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**FOMA/WLAN デュアル端末に関する技術参考資料**

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**株式会社エヌ・ティ・ティ・ドコモ**

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## 1. はじめに

本技術参考資料は、FOMA/WLAN 端末（以下端末と記述）に実装される基本 SIP モードを用いて利用可能なサービスの端末動作詳細およびシーケンスについて記述したものである。なお、本技術参考資料については、予告無く変更をおこなう場合がある。

## 2. 対象機種

本技術参考資料の 2007 年 3 月 14 日現在での対象機種を以下に示す。

表 2-1 対象機種

機種名	メーカー
N900iL/N902iL	NEC

注:本資料は 2007 年 3 月 14 日現在でリリースされている最新端末の動作に基づいているが、一部端末で差分の生じる場合がある。過去機種との差分についてはアンダーラインで※にて記載する。

### 3. 関連規格

本資料にて参照する規格を以下に示す。

#### 3.1. SIP 関連

- RFC3261 SIP: Session Initiation Protocol
- RFC3262 Reliability of Provisional Responses in the Session Initiation Protocol (SIP)
- RFC3361 Dynamic Host Configuration Protocol (DHCP-for-IPv4) Option for Session Initiation Protocol (SIP) Servers(※N900iL は非対応)
- RFC3515 The Session Initiation Protocol Refer Method
- RFC2617 HTTP Authentication: Basic and Digest Access Authentication
- RFC3265 Session Initiation Protocol (SIP)-Specific Event Notification
- RFC3311 The Session Initiation Protocol (SIP) UPDATE Method(※N900iL は非対応)
- RFC3420 Internet Media Type message/sipfrag
- RFC3891 The Session Initiation Protocol (SIP) "Replaces" Header
- RFC3892 The Session Initiation Protocol (SIP) Referred-By Mechanism
- RFC4028 Session Timers in the Session Initiation Protocol (SIP)(※N900iL は非対応)
- draft-ietf-sipping-service-examples-04 Session Initiation Protocol Service Examples
- draft-ietf-sipping-service-examples

#### 3.2. RTP/SDP 関係の関連規格

- RFC2327 SDP: Session Description Protocol
- RFC3264 An Offer/Answer Model with the Session Description Protocol(SDP)
- RFC2833 RTP Payload for DTMF Digits, Telephony Tones and Telephony Signals
- RFC3550 RTP: A Transport Protocol for Real-Time Applications
- RFC3551 RTP: Profile for Audio and Video Conferences with Minimal Control
- RFC1890 RTP: Profile for Audio and Video Conferences with Minimal Control

#### 3.3. インスタントメッセージ関係の関連規格

- RFC3428 SIP Message Extension

#### 3.4. プレゼンス関係の関連規格

- draft-ietf-sip-events-05 SIP-Specific Event Notification
- draft-ietf-simple-presence-04 "SIP Extensions for Presence
- draft-ietf-imp-cpim-pidf-02 CPIM Presence Information Data Format

#### 3.5. その他の関連規格

- RFC768 User Datagram Protocol
- RFC791 INTERNET PROTOCOL
- RFC822 STANDARD FOR THE FORMAT OF ARPA INTERNET TEXT MESSAGES
- RFC1034 DOMAIN NAMES – CONCEPTS AND FACILITIES





## 4. 用語定義

本技術資料で定義する用語(略語)を以下に示す。

表 4-1 用語

略語・記号	説明
ハンドオーバ	端末がアクセスポイント間を移動し帰属し直すこと。
基本SIPモード	RFCに準拠したSIPシーケンスで動作するSIP電話機能。
自ドメイン	自己SIPアドレスの@マークより後方部分。
開始	オフフックキーの機能
終話	オンフックキーの機能
BT	Busy Tone ビジートーン
RBT	Ring Back Tone リングバックトーン
re-INVITE	INVITEを使ったメソッドで、to tagが指定された既存のダイアログに対するINVITEのこと。
un-REGISTER	REGISTERを使ったメソッドで、expiresパラメータを0とし、REGISTER登録を抹消するためのREGISTERのこと。
最終応答	1xx以外の2xx,3xx,4xx,5xx,6xx応答のこと。

## 5. 機能概要

### 5.1. 機能一覧

本技術資料で動作を説明する端末の機能を以下に示す。

表 5-1 機能一覧

項目	機能
発信	通常発信 擬似分割発呼
着信	通常着信 発信者番号通知 外線番号識別機能 応答保留 Early Media再生
通信中	切断 保留(アウトバンド保留、インバンド保留) 保留呼び戻し 転送 転送呼び戻し(※N900iLは非対応)
通信	RTPパケットによる音声通信機能 通話中におけるRFC2833に規定される手順によるアウトバンドでのDTMF送出 通話中におけるみなし音声によるインバンドでのDTMF送出
セッション タイマ	セッションタイマによる被監視(※N900iLは非対応)
コーデック	G711A-Law 20ms,40ms G711 u-Law 20ms,40ms G729a 20ms,40ms G723.1 30ms コーデックの優先順位設定
その他	インスタントメッセージ機能 プレゼンス機能

## 5.2. プロトコルスタック

アプリケーション層	メッセージ プレゼンス	TEL (RFC3264)			
	XML	SDP (RFC2327)		DTMF (RFC2833)	G711/G729/ G723.1
	SIP (RFC3261,RFC3262,RFC3515)			RTP(RFC3550、3551)	
トランスポート層	UDP (注:TCP は未サポート)				
ネットワーク層	IP (注:IPv6 は未サポート)				
データリンク層	IEEE802.11b/g				
物理層	(※N900iL は 802.11g非対応)				

図 5-1 プロトコルスタック

## 5.3. トーン

### 5.3.1. ダイヤル送音

発信中に鳴動する。最終応答または 180 応答を受信した時点で鳴動を停止する。

### 5.3.2. リングバックトーン

INVITE の暫定応答として 180 応答を受信した時点で鳴動開始し、最終応答または CANCEL 送出後、鳴動を停止する。

### 5.3.3. ビジートーン

相手先が見つからないなど、発信時に INVITE に対してエラー応答が返ってきた場合にトーンを一定期間(7.6 参照)鳴動する。

4xx 応答(ただし 407 応答を除く)、5xx 応答、6xx 応答で規定されるすべてのエラー応答についてビジートーンを鳴動する。

### 5.3.4. 保留音(アウトバンド保留時)

相手先を保留したときに鳴動する。

### 5.3.5. 保留音(被アウトバンド保留時)

通話先から保留されたときに鳴動する。

## 6. 呼制御詳細(SIP/SDP)

### 6.1. SIP アドレス

#### 6.1.1. 使用可能文字

下記の英数字記号文字が使用可能である。最大文字数は 50 文字である。

!\$%&' \*+,-./:;=?@\_~:()

0123456789

abcdefghijklmnopqrstuvwxyz

ABCDEFGHIJKLMNOPQRSTUVWXYZ

#### 6.1.2. 非通知

着信時 INVITE の From 行の SIP アドレスが anonymous@anonymous.invalid または Anonymous@Anonymous.invalid の場合、非通知判定して表示を「非通知」とする。

発信時は非通知の発信を行わない。(anonymous@anonymous.invalid を発信アドレスとして発信しない)

#### 6.1.3. 外線判定

SIP アドレスの先頭が数字の 0 の場合、外線からの着信として判定する。

また端末はこの判定の有効、無効設定を持つ。

### 6.2. SIP 基本フォーマット

#### 6.2.1. 最大文字数

最大文字数等を表 6-1 最大文字数に示す。

表 6-1 最大文字数

項目	最大	備考
1行毎最大文字数	(制限なし)	メッセージ全体サイズに依存
1 SIP メッセージ毎最大行	(制限なし)	メッセージ全体サイズに依存
同一ヘッダパラメータ最大行	(制限なし)	メッセージ全体サイズに依存
同一ヘッダパラメータ最大要素数	(制限なし)	メッセージ全体サイズに依存
1メッセージボディ(SDP)行	(制限なし)	メッセージ全体サイズに依存
メッセージ全体サイズ	1500 バイト	
URI 最大長	159 バイト	画面表示は 26 文字 履歴や電話帳への保存は 50 文字

## 6.3. SIP メッセージ一覧

### 6.3.1. 使用メッセージ一覧

#### 6.3.1.1. REGISTER

端末に設定された SIP アドレスを REGISTER サーバーに登録する。

Request URI には、登録を行うロケーションサービスのドメイン名を指定する。(※N900iL は SIP サーバーの IP アドレスを指定する)

また SIP の動作モードが自動の場合、REGISTER の応答により SIP 動作モードを決定する。

[出力例]

```
REGISTER sip:sip.com SIP/2.0
Via: SIP/2.0/UDP 10.3.0.68:5060;branch=z9hG4bK-124eaaa5-604326.557
From: <sip:50919@sip.com>;tag=10e8cc74
To: <sip:50919@sip.com>
Call-ID: 5aa75b9596328df1@50919.10.3.0.68
CSeq: 0 REGISTER
Contact: <sip:50919@10.3.0.68>;expires=3600
Max-Forwards: 70
User-Agent: DoCoMo/1.0 N902iL
Content-Length: 0
```

(※N900iL では以下の出力となる)

```
REGISTER sip:10.3.0.105 SIP/2.0
Via: SIP/2.0/UDP 10.3.0.100:5060;branch=z9hG4bK-cc2fa03-358167.917
From: <sip:59004@sip.com>
To: <sip:59004@sip.com>
Call-ID: 6ab71618@59004.10.3.0.100
CSeq: 0 REGISTER
Contact: <sip:59004@10.3.0.100>;expires=3600
Max-Forwards: 70
User-Agent: DoCoMo/1.0 N900iL
Content-Length: 0
```

#### 6.3.1.2. INVITE(re-INVITE を含む)

- (1) 自己 SIP アドレスの @以降を自ドメインとして扱う。この自ドメインは電話番号入力により発信するときに用いる。電話番号のみで発信する場合は「電話番号@自ドメイン」のアドレス形式で発信を行う。
- (2) Call-ID の値として「乱数@ホスト名」の形式を用いる。  
(ホスト名=ダイジェスト認証のユーザ名+端末の IP アドレス)
- (3) Supported ヘッダの内容として、100rel, replaces,timer を用いる。  
(※N900iL は timer 非対応)
- (4) Allow ヘッダの内容として INVITE, ACK, BYE, CANCEL, OPTIONS, PRACK, MESSAGE, REFER, NOTIFY,UPDATE を用いる。(※N900iL は UPDATE 非対応)
- (5) Accept ヘッダの内容として application/sdp, message/sipfrag, multipart/mixedを用いる。  
(※N900iL は multipart/mixed 非対応)
- (6) Display Name で表示可能な文字列は UTF-8(※N900iL は ASCII で対応)、英数字記号のみ。端末から Display Name を設定することはできない。
- (7) Initial INVITE に Route ヘッダを含めない。(※N900iL は Route を含む)

6.3.1.3. ACK

INVITE の最終応答に対する確認応答を送出する。

6.3.1.4. CANCEL

通話開始の取りやめを行う。

6.3.1.5. BYE

通話を終了する。

6.3.1.6. OPTIONS(応答のみ)

端末は OPTIONS を送出不し。受信した場合は応答動作を行う。

6.3.1.7. REFER

転送で使用する。転送端末が被転送端末に対して転送先を指定する。

(1) unAttended 転送

転送元の SIP アドレスを Referred-By ヘッダに、転送先の SIP アドレスを Refer-To ヘッダに指定して送出的。転送者と転送先のダイアログは確立していないため Refer-To ヘッダにダイアログは指定しない。

例:

```
Refer-To: <sip:00004@sip.com>  
Referred-By: <sip:00002@sip.com>
```

(2) Attended 転送

転送元の SIP アドレスを Referred-By ヘッダに、転送先の SIP アドレスとダイアログの情報を Refer-To ヘッダに入れて送出的。

例:

```
Refer-To: <sip:00004@192.168.2.21?Replaces=call-ID%3bto-tag%3dtotag%3bfrom-tag%3dfromtag>  
Referred-By: <sip:00002@sip.com>
```

6.3.1.8. PRACK

18x の応答の信頼性を保つために使用する。

6.3.1.9. NOTIFY

転送、プレゼンスにて使用する。

Subscription-State ヘッダの expires パラメータ値は 35。(※N900iL は 30)

6.3.1.10. SUBSCRIBE

プレゼンスにて使用する。

6.3.1.11. UPDATE

セッションタイムの更新に使用する。ただしアーリーダイアログ中のセッション更新は行わない。(※N900iL は UPDATE 非対応)

## 6.3.2. 使用応答一覧

### 6.3.2.1. 1XX レスポンス

INVITE に対する暫定応答。INVITE 以外では出力しない。INVITE を受信した場合は 100 応答を1回送出する。183 応答を返信する回数は内部処理の時間によって変化する場合があります。

### 6.3.2.2. 2XX レスポンス

REFER 受信時は 202 応答を返信する。それ以外のメソッドを受信した場合は 200 応答を返信する。

### 6.3.2.3. 3XX レスポンス

INVITE に対する応答が 3xx の場合は redirection を試行する。

### 6.3.2.4. 4XX レスポンス

INVITE に対する 407 応答、REGISTER に対する 401 応答が来た場合はダイジェスト認証を行う。

REGISTER に対する 480 応答を受信した場合は 10 秒後にリトライする。ただし Retry-After を受信した場合は指定に従う。(※N900iL は Retry-After 非対応)

通話相手から通知されたセッションタイマの継続期間が設定値より小さい場合には 422 応答を返送する。(※N900iL はセッションタイマ非対応)

着信拒否、FOMA 通信中など電話に出る事が出来ない場合には 486 応答を返送する。

自己 SIP アドレスとは違う SIP アドレスを指定された INVITE を受信した場合 404 応答を返送する。

リクエストが BYE または CANCEL で終了させられた場合 487 応答を返送する。

### 6.3.2.5. 5XX レスポンス

REGISTER に対する 500 応答を受信した場合は 10 秒後にリトライする。ただし Retry-After を受信した場合は指定に従う。

IPとMACアドレスの対応が解決できないなどのネットワーク異常が発生した場合などは500 応答を返信する。

### 6.3.2.6. 6XX レスポンス

SDP ネゴシエーションエラーが発生した場合は 606 応答を返信する。

## 6.3.3. 使用ヘッダー一覧

ヘッダの一覧を

表 6-2 使用ヘッダー一覧に示す。非対応または未知のヘッダーが指定されたメソッドはそのヘッダーを無視して処理する。



表 6-2 使用ヘッダー一覧

ヘッダ	説明
Accept	受け入れ可能な Content-Type (※N900iL では大文字と小文字の識別を行う。(application/SDP は未使用))
Accept-Encoding	応答にて受け入れ可能なコンテンツ
Accept-Language	受け入れ可能な言語
Alert-Info	非対応 (アラート音の指定)
Allow	サポートするメソッドの組を指定
Allow-Events	サポートされるイベントパッケージ(RFC3265)
Authentication-Info	HTTP ダイジェスト認証
Authorization	UA の認証の信用証明書
Call-ID	識別子
Call-Info	非対応(発呼側や着呼側の付加的な情報)
Contact	URI の指定
Content-Disposition	Content-Type を拡張(※N900iL は非対応)
Content-Encoding	非対応
Content-Language	非対応
Content-Length	message-body のサイズ
Content-Type	message-body のメディアタイプ
Cseq	シーケンスナンバー
Date	非対応 (日付の指定)
Encryption	非対応
Error-Info	非対応
Event	NOTIFY 用
Expires	有効期限
From	リクエストのイニシエーター
Hide	非対応
In-Reply-To	非対応(参照 Call-ID)
Max-Forwards	最大フォワード数
Min-Expires	非対応(最小リフレッシュ間隔)
Min-SE	セッションタイマに許容される最小値(※N900iL は非対応)
MIME-Version	非対応
Organization	非対応(組織名)
Priority	非対応(緊急度)
Proxy-Authenticate	認証チャレンジ
Proxy-Authorization	認証情報、信用証明書
Proxy-Require	プロキシのサポート機能
Record-Route	ルーティング用
Refer-To	転送用
Referred-by	転送用

Replaces	転送用
Reply-To	非対応(論理的な戻り URI)
Require	サポートオプション
Response-Key	非対応
Retry-After	リトライ時間(サービス不可予測時間)
Route	ルーティング用
Rack	PRACK 用
Rseq	暫定応答用シーケンス No
Session-Expires	セッションの生存時間(※N900iL は非対応)
Server	非対応(UAS のソフト情報)
Subject	非対応
Subscription-State	サブスクリプションステート
Supported	サポートする拡張
Timestamp	タイムスタンプ
To	リクエストの論理的な受信者
Unsupported	サポートしない機能
User-Agent	UAC のソフト情報
Via	ルーティング用
Warning	非対応(付加情報)
WWW-Authenticate	認証チャレンジ

#### 6.4. ハンドオーバー

ハンドオーバーを行う場合に REGISTER を送出する条件を表 6-3 に示す。

表 6-3 REGISTER トランザクションタイムアウト時の再 REGISTER 条件

状態	ハンドオーバー時	圏外からの圏内復帰時
REGISTER 条件 注:1	以下の条件の場合に REGISTER を実施する。 ・SSID 変更 ・IP アドレス変更 ・自己 SIP アドレス変更 ・SIP サーバーアドレス変更 また reINVITE も実施される。注:1	REGISTER を実施する。 ただし直近の圏内状態から SSID 変更、IP 変更が無く、かつ REGISTER 有効期限内で圏内復帰した場合は REGISTER を実施しない。

注:1: SSID のみが変更された場合は reINVITE は実施されない

#### 6.5. SDP

SDP のネゴシエーションにより、使用できるメディアの提示と優先順位による決定を行う。本章では端末で指定される SDP のパラメータ等について記述する。

##### 6.5.1. SDP の基本フォーマット

RFC3264 ではマルチキャスト用の SDP セッションが定義され、SIP で使用される。  
以下に端末で使用する指定の例をあげる。

## 6.5.1.1. v=行

v=0 を指定する。

## 6.5.1.2. o=行

発信元の情報を指定する。

書式 : o=<ユーザ名> <セッション識別子> <バージョン番号> <ネットワーク種別> <アドレス種別> <アドレス>

表 6-3 識別情報

No.	種別	値	例	説明
1	ユーザ名	“-”固定	-	ハイフオン固定
2	セッション識別子			NTPタイムスタンプから生成する。
3	バージョン番号			NTPタイムスタンプへ(2 <sup>62</sup> )-1 を AND して使用する。セッションの UPDATE ごとに +1 インクリメントする。
4	ネットワーク種別	”IN”固定	IN	IN 固定
5	アドレス種別	”IP4”固定	IP4	IP4 固定
6	アドレス	アドレス表記	192.164.1.1	端末から指定するときは IP アドレスで表記する。
		ドメイン表記	pc1.soumu.com	相手先からドメイン指定されたときにも対応する。

出力例 : o=- 1164603972600457 1164603972600457 IN IP4 10.3.0.68

(※N900iL では桁数が異なる。出力例 : o=- 170840 170840 IN IP4 10.3.0.100 )

IP アドレス変更を伴うハンドオーバを行った場合でも、IP アドレスを更新しない。(※N900iL では IP アドレスの更新を伴う)

## 6.5.1.3. s=行

送出時は「-」を用いる。受信時において設定された内容を表示等不使用しない。

## 6.5.1.4. c=行

ネットワークの種類、IPアドレスを記述する。IP アドレスに 0.0.0.0 または\*.invalid (\*は任意の文字列)が指定されたときは保留動作する。

書式 : c=<ネットワーク種別> <アドレス種別> <アドレス>

表 6-4 コネクション情報

No.	種別	値	例	説明
1	ネットワーク種別	"IN"固定	IN	
2	アドレス種別	"IP4"固定	IP4	IP バージョン4を使う
3	アドレス	アドレス表記	192.164.1.1	端末から指定するときは IP アドレスで表記する。
		ドメイン表記	pc1.soumu.com	相手先からドメイン指定されたときにも対応する。

## 6.5.1.5. t=行

開始時間、終了時間それぞれ 0 を指定する。受信時は内容を使用しない。

## 6.5.1.6. m=行

メディアをメディアタイプ、ポート番号、プロトコル、ペイロードタイプの順で記述する。

書式 : m=<メディア種別> <ポート番号> <トランスポートプロトコル>  
<メディアフォーマットリスト>

表 6-5 メディア種別とトランスポートアドレス

No.	種別	値	例	説明
1	メディア種別	"audio"固定	"audio"	
2	ポート番号			設定可能
3	トランスポート・プロトコル	"RTP/AVP"固定	"RTP/AVP"	
		"UDP" 固定	"UDP"	
4	メディア・フォーマット・リスト	ペイロードタイプを指定	"18 0 4 8 96"	メディア属性

## 6.5.1.7. a=行

(1)使用するメディアを定義する。

a=rtpmap:0 PCMU/8000

書式 : a=rtpmap: <メディアフォーマット番号> <メディアタイプ>

表 6-6 メディアタイプ

コーデック種類	メディアタイプ	メディアフォーマット番号
G711 u-LAW	PCMU/8000	0
G711 A-LAW	PCMA/8000	8
G723.1	G723/8000	4
G729A	G729/8000	18
DTMF(RFC2833)	telephone-event/8000	96

(2)メディア送出方向を指定する。

書式 : a=送出方向

表 6-7 メディア送出方向

送出方向	説明
inactive	送受共になし
sendonly	送信のみ
recvonly	受信のみ

(3)aptime は送出間隔を ms 単位で表す。指定可能な値を表 6-8ptime に示す。

書式 : aptime: <送出間隔>

表 6-8ptime

コーデック種別	ptime として指定可能な値	ptime 指定されない場合
G711 u-LAW	20,40	20
G711 A-LAW	20,40	20
G723.1	30	30
G729	20,40	20

#### 6.5.1.8. その他タイプ

以下のチェックを行うが、構文解析のみを行い設定された内容を表示等には使用しない。

- ・i 行: メディアレベルに現れる場合は無視する。値が存在しない場合は呼を開放する。
- ・u 行: 値が存在しない場合は呼を開放する。
- ・e 行: 値が存在しない場合は呼を開放する。
- ・p 行: 値が存在しない場合は呼を開放する。
- ・b 行:  
b=CT:数値はセッションレベルでの指定でなければならない。  
b=AS:数値はメディアレベルでの指定でなければならない。
- ・k 行:  
' ':区切りで無く、k=の先が"prompt"以外の場合は呼を開放する。  
' ':区切りで、' ':の前に"clear"、"base64"、"uri"以外が設定されている場合は呼を開放する。
- ・その他使用しないタイプ(z 行や r 行など)  
行を無視します。

#### 6.5.2. 保留等に関する SDP の記述

保留時に指定する SDP の記述と対応している保留方法について記述する。

##### 6.5.2.1. 相手端末を保留する方法

通話相手の端末を保留する方法を以下に示す。

- (1) a=行で inactive を指定した SDP を送信(相手端末内部の保留音を鳴動させる場合)  
(※N900iL では re-INVITE に失敗した場合には、通話に戻さず保留状態とする。この

状態から保留解除した場合は re-INVITE を再送しない。)

- (2) 保留音をインバンドで相手端末に送出する。  
保留する側で受信した RTP パケットは破棄する。(インバンドの場合は SIP シーケンスが介在しないため、SDP ネゴシエーションは行われない)

#### 6.5.2.2. 相手端末からの保留

通話相手の端末からの指示で自端末を保留する方法を以下に示す。

- (1) c=行のIPへ0.0.0.0を指定されたSDPを受信  
端末内部の保留音を鳴動する。RTP/RTCPパケットの送受信は行わない。
- (2) c=行のIPへ\*.invalidたとえばhold.invalidが指定されたSDPを受信  
端末内部の保留音を鳴動する。RTP/RTCPパケットの送受信は行わない。
- (3) a=行でsendonlyが指定されたSDPを受信(recvonlyで返答)  
インバンドで受信した保留音を鳴動する。保留音はRTPパケットで受信し、RTCPパケットの送受信も行う。
- (4) a=行でinactiveを指定されたSDPを受信  
端末内部の保留音を鳴動する。RTPパケットの送受信は行わないが、RTCPパケットの送受信は行う。
- (5) インバンドで保留音を受信  
通話状態と同様に、通話音声の代わりに保留音を受信する。(インバンドの場合は SIPシーケンス介在しないため、SDPのネゴシエーションは行われない)
- (6) m=行が指定されないSDPを受信(nomedia SDP =nomedia session)  
端末内部の保留音を鳴動しない。RTP/RTCPパケットの送受信は行わない。  
通常は通話開始時に本指示を受信し、直後にm=行を含むre-INVITEを受信しSDPの指示に従った音声の鳴動を開始する。  
本指示は、通話確立後はおこなわれない。
- (7) m=行のポート番号に0を指定されたSDPを受信し、使用するメディアが存在しない場合  
端末内部の保留音を鳴動する。RTP/RTCP パケットの送受信は行わない。

#### 6.5.3. Early Media

183 Session progress で SDP が指定された場合の音声の聴取に対応する。(※N900iL では Early Media 中の DTMF の送受信には対応しない。)

Early Media 確立後に最初の 183 with SDP と接続先が異なる 183 with SDP を受信した場合には、前者の 183 with SDP の接続を更新し、後者の 183 with SDP を有効とする。(※N900iL では前者の 183withSDP を有効とし、後者を無効とする。ただしその際コーデック変更は行わない。)

Early Media 無しの状態から Early Media ありの状態への遷移は可能。(※N900iL では Early Media ありの状態から Early Media 無しの状態への遷移は行わない。)

着信時、180 暫定応答に SDP(以後 180 with SDP と呼称)の Early Media を再生可能である。(※N900iL では、第 2 呼び制御時に 180 with SDP を受信した場合は無視する。)

18x wSDP を受信して Early Media 確立した後に 180 w/o SDP を受信した場合は、Early Media を停止して端末内部で生成する RBT を鳴動する。183 w/o SDP を受信した場合には

端末内部で生成する RBT を鳴動せず、Early Media 状態を継続する。(※N900iL では Early Media 確立後の 180 w/o SDP 受信した場合も端末内部で生成する RBT を鳴動せず、Early Media 状態を継続する。)

#### 6.5.4. SDP ネゴシエーション

通話する相手の端末へ SDP を送出する際に提示するコーデックは、端末内部に設定されたものを指定する。通話する相手の端末から SDP にてコーデックが提示されたときのネゴシエーション時の優先順位は、端末内部の設定に従う。

通話中のコーデック変更については、一旦通話を保留することなく re-INVITE による変更が可能(通話を保留してから変更することも可能)(※N900iL では通話中のコーデック変更については、re-INVITE による変更ではなく、一旦通話を保留して行う必要がある。)

SDP の指定の一例を以下に示す。シーケンス例では暫定応答や ACK を省略している。

##### 6.5.4.1. 制限を行わなかった場合

表 6-9 優先度設定

	DTMF 利用設定	優先度1	優先度2	優先度3	優先度4
A	ON	G711 u-LAW	G711 A-LAW	G723.1	G729
B	ON	G711 u-LAW	G711 A-LAW	G723.1	G729

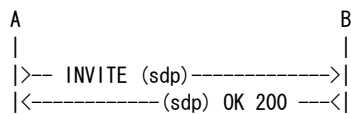


図 6-1

```

A
INVITE .....
:
Content-Length: ...

v=0
o=- 363305 701 IN IP4 192.168.2.10
s=-
c=IN IP4 192.168.2.10
t=0 0
m=audio 5006 RTP/AVP 0 8 4 18 96
a=rtpmap:0 PCMU/8000
a=rtpmap:8 PCMA/8000
a=rtpmap:4 G723/8000
a=rtpmap:18 G729/8000
a=rtpmap:96 telephone-event/8000
a=fmtp:96 0-11
  
```

```

B

SIP/2.0 200 OK
:
Content-Length: ...

v=0
o=- 363305 701 IN IP4 192.168.2.11
s=-
  
```

```

c=IN IP4 192.168.2.11
t=0 0
m=audio 5006 RTP/AVP 0 96
a=rtpmap:0 PCMU/8000
a=rtpmap:96 telephone-event/8000
a=fmtp:96 0-11

```

---

#### 6.5.4.2. 制限を行なった場合

表 6-10 優先度設定

	DTMF 利用設定	優先度1	優先度2	優先度3	優先度4
A	ON	G711 u-LAW			
B	OFF	G711 u-LAW	G711 A-LAW	G729	G723.1

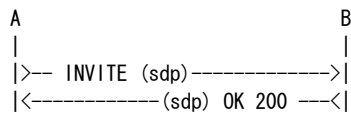


図 6-2

```

A
INVITE .....
:
Content-Length: ...

v=0
o=- 363305 701 IN IP4 192.168.2.10
s=-
c=IN IP4 192.168.2.10
t=0 0
m=audio 5006 RTP/AVP 0 96
a=rtpmap:0 PCMU/8000
a=rtpmap:96 telephone-event/8000
a=fmtp:96 0-11

```

---

```

B

SIP/2.0 200 OK
:
Content-Length: ...

v=0
o=- 363305 701 IN IP4 192.168.2.11
s=-
c=IN IP4 192.168.2.11
t=0 0
m=audio 5006 RTP/AVP 0
a=rtpmap:0 PCMU/8000

```

---



## 6.5.4.3. 適合しない場合

表 6-11 優先度設定

	DTMF 利用設定	優先度1	優先度2	優先度3	優先度4
A	ON	G711 u-LAW			
B	OFF	G711 A-LAW	G729	G723.1	

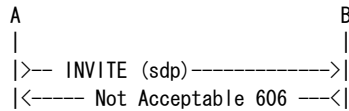


図 6-3

```

-----
A
INVITE .....
:
Content-Length: ...

v=0
o=- 363305 701 IN IP4 192.168.2.10
s=-
c=IN IP4 192.168.2.10
t=0 0
m=audio 5006 RTP/AVP 0 96
a=rtpmap:0 PCMU/8000
a=rtpmap:96 telephone-event/8000
a=fmtp:96 0-11
-----
B
SIP/2.0 606 Not Acceptable
:
Content-Length: 0
  
```

## 6.6. RTP

## 6.6.1. 音声送出間隔

20ms または 30ms、40ms ごとに送出する。

表 6-12 音声送出間隔

コーデック種類	対応音声送出間隔
G711	20ms または 40ms
G723.1	30ms
G729	20ms または 40ms

- ・ 発信側端末から送出する SDP Request には ptime を指定しない。相手端末からの応答メッセージに ptime が含まれていた場合、対応可能なパケット化周期である時は ptime で指定されたパケット化周期を使用して通話する。ptime が含まれていない場合、デフォルトパケット化周期を使用して通話する。非対応のパケット化周期であった場合は、BYE 又は CANCEL を送信して呼接続を終了する。
- ・ 着信側端末は、受信した SDP ptime によりパケット化周期が指定され、対応可能なパケット化

周期である場合は、応答メッセージに ptime を含めて応答し、ネゴシエーションにより決定されたパケット化周期を使用する。非対応のパケット化周期であった場合は、606 Not Acceptable を返して呼接続を終了する。受信した SDP Request に ptime が含まれていない場合、コーデック毎のパケット化周期の設定値に基づき、応答に ptime を含める。(※N900iL では受信した SDP の ptime 有無にかかわらず、応答メッセージに ptime を含めない。)

#### 6.6.2. RTP ペイロードフォーマット

使用するペイロードフォーマットを以下に示す。

表 6-13 使用するペイロードフォーマット

PT	encoding name/clock rate	備考
0	PCMU/8000	u-LAW
4	G723/8000	G723.1
8	PCMA/8000	A-LAW
18	G729/8000	G729
96	telephone-event/8000	DTMF

#### 6.6.3. RTP フォーマット

RTP の送出フォーマットについて以下に示す。

##### 6.6.3.1. u-LAW/A-LAW のフォーマット

RFC3551 Section 4.5.14 に準拠する。20ms,40ms の送信間隔に対応する。

##### 6.6.3.2. G.723 のフォーマット

RFC3551 Section 4.5.3 に準拠する。30ms の送信間隔に対応する。

##### 6.6.3.3. G.729 のフォーマット

RFC3551 Section 4.5.6 に準拠する。20ms,40ms の送信間隔に対応する。

##### 6.6.3.4. DTMF のフォーマット

RFC2833 に準拠する。ただし、1 つの RTP パケットに複数のペイロードを格納するフォーマットは使用しない。Telephone-Event のうち、DTMF Events(0～11 つまり、0～9, #, \*) を使用する。

Telephone-Event がある場合は RFC2833 に規定された動作を行い、ない場合はみなし音声をインバンドにて送出する。

RFC2833 で規定されている DTMF 以外のトーンは使用しない。

表 6-14 DTMF 送信

ネゴシエーション方法	EarlyMedia 中	通話中
a=sendonly	×	×
a=fmtp:96 (telephone event)	RFC2833 に従い送出 (※N900iL 非対応)	RFC2833 に従い送出

a=fmtp:96 でネゴなし	みなし音声 (※N900iL 非対応)	みなし音声
a=inactive	-	×

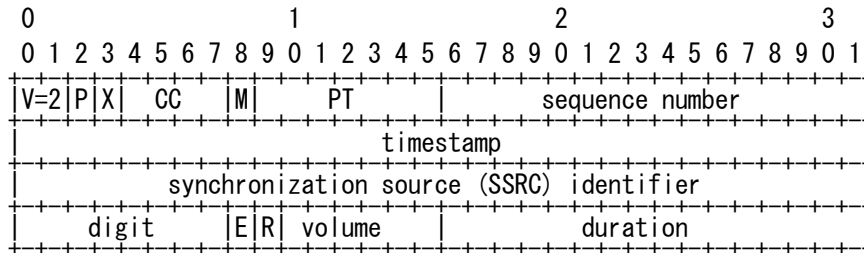


図 6-4: DTMF フォーマット

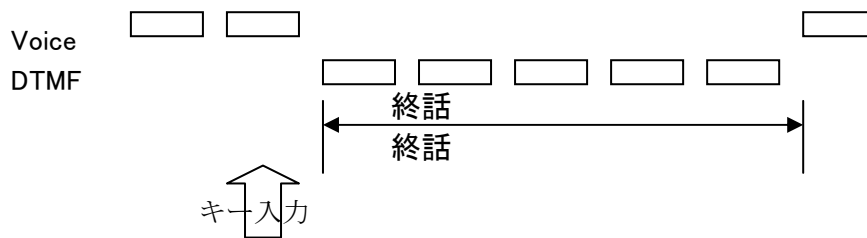


図 6-5 送出方法の概念図

ストリーム(SSRC)は1つで RTP のパケットタイプによって送出するパケットを変更する。Voice パケットの代わりに DTMF を送出する。この時タイムスタンプはインクリメントせず、シーケンス No をインクリメントする。

以下に  $\mu$  LAW 20ms の場合の動作例を示す。

Sequence No	Time Stamp	PT	MarkerBit	Duration	EndBit
100	100160	0( $\mu$ LAW)	0	-	
101	100320	0( $\mu$ LAW)	0	-	
102	100480	96(DTMF)	1	800	0
103	100480	96(DTMF)	0	800	0
104	100480	96(DTMF)	0	800	1
105	100480	96(DTMF)	0	800	1
106	100480	96(DTMF)	0	800	1
107	101280	0( $\mu$ LAW)	1	-	
108	101440	0( $\mu$ LAW)	0	-	

図 6-6 シーケンス No とタイムスタンプの動き

Sequence No:

RFC2833(DTMF パケット)と音声パケットを区別せず、1 ずつインクリメントする。

Time Stamp:

RFC2833 部分では同じ値(最初のパケットに相当する時間)を用いる。

PT:パケットタイプ

Duration:

$160\text{sample}(20\text{ms}) * 5(\text{packet}) = 800 (\text{sample})$  (長さ 100ms)

duration,volume の値は固定値(800)を用いる。Duration の値(時間)に相当するパケット数だけ DTMF パケット(RFC2833)を送出するが、このとき DTMF パケットが送出される時間に相当する音声パケットは休止する。

Marker Bit:

DTMF と音声のパケットを切り替える最初のパケットに 1 を設定する。

End Bit:

DTMF の最後の 3 パケットに 1 を設定する。ただし DTMF パケットが 3 以下の場合は、全ての DTMF パケットに 1 を設定する。

#### 6.7. ストリームの接続変更

RTP ストリームの変更に SSRC の変更は不要。(※N900iL では RTP ストリームの変更時には SSRC の変更を伴う必要がある。)

## 7. タイマ

端末で使用しているタイマについて記述する

### 7.1. SIP タイマ

SIP に関して下記タイマを使用する。

表 7-1 SIP タイマ

略称	説明	パラメータ値	パラメータ値(N900iL)
T1	RTT 予測値	1000ms	1500ms 注:
T2	非 INVITE リクエスト及び INVITE に対する応答のための最大再送間隔	4 秒固定	4 秒固定
T4	メッセージが網上に残存する最大期間	5 秒固定	5 秒固定
Timer A	INVITE リクエストの再送間隔	初回 = 1 秒 2 回目 = 2 秒 3 回目 = 4 秒 4 回目 = 8 秒 5 回目 = 16 秒 実際には 1~2 秒の誤差あり。	初回=T1 2 回目=T1 * 2 3 回目=T1 * 4 4 回目=T1 * 8 実際には 1~2 秒の誤差あり。
Timer B	INVITE トランザクションのタイムアウト値	32 秒固定	32 秒固定
Timer D	応答の再送のための待ち時間	32 秒固定	32 秒固定
Timer E	非 INVITE リクエストの再送間隔	初回 = 1 秒 2 回目 = 2 秒 3 回目~9 回目 = 4 秒 実際には 1~2 秒の誤差あり。	初回=T1 2 回目=min(T1*2, 4 秒) 3 回目=min(T1*4, 4 秒) 4 回目=min(T1*8, 4 秒) 実際には 1~2 秒の誤差あり。
Timer F	非 INVITE トランザクションのタイムアウト値	Timer B に同じ	Timer B に同じ
Timer G	INVITE に対する応答の再送間隔	初回 = 500ms 2 回目 = 1 秒 3 回目 = 2 秒 4 回目以降 = 4 秒	初回 = 500ms 2 回目 = 1 秒 3 回目 = 2 秒 4 回目以降 = 4 秒
Timer H	ACK 受信のための待ち時間	Timer B に同じ	Timer B に同じ
Timer I	ACK 再送のための待ち時間	T4	T4
Timer J	非 INVITE リクエストの再送のための待ち時間	Timer B に同じ	Timer B に同じ
Timer K	応答の再送のための待ち時間	T4	T4

(※N900iL では、待ち受け時の待ち受け時間間隔(つまりビーコン間隔 \* DTIM 周期もしくはビーコン間隔\*ListenInterval)が 1 秒より長くなる場合には T1 は 1.5\*ビーコン間隔 \* DTIM 周期または 1.5\*ビーコン間隔 \* ListenInterval となる。)

## 7.2. 呼び出し中再送タイマ

PRACK 使用時、未使用時ともに 180Ringing を 10 秒間隔で送出する。(※N900iL では、PRACK 使用時は 180Ringing を 10 秒間隔で送出し、PRACK 未使用時は 180Ringing を 60 秒間隔で送出する)

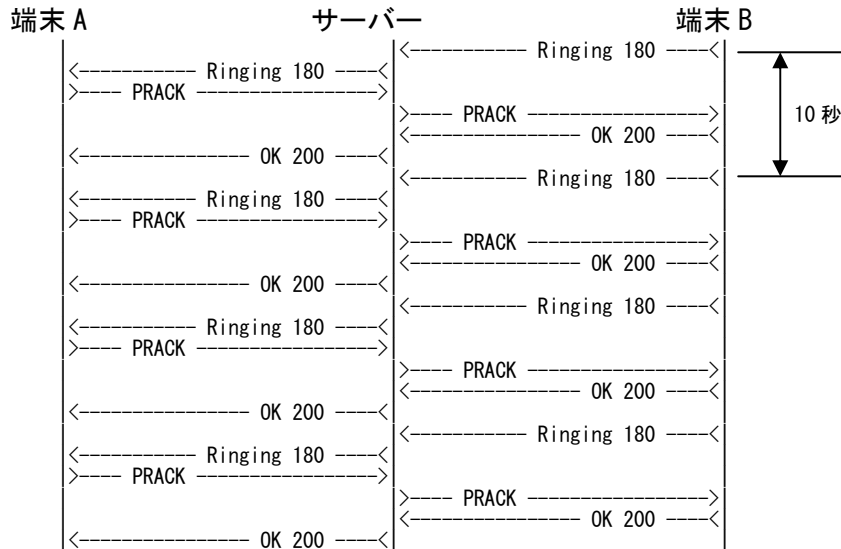


図 7-1 呼び出し中タイマ(PRACK 使用)

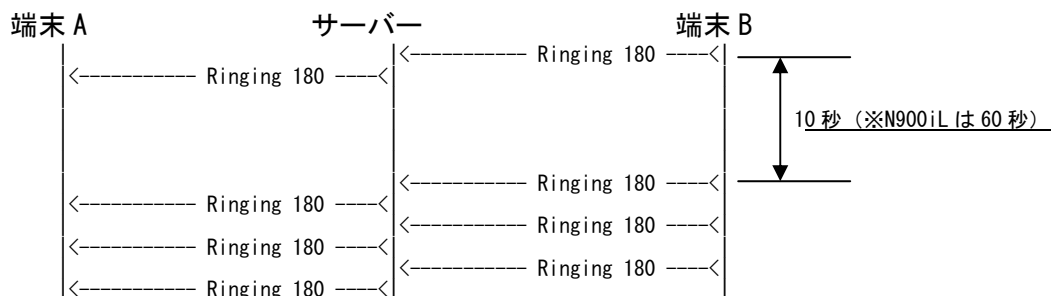


図 7-2 呼び出し中タイマ(PRACK 未使用)

## 7.3. 被呼び出し中監視タイマ

PRACK にてネゴシエーションが実施されたときに被呼び出し状態を監視する。180 に対する PRACK を一定時間受信しなかった場合にタイムアウトし、呼接続を終了する。

## 7.4. 呼び出し中監視タイマ

図 7-3 の端末 A において相手先を呼び出し中を監視する。180 Ringing の受信を監視し、次のメッセージを 180 秒未受信(※N900iL は 20 秒)だった場合、呼接続を終了し、待ち受け状態に戻る。

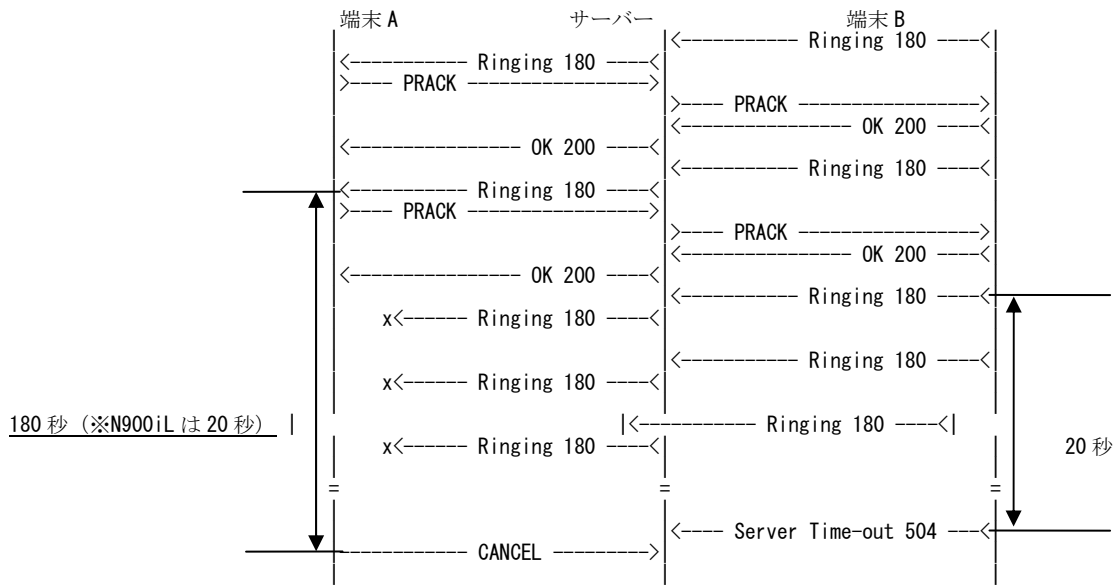


図 7-3 被呼び出し中/呼び出し中監視タイマ

#### 7.5. 通話断監視タイマ

通話中に RTCP、RTP の転送を監視し、20 秒間 RTCP、RTP 双方のパケットが受信できなかった場合は呼を終了する。(ユーザーインターフェースは終話処理とし、通信層は BYE を発生させる。)

また本タイマは通信の状態が保留中の場合は起動しない。

#### 7.6. ビジートーン鳴動タイマ

発信時相手先が見つからなかった場合など、INVITE に対するエラー応答が返送された場合のビジートーンの鳴動時間は 5 秒。

通話中相手先から切断または終話された場合のビジートーンの鳴動時間は 5 秒。

#### 7.7. 擬似分割発呼発信タイマ

擬似分割発呼時、または転送先入力時に 5 秒間入力がないと発信または転送を開始する。

また、擬似分割発呼発信タイマがタイムアウトする前でも、オフフックキーを押下することで発信または転送を開始する。(※N900iL では、擬似分割発呼発信タイマのタイムアウト前のオフフックキー押下に非対応)

## 7.8. REGISTER タイマ

## 7.8.1. REGISTER 動作

REGISTER の有効期限を 3600ms として Expires フィールドに指定し送出する。再 REGISTER のタイミングは、Expires フィールド値の有効期限の半分の時間で実施する。REGISTER の動作全般を図 7-4 REGISTER 処理に示す。

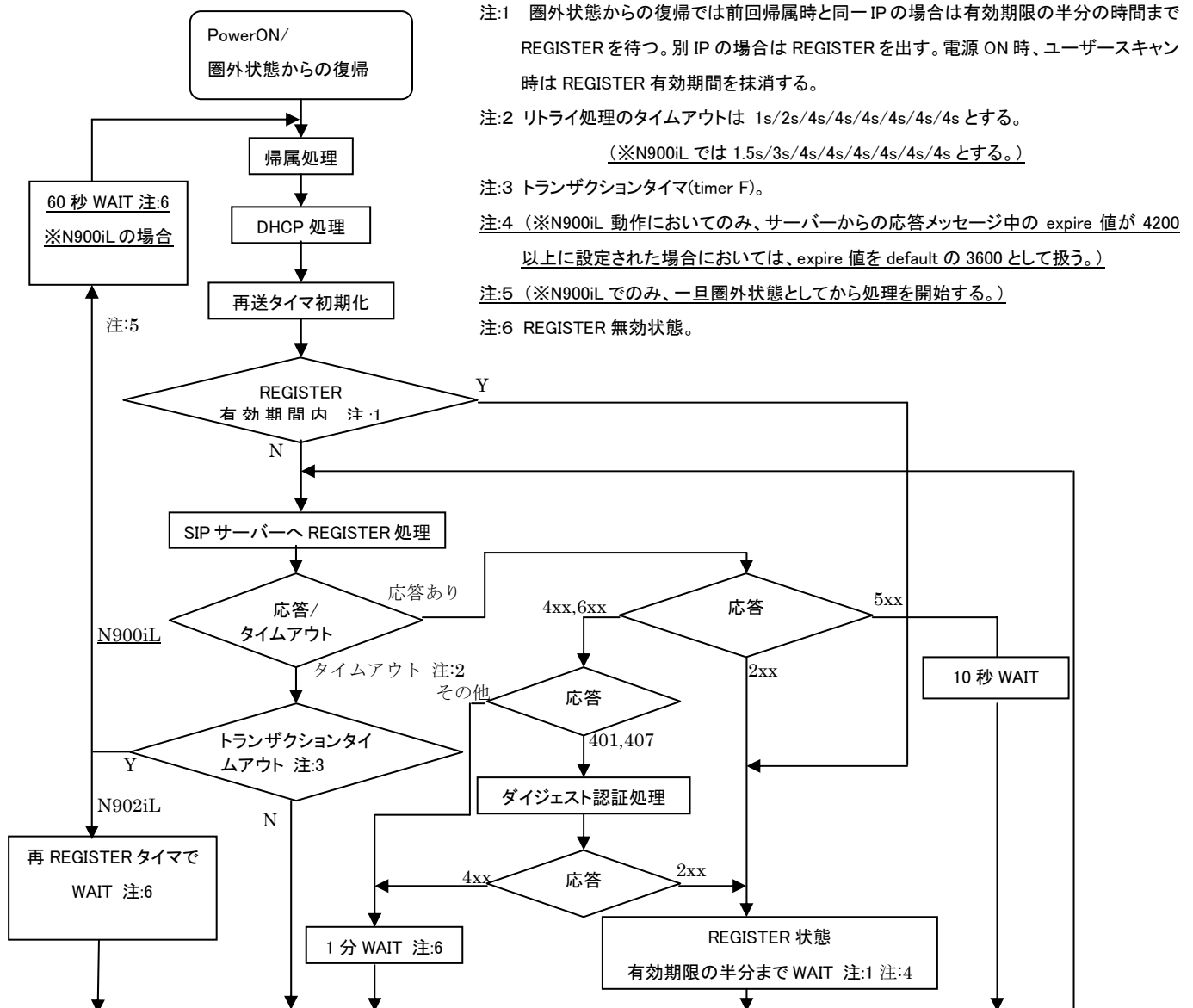


図 7-4 REGISTER 処理



## 7.8.2. REGISTER タイマ動作例

REGISTER の動作、REGISTER エラー時の再送の動作、トランザクションタイムアウト時の再 REGISTER の動作を以下に示す。

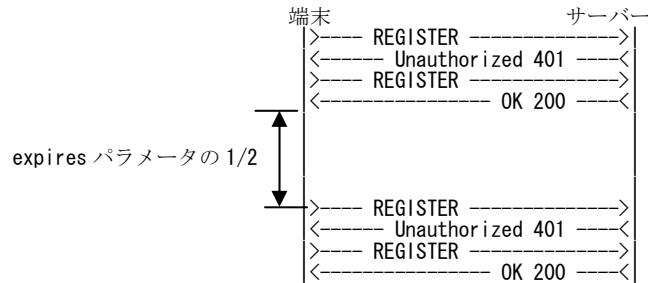


図 7-5 定期 REGISTER

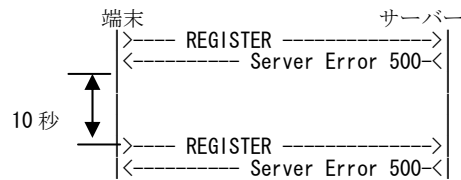


図 7-6 REGISTER エラー時の再送

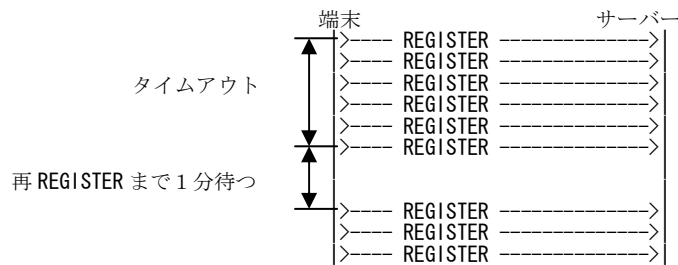


図 7-7 REGISTER トランザクションタイムアウト時の再 REGISTER

## 7.8.3. セッションタイム(※N900iL は非対応)

準正常時のセッション開放の検出を行う。セッションタイムに関する動作を以下に示す。

発信側	着信側	動作	発信側	着信側
OFF	非対応機	セッションタイムは動作しない	セッションタイムヘッダなし Allow:に UPDATE なし	セッションタイムヘッダなし Allow:に UPDATE なし
OFF	OFF	セッションタイムは動作しない	セッションタイムヘッダなし Allow:に UPDATE なし	セッションタイムヘッダなし Allow:に UPDATE なし
OFF	ON	セッションタイムは動作しない	セッションタイムヘッダなし Allow:に UPDATE なし	Supported: timer Allow:UPDATE
ON	非対応機	セッションタイムは動作しない	Session-Expires: 90;refresher=uac Supported: timer Allow: UPDATE	セッションタイムヘッダなし
ON	OFF	セッションタイムは動作しない	Session-Expires: 90;refresher=uac Supported: timer Allow: UPDATE	セッションタイムヘッダなし Allow:に UPDATE なし
ON	ON	発信側から動作	Session-Expires: 90;refresher=uac Supported: timer Allow: UPDATE	200OK に Session-Expires: xx;refresher=uac Supported: timer Require: timer Allow: UPDATE

図 7-8 セッションタイム動作

リクエスト中の SessionTimer パラメータ			レスポンス側の動作
Supported:timer or Require:timer	Session-Expires ヘッダ	refresher	
有り	有り	uac	200 応答に以下のヘッダを含め、非リフレッシャとして起動する。 Session-Expires:値;refresher=uac 、 Supported:timer 、 Require:timer 、 Allow:UPDATE
有り	有り	uas	200 応答に以下のヘッダを含め、リフレッシャとして起動する。 Session-Expires:値;refresher=uas 、 Supported:timer 、 Require:timer 、 Allow:UPDATE
有り	有り	無し	200 応答に以下のヘッダを含め、リフレッシャとして起動する。 Session-Expires:値;refresher=uas 、 Supported:timer 、 Require:timer 、 Allow:UPDATE
有り	無し	-	200 応答に以下のヘッダを含め、リフレッシャとして起動する。 Session-Expires:値;refresher=uas 、 Supported:timer 、 Require:timer 、 Allow:UPDATE
無し	-	-	200 応答に以下のヘッダを含め、セッションタイムを解除する。 Supported:timer 、 Allow:UPDATE

図 7-9 initial-INVITE , re-INVITE , UPDATE 受信

レスポンス中の SessionTimer パラメータ			リクエスト側の動作
Supported:timer or Require:timer	Session-Expires ヘッダ	refresher	
－	有り	uac	リフレッシャとして起動する。
－	有り	uas	非リフレッシャとして起動する。
－	有り	無し	リフレッシャとして起動している場合は、更新を行いセッションタイマを解除する
－	無し	－	セッションタイマを解除する。

図 7-10 200OK (initial-INVITE , re-INVITE , UPDATE) 受信

Allow	条件	使用するメソッド
Allow がある	UPDATE がある	UPDATE
	UPDATE がない	INVITE
Allow がない	最初のネゴシエーションに Allow がない	INVITE
	Re-INVITE に Allow がない	最初に決定したメソッド

図 7-11 使用メソッドの決定

## 8. パラメータ

端末で使用するパラメータについて以下に示す。

### 端末操作で設定が可能なパラメータ

設定	パラメータ名	デフォルト値	設定範囲	説明
移動機 SIP アドレス設定	移動機 SIP アドレス設定	なし	最大 50 文字	使用可能な文字は半角英数記号(半角スペース、<#”[]¥`^`_`及び”@”の先頭、末尾、複数は使用不可)
SIP サーバー設定	SIP サーバー自動取得 (※N900iL 非対応)	OFF	ON/OFF	ON:DHCP より取得 OFF:移動機設定の SIP サーバーアドレス設定を使用
	SIP サーバー IP アドレス設定	0.0.0.0	最大 64 文字	IP アドレス及び、FQDN の形態で設定可能 使用可能な文字は半角英数字、記号、スペース (※N900iL は IP アドレスのみ、FQDN は非対応)
	Register サーバー IP アドレス設定	0.0.0.0	最大 64 文字	IP アドレス及び、FQDN の形態で設定可能 使用可能な文字は半角英数字、記号、スペース
	SIP サーバー ポート番号	5060	1～65535	
プレゼンスサーバー設定	プレゼンスサーバー IP アドレス設定	0.0.0.0	最大 64 文字	IP アドレス及び、FQDN の形態で設定可能 使用可能な文字は半角英数字、記号、スペース (※N900iL は IP アドレスのみ、FQDN は非対応)
	プレゼンスサーバー ポ ート設定	5060	1～65535	
SIP シーケンス設定	SIP シーケンス設定	自動(基本 SIP 優先)	自動(基本 SIP 優先) 自動(拡張 SIP 優先) 基本 SIP 固定 拡張 SIP 固定	
ダイジェスト認証設 定	ユーザーID	なし	最大 64 文字	使用可能文字は、ASCII コードの 0x20(SP)～0x7e(~)
	パスワード	なし	最大 64 文字	使用可能文字は、ASCII コードの 0x20(SP)～0x7e(~)
VoIP 設定	ジッタバッファ設定	ダイナミック	ダイナミック スタティック	(※N900iL はスタティックのみ)
	ジッタバッファサイズ [ms] (※N900iL は非対応)	240(ms)	40～240 (20[ms]ステップ)	ジッタバッファサイズの最大値の設定 注:ダイナミック/スタティックの両方に適用する
	使用するポート(RTP)	5006	1～65532	指定されたポートから4ポート分を RTP,RTCP 用のポートと して使用するため、実際の設定は 65532 まで。

## 9. インスタントメッセージ

インスタントメッセージは端末間でメッセージの交換を行う機能である。

なお、対応する Content-Type は text/plain のみで cpim(draft-ietf-impp-cpim-msgfmt-08)は非対応である。

### 9.1. 使用文字

文字コード: UTF-8

最大文字数: 300 byte

## 10. プレゼンス

プレゼンスとは、端末上にあらかじめ設定された他の端末の状態を把握する機能である。

### 10.1. プレゼンス情報のステータス

ユーザ設定が可能なステータスは、以下の通りである。

「オンライン」

「離席」

「取込中」

「会議中」

「休憩中」

「食事中」

「帰宅」

「外出中」

「出張中」

「秘密」

### 10.2. 未知のステータス

PIDF のステータス(mean=schedule)に予約されていない文字列が指定されていた場合には、no\_plan を受信したものとして動作する。

例)

ステータス情報の status(mean=schedule)に「ABCDEFGH」が指定されていた場合、ステータス文字列には「取込中」を表示する。

### 10.3. 動作詳細

#### 10.3.1. 電源立ち上げ時

- (1) 端末は、REGISTER を SIP サーバーへ送出する。  
このとき SIP サーバーからプレゼンスサーバーへ通知が送出される。  
プレゼンスサーバーは、必要により SUBSCRIBE を端末へ送出する。
- (2) 端末は、バディリストに登録があれば SUBSCRIBE をプレゼンスサーバー経由にて送出する。

#### 10.3.2. 定常動作

- (1) 端末は SUBSCRIBE を受信すると、自端末の状態を示す NOTIFY を送出する。
- (2) 端末が他端末から SUBSCRIBE を受信している状態で自端末の状態を更新すると、自端末の状態を示す NOTIFY を送出する。
- (3) 端末が他端末に SUBSCRIBE を送出している場合、サーバーから定期的もしくは不定期に当該端末に関する NOTIFY を受信する。端末は、この NOTIFY 中のメッセージを元に画面上のプレゼンス情報を更新する。
- (4) 端末は SUBSCRIBE の有効期限に指定された時間の半分会過後再度 SUBSCRIBE を送出する。
- (5) IP 変更を伴うハンドオーバーがあれば、再度 SUBSCRIBE を送出する。
- (6) SUBSCRIBE に対してエラー応答があった場合には NOTIFY の監視をとりやめる。

#### 10.3.3. 電話中のプレゼンスの情報

INVITE の送受信後には NOTIFY(on\_phone)を送出し、BYE の送受信後は元の状態を示す NOTIFY(online 等)を送出する。

なお FOMA 通話中の通知と VoIP 通話中の通知はそれぞれ独立に ON/OFF できる。

#### 10.3.4. 他端末のプレゼンスの表示更新

ユーザー操作で他端末プレゼンス情報表示の更新を行う。

この更新を行うときは SUBSCRIBE の有効期限内でも再度 SUBSCRIBE を送出する。

#### 10.3.5. ハンドオーバー時

IP 変更時には他端末への SUBSCRIBE を送出する。

IP の変更が無かった場合、他端末への SUBSCRIBE を送出しない。

#### 10.3.6. 圏外復帰時

一定期間圏外を経過し、圏内に復帰した場合は、自端末のプレゼンス情報の変更が無くても現在の状態を示す NOTIFY を送出する。

#### 10.3.7. 電源断時

電源 OFF 時／FOMA シングルモードに切り替えたとき／セルフモードに切り替えたときには、NOTIFY(offline)を送出する。このときスケジュールが設定されていた場合はスケジュールも通知する。

なお電源 OFF 時には unSUBSCRIBE は行わない。

#### 10.3.8.エラー関係

端末は、XML の内容が解析できなくてもエラー応答とはしない。

ただし、ネットワーク障害や存在しないダイアログが指定されるなどの準正常系の動作では、エラーを返送する。

#### 10.4. メッセージ

<?xml version="1.0" encoding="UTF-8"?>をメッセージの先頭に挿入する。

##### 10.4.1.DTD 定義

DTD 定義を以下に示す。このうち contact,note のエレメントは使用しない。

<!DOCTYPE presence >

<!ELEMENT presence (tuple+) >

<!ELEMENT tuple (status, contact?, note?) >

<!ELEMENT status (value) >

<!ELEMENT contact (#PCDATA) >

<!ELEMENT note (#PCDATA) >

<!ELEMENT value (#PCDATA) >

<!ATTLIST presence xmlns CDATA #FIXED "urn:ietf:params:cpim-presence" >

<!ATTLIST tuple id (#PCDATA) #REQUIRED >

<!ATTLIST contact priority NMTOKEN #REQUIRED >

## 10.4.2. NOTIFY 送信時のタプル情報

状態/操作		ステータス(status)		備考
		mean = mobile-phone	mean = schedule	
電源 ON 時		online	no_plan	電源 ON 時に以前の schedule 設定を解除する。
電源 OFF 時		offline	指定しない (tuple を設定しない)	schedule を指定しないことにより、サーバーにて schedule が保持される。たとえば出張設定後、電源 OFF すると offline/biz_trip が他端末で監視される。
通話開始時		on_phone	(tuple を設定しない)	
通話終了時		以前の設定	以前の設定	通話開始以前に通知していた設定を通知する。
ユーザー設定	オンラインを設定	online	no_plan	電源 ON 時にも「オンライン」に初期化
	取込中を設定	absence	no_plan	
	外出中を設定	absence	away	
	会議中を設定	absence	meeting	
	出張中を設定	absence	biz_trip	
	離席を設定	absence	step_out	
	休憩中を設定	absence	break	
	食事中を設定	absence	meal	
	帰宅を設定	absence	go_home	
	秘密を設定	absence	secret	

## 10.4.3. 他端末でのプレゼンスの表示例

他端末がプレゼンス状態を変更したことを NOTIFY にて通知されたら、プレゼンスの画面に表示する。

以下に、プレゼンス表示の一例を示す。

外出(グレー)、会議(グレー)、出張(グレー)等の(グレー)は、他端末が状態を変更してそのまま圏外へ移動した場合、または電源を切った場合のステータスを示す。

また、他端末が圏外状態のときのサブステータス(mean=schedule)は、サーバーで保持する。



表示	ステータス(status)		アイコン例	備考
	mean = mobile-phone	mean = schedule		
不明(グレー)	–	–		NOTIFY がまだ来ない場合 エラー応答が来た場合
オンライン	online			schedule は無視する。 未知のリテラルが来た場合に不明とせず「オンライン」とする。
オフライン	offline	指定なし or no_plan or 未知のリテラル		未知のリテラルが来た場合に不明とせず、「オフライン」とする(no_plan として扱う)。
外出中(グレー)	offline	away		他端末が圏外状態
会議中(グレー)	offline	meeting		他端末が圏外状態
出張中(グレー)	offline	biz_trip		他端末が圏外状態
離席(グレー)	offline	step_out		他端末が圏外状態
休憩中(グレー)	offline	break		他端末が圏外状態
食事中(グレー)	offline	meal		他端末が圏外状態
帰宅(グレー)	offline	go_home		他端末が圏外状態
秘密(グレー)	offline	secret		他端末が圏外状態
電話中	on_phone			schedule は無視する。 未知のリテラルも無視する。
取込中	absence	no_plan or 指定なし or 未知のリテラル		未知のリテラルが来た場合に不明とせず、「取込中」とする。
外出中	absence	away		
会議中	absence	meeting		
出張中	absence	biz_trip		
離席	absence	step_out		
休憩中	absence	break		
食事中	absence	meal		
帰宅	absence	go_home		
秘密	absence	secret		

## 10.5. メッセージフォーマット例

メッセージフォーマット例を以下に示す。

### 10.5.1. サブステータスがある場合

```

NOTIFY sip:3501@172.16.200.1 SIP/2.0
Via: SIP/2.0/UDP 172.16.200.150:5060;branch=z9hG4bK-abc
From: <sip:3500@sip.com>;tag=0000123
To: <sip:3501@172.16.200.1>
Call-ID: 00003579@sip.com
CSeq: 28752 NOTIFY
Contact: <sip:3500@172.16.200.150>
Max-Forwards: 70
Content-Type: text/plain ;charset=UTF-8
Content-Length: xxx

<?xml version="1.0" encoding="UTF-8"?>
<presence xmlns="urn:ietf:params:cpim-presence">
<tuple id= mobile-phone >
  <status>
    <value> absence </value>
  </status>
  <contact priority="1"></contact>
</tuple>
<note></note>
<tuple id= schedule >
  <status>
    <value> biz_trip </value>
  </status>
  <contact priority="1"></contact>
</tuple>
</presence>

```

### 10.5.2. サブステータスが無い場合

```

NOTIFY sip:3501@172.16.200.1 SIP/2.0
Via: SIP/2.0/UDP 172.16.200.150:5060;branch=z9hG4bK-abc
From: <sip:3500@sip.com>;tag=0000123
To: <sip:3501@172.16.200.1>
Call-ID: 00003579@sip.com
CSeq: 28752 NOTIFY
Contact: <sip:3500@172.16.200.150>
Max-Forwards: 70
Content-Type: text/plain ;charset=UTF-8
Content-Length: xxx

<?xml version="1.0" encoding="UTF-8"?>
<presence xmlns="urn:ietf:params:cpim-presence">
<tuple id= mobile-phone >
  <status>
    <value> offline </value>
  </status>
  <contact priority="1"></contact>
</tuple>
</presence>

```

## 11. VoIP シーケンス例

本章では VoIP 通信における SIP シーケンスの例を示す。なお、本シーケンス例は参考例であり、実際と異なる場合がある。また、900iL と 902iL の実装差分については本文を参照すること。

シーケンス例において、発信時ダイジェスト認証ありの場合と無しの場合とが混在しているが、ダイジェスト認証を使っているシーケンスにおいて必ずしもダイジェスト認証が必要というわけではない。同様に Call-ID 等のパラメータは、シーケンス例と異なった値が出力される。

また新規発信時のダイジェスト認証を使っていないシーケンス例においても、新規発信時の INVITE に対するダイジェスト認証を含むレスポンスを受信した場合は、ダイジェスト認証を実施する。シーケンス例の中の初期 INVITE で Proxy-Authorization ヘッダが含まれる場合と含まれない場合がある。これは電源投入、ユーザースキャン等の内部状態の初期化が起こった場合には Proxy-Authorization ヘッダが含まれない為である。

### 11.1. 登録

#### 11.1.1. REGISTER

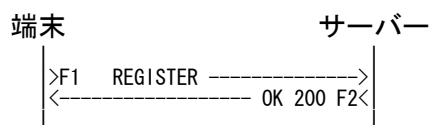


図 11-1REGISTER

```

=====
F1    192.168.2.19:1024(00002@sip.com) -> 192.168.1.1:5060(Server)

REGISTER sip:192.168.1.1 SIP/2.0
Via: SIP/2.0/UDP 192.168.2.19:5060;branch=z9hG4bK-305c320b-526964.270
From: <sip:00002@sip.com>
To: <sip:00002@sip.com>
Call-ID: 025cebc7@00002.192.168.1.1
CSeq: 1 REGISTER
Contact: <sip:00002@192.168.2.19>;expires=3600
Max-Forwards: 70
User-Agent: △△△△△△ //端末種別
Content-Length: 0

=====
F2    192.168.1.1:5062(Server) -> 192.168.2.19:5060(00002@sip.com)

SIP/2.0 200 OK
Via: SIP/2.0/UDP 192.168.2.19:5060;branch=z9hG4bK-305c320b-526964.270
From: <sip:00002@sip.com>
To: <sip:00002@sip.com>
Call-ID: 025cebc7@00002.192.168.1.1
CSeq: 1 REGISTER
Contact: <sip:00002@192.168.2.19>;expires=3600
Content-Length: 0
  
```

## 11.1.2.REGISTER(ダイジェスト認証)

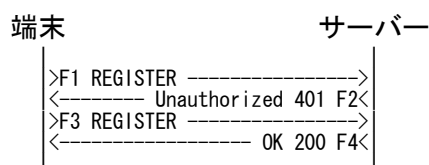


図 11-2REGISTER(ダイジェスト認証)

```
=====
```

F1 192.168.2.19:1024(00002@sip.com) -> 192.168.1.1:5060(Server)

```
REGISTER sip:192.168.1.1 SIP/2.0
Via: SIP/2.0/UDP 192.168.2.19:5060;branch=z9hG4bK-414ed9e5-526962.190
From: <sip:00002@sip.com>
To: <sip:00002@sip.com>
Call-ID: 025cebc7@00002.192.168.1.1
CSeq: 0 REGISTER
Contact: <sip:00002@192.168.2.19>;expires=3600
Max-Forwards: 70
User-Agent: △△△△△△ //端末種別
Content-Length: 0
```

```
=====
```

F2 192.168.1.1:5062(Server) -> 192.168.2.19:5060(00002@sip.com)

```
SIP/2.0 401 Unauthorized
Via: SIP/2.0/UDP 192.168.2.19:5060;branch=z9hG4bK-414ed9e5-526962.190
From: <sip:00002@sip.com>
To: <sip:00002@sip.com>
Call-ID: 025cebc7@00002.192.168.1.1
CSeq: 0 REGISTER
WWW-Authenticate: Digest realm="heliossv2", nonce="713000757ff54c3a948f8e0062f47f0b",
opaque="6277e1c03724feb722e89ea7509d5877", stale=false, algorithm=MD5, qop="auth,auth-int"
Content-Length: 0
```

```
=====
```

F3 192.168.2.19:1024(00002@sip.com) -> 192.168.1.1:5060(Server)

```
REGISTER sip:192.168.1.1 SIP/2.0
Via: SIP/2.0/UDP 192.168.2.19:5060;branch=z9hG4bK-305c320b-526964.270
From: <sip:00002@sip.com>
To: <sip:00002@sip.com>
Call-ID: 025cebc7@00002.192.168.1.1
CSeq: 1 REGISTER
Contact: <sip:00002@192.168.2.19>;expires=3600
Authorization: Digest username="00002", realm="heliossv2", nonce="713000757ff54c3a948f8e0062f47f0b",
uri="sip:192.168.1.1", response="445c2f4aa2099ac3045133b19a23bee5", algorithm=MD5, cnonce="78b6b1a4",
opaque="6277e1c03724feb722e89ea7509d5877", qop=auth, nc=00000001
Max-Forwards: 70
User-Agent: △△△△△△ //端末種別
Content-Length: 0
```

```
=====
```

F4 192.168.1.1:5062(Server) -> 192.168.2.19:5060(00002@sip.com)

```
SIP/2.0 200 OK
Via: SIP/2.0/UDP 192.168.2.19:5060;branch=z9hG4bK-305c320b-526964.270
From: <sip:00002@sip.com>
To: <sip:00002@sip.com>
Call-ID: 025cebc7@00002.192.168.1.1
CSeq: 1 REGISTER
Contact: <sip:00002@192.168.2.19>;expires=3600
Content-Length: 0
```

## 11.1.3.un-REGISTER



図 11-3 un-REGISTER

```
=====
```

F1      192.168.2.19:1037(00002@sip.com) -> 192.168.1.1:5060(Server)

REGISTER sip:192.168.1.1 SIP/2.0  
 Via: SIP/2.0/UDP 192.168.2.19:5060;branch=z9hG4bK-75f0e336-526882.159  
 From: <sip:00002@sip.com>  
 To: <sip:00002@sip.com>  
 Call-ID: 65af48e0@00002.192.168.1.1  
 CSeq: 2 REGISTER  
 Contact: <sip:00002@192.168.2.19>;expires=0  
 Max-Forwards: 70  
 User-Agent: △△△△△△ //端末種別  
 Content-Length: 0

```
=====
```

F2      192.168.1.1:5062(Server) -> 192.168.2.10:5060(00003@sip.com)

SIP/2.0 200 OK  
 Via: SIP/2.0/UDP 192.168.2.10:5060;branch=z9hG4bK-10ce0b06-678332.411  
 From: <sip:00003@sip.com>  
 To: <sip:00003@sip.com>  
 Call-ID: 558b7575@00003.192.168.1.1  
 CSeq: 1 REGISTER  
 Contact: <sip:00003@192.168.2.10>;expires=0  
 Content-Length: 0

## 11.2. 発信処理

## 11.2.1. 通常発信

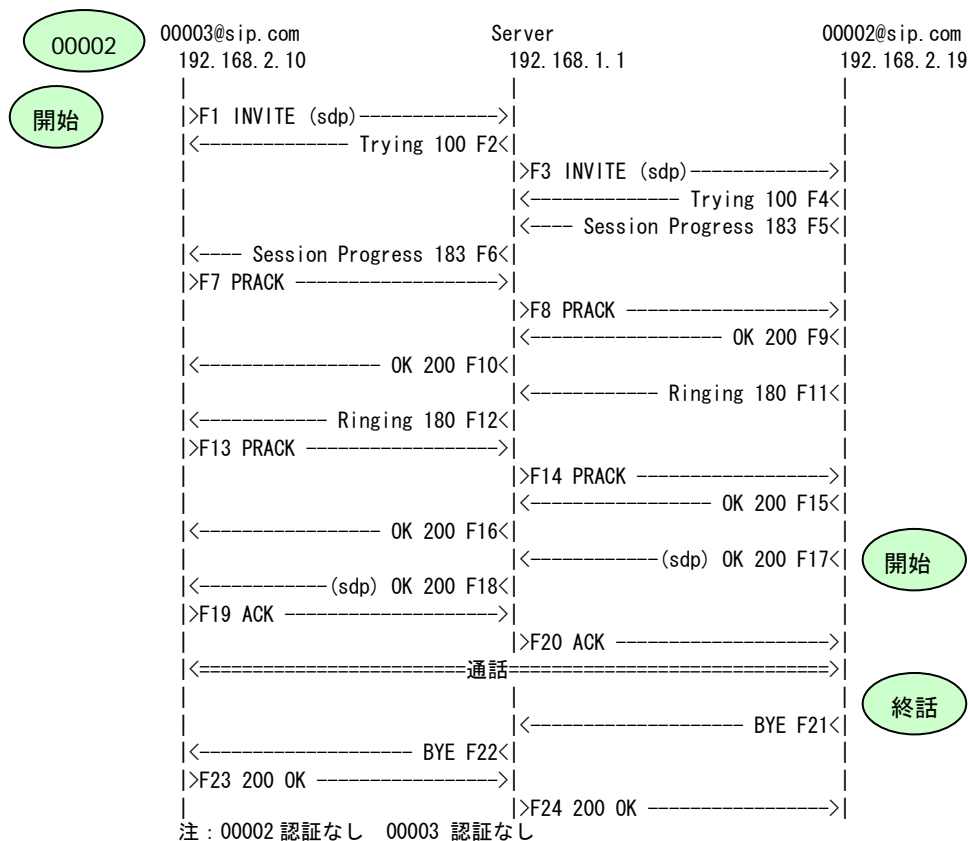


図 11-4 通常発信

```
=====
F1      192.168.2.10:1026 (00003@sip.com) -> 192.168.1.1:5060 (Server)

INVITE sip:00002@sip.com SIP/2.0
Via: SIP/2.0/UDP 192.168.2.10:5060;branch=z9hG4bK-75a90e13-681519.379
Route: <sip:192.168.1.1:5060>
From: <sip:00003@sip.com>;tag=7f47da79
To: <sip:00002@sip.com>
Call-ID: 74ab4366@00003.192.168.1.1
CSeq: 1597644125 INVITE
Contact: <sip:00003@192.168.2.10>
Max-Forwards: 70
Supported: 100rel, replaces
Allow: INVITE, ACK, BYE, CANCEL, OPTIONS, PRACK, MESSAGE, REFER, NOTIFY
Content-Type: application/sdp
Accept: application/sdp, message/sipfrag
Content-Length: 249

v=0
o=- 363305 701 IN IP4 192.168.2.10
s=-
c=IN IP4 192.168.2.10
```

```
t=0 0
m=audio 5006 RTP/AVP 0 8 4 18 96
a=rtpmap:0 PCMU/8000
a=rtpmap:8 PCMA/8000
a=rtpmap:4 G723/8000
a=rtpmap:18 G729/8000
a=rtpmap:96 telephone-event/8000
a=fmtp:96 0-11
```

```
=====
```

F2            192.168.1.1:5062(Server) -> 192.168.2.10:5060(00003@sip.com)

```
SIP/2.0 100 Trying
Via: SIP/2.0/UDP 192.168.2.10:5060;branch=z9hG4bK-75a90e13-681519.379
From: <sip:00003@sip.com>;tag=7f47da79
To: <sip:00002@sip.com>
Call-ID: 74ab4366@00003.192.168.1.1
CSeq: 1597644125 INVITE
Content-Length: 0
```

```
=====
```

F3            192.168.1.1:5062(Server) -> 192.168.2.19:5060(00002@sip.com)

```
INVITE sip:00002@192.168.2.19 SIP/2.0
Via: SIP/2.0/UDP 192.168.1.1:5060;branch=z9hG4bK-332.381359.1597644125
Via: SIP/2.0/UDP 192.168.2.10:5060;branch=z9hG4bK-75a90e13-681519.379
Record-Route: <sip:00002@192.168.1.1>
Route: <sip:192.168.1.1:5060>
From: 00003 <sip:00003@sip.com>;tag=7f47da79
To: <sip:00002@sip.com>
Call-ID: 74ab4366@00003.192.168.1.1
CSeq: 1597644125 INVITE
Contact: <sip:00003@192.168.2.10>
max-forwards: 69
supported: 100rel
supported: replaces
Allow: INVITE, ACK, BYE, CANCEL, OPTIONS, PRACK, MESSAGE, REFER, NOTIFY
Content-Type: application/sdp
Accept: application/sdp, message/sipfrag
Content-Length: 249
```

```
v=0
o=- 363305 701 IN IP4 192.168.2.10
s=-
c=IN IP4 192.168.2.10
t=0 0
m=audio 5006 RTP/AVP 0 8 4 18 96
a=rtpmap:0 PCMU/8000
a=rtpmap:8 PCMA/8000
a=rtpmap:4 G723/8000
a=rtpmap:18 G729/8000
a=rtpmap:96 telephone-event/8000
a=fmtp:96 0-11
```

```
=====
```

F4            192.168.2.19:1025(00002@sip.com) -> 192.168.1.1:5060(Server)

```
SIP/2.0 100 Trying
Via: SIP/2.0/UDP 192.168.1.1:5060;branch=z9hG4bK-332.381359.1597644125
```

Via: SIP/2.0/UDP 192.168.2.10:5060;branch=z9hG4bK-75a90e13-681519.379  
From: 00003 <sip:00003@sip.com>;tag=7f47da79  
To: <sip:00002@sip.com>  
Call-ID: 74ab4366@00003.192.168.1.1  
CSeq: 1597644125 INVITE  
Content-Length: 0

=====

F5            192.168.2.19:1025(00002@sip.com) -> 192.168.1.1:5060(Server)

SIP/2.0 183 Session Progress  
Via: SIP/2.0/UDP 192.168.1.1:5060;branch=z9hG4bK-332.381359.1597644125  
Via: SIP/2.0/UDP 192.168.2.10:5060;branch=z9hG4bK-75a90e13-681519.379  
Record-Route: <sip:00002@192.168.1.1>  
From: 00003 <sip:00003@sip.com>;tag=7f47da79  
To: <sip:00002@sip.com>;tag=6a6e0cb5  
Call-ID: 74ab4366@00003.192.168.1.1  
CSeq: 1597644125 INVITE  
Contact: <sip:00002@192.168.2.19>  
Require: 100rel  
RSeq: 1961165082  
Content-Length: 0

=====

F6            192.168.1.1:5062(Server) -> 192.168.2.10:5060(00003@sip.com)

SIP/2.0 183 Session Progress  
Via: SIP/2.0/UDP 192.168.2.10:5060;branch=z9hG4bK-75a90e13-681519.379  
Record-Route: <sip:00002@192.168.1.1>  
From: 00003 <sip:00003@sip.com>;tag=7f47da79  
To: <sip:00002@sip.com>;tag=6a6e0cb5  
Call-ID: 74ab4366@00003.192.168.1.1  
CSeq: 1597644125 INVITE  
Contact: <sip:00002@192.168.2.19>  
require: 100rel  
rseq: 1961165082  
Content-Length: 0

=====

F7            192.168.2.10:1026(00003@sip.com) -> 192.168.1.1:5060(Server)

PRACK sip:00002@192.168.1.1 SIP/2.0  
Via: SIP/2.0/UDP 192.168.2.10:5060;branch=z9hG4bK-1c929a66-681520.488  
Route: <sip:00002@192.168.2.19>  
From: 00003 <sip:00003@sip.com>;tag=7f47da79  
To: <sip:00002@sip.com>;tag=6a6e0cb5  
Call-ID: 74ab4366@00003.192.168.1.1  
CSeq: 1597644126 PRACK  
Max-Forwards: 70  
RAck: 1961165082 1597644125 INVITE  
Content-Length: 0

=====

F8            192.168.1.1:5062(Server) -> 192.168.2.19:5060(00002@sip.com)



PRACK sip:00002@192.168.2.19 SIP/2.0  
 Via: SIP/2.0/UDP 192.168.1.1:5060;branch=z9hG4bK-332.1085830794.1597644126  
 Via: SIP/2.0/UDP 192.168.2.10:5060;branch=z9hG4bK-1c929a66-681520.488  
 Route: <sip:00002@192.168.2.19>  
 From: 00003 <sip:00003@sip.com>;tag=7f47da79  
 To: <sip:00002@sip.com>;tag=6a6e0cb5  
 Call-ID: 74ab4366@00003.192.168.1.1  
 CSeq: 1597644126 PRACK  
 max-forwards: 69  
 rack: 1961165082 1597644125 INVITE  
 Content-Length: 0

=====

F9 192.168.2.19:1025(00002@sip.com) -> 192.168.1.1:5060(Server)

SIP/2.0 200 OK  
 Via: SIP/2.0/UDP 192.168.1.1:5060;branch=z9hG4bK-332.1085830794.1597644126  
 Via: SIP/2.0/UDP 192.168.2.10:5060;branch=z9hG4bK-1c929a66-681520.488  
 From: 00003 <sip:00003@sip.com>;tag=7f47da79  
 To: <sip:00002@sip.com>;tag=6a6e0cb5  
 Call-ID: 74ab4366@00003.192.168.1.1  
 CSeq: 1597644126 PRACK  
 Content-Length: 0

=====

F10 192.168.1.1:5062(Server) -> 192.168.2.10:5060(00003@sip.com)

SIP/2.0 200 OK  
 Via: SIP/2.0/UDP 192.168.2.10:5060;branch=z9hG4bK-1c929a66-681520.488  
 From: 00003 <sip:00003@sip.com>;tag=7f47da79  
 To: <sip:00002@sip.com>;tag=6a6e0cb5  
 Call-ID: 74ab4366@00003.192.168.1.1  
 CSeq: 1597644126 PRACK  
 Content-Length: 0

=====

F11 192.168.2.19:1025(00002@sip.com) -> 192.168.1.1:5060(Server)

SIP/2.0 180 Ringing  
 Via: SIP/2.0/UDP 192.168.1.1:5060;branch=z9hG4bK-332.381359.1597644125  
 Via: SIP/2.0/UDP 192.168.2.10:5060;branch=z9hG4bK-75a90e13-681519.379  
 Record-Route: <sip:00002@192.168.1.1>  
 From: 00003 <sip:00003@sip.com>;tag=7f47da79  
 To: <sip:00002@sip.com>;tag=6a6e0cb5  
 Call-ID: 74ab4366@00003.192.168.1.1  
 CSeq: 1597644125 INVITE  
 Contact: <sip:00002@192.168.2.19>  
 Require: 100rel  
 RSeq: 1961165083  
 Content-Length: 0

=====

F12 192.168.1.1:5062(Server) -> 192.168.2.10:5060(00003@sip.com)

SIP/2.0 180 Ringing

FOMA/WLAN デュアル端末に関する技術参考資料 第 1.2 版

Via: SIP/2.0/UDP 192.168.2.10:5060;branch=z9hG4bK-75a90e13-681519.379  
 Record-Route: <sip:00002@192.168.1.1>  
 From: 00003 <sip:00003@sip.com>;tag=7f47da79  
 To: <sip:00002@sip.com>;tag=6a6e0cb5  
 Call-ID: 74ab4366@00003.192.168.1.1  
 CSeq: 1597644125 INVITE  
 Contact: <sip:00002@192.168.2.19>  
 require: 100rel  
 rseq: 1961165083  
 Content-Length: 0

=====

F13 192.168.2.10:1026(00003@sip.com) -> 192.168.1.1:5060(Server)

PRACK sip:00002@192.168.1.1 SIP/2.0  
 Via: SIP/2.0/UDP 192.168.2.10:5060;branch=z9hG4bK-55904980-681520.889  
 Route: <sip:00002@192.168.2.19>  
 From: 00003 <sip:00003@sip.com>;tag=7f47da79  
 To: <sip:00002@sip.com>;tag=6a6e0cb5  
 Call-ID: 74ab4366@00003.192.168.1.1  
 CSeq: 1597644127 PRACK  
 Max-Forwards: 70  
 RACK: 1961165083 1597644125 INVITE  
 Content-Length: 0

=====

F14 192.168.1.1:5062(Server) -> 192.168.2.19:5060(00002@sip.com)

PRACK sip:00002@192.168.2.19 SIP/2.0  
 Via: SIP/2.0/UDP 192.168.1.1:5060;branch=z9hG4bK-332.1085830794.1597644127  
 Via: SIP/2.0/UDP 192.168.2.10:5060;branch=z9hG4bK-55904980-681520.889  
 Route: <sip:00002@192.168.2.19>  
 From: 00003 <sip:00003@sip.com>;tag=7f47da79  
 To: <sip:00002@sip.com>;tag=6a6e0cb5  
 Call-ID: 74ab4366@00003.192.168.1.1  
 CSeq: 1597644127 PRACK  
 max-forwards: 69  
 rack: 1961165083 1597644125 INVITE  
 Content-Length: 0

=====

F15 192.168.2.19:1025(00002@sip.com) -> 192.168.1.1:5060(Server)

SIP/2.0 200 OK  
 Via: SIP/2.0/UDP 192.168.1.1:5060;branch=z9hG4bK-332.1085830794.1597644127  
 Via: SIP/2.0/UDP 192.168.2.10:5060;branch=z9hG4bK-55904980-681520.889  
 From: 00003 <sip:00003@sip.com>;tag=7f47da79  
 To: <sip:00002@sip.com>;tag=6a6e0cb5  
 Call-ID: 74ab4366@00003.192.168.1.1  
 CSeq: 1597644127 PRACK  
 Content-Length: 0

=====

F16 192.168.1.1:5062(Server) -> 192.168.2.10:5060(00003@sip.com)

SIP/2.0 200 OK  
 Via: SIP/2.0/UDP 192.168.2.10:5060;branch=z9hG4bK-55904980-681520.889  
 From: 00003 <sip:00003@sip.com>;tag=7f47da79  
 To: <sip:00002@sip.com>;tag=6a6e0cb5  
 Call-ID: 74ab4366@00003.192.168.1.1  
 CSeq: 1597644127 PRACK  
 Content-Length: 0

=====

F17        192.168.2.19:1025(00002@sip.com) -> 192.168.1.1:5060(Server)

SIP/2.0 200 OK  
 Via: SIP/2.0/UDP 192.168.1.1:5060;branch=z9hG4bK-332.381359.1597644125  
 Via: SIP/2.0/UDP 192.168.2.10:5060;branch=z9hG4bK-75a90e13-681519.379  
 Record-Route: <sip:00002@192.168.1.1>  
 From: 00003 <sip:00003@sip.com>;tag=7f47da79  
 To: <sip:00002@sip.com>;tag=6a6e0cb5  
 Call-ID: 74ab4366@00003.192.168.1.1  
 CSeq: 1597644125 INVITE  
 Contact: <sip:00002@192.168.2.19>  
 Supported: 100rel, replaces  
 Allow: INVITE, ACK, BYE, CANCEL, OPTIONS, PRACK, MESSAGE, REFER, NOTIFY  
 Content-Type: application/sdp  
 Accept: application/sdp, message/sipfrag  
 Content-Length: 177

v=0  
 o=- 272930 13301 IN IP4 192.168.2.19  
 s=-  
 c=IN IP4 192.168.2.19  
 t=0 0  
 m=audio 5006 RTP/AVP 0 96  
 a=rtpmap:0 PCMU/8000  
 a=rtpmap:96 telephone-event/8000  
 a=fmtp:96 0-11

=====

F18        192.168.1.1:5062(Server) -> 192.168.2.10:5060(00003@sip.com)

SIP/2.0 200 OK  
 Via: SIP/2.0/UDP 192.168.2.10:5060;branch=z9hG4bK-75a90e13-681519.379  
 Record-Route: <sip:00002@192.168.1.1>  
 From: 00003 <sip:00003@sip.com>;tag=7f47da79  
 To: <sip:00002@sip.com>;tag=6a6e0cb5  
 Call-ID: 74ab4366@00003.192.168.1.1  
 CSeq: 1597644125 INVITE  
 Contact: <sip:00002@192.168.2.19>  
 supported: 100rel  
 supported: replaces  
 Allow: INVITE, ACK, BYE, CANCEL, OPTIONS, PRACK, MESSAGE, REFER, NOTIFY  
 Content-Type: application/sdp  
 Accept: application/sdp, message/sipfrag  
 Content-Length: 177

v=0  
 o=- 272930 13301 IN IP4 192.168.2.19  
 s=-  
 c=IN IP4 192.168.2.19  
 t=0 0  
 m=audio 5006 RTP/AVP 0 96

a=rtpmap:0 PCMU/8000  
a=rtpmap:96 telephone-event/8000  
a=fmtp:96 0-11

=====

F19 192.168.2.10:1026(00003@sip.com) -> 192.168.1.1:5060(Server)

ACK sip:00002@192.168.1.1 SIP/2.0  
Via: SIP/2.0/UDP 192.168.2.10:5060;branch=z9hG4bK-34b62c1c-681526.771  
Route: <sip:00002@192.168.2.19>  
From: 00003 <sip:00003@sip.com>;tag=7f47da79  
To: <sip:00002@sip.com>;tag=6a6e0cb5  
Call-ID: 74ab4366@00003.192.168.1.1  
CSeq: 1597644125 ACK  
Max-Forwards: 70  
Content-Length: 0

=====

F20 192.168.1.1:5062(Server) -> 192.168.2.19:5060(00002@sip.com)

ACK sip:00002@192.168.2.19 SIP/2.0  
Via: SIP/2.0/UDP 192.168.1.1:5060;branch=z9hG4bK-332.1085830800.1597644125  
Via: SIP/2.0/UDP 192.168.2.10:5060;branch=z9hG4bK-34b62c1c-681526.771  
From: 00003 <sip:00003@sip.com>;tag=7f47da79  
To: <sip:00002@sip.com>;tag=6a6e0cb5  
Call-ID: 74ab4366@00003.192.168.1.1  
CSeq: 1597644125 ACK  
max-forwards: 69  
Content-Length: 0

=====

F21 192.168.2.19:1025(00002@sip.com) -> 192.168.1.1:5060(Server)

BYE sip:00002@192.168.1.1 SIP/2.0  
Via: SIP/2.0/UDP 192.168.2.19:5060;branch=z9hG4bK-216c5121-530086.721  
Route: <sip:00003@192.168.2.10>  
From: <sip:00002@sip.com>;tag=6a6e0cb5  
To: 00003 <sip:00003@sip.com>;tag=7f47da79  
Call-ID: 74ab4366@00003.192.168.1.1  
CSeq: 1636806603 BYE  
Proxy-Authorization: Digest username="00002", realm="heliossv2",  
nonce="5b9dd943a8f3f8080046d8e6a132ce04", uri="sip:00002@192.168.1.1",  
response="4bfa2320ce651a7858320802d0948cab", algorithm=MD5, cnonce="4ca69e45",  
opaque="10e95934929629ceed4c913a34b5da5", qop=auth, nc=00000008  
Max-Forwards: 70  
Content-Length: 0

=====

F22 192.168.1.1:5062(Server) -> 192.168.2.10:5060(00003@sip.com)

BYE sip:00003@192.168.2.10 SIP/2.0  
Via: SIP/2.0/UDP 192.168.1.1:5060;branch=z9hG4bK-331.1085830811.1636806603  
Via: SIP/2.0/UDP 192.168.2.19:5060;branch=z9hG4bK-216c5121-530086.721  
Route: <sip:00003@192.168.2.10>  
From: <sip:00002@sip.com>;tag=6a6e0cb5  
To: 00003 <sip:00003@sip.com>;tag=7f47da79

Call-ID: 74ab4366@00003.192.168.1.1  
CSeq: 1636806603 BYE  
max-forwards: 69  
Content-Length: 0

=====

F23        192.168.2.10:1026(00003@sip.com) -> 192.168.1.1:5060(Server)

SIP/2.0 200 OK  
Via: SIP/2.0/UDP 192.168.1.1:5060;branch=z9hG4bK-331.1085830811.1636806603  
Via: SIP/2.0/UDP 192.168.2.19:5060;branch=z9hG4bK-216c5121-530086.721  
From: <sip:00002@sip.com>;tag=6a6e0cb5  
To: 00003 <sip:00003@sip.com>;tag=7f47da79  
Call-ID: 74ab4366@00003.192.168.1.1  
CSeq: 1636806603 BYE  
Content-Length: 0

=====

F24        192.168.1.1:5062(Server) -> 192.168.2.19:5060(00002@sip.com)

SIP/2.0 200 OK  
Via: SIP/2.0/UDP 192.168.2.19:5060;branch=z9hG4bK-216c5121-530086.721  
From: <sip:00002@sip.com>;tag=6a6e0cb5  
To: 00003 <sip:00003@sip.com>;tag=7f47da79  
Call-ID: 74ab4366@00003.192.168.1.1  
CSeq: 1636806603 BYE  
Content-Length: 0

=====

## 11.2.2. 擬似分割発呼

開始キー、発信先電話番号を押下し、一定時間(5 秒)経過後、または【開始】キー押下で端末は発呼する。(※N900iL では【開始】キー押下での発呼に非対応)発呼後のシーケンスは 11.2.1 通常発呼と同じシーケンスとなる。

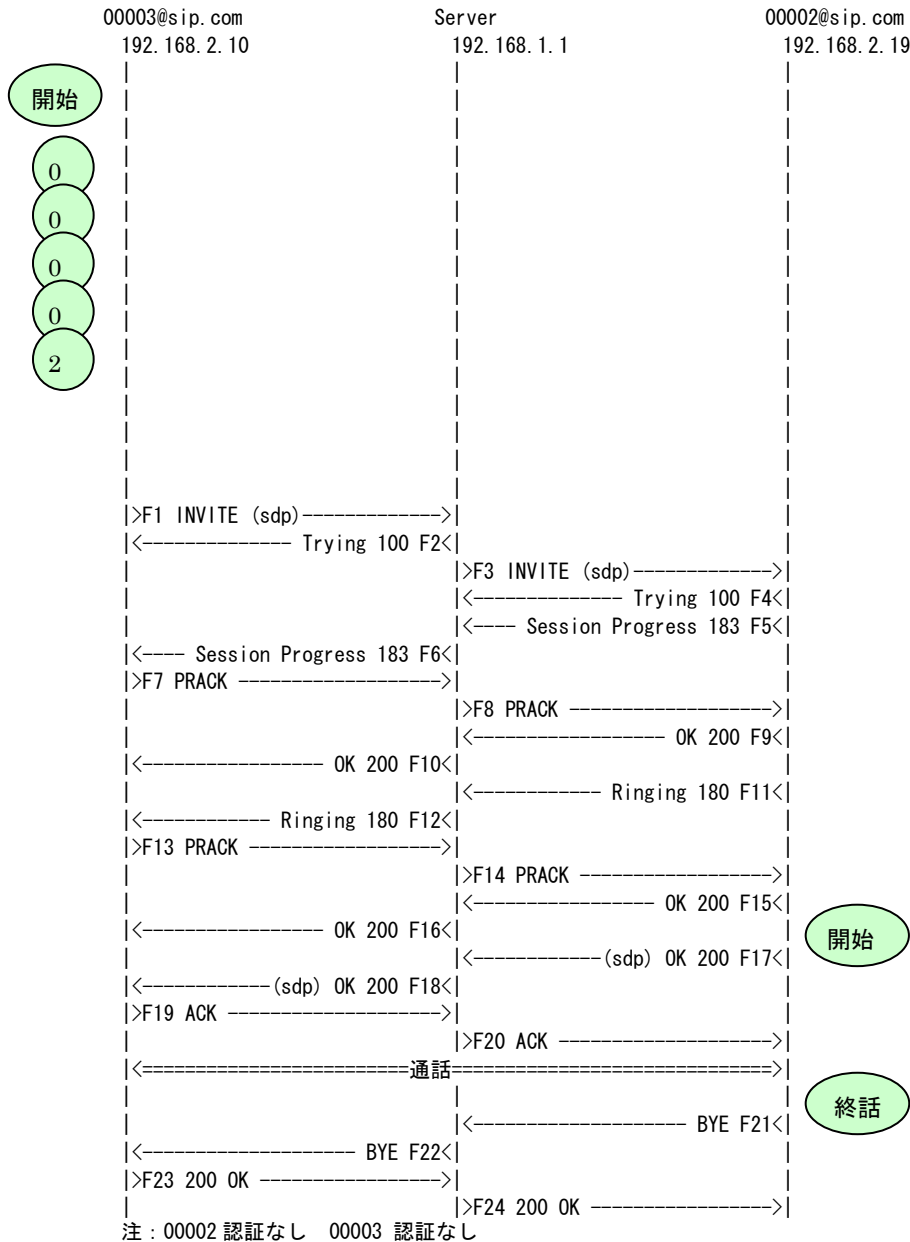


図 11-5 擬似分割発呼



F2 192.168.1.1:5062 (Server) -> 192.168.2.19:5060 (00002@sip.com)

SIP/2.0 407 Proxy Authentication Required  
Via: SIP/2.0/UDP 192.168.2.19:5060;branch=z9hG4bK-3fee8ab2-526138.500  
From: <sip:00002@sip.com>;tag=1b83bdbb  
To: <sip:00003@sip.com>  
Call-ID: 385517ad@00002.192.168.1.1  
CSeq: 1868355500 INVITE  
Proxy-Authenticate: Digest realm="heliossv2", nonce="b9a3d4ba86ab7240fd9df483dfc49958",  
opaque="f187708315fc2e2068fc049915d2a626", stale=false, algorithm=MD5, qop="auth,auth-int"  
Content-Length: 0

F3 192.168.2.19:1036 (00002@sip.com) -> 192.168.1.1:5060 (Server)

ACK sip:00003@sip.com SIP/2.0  
Via: SIP/2.0/UDP 192.168.2.19:5060;branch=z9hG4bK-3fee8ab2-526138.500  
Route: <sip:192.168.1.1:5060>  
From: <sip:00002@sip.com>;tag=1b83bdbb  
To: <sip:00003@sip.com>  
Call-ID: 385517ad@00002.192.168.1.1  
CSeq: 1868355500 ACK  
Content-Length: 0

F4 192.168.2.19:1036 (00002@sip.com) -> 192.168.1.1:5060 (Server)

INVITE sip:00003@sip.com SIP/2.0  
Via: SIP/2.0/UDP 192.168.2.19:5060;branch=z9hG4bK-6b0cc931-526138.970  
Route: <sip:192.168.1.1:5060>  
From: <sip:00002@sip.com>;tag=1b83bdbb  
To: <sip:00003@sip.com>  
Call-ID: 385517ad@00002.192.168.1.1  
CSeq: 1868355501 INVITE  
Contact: <sip:00002@192.168.2.19>  
Proxy-Authorization: Digest username="00002", realm="heliossv2", nonce="b9a3d4ba86ab7240fd9df483dfc49958",  
uri="sip:00003@sip.com", response="1a8d13c6ce1ffb30dcdac91520f53a4c", algorithm=MD5, cnonce="3f4c8d80",  
opaque="f187708315fc2e2068fc049915d2a626", qop=auth, nc=00000001  
Max-Forwards: 70  
Supported: 100rel, replaces  
Allow: INVITE, ACK, BYE, CANCEL, OPTIONS, PRACK, MESSAGE, REFER, NOTIFY  
Content-Type: application/sdp  
Accept: application/sdp, message/sipfrag  
Content-Length: 249

v=0  
o=- 481117 201 IN IP4 192.168.2.19  
s=-  
c=IN IP4 192.168.2.19  
t=0 0  
m=audio 5006 RTP/AVP 0 8 4 18 96  
a=rtpmap:0 PCMU/8000  
a=rtpmap:8 PCMA/8000  
a=rtpmap:4 G723/8000  
a=rtpmap:18 G729/8000  
a=rtpmap:96 telephone-event/8000  
a=fmtp:96 0-11

F5 192.168.1.1:5062 (Server) -> 192.168.2.19:5060 (00002@sip.com)

SIP/2.0 100 Trying  
Via: SIP/2.0/UDP 192.168.2.19:5060;branch=z9hG4bK-6b0cc931-526138.970  
From: <sip:00002@sip.com>;tag=1b83bdbb  
To: <sip:00003@sip.com>  
Call-ID: 385517ad@00002.192.168.1.1  
CSeq: 1868355501 INVITE  
Content-Length: 0

F6 192.168.1.1:5062 (Server) -> 192.168.2.10:5060 (00003@sip.com)



```

INVITE sip:00003@192.168.2.10 SIP/2.0
Via: SIP/2.0/UDP 192.168.1.1:5060;branch=z9hG4bK-218.871448.1868355501
Via: SIP/2.0/UDP 192.168.2.19:5060;branch=z9hG4bK-6b0cc931-526138.970
Record-Route: <sip:00003@192.168.1.1>
Route: <sip:192.168.1.1:5060>
From: 00002 <sip:00002@sip.com>;tag=1b83bdbb
To: <sip:00003@sip.com>
Call-ID: 385517ad@00002.192.168.1.1
CSeq: 1868355501 INVITE
Contact: <sip:00002@192.168.2.19>
max-forwards: 69
supported: 100rel
supported: replaces
Allow: INVITE, ACK, BYE, CANCEL, OPTIONS, PRACK, MESSAGE, REFER, NOTIFY
Content-Type: application/sdp
Accept: application/sdp, message/sipfrag
Content-Length: 249

```

```

v=0
o=- 481117 201 IN IP4 192.168.2.19
s=-
c=IN IP4 192.168.2.19
t=0 0
m=audio 5006 RTP/AVP 0 8 4 18 96
a=rtpmap:0 PCMU/8000
a=rtpmap:8 PCMA/8000
a=rtpmap:4 G723/8000
a=rtpmap:18 G729/8000
a=rtpmap:96 telephone-event/8000
a=fmtp:96 0-11

```

```
=====
```

F7            192.168.2.10:1075(00003@sip.com) -> 192.168.1.1:5060(Server)

```

SIP/2.0 100 Trying
Via: SIP/2.0/UDP 192.168.1.1:5060;branch=z9hG4bK-218.871448.1868355501
Via: SIP/2.0/UDP 192.168.2.19:5060;branch=z9hG4bK-6b0cc931-526138.970
From: 00002 <sip:00002@sip.com>;tag=1b83bdbb
To: <sip:00003@sip.com>
Call-ID: 385517ad@00002.192.168.1.1
CSeq: 1868355501 INVITE
Content-Length: 0

```

```
=====
```

F8            192.168.2.10:1075(00003@sip.com) -> 192.168.1.1:5060(Server)

```

SIP/2.0 183 Session Progress
Via: SIP/2.0/UDP 192.168.1.1:5060;branch=z9hG4bK-218.871448.1868355501
Via: SIP/2.0/UDP 192.168.2.19:5060;branch=z9hG4bK-6b0cc931-526138.970
Record-Route: <sip:00003@192.168.1.1>
From: 00002 <sip:00002@sip.com>;tag=1b83bdbb
To: <sip:00003@sip.com>;tag=35b3498b
Call-ID: 385517ad@00002.192.168.1.1
CSeq: 1868355501 INVITE
Contact: <sip:00003@192.168.2.10>
Require: 100rel
RSeq: 140062457
Content-Length: 0

```

```
=====
```

F9            192.168.1.1:5062(Server) -> 192.168.2.19:5060(00002@sip.com)

```

SIP/2.0 183 Session Progress
Via: SIP/2.0/UDP 192.168.2.19:5060;branch=z9hG4bK-6b0cc931-526138.970
Record-Route: <sip:00003@192.168.1.1>
From: 00002 <sip:00002@sip.com>;tag=1b83bdbb
To: <sip:00003@sip.com>;tag=35b3498b
Call-ID: 385517ad@00002.192.168.1.1
CSeq: 1868355501 INVITE
Contact: <sip:00003@192.168.2.10>
require: 100rel
rseq: 140062457
Content-Length: 0

```

F10 192.168.2.19:1036(00002@sip.com) -> 192.168.1.1:5060(Server)

PRACK sip:00003@192.168.1.1 SIP/2.0  
Via: SIP/2.0/UDP 192.168.2.19:5060;branch=z9hG4bK-439ad2cc-526140.683  
Route: <sip:00003@192.168.2.10>  
From: 00002 <sip:00002@sip.com>;tag=1b83bdbb  
To: <sip:00003@sip.com>;tag=35b3498b  
Call-ID: 385517ad@00002.192.168.1.1  
CSeq: 1868355502 PRACK  
Proxy-Authorization: Digest username="00002", realm="heliossv2", nonce="b9a3d4ba86ab7240fd9df483dfc49958",  
uri="sip:00003@192.168.1.1", response="92eec9a7a164676f0d30dbef484e0f64", algorithm=MD5, cnonce="1c406bbe",  
opaque="f187708315fc2e2068fc049915d2a626", qop=auth, nc=00000002  
Max-Forwards: 70  
RAck: 140062457 1868355501 INVITE  
Content-Length: 0

F11 192.168.1.1:5062(Server) -> 192.168.2.10:5060(00003@sip.com)

PRACK sip:00003@192.168.2.10 SIP/2.0  
Via: SIP/2.0/UDP 192.168.1.1:5060;branch=z9hG4bK-218.1085826865.1868355502  
Via: SIP/2.0/UDP 192.168.2.19:5060;branch=z9hG4bK-439ad2cc-526140.683  
Route: <sip:00003@192.168.2.10>  
From: 00002 <sip:00002@sip.com>;tag=1b83bdbb  
To: <sip:00003@sip.com>;tag=35b3498b  
Call-ID: 385517ad@00002.192.168.1.1  
CSeq: 1868355502 PRACK  
max-forwards: 69  
rack: 140062457 1868355501 INVITE  
Content-Length: 0

F12 192.168.2.10:1075(00003@sip.com) -> 192.168.1.1:5060(Server)

SIP/2.0 200 OK  
Via: SIP/2.0/UDP 192.168.1.1:5060;branch=z9hG4bK-218.1085826865.1868355502  
Via: SIP/2.0/UDP 192.168.2.19:5060;branch=z9hG4bK-439ad2cc-526140.683  
From: 00002 <sip:00002@sip.com>;tag=1b83bdbb  
To: <sip:00003@sip.com>;tag=35b3498b  
Call-ID: 385517ad@00002.192.168.1.1  
CSeq: 1868355502 PRACK  
Content-Length: 0

F13 192.168.2.10:1075(00003@sip.com) -> 192.168.1.1:5060(Server)

SIP/2.0 180 Ringing  
Via: SIP/2.0/UDP 192.168.1.1:5060;branch=z9hG4bK-218.871448.1868355501  
Via: SIP/2.0/UDP 192.168.2.19:5060;branch=z9hG4bK-6b0cc931-526138.970  
Record-Route: <sip:00003@192.168.1.1>  
From: 00002 <sip:00002@sip.com>;tag=1b83bdbb  
To: <sip:00003@sip.com>;tag=35b3498b  
Call-ID: 385517ad@00002.192.168.1.1  
CSeq: 1868355501 INVITE  
Contact: <sip:00003@192.168.2.10>  
Require: 100rel  
RSeq: 140062458  
Content-Length: 0

F14 192.168.1.1:5062(Server) -> 192.168.2.19:5060(00002@sip.com)

SIP/2.0 200 OK  
Via: SIP/2.0/UDP 192.168.2.19:5060;branch=z9hG4bK-439ad2cc-526140.683  
From: 00002 <sip:00002@sip.com>;tag=1b83bdbb  
To: <sip:00003@sip.com>;tag=35b3498b  
Call-ID: 385517ad@00002.192.168.1.1  
CSeq: 1868355502 PRACK  
Content-Length: 0

F15 192.168.1.1:5062(Server) -> 192.168.2.19:5060(00002@sip.com)

SIP/2.0 180 Ringing  
Via: SIP/2.0/UDP 192.168.2.19:5060;branch=z9hG4bK-6b0cc931-526138.970  
Record-Route: <sip:00003@192.168.1.1>  
From: 00002 <sip:00002@sip.com>;tag=1b83bdbb  
To: <sip:00003@sip.com>;tag=35b3498b  
Call-ID: 385517ad@00002.192.168.1.1  
CSeq: 1868355501 INVITE  
Contact: <sip:00003@192.168.2.10>  
require: 100rel  
rseq: 140062458  
Content-Length: 0

F16 192.168.2.19:1036(00002@sip.com) -> 192.168.1.1:5060(Server)

PRACK sip:00003@192.168.1.1 SIP/2.0  
Via: SIP/2.0/UDP 192.168.2.19:5060;branch=z9hG4bK-6ffd1fdf-526140.881  
Route: <sip:00003@192.168.2.10>  
From: 00002 <sip:00002@sip.com>;tag=1b83bdbb  
To: <sip:00003@sip.com>;tag=35b3498b  
Call-ID: 385517ad@00002.192.168.1.1  
CSeq: 1868355503 PRACK  
Proxy-Authorization: Digest username="00002", realm="heliossv2", nonce="b9a3d4ba86ab7240fd9df483dfc49958",  
uri="sip:00003@192.168.1.1", response="423d9bdbcbad7a9d9906e4d510aa56b", algorithm=MD5, cnonce="4f0be911",  
opaque="f187708315fc2e2068fc049915d2a626", qop=auth, nc=00000003  
Max-Forwards: 70  
RAck: 140062458 1868355501 INVITE  
Content-Length: 0

F17 192.168.1.1:5062(Server) -> 192.168.2.10:5060(00003@sip.com)

PRACK sip:00003@192.168.2.10 SIP/2.0  
Via: SIP/2.0/UDP 192.168.1.1:5060;branch=z9hG4bK-218.1085826865.1868355503  
Via: SIP/2.0/UDP 192.168.2.19:5060;branch=z9hG4bK-6ffd1fdf-526140.881  
Route: <sip:00003@192.168.2.10>  
From: 00002 <sip:00002@sip.com>;tag=1b83bdbb  
To: <sip:00003@sip.com>;tag=35b3498b  
Call-ID: 385517ad@00002.192.168.1.1  
CSeq: 1868355503 PRACK  
max-forwards: 69  
rack: 140062458 1868355501 INVITE  
Content-Length: 0

F18 192.168.2.10:1075(00003@sip.com) -> 192.168.1.1:5060(Server)

SIP/2.0 200 OK  
Via: SIP/2.0/UDP 192.168.1.1:5060;branch=z9hG4bK-218.1085826865.1868355503  
Via: SIP/2.0/UDP 192.168.2.19:5060;branch=z9hG4bK-6ffd1fdf-526140.881  
From: 00002 <sip:00002@sip.com>;tag=1b83bdbb  
To: <sip:00003@sip.com>;tag=35b3498b  
Call-ID: 385517ad@00002.192.168.1.1  
CSeq: 1868355503 PRACK  
Content-Length: 0

F19 192.168.1.1:5062(Server) -> 192.168.2.19:5060(00002@sip.com)

SIP/2.0 200 OK  
Via: SIP/2.0/UDP 192.168.2.19:5060;branch=z9hG4bK-6ffd1fdf-526140.881  
From: 00002 <sip:00002@sip.com>;tag=1b83bdbb  
To: <sip:00003@sip.com>;tag=35b3498b  
Call-ID: 385517ad@00002.192.168.1.1  
CSeq: 1868355503 PRACK  
Content-Length: 0

F20 192.168.2.10:1075(00003@sip.com) -> 192.168.1.1:5060(Server)

SIP/2.0 180 Ringing  
 Via: SIP/2.0/UDP 192.168.1.1:5060;branch=z9hG4bK-218.871448.1868355501  
 Via: SIP/2.0/UDP 192.168.2.19:5060;branch=z9hG4bK-6b0cc931-526138.970  
 Record-Route: <sip:00003@192.168.1.1>  
 From: 00002 <sip:00002@sip.com>;tag=1b83bdbb  
 To: <sip:00003@sip.com>;tag=35b3498b  
 Call-ID: 385517ad@00002.192.168.1.1  
 CSeq: 1868355501 INVITE  
 Contact: <sip:00003@192.168.2.10>  
 Require: 100rel  
 RSeq: 140062465  
 Content-Length: 0

F21 192.168.1.1:5062(Server) -> 192.168.2.19:5060(00002@sip.com)

SIP/2.0 180 Ringing  
 Via: SIP/2.0/UDP 192.168.2.19:5060;branch=z9hG4bK-6b0cc931-526138.970  
 Record-Route: <sip:00003@192.168.1.1>  
 From: 00002 <sip:00002@sip.com>;tag=1b83bdbb  
 To: <sip:00003@sip.com>;tag=35b3498b  
 Call-ID: 385517ad@00002.192.168.1.1  
 CSeq: 1868355501 INVITE  
 Contact: <sip:00003@192.168.2.10>  
 require: 100rel  
 rseq: 140062465  
 Content-Length: 0

F22 192.168.2.10:1075(00003@sip.com) -> 192.168.1.1:5060(Server)

SIP/2.0 180 Ringing  
 Via: SIP/2.0/UDP 192.168.1.1:5060;branch=z9hG4bK-218.871448.1868355501  
 Via: SIP/2.0/UDP 192.168.2.19:5060;branch=z9hG4bK-6b0cc931-526138.970  
 Record-Route: <sip:00003@192.168.1.1>  
 From: 00002 <sip:00002@sip.com>;tag=1b83bdbb  
 To: <sip:00003@sip.com>;tag=35b3498b  
 Call-ID: 385517ad@00002.192.168.1.1  
 CSeq: 1868355501 INVITE  
 Contact: <sip:00003@192.168.2.10>  
 Require: 100rel  
 RSeq: 140062465  
 Content-Length: 0

F23 192.168.1.1:5062(Server) -> 192.168.2.19:5060(00002@sip.com)

SIP/2.0 180 Ringing  
 Via: SIP/2.0/UDP 192.168.2.19:5060;branch=z9hG4bK-6b0cc931-526138.970  
 Record-Route: <sip:00003@192.168.1.1>  
 From: 00002 <sip:00002@sip.com>;tag=1b83bdbb  
 To: <sip:00003@sip.com>;tag=35b3498b  
 Call-ID: 385517ad@00002.192.168.1.1  
 CSeq: 1868355501 INVITE  
 Contact: <sip:00003@192.168.2.10>  
 require: 100rel  
 rseq: 140062465  
 Content-Length: 0

F24 192.168.2.10:1075(00003@sip.com) -> 192.168.1.1:5060(Server)

SIP/2.0 180 Ringing  
 Via: SIP/2.0/UDP 192.168.1.1:5060;branch=z9hG4bK-218.871448.1868355501  
 Via: SIP/2.0/UDP 192.168.2.19:5060;branch=z9hG4bK-6b0cc931-526138.970  
 Record-Route: <sip:00003@192.168.1.1>  
 From: 00002 <sip:00002@sip.com>;tag=1b83bdbb  
 To: <sip:00003@sip.com>;tag=35b3498b  
 Call-ID: 385517ad@00002.192.168.1.1  
 CSeq: 1868355501 INVITE

Contact: <sip:00003@192.168.2.10>  
Require: 100rel  
RSeq: 140062465  
Content-Length: 0

F25 192.168.1.1:5062 (Server) -> 192.168.2.19:5060 (00002@sip.com)

SIP/2.0 180 Ringing  
Via: SIP/2.0/UDP 192.168.2.19:5060;branch=z9hG4bK-6b0cc931-526138.970  
Record-Route: <sip:00003@192.168.1.1>  
From: 00002 <sip:00002@sip.com>;tag=1b83bdbb  
To: <sip:00003@sip.com>;tag=35b3498b  
Call-ID: 385517ad@00002.192.168.1.1  
CSeq: 1868355501 INVITE  
Contact: <sip:00003@192.168.2.10>  
require: 100rel  
rseq: 140062465  
Content-Length: 0

F26 192.168.2.10:1075 (00003@sip.com) -> 192.168.1.1:5060 (Server)

SIP/2.0 180 Ringing  
Via: SIP/2.0/UDP 192.168.1.1:5060;branch=z9hG4bK-218.871448.1868355501  
Via: SIP/2.0/UDP 192.168.2.19:5060;branch=z9hG4bK-6b0cc931-526138.970  
Record-Route: <sip:00003@192.168.1.1>  
From: 00002 <sip:00002@sip.com>;tag=1b83bdbb  
To: <sip:00003@sip.com>;tag=35b3498b  
Call-ID: 385517ad@00002.192.168.1.1  
CSeq: 1868355501 INVITE  
Contact: <sip:00003@192.168.2.10>  
Require: 100rel  
RSeq: 140062465  
Content-Length: 0

F27 192.168.1.1:5062 (Server) -> 192.168.2.19:5060 (00002@sip.com)

SIP/2.0 180 Ringing  
Via: SIP/2.0/UDP 192.168.2.19:5060;branch=z9hG4bK-6b0cc931-526138.970  
Record-Route: <sip:00003@192.168.1.1>  
From: 00002 <sip:00002@sip.com>;tag=1b83bdbb  
To: <sip:00003@sip.com>;tag=35b3498b  
Call-ID: 385517ad@00002.192.168.1.1  
CSeq: 1868355501 INVITE  
Contact: <sip:00003@192.168.2.10>  
require: 100rel  
rseq: 140062465  
Content-Length: 0

F28 192.168.2.10:1075 (00003@sip.com) -> 192.168.1.1:5060 (Server)

SIP/2.0 180 Ringing  
Via: SIP/2.0/UDP 192.168.1.1:5060;branch=z9hG4bK-218.871448.1868355501  
Via: SIP/2.0/UDP 192.168.2.19:5060;branch=z9hG4bK-6b0cc931-526138.970  
Record-Route: <sip:00003@192.168.1.1>  
From: 00002 <sip:00002@sip.com>;tag=1b83bdbb  
To: <sip:00003@sip.com>;tag=35b3498b  
Call-ID: 385517ad@00002.192.168.1.1  
CSeq: 1868355501 INVITE  
Contact: <sip:00003@192.168.2.10>  
Require: 100rel  
RSeq: 140062465  
Content-Length: 0

F29 192.168.1.1:5062 (Server) -> 192.168.2.19:5060 (00002@sip.com)

SIP/2.0 180 Ringing

Via: SIP/2.0/UDP 192.168.2.19:5060;branch=z9hG4bK-6b0cc931-526138.970  
 Record-Route: <sip:00003@192.168.1.1>  
 From: 00002 <sip:00002@sip.com>;tag=1b83bdbb  
 To: <sip:00003@sip.com>;tag=35b3498b  
 Call-ID: 385517ad@00002.192.168.1.1  
 CSeq: 1868355501 INVITE  
 Contact: <sip:00003@192.168.2.10>  
 require: 100rel  
 rseq: 140062465  
 Content-Length: 0

F30 192.168.2.10:1075(00003@sip.com) -> 192.168.1.1:5060(Server)

SIP/2.0 180 Ringing  
 Via: SIP/2.0/UDP 192.168.1.1:5060;branch=z9hG4bK-218.871448.1868355501  
 Via: SIP/2.0/UDP 192.168.2.19:5060;branch=z9hG4bK-6b0cc931-526138.970  
 Record-Route: <sip:00003@192.168.1.1>  
 From: 00002 <sip:00002@sip.com>;tag=1b83bdbb  
 To: <sip:00003@sip.com>;tag=35b3498b  
 Call-ID: 385517ad@00002.192.168.1.1  
 CSeq: 1868355501 INVITE  
 Contact: <sip:00003@192.168.2.10>  
 Require: 100rel  
 RSeq: 140062465  
 Content-Length: 0

F31 192.168.1.1:5062(Server) -> 192.168.2.19:5060(00002@sip.com)

SIP/2.0 180 Ringing  
 Via: SIP/2.0/UDP 192.168.2.19:5060;branch=z9hG4bK-6b0cc931-526138.970  
 Record-Route: <sip:00003@192.168.1.1>  
 From: 00002 <sip:00002@sip.com>;tag=1b83bdbb  
 To: <sip:00003@sip.com>;tag=35b3498b  
 Call-ID: 385517ad@00002.192.168.1.1  
 CSeq: 1868355501 INVITE  
 Contact: <sip:00003@192.168.2.10>  
 require: 100rel  
 rseq: 140062465  
 Content-Length: 0

F32 192.168.2.10:1075(00003@sip.com) -> 192.168.1.1:5060(Server)

SIP/2.0 504 Server Time-out  
 Via: SIP/2.0/UDP 192.168.1.1:5060;branch=z9hG4bK-218.871448.1868355501  
 Via: SIP/2.0/UDP 192.168.2.19:5060;branch=z9hG4bK-6b0cc931-526138.970  
 From: 00002 <sip:00002@sip.com>;tag=1b83bdbb  
 To: <sip:00003@sip.com>;tag=35b3498b  
 Call-ID: 385517ad@00002.192.168.1.1  
 CSeq: 1868355501 INVITE  
 Content-Length: 0

F33 192.168.1.1:5062(Server) -> 192.168.2.10:5060(00003@sip.com)

ACK sip:00003@192.168.2.10 SIP/2.0  
 Via: SIP/2.0/UDP 192.168.1.1:5060;branch=z9hG4bK-218.871448.1868355501  
 Route: <sip:192.168.1.1:5060>  
 From: 00002 <sip:00002@sip.com>;tag=1b83bdbb  
 To: <sip:00003@sip.com>;tag=35b3498b  
 Call-ID: 385517ad@00002.192.168.1.1  
 CSeq: 1868355501 ACK  
 Content-Length: 0

F34 192.168.1.1:5062(Server) -> 192.168.2.19:5060(00002@sip.com)

SIP/2.0 504 Server Time-out  
 Via: SIP/2.0/UDP 192.168.2.19:5060;branch=z9hG4bK-6b0cc931-526138.970

```

sequenceDiagram
    participant U1 as 00002@sip.com  
192.168.2.19
    participant S as Server  
192.168.1.1
    participant U2 as 00003@sip.com  
192.168.2.10
    participant U3 as 他端末

    U1->>S: >F1 INVITE (sdp)
    S-->U1: <----- Aus Required 407 F2
    U1->>S: >F3 ACK
    U1->>S: >F4 INVITE (sdp)
    S-->U1: <----- Trying 100 F5
    S->>U2: >F6 INVITE (sdp)
    U2-->S: <----- Trying 100 F7
    S->>U2: <----- Session Progress 183 F8
    U2-->S: <----- Busy Here 486 F10
    S->>U1: >F11 ACK
    U1-->S: <----- Busy Here 486 F12
    U1->>S: >F13 PRACK
    U1->>S: >F14 ACK
    
```

注：00002 認証あり 00003 認証なし

図 11-7 発信後、着信側話中

```
F1          192.168.2.19:1036 (00002@sip.com) -> 192.168.1.1:5060 (Server)

INVITE sip:00003@sip.com SIP/2.0
Via: SIP/2.0/UDP 192.168.2.19:5060;branch=z9hG4bK-af75980-526646.527
Route: <sip:192.168.1.1:5060>
From: <sip:00002@sip.com>;tag=4fd98d16
To: <sip:00003@sip.com>
Call-ID: 39d7ae69@00002.192.168.1.1
CSeq: 1917918601 INVITE
Contact: <sip:00002@192.168.2.19>
Proxy-Authorization: Digest username="00002", realm="heliossv2", nonce="b9a3d4ba86ab7240fd9df483dfc49958",
uri="sip:00003@sip.com", response="e9be6c7b63a79b6e10b733457f225018", algorithm=MD5, cnonce="132ce0d0",
opaque="f187708315fc2e2068fc049915d2a626", qop=auth, nc=0000000a
Max-Forwards: 70
Supported: 100rel, replaces
Allow: INVITE, ACK, BYE, CANCEL, OPTIONS, PRACK, MESSAGE, REFER, NOTIFY
Content-Type: application/sdp
Accept: application/sdp, message/sipfrag
Content-Length: 249

v=0
o=- 504101 301 IN IP4 192.168.2.19
s=-
c=IN IP4 192.168.2.19
t=0 0
m=audio 5008 RTP/AVP 0 8 4 18 96
a=rtpmap:0 PCMU/8000
a=rtpmap:8 PCMA/8000
a=rtpmap:4 G723/8000
a=rtpmap:18 G729/8000
a=rtpmap:96 telephone-event/8000
a=fmtp:96 0-11

=====

F2          192.168.1.1:5062 (Server) -> 192.168.2.19:5060 (00002@sip.com)

SIP/2.0 407 Proxy Authentication Required
Via: SIP/2.0/UDP 192.168.2.19:5060;branch=z9hG4bK-af75980-526646.527
From: <sip:00002@sip.com>;tag=4fd98d16
```

To: <sip:00003@sip.com>  
 Call-ID: 39d7ae69@00002.192.168.1.1  
 CSeq: 1917918601 INVITE  
 Proxy-Authenticate: Digest realm="heliossv2", nonce="b17c0829e82594634088835b65fe8899",  
 opaque="41ac6d6804c3f775cd08e616c574fdcc", stale=false, algorithm=MD5, qop="auth,auth-int"  
 Content-Length: 0

F3 192.168.2.19:1036(00002@sip.com) -> 192.168.1.1:5060(Server)

ACK sip:00003@sip.com SIP/2.0  
 Via: SIP/2.0/UDP 192.168.2.19:5060;branch=z9hG4bK-af75980-526646.527  
 Route: <sip:192.168.1.1:5060>  
 From: <sip:00002@sip.com>;tag=4fd98d16  
 To: <sip:00003@sip.com>  
 Call-ID: 39d7ae69@00002.192.168.1.1  
 CSeq: 1917918601 ACK  
 Content-Length: 0

F4 192.168.2.19:1036(00002@sip.com) -> 192.168.1.1:5060(Server)

INVITE sip:00003@sip.com SIP/2.0  
 Via: SIP/2.0/UDP 192.168.2.19:5060;branch=z9hG4bK-6fc465db-526647.244  
 Route: <sip:192.168.1.1:5060>  
 From: <sip:00002@sip.com>;tag=4fd98d16  
 To: <sip:00003@sip.com>  
 Call-ID: 39d7ae69@00002.192.168.1.1  
 CSeq: 1917918602 INVITE  
 Contact: <sip:00002@192.168.2.19>  
 Proxy-Authenticate: Digest username="00002", realm="heliossv2", nonce="b17c0829e82594634088835b65fe8899",  
 uri="sip:00003@sip.com", response="e9573d6b84dc30bffc0ef3d19d9bc2e", algorithm=MD5, cnonce="0a1c79a8",  
 opaque="41ac6d6804c3f775cd08e616c574fdcc", qop=auth, nc=00000001  
 Max-Forwards: 70  
 Supported: 100rel, replaces  
 Allow: INVITE, ACK, BYE, CANCEL, OPTIONS, PRACK, MESSAGE, REFER, NOTIFY  
 Content-Type: application/sdp  
 Accept: application/sdp, message/sipfrag  
 Content-Length: 249

v=0  
 o=- 504101 301 IN IP4 192.168.2.19  
 s=-  
 c=IN IP4 192.168.2.19  
 t=0 0  
 m=audio 5008 RTP/AVP 0 8 4 18 96  
 a=rtpmap:0 PCMU/8000  
 a=rtpmap:8 PCMA/8000  
 a=rtpmap:4 G723/8000  
 a=rtpmap:18 G729/8000  
 a=rtpmap:96 telephone-event/8000  
 a=fmtp:96 0-11

F5 192.168.1.1:5062(Server) -> 192.168.2.19:5060(00002@sip.com)

SIP/2.0 100 Trying  
 Via: SIP/2.0/UDP 192.168.2.19:5060;branch=z9hG4bK-6fc465db-526647.244  
 From: <sip:00002@sip.com>;tag=4fd98d16  
 To: <sip:00003@sip.com>  
 Call-ID: 39d7ae69@00002.192.168.1.1  
 CSeq: 1917918602 INVITE  
 Content-Length: 0

F6 192.168.1.1:5062(Server) -> 192.168.2.10:5060(00003@sip.com)

INVITE sip:00003@192.168.2.10 SIP/2.0  
 Via: SIP/2.0/UDP 192.168.1.1:5060;branch=z9hG4bK-223.061356.1917918602  
 Via: SIP/2.0/UDP 192.168.2.19:5060;branch=z9hG4bK-6fc465db-526647.244  
 Record-Route: <sip:00003@192.168.1.1>  
 Route: <sip:192.168.1.1:5060>  
 From: 00002 <sip:00002@sip.com>;tag=4fd98d16  
 To: <sip:00003@sip.com>



Call-ID: 39d7ae69@00002. 192. 168. 1. 1  
 CSeq: 1917918602 INVITE  
 Contact: <sip:00002@192. 168. 2. 19>  
 max-forwards: 69  
 supported: 100rel  
 supported: replaces  
 Allow: INVITE, ACK, BYE, CANCEL, OPTIONS, PRACK, MESSAGE, REFER, NOTIFY  
 Content-Type: application/sdp  
 Accept: application/sdp, message/sipfrag  
 Content-Length: 249

v=0  
 o=- 504101 301 IN IP4 192. 168. 2. 19  
 s=-  
 c=IN IP4 192. 168. 2. 19  
 t=0 0  
 m=audio 5008 RTP/AVP 0 8 4 18 96  
 a=rtpmap:0 PCMU/8000  
 a=rtpmap:8 PCMA/8000  
 a=rtpmap:4 G723/8000  
 a=rtpmap:18 G729/8000  
 a=rtpmap:96 telephone-event/8000  
 a=fmtp:96 0-11

F7 192. 168. 2. 10:1075(00003@sip. com) -> 192. 168. 1. 1:5060(Server)

SIP/2. 0 100 Trying  
 Via: SIP/2. 0/UDP 192. 168. 1. 1:5060;branch=z9hG4bK-223. 061356. 1917918602  
 Via: SIP/2. 0/UDP 192. 168. 2. 19:5060;branch=z9hG4bK-6fc465db-526647. 244  
 From: 00002 <sip:00002@sip. com>;tag=4fd98d16  
 To: <sip:00003@sip. com>  
 Call-ID: 39d7ae69@00002. 192. 168. 1. 1  
 CSeq: 1917918602 INVITE  
 Content-Length: 0

F8 192. 168. 2. 10:1075(00003@sip. com) -> 192. 168. 1. 1:5060(Server)

SIP/2. 0 183 Session Progress  
 Via: SIP/2. 0/UDP 192. 168. 1. 1:5060;branch=z9hG4bK-223. 061356. 1917918602  
 Via: SIP/2. 0/UDP 192. 168. 2. 19:5060;branch=z9hG4bK-6fc465db-526647. 244  
 Record-Route: <sip:00003@192. 168. 1. 1>  
 From: 00002 <sip:00002@sip. com>;tag=4fd98d16  
 To: <sip:00003@sip. com>;tag=16ac2f70  
 Call-ID: 39d7ae69@00002. 192. 168. 1. 1  
 CSeq: 1917918602 INVITE  
 Contact: <sip:00003@192. 168. 2. 10>  
 Require: 100rel  
 RSeq: 635606293  
 Content-Length: 0

F9 192. 168. 1. 1:5062(Server) -> 192. 168. 2. 19:5060(00002@sip. com)

SIP/2. 0 183 Session Progress  
 Via: SIP/2. 0/UDP 192. 168. 2. 19:5060;branch=z9hG4bK-6fc465db-526647. 244  
 Record-Route: <sip:00003@192. 168. 1. 1>  
 From: 00002 <sip:00002@sip. com>;tag=4fd98d16  
 To: <sip:00003@sip. com>;tag=16ac2f70  
 Call-ID: 39d7ae69@00002. 192. 168. 1. 1  
 CSeq: 1917918602 INVITE  
 Contact: <sip:00003@192. 168. 2. 10>  
 require: 100rel  
 rseq: 635606293  
 Content-Length: 0

F10 192. 168. 2. 10:1075(00003@sip. com) -> 192. 168. 1. 1:5060(Server)

SIP/2. 0 486 Busy Here  
 Via: SIP/2. 0/UDP 192. 168. 1. 1:5060;branch=z9hG4bK-223. 061356. 1917918602  
 Via: SIP/2. 0/UDP 192. 168. 2. 19:5060;branch=z9hG4bK-6fc465db-526647. 244  
 From: 00002 <sip:00002@sip. com>;tag=4fd98d16

To: <sip:00003@sip.com>;tag=16ac2f70  
Call-ID: 39d7ae69@00002.192.168.1.1  
CSeq: 1917918602 INVITE  
Content-Length: 0

F11 192.168.1.1:5062 (Server) -> 192.168.2.10:5060 (00003@sip.com)

ACK sip:00003@192.168.2.10 SIP/2.0  
Via: SIP/2.0/UDP 192.168.1.1:5060;branch=z9hG4bK-223.061356.1917918602  
Route: <sip:192.168.1.1:5060>  
From: 00002 <sip:00002@sip.com>;tag=4fd98d16  
To: <sip:00003@sip.com>;tag=16ac2f70  
Call-ID: 39d7ae69@00002.192.168.1.1  
CSeq: 1917918602 ACK  
Content-Length: 0

F12 192.168.1.1:5062 (Server) -> 192.168.2.19:5060 (00002@sip.com)

SIP/2.0 486 Busy Here  
Via: SIP/2.0/UDP 192.168.2.19:5060;branch=z9hG4bK-6fc465db-526647.244  
From: 00002 <sip:00002@sip.com>;tag=4fd98d16  
To: <sip:00003@sip.com>;tag=16ac2f70  
Call-ID: 39d7ae69@00002.192.168.1.1  
CSeq: 1917918602 INVITE  
Content-Length: 0

F13 192.168.2.19:1036 (00002@sip.com) -> 192.168.1.1:5060 (Server)

PRACK sip:00003@192.168.1.1 SIP/2.0  
Via: SIP/2.0/UDP 192.168.2.19:5060;branch=z9hG4bK-70de0372-526647.598  
Route: <sip:00003@192.168.2.10>  
From: 00002 <sip:00002@sip.com>;tag=4fd98d16  
To: <sip:00003@sip.com>;tag=16ac2f70  
Call-ID: 39d7ae69@00002.192.168.1.1  
CSeq: 1917918603 PRACK  
Proxy-Authorization: Digest username="00002", realm="heliossv2", nonce="b17c0829e82594634088835b65fe8899",  
uri="sip:00003@192.168.1.1", response="be859b1812055b1f071400e7c1a79283", algorithm=MD5, cnonce="1f7a3007",  
opaque="41ac6d6804c3f775cd08e616c574fdcc", qop=auth, nc=00000002  
Max-Forwards: 70  
RAck: 635606293 1917918602 INVITE  
Content-Length: 0

F14 192.168.2.19:1036 (00002@sip.com) -> 192.168.1.1:5060 (Server)

ACK sip:00003@sip.com SIP/2.0  
Via: SIP/2.0/UDP 192.168.2.19:5060;branch=z9hG4bK-6fc465db-526647.244  
Route: <sip:192.168.1.1:5060>  
From: 00002 <sip:00002@sip.com>;tag=4fd98d16  
To: <sip:00003@sip.com>;tag=16ac2f70  
Call-ID: 39d7ae69@00002.192.168.1.1  
CSeq: 1917918602 ACK  
Content-Length: 0



# FOMA/WLAN デュアル端末に関する技術参考資料 第 1.2 版

F2 192.168.1.1:5062(Server) -> 192.168.2.19:5060(00002@sip.com)

SIP/2.0 407 Proxy Authentication Required  
 Via: SIP/2.0/UDP 192.168.2.19:5060;branch=z9hG4bK-54742fa6-526675.437  
 From: <sip:00002@sip.com>;tag=7adcbab5  
 To: <sip:00003@sip.com>  
 Call-ID: 3127d884@00002.192.168.1.1  
 CSeq: 1554701054 INVITE  
 Proxy-Authenticate: Digest realm="heliossv2", nonce="7fdec96eff48149ccb40a250f58a64d5",  
 opaque="0b1cf4a2549c6dd0dfb459d06707257b", stale=false, algorithm=MD5, qop="auth,auth-int"  
 Content-Length: 0

F3 192.168.2.19:1036(00002@sip.com) -> 192.168.1.1:5060(Server)

ACK sip:00003@sip.com SIP/2.0  
 Via: SIP/2.0/UDP 192.168.2.19:5060;branch=z9hG4bK-54742fa6-526675.437  
 Route: <sip:192.168.1.1:5060>  
 From: <sip:00002@sip.com>;tag=7adcbab5  
 To: <sip:00003@sip.com>  
 Call-ID: 3127d884@00002.192.168.1.1  
 CSeq: 1554701054 ACK  
 Content-Length: 0

F4 192.168.2.19:1036(00002@sip.com) -> 192.168.1.1:5060(Server)

INVITE sip:00003@sip.com SIP/2.0  
 Via: SIP/2.0/UDP 192.168.2.19:5060;branch=z9hG4bK-64606ba0-526675.806  
 Route: <sip:192.168.1.1:5060>  
 From: <sip:00002@sip.com>;tag=7adcbab5  
 To: <sip:00003@sip.com>  
 Call-ID: 3127d884@00002.192.168.1.1  
 CSeq: 1554701055 INVITE  
 Contact: <sip:00002@192.168.2.19>  
 Proxy-Authorization: Digest username="00002", realm="heliossv2",  
 nonce="7fdec96eff48149ccb40a250f58a64d5", uri="sip:00003@sip.com",  
 response="eb61b08bdf51c7960b0cda727a72bbc2", algorithm=MD5, cnonce="4687a58d",  
 opaque="0b1cf4a2549c6dd0dfb459d06707257b", qop=auth, nc=00000001  
 Max-Forwards: 70  
 Supported: 100rel, replaces  
 Allow: INVITE, ACK, BYE, CANCEL, OPTIONS, PRACK, MESSAGE, REFER, NOTIFY  
 Content-Type: application/sdp  
 Accept: application/sdp, message/sipfrag  
 Content-Length: 249

v=0  
 o=- 418723 401 IN IP4 192.168.2.19  
 s=-  
 c=IN IP4 192.168.2.19  
 t=0 0  
 m=audio 5006 RTP/AVP 0 8 4 18 96  
 a=rtpmap:0 PCMU/8000  
 a=rtpmap:8 PCMA/8000  
 a=rtpmap:4 G723/8000  
 a=rtpmap:18 G729/8000  
 a=rtpmap:96 telephone-event/8000  
 a=fmtp:96 0-11

F5 192.168.1.1:5062(Server) -> 192.168.2.19:5060(00002@sip.com)

SIP/2.0 100 Trying  
 Via: SIP/2.0/UDP 192.168.2.19:5060;branch=z9hG4bK-64606ba0-526675.806  
 From: <sip:00002@sip.com>;tag=7adcbab5  
 To: <sip:00003@sip.com>  
 Call-ID: 3127d884@00002.192.168.1.1  
 CSeq: 1554701055 INVITE  
 Content-Length: 0

F6 192.168.1.1:5062(Server) -> 192.168.2.10:5060(00003@sip.com)

## FOMA/WLAN デュアル端末に関する技術参考資料 第 1.2 版

```

INVITE sip:00003@192.168.2.10 SIP/2.0
Via: SIP/2.0/UDP 192.168.1.1:5060;branch=z9hG4bK-225.731237.1554701055
Via: SIP/2.0/UDP 192.168.2.19:5060;branch=z9hG4bK-64606ba0-526675.806
Record-Route: <sip:00003@192.168.1.1>
Route: <sip:192.168.1.1:5060>
From: 00002 <sip:00002@sip.com>;tag=7adcbab5
To: <sip:00003@sip.com>
Call-ID: 3127d884@00002.192.168.1.1
CSeq: 1554701055 INVITE
Contact: <sip:00002@192.168.2.19>
max-forwards: 69
supported: 100rel
supported: replaces
Allow: INVITE, ACK, BYE, CANCEL, OPTIONS, PRACK, MESSAGE, REFER, NOTIFY
Content-Type: application/sdp
Accept: application/sdp, message/sipfrag
Content-Length: 249

```

```

v=0
o=- 418723 401 IN IP4 192.168.2.19
s=-
c=IN IP4 192.168.2.19
t=0 0
m=audio 5006 RTP/AVP 0 8 4 18 96
a=rtpmap:0 PCMU/8000
a=rtpmap:8 PCMA/8000
a=rtpmap:4 G723/8000
a=rtpmap:18 G729/8000
a=rtpmap:96 telephone-event/8000
a=fmtp:96 0-11

```

```
=====
F7          192.168.2.10:1075(00003@sip.com) -> 192.168.1.1:5060(Server)
```

```

SIP/2.0 100 Trying
Via: SIP/2.0/UDP 192.168.1.1:5060;branch=z9hG4bK-225.731237.1554701055
Via: SIP/2.0/UDP 192.168.2.19:5060;branch=z9hG4bK-64606ba0-526675.806
From: 00002 <sip:00002@sip.com>;tag=7adcbab5
To: <sip:00003@sip.com>
Call-ID: 3127d884@00002.192.168.1.1
CSeq: 1554701055 INVITE
Content-Length: 0

```

```
=====
F8          192.168.2.10:1075(00003@sip.com) -> 192.168.1.1:5060(Server)
```

```

SIP/2.0 183 Session Progress
Via: SIP/2.0/UDP 192.168.1.1:5060;branch=z9hG4bK-225.731237.1554701055
Via: SIP/2.0/UDP 192.168.2.19:5060;branch=z9hG4bK-64606ba0-526675.806
Record-Route: <sip:00003@192.168.1.1>
From: 00002 <sip:00002@sip.com>;tag=7adcbab5
To: <sip:00003@sip.com>;tag=2511e3af
Call-ID: 3127d884@00002.192.168.1.1
CSeq: 1554701055 INVITE
Contact: <sip:00003@192.168.2.10>
Require: 100rel
RSeq: 1473428169
Content-Length: 0

```

```
=====
F9          192.168.1.1:5062(Server) -> 192.168.2.19:5060(00002@sip.com)
```

```

SIP/2.0 183 Session Progress
Via: SIP/2.0/UDP 192.168.2.19:5060;branch=z9hG4bK-64606ba0-526675.806
Record-Route: <sip:00003@192.168.1.1>
From: 00002 <sip:00002@sip.com>;tag=7adcbab5
To: <sip:00003@sip.com>;tag=2511e3af
Call-ID: 3127d884@00002.192.168.1.1
CSeq: 1554701055 INVITE
Contact: <sip:00003@192.168.2.10>
require: 100rel
rseq: 1473428169
Content-Length: 0

```

# FOMA/WLAN デュアル端末に関する技術参考資料 第 1.2 版

F10 192.168.2.19:1036(00002@sip.com) -> 192.168.1.1:5060(Server)

```

PRACK sip:00003@192.168.1.1 SIP/2.0
Via: SIP/2.0/UDP 192.168.2.19:5060;branch=z9hG4bK-1a7e9f96-526677.250
Route: <sip:00003@192.168.2.10>
From: 00002 <sip:00002@sip.com>;tag=7adcbab5
To: <sip:00003@sip.com>;tag=2511e3af
Call-ID: 3127d884@00002.192.168.1.1
CSeq: 1554701056 PRACK
Proxy-Authorization: Digest username="00002", realm="heliossv2",
nonce="7fdec96eff48149ccb40a250f58a64d5", uri="sip:00003@192.168.1.1",
response="e618f2c49bf7e6502154d9e821c3d4d5", algorithm=MD5, cnonce="1d2110d6",
opaque="0b1cf4a2549c6dd0dfb459d06707257b", qop=auth, nc=00000002
Max-Forwards: 70
RAck: 1473428169 1554701055 INVITE
Content-Length: 0

```

F11 192.168.1.1:5062(Server) -> 192.168.2.10:5060(00003@sip.com)

```

PRACK sip:00003@192.168.2.10 SIP/2.0
Via: SIP/2.0/UDP 192.168.1.1:5060;branch=z9hG4bK-225.1085827401.1554701056
Via: SIP/2.0/UDP 192.168.2.19:5060;branch=z9hG4bK-1a7e9f96-526677.250
Route: <sip:00003@192.168.2.10>
From: 00002 <sip:00002@sip.com>;tag=7adcbab5
To: <sip:00003@sip.com>;tag=2511e3af
Call-ID: 3127d884@00002.192.168.1.1
CSeq: 1554701056 PRACK
max-forwards: 69
rack: 1473428169 1554701055 INVITE
Content-Length: 0

```

F12 192.168.2.10:1075(00003@sip.com) -> 192.168.1.1:5060(Server)

```

SIP/2.0 200 OK
Via: SIP/2.0/UDP 192.168.1.1:5060;branch=z9hG4bK-225.1085827401.1554701056
Via: SIP/2.0/UDP 192.168.2.19:5060;branch=z9hG4bK-1a7e9f96-526677.250
From: 00002 <sip:00002@sip.com>;tag=7adcbab5
To: <sip:00003@sip.com>;tag=2511e3af
Call-ID: 3127d884@00002.192.168.1.1
CSeq: 1554701056 PRACK
Content-Length: 0

```

F13 192.168.1.1:5062(Server) -> 192.168.2.19:5060(00002@sip.com)

```

SIP/2.0 200 OK
Via: SIP/2.0/UDP 192.168.2.19:5060;branch=z9hG4bK-1a7e9f96-526677.250
From: 00002 <sip:00002@sip.com>;tag=7adcbab5
To: <sip:00003@sip.com>;tag=2511e3af
Call-ID: 3127d884@00002.192.168.1.1
CSeq: 1554701056 PRACK
Content-Length: 0

```

F14 192.168.2.10:1075(00003@sip.com) -> 192.168.1.1:5060(Server)

```

SIP/2.0 180 Ringing
Via: SIP/2.0/UDP 192.168.1.1:5060;branch=z9hG4bK-225.731237.1554701055
Via: SIP/2.0/UDP 192.168.2.19:5060;branch=z9hG4bK-64606ba0-526675.806
Record-Route: <sip:00003@192.168.1.1>
From: 00002 <sip:00002@sip.com>;tag=7adcbab5
To: <sip:00003@sip.com>;tag=2511e3af
Call-ID: 3127d884@00002.192.168.1.1
CSeq: 1554701055 INVITE
Contact: <sip:00003@192.168.2.10>
Require: 100rel
RSeq: 1473428170
Content-Length: 0

```

F15 192.168.1.1:5062(Server) -> 192.168.2.19:5060(00002@sip.com)

SIP/2.0 180 Ringing  
Via: SIP/2.0/UDP 192.168.2.19:5060;branch=z9hG4bK-64606ba0-526675.806  
Record-Route: <sip:00003@192.168.1.1>  
From: 00002 <sip:00002@sip.com>;tag=7adcbab5  
To: <sip:00003@sip.com>;tag=2511e3af  
Call-ID: 3127d884@00002.192.168.1.1  
CSeq: 1554701055 INVITE  
Contact: <sip:00003@192.168.2.10>  
require: 100rel  
rseq: 1473428170  
Content-Length: 0

F16 192.168.2.19:1036(00002@sip.com) -> 192.168.1.1:5060(Server)

PRACK sip:00003@192.168.1.1 SIP/2.0  
Via: SIP/2.0/UDP 192.168.2.19:5060;branch=z9hG4bK-ff19b74-526678.112  
Route: <sip:00003@192.168.2.10>  
From: 00002 <sip:00002@sip.com>;tag=7adcbab5  
To: <sip:00003@sip.com>;tag=2511e3af  
Call-ID: 3127d884@00002.192.168.1.1  
CSeq: 1554701057 PRACK  
Proxy-Authorization: Digest username="00002", realm="heliossv2",  
nonce="7fdec96eff48149ccb40a250f58a64d5", uri="sip:00003@192.168.1.1",  
response="e6a5bd0b16e119a4b477e83d20felef0", algorithm=MD5, cnonce="410ba88c",  
opaque="0b1cf4a2549c6dd0dfb459d06707257b", qop=auth, nc=00000003  
Max-Forwards: 70  
RAck: 1473428170 1554701055 INVITE  
Content-Length: 0

F17 192.168.1.1:5062(Server) -> 192.168.2.10:5060(00003@sip.com)

PRACK sip:00003@192.168.2.10 SIP/2.0  
Via: SIP/2.0/UDP 192.168.1.1:5060;branch=z9hG4bK-225.1085827402.1554701057  
Via: SIP/2.0/UDP 192.168.2.19:5060;branch=z9hG4bK-ff19b74-526678.112  
Route: <sip:00003@192.168.2.10>  
From: 00002 <sip:00002@sip.com>;tag=7adcbab5  
To: <sip:00003@sip.com>;tag=2511e3af  
Call-ID: 3127d884@00002.192.168.1.1  
CSeq: 1554701057 PRACK  
max-forwards: 69  
rack: 1473428170 1554701055 INVITE  
Content-Length: 0

F18 192.168.2.10:1075(00003@sip.com) -> 192.168.1.1:5060(Server)

SIP/2.0 200 OK  
Via: SIP/2.0/UDP 192.168.1.1:5060;branch=z9hG4bK-225.1085827402.1554701057  
Via: SIP/2.0/UDP 192.168.2.19:5060;branch=z9hG4bK-ff19b74-526678.112  
From: 00002 <sip:00002@sip.com>;tag=7adcbab5  
To: <sip:00003@sip.com>;tag=2511e3af  
Call-ID: 3127d884@00002.192.168.1.1  
CSeq: 1554701057 PRACK  
Content-Length: 0

F19 192.168.1.1:5062(Server) -> 192.168.2.19:5060(00002@sip.com)

SIP/2.0 200 OK  
Via: SIP/2.0/UDP 192.168.2.19:5060;branch=z9hG4bK-ff19b74-526678.112  
From: 00002 <sip:00002@sip.com>;tag=7adcbab5  
To: <sip:00003@sip.com>;tag=2511e3af  
Call-ID: 3127d884@00002.192.168.1.1  
CSeq: 1554701057 PRACK  
Content-Length: 0

F20 192.168.2.10:1075(00003@sip.com) -> 192.168.1.1:5060(Server)

SIP/2.0 180 Ringing  
Via: SIP/2.0/UDP 192.168.1.1:5060;branch=z9hG4bK-225.731237.1554701055  
Via: SIP/2.0/UDP 192.168.2.19:5060;branch=z9hG4bK-64606ba0-526675.806  
Record-Route: <sip:00003@192.168.1.1>  
From: 00002 <sip:00002@sip.com>;tag=7adcbab5  
To: <sip:00003@sip.com>;tag=2511e3af  
Call-ID: 3127d884@00002.192.168.1.1  
CSeq: 1554701055 INVITE  
Contact: <sip:00003@192.168.2.10>  
Require: 100rel  
RSeq: 1473428173  
Content-Length: 0

F21 192.168.1.1:5062(Server) -> 192.168.2.19:5060(00002@sip.com)

SIP/2.0 180 Ringing  
Via: SIP/2.0/UDP 192.168.2.19:5060;branch=z9hG4bK-64606ba0-526675.806  
Record-Route: <sip:00003@192.168.1.1>  
From: 00002 <sip:00002@sip.com>;tag=7adcbab5  
To: <sip:00003@sip.com>;tag=2511e3af  
Call-ID: 3127d884@00002.192.168.1.1  
CSeq: 1554701055 INVITE  
Contact: <sip:00003@192.168.2.10>  
require: 100rel  
rseq: 1473428173  
Content-Length: 0

F22 192.168.2.19:1036(00002@sip.com) -> 192.168.1.1:5060(Server)

PRACK sip:00003@192.168.1.1 SIP/2.0  
Via: SIP/2.0/UDP 192.168.2.19:5060;branch=z9hG4bK-5ce79603-526709.096  
Route: <sip:00003@192.168.2.10>  
From: 00002 <sip:00002@sip.com>;tag=7adcbab5  
To: <sip:00003@sip.com>;tag=2511e3af  
Call-ID: 3127d884@00002.192.168.1.1  
CSeq: 1554701060 PRACK  
Proxy-Authorization: Digest username="00002", realm="heliossv2",  
nonce="7fdec96eff48149ccb40a250f58a64d5", uri="sip:00003@192.168.1.1",  
response="ff97c38aae669b65dfb20d98822b8c9c", algorithm=MD5, cnonce="2687d9bb",  
opaque="0b1cf4a2549c6dd0dfb459d06707257b", qop=auth, nc=00000006  
Max-Forwards: 70  
RAck: 1473428173 1554701055 INVITE  
Content-Length: 0

F23 192.168.1.1:5062(Server) -> 192.168.2.10:5060(00003@sip.com)

PRACK sip:00003@192.168.2.10 SIP/2.0  
Via: SIP/2.0/UDP 192.168.1.1:5060;branch=z9hG4bK-225.1085827433.1554701060  
Via: SIP/2.0/UDP 192.168.2.19:5060;branch=z9hG4bK-5ce79603-526709.096  
Route: <sip:00003@192.168.2.10>  
From: 00002 <sip:00002@sip.com>;tag=7adcbab5  
To: <sip:00003@sip.com>;tag=2511e3af  
Call-ID: 3127d884@00002.192.168.1.1  
CSeq: 1554701060 PRACK  
max-forwards: 69  
rack: 1473428173 1554701055 INVITE  
Content-Length: 0

F24 192.168.2.19:1036(00002@sip.com) -> 192.168.1.1:5060(Server)

PRACK sip:00003@192.168.1.1 SIP/2.0  
Via: SIP/2.0/UDP 192.168.2.19:5060;branch=z9hG4bK-5ce79603-526709.096  
Route: <sip:00003@192.168.2.10>  
From: 00002 <sip:00002@sip.com>;tag=7adcbab5  
To: <sip:00003@sip.com>;tag=2511e3af



## FOMA/WLAN デュアル端末に関する技術参考資料 第 1.2 版

Call-ID: 3127d884@00002.192.168.1.1  
CSeq: 1554701060 PRACK  
Proxy-Authorization: Digest username="00002", realm="heliossv2",  
nonce="7fdec96eff48149ccb40a250f58a64d5", uri="sip:00003@192.168.1.1",  
response="ff97c38aae669b65dfb20d98822b8c9c", algorithm=MD5, cnonce="2687d9bb",  
opaque="0b1cf4a2549c6dd0dfb459d06707257b", qop=auth, nc=00000006  
Max-Forwards: 70  
RAck: 1473428173 1554701055 INVITE  
Content-Length: 0

=====

F25 192.168.1.1:5062(Server) -> 192.168.2.10:5060(00003@sip.com)

PRACK sip:00003@192.168.2.10 SIP/2.0  
Via: SIP/2.0/UDP 192.168.1.1:5060;branch=z9hG4bK-225.1085827433.1554701060  
Via: SIP/2.0/UDP 192.168.2.19:5060;branch=z9hG4bK-5ce79603-526709.096  
Route: <sip:00003@192.168.2.10>  
From: 00002 <sip:00002@sip.com>;tag=7adcbab5  
To: <sip:00003@sip.com>;tag=2511e3af  
Call-ID: 3127d884@00002.192.168.1.1  
CSeq: 1554701060 PRACK  
max-forwards: 69  
rack: 1473428173 1554701055 INVITE  
Content-Length: 0

## 11.2.6.発信後、着信側通話拒否

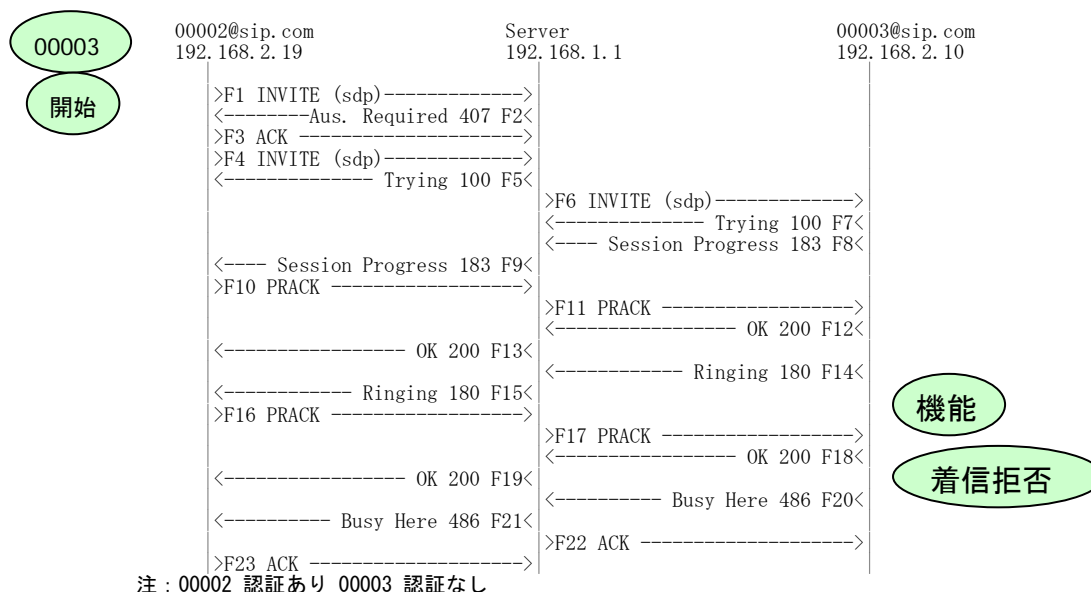


図 11-9 発信後、着信側通話拒否

```

=====
F1      192.168.2.19:1037(00002@sip.com) -> 192.168.1.1:5060(Server)

INVITE sip:00003@sip.com SIP/2.0
Via: SIP/2.0/UDP 192.168.2.19:5060;branch=z9hG4bK-29ec253d-526842.311
Route: <sip:192.168.1.1:5060>
From: <sip:00002@sip.com>;tag=16bf446c
To: <sip:00003@sip.com>
Call-ID: 2ffdf015@00002.192.168.1.1
CSeq: 1959368392 INVITE
Contact: <sip:00002@192.168.2.19>
Proxy-Authorization: Digest username="00002", realm="heliossv2",
nonce="7fdec96eff48149ccb40a250f58a64d5", uri="sip:00003@sip.com",
response="4dc636b08f912a551087175b391f9b16", algorithm=MD5, cnonce="224f0d9e",
opaque="0b1cf4a2549c6dd0dfb459d06707257b", qop=auth, nc=00000007
Max-Forwards: 70
Supported: 100rel, replaces
Allow: INVITE, ACK, BYE, CANCEL, OPTIONS, PRACK, MESSAGE, REFER, NOTIFY
Content-Type: application/sdp
Accept: application/sdp, message/sipfrag
Content-Length: 249

v=0
o=- 209815 501 IN IP4 192.168.2.19
s=-
c=IN IP4 192.168.2.19
t=0 0
m=audio 5008 RTP/AVP 0 8 4 18 96
a=rtpmap:0 PCMU/8000
a=rtpmap:8 PCMA/8000
a=rtpmap:4 G723/8000
a=rtpmap:18 G729/8000
a=rtpmap:96 telephone-event/8000
a=fmtp:96 0-11

=====
F2      192.168.1.1:5062(Server) -> 192.168.2.19:5060(00002@sip.com)

SIP/2.0 407 Proxy Authentication Required
Via: SIP/2.0/UDP 192.168.2.19:5060;branch=z9hG4bK-29ec253d-526842.311
From: <sip:00002@sip.com>;tag=16bf446c
To: <sip:00003@sip.com>
Call-ID: 2ffdf015@00002.192.168.1.1
CSeq: 1959368392 INVITE

```

## FOMA/WLAN デュアル端末に関する技術参考資料 第 1.2 版

Proxy-Authenticate: Digest realm="heliossv2", nonce="8e770b0c98c284f6ff6a7612aacc7385",  
opaque="fe480f51989838b1969553318f4924da", stale=false, algorithm=MD5, qop="auth,auth-int"  
Content-Length: 0

=====

F3 192.168.2.19:1037(00002@sip.com) -> 192.168.1.1:5060(Server)

ACK sip:00003@sip.com SIP/2.0  
Via: SIP/2.0/UDP 192.168.2.19:5060;branch=z9hG4bK-29ec253d-526842.311  
Route: <sip:192.168.1.1:5060>  
From: <sip:00002@sip.com>;tag=16bf446c  
To: <sip:00003@sip.com>  
Call-ID: 2ffdf015@00002.192.168.1.1  
CSeq: 1959368392 ACK  
Content-Length: 0

=====

F4 192.168.2.19:1037(00002@sip.com) -> 192.168.1.1:5060(Server)

INVITE sip:00003@sip.com SIP/2.0  
Via: SIP/2.0/UDP 192.168.2.19:5060;branch=z9hG4bK-34089ee5-526842.774  
Route: <sip:192.168.1.1:5060>  
From: <sip:00002@sip.com>;tag=16bf446c  
To: <sip:00003@sip.com>  
Call-ID: 2ffdf015@00002.192.168.1.1  
CSeq: 1959368393 INVITE  
Contact: <sip:00002@192.168.2.19>  
Proxy-Authorization: Digest username="00002", realm="heliossv2",  
nonce="8e770b0c98c284f6ff6a7612aacc7385", uri="sip:00003@sip.com",  
response="5e11a67b671506c43885d418a542e129", algorithm=MD5, cnonce="51682914",  
opaque="fe480f51989838b1969553318f4924da", qop=auth, nc=00000001  
Max-Forwards: 70  
Supported: 100rel, replaces  
Allow: INVITE, ACK, BYE, CANCEL, OPTIONS, PRACK, MESSAGE, REFER, NOTIFY  
Content-Type: application/sdp  
Accept: application/sdp, message/sipfrag  
Content-Length: 249

v=0  
o=- 209815 501 IN IP4 192.168.2.19  
s=-  
c=IN IP4 192.168.2.19  
t=0 0  
m=audio 5008 RTP/AVP 0 8 4 18 96  
a=rtpmap:0 PCMU/8000  
a=rtpmap:8 PCMA/8000  
a=rtpmap:4 G723/8000  
a=rtpmap:18 G729/8000  
a=rtpmap:96 telephone-event/8000  
a=fmtp:96 0-11

=====

F5 192.168.1.1:5062(Server) -> 192.168.2.19:5060(00002@sip.com)

SIP/2.0 100 Trying  
Via: SIP/2.0/UDP 192.168.2.19:5060;branch=z9hG4bK-34089ee5-526842.774  
From: <sip:00002@sip.com>;tag=16bf446c  
To: <sip:00003@sip.com>  
Call-ID: 2ffdf015@00002.192.168.1.1  
CSeq: 1959368393 INVITE  
Content-Length: 0

=====

F6 192.168.1.1:5062(Server) -> 192.168.2.10:5060(00003@sip.com)

INVITE sip:00003@192.168.2.10 SIP/2.0  
Via: SIP/2.0/UDP 192.168.1.1:5060;branch=z9hG4bK-227.641465.1959368393  
Via: SIP/2.0/UDP 192.168.2.19:5060;branch=z9hG4bK-34089ee5-526842.774  
Record-Route: <sip:00003@192.168.1.1>  
Route: <sip:192.168.1.1:5060>  
From: 00002 <sip:00002@sip.com>;tag=16bf446c  
To: <sip:00003@sip.com>  
Call-ID: 2ffdf015@00002.192.168.1.1  
CSeq: 1959368393 INVITE

Contact: <sip:00002@192.168.2.19>  
 max-forwards: 69  
 supported: 100rel  
 supported: replaces  
 Allow: INVITE, ACK, BYE, CANCEL, OPTIONS, PRACK, MESSAGE, REFER, NOTIFY  
 Content-Type: application/sdp  
 Accept: application/sdp, message/sipfrag  
 Content-Length: 249

v=0  
 o=- 209815 501 IN IP4 192.168.2.19  
 s=-  
 c=IN IP4 192.168.2.19  
 t=0 0  
 m=audio 5008 RTP/AVP 0 8 4 18 96  
 a=rtpmap:0 PCMU/8000  
 a=rtpmap:8 PCMA/8000  
 a=rtpmap:4 G723/8000  
 a=rtpmap:18 G729/8000  
 a=rtpmap:96 telephone-event/8000  
 a=fmtp:96 0-11

F7 192.168.2.10:1075(00003@sip.com) -> 192.168.1.1:5060(Server)

SIP/2.0 100 Trying  
 Via: SIP/2.0/UDP 192.168.1.1:5060;branch=z9hG4bK-227.641465.1959368393  
 Via: SIP/2.0/UDP 192.168.2.19:5060;branch=z9hG4bK-34089ee5-526842.774  
 From: 00002 <sip:00002@sip.com>;tag=16bf446c  
 To: <sip:00003@sip.com>  
 Call-ID: 2ffdf015@00002.192.168.1.1  
 CSeq: 1959368393 INVITE  
 Content-Length: 0

F8 192.168.2.10:1075(00003@sip.com) -> 192.168.1.1:5060(Server)

SIP/2.0 183 Session Progress  
 Via: SIP/2.0/UDP 192.168.1.1:5060;branch=z9hG4bK-227.641465.1959368393  
 Via: SIP/2.0/UDP 192.168.2.19:5060;branch=z9hG4bK-34089ee5-526842.774  
 Record-Route: <sip:00003@192.168.1.1>  
 From: 00002 <sip:00002@sip.com>;tag=16bf446c  
 To: <sip:00003@sip.com>;tag=4ec1d2c8  
 Call-ID: 2ffdf015@00002.192.168.1.1  
 CSeq: 1959368393 INVITE  
 Contact: <sip:00003@192.168.2.10>  
 Require: 100rel  
 RSeq: 781766568  
 Content-Length: 0

F9 192.168.1.1:5062(Server) -> 192.168.2.19:5060(00002@sip.com)

SIP/2.0 183 Session Progress  
 Via: SIP/2.0/UDP 192.168.2.19:5060;branch=z9hG4bK-34089ee5-526842.774  
 Record-Route: <sip:00003@192.168.1.1>  
 From: 00002 <sip:00002@sip.com>;tag=16bf446c  
 To: <sip:00003@sip.com>;tag=4ec1d2c8  
 Call-ID: 2ffdf015@00002.192.168.1.1  
 CSeq: 1959368393 INVITE  
 Contact: <sip:00003@192.168.2.10>  
 require: 100rel  
 rseq: 781766568  
 Content-Length: 0

F10 192.168.2.19:1037(00002@sip.com) -> 192.168.1.1:5060(Server)

PRACK sip:00003@192.168.1.1 SIP/2.0  
 Via: SIP/2.0/UDP 192.168.2.19:5060;branch=z9hG4bK-70e2591b-526844.779  
 Route: <sip:00003@192.168.2.10>  
 From: 00002 <sip:00002@sip.com>;tag=16bf446c  
 To: <sip:00003@sip.com>;tag=4ec1d2c8  
 Call-ID: 2ffdf015@00002.192.168.1.1

## FOMA/WLAN デュアル端末に関する技術参考資料 第 1.2 版

```
CSeq: 1959368394 PRACK
Proxy-Authorization: Digest username="00002", realm="heliossv2",
nonce="8e770b0c98c284f6ff6a7612aacc7385", uri="sip:00003@192.168.1.1",
response="9487cfd1060b5745ad6539f57ac17fb2", algorithm=MD5, cnonce="6f855624",
opaque="fe480f51989838b1969553318f4924da", qop=auth, nc=00000002
Max-Forwards: 70
RAck: 781766568 1959368393 INVITE
Content-Length: 0
```

---

```
F11      192.168.1.1:5062(Server) -> 192.168.2.10:5060(00003@sip.com)
```

```
PRACK sip:00003@192.168.2.10 SIP/2.0
Via: SIP/2.0/UDP 192.168.1.1:5060;branch=z9hG4bK-227.1085827569.1959368394
Via: SIP/2.0/UDP 192.168.2.19:5060;branch=z9hG4bK-70e2591b-526844.779
Route: <sip:00003@192.168.2.10>
From: 00002 <sip:00002@sip.com>;tag=16bf446c
To: <sip:00003@sip.com>;tag=4ec1d2c8
Call-ID: 2ffdf015@00002.192.168.1.1
CSeq: 1959368394 PRACK
max-forwards: 69
rack: 781766568 1959368393 INVITE
Content-Length: 0
```

---

```
F12      192.168.2.10:1075(00003@sip.com) -> 192.168.1.1:5060(Server)
```

```
SIP/2.0 200 OK
Via: SIP/2.0/UDP 192.168.1.1:5060;branch=z9hG4bK-227.1085827569.1959368394
Via: SIP/2.0/UDP 192.168.2.19:5060;branch=z9hG4bK-70e2591b-526844.779
From: 00002 <sip:00002@sip.com>;tag=16bf446c
To: <sip:00003@sip.com>;tag=4ec1d2c8
Call-ID: 2ffdf015@00002.192.168.1.1
CSeq: 1959368394 PRACK
Content-Length: 0
```

---

```
F13      192.168.1.1:5062(Server) -> 192.168.2.19:5060(00002@sip.com)
```

```
SIP/2.0 200 OK
Via: SIP/2.0/UDP 192.168.2.19:5060;branch=z9hG4bK-70e2591b-526844.779
From: 00002 <sip:00002@sip.com>;tag=16bf446c
To: <sip:00003@sip.com>;tag=4ec1d2c8
Call-ID: 2ffdf015@00002.192.168.1.1
CSeq: 1959368394 PRACK
Content-Length: 0
```

---

```
F14      192.168.2.10:1075(00003@sip.com) -> 192.168.1.1:5060(Server)
```

```
SIP/2.0 180 Ringing
Via: SIP/2.0/UDP 192.168.1.1:5060;branch=z9hG4bK-227.641465.1959368393
Via: SIP/2.0/UDP 192.168.2.19:5060;branch=z9hG4bK-34089ee5-526842.774
Record-Route: <sip:00003@192.168.1.1>
From: 00002 <sip:00002@sip.com>;tag=16bf446c
To: <sip:00003@sip.com>;tag=4ec1d2c8
Call-ID: 2ffdf015@00002.192.168.1.1
CSeq: 1959368393 INVITE
Contact: <sip:00003@192.168.2.10>
Require: 100rel
RSeq: 781766569
Content-Length: 0
```

---

```
F15      192.168.1.1:5062(Server) -> 192.168.2.19:5060(00002@sip.com)
```

```
SIP/2.0 180 Ringing
Via: SIP/2.0/UDP 192.168.2.19:5060;branch=z9hG4bK-34089ee5-526842.774
Record-Route: <sip:00003@192.168.1.1>
From: 00002 <sip:00002@sip.com>;tag=16bf446c
To: <sip:00003@sip.com>;tag=4ec1d2c8
```

# FOMA/WLAN デュアル端末に関する技術参考資料 第 1.2 版

Call-ID: 2ffdf015@00002.192.168.1.1  
 CSeq: 1959368393 INVITE  
 Contact: <sip:00003@192.168.2.10>  
 require: 100rel  
 rseq: 781766569  
 Content-Length: 0

F16 192.168.2.19:1037(00002@sip.com) -> 192.168.1.1:5060(Server)

PRACK sip:00003@192.168.1.1 SIP/2.0  
 Via: SIP/2.0/UDP 192.168.2.19:5060;branch=z9hG4bK-423e7220-526845.203  
 Route: <sip:00003@192.168.2.10>  
 From: 00002 <sip:00002@sip.com>;tag=16bf446c  
 To: <sip:00003@sip.com>;tag=4ec1d2c8  
 Call-ID: 2ffdf015@00002.192.168.1.1  
 CSeq: 1959368395 PRACK  
 Proxy-Authorization: Digest username="00002", realm="heliossv2",  
 nonce="8e770b0c98c284f6ff6a7612aacc7385", uri="sip:00003@192.168.1.1",  
 response="e97ea8c00297aac3177f462751e604a1", algorithm=MD5, cnonce="24e6a258",  
 opaque="fe480f51989838b1969553318f4924da", qop=auth, nc=00000003  
 Max-Forwards: 70  
 RAck: 781766569 1959368393 INVITE  
 Content-Length: 0

F17 192.168.1.1:5062(Server) -> 192.168.2.10:5060(00003@sip.com)

PRACK sip:00003@192.168.2.10 SIP/2.0  
 Via: SIP/2.0/UDP 192.168.1.1:5060;branch=z9hG4bK-227.1085827569.1959368395  
 Via: SIP/2.0/UDP 192.168.2.19:5060;branch=z9hG4bK-423e7220-526845.203  
 Route: <sip:00003@192.168.2.10>  
 From: 00002 <sip:00002@sip.com>;tag=16bf446c  
 To: <sip:00003@sip.com>;tag=4ec1d2c8  
 Call-ID: 2ffdf015@00002.192.168.1.1  
 CSeq: 1959368395 PRACK  
 max-forwards: 69  
 rack: 781766569 1959368393 INVITE  
 Content-Length: 0

F18 192.168.2.10:1075(00003@sip.com) -> 192.168.1.1:5060(Server)

SIP/2.0 200 OK  
 Via: SIP/2.0/UDP 192.168.1.1:5060;branch=z9hG4bK-227.1085827569.1959368395  
 Via: SIP/2.0/UDP 192.168.2.19:5060;branch=z9hG4bK-423e7220-526845.203  
 From: 00002 <sip:00002@sip.com>;tag=16bf446c  
 To: <sip:00003@sip.com>;tag=4ec1d2c8  
 Call-ID: 2ffdf015@00002.192.168.1.1  
 CSeq: 1959368395 PRACK  
 Content-Length: 0

F19 192.168.1.1:5062(Server) -> 192.168.2.19:5060(00002@sip.com)

SIP/2.0 200 OK  
 Via: SIP/2.0/UDP 192.168.2.19:5060;branch=z9hG4bK-423e7220-526845.203  
 From: 00002 <sip:00002@sip.com>;tag=16bf446c  
 To: <sip:00003@sip.com>;tag=4ec1d2c8  
 Call-ID: 2ffdf015@00002.192.168.1.1  
 CSeq: 1959368395 PRACK  
 Content-Length: 0

F20 192.168.2.10:1075(00003@sip.com) -> 192.168.1.1:5060(Server)

SIP/2.0 486 Busy Here  
 Via: SIP/2.0/UDP 192.168.1.1:5060;branch=z9hG4bK-227.641465.1959368393  
 Via: SIP/2.0/UDP 192.168.2.19:5060;branch=z9hG4bK-34089ee5-526842.774  
 From: 00002 <sip:00002@sip.com>;tag=16bf446c  
 To: <sip:00003@sip.com>;tag=4ec1d2c8

## FOMA/WLAN デュアル端末に関する技術参考資料 第 1.2 版

Call-ID: 2ffdf015@00002.192.168.1.1  
CSeq: 1959368393 INVITE  
Content-Length: 0

=====

F21 192.168.1.1:5062(Server) -> 192.168.2.10:5060(00003@sip.com)

ACK sip:00003@192.168.2.10 SIP/2.0  
Via: SIP/2.0/UDP 192.168.1.1:5060;branch=z9hG4bK-227.1085827575.1959368393  
Route: <sip:192.168.1.1:5060>  
From: 00002 <sip:00002@sip.com>;tag=16bf446c  
To: <sip:00003@sip.com>;tag=4ec1d2c8  
Call-ID: 2ffdf015@00002.192.168.1.1  
CSeq: 1959368393 ACK  
Content-Length: 0

=====

F22 192.168.1.1:5062(Server) -> 192.168.2.19:5060(00002@sip.com)

SIP/2.0 486 Busy Here  
Via: SIP/2.0/UDP 192.168.2.19:5060;branch=z9hG4bK-34089ee5-526842.774  
Record-Route: <sip:00003@192.168.1.1>  
From: 00002 <sip:00002@sip.com>;tag=16bf446c  
To: <sip:00003@sip.com>;tag=4ec1d2c8  
Call-ID: 2ffdf015@00002.192.168.1.1  
CSeq: 1959368393 INVITE  
Contact: <sip:00003@192.168.2.10>  
supported: 100rel  
supported: replaces  
Allow: INVITE, ACK, BYE, CANCEL, OPTIONS, PRACK, MESSAGE, REFER, NOTIFY  
Content-Type: application/sdp  
Accept: application/sdp, message/sipfrag  
Content-Length: 0

=====

F23 192.168.2.19:1037(00002@sip.com) -> 192.168.1.1:5060(Server)

ACK sip:00003@192.168.1.1 SIP/2.0  
Via: SIP/2.0/UDP 192.168.2.19:5060;branch=z9hG4bK-272d6f86-526851.288  
Route: <sip:192.168.1.1:5060>  
From: 00002 <sip:00002@sip.com>;tag=16bf446c  
To: <sip:00003@sip.com>;tag=4ec1d2c8  
Call-ID: 2ffdf015@00002.192.168.1.1  
CSeq: 1959368393 ACK  
Content-Length: 0

=====

## 11.2.7. 発信後、着信側応答なし

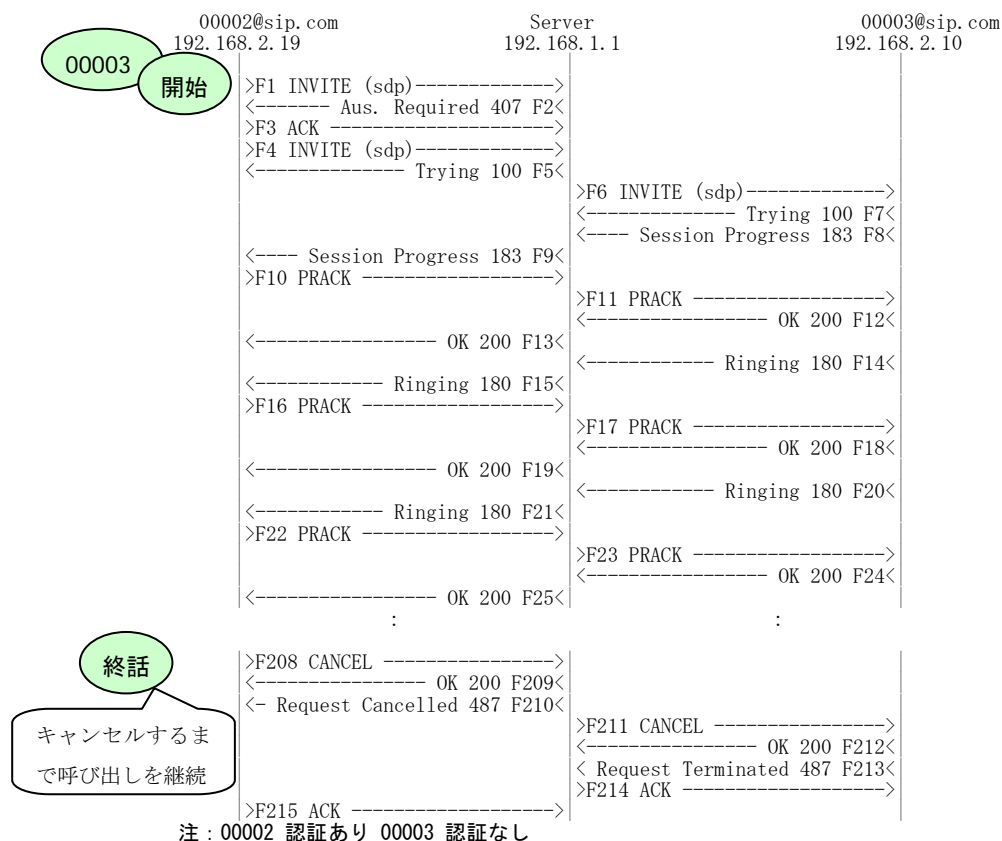


図 11-10 発信後、着信側応答なし

```

=====
F1      192.168.2.19:1024(00002@sip.com) -> 192.168.1.1:5060(Server)

INVITE sip:00003@sip.com SIP/2.0
Via: SIP/2.0/UDP 192.168.2.19:5060;branch=z9hG4bK-3406d9ca-526983.930
Route: <sip:192.168.1.1:5060>
From: <sip:00002@sip.com>;tag=085682dc
To: <sip:00003@sip.com>
Call-ID: 0ba90b74@00002.192.168.1.1
CSeq: 1539281736 INVITE
Contact: <sip:00002@192.168.2.19>
Max-Forwards: 70
Supported: 100rel, replaces
Allow: INVITE, ACK, BYE, CANCEL, OPTIONS, PRACK, MESSAGE, REFER, NOTIFY
Content-Type: application/sdp
Accept: application/sdp, message/sipfrag
Content-Length: 252

v=0
o=- 918134 918134 IN IP4 192.168.2.19
s=-
c=IN IP4 192.168.2.19
t=0 0
m=audio 5006 RTP/AVP 0 8 4 18 96
a=rtpmap:0 PCMU/8000
a=rtpmap:8 PCMA/8000
a=rtpmap:4 G723/8000
a=rtpmap:18 G729/8000
a=rtpmap:96 telephone-event/8000
a=fmtp:96 0-11

```

```

=====
F2      192.168.1.1:5062(Server) -> 192.168.2.19:5060(00002@sip.com)

```



## FOMA/WLAN デュアル端末に関する技術参考資料 第 1.2 版

SIP/2.0 407 Proxy Authentication Required  
 Via: SIP/2.0/UDP 192.168.2.19:5060;branch=z9hG4bK-3406d9ca-526983.930  
 From: <sip:00002@sip.com>;tag=085682dc  
 To: <sip:00003@sip.com>  
 Call-ID: 0ba90b74@00002.192.168.1.1  
 CSeq: 1539281736 INVITE  
 Proxy-Authenticate: Digest realm="heliossv2", nonce="eaea33a348bale8bef5fcd05136f6c27",  
 opaque="45df8feff416e2272ef8afbdc03811d0", stale=false, algorithm=MD5, qop="auth,auth-int"  
 Content-Length: 0

=====

F3 192.168.2.19:1024(00002@sip.com) -> 192.168.1.1:5060(Server)

ACK sip:00003@sip.com SIP/2.0  
 Via: SIP/2.0/UDP 192.168.2.19:5060;branch=z9hG4bK-3406d9ca-526983.930  
 Route: <sip:192.168.1.1:5060>  
 From: <sip:00002@sip.com>;tag=085682dc  
 To: <sip:00003@sip.com>  
 Call-ID: 0ba90b74@00002.192.168.1.1  
 CSeq: 1539281736 ACK  
 Content-Length: 0

=====

F4 192.168.2.19:1024(00002@sip.com) -> 192.168.1.1:5060(Server)

INVITE sip:00003@sip.com SIP/2.0  
 Via: SIP/2.0/UDP 192.168.2.19:5060;branch=z9hG4bK-3ef8dfe7-526984.161  
 Route: <sip:192.168.1.1:5060>  
 From: <sip:00002@sip.com>;tag=085682dc  
 To: <sip:00003@sip.com>  
 Call-ID: 0ba90b74@00002.192.168.1.1  
 CSeq: 1539281737 INVITE  
 Contact: <sip:00002@192.168.2.19>  
 Proxy-Authentication: Digest username="00002", realm="heliossv2", nonce="eaea33a348bale8bef5fcd05136f6c27",  
 uri="sip:00003@sip.com", response="0cf21aeda7b6ce23a4e887a21839e448", algorithm=MD5, cnonce="101bf976",  
 opaque="45df8feff416e2272ef8afbdc03811d0", qop=auth, nc=00000001  
 Max-Forwards: 70  
 Supported: 100rel, replaces  
 Allow: INVITE, ACK, BYE, CANCEL, OPTIONS, PRACK, MESSAGE, REFER, NOTIFY  
 Content-Type: application/sdp  
 Accept: application/sdp, message/sipfrag  
 Content-Length: 252

v=0  
 o=- 918134 918134 IN IP4 192.168.2.19  
 s=-  
 c=IN IP4 192.168.2.19  
 t=0 0  
 m=audio 5006 RTP/AVP 0 8 4 18 96  
 a=rtpmap:0 PCMU/8000  
 a=rtpmap:8 PCMA/8000  
 a=rtpmap:4 G723/8000  
 a=rtpmap:18 G729/8000  
 a=rtpmap:96 telephone-event/8000  
 a=fmtp:96 0-11

=====

F5 192.168.1.1:5062(Server) -> 192.168.2.19:5060(00002@sip.com)

SIP/2.0 100 Trying  
 Via: SIP/2.0/UDP 192.168.2.19:5060;branch=z9hG4bK-3ef8dfe7-526984.161  
 From: <sip:00002@sip.com>;tag=085682dc  
 To: <sip:00003@sip.com>  
 Call-ID: 0ba90b74@00002.192.168.1.1  
 CSeq: 1539281737 INVITE  
 Content-Length: 0

=====

F6 192.168.1.1:5062(Server) -> 192.168.2.10:5060(00003@sip.com)

INVITE sip:00003@192.168.2.10 SIP/2.0  
 Via: SIP/2.0/UDP 192.168.1.1:5060;branch=z9hG4bK-234.451192.1539281737  
 Via: SIP/2.0/UDP 192.168.2.19:5060;branch=z9hG4bK-3ef8dfe7-526984.161

Record-Route: <sip:00003@192.168.1.1>  
 Route: <sip:192.168.1.1:5060>  
 From: 00002 <sip:00002@sip.com>;tag=085682dc  
 To: <sip:00003@sip.com>  
 Call-ID: 0ba90b74@00002.192.168.1.1  
 CSeq: 1539281737 INVITE  
 Contact: <sip:00002@192.168.2.19>  
 max-forwards: 69  
 supported: 100rel  
 supported: replaces  
 Allow: INVITE, ACK, BYE, CANCEL, OPTIONS, PRACK, MESSAGE, REFER, NOTIFY  
 Content-Type: application/sdp  
 Accept: application/sdp, message/sipfrag  
 Content-Length: 252

v=0  
 o=- 918134 918134 IN IP4 192.168.2.19  
 s=-  
 c=IN IP4 192.168.2.19  
 t=0 0  
 m=audio 5006 RTP/AVP 0 8 4 18 96  
 a=rtpmap:0 PCMU/8000  
 a=rtpmap:8 PCMA/8000  
 a=rtpmap:4 G723/8000  
 a=rtpmap:18 G729/8000  
 a=rtpmap:96 telephone-event/8000  
 a=fmtp:96 0-11

=====

F7 192.168.2.10:1024(00003@sip.com) -> 192.168.1.1:5060(Server)

SIP/2.0 100 Trying  
 Via: SIP/2.0/UDP 192.168.1.1:5060;branch=z9hG4bK-234.451192.1539281737  
 Via: SIP/2.0/UDP 192.168.2.19:5060;branch=z9hG4bK-3ef8dfe7-526984.161  
 From: 00002 <sip:00002@sip.com>;tag=085682dc  
 To: <sip:00003@sip.com>  
 Call-ID: 0ba90b74@00002.192.168.1.1  
 CSeq: 1539281737 INVITE  
 Content-Length: 0

=====

F8 192.168.2.10:1024(00003@sip.com) -> 192.168.1.1:5060(Server)

SIP/2.0 183 Session Progress  
 Via: SIP/2.0/UDP 192.168.1.1:5060;branch=z9hG4bK-234.451192.1539281737  
 Via: SIP/2.0/UDP 192.168.2.19:5060;branch=z9hG4bK-3ef8dfe7-526984.161  
 Record-Route: <sip:00003@192.168.1.1>  
 From: 00002 <sip:00002@sip.com>;tag=085682dc  
 To: <sip:00003@sip.com>;tag=620512a3  
 Call-ID: 0ba90b74@00002.192.168.1.1  
 CSeq: 1539281737 INVITE  
 Contact: <sip:00003@192.168.2.10>  
 Require: 100rel  
 RSeq: 169055831  
 Content-Length: 0

=====

F9 192.168.1.1:5062(Server) -> 192.168.2.19:5060(00002@sip.com)

SIP/2.0 183 Session Progress  
 Via: SIP/2.0/UDP 192.168.2.19:5060;branch=z9hG4bK-3ef8dfe7-526984.161  
 Record-Route: <sip:00003@192.168.1.1>  
 From: 00002 <sip:00002@sip.com>;tag=085682dc  
 To: <sip:00003@sip.com>;tag=620512a3  
 Call-ID: 0ba90b74@00002.192.168.1.1  
 CSeq: 1539281737 INVITE  
 Contact: <sip:00003@192.168.2.10>  
 require: 100rel  
 rseq: 169055831  
 Content-Length: 0

=====

F10 192.168.2.19:1024(00002@sip.com) -> 192.168.1.1:5060(Server)

## FOMA/WLAN デュアル端末に関する技術参考資料 第 1.2 版

```

PRACK sip:00003@192.168.1.1 SIP/2.0
Via: SIP/2.0/UDP 192.168.2.19:5060;branch=z9hG4bK-713360ae-526985.161
Route: <sip:00003@192.168.2.10>
From: 00002 <sip:00002@sip.com>;tag=085682dc
To: <sip:00003@sip.com>;tag=620512a3
Call-ID: 0ba90b74@00002.192.168.1.1
CSeq: 1539281738 PRACK
Proxy-Authorization: Digest username="00002", realm="heliossv2", nonce="eaea33a348bale8bef5fcd05136f6c27",
uri="sip:00003@192.168.1.1", response="c39916a7b46324d1cd79743168464842", algorithm=MD5, cnonce="49acec50",
opaque="45df8feff416e2272ef8afbdc03811d0", qop=auth, nc=00000002
Max-Forwards: 70
RAck: 169055831 1539281737 INVITE
Content-Length: 0

```

=====

F11            192.168.1.1:5062(Server) -> 192.168.2.10:5060(00003@sip.com)

```

PRACK sip:00003@192.168.2.10 SIP/2.0
Via: SIP/2.0/UDP 192.168.1.1:5060;branch=z9hG4bK-234.1085827709.1539281738
Via: SIP/2.0/UDP 192.168.2.19:5060;branch=z9hG4bK-713360ae-526985.161
Route: <sip:00003@192.168.2.10>
From: 00002 <sip:00002@sip.com>;tag=085682dc
To: <sip:00003@sip.com>;tag=620512a3
Call-ID: 0ba90b74@00002.192.168.1.1
CSeq: 1539281738 PRACK
max-forwards: 69
rack: 169055831 1539281737 INVITE
Content-Length: 0

```

=====

F12            192.168.2.10:1024(00003@sip.com) -> 192.168.1.1:5060(Server)

```

SIP/2.0 200 OK
Via: SIP/2.0/UDP 192.168.1.1:5060;branch=z9hG4bK-234.1085827709.1539281738
Via: SIP/2.0/UDP 192.168.2.19:5060;branch=z9hG4bK-713360ae-526985.161
From: 00002 <sip:00002@sip.com>;tag=085682dc
To: <sip:00003@sip.com>;tag=620512a3
Call-ID: 0ba90b74@00002.192.168.1.1
CSeq: 1539281738 PRACK
Content-Length: 0

```

=====

F13            192.168.1.1:5062(Server) -> 192.168.2.19:5060(00002@sip.com)

```

SIP/2.0 200 OK
Via: SIP/2.0/UDP 192.168.2.19:5060;branch=z9hG4bK-713360ae-526985.161
From: 00002 <sip:00002@sip.com>;tag=085682dc
To: <sip:00003@sip.com>;tag=620512a3
Call-ID: 0ba90b74@00002.192.168.1.1
CSeq: 1539281738 PRACK
Content-Length: 0

```

=====

F14            192.168.2.10:1024(00003@sip.com) -> 192.168.1.1:5060(Server)

```

SIP/2.0 180 Ringing
Via: SIP/2.0/UDP 192.168.1.1:5060;branch=z9hG4bK-234.451192.1539281737
Via: SIP/2.0/UDP 192.168.2.19:5060;branch=z9hG4bK-3ef8dfe7-526984.161
Record-Route: <sip:00003@192.168.1.1>
From: 00002 <sip:00002@sip.com>;tag=085682dc
To: <sip:00003@sip.com>;tag=620512a3
Call-ID: 0ba90b74@00002.192.168.1.1
CSeq: 1539281737 INVITE
Contact: <sip:00003@192.168.2.10>
Require: 100rel
RSeq: 169055832
Content-Length: 0

```

=====

F15            192.168.1.1:5062(Server) -> 192.168.2.19:5060(00002@sip.com)

## FOMA/WLAN デュアル端末に関する技術参考資料 第 1.2 版

SIP/2.0 180 Ringing  
 Via: SIP/2.0/UDP 192.168.2.19:5060;branch=z9hG4bK-3ef8dfe7-526984.161  
 Record-Route: <sip:00003@192.168.1.1>  
 From: 00002 <sip:00002@sip.com>;tag=085682dc  
 To: <sip:00003@sip.com>;tag=620512a3  
 Call-ID: 0ba90b74@00002.192.168.1.1  
 CSeq: 1539281737 INVITE  
 Contact: <sip:00003@192.168.2.10>  
 require: 100rel  
 rseq: 169055832  
 Content-Length: 0

=====

F16            192.168.2.19:1024(00002@sip.com) -> 192.168.1.1:5060(Server)

PRACK sip:00003@192.168.1.1 SIP/2.0  
 Via: SIP/2.0/UDP 192.168.2.19:5060;branch=z9hG4bK-46932cfa-526985.882  
 Route: <sip:00003@192.168.2.10>  
 From: 00002 <sip:00002@sip.com>;tag=085682dc  
 To: <sip:00003@sip.com>;tag=620512a3  
 Call-ID: 0ba90b74@00002.192.168.1.1  
 CSeq: 1539281739 PRACK  
 Proxy-Authorization: Digest username="00002", realm="heliossv2", nonce="eaea33a348bale8bef5fcd05136f6c27",  
 uri="sip:00003@192.168.1.1", response="d8d056f9bf6d4f7916c2a03abb02807f", algorithm=MD5, cnonce="27c5e210",  
 opaque="45df8feff416e2272ef8afbdc03811d0", qop=auth, nc=00000003  
 Max-Forwards: 70  
 RACK: 169055832 1539281737 INVITE  
 Content-Length: 0

=====

F17            192.168.1.1:5062(Server) -> 192.168.2.10:5060(00003@sip.com)

PRACK sip:00003@192.168.2.10 SIP/2.0  
 Via: SIP/2.0/UDP 192.168.1.1:5060;branch=z9hG4bK-234.1085827710.1539281739  
 Via: SIP/2.0/UDP 192.168.2.19:5060;branch=z9hG4bK-46932cfa-526985.882  
 Route: <sip:00003@192.168.2.10>  
 From: 00002 <sip:00002@sip.com>;tag=085682dc  
 To: <sip:00003@sip.com>;tag=620512a3  
 Call-ID: 0ba90b74@00002.192.168.1.1  
 CSeq: 1539281739 PRACK  
 max-forwards: 69  
 rack: 169055832 1539281737 INVITE  
 Content-Length: 0

=====

F18            192.168.2.10:1024(00003@sip.com) -> 192.168.1.1:5060(Server)

SIP/2.0 200 OK  
 Via: SIP/2.0/UDP 192.168.1.1:5060;branch=z9hG4bK-234.1085827710.1539281739  
 Via: SIP/2.0/UDP 192.168.2.19:5060;branch=z9hG4bK-46932cfa-526985.882  
 From: 00002 <sip:00002@sip.com>;tag=085682dc  
 To: <sip:00003@sip.com>;tag=620512a3  
 Call-ID: 0ba90b74@00002.192.168.1.1  
 CSeq: 1539281739 PRACK  
 Content-Length: 0

=====

F19            192.168.1.1:5062(Server) -> 192.168.2.19:5060(00002@sip.com)

SIP/2.0 200 OK  
 Via: SIP/2.0/UDP 192.168.2.19:5060;branch=z9hG4bK-46932cfa-526985.882  
 From: 00002 <sip:00002@sip.com>;tag=085682dc  
 To: <sip:00003@sip.com>;tag=620512a3  
 Call-ID: 0ba90b74@00002.192.168.1.1  
 CSeq: 1539281739 PRACK  
 Content-Length: 0

=====

F20            192.168.2.10:1024(00003@sip.com) -> 192.168.1.1:5060(Server)

SIP/2.0 180 Ringing

# FOMA/WLAN デュアル端末に関する技術参考資料 第 1.2 版

Via: SIP/2.0/UDP 192.168.1.1:5060;branch=z9hG4bK-234.451192.1539281737  
 Via: SIP/2.0/UDP 192.168.2.19:5060;branch=z9hG4bK-3ef8dfe7-526984.161  
 Record-Route: <sip:00003@192.168.1.1>  
 From: 00002 <sip:00002@sip.com>;tag=085682dc  
 To: <sip:00003@sip.com>;tag=620512a3  
 Call-ID: 0ba90b74@00002.192.168.1.1  
 CSeq: 1539281737 INVITE  
 Contact: <sip:00003@192.168.2.10>  
 Require: 100rel  
 RSeq: 169055833  
 Content-Length: 0

F21 192.168.1.1:5062(Server) -> 192.168.2.19:5060(00002@sip.com)

SIP/2.0 180 Ringing  
 Via: SIP/2.0/UDP 192.168.2.19:5060;branch=z9hG4bK-3ef8dfe7-526984.161  
 Record-Route: <sip:00003@192.168.1.1>  
 From: 00002 <sip:00002@sip.com>;tag=085682dc  
 To: <sip:00003@sip.com>;tag=620512a3  
 Call-ID: 0ba90b74@00002.192.168.1.1  
 CSeq: 1539281737 INVITE  
 Contact: <sip:00003@192.168.2.10>  
 require: 100rel  
 rseq: 169055833  
 Content-Length: 0

F22 192.168.2.19:1024(00002@sip.com) -> 192.168.1.1:5060(Server)

PRACK sip:00003@192.168.1.1 SIP/2.0  
 Via: SIP/2.0/UDP 192.168.2.19:5060;branch=z9hG4bK-740070a7-526996.217  
 Route: <sip:00003@192.168.2.10>  
 From: 00002 <sip:00002@sip.com>;tag=085682dc  
 To: <sip:00003@sip.com>;tag=620512a3  
 Call-ID: 0ba90b74@00002.192.168.1.1  
 CSeq: 1539281740 PRACK  
 Proxy-Authorization: Digest username="00002", realm="heliossv2", nonce="eaea33a348bale8bef5fcd05136f6c27",  
 uri="sip:00003@192.168.1.1", response="aeee944018cbe6da7a4fda7837c629f1", algorithm=MD5, cnonce="5618caa7",  
 opaque="45df8feff416e2272ef8afbd03811d0", qop=auth, nc=00000004  
 Max-Forwards: 70  
 RAck: 169055833 1539281737 INVITE  
 Content-Length: 0

F23 192.168.1.1:5062(Server) -> 192.168.2.10:5060(00003@sip.com)

PRACK sip:00003@192.168.2.10 SIP/2.0  
 Via: SIP/2.0/UDP 192.168.1.1:5060;branch=z9hG4bK-234.1085827720.1539281740  
 Via: SIP/2.0/UDP 192.168.2.19:5060;branch=z9hG4bK-740070a7-526996.217  
 Route: <sip:00003@192.168.2.10>  
 From: 00002 <sip:00002@sip.com>;tag=085682dc  
 To: <sip:00003@sip.com>;tag=620512a3  
 Call-ID: 0ba90b74@00002.192.168.1.1  
 CSeq: 1539281740 PRACK  
 max-forwards: 69  
 rack: 169055833 1539281737 INVITE  
 Content-Length: 0

F24 192.168.2.10:1024(00003@sip.com) -> 192.168.1.1:5060(Server)

SIP/2.0 200 OK  
 Via: SIP/2.0/UDP 192.168.1.1:5060;branch=z9hG4bK-234.1085827720.1539281740  
 Via: SIP/2.0/UDP 192.168.2.19:5060;branch=z9hG4bK-740070a7-526996.217  
 From: 00002 <sip:00002@sip.com>;tag=085682dc  
 To: <sip:00003@sip.com>;tag=620512a3  
 Call-ID: 0ba90b74@00002.192.168.1.1  
 CSeq: 1539281740 PRACK  
 Content-Length: 0

```
=====
F208      192.168.2.19:1024(00002@sip.com) -> 192.168.1.1:5060(Server)

CANCEL sip:00003@sip.com SIP/2.0
Via: SIP/2.0/UDP 192.168.2.19:5060;branch=z9hG4bK-3ef8dfe7-526984.161
Route: <sip:192.168.1.1:5060>
From: <sip:00002@sip.com>;tag=085682dc
To: <sip:00003@sip.com>
Call-ID: 0ba90b74@00002.192.168.1.1
CSeq: 1539281737 CANCEL
Content-Length: 0

=====
F209      192.168.1.1:5062(Server) -> 192.168.2.19:5060(00002@sip.com)

SIP/2.0 200 OK
Via: SIP/2.0/UDP 192.168.2.19:5060;branch=z9hG4bK-3ef8dfe7-526984.161
From: <sip:00002@sip.com>;tag=085682dc
To: <sip:00003@sip.com>
Call-ID: 0ba90b74@00002.192.168.1.1
CSeq: 1539281737 CANCEL
Content-Length: 0

=====
F210      192.168.1.1:5062(Server) -> 192.168.2.19:5060(00002@sip.com)

SIP/2.0 487 Request Cancelled
Via: SIP/2.0/UDP 192.168.2.19:5060;branch=z9hG4bK-3ef8dfe7-526984.161
From: <sip:00002@sip.com>;tag=085682dc
To: <sip:00003@sip.com>
Call-ID: 0ba90b74@00002.192.168.1.1
CSeq: 1539281737 INVITE
Content-Length: 0

=====
F211      192.168.1.1:5062(Server) -> 192.168.2.10:5060(00003@sip.com)

CANCEL sip:00003@192.168.2.10 SIP/2.0
Via: SIP/2.0/UDP 192.168.1.1:5060;branch=z9hG4bK-234.451192.1539281737
Record-Route: <sip:00003@192.168.1.1>
Route: <sip:192.168.1.1:5060>
From: <sip:00002@sip.com>;tag=085682dc
To: <sip:00003@sip.com>
Call-ID: 0ba90b74@00002.192.168.1.1
CSeq: 1539281737 CANCEL
Content-Length: 0

=====
F212      192.168.2.10:1024(00003@sip.com) -> 192.168.1.1:5060(Server)

SIP/2.0 200 OK
Via: SIP/2.0/UDP 192.168.1.1:5060;branch=z9hG4bK-234.451192.1539281737
From: <sip:00002@sip.com>;tag=085682dc
To: <sip:00003@sip.com>
Call-ID: 0ba90b74@00002.192.168.1.1
CSeq: 1539281737 CANCEL
Content-Length: 0

=====
F213      192.168.2.10:1024(00003@sip.com) -> 192.168.1.1:5060(Server)

SIP/2.0 487 Request Terminated
Via: SIP/2.0/UDP 192.168.1.1:5060;branch=z9hG4bK-234.451192.1539281737
Via: SIP/2.0/UDP 192.168.2.19:5060;branch=z9hG4bK-3ef8dfe7-526984.161
From: 00002 <sip:00002@sip.com>;tag=085682dc
To: <sip:00003@sip.com>;tag=620512a3
Call-ID: 0ba90b74@00002.192.168.1.1
CSeq: 1539281737 INVITE
```

Content-Length: 0

```
=====
F214      192.168.1.1:5062(Server) -> 192.168.2.10:5060(00003@sip.com)

ACK sip:00003@192.168.2.10 SIP/2.0
Via: SIP/2.0/UDP 192.168.1.1:5060;branch=z9hG4bK-234.451192.1539281737
Route: <sip:192.168.1.1:5060>
From: 00002 <sip:00002@sip.com>;tag=085682dc
To: <sip:00003@sip.com>;tag=620512a3
Call-ID: 0ba90b74@00002.192.168.1.1
CSeq: 1539281737 ACK
Content-Length: 0
```

```
=====
F215      192.168.2.19:1024(00002@sip.com) -> 192.168.1.1:5060(Server)

ACK sip:00003@sip.com SIP/2.0
Via: SIP/2.0/UDP 192.168.2.19:5060;branch=z9hG4bK-3ef8dfe7-526984.161
Route: <sip:192.168.1.1:5060>
From: <sip:00002@sip.com>;tag=085682dc
To: <sip:00003@sip.com>
Call-ID: 0ba90b74@00002.192.168.1.1
CSeq: 1539281737 ACK
Content-Length: 0

=====
```

## 11.2.8.発信動作取消し

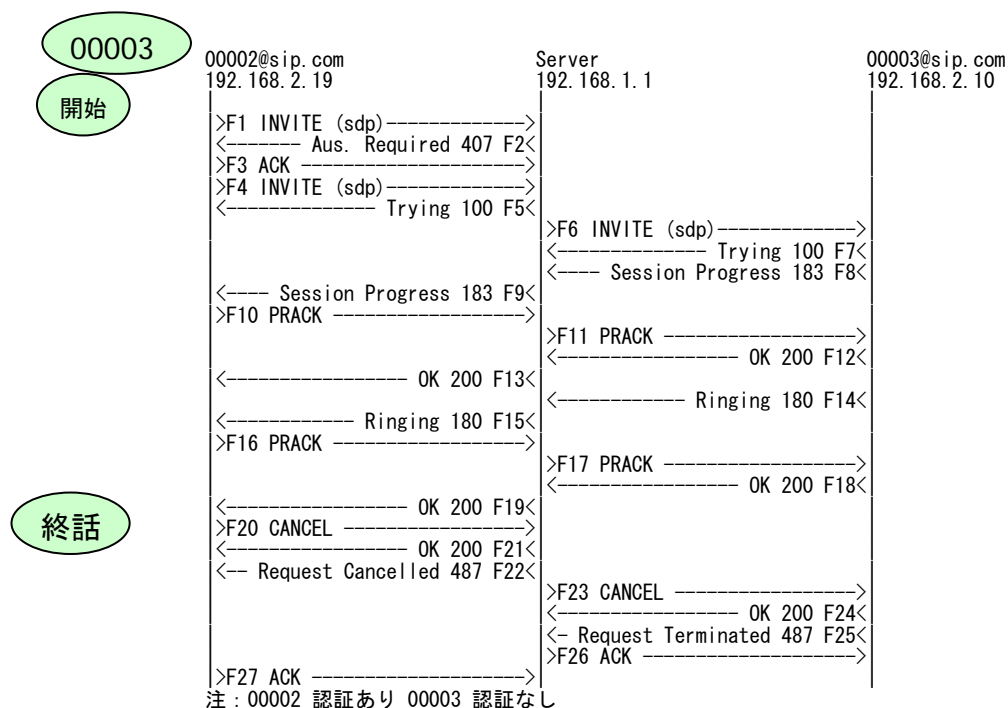


図 11-11 発信動作取消し

```

=====
F1      192.168.2.19:1024(00002@sip.com) -> 192.168.1.1:5060(Server)

INVITE sip:00003@sip.com SIP/2.0
Via: SIP/2.0/UDP 192.168.2.19:5060;branch=z9hG4bK-3406d9ca-526983.930
Route: <sip:192.168.1.1:5060>
From: <sip:00002@sip.com>;tag=085682dc
To: <sip:00003@sip.com>
Call-ID: 0ba90b74@00002.192.168.1.1
CSeq: 1539281736 INVITE
Contact: <sip:00002@192.168.2.19>
Max-Forwards: 70
Supported: 100rel, replaces
Allow: INVITE, ACK, BYE, CANCEL, OPTIONS, PRACK, MESSAGE, REFER, NOTIFY
Content-Type: application/sdp
Accept: application/sdp, message/sipfrag
Content-Length: 252

v=0
o=- 918134 918134 IN IP4 192.168.2.19
s=-
c=IN IP4 192.168.2.19
t=0 0
m=audio 5006 RTP/AVP 0 8 4 18 96
a=rtpmap:0 PCMU/8000
a=rtpmap:8 PCMA/8000
a=rtpmap:4 G723/8000
a=rtpmap:18 G729/8000
a=rtpmap:96 telephone-event/8000
a=fmtp:96 0-11
=====

```

```

=====
F2      192.168.1.1:5062(Server) -> 192.168.2.19:5060(00002@sip.com)

SIP/2.0 407 Proxy Authentication Required
Via: SIP/2.0/UDP 192.168.2.19:5060;branch=z9hG4bK-3406d9ca-526983.930
From: <sip:00002@sip.com>;tag=085682dc
To: <sip:00003@sip.com>
=====

```



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Call-ID: 0ba90b74@00002. 192. 168. 1. 1  
 CSeq: 1539281736 INVITE  
 Proxy-Authenticate: Digest realm="heliossv2", nonce="eaea33a348ba1e8bef5fcd05136f6c27",  
 opaque="45df8feff416e2272ef8afbdc03811d0", stale=false, algorithm=MD5, qop="auth,auth-int"  
 Content-Length: 0

=====

F3 192. 168. 2. 19:1024(00002@sip.com) -> 192. 168. 1. 1:5060(Server)

ACK sip:00003@sip.com SIP/2.0  
 Via: SIP/2.0/UDP 192. 168. 2. 19:5060;branch=z9hG4bK-3406d9ca-526983. 930  
 Route: <sip:192. 168. 1. 1:5060>  
 From: <sip:00002@sip.com>;tag=085682dc  
 To: <sip:00003@sip.com>  
 Call-ID: 0ba90b74@00002. 192. 168. 1. 1  
 CSeq: 1539281736 ACK  
 Content-Length: 0

=====

F4 192. 168. 2. 19:1024(00002@sip.com) -> 192. 168. 1. 1:5060(Server)

INVITE sip:00003@sip.com SIP/2.0  
 Via: SIP/2.0/UDP 192. 168. 2. 19:5060;branch=z9hG4bK-3ef8dfe7-526984. 161  
 Route: <sip:192. 168. 1. 1:5060>  
 From: <sip:00002@sip.com>;tag=085682dc  
 To: <sip:00003@sip.com>  
 Call-ID: 0ba90b74@00002. 192. 168. 1. 1  
 CSeq: 1539281737 INVITE  
 Contact: <sip:00002@192. 168. 2. 19>  
 Proxy-Authorization: Digest username="00002", realm="heliossv2", nonce="eaea33a348ba1e8bef5fcd05136f6c27",  
 uri="sip:00003@sip.com", response="0cf21aeda7b6ce23a4e887a21839e448", algorithm=MD5, cnonce="101bf976",  
 opaque="45df8feff416e2272ef8afbdc03811d0", qop=auth, nc=00000001  
 Max-Forwards: 70  
 Supported: 100rel, replaces  
 Allow: INVITE, ACK, BYE, CANCEL, OPTIONS, PRACK, MESSAGE, REFER, NOTIFY  
 Content-Type: application/sdp  
 Accept: application/sdp, message/sipfrag  
 Content-Length: 252

v=0  
 o=- 918134 918134 IN IP4 192. 168. 2. 19  
 s=-  
 c=IN IP4 192. 168. 2. 19  
 t=0 0  
 m=audio 5006 RTP/AVP 0 8 4 18 96  
 a=rtpmap:0 PCMU/8000  
 a=rtpmap:8 PCMA/8000  
 a=rtpmap:4 G723/8000  
 a=rtpmap:18 G729/8000  
 a=rtpmap:96 telephone-event/8000  
 a=fmtp:96 0-11

=====

F5 192. 168. 1. 1:5062(Server) -> 192. 168. 2. 19:5060(00002@sip.com)

SIP/2.0 100 Trying  
 Via: SIP/2.0/UDP 192. 168. 2. 19:5060;branch=z9hG4bK-3ef8dfe7-526984. 161  
 From: <sip:00002@sip.com>;tag=085682dc  
 To: <sip:00003@sip.com>  
 Call-ID: 0ba90b74@00002. 192. 168. 1. 1  
 CSeq: 1539281737 INVITE  
 Content-Length: 0

=====

F6 192. 168. 1. 1:5062(Server) -> 192. 168. 2. 10:5060(00003@sip.com)

INVITE sip:00003@192. 168. 2. 10 SIP/2.0  
 Via: SIP/2.0/UDP 192. 168. 1. 1:5060;branch=z9hG4bK-234. 451192. 1539281737  
 Via: SIP/2.0/UDP 192. 168. 2. 19:5060;branch=z9hG4bK-3ef8dfe7-526984. 161  
 Record-Route: <sip:00003@192. 168. 1. 1>  
 Route: <sip:192. 168. 1. 1:5060>  
 From: 00002 <sip:00002@sip.com>;tag=085682dc  
 To: <sip:00003@sip.com>  
 Call-ID: 0ba90b74@00002. 192. 168. 1. 1

CSeq: 1539281737 INVITE  
 Contact: <sip:00002@192.168.2.19>  
 max-forwards: 69  
 supported: 100rel  
 supported: replaces  
 Allow: INVITE, ACK, BYE, CANCEL, OPTIONS, PRACK, MESSAGE, REFER, NOTIFY  
 Content-Type: application/sdp  
 Accept: application/sdp, message/sipfrag  
 Content-Length: 252

v=0  
 o=- 918134 918134 IN IP4 192.168.2.19  
 s=-  
 c=IN IP4 192.168.2.19  
 t=0 0  
 m=audio 5006 RTP/AVP 0 8 4 18 96  
 a=rtpmap:0 PCMU/8000  
 a=rtpmap:8 PCMA/8000  
 a=rtpmap:4 G723/8000  
 a=rtpmap:18 G729/8000  
 a=rtpmap:96 telephone-event/8000  
 a=fmtp:96 0-11

F7 192.168.2.10:1024(00003@sip.com) -> 192.168.1.1:5060(Server)

SIP/2.0 100 Trying  
 Via: SIP/2.0/UDP 192.168.1.1:5060;branch=z9hG4bK-234.451192.1539281737  
 Via: SIP/2.0/UDP 192.168.2.19:5060;branch=z9hG4bK-3ef8dfe7-526984.161  
 From: 00002 <sip:00002@sip.com>;tag=085682dc  
 To: <sip:00003@sip.com>  
 Call-ID: 0ba90b74@00002.192.168.1.1  
 CSeq: 1539281737 INVITE  
 Content-Length: 0

F8 192.168.2.10:1024(00003@sip.com) -> 192.168.1.1:5060(Server)

SIP/2.0 183 Session Progress  
 Via: SIP/2.0/UDP 192.168.1.1:5060;branch=z9hG4bK-234.451192.1539281737  
 Via: SIP/2.0/UDP 192.168.2.19:5060;branch=z9hG4bK-3ef8dfe7-526984.161  
 Record-Route: <sip:00003@192.168.1.1>  
 From: 00002 <sip:00002@sip.com>;tag=085682dc  
 To: <sip:00003@sip.com>;tag=620512a3  
 Call-ID: 0ba90b74@00002.192.168.1.1  
 CSeq: 1539281737 INVITE  
 Contact: <sip:00003@192.168.2.10>  
 Require: 100rel  
 RSeq: 169055831  
 Content-Length: 0

F9 192.168.1.1:5062(Server) -> 192.168.2.19:5060(00002@sip.com)

SIP/2.0 183 Session Progress  
 Via: SIP/2.0/UDP 192.168.2.19:5060;branch=z9hG4bK-3ef8dfe7-526984.161  
 Record-Route: <sip:00003@192.168.1.1>  
 From: 00002 <sip:00002@sip.com>;tag=085682dc  
 To: <sip:00003@sip.com>;tag=620512a3  
 Call-ID: 0ba90b74@00002.192.168.1.1  
 CSeq: 1539281737 INVITE  
 Contact: <sip:00003@192.168.2.10>  
 require: 100rel  
 rseq: 169055831  
 Content-Length: 0

F10 192.168.2.19:1024(00002@sip.com) -> 192.168.1.1:5060(Server)

PRACK sip:00003@192.168.1.1 SIP/2.0  
 Via: SIP/2.0/UDP 192.168.2.19:5060;branch=z9hG4bK-713360ae-526985.161  
 Route: <sip:00003@192.168.2.10>  
 From: 00002 <sip:00002@sip.com>;tag=085682dc  
 To: <sip:00003@sip.com>;tag=620512a3

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Call-ID: 0ba90b74@00002.192.168.1.1  
 CSeq: 1539281738 PRACK  
 Proxy-Authorization: Digest username="00002", realm="heliossv2", nonce="eaea33a348bale8bef5fcd05136f6c27",  
 uri="sip:00003@192.168.1.1", response="c39916a7b46324d1cd79743168464842", algorithm=MD5, cnonce="49acec50",  
 opaque="45df8feff416e2272ef8afbdc03811d0", qop=auth, nc=00000002  
 Max-Forwards: 70  
 RACK: 169055831 1539281737 INVITE  
 Content-Length: 0

---

F11 192.168.1.1:5062(Server) -> 192.168.2.10:5060(00003@sip.com)

PRACK sip:00003@192.168.2.10 SIP/2.0  
 Via: SIP/2.0/UDP 192.168.1.1:5060;branch=z9hG4bK-234.1085827709.1539281738  
 Via: SIP/2.0/UDP 192.168.2.19:5060;branch=z9hG4bK-713360ae-526985.161  
 Route: <sip:00003@192.168.2.10>  
 From: 00002 <sip:00002@sip.com>;tag=085682dc  
 To: <sip:00003@sip.com>;tag=620512a3  
 Call-ID: 0ba90b74@00002.192.168.1.1  
 CSeq: 1539281738 PRACK  
 max-forwards: 69  
 rack: 169055831 1539281737 INVITE  
 Content-Length: 0

---

F12 192.168.2.10:1024(00003@sip.com) -> 192.168.1.1:5060(Server)

SIP/2.0 200 OK  
 Via: SIP/2.0/UDP 192.168.1.1:5060;branch=z9hG4bK-234.1085827709.1539281738  
 Via: SIP/2.0/UDP 192.168.2.19:5060;branch=z9hG4bK-713360ae-526985.161  
 From: 00002 <sip:00002@sip.com>;tag=085682dc  
 To: <sip:00003@sip.com>;tag=620512a3  
 Call-ID: 0ba90b74@00002.192.168.1.1  
 CSeq: 1539281738 PRACK  
 Content-Length: 0

---

F13 192.168.1.1:5062(Server) -> 192.168.2.19:5060(00002@sip.com)

SIP/2.0 200 OK  
 Via: SIP/2.0/UDP 192.168.2.19:5060;branch=z9hG4bK-713360ae-526985.161  
 From: 00002 <sip:00002@sip.com>;tag=085682dc  
 To: <sip:00003@sip.com>;tag=620512a3  
 Call-ID: 0ba90b74@00002.192.168.1.1  
 CSeq: 1539281738 PRACK  
 Content-Length: 0

---

F14 192.168.2.10:1024(00003@sip.com) -> 192.168.1.1:5060(Server)

SIP/2.0 180 Ringing  
 Via: SIP/2.0/UDP 192.168.1.1:5060;branch=z9hG4bK-234.451192.1539281737  
 Via: SIP/2.0/UDP 192.168.2.19:5060;branch=z9hG4bK-3ef8dfe7-526984.161  
 Record-Route: <sip:00003@192.168.1.1>  
 From: 00002 <sip:00002@sip.com>;tag=085682dc  
 To: <sip:00003@sip.com>;tag=620512a3  
 Call-ID: 0ba90b74@00002.192.168.1.1  
 CSeq: 1539281737 INVITE  
 Contact: <sip:00003@192.168.2.10>  
 Require: 100rel  
 RSeq: 169055832  
 Content-Length: 0

---

F15 192.168.1.1:5062(Server) -> 192.168.2.19:5060(00002@sip.com)

SIP/2.0 180 Ringing  
 Via: SIP/2.0/UDP 192.168.2.19:5060;branch=z9hG4bK-3ef8dfe7-526984.161  
 Record-Route: <sip:00003@192.168.1.1>  
 From: 00002 <sip:00002@sip.com>;tag=085682dc  
 To: <sip:00003@sip.com>;tag=620512a3

Call-ID: 0ba90b74@00002.192.168.1.1  
CSeq: 1539281737 INVITE  
Contact: <sip:00003@192.168.2.10>  
require: 100rel  
rseq: 169055832  
Content-Length: 0

F16 192.168.2.19:1024(00002@sip.com) -> 192.168.1.1:5060(Server)

PRACK sip:00003@192.168.1.1 SIP/2.0  
Via: SIP/2.0/UDP 192.168.2.19:5060;branch=z9hG4bK-46932cfa-526985.882  
Route: <sip:00003@192.168.2.10>  
From: 00002 <sip:00002@sip.com>;tag=085682dc  
To: <sip:00003@sip.com>;tag=620512a3  
Call-ID: 0ba90b74@00002.192.168.1.1  
CSeq: 1539281739 PRACK  
Proxy-Authorization: Digest username="00002", realm="heliossv2", nonce="eaea33a348ba1e8bef5fcd05136f6c27",  
uri="sip:00003@192.168.1.1", response="d8d056f9bf6d4f7916c2a03abb02807f", algorithm=MD5, cnonce="27c5e210",  
opaque="45df8feff416e2272ef8afbdc03811d0", qop=auth, nc=00000003  
Max-Forwards: 70  
RAck: 169055832 1539281737 INVITE  
Content-Length: 0

F17 192.168.1.1:5062(Server) -> 192.168.2.10:5060(00003@sip.com)

PRACK sip:00003@192.168.2.10 SIP/2.0  
Via: SIP/2.0/UDP 192.168.1.1:5060;branch=z9hG4bK-234.1085827710.1539281739  
Via: SIP/2.0/UDP 192.168.2.19:5060;branch=z9hG4bK-46932cfa-526985.882  
Route: <sip:00003@192.168.2.10>  
From: 00002 <sip:00002@sip.com>;tag=085682dc  
To: <sip:00003@sip.com>;tag=620512a3  
Call-ID: 0ba90b74@00002.192.168.1.1  
CSeq: 1539281739 PRACK  
max-forwards: 69  
rack: 169055832 1539281737 INVITE  
Content-Length: 0

F18 192.168.2.10:1024(00003@sip.com) -> 192.168.1.1:5060(Server)

SIP/2.0 200 OK  
Via: SIP/2.0/UDP 192.168.1.1:5060;branch=z9hG4bK-234.1085827710.1539281739  
Via: SIP/2.0/UDP 192.168.2.19:5060;branch=z9hG4bK-46932cfa-526985.882  
From: 00002 <sip:00002@sip.com>;tag=085682dc  
To: <sip:00003@sip.com>;tag=620512a3  
Call-ID: 0ba90b74@00002.192.168.1.1  
CSeq: 1539281739 PRACK  
Content-Length: 0

F19 192.168.1.1:5062(Server) -> 192.168.2.19:5060(00002@sip.com)

SIP/2.0 200 OK  
Via: SIP/2.0/UDP 192.168.2.19:5060;branch=z9hG4bK-46932cfa-526985.882  
From: 00002 <sip:00002@sip.com>;tag=085682dc  
To: <sip:00003@sip.com>;tag=620512a3  
Call-ID: 0ba90b74@00002.192.168.1.1  
CSeq: 1539281739 PRACK  
Content-Length: 0

F20 192.168.2.19:1024(00002@sip.com) -> 192.168.1.1:5060(Server)

CANCEL sip:00003@sip.com SIP/2.0  
Via: SIP/2.0/UDP 192.168.2.19:5060;branch=z9hG4bK-3ef8dfe7-526984.161  
Route: <sip:192.168.1.1:5060>  
From: <sip:00002@sip.com>;tag=085682dc  
To: <sip:00003@sip.com>  
Call-ID: 0ba90b74@00002.192.168.1.1

CSeq: 1539281737 CANCEL  
Content-Length: 0

=====

F21 192.168.1.1:5062 (Server) -> 192.168.2.19:5060 (00002@sip.com)

SIP/2.0 200 OK  
Via: SIP/2.0/UDP 192.168.2.19:5060;branch=z9hG4bK-3ef8dfe7-526984.161  
From: <sip:00002@sip.com>;tag=085682dc  
To: <sip:00003@sip.com>  
Call-ID: 0ba90b74@00002.192.168.1.1  
CSeq: 1539281737 CANCEL  
Content-Length: 0

=====

F22 192.168.1.1:5062 (Server) -> 192.168.2.19:5060 (00002@sip.com)

SIP/2.0 487 Request Cancelled  
Via: SIP/2.0/UDP 192.168.2.19:5060;branch=z9hG4bK-3ef8dfe7-526984.161  
From: <sip:00002@sip.com>;tag=085682dc  
To: <sip:00003@sip.com>  
Call-ID: 0ba90b74@00002.192.168.1.1  
CSeq: 1539281737 INVITE  
Content-Length: 0

=====

F23 192.168.1.1:5062 (Server) -> 192.168.2.10:5060 (00003@sip.com)

CANCEL sip:00003@192.168.2.10 SIP/2.0  
Via: SIP/2.0/UDP 192.168.1.1:5060;branch=z9hG4bK-234.451192.1539281737  
Record-Route: <sip:00003@192.168.1.1>  
Route: <sip:192.168.1.1:5060>  
From: <sip:00002@sip.com>;tag=085682dc  
To: <sip:00003@sip.com>  
Call-ID: 0ba90b74@00002.192.168.1.1  
CSeq: 1539281737 CANCEL  
Content-Length: 0

=====

F24 192.168.2.10:1024 (00003@sip.com) -> 192.168.1.1:5060 (Server)

SIP/2.0 200 OK  
Via: SIP/2.0/UDP 192.168.1.1:5060;branch=z9hG4bK-234.451192.1539281737  
From: <sip:00002@sip.com>;tag=085682dc  
To: <sip:00003@sip.com>  
Call-ID: 0ba90b74@00002.192.168.1.1  
CSeq: 1539281737 CANCEL  
Content-Length: 0

=====

F25 192.168.2.10:1024 (00003@sip.com) -> 192.168.1.1:5060 (Server)

SIP/2.0 487 Request Terminated  
Via: SIP/2.0/UDP 192.168.1.1:5060;branch=z9hG4bK-234.451192.1539281737  
Via: SIP/2.0/UDP 192.168.2.19:5060;branch=z9hG4bK-3ef8dfe7-526984.161  
From: 00002 <sip:00002@sip.com>;tag=085682dc  
To: <sip:00003@sip.com>;tag=620512a3  
Call-ID: 0ba90b74@00002.192.168.1.1  
CSeq: 1539281737 INVITE  
Content-Length: 0

=====

F26 192.168.1.1:5062 (Server) -> 192.168.2.10:5060 (00003@sip.com)

ACK sip:00003@192.168.2.10 SIP/2.0  
Via: SIP/2.0/UDP 192.168.1.1:5060;branch=z9hG4bK-234.451192.1539281737  
Route: <sip:192.168.1.1:5060>  
From: 00002 <sip:00002@sip.com>;tag=085682dc  
To: <sip:00003@sip.com>;tag=620512a3

Call-ID: 0ba90b74@00002.192.168.1.1  
CSeq: 1539281737 ACK  
Content-Length: 0

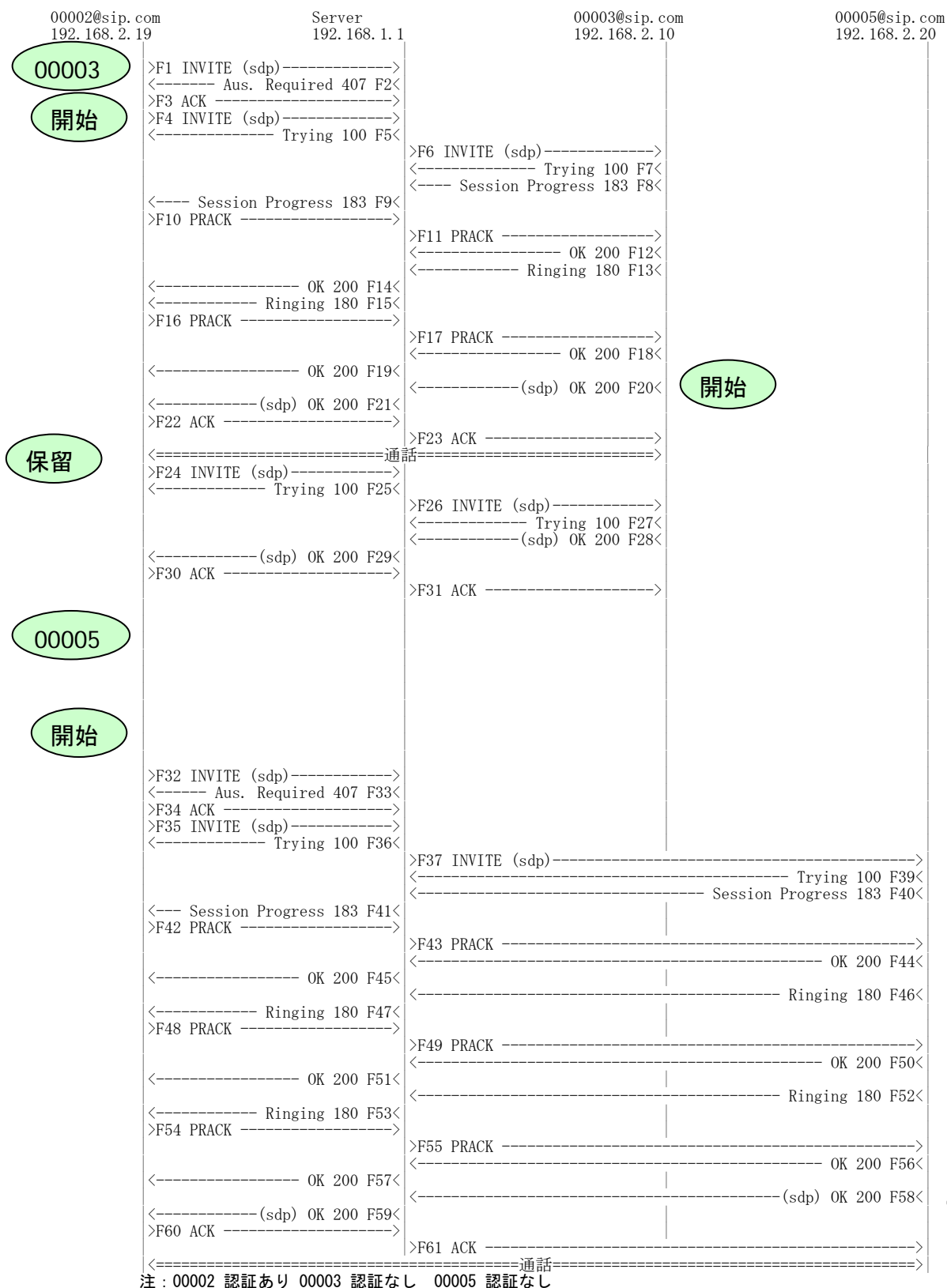
=====

F27            192.168.2.19:1024 (00002@sip.com) -> 192.168.1.1:5060 (Server)

ACK sip:00003@sip.com SIP/2.0  
Via: SIP/2.0/UDP 192.168.2.19:5060;branch=z9hG4bK-3ef8dfe7-526984.161  
Route: <sip:192.168.1.1:5060>  
From: <sip:00002@sip.com>;tag=085682dc  
To: <sip:00003@sip.com>  
Call-ID: 0ba90b74@00002.192.168.1.1  
CSeq: 1539281737 ACK  
Content-Length: 0

=====

## 11.2.9.通話中発信(第二呼発信)



注：00002 認証あり 00003 認証なし 00005 認証なし

## 図 11-12 通話中発信(第二呼発信)

```

=====
F1          192.168.2.19:1024(00002@sip.com) -> 192.168.1.1:5060(Server)

INVITE sip:00003@sip.com SIP/2.0
Via: SIP/2.0/UDP 192.168.2.19:5060;branch=z9hG4bK-49295b61-527397.018
Route: <sip:192.168.1.1:5060>
From: <sip:00002@sip.com>;tag=683cba79
To: <sip:00003@sip.com>
Call-ID: 23694405@00002.192.168.1.1
CSeq: 1713616243 INVITE
Contact: <sip:00002@192.168.2.19>
Proxy-Authorization: Digest username="00002", realm="heliossv2", nonce="eaea33a348bale8bef5fcd05136f6c27",
uri="sip:00003@sip.com", response="6b00d2092f1f4cbf48f71a7afaa301f7", algorithm=MD5, cnonce="687af610",
opaque="45df8feff416e2272ef8afbdc03811d0", qop=auth, nc=00000022
Max-Forwards: 70
Supported: 100rel, replaces
Allow: INVITE, ACK, BYE, CANCEL, OPTIONS, PRACK, MESSAGE, REFER, NOTIFY
Content-Type: application/sdp
Accept: application/sdp, message/sipfrag
Content-Length: 249

v=0
o=- 897240 101 IN IP4 192.168.2.19
s=-
c=IN IP4 192.168.2.19
t=0 0
m=audio 5008 RTP/AVP 0 8 4 18 96
a=rtpmap:0 PCMU/8000
a=rtpmap:8 PCMA/8000
a=rtpmap:4 G723/8000
a=rtpmap:18 G729/8000
a=rtpmap:96 telephone-event/8000
a=fmtp:96 0-11

=====
F2          192.168.1.1:5062(Server) -> 192.168.2.19:5060(00002@sip.com)

SIP/2.0 407 Proxy Authentication Required
Via: SIP/2.0/UDP 192.168.2.19:5060;branch=z9hG4bK-49295b61-527397.018
From: <sip:00002@sip.com>;tag=683cba79
To: <sip:00003@sip.com>
Call-ID: 23694405@00002.192.168.1.1
CSeq: 1713616243 INVITE
Proxy-Authenticate: Digest realm="heliossv2", nonce="97f5a97dedb014ad4af6629f81b7248a",
opaque="1e89367ede8e05a0d9f82a635bae2e1a", stale=false, algorithm=MD5, qop="auth,auth-int"
Content-Length: 0

=====
F3          192.168.2.19:1024(00002@sip.com) -> 192.168.1.1:5060(Server)

ACK sip:00003@sip.com SIP/2.0
Via: SIP/2.0/UDP 192.168.2.19:5060;branch=z9hG4bK-49295b61-527397.018
Route: <sip:192.168.1.1:5060>
From: <sip:00002@sip.com>;tag=683cba79
To: <sip:00003@sip.com>
Call-ID: 23694405@00002.192.168.1.1
CSeq: 1713616243 ACK
Content-Length: 0

=====
F4          192.168.2.19:1024(00002@sip.com) -> 192.168.1.1:5060(Server)

INVITE sip:00003@sip.com SIP/2.0
Via: SIP/2.0/UDP 192.168.2.19:5060;branch=z9hG4bK-7ce833a3-527397.724
Route: <sip:192.168.1.1:5060>
From: <sip:00002@sip.com>;tag=683cba79
To: <sip:00003@sip.com>
Call-ID: 23694405@00002.192.168.1.1
CSeq: 1713616244 INVITE
Contact: <sip:00002@192.168.2.19>
Proxy-Authorization: Digest username="00002", realm="heliossv2", nonce="97f5a97dedb014ad4af6629f81b7248a",
uri="sip:00003@sip.com", response="03d18c7292ac5927ae312b835ea25e49", algorithm=MD5, cnonce="567a5fd6",

```



```
opaque="1e89367ede8e05a0d9f82a635bae2e1a", qop=auth, nc=00000001
Max-Forwards: 70
Supported: 100rel, replaces
Allow: INVITE, ACK, BYE, CANCEL, OPTIONS, PRACK, MESSAGE, REFER, NOTIFY
Content-Type: application/sdp
Accept: application/sdp, message/sipfrag
Content-Length: 249
```

```
v=0
o=- 897240 101 IN IP4 192.168.2.19
s=-
c=IN IP4 192.168.2.19
t=0 0
m=audio 5008 RTP/AVP 0 8 4 18 96
a=rtpmap:0 PCMU/8000
a=rtpmap:8 PCMA/8000
a=rtpmap:4 G723/8000
a=rtpmap:18 G729/8000
a=rtpmap:96 telephone-event/8000
a=fmtp:96 0-11
```

```
=====
F5          192.168.1.1:5062(Server) -> 192.168.2.19:5060(00002@sip.com)
```

```
SIP/2.0 100 Trying
Via: SIP/2.0/UDP 192.168.2.19:5060;branch=z9hG4bK-7ce833a3-527397.724
From: <sip:00002@sip.com>;tag=683cba79
To: <sip:00003@sip.com>
Call-ID: 23694405@00002.192.168.1.1
CSeq: 1713616244 INVITE
Content-Length: 0
```

```
=====
F6          192.168.1.1:5062(Server) -> 192.168.2.10:5060(00003@sip.com)
```

```
INVITE sip:00003@192.168.2.10 SIP/2.0
Via: SIP/2.0/UDP 192.168.1.1:5060;branch=z9hG4bK-238.311289.1713616244
Via: SIP/2.0/UDP 192.168.2.19:5060;branch=z9hG4bK-7ce833a3-527397.724
Record-Route: <sip:00003@192.168.1.1>
Route: <sip:192.168.1.1:5060>
From: 00002 <sip:00002@sip.com>;tag=683cba79
To: <sip:00003@sip.com>
Call-ID: 23694405@00002.192.168.1.1
CSeq: 1713616244 INVITE
Contact: <sip:00002@192.168.2.19>
max-forwards: 69
supported: 100rel
supported: replaces
Allow: INVITE, ACK, BYE, CANCEL, OPTIONS, PRACK, MESSAGE, REFER, NOTIFY
Content-Type: application/sdp
Accept: application/sdp, message/sipfrag
Content-Length: 249
```

```
v=0
o=- 897240 101 IN IP4 192.168.2.19
s=-
c=IN IP4 192.168.2.19
t=0 0
m=audio 5008 RTP/AVP 0 8 4 18 96
a=rtpmap:0 PCMU/8000
a=rtpmap:8 PCMA/8000
a=rtpmap:4 G723/8000
a=rtpmap:18 G729/8000
a=rtpmap:96 telephone-event/8000
a=fmtp:96 0-11
```

```
=====
F7          192.168.2.10:1024(00003@sip.com) -> 192.168.1.1:5060(Server)
```

```
SIP/2.0 100 Trying
Via: SIP/2.0/UDP 192.168.1.1:5060;branch=z9hG4bK-238.311289.1713616244
Via: SIP/2.0/UDP 192.168.2.19:5060;branch=z9hG4bK-7ce833a3-527397.724
From: 00002 <sip:00002@sip.com>;tag=683cba79
To: <sip:00003@sip.com>
Call-ID: 23694405@00002.192.168.1.1
CSeq: 1713616244 INVITE
Content-Length: 0
```

=====

F8            192.168.2.10:1024(00003@sip.com) -> 192.168.1.1:5060 (Server)

SIP/2.0 183 Session Progress  
Via: SIP/2.0/UDP 192.168.1.1:5060;branch=z9hG4bK-238.311289.1713616244  
Via: SIP/2.0/UDP 192.168.2.19:5060;branch=z9hG4bK-7ce833a3-527397.724  
Record-Route: <sip:00003@192.168.1.1>  
From: 00002 <sip:00002@sip.com>;tag=683cba79  
To: <sip:00003@sip.com>;tag=64d02e20  
Call-ID: 23694405@00002.192.168.1.1  
CSeq: 1713616244 INVITE  
Contact: <sip:00003@192.168.2.10>  
Require: 100rel  
RSeq: 1007318450  
Content-Length: 0

=====

F9            192.168.1.1:5062 (Server) -> 192.168.2.19:5060 (00002@sip.com)

SIP/2.0 183 Session Progress  
Via: SIP/2.0/UDP 192.168.2.19:5060;branch=z9hG4bK-7ce833a3-527397.724  
Record-Route: <sip:00003@192.168.1.1>  
From: 00002 <sip:00002@sip.com>;tag=683cba79  
To: <sip:00003@sip.com>;tag=64d02e20  
Call-ID: 23694405@00002.192.168.1.1  
CSeq: 1713616244 INVITE  
Contact: <sip:00003@192.168.2.10>  
require: 100rel  
rseq: 1007318450  
Content-Length: 0

=====

F10           192.168.2.19:1024(00002@sip.com) -> 192.168.1.1:5060 (Server)

PRACK sip:00003@192.168.1.1 SIP/2.0  
Via: SIP/2.0/UDP 192.168.2.19:5060;branch=z9hG4bK-61353c41-527399.492  
Route: <sip:00003@192.168.2.10>  
From: 00002 <sip:00002@sip.com>;tag=683cba79  
To: <sip:00003@sip.com>;tag=64d02e20  
Call-ID: 23694405@00002.192.168.1.1  
CSeq: 1713616245 PRACK  
Proxy-Authorization: Digest username="00002", realm="heliossv2", nonce="97f5a97dedb014ad4af6629f81b7248a",  
uri="sip:00003@192.168.1.1", response="7f4181b286e429be1438ccab5caleec2", algorithm=MD5, cnonce="51c6bc28",  
opaque="1e89367ede8e05a0d9f82a635bae2e1a", qop=auth, nc=00000002  
Max-Forwards: 70  
RAck: 1007318450 1713616244 INVITE  
Content-Length: 0

=====

F11           192.168.1.1:5062 (Server) -> 192.168.2.10:5060 (00003@sip.com)

PRACK sip:00003@192.168.2.10 SIP/2.0  
Via: SIP/2.0/UDP 192.168.1.1:5060;branch=z9hG4bK-238.1085828123.1713616245  
Via: SIP/2.0/UDP 192.168.2.19:5060;branch=z9hG4bK-61353c41-527399.492  
Route: <sip:00003@192.168.2.10>  
From: 00002 <sip:00002@sip.com>;tag=683cba79  
To: <sip:00003@sip.com>;tag=64d02e20  
Call-ID: 23694405@00002.192.168.1.1  
CSeq: 1713616245 PRACK  
max-forwards: 69  
rack: 1007318450 1713616244 INVITE  
Content-Length: 0

=====

F12           192.168.2.10:1024(00003@sip.com) -> 192.168.1.1:5060 (Server)

SIP/2.0 200 OK  
Via: SIP/2.0/UDP 192.168.1.1:5060;branch=z9hG4bK-238.1085828123.1713616245  
Via: SIP/2.0/UDP 192.168.2.19:5060;branch=z9hG4bK-61353c41-527399.492  
From: 00002 <sip:00002@sip.com>;tag=683cba79

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To: <sip:00003@sip.com>;tag=64d02e20  
 Call-ID: 23694405@00002.192.168.1.1  
 CSeq: 1713616245 PRACK  
 Content-Length: 0

F13 192.168.2.10:1024(00003@sip.com) -> 192.168.1.1:5060(Server)

SIP/2.0 180 Ringing  
 Via: SIP/2.0/UDP 192.168.1.1:5060;branch=z9hG4bK-238.311289.1713616244  
 Via: SIP/2.0/UDP 192.168.2.19:5060;branch=z9hG4bK-7ce833a3-527397.724  
 Record-Route: <sip:00003@192.168.1.1>  
 From: 00002 <sip:00002@sip.com>;tag=683cba79  
 To: <sip:00003@sip.com>;tag=64d02e20  
 Call-ID: 23694405@00002.192.168.1.1  
 CSeq: 1713616244 INVITE  
 Contact: <sip:00003@192.168.2.10>  
 Require: 100rel  
 RSeq: 1007318451  
 Content-Length: 0

F14 192.168.1.1:5062(Server) -> 192.168.2.19:5060(00002@sip.com)

SIP/2.0 200 OK  
 Via: SIP/2.0/UDP 192.168.2.19:5060;branch=z9hG4bK-61353c41-527399.492  
 From: 00002 <sip:00002@sip.com>;tag=683cba79  
 To: <sip:00003@sip.com>;tag=64d02e20  
 Call-ID: 23694405@00002.192.168.1.1  
 CSeq: 1713616245 PRACK  
 Content-Length: 0

F15 192.168.1.1:5062(Server) -> 192.168.2.19:5060(00002@sip.com)

SIP/2.0 180 Ringing  
 Via: SIP/2.0/UDP 192.168.2.19:5060;branch=z9hG4bK-7ce833a3-527397.724  
 Record-Route: <sip:00003@192.168.1.1>  
 From: 00002 <sip:00002@sip.com>;tag=683cba79  
 To: <sip:00003@sip.com>;tag=64d02e20  
 Call-ID: 23694405@00002.192.168.1.1  
 CSeq: 1713616244 INVITE  
 Contact: <sip:00003@192.168.2.10>  
 require: 100rel  
 rseq: 1007318451  
 Content-Length: 0

F16 192.168.2.19:1024(00002@sip.com) -> 192.168.1.1:5060(Server)

PRACK sip:00003@192.168.1.1 SIP/2.0  
 Via: SIP/2.0/UDP 192.168.2.19:5060;branch=z9hG4bK-f88c4e9-527399.711  
 Route: <sip:00003@192.168.2.10>  
 From: 00002 <sip:00002@sip.com>;tag=683cba79  
 To: <sip:00003@sip.com>;tag=64d02e20  
 Call-ID: 23694405@00002.192.168.1.1  
 CSeq: 1713616246 PRACK  
 Proxy-Authorization: Digest username="00002", realm="heliossv2", nonce="97f5a97dedb014ad4af6629f81b7248a",  
 uri="sip:00003@192.168.1.1", response="e9309a520f13d4f7bd4f0d9c2550aald", algorithm=MD5, cnonce="4b14da39",  
 opaque="1e89367ede8e05a0d9f82a635bae2e1a", qop=auth, nc=00000003  
 Max-Forwards: 70  
 RAck: 1007318451 1713616244 INVITE  
 Content-Length: 0

F17 192.168.1.1:5062(Server) -> 192.168.2.10:5060(00003@sip.com)

PRACK sip:00003@192.168.2.10 SIP/2.0  
 Via: SIP/2.0/UDP 192.168.1.1:5060;branch=z9hG4bK-238.1085828123.1713616246  
 Via: SIP/2.0/UDP 192.168.2.19:5060;branch=z9hG4bK-f88c4e9-527399.711  
 Route: <sip:00003@192.168.2.10>

# FOMA/WLAN デュアル端末に関する技術参考資料 第 1.2 版

From: 00002 <sip:00002@sip.com>;tag=683cba79  
To: <sip:00003@sip.com>;tag=64d02e20  
Call-ID: 23694405@00002.192.168.1.1  
CSeq: 1713616246 PRACK  
max-forwards: 69  
rack: 1007318451 1713616244 INVITE  
Content-Length: 0

F18 192.168.2.10:1024(00003@sip.com) -> 192.168.1.1:5060(Server)

SIP/2.0 200 OK  
Via: SIP/2.0/UDP 192.168.1.1:5060;branch=z9hG4bK-238.1085828123.1713616246  
Via: SIP/2.0/UDP 192.168.2.19:5060;branch=z9hG4bK-f88c4e9-527399.711  
From: 00002 <sip:00002@sip.com>;tag=683cba79  
To: <sip:00003@sip.com>;tag=64d02e20  
Call-ID: 23694405@00002.192.168.1.1  
CSeq: 1713616246 PRACK  
Content-Length: 0

F19 192.168.1.1:5062(Server) -> 192.168.2.19:5060(00002@sip.com)

SIP/2.0 200 OK  
Via: SIP/2.0/UDP 192.168.2.19:5060;branch=z9hG4bK-f88c4e9-527399.711  
From: 00002 <sip:00002@sip.com>;tag=683cba79  
To: <sip:00003@sip.com>;tag=64d02e20  
Call-ID: 23694405@00002.192.168.1.1  
CSeq: 1713616246 PRACK  
Content-Length: 0

F20 192.168.2.10:1024(00003@sip.com) -> 192.168.1.1:5060(Server)

SIP/2.0 200 OK  
Via: SIP/2.0/UDP 192.168.1.1:5060;branch=z9hG4bK-238.311289.1713616244  
Via: SIP/2.0/UDP 192.168.2.19:5060;branch=z9hG4bK-7ce833a3-527397.724  
Record-Route: <sip:00003@192.168.1.1>  
From: 00002 <sip:00002@sip.com>;tag=683cba79  
To: <sip:00003@sip.com>;tag=64d02e20  
Call-ID: 23694405@00002.192.168.1.1  
CSeq: 1713616244 INVITE  
Contact: <sip:00003@192.168.2.10>  
Supported: 100rel, replaces  
Allow: INVITE, ACK, BYE, CANCEL, OPTIONS, PRACK, MESSAGE, REFER, NOTIFY  
Content-Type: application/sdp  
Accept: application/sdp, message/sipfrag  
Content-Length: 177

v=0  
o=- 429087 12901 IN IP4 192.168.2.10  
s=-  
c=IN IP4 192.168.2.10  
t=0 0  
m=audio 5008 RTP/AVP 0 96  
a=rtpmap:0 PCMU/8000  
a=rtpmap:96 telephone-event/8000  
a=fmtp:96 0-11

F21 192.168.1.1:5062(Server) -> 192.168.2.19:5060(00002@sip.com)

SIP/2.0 200 OK  
Via: SIP/2.0/UDP 192.168.2.19:5060;branch=z9hG4bK-7ce833a3-527397.724  
Record-Route: <sip:00003@192.168.1.1>  
From: 00002 <sip:00002@sip.com>;tag=683cba79  
To: <sip:00003@sip.com>;tag=64d02e20  
Call-ID: 23694405@00002.192.168.1.1  
CSeq: 1713616244 INVITE  
Contact: <sip:00003@192.168.2.10>  
supported: 100rel  
supported: replaces  
Allow: INVITE, ACK, BYE, CANCEL, OPTIONS, PRACK, MESSAGE, REFER, NOTIFY  
Content-Type: application/sdp

Accept: application/sdp, message/sipfrag  
Content-Length: 177

v=0  
o=- 429087 12901 IN IP4 192.168.2.10  
s=-  
c=IN IP4 192.168.2.10  
t=0 0  
m=audio 5008 RTP/AVP 0 96  
a=rtpmap:0 PCMU/8000  
a=rtpmap:96 telephone-event/8000  
a=fmtp:96 0-11

F22 192.168.2.19:1024(00002@sip.com) -> 192.168.1.1:5060(Server)

ACK sip:00003@192.168.1.1 SIP/2.0  
Via: SIP/2.0/UDP 192.168.2.19:5060;branch=z9hG4bK-45526cc4-527409.985  
Route: <sip:00003@192.168.2.10>  
From: 00002 <sip:00002@sip.com>;tag=683cba79  
To: <sip:00003@sip.com>;tag=64d02e20  
Call-ID: 23694405@00002.192.168.1.1  
CSeq: 1713616244 ACK  
Proxy-Authorization: Digest username="00002", realm="heliossv2", nonce="97f5a97dedb014ad4af6629f81b7248a",  
uri="sip:00003@sip.com", response="03d18c7292ac5927ae312b835ea25e49", algorithm=MD5, cnonce="567a5fd6",  
opaque="1e89367ede8e05a0d9f82a635bae2e1a", qop=auth, nc=00000001  
Max-Forwards: 70  
Content-Length: 0

F23 192.168.1.1:5062(Server) -> 192.168.2.10:5060(00003@sip.com)

ACK sip:00003@192.168.2.10 SIP/2.0  
Via: SIP/2.0/UDP 192.168.1.1:5060;branch=z9hG4bK-238.1085828134.1713616244  
Via: SIP/2.0/UDP 192.168.2.19:5060;branch=z9hG4bK-45526cc4-527409.985  
From: 00002 <sip:00002@sip.com>;tag=683cba79  
To: <sip:00003@sip.com>;tag=64d02e20  
Call-ID: 23694405@00002.192.168.1.1  
CSeq: 1713616244 ACK  
max-forwards: 69  
Content-Length: 0

F24 192.168.2.19:1024(00002@sip.com) -> 192.168.1.1:5060(Server)

INVITE sip:00003@192.168.1.1 SIP/2.0  
Via: SIP/2.0/UDP 192.168.2.19:5060;branch=z9hG4bK-ab1478-527421.897  
Route: <sip:00003@192.168.2.10>  
From: 00002 <sip:00002@sip.com>;tag=683cba79  
To: <sip:00003@sip.com>;tag=64d02e20  
Call-ID: 23694405@00002.192.168.1.1  
CSeq: 1713616247 INVITE  
Contact: <sip:00002@192.168.2.19>  
Max-Forwards: 70  
Supported: 100rel, replaces  
Allow: INVITE, ACK, BYE, CANCEL, OPTIONS, PRACK, MESSAGE, REFER, NOTIFY  
Content-Type: application/sdp  
Content-Length: 187

v=0  
o=- 884003 102 IN IP4 192.168.2.19  
s=-  
c=IN IP4 192.168.2.19  
t=0 0  
m=audio 5008 RTP/AVP 0 96  
a=rtpmap:0 PCMU/8000  
a=rtpmap:96 telephone-event/8000  
a=fmtp:96 0-11  
a=inactive

F25 192.168.1.1:5062(Server) -> 192.168.2.19:5060(00002@sip.com)

SIP/2.0 100 Trying  
Via: SIP/2.0/UDP 192.168.2.19:5060;branch=z9hG4bK-ab1478-527421.897

# FOMA/WLAN デュアル端末に関する技術参考資料 第 1.2 版

From: 00002 <sip:00002@sip.com>;tag=683cba79  
To: <sip:00003@sip.com>;tag=64d02e20  
Call-ID: 23694405@00002.192.168.1.1  
CSeq: 1713616247 INVITE  
Content-Length: 0

=====

F26 192.168.1.1:5062(Server) -> 192.168.2.10:5060(00003@sip.com)

INVITE sip:00003@192.168.2.10 SIP/2.0  
Via: SIP/2.0/UDP 192.168.1.1:5060;branch=z9hG4bK-238.311289.1713616247  
Via: SIP/2.0/UDP 192.168.2.19:5060;branch=z9hG4bK-ab1478-527421.897  
Record-Route: <sip:00003@192.168.1.1>  
Route: <sip:00003@192.168.2.10>  
From: 00002 <sip:00002@sip.com>;tag=683cba79  
To: <sip:00003@sip.com>;tag=64d02e20  
Call-ID: 23694405@00002.192.168.1.1  
CSeq: 1713616247 INVITE  
Contact: <sip:00002@192.168.2.19>  
max-forwards: 69  
supported: 100rel  
supported: replaces  
Allow: INVITE, ACK, BYE, CANCEL, OPTIONS, PRACK, MESSAGE, REFER, NOTIFY  
Content-Type: application/sdp  
Content-Length: 187

v=0  
o=- 884003 102 IN IP4 192.168.2.19  
s=-  
c=IN IP4 192.168.2.19  
t=0 0  
m=audio 5008 RTP/AVP 0 96  
a=rtpmap:0 PCMU/8000  
a=rtpmap:96 telephone-event/8000  
a=fmtp:96 0-11  
a=inactive

=====

F27 192.168.2.10:1024(00003@sip.com) -> 192.168.1.1:5060(Server)

SIP/2.0 100 Trying  
Via: SIP/2.0/UDP 192.168.1.1:5060;branch=z9hG4bK-238.311289.1713616247  
Via: SIP/2.0/UDP 192.168.2.19:5060;branch=z9hG4bK-ab1478-527421.897  
From: 00002 <sip:00002@sip.com>;tag=683cba79  
To: <sip:00003@sip.com>;tag=64d02e20  
Call-ID: 23694405@00002.192.168.1.1  
CSeq: 1713616247 INVITE  
Content-Length: 0

=====

F28 192.168.2.10:1024(00003@sip.com) -> 192.168.1.1:5060(Server)

SIP/2.0 200 OK  
Via: SIP/2.0/UDP 192.168.1.1:5060;branch=z9hG4bK-238.311289.1713616247  
Via: SIP/2.0/UDP 192.168.2.19:5060;branch=z9hG4bK-ab1478-527421.897  
Record-Route: <sip:00003@192.168.1.1>  
From: 00002 <sip:00002@sip.com>;tag=683cba79  
To: <sip:00003@sip.com>;tag=64d02e20  
Call-ID: 23694405@00002.192.168.1.1  
CSeq: 1713616247 INVITE  
Contact: <sip:00003@192.168.2.10>  
Supported: 100rel, replaces  
Allow: INVITE, ACK, BYE, CANCEL, OPTIONS, PRACK, MESSAGE, REFER, NOTIFY  
Content-Type: application/sdp  
Accept: application/sdp, message/sipfrag  
Content-Length: 189

v=0  
o=- 361487 12902 IN IP4 192.168.2.10  
s=-  
c=IN IP4 192.168.2.10  
t=0 0  
m=audio 5008 RTP/AVP 0 96  
a=rtpmap:0 PCMU/8000  
a=rtpmap:96 telephone-event/8000  
a=fmtp:96 0-11

a=inactive

=====

F29 192.168.1.1:5062(Server) -&gt; 192.168.2.19:5060(00002@sip.com)

SIP/2.0 200 OK  
 Via: SIP/2.0/UDP 192.168.2.19:5060;branch=z9hG4bK-ab1478-527421.897  
 Record-Route: <sip:00003@192.168.1.1>  
 From: 00002 <sip:00002@sip.com>;tag=683cba79  
 To: <sip:00003@sip.com>;tag=64d02e20  
 Call-ID: 23694405@00002.192.168.1.1  
 CSeq: 1713616247 INVITE  
 Contact: <sip:00003@192.168.2.10>  
 supported: 100rel  
 supported: replaces  
 Allow: INVITE, ACK, BYE, CANCEL, OPTIONS, PRACK, MESSAGE, REFER, NOTIFY  
 Content-Type: application/sdp  
 Accept: application/sdp, message/sipfrag  
 Content-Length: 189

v=0  
 o=- 361487 12902 IN IP4 192.168.2.10  
 s=-  
 c=IN IP4 192.168.2.10  
 t=0 0  
 m=audio 5008 RTP/AVP 0 96  
 a=rtpmap:0 PCMU/8000  
 a=rtpmap:96 telephone-event/8000  
 a=fmtp:96 0-11  
 a=inactive

=====

F30 192.168.2.19:1024(00002@sip.com) -&gt; 192.168.1.1:5060(Server)

ACK sip:00003@192.168.1.1 SIP/2.0  
 Via: SIP/2.0/UDP 192.168.2.19:5060;branch=z9hG4bK-788bbb4c-527422.434  
 Route: <sip:00003@192.168.2.10>  
 From: 00002 <sip:00002@sip.com>;tag=683cba79  
 To: <sip:00003@sip.com>;tag=64d02e20  
 Call-ID: 23694405@00002.192.168.1.1  
 CSeq: 1713616247 ACK  
 Max-Forwards: 70  
 Content-Length: 0

=====

F31 192.168.1.1:5062(Server) -&gt; 192.168.2.10:5060(00003@sip.com)

ACK sip:00003@192.168.2.10 SIP/2.0  
 Via: SIP/2.0/UDP 192.168.1.1:5060;branch=z9hG4bK-238.1085828146.1713616247  
 Via: SIP/2.0/UDP 192.168.2.19:5060;branch=z9hG4bK-788bbb4c-527422.434  
 From: 00002 <sip:00002@sip.com>;tag=683cba79  
 To: <sip:00003@sip.com>;tag=64d02e20  
 Call-ID: 23694405@00002.192.168.1.1  
 CSeq: 1713616247 ACK  
 max-forwards: 69  
 Content-Length: 0

=====

F32 192.168.2.19:1024(00002@sip.com) -&gt; 192.168.1.1:5060(Server)

INVITE sip:00005@sip.com SIP/2.0  
 Via: SIP/2.0/UDP 192.168.2.19:5060;branch=z9hG4bK-adb430e-527435.695  
 Route: <sip:192.168.1.1:5060>  
 From: <sip:00002@sip.com>;tag=0d8937be  
 To: <sip:00005@sip.com>  
 Call-ID: 5cf24540@00002.192.168.1.1  
 CSeq: 1304463655 INVITE  
 Contact: <sip:00002@192.168.2.19>  
 Proxy-Authorization: Digest username="00002", realm="heliossv2", nonce="97f5a97dedb014ad4af6629f81b7248a",  
 uri="sip:00005@sip.com", response="485a7d3ad4a478e7987a73a33cb479b4", algorithm=MD5, cnonce="6f53a6c7",  
 opaque="1e89367ede8e05a0d9f82a635bae2e1a", qop=auth, nc=00000004  
 Max-Forwards: 70  
 Supported: 100rel, replaces  
 Allow: INVITE, ACK, BYE, CANCEL, OPTIONS, PRACK, MESSAGE, REFER, NOTIFY  
 Content-Type: application/sdp

Accept: application/sdp, message/sipfrag  
Content-Length: 249

v=0  
o=- 647701 201 IN IP4 192.168.2.19  
s=-  
c=IN IP4 192.168.2.19  
t=0 0  
m=audio 5006 RTP/AVP 0 8 4 18 96  
a=rtpmap:0 PCMU/8000  
a=rtpmap:8 PCMA/8000  
a=rtpmap:4 G723/8000  
a=rtpmap:18 G729/8000  
a=rtpmap:96 telephone-event/8000  
a=fmtp:96 0-11

F33 192.168.1.1:5062(Server) -> 192.168.2.19:5060(00002@sip.com)

SIP/2.0 407 Proxy Authentication Required  
Via: SIP/2.0/UDP 192.168.2.19:5060;branch=z9hG4bK-adb430e-527435.695  
From: <sip:00002@sip.com>;tag=0d8937be  
To: <sip:00005@sip.com>  
Call-ID: 5cf24540@00002.192.168.1.1  
CSeq: 1304463655 INVITE  
Proxy-Authenticate: Digest realm="heliossv2", nonce="3280ce44e3f1ccd3e2123d4aee93314f",  
opaque="d4cb405095058c71f59ca9f10f44b243", stale=false, algorithm=MD5, qop="auth,auth-int"  
Content-Length: 0

F34 192.168.2.19:1024(00002@sip.com) -> 192.168.1.1:5060(Server)

ACK sip:00005@sip.com SIP/2.0  
Via: SIP/2.0/UDP 192.168.2.19:5060;branch=z9hG4bK-adb430e-527435.695  
Route: <sip:192.168.1.1:5060>  
From: <sip:00002@sip.com>;tag=0d8937be  
To: <sip:00005@sip.com>  
Call-ID: 5cf24540@00002.192.168.1.1  
CSeq: 1304463655 ACK  
Content-Length: 0

F35 192.168.2.19:1024(00002@sip.com) -> 192.168.1.1:5060(Server)

INVITE sip:00005@sip.com SIP/2.0  
Via: SIP/2.0/UDP 192.168.2.19:5060;branch=z9hG4bK-3bff50af-527436.018  
Route: <sip:192.168.1.1:5060>  
From: <sip:00002@sip.com>;tag=0d8937be  
To: <sip:00005@sip.com>  
Call-ID: 5cf24540@00002.192.168.1.1  
CSeq: 1304463656 INVITE  
Contact: <sip:00002@192.168.2.19>  
Proxy-Authorization: Digest username="00002", realm="heliossv2", nonce="3280ce44e3f1ccd3e2123d4aee93314f",  
uri="sip:00005@sip.com", response="58c20590ae9c6c4e1211eec2cf7e4959", algorithm=MD5, cnonce="38f4435e",  
opaque="d4cb405095058c71f59ca9f10f44b243", qop=auth, nc=00000001  
Max-Forwards: 70  
Supported: 100rel, replaces  
Allow: INVITE, ACK, BYE, CANCEL, OPTIONS, PRACK, MESSAGE, REFER, NOTIFY  
Content-Type: application/sdp  
Accept: application/sdp, message/sipfrag  
Content-Length: 249

v=0  
o=- 647701 201 IN IP4 192.168.2.19  
s=-  
c=IN IP4 192.168.2.19  
t=0 0  
m=audio 5006 RTP/AVP 0 8 4 18 96  
a=rtpmap:0 PCMU/8000  
a=rtpmap:8 PCMA/8000  
a=rtpmap:4 G723/8000  
a=rtpmap:18 G729/8000  
a=rtpmap:96 telephone-event/8000  
a=fmtp:96 0-11



F36 192.168.1.1:5062(Server) -> 192.168.2.19:5060(00002@sip.com)

SIP/2.0 100 Trying  
 Via: SIP/2.0/UDP 192.168.2.19:5060;branch=z9hG4bK-3bff50af-527436.018  
 From: <sip:00002@sip.com>;tag=0d8937be  
 To: <sip:00005@sip.com>  
 Call-ID: 5cf24540@00002.192.168.1.1  
 CSeq: 1304463656 INVITE  
 Content-Length: 0

F37 192.168.1.1:5062(Server) -> 192.168.2.20:5060(00005@sip.com)

INVITE sip:00005@192.168.2.20 SIP/2.0  
 Via: SIP/2.0/UDP 192.168.1.1:5060;branch=z9hG4bK-240.961233.1304463656  
 Via: SIP/2.0/UDP 192.168.2.19:5060;branch=z9hG4bK-3bff50af-527436.018  
 Record-Route: <sip:00005@192.168.1.1>  
 Route: <sip:192.168.1.1:5060>  
 From: 00002 <sip:00002@sip.com>;tag=0d8937be  
 To: <sip:00005@sip.com>  
 Call-ID: 5cf24540@00002.192.168.1.1  
 CSeq: 1304463656 INVITE  
 Contact: <sip:00002@192.168.2.19>  
 max-forwards: 69  
 supported: 100rel  
 supported: replaces  
 Allow: INVITE, ACK, BYE, CANCEL, OPTIONS, PRACK, MESSAGE, REFER, NOTIFY  
 Content-Type: application/sdp  
 Accept: application/sdp, message/sipfrag  
 Content-Length: 249

v=0  
 o=- 647701 201 IN IP4 192.168.2.19  
 s=-  
 c=IN IP4 192.168.2.19  
 t=0 0  
 m=audio 5006 RTP/AVP 0 8 4 18 96  
 a=rtpmap:0 PCMU/8000  
 a=rtpmap:8 PCMA/8000  
 a=rtpmap:4 G723/8000  
 a=rtpmap:18 G729/8000  
 a=rtpmap:96 telephone-event/8000  
 a=fmtp:96 0-11

F39 192.168.2.20:1028(00005@sip.com) -> 192.168.1.1:5060(Server)

SIP/2.0 100 Trying  
 Via: SIP/2.0/UDP 192.168.1.1:5060;branch=z9hG4bK-240.961233.1304463656  
 Via: SIP/2.0/UDP 192.168.2.19:5060;branch=z9hG4bK-3bff50af-527436.018  
 From: 00002 <sip:00002@sip.com>;tag=0d8937be  
 To: <sip:00005@sip.com>  
 Call-ID: 5cf24540@00002.192.168.1.1  
 CSeq: 1304463656 INVITE  
 Content-Length: 0

F40 192.168.2.20:1028(00005@sip.com) -> 192.168.1.1:5060(Server)

SIP/2.0 183 Session Progress  
 Via: SIP/2.0/UDP 192.168.1.1:5060;branch=z9hG4bK-240.961233.1304463656  
 Via: SIP/2.0/UDP 192.168.2.19:5060;branch=z9hG4bK-3bff50af-527436.018  
 Record-Route: <sip:00005@192.168.1.1>  
 From: 00002 <sip:00002@sip.com>;tag=0d8937be  
 To: <sip:00005@sip.com>;tag=7c4774d6  
 Call-ID: 5cf24540@00002.192.168.1.1  
 CSeq: 1304463656 INVITE  
 Contact: <sip:00005@192.168.2.20>  
 Require: 100rel  
 RSeq: 907501915  
 Content-Length: 0

F41 192.168.1.1:5062(Server) -> 192.168.2.19:5060(00002@sip.com)

SIP/2.0 183 Session Progress  
Via: SIP/2.0/UDP 192.168.2.19:5060;branch=z9hG4bK-3bff50af-527436.018  
Record-Route: <sip:00005@192.168.1.1>  
From: 00002 <sip:00002@sip.com>;tag=0d8937be  
To: <sip:00005@sip.com>;tag=7c4774d6  
Call-ID: 5cf24540@00002.192.168.1.1  
CSeq: 1304463656 INVITE  
Contact: <sip:00005@192.168.2.20>  
require: 100rel  
rseq: 907501915  
Content-Length: 0

F42 192.168.2.19:1024(00002@sip.com) -> 192.168.1.1:5060(Server)

PRACK sip:00005@192.168.1.1 SIP/2.0  
Via: SIP/2.0/UDP 192.168.2.19:5060;branch=z9hG4bK-48bcb99d-527439.730  
Route: <sip:00005@192.168.2.20>  
From: 00002 <sip:00002@sip.com>;tag=0d8937be  
To: <sip:00005@sip.com>;tag=7c4774d6  
Call-ID: 5cf24540@00002.192.168.1.1  
CSeq: 1304463657 PRACK  
Proxy-Authorization: Digest username="00002", realm="heliossv2", nonce="3280ce44e3f1ccd3e2123d4aee93314f",  
uri="sip:00005@192.168.1.1", response="41b34351ca0cc1cfe361b227felbdbc7", algorithm=MD5, cnonce="121d5c05",  
opaque="d4cb405095058c71f59ca9f10f44b243", qop=auth, nc=00000002  
Max-Forwards: 70  
RAck: 907501915 1304463656 INVITE  
Content-Length: 0

F43 192.168.1.1:5062(Server) -> 192.168.2.20:5060(00005@sip.com)

PRACK sip:00005@192.168.2.20 SIP/2.0  
Via: SIP/2.0/UDP 192.168.1.1:5060;branch=z9hG4bK-240.1085828164.1304463657  
Via: SIP/2.0/UDP 192.168.2.19:5060;branch=z9hG4bK-48bcb99d-527439.730  
Route: <sip:00005@192.168.2.20>  
From: 00002 <sip:00002@sip.com>;tag=0d8937be  
To: <sip:00005@sip.com>;tag=7c4774d6  
Call-ID: 5cf24540@00002.192.168.1.1  
CSeq: 1304463657 PRACK  
max-forwards: 69  
rack: 907501915 1304463656 INVITE  
Content-Length: 0

F44 192.168.2.20:1028(00005@sip.com) -> 192.168.1.1:5060(Server)

SIP/2.0 200 OK  
Via: SIP/2.0/UDP 192.168.1.1:5060;branch=z9hG4bK-240.1085828164.1304463657  
Via: SIP/2.0/UDP 192.168.2.19:5060;branch=z9hG4bK-48bcb99d-527439.730  
From: 00002 <sip:00002@sip.com>;tag=0d8937be  
To: <sip:00005@sip.com>;tag=7c4774d6  
Call-ID: 5cf24540@00002.192.168.1.1  
CSeq: 1304463657 PRACK  
Content-Length: 0

F45 192.168.1.1:5062(Server) -> 192.168.2.19:5060(00002@sip.com)

SIP/2.0 200 OK  
Via: SIP/2.0/UDP 192.168.2.19:5060;branch=z9hG4bK-48bcb99d-527439.730  
From: 00002 <sip:00002@sip.com>;tag=0d8937be  
To: <sip:00005@sip.com>;tag=7c4774d6  
Call-ID: 5cf24540@00002.192.168.1.1  
CSeq: 1304463657 PRACK  
Content-Length: 0

## FOMA/WLAN デュアル端末に関する技術参考資料 第 1.2 版

F46 192.168.2.20:1028(00005@sip.com) -> 192.168.1.1:5060(Server)

SIP/2.0 180 Ringing  
Via: SIP/2.0/UDP 192.168.1.1:5060;branch=z9hG4bK-240.961233.1304463656  
Via: SIP/2.0/UDP 192.168.2.19:5060;branch=z9hG4bK-3bff50af-527436.018  
Record-Route: <sip:00005@192.168.1.1>  
From: 00002 <sip:00002@sip.com>;tag=0d8937be  
To: <sip:00005@sip.com>;tag=7c4774d6  
Call-ID: 5cf24540@00002.192.168.1.1  
CSeq: 1304463656 INVITE  
Contact: <sip:00005@192.168.2.20>  
Require: 100rel  
RSeq: 907501916  
Content-Length: 0

F47 192.168.1.1:5062(Server) -> 192.168.2.19:5060(00002@sip.com)

SIP/2.0 180 Ringing  
Via: SIP/2.0/UDP 192.168.2.19:5060;branch=z9hG4bK-3bff50af-527436.018  
Record-Route: <sip:00005@192.168.1.1>  
From: 00002 <sip:00002@sip.com>;tag=0d8937be  
To: <sip:00005@sip.com>;tag=7c4774d6  
Call-ID: 5cf24540@00002.192.168.1.1  
CSeq: 1304463656 INVITE  
Contact: <sip:00005@192.168.2.20>  
require: 100rel  
rseq: 907501916  
Content-Length: 0

F48 192.168.2.19:1024(00002@sip.com) -> 192.168.1.1:5060(Server)

PRACK sip:00005@192.168.1.1 SIP/2.0  
Via: SIP/2.0/UDP 192.168.2.19:5060;branch=z9hG4bK-75853195-527440.944  
Route: <sip:00005@192.168.2.20>  
From: 00002 <sip:00002@sip.com>;tag=0d8937be  
To: <sip:00005@sip.com>;tag=7c4774d6  
Call-ID: 5cf24540@00002.192.168.1.1  
CSeq: 1304463658 PRACK  
Proxy-Authorization: Digest username="00002", realm="heliossv2", nonce="3280ce44e3f1ccd3e2123d4aee93314f",  
uri="sip:00005@192.168.1.1", response="59728cda9836bb5b79a59f3790b29ae3", algorithm=MD5, cnonce="5db4de52",  
opaque="d4cb405095058c71f59ca9f10f44b243", qop=auth, nc=000000003  
Max-Forwards: 70  
RAck: 907501916 1304463656 INVITE  
Content-Length: 0

F49 192.168.1.1:5062(Server) -> 192.168.2.20:5060(00005@sip.com)

PRACK sip:00005@192.168.2.20 SIP/2.0  
Via: SIP/2.0/UDP 192.168.1.1:5060;branch=z9hG4bK-240.1085828165.1304463658  
Via: SIP/2.0/UDP 192.168.2.19:5060;branch=z9hG4bK-75853195-527440.944  
Route: <sip:00005@192.168.2.20>  
From: 00002 <sip:00002@sip.com>;tag=0d8937be  
To: <sip:00005@sip.com>;tag=7c4774d6  
Call-ID: 5cf24540@00002.192.168.1.1  
CSeq: 1304463658 PRACK  
max-forwards: 69  
rack: 907501916 1304463656 INVITE  
Content-Length: 0

F50 192.168.2.20:1028(00005@sip.com) -> 192.168.1.1:5060(Server)

SIP/2.0 200 OK  
Via: SIP/2.0/UDP 192.168.1.1:5060;branch=z9hG4bK-240.1085828165.1304463658  
Via: SIP/2.0/UDP 192.168.2.19:5060;branch=z9hG4bK-75853195-527440.944  
From: 00002 <sip:00002@sip.com>;tag=0d8937be  
To: <sip:00005@sip.com>;tag=7c4774d6  
Call-ID: 5cf24540@00002.192.168.1.1  
CSeq: 1304463658 PRACK  
Content-Length: 0

=====

F51            192.168.1.1:5062(Server) -> 192.168.2.19:5060(00002@sip.com)

SIP/2.0 200 OK  
Via: SIP/2.0/UDP 192.168.2.19:5060;branch=z9hG4bK-75853195-527440.944  
From: 00002 <sip:00002@sip.com>;tag=0d8937be  
To: <sip:00005@sip.com>;tag=7c4774d6  
Call-ID: 5cf24540@00002.192.168.1.1  
CSeq: 1304463658 PRACK  
Content-Length: 0

=====

F52            192.168.2.20:1028(00005@sip.com) -> 192.168.1.1:5060(Server)

SIP/2.0 180 Ringing  
Via: SIP/2.0/UDP 192.168.1.1:5060;branch=z9hG4bK-240.961233.1304463656  
Via: SIP/2.0/UDP 192.168.2.19:5060;branch=z9hG4bK-3bff50af-527436.018  
Record-Route: <sip:00005@192.168.1.1>  
From: 00002 <sip:00002@sip.com>;tag=0d8937be  
To: <sip:00005@sip.com>;tag=7c4774d6  
Call-ID: 5cf24540@00002.192.168.1.1  
CSeq: 1304463656 INVITE  
Contact: <sip:00005@192.168.2.20>  
Require: 100rel  
RSeq: 907501917  
Content-Length: 0

=====

F53            192.168.1.1:5062(Server) -> 192.168.2.19:5060(00002@sip.com)

SIP/2.0 180 Ringing  
Via: SIP/2.0/UDP 192.168.2.19:5060;branch=z9hG4bK-3bff50af-527436.018  
Record-Route: <sip:00005@192.168.1.1>  
From: 00002 <sip:00002@sip.com>;tag=0d8937be  
To: <sip:00005@sip.com>;tag=7c4774d6  
Call-ID: 5cf24540@00002.192.168.1.1  
CSeq: 1304463656 INVITE  
Contact: <sip:00005@192.168.2.20>  
require: 100rel  
rseq: 907501917  
Content-Length: 0

=====

F54            192.168.2.19:1024(00002@sip.com) -> 192.168.1.1:5060(Server)

PRACK sip:00005@192.168.1.1 SIP/2.0  
Via: SIP/2.0/UDP 192.168.2.19:5060;branch=z9hG4bK-163fc4c4-527451.195  
Route: <sip:00005@192.168.2.20>  
From: 00002 <sip:00002@sip.com>;tag=0d8937be  
To: <sip:00005@sip.com>;tag=7c4774d6  
Call-ID: 5cf24540@00002.192.168.1.1  
CSeq: 1304463659 PRACK  
Proxy-Authentication: Digest username="00002", realm="heliossv2", nonce="3280ce44e3f1ccd3e2123d4aee93314f",  
uri="sip:00005@192.168.1.1", response="7772e973a88adf65b0b27133eb48a303", algorithm=MD5, cnonce="6eecd657",  
opaque="d4cb405095058c71f59ca9f10f44b243", qop=auth, nc=00000004  
Max-Forwards: 70  
RAck: 907501917 1304463656 INVITE  
Content-Length: 0

=====

F55            192.168.1.1:5062(Server) -> 192.168.2.20:5060(00005@sip.com)

PRACK sip:00005@192.168.2.20 SIP/2.0  
Via: SIP/2.0/UDP 192.168.1.1:5060;branch=z9hG4bK-240.1085828175.1304463659  
Via: SIP/2.0/UDP 192.168.2.19:5060;branch=z9hG4bK-163fc4c4-527451.195  
Route: <sip:00005@192.168.2.20>  
From: 00002 <sip:00002@sip.com>;tag=0d8937be  
To: <sip:00005@sip.com>;tag=7c4774d6  
Call-ID: 5cf24540@00002.192.168.1.1  
CSeq: 1304463659 PRACK

max-forwards: 69  
rack: 907501917 1304463656 INVITE  
Content-Length: 0

=====

F56 192.168.2.20:1028(00005@sip.com) -> 192.168.1.1:5060(Server)

SIP/2.0 200 OK  
Via: SIP/2.0/UDP 192.168.1.1:5060;branch=z9hG4bK-240.1085828175.1304463659  
Via: SIP/2.0/UDP 192.168.2.19:5060;branch=z9hG4bK-163fc4c4-527451.195  
From: 00002 <sip:00002@sip.com>;tag=0d8937be  
To: <sip:00005@sip.com>;tag=7c4774d6  
Call-ID: 5cf24540@00002.192.168.1.1  
CSeq: 1304463659 PRACK  
Content-Length: 0

=====

F57 192.168.1.1:5062(Server) -> 192.168.2.19:5060(00002@sip.com)

SIP/2.0 200 OK  
Via: SIP/2.0/UDP 192.168.2.19:5060;branch=z9hG4bK-163fc4c4-527451.195  
From: 00002 <sip:00002@sip.com>;tag=0d8937be  
To: <sip:00005@sip.com>;tag=7c4774d6  
Call-ID: 5cf24540@00002.192.168.1.1  
CSeq: 1304463659 PRACK  
Content-Length: 0

=====

F58 192.168.2.20:1028(00005@sip.com) -> 192.168.1.1:5060(Server)

SIP/2.0 200 OK  
Via: SIP/2.0/UDP 192.168.1.1:5060;branch=z9hG4bK-240.961233.1304463656  
Via: SIP/2.0/UDP 192.168.2.19:5060;branch=z9hG4bK-3bff50af-527436.018  
Record-Route: <sip:00005@192.168.1.1>  
From: 00002 <sip:00002@sip.com>;tag=0d8937be  
To: <sip:00005@sip.com>;tag=7c4774d6  
Call-ID: 5cf24540@00002.192.168.1.1  
CSeq: 1304463656 INVITE  
Contact: <sip:00005@192.168.2.20>  
Supported: 100rel, replaces  
Allow: INVITE, ACK, BYE, CANCEL, OPTIONS, PRACK, MESSAGE, REFER, NOTIFY  
Content-Type: application/sdp  
Accept: application/sdp, message/sipfrag  
Content-Length: 177

v=0  
o=- 810429 12901 IN IP4 192.168.2.20  
s=-  
c=IN IP4 192.168.2.20  
t=0 0  
m=audio 5008 RTP/AVP 0 96  
a=rtpmap:0 PCMU/8000  
a=rtpmap:96 telephone-event/8000  
a=fmtp:96 0-11

=====

F59 192.168.1.1:5062(Server) -> 192.168.2.19:5060(00002@sip.com)

SIP/2.0 200 OK  
Via: SIP/2.0/UDP 192.168.2.19:5060;branch=z9hG4bK-3bff50af-527436.018  
Record-Route: <sip:00005@192.168.1.1>  
From: 00002 <sip:00002@sip.com>;tag=0d8937be  
To: <sip:00005@sip.com>;tag=7c4774d6  
Call-ID: 5cf24540@00002.192.168.1.1  
CSeq: 1304463656 INVITE  
Contact: <sip:00005@192.168.2.20>  
supported: 100rel  
supported: replaces  
Allow: INVITE, ACK, BYE, CANCEL, OPTIONS, PRACK, MESSAGE, REFER, NOTIFY  
Content-Type: application/sdp  
Accept: application/sdp, message/sipfrag  
Content-Length: 177

v=0

o=- 810429 12901 IN IP4 192.168.2.20  
s=-  
c=IN IP4 192.168.2.20  
t=0 0  
m=audio 5008 RTP/AVP 0 96  
a=rtpmap:0 PCMU/8000  
a=rtpmap:96 telephone-event/8000  
a=fmtp:96 0-11

=====

F60 192.168.2.19:1024(00002@sip.com) -> 192.168.1.1:5060(Server)

ACK sip:00005@192.168.1.1 SIP/2.0  
Via: SIP/2.0/UDP 192.168.2.19:5060;branch=z9hG4bK-22f51b3c-527455.423  
Route: <sip:00005@192.168.2.20>  
From: 00002 <sip:00002@sip.com>;tag=0d8937be  
To: <sip:00005@sip.com>;tag=7c4774d6  
Call-ID: 5cf24540@00002.192.168.1.1  
CSeq: 1304463656 ACK  
Proxy-Authorization: Digest username="00002", realm="heliossv2", nonce="3280ce44e3f1ccd3e2123d4aee93314f",  
uri="sip:00005@sip.com", response="58c20590ae9c6c4e1211eec2cf7e4959", algorithm=MD5, cnonce="38f4435e",  
opaque="d4cb405095058c71f59ca9f10f44b243", qop=auth, nc=00000001  
Max-Forwards: 70  
Content-Length: 0

=====

F61 192.168.1.1:5062(Server) -> 192.168.2.20:5060(00005@sip.com)

ACK sip:00005@192.168.2.20 SIP/2.0  
Via: SIP/2.0/UDP 192.168.1.1:5060;branch=z9hG4bK-240.1085828179.1304463656  
Via: SIP/2.0/UDP 192.168.2.19:5060;branch=z9hG4bK-22f51b3c-527455.423  
From: 00002 <sip:00002@sip.com>;tag=0d8937be  
To: <sip:00005@sip.com>;tag=7c4774d6  
Call-ID: 5cf24540@00002.192.168.1.1  
CSeq: 1304463656 ACK  
max-forwards: 69  
Content-Length: 0

## 11.2.10. 発信番号誤り

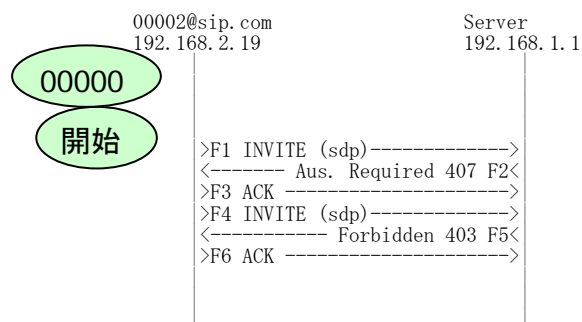


図 11-13 発信番号誤り

```

=====
F1      192.168.2.19:1024(00002@sip.com) -> 192.168.1.1:5060(Server)

INVITE sip:0000@sip.com SIP/2.0
Via: SIP/2.0/UDP 192.168.2.19:5060;branch=z9hG4bK-6f46d4db-527510.296
Route: <sip:192.168.1.1:5060>
From: <sip:00002@sip.com>;tag=42af9035
To: <sip:0000@sip.com>
Call-ID: 18ba7189@00002.192.168.1.1
CSeq: 1690334394 INVITE
Contact: <sip:00002@192.168.2.19>
Proxy-Authorization: Digest username="00002", realm="heliossv2", nonce="3280ce44e3f1ccd3e2123d4aee93314f",
uri="sip:0000@sip.com", response="d4caa9cb798ef88189dea49b626c0c49", algorithm=MD5, cnonce="30d13072",
opaque="d4cb405095058c71f59ca9f10f44b243", qop=auth, nc=00000007
Max-Forwards: 70
Supported: 100rel, replaces
Allow: INVITE, ACK, BYE, CANCEL, OPTIONS, PRACK, MESSAGE, REFER, NOTIFY
Content-Type: application/sdp
Accept: application/sdp, message/sipfrag
Content-Length: 249

v=0
o=- 258113 301 IN IP4 192.168.2.19
s=-
c=IN IP4 192.168.2.19
t=0 0
m=audio 5008 RTP/AVP 0 8 4 18 96
a=rtpmap:0 PCMU/8000
a=rtpmap:8 PCMA/8000
a=rtpmap:4 G723/8000
a=rtpmap:18 G729/8000
a=rtpmap:96 telephone-event/8000
a=fmtp:96 0-11

=====
F2      192.168.1.1:5062(Server) -> 192.168.2.19:5060(00002@sip.com)

SIP/2.0 407 Proxy Authentication Required
Via: SIP/2.0/UDP 192.168.2.19:5060;branch=z9hG4bK-6f46d4db-527510.296
From: <sip:00002@sip.com>;tag=42af9035
To: <sip:0000@sip.com>
Call-ID: 18ba7189@00002.192.168.1.1
CSeq: 1690334394 INVITE
Proxy-Authenticate: Digest realm="heliossv2", nonce="d0315768a48b76a3e7a69bd0e5c1d6d6",
opaque="92263aac08576ba70bac0c9f6a2a09aa", stale=false, algorithm=MD5, qop="auth,auth-int"
Content-Length: 0

=====
F3      192.168.2.19:1024(00002@sip.com) -> 192.168.1.1:5060(Server)

ACK sip:0000@sip.com SIP/2.0
Via: SIP/2.0/UDP 192.168.2.19:5060;branch=z9hG4bK-6f46d4db-527510.296
Route: <sip:192.168.1.1:5060>
From: <sip:00002@sip.com>;tag=42af9035
To: <sip:0000@sip.com>
Call-ID: 18ba7189@00002.192.168.1.1
  
```

CSeq: 1690334394 ACK  
Content-Length: 0

=====

F4 192.168.2.19:1024(00002@sip.com) -> 192.168.1.1:5060(Server)

INVITE sip:0000@sip.com SIP/2.0  
Via: SIP/2.0/UDP 192.168.2.19:5060;branch=z9hG4bK-167357fa-527511.093  
Route: <sip:192.168.1.1:5060>  
From: <sip:00002@sip.com>;tag=42af9035  
To: <sip:0000@sip.com>  
Call-ID: 18ba7189@00002.192.168.1.1  
CSeq: 1690334395 INVITE  
Contact: <sip:00002@192.168.2.19>  
Proxy-Authorization: Digest username="00002", realm="heliossv2", nonce="d0315768a48b76a3e7a69bd0e5c1d6d6",  
uri="sip:0000@sip.com", response="65f509932137846aceaaf928e45b33f5", algorithm=MD5, cnonce="4c8fe272",  
opaque="92263aac08576ba70bac0c9f6a2a09aa", qop=auth, nc=00000001  
Max-Forwards: 70  
Supported: 100rel, replaces  
Allow: INVITE, ACK, BYE, CANCEL, OPTIONS, PRACK, MESSAGE, REFER, NOTIFY  
Content-Type: application/sdp  
Accept: application/sdp, message/sipfrag  
Content-Length: 249

v=0  
o=- 258113 301 IN IP4 192.168.2.19  
s=-  
c=IN IP4 192.168.2.19  
t=0 0  
m=audio 5008 RTP/AVP 0 8 4 18 96  
a=rtpmap:0 PCMU/8000  
a=rtpmap:8 PCMA/8000  
a=rtpmap:4 G723/8000  
a=rtpmap:18 G729/8000  
a=rtpmap:96 telephone-event/8000  
a=fmtp:96 0-11

=====

F5 192.168.1.1:5062(Server) -> 192.168.2.19:5060(00002@sip.com)

SIP/2.0 403 Forbidden  
Via: SIP/2.0/UDP 192.168.2.19:5060;branch=z9hG4bK-167357fa-527511.093  
From: <sip:00002@sip.com>;tag=42af9035  
To: <sip:0000@sip.com>  
Call-ID: 18ba7189@00002.192.168.1.1  
CSeq: 1690334395 INVITE  
Content-Length: 0

=====

F6 192.168.2.19:1024(00002@sip.com) -> 192.168.1.1:5060(Server)

ACK sip:0000@sip.com SIP/2.0  
Via: SIP/2.0/UDP 192.168.2.19:5060;branch=z9hG4bK-167357fa-527511.093  
Route: <sip:192.168.1.1:5060>  
From: <sip:00002@sip.com>;tag=42af9035  
To: <sip:0000@sip.com>  
Call-ID: 18ba7189@00002.192.168.1.1  
CSeq: 1690334395 ACK  
Content-Length: 0

=====



## 11.2.11. 発信後、着信側公共(ドライブ)モード

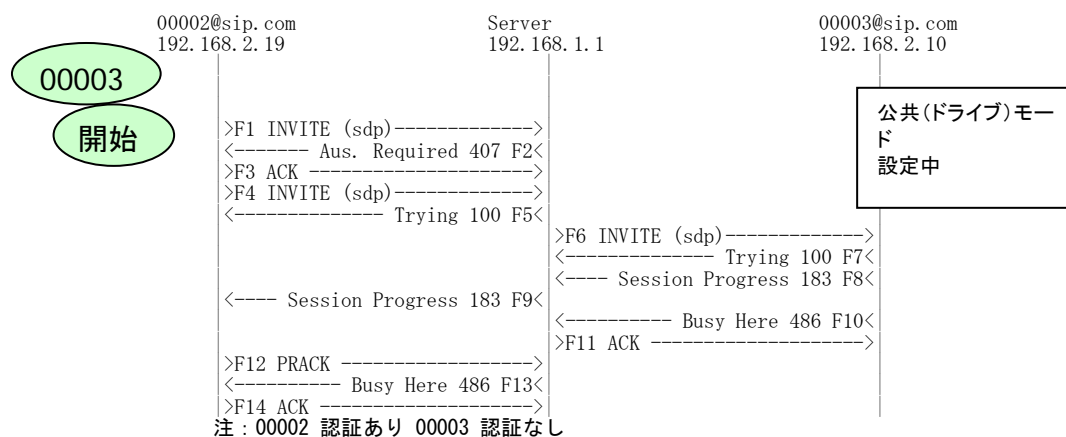


図 11-14 発信後、着信側公共(ドライブ)モード

```
=====
F1      192.168.2.19:1024(00002@sip.com) -> 192.168.1.1:5060(Server)

INVITE sip:00003@sip.com SIP/2.0
Via: SIP/2.0/UDP 192.168.2.19:5060;branch=z9hG4bK-17375218-527533.885
Route: <sip:192.168.1.1:5060>
From: <sip:00002@sip.com>;tag=5836fd00
To: <sip:00003@sip.com>
Call-ID: 29d0b3a4000002.192.168.1.1
CSeq: 669544012 INVITE
Contact: <sip:00002@192.168.2.19>
Proxy-Authorization: Digest username="00002", realm="heliossv2", nonce="d0315768a48b76a3e7a69bd0e5c1d6d6",
uri="sip:00003@sip.com", response="89c6elc71b6ca8d20323752cc6d24490", algorithm=MD5, cnonce="34a2ebbb8",
opaque="92263aac08576ba70bac0c9f6a2a09aa", qop=auth, nc=000000002
Max-Forwards: 70
Supported: 100rel, replaces
Allow: INVITE, ACK, BYE, CANCEL, OPTIONS, PRACK, MESSAGE, REFER, NOTIFY
Content-Type: application/sdp
Accept: application/sdp, message/sipfrag
Content-Length: 249

v=0
o=- 865066 401 IN IP4 192.168.2.19
s=-
c=IN IP4 192.168.2.19
t=0 0
m=audio 5006 RTP/AVP 0 8 4 18 96
a=rtpmap:0 PCMU/8000
a=rtpmap:8 PCMA/8000
a=rtpmap:4 G723/8000
a=rtpmap:18 G729/8000
a=rtpmap:96 telephone-event/8000
a=fmtp:96 0-11

=====
F2      192.168.1.1:5062(Server) -> 192.168.2.19:5060(00002@sip.com)

SIP/2.0 407 Proxy Authentication Required
Via: SIP/2.0/UDP 192.168.2.19:5060;branch=z9hG4bK-17375218-527533.885
From: <sip:00002@sip.com>;tag=5836fd00
To: <sip:00003@sip.com>
Call-ID: 29d0b3a4000002.192.168.1.1
CSeq: 669544012 INVITE
Proxy-Authenticate: Digest realm="heliossv2", nonce="7063046303170b5ef7d383dec8265895",
opaque="d2905b31aaa5d7a8bb1dadacb2c5438d", stale=false, algorithm=MD5, qop="auth,auth-int"
Content-Length: 0
=====
```

F3 192.168.2.19:1024(00002@sip.com) -> 192.168.1.1:5060(Server)

ACK sip:00003@sip.com SIP/2.0  
 Via: SIP/2.0/UDP 192.168.2.19:5060;branch=z9hG4bK-17375218-527533.885  
 Route: <sip:192.168.1.1:5060>  
 From: <sip:00002@sip.com>;tag=5836fd00  
 To: <sip:00003@sip.com>  
 Call-ID: 29d0b3a4@00002.192.168.1.1  
 CSeq: 669544012 ACK  
 Content-Length: 0

F4 192.168.2.19:1024(00002@sip.com) -> 192.168.1.1:5060(Server)

INVITE sip:00003@sip.com SIP/2.0  
 Via: SIP/2.0/UDP 192.168.2.19:5060;branch=z9hG4bK-63dc710f-527534.628  
 Route: <sip:192.168.1.1:5060>  
 From: <sip:00002@sip.com>;tag=5836fd00  
 To: <sip:00003@sip.com>  
 Call-ID: 29d0b3a4@00002.192.168.1.1  
 CSeq: 669544013 INVITE  
 Contact: <sip:00002@192.168.2.19>  
 Proxy-Authorization: Digest username="00002", realm="heliossv2", nonce="7063046303170b5ef7d383dec8265895",  
 uri="sip:00003@sip.com", response="c8d5a8bd1cf2aa38a893a7b5bc029995", algorithm=MD5, cnonce="3e4c58cc",  
 opaque="d2905b31aaa5d7a8bb1dadac2c5438d", qop=auth, nc=00000001  
 Max-Forwards: 70  
 Supported: 100rel, replaces  
 Allow: INVITE, ACK, BYE, CANCEL, OPTIONS, PRACK, MESSAGE, REFER, NOTIFY  
 Content-Type: application/sdp  
 Accept: application/sdp, message/sipfrag  
 Content-Length: 249

v=0  
 o=- 865066 401 IN IP4 192.168.2.19  
 s=-  
 c=IN IP4 192.168.2.19  
 t=0 0  
 m=audio 5006 RTP/AVP 0 8 4 18 96  
 a=rtpmap:0 PCMU/8000  
 a=rtpmap:8 PCMA/8000  
 a=rtpmap:4 G723/8000  
 a=rtpmap:18 G729/8000  
 a=rtpmap:96 telephone-event/8000  
 a=fmtp:96 0-11

F5 192.168.1.1:5062(Server) -> 192.168.2.19:5060(00002@sip.com)

SIP/2.0 100 Trying  
 Via: SIP/2.0/UDP 192.168.2.19:5060;branch=z9hG4bK-63dc710f-527534.628  
 From: <sip:00002@sip.com>;tag=5836fd00  
 To: <sip:00003@sip.com>  
 Call-ID: 29d0b3a4@00002.192.168.1.1  
 CSeq: 669544013 INVITE  
 Content-Length: 0

F6 192.168.1.1:5062(Server) -> 192.168.2.10:5060(00003@sip.com)

INVITE sip:00003@192.168.2.10 SIP/2.0  
 Via: SIP/2.0/UDP 192.168.1.1:5060;branch=z9hG4bK-245.111110.669544013  
 Via: SIP/2.0/UDP 192.168.2.19:5060;branch=z9hG4bK-63dc710f-527534.628  
 Record-Route: <sip:00003@192.168.1.1>  
 Route: <sip:192.168.1.1:5060>  
 From: 00002 <sip:00002@sip.com>;tag=5836fd00  
 To: <sip:00003@sip.com>  
 Call-ID: 29d0b3a4@00002.192.168.1.1  
 CSeq: 669544013 INVITE  
 Contact: <sip:00002@192.168.2.19>  
 max-forwards: 69  
 supported: 100rel  
 supported: replaces  
 Allow: INVITE, ACK, BYE, CANCEL, OPTIONS, PRACK, MESSAGE, REFER, NOTIFY  
 Content-Type: application/sdp  
 Accept: application/sdp, message/sipfrag

Content-Length: 249

v=0  
o=- 865066 401 IN IP4 192.168.2.19  
s=-  
c=IN IP4 192.168.2.19  
t=0 0  
m=audio 5006 RTP/AVP 0 8 4 18 96  
a=rtpmap:0 PCMU/8000  
a=rtpmap:8 PCMA/8000  
a=rtpmap:4 G723/8000  
a=rtpmap:18 G729/8000  
a=rtpmap:96 telephone-event/8000  
a=fmtp:96 0-11

F7 192.168.2.10:1024(00003@sip.com) -> 192.168.1.1:5060(Server)

SIP/2.0 100 Trying  
Via: SIP/2.0/UDP 192.168.1.1:5060;branch=z9hG4bK-245.111110.669544013  
Via: SIP/2.0/UDP 192.168.2.19:5060;branch=z9hG4bK-63dc710f-527534.628  
From: 00002 <sip:00002@sip.com>;tag=5836fd00  
To: <sip:00003@sip.com>  
Call-ID: 29d0b3a4@00002.192.168.1.1  
CSeq: 669544013 INVITE  
Content-Length: 0

F8 192.168.2.10:1024(00003@sip.com) -> 192.168.1.1:5060(Server)

SIP/2.0 183 Session Progress  
Via: SIP/2.0/UDP 192.168.1.1:5060;branch=z9hG4bK-245.111110.669544013  
Via: SIP/2.0/UDP 192.168.2.19:5060;branch=z9hG4bK-63dc710f-527534.628  
Record-Route: <sip:00003@192.168.1.1>  
From: 00002 <sip:00002@sip.com>;tag=5836fd00  
To: <sip:00003@sip.com>;tag=0c17d9fa  
Call-ID: 29d0b3a4@00002.192.168.1.1  
CSeq: 669544013 INVITE  
Contact: <sip:00003@192.168.2.10>  
Require: 100rel  
RSeq: 159548732  
Content-Length: 0

F9 192.168.1.1:5062(Server) -> 192.168.2.19:5060(00002@sip.com)

SIP/2.0 183 Session Progress  
Via: SIP/2.0/UDP 192.168.2.19:5060;branch=z9hG4bK-63dc710f-527534.628  
Record-Route: <sip:00003@192.168.1.1>  
From: 00002 <sip:00002@sip.com>;tag=5836fd00  
To: <sip:00003@sip.com>;tag=0c17d9fa  
Call-ID: 29d0b3a4@00002.192.168.1.1  
CSeq: 669544013 INVITE  
Contact: <sip:00003@192.168.2.10>  
require: 100rel  
rseq: 159548732  
Content-Length: 0

F10 192.168.2.10:1024(00003@sip.com) -> 192.168.1.1:5060(Server)

SIP/2.0 486 Busy Here  
Via: SIP/2.0/UDP 192.168.1.1:5060;branch=z9hG4bK-245.111110.669544013  
Via: SIP/2.0/UDP 192.168.2.19:5060;branch=z9hG4bK-63dc710f-527534.628  
From: 00002 <sip:00002@sip.com>;tag=5836fd00  
To: <sip:00003@sip.com>;tag=0c17d9fa  
Call-ID: 29d0b3a4@00002.192.168.1.1  
CSeq: 669544013 INVITE  
Content-Length: 0

F11 192.168.1.1:5062(Server) -> 192.168.2.10:5060(00003@sip.com)

ACK sip:00003@192.168.2.10 SIP/2.0  
Via: SIP/2.0/UDP 192.168.1.1:5060;branch=z9hG4bK-245.111110.669544013  
Route: <sip:192.168.1.1:5060>  
From: 00002 <sip:00002@sip.com>;tag=5836fd00  
To: <sip:00003@sip.com>;tag=0c17d9fa  
Call-ID: 29d0b3a4@00002.192.168.1.1  
CSeq: 669544013 ACK  
Content-Length: 0

=====

F12            192.168.2.19:1024(00002@sip.com) -> 192.168.1.1:5060(Server)

PRACK sip:00003@192.168.1.1 SIP/2.0  
Via: SIP/2.0/UDP 192.168.2.19:5060;branch=z9hG4bK-70a9373d-527535.177  
Route: <sip:00003@192.168.2.10>  
From: 00002 <sip:00002@sip.com>;tag=5836fd00  
To: <sip:00003@sip.com>;tag=0c17d9fa  
Call-ID: 29d0b3a4@00002.192.168.1.1  
CSeq: 669544014 PRACK  
Proxy-Authorization: Digest username="00002", realm="heliossv2", nonce="7063046303170b5ef7d383dec8265895",  
uri="sip:00003@192.168.1.1", response="ec7b9fdf0cc98d1c62c673b795495d5c", algorithm=MD5, cnonce="0ebfdd3c",  
opaque="d2905b31aaa5d7a8bb1dadacb2c5438d", qop=auth, nc=00000002  
Max-Forwards: 70  
RAck: 159548732 669544013 INVITE  
Content-Length: 0

=====

F13            192.168.1.1:5062(Server) -> 192.168.2.19:5060(00002@sip.com)

SIP/2.0 486 Busy Here  
Via: SIP/2.0/UDP 192.168.2.19:5060;branch=z9hG4bK-63dc710f-527534.628  
From: 00002 <sip:00002@sip.com>;tag=5836fd00  
To: <sip:00003@sip.com>;tag=0c17d9fa  
Call-ID: 29d0b3a4@00002.192.168.1.1  
CSeq: 669544013 INVITE  
Content-Length: 0

=====

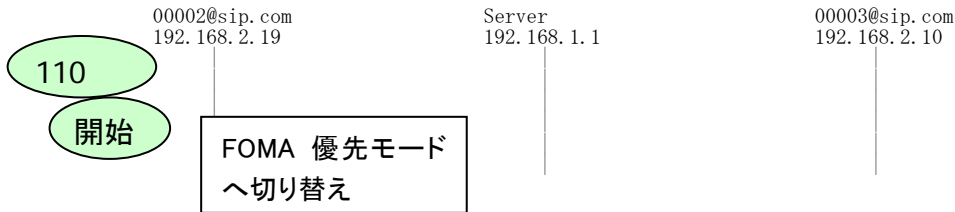
F14            192.168.2.19:1024(00002@sip.com) -> 192.168.1.1:5060(Server)

ACK sip:00003@sip.com SIP/2.0  
Via: SIP/2.0/UDP 192.168.2.19:5060;branch=z9hG4bK-63dc710f-527534.628  
Route: <sip:192.168.1.1:5060>  
From: 00002 <sip:00002@sip.com>;tag=5836fd00  
To: <sip:00003@sip.com>;tag=0c17d9fa  
Call-ID: 29d0b3a4@00002.192.168.1.1  
CSeq: 669544013 ACK  
Content-Length: 0

=====

### 11.2.12. 緊急呼発信

緊急呼発信とは FOMA サービスにて規定する緊急通報番号への発信である。この緊急呼番号は 110,118,119,000,08,112, 911,999 である。



WLAN モードでも緊急呼番号を通常の発呼と同様に WLAN 発信する。

(※N900iL では、WLAN モードでは緊急呼発信を行わない。WLAN モードにおいて、FOMA サービスで規定されている緊急呼の番号で一括発信を行った場合は、FOMA モードに自動的に切り替えて発信する。FOMA が使用できない WLAN シングルモードの場合も、同様に FOMA モードに切り替えて発信する。)

—

## 11.3. 着信処理

## 11.3.1. 通常着信

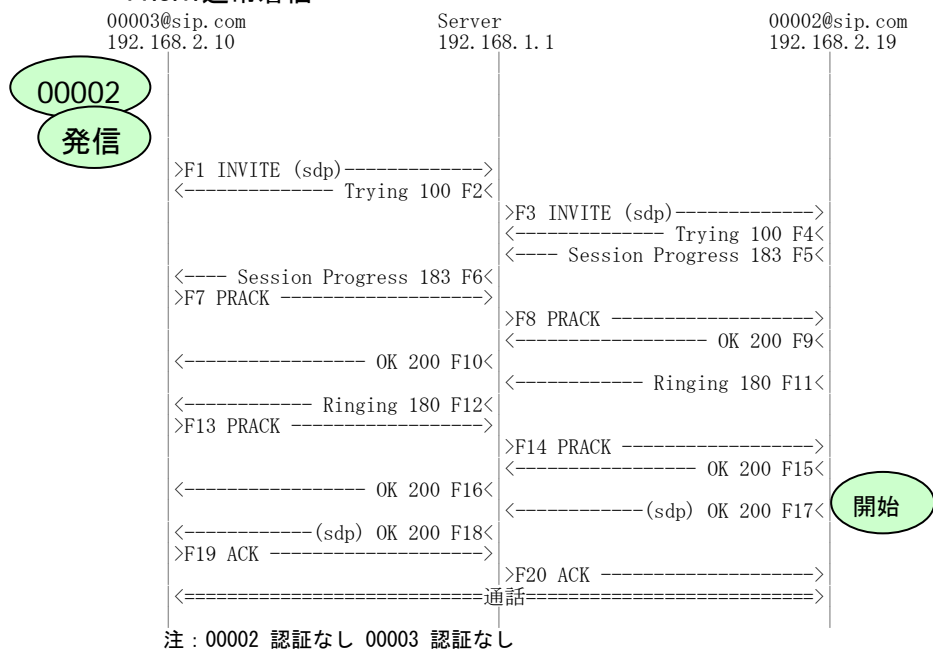


図 11-15 通常着信

F1 192.168.2.10:1024(00003@sip.com) -> 192.168.1.1:5060(Server)

```

INVITE sip:00002@sip.com SIP/2.0
Via: SIP/2.0/UDP 192.168.2.10:5060;branch=z9hG4bK-97c605c-679046.779
Route: <sip:192.168.1.1:5060>
From: <sip:00003@sip.com>;tag=38ba1154
To: <sip:00002@sip.com>
Call-ID: 15c233ec@00003.192.168.1.1
CSeq: 1162907406 INVITE
Contact: <sip:00003@192.168.2.10>
Max-Forwards: 70
Supported: 100rel, replaces
Allow: INVITE, ACK, BYE, CANCEL, OPTIONS, PRACK, MESSAGE, REFER, NOTIFY
Content-Type: application/sdp
Accept: application/sdp, message/sipfrag
Content-Length: 252

```

```

v=0
o=- 766585 766585 IN IP4 192.168.2.10
s=-
c=IN IP4 192.168.2.10
t=0 0
m=audio 5006 RTP/AVP 0 8 4 18 96
a=rtpmap:0 PCMU/8000
a=rtpmap:8 PCMA/8000
a=rtpmap:4 G723/8000
a=rtpmap:18 G729/8000
a=rtpmap:96 telephone-event/8000
a=fmtp:96 0-11

```

F2 192.168.1.1:5062(Server) -> 192.168.2.10:5060(00003@sip.com)

```

SIP/2.0 100 Trying
Via: SIP/2.0/UDP 192.168.2.10:5060;branch=z9hG4bK-97c605c-679046.779
From: <sip:00003@sip.com>;tag=38ba1154
To: <sip:00002@sip.com>
Call-ID: 15c233ec@00003.192.168.1.1

```

CSeq: 1162907406 INVITE  
Content-Length: 0

```
=====
F3          192.168.1.1:5062(Server) -> 192.168.2.19:5060(00002@sip.com)

INVITE sip:00002@192.168.2.19 SIP/2.0
Via: SIP/2.0/UDP 192.168.1.1:5060;branch=z9hG4bK-247.961219.1162907406
Via: SIP/2.0/UDP 192.168.2.10:5060;branch=z9hG4bK-97c605c-679046.779
Record-Route: <sip:00002@192.168.1.1>
Route: <sip:192.168.1.1:5060>
From: 00003 <sip:00003@sip.com>;tag=38ba1154
To: <sip:00002@sip.com>
Call-ID: 15c233ec@00003.192.168.1.1
CSeq: 1162907406 INVITE
Contact: <sip:00003@192.168.2.10>
max-forwards: 69
supported: 100rel
supported: replaces
Allow: INVITE, ACK, BYE, CANCEL, OPTIONS, PRACK, MESSAGE, REFER, NOTIFY
Content-Type: application/sdp
Accept: application/sdp, message/sipfrag
Content-Length: 252

v=0
o=- 766585 766585 IN IP4 192.168.2.10
s=-
c=IN IP4 192.168.2.10
t=0 0
m=audio 5006 RTP/AVP 0 8 4 18 96
a=rtpmap:0 PCMU/8000
a=rtpmap:8 PCMA/8000
a=rtpmap:4 G723/8000
a=rtpmap:18 G729/8000
a=rtpmap:96 telephone-event/8000
a=fmtp:96 0-11
=====
```

```
=====
F4          192.168.2.19:1024(00002@sip.com) -> 192.168.1.1:5060(Server)

SIP/2.0 100 Trying
Via: SIP/2.0/UDP 192.168.1.1:5060;branch=z9hG4bK-247.961219.1162907406
Via: SIP/2.0/UDP 192.168.2.10:5060;branch=z9hG4bK-97c605c-679046.779
From: 00003 <sip:00003@sip.com>;tag=38ba1154
To: <sip:00002@sip.com>
Call-ID: 15c233ec@00003.192.168.1.1
CSeq: 1162907406 INVITE
Content-Length: 0
=====
```

```
=====
F5          192.168.2.19:1024(00002@sip.com) -> 192.168.1.1:5060(Server)

SIP/2.0 183 Session Progress
Via: SIP/2.0/UDP 192.168.1.1:5060;branch=z9hG4bK-247.961219.1162907406
Via: SIP/2.0/UDP 192.168.2.10:5060;branch=z9hG4bK-97c605c-679046.779
Record-Route: <sip:00002@192.168.1.1>
From: 00003 <sip:00003@sip.com>;tag=38ba1154
To: <sip:00002@sip.com>;tag=0b2a50ef
Call-ID: 15c233ec@00003.192.168.1.1
CSeq: 1162907406 INVITE
Contact: <sip:00002@192.168.2.19>
Require: 100rel
RSeq: 1568577120
Content-Length: 0
=====
```

```
=====
F6          192.168.1.1:5062(Server) -> 192.168.2.10:5060(00003@sip.com)

SIP/2.0 183 Session Progress
Via: SIP/2.0/UDP 192.168.2.10:5060;branch=z9hG4bK-97c605c-679046.779
Record-Route: <sip:00002@192.168.1.1>
From: 00003 <sip:00003@sip.com>;tag=38ba1154
To: <sip:00002@sip.com>;tag=0b2a50ef
Call-ID: 15c233ec@00003.192.168.1.1
=====
```

CSeq: 1162907406 INVITE  
Contact: <sip:00002@192.168.2.19>  
require: 100rel  
rseq: 1568577120  
Content-Length: 0

F7 192.168.2.10:1024(00003@sip.com) -> 192.168.1.1:5060(Server)

PRACK sip:00002@192.168.1.1 SIP/2.0  
Via: SIP/2.0/UDP 192.168.2.10:5060;branch=z9hG4bK-6db7df7-679047.479  
Route: <sip:00002@192.168.2.19>  
From: 00003 <sip:00003@sip.com>;tag=38ba1154  
To: <sip:00002@sip.com>;tag=0b2a50ef  
Call-ID: 15c233ec@00003.192.168.1.1  
CSeq: 1162907407 PRACK  
Max-Forwards: 70  
RAck: 1568577120 1162907406 INVITE  
Content-Length: 0

F8 192.168.1.1:5062(Server) -> 192.168.2.19:5060(00002@sip.com)

PRACK sip:00002@192.168.2.19 SIP/2.0  
Via: SIP/2.0/UDP 192.168.1.1:5060;branch=z9hG4bK-247.1085828321.1162907407  
Via: SIP/2.0/UDP 192.168.2.10:5060;branch=z9hG4bK-6db7df7-679047.479  
Route: <sip:00002@192.168.2.19>  
From: 00003 <sip:00003@sip.com>;tag=38ba1154  
To: <sip:00002@sip.com>;tag=0b2a50ef  
Call-ID: 15c233ec@00003.192.168.1.1  
CSeq: 1162907407 PRACK  
max-forwards: 69  
rack: 1568577120 1162907406 INVITE  
Content-Length: 0

F9 192.168.2.19:1024(00002@sip.com) -> 192.168.1.1:5060(Server)

SIP/2.0 200 OK  
Via: SIP/2.0/UDP 192.168.1.1:5060;branch=z9hG4bK-247.1085828321.1162907407  
Via: SIP/2.0/UDP 192.168.2.10:5060;branch=z9hG4bK-6db7df7-679047.479  
From: 00003 <sip:00003@sip.com>;tag=38ba1154  
To: <sip:00002@sip.com>;tag=0b2a50ef  
Call-ID: 15c233ec@00003.192.168.1.1  
CSeq: 1162907407 PRACK  
Content-Length: 0

F10 192.168.1.1:5062(Server) -> 192.168.2.10:5060(00003@sip.com)

SIP/2.0 200 OK  
Via: SIP/2.0/UDP 192.168.2.10:5060;branch=z9hG4bK-6db7df7-679047.479  
From: 00003 <sip:00003@sip.com>;tag=38ba1154  
To: <sip:00002@sip.com>;tag=0b2a50ef  
Call-ID: 15c233ec@00003.192.168.1.1  
CSeq: 1162907407 PRACK  
Content-Length: 0

F11 192.168.2.19:1024(00002@sip.com) -> 192.168.1.1:5060(Server)

SIP/2.0 180 Ringing  
Via: SIP/2.0/UDP 192.168.1.1:5060;branch=z9hG4bK-247.961219.1162907406  
Via: SIP/2.0/UDP 192.168.2.10:5060;branch=z9hG4bK-97c605c-679046.779  
Record-Route: <sip:00002@192.168.1.1>  
From: 00003 <sip:00003@sip.com>;tag=38ba1154  
To: <sip:00002@sip.com>;tag=0b2a50ef  
Call-ID: 15c233ec@00003.192.168.1.1  
CSeq: 1162907406 INVITE  
Contact: <sip:00002@192.168.2.19>  
Require: 100rel



RSeq: 1568577121  
Content-Length: 0

F12 192.168.1.1:5062(Server) -> 192.168.2.10:5060(00003@sip.com)

SIP/2.0 180 Ringing  
Via: SIP/2.0/UDP 192.168.2.10:5060;branch=z9hG4bK-97c605c-679046.779  
Record-Route: <sip:00002@192.168.1.1>  
From: 00003 <sip:00003@sip.com>;tag=38ba1154  
To: <sip:00002@sip.com>;tag=0b2a50ef  
Call-ID: 15c233ec@00003.192.168.1.1  
CSeq: 1162907406 INVITE  
Contact: <sip:00002@192.168.2.19>  
require: 100rel  
rseq: 1568577121  
Content-Length: 0

F13 192.168.2.10:1024(00003@sip.com) -> 192.168.1.1:5060(Server)

PRACK sip:00002@192.168.1.1 SIP/2.0  
Via: SIP/2.0/UDP 192.168.2.10:5060;branch=z9hG4bK-2292c0c2-679047.883  
Route: <sip:00002@192.168.2.19>  
From: 00003 <sip:00003@sip.com>;tag=38ba1154  
To: <sip:00002@sip.com>;tag=0b2a50ef  
Call-ID: 15c233ec@00003.192.168.1.1  
CSeq: 1162907408 PRACK  
Max-Forwards: 70  
RAck: 1568577121 1162907406 INVITE  
Content-Length: 0

F14 192.168.1.1:5062(Server) -> 192.168.2.19:5060(00002@sip.com)

PRACK sip:00002@192.168.2.19 SIP/2.0  
Via: SIP/2.0/UDP 192.168.1.1:5060;branch=z9hG4bK-247.1085828322.1162907408  
Via: SIP/2.0/UDP 192.168.2.10:5060;branch=z9hG4bK-2292c0c2-679047.883  
Route: <sip:00002@192.168.2.19>  
From: 00003 <sip:00003@sip.com>;tag=38ba1154  
To: <sip:00002@sip.com>;tag=0b2a50ef  
Call-ID: 15c233ec@00003.192.168.1.1  
CSeq: 1162907408 PRACK  
max-forwards: 69  
rack: 1568577121 1162907406 INVITE  
Content-Length: 0

F15 192.168.2.19:1024(00002@sip.com) -> 192.168.1.1:5060(Server)

SIP/2.0 200 OK  
Via: SIP/2.0/UDP 192.168.1.1:5060;branch=z9hG4bK-247.1085828322.1162907408  
Via: SIP/2.0/UDP 192.168.2.10:5060;branch=z9hG4bK-2292c0c2-679047.883  
From: 00003 <sip:00003@sip.com>;tag=38ba1154  
To: <sip:00002@sip.com>;tag=0b2a50ef  
Call-ID: 15c233ec@00003.192.168.1.1  
CSeq: 1162907408 PRACK  
Content-Length: 0

F16 192.168.1.1:5062(Server) -> 192.168.2.10:5060(00003@sip.com)

SIP/2.0 200 OK  
Via: SIP/2.0/UDP 192.168.2.10:5060;branch=z9hG4bK-2292c0c2-679047.883  
From: 00003 <sip:00003@sip.com>;tag=38ba1154  
To: <sip:00002@sip.com>;tag=0b2a50ef  
Call-ID: 15c233ec@00003.192.168.1.1  
CSeq: 1162907408 PRACK  
Content-Length: 0

F17 192.168.2.19:1024(00002@sip.com) -> 192.168.1.1:5060(Server)

SIP/2.0 200 OK  
Via: SIP/2.0/UDP 192.168.1.1:5060;branch=z9hG4bK-247.961219.1162907406  
Via: SIP/2.0/UDP 192.168.2.10:5060;branch=z9hG4bK-97c605c-679046.779  
Record-Route: <sip:00002@192.168.1.1>  
From: 00003 <sip:00003@sip.com>;tag=38ba1154  
To: <sip:00002@sip.com>;tag=0b2a50ef  
Call-ID: 15c233ec@00003.192.168.1.1  
CSeq: 1162907406 INVITE  
Contact: <sip:00002@192.168.2.19>  
Supported: 100rel, replaces  
Allow: INVITE, ACK, BYE, CANCEL, OPTIONS, PRACK, MESSAGE, REFER, NOTIFY  
Content-Type: application/sdp  
Accept: application/sdp, message/sipfrag  
Content-Length: 177

v=0  
o=- 488423 12801 IN IP4 192.168.2.19  
s=-  
c=IN IP4 192.168.2.19  
t=0 0  
m=audio 5008 RTP/AVP 0 96  
a=rtpmap:0 PCMU/8000  
a=rtpmap:96 telephone-event/8000  
a=fmtp:96 0-11

F18 192.168.1.1:5062(Server) -> 192.168.2.10:5060(00003@sip.com)

SIP/2.0 200 OK  
Via: SIP/2.0/UDP 192.168.2.10:5060;branch=z9hG4bK-97c605c-679046.779  
Record-Route: <sip:00002@192.168.1.1>  
From: 00003 <sip:00003@sip.com>;tag=38ba1154  
To: <sip:00002@sip.com>;tag=0b2a50ef  
Call-ID: 15c233ec@00003.192.168.1.1  
CSeq: 1162907406 INVITE  
Contact: <sip:00002@192.168.2.19>  
supported: 100rel  
supported: replaces  
Allow: INVITE, ACK, BYE, CANCEL, OPTIONS, PRACK, MESSAGE, REFER, NOTIFY  
Content-Type: application/sdp  
Accept: application/sdp, message/sipfrag  
Content-Length: 177

v=0  
o=- 488423 12801 IN IP4 192.168.2.19  
s=-  
c=IN IP4 192.168.2.19  
t=0 0  
m=audio 5008 RTP/AVP 0 96  
a=rtpmap:0 PCMU/8000  
a=rtpmap:96 telephone-event/8000  
a=fmtp:96 0-11

F19 192.168.2.10:1024(00003@sip.com) -> 192.168.1.1:5060(Server)

ACK sip:00002@192.168.1.1 SIP/2.0  
Via: SIP/2.0/UDP 192.168.2.10:5060;branch=z9hG4bK-16129e22-679059.996  
Route: <sip:00002@192.168.2.19>  
From: 00003 <sip:00003@sip.com>;tag=38ba1154  
To: <sip:00002@sip.com>;tag=0b2a50ef  
Call-ID: 15c233ec@00003.192.168.1.1  
CSeq: 1162907406 ACK  
Max-Forwards: 70  
Content-Length: 0

F20 192.168.1.1:5062(Server) -> 192.168.2.19:5060(00002@sip.com)

ACK sip:00002@192.168.2.19 SIP/2.0  
Via: SIP/2.0/UDP 192.168.1.1:5060;branch=z9hG4bK-247.1085828334.1162907406  
Via: SIP/2.0/UDP 192.168.2.10:5060;branch=z9hG4bK-16129e22-679059.996  
From: 00003 <sip:00003@sip.com>;tag=38ba1154

To: <sip:00002@sip.com>;tag=0b2a50ef  
Call-ID: 15c233ec@00003.192.168.1.1  
CSeq: 1162907406 ACK  
max-forwards: 69  
Content-Length: 0

=====

## 11.3.2. 着信拒否

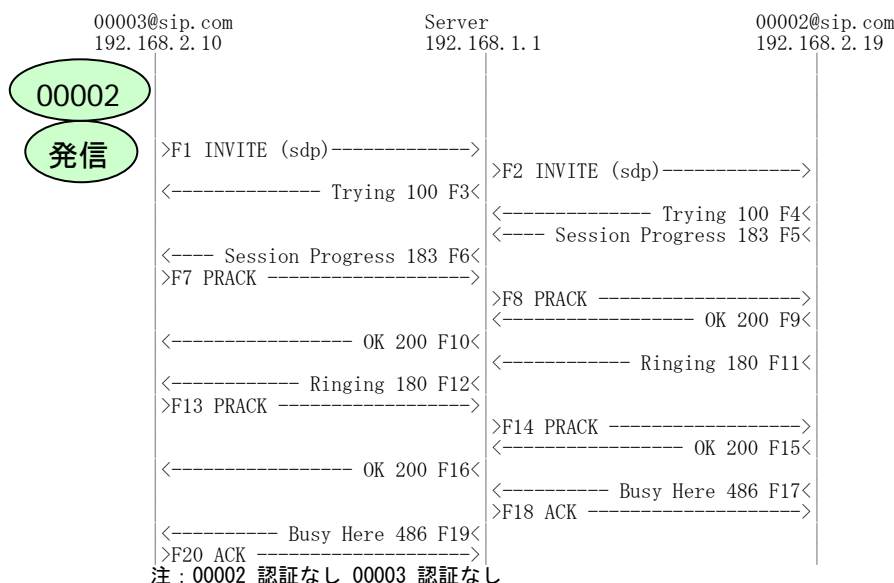


図 11-16 着信拒否

```
=====
F1          192.168.2.10:1024(00003@sip.com) -> 192.168.1.1:5060(Server)

INVITE sip:00002@sip.com SIP/2.0
Via: SIP/2.0/UDP 192.168.2.10:5060;branch=z9hG4bK-261225b6-679863.145
Route: <sip:192.168.1.1:5060>
From: <sip:00003@sip.com>;tag=34a7c0e8
To: <sip:00002@sip.com>
Call-ID: 5d7b36c3@000003.192.168.1.1
CSeq: 744198133 INVITE
Contact: <sip:00003@192.168.2.10>
Max-Forwards: 70
Supported: 100rel, replaces
Allow: INVITE, ACK, BYE, CANCEL, OPTIONS, PRACK, MESSAGE, REFER, NOTIFY
Content-Type: application/sdp
Accept: application/sdp, message/sipfrag
Content-Length: 249

v=0
o=- 132452 401 IN IP4 192.168.2.10
s=-
c=IN IP4 192.168.2.10
t=0 0
m=audio 5006 RTP/AVP 0 8 4 18 96
a=rtpmap:0 PCMU/8000
a=rtpmap:8 PCMA/8000
a=rtpmap:4 G723/8000
a=rtpmap:18 G729/8000
a=rtpmap:96 telephone-event/8000
a=fmtp:96 0-11

=====
F2          192.168.1.1:5062(Server) -> 192.168.2.19:5060(00002@sip.com)

INVITE sip:00002@192.168.2.19 SIP/2.0
Via: SIP/2.0/UDP 192.168.1.1:5060;branch=z9hG4bK-259.271132.744198133
Via: SIP/2.0/UDP 192.168.2.10:5060;branch=z9hG4bK-261225b6-679863.145
Record-Route: <sip:00002@192.168.1.1>
Route: <sip:192.168.1.1:5060>
From: 00003 <sip:00003@sip.com>;tag=34a7c0e8
To: <sip:00002@sip.com>
Call-ID: 5d7b36c3@000003.192.168.1.1
CSeq: 744198133 INVITE
Contact: <sip:00003@192.168.2.10>
max-forwards: 69
```

```
supported: 100rel
supported: replaces
Allow: INVITE, ACK, BYE, CANCEL, OPTIONS, PRACK, MESSAGE, REFER, NOTIFY
Content-Type: application/sdp
Accept: application/sdp, message/sipfrag
Content-Length: 249
```

```
v=0
o=- 132452 401 IN IP4 192.168.2.10
s=-
c=IN IP4 192.168.2.10
t=0 0
m=audio 5006 RTP/AVP 0 8 4 18 96
a=rtpmap:0 PCMU/8000
a=rtpmap:8 PCMA/8000
a=rtpmap:4 G723/8000
a=rtpmap:18 G729/8000
a=rtpmap:96 telephone-event/8000
a=fmtp:96 0-11
```

```
=====
F3          192.168.1.1:5062(Server) -> 192.168.2.10:5060(00003@sip.com)
```

```
SIP/2.0 100 Trying
Via: SIP/2.0/UDP 192.168.2.10:5060;branch=z9hG4bK-261225b6-679863.145
From: <sip:00003@sip.com>;tag=34a7c0e8
To: <sip:00002@sip.com>
Call-ID: 5d7b36c3@00003.192.168.1.1
CSeq: 744198133 INVITE
Content-Length: 0
```

```
=====
F4          192.168.2.19:1024(00002@sip.com) -> 192.168.1.1:5060(Server)
```

```
SIP/2.0 100 Trying
Via: SIP/2.0/UDP 192.168.1.1:5060;branch=z9hG4bK-259.271132.744198133
Via: SIP/2.0/UDP 192.168.2.10:5060;branch=z9hG4bK-261225b6-679863.145
From: 00003 <sip:00003@sip.com>;tag=34a7c0e8
To: <sip:00002@sip.com>
Call-ID: 5d7b36c3@00003.192.168.1.1
CSeq: 744198133 INVITE
Content-Length: 0
```

```
=====
F5          192.168.2.19:1024(00002@sip.com) -> 192.168.1.1:5060(Server)
```

```
SIP/2.0 183 Session Progress
Via: SIP/2.0/UDP 192.168.1.1:5060;branch=z9hG4bK-259.271132.744198133
Via: SIP/2.0/UDP 192.168.2.10:5060;branch=z9hG4bK-261225b6-679863.145
Record-Route: <sip:00002@192.168.1.1>
From: 00003 <sip:00003@sip.com>;tag=34a7c0e8
To: <sip:00002@sip.com>;tag=5d15437f
Call-ID: 5d7b36c3@00003.192.168.1.1
CSeq: 744198133 INVITE
Contact: <sip:00002@192.168.2.19>
Require: 100rel
RSeq: 1325564050
Content-Length: 0
```

```
=====
F6          192.168.1.1:5062(Server) -> 192.168.2.10:5060(00003@sip.com)
```

```
SIP/2.0 183 Session Progress
Via: SIP/2.0/UDP 192.168.2.10:5060;branch=z9hG4bK-261225b6-679863.145
Record-Route: <sip:00002@192.168.1.1>
From: 00003 <sip:00003@sip.com>;tag=34a7c0e8
To: <sip:00002@sip.com>;tag=5d15437f
Call-ID: 5d7b36c3@00003.192.168.1.1
CSeq: 744198133 INVITE
Contact: <sip:00002@192.168.2.19>
require: 100rel
rseq: 1325564050
Content-Length: 0
```

```
=====
F7          192.168.2.10:1024(00003@sip.com) -> 192.168.1.1:5060(Server)

PRACK sip:00002@192.168.1.1 SIP/2.0
Via: SIP/2.0/UDP 192.168.2.10:5060;branch=z9hG4bK-7087fa32-679864.639
Route: <sip:00002@192.168.2.19>
From: 00003 <sip:00003@sip.com>;tag=34a7c0e8
To: <sip:00002@sip.com>;tag=5d15437f
Call-ID: 5d7b36c3@00003.192.168.1.1
CSeq: 744198134 PRACK
Max-Forwards: 70
RAck: 1325564050 744198133 INVITE
Content-Length: 0
=====
```

```
=====
F8          192.168.1.1:5062(Server) -> 192.168.2.19:5060(00002@sip.com)

PRACK sip:00002@192.168.2.19 SIP/2.0
Via: SIP/2.0/UDP 192.168.1.1:5060;branch=z9hG4bK-259.1085829138.744198134
Via: SIP/2.0/UDP 192.168.2.10:5060;branch=z9hG4bK-7087fa32-679864.639
Route: <sip:00002@192.168.2.19>
From: 00003 <sip:00003@sip.com>;tag=34a7c0e8
To: <sip:00002@sip.com>;tag=5d15437f
Call-ID: 5d7b36c3@00003.192.168.1.1
CSeq: 744198134 PRACK
max-forwards: 69
rack: 1325564050 744198133 INVITE
Content-Length: 0
=====
```

```
=====
F9          192.168.2.19:1024(00002@sip.com) -> 192.168.1.1:5060(Server)

SIP/2.0 200 OK
Via: SIP/2.0/UDP 192.168.1.1:5060;branch=z9hG4bK-259.1085829138.744198134
Via: SIP/2.0/UDP 192.168.2.10:5060;branch=z9hG4bK-7087fa32-679864.639
From: 00003 <sip:00003@sip.com>;tag=34a7c0e8
To: <sip:00002@sip.com>;tag=5d15437f
Call-ID: 5d7b36c3@00003.192.168.1.1
CSeq: 744198134 PRACK
Content-Length: 0
=====
```

```
=====
F10         192.168.1.1:5062(Server) -> 192.168.2.10:5060(00003@sip.com)

SIP/2.0 200 OK
Via: SIP/2.0/UDP 192.168.2.10:5060;branch=z9hG4bK-7087fa32-679864.639
From: 00003 <sip:00003@sip.com>;tag=34a7c0e8
To: <sip:00002@sip.com>;tag=5d15437f
Call-ID: 5d7b36c3@00003.192.168.1.1
CSeq: 744198134 PRACK
Content-Length: 0
=====
```

```
=====
F11         192.168.2.19:1024(00002@sip.com) -> 192.168.1.1:5060(Server)

SIP/2.0 180 Ringing
Via: SIP/2.0/UDP 192.168.1.1:5060;branch=z9hG4bK-259.271132.744198133
Via: SIP/2.0/UDP 192.168.2.10:5060;branch=z9hG4bK-261225b6-679863.145
Record-Route: <sip:00002@192.168.1.1>
From: 00003 <sip:00003@sip.com>;tag=34a7c0e8
To: <sip:00002@sip.com>;tag=5d15437f
Call-ID: 5d7b36c3@00003.192.168.1.1
CSeq: 744198133 INVITE
Contact: <sip:00002@192.168.2.19>
Require: 100rel
RSeq: 1325564051
Content-Length: 0
=====
```

F12 192.168.1.1:5062(Server) -> 192.168.2.10:5060(00003@sip.com)

SIP/2.0 180 Ringing  
Via: SIP/2.0/UDP 192.168.2.10:5060;branch=z9hG4bK-261225b6-679863.145  
Record-Route: <sip:00002@192.168.1.1>  
From: 00003 <sip:00003@sip.com>;tag=34a7c0e8  
To: <sip:00002@sip.com>;tag=5d15437f  
Call-ID: 5d7b36c3@00003.192.168.1.1  
CSeq: 744198133 INVITE  
Contact: <sip:00002@192.168.2.19>  
require: 100rel  
rseq: 1325564051  
Content-Length: 0

F13 192.168.2.10:1024(00003@sip.com) -> 192.168.1.1:5060(Server)

PRACK sip:00002@192.168.1.1 SIP/2.0  
Via: SIP/2.0/UDP 192.168.2.10:5060;branch=z9hG4bK-3b23cfc5-679864.943  
Route: <sip:00002@192.168.2.19>  
From: 00003 <sip:00003@sip.com>;tag=34a7c0e8  
To: <sip:00002@sip.com>;tag=5d15437f  
Call-ID: 5d7b36c3@00003.192.168.1.1  
CSeq: 744198135 PRACK  
Max-Forwards: 70  
RAck: 1325564051 744198133 INVITE  
Content-Length: 0

F14 192.168.1.1:5062(Server) -> 192.168.2.19:5060(00002@sip.com)

PRACK sip:00002@192.168.2.19 SIP/2.0  
Via: SIP/2.0/UDP 192.168.1.1:5060;branch=z9hG4bK-259.1085829139.744198135  
Via: SIP/2.0/UDP 192.168.2.10:5060;branch=z9hG4bK-3b23cfc5-679864.943  
Route: <sip:00002@192.168.2.19>  
From: 00003 <sip:00003@sip.com>;tag=34a7c0e8  
To: <sip:00002@sip.com>;tag=5d15437f  
Call-ID: 5d7b36c3@00003.192.168.1.1  
CSeq: 744198135 PRACK  
max-forwards: 69  
rack: 1325564051 744198133 INVITE  
Content-Length: 0

F15 192.168.2.19:1024(00002@sip.com) -> 192.168.1.1:5060(Server)

SIP/2.0 200 OK  
Via: SIP/2.0/UDP 192.168.1.1:5060;branch=z9hG4bK-259.1085829139.744198135  
Via: SIP/2.0/UDP 192.168.2.10:5060;branch=z9hG4bK-3b23cfc5-679864.943  
From: 00003 <sip:00003@sip.com>;tag=34a7c0e8  
To: <sip:00002@sip.com>;tag=5d15437f  
Call-ID: 5d7b36c3@00003.192.168.1.1  
CSeq: 744198135 PRACK  
Content-Length: 0

F16 192.168.1.1:5062(Server) -> 192.168.2.10:5060(00003@sip.com)

SIP/2.0 200 OK  
Via: SIP/2.0/UDP 192.168.2.10:5060;branch=z9hG4bK-3b23cfc5-679864.943  
From: 00003 <sip:00003@sip.com>;tag=34a7c0e8  
To: <sip:00002@sip.com>;tag=5d15437f  
Call-ID: 5d7b36c3@00003.192.168.1.1  
CSeq: 744198135 PRACK  
Content-Length: 0

F17 192.168.2.19:1024(00002@sip.com) -> 192.168.1.1:5060(Server)

SIP/2.0 486 Busy Here  
Via: SIP/2.0/UDP 192.168.1.1:5060;branch=z9hG4bK-259.271132.744198133

## FOMA/WLAN デュアル端末に関する技術参考資料 第 1.2 版

Via: SIP/2.0/UDP 192.168.2.10:5060;branch=z9hG4bK-261225b6-679863.145  
From: 00003 <sip:00003@sip.com>;tag=34a7c0e8  
To: <sip:00002@sip.com>;tag=5d15437f  
Call-ID: 5d7b36c3@00003.192.168.1.1  
CSeq: 744198133 INVITE  
Content-Length: 0

=====

F18 192.168.1.1:5062(Server) -> 192.168.2.19:5060(00002@sip.com)

ACK sip:00002@192.168.2.19 SIP/2.0  
Via: SIP/2.0/UDP 192.168.1.1:5060;branch=z9hG4bK-259.271132.744198133  
Route: <sip:192.168.1.1:5060>  
From: 00003 <sip:00003@sip.com>;tag=34a7c0e8  
To: <sip:00002@sip.com>;tag=5d15437f  
Call-ID: 5d7b36c3@00003.192.168.1.1  
CSeq: 744198133 ACK  
Content-Length: 0

=====

F19 192.168.1.1:5062(Server) -> 192.168.2.10:5060(00003@sip.com)

SIP/2.0 486 Busy Here  
Via: SIP/2.0/UDP 192.168.2.10:5060;branch=z9hG4bK-261225b6-679863.145  
From: 00003 <sip:00003@sip.com>;tag=34a7c0e8  
To: <sip:00002@sip.com>;tag=5d15437f  
Call-ID: 5d7b36c3@00003.192.168.1.1  
CSeq: 744198133 INVITE  
Content-Length: 0

=====

F20 192.168.2.10:1024(00003@sip.com) -> 192.168.1.1:5060(Server)

ACK sip:00002@sip.com SIP/2.0  
Via: SIP/2.0/UDP 192.168.2.10:5060;branch=z9hG4bK-261225b6-679863.145  
Route: <sip:192.168.1.1:5060>  
From: 00003 <sip:00003@sip.com>;tag=34a7c0e8  
To: <sip:00002@sip.com>;tag=5d15437f  
Call-ID: 5d7b36c3@00003.192.168.1.1  
CSeq: 744198133 ACK  
Content-Length: 0

=====



## 11.3.3. 着信中着信者圏外→圏外滞在

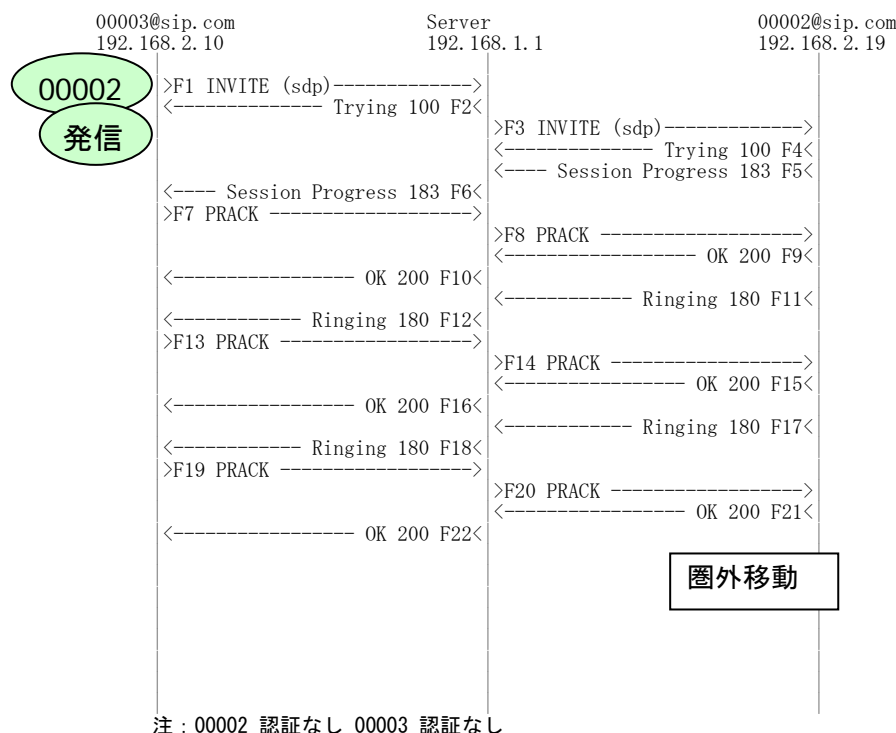


図 11-17 着信中着信者圏外→圏外滞在

```

=====
F1      192.168.2.10:1024(00003@sip.com) -> 192.168.1.1:5060(Server)

INVITE sip:00002@sip.com SIP/2.0
Via: SIP/2.0/UDP 192.168.2.10:5060;branch=z9hG4bK-4e92cd07-679182.548
Route: <sip:192.168.1.1:5060>
From: <sip:00003@sip.com>;tag=5b67ca38
To: <sip:00002@sip.com>
Call-ID: 4e5c59ad@00003.192.168.1.1
CSeq: 1337915221 INVITE
Contact: <sip:00003@192.168.2.10>
Max-Forwards: 70
Supported: 100rel, replaces
Allow: INVITE, ACK, BYE, CANCEL, OPTIONS, PRACK, MESSAGE, REFER, NOTIFY
Content-Type: application/sdp
Accept: application/sdp, message/sipfrag
Content-Length: 249

v=0
o=- 517686 301 IN IP4 192.168.2.10
s=-
c=IN IP4 192.168.2.10
t=0 0
m=audio 5008 RTP/AVP 0 8 4 18 96
a=rtpmap:0 PCMU/8000
a=rtpmap:8 PCMA/8000
a=rtpmap:4 G723/8000
a=rtpmap:18 G729/8000
a=rtpmap:96 telephone-event/8000
a=fmtp:96 0-11
=====

```

```

=====
F2      192.168.1.1:5062(Server) -> 192.168.2.10:5060(00003@sip.com)

SIP/2.0 100 Trying
Via: SIP/2.0/UDP 192.168.2.10:5060;branch=z9hG4bK-4e92cd07-679182.548
From: <sip:00003@sip.com>;tag=5b67ca38
=====

```

To: <sip:00002@sip.com>  
 Call-ID: 4e5c59ad@00003.192.168.1.1  
 CSeq: 1337915221 INVITE  
 Content-Length: 0

F3 192.168.1.1:5062(Server) -> 192.168.2.19:5060(00002@sip.com)

INVITE sip:00002@192.168.2.19 SIP/2.0  
 Via: SIP/2.0/UDP 192.168.1.1:5060;branch=z9hG4bK-253.721221.1337915221  
 Via: SIP/2.0/UDP 192.168.2.10:5060;branch=z9hG4bK-4e92cd07-679182.548  
 Record-Route: <sip:00002@192.168.1.1>  
 Route: <sip:192.168.1.1:5060>  
 From: 00003 <sip:00003@sip.com>;tag=5b67ca38  
 To: <sip:00002@sip.com>  
 Call-ID: 4e5c59ad@00003.192.168.1.1  
 CSeq: 1337915221 INVITE  
 Contact: <sip:00003@192.168.2.10>  
 max-forwards: 69  
 supported: 100rel  
 supported: replaces  
 Allow: INVITE, ACK, BYE, CANCEL, OPTIONS, PRACK, MESSAGE, REFER, NOTIFY  
 Content-Type: application/sdp  
 Accept: application/sdp, message/sipfrag  
 Content-Length: 249

v=0  
 o=- 517686 301 IN IP4 192.168.2.10  
 s=-  
 c=IN IP4 192.168.2.10  
 t=0 0  
 m=audio 5008 RTP/AVP 0 8 4 18 96  
 a=rtpmap:0 PCMU/8000  
 a=rtpmap:8 PCMA/8000  
 a=rtpmap:4 G723/8000  
 a=rtpmap:18 G729/8000  
 a=rtpmap:96 telephone-event/8000  
 a=fmtp:96 0-11

F4 192.168.2.19:1024(00002@sip.com) -> 192.168.1.1:5060(Server)

SIP/2.0 100 Trying  
 Via: SIP/2.0/UDP 192.168.1.1:5060;branch=z9hG4bK-253.721221.1337915221  
 Via: SIP/2.0/UDP 192.168.2.10:5060;branch=z9hG4bK-4e92cd07-679182.548  
 From: 00003 <sip:00003@sip.com>;tag=5b67ca38  
 To: <sip:00002@sip.com>  
 Call-ID: 4e5c59ad@00003.192.168.1.1  
 CSeq: 1337915221 INVITE  
 Content-Length: 0

F5 192.168.2.19:1024(00002@sip.com) -> 192.168.1.1:5060(Server)

SIP/2.0 183 Session Progress  
 Via: SIP/2.0/UDP 192.168.1.1:5060;branch=z9hG4bK-253.721221.1337915221  
 Via: SIP/2.0/UDP 192.168.2.10:5060;branch=z9hG4bK-4e92cd07-679182.548  
 Record-Route: <sip:00002@192.168.1.1>  
 From: 00003 <sip:00003@sip.com>;tag=5b67ca38  
 To: <sip:00002@sip.com>;tag=51a07ca2  
 Call-ID: 4e5c59ad@00003.192.168.1.1  
 CSeq: 1337915221 INVITE  
 Contact: <sip:00002@192.168.2.19>  
 Require: 100rel  
 RSeq: 1622323995  
 Content-Length: 0

F6 192.168.1.1:5062(Server) -> 192.168.2.10:5060(00003@sip.com)

SIP/2.0 183 Session Progress  
 Via: SIP/2.0/UDP 192.168.2.10:5060;branch=z9hG4bK-4e92cd07-679182.548  
 Record-Route: <sip:00002@192.168.1.1>  
 From: 00003 <sip:00003@sip.com>;tag=5b67ca38

To: <sip:00002@sip.com>;tag=51a07ca2  
Call-ID: 4e5c59ad@00003.192.168.1.1  
CSeq: 1337915221 INVITE  
Contact: <sip:00002@192.168.2.19>  
require: 100rel  
rseq: 1622323995  
Content-Length: 0

=====

F7 192.168.2.10:1024(00003@sip.com) -> 192.168.1.1:5060(Server)

PRACK sip:00002@192.168.1.1 SIP/2.0  
Via: SIP/2.0/UDP 192.168.2.10:5060;branch=z9hG4bK-7f7a445d-679183.672  
Route: <sip:00002@192.168.2.19>  
From: 00003 <sip:00003@sip.com>;tag=5b67ca38  
To: <sip:00002@sip.com>;tag=51a07ca2  
Call-ID: 4e5c59ad@00003.192.168.1.1  
CSeq: 1337915222 PRACK  
Max-Forwards: 70  
RAck: 1622323995 1337915221 INVITE  
Content-Length: 0

=====

F8 192.168.1.1:5062(Server) -> 192.168.2.19:5060(00002@sip.com)

PRACK sip:00002@192.168.2.19 SIP/2.0  
Via: SIP/2.0/UDP 192.168.1.1:5060;branch=z9hG4bK-253.1085828457.1337915222  
Via: SIP/2.0/UDP 192.168.2.10:5060;branch=z9hG4bK-7f7a445d-679183.672  
Route: <sip:00002@192.168.2.19>  
From: 00003 <sip:00003@sip.com>;tag=5b67ca38  
To: <sip:00002@sip.com>;tag=51a07ca2  
Call-ID: 4e5c59ad@00003.192.168.1.1  
CSeq: 1337915222 PRACK  
max-forwards: 69  
rack: 1622323995 1337915221 INVITE  
Content-Length: 0

=====

F9 192.168.2.19:1024(00002@sip.com) -> 192.168.1.1:5060(Server)

SIP/2.0 200 OK  
Via: SIP/2.0/UDP 192.168.1.1:5060;branch=z9hG4bK-253.1085828457.1337915222  
Via: SIP/2.0/UDP 192.168.2.10:5060;branch=z9hG4bK-7f7a445d-679183.672  
From: 00003 <sip:00003@sip.com>;tag=5b67ca38  
To: <sip:00002@sip.com>;tag=51a07ca2  
Call-ID: 4e5c59ad@00003.192.168.1.1  
CSeq: 1337915222 PRACK  
Content-Length: 0

=====

F10 192.168.1.1:5062(Server) -> 192.168.2.10:5060(00003@sip.com)

SIP/2.0 200 OK  
Via: SIP/2.0/UDP 192.168.2.10:5060;branch=z9hG4bK-7f7a445d-679183.672  
From: 00003 <sip:00003@sip.com>;tag=5b67ca38  
To: <sip:00002@sip.com>;tag=51a07ca2  
Call-ID: 4e5c59ad@00003.192.168.1.1  
CSeq: 1337915222 PRACK  
Content-Length: 0

=====

F11 192.168.2.19:1024(00002@sip.com) -> 192.168.1.1:5060(Server)

SIP/2.0 180 Ringing  
Via: SIP/2.0/UDP 192.168.1.1:5060;branch=z9hG4bK-253.721221.1337915221  
Via: SIP/2.0/UDP 192.168.2.10:5060;branch=z9hG4bK-4e92cd07-679182.548  
Record-Route: <sip:00002@192.168.1.1>  
From: 00003 <sip:00003@sip.com>;tag=5b67ca38  
To: <sip:00002@sip.com>;tag=51a07ca2  
Call-ID: 4e5c59ad@00003.192.168.1.1  
CSeq: 1337915221 INVITE

Contact: <sip:00002@192.168.2.19>  
Require: 100rel  
RSeq: 1622323996  
Content-Length: 0

F12 192.168.1.1:5062(Server) -> 192.168.2.10:5060(00003@sip.com)

SIP/2.0 180 Ringing  
Via: SIP/2.0/UDP 192.168.2.10:5060;branch=z9hG4bK-4e92cd07-679182.548  
Record-Route: <sip:00002@192.168.1.1>  
From: 00003 <sip:00003@sip.com>;tag=5b67ca38  
To: <sip:00002@sip.com>;tag=51a07ca2  
Call-ID: 4e5c59ad@00003.192.168.1.1  
CSeq: 1337915221 INVITE  
Contact: <sip:00002@192.168.2.19>  
require: 100rel  
rseq: 1622323996  
Content-Length: 0

F13 192.168.2.10:1024(00003@sip.com) -> 192.168.1.1:5060(Server)

PRACK sip:00002@192.168.1.1 SIP/2.0  
Via: SIP/2.0/UDP 192.168.2.10:5060;branch=z9hG4bK-27c03d31-679184.071  
Route: <sip:00002@192.168.2.19>  
From: 00003 <sip:00003@sip.com>;tag=5b67ca38  
To: <sip:00002@sip.com>;tag=51a07ca2  
Call-ID: 4e5c59ad@00003.192.168.1.1  
CSeq: 1337915223 PRACK  
Max-Forwards: 70  
RAck: 1622323996 1337915221 INVITE  
Content-Length: 0

F14 192.168.1.1:5062(Server) -> 192.168.2.19:5060(00002@sip.com)

PRACK sip:00002@192.168.2.19 SIP/2.0  
Via: SIP/2.0/UDP 192.168.1.1:5060;branch=z9hG4bK-253.1085828458.1337915223  
Via: SIP/2.0/UDP 192.168.2.10:5060;branch=z9hG4bK-27c03d31-679184.071  
Route: <sip:00002@192.168.2.19>  
From: 00003 <sip:00003@sip.com>;tag=5b67ca38  
To: <sip:00002@sip.com>;tag=51a07ca2  
Call-ID: 4e5c59ad@00003.192.168.1.1  
CSeq: 1337915223 PRACK  
max-forwards: 69  
rack: 1622323996 1337915221 INVITE  
Content-Length: 0

F15 192.168.2.19:1024(00002@sip.com) -> 192.168.1.1:5060(Server)

SIP/2.0 200 OK  
Via: SIP/2.0/UDP 192.168.1.1:5060;branch=z9hG4bK-253.1085828458.1337915223  
Via: SIP/2.0/UDP 192.168.2.10:5060;branch=z9hG4bK-27c03d31-679184.071  
From: 00003 <sip:00003@sip.com>;tag=5b67ca38  
To: <sip:00002@sip.com>;tag=51a07ca2  
Call-ID: 4e5c59ad@00003.192.168.1.1  
CSeq: 1337915223 PRACK  
Content-Length: 0

F16 192.168.1.1:5062(Server) -> 192.168.2.10:5060(00003@sip.com)

SIP/2.0 200 OK  
Via: SIP/2.0/UDP 192.168.2.10:5060;branch=z9hG4bK-27c03d31-679184.071  
From: 00003 <sip:00003@sip.com>;tag=5b67ca38  
To: <sip:00002@sip.com>;tag=51a07ca2  
Call-ID: 4e5c59ad@00003.192.168.1.1  
CSeq: 1337915223 PRACK  
Content-Length: 0

```
=====
F17      192.168.2.19:1024(00002@sip.com) -> 192.168.1.1:5060(Server)

SIP/2.0 180 Ringing
Via: SIP/2.0/UDP 192.168.1.1:5060;branch=z9hG4bK-253.721221.1337915221
Via: SIP/2.0/UDP 192.168.2.10:5060;branch=z9hG4bK-4e92cd07-679182.548
Record-Route: <sip:00002@192.168.1.1>
From: 00003 <sip:00003@sip.com>;tag=5b67ca38
To: <sip:00002@sip.com>;tag=51a07ca2
Call-ID: 4e5c59ad@00003.192.168.1.1
CSeq: 1337915221 INVITE
Contact: <sip:00002@192.168.2.19>
Require: 100rel
RSeq: 1622323997
Content-Length: 0

=====
F18      192.168.1.1:5062(Server) -> 192.168.2.10:5060(00003@sip.com)

SIP/2.0 180 Ringing
Via: SIP/2.0/UDP 192.168.2.10:5060;branch=z9hG4bK-4e92cd07-679182.548
Record-Route: <sip:00002@192.168.1.1>
From: 00003 <sip:00003@sip.com>;tag=5b67ca38
To: <sip:00002@sip.com>;tag=51a07ca2
Call-ID: 4e5c59ad@00003.192.168.1.1
CSeq: 1337915221 INVITE
Contact: <sip:00002@192.168.2.19>
require: 100rel
rseq: 1622323997
Content-Length: 0

=====
F19      192.168.2.10:1024(00003@sip.com) -> 192.168.1.1:5060(Server)

PRACK sip:00002@192.168.1.1 SIP/2.0
Via: SIP/2.0/UDP 192.168.2.10:5060;branch=z9hG4bK-3398ec29-679194.306
Route: <sip:00002@192.168.2.19>
From: 00003 <sip:00003@sip.com>;tag=5b67ca38
To: <sip:00002@sip.com>;tag=51a07ca2
Call-ID: 4e5c59ad@00003.192.168.1.1
CSeq: 1337915224 PRACK
Max-Forwards: 70
RAck: 1622323997 1337915221 INVITE
Content-Length: 0

=====
F20      192.168.1.1:5062(Server) -> 192.168.2.19:5060(00002@sip.com)

PRACK sip:00002@192.168.2.19 SIP/2.0
Via: SIP/2.0/UDP 192.168.1.1:5060;branch=z9hG4bK-253.1085828468.1337915224
Via: SIP/2.0/UDP 192.168.2.10:5060;branch=z9hG4bK-3398ec29-679194.306
Route: <sip:00002@192.168.2.19>
From: 00003 <sip:00003@sip.com>;tag=5b67ca38
To: <sip:00002@sip.com>;tag=51a07ca2
Call-ID: 4e5c59ad@00003.192.168.1.1
CSeq: 1337915224 PRACK
max-forwards: 69
rack: 1622323997 1337915221 INVITE
Content-Length: 0

=====
F21      192.168.2.19:1024(00002@sip.com) -> 192.168.1.1:5060(Server)

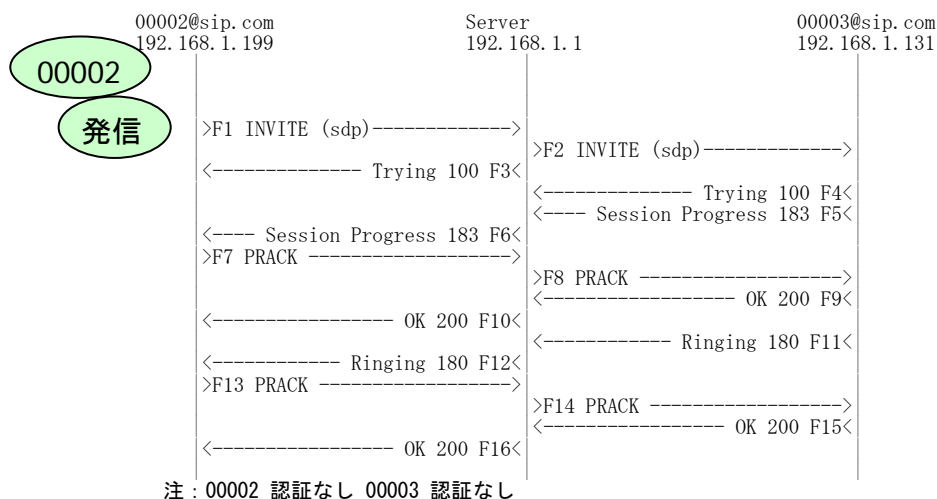
SIP/2.0 200 OK
Via: SIP/2.0/UDP 192.168.1.1:5060;branch=z9hG4bK-253.1085828468.1337915224
Via: SIP/2.0/UDP 192.168.2.10:5060;branch=z9hG4bK-3398ec29-679194.306
From: 00003 <sip:00003@sip.com>;tag=5b67ca38
To: <sip:00002@sip.com>;tag=51a07ca2
Call-ID: 4e5c59ad@00003.192.168.1.1
CSeq: 1337915224 PRACK
```

Content-Length: 0

```
=====
F22      192.168.1.1:5062(Server) -> 192.168.2.10:5060(00003@sip.com)

SIP/2.0 200 OK
Via: SIP/2.0/UDP 192.168.2.10:5060;branch=z9hG4bK-3398ec29-679194.306
From: 00003 <sip:00003@sip.com>;tag=5b67ca38
To: <sip:00002@sip.com>;tag=51a07ca2
Call-ID: 4e5c59ad@00003.192.168.1.1
CSeq: 1337915224 PRACK
Content-Length: 0
```

## 11.3.4. 着信無応答



注：00002 認証なし 00003 認証なし

図 11-18 着信無応答

着信端末で応答しない場合、タイマ制御による呼切断は行なわない。

```

=====
F1      192.168.1.199:1025(00002@sip.com) -> 192.168.1.1:5060(Server)

INVITE sip:00003@sip.com SIP/2.0
Via: SIP/2.0/UDP 192.168.1.199:5060;branch=z9hG4bK-59867320-836312.065
Route: <sip:192.168.1.1:5060>
From: <sip:00002@sip.com>;tag=1a48c249
To: <sip:00003@sip.com>
Call-ID: 788d3871@00002.192.168.1.1
CSeq: 462745096 INVITE
Contact: <sip:00002@192.168.1.199>
Max-Forwards: 70
Supported: 100rel, replaces
Allow: INVITE, ACK, BYE, CANCEL, OPTIONS, PRACK, MESSAGE, REFER, NOTIFY
Content-Type: application/sdp
Accept: application/sdp, message/sipfrag
Content-Length: 250

v=0
o=- 51940 301 IN IP4 192.168.1.199
s=-
c=IN IP4 192.168.1.199
t=0 0
m=audio 5006 RTP/AVP 0 8 4 18 96
a=rtpmap:0 PCMU/8000
a=rtpmap:8 PCMA/8000
a=rtpmap:4 G723/8000
a=rtpmap:18 G729/8000
a=rtpmap:96 telephone-event/8000
a=fmtp:96 0-11

=====
F2      192.168.1.1:5062(Server) -> 192.168.1.131:5060(00003@sip.com)

INVITE sip:00003@192.168.1.131 SIP/2.0
Via: SIP/2.0/UDP 192.168.1.1:5060;branch=z9hG4bK-365.237383.462745096
Via: SIP/2.0/UDP 192.168.1.199:5060;branch=z9hG4bK-59867320-836312.065
Record-Route: <sip:00003@192.168.1.1>
Route: <sip:192.168.1.1:5060>
From: 00002 <sip:00002@sip.com>;tag=1a48c249
To: <sip:00003@sip.com>
Call-ID: 788d3871@00002.192.168.1.1
CSeq: 462745096 INVITE
  
```

Contact: <sip:00002@192.168.1.199>  
 max-forwards: 69  
 supported: 100rel  
 supported: replaces  
 Allow: INVITE, ACK, BYE, CANCEL, OPTIONS, PRACK, MESSAGE, REFER, NOTIFY  
 Content-Type: application/sdp  
 Accept: application/sdp, message/sipfrag  
 Content-Length: 250

v=0  
 o=- 51940 301 IN IP4 192.168.1.199  
 s=-  
 c=IN IP4 192.168.1.199  
 t=0 0  
 m=audio 5006 RTP/AVP 0 8 4 18 96  
 a=rtpmap:0 PCMU/8000  
 a=rtpmap:8 PCMA/8000  
 a=rtpmap:4 G723/8000  
 a=rtpmap:18 G729/8000  
 a=rtpmap:96 telephone-event/8000  
 a=fmtp:96 0-11

F3 192.168.1.1:5062(Server) -> 192.168.1.199:5060(00002@sip.com)

SIP/2.0 100 Trying  
 Via: SIP/2.0/UDP 192.168.1.199:5060;branch=z9hG4bK-59867320-836312.065  
 From: <sip:00002@sip.com>;tag=1a48c249  
 To: <sip:00003@sip.com>  
 Call-ID: 788d3871@00002.192.168.1.1  
 CSeq: 462745096 INVITE  
 Content-Length: 0

F4 192.168.1.131:1026(00003@sip.com) -> 192.168.1.1:5060(Server)

SIP/2.0 100 Trying  
 Via: SIP/2.0/UDP 192.168.1.1:5060;branch=z9hG4bK-365.237383.462745096  
 Via: SIP/2.0/UDP 192.168.1.199:5060;branch=z9hG4bK-59867320-836312.065  
 From: 00002 <sip:00002@sip.com>;tag=1a48c249  
 To: <sip:00003@sip.com>  
 Call-ID: 788d3871@00002.192.168.1.1  
 CSeq: 462745096 INVITE  
 Content-Length: 0

F5 192.168.1.131:1026(00003@sip.com) -> 192.168.1.1:5060(Server)

SIP/2.0 183 Session Progress  
 Via: SIP/2.0/UDP 192.168.1.1:5060;branch=z9hG4bK-365.237383.462745096  
 Via: SIP/2.0/UDP 192.168.1.199:5060;branch=z9hG4bK-59867320-836312.065  
 Record-Route: <sip:00003@192.168.1.1>  
 From: 00002 <sip:00002@sip.com>;tag=1a48c249  
 To: <sip:00003@sip.com>;tag=7976d8bc  
 Call-ID: 788d3871@00002.192.168.1.1  
 CSeq: 462745096 INVITE  
 Contact: <sip:00003@192.168.1.131>  
 Require: 100rel  
 RSeq: 1472933274  
 Content-Length: 0

F6 192.168.1.1:5062(Server) -> 192.168.1.199:5060(00002@sip.com)

SIP/2.0 183 Session Progress  
 Via: SIP/2.0/UDP 192.168.1.199:5060;branch=z9hG4bK-59867320-836312.065  
 Record-Route: <sip:00003@192.168.1.1>  
 From: 00002 <sip:00002@sip.com>;tag=1a48c249  
 To: <sip:00003@sip.com>;tag=7976d8bc  
 Call-ID: 788d3871@00002.192.168.1.1  
 CSeq: 462745096 INVITE  
 Contact: <sip:00003@192.168.1.131>  
 require: 100rel  
 rseq: 1472933274



Content-Length: 0

```
=====
F7          192.168.1.199:1025(00002@sip.com) -> 192.168.1.1:5060(Server)

PRACK sip:00003@192.168.1.1 SIP/2.0
Via: SIP/2.0/UDP 192.168.1.199:5060;branch=z9hG4bK-3f98249b-836314.135
Route: <sip:00003@192.168.1.131>
From: 00002 <sip:00002@sip.com>;tag=1a48c249
To: <sip:00003@sip.com>;tag=7976d8bc
Call-ID: 788d3871@00002.192.168.1.1
CSeq: 462745097 PRACK
Max-Forwards: 70
RAck: 1472933274 462745096 INVITE
Content-Length: 0
```

```
=====
F8          192.168.1.1:5062(Server) -> 192.168.1.131:5060(00003@sip.com)

PRACK sip:00003@192.168.1.131 SIP/2.0
Via: SIP/2.0/UDP 192.168.1.1:5060;branch=z9hG4bK-365.1109079510.462745097
Via: SIP/2.0/UDP 192.168.1.199:5060;branch=z9hG4bK-3f98249b-836314.135
Route: <sip:00003@192.168.1.131>
From: 00002 <sip:00002@sip.com>;tag=1a48c249
To: <sip:00003@sip.com>;tag=7976d8bc
Call-ID: 788d3871@00002.192.168.1.1
CSeq: 462745097 PRACK
max-forwards: 69
rack: 1472933274 462745096 INVITE
Content-Length: 0
```

```
=====
F9          192.168.1.131:1026(00003@sip.com) -> 192.168.1.1:5060(Server)

SIP/2.0 200 OK
Via: SIP/2.0/UDP 192.168.1.1:5060;branch=z9hG4bK-365.1109079510.462745097
Via: SIP/2.0/UDP 192.168.1.199:5060;branch=z9hG4bK-3f98249b-836314.135
From: 00002 <sip:00002@sip.com>;tag=1a48c249
To: <sip:00003@sip.com>;tag=7976d8bc
Call-ID: 788d3871@00002.192.168.1.1
CSeq: 462745097 PRACK
Content-Length: 0
```

```
=====
F10         192.168.1.1:5062(Server) -> 192.168.1.199:5060(00002@sip.com)

SIP/2.0 200 OK
Via: SIP/2.0/UDP 192.168.1.199:5060;branch=z9hG4bK-3f98249b-836314.135
From: 00002 <sip:00002@sip.com>;tag=1a48c249
To: <sip:00003@sip.com>;tag=7976d8bc
Call-ID: 788d3871@00002.192.168.1.1
CSeq: 462745097 PRACK
Content-Length: 0
```

```
=====
F11         192.168.1.131:1026(00003@sip.com) -> 192.168.1.1:5060(Server)

SIP/2.0 180 Ringing
Via: SIP/2.0/UDP 192.168.1.1:5060;branch=z9hG4bK-365.237383.462745096
Via: SIP/2.0/UDP 192.168.1.199:5060;branch=z9hG4bK-59867320-836312.065
Record-Route: <sip:00003@192.168.1.1>
From: 00002 <sip:00002@sip.com>;tag=1a48c249
To: <sip:00003@sip.com>;tag=7976d8bc
Call-ID: 788d3871@00002.192.168.1.1
CSeq: 462745096 INVITE
Contact: <sip:00003@192.168.1.131>
Require: 100rel
RSeq: 1472933275
Content-Length: 0
```

```
=====
F12          192.168.1.1:5062(Server) -> 192.168.1.199:5060(00002@sip.com)

SIP/2.0 180 Ringing
Via: SIP/2.0/UDP 192.168.1.199:5060;branch=z9hG4bK-59867320-836312.065
Record-Route: <sip:00003@192.168.1.1>
From: 00002 <sip:00002@sip.com>;tag=1a48c249
To: <sip:00003@sip.com>;tag=7976d8bc
Call-ID: 788d3871@00002.192.168.1.1
CSeq: 462745096 INVITE
Contact: <sip:00003@192.168.1.131>
require: 100rel
rseq: 1472933275
Content-Length: 0
=====
```

```
=====
F13          192.168.1.199:1025(00002@sip.com) -> 192.168.1.1:5060(Server)

PRACK sip:00003@192.168.1.1 SIP/2.0
Via: SIP/2.0/UDP 192.168.1.199:5060;branch=z9hG4bK-557baa45-836314.758
Route: <sip:00003@192.168.1.131>
From: 00002 <sip:00002@sip.com>;tag=1a48c249
To: <sip:00003@sip.com>;tag=7976d8bc
Call-ID: 788d3871@00002.192.168.1.1
CSeq: 462745098 PRACK
Max-Forwards: 70
RAck: 1472933275 462745096 INVITE
Content-Length: 0
=====
```

```
=====
F14          192.168.1.1:5062(Server) -> 192.168.1.131:5060(00003@sip.com)

PRACK sip:00003@192.168.1.131 SIP/2.0
Via: SIP/2.0/UDP 192.168.1.1:5060;branch=z9hG4bK-365.1109079510.462745098
Via: SIP/2.0/UDP 192.168.1.199:5060;branch=z9hG4bK-557baa45-836314.758
Route: <sip:00003@192.168.1.131>
From: 00002 <sip:00002@sip.com>;tag=1a48c249
To: <sip:00003@sip.com>;tag=7976d8bc
Call-ID: 788d3871@00002.192.168.1.1
CSeq: 462745098 PRACK
max-forwards: 69
rack: 1472933275 462745096 INVITE
Content-Length: 0
=====
```

```
=====
F15          192.168.1.131:1026(00003@sip.com) -> 192.168.1.1:5060(Server)

SIP/2.0 200 OK
Via: SIP/2.0/UDP 192.168.1.1:5060;branch=z9hG4bK-365.1109079510.462745098
Via: SIP/2.0/UDP 192.168.1.199:5060;branch=z9hG4bK-557baa45-836314.758
From: 00002 <sip:00002@sip.com>;tag=1a48c249
To: <sip:00003@sip.com>;tag=7976d8bc
Call-ID: 788d3871@00002.192.168.1.1
CSeq: 462745098 PRACK
Content-Length: 0
=====
```

```
=====
F16          192.168.1.1:5062(Server) -> 192.168.1.199:5060(00002@sip.com)

SIP/2.0 200 OK
Via: SIP/2.0/UDP 192.168.1.199:5060;branch=z9hG4bK-557baa45-836314.758
From: 00002 <sip:00002@sip.com>;tag=1a48c249
To: <sip:00003@sip.com>;tag=7976d8bc
Call-ID: 788d3871@00002.192.168.1.1
CSeq: 462745098 PRACK
Content-Length: 0
=====
```

## 11.3.5. 着信中 CANCEL 受信

シーケンスは 11.2.8 発信動作取消しと同様になる。

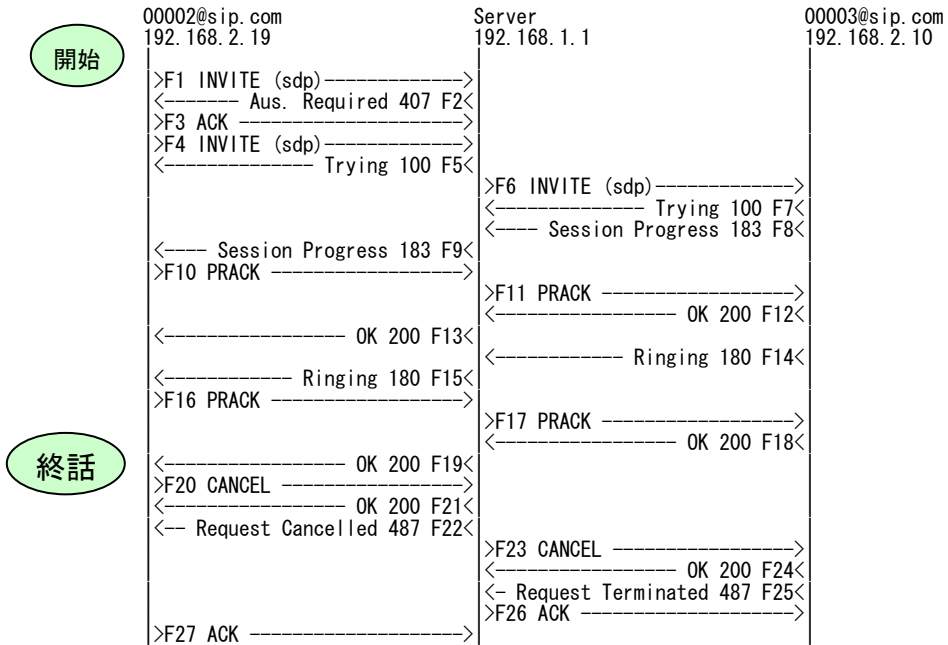


図 11-19 着信中 CANCEL 受信

## 11.4. 通話中(単独呼)

## 11.4.1. 通話中圏外へ移動→そのまま圏外滞在

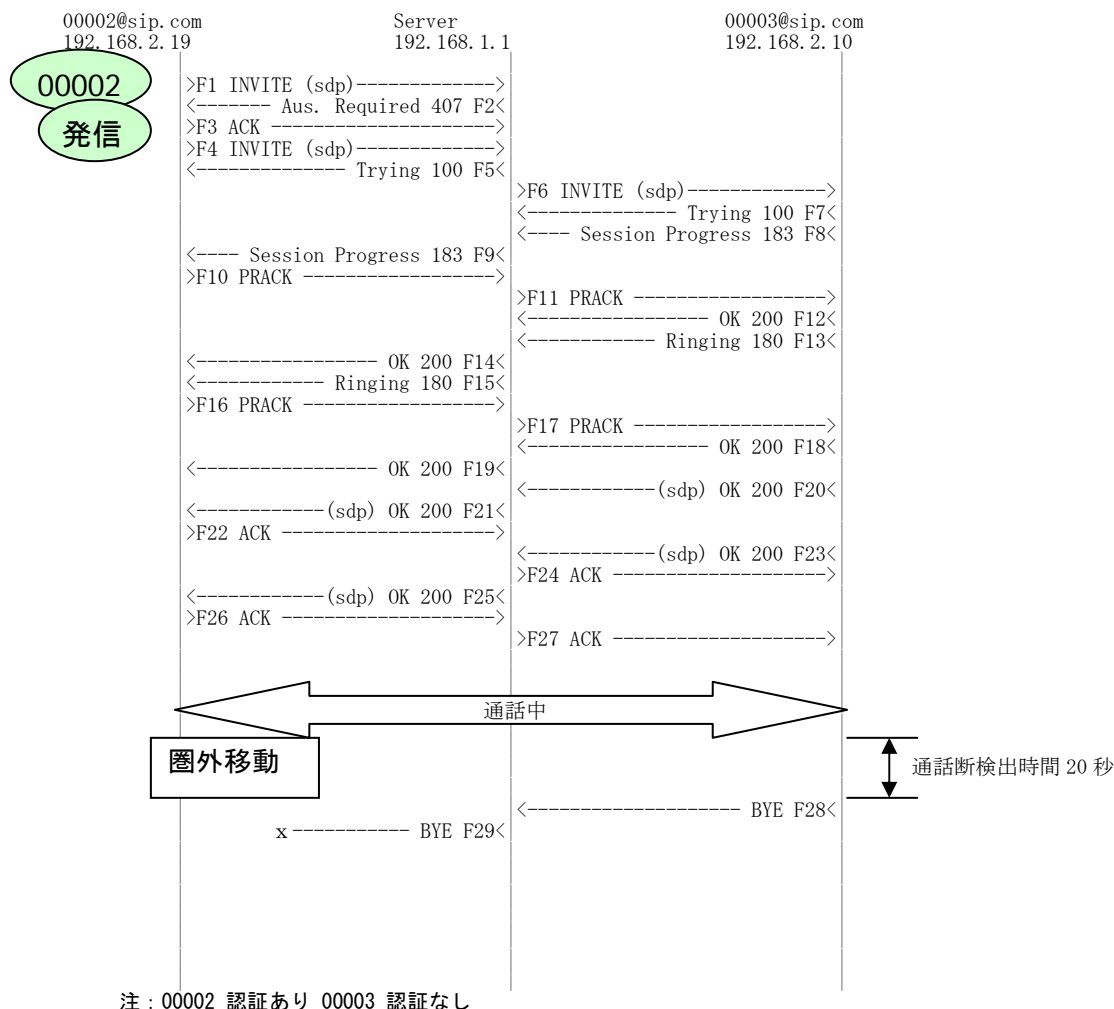


図 11-20 通話中圏外へ移動→そのまま圏外滞在

```

F1      192.168.2.19:1024(00002@sip.com) -> 192.168.1.1:5060(Server)

INVITE sip:00003@sip.com SIP/2.0
Via: SIP/2.0/UDP 192.168.2.19:5060;branch=z9hG4bK-580281c-527939.373
Route: <sip:192.168.1.1:5060>
From: <sip:00002@sip.com>;tag=70ace6e9
To: <sip:00003@sip.com>
Call-ID: 5aebdf62@00002.192.168.1.1
CSeq: 222368529 INVITE
Contact: <sip:00002@192.168.2.19>
Proxy-Authorization: Digest username="00002", realm="heliossv2", nonce="7063046303170b5ef7d383dec8265895",
uri="sip:00003@sip.com", response="3707b57079c6466fb7d99d51c4a3ae54", algorithm=MD5, cnonce="7a6e601a",
opaque="d2905b31aaa5d7a8bb1dadacb2c5438d", qop=auth, nc=000000005
Max-Forwards: 70
Supported: 100rel, replaces
Allow: INVITE, ACK, BYE, CANCEL, OPTIONS, PRACK, MESSAGE, REFER, NOTIFY
Content-Type: application/sdp
Accept: application/sdp, message/sipfrag
Content-Length: 249

v=0
o=- 357275 501 IN IP4 192.168.2.19

```

```

s=-
c=IN IP4 192.168.2.19
t=0 0
m=audio 5008 RTP/AVP 0 8 4 18 96
a=rtpmap:0 PCMU/8000
a=rtpmap:8 PCMA/8000
a=rtpmap:4 G723/8000
a=rtpmap:18 G729/8000
a=rtpmap:96 telephone-event/8000
a=fmtp:96 0-11

```

```
=====
```

F2 192.168.1.1:5062(Server) -> 192.168.2.19:5060(00002@sip.com)

```

SIP/2.0 407 Proxy Authentication Required
Via: SIP/2.0/UDP 192.168.2.19:5060;branch=z9hG4bK-580281c-527939.373
From: <sip:00002@sip.com>;tag=70ace6e9
To: <sip:00003@sip.com>
Call-ID: 5aebdf62@00002.192.168.1.1
CSeq: 222368529 INVITE
Proxy-Authenticate: Digest realm="heliossv2", nonce="3e2d269baab1434d071a78af7dff5a93",
opaque="d40e73b010fcc9dee0dba953abd485a9", stale=false, algorithm=MD5, qop="auth,auth-int"
Content-Length: 0

```

```
=====
```

F3 192.168.2.19:1024(00002@sip.com) -> 192.168.1.1:5060(Server)

```

ACK sip:00003@sip.com SIP/2.0
Via: SIP/2.0/UDP 192.168.2.19:5060;branch=z9hG4bK-580281c-527939.373
Route: <sip:192.168.1.1:5060>
From: <sip:00002@sip.com>;tag=70ace6e9
To: <sip:00003@sip.com>
Call-ID: 5aebdf62@00002.192.168.1.1
CSeq: 222368529 ACK
Content-Length: 0

```

```
=====
```

F4 192.168.2.19:1024(00002@sip.com) -> 192.168.1.1:5060(Server)

```

INVITE sip:00003@sip.com SIP/2.0
Via: SIP/2.0/UDP 192.168.2.19:5060;branch=z9hG4bK-63efeccd-527939.746
Route: <sip:192.168.1.1:5060>
From: <sip:00002@sip.com>;tag=70ace6e9
To: <sip:00003@sip.com>
Call-ID: 5aebdf62@00002.192.168.1.1
CSeq: 222368530 INVITE
Contact: <sip:00002@192.168.2.19>
Proxy-Authorization: Digest username="00002", realm="heliossv2", nonce="3e2d269baab1434d071a78af7dff5a93",
uri="sip:00003@sip.com", response="50b9205dfc4dfcdeff3ec7fde537141e", algorithm=MD5, cnonce="1b982964",
opaque="d40e73b010fcc9dee0dba953abd485a9", qop=auth, nc=00000001
Max-Forwards: 70
Supported: 100rel, replaces
Allow: INVITE, ACK, BYE, CANCEL, OPTIONS, PRACK, MESSAGE, REFER, NOTIFY
Content-Type: application/sdp
Accept: application/sdp, message/sipfrag
Content-Length: 249

```

```

v=0
o=- 357275 501 IN IP4 192.168.2.19
s=-
c=IN IP4 192.168.2.19
t=0 0
m=audio 5008 RTP/AVP 0 8 4 18 96
a=rtpmap:0 PCMU/8000
a=rtpmap:8 PCMA/8000
a=rtpmap:4 G723/8000
a=rtpmap:18 G729/8000
a=rtpmap:96 telephone-event/8000
a=fmtp:96 0-11

```

```
=====
```

F5 192.168.1.1:5062(Server) -> 192.168.2.19:5060(00002@sip.com)

```

SIP/2.0 100 Trying
Via: SIP/2.0/UDP 192.168.2.19:5060;branch=z9hG4bK-63efeccd-527939.746

```

From: <sip:00002@sip.com>;tag=70ace6e9  
To: <sip:00003@sip.com>  
Call-ID: 5aebdf62@00002.192.168.1.1  
CSeq: 222368530 INVITE  
Content-Length: 0

=====

F6           192.168.1.1:5062(Server) -> 192.168.2.10:5060(00003@sip.com)

INVITE sip:00003@192.168.2.10 SIP/2.0  
Via: SIP/2.0/UDP 192.168.1.1:5060;branch=z9hG4bK-255.601234.222368530  
Via: SIP/2.0/UDP 192.168.2.19:5060;branch=z9hG4bK-63efeccd-527939.746  
Record-Route: <sip:00003@192.168.1.1>  
Route: <sip:192.168.1.1:5060>  
From: 00002 <sip:00002@sip.com>;tag=70ace6e9  
To: <sip:00003@sip.com>  
Call-ID: 5aebdf62@00002.192.168.1.1  
CSeq: 222368530 INVITE  
Contact: <sip:00002@192.168.2.19>  
max-forwards: 69  
supported: 100rel  
supported: replaces  
Allow: INVITE, ACK, BYE, CANCEL, OPTIONS, PRACK, MESSAGE, REFER, NOTIFY  
Content-Type: application/sdp  
Accept: application/sdp, message/sipfrag  
Content-Length: 249

v=0  
o=- 357275 501 IN IP4 192.168.2.19  
s=-  
c=IN IP4 192.168.2.19  
t=0 0  
m=audio 5008 RTP/AVP 0 8 4 18 96  
a=rtpmap:0 PCMU/8000  
a=rtpmap:8 PCMA/8000  
a=rtpmap:4 G723/8000  
a=rtpmap:18 G729/8000  
a=rtpmap:96 telephone-event/8000  
a=fmtp:96 0-11

=====

F7           192.168.2.10:1024(00003@sip.com) -> 192.168.1.1:5060(Server)

SIP/2.0 100 Trying  
Via: SIP/2.0/UDP 192.168.1.1:5060;branch=z9hG4bK-255.601234.222368530  
Via: SIP/2.0/UDP 192.168.2.19:5060;branch=z9hG4bK-63efeccd-527939.746  
From: 00002 <sip:00002@sip.com>;tag=70ace6e9  
To: <sip:00003@sip.com>  
Call-ID: 5aebdf62@00002.192.168.1.1  
CSeq: 222368530 INVITE  
Content-Length: 0

=====

F8           192.168.2.10:1024(00003@sip.com) -> 192.168.1.1:5060(Server)

SIP/2.0 183 Session Progress  
Via: SIP/2.0/UDP 192.168.1.1:5060;branch=z9hG4bK-255.601234.222368530  
Via: SIP/2.0/UDP 192.168.2.19:5060;branch=z9hG4bK-63efeccd-527939.746  
Record-Route: <sip:00003@192.168.1.1>  
From: 00002 <sip:00002@sip.com>;tag=70ace6e9  
To: <sip:00003@sip.com>;tag=37b063da  
Call-ID: 5aebdf62@00002.192.168.1.1  
CSeq: 222368530 INVITE  
Contact: <sip:00003@192.168.2.10>  
Require: 100rel  
RSeq: 841530739  
Content-Length: 0

=====

F9           192.168.1.1:5062(Server) -> 192.168.2.19:5060(00002@sip.com)

SIP/2.0 183 Session Progress  
Via: SIP/2.0/UDP 192.168.2.19:5060;branch=z9hG4bK-63efeccd-527939.746  
Record-Route: <sip:00003@192.168.1.1>

# FOMA/WLAN デュアル端末に関する技術参考資料 第 1.2 版

From: 00002 <sip:00002@sip.com>;tag=70ace6e9  
To: <sip:00003@sip.com>;tag=37b063da  
Call-ID: 5aebdf62@00002.192.168.1.1  
CSeq: 222368530 INVITE  
Contact: <sip:00003@192.168.2.10>  
require: 100rel  
rseq: 841530739  
Content-Length: 0

=====

F10 192.168.2.19:1024(00002@sip.com) -> 192.168.1.1:5060(Server)

PRACK sip:00003@192.168.1.1 SIP/2.0  
Via: SIP/2.0/UDP 192.168.2.19:5060;branch=z9hG4bK-56b5be30-527940.921  
Route: <sip:00003@192.168.2.10>  
From: 00002 <sip:00002@sip.com>;tag=70ace6e9  
To: <sip:00003@sip.com>;tag=37b063da  
Call-ID: 5aebdf62@00002.192.168.1.1  
CSeq: 222368531 PRACK  
Proxy-Authorization: Digest username="00002", realm="heliossv2", nonce="3e2d269baab1434d071a78af7dff5a93", uri="sip:00003@192.168.1.1", response="8a82cb0d510b91962a16b37aba8a078a", algorithm=MD5, cnonce="58845457", opaque="d40e73b010fcc9dee0dba953abd485a9", qop=auth, nc=00000002  
Max-Forwards: 70  
RAck: 841530739 222368530 INVITE  
Content-Length: 0

=====

F11 192.168.1.1:5062(Server) -> 192.168.2.10:5060(00003@sip.com)

PRACK sip:00003@192.168.2.10 SIP/2.0  
Via: SIP/2.0/UDP 192.168.1.1:5060;branch=z9hG4bK-255.1085828665.222368531  
Via: SIP/2.0/UDP 192.168.2.19:5060;branch=z9hG4bK-56b5be30-527940.921  
Route: <sip:00003@192.168.2.10>  
From: 00002 <sip:00002@sip.com>;tag=70ace6e9  
To: <sip:00003@sip.com>;tag=37b063da  
Call-ID: 5aebdf62@00002.192.168.1.1  
CSeq: 222368531 PRACK  
max-forwards: 69  
rack: 841530739 222368530 INVITE  
Content-Length: 0

=====

F12 192.168.2.10:1024(00003@sip.com) -> 192.168.1.1:5060(Server)

SIP/2.0 200 OK  
Via: SIP/2.0/UDP 192.168.1.1:5060;branch=z9hG4bK-255.1085828665.222368531  
Via: SIP/2.0/UDP 192.168.2.19:5060;branch=z9hG4bK-56b5be30-527940.921  
From: 00002 <sip:00002@sip.com>;tag=70ace6e9  
To: <sip:00003@sip.com>;tag=37b063da  
Call-ID: 5aebdf62@00002.192.168.1.1  
CSeq: 222368531 PRACK  
Content-Length: 0

=====

F13 192.168.2.10:1024(00003@sip.com) -> 192.168.1.1:5060(Server)

SIP/2.0 180 Ringing  
Via: SIP/2.0/UDP 192.168.1.1:5060;branch=z9hG4bK-255.601234.222368530  
Via: SIP/2.0/UDP 192.168.2.19:5060;branch=z9hG4bK-63efeccd-527939.746  
Record-Route: <sip:00003@192.168.1.1>  
From: 00002 <sip:00002@sip.com>;tag=70ace6e9  
To: <sip:00003@sip.com>;tag=37b063da  
Call-ID: 5aebdf62@00002.192.168.1.1  
CSeq: 222368530 INVITE  
Contact: <sip:00003@192.168.2.10>  
Require: 100rel  
RSeq: 841530740  
Content-Length: 0

=====

F14 192.168.1.1:5062(Server) -> 192.168.2.19:5060(00002@sip.com)

SIP/2.0 200 OK  
 Via: SIP/2.0/UDP 192.168.2.19:5060;branch=z9hG4bK-56b5be30-527940.921  
 From: 00002 <sip:00002@sip.com>;tag=70ace6e9  
 To: <sip:00003@sip.com>;tag=37b063da  
 Call-ID: 5aebdf62@00002.192.168.1.1  
 CSeq: 222368531 PRACK  
 Content-Length: 0

F15 192.168.1.1:5062(Server) -> 192.168.2.19:5060(00002@sip.com)

SIP/2.0 180 Ringing  
 Via: SIP/2.0/UDP 192.168.2.19:5060;branch=z9hG4bK-63efeccd-527939.746  
 Record-Route: <sip:00003@192.168.1.1>  
 From: 00002 <sip:00002@sip.com>;tag=70ace6e9  
 To: <sip:00003@sip.com>;tag=37b063da  
 Call-ID: 5aebdf62@00002.192.168.1.1  
 CSeq: 222368530 INVITE  
 Contact: <sip:00003@192.168.2.10>  
 require: 100rel  
 rseq: 841530740  
 Content-Length: 0

F16 192.168.2.19:1024(00002@sip.com) -> 192.168.1.1:5060(Server)

PRACK sip:00003@192.168.1.1 SIP/2.0  
 Via: SIP/2.0/UDP 192.168.2.19:5060;branch=z9hG4bK-7f1f217c-527941.108  
 Route: <sip:00003@192.168.2.10>  
 From: 00002 <sip:00002@sip.com>;tag=70ace6e9  
 To: <sip:00003@sip.com>;tag=37b063da  
 Call-ID: 5aebdf62@00002.192.168.1.1  
 CSeq: 222368532 PRACK  
 Proxy-Authorization: Digest username="00002", realm="heliossv2", nonce="3e2d269baab1434d071a78af7dff5a93", uri="sip:00003@192.168.1.1", response="8eefa467a3e43e87348ec4f9bcf58308", algorithm=MD5, cnonce="19c745c3", opaque="d40e73b010fcc9dee0dba953abd485a9", qop=auth, nc=00000003  
 Max-Forwards: 70  
 RAck: 841530740 222368530 INVITE  
 Content-Length: 0

F17 192.168.1.1:5062(Server) -> 192.168.2.10:5060(00003@sip.com)

PRACK sip:00003@192.168.2.10 SIP/2.0  
 Via: SIP/2.0/UDP 192.168.1.1:5060;branch=z9hG4bK-255.1085828665.222368532  
 Via: SIP/2.0/UDP 192.168.2.19:5060;branch=z9hG4bK-7f1f217c-527941.108  
 Route: <sip:00003@192.168.2.10>  
 From: 00002 <sip:00002@sip.com>;tag=70ace6e9  
 To: <sip:00003@sip.com>;tag=37b063da  
 Call-ID: 5aebdf62@00002.192.168.1.1  
 CSeq: 222368532 PRACK  
 max-forwards: 69  
 rack: 841530740 222368530 INVITE  
 Content-Length: 0

F18 192.168.2.10:1024(00003@sip.com) -> 192.168.1.1:5060(Server)

SIP/2.0 200 OK  
 Via: SIP/2.0/UDP 192.168.1.1:5060;branch=z9hG4bK-255.1085828665.222368532  
 Via: SIP/2.0/UDP 192.168.2.19:5060;branch=z9hG4bK-7f1f217c-527941.108  
 From: 00002 <sip:00002@sip.com>;tag=70ace6e9  
 To: <sip:00003@sip.com>;tag=37b063da  
 Call-ID: 5aebdf62@00002.192.168.1.1  
 CSeq: 222368532 PRACK  
 Content-Length: 0

F19 192.168.1.1:5062(Server) -> 192.168.2.19:5060(00002@sip.com)



SIP/2.0 200 OK  
 Via: SIP/2.0/UDP 192.168.2.19:5060;branch=z9hG4bK-7f1f217c-527941.108  
 From: 00002 <sip:00002@sip.com>;tag=70ace6e9  
 To: <sip:00003@sip.com>;tag=37b063da  
 Call-ID: 5aebdf62@00002.192.168.1.1  
 CSeq: 222368532 PRACK  
 Content-Length: 0

=====

F20 192.168.2.10:1024(00003@sip.com) -> 192.168.1.1:5060(Server)

SIP/2.0 200 OK  
 Via: SIP/2.0/UDP 192.168.1.1:5060;branch=z9hG4bK-255.601234.222368530  
 Via: SIP/2.0/UDP 192.168.2.19:5060;branch=z9hG4bK-63efeccd-527939.746  
 Record-Route: <sip:00003@192.168.1.1>  
 From: 00002 <sip:00002@sip.com>;tag=70ace6e9  
 To: <sip:00003@sip.com>;tag=37b063da  
 Call-ID: 5aebdf62@00002.192.168.1.1  
 CSeq: 222368530 INVITE  
 Contact: <sip:00003@192.168.2.10>  
 Supported: 100rel, replaces  
 Allow: INVITE, ACK, BYE, CANCEL, OPTIONS, PRACK, MESSAGE, REFER, NOTIFY  
 Content-Type: application/sdp  
 Accept: application/sdp, message/sipfrag  
 Content-Length: 177

v=0  
 o=- 974018 13201 IN IP4 192.168.2.10  
 s=-  
 c=IN IP4 192.168.2.10  
 t=0 0  
 m=audio 5006 RTP/AVP 0 96  
 a=rtpmap:0 PCMU/8000  
 a=rtpmap:96 telephone-event/8000  
 a=fmtp:96 0-11

=====

F21 192.168.1.1:5062(Server) -> 192.168.2.19:5060(00002@sip.com)

SIP/2.0 200 OK  
 Via: SIP/2.0/UDP 192.168.2.19:5060;branch=z9hG4bK-63efeccd-527939.746  
 Record-Route: <sip:00003@192.168.1.1>  
 From: 00002 <sip:00002@sip.com>;tag=70ace6e9  
 To: <sip:00003@sip.com>;tag=37b063da  
 Call-ID: 5aebdf62@00002.192.168.1.1  
 CSeq: 222368530 INVITE  
 Contact: <sip:00003@192.168.2.10>  
 supported: 100rel  
 supported: replaces  
 Allow: INVITE, ACK, BYE, CANCEL, OPTIONS, PRACK, MESSAGE, REFER, NOTIFY  
 Content-Type: application/sdp  
 Accept: application/sdp, message/sipfrag  
 Content-Length: 177

v=0  
 o=- 974018 13201 IN IP4 192.168.2.10  
 s=-  
 c=IN IP4 192.168.2.10  
 t=0 0  
 m=audio 5006 RTP/AVP 0 96  
 a=rtpmap:0 PCMU/8000  
 a=rtpmap:96 telephone-event/8000  
 a=fmtp:96 0-11

=====

F22 192.168.2.19:1024(00002@sip.com) -> 192.168.1.1:5060(Server)

ACK sip:00003@192.168.1.1 SIP/2.0  
 Via: SIP/2.0/UDP 192.168.2.19:5060;branch=z9hG4bK-6dfe05a2-527943.674  
 Route: <sip:00003@192.168.2.10>  
 From: 00002 <sip:00002@sip.com>;tag=70ace6e9  
 To: <sip:00003@sip.com>;tag=37b063da  
 Call-ID: 5aebdf62@00002.192.168.1.1  
 CSeq: 222368530 ACK  
 Proxy-Authorization: Digest username="00002", realm="heliossv2", nonce="3e2d269baab1434d071a78af7dff5a93",  
 uri="sip:00003@sip.com", response="50b9205dfc4dfcdeff3ec7fde537141e", algorithm=MD5, cnonce="1b982964",  
 opaque="d40e73b010fcc9dee0dba953abd485a9", qop=auth, nc=00000001

Max-Forwards: 70  
Content-Length: 0

```
=====
F23      192.168.2.10:1024(00003@sip.com) -> 192.168.1.1:5060(Server)

SIP/2.0 200 OK
Via: SIP/2.0/UDP 192.168.1.1:5060;branch=z9hG4bK-255.601234.222368530
Via: SIP/2.0/UDP 192.168.2.19:5060;branch=z9hG4bK-63efeccd-527939.746
Record-Route: <sip:00003@192.168.1.1>
From: 00002 <sip:00002@sip.com>;tag=70ace6e9
To: <sip:00003@sip.com>;tag=37b063da
Call-ID: 5aebdf62@00002.192.168.1.1
CSeq: 222368530 INVITE
Contact: <sip:00003@192.168.2.10>
Supported: 100rel, replaces
Allow: INVITE, ACK, BYE, CANCEL, OPTIONS, PRACK, MESSAGE, REFER, NOTIFY
Content-Type: application/sdp
Accept: application/sdp, message/sipfrag
Content-Length: 177

v=0
o=- 974018 13201 IN IP4 192.168.2.10
s=-
c=IN IP4 192.168.2.10
t=0 0
m=audio 5006 RTP/AVP 0 96
a=rtpmap:0 PCMU/8000
a=rtpmap:96 telephone-event/8000
a=fmtp:96 0-11
=====
```

```
=====
F24      192.168.1.1:5062(Server) -> 192.168.2.10:5060(00003@sip.com)

ACK sip:00003@192.168.2.10 SIP/2.0
Via: SIP/2.0/UDP 192.168.1.1:5060;branch=z9hG4bK-255.1085828667.222368530
Via: SIP/2.0/UDP 192.168.2.19:5060;branch=z9hG4bK-6dfe05a2-527943.674
From: 00002 <sip:00002@sip.com>;tag=70ace6e9
To: <sip:00003@sip.com>;tag=37b063da
Call-ID: 5aebdf62@00002.192.168.1.1
CSeq: 222368530 ACK
max-forwards: 69
Content-Length: 0
=====
```

```
=====
F25      192.168.1.1:5062(Server) -> 192.168.2.19:5060(00002@sip.com)

SIP/2.0 200 OK
Via: SIP/2.0/UDP 192.168.2.19:5060;branch=z9hG4bK-63efeccd-527939.746
Record-Route: <sip:00003@192.168.1.1>
From: 00002 <sip:00002@sip.com>;tag=70ace6e9
To: <sip:00003@sip.com>;tag=37b063da
Call-ID: 5aebdf62@00002.192.168.1.1
CSeq: 222368530 INVITE
Contact: <sip:00003@192.168.2.10>
supported: 100rel
supported: replaces
Allow: INVITE, ACK, BYE, CANCEL, OPTIONS, PRACK, MESSAGE, REFER, NOTIFY
Content-Type: application/sdp
Accept: application/sdp, message/sipfrag
Content-Length: 177

v=0
o=- 974018 13201 IN IP4 192.168.2.10
s=-
c=IN IP4 192.168.2.10
t=0 0
m=audio 5006 RTP/AVP 0 96
a=rtpmap:0 PCMU/8000
a=rtpmap:96 telephone-event/8000
a=fmtp:96 0-11
=====
```

```
=====
F26      192.168.2.19:1024(00002@sip.com) -> 192.168.1.1:5060(Server)
```

# FOMA/WLAN デュアル端末に関する技術参考資料 第 1.2 版

```
ACK sip:00003@192.168.1.1 SIP/2.0
Via: SIP/2.0/UDP 192.168.2.19:5060;branch=z9hG4bK-3827c329-527943.859
Route: <sip:00003@192.168.2.10>
From: 00002 <sip:00002@sip.com>;tag=70ace6e9
To: <sip:00003@sip.com>;tag=37b063da
Call-ID: 5aebdf62@00002.192.168.1.1
CSeq: 222368530 ACK
Proxy-Authorization: Digest username="00002", realm="heliossv2", nonce="3e2d269baab1434d071a78af7dff5a93",
uri="sip:00003@sip.com", response="50b9205dfc4dfcdef3ec7fde537141e", algorithm=MD5, cnonce="1b982964",
opaque="d40e73b010fcc9dee0dba953abd485a9", qop=auth, nc=00000001
Max-Forwards: 70
Content-Length: 0
```

```
=====
F27      192.168.1.1:5062(Server) -> 192.168.2.10:5060(00003@sip.com)
```

```
ACK sip:00003@192.168.2.10 SIP/2.0
Via: SIP/2.0/UDP 192.168.1.1:5060;branch=z9hG4bK-255.1085828668.222368530
Via: SIP/2.0/UDP 192.168.2.19:5060;branch=z9hG4bK-3827c329-527943.859
From: 00002 <sip:00002@sip.com>;tag=70ace6e9
To: <sip:00003@sip.com>;tag=37b063da
Call-ID: 5aebdf62@00002.192.168.1.1
CSeq: 222368530 ACK
max-forwards: 69
Content-Length: 0
```

```
=====
F28      192.168.2.10:1024(00003@sip.com) -> 192.168.1.1:5060(Server)
```

```
BYE sip:00003@192.168.1.1 SIP/2.0
Via: SIP/2.0/UDP 192.168.2.10:5060;branch=z9hG4bK-50b7d39e-679451.349
Route: <sip:00002@192.168.2.19>
From: <sip:00003@sip.com>;tag=37b063da
To: 00002 <sip:00002@sip.com>;tag=70ace6e9
Call-ID: 5aebdf62@00002.192.168.1.1
CSeq: 2125563724 BYE
Max-Forwards: 70
Content-Length: 0
```

```
=====
F29      192.168.1.1:5062(Server) -> 192.168.2.19:5060(00002@sip.com)
```

```
BYE sip:00002@192.168.2.19 SIP/2.0
Via: SIP/2.0/UDP 192.168.1.1:5060;branch=z9hG4bK-254.1085828725.2125563724
Via: SIP/2.0/UDP 192.168.2.10:5060;branch=z9hG4bK-50b7d39e-679451.349
Route: <sip:00002@192.168.2.19>
From: <sip:00003@sip.com>;tag=37b063da
To: 00002 <sip:00002@sip.com>;tag=70ace6e9
Call-ID: 5aebdf62@00002.192.168.1.1
CSeq: 2125563724 BYE
max-forwards: 69
Content-Length: 0
```

## 11.4.2. 通話先が圏外へ移動→そのまま通話先が圏外滞在

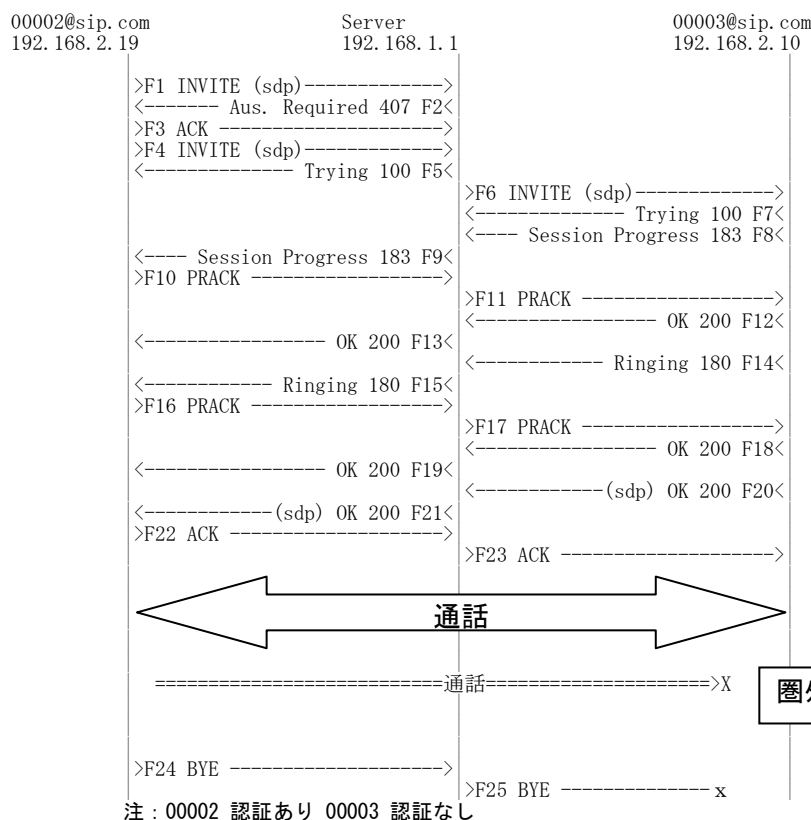


図 11-21 通話先が圏外へ移動→そのまま通話先が圏外滞在

```

=====
F1          192.168.2.19:1024(00002@sip.com) -> 192.168.1.1:5060(Server)

INVITE sip:00003@sip.com SIP/2.0
Via: SIP/2.0/UDP 192.168.2.19:5060;branch=z9hG4bK-263b4885-528032.969
Route: <sip:192.168.1.1:5060>
From: <sip:00002@sip.com>;tag=12b5168c
To: <sip:00003@sip.com>
Call-ID: 4def2720@00002.192.168.1.1
CSeq: 1299630080 INVITE
Contact: <sip:00002@192.168.2.19>
Proxy-Authorization: Digest username="00002", realm="heliossv2", nonce="3e2d269baab1434d071a78af7dff5a93",
uri="sip:00003@sip.com", response="f06ccaf2b610d90f06abe13f97502d23", algorithm=MD5, cnonce="6b63c93b",
opaque="d40e73b010fcc9dee0dba953abd485a9", qop=auth, nc=00000005
Max-Forwards: 70
Supported: 100rel, replaces
Allow: INVITE, ACK, BYE, CANCEL, OPTIONS, PRACK, MESSAGE, REFER, NOTIFY
Content-Type: application/sdp
Accept: application/sdp, message/sipfrag
Content-Length: 249

v=0
o=- 953122 601 IN IP4 192.168.2.19
s=-
c=IN IP4 192.168.2.19
t=0 0
m=audio 5006 RTP/AVP 0 8 4 18 96
a=rtpmap:0 PCMU/8000
a=rtpmap:8 PCMA/8000
a=rtpmap:4 G723/8000
a=rtpmap:18 G729/8000
a=rtpmap:96 telephone-event/8000
a=fmtp:96 0-11

```

F2 192.168.1.1:5062(Server) -> 192.168.2.19:5060(00002@sip.com)

SIP/2.0 407 Proxy Authentication Required  
Via: SIP/2.0/UDP 192.168.2.19:5060;branch=z9hG4bK-263b4885-528032.969  
From: <sip:00002@sip.com>;tag=12b5168c  
To: <sip:00003@sip.com>  
Call-ID: 4def2720@00002.192.168.1.1  
CSeq: 1299630080 INVITE  
Proxy-Authenticate: Digest realm="heliossv2", nonce="c17f2a3a80d03b622bda4a497ff67148",  
opaque="c0e5108e2744c190d181c43e004435d8", stale=false, algorithm=MD5, qop="auth,auth-int"  
Content-Length: 0

F3 192.168.2.19:1024(00002@sip.com) -> 192.168.1.1:5060(Server)

ACK sip:00003@sip.com SIP/2.0  
Via: SIP/2.0/UDP 192.168.2.19:5060;branch=z9hG4bK-263b4885-528032.969  
Route: <sip:192.168.1.1:5060>  
From: <sip:00002@sip.com>;tag=12b5168c  
To: <sip:00003@sip.com>  
Call-ID: 4def2720@00002.192.168.1.1  
CSeq: 1299630080 ACK  
Content-Length: 0

F4 192.168.2.19:1024(00002@sip.com) -> 192.168.1.1:5060(Server)

INVITE sip:00003@sip.com SIP/2.0  
Via: SIP/2.0/UDP 192.168.2.19:5060;branch=z9hG4bK-14001f03-528033.681  
Route: <sip:192.168.1.1:5060>  
From: <sip:00002@sip.com>;tag=12b5168c  
To: <sip:00003@sip.com>  
Call-ID: 4def2720@00002.192.168.1.1  
CSeq: 1299630081 INVITE  
Contact: <sip:00002@192.168.2.19>  
Proxy-Authorization: Digest username="00002", realm="heliossv2", nonce="c17f2a3a80d03b622bda4a497ff67148",  
uri="sip:00003@sip.com", response="5556576b807a11b2eb8ff6ce31f1b5a2", algorithm=MD5, cnonce="2ceff709",  
opaque="c0e5108e2744c190d181c43e004435d8", qop=auth, nc=00000001  
Max-Forwards: 70  
Supported: 100rel, replaces  
Allow: INVITE, ACK, BYE, CANCEL, OPTIONS, PRACK, MESSAGE, REFER, NOTIFY  
Content-Type: application/sdp  
Accept: application/sdp, message/sipfrag  
Content-Length: 249

v=0  
o=- 953122 601 IN IP4 192.168.2.19  
s=-  
c=IN IP4 192.168.2.19  
t=0 0  
m=audio 5006 RTP/AVP 0 8 4 18 96  
a=rtpmap:0 PCMU/8000  
a=rtpmap:8 PCMA/8000  
a=rtpmap:4 G723/8000  
a=rtpmap:18 G729/8000  
a=rtpmap:96 telephone-event/8000  
a=fmtp:96 0-11

F5 192.168.1.1:5062(Server) -> 192.168.2.19:5060(00002@sip.com)

SIP/2.0 100 Trying  
Via: SIP/2.0/UDP 192.168.2.19:5060;branch=z9hG4bK-14001f03-528033.681  
From: <sip:00002@sip.com>;tag=12b5168c  
To: <sip:00003@sip.com>  
Call-ID: 4def2720@00002.192.168.1.1  
CSeq: 1299630081 INVITE  
Content-Length: 0

F6 192.168.1.1:5062(Server) -> 192.168.2.10:5060(00003@sip.com)

```

INVITE sip:00003@192.168.2.10 SIP/2.0
Via: SIP/2.0/UDP 192.168.1.1:5060;branch=z9hG4bK-257.391180.1299630081
Via: SIP/2.0/UDP 192.168.2.19:5060;branch=z9hG4bK-14001f03-528033.681
Record-Route: <sip:00003@192.168.1.1>
Route: <sip:192.168.1.1:5060>
From: 00002 <sip:00002@sip.com>;tag=12b5168c
To: <sip:00003@sip.com>
Call-ID: 4def2720@00002.192.168.1.1
CSeq: 1299630081 INVITE
Contact: <sip:00002@192.168.2.19>
max-forwards: 69
supported: 100rel
supported: replaces
Allow: INVITE, ACK, BYE, CANCEL, OPTIONS, PRACK, MESSAGE, REFER, NOTIFY
Content-Type: application/sdp
Accept: application/sdp, message/sipfrag
Content-Length: 249

```

```

v=0
o=- 953122 601 IN IP4 192.168.2.19
s=-
c=IN IP4 192.168.2.19
t=0 0
m=audio 5006 RTP/AVP 0 8 4 18 96
a=rtpmap:0 PCMU/8000
a=rtpmap:8 PCMA/8000
a=rtpmap:4 G723/8000
a=rtpmap:18 G729/8000
a=rtpmap:96 telephone-event/8000
a=fmtp:96 0-11

```

```
=====
F7          192.168.2.10:1024(00003@sip.com) -> 192.168.1.1:5060(Server)
```

```

SIP/2.0 100 Trying
Via: SIP/2.0/UDP 192.168.1.1:5060;branch=z9hG4bK-257.391180.1299630081
Via: SIP/2.0/UDP 192.168.2.19:5060;branch=z9hG4bK-14001f03-528033.681
From: 00002 <sip:00002@sip.com>;tag=12b5168c
To: <sip:00003@sip.com>
Call-ID: 4def2720@00002.192.168.1.1
CSeq: 1299630081 INVITE
Content-Length: 0

```

```
=====
F8          192.168.2.10:1024(00003@sip.com) -> 192.168.1.1:5060(Server)
```

```

SIP/2.0 183 Session Progress
Via: SIP/2.0/UDP 192.168.1.1:5060;branch=z9hG4bK-257.391180.1299630081
Via: SIP/2.0/UDP 192.168.2.19:5060;branch=z9hG4bK-14001f03-528033.681
Record-Route: <sip:00003@192.168.1.1>
From: 00002 <sip:00002@sip.com>;tag=12b5168c
To: <sip:00003@sip.com>;tag=29e008ae
Call-ID: 4def2720@00002.192.168.1.1
CSeq: 1299630081 INVITE
Contact: <sip:00003@192.168.2.10>
Require: 100rel
RSeq: 582500731
Content-Length: 0

```

```
=====
F9          192.168.1.1:5062(Server) -> 192.168.2.19:5060(00002@sip.com)
```

```

SIP/2.0 183 Session Progress
Via: SIP/2.0/UDP 192.168.2.19:5060;branch=z9hG4bK-14001f03-528033.681
Record-Route: <sip:00003@192.168.1.1>
From: 00002 <sip:00002@sip.com>;tag=12b5168c
To: <sip:00003@sip.com>;tag=29e008ae
Call-ID: 4def2720@00002.192.168.1.1
CSeq: 1299630081 INVITE
Contact: <sip:00003@192.168.2.10>
require: 100rel
rseq: 582500731
Content-Length: 0

```

F10 192.168.2.19:1024(00002@sip.com) -> 192.168.1.1:5060(Server)

PRACK sip:00003@192.168.1.1 SIP/2.0  
Via: SIP/2.0/UDP 192.168.2.19:5060;branch=z9hG4bK-1a1f14e1-528034.990  
Route: <sip:00003@192.168.2.10>  
From: 00002 <sip:00002@sip.com>;tag=12b5168c  
To: <sip:00003@sip.com>;tag=29e008ae  
Call-ID: 4def2720@00002.192.168.1.1  
CSeq: 1299630082 PRACK  
Proxy-Authorization: Digest username="00002", realm="heliossv2", nonce="c17f2a3a80d03b622bda4a497ff67148",  
uri="sip:00003@192.168.1.1", response="23c07f107e9419094431a4f998ca52d4", algorithm=MD5, cnonce="27a01502",  
opaque="c0e5108e2744c190d181c43e004435d8", qop=auth, nc=00000002  
Max-Forwards: 70  
RAck: 582500731 1299630081 INVITE  
Content-Length: 0

=====

F11 192.168.1.1:5062(Server) -> 192.168.2.10:5060(00003@sip.com)

PRACK sip:00003@192.168.2.10 SIP/2.0  
Via: SIP/2.0/UDP 192.168.1.1:5060;branch=z9hG4bK-257.1085828759.1299630082  
Via: SIP/2.0/UDP 192.168.2.19:5060;branch=z9hG4bK-1a1f14e1-528034.990  
Route: <sip:00003@192.168.2.10>  
From: 00002 <sip:00002@sip.com>;tag=12b5168c  
To: <sip:00003@sip.com>;tag=29e008ae  
Call-ID: 4def2720@00002.192.168.1.1  
CSeq: 1299630082 PRACK  
max-forwards: 69  
rack: 582500731 1299630081 INVITE  
Content-Length: 0

=====

F12 192.168.2.10:1024(00003@sip.com) -> 192.168.1.1:5060(Server)

SIP/2.0 200 OK  
Via: SIP/2.0/UDP 192.168.1.1:5060;branch=z9hG4bK-257.1085828759.1299630082  
Via: SIP/2.0/UDP 192.168.2.19:5060;branch=z9hG4bK-1a1f14e1-528034.990  
From: 00002 <sip:00002@sip.com>;tag=12b5168c  
To: <sip:00003@sip.com>;tag=29e008ae  
Call-ID: 4def2720@00002.192.168.1.1  
CSeq: 1299630082 PRACK  
Content-Length: 0

=====

F13 192.168.1.1:5062(Server) -> 192.168.2.19:5060(00002@sip.com)

SIP/2.0 200 OK  
Via: SIP/2.0/UDP 192.168.2.19:5060;branch=z9hG4bK-1a1f14e1-528034.990  
From: 00002 <sip:00002@sip.com>;tag=12b5168c  
To: <sip:00003@sip.com>;tag=29e008ae  
Call-ID: 4def2720@00002.192.168.1.1  
CSeq: 1299630082 PRACK  
Content-Length: 0

=====

F14 192.168.2.10:1024(00003@sip.com) -> 192.168.1.1:5060(Server)

SIP/2.0 180 Ringing  
Via: SIP/2.0/UDP 192.168.1.1:5060;branch=z9hG4bK-257.391180.1299630081  
Via: SIP/2.0/UDP 192.168.2.19:5060;branch=z9hG4bK-14001f03-528033.681  
Record-Route: <sip:00003@192.168.1.1>  
From: 00002 <sip:00002@sip.com>;tag=12b5168c  
To: <sip:00003@sip.com>;tag=29e008ae  
Call-ID: 4def2720@00002.192.168.1.1  
CSeq: 1299630081 INVITE  
Contact: <sip:00003@192.168.2.10>  
Require: 100rel  
RSeq: 582500732  
Content-Length: 0

=====

F15 192.168.1.1:5062(Server) -> 192.168.2.19:5060(00002@sip.com)

SIP/2.0 180 Ringing  
Via: SIP/2.0/UDP 192.168.2.19:5060;branch=z9hG4bK-14001f03-528033.681  
Record-Route: <sip:00003@192.168.1.1>  
From: 00002 <sip:00002@sip.com>;tag=12b5168c  
To: <sip:00003@sip.com>;tag=29e008ae  
Call-ID: 4def2720@00002.192.168.1.1  
CSeq: 1299630081 INVITE  
Contact: <sip:00003@192.168.2.10>  
require: 100rel  
rseq: 582500732  
Content-Length: 0

F16 192.168.2.19:1024(00002@sip.com) -> 192.168.1.1:5060(Server)

PRACK sip:00003@192.168.1.1 SIP/2.0  
Via: SIP/2.0/UDP 192.168.2.19:5060;branch=z9hG4bK-2fa4d006-528035.411  
Route: <sip:00003@192.168.2.10>  
From: 00002 <sip:00002@sip.com>;tag=12b5168c  
To: <sip:00003@sip.com>;tag=29e008ae  
Call-ID: 4def2720@00002.192.168.1.1  
CSeq: 1299630083 PRACK  
Proxy-Authorization: Digest username="00002", realm="heliossv2", nonce="c17f2a3a80d03b622bda4a497ff67148",  
uri="sip:00003@192.168.1.1", response="2989edc41a8d0aea57bad6eed9252eb0", algorithm=MD5, cnonce="2cb1171b",  
opaque="c0e5108e2744c190d181c43e004435d8", qop=auth, nc=00000003  
Max-Forwards: 70  
RAck: 582500732 1299630081 INVITE  
Content-Length: 0

F17 192.168.1.1:5062(Server) -> 192.168.2.10:5060(00003@sip.com)

PRACK sip:00003@192.168.2.10 SIP/2.0  
Via: SIP/2.0/UDP 192.168.1.1:5060;branch=z9hG4bK-257.1085828759.1299630083  
Via: SIP/2.0/UDP 192.168.2.19:5060;branch=z9hG4bK-2fa4d006-528035.411  
Route: <sip:00003@192.168.2.10>  
From: 00002 <sip:00002@sip.com>;tag=12b5168c  
To: <sip:00003@sip.com>;tag=29e008ae  
Call-ID: 4def2720@00002.192.168.1.1  
CSeq: 1299630083 PRACK  
max-forwards: 69  
rack: 582500732 1299630081 INVITE  
Content-Length: 0

F18 192.168.2.10:1024(00003@sip.com) -> 192.168.1.1:5060(Server)

SIP/2.0 200 OK  
Via: SIP/2.0/UDP 192.168.1.1:5060;branch=z9hG4bK-257.1085828759.1299630083  
Via: SIP/2.0/UDP 192.168.2.19:5060;branch=z9hG4bK-2fa4d006-528035.411  
From: 00002 <sip:00002@sip.com>;tag=12b5168c  
To: <sip:00003@sip.com>;tag=29e008ae  
Call-ID: 4def2720@00002.192.168.1.1  
CSeq: 1299630083 PRACK  
Content-Length: 0

F19 192.168.1.1:5062(Server) -> 192.168.2.19:5060(00002@sip.com)

SIP/2.0 200 OK  
Via: SIP/2.0/UDP 192.168.2.19:5060;branch=z9hG4bK-2fa4d006-528035.411  
From: 00002 <sip:00002@sip.com>;tag=12b5168c  
To: <sip:00003@sip.com>;tag=29e008ae  
Call-ID: 4def2720@00002.192.168.1.1  
CSeq: 1299630083 PRACK  
Content-Length: 0



## FOMA/WLAN デュアル端末に関する技術参考資料 第 1.2 版

F20 192.168.2.10:1024(00003@sip.com) -&gt; 192.168.1.1:5060(Server)

```
SIP/2.0 200 OK
Via: SIP/2.0/UDP 192.168.1.1:5060;branch=z9hG4bK-257.391180.1299630081
Via: SIP/2.0/UDP 192.168.2.19:5060;branch=z9hG4bK-14001f03-528033.681
Record-Route: <sip:00003@192.168.1.1>
From: 00002 <sip:00002@sip.com>;tag=12b5168c
To: <sip:00003@sip.com>;tag=29e008ae
Call-ID: 4def2720@00002.192.168.1.1
CSeq: 1299630081 INVITE
Contact: <sip:00003@192.168.2.10>
Supported: 100rel, replaces
Allow: INVITE, ACK, BYE, CANCEL, OPTIONS, PRACK, MESSAGE, REFER, NOTIFY
Content-Type: application/sdp
Accept: application/sdp, message/sipfrag
Content-Length: 177
```

```
v=0
o=- 850465 13301 IN IP4 192.168.2.10
s=-
c=IN IP4 192.168.2.10
t=0 0
m=audio 5008 RTP/AVP 0 96
a=rtpmap:0 PCMU/8000
a=rtpmap:96 telephone-event/8000
a=fmtp:96 0-11
```

F21 192.168.1.1:5062(Server) -&gt; 192.168.2.19:5060(00002@sip.com)

```
SIP/2.0 200 OK
Via: SIP/2.0/UDP 192.168.2.19:5060;branch=z9hG4bK-14001f03-528033.681
Record-Route: <sip:00003@192.168.1.1>
From: 00002 <sip:00002@sip.com>;tag=12b5168c
To: <sip:00003@sip.com>;tag=29e008ae
Call-ID: 4def2720@00002.192.168.1.1
CSeq: 1299630081 INVITE
Contact: <sip:00003@192.168.2.10>
supported: 100rel
supported: replaces
Allow: INVITE, ACK, BYE, CANCEL, OPTIONS, PRACK, MESSAGE, REFER, NOTIFY
Content-Type: application/sdp
Accept: application/sdp, message/sipfrag
Content-Length: 177
```

```
v=0
o=- 850465 13301 IN IP4 192.168.2.10
s=-
c=IN IP4 192.168.2.10
t=0 0
m=audio 5008 RTP/AVP 0 96
a=rtpmap:0 PCMU/8000
a=rtpmap:96 telephone-event/8000
a=fmtp:96 0-11
```

F22 192.168.2.19:1024(00002@sip.com) -&gt; 192.168.1.1:5060(Server)

```
ACK sip:00003@192.168.1.1 SIP/2.0
Via: SIP/2.0/UDP 192.168.2.19:5060;branch=z9hG4bK-3e4bd299-528038.429
Route: <sip:00003@192.168.2.10>
From: 00002 <sip:00002@sip.com>;tag=12b5168c
To: <sip:00003@sip.com>;tag=29e008ae
Call-ID: 4def2720@00002.192.168.1.1
CSeq: 1299630081 ACK
Proxy-Authorization: Digest username="00002", realm="heliossv2", nonce="c17f2a3a80d03b622bda4a497ff67148",
uri="sip:00003@sip.com", response="5556576b807a11b2eb8ff6ce31flb5a2", algorithm=MD5, cnonce="2ceff709",
opaque="c0e5108e2744c190d181c43e004435d8", qop=auth, nc=00000001
Max-Forwards: 70
Content-Length: 0
```

F23 192.168.1.1:5062(Server) -&gt; 192.168.2.10:5060(00003@sip.com)

```
ACK sip:00003@192.168.2.10 SIP/2.0
Via: SIP/2.0/UDP 192.168.1.1:5060;branch=z9hG4bK-257.1085828762.1299630081
Via: SIP/2.0/UDP 192.168.2.19:5060;branch=z9hG4bK-3e4bd299-528038.429
```

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From: 00002 <sip:00002@sip.com>;tag=12b5168c  
To: <sip:00003@sip.com>;tag=29e008ae  
Call-ID: 4def2720@00002.192.168.1.1  
CSeq: 1299630081 ACK  
max-forwards: 69  
Content-Length: 0

```
=====
F24      192.168.2.19:1024(00002@sip.com) -> 192.168.1.1:5060(Server)

BYE sip:00003@192.168.1.1 SIP/2.0
Via: SIP/2.0/UDP 192.168.2.19:5060;branch=z9hG4bK-1ce70ac4-528103.495
Route: <sip:00003@192.168.2.10>
From: 00002 <sip:00002@sip.com>;tag=12b5168c
To: <sip:00003@sip.com>;tag=29e008ae
Call-ID: 4def2720@00002.192.168.1.1
CSeq: 1299630084 BYE
Proxy-Authorization: Digest username="00002", realm="heliossv2", nonce="c17f2a3a80d03b622bda4a497ff67148",
uri="sip:00003@192.168.1.1", response="a99bd00b02af821f6d47ac1f58017b37", algorithm=MD5, cnonce="2dc0c910",
opaque="c0e5108e2744c190d181c43e004435d8", qop=auth, nc=00000004
Max-Forwards: 70
Content-Length: 0
=====
```

```
=====
F25      192.168.1.1:5062(Server) -> 192.168.2.10:5060(00003@sip.com)

BYE sip:00003@192.168.2.10 SIP/2.0
Via: SIP/2.0/UDP 192.168.1.1:5060;branch=z9hG4bK-257.1085828828.1299630084
Via: SIP/2.0/UDP 192.168.2.19:5060;branch=z9hG4bK-1ce70ac4-528103.495
Route: <sip:00003@192.168.2.10>
From: 00002 <sip:00002@sip.com>;tag=12b5168c
To: <sip:00003@sip.com>;tag=29e008ae
Call-ID: 4def2720@00002.192.168.1.1
CSeq: 1299630084 BYE
max-forwards: 69
Content-Length: 0
=====
```

## 11.4.3.DTMF 送出

DTMF 送出時には SIP シーケンスは発生しない。DTMF 送出は RFC2833 による方法の他、インバンドによる送出にも対応する。

```
Payload type=0, SSRC=513769813, Seq=201, Time=32000(音声)
0000 00 00 4c 1a 90 90 00 00 4c 1a d0 fb 08 00 45 00
0010 00 c8 00 00 40 00 40 11 b5 8a c0 a8 01 c7 c0 a8
0020 01 83 13 8e 13 90 00 b4 c5 9c 80 00 00 c9 00 00
0030 7d 00 1e 9f 81 55 ff 7f 7f 7f 7f 7f ff ff 7f ff
      :
00c0 ff ff ff ff ff ff ff ff ff ff ff ff ff ff 7f
00d0 7f 7f 7f 7f 7f 7f
```

```
Payload type=0, SSRC=513769813, Seq=202, Time=32160(音声)
0000 00 00 4c 1a 90 90 00 00 4c 1a d0 fb 08 00 45 00
0010 00 c8 00 00 40 00 40 11 b5 8a c0 a8 01 c7 c0 a8
0020 01 83 13 8e 13 90 00 b4 c2 7d 80 00 00 ca 00 00
0030 7d a0 1e 9f 81 55 7f 7f 7f 7f 7f 7f 7f ff ff
      :
00c0 7f ff ff ff ff ff ff ff ff ff ff ff ff ff ff
00d0 ff ff ff 7f 7f 7f
```

```
Payload type=96, SSRC=513769813, Seq=203, Time=32320, Mark (DTMF)
0000 00 00 4c 1a 90 90 00 00 4c 1a d0 fb 08 00 45 00
0010 00 2c 00 00 40 00 40 11 b6 26 c0 a8 01 c7 c0 a8
0020 01 83 13 8e 13 90 00 18 af fa 80 e0 00 cb 00 00
0030 7e 40 1e 9f 81 55 01 0a 03 20 00 00
```

```
Payload type=96, SSRC=513769813, Seq=204, Time=32320 (DTMF)
0000 00 00 4c 1a 90 90 00 00 4c 1a d0 fb 08 00 45 00
0010 00 2c 00 00 40 00 40 11 b6 26 c0 a8 01 c7 c0 a8
0020 01 83 13 8e 13 90 00 18 b0 79 80 60 00 cc 00 00
0030 7e 40 1e 9f 81 55 01 0a 03 20 00 00
```

```
Payload type=96, SSRC=513769813, Seq=205, Time=32320 (DTMF)
0000 00 00 4c 1a 90 90 00 00 4c 1a d0 fb 08 00 45 00
0010 00 2c 00 00 40 00 40 11 b6 26 c0 a8 01 c7 c0 a8
0020 01 83 13 8e 13 90 00 18 af f8 80 60 00 cd 00 00
0030 7e 40 1e 9f 81 55 01 8a 03 20 00 00
```

```
Payload type=96, SSRC=513769813, Seq=206, Time=32320 (DTMF)
0000 00 00 4c 1a 90 90 00 00 4c 1a d0 fb 08 00 45 00
0010 00 2c 00 00 40 00 40 11 b6 26 c0 a8 01 c7 c0 a8
0020 01 83 13 8e 13 90 00 18 af f7 80 60 00 ce 00 00
0030 7e 40 1e 9f 81 55 01 8a 03 20 00 00
```

```
Payload type96, SSRC=513769813, Seq=207, Time=32320 (DTMF)
0000 00 00 4c 1a 90 90 00 00 4c 1a d0 fb 08 00 45 00
0010 00 2c 00 00 40 00 40 11 b6 26 c0 a8 01 c7 c0 a8
0020 01 83 13 8e 13 90 00 18 af f6 80 60 00 cf 00 00
0030 7e 40 1e 9f 81 55 01 8a 03 20 00 00
```

```
Payload type=0, SSRC=513769813, Seq=208, Time=33120, Mark (音声)
0000 00 00 4c 1a 90 90 00 00 4c 1a d0 fb 08 00 45 00
0010 00 c8 00 00 40 00 40 11 b5 8a c0 a8 01 c7 c0 a8
0020 01 83 13 8e 13 90 00 b4 bb 34 80 80 00 d0 00 00
0030 81 60 1e 9f 81 55 7d 7d 7c 7c 7c 7c 7c 7b 7c
      :
00c0 7c 7b 7c 7c 7c 7c 7d 7d 7d 7e 7f ff fe fd fd fd
00d0 fc fc fc fc fc fc
```

```
Payload type=0, SSRC=513769813, Seq=209, Time=33280 (音声)
0000 00 00 4c 1a 90 90 00 00 4c 1a d0 fb 08 00 45 00
0010 00 c8 00 00 40 00 40 11 b5 8a c0 a8 01 c7 c0 a8
0020 01 83 13 8e 13 90 00 b4 6f c9 80 00 00 d1 00 00
0030 82 00 1e 9f 81 55 fc fc fd fd fe fe 7f 7e 7e 7e
      :
00c0 ff ff 7f 7f 7f 7f 7f 7e 7e 7f 7f 7f 7f 7f 7f
00d0 ff ff ff ff ff 7f
```

## 11.5. 保留

## 11.5.1. 応答保留

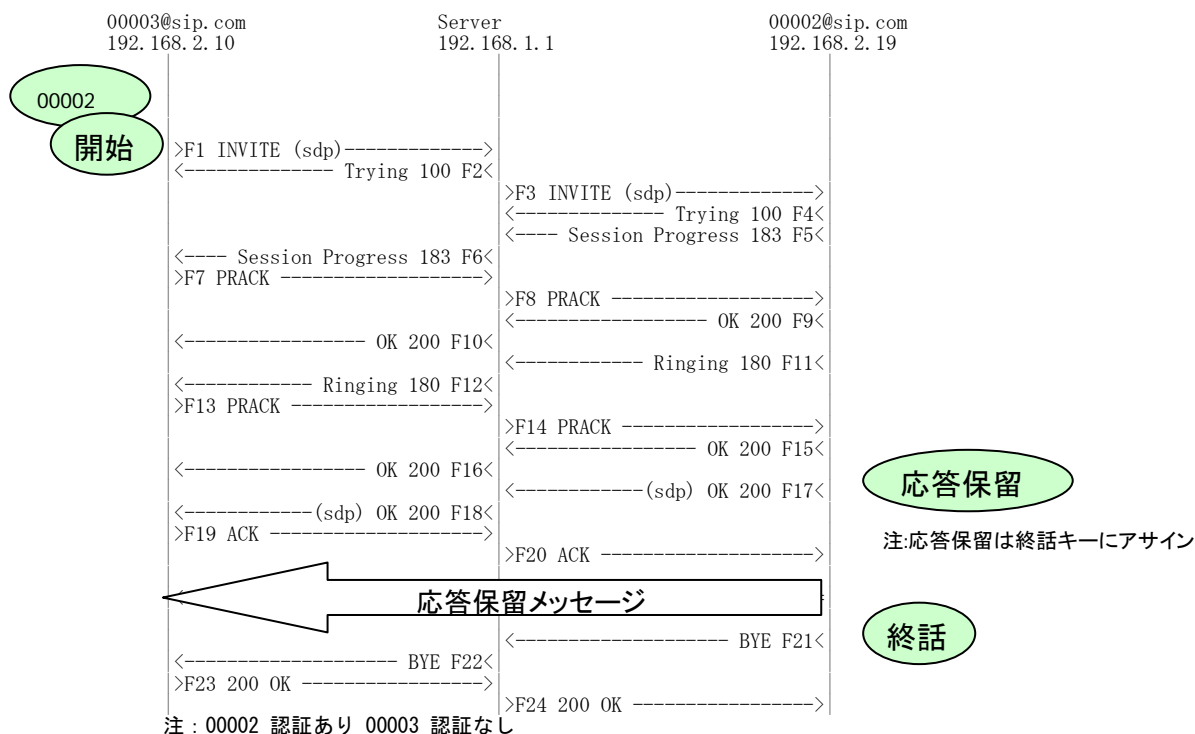


図 11-22 応答保留

```
=====
F1      192.168.2.10:1024(00003@sip.com) -> 192.168.1.1:5060(Server)

INVITE sip:00002@sip.com SIP/2.0
Via: SIP/2.0/UDP 192.168.2.10:5060;branch=z9hG4bK-3da2efb7-679109.580
Route: <sip:192.168.1.1:5060>
From: <sip:00003@sip.com>;tag=56260f8a
To: <sip:00002@sip.com>
Call-ID: 5978d049@00003.192.168.1.1
CSeq: 666935892 INVITE
Contact: <sip:00003@192.168.2.10>
Max-Forwards: 70
Supported: 100rel, replaces
Allow: INVITE, ACK, BYE, CANCEL, OPTIONS, PRACK, MESSAGE, REFER, NOTIFY
Content-Type: application/sdp
Accept: application/sdp, message/sipfrag
Content-Length: 249

v=0
o=- 564541 101 IN IP4 192.168.2.10
s=-
c=IN IP4 192.168.2.10
t=0 0
m=audio 5008 RTP/AVP 0 8 4 18 96
a=rtpmap:0 PCMU/8000
a=rtpmap:8 PCMA/8000
a=rtpmap:4 G723/8000
a=rtpmap:18 G729/8000
a=rtpmap:96 telephone-event/8000
a=fmtp:96 0-11
=====
```

```
F2      192.168.1.1:5062(Server) -> 192.168.2.10:5060(00003@sip.com)
```

SIP/2.0 100 Trying  
 Via: SIP/2.0/UDP 192.168.2.10:5060;branch=z9hG4bK-3da2efb7-679109.580  
 From: <sip:00003@sip.com>;tag=56260f8a  
 To: <sip:00002@sip.com>  
 Call-ID: 5978d049@00003.192.168.1.1  
 CSeq: 666935892 INVITE  
 Content-Length: 0

=====

F3            192.168.1.1:5062(Server) -> 192.168.2.19:5060(00002@sip.com)

INVITE sip:00002@192.168.2.19 SIP/2.0  
 Via: SIP/2.0/UDP 192.168.1.1:5060;branch=z9hG4bK-249.751075.666935892  
 Via: SIP/2.0/UDP 192.168.2.10:5060;branch=z9hG4bK-3da2efb7-679109.580  
 Record-Route: <sip:00002@192.168.1.1>  
 Route: <sip:192.168.1.1:5060>  
 From: 00003 <sip:00003@sip.com>;tag=56260f8a  
 To: <sip:00002@sip.com>  
 Call-ID: 5978d049@00003.192.168.1.1  
 CSeq: 666935892 INVITE  
 Contact: <sip:00003@192.168.2.10>  
 max-forwards: 69  
 supported: 100rel  
 supported: replaces  
 Allow: INVITE, ACK, BYE, CANCEL, OPTIONS, PRACK, MESSAGE, REFER, NOTIFY  
 Content-Type: application/sdp  
 Accept: application/sdp, message/sipfrag  
 Content-Length: 249

v=0  
 o=- 564541 101 IN IP4 192.168.2.10  
 s=-  
 c=IN IP4 192.168.2.10  
 t=0 0  
 m=audio 5008 RTP/AVP 0 8 4 18 96  
 a=rtpmap:0 PCMU/8000  
 a=rtpmap:8 PCMA/8000  
 a=rtpmap:4 G723/8000  
 a=rtpmap:18 G729/8000  
 a=rtpmap:96 telephone-event/8000  
 a=fmtp:96 0-11

=====

F4            192.168.2.19:1024(00002@sip.com) -> 192.168.1.1:5060(Server)

SIP/2.0 100 Trying  
 Via: SIP/2.0/UDP 192.168.1.1:5060;branch=z9hG4bK-249.751075.666935892  
 Via: SIP/2.0/UDP 192.168.2.10:5060;branch=z9hG4bK-3da2efb7-679109.580  
 From: 00003 <sip:00003@sip.com>;tag=56260f8a  
 To: <sip:00002@sip.com>  
 Call-ID: 5978d049@00003.192.168.1.1  
 CSeq: 666935892 INVITE  
 Content-Length: 0

=====

F5            192.168.2.19:1024(00002@sip.com) -> 192.168.1.1:5060(Server)

SIP/2.0 183 Session Progress  
 Via: SIP/2.0/UDP 192.168.1.1:5060;branch=z9hG4bK-249.751075.666935892  
 Via: SIP/2.0/UDP 192.168.2.10:5060;branch=z9hG4bK-3da2efb7-679109.580  
 Record-Route: <sip:00002@192.168.1.1>  
 From: 00003 <sip:00003@sip.com>;tag=56260f8a  
 To: <sip:00002@sip.com>;tag=3ca97e72  
 Call-ID: 5978d049@00003.192.168.1.1  
 CSeq: 666935892 INVITE  
 Contact: <sip:00002@192.168.2.19>  
 Require: 100rel  
 RSeq: 1528218522  
 Content-Length: 0

=====

F6            192.168.1.1:5062(Server) -> 192.168.2.10:5060(00003@sip.com)

SIP/2.0 183 Session Progress  
Via: SIP/2.0/UDP 192.168.2.10:5060;branch=z9hG4bK-3da2efb7-679109.580  
Record-Route: <sip:00002@192.168.1.1>  
From: 00003 <sip:00003@sip.com>;tag=56260f8a  
To: <sip:00002@sip.com>;tag=3ca97e72  
Call-ID: 5978d049@00003.192.168.1.1  
CSeq: 666935892 INVITE  
Contact: <sip:00002@192.168.2.19>  
require: 100rel  
rseq: 1528218522  
Content-Length: 0

=====

F7 192.168.2.10:1024(00003@sip.com) -> 192.168.1.1:5060(Server)

PRACK sip:00002@192.168.1.1 SIP/2.0  
Via: SIP/2.0/UDP 192.168.2.10:5060;branch=z9hG4bK-71b603ea-679110.149  
Route: <sip:00002@192.168.2.19>  
From: 00003 <sip:00003@sip.com>;tag=56260f8a  
To: <sip:00002@sip.com>;tag=3ca97e72  
Call-ID: 5978d049@00003.192.168.1.1  
CSeq: 666935893 PRACK  
Max-Forwards: 70  
RAck: 1528218522 666935892 INVITE  
Content-Length: 0

=====

F8 192.168.1.1:5062(Server) -> 192.168.2.19:5060(00002@sip.com)

PRACK sip:00002@192.168.2.19 SIP/2.0  
Via: SIP/2.0/UDP 192.168.1.1:5060;branch=z9hG4bK-249.1085828384.666935893  
Via: SIP/2.0/UDP 192.168.2.10:5060;branch=z9hG4bK-71b603ea-679110.149  
Route: <sip:00002@192.168.2.19>  
From: 00003 <sip:00003@sip.com>;tag=56260f8a  
To: <sip:00002@sip.com>;tag=3ca97e72  
Call-ID: 5978d049@00003.192.168.1.1  
CSeq: 666935893 PRACK  
max-forwards: 69  
rack: 1528218522 666935892 INVITE  
Content-Length: 0

=====

F9 192.168.2.19:1024(00002@sip.com) -> 192.168.1.1:5060(Server)

SIP/2.0 200 OK  
Via: SIP/2.0/UDP 192.168.1.1:5060;branch=z9hG4bK-249.1085828384.666935893  
Via: SIP/2.0/UDP 192.168.2.10:5060;branch=z9hG4bK-71b603ea-679110.149  
From: 00003 <sip:00003@sip.com>;tag=56260f8a  
To: <sip:00002@sip.com>;tag=3ca97e72  
Call-ID: 5978d049@00003.192.168.1.1  
CSeq: 666935893 PRACK  
Content-Length: 0

=====

F10 192.168.1.1:5062(Server) -> 192.168.2.10:5060(00003@sip.com)

SIP/2.0 200 OK  
Via: SIP/2.0/UDP 192.168.2.10:5060;branch=z9hG4bK-71b603ea-679110.149  
From: 00003 <sip:00003@sip.com>;tag=56260f8a  
To: <sip:00002@sip.com>;tag=3ca97e72  
Call-ID: 5978d049@00003.192.168.1.1  
CSeq: 666935893 PRACK  
Content-Length: 0

=====

F11 192.168.2.19:1024(00002@sip.com) -> 192.168.1.1:5060(Server)

SIP/2.0 180 Ringing  
Via: SIP/2.0/UDP 192.168.1.1:5060;branch=z9hG4bK-249.751075.666935892  
Via: SIP/2.0/UDP 192.168.2.10:5060;branch=z9hG4bK-3da2efb7-679109.580  
Record-Route: <sip:00002@192.168.1.1>

From: 00003 <sip:00003@sip.com>;tag=56260f8a  
To: <sip:00002@sip.com>;tag=3ca97e72  
Call-ID: 5978d049@00003.192.168.1.1  
CSeq: 666935892 INVITE  
Contact: <sip:00002@192.168.2.19>  
Require: 100rel  
RSeq: 1528218523  
Content-Length: 0

=====

F12            192.168.1.1:5062(Server) -> 192.168.2.10:5060(00003@sip.com)

SIP/2.0 180 Ringing  
Via: SIP/2.0/UDP 192.168.2.10:5060;branch=z9hG4bK-3da2efb7-679109.580  
Record-Route: <sip:00002@192.168.1.1>  
From: 00003 <sip:00003@sip.com>;tag=56260f8a  
To: <sip:00002@sip.com>;tag=3ca97e72  
Call-ID: 5978d049@00003.192.168.1.1  
CSeq: 666935892 INVITE  
Contact: <sip:00002@192.168.2.19>  
require: 100rel  
rseq: 1528218523  
Content-Length: 0

=====

F13            192.168.2.10:1024(00003@sip.com) -> 192.168.1.1:5060(Server)

PRACK sip:00002@192.168.1.1 SIP/2.0  
Via: SIP/2.0/UDP 192.168.2.10:5060;branch=z9hG4bK-ceb1525-679110.553  
Route: <sip:00002@192.168.2.19>  
From: 00003 <sip:00003@sip.com>;tag=56260f8a  
To: <sip:00002@sip.com>;tag=3ca97e72  
Call-ID: 5978d049@00003.192.168.1.1  
CSeq: 666935894 PRACK  
Max-Forwards: 70  
RAck: 1528218523 666935892 INVITE  
Content-Length: 0

=====

F14            192.168.1.1:5062(Server) -> 192.168.2.19:5060(00002@sip.com)

PRACK sip:00002@192.168.2.19 SIP/2.0  
Via: SIP/2.0/UDP 192.168.1.1:5060;branch=z9hG4bK-249.1085828384.666935894  
Via: SIP/2.0/UDP 192.168.2.10:5060;branch=z9hG4bK-ceb1525-679110.553  
Route: <sip:00002@192.168.2.19>  
From: 00003 <sip:00003@sip.com>;tag=56260f8a  
To: <sip:00002@sip.com>;tag=3ca97e72  
Call-ID: 5978d049@00003.192.168.1.1  
CSeq: 666935894 PRACK  
max-forwards: 69  
rack: 1528218523 666935892 INVITE  
Content-Length: 0

=====

F15            192.168.2.19:1024(00002@sip.com) -> 192.168.1.1:5060(Server)

SIP/2.0 200 OK  
Via: SIP/2.0/UDP 192.168.1.1:5060;branch=z9hG4bK-249.1085828384.666935894  
Via: SIP/2.0/UDP 192.168.2.10:5060;branch=z9hG4bK-ceb1525-679110.553  
From: 00003 <sip:00003@sip.com>;tag=56260f8a  
To: <sip:00002@sip.com>;tag=3ca97e72  
Call-ID: 5978d049@00003.192.168.1.1  
CSeq: 666935894 PRACK  
Content-Length: 0

=====

F16            192.168.1.1:5062(Server) -> 192.168.2.10:5060(00003@sip.com)

SIP/2.0 200 OK  
Via: SIP/2.0/UDP 192.168.2.10:5060;branch=z9hG4bK-ceb1525-679110.553  
From: 00003 <sip:00003@sip.com>;tag=56260f8a

To: <sip:00002@sip.com>;tag=3ca97e72  
Call-ID: 5978d049@00003.192.168.1.1  
CSeq: 666935894 PRACK  
Content-Length: 0

=====

F17 192.168.2.19:1024(00002@sip.com) -> 192.168.1.1:5060(Server)

SIP/2.0 200 OK  
Via: SIP/2.0/UDP 192.168.1.1:5060;branch=z9hG4bK-249.751075.666935892  
Via: SIP/2.0/UDP 192.168.2.10:5060;branch=z9hG4bK-3da2efb7-679109.580  
Record-Route: <sip:00002@192.168.1.1>  
From: 00003 <sip:00003@sip.com>;tag=56260f8a  
To: <sip:00002@sip.com>;tag=3ca97e72  
Call-ID: 5978d049@00003.192.168.1.1  
CSeq: 666935892 INVITE  
Contact: <sip:00002@192.168.2.19>  
Supported: 100rel, replaces  
Allow: INVITE, ACK, BYE, CANCEL, OPTIONS, PRACK, MESSAGE, REFER, NOTIFY  
Content-Type: application/sdp  
Accept: application/sdp, message/sipfrag  
Content-Length: 177

v=0  
o=- 132149 12901 IN IP4 192.168.2.19  
s=-  
c=IN IP4 192.168.2.19  
t=0 0  
m=audio 5006 RTP/AVP 0 96  
a=rtpmap:0 PCMU/8000  
a=rtpmap:96 telephone-event/8000  
a=fmtp:96 0-11

=====

F18 192.168.1.1:5062(Server) -> 192.168.2.10:5060(00003@sip.com)

SIP/2.0 200 OK  
Via: SIP/2.0/UDP 192.168.2.10:5060;branch=z9hG4bK-3da2efb7-679109.580  
Record-Route: <sip:00002@192.168.1.1>  
From: 00003 <sip:00003@sip.com>;tag=56260f8a  
To: <sip:00002@sip.com>;tag=3ca97e72  
Call-ID: 5978d049@00003.192.168.1.1  
CSeq: 666935892 INVITE  
Contact: <sip:00002@192.168.2.19>  
supported: 100rel  
supported: replaces  
Allow: INVITE, ACK, BYE, CANCEL, OPTIONS, PRACK, MESSAGE, REFER, NOTIFY  
Content-Type: application/sdp  
Accept: application/sdp, message/sipfrag  
Content-Length: 177

v=0  
o=- 132149 12901 IN IP4 192.168.2.19  
s=-  
c=IN IP4 192.168.2.19  
t=0 0  
m=audio 5006 RTP/AVP 0 96  
a=rtpmap:0 PCMU/8000  
a=rtpmap:96 telephone-event/8000  
a=fmtp:96 0-11

=====

F19 192.168.2.10:1024(00003@sip.com) -> 192.168.1.1:5060(Server)

ACK sip:00002@192.168.1.1 SIP/2.0  
Via: SIP/2.0/UDP 192.168.2.10:5060;branch=z9hG4bK-328b1f1e-679117.661  
Route: <sip:00002@192.168.2.19>  
From: 00003 <sip:00003@sip.com>;tag=56260f8a  
To: <sip:00002@sip.com>;tag=3ca97e72  
Call-ID: 5978d049@00003.192.168.1.1  
CSeq: 666935892 ACK  
Max-Forwards: 70  
Content-Length: 0



# FOMA/WLAN デュアル端末に関する技術参考資料 第 1.2 版

F20 192.168.1.1:5062(Server) -> 192.168.2.19:5060(00002@sip.com)

ACK sip:00002@192.168.2.19 SIP/2.0  
Via: SIP/2.0/UDP 192.168.1.1:5060;branch=z9hG4bK-249.1085828391.666935892  
Via: SIP/2.0/UDP 192.168.2.10:5060;branch=z9hG4bK-328b1f1e-679117.661  
From: 00003 <sip:00003@sip.com>;tag=56260f8a  
To: <sip:00002@sip.com>;tag=3ca97e72  
Call-ID: 5978d049@00003.192.168.1.1  
CSeq: 666935892 ACK  
max-forwards: 69  
Content-Length: 0

F21 192.168.2.19:1024(00002@sip.com) -> 192.168.1.1:5060(Server)

BYE sip:00002@192.168.1.1 SIP/2.0  
Via: SIP/2.0/UDP 192.168.2.19:5060;branch=z9hG4bK-1dce4e5c-527672.706  
Route: <sip:00003@192.168.2.10>  
From: <sip:00002@sip.com>;tag=3ca97e72  
To: 00003 <sip:00003@sip.com>;tag=56260f8a  
Call-ID: 5978d049@00003.192.168.1.1  
CSeq: 1402468641 BYE  
Proxy-Authorization: Digest username="00002", realm="heliossv2", nonce="7063046303170b5ef7d383dec8265895",  
uri="sip:00002@192.168.1.1", response="3c5b699b86be8593c5304a9574636c88", algorithm=MD5, cnonce="46ec6878",  
opaque="d2905b31aaa5d7a8bb1dadacb2c5438d", qop=auth, nc=00000004  
Max-Forwards: 70  
Content-Length: 0

F22 192.168.1.1:5062(Server) -> 192.168.2.10:5060(00003@sip.com)

BYE sip:00003@192.168.2.10 SIP/2.0  
Via: SIP/2.0/UDP 192.168.1.1:5060;branch=z9hG4bK-248.1085828396.1402468641  
Via: SIP/2.0/UDP 192.168.2.19:5060;branch=z9hG4bK-1dce4e5c-527672.706  
Route: <sip:00003@192.168.2.10>  
From: <sip:00002@sip.com>;tag=3ca97e72  
To: 00003 <sip:00003@sip.com>;tag=56260f8a  
Call-ID: 5978d049@00003.192.168.1.1  
CSeq: 1402468641 BYE  
max-forwards: 69  
Content-Length: 0

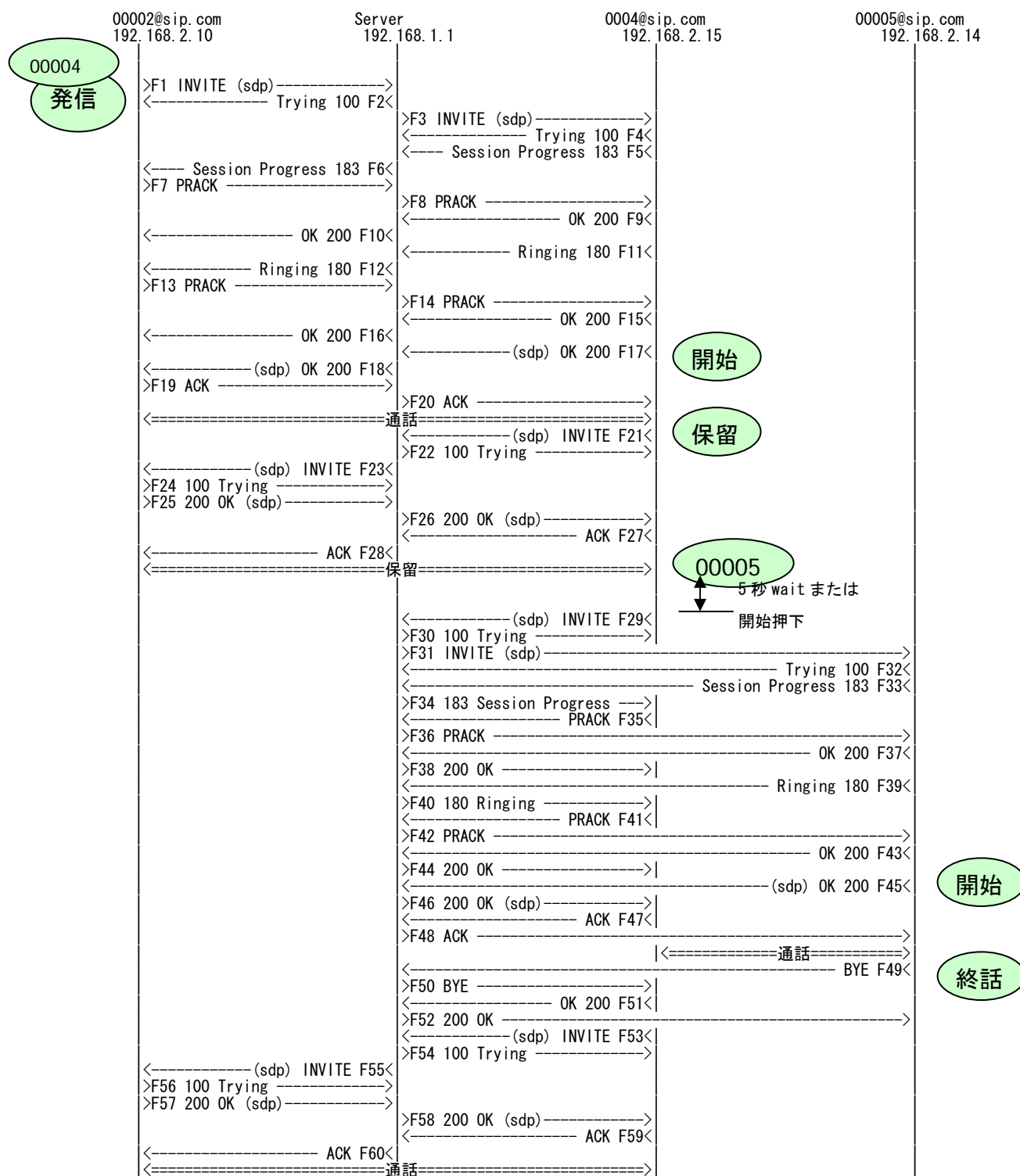
F23 192.168.2.10:1024(00003@sip.com) -> 192.168.1.1:5060(Server)

SIP/2.0 200 OK  
Via: SIP/2.0/UDP 192.168.1.1:5060;branch=z9hG4bK-248.1085828396.1402468641  
Via: SIP/2.0/UDP 192.168.2.19:5060;branch=z9hG4bK-1dce4e5c-527672.706  
From: <sip:00002@sip.com>;tag=3ca97e72  
To: 00003 <sip:00003@sip.com>;tag=56260f8a  
Call-ID: 5978d049@00003.192.168.1.1  
CSeq: 1402468641 BYE  
Content-Length: 0

F24 192.168.1.1:5062(Server) -> 192.168.2.19:5060(00002@sip.com)

SIP/2.0 200 OK  
Via: SIP/2.0/UDP 192.168.2.19:5060;branch=z9hG4bK-1dce4e5c-527672.706  
From: <sip:00002@sip.com>;tag=3ca97e72  
To: 00003 <sip:00003@sip.com>;tag=56260f8a  
Call-ID: 5978d049@00003.192.168.1.1  
CSeq: 1402468641 BYE  
Content-Length: 0

## 11.5.2. 保留中+通話呼の状態での通話先による通話呼切断



終話時にRTCPでGoodbyeを送出するのでタイミングによってBYEを送出するシーケンスが逆方向になる場合がある。  
 注：00002 認証なし 00004 認証なし 00005 認証なし

図 11-23 保留中+通話呼の状態での通話先による通話呼切断

F1 192.168.2.10:1090(1) -> 192.168.1.1:5060(2)

INVITE sip:00004@sip.com SIP/2.0  
Via: SIP/2.0/UDP 192.168.2.10:5060;branch=z9hG4bK-345d467f-878676.600  
Route: <sip:192.168.1.1:5060>  
From: <sip:00002@sip.com>;tag=75ce0111  
To: <sip:00004@sip.com>  
Call-ID: 1f2c54c2@00002.192.168.1.1  
CSeq: 945570370 INVITE  
Contact: <sip:00002@192.168.2.10>  
Max-Forwards: 70  
Supported: 100rel, replaces  
Allow: INVITE, ACK, BYE, CANCEL, OPTIONS, PRACK, MESSAGE, REFER, NOTIFY  
Content-Type: application/sdp  
Accept: application/sdp, message/sipfrag  
Content-Length: 250

v=0  
o=- 537503 2701 IN IP4 192.168.2.10  
s=-  
c=IN IP4 192.168.2.10  
t=0 0  
m=audio 5006 RTP/AVP 0 8 4 18 96  
a=rtpmap:0 PCMU/8000  
a=rtpmap:8 PCMA/8000  
a=rtpmap:4 G723/8000  
a=rtpmap:18 G729/8000  
a=rtpmap:96 telephone-event/8000  
a=fmtp:96 0-11

F2 192.168.1.1:5062(2) -> 192.168.2.10:5060(1)

SIP/2.0 100 Trying  
Via: SIP/2.0/UDP 192.168.2.10:5060;branch=z9hG4bK-345d467f-878676.600  
From: <sip:00002@sip.com>;tag=75ce0111  
To: <sip:00004@sip.com>  
Call-ID: 1f2c54c2@00002.192.168.1.1  
CSeq: 945570370 INVITE  
Content-Length: 0

F3 192.168.1.1:5062(2) -> 192.168.2.15:5060(3)

INVITE sip:00004@192.168.2.15 SIP/2.0  
Via: SIP/2.0/UDP 192.168.1.1:5060;branch=z9hG4bK-718.031216.945570370  
Via: SIP/2.0/UDP 192.168.2.10:5060;branch=z9hG4bK-345d467f-878676.600  
Record-Route: <sip:00004@192.168.1.1>  
Route: <sip:192.168.1.1:5060>  
From: 00002 <sip:00002@sip.com>;tag=75ce0111  
To: <sip:00004@sip.com>  
Call-ID: 1f2c54c2@00002.192.168.1.1  
CSeq: 945570370 INVITE  
Contact: <sip:00002@192.168.2.10>  
max-forwards: 69  
supported: 100rel  
supported: replaces  
Allow: INVITE, ACK, BYE, CANCEL, OPTIONS, PRACK, MESSAGE, REFER, NOTIFY  
Content-Type: application/sdp  
Accept: application/sdp, message/sipfrag  
Content-Length: 250

v=0  
o=- 537503 2701 IN IP4 192.168.2.10  
s=-  
c=IN IP4 192.168.2.10  
t=0 0  
m=audio 5006 RTP/AVP 0 8 4 18 96  
a=rtpmap:0 PCMU/8000  
a=rtpmap:8 PCMA/8000  
a=rtpmap:4 G723/8000  
a=rtpmap:18 G729/8000  
a=rtpmap:96 telephone-event/8000  
a=fmtp:96 0-11

---

F4 192.168.2.15:1131(3) -> 192.168.1.1:5060(2)

SIP/2.0 100 Trying  
Via: SIP/2.0/UDP 192.168.1.1:5060;branch=z9hG4bK-718.031216.945570370  
Via: SIP/2.0/UDP 192.168.2.10:5060;branch=z9hG4bK-345d467f-878676.600  
From: 00002 <sip:00002@sip.com>;tag=75ce0111  
To: <sip:00004@sip.com>  
Call-ID: 1f2c54c2@00002.192.168.1.1  
CSeq: 945570370 INVITE  
Content-Length: 0

---

F5 192.168.2.15:1131(3) -> 192.168.1.1:5060(2)

SIP/2.0 183 Session Progress  
Via: SIP/2.0/UDP 192.168.1.1:5060;branch=z9hG4bK-718.031216.945570370  
Via: SIP/2.0/UDP 192.168.2.10:5060;branch=z9hG4bK-345d467f-878676.600  
Record-Route: <sip:00004@192.168.1.1>  
From: 00002 <sip:00002@sip.com>;tag=75ce0111  
To: <sip:00004@sip.com>;tag=20377d79  
Call-ID: 1f2c54c2@00002.192.168.1.1  
CSeq: 945570370 INVITE  
Contact: <sip:00004@192.168.2.15>  
Require: 100rel  
RSeq: 1159588973  
Content-Length: 0

---

F6 192.168.1.1:5062(2) -> 192.168.2.10:5060(1)

SIP/2.0 183 Session Progress  
Via: SIP/2.0/UDP 192.168.2.10:5060;branch=z9hG4bK-345d467f-878676.600  
Record-Route: <sip:00004@192.168.1.1>  
From: 00002 <sip:00002@sip.com>;tag=75ce0111  
To: <sip:00004@sip.com>;tag=20377d79  
Call-ID: 1f2c54c2@00002.192.168.1.1  
CSeq: 945570370 INVITE  
Contact: <sip:00004@192.168.2.15>  
require: 100rel  
rseq: 1159588973  
Content-Length: 0

---

F7 192.168.2.10:1090(1) -> 192.168.1.1:5060(2)

PRACK sip:00004@192.168.1.1 SIP/2.0  
Via: SIP/2.0/UDP 192.168.2.10:5060;branch=z9hG4bK-9dcfc19-878679.889  
Route: <sip:00004@192.168.2.15>  
From: 00002 <sip:00002@sip.com>;tag=75ce0111  
To: <sip:00004@sip.com>;tag=20377d79  
Call-ID: 1f2c54c2@00002.192.168.1.1  
CSeq: 945570371 PRACK  
Max-Forwards: 70  
Rack: 1159588973 945570370 INVITE  
Content-Length: 0

---

F8 192.168.1.1:5062(2) -> 192.168.2.15:5060(3)

PRACK sip:00004@192.168.2.15 SIP/2.0  
Via: SIP/2.0/UDP 192.168.1.1:5060;branch=z9hG4bK-718.1084362057.945570371  
Via: SIP/2.0/UDP 192.168.2.10:5060;branch=z9hG4bK-9dcfc19-878679.889  
Route: <sip:00004@192.168.2.15>  
From: 00002 <sip:00002@sip.com>;tag=75ce0111  
To: <sip:00004@sip.com>;tag=20377d79  
Call-ID: 1f2c54c2@00002.192.168.1.1  
CSeq: 945570371 PRACK  
max-forwards: 69  
rack: 1159588973 945570370 INVITE  
Content-Length: 0

F9 192.168.2.15:1131(3) -> 192.168.1.1:5060(2)

SIP/2.0 200 OK  
Via: SIP/2.0/UDP 192.168.1.1:5060;branch=z9hG4bK-718.1084362057.945570371  
Via: SIP/2.0/UDP 192.168.2.10:5060;branch=z9hG4bK-9dcfc19-878679.889  
From: 00002 <sip:00002@sip.com>;tag=75ce0111  
To: <sip:00004@sip.com>;tag=20377d79  
Call-ID: 1f2c54c2@00002.192.168.1.1  
CSeq: 945570371 PRACK  
Content-Length: 0

F10 192.168.1.1:5062(2) -> 192.168.2.10:5060(1)

SIP/2.0 200 OK  
Via: SIP/2.0/UDP 192.168.2.10:5060;branch=z9hG4bK-9dcfc19-878679.889  
From: 00002 <sip:00002@sip.com>;tag=75ce0111  
To: <sip:00004@sip.com>;tag=20377d79  
Call-ID: 1f2c54c2@00002.192.168.1.1  
CSeq: 945570371 PRACK  
Content-Length: 0

F11 192.168.2.15:1131(3) -> 192.168.1.1:5060(2)

SIP/2.0 180 Ringing  
Via: SIP/2.0/UDP 192.168.1.1:5060;branch=z9hG4bK-718.031216.945570370  
Via: SIP/2.0/UDP 192.168.2.10:5060;branch=z9hG4bK-345d467f-878676.600  
Record-Route: <sip:00004@192.168.1.1>  
From: 00002 <sip:00002@sip.com>;tag=75ce0111  
To: <sip:00004@sip.com>;tag=20377d79  
Call-ID: 1f2c54c2@00002.192.168.1.1  
CSeq: 945570370 INVITE  
Contact: <sip:00004@192.168.2.15>  
Require: 100rel  
RSeq: 1159588974  
Content-Length: 0

F12 192.168.1.1:5062(2) -> 192.168.2.10:5060(1)

SIP/2.0 180 Ringing  
Via: SIP/2.0/UDP 192.168.2.10:5060;branch=z9hG4bK-345d467f-878676.600  
Record-Route: <sip:00004@192.168.1.1>  
From: 00002 <sip:00002@sip.com>;tag=75ce0111  
To: <sip:00004@sip.com>;tag=20377d79  
Call-ID: 1f2c54c2@00002.192.168.1.1  
CSeq: 945570370 INVITE  
Contact: <sip:00004@192.168.2.15>  
require: 100rel  
rseq: 1159588974  
Content-Length: 0

F13 192.168.2.10:1090(1) -> 192.168.1.1:5060(2)

PRACK sip:00004@192.168.1.1 SIP/2.0  
Via: SIP/2.0/UDP 192.168.2.10:5060;branch=z9hG4bK-1b74a9c6-878680.479  
Route: <sip:00004@192.168.2.15>  
From: 00002 <sip:00002@sip.com>;tag=75ce0111  
To: <sip:00004@sip.com>;tag=20377d79  
Call-ID: 1f2c54c2@00002.192.168.1.1  
CSeq: 945570372 PRACK  
Max-Forwards: 70  
RAck: 1159588974 945570370 INVITE  
Content-Length: 0

F14 192.168.1.1:5062(2) -> 192.168.2.15:5060(3)

PRACK sip:00004@192.168.2.15 SIP/2.0  
 Via: SIP/2.0/UDP 192.168.1.1:5060;branch=z9hG4bK-718.1084362057.945570372  
 Via: SIP/2.0/UDP 192.168.2.10:5060;branch=z9hG4bK-1b74a9c6-878680.479  
 Route: <sip:00004@192.168.2.15>  
 From: 00002 <sip:00002@sip.com>;tag=75ce0111  
 To: <sip:00004@sip.com>;tag=20377d79  
 Call-ID: 1f2c54c2@00002.192.168.1.1  
 CSeq: 945570372 PRACK  
 max-forwards: 69  
 rack: 1159588974 945570370 INVITE  
 Content-Length: 0

F15 192.168.2.15:1131(3) -> 192.168.1.1:5060(2)

SIP/2.0 200 OK  
 Via: SIP/2.0/UDP 192.168.1.1:5060;branch=z9hG4bK-718.1084362057.945570372  
 Via: SIP/2.0/UDP 192.168.2.10:5060;branch=z9hG4bK-1b74a9c6-878680.479  
 From: 00002 <sip:00002@sip.com>;tag=75ce0111  
 To: <sip:00004@sip.com>;tag=20377d79  
 Call-ID: 1f2c54c2@00002.192.168.1.1  
 CSeq: 945570372 PRACK  
 Content-Length: 0

F16 192.168.1.1:5062(2) -> 192.168.2.10:5060(1)

SIP/2.0 200 OK  
 Via: SIP/2.0/UDP 192.168.2.10:5060;branch=z9hG4bK-1b74a9c6-878680.479  
 From: 00002 <sip:00002@sip.com>;tag=75ce0111  
 To: <sip:00004@sip.com>;tag=20377d79  
 Call-ID: 1f2c54c2@00002.192.168.1.1  
 CSeq: 945570372 PRACK  
 Content-Length: 0

F17 192.168.2.15:1131(3) -> 192.168.1.1:5060(2)

SIP/2.0 200 OK  
 Via: SIP/2.0/UDP 192.168.1.1:5060;branch=z9hG4bK-718.031216.945570370  
 Via: SIP/2.0/UDP 192.168.2.10:5060;branch=z9hG4bK-345d467f-878676.600  
 Record-Route: <sip:00004@192.168.1.1>  
 From: 00002 <sip:00002@sip.com>;tag=75ce0111  
 To: <sip:00004@sip.com>;tag=20377d79  
 Call-ID: 1f2c54c2@00002.192.168.1.1  
 CSeq: 945570370 INVITE  
 Contact: <sip:00004@192.168.2.15>  
 Supported: 100rel, replaces  
 Allow: INVITE, ACK, BYE, CANCEL, OPTIONS, PRACK, MESSAGE, REFER, NOTIFY  
 Content-Type: application/sdp  
 Accept: application/sdp, message/sipfrag  
 Content-Length: 177

v=0  
 o=- 619237 14401 IN IP4 192.168.2.15  
 s=-  
 c=IN IP4 192.168.2.15  
 t=0 0  
 m=audio 5006 RTP/AVP 0 96  
 a=rtpmap:0 PCMU/8000  
 a=rtpmap:96 telephone-event/8000  
 a=fmtp:96 0-11

F18 192.168.1.1:5062(2) -> 192.168.2.10:5060(1)

SIP/2.0 200 OK  
 Via: SIP/2.0/UDP 192.168.2.10:5060;branch=z9hG4bK-345d467f-878676.600  
 Record-Route: <sip:00004@192.168.1.1>  
 From: 00002 <sip:00002@sip.com>;tag=75ce0111  
 To: <sip:00004@sip.com>;tag=20377d79  
 Call-ID: 1f2c54c2@00002.192.168.1.1

CSeq: 945570370 INVITE  
 Contact: <sip:00004@192.168.2.15>  
 supported: 100rel  
 supported: replaces  
 Allow: INVITE, ACK, BYE, CANCEL, OPTIONS, PRACK, MESSAGE, REFER, NOTIFY  
 Content-Type: application/sdp  
 Accept: application/sdp, message/sipfrag  
 Content-Length: 177

v=0  
 o=- 619237 14401 IN IP4 192.168.2.15  
 s=-  
 c=IN IP4 192.168.2.15  
 t=0 0  
 m=audio 5006 RTP/AVP 0 96  
 a=rtpmap:0 PCMU/8000  
 a=rtpmap:96 telephone-event/8000  
 a=fmtp:96 0-11

F19 192.168.2.10:1090(1) -> 192.168.1.1:5060(2)

ACK sip:00004@192.168.1.1 SIP/2.0  
 Via: SIP/2.0/UDP 192.168.2.10:5060;branch=z9hG4bK-5bc0a052-878682.833  
 Route: <sip:00004@192.168.2.15>  
 From: 00002 <sip:00002@sip.com>;tag=75ce0111  
 To: <sip:00004@sip.com>;tag=20377d79  
 Call-ID: 1f2c54c2@00002.192.168.1.1  
 CSeq: 945570370 ACK  
 Max-Forwards: 70  
 Content-Length: 0

F20 192.168.1.1:5062(2) -> 192.168.2.15:5060(3)

ACK sip:00004@192.168.2.15 SIP/2.0  
 Via: SIP/2.0/UDP 192.168.1.1:5060;branch=z9hG4bK-718.1084362060.945570370  
 Via: SIP/2.0/UDP 192.168.2.10:5060;branch=z9hG4bK-5bc0a052-878682.833  
 From: 00002 <sip:00002@sip.com>;tag=75ce0111  
 To: <sip:00004@sip.com>;tag=20377d79  
 Call-ID: 1f2c54c2@00002.192.168.1.1  
 CSeq: 945570370 ACK  
 max-forwards: 69  
 Content-Length: 0

F21 192.168.2.15:1131(3) -> 192.168.1.1:5060(2)

INVITE sip:00004@192.168.1.1 SIP/2.0  
 Via: SIP/2.0/UDP 192.168.2.15:5060;branch=z9hG4bK-5be8c8da-878521.280  
 Route: <sip:00002@192.168.2.10>  
 From: <sip:00004@sip.com>;tag=20377d79  
 To: 00002 <sip:00002@sip.com>;tag=75ce0111  
 Call-ID: 1f2c54c2@00002.192.168.1.1  
 CSeq: 600103472 INVITE  
 Contact: <sip:00004@192.168.2.15>  
 Max-Forwards: 70  
 Supported: 100rel, replaces  
 Allow: INVITE, ACK, BYE, CANCEL, OPTIONS, PRACK, MESSAGE, REFER, NOTIFY  
 Content-Type: application/sdp  
 Content-Length: 189

v=0  
 o=- 267180 14402 IN IP4 192.168.2.15  
 s=-  
 c=IN IP4 192.168.2.15  
 t=0 0  
 m=audio 5006 RTP/AVP 0 96  
 a=rtpmap:0 PCMU/8000  
 a=rtpmap:96 telephone-event/8000  
 a=fmtp:96 0-11  
 a=inactive

F22 192.168.1.1:5062(2) -> 192.168.2.15:5060(3)

SIP/2.0 100 Trying  
 Via: SIP/2.0/UDP 192.168.2.15:5060;branch=z9hG4bK-5be8c8da-878521.280  
 From: <sip:00004@sip.com>;tag=20377d79  
 To: 00002 <sip:00002@sip.com>;tag=75ce0111  
 Call-ID: 1f2c54c2@00002.192.168.1.1  
 CSeq: 600103472 INVITE  
 Content-Length: 0

=====

F23          192.168.1.1:5062(2) -> 192.168.2.10:5060(1)

INVITE sip:00002@192.168.2.10 SIP/2.0  
 Via: SIP/2.0/UDP 192.168.1.1:5060;branch=z9hG4bK-717.031216.600103472  
 Via: SIP/2.0/UDP 192.168.2.15:5060;branch=z9hG4bK-5be8c8da-878521.280  
 Record-Route: <sip:00004@192.168.1.1>  
 Route: <sip:00002@192.168.2.10>  
 From: <sip:00004@sip.com>;tag=20377d79  
 To: 00002 <sip:00002@sip.com>;tag=75ce0111  
 Call-ID: 1f2c54c2@00002.192.168.1.1  
 CSeq: 600103472 INVITE  
 Contact: <sip:00004@192.168.2.15>  
 max-forwards: 69  
 supported: 100rel  
 supported: replaces  
 Allow: INVITE, ACK, BYE, CANCEL, OPTIONS, PRACK, MESSAGE, REFER, NOTIFY  
 Content-Type: application/sdp  
 Content-Length: 189

v=0  
 o=- 267180 14402 IN IP4 192.168.2.15  
 s=-  
 c=IN IP4 192.168.2.15  
 t=0 0  
 m=audio 5006 RTP/AVP 0 96  
 a=rtpmap:0 PCMU/8000  
 a=rtpmap:96 telephone-event/8000  
 a=fmtp:96 0-11  
 a=inactive

=====

F24          192.168.2.10:1090(1) -> 192.168.1.1:5060(2)

SIP/2.0 100 Trying  
 Via: SIP/2.0/UDP 192.168.1.1:5060;branch=z9hG4bK-717.031216.600103472  
 Via: SIP/2.0/UDP 192.168.2.15:5060;branch=z9hG4bK-5be8c8da-878521.280  
 From: <sip:00004@sip.com>;tag=20377d79  
 To: 00002 <sip:00002@sip.com>;tag=75ce0111  
 Call-ID: 1f2c54c2@00002.192.168.1.1  
 CSeq: 600103472 INVITE  
 Content-Length: 0

=====

F25          192.168.2.10:1090(1) -> 192.168.1.1:5060(2)

SIP/2.0 200 OK  
 Via: SIP/2.0/UDP 192.168.1.1:5060;branch=z9hG4bK-717.031216.600103472  
 Via: SIP/2.0/UDP 192.168.2.15:5060;branch=z9hG4bK-5be8c8da-878521.280  
 Record-Route: <sip:00004@192.168.1.1>  
 From: <sip:00004@sip.com>;tag=20377d79  
 To: 00002 <sip:00002@sip.com>;tag=75ce0111  
 Call-ID: 1f2c54c2@00002.192.168.1.1  
 CSeq: 600103472 INVITE  
 Contact: <sip:00002@192.168.2.10>  
 Supported: 100rel, replaces  
 Allow: INVITE, ACK, BYE, CANCEL, OPTIONS, PRACK, MESSAGE, REFER, NOTIFY  
 Content-Type: application/sdp  
 Accept: application/sdp, message/sipfrag  
 Content-Length: 188

v=0  
 o=- 381669 2702 IN IP4 192.168.2.10  
 s=-  
 c=IN IP4 192.168.2.10  
 t=0 0  
 m=audio 5006 RTP/AVP 0 96



```

a=rtpmap:0 PCMU/8000
a=rtpmap:96 telephone-event/8000
a=fmtp:96 0-11
a=inactive

```

```
=====
```

F26        192.168.1.1:5062(2) -> 192.168.2.15:5060(3)

```

SIP/2.0 200 OK
Via: SIP/2.0/UDP 192.168.2.15:5060;branch=z9hG4bK-5be8c8da-878521.280
Record-Route: <sip:00004@192.168.1.1>
From: <sip:00004@sip.com>;tag=20377d79
To: 00002 <sip:00002@sip.com>;tag=75ce0111
Call-ID: 1f2c54c2@00002.192.168.1.1
CSeq: 600103472 INVITE
Contact: <sip:00002@192.168.2.10>
supported: 100rel
supported: replaces
Allow: INVITE, ACK, BYE, CANCEL, OPTIONS, PRACK, MESSAGE, REFER, NOTIFY
Content-Type: application/sdp
Accept: application/sdp, message/sipfrag
Content-Length: 188

v=0
o=- 381669 2702 IN IP4 192.168.2.10
s=-
c=IN IP4 192.168.2.10
t=0 0
m=audio 5006 RTP/AVP 0 96
a=rtpmap:0 PCMU/8000
a=rtpmap:96 telephone-event/8000
a=fmtp:96 0-11
a=inactive

```

```
=====
```

F27        192.168.2.15:1131(3) -> 192.168.1.1:5060(2)

```

ACK sip:00004@192.168.1.1 SIP/2.0
Via: SIP/2.0/UDP 192.168.2.15:5060;branch=z9hG4bK-39b16994-878521.571
Route: <sip:00002@192.168.2.10>
From: <sip:00004@sip.com>;tag=20377d79
To: 00002 <sip:00002@sip.com>;tag=75ce0111
Call-ID: 1f2c54c2@00002.192.168.1.1
CSeq: 600103472 ACK
Max-Forwards: 70
Content-Length: 0

```

```
=====
```

F28        192.168.1.1:5062(2) -> 192.168.2.10:5060(1)

```

ACK sip:00002@192.168.2.10 SIP/2.0
Via: SIP/2.0/UDP 192.168.1.1:5060;branch=z9hG4bK-717.1084362063.600103472
Via: SIP/2.0/UDP 192.168.2.15:5060;branch=z9hG4bK-39b16994-878521.571
From: <sip:00004@sip.com>;tag=20377d79
To: 00002 <sip:00002@sip.com>;tag=75ce0111
Call-ID: 1f2c54c2@00002.192.168.1.1
CSeq: 600103472 ACK
max-forwards: 69
Content-Length: 0

```

```
=====
```

F29        192.168.2.15:1131(3) -> 192.168.1.1:5060(2)

```

INVITE sip:00005@sip.com SIP/2.0
Via: SIP/2.0/UDP 192.168.2.15:5060;branch=z9hG4bK-72fa593-878531.387
Route: <sip:192.168.1.1:5060>
From: <sip:00004@sip.com>;tag=3cc5185c
To: <sip:00005@sip.com>
Call-ID: 5dbacb42@00004.192.168.1.1
CSeq: 2069385857 INVITE
Contact: <sip:00004@192.168.2.15>
Max-Forwards: 70
Supported: 100rel, replaces
Allow: INVITE, ACK, BYE, CANCEL, OPTIONS, PRACK, MESSAGE, REFER, NOTIFY
Content-Type: application/sdp

```

Accept: application/sdp, message/sipfrag  
Content-Length: 250

v=0  
o=- 358762 3601 IN IP4 192.168.2.15  
s=-  
c=IN IP4 192.168.2.15  
t=0 0  
m=audio 5008 RTP/AVP 0 8 4 18 96  
a=rtpmap:0 PCMU/8000  
a=rtpmap:8 PCMA/8000  
a=rtpmap:4 G723/8000  
a=rtpmap:18 G729/8000  
a=rtpmap:96 telephone-event/8000  
a=fmtp:96 0-11

=====

F30 192.168.1.1:5062(2) -> 192.168.2.15:5060(3)

SIP/2.0 100 Trying  
Via: SIP/2.0/UDP 192.168.2.15:5060;branch=z9hG4bK-72fa593-878531.387  
From: <sip:00004@sip.com>;tag=3cc5185c  
To: <sip:00005@sip.com>  
Call-ID: 5dbacb42@00004.192.168.1.1  
CSeq: 2069385857 INVITE  
Content-Length: 0

=====

F31 192.168.1.1:5062(2) -> 192.168.2.14:5060(4)

INVITE sip:00005@192.168.2.14 SIP/2.0  
Via: SIP/2.0/UDP 192.168.1.1:5060;branch=z9hG4bK-720.701081.2069385857  
Via: SIP/2.0/UDP 192.168.2.15:5060;branch=z9hG4bK-72fa593-878531.387  
Record-Route: <sip:00005@192.168.1.1>  
Route: <sip:192.168.1.1:5060>  
From: 00004 <sip:00004@sip.com>;tag=3cc5185c  
To: <sip:00005@sip.com>  
Call-ID: 5dbacb42@00004.192.168.1.1  
CSeq: 2069385857 INVITE  
Contact: <sip:00004@192.168.2.15>  
max-forwards: 69  
supported: 100rel  
supported: replaces  
Allow: INVITE, ACK, BYE, CANCEL, OPTIONS, PRACK, MESSAGE, REFER, NOTIFY  
Content-Type: application/sdp  
Accept: application/sdp, message/sipfrag  
Content-Length: 250

v=0  
o=- 358762 3601 IN IP4 192.168.2.15  
s=-  
c=IN IP4 192.168.2.15  
t=0 0  
m=audio 5008 RTP/AVP 0 8 4 18 96  
a=rtpmap:0 PCMU/8000  
a=rtpmap:8 PCMA/8000  
a=rtpmap:4 G723/8000  
a=rtpmap:18 G729/8000  
a=rtpmap:96 telephone-event/8000  
a=fmtp:96 0-11

=====

F32 192.168.2.14:1055(4) -> 192.168.1.1:5060(2)

SIP/2.0 100 Trying  
Via: SIP/2.0/UDP 192.168.1.1:5060;branch=z9hG4bK-720.701081.2069385857  
Via: SIP/2.0/UDP 192.168.2.15:5060;branch=z9hG4bK-72fa593-878531.387  
From: 00004 <sip:00004@sip.com>;tag=3cc5185c  
To: <sip:00005@sip.com>  
Call-ID: 5dbacb42@00004.192.168.1.1  
CSeq: 2069385857 INVITE  
Content-Length: 0

=====

F33 192.168.2.14:1055(4) -> 192.168.1.1:5060(2)

SIP/2.0 183 Session Progress  
 Via: SIP/2.0/UDP 192.168.1.1:5060;branch=z9hG4bK-720.701081.2069385857  
 Via: SIP/2.0/UDP 192.168.2.15:5060;branch=z9hG4bK-72fa593-878531.387  
 Record-Route: <sip:00005@192.168.1.1>  
 From: 00004 <sip:00004@sip.com>;tag=3cc5185c  
 To: <sip:00005@sip.com>;tag=6c6f180b  
 Call-ID: 5dbacb42@00004.192.168.1.1  
 CSeq: 2069385857 INVITE  
 Contact: <sip:00005@192.168.2.14>  
 Require: 100rel  
 RSeq: 277557848  
 Content-Length: 0

=====

F34 192.168.1.1:5062(2) -> 192.168.2.15:5060(3)

SIP/2.0 183 Session Progress  
 Via: SIP/2.0/UDP 192.168.2.15:5060;branch=z9hG4bK-72fa593-878531.387  
 Record-Route: <sip:00005@192.168.1.1>  
 From: 00004 <sip:00004@sip.com>;tag=3cc5185c  
 To: <sip:00005@sip.com>;tag=6c6f180b  
 Call-ID: 5dbacb42@00004.192.168.1.1  
 CSeq: 2069385857 INVITE  
 Contact: <sip:00005@192.168.2.14>  
 require: 100rel  
 rseq: 277557848  
 Content-Length: 0

=====

F35 192.168.2.15:1131(3) -> 192.168.1.1:5060(2)

PRACK sip:00005@192.168.1.1 SIP/2.0  
 Via: SIP/2.0/UDP 192.168.2.15:5060;branch=z9hG4bK-2db1e22e-878534.504  
 Route: <sip:00005@192.168.2.14>  
 From: 00004 <sip:00004@sip.com>;tag=3cc5185c  
 To: <sip:00005@sip.com>;tag=6c6f180b  
 Call-ID: 5dbacb42@00004.192.168.1.1  
 CSeq: 2069385858 PRACK  
 Max-Forwards: 70  
 RAck: 277557848 2069385857 INVITE  
 Content-Length: 0

=====

F36 192.168.1.1:5062(2) -> 192.168.2.14:5060(4)

PRACK sip:00005@192.168.2.14 SIP/2.0  
 Via: SIP/2.0/UDP 192.168.1.1:5060;branch=z9hG4bK-720.1084362076.2069385858  
 Via: SIP/2.0/UDP 192.168.2.15:5060;branch=z9hG4bK-2db1e22e-878534.504  
 Route: <sip:00005@192.168.2.14>  
 From: 00004 <sip:00004@sip.com>;tag=3cc5185c  
 To: <sip:00005@sip.com>;tag=6c6f180b  
 Call-ID: 5dbacb42@00004.192.168.1.1  
 CSeq: 2069385858 PRACK  
 max-forwards: 69  
 rack: 277557848 2069385857 INVITE  
 Content-Length: 0

=====

F37 192.168.2.14:1055(4) -> 192.168.1.1:5060(2)

SIP/2.0 200 OK  
 Via: SIP/2.0/UDP 192.168.1.1:5060;branch=z9hG4bK-720.1084362076.2069385858  
 Via: SIP/2.0/UDP 192.168.2.15:5060;branch=z9hG4bK-2db1e22e-878534.504  
 From: 00004 <sip:00004@sip.com>;tag=3cc5185c  
 To: <sip:00005@sip.com>;tag=6c6f180b  
 Call-ID: 5dbacb42@00004.192.168.1.1  
 CSeq: 2069385858 PRACK  
 Content-Length: 0

F38 192.168.1.1:5062(2) -> 192.168.2.15:5060(3)

SIP/2.0 200 OK  
Via: SIP/2.0/UDP 192.168.2.15:5060;branch=z9hG4bK-2db1e22e-878534.504  
From: 00004 <sip:00004@sip.com>;tag=3cc5185c  
To: <sip:00005@sip.com>;tag=6c6f180b  
Call-ID: 5dbacb42@00004.192.168.1.1  
CSeq: 2069385858 PRACK  
Content-Length: 0

---

F39 192.168.2.14:1055(4) -> 192.168.1.1:5060(2)

SIP/2.0 180 Ringing  
Via: SIP/2.0/UDP 192.168.1.1:5060;branch=z9hG4bK-720.701081.2069385857  
Via: SIP/2.0/UDP 192.168.2.15:5060;branch=z9hG4bK-72fa593-878531.387  
Record-Route: <sip:00005@192.168.1.1>  
From: 00004 <sip:00004@sip.com>;tag=3cc5185c  
To: <sip:00005@sip.com>;tag=6c6f180b  
Call-ID: 5dbacb42@00004.192.168.1.1  
CSeq: 2069385857 INVITE  
Contact: <sip:00005@192.168.2.14>  
Require: 100rel  
RSeq: 277557849  
Content-Length: 0

---

F40 192.168.1.1:5062(2) -> 192.168.2.15:5060(3)

SIP/2.0 180 Ringing  
Via: SIP/2.0/UDP 192.168.2.15:5060;branch=z9hG4bK-72fa593-878531.387  
Record-Route: <sip:00005@192.168.1.1>  
From: 00004 <sip:00004@sip.com>;tag=3cc5185c  
To: <sip:00005@sip.com>;tag=6c6f180b  
Call-ID: 5dbacb42@00004.192.168.1.1  
CSeq: 2069385857 INVITE  
Contact: <sip:00005@192.168.2.14>  
require: 100rel  
rseq: 277557849  
Content-Length: 0

---

F41 192.168.2.15:1131(3) -> 192.168.1.1:5060(2)

PRACK sip:00005@192.168.1.1 SIP/2.0  
Via: SIP/2.0/UDP 192.168.2.15:5060;branch=z9hG4bK-2bbd4d4-878535.089  
Route: <sip:00005@192.168.2.14>  
From: 00004 <sip:00004@sip.com>;tag=3cc5185c  
To: <sip:00005@sip.com>;tag=6c6f180b  
Call-ID: 5dbacb42@00004.192.168.1.1  
CSeq: 2069385859 PRACK  
Max-Forwards: 70  
RAck: 277557849 2069385857 INVITE  
Content-Length: 0

---

F42 192.168.1.1:5062(2) -> 192.168.2.14:5060(4)

PRACK sip:00005@192.168.2.14 SIP/2.0  
Via: SIP/2.0/UDP 192.168.1.1:5060;branch=z9hG4bK-720.1084362077.2069385859  
Via: SIP/2.0/UDP 192.168.2.15:5060;branch=z9hG4bK-2bbd4d4-878535.089  
Route: <sip:00005@192.168.2.14>  
From: 00004 <sip:00004@sip.com>;tag=3cc5185c  
To: <sip:00005@sip.com>;tag=6c6f180b  
Call-ID: 5dbacb42@00004.192.168.1.1  
CSeq: 2069385859 PRACK  
max-forwards: 69  
rack: 277557849 2069385857 INVITE  
Content-Length: 0

---

F43 192.168.2.14:1055(4) -> 192.168.1.1:5060(2)

SIP/2.0 200 OK  
 Via: SIP/2.0/UDP 192.168.1.1:5060;branch=z9hG4bK-720.1084362077.2069385859  
 Via: SIP/2.0/UDP 192.168.2.15:5060;branch=z9hG4bK-2bbd4d4-878535.089  
 From: 00004 <sip:00004@sip.com>;tag=3cc5185c  
 To: <sip:00005@sip.com>;tag=6c6f180b  
 Call-ID: 5dbacb42@00004.192.168.1.1  
 CSeq: 2069385859 PRACK  
 Content-Length: 0

F44 192.168.1.1:5062(2) -> 192.168.2.15:5060(3)

SIP/2.0 200 OK  
 Via: SIP/2.0/UDP 192.168.2.15:5060;branch=z9hG4bK-2bbd4d4-878535.089  
 From: 00004 <sip:00004@sip.com>;tag=3cc5185c  
 To: <sip:00005@sip.com>;tag=6c6f180b  
 Call-ID: 5dbacb42@00004.192.168.1.1  
 CSeq: 2069385859 PRACK  
 Content-Length: 0

F45 192.168.2.14:1055(4) -> 192.168.1.1:5060(2)

SIP/2.0 200 OK  
 Via: SIP/2.0/UDP 192.168.1.1:5060;branch=z9hG4bK-720.701081.2069385857  
 Via: SIP/2.0/UDP 192.168.2.15:5060;branch=z9hG4bK-72fa593-878531.387  
 Record-Route: <sip:00005@192.168.1.1>  
 From: 00004 <sip:00004@sip.com>;tag=3cc5185c  
 To: <sip:00005@sip.com>;tag=6c6f180b  
 Call-ID: 5dbacb42@00004.192.168.1.1  
 CSeq: 2069385857 INVITE  
 Contact: <sip:00005@192.168.2.14>  
 Supported: 100rel, replaces  
 Allow: INVITE, ACK, BYE, CANCEL, OPTIONS, PRACK, MESSAGE, REFER, NOTIFY  
 Content-Type: application/sdp  
 Accept: application/sdp, message/sipfrag  
 Content-Length: 177

v=0  
 o=- 714426 14101 IN IP4 192.168.2.14  
 s=-  
 c=IN IP4 192.168.2.14  
 t=0 0  
 m=audio 5006 RTP/AVP 0 96  
 a=rtpmap:0 PCMU/8000  
 a=rtpmap:96 telephone-event/8000  
 a=fmtp:96 0-11

F46 192.168.1.1:5062(2) -> 192.168.2.15:5060(3)

SIP/2.0 200 OK  
 Via: SIP/2.0/UDP 192.168.2.15:5060;branch=z9hG4bK-72fa593-878531.387  
 Record-Route: <sip:00005@192.168.1.1>  
 From: 00004 <sip:00004@sip.com>;tag=3cc5185c  
 To: <sip:00005@sip.com>;tag=6c6f180b  
 Call-ID: 5dbacb42@00004.192.168.1.1  
 CSeq: 2069385857 INVITE  
 Contact: <sip:00005@192.168.2.14>  
 supported: 100rel  
 supported: replaces  
 Allow: INVITE, ACK, BYE, CANCEL, OPTIONS, PRACK, MESSAGE, REFER, NOTIFY  
 Content-Type: application/sdp  
 Accept: application/sdp, message/sipfrag  
 Content-Length: 177

v=0  
 o=- 714426 14101 IN IP4 192.168.2.14  
 s=-  
 c=IN IP4 192.168.2.14  
 t=0 0  
 m=audio 5006 RTP/AVP 0 96  
 a=rtpmap:0 PCMU/8000  
 a=rtpmap:96 telephone-event/8000

a=fmtp:96 0-11

=====

F47 192.168.2.15:1131(3) -&gt; 192.168.1.1:5060(2)

ACK sip:00005@192.168.1.1 SIP/2.0  
Via: SIP/2.0/UDP 192.168.2.15:5060;branch=z9hG4bK-5a14f279-878538.870  
Route: <sip:00005@192.168.2.14>  
From: 00004 <sip:00004@sip.com>;tag=3cc5185c  
To: <sip:00005@sip.com>;tag=6c6f180b  
Call-ID: 5dbacb42@00004.192.168.1.1  
CSeq: 2069385857 ACK  
Max-Forwards: 70  
Content-Length: 0

=====

F48 192.168.1.1:5062(2) -&gt; 192.168.2.14:5060(4)

ACK sip:00005@192.168.2.14 SIP/2.0  
Via: SIP/2.0/UDP 192.168.1.1:5060;branch=z9hG4bK-720.1084362081.2069385857  
Via: SIP/2.0/UDP 192.168.2.15:5060;branch=z9hG4bK-5a14f279-878538.870  
From: 00004 <sip:00004@sip.com>;tag=3cc5185c  
To: <sip:00005@sip.com>;tag=6c6f180b  
Call-ID: 5dbacb42@00004.192.168.1.1  
CSeq: 2069385857 ACK  
max-forwards: 69  
Content-Length: 0

=====

F49 192.168.2.14:5060(4) -&gt; 192.168.1.1:5060(2)

BYE sip:00004@192.168.1.1 SIP/2.0  
Via: SIP/2.0/UDP 192.168.2.14:5060;branch=z9hG4bK-549ba216-878545.388  
Route: <sip:00005@192.168.2.15>  
From: 00005 <sip:00004@sip.com>;tag=6c6f180b  
To: <sip:00004@sip.com>;tag=3cc5185c  
Call-ID: 5dbacb42@00004.192.168.1.1  
CSeq: 2069385858 BYE  
Max-Forwards: 70  
Content-Length: 0

=====

F50 192.168.1.1:5062(2) -&gt; 192.168.2.15:1131(3)

BYE sip:00004@192.168.2.14 SIP/2.0  
Via: SIP/2.0/UDP 192.168.1.1:5060;branch=z9hG4bK-720.1084362087.2069385860  
Via: SIP/2.0/UDP 192.168.2.14:5060;branch=z9hG4bK-549ba216-878545.388  
Route: <sip:00005@192.168.2.15>  
From: 00005 <sip:00004@sip.com>;tag=6c6f180b  
To: <sip:00004@sip.com>;tag=3cc5185c  
Call-ID: 5dbacb42@00004.192.168.1.1  
CSeq: 2069385858 BYE  
max-forwards: 69  
Content-Length: 0

=====

F51 192.168.2.15:5060(3) -&gt; 192.168.1.1:5060(2)

SIP/2.0 200 OK  
Via: SIP/2.0/UDP 192.168.1.1:5060;branch=z9hG4bK-720.1084362087.2069385860  
Via: SIP/2.0/UDP 192.168.2.14:5060;branch=z9hG4bK-549ba216-878545.388  
From: 00005 <sip:00005@sip.com>;tag=6c6f180b  
To: <sip:00004@sip.com>;tag=3cc5185c  
Call-ID: 5dbacb42@00004.192.168.1.1  
CSeq: 2069385858 BYE  
Content-Length: 0

=====

F52 192.168.1.1:5062(2) -&gt; 192.168.2.14:1055(4)

SIP/2.0 200 OK  
 Via: SIP/2.0/UDP 192.168.2.14:5060;branch=z9hG4bK-549ba216-878545.388  
 From: 00005 <sip:00005@sip.com>;tag=6c6f180b  
 To: <sip:00004@sip.com>;tag=3cc5185c  
 Call-ID: 5dbacb42@00004.192.168.1.1  
 CSeq: 2069385858 BYE  
 Content-Length: 0

=====

F53 192.168.2.15:1131(3) -> 192.168.1.1:5060(2)

INVITE sip:00004@192.168.1.1 SIP/2.0  
 Via: SIP/2.0/UDP 192.168.2.15:5060;branch=z9hG4bK-55fbd381-878546.203  
 Route: <sip:00002@192.168.2.10>  
 From: <sip:00004@sip.com>;tag=20377d79  
 To: 00002 <sip:00002@sip.com>;tag=75ce0111  
 Call-ID: 1f2c54c2@00002.192.168.1.1  
 CSeq: 600103473 INVITE  
 Contact: <sip:00004@192.168.2.15>  
 Max-Forwards: 70  
 Supported: 100rel, replaces  
 Allow: INVITE, ACK, BYE, CANCEL, OPTIONS, PRACK, MESSAGE, REFER, NOTIFY  
 Content-Type: application/sdp  
 Content-Length: 177

v=0  
 o=- 195742 14403 IN IP4 192.168.2.15  
 s=-  
 c=IN IP4 192.168.2.15  
 t=0 0  
 m=audio 5006 RTP/AVP 0 96  
 a=rtpmap:0 PCMU/8000  
 a=rtpmap:96 telephone-event/8000  
 a=fmtp:96 0-11

=====

F54 192.168.1.1:5062(2) -> 192.168.2.15:5060(3)

SIP/2.0 100 Trying  
 Via: SIP/2.0/UDP 192.168.2.15:5060;branch=z9hG4bK-55fbd381-878546.203  
 From: <sip:00004@sip.com>;tag=20377d79  
 To: 00002 <sip:00002@sip.com>;tag=75ce0111  
 Call-ID: 1f2c54c2@00002.192.168.1.1  
 CSeq: 600103473 INVITE  
 Content-Length: 0

=====

F55 192.168.1.1:5062(2) -> 192.168.2.10:5060(1)

INVITE sip:00002@192.168.2.10 SIP/2.0  
 Via: SIP/2.0/UDP 192.168.1.1:5060;branch=z9hG4bK-717.031216.600103473  
 Via: SIP/2.0/UDP 192.168.2.15:5060;branch=z9hG4bK-55fbd381-878546.203  
 Record-Route: <sip:00004@192.168.1.1>  
 Route: <sip:00002@192.168.2.10>  
 From: <sip:00004@sip.com>;tag=20377d79  
 To: 00002 <sip:00002@sip.com>;tag=75ce0111  
 Call-ID: 1f2c54c2@00002.192.168.1.1  
 CSeq: 600103473 INVITE  
 Contact: <sip:00004@192.168.2.15>  
 max-forwards: 69  
 supported: 100rel  
 supported: replaces  
 Allow: INVITE, ACK, BYE, CANCEL, OPTIONS, PRACK, MESSAGE, REFER, NOTIFY  
 Content-Type: application/sdp  
 Content-Length: 177

v=0  
 o=- 195742 14403 IN IP4 192.168.2.15  
 s=-  
 c=IN IP4 192.168.2.15  
 t=0 0  
 m=audio 5006 RTP/AVP 0 96  
 a=rtpmap:0 PCMU/8000  
 a=rtpmap:96 telephone-event/8000  
 a=fmtp:96 0-11

---

F56 192.168.2.10:1090(1) -> 192.168.1.1:5060(2)

SIP/2.0 100 Trying  
Via: SIP/2.0/UDP 192.168.1.1:5060;branch=z9hG4bK-717.031216.600103473  
Via: SIP/2.0/UDP 192.168.2.15:5060;branch=z9hG4bK-55fbd381-878546.203  
From: <sip:00004@sip.com>;tag=20377d79  
To: 00002 <sip:00002@sip.com>;tag=75ce0111  
Call-ID: 1f2c54c2@00002.192.168.1.1  
CSeq: 600103473 INVITE  
Content-Length: 0

---

F57 192.168.2.10:1090(1) -> 192.168.1.1:5060(2)

SIP/2.0 200 OK  
Via: SIP/2.0/UDP 192.168.1.1:5060;branch=z9hG4bK-717.031216.600103473  
Via: SIP/2.0/UDP 192.168.2.15:5060;branch=z9hG4bK-55fbd381-878546.203  
Record-Route: <sip:00004@192.168.1.1>  
From: <sip:00004@sip.com>;tag=20377d79  
To: 00002 <sip:00002@sip.com>;tag=75ce0111  
Call-ID: 1f2c54c2@00002.192.168.1.1  
CSeq: 600103473 INVITE  
Contact: <sip:00002@192.168.2.10>  
Supported: 100rel, replaces  
Allow: INVITE, ACK, BYE, CANCEL, OPTIONS, PRACK, MESSAGE, REFER, NOTIFY  
Content-Type: application/sdp  
Accept: application/sdp, message/sipfrag  
Content-Length: 250

v=0  
o=- 236947 2703 IN IP4 192.168.2.10  
s=-  
c=IN IP4 192.168.2.10  
t=0 0  
m=audio 5006 RTP/AVP 0 8 4 18 96  
a=rtpmap:0 PCMU/8000  
a=rtpmap:8 PCMA/8000  
a=rtpmap:4 G723/8000  
a=rtpmap:18 G729/8000  
a=rtpmap:96 telephone-event/8000  
a=fmtp:96 0-11

---

F58 192.168.1.1:5062(2) -> 192.168.2.15:5060(3)

SIP/2.0 200 OK  
Via: SIP/2.0/UDP 192.168.2.15:5060;branch=z9hG4bK-55fbd381-878546.203  
Record-Route: <sip:00004@192.168.1.1>  
From: <sip:00004@sip.com>;tag=20377d79  
To: 00002 <sip:00002@sip.com>;tag=75ce0111  
Call-ID: 1f2c54c2@00002.192.168.1.1  
CSeq: 600103473 INVITE  
Contact: <sip:00002@192.168.2.10>  
supported: 100rel  
supported: replaces  
Allow: INVITE, ACK, BYE, CANCEL, OPTIONS, PRACK, MESSAGE, REFER, NOTIFY  
Content-Type: application/sdp  
Accept: application/sdp, message/sipfrag  
Content-Length: 250

v=0  
o=- 236947 2703 IN IP4 192.168.2.10  
s=-  
c=IN IP4 192.168.2.10  
t=0 0  
m=audio 5006 RTP/AVP 0 8 4 18 96  
a=rtpmap:0 PCMU/8000  
a=rtpmap:8 PCMA/8000  
a=rtpmap:4 G723/8000  
a=rtpmap:18 G729/8000  
a=rtpmap:96 telephone-event/8000  
a=fmtp:96 0-11

---

F59 192.168.2.15:1131(3) -> 192.168.1.1:5060(2)



ACK sip:00004@192.168.1.1 SIP/2.0  
Via: SIP/2.0/UDP 192.168.2.15:5060;branch=z9hG4bK-45f0166a-878546.559  
Route: <sip:00002@192.168.2.10>  
From: <sip:00004@sip.com>;tag=20377d79  
To: 00002 <sip:00002@sip.com>;tag=75ce0111  
Call-ID: 1f2c54c2@00002.192.168.1.1  
CSeq: 600103473 ACK  
Max-Forwards: 70  
Content-Length: 0

=====

F60            192.168.1.1:5062(2) -> 192.168.2.10:5060(1)

ACK sip:00002@192.168.2.10 SIP/2.0  
Via: SIP/2.0/UDP 192.168.1.1:5060;branch=z9hG4bK-717.1084362088.600103473  
Via: SIP/2.0/UDP 192.168.2.15:5060;branch=z9hG4bK-45f0166a-878546.559  
From: <sip:00004@sip.com>;tag=20377d79  
To: 00002 <sip:00002@sip.com>;tag=75ce0111  
Call-ID: 1f2c54c2@00002.192.168.1.1  
CSeq: 600103473 ACK  
max-forwards: 69  
Content-Length: 0

=====

## 11.5.3. 保留中+通話呼の状態での保留先による通話呼切断

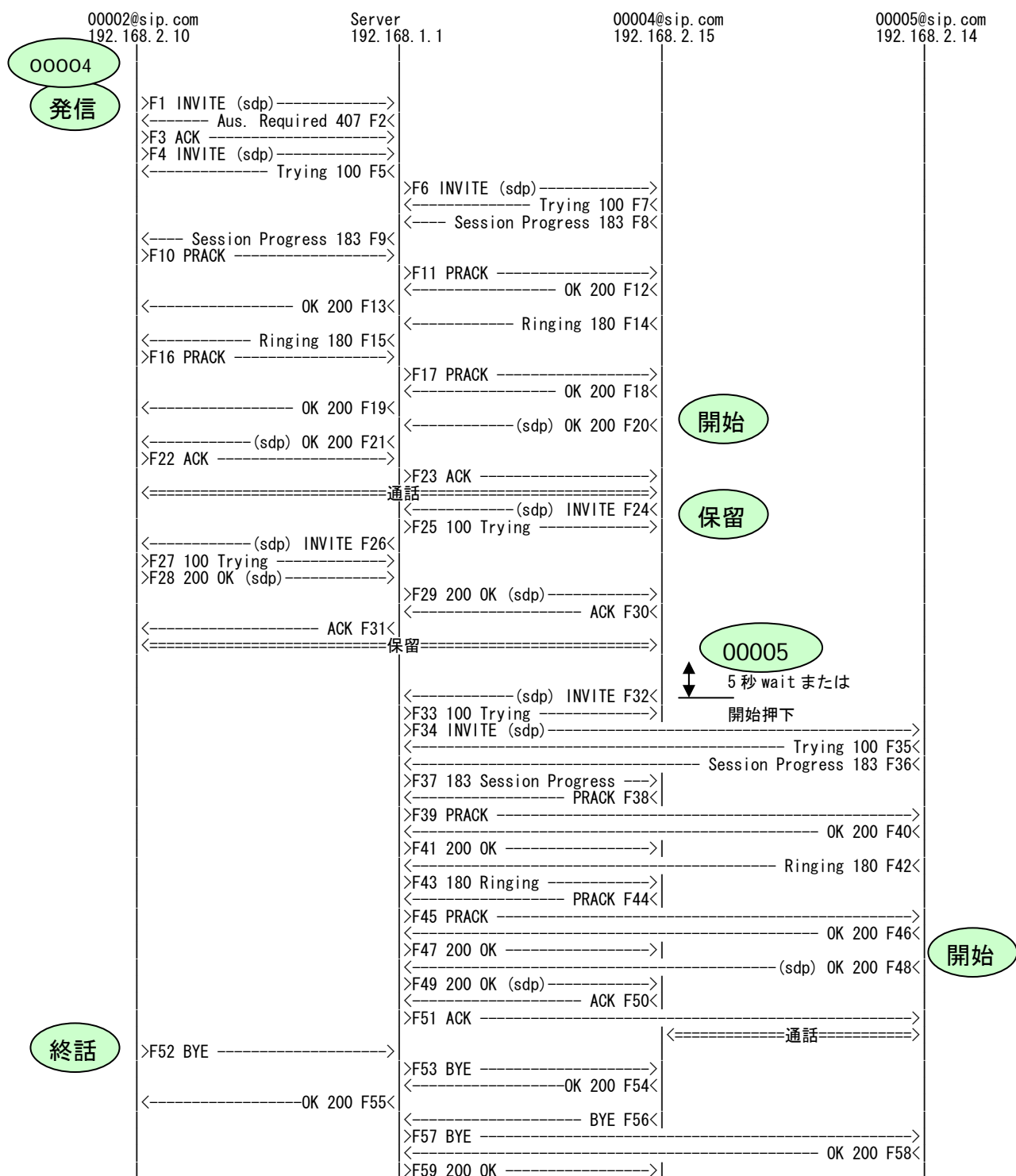


図 11-24 保留中+通話呼の状態での保留先による通話呼切断

---

F1 192.168.2.10:1091(1) -> 192.168.1.1:5060(2)

INVITE sip:00004@sip.com SIP/2.0  
Via: SIP/2.0/UDP 192.168.2.10:5060;branch=z9hG4bK-186c31fc-879145.608  
Route: <sip:192.168.1.1:5060>  
From: <sip:00002@sip.com>;tag=7aacc858  
To: <sip:00004@sip.com>  
Call-ID: 2b156b2b@00002.192.168.1.1  
CSeq: 772488159 INVITE  
Contact: <sip:00002@192.168.2.10>  
Proxy-Authorization: Digest username="00002", realm="heliossv2",  
nonce="c0a034624ed69bdd099f2ee385a548c6", uri="sip:00004@sip.com",  
response="d9731fa3ee98c81fb1809e71e2875d0c", algorithm=MD5,  
opaque="9a1dda791664317c308255649d53f589", qop=auth, nc=00000005  
Max-Forwards: 70  
Supported: 100rel, replaces  
Allow: INVITE, ACK, BYE, CANCEL, OPTIONS, PRACK, MESSAGE, REFER, NOTIFY  
Content-Type: application/sdp  
Accept: application/sdp, message/sipfrag  
Content-Length: 250

v=0  
o=- 592257 2801 IN IP4 192.168.2.10  
s=-  
c=IN IP4 192.168.2.10  
t=0 0  
m=audio 5008 RTP/AVP 0 8 4 18 96  
a=rtpmap:0 PCMU/8000  
a=rtpmap:8 PCMA/8000  
a=rtpmap:4 G723/8000  
a=rtpmap:18 G729/8000  
a=rtpmap:96 telephone-event/8000  
a=fmtp:96 0-11

---

F2 192.168.1.1:5062(2) -> 192.168.2.10:5060(1)

SIP/2.0 407 Proxy Authentication Required  
Via: SIP/2.0/UDP 192.168.2.10:5060;branch=z9hG4bK-186c31fc-879145.608  
From: <sip:00002@sip.com>;tag=7aacc858  
To: <sip:00004@sip.com>  
Call-ID: 2b156b2b@00002.192.168.1.1  
CSeq: 772488159 INVITE  
Proxy-Authenticate: Digest realm="heliossv2", nonce="dbbc7afbda2185ac64b6057c59376ff5",  
opaque="3be3a5dd9718a715d3386eab4cf10f3a", stale=false, algorithm=MD5, qop="auth,auth-int"  
Content-Length: 0

---

F3 192.168.2.10:1091(1) -> 192.168.1.1:5060(2)

ACK sip:00004@sip.com SIP/2.0  
Via: SIP/2.0/UDP 192.168.2.10:5060;branch=z9hG4bK-186c31fc-879145.608  
Route: <sip:192.168.1.1:5060>  
From: <sip:00002@sip.com>;tag=7aacc858  
To: <sip:00004@sip.com>  
Call-ID: 2b156b2b@00002.192.168.1.1  
CSeq: 772488159 ACK  
Content-Length: 0

---

F4 192.168.2.10:1091(1) -> 192.168.1.1:5060(2)

INVITE sip:00004@sip.com SIP/2.0  
Via: SIP/2.0/UDP 192.168.2.10:5060;branch=z9hG4bK-6fb8c6ca-879145.876  
Route: <sip:192.168.1.1:5060>  
From: <sip:00002@sip.com>;tag=7aacc858  
To: <sip:00004@sip.com>  
Call-ID: 2b156b2b@00002.192.168.1.1  
CSeq: 772488160 INVITE  
Contact: <sip:00002@192.168.2.10>  
Proxy-Authorization: Digest username="00002", realm="heliossv2",  
nonce="dbbc7afbda2185ac64b6057c59376ff5", uri="sip:00004@sip.com",  
response="7ebe96981b5351ec40a1b424b0746032", algorithm=MD5,  
opaque="3be3a5dd9718a715d3386eab4cf10f3a", qop=auth, nc=00000001  
cnonce="016fc703",

Max-Forwards: 70  
 Supported: 100rel, replaces  
 Allow: INVITE, ACK, BYE, CANCEL, OPTIONS, PRACK, MESSAGE, REFER, NOTIFY  
 Content-Type: application/sdp  
 Accept: application/sdp, message/sipfrag  
 Content-Length: 250

v=0  
 o=- 592257 2801 IN IP4 192.168.2.10  
 s=-  
 c=IN IP4 192.168.2.10  
 t=0 0  
 m=audio 5008 RTP/AVP 0 8 4 18 96  
 a=rtpmap:0 PCMU/8000  
 a=rtpmap:8 PCMA/8000  
 a=rtpmap:4 G723/8000  
 a=rtpmap:18 G729/8000  
 a=rtpmap:96 telephone-event/8000  
 a=fmtp:96 0-11

F5 192.168.1.1:5062(2) -> 192.168.2.10:5060(1)

SIP/2.0 100 Trying  
 Via: SIP/2.0/UDP 192.168.2.10:5060;branch=z9hG4bK-6fb8c6ca-879145.876  
 From: <sip:00002@sip.com>;tag=7aacc858  
 To: <sip:00004@sip.com>  
 Call-ID: 2b156b2b@00002.192.168.1.1  
 CSeq: 772488160 INVITE  
 Content-Length: 0

F6 192.168.1.1:5062(2) -> 192.168.2.15:5060(3)

INVITE sip:00004@192.168.2.15 SIP/2.0  
 Via: SIP/2.0/UDP 192.168.1.1:5060;branch=z9hG4bK-722.061266.772488160  
 Via: SIP/2.0/UDP 192.168.2.10:5060;branch=z9hG4bK-6fb8c6ca-879145.876  
 Record-Route: <sip:00004@192.168.1.1>  
 Route: <sip:192.168.1.1:5060>  
 From: 00002 <sip:00002@sip.com>;tag=7aacc858  
 To: <sip:00004@sip.com>  
 Call-ID: 2b156b2b@00002.192.168.1.1  
 CSeq: 772488160 INVITE  
 Contact: <sip:00002@192.168.2.10>  
 max-forwards: 69  
 supported: 100rel  
 supported: replaces  
 Allow: INVITE, ACK, BYE, CANCEL, OPTIONS, PRACK, MESSAGE, REFER, NOTIFY  
 Content-Type: application/sdp  
 Accept: application/sdp, message/sipfrag  
 Content-Length: 250

v=0  
 o=- 592257 2801 IN IP4 192.168.2.10  
 s=-  
 c=IN IP4 192.168.2.10  
 t=0 0  
 m=audio 5008 RTP/AVP 0 8 4 18 96  
 a=rtpmap:0 PCMU/8000  
 a=rtpmap:8 PCMA/8000  
 a=rtpmap:4 G723/8000  
 a=rtpmap:18 G729/8000  
 a=rtpmap:96 telephone-event/8000  
 a=fmtp:96 0-11

F7 192.168.2.15:1131(3) -> 192.168.1.1:5060(2)

SIP/2.0 100 Trying  
 Via: SIP/2.0/UDP 192.168.1.1:5060;branch=z9hG4bK-722.061266.772488160  
 Via: SIP/2.0/UDP 192.168.2.10:5060;branch=z9hG4bK-6fb8c6ca-879145.876  
 From: 00002 <sip:00002@sip.com>;tag=7aacc858  
 To: <sip:00004@sip.com>  
 Call-ID: 2b156b2b@00002.192.168.1.1  
 CSeq: 772488160 INVITE  
 Content-Length: 0

F8 192.168.2.15:1131(3) -> 192.168.1.1:5060(2)

SIP/2.0 183 Session Progress  
Via: SIP/2.0/UDP 192.168.1.1:5060;branch=z9hG4bK-722.061266.772488160  
Via: SIP/2.0/UDP 192.168.2.10:5060;branch=z9hG4bK-6fb8c6ca-879145.876  
Record-Route: <sip:00004@192.168.1.1>  
From: 00002 <sip:00002@sip.com>;tag=7aacc858  
To: <sip:00004@sip.com>;tag=610450dd  
Call-ID: 2b156b2b@00002.192.168.1.1  
CSeq: 772488160 INVITE  
Contact: <sip:00004@192.168.2.15>  
Require: 100rel  
RSeq: 1109973483  
Content-Length: 0

F9 192.168.1.1:5062(2) -> 192.168.2.10:5060(1)

SIP/2.0 183 Session Progress  
Via: SIP/2.0/UDP 192.168.2.10:5060;branch=z9hG4bK-6fb8c6ca-879145.876  
Record-Route: <sip:00004@192.168.1.1>  
From: 00002 <sip:00002@sip.com>;tag=7aacc858  
To: <sip:00004@sip.com>;tag=610450dd  
Call-ID: 2b156b2b@00002.192.168.1.1  
CSeq: 772488160 INVITE  
Contact: <sip:00004@192.168.2.15>  
require: 100rel  
rseq: 1109973483  
Content-Length: 0

F10 192.168.2.10:1091(1) -> 192.168.1.1:5060(2)

PRACK sip:00004@192.168.1.1 SIP/2.0  
Via: SIP/2.0/UDP 192.168.2.10:5060;branch=z9hG4bK-60a6d737-879148.882  
Route: <sip:00004@192.168.2.15>  
From: 00002 <sip:00002@sip.com>;tag=7aacc858  
To: <sip:00004@sip.com>;tag=610450dd  
Call-ID: 2b156b2b@00002.192.168.1.1  
CSeq: 772488161 PRACK  
Proxy-Authorization: Digest username="00002", realm="heliossv2",  
nonce="dbbc7afbda2185ac64b6057c59376ff5", uri="sip:00004@192.168.1.1",  
response="5b108fce0f828b8424cb77583ded796f", algorithm=MD5, cnonce="17a6ba96",  
opaque="3be3a5dd9718a715d3386eab4cf10f3a", qop=auth, nc=00000002  
Max-Forwards: 70  
RAck: 1109973483 772488160 INVITE  
Content-Length: 0

F11 192.168.1.1:5062(2) -> 192.168.2.15:5060(3)

PRACK sip:00004@192.168.2.15 SIP/2.0  
Via: SIP/2.0/UDP 192.168.1.1:5060;branch=z9hG4bK-722.1084362526.772488161  
Via: SIP/2.0/UDP 192.168.2.10:5060;branch=z9hG4bK-60a6d737-879148.882  
Route: <sip:00004@192.168.2.15>  
From: 00002 <sip:00002@sip.com>;tag=7aacc858  
To: <sip:00004@sip.com>;tag=610450dd  
Call-ID: 2b156b2b@00002.192.168.1.1  
CSeq: 772488161 PRACK  
max-forwards: 69  
rack: 1109973483 772488160 INVITE  
Content-Length: 0

F12 192.168.2.15:1131(3) -> 192.168.1.1:5060(2)

SIP/2.0 200 OK  
Via: SIP/2.0/UDP 192.168.1.1:5060;branch=z9hG4bK-722.1084362526.772488161  
Via: SIP/2.0/UDP 192.168.2.10:5060;branch=z9hG4bK-60a6d737-879148.882  
From: 00002 <sip:00002@sip.com>;tag=7aacc858

# FOMA/WLAN デュアル端末に関する技術参考資料 第 1.2 版

To: <sip:00004@sip.com>;tag=610450dd  
 Call-ID: 2b156b2b@00002.192.168.1.1  
 CSeq: 772488161 PRACK  
 Content-Length: 0

F13 192.168.1.1:5062(2) -> 192.168.2.10:5060(1)

SIP/2.0 200 OK  
 Via: SIP/2.0/UDP 192.168.2.10:5060;branch=z9hG4bK-60a6d737-879148.882  
 From: 00002 <sip:00002@sip.com>;tag=7aacc858  
 To: <sip:00004@sip.com>;tag=610450dd  
 Call-ID: 2b156b2b@00002.192.168.1.1  
 CSeq: 772488161 PRACK  
 Content-Length: 0

F14 192.168.2.15:1131(3) -> 192.168.1.1:5060(2)

SIP/2.0 180 Ringing  
 Via: SIP/2.0/UDP 192.168.1.1:5060;branch=z9hG4bK-722.061266.772488160  
 Via: SIP/2.0/UDP 192.168.2.10:5060;branch=z9hG4bK-6fb8c6ca-879145.876  
 Record-Route: <sip:00004@192.168.1.1>  
 From: 00002 <sip:00002@sip.com>;tag=7aacc858  
 To: <sip:00004@sip.com>;tag=610450dd  
 Call-ID: 2b156b2b@00002.192.168.1.1  
 CSeq: 772488160 INVITE  
 Contact: <sip:00004@192.168.2.15>  
 Require: 100rel  
 RSeq: 1109973484  
 Content-Length: 0

F15 192.168.1.1:5062(2) -> 192.168.2.10:5060(1)

SIP/2.0 180 Ringing  
 Via: SIP/2.0/UDP 192.168.2.10:5060;branch=z9hG4bK-6fb8c6ca-879145.876  
 Record-Route: <sip:00004@192.168.1.1>  
 From: 00002 <sip:00002@sip.com>;tag=7aacc858  
 To: <sip:00004@sip.com>;tag=610450dd  
 Call-ID: 2b156b2b@00002.192.168.1.1  
 CSeq: 772488160 INVITE  
 Contact: <sip:00004@192.168.2.15>  
 require: 100rel  
 rseq: 1109973484  
 Content-Length: 0

F16 192.168.2.10:1091(1) -> 192.168.1.1:5060(2)

PRACK sip:00004@192.168.1.1 SIP/2.0  
 Via: SIP/2.0/UDP 192.168.2.10:5060;branch=z9hG4bK-6b19b4b2-879149.474  
 Route: <sip:00004@192.168.2.15>  
 From: 00002 <sip:00002@sip.com>;tag=7aacc858  
 To: <sip:00004@sip.com>;tag=610450dd  
 Call-ID: 2b156b2b@00002.192.168.1.1  
 CSeq: 772488162 PRACK  
 Proxy-Authentication: Digest username="00002", realm="heliossv2",  
 nonce="dbbc7afbda2185ac64b6057c59376ff5", uri="sip:00004@192.168.1.1",  
 response="f01f4f45a3ce0ea332a6f8dd7749cbff", algorithm=MD5, cnonce="0693ccbf",  
 opaque="3be3a5dd9718a715d3386eab4cf10f3a", qop=auth, nc=00000003  
 Max-Forwards: 70  
 RAck: 1109973484 772488160 INVITE  
 Content-Length: 0

F17 192.168.1.1:5062(2) -> 192.168.2.15:5060(3)

PRACK sip:00004@192.168.2.15 SIP/2.0  
 Via: SIP/2.0/UDP 192.168.1.1:5060;branch=z9hG4bK-722.1084362526.772488162  
 Via: SIP/2.0/UDP 192.168.2.10:5060;branch=z9hG4bK-6b19b4b2-879149.474

```

Route: <sip:00004@192.168.2.15>
From: 00002 <sip:00002@sip.com>;tag=7aacc858
To: <sip:00004@sip.com>;tag=610450dd
Call-ID: 2b156b2b@00002.192.168.1.1
CSeq: 772488162 PRACK
max-forwards: 69
rack: 1109973484 772488160 INVITE
Content-Length: 0

```

```
=====
```

F18        192.168.2.15:1131(3) -> 192.168.1.1:5060(2)

```

SIP/2.0 200 OK
Via: SIP/2.0/UDP 192.168.1.1:5060;branch=z9hG4bK-722.1084362526.772488162
Via: SIP/2.0/UDP 192.168.2.10:5060;branch=z9hG4bK-6b19b4b2-879149.474
From: 00002 <sip:00002@sip.com>;tag=7aacc858
To: <sip:00004@sip.com>;tag=610450dd
Call-ID: 2b156b2b@00002.192.168.1.1
CSeq: 772488162 PRACK
Content-Length: 0

```

```
=====
```

F19        192.168.1.1:5062(2) -> 192.168.2.10:5060(1)

```

SIP/2.0 200 OK
Via: SIP/2.0/UDP 192.168.2.10:5060;branch=z9hG4bK-6b19b4b2-879149.474
From: 00002 <sip:00002@sip.com>;tag=7aacc858
To: <sip:00004@sip.com>;tag=610450dd
Call-ID: 2b156b2b@00002.192.168.1.1
CSeq: 772488162 PRACK
Content-Length: 0

```

```
=====
```

F20        192.168.2.15:1131(3) -> 192.168.1.1:5060(2)

```

SIP/2.0 200 OK
Via: SIP/2.0/UDP 192.168.1.1:5060;branch=z9hG4bK-722.061266.772488160
Via: SIP/2.0/UDP 192.168.2.10:5060;branch=z9hG4bK-6fb8c6ca-879145.876
Record-Route: <sip:00004@192.168.1.1>
From: 00002 <sip:00002@sip.com>;tag=7aacc858
To: <sip:00004@sip.com>;tag=610450dd
Call-ID: 2b156b2b@00002.192.168.1.1
CSeq: 772488160 INVITE
Contact: <sip:00004@192.168.2.15>
Supported: 100rel, replaces
Allow: INVITE, ACK, BYE, CANCEL, OPTIONS, PRACK, MESSAGE, REFER, NOTIFY
Content-Type: application/sdp
Accept: application/sdp, message/sipfrag
Content-Length: 177

```

```

v=0
o=- 565973 14501 IN IP4 192.168.2.15
s=-
c=IN IP4 192.168.2.15
t=0 0
m=audio 5006 RTP/AVP 0 96
a=rtpmap:0 PCMU/8000
a=rtpmap:96 telephone-event/8000
a=fmtp:96 0-11

```

```
=====
```

F21        192.168.1.1:5062(2) -> 192.168.2.10:5060(1)

```

SIP/2.0 200 OK
Via: SIP/2.0/UDP 192.168.2.10:5060;branch=z9hG4bK-6fb8c6ca-879145.876
Record-Route: <sip:00004@192.168.1.1>
From: 00002 <sip:00002@sip.com>;tag=7aacc858
To: <sip:00004@sip.com>;tag=610450dd
Call-ID: 2b156b2b@00002.192.168.1.1
CSeq: 772488160 INVITE
Contact: <sip:00004@192.168.2.15>
supported: 100rel
supported: replaces
Allow: INVITE, ACK, BYE, CANCEL, OPTIONS, PRACK, MESSAGE, REFER, NOTIFY

```

Content-Type: application/sdp  
 Accept: application/sdp, message/sipfrag  
 Content-Length: 177

v=0  
 o=- 565973 14501 IN IP4 192.168.2.15  
 s=-  
 c=IN IP4 192.168.2.15  
 t=0 0  
 m=audio 5006 RTP/AVP 0 96  
 a=rtpmap:0 PCMU/8000  
 a=rtpmap:96 telephone-event/8000  
 a=fmtp:96 0-11

F22 192.168.2.10:1091(1) -> 192.168.1.1:5060(2)

ACK sip:00004@192.168.1.1 SIP/2.0  
 Via: SIP/2.0/UDP 192.168.2.10:5060;branch=z9hG4bK-5fbf093d-879151.770  
 Route: <sip:00004@192.168.2.15>  
 From: 00002 <sip:00002@sip.com>;tag=7aacc858  
 To: <sip:00004@sip.com>;tag=610450dd  
 Call-ID: 2b156b2b@00002.192.168.1.1  
 CSeq: 772488160 ACK  
 Proxy-Authorization: Digest username="00002", realm="heliossv2",  
 nonce="dbbc7afbda2185ac64b6057c59376ff5", uri="sip:00004@sip.com",  
 response="7ebe96981b5351ec40a1b424b0746032", algorithm=MD5,  
 opaque="3be3a5dd9718a715d3386eab4cf10f3a", qop=auth, nc=00000001  
 Max-Forwards: 70  
 Content-Length: 0

F23 192.168.1.1:5062(2) -> 192.168.2.15:5060(3)

ACK sip:00004@192.168.2.15 SIP/2.0  
 Via: SIP/2.0/UDP 192.168.1.1:5060;branch=z9hG4bK-722.1084362529.772488160  
 Via: SIP/2.0/UDP 192.168.2.10:5060;branch=z9hG4bK-5fbf093d-879151.770  
 From: 00002 <sip:00002@sip.com>;tag=7aacc858  
 To: <sip:00004@sip.com>;tag=610450dd  
 Call-ID: 2b156b2b@00002.192.168.1.1  
 CSeq: 772488160 ACK  
 max-forwards: 69  
 Content-Length: 0

F24 192.168.2.15:1131(3) -> 192.168.1.1:5060(2)

INVITE sip:00004@192.168.1.1 SIP/2.0  
 Via: SIP/2.0/UDP 192.168.2.15:5060;branch=z9hG4bK-2eb46320-878989.502  
 Route: <sip:00002@192.168.2.10>  
 From: <sip:00004@sip.com>;tag=610450dd  
 To: 00002 <sip:00002@sip.com>;tag=7aacc858  
 Call-ID: 2b156b2b@00002.192.168.1.1  
 CSeq: 1060199224 INVITE  
 Contact: <sip:00004@192.168.2.15>  
 Max-Forwards: 70  
 Supported: 100rel, replaces  
 Allow: INVITE, ACK, BYE, CANCEL, OPTIONS, PRACK, MESSAGE, REFER, NOTIFY  
 Content-Type: application/sdp  
 Content-Length: 189

v=0  
 o=- 486080 14502 IN IP4 192.168.2.15  
 s=-  
 c=IN IP4 192.168.2.15  
 t=0 0  
 m=audio 5006 RTP/AVP 0 96  
 a=rtpmap:0 PCMU/8000  
 a=rtpmap:96 telephone-event/8000  
 a=fmtp:96 0-11  
 a=inactive

F25 192.168.1.1:5062(2) -> 192.168.2.15:5060(3)



```
SIP/2.0 100 Trying
Via: SIP/2.0/UDP 192.168.2.15:5060;branch=z9hG4bK-2eb46320-878989.502
From: <sip:00004@sip.com>;tag=610450dd
To: 00002 <sip:00002@sip.com>;tag=7aacc858
Call-ID: 2b156b2b@00002.192.168.1.1
CSeq: 1060199224 INVITE
Content-Length: 0
```

```
=====
F26      192.168.1.1:5062(2) -> 192.168.2.10:5060(1)
```

```
INVITE sip:00002@192.168.2.10 SIP/2.0
Via: SIP/2.0/UDP 192.168.1.1:5060;branch=z9hG4bK-721.061266.1060199224
Via: SIP/2.0/UDP 192.168.2.15:5060;branch=z9hG4bK-2eb46320-878989.502
Record-Route: <sip:00004@192.168.1.1>
Route: <sip:00002@192.168.2.10>
From: <sip:00004@sip.com>;tag=610450dd
To: 00002 <sip:00002@sip.com>;tag=7aacc858
Call-ID: 2b156b2b@00002.192.168.1.1
CSeq: 1060199224 INVITE
Contact: <sip:00004@192.168.2.15>
max-forwards: 69
supported: 100rel
supported: replaces
Allow: INVITE, ACK, BYE, CANCEL, OPTIONS, PRACK, MESSAGE, REFER, NOTIFY
Content-Type: application/sdp
Content-Length: 189
```

```
v=0
o=- 486080 14502 IN IP4 192.168.2.15
s=-
c=IN IP4 192.168.2.15
t=0 0
m=audio 5006 RTP/AVP 0 96
a=rtpmap:0 PCMU/8000
a=rtpmap:96 telephone-event/8000
a=fmtp:96 0-11
a=inactive
```

```
=====
F27      192.168.2.10:1091(1) -> 192.168.1.1:5060(2)
```

```
SIP/2.0 100 Trying
Via: SIP/2.0/UDP 192.168.1.1:5060;branch=z9hG4bK-721.061266.1060199224
Via: SIP/2.0/UDP 192.168.2.15:5060;branch=z9hG4bK-2eb46320-878989.502
From: <sip:00004@sip.com>;tag=610450dd
To: 00002 <sip:00002@sip.com>;tag=7aacc858
Call-ID: 2b156b2b@00002.192.168.1.1
CSeq: 1060199224 INVITE
Content-Length: 0
```

```
=====
F28      192.168.2.10:1091(1) -> 192.168.1.1:5060(2)
```

```
SIP/2.0 200 OK
Via: SIP/2.0/UDP 192.168.1.1:5060;branch=z9hG4bK-721.061266.1060199224
Via: SIP/2.0/UDP 192.168.2.15:5060;branch=z9hG4bK-2eb46320-878989.502
Record-Route: <sip:00004@192.168.1.1>
From: <sip:00004@sip.com>;tag=610450dd
To: 00002 <sip:00002@sip.com>;tag=7aacc858
Call-ID: 2b156b2b@00002.192.168.1.1
CSeq: 1060199224 INVITE
Contact: <sip:00002@192.168.2.10>
Supported: 100rel, replaces
Allow: INVITE, ACK, BYE, CANCEL, OPTIONS, PRACK, MESSAGE, REFER, NOTIFY
Content-Type: application/sdp
Accept: application/sdp, message/sipfrag
Content-Length: 188
```

```
v=0
o=- 553389 2802 IN IP4 192.168.2.10
s=-
c=IN IP4 192.168.2.10
t=0 0
m=audio 5008 RTP/AVP 0 96
a=rtpmap:0 PCMU/8000
```

a=rtpmap:96 telephone-event/8000  
a=fmtp:96 0-11  
a=inactive

F29 192.168.1.1:5062(2) -> 192.168.2.15:5060(3)

SIP/2.0 200 OK  
Via: SIP/2.0/UDP 192.168.2.15:5060;branch=z9hG4bK-2eb46320-878989.502  
Record-Route: <sip:00004@192.168.1.1>  
From: <sip:00004@sip.com>;tag=610450dd  
To: 00002 <sip:00002@sip.com>;tag=7aacc858  
Call-ID: 2b156b2b@00002.192.168.1.1  
CSeq: 1060199224 INVITE  
Contact: <sip:00002@192.168.2.10>  
supported: 100rel  
supported: replaces  
Allow: INVITE, ACK, BYE, CANCEL, OPTIONS, PRACK, MESSAGE, REFER, NOTIFY  
Content-Type: application/sdp  
Accept: application/sdp, message/sipfrag  
Content-Length: 188  
  
v=0  
o=- 553389 2802 IN IP4 192.168.2.10  
s=-  
c=IN IP4 192.168.2.10  
t=0 0  
m=audio 5008 RTP/AVP 0 96  
a=rtpmap:0 PCMU/8000  
a=rtpmap:96 telephone-event/8000  
a=fmtp:96 0-11  
a=inactive

F30 192.168.2.15:1131(3) -> 192.168.1.1:5060(2)

ACK sip:00004@192.168.1.1 SIP/2.0  
Via: SIP/2.0/UDP 192.168.2.15:5060;branch=z9hG4bK-4a2ac377-878989.754  
Route: <sip:00002@192.168.2.10>  
From: <sip:00004@sip.com>;tag=610450dd  
To: 00002 <sip:00002@sip.com>;tag=7aacc858  
Call-ID: 2b156b2b@00002.192.168.1.1  
CSeq: 1060199224 ACK  
Max-Forwards: 70  
Content-Length: 0

F31 192.168.1.1:5062(2) -> 192.168.2.10:5060(1)

ACK sip:00002@192.168.2.10 SIP/2.0  
Via: SIP/2.0/UDP 192.168.1.1:5060;branch=z9hG4bK-721.1084362532.1060199224  
Via: SIP/2.0/UDP 192.168.2.15:5060;branch=z9hG4bK-4a2ac377-878989.754  
From: <sip:00004@sip.com>;tag=610450dd  
To: 00002 <sip:00002@sip.com>;tag=7aacc858  
Call-ID: 2b156b2b@00002.192.168.1.1  
CSeq: 1060199224 ACK  
max-forwards: 69  
Content-Length: 0

F32 192.168.2.15:1131(3) -> 192.168.1.1:5060(2)

INVITE sip:00005@sip.com SIP/2.0  
Via: SIP/2.0/UDP 192.168.2.15:5060;branch=z9hG4bK-3648963b-878999.469  
Route: <sip:192.168.1.1:5060>  
From: <sip:00004@sip.com>;tag=2927095b  
To: <sip:00005@sip.com>  
Call-ID: 7d60a1ae@00004.192.168.1.1  
CSeq: 1459496919 INVITE  
Contact: <sip:00004@192.168.2.15>  
Max-Forwards: 70  
Supported: 100rel, replaces  
Allow: INVITE, ACK, BYE, CANCEL, OPTIONS, PRACK, MESSAGE, REFER, NOTIFY  
Content-Type: application/sdp  
Accept: application/sdp, message/sipfrag

Content-Length: 250

```

v=0
o=- 453415 3701 IN IP4 192.168.2.15
s=-
c=IN IP4 192.168.2.15
t=0 0
m=audio 5008 RTP/AVP 0 8 4 18 96
a=rtpmap:0 PCMU/8000
a=rtpmap:8 PCMA/8000
a=rtpmap:4 G723/8000
a=rtpmap:18 G729/8000
a=rtpmap:96 telephone-event/8000
a=fmtp:96 0-11

```

```
=====
```

F33 192.168.1.1:5062(2) -> 192.168.2.15:5060(3)

```

SIP/2.0 100 Trying
Via: SIP/2.0/UDP 192.168.2.15:5060;branch=z9hG4bK-3648963b-878999.469
From: <sip:00004@sip.com>;tag=2927095b
To: <sip:00005@sip.com>
Call-ID: 7d60a1ae@00004.192.168.1.1
CSeq: 1459496919 INVITE
Content-Length: 0

```

```
=====
```

F34 192.168.1.1:5062(2) -> 192.168.2.14:5060(4)

```

INVITE sip:00005@192.168.2.14 SIP/2.0
Via: SIP/2.0/UDP 192.168.1.1:5060;branch=z9hG4bK-724.751282.1459496919
Via: SIP/2.0/UDP 192.168.2.15:5060;branch=z9hG4bK-3648963b-878999.469
Record-Route: <sip:00005@192.168.1.1>
Route: <sip:192.168.1.1:5060>
From: 00004 <sip:00004@sip.com>;tag=2927095b
To: <sip:00005@sip.com>
Call-ID: 7d60a1ae@00004.192.168.1.1
CSeq: 1459496919 INVITE
Contact: <sip:00004@192.168.2.15>
max-forwards: 69
supported: 100rel
supported: replaces
Allow: INVITE, ACK, BYE, CANCEL, OPTIONS, PRACK, MESSAGE, REFER, NOTIFY
Content-Type: application/sdp
Accept: application/sdp, message/sipfrag
Content-Length: 250

```

```

v=0
o=- 453415 3701 IN IP4 192.168.2.15
s=-
c=IN IP4 192.168.2.15
t=0 0
m=audio 5008 RTP/AVP 0 8 4 18 96
a=rtpmap:0 PCMU/8000
a=rtpmap:8 PCMA/8000
a=rtpmap:4 G723/8000
a=rtpmap:18 G729/8000
a=rtpmap:96 telephone-event/8000
a=fmtp:96 0-11

```

```
=====
```

F35 192.168.2.14:1057(4) -> 192.168.1.1:5060(2)

```

SIP/2.0 100 Trying
Via: SIP/2.0/UDP 192.168.1.1:5060;branch=z9hG4bK-724.751282.1459496919
Via: SIP/2.0/UDP 192.168.2.15:5060;branch=z9hG4bK-3648963b-878999.469
From: 00004 <sip:00004@sip.com>;tag=2927095b
To: <sip:00005@sip.com>
Call-ID: 7d60a1ae@00004.192.168.1.1
CSeq: 1459496919 INVITE
Content-Length: 0

```

```
=====
```

F36 192.168.2.14:1057(4) -> 192.168.1.1:5060(2)

SIP/2.0 183 Session Progress  
 Via: SIP/2.0/UDP 192.168.1.1:5060;branch=z9hG4bK-724.751282.1459496919  
 Via: SIP/2.0/UDP 192.168.2.15:5060;branch=z9hG4bK-3648963b-878999.469  
 Record-Route: <sip:00005@192.168.1.1>  
 From: 00004 <sip:00004@sip.com>;tag=2927095b  
 To: <sip:00005@sip.com>;tag=0a67ff73  
 Call-ID: 7d60a1ae@00004.192.168.1.1  
 CSeq: 1459496919 INVITE  
 Contact: <sip:00005@192.168.2.14>  
 Require: 100rel  
 RSeq: 523428224  
 Content-Length: 0

=====

F37            192.168.1.1:5062(2) -> 192.168.2.15:5060(3)

SIP/2.0 183 Session Progress  
 Via: SIP/2.0/UDP 192.168.2.15:5060;branch=z9hG4bK-3648963b-878999.469  
 Record-Route: <sip:00005@192.168.1.1>  
 From: 00004 <sip:00004@sip.com>;tag=2927095b  
 To: <sip:00005@sip.com>;tag=0a67ff73  
 Call-ID: 7d60a1ae@00004.192.168.1.1  
 CSeq: 1459496919 INVITE  
 Contact: <sip:00005@192.168.2.14>  
 require: 100rel  
 rseq: 523428224  
 Content-Length: 0

=====

F38            192.168.2.15:1131(3) -> 192.168.1.1:5060(2)

PRACK sip:00005@192.168.1.1 SIP/2.0  
 Via: SIP/2.0/UDP 192.168.2.15:5060;branch=z9hG4bK-5fad399a-879000.294  
 Route: <sip:00005@192.168.2.14>  
 From: 00004 <sip:00004@sip.com>;tag=2927095b  
 To: <sip:00005@sip.com>;tag=0a67ff73  
 Call-ID: 7d60a1ae@00004.192.168.1.1  
 CSeq: 1459496920 PRACK  
 Max-Forwards: 70  
 RAck: 523428224 1459496919 INVITE  
 Content-Length: 0

=====

F39            192.168.1.1:5062(2) -> 192.168.2.14:5060(4)

PRACK sip:00005@192.168.2.14 SIP/2.0  
 Via: SIP/2.0/UDP 192.168.1.1:5060;branch=z9hG4bK-724.1084362542.1459496920  
 Via: SIP/2.0/UDP 192.168.2.15:5060;branch=z9hG4bK-5fad399a-879000.294  
 Route: <sip:00005@192.168.2.14>  
 From: 00004 <sip:00004@sip.com>;tag=2927095b  
 To: <sip:00005@sip.com>;tag=0a67ff73  
 Call-ID: 7d60a1ae@00004.192.168.1.1  
 CSeq: 1459496920 PRACK  
 max-forwards: 69  
 rack: 523428224 1459496919 INVITE  
 Content-Length: 0

=====

F40            192.168.2.14:1057(4) -> 192.168.1.1:5060(2)

SIP/2.0 200 OK  
 Via: SIP/2.0/UDP 192.168.1.1:5060;branch=z9hG4bK-724.1084362542.1459496920  
 Via: SIP/2.0/UDP 192.168.2.15:5060;branch=z9hG4bK-5fad399a-879000.294  
 From: 00004 <sip:00004@sip.com>;tag=2927095b  
 To: <sip:00005@sip.com>;tag=0a67ff73  
 Call-ID: 7d60a1ae@00004.192.168.1.1  
 CSeq: 1459496920 PRACK  
 Content-Length: 0

=====

F41            192.168.1.1:5062(2) -> 192.168.2.15:5060(3)

SIP/2.0 200 OK  
Via: SIP/2.0/UDP 192.168.2.15:5060;branch=z9hG4bK-5fad399a-879000.294  
From: 00004 <sip:00004@sip.com>;tag=2927095b  
To: <sip:00005@sip.com>;tag=0a67ff73  
Call-ID: 7d60a1ae@00004.192.168.1.1  
CSeq: 1459496920 PRACK  
Content-Length: 0

=====

F42            192.168.2.14:1057(4) -> 192.168.1.1:5060(2)

SIP/2.0 180 Ringing  
Via: SIP/2.0/UDP 192.168.1.1:5060;branch=z9hG4bK-724.751282.1459496919  
Via: SIP/2.0/UDP 192.168.2.15:5060;branch=z9hG4bK-3648963b-878999.469  
Record-Route: <sip:00005@192.168.1.1>  
From: 00004 <sip:00004@sip.com>;tag=2927095b  
To: <sip:00005@sip.com>;tag=0a67ff73  
Call-ID: 7d60a1ae@00004.192.168.1.1  
CSeq: 1459496919 INVITE  
Contact: <sip:00005@192.168.2.14>  
Require: 100rel  
RSeq: 523428225  
Content-Length: 0

=====

F43            192.168.1.1:5062(2) -> 192.168.2.15:5060(3)

SIP/2.0 180 Ringing  
Via: SIP/2.0/UDP 192.168.2.15:5060;branch=z9hG4bK-3648963b-878999.469  
Record-Route: <sip:00005@192.168.1.1>  
From: 00004 <sip:00004@sip.com>;tag=2927095b  
To: <sip:00005@sip.com>;tag=0a67ff73  
Call-ID: 7d60a1ae@00004.192.168.1.1  
CSeq: 1459496919 INVITE  
Contact: <sip:00005@192.168.2.14>  
require: 100rel  
rseq: 523428225  
Content-Length: 0

=====

F44            192.168.2.15:1131(3) -> 192.168.1.1:5060(2)

PRACK sip:00005@192.168.1.1 SIP/2.0  
Via: SIP/2.0/UDP 192.168.2.15:5060;branch=z9hG4bK-34b006e2-879000.888  
Route: <sip:00005@192.168.2.14>  
From: 00004 <sip:00004@sip.com>;tag=2927095b  
To: <sip:00005@sip.com>;tag=0a67ff73  
Call-ID: 7d60a1ae@00004.192.168.1.1  
CSeq: 1459496921 PRACK  
Max-Forwards: 70  
RAck: 523428225 1459496919 INVITE  
Content-Length: 0

=====

F45            192.168.1.1:5062(2) -> 192.168.2.14:5060(4)

PRACK sip:00005@192.168.2.14 SIP/2.0  
Via: SIP/2.0/UDP 192.168.1.1:5060;branch=z9hG4bK-724.1084362543.1459496921  
Via: SIP/2.0/UDP 192.168.2.15:5060;branch=z9hG4bK-34b006e2-879000.888  
Route: <sip:00005@192.168.2.14>  
From: 00004 <sip:00004@sip.com>;tag=2927095b  
To: <sip:00005@sip.com>;tag=0a67ff73  
Call-ID: 7d60a1ae@00004.192.168.1.1  
CSeq: 1459496921 PRACK  
max-forwards: 69  
rack: 523428225 1459496919 INVITE  
Content-Length: 0

=====

F46            192.168.2.14:1057(4) -> 192.168.1.1:5060(2)

SIP/2.0 200 OK  
 Via: SIP/2.0/UDP 192.168.1.1:5060;branch=z9hG4bK-724.1084362543.1459496921  
 Via: SIP/2.0/UDP 192.168.2.15:5060;branch=z9hG4bK-34b006e2-879000.888  
 From: 00004 <sip:00004@sip.com>;tag=2927095b  
 To: <sip:00005@sip.com>;tag=0a67ff73  
 Call-ID: 7d60a1ae@00004.192.168.1.1  
 CSeq: 1459496921 PRACK  
 Content-Length: 0

=====

F47        192.168.1.1:5062(2) -> 192.168.2.15:5060(3)

SIP/2.0 200 OK  
 Via: SIP/2.0/UDP 192.168.2.15:5060;branch=z9hG4bK-34b006e2-879000.888  
 From: 00004 <sip:00004@sip.com>;tag=2927095b  
 To: <sip:00005@sip.com>;tag=0a67ff73  
 Call-ID: 7d60a1ae@00004.192.168.1.1  
 CSeq: 1459496921 PRACK  
 Content-Length: 0

=====

F48        192.168.2.14:1057(4) -> 192.168.1.1:5060(2)

SIP/2.0 200 OK  
 Via: SIP/2.0/UDP 192.168.1.1:5060;branch=z9hG4bK-724.751282.1459496919  
 Via: SIP/2.0/UDP 192.168.2.15:5060;branch=z9hG4bK-3648963b-878999.469  
 Record-Route: <sip:00005@192.168.1.1>  
 From: 00004 <sip:00004@sip.com>;tag=2927095b  
 To: <sip:00005@sip.com>;tag=0a67ff73  
 Call-ID: 7d60a1ae@00004.192.168.1.1  
 CSeq: 1459496919 INVITE  
 Contact: <sip:00005@192.168.2.14>  
 Supported: 100rel, replaces  
 Allow: INVITE, ACK, BYE, CANCEL, OPTIONS, PRACK, MESSAGE, REFER, NOTIFY  
 Content-Type: application/sdp  
 Accept: application/sdp, message/sipfrag  
 Content-Length: 177

v=0  
 o=- 408986 14201 IN IP4 192.168.2.14  
 s=-  
 c=IN IP4 192.168.2.14  
 t=0 0  
 m=audio 5008 RTP/AVP 0 96  
 a=rtpmap:0 PCMU/8000  
 a=rtpmap:96 telephone-event/8000  
 a=fmtp:96 0-11

=====

F49        192.168.1.1:5062(2) -> 192.168.2.15:5060(3)

SIP/2.0 200 OK  
 Via: SIP/2.0/UDP 192.168.2.15:5060;branch=z9hG4bK-3648963b-878999.469  
 Record-Route: <sip:00005@192.168.1.1>  
 From: 00004 <sip:00004@sip.com>;tag=2927095b  
 To: <sip:00005@sip.com>;tag=0a67ff73  
 Call-ID: 7d60a1ae@00004.192.168.1.1  
 CSeq: 1459496919 INVITE  
 Contact: <sip:00005@192.168.2.14>  
 supported: 100rel  
 supported: replaces  
 Allow: INVITE, ACK, BYE, CANCEL, OPTIONS, PRACK, MESSAGE, REFER, NOTIFY  
 Content-Type: application/sdp  
 Accept: application/sdp, message/sipfrag  
 Content-Length: 177

v=0  
 o=- 408986 14201 IN IP4 192.168.2.14  
 s=-  
 c=IN IP4 192.168.2.14  
 t=0 0  
 m=audio 5008 RTP/AVP 0 96  
 a=rtpmap:0 PCMU/8000  
 a=rtpmap:96 telephone-event/8000  
 a=fmtp:96 0-11

```
=====
F50      192.168.2.15:1131(3) -> 192.168.1.1:5060(2)

ACK sip:00005@192.168.1.1 SIP/2.0
Via: SIP/2.0/UDP 192.168.2.15:5060;branch=z9hG4bK-6df7c3c9-879005.570
Route: <sip:00005@192.168.2.14>
From: 00004 <sip:00004@sip.com>;tag=2927095b
To: <sip:00005@sip.com>;tag=0a67ff73
Call-ID: 7d60a1ae@00004.192.168.1.1
CSeq: 1459496919 ACK
Max-Forwards: 70
Content-Length: 0
=====
```

```
=====
F51      192.168.1.1:5062(2) -> 192.168.2.14:5060(4)

ACK sip:00005@192.168.2.14 SIP/2.0
Via: SIP/2.0/UDP 192.168.1.1:5060;branch=z9hG4bK-724.1084362547.1459496919
Via: SIP/2.0/UDP 192.168.2.15:5060;branch=z9hG4bK-6df7c3c9-879005.570
From: 00004 <sip:00004@sip.com>;tag=2927095b
To: <sip:00005@sip.com>;tag=0a67ff73
Call-ID: 7d60a1ae@00004.192.168.1.1
CSeq: 1459496919 ACK
max-forwards: 69
Content-Length: 0
=====
```

```
=====
F52      192.168.2.10:1091(1) -> 192.168.1.1:5060(2)

BYE sip:00002@192.168.1.1 SIP/2.0
Via: SIP/2.0/UDP 192.168.2.10:5060;branch=z9hG4bK-214bbca5-879008.990
Route: <sip:00004@192.168.2.15>
From: <sip:00002@sip.com>;tag=7aacc858
To: 00002 <sip:00004@sip.com>;tag=610450dd
Call-ID: 2b156b2b@00002.192.168.1.1
CSeq: 1459496920 BYE
Max-Forwards: 70
Content-Length: 0
=====
```

```
=====
F53      192.168.1.1:5062(2) -> 192.168.2.15:5060(3)

BYE sip:00004@192.168.2.10 SIP/2.0
Via: SIP/2.0/UDP 192.168.1.1:5060;branch=z9hG4bK-721.1084362551.1060199225
Via: SIP/2.0/UDP 192.168.2.10:5060;branch=z9hG4bK-214bbca5-879008.990
Route: <sip:00004@192.168.2.15>
From: <sip:00002@sip.com>;tag=7aacc858
To: 00002 <sip:00004@sip.com>;tag=610450dd
Call-ID: 2b156b2b@00002.192.168.1.1
CSeq: 1459496920 BYE
max-forwards: 69
Content-Length: 0
=====
```

```
=====
F54      192.168.2.15:1131(3) -> 192.168.1.1:5060(2)

SIP/2.0 200 OK
Via: SIP/2.0/UDP 192.168.1.1:5060;branch=z9hG4bK-721.1084362551.1060199225
Via: SIP/2.0/UDP 192.168.2.10:5060;branch=z9hG4bK-214bbca5-879008.990
From: <sip:00002@sip.com>;tag=7aacc85
To: 00002 <sip:00005@sip.com>;tag=610450dd
Call-ID: 2b156b2b@00002.192.168.1.1
CSeq: 1459496920 BYE
Content-Length: 0
=====
```

```
=====
F55      192.168.1.1:5062(2) -> 192.168.2.10:5060(1)

SIP/2.0 200 OK
=====
```

FOMA/WLAN デュアル端末に関する技術参考資料 第 1.2 版

Via: SIP/2.0/UDP 192.168.2.10:5060;branch=z9hG4bK-214bbca5-879008.990  
 From: <sip:00002@sip.com>;tag=7aacc858  
 To: 00002 <sip:00004@sip.com>;tag=610450dd  
 Call-ID: 2b156b2b@00002.192.168.1.1  
 CSeq: 1459496920 BYE  
 Content-Length: 0

F56 192.168.2.15:1131(3) -> 192.168.1.1:5060(2)

BYE sip:00005@192.168.1.1 SIP/2.0  
 Via: SIP/2.0/UDP 192.168.2.15:5060;branch=z9hG4bK-36c76a5a-879020.852  
 Route: <sip:00005@192.168.2.14>  
 From: 00004 <sip:00004@sip.com>;tag=2927095b  
 To: <sip:00005@sip.com>;tag=0a67ff73  
 Call-ID: 7d60a1ae@00004.192.168.1.1  
 CSeq: 1459496922 BYE  
 Max-Forwards: 70  
 Content-Length: 0

F57 192.168.1.1:5062(2) -> 192.168.2.14:5060(4)

BYE sip:00005@192.168.2.14 SIP/2.0  
 Via: SIP/2.0/UDP 192.168.1.1:5060;branch=z9hG4bK-724.1084362563.1459496922  
 Via: SIP/2.0/UDP 192.168.2.15:5060;branch=z9hG4bK-36c76a5a-879020.852  
 Route: <sip:00005@192.168.2.14>  
 From: 00004 <sip:00004@sip.com>;tag=2927095b  
 To: <sip:00005@sip.com>;tag=0a67ff73  
 Call-ID: 7d60a1ae@00004.192.168.1.1  
 CSeq: 1459496922 BYE  
 max-forwards: 69  
 Content-Length: 0

F58 192.168.2.14:1057(4) -> 192.168.1.1:5060(2)

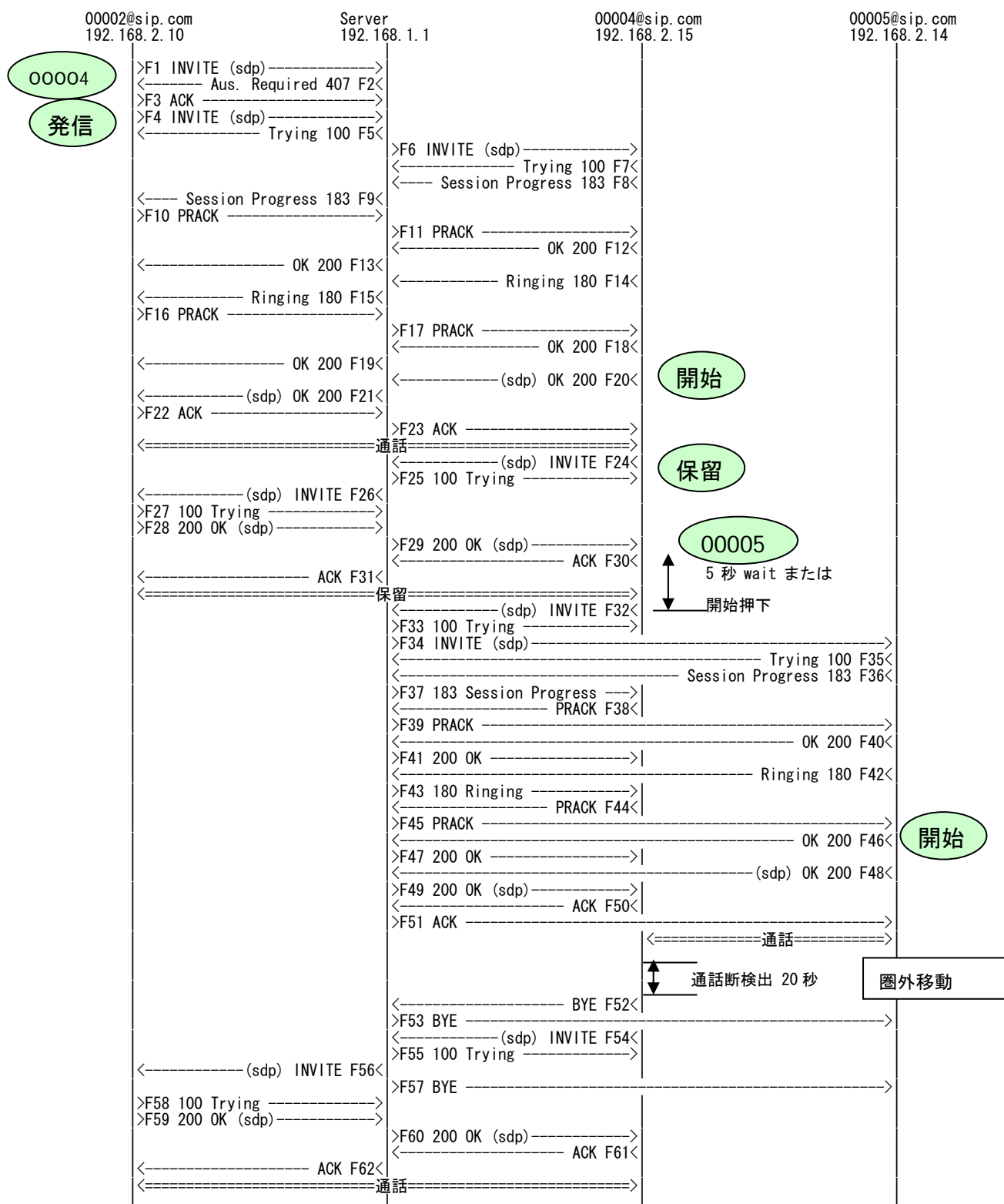
SIP/2.0 200 OK  
 Via: SIP/2.0/UDP 192.168.1.1:5060;branch=z9hG4bK-724.1084362563.1459496922  
 Via: SIP/2.0/UDP 192.168.2.15:5060;branch=z9hG4bK-36c76a5a-879020.852  
 From: 00004 <sip:00004@sip.com>;tag=2927095b  
 To: <sip:00005@sip.com>;tag=0a67ff73  
 Call-ID: 7d60a1ae@00004.192.168.1.1  
 CSeq: 1459496922 BYE  
 Content-Length: 0

F59 192.168.1.1:5062(2) -> 192.168.2.15:5060(3)

SIP/2.0 200 OK  
 Via: SIP/2.0/UDP 192.168.2.15:5060;branch=z9hG4bK-36c76a5a-879020.852  
 From: 00004 <sip:00004@sip.com>;tag=2927095b  
 To: <sip:00005@sip.com>;tag=0a67ff73  
 Call-ID: 7d60a1ae@00004.192.168.1.1  
 CSeq: 1459496922 BYE  
 Content-Length: 0



#### 11.5.4. 保留中+通話呼の状態に通話先が通話中に圏外



注：00002 認証あり    00004 認証なし    00005 認証なし

図 11-25 保留中+通話呼の状態に通話先が通話中に圏外

---

F1 192.168.2.10:1091(1) -> 192.168.1.1:5060(2)

INVITE sip:00004@sip.com SIP/2.0  
Via: SIP/2.0/UDP 192.168.2.10:5060;branch=z9hG4bK-77d7e06d-879335.077  
Route: <sip:192.168.1.1:5060>  
From: <sip:00002@sip.com>;tag=26444a74  
To: <sip:00004@sip.com>  
Call-ID: 388cdaa3@00002.192.168.1.1  
CSeq: 1691907659 INVITE  
Contact: <sip:00002@192.168.2.10>  
Proxy-Authorization: Digest username="00002", realm="heliossv2",  
nonce="dbbc7afbda2185ac64b6057c59376ff5", uri="sip:00004@sip.com",  
response="1c4ed429c45ecf20347889db1d8ff83c", algorithm=MD5,  
opaque="3be3a5dd9718a715d3386eab4cf10f3a", qop=auth, nc=00000004  
Max-Forwards: 70  
Supported: 100rel, replaces  
Allow: INVITE, ACK, BYE, CANCEL, OPTIONS, PRACK, MESSAGE, REFER, NOTIFY  
Content-Type: application/sdp  
Accept: application/sdp, message/sipfrag  
Content-Length: 249

v=0  
o=- 28427 2901 IN IP4 192.168.2.10  
s=-  
c=IN IP4 192.168.2.10  
t=0 0  
m=audio 5006 RTP/AVP 0 8 4 18 96  
a=rtpmap:0 PCMU/8000  
a=rtpmap:8 PCMA/8000  
a=rtpmap:4 G723/8000  
a=rtpmap:18 G729/8000  
a=rtpmap:96 telephone-event/8000  
a=fmtp:96 0-11

---

F2 192.168.1.1:5062(2) -> 192.168.2.10:5060(1)

SIP/2.0 407 Proxy Authentication Required  
Via: SIP/2.0/UDP 192.168.2.10:5060;branch=z9hG4bK-77d7e06d-879335.077  
From: <sip:00002@sip.com>;tag=26444a74  
To: <sip:00004@sip.com>  
Call-ID: 388cdaa3@00002.192.168.1.1  
CSeq: 1691907659 INVITE  
Proxy-Authenticate: Digest realm="heliossv2", nonce="25f5da30308871eae513215d67972704",  
opaque="c2bf03bf6baffb16875958983b11fcb7", stale=false, algorithm=MD5, qop="auth,auth-int"  
Content-Length: 0

---

F3 192.168.2.10:1091(1) -> 192.168.1.1:5060(2)

ACK sip:00004@sip.com SIP/2.0  
Via: SIP/2.0/UDP 192.168.2.10:5060;branch=z9hG4bK-77d7e06d-879335.077  
Route: <sip:192.168.1.1:5060>  
From: <sip:00002@sip.com>;tag=26444a74  
To: <sip:00004@sip.com>  
Call-ID: 388cdaa3@00002.192.168.1.1  
CSeq: 1691907659 ACK  
Content-Length: 0

---

F4 192.168.2.10:1091(1) -> 192.168.1.1:5060(2)

INVITE sip:00004@sip.com SIP/2.0  
Via: SIP/2.0/UDP 192.168.2.10:5060;branch=z9hG4bK-2d043-879335.544  
Route: <sip:192.168.1.1:5060>  
From: <sip:00002@sip.com>;tag=26444a74  
To: <sip:00004@sip.com>  
Call-ID: 388cdaa3@00002.192.168.1.1  
CSeq: 1691907660 INVITE  
Contact: <sip:00002@192.168.2.10>  
Proxy-Authorization: Digest username="00002", realm="heliossv2",  
nonce="25f5da30308871eae513215d67972704", uri="sip:00004@sip.com",  
response="ddd95af1c9133bf65508890e69a295c3", algorithm=MD5,  
opaque="c2bf03bf6baffb16875958983b11fcb7", qop=auth, nc=00000001  
cnonce="0c2d0298",

Max-Forwards: 70  
 Supported: 100rel, replaces  
 Allow: INVITE, ACK, BYE, CANCEL, OPTIONS, PRACK, MESSAGE, REFER, NOTIFY  
 Content-Type: application/sdp  
 Accept: application/sdp, message/sipfrag  
 Content-Length: 249

v=0  
 o=- 28427 2901 IN IP4 192.168.2.10  
 s=-  
 c=IN IP4 192.168.2.10  
 t=0 0  
 m=audio 5006 RTP/AVP 0 8 4 18 96  
 a=rtpmap:0 PCMU/8000  
 a=rtpmap:8 PCMA/8000  
 a=rtpmap:4 G723/8000  
 a=rtpmap:18 G729/8000  
 a=rtpmap:96 telephone-event/8000  
 a=fmtp:96 0-11

---

F5 192.168.1.1:5062(2) -> 192.168.2.10:5060(1)

SIP/2.0 100 Trying  
 Via: SIP/2.0/UDP 192.168.2.10:5060;branch=z9hG4bK-2d043-879335.544  
 From: <sip:00002@sip.com>;tag=26444a74  
 To: <sip:00004@sip.com>  
 Call-ID: 388cdaa3@00002.192.168.1.1  
 CSeq: 1691907660 INVITE  
 Content-Length: 0

---

F6 192.168.1.1:5062(2) -> 192.168.2.15:5060(3)

INVITE sip:00004@192.168.2.15 SIP/2.0  
 Via: SIP/2.0/UDP 192.168.1.1:5060;branch=z9hG4bK-726.511247.1691907660  
 Via: SIP/2.0/UDP 192.168.2.10:5060;branch=z9hG4bK-2d043-879335.544  
 Record-Route: <sip:00004@192.168.1.1>  
 Route: <sip:192.168.1.1:5060>  
 From: 00002 <sip:00002@sip.com>;tag=26444a74  
 To: <sip:00004@sip.com>  
 Call-ID: 388cdaa3@00002.192.168.1.1  
 CSeq: 1691907660 INVITE  
 Contact: <sip:00002@192.168.2.10>  
 max-forwards: 69  
 supported: 100rel  
 supported: replaces  
 Allow: INVITE, ACK, BYE, CANCEL, OPTIONS, PRACK, MESSAGE, REFER, NOTIFY  
 Content-Type: application/sdp  
 Accept: application/sdp, message/sipfrag  
 Content-Length: 249

v=0  
 o=- 28427 2901 IN IP4 192.168.2.10  
 s=-  
 c=IN IP4 192.168.2.10  
 t=0 0  
 m=audio 5006 RTP/AVP 0 8 4 18 96  
 a=rtpmap:0 PCMU/8000  
 a=rtpmap:8 PCMA/8000  
 a=rtpmap:4 G723/8000  
 a=rtpmap:18 G729/8000  
 a=rtpmap:96 telephone-event/8000  
 a=fmtp:96 0-11

---

F7 192.168.2.15:1132(3) -> 192.168.1.1:5060(2)

SIP/2.0 100 Trying  
 Via: SIP/2.0/UDP 192.168.1.1:5060;branch=z9hG4bK-726.511247.1691907660  
 Via: SIP/2.0/UDP 192.168.2.10:5060;branch=z9hG4bK-2d043-879335.544  
 From: 00002 <sip:00002@sip.com>;tag=26444a74  
 To: <sip:00004@sip.com>  
 Call-ID: 388cdaa3@00002.192.168.1.1  
 CSeq: 1691907660 INVITE  
 Content-Length: 0

F8 192.168.2.15:1132(3) -> 192.168.1.1:5060(2)

SIP/2.0 183 Session Progress  
Via: SIP/2.0/UDP 192.168.1.1:5060;branch=z9hG4bK-726.511247.1691907660  
Via: SIP/2.0/UDP 192.168.2.10:5060;branch=z9hG4bK-2d043-879335.544  
Record-Route: <sip:00004@192.168.1.1>  
From: 00002 <sip:00002@sip.com>;tag=26444a74  
To: <sip:00004@sip.com>;tag=59df66e3  
Call-ID: 388cdaa3@00002.192.168.1.1  
CSeq: 1691907660 INVITE  
Contact: <sip:00004@192.168.2.15>  
Require: 100rel  
RSeq: 971343153  
Content-Length: 0

F9 192.168.1.1:5062(2) -> 192.168.2.10:5060(1)

SIP/2.0 183 Session Progress  
Via: SIP/2.0/UDP 192.168.2.10:5060;branch=z9hG4bK-2d043-879335.544  
Record-Route: <sip:00004@192.168.1.1>  
From: 00002 <sip:00002@sip.com>;tag=26444a74  
To: <sip:00004@sip.com>;tag=59df66e3  
Call-ID: 388cdaa3@00002.192.168.1.1  
CSeq: 1691907660 INVITE  
Contact: <sip:00004@192.168.2.15>  
require: 100rel  
rseq: 971343153  
Content-Length: 0

F10 192.168.2.10:1091(1) -> 192.168.1.1:5060(2)

PRACK sip:00004@192.168.1.1 SIP/2.0  
Via: SIP/2.0/UDP 192.168.2.10:5060;branch=z9hG4bK-1f02f006-879336.931  
Route: <sip:00004@192.168.2.15>  
From: 00002 <sip:00002@sip.com>;tag=26444a74  
To: <sip:00004@sip.com>;tag=59df66e3  
Call-ID: 388cdaa3@00002.192.168.1.1  
CSeq: 1691907661 PRACK  
Proxy-Authorization: Digest username="00002", realm="heliossv2",  
nonce="25f5da30308871eae513215d67972704", uri="sip:00004@192.168.1.1",  
response="49262ae81ea8a9384fafb053e02c6c07", algorithm=MD5, cnonce="14561ac8",  
opaque="c2bf03bf6baffb16875958983b11fcb7", qop=auth, nc=00000002  
Max-Forwards: 70  
RAck: 971343153 1691907660 INVITE  
Content-Length: 0

F11 192.168.1.1:5062(2) -> 192.168.2.15:5060(3)

PRACK sip:00004@192.168.2.15 SIP/2.0  
Via: SIP/2.0/UDP 192.168.1.1:5060;branch=z9hG4bK-726.1084362714.1691907661  
Via: SIP/2.0/UDP 192.168.2.10:5060;branch=z9hG4bK-1f02f006-879336.931  
Route: <sip:00004@192.168.2.15>  
From: 00002 <sip:00002@sip.com>;tag=26444a74  
To: <sip:00004@sip.com>;tag=59df66e3  
Call-ID: 388cdaa3@00002.192.168.1.1  
CSeq: 1691907661 PRACK  
max-forwards: 69  
rack: 971343153 1691907660 INVITE  
Content-Length: 0

F12 192.168.2.15:1132(3) -> 192.168.1.1:5060(2)

SIP/2.0 200 OK  
Via: SIP/2.0/UDP 192.168.1.1:5060;branch=z9hG4bK-726.1084362714.1691907661  
Via: SIP/2.0/UDP 192.168.2.10:5060;branch=z9hG4bK-1f02f006-879336.931  
From: 00002 <sip:00002@sip.com>;tag=26444a74

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To: <sip:00004@sip.com>;tag=59df66e3  
Call-ID: 388cdaa3@00002.192.168.1.1  
CSeq: 1691907661 PRACK  
Content-Length: 0

F13 192.168.1.1:5062(2) -> 192.168.2.10:5060(1)

SIP/2.0 200 OK  
Via: SIP/2.0/UDP 192.168.2.10:5060;branch=z9hG4bK-1f02f006-879336.931  
From: 00002 <sip:00002@sip.com>;tag=26444a74  
To: <sip:00004@sip.com>;tag=59df66e3  
Call-ID: 388cdaa3@00002.192.168.1.1  
CSeq: 1691907661 PRACK  
Content-Length: 0

F14 192.168.2.15:1132(3) -> 192.168.1.1:5060(2)

SIP/2.0 180 Ringing  
Via: SIP/2.0/UDP 192.168.1.1:5060;branch=z9hG4bK-726.511247.1691907660  
Via: SIP/2.0/UDP 192.168.2.10:5060;branch=z9hG4bK-2d043-879335.544  
Record-Route: <sip:00004@192.168.1.1>  
From: 00002 <sip:00002@sip.com>;tag=26444a74  
To: <sip:00004@sip.com>;tag=59df66e3  
Call-ID: 388cdaa3@00002.192.168.1.1  
CSeq: 1691907660 INVITE  
Contact: <sip:00004@192.168.2.15>  
Require: 100rel  
RSeq: 971343154  
Content-Length: 0

F15 192.168.1.1:5062(2) -> 192.168.2.10:5060(1)

SIP/2.0 180 Ringing  
Via: SIP/2.0/UDP 192.168.2.10:5060;branch=z9hG4bK-2d043-879335.544  
Record-Route: <sip:00004@192.168.1.1>  
From: 00002 <sip:00002@sip.com>;tag=26444a74  
To: <sip:00004@sip.com>;tag=59df66e3  
Call-ID: 388cdaa3@00002.192.168.1.1  
CSeq: 1691907660 INVITE  
Contact: <sip:00004@192.168.2.15>  
require: 100rel  
rseq: 971343154  
Content-Length: 0

F16 192.168.2.10:1091(1) -> 192.168.1.1:5060(2)

PRACK sip:00004@192.168.1.1 SIP/2.0  
Via: SIP/2.0/UDP 192.168.2.10:5060;branch=z9hG4bK-36e44bd9-879337.520  
Route: <sip:00004@192.168.2.15>  
From: 00002 <sip:00002@sip.com>;tag=26444a74  
To: <sip:00004@sip.com>;tag=59df66e3  
Call-ID: 388cdaa3@00002.192.168.1.1  
CSeq: 1691907662 PRACK  
Proxy-Authorization: Digest username="00002", realm="heliossv2",  
nonce="25f5da30308871eae513215d67972704", uri="sip:00004@192.168.1.1",  
response="a68d1915557eaa4353ba1bd2adb9f56b", algorithm=MD5, cnonce="0049914f",  
opaque="c2bf03bf6baffb16875958983b11fcb7", qop=auth, nc=00000003  
Max-Forwards: 70  
RAck: 971343154 1691907660 INVITE  
Content-Length: 0

F17 192.168.1.1:5062(2) -> 192.168.2.15:5060(3)

PRACK sip:00004@192.168.2.15 SIP/2.0  
Via: SIP/2.0/UDP 192.168.1.1:5060;branch=z9hG4bK-726.1084362714.1691907662  
Via: SIP/2.0/UDP 192.168.2.10:5060;branch=z9hG4bK-36e44bd9-879337.520

```

Route: <sip:00004@192.168.2.15>
From: 00002 <sip:00002@sip.com>;tag=26444a74
To: <sip:00004@sip.com>;tag=59df66e3
Call-ID: 388cdaa3@00002.192.168.1.1
CSeq: 1691907662 PRACK
max-forwards: 69
rack: 971343154 1691907660 INVITE
Content-Length: 0

```

```
=====
```

F18          192.168.2.15:1132(3) -> 192.168.1.1:5060(2)

```

SIP/2.0 200 OK
Via: SIP/2.0/UDP 192.168.1.1:5060;branch=z9hG4bK-726.1084362714.1691907662
Via: SIP/2.0/UDP 192.168.2.10:5060;branch=z9hG4bK-36e44bd9-879337.520
From: 00002 <sip:00002@sip.com>;tag=26444a74
To: <sip:00004@sip.com>;tag=59df66e3
Call-ID: 388cdaa3@00002.192.168.1.1
CSeq: 1691907662 PRACK
Content-Length: 0

```

```
=====
```

F19          192.168.1.1:5062(2) -> 192.168.2.10:5060(1)

```

SIP/2.0 200 OK
Via: SIP/2.0/UDP 192.168.2.10:5060;branch=z9hG4bK-36e44bd9-879337.520
From: 00002 <sip:00002@sip.com>;tag=26444a74
To: <sip:00004@sip.com>;tag=59df66e3
Call-ID: 388cdaa3@00002.192.168.1.1
CSeq: 1691907662 PRACK
Content-Length: 0

```

```
=====
```

F20          192.168.2.15:1132(3) -> 192.168.1.1:5060(2)

```

SIP/2.0 200 OK
Via: SIP/2.0/UDP 192.168.1.1:5060;branch=z9hG4bK-726.511247.1691907660
Via: SIP/2.0/UDP 192.168.2.10:5060;branch=z9hG4bK-2d043-879335.544
Record-Route: <sip:00004@192.168.1.1>
From: 00002 <sip:00002@sip.com>;tag=26444a74
To: <sip:00004@sip.com>;tag=59df66e3
Call-ID: 388cdaa3@00002.192.168.1.1
CSeq: 1691907660 INVITE
Contact: <sip:00004@192.168.2.15>
Supported: 100rel, replaces
Allow: INVITE, ACK, BYE, CANCEL, OPTIONS, PRACK, MESSAGE, REFER, NOTIFY
Content-Type: application/sdp
Accept: application/sdp, message/sipfrag
Content-Length: 177

```

```

v=0
o=- 183201 14601 IN IP4 192.168.2.15
s=-
c=IN IP4 192.168.2.15
t=0 0
m=audio 5006 RTP/AVP 0 96
a=rtpmap:0 PCMU/8000
a=rtpmap:96 telephone-event/8000
a=fmtp:96 0-11

```

```
=====
```

F21          192.168.1.1:5062(2) -> 192.168.2.10:5060(1)

```

SIP/2.0 200 OK
Via: SIP/2.0/UDP 192.168.2.10:5060;branch=z9hG4bK-2d043-879335.544
Record-Route: <sip:00004@192.168.1.1>
From: 00002 <sip:00002@sip.com>;tag=26444a74
To: <sip:00004@sip.com>;tag=59df66e3
Call-ID: 388cdaa3@00002.192.168.1.1
CSeq: 1691907660 INVITE
Contact: <sip:00004@192.168.2.15>
supported: 100rel
supported: replaces
Allow: INVITE, ACK, BYE, CANCEL, OPTIONS, PRACK, MESSAGE, REFER, NOTIFY

```

Content-Type: application/sdp  
 Accept: application/sdp, message/sipfrag  
 Content-Length: 177

v=0  
 o=- 183201 14601 IN IP4 192.168.2.15  
 s=-  
 c=IN IP4 192.168.2.15  
 t=0 0  
 m=audio 5006 RTP/AVP 0 96  
 a=rtpmap:0 PCMU/8000  
 a=rtpmap:96 telephone-event/8000  
 a=fmtp:96 0-11

F22 192.168.2.10:1091(1) -> 192.168.1.1:5060(2)

ACK sip:00004@192.168.1.1 SIP/2.0  
 Via: SIP/2.0/UDP 192.168.2.10:5060;branch=z9hG4bK-cea6a6c-879339.366  
 Route: <sip:00004@192.168.2.15>  
 From: 00002 <sip:00002@sip.com>;tag=26444a74  
 To: <sip:00004@sip.com>;tag=59df66e3  
 Call-ID: 388cdaa3@00002.192.168.1.1  
 CSeq: 1691907660 ACK  
 Proxy-Authentication: Digest username="00002", realm="heliossv2",  
 nonce="25f5da30308871eae513215d67972704", uri="sip:00004@sip.com",  
 response="ddd95af1c9133bf65508890e69a295c3", algorithm=MD5, cnonce="0c2d0298",  
 opaque="c2bf03bf6baffb16875958983b11fcb7", qop=auth, nc=00000001  
 Max-Forwards: 70  
 Content-Length: 0

F23 192.168.1.1:5062(2) -> 192.168.2.15:5060(3)

ACK sip:00004@192.168.2.15 SIP/2.0  
 Via: SIP/2.0/UDP 192.168.1.1:5060;branch=z9hG4bK-726.1084362716.1691907660  
 Via: SIP/2.0/UDP 192.168.2.10:5060;branch=z9hG4bK-cea6a6c-879339.366  
 From: 00002 <sip:00002@sip.com>;tag=26444a74  
 To: <sip:00004@sip.com>;tag=59df66e3  
 Call-ID: 388cdaa3@00002.192.168.1.1  
 CSeq: 1691907660 ACK  
 max-forwards: 69  
 Content-Length: 0

F24 192.168.2.15:1132(3) -> 192.168.1.1:5060(2)

INVITE sip:00004@192.168.1.1 SIP/2.0  
 Via: SIP/2.0/UDP 192.168.2.15:5060;branch=z9hG4bK-67816cb3-879176.400  
 Route: <sip:00002@192.168.2.10>  
 From: <sip:00004@sip.com>;tag=59df66e3  
 To: 00002 <sip:00002@sip.com>;tag=26444a74  
 Call-ID: 388cdaa3@00002.192.168.1.1  
 CSeq: 2134428637 INVITE  
 Contact: <sip:00004@192.168.2.15>  
 Max-Forwards: 70  
 Supported: 100rel, replaces  
 Allow: INVITE, ACK, BYE, CANCEL, OPTIONS, PRACK, MESSAGE, REFER, NOTIFY  
 Content-Type: application/sdp  
 Content-Length: 189

v=0  
 o=- 388212 14602 IN IP4 192.168.2.15  
 s=-  
 c=IN IP4 192.168.2.15  
 t=0 0  
 m=audio 5006 RTP/AVP 0 96  
 a=rtpmap:0 PCMU/8000  
 a=rtpmap:96 telephone-event/8000  
 a=fmtp:96 0-11  
 a=inactive

F25 192.168.1.1:5062(2) -> 192.168.2.15:5060(3)

SIP/2.0 100 Trying  
 Via: SIP/2.0/UDP 192.168.2.15:5060;branch=z9hG4bK-67816cb3-879176.400  
 From: <sip:00004@sip.com>;tag=59df66e3  
 To: 00002 <sip:00002@sip.com>;tag=26444a74  
 Call-ID: 388cdaa3@00002.192.168.1.1  
 CSeq: 2134428637 INVITE  
 Content-Length: 0

=====

F26          192.168.1.1:5062(2) -> 192.168.2.10:5060(1)

INVITE sip:00002@192.168.2.10 SIP/2.0  
 Via: SIP/2.0/UDP 192.168.1.1:5060;branch=z9hG4bK-725.511247.2134428637  
 Via: SIP/2.0/UDP 192.168.2.15:5060;branch=z9hG4bK-67816cb3-879176.400  
 Record-Route: <sip:00004@192.168.1.1>  
 Route: <sip:00002@192.168.2.10>  
 From: <sip:00004@sip.com>;tag=59df66e3  
 To: 00002 <sip:00002@sip.com>;tag=26444a74  
 Call-ID: 388cdaa3@00002.192.168.1.1  
 CSeq: 2134428637 INVITE  
 Contact: <sip:00004@192.168.2.15>  
 max-forwards: 69  
 supported: 100rel  
 supported: replaces  
 Allow: INVITE, ACK, BYE, CANCEL, OPTIONS, PRACK, MESSAGE, REFER, NOTIFY  
 Content-Type: application/sdp  
 Content-Length: 189

v=0  
 o=- 388212 14602 IN IP4 192.168.2.15  
 s=-  
 c=IN IP4 192.168.2.15  
 t=0 0  
 m=audio 5006 RTP/AVP 0 96  
 a=rtpmap:0 PCMU/8000  
 a=rtpmap:96 telephone-event/8000  
 a=fmtp:96 0-11  
 a=inactive

=====

F27          192.168.2.10:1091(1) -> 192.168.1.1:5060(2)

SIP/2.0 100 Trying  
 Via: SIP/2.0/UDP 192.168.1.1:5060;branch=z9hG4bK-725.511247.2134428637  
 Via: SIP/2.0/UDP 192.168.2.15:5060;branch=z9hG4bK-67816cb3-879176.400  
 From: <sip:00004@sip.com>;tag=59df66e3  
 To: 00002 <sip:00002@sip.com>;tag=26444a74  
 Call-ID: 388cdaa3@00002.192.168.1.1  
 CSeq: 2134428637 INVITE  
 Content-Length: 0

=====

F28          192.168.2.10:1091(1) -> 192.168.1.1:5060(2)

SIP/2.0 200 OK  
 Via: SIP/2.0/UDP 192.168.1.1:5060;branch=z9hG4bK-725.511247.2134428637  
 Via: SIP/2.0/UDP 192.168.2.15:5060;branch=z9hG4bK-67816cb3-879176.400  
 Record-Route: <sip:00004@192.168.1.1>  
 From: <sip:00004@sip.com>;tag=59df66e3  
 To: 00002 <sip:00002@sip.com>;tag=26444a74  
 Call-ID: 388cdaa3@00002.192.168.1.1  
 CSeq: 2134428637 INVITE  
 Contact: <sip:00002@192.168.2.10>  
 Supported: 100rel, replaces  
 Allow: INVITE, ACK, BYE, CANCEL, OPTIONS, PRACK, MESSAGE, REFER, NOTIFY  
 Content-Type: application/sdp  
 Accept: application/sdp, message/sipfrag  
 Content-Length: 188

v=0  
 o=- 731943 2902 IN IP4 192.168.2.10  
 s=-  
 c=IN IP4 192.168.2.10  
 t=0 0  
 m=audio 5006 RTP/AVP 0 96  
 a=rtpmap:0 PCMU/8000



a=rtpmap:96 telephone-event/8000  
a=fmtp:96 0-11  
a=inactive

F29 192.168.1.1:5062(2) -> 192.168.2.15:5060(3)

SIP/2.0 200 OK  
Via: SIP/2.0/UDP 192.168.2.15:5060;branch=z9hG4bK-67816cb3-879176.400  
Record-Route: <sip:00004@192.168.1.1>  
From: <sip:00004@sip.com>;tag=59df66e3  
To: 00002 <sip:00002@sip.com>;tag=26444a74  
Call-ID: 388cdaa3@00002.192.168.1.1  
CSeq: 2134428637 INVITE  
Contact: <sip:00002@192.168.2.10>  
supported: 100rel  
supported: replaces  
Allow: INVITE, ACK, BYE, CANCEL, OPTIONS, PRACK, MESSAGE, REFER, NOTIFY  
Content-Type: application/sdp  
Accept: application/sdp, message/sipfrag  
Content-Length: 188  
  
v=0  
o=- 731943 2902 IN IP4 192.168.2.10  
s=-  
c=IN IP4 192.168.2.10  
t=0 0  
m=audio 5006 RTP/AVP 0 96  
a=rtpmap:0 PCMU/8000  
a=rtpmap:96 telephone-event/8000  
a=fmtp:96 0-11  
a=inactive

F30 192.168.2.15:1132(3) -> 192.168.1.1:5060(2)

ACK sip:00004@192.168.1.1 SIP/2.0  
Via: SIP/2.0/UDP 192.168.2.15:5060;branch=z9hG4bK-429fa481-879176.935  
Route: <sip:00002@192.168.2.10>  
From: <sip:00004@sip.com>;tag=59df66e3  
To: 00002 <sip:00002@sip.com>;tag=26444a74  
Call-ID: 388cdaa3@00002.192.168.1.1  
CSeq: 2134428637 ACK  
Max-Forwards: 70  
Content-Length: 0

F31 192.168.1.1:5062(2) -> 192.168.2.10:5060(1)

ACK sip:00002@192.168.2.10 SIP/2.0  
Via: SIP/2.0/UDP 192.168.1.1:5060;branch=z9hG4bK-725.1084362719.2134428637  
Via: SIP/2.0/UDP 192.168.2.15:5060;branch=z9hG4bK-429fa481-879176.935  
From: <sip:00004@sip.com>;tag=59df66e3  
To: 00002 <sip:00002@sip.com>;tag=26444a74  
Call-ID: 388cdaa3@00002.192.168.1.1  
CSeq: 2134428637 ACK  
max-forwards: 69  
Content-Length: 0

F32 192.168.2.15:1132(3) -> 192.168.1.1:5060(2)

INVITE sip:00005@sip.com SIP/2.0  
Via: SIP/2.0/UDP 192.168.2.15:5060;branch=z9hG4bK-2dd55ac5-879186.362  
Route: <sip:192.168.1.1:5060>  
From: <sip:00004@sip.com>;tag=7f26cffa  
To: <sip:00005@sip.com>  
Call-ID: 1236094d@00004.192.168.1.1  
CSeq: 1213513514 INVITE  
Contact: <sip:00004@192.168.2.15>  
Max-Forwards: 70  
Supported: 100rel, replaces  
Allow: INVITE, ACK, BYE, CANCEL, OPTIONS, PRACK, MESSAGE, REFER, NOTIFY  
Content-Type: application/sdp  
Accept: application/sdp, message/sipfrag

Content-Length: 250

```

v=0
o=- 353265 3801 IN IP4 192.168.2.15
s=-
c=IN IP4 192.168.2.15
t=0 0
m=audio 5008 RTP/AVP 0 8 4 18 96
a=rtpmap:0 PCMU/8000
a=rtpmap:8 PCMA/8000
a=rtpmap:4 G723/8000
a=rtpmap:18 G729/8000
a=rtpmap:96 telephone-event/8000
a=fmtp:96 0-11

```

```
=====
```

F33 192.168.1.1:5062(2) -> 192.168.2.15:5060(3)

```

SIP/2.0 100 Trying
Via: SIP/2.0/UDP 192.168.2.15:5060;branch=z9hG4bK-2dd55ac5-879186.362
From: <sip:00004@sip.com>;tag=7f26cffa
To: <sip:00005@sip.com>
Call-ID: 1236094d@00004.192.168.1.1
CSeq: 1213513514 INVITE
Content-Length: 0

```

```
=====
```

F34 192.168.1.1:5062(2) -> 192.168.2.14:5060(4)

```

INVITE sip:00005@192.168.2.14 SIP/2.0
Via: SIP/2.0/UDP 192.168.1.1:5060;branch=z9hG4bK-728.621135.1213513514
Via: SIP/2.0/UDP 192.168.2.15:5060;branch=z9hG4bK-2dd55ac5-879186.362
Record-Route: <sip:00005@192.168.1.1>
Route: <sip:192.168.1.1:5060>
From: 00004 <sip:00004@sip.com>;tag=7f26cffa
To: <sip:00005@sip.com>
Call-ID: 1236094d@00004.192.168.1.1
CSeq: 1213513514 INVITE
Contact: <sip:00004@192.168.2.15>
max-forwards: 69
supported: 100rel
supported: replaces
Allow: INVITE, ACK, BYE, CANCEL, OPTIONS, PRACK, MESSAGE, REFER, NOTIFY
Content-Type: application/sdp
Accept: application/sdp, message/sipfrag
Content-Length: 250

```

```

v=0
o=- 353265 3801 IN IP4 192.168.2.15
s=-
c=IN IP4 192.168.2.15
t=0 0
m=audio 5008 RTP/AVP 0 8 4 18 96
a=rtpmap:0 PCMU/8000
a=rtpmap:8 PCMA/8000
a=rtpmap:4 G723/8000
a=rtpmap:18 G729/8000
a=rtpmap:96 telephone-event/8000
a=fmtp:96 0-11

```

```
=====
```

F35 192.168.2.14:1057(4) -> 192.168.1.1:5060(2)

```

SIP/2.0 100 Trying
Via: SIP/2.0/UDP 192.168.1.1:5060;branch=z9hG4bK-728.621135.1213513514
Via: SIP/2.0/UDP 192.168.2.15:5060;branch=z9hG4bK-2dd55ac5-879186.362
From: 00004 <sip:00004@sip.com>;tag=7f26cffa
To: <sip:00005@sip.com>
Call-ID: 1236094d@00004.192.168.1.1
CSeq: 1213513514 INVITE
Content-Length: 0

```

```
=====
```

F36 192.168.2.14:1057(4) -> 192.168.1.1:5060(2)

# FOMA/WLAN デュアル端末に関する技術参考資料 第 1.2 版

SIP/2.0 183 Session Progress  
 Via: SIP/2.0/UDP 192.168.1.1:5060;branch=z9hG4bK-728.621135.1213513514  
 Via: SIP/2.0/UDP 192.168.2.15:5060;branch=z9hG4bK-2dd55ac5-879186.362  
 Record-Route: <sip:00005@192.168.1.1>  
 From: 00004 <sip:00004@sip.com>;tag=7f26cffa  
 To: <sip:00005@sip.com>;tag=736b118c  
 Call-ID: 1236094d@00004.192.168.1.1  
 CSeq: 1213513514 INVITE  
 Contact: <sip:00005@192.168.2.14>  
 Require: 100rel  
 RSeq: 269072547  
 Content-Length: 0

F37 192.168.1.1:5062(2) -> 192.168.2.15:5060(3)

SIP/2.0 183 Session Progress  
 Via: SIP/2.0/UDP 192.168.2.15:5060;branch=z9hG4bK-2dd55ac5-879186.362  
 Record-Route: <sip:00005@192.168.1.1>  
 From: 00004 <sip:00004@sip.com>;tag=7f26cffa  
 To: <sip:00005@sip.com>;tag=736b118c  
 Call-ID: 1236094d@00004.192.168.1.1  
 CSeq: 1213513514 INVITE  
 Contact: <sip:00005@192.168.2.14>  
 require: 100rel  
 rseq: 269072547  
 Content-Length: 0

F38 192.168.2.15:1132(3) -> 192.168.1.1:5060(2)

PRACK sip:00005@192.168.1.1 SIP/2.0  
 Via: SIP/2.0/UDP 192.168.2.15:5060;branch=z9hG4bK-282fa9fd-879187.756  
 Route: <sip:00005@192.168.2.14>  
 From: 00004 <sip:00004@sip.com>;tag=7f26cffa  
 To: <sip:00005@sip.com>;tag=736b118c  
 Call-ID: 1236094d@00004.192.168.1.1  
 CSeq: 1213513515 PRACK  
 Max-Forwards: 70  
 RAck: 269072547 1213513514 INVITE  
 Content-Length: 0

F39 192.168.1.1:5062(2) -> 192.168.2.14:5060(4)

PRACK sip:00005@192.168.2.14 SIP/2.0  
 Via: SIP/2.0/UDP 192.168.1.1:5060;branch=z9hG4bK-728.1084362730.1213513515  
 Via: SIP/2.0/UDP 192.168.2.15:5060;branch=z9hG4bK-282fa9fd-879187.756  
 Route: <sip:00005@192.168.2.14>  
 From: 00004 <sip:00004@sip.com>;tag=7f26cffa  
 To: <sip:00005@sip.com>;tag=736b118c  
 Call-ID: 1236094d@00004.192.168.1.1  
 CSeq: 1213513515 PRACK  
 max-forwards: 69  
 rack: 269072547 1213513514 INVITE  
 Content-Length: 0

F40 192.168.2.14:1057(4) -> 192.168.1.1:5060(2)

SIP/2.0 200 OK  
 Via: SIP/2.0/UDP 192.168.1.1:5060;branch=z9hG4bK-728.1084362730.1213513515  
 Via: SIP/2.0/UDP 192.168.2.15:5060;branch=z9hG4bK-282fa9fd-879187.756  
 From: 00004 <sip:00004@sip.com>;tag=7f26cffa  
 To: <sip:00005@sip.com>;tag=736b118c  
 Call-ID: 1236094d@00004.192.168.1.1  
 CSeq: 1213513515 PRACK  
 Content-Length: 0

F41 192.168.1.1:5062(2) -> 192.168.2.15:5060(3)

SIP/2.0 200 OK  
Via: SIP/2.0/UDP 192.168.2.15:5060;branch=z9hG4bK-282fa9fd-879187.756  
From: 00004 <sip:00004@sip.com>;tag=7f26cffa  
To: <sip:00005@sip.com>;tag=736b118c  
Call-ID: 1236094d@00004.192.168.1.1  
CSeq: 1213513515 PRACK  
Content-Length: 0

=====

F42            192.168.2.14:1057(4) -> 192.168.1.1:5060(2)

SIP/2.0 180 Ringing  
Via: SIP/2.0/UDP 192.168.1.1:5060;branch=z9hG4bK-728.621135.1213513514  
Via: SIP/2.0/UDP 192.168.2.15:5060;branch=z9hG4bK-2dd55ac5-879186.362  
Record-Route: <sip:00005@192.168.1.1>  
From: 00004 <sip:00004@sip.com>;tag=7f26cffa  
To: <sip:00005@sip.com>;tag=736b118c  
Call-ID: 1236094d@00004.192.168.1.1  
CSeq: 1213513514 INVITE  
Contact: <sip:00005@192.168.2.14>  
Require: 100rel  
RSeq: 269072548  
Content-Length: 0

=====

F43            192.168.1.1:5062(2) -> 192.168.2.15:5060(3)

SIP/2.0 180 Ringing  
Via: SIP/2.0/UDP 192.168.2.15:5060;branch=z9hG4bK-2dd55ac5-879186.362  
Record-Route: <sip:00005@192.168.1.1>  
From: 00004 <sip:00004@sip.com>;tag=7f26cffa  
To: <sip:00005@sip.com>;tag=736b118c  
Call-ID: 1236094d@00004.192.168.1.1  
CSeq: 1213513514 INVITE  
Contact: <sip:00005@192.168.2.14>  
require: 100rel  
rseq: 269072548  
Content-Length: 0

=====

F44            192.168.2.15:1132(3) -> 192.168.1.1:5060(2)

PRACK sip:00005@192.168.1.1 SIP/2.0  
Via: SIP/2.0/UDP 192.168.2.15:5060;branch=z9hG4bK-5ea9375a-879188.338  
Route: <sip:00005@192.168.2.14>  
From: 00004 <sip:00004@sip.com>;tag=7f26cffa  
To: <sip:00005@sip.com>;tag=736b118c  
Call-ID: 1236094d@00004.192.168.1.1  
CSeq: 1213513516 PRACK  
Max-Forwards: 70  
RAck: 269072548 1213513514 INVITE  
Content-Length: 0

=====

F45            192.168.1.1:5062(2) -> 192.168.2.14:5060(4)

PRACK sip:00005@192.168.2.14 SIP/2.0  
Via: SIP/2.0/UDP 192.168.1.1:5060;branch=z9hG4bK-728.1084362730.1213513516  
Via: SIP/2.0/UDP 192.168.2.15:5060;branch=z9hG4bK-5ea9375a-879188.338  
Route: <sip:00005@192.168.2.14>  
From: 00004 <sip:00004@sip.com>;tag=7f26cffa  
To: <sip:00005@sip.com>;tag=736b118c  
Call-ID: 1236094d@00004.192.168.1.1  
CSeq: 1213513516 PRACK  
max-forwards: 69  
rack: 269072548 1213513514 INVITE  
Content-Length: 0

=====

F46            192.168.2.14:1057(4) -> 192.168.1.1:5060(2)

```
SIP/2.0 200 OK
Via: SIP/2.0/UDP 192.168.1.1:5060;branch=z9hG4bK-728.1084362730.1213513516
Via: SIP/2.0/UDP 192.168.2.15:5060;branch=z9hG4bK-5ea9375a-879188.338
From: 00004 <sip:00004@sip.com>;tag=7f26cffa
To: <sip:00005@sip.com>;tag=736b118c
Call-ID: 1236094d@00004.192.168.1.1
CSeq: 1213513516 PRACK
Content-Length: 0
```

```
=====
F47      192.168.1.1:5062(2) -> 192.168.2.15:5060(3)
```

```
SIP/2.0 200 OK
Via: SIP/2.0/UDP 192.168.2.15:5060;branch=z9hG4bK-5ea9375a-879188.338
From: 00004 <sip:00004@sip.com>;tag=7f26cffa
To: <sip:00005@sip.com>;tag=736b118c
Call-ID: 1236094d@00004.192.168.1.1
CSeq: 1213513516 PRACK
Content-Length: 0
```

```
=====
F48      192.168.2.14:1057(4) -> 192.168.1.1:5060(2)
```

```
SIP/2.0 200 OK
Via: SIP/2.0/UDP 192.168.1.1:5060;branch=z9hG4bK-728.621135.1213513514
Via: SIP/2.0/UDP 192.168.2.15:5060;branch=z9hG4bK-2dd55ac5-879186.362
Record-Route: <sip:00005@192.168.1.1>
From: 00004 <sip:00004@sip.com>;tag=7f26cffa
To: <sip:00005@sip.com>;tag=736b118c
Call-ID: 1236094d@00004.192.168.1.1
CSeq: 1213513514 INVITE
Contact: <sip:00005@192.168.2.14>
Supported: 100rel, replaces
Allow: INVITE, ACK, BYE, CANCEL, OPTIONS, PRACK, MESSAGE, REFER, NOTIFY
Content-Type: application/sdp
Accept: application/sdp, message/sipfrag
Content-Length: 177
```

```
v=0
o=- 909720 14301 IN IP4 192.168.2.14
s=-
c=IN IP4 192.168.2.14
t=0 0
m=audio 5006 RTP/AVP 0 96
a=rtpmap:0 PCMU/8000
a=rtpmap:96 telephone-event/8000
a=fmtp:96 0-11
```

```
=====
F49      192.168.1.1:5062(2) -> 192.168.2.15:5060(3)
```

```
SIP/2.0 200 OK
Via: SIP/2.0/UDP 192.168.2.15:5060;branch=z9hG4bK-2dd55ac5-879186.362
Record-Route: <sip:00005@192.168.1.1>
From: 00004 <sip:00004@sip.com>;tag=7f26cffa
To: <sip:00005@sip.com>;tag=736b118c
Call-ID: 1236094d@00004.192.168.1.1
CSeq: 1213513514 INVITE
Contact: <sip:00005@192.168.2.14>
supported: 100rel
supported: replaces
Allow: INVITE, ACK, BYE, CANCEL, OPTIONS, PRACK, MESSAGE, REFER, NOTIFY
Content-Type: application/sdp
Accept: application/sdp, message/sipfrag
Content-Length: 177
```

```
v=0
o=- 909720 14301 IN IP4 192.168.2.14
s=-
c=IN IP4 192.168.2.14
t=0 0
m=audio 5006 RTP/AVP 0 96
a=rtpmap:0 PCMU/8000
a=rtpmap:96 telephone-event/8000
a=fmtp:96 0-11
```

=====

F50            192.168.2.15:1132(3) -> 192.168.1.1:5060(2)

ACK sip:00005@192.168.1.1 SIP/2.0  
Via: SIP/2.0/UDP 192.168.2.15:5060;branch=z9hG4bK-64e38426-879191.108  
Route: <sip:00005@192.168.2.14>  
From: 00004 <sip:00004@sip.com>;tag=7f26cffa  
To: <sip:00005@sip.com>;tag=736b118c  
Call-ID: 1236094d@00004.192.168.1.1  
CSeq: 1213513514 ACK  
Max-Forwards: 70  
Content-Length: 0

=====

F51            192.168.1.1:5062(2) -> 192.168.2.14:5060(4)

ACK sip:00005@192.168.2.14 SIP/2.0  
Via: SIP/2.0/UDP 192.168.1.1:5060;branch=z9hG4bK-728.1084362733.1213513514  
Via: SIP/2.0/UDP 192.168.2.15:5060;branch=z9hG4bK-64e38426-879191.108  
From: 00004 <sip:00004@sip.com>;tag=7f26cffa  
To: <sip:00005@sip.com>;tag=736b118c  
Call-ID: 1236094d@00004.192.168.1.1  
CSeq: 1213513514 ACK  
max-forwards: 69  
Content-Length: 0

=====

F52            192.168.2.15:1132(3) -> 192.168.1.1:5060(2)

BYE sip:00005@192.168.1.1 SIP/2.0  
Via: SIP/2.0/UDP 192.168.2.15:5060;branch=z9hG4bK-1897b17c-879251.711  
Route: <sip:00005@192.168.2.14>  
From: 00004 <sip:00004@sip.com>;tag=7f26cffa  
To: <sip:00005@sip.com>;tag=736b118c  
Call-ID: 1236094d@00004.192.168.1.1  
CSeq: 1213513517 BYE  
Max-Forwards: 70  
Content-Length: 0

=====

F53            192.168.1.1:5062(2) -> 192.168.2.14:5060(4)

BYE sip:00005@192.168.2.14 SIP/2.0  
Via: SIP/2.0/UDP 192.168.1.1:5060;branch=z9hG4bK-728.1084362793.1213513517  
Via: SIP/2.0/UDP 192.168.2.15:5060;branch=z9hG4bK-1897b17c-879251.711  
Route: <sip:00005@192.168.2.14>  
From: 00004 <sip:00004@sip.com>;tag=7f26cffa  
To: <sip:00005@sip.com>;tag=736b118c  
Call-ID: 1236094d@00004.192.168.1.1  
CSeq: 1213513517 BYE  
max-forwards: 69  
Content-Length: 0

=====

F54            192.168.2.15:1132(3) -> 192.168.1.1:5060(2)

INVITE sip:00004@192.168.1.1 SIP/2.0  
Via: SIP/2.0/UDP 192.168.2.15:5060;branch=z9hG4bK-717bb705-879252.143  
Route: <sip:00002@192.168.2.10>  
From: <sip:00004@sip.com>;tag=59df66e3  
To: 00002 <sip:00002@sip.com>;tag=26444a74  
Call-ID: 388cdaa3@00002.192.168.1.1  
CSeq: 2134428638 INVITE  
Contact: <sip:00004@192.168.2.15>  
Max-Forwards: 70  
Supported: 100rel, replaces  
Allow: INVITE, ACK, BYE, CANCEL, OPTIONS, PRACK, MESSAGE, REFER, NOTIFY  
Content-Type: application/sdp  
Content-Length: 177

v=0

```

o=- 135734 14603 IN IP4 192.168.2.15
s=-
c=IN IP4 192.168.2.15
t=0 0
m=audio 5006 RTP/AVP 0 96
a=rtpmap:0 PCMU/8000
a=rtpmap:96 telephone-event/8000
a=fmtp:96 0-11

```

```
=====
```

F55            192.168.1.1:5062(2) -> 192.168.2.15:5060(3)

```

SIP/2.0 100 Trying
Via: SIP/2.0/UDP 192.168.2.15:5060;branch=z9hG4bK-717bb705-879252.143
From: <sip:00004@sip.com>;tag=59df66e3
To: 00002 <sip:00002@sip.com>;tag=26444a74
Call-ID: 388cdaa3@00002.192.168.1.1
CSeq: 2134428638 INVITE
Content-Length: 0

```

```
=====
```

F56            192.168.1.1:5062(2) -> 192.168.2.10:5060(1)

```

INVITE sip:00002@192.168.2.10 SIP/2.0
Via: SIP/2.0/UDP 192.168.1.1:5060;branch=z9hG4bK-725.511247.2134428638
Via: SIP/2.0/UDP 192.168.2.15:5060;branch=z9hG4bK-717bb705-879252.143
Record-Route: <sip:00004@192.168.1.1>
Route: <sip:00002@192.168.2.10>
From: <sip:00004@sip.com>;tag=59df66e3
To: 00002 <sip:00002@sip.com>;tag=26444a74
Call-ID: 388cdaa3@00002.192.168.1.1
CSeq: 2134428638 INVITE
Contact: <sip:00004@192.168.2.15>
max-forwards: 69
supported: 100rel
supported: replaces
Allow: INVITE, ACK, BYE, CANCEL, OPTIONS, PRACK, MESSAGE, REFER, NOTIFY
Content-Type: application/sdp
Content-Length: 177

```

```

v=0
o=- 135734 14603 IN IP4 192.168.2.15
s=-
c=IN IP4 192.168.2.15
t=0 0
m=audio 5006 RTP/AVP 0 96
a=rtpmap:0 PCMU/8000
a=rtpmap:96 telephone-event/8000
a=fmtp:96 0-11

```

```
=====
```

F57            192.168.1.1:5062(2) -> 192.168.2.14:5060(4)

```

BYE sip:00005@192.168.2.14 SIP/2.0
Via: SIP/2.0/UDP 192.168.1.1:5060;branch=z9hG4bK-728.1084362793.1213513517
Via: SIP/2.0/UDP 192.168.2.15:5060;branch=z9hG4bK-1897b17c-879251.711
Route: <sip:00005@192.168.2.14>
From: 00004 <sip:00004@sip.com>;tag=7f26cffa
To: <sip:00005@sip.com>;tag=736b118c
Call-ID: 1236094d@00004.192.168.1.1
CSeq: 1213513517 BYE
max-forwards: 69
Content-Length: 0

```

```
=====
```

F58            192.168.2.10:1091(1) -> 192.168.1.1:5060(2)

```

SIP/2.0 100 Trying
Via: SIP/2.0/UDP 192.168.1.1:5060;branch=z9hG4bK-725.511247.2134428638
Via: SIP/2.0/UDP 192.168.2.15:5060;branch=z9hG4bK-717bb705-879252.143
From: <sip:00004@sip.com>;tag=59df66e3
To: 00002 <sip:00002@sip.com>;tag=26444a74
Call-ID: 388cdaa3@00002.192.168.1.1
CSeq: 2134428638 INVITE
Content-Length: 0

```

F59 192.168.2.10:1091(1) -> 192.168.1.1:5060(2)

SIP/2.0 200 OK  
Via: SIP/2.0/UDP 192.168.1.1:5060;branch=z9hG4bK-725.511247.2134428638  
Via: SIP/2.0/UDP 192.168.2.15:5060;branch=z9hG4bK-717bb705-879252.143  
Record-Route: <sip:00004@192.168.1.1>  
From: <sip:00004@sip.com>;tag=59df66e3  
To: 00002 <sip:00002@sip.com>;tag=26444a74  
Call-ID: 388cdaa3@00002.192.168.1.1  
CSeq: 2134428638 INVITE  
Contact: <sip:00002@192.168.2.10>  
Supported: 100rel, replaces  
Allow: INVITE, ACK, BYE, CANCEL, OPTIONS, PRACK, MESSAGE, REFER, NOTIFY  
Content-Type: application/sdp  
Accept: application/sdp, message/sipfrag  
Content-Length: 250

v=0  
o=- 129384 2903 IN IP4 192.168.2.10  
s=-  
c=IN IP4 192.168.2.10  
t=0 0  
m=audio 5006 RTP/AVP 0 8 4 18 96  
a=rtpmap:0 PCMU/8000  
a=rtpmap:8 PCMA/8000  
a=rtpmap:4 G723/8000  
a=rtpmap:18 G729/8000  
a=rtpmap:96 telephone-event/8000  
a=fmtp:96 0-11

F60 192.168.1.1:5062(2) -> 192.168.2.15:5060(3)

SIP/2.0 200 OK  
Via: SIP/2.0/UDP 192.168.2.15:5060;branch=z9hG4bK-717bb705-879252.143  
Record-Route: <sip:00004@192.168.1.1>  
From: <sip:00004@sip.com>;tag=59df66e3  
To: 00002 <sip:00002@sip.com>;tag=26444a74  
Call-ID: 388cdaa3@00002.192.168.1.1  
CSeq: 2134428638 INVITE  
Contact: <sip:00002@192.168.2.10>  
supported: 100rel  
supported: replaces  
Allow: INVITE, ACK, BYE, CANCEL, OPTIONS, PRACK, MESSAGE, REFER, NOTIFY  
Content-Type: application/sdp  
Accept: application/sdp, message/sipfrag  
Content-Length: 250

v=0  
o=- 129384 2903 IN IP4 192.168.2.10  
s=-  
c=IN IP4 192.168.2.10  
t=0 0  
m=audio 5006 RTP/AVP 0 8 4 18 96  
a=rtpmap:0 PCMU/8000  
a=rtpmap:8 PCMA/8000  
a=rtpmap:4 G723/8000  
a=rtpmap:18 G729/8000  
a=rtpmap:96 telephone-event/8000  
a=fmtp:96 0-11

F61 192.168.2.15:1132(3) -> 192.168.1.1:5060(2)

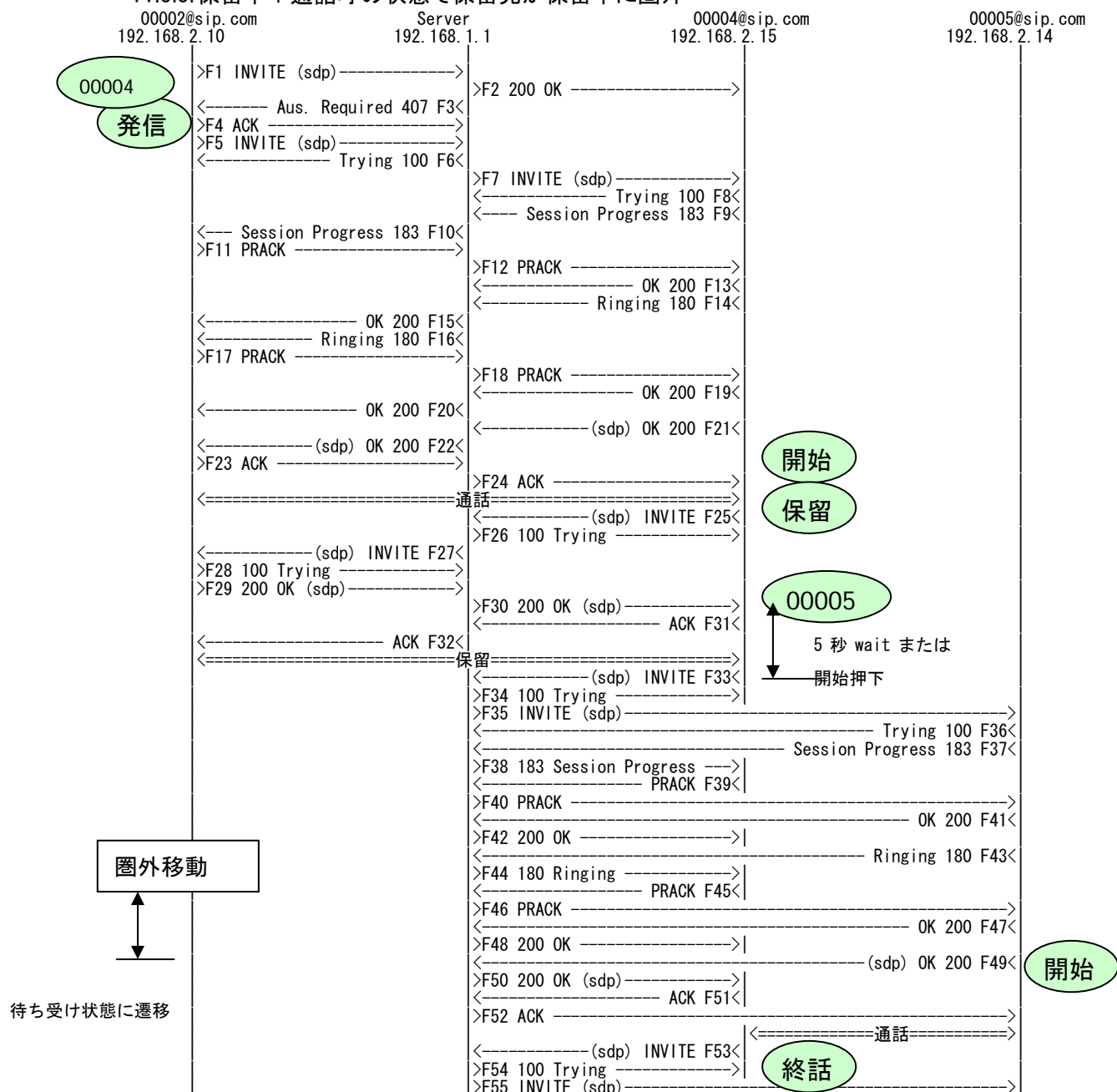
ACK sip:00004@192.168.1.1 SIP/2.0  
Via: SIP/2.0/UDP 192.168.2.15:5060;branch=z9hG4bK-aeb774e-879254.330  
Route: <sip:00002@192.168.2.10>  
From: <sip:00004@sip.com>;tag=59df66e3  
To: 00002 <sip:00002@sip.com>;tag=26444a74  
Call-ID: 388cdaa3@00002.192.168.1.1  
CSeq: 2134428638 ACK  
Max-Forwards: 70  
Content-Length: 0



F62 192.168.1.1:5062(2) -&gt; 192.168.2.10:5060(1)

ACK sip:00002@192.168.2.10 SIP/2.0  
 Via: SIP/2.0/UDP 192.168.1.1:5060;branch=z9hG4bK-725.1084362796.2134428638  
 Via: SIP/2.0/UDP 192.168.2.15:5060;branch=z9hG4bK-aeb774e-879254.330  
 From: <sip:00004@sip.com>;tag=59df66e3  
 To: 00002 <sip:00002@sip.com>;tag=26444a74  
 Call-ID: 388cdaa3@00002.192.168.1.1  
 CSeq: 2134428638 ACK  
 max-forwards: 69  
 Content-Length: 0

## 11.5.5. 保留中+通話呼の状態では保留先が保留中に圏外



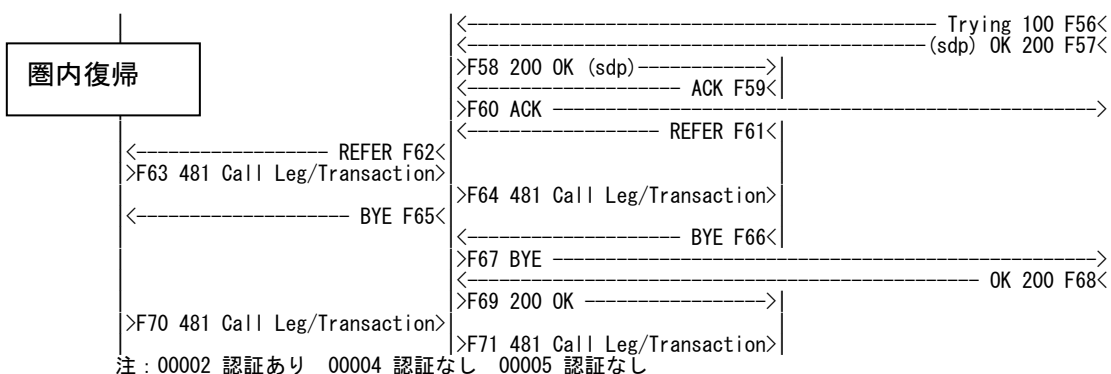


図 11-26 保留中+通話呼の状態では保留先が保留中に圏外

F1 192.168.2.10:1091(1) -> 192.168.1.1:5060(2)

```

INVITE sip:00004@sip.com SIP/2.0
Via: SIP/2.0/UDP 192.168.2.10:5060;branch=z9hG4bK-5d456c8e-879826.379
Route: <sip:192.168.1.1:5060>
From: <sip:00002@sip.com>;tag=63bca8db
To: <sip:00004@sip.com>
Call-ID: Odac6256@00002.192.168.1.1
CSeq: 1519211095 INVITE
Contact: <sip:00002@192.168.2.10>
Proxy-Authorization: Digest username="00002", realm="heliossv2", uri="sip:00004@sip.com", cnonce="49d4df8a",
nonce="c9dae664531996e0cb8ec5610f86847f", response="a9fe986ec1ef72e7abef81488b886704", algorithm=MD5, opaque="0fd219aea186751f560652bcb35e81e3", qop=auth, nc=00000004
Max-Forwards: 70
Supported: 100rel, replaces
Allow: INVITE, ACK, BYE, CANCEL, OPTIONS, PRACK, MESSAGE, REFER, NOTIFY
Content-Type: application/sdp
Accept: application/sdp, message/sipfrag
Content-Length: 250

v=0
o=- 359715 3101 IN IP4 192.168.2.10
s=-
c=IN IP4 192.168.2.10
t=0 0
m=audio 5006 RTP/AVP 0 8 4 18 96
a=rtpmap:0 PCMU/8000
a=rtpmap:8 PCMA/8000
a=rtpmap:4 G723/8000
a=rtpmap:18 G729/8000
a=rtpmap:96 telephone-event/8000
a=fmtp:96 0-11
  
```

F2 192.168.1.1:5062(2) -> 192.168.2.15:5060(3)

```

SIP/2.0 200 OK
Via: SIP/2.0/UDP 192.168.2.15:5060;branch=z9hG4bK-5458a21-879658.797
From: <sip:00004@sip.com>
To: <sip:00004@sip.com>
Call-ID: 6aa0d362@00004.192.168.1.1
CSeq: 0 REGISTER
Contact: <sip:00004@192.168.2.15>;expires=3600
Date: Wed, 12 May 2004 12:00:03 GMT
Content-Length: 0
  
```

F3 192.168.1.1:5062(2) -> 192.168.2.10:5060(1)

```

SIP/2.0 407 Proxy Authentication Required
Via: SIP/2.0/UDP 192.168.2.10:5060;branch=z9hG4bK-5d456c8e-879826.379
From: <sip:00002@sip.com>;tag=63bca8db
To: <sip:00004@sip.com>
Call-ID: Odac6256@00002.192.168.1.1
CSeq: 1519211095 INVITE
  
```

## FOMA/WLAN デュアル端末に関する技術参考資料 第 1.2 版

Proxy-Authenticate: Digest realm="heliossv2", nonce="583f0380497c154a0fbad8f6c256316b",  
opaque="be505be6042f2a3bb6defda6d949ee45", stale=false, algorithm=MD5, qop="auth,auth-int"  
Content-Length: 0

F4 192.168.2.10:1091(1) -> 192.168.1.1:5060(2)

ACK sip:00004@sip.com SIP/2.0  
Via: SIP/2.0/UDP 192.168.2.10:5060;branch=z9hG4bK-5d456c8e-879826.379  
Route: <sip:192.168.1.1:5060>  
From: <sip:00002@sip.com>;tag=63bca8db  
To: <sip:00004@sip.com>  
Call-ID: Odac6256@00002.192.168.1.1  
CSeq: 1519211095 ACK  
Content-Length: 0

F5 192.168.2.10:1091(1) -> 192.168.1.1:5060(2)

INVITE sip:00004@sip.com SIP/2.0  
Via: SIP/2.0/UDP 192.168.2.10:5060;branch=z9hG4bK-5adccaf3-879826.661  
Route: <sip:192.168.1.1:5060>  
From: <sip:00002@sip.com>;tag=63bca8db  
To: <sip:00004@sip.com>  
Call-ID: Odac6256@00002.192.168.1.1  
CSeq: 1519211096 INVITE  
Contact: <sip:00002@192.168.2.10>  
Proxy-Authenticate: Digest username="00002", realm="heliossv2",  
nonce="583f0380497c154a0fbad8f6c256316b", uri="sip:00004@sip.com",  
response="069de56184a8a50245cc1535b4cdef9", algorithm=MD5,  
opaque="be505be6042f2a3bb6defda6d949ee45", qop=auth, nc=00000001,  
cnonce="125f05fc",  
Max-Forwards: 70  
Supported: 100rel, replaces  
Allow: INVITE, ACK, BYE, CANCEL, OPTIONS, PRACK, MESSAGE, REFER, NOTIFY  
Content-Type: application/sdp  
Accept: application/sdp, message/sipfrag  
Content-Length: 250

v=0  
o=- 359715 3101 IN IP4 192.168.2.10  
s=-  
c=IN IP4 192.168.2.10  
t=0 0  
m=audio 5006 RTP/AVP 0 8 4 18 96  
a=rtpmap:0 PCMU/8000  
a=rtpmap:8 PCMA/8000  
a=rtpmap:4 G723/8000  
a=rtpmap:18 G729/8000  
a=rtpmap:96 telephone-event/8000  
a=fmtp:96 0-11

F6 192.168.1.1:5062(2) -> 192.168.2.10:5060(1)

SIP/2.0 100 Trying  
Via: SIP/2.0/UDP 192.168.2.10:5060;branch=z9hG4bK-5adccaf3-879826.661  
From: <sip:00002@sip.com>;tag=63bca8db  
To: <sip:00004@sip.com>  
Call-ID: Odac6256@00002.192.168.1.1  
CSeq: 1519211096 INVITE  
Content-Length: 0

F7 192.168.1.1:5062(2) -> 192.168.2.15:5060(3)

INVITE sip:00004@192.168.2.15 SIP/2.0  
Via: SIP/2.0/UDP 192.168.1.1:5060;branch=z9hG4bK-738.783495.1519211096  
Via: SIP/2.0/UDP 192.168.2.10:5060;branch=z9hG4bK-5adccaf3-879826.661  
Record-Route: <sip:00004@192.168.1.1>  
Route: <sip:192.168.1.1:5060>  
From: 00002 <sip:00002@sip.com>;tag=63bca8db  
To: <sip:00004@sip.com>  
Call-ID: Odac6256@00002.192.168.1.1  
CSeq: 1519211096 INVITE

Contact: <sip:00002@192.168.2.10>  
 max-forwards: 69  
 supported: 100rel  
 supported: replaces  
 Allow: INVITE, ACK, BYE, CANCEL, OPTIONS, PRACK, MESSAGE, REFER, NOTIFY  
 Content-Type: application/sdp  
 Accept: application/sdp, message/sipfrag  
 Content-Length: 250

v=0  
 o=- 359715 3101 IN IP4 192.168.2.10  
 s=-  
 c=IN IP4 192.168.2.10  
 t=0 0  
 m=audio 5006 RTP/AVP 0 8 4 18 96  
 a=rtpmap:0 PCMU/8000  
 a=rtpmap:8 PCMA/8000  
 a=rtpmap:4 G723/8000  
 a=rtpmap:18 G729/8000  
 a=rtpmap:96 telephone-event/8000  
 a=fmtp:96 0-11

=====

F8 192.168.2.15:1133(3) -> 192.168.1.1:5060(2)

SIP/2.0 100 Trying  
 Via: SIP/2.0/UDP 192.168.1.1:5060;branch=z9hG4bK-738.783495.1519211096  
 Via: SIP/2.0/UDP 192.168.2.10:5060;branch=z9hG4bK-5adccaf3-879826.661  
 From: 00002 <sip:00002@sip.com>;tag=63bca8db  
 To: <sip:00004@sip.com>  
 Call-ID: 0dac6256@00002.192.168.1.1  
 CSeq: 1519211096 INVITE  
 Content-Length: 0

=====

F9 192.168.2.15:1133(3) -> 192.168.1.1:5060(2)

SIP/2.0 183 Session Progress  
 Via: SIP/2.0/UDP 192.168.1.1:5060;branch=z9hG4bK-738.783495.1519211096  
 Via: SIP/2.0/UDP 192.168.2.10:5060;branch=z9hG4bK-5adccaf3-879826.661  
 Record-Route: <sip:00004@192.168.1.1>  
 From: 00002 <sip:00002@sip.com>;tag=63bca8db  
 To: <sip:00004@sip.com>;tag=5cca58b7  
 Call-ID: 0dac6256@00002.192.168.1.1  
 CSeq: 1519211096 INVITE  
 Contact: <sip:00004@192.168.2.15>  
 Require: 100rel  
 RSeq: 1076966748  
 Content-Length: 0

=====

F10 192.168.1.1:5062(2) -> 192.168.2.10:5060(1)

SIP/2.0 183 Session Progress  
 Via: SIP/2.0/UDP 192.168.2.10:5060;branch=z9hG4bK-5adccaf3-879826.661  
 Record-Route: <sip:00004@192.168.1.1>  
 From: 00002 <sip:00002@sip.com>;tag=63bca8db  
 To: <sip:00004@sip.com>;tag=5cca58b7  
 Call-ID: 0dac6256@00002.192.168.1.1  
 CSeq: 1519211096 INVITE  
 Contact: <sip:00004@192.168.2.15>  
 require: 100rel  
 rseq: 1076966748  
 Content-Length: 0

=====

F11 192.168.2.10:1091(1) -> 192.168.1.1:5060(2)

PRACK sip:00004@192.168.1.1 SIP/2.0  
 Via: SIP/2.0/UDP 192.168.2.10:5060;branch=z9hG4bK-51cfea06-879827.768  
 Route: <sip:00004@192.168.2.15>  
 From: 00002 <sip:00002@sip.com>;tag=63bca8db  
 To: <sip:00004@sip.com>;tag=5cca58b7  
 Call-ID: 0dac6256@00002.192.168.1.1

## FOMA/WLAN デュアル端末に関する技術参考資料 第 1.2 版

CSeq: 1519211097 PRACK  
Proxy-Authorization: Digest username="00002", realm="heliossv2",  
nonce="583f0380497c154a0fbad8f6c256316b", uri="sip:00004@192.168.1.1",  
response="1c2b602988a66d1bfcf88b6dd95b59c9", algorithm=MD5, cnonce="50348629",  
opaque="be505be6042f2a3bb6defda6d949ee45", qop=auth, nc=00000002  
Max-Forwards: 70  
RAck: 1076966748 1519211096 INVITE  
Content-Length: 0

F12 192.168.1.1:5062(2) -> 192.168.2.15:5060(3)

PRACK sip:00004@192.168.2.15 SIP/2.0  
Via: SIP/2.0/UDP 192.168.1.1:5060;branch=z9hG4bK-738.1084363205.1519211097  
Via: SIP/2.0/UDP 192.168.2.10:5060;branch=z9hG4bK-51cfea06-879827.768  
Route: <sip:00004@192.168.2.15>  
From: 00002 <sip:00002@sip.com>;tag=63bca8db  
To: <sip:00004@sip.com>;tag=5cca58b7  
Call-ID: 0dac6256@00002.192.168.1.1  
CSeq: 1519211097 PRACK  
max-forwards: 69  
rack: 1076966748 1519211096 INVITE  
Content-Length: 0

F13 192.168.2.15:1133(3) -> 192.168.1.1:5060(2)

SIP/2.0 200 OK  
Via: SIP/2.0/UDP 192.168.1.1:5060;branch=z9hG4bK-738.1084363205.1519211097  
Via: SIP/2.0/UDP 192.168.2.10:5060;branch=z9hG4bK-51cfea06-879827.768  
From: 00002 <sip:00002@sip.com>;tag=63bca8db  
To: <sip:00004@sip.com>;tag=5cca58b7  
Call-ID: 0dac6256@00002.192.168.1.1  
CSeq: 1519211097 PRACK  
Content-Length: 0

F14 192.168.2.15:1133(3) -> 192.168.1.1:5060(2)

SIP/2.0 180 Ringing  
Via: SIP/2.0/UDP 192.168.1.1:5060;branch=z9hG4bK-738.783495.1519211096  
Via: SIP/2.0/UDP 192.168.2.10:5060;branch=z9hG4bK-5adccaf3-879826.661  
Record-Route: <sip:00004@192.168.1.1>  
From: 00002 <sip:00002@sip.com>;tag=63bca8db  
To: <sip:00004@sip.com>;tag=5cca58b7  
Call-ID: 0dac6256@00002.192.168.1.1  
CSeq: 1519211096 INVITE  
Contact: <sip:00004@192.168.2.15>  
Require: 100rel  
RSeq: 1076966749  
Content-Length: 0

F15 192.168.1.1:5062(2) -> 192.168.2.10:5060(1)

SIP/2.0 200 OK  
Via: SIP/2.0/UDP 192.168.2.10:5060;branch=z9hG4bK-51cfea06-879827.768  
From: 00002 <sip:00002@sip.com>;tag=63bca8db  
To: <sip:00004@sip.com>;tag=5cca58b7  
Call-ID: 0dac6256@00002.192.168.1.1  
CSeq: 1519211097 PRACK  
Content-Length: 0

F16 192.168.1.1:5062(2) -> 192.168.2.10:5060(1)

SIP/2.0 180 Ringing  
Via: SIP/2.0/UDP 192.168.2.10:5060;branch=z9hG4bK-5adccaf3-879826.661  
Record-Route: <sip:00004@192.168.1.1>  
From: 00002 <sip:00002@sip.com>;tag=63bca8db  
To: <sip:00004@sip.com>;tag=5cca58b7

Call-ID: 0dac6256@00002.192.168.1.1  
 CSeq: 1519211096 INVITE  
 Contact: <sip:00004@192.168.2.15>  
 require: 100rel  
 rseq: 1076966749  
 Content-Length: 0

F17 192.168.2.10:1091(1) -> 192.168.1.1:5060(2)

PRACK sip:00004@192.168.1.1 SIP/2.0  
 Via: SIP/2.0/UDP 192.168.2.10:5060:branch=z9hG4bK-20f354c6-879827.886  
 Route: <sip:00004@192.168.2.15>  
 From: 00002 <sip:00002@sip.com>;tag=63bca8db  
 To: <sip:00004@sip.com>;tag=5cca58b7  
 Call-ID: 0dac6256@00002.192.168.1.1  
 CSeq: 1519211098 PRACK  
 Proxy-Authorization: Digest username="00002", realm="heliossv2",  
 nonce="583f0380497c154a0fbad8f6c256316b", uri="sip:00004@192.168.1.1",  
 response="57e97e956125cd6f5d178ba159d2f022", algorithm=MD5,  
 opaque="be505be6042f2a3bb6defda6d949ee45", qop=auth, nc=00000003  
 Max-Forwards: 70  
 Rack: 1076966749 1519211096 INVITE  
 Content-Length: 0

F18 192.168.1.1:5062(2) -> 192.168.2.15:5060(3)

PRACK sip:00004@192.168.2.15 SIP/2.0  
 Via: SIP/2.0/UDP 192.168.1.1:5060:branch=z9hG4bK-738.1084363205.1519211098  
 Via: SIP/2.0/UDP 192.168.2.10:5060:branch=z9hG4bK-20f354c6-879827.886  
 Route: <sip:00004@192.168.2.15>  
 From: 00002 <sip:00002@sip.com>;tag=63bca8db  
 To: <sip:00004@sip.com>;tag=5cca58b7  
 Call-ID: 0dac6256@00002.192.168.1.1  
 CSeq: 1519211098 PRACK  
 max-forwards: 69  
 rack: 1076966749 1519211096 INVITE  
 Content-Length: 0

F19 192.168.2.15:1133(3) -> 192.168.1.1:5060(2)

SIP/2.0 200 OK  
 Via: SIP/2.0/UDP 192.168.1.1:5060:branch=z9hG4bK-738.1084363205.1519211098  
 Via: SIP/2.0/UDP 192.168.2.10:5060:branch=z9hG4bK-20f354c6-879827.886  
 From: 00002 <sip:00002@sip.com>;tag=63bca8db  
 To: <sip:00004@sip.com>;tag=5cca58b7  
 Call-ID: 0dac6256@00002.192.168.1.1  
 CSeq: 1519211098 PRACK  
 Content-Length: 0

F20 192.168.1.1:5062(2) -> 192.168.2.10:5060(1)

SIP/2.0 200 OK  
 Via: SIP/2.0/UDP 192.168.2.10:5060:branch=z9hG4bK-20f354c6-879827.886  
 From: 00002 <sip:00002@sip.com>;tag=63bca8db  
 To: <sip:00004@sip.com>;tag=5cca58b7  
 Call-ID: 0dac6256@00002.192.168.1.1  
 CSeq: 1519211098 PRACK  
 Content-Length: 0

F21 192.168.2.15:1133(3) -> 192.168.1.1:5060(2)

SIP/2.0 200 OK  
 Via: SIP/2.0/UDP 192.168.1.1:5060:branch=z9hG4bK-738.783495.1519211096  
 Via: SIP/2.0/UDP 192.168.2.10:5060:branch=z9hG4bK-5adccaf3-879826.661  
 Record-Route: <sip:00004@192.168.1.1>  
 From: 00002 <sip:00002@sip.com>;tag=63bca8db

To: <sip:00004@sip.com>;tag=5cca58b7  
 Call-ID: 0dac6256@00002.192.168.1.1  
 CSeq: 1519211096 INVITE  
 Contact: <sip:00004@192.168.2.15>  
 Supported: 100rel, replaces  
 Allow: INVITE, ACK, BYE, CANCEL, OPTIONS, PRACK, MESSAGE, REFER, NOTIFY  
 Content-Type: application/sdp  
 Accept: application/sdp, message/sipfrag  
 Content-Length: 177

v=0  
 o=- 701135 12801 IN IP4 192.168.2.15  
 s=-  
 c=IN IP4 192.168.2.15  
 t=0 0  
 m=audio 5008 RTP/AVP 0 96  
 a=rtpmap:0 PCMU/8000  
 a=rtpmap:96 telephone-event/8000  
 a=fmtp:96 0-11

=====

F22 192.168.1.1:5062(2) -> 192.168.2.10:5060(1)

SIP/2.0 200 OK  
 Via: SIP/2.0/UDP 192.168.2.10:5060;branch=z9hG4bK-5adccaf3-879826.661  
 Record-Route: <sip:00004@192.168.1.1>  
 From: 00002 <sip:00002@sip.com>;tag=63bca8db  
 To: <sip:00004@sip.com>;tag=5cca58b7  
 Call-ID: 0dac6256@00002.192.168.1.1  
 CSeq: 1519211096 INVITE  
 Contact: <sip:00004@192.168.2.15>  
 supported: 100rel  
 supported: replaces  
 Allow: INVITE, ACK, BYE, CANCEL, OPTIONS, PRACK, MESSAGE, REFER, NOTIFY  
 Content-Type: application/sdp  
 Accept: application/sdp, message/sipfrag  
 Content-Length: 177

v=0  
 o=- 701135 12801 IN IP4 192.168.2.15  
 s=-  
 c=IN IP4 192.168.2.15  
 t=0 0  
 m=audio 5008 RTP/AVP 0 96  
 a=rtpmap:0 PCMU/8000  
 a=rtpmap:96 telephone-event/8000  
 a=fmtp:96 0-11

=====

F23 192.168.2.10:1091(1) -> 192.168.1.1:5060(2)

ACK sip:00004@192.168.1.1 SIP/2.0  
 Via: SIP/2.0/UDP 192.168.2.10:5060;branch=z9hG4bK-1197312c-879831.071  
 Route: <sip:00004@192.168.2.15>  
 From: 00002 <sip:00002@sip.com>;tag=63bca8db  
 To: <sip:00004@sip.com>;tag=5cca58b7  
 Call-ID: 0dac6256@00002.192.168.1.1  
 CSeq: 1519211096 ACK  
 Proxy-Authorization: Digest username="00002", realm="heliossv2",  
 nonce="583f0380497c154a0fbad8f6c256316b", uri="sip:00004@sip.com",  
 response="069de56184a8a50245cc1535b4cdedf9", algorithm=MD5,  
 opaque="be505be6042f2a3bb6defda6d949ee45", qop=auth, nc=00000001  
 Max-Forwards: 70  
 Content-Length: 0

=====

F24 192.168.1.1:5062(2) -> 192.168.2.15:5060(3)

ACK sip:00004@192.168.2.15 SIP/2.0  
 Via: SIP/2.0/UDP 192.168.1.1:5060;branch=z9hG4bK-738.1084363208.1519211096  
 Via: SIP/2.0/UDP 192.168.2.10:5060;branch=z9hG4bK-1197312c-879831.071  
 From: 00002 <sip:00002@sip.com>;tag=63bca8db  
 To: <sip:00004@sip.com>;tag=5cca58b7  
 Call-ID: 0dac6256@00002.192.168.1.1  
 CSeq: 1519211096 ACK  
 max-forwards: 69  
 Content-Length: 0

```
=====
F25      192.168.2.15:1133(3) -> 192.168.1.1:5060(2)

INVITE sip:00004@192.168.1.1 SIP/2.0
Via: SIP/2.0/UDP 192.168.2.15:5060;branch=z9hG4bK-5da578d3-879682.709
Route: <sip:00002@192.168.2.10>
From: <sip:00004@sip.com>;tag=5cca58b7
To: 00002 <sip:00002@sip.com>;tag=63bca8db
Call-ID: Odac6256@00002.192.168.1.1
CSeq: 30590294 INVITE
Contact: <sip:00004@192.168.2.15>
Max-Forwards: 70
Supported: 100rel, replaces
Allow: INVITE, ACK, BYE, CANCEL, OPTIONS, PRACK, MESSAGE, REFER, NOTIFY
Content-Type: application/sdp
Content-Length: 189

v=0
o=- 697253 12802 IN IP4 192.168.2.15
s=-
c=IN IP4 192.168.2.15
t=0 0
m=audio 5008 RTP/AVP 0 96
a=rtpmap:0 PCMU/8000
a=rtpmap:96 telephone-event/8000
a=fmtp:96 0-11
a=inactive
=====
```

```
=====
F26      192.168.1.1:5062(2) -> 192.168.2.15:5060(3)

SIP/2.0 100 Trying
Via: SIP/2.0/UDP 192.168.2.15:5060;branch=z9hG4bK-5da578d3-879682.709
From: <sip:00004@sip.com>;tag=5cca58b7
To: 00002 <sip:00002@sip.com>;tag=63bca8db
Call-ID: Odac6256@00002.192.168.1.1
CSeq: 30590294 INVITE
Content-Length: 0
=====
```

```
=====
F27      192.168.1.1:5062(2) -> 192.168.2.10:5060(1)

INVITE sip:00002@192.168.2.10 SIP/2.0
Via: SIP/2.0/UDP 192.168.1.1:5060;branch=z9hG4bK-737.783495.30590294
Via: SIP/2.0/UDP 192.168.2.15:5060;branch=z9hG4bK-5da578d3-879682.709
Record-Route: <sip:00004@192.168.1.1>
Route: <sip:00002@192.168.2.10>
From: <sip:00004@sip.com>;tag=5cca58b7
To: 00002 <sip:00002@sip.com>;tag=63bca8db
Call-ID: Odac6256@00002.192.168.1.1
CSeq: 30590294 INVITE
Contact: <sip:00004@192.168.2.15>
max-forwards: 69
supported: 100rel
supported: replaces
Allow: INVITE, ACK, BYE, CANCEL, OPTIONS, PRACK, MESSAGE, REFER, NOTIFY
Content-Type: application/sdp
Content-Length: 189

v=0
o=- 697253 12802 IN IP4 192.168.2.15
s=-
c=IN IP4 192.168.2.15
t=0 0
m=audio 5008 RTP/AVP 0 96
a=rtpmap:0 PCMU/8000
a=rtpmap:96 telephone-event/8000
a=fmtp:96 0-11
a=inactive
=====
```

```
=====
F28      192.168.2.10:1091(1) -> 192.168.1.1:5060(2)

SIP/2.0 100 Trying
=====
```



## FOMA/WLAN デュアル端末に関する技術参考資料 第 1.2 版

Via: SIP/2.0/UDP 192.168.1.1:5060;branch=z9hG4bK-737.783495.30590294  
Via: SIP/2.0/UDP 192.168.2.15:5060;branch=z9hG4bK-5da578d3-879682.709  
From: <sip:00004@sip.com>;tag=5cca58b7  
To: 00002 <sip:00002@sip.com>;tag=63bca8db  
Call-ID: Odac6256@00002.192.168.1.1  
CSeq: 30590294 INVITE  
Content-Length: 0

---

F29 192.168.2.10:1091(1) -> 192.168.1.1:5060(2)

SIP/2.0 200 OK  
Via: SIP/2.0/UDP 192.168.1.1:5060;branch=z9hG4bK-737.783495.30590294  
Via: SIP/2.0/UDP 192.168.2.15:5060;branch=z9hG4bK-5da578d3-879682.709  
Record-Route: <sip:00004@192.168.1.1>  
From: <sip:00004@sip.com>;tag=5cca58b7  
To: 00002 <sip:00002@sip.com>;tag=63bca8db  
Call-ID: Odac6256@00002.192.168.1.1  
CSeq: 30590294 INVITE  
Contact: <sip:00002@192.168.2.10>  
Supported: 100rel, replaces  
Allow: INVITE, ACK, BYE, CANCEL, OPTIONS, PRACK, MESSAGE, REFER, NOTIFY  
Content-Type: application/sdp  
Accept: application/sdp, message/sipfrag  
Content-Length: 188

v=0  
o=- 757201 3102 IN IP4 192.168.2.10  
s=-  
c=IN IP4 192.168.2.10  
t=0 0  
m=audio 5006 RTP/AVP 0 96  
a=rtpmap:0 PCMU/8000  
a=rtpmap:96 telephone-event/8000  
a=fmtp:96 0-11  
a=inactive

---

F30 192.168.1.1:5062(2) -> 192.168.2.15:5060(3)

SIP/2.0 200 OK  
Via: SIP/2.0/UDP 192.168.2.15:5060;branch=z9hG4bK-5da578d3-879682.709  
Record-Route: <sip:00004@192.168.1.1>  
From: <sip:00004@sip.com>;tag=5cca58b7  
To: 00002 <sip:00002@sip.com>;tag=63bca8db  
Call-ID: Odac6256@00002.192.168.1.1  
CSeq: 30590294 INVITE  
Contact: <sip:00002@192.168.2.10>  
supported: 100rel  
supported: replaces  
Allow: INVITE, ACK, BYE, CANCEL, OPTIONS, PRACK, MESSAGE, REFER, NOTIFY  
Content-Type: application/sdp  
Accept: application/sdp, message/sipfrag  
Content-Length: 188

v=0  
o=- 757201 3102 IN IP4 192.168.2.10  
s=-  
c=IN IP4 192.168.2.10  
t=0 0  
m=audio 5006 RTP/AVP 0 96  
a=rtpmap:0 PCMU/8000  
a=rtpmap:96 telephone-event/8000  
a=fmtp:96 0-11  
a=inactive

---

F31 192.168.2.15:1133(3) -> 192.168.1.1:5060(2)

ACK sip:00004@192.168.1.1 SIP/2.0  
Via: SIP/2.0/UDP 192.168.2.15:5060;branch=z9hG4bK-4ee550b3-879682.960  
Route: <sip:00002@192.168.2.10>  
From: <sip:00004@sip.com>;tag=5cca58b7  
To: 00002 <sip:00002@sip.com>;tag=63bca8db  
Call-ID: Odac6256@00002.192.168.1.1  
CSeq: 30590294 ACK  
Max-Forwards: 70

Content-Length: 0

---

F32 192.168.1.1:5062(2) -> 192.168.2.10:5060(1)

ACK sip:00002@192.168.2.10 SIP/2.0  
Via: SIP/2.0/UDP 192.168.1.1:5060;branch=z9hG4bK-737.1084363225.30590294  
Via: SIP/2.0/UDP 192.168.2.15:5060;branch=z9hG4bK-4ee550b3-879682.960  
From: <sip:00004@sip.com>;tag=5cca58b7  
To: 00002 <sip:00002@sip.com>;tag=63bca8db  
Call-ID: 0dac6256@00002.192.168.1.1  
CSeq: 30590294 ACK  
max-forwards: 69  
Content-Length: 0

---

F33 192.168.2.15:1133(3) -> 192.168.1.1:5060(2)

INVITE sip:00005@sip.com SIP/2.0  
Via: SIP/2.0/UDP 192.168.2.15:5060;branch=z9hG4bK-79354b31-879692.865  
Route: <sip:192.168.1.1:5060>  
From: <sip:00004@sip.com>;tag=1fe6b9e1  
To: <sip:00005@sip.com>  
Call-ID: 362e5d13@00004.192.168.1.1  
CSeq: 741815196 INVITE  
Contact: <sip:00004@192.168.2.15>  
Max-Forwards: 70  
Supported: 100rel, replaces  
Allow: INVITE, ACK, BYE, CANCEL, OPTIONS, PRACK, MESSAGE, REFER, NOTIFY  
Content-Type: application/sdp  
Accept: application/sdp, message/sipfrag  
Content-Length: 252

v=0  
o=- 836396 836396 IN IP4 192.168.2.15  
s=-  
c=IN IP4 192.168.2.15  
t=0 0  
m=audio 5006 RTP/AVP 0 8 4 18 96  
a=rtpmap:0 PCMU/8000  
a=rtpmap:8 PCMA/8000  
a=rtpmap:4 G723/8000  
a=rtpmap:18 G729/8000  
a=rtpmap:96 telephone-event/8000  
a=fmtp:96 0-11

---

F34 192.168.1.1:5062(2) -> 192.168.2.15:5060(3)

SIP/2.0 100 Trying  
Via: SIP/2.0/UDP 192.168.2.15:5060;branch=z9hG4bK-79354b31-879692.865  
From: <sip:00004@sip.com>;tag=1fe6b9e1  
To: <sip:00005@sip.com>  
Call-ID: 362e5d13@00004.192.168.1.1  
CSeq: 741815196 INVITE  
Content-Length: 0

---

F35 192.168.1.1:5062(2) -> 192.168.2.14:5060(4)

INVITE sip:00005@192.168.2.14 SIP/2.0  
Via: SIP/2.0/UDP 192.168.1.1:5060;branch=z9hG4bK-740.101206.741815196  
Via: SIP/2.0/UDP 192.168.2.15:5060;branch=z9hG4bK-79354b31-879692.865  
Record-Route: <sip:00005@192.168.1.1>  
Route: <sip:192.168.1.1:5060>  
From: 00004 <sip:00004@sip.com>;tag=1fe6b9e1  
To: <sip:00005@sip.com>  
Call-ID: 362e5d13@00004.192.168.1.1  
CSeq: 741815196 INVITE  
Contact: <sip:00004@192.168.2.15>  
max-forwards: 69  
supported: 100rel  
supported: replaces  
Allow: INVITE, ACK, BYE, CANCEL, OPTIONS, PRACK, MESSAGE, REFER, NOTIFY

Content-Type: application/sdp  
 Accept: application/sdp, message/sipfrag  
 Content-Length: 252

v=0  
 o=- 836396 836396 IN IP4 192.168.2.15  
 s=-  
 c=IN IP4 192.168.2.15  
 t=0 0  
 m=audio 5006 RTP/AVP 0 8 4 18 96  
 a=rtpmap:0 PCMU/8000  
 a=rtpmap:8 PCMA/8000  
 a=rtpmap:4 G723/8000  
 a=rtpmap:18 G729/8000  
 a=rtpmap:96 telephone-event/8000  
 a=fmtp:96 0-11

F36 192.168.2.14:1057(4) -> 192.168.1.1:5060(2)

SIP/2.0 100 Trying  
 Via: SIP/2.0/UDP 192.168.1.1:5060;branch=z9hG4bK-740.101206.741815196  
 Via: SIP/2.0/UDP 192.168.2.15:5060;branch=z9hG4bK-79354b31-879692.865  
 From: 00004 <sip:00004@sip.com>;tag=1fe6b9e1  
 To: <sip:00005@sip.com>  
 Call-ID: 362e5d13@00004.192.168.1.1  
 CSeq: 741815196 INVITE  
 Content-Length: 0

F37 192.168.2.14:1057(4) -> 192.168.1.1:5060(2)

SIP/2.0 183 Session Progress  
 Via: SIP/2.0/UDP 192.168.1.1:5060;branch=z9hG4bK-740.101206.741815196  
 Via: SIP/2.0/UDP 192.168.2.15:5060;branch=z9hG4bK-79354b31-879692.865  
 Record-Route: <sip:00005@192.168.1.1>  
 From: 00004 <sip:00004@sip.com>;tag=1fe6b9e1  
 To: <sip:00005@sip.com>;tag=130612e8  
 Call-ID: 362e5d13@00004.192.168.1.1  
 CSeq: 741815196 INVITE  
 Contact: <sip:00005@192.168.2.14>  
 Require: 100rel  
 RSeq: 1524254304  
 Content-Length: 0

F38 192.168.1.1:5062(2) -> 192.168.2.15:5060(3)

SIP/2.0 183 Session Progress  
 Via: SIP/2.0/UDP 192.168.2.15:5060;branch=z9hG4bK-79354b31-879692.865  
 Record-Route: <sip:00005@192.168.1.1>  
 From: 00004 <sip:00004@sip.com>;tag=1fe6b9e1  
 To: <sip:00005@sip.com>;tag=130612e8  
 Call-ID: 362e5d13@00004.192.168.1.1  
 CSeq: 741815196 INVITE  
 Contact: <sip:00005@192.168.2.14>  
 require: 100rel  
 rseq: 1524254304  
 Content-Length: 0

F39 192.168.2.15:1133(3) -> 192.168.1.1:5060(2)

PRACK sip:00005@192.168.1.1 SIP/2.0  
 Via: SIP/2.0/UDP 192.168.2.15:5060;branch=z9hG4bK-4a29ff21-879695.691  
 Route: <sip:00005@192.168.2.14>  
 From: 00004 <sip:00004@sip.com>;tag=1fe6b9e1  
 To: <sip:00005@sip.com>;tag=130612e8  
 Call-ID: 362e5d13@00004.192.168.1.1  
 CSeq: 741815197 PRACK  
 Max-Forwards: 70  
 RAck: 1524254304 741815196 INVITE  
 Content-Length: 0

F40 192.168.1.1:5062(2) -> 192.168.2.14:5060(4)

PRACK sip:00005@192.168.2.14 SIP/2.0  
Via: SIP/2.0/UDP 192.168.1.1:5060;branch=z9hG4bK-740.1084363237.741815197  
Via: SIP/2.0/UDP 192.168.2.15:5060;branch=z9hG4bK-4a29ff21-879695.691  
Route: <sip:00005@192.168.2.14>  
From: 00004 <sip:00004@sip.com>;tag=1fe6b9e1  
To: <sip:00005@sip.com>;tag=130612e8  
Call-ID: 362e5d13@00004.192.168.1.1  
CSeq: 741815197 PRACK  
max-forwards: 69  
rack: 1524254304 741815196 INVITE  
Content-Length: 0

F41 192.168.2.14:1057(4) -> 192.168.1.1:5060(2)

SIP/2.0 200 OK  
Via: SIP/2.0/UDP 192.168.1.1:5060;branch=z9hG4bK-740.1084363237.741815197  
Via: SIP/2.0/UDP 192.168.2.15:5060;branch=z9hG4bK-4a29ff21-879695.691  
From: 00004 <sip:00004@sip.com>;tag=1fe6b9e1  
To: <sip:00005@sip.com>;tag=130612e8  
Call-ID: 362e5d13@00004.192.168.1.1  
CSeq: 741815197 PRACK  
Content-Length: 0

F42 192.168.1.1:5062(2) -> 192.168.2.15:5060(3)

SIP/2.0 200 OK  
Via: SIP/2.0/UDP 192.168.2.15:5060;branch=z9hG4bK-4a29ff21-879695.691  
From: 00004 <sip:00004@sip.com>;tag=1fe6b9e1  
To: <sip:00005@sip.com>;tag=130612e8  
Call-ID: 362e5d13@00004.192.168.1.1  
CSeq: 741815197 PRACK  
Content-Length: 0

F43 192.168.2.14:1057(4) -> 192.168.1.1:5060(2)

SIP/2.0 180 Ringing  
Via: SIP/2.0/UDP 192.168.1.1:5060;branch=z9hG4bK-740.101206.741815196  
Via: SIP/2.0/UDP 192.168.2.15:5060;branch=z9hG4bK-79354b31-879692.865  
Record-Route: <sip:00005@192.168.1.1>  
From: 00004 <sip:00004@sip.com>;tag=1fe6b9e1  
To: <sip:00005@sip.com>;tag=130612e8  
Call-ID: 362e5d13@00004.192.168.1.1  
CSeq: 741815196 INVITE  
Contact: <sip:00005@192.168.2.14>  
Require: 100rel  
RSeq: 1524254305  
Content-Length: 0

F44 192.168.1.1:5062(2) -> 192.168.2.15:5060(3)

SIP/2.0 180 Ringing  
Via: SIP/2.0/UDP 192.168.2.15:5060;branch=z9hG4bK-79354b31-879692.865  
Record-Route: <sip:00005@192.168.1.1>  
From: 00004 <sip:00004@sip.com>;tag=1fe6b9e1  
To: <sip:00005@sip.com>;tag=130612e8  
Call-ID: 362e5d13@00004.192.168.1.1  
CSeq: 741815196 INVITE  
Contact: <sip:00005@192.168.2.14>  
require: 100rel  
rseq: 1524254305  
Content-Length: 0

F45 192.168.2.15:1133(3) -> 192.168.1.1:5060(2)

PRACK sip:00005@192.168.1.1 SIP/2.0  
 Via: SIP/2.0/UDP 192.168.2.15:5060;branch=z9hG4bK-19b1abad-879696.275  
 Route: <sip:00005@192.168.2.14>  
 From: 00004 <sip:00004@sip.com>;tag=1fe6b9e1  
 To: <sip:00005@sip.com>;tag=130612e8  
 Call-ID: 362e5d13@00004.192.168.1.1  
 CSeq: 741815198 PRACK  
 Max-Forwards: 70  
 RAck: 1524254305 741815196 INVITE  
 Content-Length: 0

F46 192.168.1.1:5062(2) -> 192.168.2.14:5060(4)

PRACK sip:00005@192.168.2.14 SIP/2.0  
 Via: SIP/2.0/UDP 192.168.1.1:5060;branch=z9hG4bK-740.1084363238.741815198  
 Via: SIP/2.0/UDP 192.168.2.15:5060;branch=z9hG4bK-19b1abad-879696.275  
 Route: <sip:00005@192.168.2.14>  
 From: 00004 <sip:00004@sip.com>;tag=1fe6b9e1  
 To: <sip:00005@sip.com>;tag=130612e8  
 Call-ID: 362e5d13@00004.192.168.1.1  
 CSeq: 741815198 PRACK  
 max-forwards: 69  
 rack: 1524254305 741815196 INVITE  
 Content-Length: 0

F47 192.168.2.14:1057(4) -> 192.168.1.1:5060(2)

SIP/2.0 200 OK  
 Via: SIP/2.0/UDP 192.168.1.1:5060;branch=z9hG4bK-740.1084363238.741815198  
 Via: SIP/2.0/UDP 192.168.2.15:5060;branch=z9hG4bK-19b1abad-879696.275  
 From: 00004 <sip:00004@sip.com>;tag=1fe6b9e1  
 To: <sip:00005@sip.com>;tag=130612e8  
 Call-ID: 362e5d13@00004.192.168.1.1  
 CSeq: 741815198 PRACK  
 Content-Length: 0

F48 192.168.1.1:5062(2) -> 192.168.2.15:5060(3)

SIP/2.0 200 OK  
 Via: SIP/2.0/UDP 192.168.2.15:5060;branch=z9hG4bK-19b1abad-879696.275  
 From: 00004 <sip:00004@sip.com>;tag=1fe6b9e1  
 To: <sip:00005@sip.com>;tag=130612e8  
 Call-ID: 362e5d13@00004.192.168.1.1  
 CSeq: 741815198 PRACK  
 Content-Length: 0

F49 192.168.2.14:1057(4) -> 192.168.1.1:5060(2)

SIP/2.0 200 OK  
 Via: SIP/2.0/UDP 192.168.1.1:5060;branch=z9hG4bK-740.101206.741815196  
 Via: SIP/2.0/UDP 192.168.2.15:5060;branch=z9hG4bK-79354b31-879692.865  
 Record-Route: <sip:00005@192.168.1.1>  
 From: 00004 <sip:00004@sip.com>;tag=1fe6b9e1  
 To: <sip:00005@sip.com>;tag=130612e8  
 Call-ID: 362e5d13@00004.192.168.1.1  
 CSeq: 741815196 INVITE  
 Contact: <sip:00005@192.168.2.14>  
 Supported: 100rel, replaces  
 Allow: INVITE, ACK, BYE, CANCEL, OPTIONS, PRACK, MESSAGE, REFER, NOTIFY  
 Content-Type: application/sdp  
 Accept: application/sdp, message/sipfrag  
 Content-Length: 177

v=0  
 o=- 135029 14401 IN IP4 192.168.2.14  
 s=-

```
c=IN IP4 192.168.2.14
t=0 0
m=audio 5008 RTP/AVP 0 96
a=rtpmap:0 PCMU/8000
a=rtpmap:96 telephone-event/8000
a=fmtp:96 0-11
```

```
F50      192.168.1.1:5062(2) -> 192.168.2.15:5060(3)
```

```
SIP/2.0 200 OK
Via: SIP/2.0/UDP 192.168.2.15:5060;branch=z9hG4bK-79354b31-879692.865
Record-Route: <sip:00005@192.168.1.1>
From: 00004 <sip:00004@sip.com>;tag=1fe6b9e1
To: <sip:00005@sip.com>;tag=130612e8
Call-ID: 362e5d13@00004.192.168.1.1
CSeq: 741815196 INVITE
Contact: <sip:00005@192.168.2.14>
supported: 100rel
supported: replaces
Allow: INVITE, ACK, BYE, CANCEL, OPTIONS, PRACK, MESSAGE, REFER, NOTIFY
Content-Type: application/sdp
Accept: application/sdp, message/sipfrag
Content-Length: 177
```

```
v=0
o=- 135029 14401 IN IP4 192.168.2.14
s=-
c=IN IP4 192.168.2.14
t=0 0
m=audio 5008 RTP/AVP 0 96
a=rtpmap:0 PCMU/8000
a=rtpmap:96 telephone-event/8000
a=fmtp:96 0-11
```

```
F51      192.168.2.15:1133(3) -> 192.168.1.1:5060(2)
```

```
ACK sip:00005@192.168.1.1 SIP/2.0
Via: SIP/2.0/UDP 192.168.2.15:5060;branch=z9hG4bK-17e59e55-879701.294
Route: <sip:00005@192.168.2.14>
From: 00004 <sip:00004@sip.com>;tag=1fe6b9e1
To: <sip:00005@sip.com>;tag=130612e8
Call-ID: 362e5d13@00004.192.168.1.1
CSeq: 741815196 ACK
Max-Forwards: 70
Content-Length: 0
```

```
F52      192.168.1.1:5062(2) -> 192.168.2.14:5060(4)
```

```
ACK sip:00005@192.168.2.14 SIP/2.0
Via: SIP/2.0/UDP 192.168.1.1:5060;branch=z9hG4bK-740.1084363243.741815196
Via: SIP/2.0/UDP 192.168.2.15:5060;branch=z9hG4bK-17e59e55-879701.294
From: 00004 <sip:00004@sip.com>;tag=1fe6b9e1
To: <sip:00005@sip.com>;tag=130612e8
Call-ID: 362e5d13@00004.192.168.1.1
CSeq: 741815196 ACK
max-forwards: 69
Content-Length: 0
```

```
F53      192.168.2.15:1133(3) -> 192.168.1.1:5060(2)
```

```
INVITE sip:00005@192.168.1.1 SIP/2.0
Via: SIP/2.0/UDP 192.168.2.15:5060;branch=z9hG4bK-1d2cd2eb-879970.350
Route: <sip:00005@192.168.2.14>
From: 00004 <sip:00004@sip.com>;tag=1fe6b9e1
To: <sip:00005@sip.com>;tag=130612e8
Call-ID: 362e5d13@00004.192.168.1.1
CSeq: 741815199 INVITE
Contact: <sip:00004@192.168.2.15>
Max-Forwards: 70
Supported: 100rel, replaces
Allow: INVITE, ACK, BYE, CANCEL, OPTIONS, PRACK, MESSAGE, REFER, NOTIFY
```

Content-Type: application/sdp  
Content-Length: 190

v=0  
o=- 344693 836397 IN IP4 192.168.2.15  
s=-  
c=IN IP4 192.168.2.15  
t=0 0  
m=audio 5006 RTP/AVP 0 96  
a=rtpmap:0 PCMU/8000  
a=rtpmap:96 telephone-event/8000  
a=fmtp:96 0-11  
a=inactive

=====

F54 192.168.1.1:5062(2) -> 192.168.2.15:5060(3)

SIP/2.0 100 Trying  
Via: SIP/2.0/UDP 192.168.2.15:5060;branch=z9hG4bK-1d2cd2eb-879970.350  
From: 00004 <sip:00004@sip.com>;tag=1fe6b9e1  
To: <sip:00005@sip.com>;tag=130612e8  
Call-ID: 362e5d13@00004.192.168.1.1  
CSeq: 741815199 INVITE  
Content-Length: 0

=====

F55 192.168.1.1:5062(2) -> 192.168.2.14:5060(4)

INVITE sip:00005@192.168.2.14 SIP/2.0  
Via: SIP/2.0/UDP 192.168.1.1:5060;branch=z9hG4bK-740.101206.741815199  
Via: SIP/2.0/UDP 192.168.2.15:5060;branch=z9hG4bK-1d2cd2eb-879970.350  
Record-Route: <sip:00005@192.168.1.1>  
Route: <sip:00005@192.168.2.14>  
From: 00004 <sip:00004@sip.com>;tag=1fe6b9e1  
To: <sip:00005@sip.com>;tag=130612e8  
Call-ID: 362e5d13@00004.192.168.1.1  
CSeq: 741815199 INVITE  
Contact: <sip:00004@192.168.2.15>  
max-forwards: 69  
supported: 100rel  
supported: replaces  
Allow: INVITE, ACK, BYE, CANCEL, OPTIONS, PRACK, MESSAGE, REFER, NOTIFY  
Content-Type: application/sdp  
Content-Length: 190

v=0  
o=- 344693 836397 IN IP4 192.168.2.15  
s=-  
c=IN IP4 192.168.2.15  
t=0 0  
m=audio 5006 RTP/AVP 0 96  
a=rtpmap:0 PCMU/8000  
a=rtpmap:96 telephone-event/8000  
a=fmtp:96 0-11  
a=inactive

=====

F56 192.168.2.14:1057(4) -> 192.168.1.1:5060(2)

SIP/2.0 100 Trying  
Via: SIP/2.0/UDP 192.168.1.1:5060;branch=z9hG4bK-740.101206.741815199  
Via: SIP/2.0/UDP 192.168.2.15:5060;branch=z9hG4bK-1d2cd2eb-879970.350  
From: 00004 <sip:00004@sip.com>;tag=1fe6b9e1  
To: <sip:00005@sip.com>;tag=130612e8  
Call-ID: 362e5d13@00004.192.168.1.1  
CSeq: 741815199 INVITE  
Content-Length: 0

=====

F57 192.168.2.14:1057(4) -> 192.168.1.1:5060(2)

SIP/2.0 200 OK  
Via: SIP/2.0/UDP 192.168.1.1:5060;branch=z9hG4bK-740.101206.741815199  
Via: SIP/2.0/UDP 192.168.2.15:5060;branch=z9hG4bK-1d2cd2eb-879970.350  
Record-Route: <sip:00005@192.168.1.1>

From: 00004 <sip:00004@sip.com>;tag=1fe6b9e1  
 To: <sip:00005@sip.com>;tag=130612e8  
 Call-ID: 362e5d13@00004.192.168.1.1  
 CSeq: 741815199 INVITE  
 Contact: <sip:00005@192.168.2.14>  
 Supported: 100rel, replaces  
 Allow: INVITE, ACK, BYE, CANCEL, OPTIONS, PRACK, MESSAGE, REFER, NOTIFY  
 Content-Type: application/sdp  
 Accept: application/sdp, message/sipfrag  
 Content-Length: 188

v=0  
 o=- 69285 14402 IN IP4 192.168.2.14  
 s=-  
 c=IN IP4 192.168.2.14  
 t=0 0  
 m=audio 5008 RTP/AVP 0 96  
 a=rtpmap:0 PCMU/8000  
 a=rtpmap:96 telephone-event/8000  
 a=fmtp:96 0-11  
 a=inactive

=====

F58 192.168.1.1:5062(2) -> 192.168.2.15:5060(3)

SIP/2.0 200 OK  
 Via: SIP/2.0/UDP 192.168.2.15:5060;branch=z9hG4bK-1d2cd2eb-879970.350  
 Record-Route: <sip:00005@192.168.1.1>  
 From: 00004 <sip:00004@sip.com>;tag=1fe6b9e1  
 To: <sip:00005@sip.com>;tag=130612e8  
 Call-ID: 362e5d13@00004.192.168.1.1  
 CSeq: 741815199 INVITE  
 Contact: <sip:00005@192.168.2.14>  
 supported: 100rel  
 supported: replaces  
 Allow: INVITE, ACK, BYE, CANCEL, OPTIONS, PRACK, MESSAGE, REFER, NOTIFY  
 Content-Type: application/sdp  
 Accept: application/sdp, message/sipfrag  
 Content-Length: 188

v=0  
 o=- 69285 14402 IN IP4 192.168.2.14  
 s=-  
 c=IN IP4 192.168.2.14  
 t=0 0  
 m=audio 5008 RTP/AVP 0 96  
 a=rtpmap:0 PCMU/8000  
 a=rtpmap:96 telephone-event/8000  
 a=fmtp:96 0-11  
 a=inactive

=====

F59 192.168.2.15:1133(3) -> 192.168.1.1:5060(2)

ACK sip:00005@192.168.1.1 SIP/2.0  
 Via: SIP/2.0/UDP 192.168.2.15:5060;branch=z9hG4bK-79bf84fa-879970.933  
 Route: <sip:00005@192.168.2.14>  
 From: 00004 <sip:00004@sip.com>;tag=1fe6b9e1  
 To: <sip:00005@sip.com>;tag=130612e8  
 Call-ID: 362e5d13@00004.192.168.1.1  
 CSeq: 741815199 ACK  
 Max-Forwards: 70  
 Content-Length: 0

=====

F60 192.168.1.1:5062(2) -> 192.168.2.14:5060(4)

ACK sip:00005@192.168.2.14 SIP/2.0  
 Via: SIP/2.0/UDP 192.168.1.1:5060;branch=z9hG4bK-740.1084363513.741815199  
 Via: SIP/2.0/UDP 192.168.2.15:5060;branch=z9hG4bK-79bf84fa-879970.933  
 From: 00004 <sip:00004@sip.com>;tag=1fe6b9e1  
 To: <sip:00005@sip.com>;tag=130612e8  
 Call-ID: 362e5d13@00004.192.168.1.1  
 CSeq: 741815199 ACK  
 max-forwards: 69  
 Content-Length: 0



F61 192.168.2.15:1133(3) -> 192.168.1.1:5060(2)

REFER sip:00004@192.168.1.1 SIP/2.0  
Via: SIP/2.0/UDP 192.168.2.15:5060;branch=z9hG4bK-5a2955d4-879970.988  
Route: <sip:00002@192.168.2.10>  
From: <sip:00004@sip.com>;tag=5cca58b7  
To: 00002 <sip:00002@sip.com>;tag=63bca8db  
Call-ID: 0dac6256@00002.192.168.1.1  
CSeq: 30590295 REFER  
Contact: <sip:00004@192.168.2.15>  
Max-Forwards: 70  
Refer-To:  
<sip:00005@192.168.2.14?Replaces=362e5d13@00004.192.168.1.1%3bto-tag%3d130612e8%3bfrom-tag%3d1fe6b9e1>  
Referred-By: <sip:00004@sip.com>  
Content-Length: 0

F62 192.168.1.1:5062(2) -> 192.168.2.10:5060(1)

REFER sip:00002@192.168.2.10 SIP/2.0  
Via: SIP/2.0/UDP 192.168.1.1:5060;branch=z9hG4bK-737.1084363513.30590295  
Via: SIP/2.0/UDP 192.168.2.15:5060;branch=z9hG4bK-5a2955d4-879970.988  
Route: <sip:00002@192.168.2.10>  
From: <sip:00004@sip.com>;tag=5cca58b7  
To: 00002 <sip:00002@sip.com>;tag=63bca8db  
Call-ID: 0dac6256@00002.192.168.1.1  
CSeq: 30590295 REFER  
Contact: <sip:00004@192.168.2.15>  
max-forwards: 69  
refer-to:  
<sip:00005@192.168.2.14?Replaces=362e5d13@00004.192.168.1.1%3bto-tag%3d130612e8%3bfrom-tag%3d1fe6b9e1>  
referred-by: <sip:00004@sip.com>  
Content-Length: 0

F63 192.168.2.10:1091(1) -> 192.168.1.1:5060(2)

SIP/2.0 481 Call Leg/Transaction Does Not Exist  
Via: SIP/2.0/UDP 192.168.1.1:5060;branch=z9hG4bK-737.1084363513.30590295  
Via: SIP/2.0/UDP 192.168.2.15:5060;branch=z9hG4bK-5a2955d4-879970.988  
From: <sip:00004@sip.com>;tag=5cca58b7  
To: 00002 <sip:00002@sip.com>;tag=63bca8db  
Call-ID: 0dac6256@00002.192.168.1.1  
CSeq: 30590295 REFER  
Content-Length: 0

F64 192.168.1.1:5062(2) -> 192.168.2.15:5060(3)

SIP/2.0 481 Call Leg/Transaction Does Not Exist  
Via: SIP/2.0/UDP 192.168.2.15:5060;branch=z9hG4bK-5a2955d4-879970.988  
From: <sip:00004@sip.com>;tag=5cca58b7  
To: 00002 <sip:00002@sip.com>;tag=63bca8db  
Call-ID: 0dac6256@00002.192.168.1.1  
CSeq: 30590295 REFER  
Content-Length: 0

F65 192.168.1.1:5062(2) -> 192.168.2.10:5060(1)

BYE sip:00002@192.168.2.10 SIP/2.0  
Via: SIP/2.0/UDP 192.168.1.1:5060;branch=z9hG4bK-737.1084363516.30590296  
Via: SIP/2.0/UDP 192.168.2.15:5060;branch=z9hG4bK-42f0ae42-879974.608  
Route: <sip:00002@192.168.2.10>  
From: <sip:00004@sip.com>;tag=5cca58b7  
To: 00002 <sip:00002@sip.com>;tag=63bca8db  
Call-ID: 0dac6256@00002.192.168.1.1  
CSeq: 30590296 BYE  
max-forwards: 69  
Content-Length: 0

```
=====
F66      192.168.2.15:1133(3) -> 192.168.1.1:5060(2)

BYE sip:00004@192.168.1.1 SIP/2.0
Via: SIP/2.0/UDP 192.168.2.15:5060;branch=z9hG4bK-42f0ae42-879974.608
Route: <sip:00002@192.168.2.10>
From: <sip:00004@sip.com>;tag=5cca58b7
To: 00002 <sip:00002@sip.com>;tag=63bca8db
Call-ID: 0dac6256@00002.192.168.1.1
CSeq: 30590296 BYE
Max-Forwards: 70
Content-Length: 0
=====
```

```
=====
F67      192.168.1.1:5062(2) -> 192.168.2.14:5060(4)

BYE sip:00005@192.168.2.14 SIP/2.0
Via: SIP/2.0/UDP 192.168.1.1:5060;branch=z9hG4bK-740.1084363516.741815200
Via: SIP/2.0/UDP 192.168.2.15:5060;branch=z9hG4bK-36401c37-879974.616
Route: <sip:00005@192.168.2.14>
From: 00004 <sip:00004@sip.com>;tag=1fe6b9e1
To: <sip:00005@sip.com>;tag=130612e8
Call-ID: 362e5d13@00004.192.168.1.1
CSeq: 741815200 BYE
max-forwards: 69
Content-Length: 0
=====
```

```
=====
F68      192.168.2.14:1057(4) -> 192.168.1.1:5060(2)

SIP/2.0 200 OK
Via: SIP/2.0/UDP 192.168.1.1:5060;branch=z9hG4bK-740.1084363516.741815200
Via: SIP/2.0/UDP 192.168.2.15:5060;branch=z9hG4bK-36401c37-879974.616
From: 00004 <sip:00004@sip.com>;tag=1fe6b9e1
To: <sip:00005@sip.com>;tag=130612e8
Call-ID: 362e5d13@00004.192.168.1.1
CSeq: 741815200 BYE
Content-Length: 0
=====
```

```
=====
F69      192.168.1.1:5062(2) -> 192.168.2.15:5060(3)

SIP/2.0 200 OK
Via: SIP/2.0/UDP 192.168.2.15:5060;branch=z9hG4bK-36401c37-879974.616
From: 00004 <sip:00004@sip.com>;tag=1fe6b9e1
To: <sip:00005@sip.com>;tag=130612e8
Call-ID: 362e5d13@00004.192.168.1.1
CSeq: 741815200 BYE
Content-Length: 0
=====
```

```
=====
F70      192.168.2.10:1091(1) -> 192.168.1.1:5060(2)

SIP/2.0 481 Call Leg/Transaction Does Not Exist
Via: SIP/2.0/UDP 192.168.1.1:5060;branch=z9hG4bK-737.1084363513.30590295
Via: SIP/2.0/UDP 192.168.2.15:5060;branch=z9hG4bK-5a2955d4-879970.988
From: <sip:00004@sip.com>;tag=5cca58b7
To: 00002 <sip:00002@sip.com>;tag=63bca8db
Call-ID: 0dac6256@00002.192.168.1.1
CSeq: 30590295 REFER
Content-Length: 0
=====
```

```
=====
F71      192.168.1.1:5062(2) -> 192.168.2.15:5060(3)

SIP/2.0 481 Call Leg/Transaction Does Not Exist
Via: SIP/2.0/UDP 192.168.2.15:5060;branch=z9hG4bK-42f0ae42-879974.608
From: <sip:00004@sip.com>;tag=5cca58b7
=====
```

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To: 00002 <sip:00002@sip.com>;tag=63bca8db  
Call-ID: 0dac6256@00002.192.168.1.1  
CSeq: 30590296 BYE  
Content-Length: 0

=====

## 11.5.6. 保留中+通話呼の状態で保留者が圏外→そのまま圏外滞在

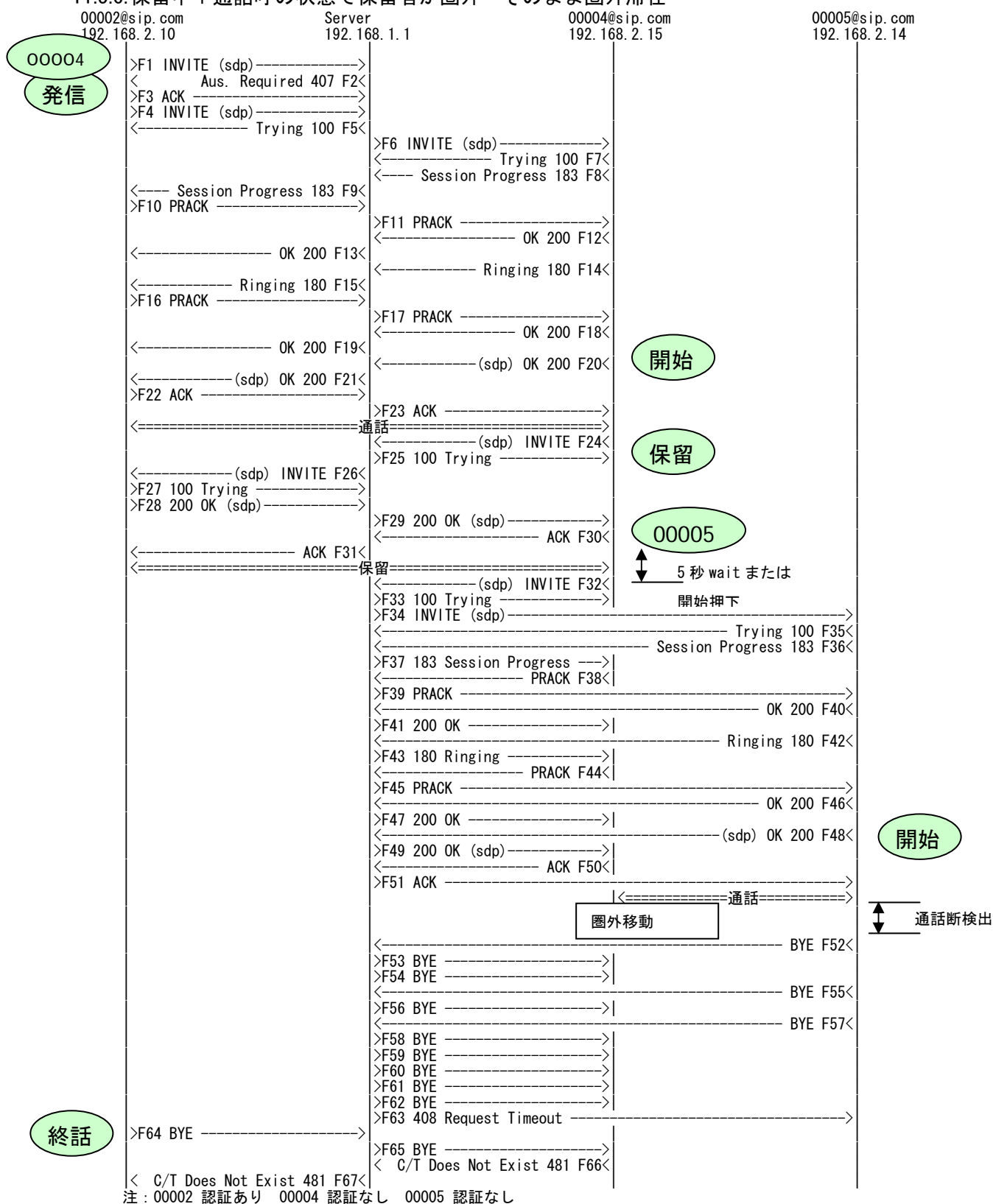


図 11-27 保留中+通話呼の状態で保留者が圏外→そのまま圏外滞在

```

=====
F1      192.168.2.10:1091(1) -> 192.168.1.1:5060(2)

INVITE sip:00004@sip.com SIP/2.0
Via: SIP/2.0/UDP 192.168.2.10:5060;branch=z9hG4bK-3a6d28b4-880335.203
Route: <sip:192.168.1.1:5060>
From: <sip:00002@sip.com>;tag=24e711f6
To: <sip:00004@sip.com>
Call-ID: 4046c721@00002.192.168.1.1
CSeq: 80380603 INVITE
Contact: <sip:00002@192.168.2.10>
Proxy-Authorization: Digest username="00002", realm="heliossv2",
nonce="c53c462f25b51b76b6163066674a800e", uri="sip:00004@sip.com",
response="fd6294324ff996a191f518ab987a906b", algorithm=MD5, cnonce="5f406aa9",
opaque="0c058e9b2e850a7b8a6dcc7e277738f6", qop=auth, nc=00000004
Max-Forwards: 70
Supported: 100rel, replaces
Allow: INVITE, ACK, BYE, CANCEL, OPTIONS, PRACK, MESSAGE, REFER, NOTIFY
Content-Type: application/sdp
Accept: application/sdp, message/sipfrag
Content-Length: 250

v=0
o=- 184791 3301 IN IP4 192.168.2.10
s=-
c=IN IP4 192.168.2.10
t=0 0
m=audio 5008 RTP/AVP 0 8 4 18 96
a=rtpmap:0 PCMU/8000
a=rtpmap:8 PCMA/8000
a=rtpmap:4 G723/8000
a=rtpmap:18 G729/8000
a=rtpmap:96 telephone-event/8000
a=fmtp:96 0-11

=====
F2      192.168.1.1:5062(2) -> 192.168.2.10:5060(1)

SIP/2.0 407 Proxy Authentication Required
Via: SIP/2.0/UDP 192.168.2.10:5060;branch=z9hG4bK-3a6d28b4-880335.203
From: <sip:00002@sip.com>;tag=24e711f6
To: <sip:00004@sip.com>
Call-ID: 4046c721@00002.192.168.1.1
CSeq: 80380603 INVITE
Proxy-Authenticate: Digest realm="heliossv2", nonce="79fb077af766d9bfd404294510af41ee",
opaque="e85adea5ef93bedb3f17b8f1cd27ad7c", stale=false, algorithm=MD5, qop="auth,auth-int"
Content-Length: 0

=====
F3      192.168.2.10:1091(1) -> 192.168.1.1:5060(2)

ACK sip:00004@sip.com SIP/2.0
Via: SIP/2.0/UDP 192.168.2.10:5060;branch=z9hG4bK-3a6d28b4-880335.203
Route: <sip:192.168.1.1:5060>
From: <sip:00002@sip.com>;tag=24e711f6
To: <sip:00004@sip.com>
Call-ID: 4046c721@00002.192.168.1.1
CSeq: 80380603 ACK
Content-Length: 0

=====
F4      192.168.2.10:1091(1) -> 192.168.1.1:5060(2)

INVITE sip:00004@sip.com SIP/2.0
Via: SIP/2.0/UDP 192.168.2.10:5060;branch=z9hG4bK-2957a51c-880335.473
Route: <sip:192.168.1.1:5060>
From: <sip:00002@sip.com>;tag=24e711f6
To: <sip:00004@sip.com>
Call-ID: 4046c721@00002.192.168.1.1
CSeq: 80380604 INVITE
Contact: <sip:00002@192.168.2.10>
Proxy-Authorization: Digest username="00002", realm="heliossv2",
nonce="79fb077af766d9bfd404294510af41ee", uri="sip:00004@sip.com",

```

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```
response="2a78c2d2dc6b7c6694e11a6023b738d9", algorithm=MD5, cnonce="2f9d085a",
opaque="e85adea5ef93bedb3f17b8f1cd27ad7c", qop=auth, nc=00000001
Max-Forwards: 70
Supported: 100rel, replaces
Allow: INVITE, ACK, BYE, CANCEL, OPTIONS, PRACK, MESSAGE, REFER, NOTIFY
Content-Type: application/sdp
Accept: application/sdp, message/sipfrag
Content-Length: 250
```

```
v=0
o=- 184791 3301 IN IP4 192.168.2.10
s=-
c=IN IP4 192.168.2.10
t=0 0
m=audio 5008 RTP/AVP 0 8 4 18 96
a=rtpmap:0 PCMU/8000
a=rtpmap:8 PCMA/8000
a=rtpmap:4 G723/8000
a=rtpmap:18 G729/8000
a=rtpmap:96 telephone-event/8000
a=fmtp:96 0-11
```

---

```
F5 192.168.1.1:5062(2) -> 192.168.2.10:5060(1)
```

```
SIP/2.0 100 Trying
Via: SIP/2.0/UDP 192.168.2.10:5060;branch=z9hG4bK-2957a51c-880335.473
From: <sip:00002@sip.com>;tag=24e711f6
To: <sip:00004@sip.com>
Call-ID: 4046c721@00002.192.168.1.1
CSeq: 80380604 INVITE
Content-Length: 0
```

---

```
F6 192.168.1.1:5062(2) -> 192.168.2.15:5060(3)
```

```
INVITE sip:00004@192.168.2.15 SIP/2.0
Via: SIP/2.0/UDP 192.168.1.1:5060;branch=z9hG4bK-748.571480.80380604
Via: SIP/2.0/UDP 192.168.2.10:5060;branch=z9hG4bK-2957a51c-880335.473
Record-Route: <sip:00004@192.168.1.1>
Route: <sip:192.168.1.1:5060>
From: 00002 <sip:00002@sip.com>;tag=24e711f6
To: <sip:00004@sip.com>
Call-ID: 4046c721@00002.192.168.1.1
CSeq: 80380604 INVITE
Contact: <sip:00002@192.168.2.10>
max-forwards: 69
supported: 100rel
supported: replaces
Allow: INVITE, ACK, BYE, CANCEL, OPTIONS, PRACK, MESSAGE, REFER, NOTIFY
Content-Type: application/sdp
Accept: application/sdp, message/sipfrag
Content-Length: 250
```

```
v=0
o=- 184791 3301 IN IP4 192.168.2.10
s=-
c=IN IP4 192.168.2.10
t=0 0
m=audio 5008 RTP/AVP 0 8 4 18 96
a=rtpmap:0 PCMU/8000
a=rtpmap:8 PCMA/8000
a=rtpmap:4 G723/8000
a=rtpmap:18 G729/8000
a=rtpmap:96 telephone-event/8000
a=fmtp:96 0-11
```

---

```
F7 192.168.2.15:1133(3) -> 192.168.1.1:5060(2)
```

```
SIP/2.0 100 Trying
Via: SIP/2.0/UDP 192.168.1.1:5060;branch=z9hG4bK-748.571480.80380604
Via: SIP/2.0/UDP 192.168.2.10:5060;branch=z9hG4bK-2957a51c-880335.473
From: 00002 <sip:00002@sip.com>;tag=24e711f6
To: <sip:00004@sip.com>
Call-ID: 4046c721@00002.192.168.1.1
CSeq: 80380604 INVITE
```

Content-Length: 0

---



---

F8 192.168.2.15:1133(3) -> 192.168.1.1:5060(2)

SIP/2.0 183 Session Progress  
 Via: SIP/2.0/UDP 192.168.1.1:5060;branch=z9hG4bK-748.571480.80380604  
 Via: SIP/2.0/UDP 192.168.2.10:5060;branch=z9hG4bK-2957a51c-880335.473  
 Record-Route: <sip:00004@192.168.1.1>  
 From: 00002 <sip:00002@sip.com>;tag=24e711f6  
 To: <sip:00004@sip.com>;tag=0c93f8a6  
 Call-ID: 4046c721@00002.192.168.1.1  
 CSeq: 80380604 INVITE  
 Contact: <sip:00004@192.168.2.15>  
 Require: 100rel  
 RSeq: 1075886402  
 Content-Length: 0

---



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---



---

F9 192.168.1.1:5062(2) -> 192.168.2.10:5060(1)

SIP/2.0 183 Session Progress  
 Via: SIP/2.0/UDP 192.168.2.10:5060;branch=z9hG4bK-2957a51c-880335.473  
 Record-Route: <sip:00004@192.168.1.1>  
 From: 00002 <sip:00002@sip.com>;tag=24e711f6  
 To: <sip:00004@sip.com>;tag=0c93f8a6  
 Call-ID: 4046c721@00002.192.168.1.1  
 CSeq: 80380604 INVITE  
 Contact: <sip:00004@192.168.2.15>  
 require: 100rel  
 rseq: 1075886402  
 Content-Length: 0

---



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F10 192.168.2.10:1091(1) -> 192.168.1.1:5060(2)

PRACK sip:00004@192.168.1.1 SIP/2.0  
 Via: SIP/2.0/UDP 192.168.2.10:5060;branch=z9hG4bK-43f8d149-880336.721  
 Route: <sip:00004@192.168.2.15>  
 From: 00002 <sip:00002@sip.com>;tag=24e711f6  
 To: <sip:00004@sip.com>;tag=0c93f8a6  
 Call-ID: 4046c721@00002.192.168.1.1  
 CSeq: 80380605 PRACK  
 Proxy-Authorization: Digest username="00002", realm="heliossv2",  
 nonce="79fb077af766d9bfd404294510af41ee", uri="sip:00004@192.168.1.1",  
 response="43693cdfc751eb2d5a529d76a22057f3", algorithm=MD5,  
 opaque="e85adea5ef93bedb3f17b8f1cd27ad7c", qop=auth, nc=00000002, cnonce="47402757",  
 Max-Forwards: 70  
 Rack: 1075886402 80380604 INVITE  
 Content-Length: 0

---



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---



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F11 192.168.1.1:5062(2) -> 192.168.2.15:5060(3)

PRACK sip:00004@192.168.2.15 SIP/2.0  
 Via: SIP/2.0/UDP 192.168.1.1:5060;branch=z9hG4bK-748.1084363714.80380605  
 Via: SIP/2.0/UDP 192.168.2.10:5060;branch=z9hG4bK-43f8d149-880336.721  
 Route: <sip:00004@192.168.2.15>  
 From: 00002 <sip:00002@sip.com>;tag=24e711f6  
 To: <sip:00004@sip.com>;tag=0c93f8a6  
 Call-ID: 4046c721@00002.192.168.1.1  
 CSeq: 80380605 PRACK  
 max-forwards: 69  
 rack: 1075886402 80380604 INVITE  
 Content-Length: 0

---



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---

F12 192.168.2.15:1133(3) -> 192.168.1.1:5060(2)

SIP/2.0 200 OK  
 Via: SIP/2.0/UDP 192.168.1.1:5060;branch=z9hG4bK-748.1084363714.80380605

## FOMA/WLAN デュアル端末に関する技術参考資料 第 1.2 版

Via: SIP/2.0/UDP 192.168.2.10:5060;branch=z9hG4bK-43f8d149-880336.721  
From: 00002 <sip:00002@sip.com>;tag=24e711f6  
To: <sip:00004@sip.com>;tag=0c93f8a6  
Call-ID: 4046c721@00002.192.168.1.1  
CSeq: 80380605 PRACK  
Content-Length: 0

F13 192.168.1.1:5062(2) -> 192.168.2.10:5060(1)

SIP/2.0 200 OK  
Via: SIP/2.0/UDP 192.168.2.10:5060;branch=z9hG4bK-43f8d149-880336.721  
From: 00002 <sip:00002@sip.com>;tag=24e711f6  
To: <sip:00004@sip.com>;tag=0c93f8a6  
Call-ID: 4046c721@00002.192.168.1.1  
CSeq: 80380605 PRACK  
Content-Length: 0

F14 192.168.2.15:1133(3) -> 192.168.1.1:5060(2)

SIP/2.0 180 Ringing  
Via: SIP/2.0/UDP 192.168.1.1:5060;branch=z9hG4bK-748.571480.80380604  
Via: SIP/2.0/UDP 192.168.2.10:5060;branch=z9hG4bK-2957a51c-880335.473  
Record-Route: <sip:00004@192.168.1.1>  
From: 00002 <sip:00002@sip.com>;tag=24e711f6  
To: <sip:00004@sip.com>;tag=0c93f8a6  
Call-ID: 4046c721@00002.192.168.1.1  
CSeq: 80380604 INVITE  
Contact: <sip:00004@192.168.2.15>  
Require: 100rel  
RSeq: 1075886403  
Content-Length: 0

F15 192.168.1.1:5062(2) -> 192.168.2.10:5060(1)

SIP/2.0 180 Ringing  
Via: SIP/2.0/UDP 192.168.2.10:5060;branch=z9hG4bK-2957a51c-880335.473  
Record-Route: <sip:00004@192.168.1.1>  
From: 00002 <sip:00002@sip.com>;tag=24e711f6  
To: <sip:00004@sip.com>;tag=0c93f8a6  
Call-ID: 4046c721@00002.192.168.1.1  
CSeq: 80380604 INVITE  
Contact: <sip:00004@192.168.2.15>  
require: 100rel  
rseq: 1075886403  
Content-Length: 0

F16 192.168.2.10:1091(1) -> 192.168.1.1:5060(2)

PRACK sip:00004@192.168.1.1 SIP/2.0  
Via: SIP/2.0/UDP 192.168.2.10:5060;branch=z9hG4bK-54ccfcec-880337.309  
Route: <sip:00004@192.168.2.15>  
From: 00002 <sip:00002@sip.com>;tag=24e711f6  
To: <sip:00004@sip.com>;tag=0c93f8a6  
Call-ID: 4046c721@00002.192.168.1.1  
CSeq: 80380606 PRACK  
Proxy-Authentication: Digest username="00002", realm="heliossv2",  
nonce="79fb077af766d9bfd404294510af41ee", uri="sip:00004@192.168.1.1",  
response="72c4bab2204fd28f68354b8652304b82", algorithm=MD5, cnonce="24f2cd1c",  
opaque="e85adea5ef93bedb3f17b8f1cd27ad7c", qop=auth, nc=00000003  
Max-Forwards: 70  
RAck: 1075886403 80380604 INVITE  
Content-Length: 0

F17 192.168.1.1:5062(2) -> 192.168.2.15:5060(3)

PRACK sip:00004@192.168.2.15 SIP/2.0



## FOMA/WLAN デュアル端末に関する技術参考資料 第 1.2 版

Via: SIP/2.0/UDP 192.168.1.1:5060;branch=z9hG4bK-748.1084363714.80380606  
Via: SIP/2.0/UDP 192.168.2.10:5060;branch=z9hG4bK-54ccfcec-880337.309  
Route: <sip:00004@192.168.2.15>  
From: 00002 <sip:00002@sip.com>;tag=24e711f6  
To: <sip:00004@sip.com>;tag=0c93f8a6  
Call-ID: 4046c721@00002.192.168.1.1  
CSeq: 80380606 PRACK  
max-forwards: 69  
rack: 1075886403 80380604 INVITE  
Content-Length: 0

F18 192.168.2.15:1133(3) -> 192.168.1.1:5060(2)

SIP/2.0 200 OK  
Via: SIP/2.0/UDP 192.168.1.1:5060;branch=z9hG4bK-748.1084363714.80380606  
Via: SIP/2.0/UDP 192.168.2.10:5060;branch=z9hG4bK-54ccfcec-880337.309  
From: 00002 <sip:00002@sip.com>;tag=24e711f6  
To: <sip:00004@sip.com>;tag=0c93f8a6  
Call-ID: 4046c721@00002.192.168.1.1  
CSeq: 80380606 PRACK  
Content-Length: 0

F19 192.168.1.1:5062(2) -> 192.168.2.10:5060(1)

SIP/2.0 200 OK  
Via: SIP/2.0/UDP 192.168.2.10:5060;branch=z9hG4bK-54ccfcec-880337.309  
From: 00002 <sip:00002@sip.com>;tag=24e711f6  
To: <sip:00004@sip.com>;tag=0c93f8a6  
Call-ID: 4046c721@00002.192.168.1.1  
CSeq: 80380606 PRACK  
Content-Length: 0

F20 192.168.2.15:1133(3) -> 192.168.1.1:5060(2)

SIP/2.0 200 OK  
Via: SIP/2.0/UDP 192.168.1.1:5060;branch=z9hG4bK-748.571480.80380604  
Via: SIP/2.0/UDP 192.168.2.10:5060;branch=z9hG4bK-2957a51c-880335.473  
Record-Route: <sip:00004@192.168.1.1>  
From: 00002 <sip:00002@sip.com>;tag=24e711f6  
To: <sip:00004@sip.com>;tag=0c93f8a6  
Call-ID: 4046c721@00002.192.168.1.1  
CSeq: 80380604 INVITE  
Contact: <sip:00004@192.168.2.15>  
Supported: 100rel, replaces  
Allow: INVITE, ACK, BYE, CANCEL, OPTIONS, PRACK, MESSAGE, REFER, NOTIFY  
Content-Type: application/sdp  
Accept: application/sdp, message/sipfrag  
Content-Length: 177

v=0  
o=- 939166 13001 IN IP4 192.168.2.15  
s=-  
c=IN IP4 192.168.2.15  
t=0 0  
m=audio 5008 RTP/AVP 0 96  
a=rtpmap:0 PCMU/8000  
a=rtpmap:96 telephone-event/8000  
a=fmtp:96 0-11

F21 192.168.1.1:5062(2) -> 192.168.2.10:5060(1)

SIP/2.0 200 OK  
Via: SIP/2.0/UDP 192.168.2.10:5060;branch=z9hG4bK-2957a51c-880335.473  
Record-Route: <sip:00004@192.168.1.1>  
From: 00002 <sip:00002@sip.com>;tag=24e711f6  
To: <sip:00004@sip.com>;tag=0c93f8a6  
Call-ID: 4046c721@00002.192.168.1.1  
CSeq: 80380604 INVITE  
Contact: <sip:00004@192.168.2.15>  
supported: 100rel

supported: replaces  
 Allow: INVITE, ACK, BYE, CANCEL, OPTIONS, PRACK, MESSAGE, REFER, NOTIFY  
 Content-Type: application/sdp  
 Accept: application/sdp, message/sipfrag  
 Content-Length: 177

v=0  
 o=- 939166 13001 IN IP4 192.168.2.15  
 s=-  
 c=IN IP4 192.168.2.15  
 t=0 0  
 m=audio 5008 RTP/AVP 0 96  
 a=rtpmap:0 PCMU/8000  
 a=rtpmap:96 telephone-event/8000  
 a=fmtp:96 0-11

F22 192.168.2.10:1091(1) -> 192.168.1.1:5060(2)

ACK sip:00004@192.168.1.1 SIP/2.0  
 Via: SIP/2.0/UDP 192.168.2.10:5060;branch=z9hG4bK-6f9005ea-880339.136  
 Route: <sip:00004@192.168.2.15>  
 From: 00002 <sip:00002@sip.com>;tag=24e711f6  
 To: <sip:00004@sip.com>;tag=0c93f8a6  
 Call-ID: 4046c721@00002.192.168.1.1  
 CSeq: 80380604 ACK  
 Proxy-Authorization: Digest username="00002",  
 nonce="79fb077af766d9bfd404294510af41ee", realm="heliossv2",  
 response="2a78c2d2dc6b7c6694e11a6023b738d9", uri="sip:00004@sip.com",  
 opaque="e85adea5ef93bedb3f17b8f1cd27ad7c", algorithm=MD5, cnonce="2f9d085a",  
 qop=auth, nc=00000001  
 Max-Forwards: 70  
 Content-Length: 0

F23 192.168.1.1:5062(2) -> 192.168.2.15:5060(3)

ACK sip:00004@192.168.2.15 SIP/2.0  
 Via: SIP/2.0/UDP 192.168.1.1:5060;branch=z9hG4bK-748.1084363716.80380604  
 Via: SIP/2.0/UDP 192.168.2.10:5060;branch=z9hG4bK-6f9005ea-880339.136  
 From: 00002 <sip:00002@sip.com>;tag=24e711f6  
 To: <sip:00004@sip.com>;tag=0c93f8a6  
 Call-ID: 4046c721@00002.192.168.1.1  
 CSeq: 80380604 ACK  
 max-forwards: 69  
 Content-Length: 0

F24 192.168.2.15:1133(3) -> 192.168.1.1:5060(2)

INVITE sip:00004@192.168.1.1 SIP/2.0  
 Via: SIP/2.0/UDP 192.168.2.15:5060;branch=z9hG4bK-5521248b-880185.561  
 Route: <sip:00002@192.168.2.10>  
 From: <sip:00004@sip.com>;tag=0c93f8a6  
 To: 00002 <sip:00002@sip.com>;tag=24e711f6  
 Call-ID: 4046c721@00002.192.168.1.1  
 CSeq: 1285305168 INVITE  
 Contact: <sip:00004@192.168.2.15>  
 Max-Forwards: 70  
 Supported: 100rel, replaces  
 Allow: INVITE, ACK, BYE, CANCEL, OPTIONS, PRACK, MESSAGE, REFER, NOTIFY  
 Content-Type: application/sdp  
 Content-Length: 189

v=0  
 o=- 543804 13002 IN IP4 192.168.2.15  
 s=-  
 c=IN IP4 192.168.2.15  
 t=0 0  
 m=audio 5008 RTP/AVP 0 96  
 a=rtpmap:0 PCMU/8000  
 a=rtpmap:96 telephone-event/8000  
 a=fmtp:96 0-11  
 a=inactive

F25 192.168.1.1:5062(2) -> 192.168.2.15:5060(3)

SIP/2.0 100 Trying  
 Via: SIP/2.0/UDP 192.168.2.15:5060;branch=z9hG4bK-5521248b-880185.561  
 From: <sip:00004@sip.com>;tag=0c93f8a6  
 To: 00002 <sip:00002@sip.com>;tag=24e711f6  
 Call-ID: 4046c721@00002.192.168.1.1  
 CSeq: 1285305168 INVITE  
 Content-Length: 0

F26 192.168.1.1:5062(2) -> 192.168.2.10:5060(1)

INVITE sip:00002@192.168.2.10 SIP/2.0  
 Via: SIP/2.0/UDP 192.168.1.1:5060;branch=z9hG4bK-747.571480.1285305168  
 Via: SIP/2.0/UDP 192.168.2.15:5060;branch=z9hG4bK-5521248b-880185.561  
 Record-Route: <sip:00004@192.168.1.1>  
 Route: <sip:00002@192.168.2.10>  
 From: <sip:00004@sip.com>;tag=0c93f8a6  
 To: 00002 <sip:00002@sip.com>;tag=24e711f6  
 Call-ID: 4046c721@00002.192.168.1.1  
 CSeq: 1285305168 INVITE  
 Contact: <sip:00004@192.168.2.15>  
 max-forwards: 69  
 supported: 100rel  
 supported: replaces  
 Allow: INVITE, ACK, BYE, CANCEL, OPTIONS, PRACK, MESSAGE, REFER, NOTIFY  
 Content-Type: application/sdp  
 Content-Length: 189

v=0  
 o=- 543804 13002 IN IP4 192.168.2.15  
 s=-  
 c=IN IP4 192.168.2.15  
 t=0 0  
 m=audio 5008 RTP/AVP 0 96  
 a=rtpmap:0 PCMU/8000  
 a=rtpmap:96 telephone-event/8000  
 a=fmtp:96 0-11  
 a=inactive

F27 192.168.2.10:1091(1) -> 192.168.1.1:5060(2)

SIP/2.0 100 Trying  
 Via: SIP/2.0/UDP 192.168.1.1:5060;branch=z9hG4bK-747.571480.1285305168  
 Via: SIP/2.0/UDP 192.168.2.15:5060;branch=z9hG4bK-5521248b-880185.561  
 From: <sip:00004@sip.com>;tag=0c93f8a6  
 To: 00002 <sip:00002@sip.com>;tag=24e711f6  
 Call-ID: 4046c721@00002.192.168.1.1  
 CSeq: 1285305168 INVITE  
 Content-Length: 0

F28 192.168.2.10:1091(1) -> 192.168.1.1:5060(2)

SIP/2.0 200 OK  
 Via: SIP/2.0/UDP 192.168.1.1:5060;branch=z9hG4bK-747.571480.1285305168  
 Via: SIP/2.0/UDP 192.168.2.15:5060;branch=z9hG4bK-5521248b-880185.561  
 Record-Route: <sip:00004@192.168.1.1>  
 From: <sip:00004@sip.com>;tag=0c93f8a6  
 To: 00002 <sip:00002@sip.com>;tag=24e711f6  
 Call-ID: 4046c721@00002.192.168.1.1  
 CSeq: 1285305168 INVITE  
 Contact: <sip:00002@192.168.2.10>  
 Supported: 100rel, replaces  
 Allow: INVITE, ACK, BYE, CANCEL, OPTIONS, PRACK, MESSAGE, REFER, NOTIFY  
 Content-Type: application/sdp  
 Accept: application/sdp, message/sipfrag  
 Content-Length: 188

v=0  
 o=- 609325 3302 IN IP4 192.168.2.10  
 s=-  
 c=IN IP4 192.168.2.10  
 t=0 0

```

m=audio 5008 RTP/AVP 0 96
a=rtpmap:0 PCMU/8000
a=rtpmap:96 telephone-event/8000
a=fmtp:96 0-11
a=inactive

```

---

F29 192.168.1.1:5062(2) -> 192.168.2.15:5060(3)

```

SIP/2.0 200 OK
Via: SIP/2.0/UDP 192.168.2.15:5060;branch=z9hG4bK-5521248b-880185.561
Record-Route: <sip:00004@192.168.1.1>
From: <sip:00004@sip.com>;tag=0c93f8a6
To: 00002 <sip:00002@sip.com>;tag=24e711f6
Call-ID: 4046c721@00002.192.168.1.1
CSeq: 1285305168 INVITE
Contact: <sip:00002@192.168.2.10>
supported: 100rel
supported: replaces
Allow: INVITE, ACK, BYE, CANCEL, OPTIONS, PRACK, MESSAGE, REFER, NOTIFY
Content-Type: application/sdp
Accept: application/sdp, message/sipfrag
Content-Length: 188

```

```

v=0
o=- 609325 3302 IN IP4 192.168.2.10
s=-
c=IN IP4 192.168.2.10
t=0 0
m=audio 5008 RTP/AVP 0 96
a=rtpmap:0 PCMU/8000
a=rtpmap:96 telephone-event/8000
a=fmtp:96 0-11
a=inactive

```

---

F30 192.168.2.15:1133(3) -> 192.168.1.1:5060(2)

```

ACK sip:00004@192.168.1.1 SIP/2.0
Via: SIP/2.0/UDP 192.168.2.15:5060;branch=z9hG4bK-54155b0b-880185.818
Route: <sip:00002@192.168.2.10>
From: <sip:00004@sip.com>;tag=0c93f8a6
To: 00002 <sip:00002@sip.com>;tag=24e711f6
Call-ID: 4046c721@00002.192.168.1.1
CSeq: 1285305168 ACK
Max-Forwards: 70
Content-Length: 0

```

---

F31 192.168.1.1:5062(2) -> 192.168.2.10:5060(1)

```

ACK sip:00002@192.168.2.10 SIP/2.0
Via: SIP/2.0/UDP 192.168.1.1:5060;branch=z9hG4bK-747.1084363728.1285305168
Via: SIP/2.0/UDP 192.168.2.15:5060;branch=z9hG4bK-54155b0b-880185.818
From: <sip:00004@sip.com>;tag=0c93f8a6
To: 00002 <sip:00002@sip.com>;tag=24e711f6
Call-ID: 4046c721@00002.192.168.1.1
CSeq: 1285305168 ACK
max-forwards: 69
Content-Length: 0

```

---

F32 192.168.2.15:1133(3) -> 192.168.1.1:5060(2)

```

INVITE sip:00005@sip.com SIP/2.0
Via: SIP/2.0/UDP 192.168.2.15:5060;branch=z9hG4bK-7dfd41e5-880195.345
Route: <sip:192.168.1.1:5060>
From: <sip:00004@sip.com>;tag=6b8444b3
To: <sip:00005@sip.com>
Call-ID: 70d8d4cc@00004.192.168.1.1
CSeq: 943695672 INVITE
Contact: <sip:00004@192.168.2.15>
Max-Forwards: 70
Supported: 100rel, replaces
Allow: INVITE, ACK, BYE, CANCEL, OPTIONS, PRACK, MESSAGE, REFER, NOTIFY

```

Content-Type: application/sdp  
 Accept: application/sdp, message/sipfrag  
 Content-Length: 249

v=0  
 o=- 316873 201 IN IP4 192.168.2.15  
 s=-  
 c=IN IP4 192.168.2.15  
 t=0 0  
 m=audio 5006 RTP/AVP 0 8 4 18 96  
 a=rtpmap:0 PCMU/8000  
 a=rtpmap:8 PCMA/8000  
 a=rtpmap:4 G723/8000  
 a=rtpmap:18 G729/8000  
 a=rtpmap:96 telephone-event/8000  
 a=fmtp:96 0-11

=====

F33 192.168.1.1:5062(2) -> 192.168.2.15:5060(3)

SIP/2.0 100 Trying  
 Via: SIP/2.0/UDP 192.168.2.15:5060;branch=z9hG4bK-7dfd41e5-880195.345  
 From: <sip:00004@sip.com>;tag=6b8444b3  
 To: <sip:00005@sip.com>  
 Call-ID: 70d8d4cc@00004.192.168.1.1  
 CSeq: 943695672 INVITE  
 Content-Length: 0

=====

F34 192.168.1.1:5062(2) -> 192.168.2.14:5060(4)

INVITE sip:00005@192.168.2.14 SIP/2.0  
 Via: SIP/2.0/UDP 192.168.1.1:5060;branch=z9hG4bK-750.551228.943695672  
 Via: SIP/2.0/UDP 192.168.2.15:5060;branch=z9hG4bK-7dfd41e5-880195.345  
 Record-Route: <sip:00005@192.168.1.1>  
 Route: <sip:192.168.1.1:5060>  
 From: 00004 <sip:00004@sip.com>;tag=6b8444b3  
 To: <sip:00005@sip.com>  
 Call-ID: 70d8d4cc@00004.192.168.1.1  
 CSeq: 943695672 INVITE  
 Contact: <sip:00004@192.168.2.15>  
 max-forwards: 69  
 supported: 100rel  
 supported: replaces  
 Allow: INVITE, ACK, BYE, CANCEL, OPTIONS, PRACK, MESSAGE, REFER, NOTIFY  
 Content-Type: application/sdp  
 Accept: application/sdp, message/sipfrag  
 Content-Length: 249

v=0  
 o=- 316873 201 IN IP4 192.168.2.15  
 s=-  
 c=IN IP4 192.168.2.15  
 t=0 0  
 m=audio 5006 RTP/AVP 0 8 4 18 96  
 a=rtpmap:0 PCMU/8000  
 a=rtpmap:8 PCMA/8000  
 a=rtpmap:4 G723/8000  
 a=rtpmap:18 G729/8000  
 a=rtpmap:96 telephone-event/8000  
 a=fmtp:96 0-11

=====

F35 192.168.2.14:1057(4) -> 192.168.1.1:5060(2)

SIP/2.0 100 Trying  
 Via: SIP/2.0/UDP 192.168.1.1:5060;branch=z9hG4bK-750.551228.943695672  
 Via: SIP/2.0/UDP 192.168.2.15:5060;branch=z9hG4bK-7dfd41e5-880195.345  
 From: 00004 <sip:00004@sip.com>;tag=6b8444b3  
 To: <sip:00005@sip.com>  
 Call-ID: 70d8d4cc@00004.192.168.1.1  
 CSeq: 943695672 INVITE  
 Content-Length: 0

F36 192.168.2.14:1057(4) -> 192.168.1.1:5060(2)

SIP/2.0 183 Session Progress  
 Via: SIP/2.0/UDP 192.168.1.1:5060;branch=z9hG4bK-750.551228.943695672  
 Via: SIP/2.0/UDP 192.168.2.15:5060;branch=z9hG4bK-7dfd41e5-880195.345  
 Record-Route: <sip:00005@192.168.1.1>  
 From: 00004 <sip:00004@sip.com>;tag=6b8444b3  
 To: <sip:00005@sip.com>;tag=518fb9f8  
 Call-ID: 70d8d4cc@00004.192.168.1.1  
 CSeq: 943695672 INVITE  
 Contact: <sip:00005@192.168.2.14>  
 Require: 100rel  
 RSeq: 1459906216  
 Content-Length: 0

F37 192.168.1.1:5062(2) -> 192.168.2.15:5060(3)

SIP/2.0 183 Session Progress  
 Via: SIP/2.0/UDP 192.168.2.15:5060;branch=z9hG4bK-7dfd41e5-880195.345  
 Record-Route: <sip:00005@192.168.1.1>  
 From: 00004 <sip:00004@sip.com>;tag=6b8444b3  
 To: <sip:00005@sip.com>;tag=518fb9f8  
 Call-ID: 70d8d4cc@00004.192.168.1.1  
 CSeq: 943695672 INVITE  
 Contact: <sip:00005@192.168.2.14>  
 require: 100rel  
 rseq: 1459906216  
 Content-Length: 0

F38 192.168.2.15:1133(3) -> 192.168.1.1:5060(2)

PRACK sip:00005@192.168.1.1 SIP/2.0  
 Via: SIP/2.0/UDP 192.168.2.15:5060;branch=z9hG4bK-d6c186e-880196.354  
 Route: <sip:00005@192.168.2.14>  
 From: 00004 <sip:00004@sip.com>;tag=6b8444b3  
 To: <sip:00005@sip.com>;tag=518fb9f8  
 Call-ID: 70d8d4cc@00004.192.168.1.1  
 CSeq: 943695673 PRACK  
 Max-Forwards: 70  
 RAck: 1459906216 943695672 INVITE  
 Content-Length: 0

F39 192.168.1.1:5062(2) -> 192.168.2.14:5060(4)

PRACK sip:00005@192.168.2.14 SIP/2.0  
 Via: SIP/2.0/UDP 192.168.1.1:5060;branch=z9hG4bK-750.1084363738.943695673  
 Via: SIP/2.0/UDP 192.168.2.15:5060;branch=z9hG4bK-d6c186e-880196.354  
 Route: <sip:00005@192.168.2.14>  
 From: 00004 <sip:00004@sip.com>;tag=6b8444b3  
 To: <sip:00005@sip.com>;tag=518fb9f8  
 Call-ID: 70d8d4cc@00004.192.168.1.1  
 CSeq: 943695673 PRACK  
 max-forwards: 69  
 rack: 1459906216 943695672 INVITE  
 Content-Length: 0

F40 192.168.2.14:1057(4) -> 192.168.1.1:5060(2)

SIP/2.0 200 OK  
 Via: SIP/2.0/UDP 192.168.1.1:5060;branch=z9hG4bK-750.1084363738.943695673  
 Via: SIP/2.0/UDP 192.168.2.15:5060;branch=z9hG4bK-d6c186e-880196.354  
 From: 00004 <sip:00004@sip.com>;tag=6b8444b3  
 To: <sip:00005@sip.com>;tag=518fb9f8  
 Call-ID: 70d8d4cc@00004.192.168.1.1  
 CSeq: 943695673 PRACK  
 Content-Length: 0

F41 192.168.1.1:5062(2) -> 192.168.2.15:5060(3)

SIP/2.0 200 OK  
Via: SIP/2.0/UDP 192.168.2.15:5060;branch=z9hG4bK-d6c186e-880196.354  
From: 00004 <sip:00004@sip.com>;tag=6b8444b3  
To: <sip:00005@sip.com>;tag=518fb9f8  
Call-ID: 70d8d4cc@00004.192.168.1.1  
CSeq: 943695673 PRACK  
Content-Length: 0

---

F42 192.168.2.14:1057(4) -> 192.168.1.1:5060(2)

SIP/2.0 180 Ringing  
Via: SIP/2.0/UDP 192.168.1.1:5060;branch=z9hG4bK-750.551228.943695672  
Via: SIP/2.0/UDP 192.168.2.15:5060;branch=z9hG4bK-7dfd41e5-880195.345  
Record-Route: <sip:00005@192.168.1.1>  
From: 00004 <sip:00004@sip.com>;tag=6b8444b3  
To: <sip:00005@sip.com>;tag=518fb9f8  
Call-ID: 70d8d4cc@00004.192.168.1.1  
CSeq: 943695672 INVITE  
Contact: <sip:00005@192.168.2.14>  
Require: 100rel  
RSeq: 1459906217  
Content-Length: 0

---

F43 192.168.1.1:5062(2) -> 192.168.2.15:5060(3)

SIP/2.0 180 Ringing  
Via: SIP/2.0/UDP 192.168.2.15:5060;branch=z9hG4bK-7dfd41e5-880195.345  
Record-Route: <sip:00005@192.168.1.1>  
From: 00004 <sip:00004@sip.com>;tag=6b8444b3  
To: <sip:00005@sip.com>;tag=518fb9f8  
Call-ID: 70d8d4cc@00004.192.168.1.1  
CSeq: 943695672 INVITE  
Contact: <sip:00005@192.168.2.14>  
require: 100rel  
rseq: 1459906217  
Content-Length: 0

---

F44 192.168.2.15:1133(3) -> 192.168.1.1:5060(2)

PRACK sip:00005@192.168.1.1 SIP/2.0  
Via: SIP/2.0/UDP 192.168.2.15:5060;branch=z9hG4bK-541dc99-880196.991  
Route: <sip:00005@192.168.2.14>  
From: 00004 <sip:00004@sip.com>;tag=6b8444b3  
To: <sip:00005@sip.com>;tag=518fb9f8  
Call-ID: 70d8d4cc@00004.192.168.1.1  
CSeq: 943695674 PRACK  
Max-Forwards: 70  
RAck: 1459906217 943695672 INVITE  
Content-Length: 0

---

F45 192.168.1.1:5062(2) -> 192.168.2.14:5060(4)

PRACK sip:00005@192.168.2.14 SIP/2.0  
Via: SIP/2.0/UDP 192.168.1.1:5060;branch=z9hG4bK-750.1084363739.943695674  
Via: SIP/2.0/UDP 192.168.2.15:5060;branch=z9hG4bK-541dc99-880196.991  
Route: <sip:00005@192.168.2.14>  
From: 00004 <sip:00004@sip.com>;tag=6b8444b3  
To: <sip:00005@sip.com>;tag=518fb9f8  
Call-ID: 70d8d4cc@00004.192.168.1.1  
CSeq: 943695674 PRACK  
max-forwards: 69  
rack: 1459906217 943695672 INVITE  
Content-Length: 0

---

F46 192.168.2.14:1057(4) -> 192.168.1.1:5060(2)

SIP/2.0 200 OK  
 Via: SIP/2.0/UDP 192.168.1.1:5060;branch=z9hG4bK-750.1084363739.943695674  
 Via: SIP/2.0/UDP 192.168.2.15:5060;branch=z9hG4bK-541dc99-880196.991  
 From: 00004 <sip:00004@sip.com>;tag=6b8444b3  
 To: <sip:00005@sip.com>;tag=518fb9f8  
 Call-ID: 70d8d4cc@00004.192.168.1.1  
 CSeq: 943695674 PRACK  
 Content-Length: 0

F47 192.168.1.1:5062(2) -> 192.168.2.15:5060(3)

SIP/2.0 200 OK  
 Via: SIP/2.0/UDP 192.168.2.15:5060;branch=z9hG4bK-541dc99-880196.991  
 From: 00004 <sip:00004@sip.com>;tag=6b8444b3  
 To: <sip:00005@sip.com>;tag=518fb9f8  
 Call-ID: 70d8d4cc@00004.192.168.1.1  
 CSeq: 943695674 PRACK  
 Content-Length: 0

F48 192.168.2.14:1057(4) -> 192.168.1.1:5060(2)

SIP/2.0 200 OK  
 Via: SIP/2.0/UDP 192.168.1.1:5060;branch=z9hG4bK-750.551228.943695672  
 Via: SIP/2.0/UDP 192.168.2.15:5060;branch=z9hG4bK-7dfd41e5-880195.345  
 Record-Route: <sip:00005@192.168.1.1>  
 From: 00004 <sip:00004@sip.com>;tag=6b8444b3  
 To: <sip:00005@sip.com>;tag=518fb9f8  
 Call-ID: 70d8d4cc@00004.192.168.1.1  
 CSeq: 943695672 INVITE  
 Contact: <sip:00005@192.168.2.14>  
 Supported: 100rel, replaces  
 Allow: INVITE, ACK, BYE, CANCEL, OPTIONS, PRACK, MESSAGE, REFER, NOTIFY  
 Content-Type: application/sdp  
 Accept: application/sdp, message/sipfrag  
 Content-Length: 177

v=0  
 o=- 353347 14701 IN IP4 192.168.2.14  
 s=-  
 c=IN IP4 192.168.2.14  
 t=0 0  
 m=audio 5006 RTP/AVP 0 96  
 a=rtpmap:0 PCMU/8000  
 a=rtpmap:96 telephone-event/8000  
 a=fmtp:96 0-11

F49 192.168.1.1:5062(2) -> 192.168.2.15:5060(3)

SIP/2.0 200 OK  
 Via: SIP/2.0/UDP 192.168.2.15:5060;branch=z9hG4bK-7dfd41e5-880195.345  
 Record-Route: <sip:00005@192.168.1.1>  
 From: 00004 <sip:00004@sip.com>;tag=6b8444b3  
 To: <sip:00005@sip.com>;tag=518fb9f8  
 Call-ID: 70d8d4cc@00004.192.168.1.1  
 CSeq: 943695672 INVITE  
 Contact: <sip:00005@192.168.2.14>  
 supported: 100rel  
 supported: replaces  
 Allow: INVITE, ACK, BYE, CANCEL, OPTIONS, PRACK, MESSAGE, REFER, NOTIFY  
 Content-Type: application/sdp  
 Accept: application/sdp, message/sipfrag  
 Content-Length: 177

v=0  
 o=- 353347 14701 IN IP4 192.168.2.14  
 s=-  
 c=IN IP4 192.168.2.14  
 t=0 0  
 m=audio 5006 RTP/AVP 0 96  
 a=rtpmap:0 PCMU/8000



a=rtpmap:96 telephone-event/8000  
a=fmtp:96 0-11

F50 192.168.2.15:1133(3) -> 192.168.1.1:5060(2)

ACK sip:00005@192.168.1.1 SIP/2.0  
Via: SIP/2.0/UDP 192.168.2.15:5060;branch=z9hG4bK-4985a224-880199.356  
Route: <sip:00005@192.168.2.14>  
From: 00004 <sip:00004@sip.com>;tag=6b8444b3  
To: <sip:00005@sip.com>;tag=518fb9f8  
Call-ID: 70d8d4cc@00004.192.168.1.1  
CSeq: 943695672 ACK  
Max-Forwards: 70  
Content-Length: 0

F51 192.168.1.1:5062(2) -> 192.168.2.14:5060(4)

ACK sip:00005@192.168.2.14 SIP/2.0  
Via: SIP/2.0/UDP 192.168.1.1:5060;branch=z9hG4bK-750.1084363741.943695672  
Via: SIP/2.0/UDP 192.168.2.15:5060;branch=z9hG4bK-4985a224-880199.356  
From: 00004 <sip:00004@sip.com>;tag=6b8444b3  
To: <sip:00005@sip.com>;tag=518fb9f8  
Call-ID: 70d8d4cc@00004.192.168.1.1  
CSeq: 943695672 ACK  
max-forwards: 69  
Content-Length: 0

F52 192.168.2.14:1057(4) -> 192.168.1.1:5060(2)

BYE sip:00005@192.168.1.1 SIP/2.0  
Via: SIP/2.0/UDP 192.168.2.14:5060;branch=z9hG4bK-2ac9a4e9-880183.527  
Route: <sip:00004@192.168.2.15>  
From: <sip:00005@sip.com>;tag=518fb9f8  
To: 00004 <sip:00004@sip.com>;tag=6b8444b3  
Call-ID: 70d8d4cc@00004.192.168.1.1  
CSeq: 2014889596 BYE  
Max-Forwards: 70  
Content-Length: 0

F53 192.168.1.1:5062(2) -> 192.168.2.15:5060(3)

BYE sip:00004@192.168.2.15 SIP/2.0  
Via: SIP/2.0/UDP 192.168.1.1:5060;branch=z9hG4bK-749.1084363800.2014889596  
Via: SIP/2.0/UDP 192.168.2.14:5060;branch=z9hG4bK-2ac9a4e9-880183.527  
Route: <sip:00004@192.168.2.15>  
From: <sip:00005@sip.com>;tag=518fb9f8  
To: 00004 <sip:00004@sip.com>;tag=6b8444b3  
Call-ID: 70d8d4cc@00004.192.168.1.1  
CSeq: 2014889596 BYE  
max-forwards: 69  
Content-Length: 0

F54 192.168.1.1:5062(2) -> 192.168.2.15:5060(3)

BYE sip:00004@192.168.2.15 SIP/2.0  
Via: SIP/2.0/UDP 192.168.1.1:5060;branch=z9hG4bK-749.1084363800.2014889596  
Via: SIP/2.0/UDP 192.168.2.14:5060;branch=z9hG4bK-2ac9a4e9-880183.527  
Route: <sip:00004@192.168.2.15>  
From: <sip:00005@sip.com>;tag=518fb9f8  
To: 00004 <sip:00004@sip.com>;tag=6b8444b3  
Call-ID: 70d8d4cc@00004.192.168.1.1  
CSeq: 2014889596 BYE  
max-forwards: 69  
Content-Length: 0

F55 192.168.2.14:1057(4) -> 192.168.1.1:5060(2)

BYE sip:00005@192.168.1.1 SIP/2.0  
Via: SIP/2.0/UDP 192.168.2.14:5060;branch=z9hG4bK-2ac9a4e9-880183.527  
Route: <sip:00004@192.168.2.15>  
From: <sip:00005@sip.com>;tag=518fb9f8  
To: 00004 <sip:00004@sip.com>;tag=6b8444b3  
Call-ID: 70d8d4cc@00004.192.168.1.1  
CSeq: 2014889596 BYE  
Max-Forwards: 70  
Content-Length: 0

---

F56 192.168.1.1:5062(2) -> 192.168.2.15:5060(3)

BYE sip:00004@192.168.2.15 SIP/2.0  
Via: SIP/2.0/UDP 192.168.1.1:5060;branch=z9hG4bK-749.1084363800.2014889596  
Via: SIP/2.0/UDP 192.168.2.14:5060;branch=z9hG4bK-2ac9a4e9-880183.527  
Route: <sip:00004@192.168.2.15>  
From: <sip:00005@sip.com>;tag=518fb9f8  
To: 00004 <sip:00004@sip.com>;tag=6b8444b3  
Call-ID: 70d8d4cc@00004.192.168.1.1  
CSeq: 2014889596 BYE  
max-forwards: 69  
Content-Length: 0

---

F57 192.168.2.14:1057(4) -> 192.168.1.1:5060(2)

BYE sip:00005@192.168.1.1 SIP/2.0  
Via: SIP/2.0/UDP 192.168.2.14:5060;branch=z9hG4bK-2ac9a4e9-880183.527  
Route: <sip:00004@192.168.2.15>  
From: <sip:00005@sip.com>;tag=518fb9f8  
To: 00004 <sip:00004@sip.com>;tag=6b8444b3  
Call-ID: 70d8d4cc@00004.192.168.1.1  
CSeq: 2014889596 BYE  
Max-Forwards: 70  
Content-Length: 0

---

F58 192.168.1.1:5062(2) -> 192.168.2.15:5060(3)

BYE sip:00004@192.168.2.15 SIP/2.0  
Via: SIP/2.0/UDP 192.168.1.1:5060;branch=z9hG4bK-749.1084363800.2014889596  
Via: SIP/2.0/UDP 192.168.2.14:5060;branch=z9hG4bK-2ac9a4e9-880183.527  
Route: <sip:00004@192.168.2.15>  
From: <sip:00005@sip.com>;tag=518fb9f8  
To: 00004 <sip:00004@sip.com>;tag=6b8444b3  
Call-ID: 70d8d4cc@00004.192.168.1.1  
CSeq: 2014889596 BYE  
max-forwards: 69  
Content-Length: 0

---

F59 192.168.1.1:5062(2) -> 192.168.2.15:5060(3)

BYE sip:00004@192.168.2.15 SIP/2.0  
Via: SIP/2.0/UDP 192.168.1.1:5060;branch=z9hG4bK-749.1084363800.2014889596  
Via: SIP/2.0/UDP 192.168.2.14:5060;branch=z9hG4bK-2ac9a4e9-880183.527  
Route: <sip:00004@192.168.2.15>  
From: <sip:00005@sip.com>;tag=518fb9f8  
To: 00004 <sip:00004@sip.com>;tag=6b8444b3  
Call-ID: 70d8d4cc@00004.192.168.1.1  
CSeq: 2014889596 BYE  
max-forwards: 69  
Content-Length: 0

---

F60 192.168.1.1:5062(2) -> 192.168.2.15:5060(3)

BYE sip:00004@192.168.2.15 SIP/2.0  
 Via: SIP/2.0/UDP 192.168.1.1:5060;branch=z9hG4bK-749.1084363800.2014889596  
 Via: SIP/2.0/UDP 192.168.2.14:5060;branch=z9hG4bK-2ac9a4e9-880183.527  
 Route: <sip:00004@192.168.2.15>  
 From: <sip:00005@sip.com>;tag=518fb9f8  
 To: 00004 <sip:00004@sip.com>;tag=6b8444b3  
 Call-ID: 70d8d4cc@00004.192.168.1.1  
 CSeq: 2014889596 BYE  
 max-forwards: 69  
 Content-Length: 0

=====

F61 192.168.1.1:5062(2) -> 192.168.2.15:5060(3)

BYE sip:00004@192.168.2.15 SIP/2.0  
 Via: SIP/2.0/UDP 192.168.1.1:5060;branch=z9hG4bK-749.1084363800.2014889596  
 Via: SIP/2.0/UDP 192.168.2.14:5060;branch=z9hG4bK-2ac9a4e9-880183.527  
 Route: <sip:00004@192.168.2.15>  
 From: <sip:00005@sip.com>;tag=518fb9f8  
 To: 00004 <sip:00004@sip.com>;tag=6b8444b3  
 Call-ID: 70d8d4cc@00004.192.168.1.1  
 CSeq: 2014889596 BYE  
 max-forwards: 69  
 Content-Length: 0

=====

F62 192.168.1.1:5062(2) -> 192.168.2.15:5060(3)

BYE sip:00004@192.168.2.15 SIP/2.0  
 Via: SIP/2.0/UDP 192.168.1.1:5060;branch=z9hG4bK-749.1084363800.2014889596  
 Via: SIP/2.0/UDP 192.168.2.14:5060;branch=z9hG4bK-2ac9a4e9-880183.527  
 Route: <sip:00004@192.168.2.15>  
 From: <sip:00005@sip.com>;tag=518fb9f8  
 To: 00004 <sip:00004@sip.com>;tag=6b8444b3  
 Call-ID: 70d8d4cc@00004.192.168.1.1  
 CSeq: 2014889596 BYE  
 max-forwards: 69  
 Content-Length: 0

=====

F63 192.168.1.1:5062(2) -> 192.168.2.14:5060(4)

SIP/2.0 408 Request Timeout  
 Via: SIP/2.0/UDP 192.168.2.14:5060;branch=z9hG4bK-2ac9a4e9-880183.527  
 From: <sip:00005@sip.com>;tag=518fb9f8  
 To: 00004 <sip:00004@sip.com>;tag=6b8444b3  
 Call-ID: 70d8d4cc@00004.192.168.1.1  
 CSeq: 2014889596 BYE  
 Content-Length: 0

=====

F64 192.168.2.10:1091(1) -> 192.168.1.1:5060(2)

BYE sip:00004@192.168.1.1 SIP/2.0  
 Via: SIP/2.0/UDP 192.168.2.10:5060;branch=z9hG4bK-45e02787-880518.497  
 Route: <sip:00004@192.168.2.15>  
 From: 00002 <sip:00002@sip.com>;tag=24e711f6  
 To: <sip:00004@sip.com>;tag=0c93f8a6  
 Call-ID: 4046c721@00002.192.168.1.1  
 CSeq: 80380607 BYE  
 Proxy-Authorization: Digest username="00002", realm="heliossv2",  
 nonce="79fb077af766d9bfd404294510af41ee", uri="sip:00004@192.168.1.1",  
 response="2724e8fe0724639380470e92547c2f71", algorithm=MD5, cnonce="73d8a400",  
 opaque="e85adea5ef93bedb3f17b8f1cd27ad7c", qop=auth, nc=00000004  
 Max-Forwards: 70  
 Content-Length: 0

=====

F65 192.168.1.1:5062(2) -> 192.168.2.15:5060(3)

BYE sip:00004@192.168.2.15 SIP/2.0

FOMA/WLAN デュアル端末に関する技術参考資料 第 1.2 版

Via: SIP/2.0/UDP 192.168.1.1:5060;branch=z9hG4bK-748.1084363895.80380607  
Via: SIP/2.0/UDP 192.168.2.10:5060;branch=z9hG4bK-45e02787-880518.497  
Route: <sip:00004@192.168.2.15>  
From: 00002 <sip:00002@sip.com>;tag=24e711f6  
To: <sip:00004@sip.com>;tag=0c93f8a6  
Call-ID: 4046c721@00002.192.168.1.1  
CSeq: 80380607 BYE  
max-forwards: 69  
Content-Length: 0

=====

F66            192.168.2.15:1133(3) -> 192.168.1.1:5060(2)

SIP/2.0 481 Call Leg/Transaction Does Not Exist  
Via: SIP/2.0/UDP 192.168.1.1:5060;branch=z9hG4bK-748.1084363895.80380607  
Via: SIP/2.0/UDP 192.168.2.10:5060;branch=z9hG4bK-45e02787-880518.497  
From: 00002 <sip:00002@sip.com>;tag=24e711f6  
To: <sip:00004@sip.com>;tag=0c93f8a6  
Call-ID: 4046c721@00002.192.168.1.1  
CSeq: 80380607 BYE  
Content-Length: 0

=====

F67            192.168.1.1:5062(2) -> 192.168.2.10:5060(1)

SIP/2.0 481 Call Leg/Transaction Does Not Exist  
Via: SIP/2.0/UDP 192.168.2.10:5060;branch=z9hG4bK-45e02787-880518.497  
From: 00002 <sip:00002@sip.com>;tag=24e711f6  
To: <sip:00004@sip.com>;tag=0c93f8a6  
Call-ID: 4046c721@00002.192.168.1.1  
CSeq: 80380607 BYE  
Content-Length: 0

=====

## 11.6. 転送

## 11.6.1. Unattended Transfer

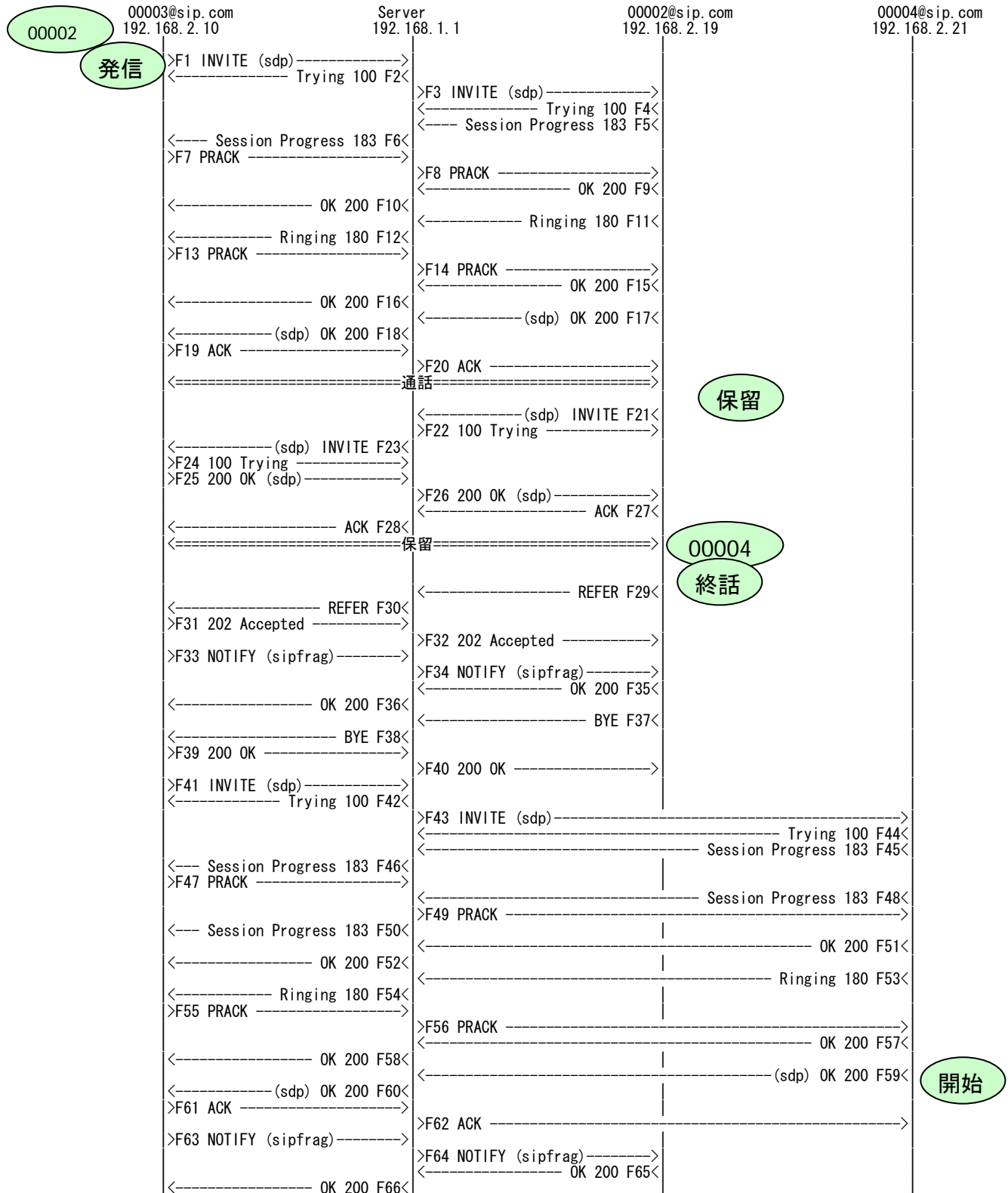




図 11-28 Unattended Transfer

```
=====
F1          192.168.2.10:1025(00003@sip.com) -> 192.168.1.1:5060(Server)
```

```

INVITE sip:00002@sip.com SIP/2.0
Via: SIP/2.0/UDP 192.168.2.10:5060;branch=z9hG4bK-436d52dd-681091.335
Route: <sip:192.168.1.1:5060>
From: <sip:00003@sip.com>;tag=11d8bc01
To: <sip:00002@sip.com>
Call-ID: 0a912031@00003.192.168.1.1
CSeq: 580532861 INVITE
Contact: <sip:00003@192.168.2.10>
Max-Forwards: 70
Supported: 100rel, replaces
Allow: INVITE, ACK, BYE, CANCEL, OPTIONS, PRACK, MESSAGE, REFER, NOTIFY
Content-Type: application/sdp
Accept: application/sdp, message/sipfrag
Content-Length: 249

```

```

v=0
o=- 319515 201 IN IP4 192.168.2.10
s=-
c=IN IP4 192.168.2.10
t=0 0
m=audio 5006 RTP/AVP 0 8 4 18 96
a=rtpmap:0 PCMU/8000
a=rtpmap:8 PCMA/8000
a=rtpmap:4 G723/8000
a=rtpmap:18 G729/8000
a=rtpmap:96 telephone-event/8000
a=fmtp:96 0-11

```

```
=====
F2          192.168.1.1:5062(Server) -> 192.168.2.10:5060(00003@sip.com)
```

```

SIP/2.0 100 Trying
Via: SIP/2.0/UDP 192.168.2.10:5060;branch=z9hG4bK-436d52dd-681091.335
From: <sip:00003@sip.com>;tag=11d8bc01
To: <sip:00002@sip.com>
Call-ID: 0a912031@00003.192.168.1.1
CSeq: 580532861 INVITE
Content-Length: 0

```

```
=====
F3          192.168.1.1:5062(Server) -> 192.168.2.19:5060(00002@sip.com)
```

```

INVITE sip:00002@192.168.2.19 SIP/2.0
Via: SIP/2.0/UDP 192.168.1.1:5060;branch=z9hG4bK-300.371035.580532861
Via: SIP/2.0/UDP 192.168.2.10:5060;branch=z9hG4bK-436d52dd-681091.335
Record-Route: <sip:00002@192.168.1.1>
Route: <sip:192.168.1.1:5060>
From: 00003 <sip:00003@sip.com>;tag=11d8bc01
To: <sip:00002@sip.com>
Call-ID: 0a912031@00003.192.168.1.1
CSeq: 580532861 INVITE
Contact: <sip:00003@192.168.2.10>
max-forwards: 69
supported: 100rel
supported: replaces
Allow: INVITE, ACK, BYE, CANCEL, OPTIONS, PRACK, MESSAGE, REFER, NOTIFY
Content-Type: application/sdp
Accept: application/sdp, message/sipfrag
Content-Length: 249

```

```
v=0
```

```

o=- 319515 201 IN IP4 192.168.2.10
s=-
c=IN IP4 192.168.2.10
t=0 0
m=audio 5006 RTP/AVP 0 8 4 18 96
a=rtpmap:0 PCMU/8000
a=rtpmap:8 PCMA/8000
a=rtpmap:4 G723/8000
a=rtpmap:18 G729/8000
a=rtpmap:96 telephone-event/8000
a=fmtp:96 0-11

```

---

F4 192.168.2.19:1025(00002@sip.com) -> 192.168.1.1:5060(Server)

```

SIP/2.0 100 Trying
Via: SIP/2.0/UDP 192.168.1.1:5060;branch=z9hG4bK-300.371035.580532861
Via: SIP/2.0/UDP 192.168.2.10:5060;branch=z9hG4bK-436d52dd-681091.335
From: 00003 <sip:00003@sip.com>;tag=11d8bc01
To: <sip:00002@sip.com>
Call-ID: 0a912031@00003.192.168.1.1
CSeq: 580532861 INVITE
Content-Length: 0

```

---

F5 192.168.2.19:1025(00002@sip.com) -> 192.168.1.1:5060(Server)

```

SIP/2.0 183 Session Progress
Via: SIP/2.0/UDP 192.168.1.1:5060;branch=z9hG4bK-300.371035.580532861
Via: SIP/2.0/UDP 192.168.2.10:5060;branch=z9hG4bK-436d52dd-681091.335
Record-Route: <sip:00002@192.168.1.1>
From: 00003 <sip:00003@sip.com>;tag=11d8bc01
To: <sip:00002@sip.com>;tag=76752a3b
Call-ID: 0a912031@00003.192.168.1.1
CSeq: 580532861 INVITE
Contact: <sip:00002@192.168.2.19>
Require: 100rel
RSeq: 1904028007
Content-Length: 0

```

---

F6 192.168.1.1:5062(Server) -> 192.168.2.10:5060(00003@sip.com)

```

SIP/2.0 183 Session Progress
Via: SIP/2.0/UDP 192.168.2.10:5060;branch=z9hG4bK-436d52dd-681091.335
Record-Route: <sip:00002@192.168.1.1>
From: 00003 <sip:00003@sip.com>;tag=11d8bc01
To: <sip:00002@sip.com>;tag=76752a3b
Call-ID: 0a912031@00003.192.168.1.1
CSeq: 580532861 INVITE
Contact: <sip:00002@192.168.2.19>
require: 100rel
rseq: 1904028007
Content-Length: 0

```

---

F7 192.168.2.10:1025(00003@sip.com) -> 192.168.1.1:5060(Server)

```

PRACK sip:00002@192.168.1.1 SIP/2.0
Via: SIP/2.0/UDP 192.168.2.10:5060;branch=z9hG4bK-74c380ae-681092.453
Route: <sip:00002@192.168.2.19>
From: 00003 <sip:00003@sip.com>;tag=11d8bc01
To: <sip:00002@sip.com>;tag=76752a3b
Call-ID: 0a912031@00003.192.168.1.1
CSeq: 580532862 PRACK
Max-Forwards: 70
RAck: 1904028007 580532861 INVITE
Content-Length: 0

```

---

F8 192.168.1.1:5062(Server) -> 192.168.2.19:5060(00002@sip.com)

PRACK sip:00002@192.168.2.19 SIP/2.0  
 Via: SIP/2.0/UDP 192.168.1.1:5060;branch=z9hG4bK-300.1085830366.580532862  
 Via: SIP/2.0/UDP 192.168.2.10:5060;branch=z9hG4bK-74c380ae-681092.453  
 Route: <sip:00002@192.168.2.19>  
 From: 00003 <sip:00003@sip.com>;tag=11d8bc01  
 To: <sip:00002@sip.com>;tag=76752a3b  
 Call-ID: 0a912031@00003.192.168.1.1  
 CSeq: 580532862 PRACK  
 max-forwards: 69  
 rack: 1904028007 580532861 INVITE  
 Content-Length: 0

F9 192.168.2.19:1025(00002@sip.com) -> 192.168.1.1:5060(Server)

SIP/2.0 200 OK  
 Via: SIP/2.0/UDP 192.168.1.1:5060;branch=z9hG4bK-300.1085830366.580532862  
 Via: SIP/2.0/UDP 192.168.2.10:5060;branch=z9hG4bK-74c380ae-681092.453  
 From: 00003 <sip:00003@sip.com>;tag=11d8bc01  
 To: <sip:00002@sip.com>;tag=76752a3b  
 Call-ID: 0a912031@00003.192.168.1.1  
 CSeq: 580532862 PRACK  
 Content-Length: 0

F10 192.168.1.1:5062(Server) -> 192.168.2.10:5060(00003@sip.com)

SIP/2.0 200 OK  
 Via: SIP/2.0/UDP 192.168.2.10:5060;branch=z9hG4bK-74c380ae-681092.453  
 From: 00003 <sip:00003@sip.com>;tag=11d8bc01  
 To: <sip:00002@sip.com>;tag=76752a3b  
 Call-ID: 0a912031@00003.192.168.1.1  
 CSeq: 580532862 PRACK  
 Content-Length: 0

F11 192.168.2.19:1025(00002@sip.com) -> 192.168.1.1:5060(Server)

SIP/2.0 180 Ringing  
 Via: SIP/2.0/UDP 192.168.1.1:5060;branch=z9hG4bK-300.371035.580532861  
 Via: SIP/2.0/UDP 192.168.2.10:5060;branch=z9hG4bK-436d52dd-681091.335  
 Record-Route: <sip:00002@192.168.1.1>  
 From: 00003 <sip:00003@sip.com>;tag=11d8bc01  
 To: <sip:00002@sip.com>;tag=76752a3b  
 Call-ID: 0a912031@00003.192.168.1.1  
 CSeq: 580532861 INVITE  
 Contact: <sip:00002@192.168.2.19>  
 Require: 100rel  
 RSeq: 1904028008  
 Content-Length: 0

F12 192.168.1.1:5062(Server) -> 192.168.2.10:5060(00003@sip.com)

SIP/2.0 180 Ringing  
 Via: SIP/2.0/UDP 192.168.2.10:5060;branch=z9hG4bK-436d52dd-681091.335  
 Record-Route: <sip:00002@192.168.1.1>  
 From: 00003 <sip:00003@sip.com>;tag=11d8bc01  
 To: <sip:00002@sip.com>;tag=76752a3b  
 Call-ID: 0a912031@00003.192.168.1.1  
 CSeq: 580532861 INVITE  
 Contact: <sip:00002@192.168.2.19>  
 require: 100rel  
 rseq: 1904028008  
 Content-Length: 0

F13 192.168.2.10:1025(00003@sip.com) -> 192.168.1.1:5060(Server)

PRACK sip:00002@192.168.1.1 SIP/2.0  
 Via: SIP/2.0/UDP 192.168.2.10:5060;branch=z9hG4bK-7189b62d-681092.743



Route: <sip:00002@192.168.2.19>  
 From: 00003 <sip:00003@sip.com>;tag=11d8bc01  
 To: <sip:00002@sip.com>;tag=76752a3b  
 Call-ID: 0a912031@00003.192.168.1.1  
 CSeq: 580532863 PRACK  
 Max-Forwards: 70  
 Rack: 1904028008 580532861 INVITE  
 Content-Length: 0

F14 192.168.1.1:5062(Server) -> 192.168.2.19:5060(00002@sip.com)

PRACK sip:00002@192.168.2.19 SIP/2.0  
 Via: SIP/2.0/UDP 192.168.1.1:5060;branch=z9hG4bK-300.1085830366.580532863  
 Via: SIP/2.0/UDP 192.168.2.10:5060;branch=z9hG4bK-7189b62d-681092.743  
 Route: <sip:00002@192.168.2.19>  
 From: 00003 <sip:00003@sip.com>;tag=11d8bc01  
 To: <sip:00002@sip.com>;tag=76752a3b  
 Call-ID: 0a912031@00003.192.168.1.1  
 CSeq: 580532863 PRACK  
 max-forwards: 69  
 rack: 1904028008 580532861 INVITE  
 Content-Length: 0

F15 192.168.2.19:1025(00002@sip.com) -> 192.168.1.1:5060(Server)

SIP/2.0 200 OK  
 Via: SIP/2.0/UDP 192.168.1.1:5060;branch=z9hG4bK-300.1085830366.580532863  
 Via: SIP/2.0/UDP 192.168.2.10:5060;branch=z9hG4bK-7189b62d-681092.743  
 From: 00003 <sip:00003@sip.com>;tag=11d8bc01  
 To: <sip:00002@sip.com>;tag=76752a3b  
 Call-ID: 0a912031@00003.192.168.1.1  
 CSeq: 580532863 PRACK  
 Content-Length: 0

F16 192.168.1.1:5062(Server) -> 192.168.2.10:5060(00003@sip.com)

SIP/2.0 200 OK  
 Via: SIP/2.0/UDP 192.168.2.10:5060;branch=z9hG4bK-7189b62d-681092.743  
 From: 00003 <sip:00003@sip.com>;tag=11d8bc01  
 To: <sip:00002@sip.com>;tag=76752a3b  
 Call-ID: 0a912031@00003.192.168.1.1  
 CSeq: 580532863 PRACK  
 Content-Length: 0

F17 192.168.2.19:1025(00002@sip.com) -> 192.168.1.1:5060(Server)

SIP/2.0 200 OK  
 Via: SIP/2.0/UDP 192.168.1.1:5060;branch=z9hG4bK-300.371035.580532861  
 Via: SIP/2.0/UDP 192.168.2.10:5060;branch=z9hG4bK-436d52dd-681091.335  
 Record-Route: <sip:00002@192.168.1.1>  
 From: 00003 <sip:00003@sip.com>;tag=11d8bc01  
 To: <sip:00002@sip.com>;tag=76752a3b  
 Call-ID: 0a912031@00003.192.168.1.1  
 CSeq: 580532861 INVITE  
 Contact: <sip:00002@192.168.2.19>  
 Supported: 100rel, replaces  
 Allow: INVITE, ACK, BYE, CANCEL, OPTIONS, PRACK, MESSAGE, REFER, NOTIFY  
 Content-Type: application/sdp  
 Accept: application/sdp, message/sipfrag  
 Content-Length: 177

v=0  
 o=- 537516 12801 IN IP4 192.168.2.19  
 s=-  
 c=IN IP4 192.168.2.19  
 t=0 0  
 m=audio 5006 RTP/AVP 0 96  
 a=rtpmap:0 PCMU/8000  
 a=rtpmap:96 telephone-event/8000

a=fmtp:96 0-11

=====

F18 192.168.1.1:5062 (Server) -&gt; 192.168.2.10:5060(00003@sip.com)

SIP/2.0 200 OK  
 Via: SIP/2.0/UDP 192.168.2.10:5060;branch=z9hG4bK-436d52dd-681091.335  
 Record-Route: <sip:00002@192.168.1.1>  
 From: 00003 <sip:00003@sip.com>;tag=11d8bc01  
 To: <sip:00002@sip.com>;tag=76752a3b  
 Call-ID: 0a912031@00003.192.168.1.1  
 CSeq: 580532861 INVITE  
 Contact: <sip:00002@192.168.2.19>  
 supported: 100rel  
 supported: replaces  
 Allow: INVITE, ACK, BYE, CANCEL, OPTIONS, PRACK, MESSAGE, REFER, NOTIFY  
 Content-Type: application/sdp  
 Accept: application/sdp, message/sipfrag  
 Content-Length: 177

v=0  
 o=- 537516 12801 IN IP4 192.168.2.19  
 s=-  
 c=IN IP4 192.168.2.19  
 t=0 0  
 m=audio 5006 RTP/AVP 0 96  
 a=rtpmap:0 PCMU/8000  
 a=rtpmap:96 telephone-event/8000  
 a=fmtp:96 0-11

=====

F19 192.168.2.10:1025(00003@sip.com) -&gt; 192.168.1.1:5060 (Server)

ACK sip:00002@192.168.1.1 SIP/2.0  
 Via: SIP/2.0/UDP 192.168.2.10:5060;branch=z9hG4bK-2de461cc-681095.980  
 Route: <sip:00002@192.168.2.19>  
 From: 00003 <sip:00003@sip.com>;tag=11d8bc01  
 To: <sip:00002@sip.com>;tag=76752a3b  
 Call-ID: 0a912031@00003.192.168.1.1  
 CSeq: 580532861 ACK  
 Max-Forwards: 70  
 Content-Length: 0

=====

F20 192.168.1.1:5062 (Server) -&gt; 192.168.2.19:5060(00002@sip.com)

ACK sip:00002@192.168.2.19 SIP/2.0  
 Via: SIP/2.0/UDP 192.168.1.1:5060;branch=z9hG4bK-300.1085830370.580532861  
 Via: SIP/2.0/UDP 192.168.2.10:5060;branch=z9hG4bK-2de461cc-681095.980  
 From: 00003 <sip:00003@sip.com>;tag=11d8bc01  
 To: <sip:00002@sip.com>;tag=76752a3b  
 Call-ID: 0a912031@00003.192.168.1.1  
 CSeq: 580532861 ACK  
 max-forwards: 69  
 Content-Length: 0

=====

F21 192.168.2.19:1025(00002@sip.com) -&gt; 192.168.1.1:5060 (Server)

INVITE sip:00002@192.168.1.1 SIP/2.0  
 Via: SIP/2.0/UDP 192.168.2.19:5060;branch=z9hG4bK-45e2f9d9-529651.287  
 Route: <sip:00003@192.168.2.10>  
 From: <sip:00002@sip.com>;tag=76752a3b  
 To: 00003 <sip:00003@sip.com>;tag=11d8bc01  
 Call-ID: 0a912031@00003.192.168.1.1  
 CSeq: 1900208419 INVITE  
 Contact: <sip:00002@192.168.2.19>  
 Max-Forwards: 70  
 Supported: 100rel, replaces  
 Allow: INVITE, ACK, BYE, CANCEL, OPTIONS, PRACK, MESSAGE, REFER, NOTIFY  
 Content-Type: application/sdp  
 Content-Length: 189

v=0  
 o=- 274285 12802 IN IP4 192.168.2.19

```

s=-
c=IN IP4 192.168.2.19
t=0 0
m=audio 5006 RTP/AVP 0 96
a=rtpmap:0 PCMU/8000
a=rtpmap:96 telephone-event/8000
a=fmtp:96 0-11
a=inactive

```

```
=====
```

F22        192.168.1.1:5062(Server) -> 192.168.2.19:5060(00002@sip.com)

```

SIP/2.0 100 Trying
Via: SIP/2.0/UDP 192.168.2.19:5060;branch=z9hG4bK-45e2f9d9-529651.287
From: <sip:00002@sip.com>;tag=76752a3b
To: 00003 <sip:00003@sip.com>;tag=11d8bc01
Call-ID: 0a912031@00003.192.168.1.1
CSeq: 1900208419 INVITE
Content-Length: 0

```

```
=====
```

F23        192.168.1.1:5062(Server) -> 192.168.2.10:5060(00003@sip.com)

```

INVITE sip:00003@192.168.2.10 SIP/2.0
Via: SIP/2.0/UDP 192.168.1.1:5060;branch=z9hG4bK-299.371035.1900208419
Via: SIP/2.0/UDP 192.168.2.19:5060;branch=z9hG4bK-45e2f9d9-529651.287
Record-Route: <sip:00002@192.168.1.1>
Route: <sip:00003@192.168.2.10>
From: <sip:00002@sip.com>;tag=76752a3b
To: 00003 <sip:00003@sip.com>;tag=11d8bc01
Call-ID: 0a912031@00003.192.168.1.1
CSeq: 1900208419 INVITE
Contact: <sip:00002@192.168.2.19>
max-forwards: 69
supported: 100rel
supported: replaces
Allow: INVITE, ACK, BYE, CANCEL, OPTIONS, PRACK, MESSAGE, REFER, NOTIFY
Content-Type: application/sdp
Content-Length: 189

```

```

v=0
o=- 274285 12802 IN IP4 192.168.2.19
s=-
c=IN IP4 192.168.2.19
t=0 0
m=audio 5006 RTP/AVP 0 96
a=rtpmap:0 PCMU/8000
a=rtpmap:96 telephone-event/8000
a=fmtp:96 0-11
a=inactive

```

```
=====
```

F24        192.168.2.10:1025(00003@sip.com) -> 192.168.1.1:5060(Server)

```

SIP/2.0 100 Trying
Via: SIP/2.0/UDP 192.168.1.1:5060;branch=z9hG4bK-299.371035.1900208419
Via: SIP/2.0/UDP 192.168.2.19:5060;branch=z9hG4bK-45e2f9d9-529651.287
From: <sip:00002@sip.com>;tag=76752a3b
To: 00003 <sip:00003@sip.com>;tag=11d8bc01
Call-ID: 0a912031@00003.192.168.1.1
CSeq: 1900208419 INVITE
Content-Length: 0

```

```
=====
```

F25        192.168.2.10:1025(00003@sip.com) -> 192.168.1.1:5060(Server)

```

SIP/2.0 200 OK
Via: SIP/2.0/UDP 192.168.1.1:5060;branch=z9hG4bK-299.371035.1900208419
Via: SIP/2.0/UDP 192.168.2.19:5060;branch=z9hG4bK-45e2f9d9-529651.287
Record-Route: <sip:00002@192.168.1.1>
From: <sip:00002@sip.com>;tag=76752a3b
To: 00003 <sip:00003@sip.com>;tag=11d8bc01
Call-ID: 0a912031@00003.192.168.1.1
CSeq: 1900208419 INVITE
Contact: <sip:00003@192.168.2.10>

```

Supported: 100rel, replaces  
 Allow: INVITE, ACK, BYE, CANCEL, OPTIONS, PRACK, MESSAGE, REFER, NOTIFY  
 Content-Type: application/sdp  
 Accept: application/sdp, message/sipfrag  
 Content-Length: 187

v=0  
 o=- 655376 202 IN IP4 192.168.2.10  
 s=-  
 c=IN IP4 192.168.2.10  
 t=0 0  
 m=audio 5006 RTP/AVP 0 96  
 a=rtpmap:0 PCMU/8000  
 a=rtpmap:96 telephone-event/8000  
 a=fmtp:96 0-11  
 a=inactive

=====

F26 192.168.1.1:5062 (Server) -> 192.168.2.19:5060 (00002@sip.com)

SIP/2.0 200 OK  
 Via: SIP/2.0/UDP 192.168.2.19:5060;branch=z9hG4bK-45e2f9d9-529651.287  
 Record-Route: <sip:00002@192.168.1.1>  
 From: <sip:00002@sip.com>;tag=76752a3b  
 To: 00003 <sip:00003@sip.com>;tag=11d8bc01  
 Call-ID: 0a912031@00003.192.168.1.1  
 CSeq: 1900208419 INVITE  
 Contact: <sip:00003@192.168.2.10>  
 supported: 100rel  
 supported: replaces  
 Allow: INVITE, ACK, BYE, CANCEL, OPTIONS, PRACK, MESSAGE, REFER, NOTIFY  
 Content-Type: application/sdp  
 Accept: application/sdp, message/sipfrag  
 Content-Length: 187

v=0  
 o=- 655376 202 IN IP4 192.168.2.10  
 s=-  
 c=IN IP4 192.168.2.10  
 t=0 0  
 m=audio 5006 RTP/AVP 0 96  
 a=rtpmap:0 PCMU/8000  
 a=rtpmap:96 telephone-event/8000  
 a=fmtp:96 0-11  
 a=inactive

=====

F27 192.168.2.19:1025 (00002@sip.com) -> 192.168.1.1:5060 (Server)

ACK sip:00002@192.168.1.1 SIP/2.0  
 Via: SIP/2.0/UDP 192.168.2.19:5060;branch=z9hG4bK-17e4dd48-529651.721  
 Route: <sip:00003@192.168.2.10>  
 From: <sip:00002@sip.com>;tag=76752a3b  
 To: 00003 <sip:00003@sip.com>;tag=11d8bc01  
 Call-ID: 0a912031@00003.192.168.1.1  
 CSeq: 1900208419 ACK  
 Max-Forwards: 70  
 Content-Length: 0

=====

F28 192.168.1.1:5062 (Server) -> 192.168.2.10:5060 (00003@sip.com)

ACK sip:00003@192.168.2.10 SIP/2.0  
 Via: SIP/2.0/UDP 192.168.1.1:5060;branch=z9hG4bK-299.1085830375.1900208419  
 Via: SIP/2.0/UDP 192.168.2.19:5060;branch=z9hG4bK-17e4dd48-529651.721  
 From: <sip:00002@sip.com>;tag=76752a3b  
 To: 00003 <sip:00003@sip.com>;tag=11d8bc01  
 Call-ID: 0a912031@00003.192.168.1.1  
 CSeq: 1900208419 ACK  
 max-forwards: 69  
 Content-Length: 0

=====

F29 192.168.2.19:1025 (00002@sip.com) -> 192.168.1.1:5060 (Server)

REFER sip:00002@192.168.1.1 SIP/2.0  
 Via: SIP/2.0/UDP 192.168.2.19:5060;branch=z9hG4bK-23e8460-529656.688  
 Route: <sip:00003@192.168.2.10>  
 From: <sip:00002@sip.com>;tag=76752a3b  
 To: 00003 <sip:00003@sip.com>;tag=11d8bc01  
 Call-ID: 0a912031@00003.192.168.1.1  
 CSeq: 1900208420 REFER  
 Contact: <sip:00002@192.168.2.19>  
 Max-Forwards: 70  
 Refer-To: <sip:00004@sip.com>  
 Referred-By: <sip:00002@sip.com>  
 Content-Length: 0

F30 192.168.1.1:5062 (Server) -> 192.168.2.10:5060 (00003@sip.com)

REFER sip:00003@192.168.2.10 SIP/2.0  
 Via: SIP/2.0/UDP 192.168.1.1:5060;branch=z9hG4bK-299.1085830380.1900208420  
 Via: SIP/2.0/UDP 192.168.2.19:5060;branch=z9hG4bK-23e8460-529656.688  
 Route: <sip:00003@192.168.2.10>  
 From: <sip:00002@sip.com>;tag=76752a3b  
 To: 00003 <sip:00003@sip.com>;tag=11d8bc01  
 Call-ID: 0a912031@00003.192.168.1.1  
 CSeq: 1900208420 REFER  
 Contact: <sip:00002@192.168.2.19>  
 max-forwards: 69  
 refer-to: <sip:00004@sip.com>  
 referred-by: <sip:00002@sip.com>  
 Content-Length: 0

F31 192.168.2.10:1025 (00003@sip.com) -> 192.168.1.1:5060 (Server)

SIP/2.0 202 Accepted  
 Via: SIP/2.0/UDP 192.168.1.1:5060;branch=z9hG4bK-299.1085830380.1900208420  
 Via: SIP/2.0/UDP 192.168.2.19:5060;branch=z9hG4bK-23e8460-529656.688  
 From: <sip:00002@sip.com>;tag=76752a3b  
 To: 00003 <sip:00003@sip.com>;tag=11d8bc01  
 Call-ID: 0a912031@00003.192.168.1.1  
 CSeq: 1900208420 REFER  
 Contact: <sip:00003@192.168.2.10>  
 Content-Length: 0

F32 192.168.1.1:5062 (Server) -> 192.168.2.19:5060 (00002@sip.com)

SIP/2.0 202 Accepted  
 Via: SIP/2.0/UDP 192.168.2.19:5060;branch=z9hG4bK-23e8460-529656.688  
 From: <sip:00002@sip.com>;tag=76752a3b  
 To: 00003 <sip:00003@sip.com>;tag=11d8bc01  
 Call-ID: 0a912031@00003.192.168.1.1  
 CSeq: 1900208420 REFER  
 Contact: <sip:00003@192.168.2.10>  
 Content-Length: 0

F33 192.168.2.10:1091 (1) -> 192.168.1.1:5060 (2)

NOTIFY sip:00004@192.168.1.1 SIP/2.0  
 Via: SIP/2.0/UDP 192.168.2.10:5060;branch=z9hG4bK-682e1229-880764.656  
 Route: <sip:00002@192.168.2.19>  
 From: <sip:00003@sip.com>;tag=11d8bc01  
 To: 00002 <sip:00002@sip.com>;tag=76752a3b  
 Call-ID: 0a912031@00003.192.168.1.1  
 CSeq: 580532864 NOTIFY  
 Contact: <sip:00002@192.168.2.10>  
 Max-Forwards: 70  
 Event: refer  
 Subscription-State: active;expires=30  
 Content-Type: message/sipfrag  
 Content-Length: 18

SIP/2.0 100 Trying

---

F34 192.168.1.1:5062(2) -> 192.168.2.19:5060(3)

NOTIFY sip:00004@192.168.2.15 SIP/2.0  
Via: SIP/2.0/UDP 192.168.1.1:5060;branch=z9hG4bK-755.1084364142.1899349293  
Via: SIP/2.0/UDP 192.168.2.10:5060;branch=z9hG4bK-682e1229-880764.656  
Route: <sip:00002@192.168.2.19>  
From: <sip:00003@sip.com>;tag=11d8bc01  
To: 00002 <sip:00002@sip.com>;tag=76752a3b  
Call-ID: 0a912031@00003.192.168.1.1  
CSeq: 580532864 NOTIFY  
Contact: <sip:00002@192.168.2.10>  
max-forwards: 69  
event: refer  
subscription-state: active;expires=30  
Content-Type: message/sipfrag  
Content-Length: 18

SIP/2.0 100 Trying

---

F35 192.168.2.19:1025(3) -> 192.168.1.1:5060(2)

SIP/2.0 200 OK  
Via: SIP/2.0/UDP 192.168.1.1:5060;branch=z9hG4bK-755.1084364142.1899349293  
Via: SIP/2.0/UDP 192.168.2.10:5060;branch=z9hG4bK-682e1229-880764.656  
From: <sip:00003@sip.com>;tag=11d8bc01  
To: 00002 <sip:00002@sip.com>;tag=76752a3b  
Call-ID: 0a912031@00003.192.168.1.1  
CSeq: 580532864 NOTIFY  
Content-Length: 0

---

F36 192.168.1.1:5062(2) -> 192.168.2.10:5060(1)

SIP/2.0 200 OK  
Via: SIP/2.0/UDP 192.168.2.10:5060;branch=z9hG4bK-682e1229-880764.656  
From: <sip:00003@sip.com>;tag=11d8bc01  
To: 00002 <sip:00002@sip.com>;tag=76752a3b  
Call-ID: 0a912031@00003.192.168.1.1  
CSeq: 580532864 NOTIFY  
Content-Length: 0

---

F37 192.168.2.19:1025(00002@sip.com) -> 192.168.1.1:5060(Server)

BYE sip:00002@192.168.1.1 SIP/2.0  
Via: SIP/2.0/UDP 192.168.2.19:5060;branch=z9hG4bK-384ad6e0-529656.972  
Route: <sip:00003@192.168.2.10>  
From: <sip:00002@sip.com>;tag=76752a3b  
To: 00003 <sip:00003@sip.com>;tag=11d8bc01  
Call-ID: 0a912031@00003.192.168.1.1  
CSeq: 1900208421 BYE  
Max-Forwards: 70  
Content-Length: 0

---

F38 192.168.1.1:5062(Server) -> 192.168.2.10:5060(00003@sip.com)

BYE sip:00003@192.168.2.10 SIP/2.0  
Via: SIP/2.0/UDP 192.168.1.1:5060;branch=z9hG4bK-299.1085830381.1900208421  
Via: SIP/2.0/UDP 192.168.2.19:5060;branch=z9hG4bK-384ad6e0-529656.972  
Route: <sip:00003@192.168.2.10>  
From: <sip:00002@sip.com>;tag=76752a3b  
To: 00003 <sip:00003@sip.com>;tag=11d8bc01  
Call-ID: 0a912031@00003.192.168.1.1  
CSeq: 1900208421 BYE  
max-forwards: 69  
Content-Length: 0

---

F39 192.168.2.10:1025(00003@sip.com) -> 192.168.1.1:5060(Server)

```
SIP/2.0 200 OK
Via: SIP/2.0/UDP 192.168.1.1:5060;branch=z9hG4bK-299.1085830381.1900208421
Via: SIP/2.0/UDP 192.168.2.19:5060;branch=z9hG4bK-384ad6e0-529656.972
From: <sip:00002@sip.com>;tag=76752a3b
To: 00003 <sip:00003@sip.com>;tag=11d8bc01
Call-ID: 0a912031@00003.192.168.1.1
CSeq: 1900208421 BYE
Content-Length: 0
```

```
=====
F40      192.168.1.1:5062 (Server) -> 192.168.2.19:5060 (00002@sip.com)
```

```
SIP/2.0 200 OK
Via: SIP/2.0/UDP 192.168.2.19:5060;branch=z9hG4bK-384ad6e0-529656.972
From: <sip:00002@sip.com>;tag=76752a3b
To: 00003 <sip:00003@sip.com>;tag=11d8bc01
Call-ID: 0a912031@00003.192.168.1.1
CSeq: 1900208421 BYE
Content-Length: 0
```

```
=====
F41      192.168.2.10:1025 (00003@sip.com) -> 192.168.1.1:5060 (Server)
```

```
INVITE sip:00004@sip.com SIP/2.0
Via: SIP/2.0/UDP 192.168.2.10:5060;branch=z9hG4bK-48381539-681107.486
Route: <sip:192.168.1.1:5060>
From: <sip:00003@sip.com>;tag=25548f4d
To: <sip:00004@sip.com>
Call-ID: 786e223f@00003.192.168.1.1
CSeq: 1404494216 INVITE
Contact: <sip:00003@192.168.2.10>
Max-Forwards: 70
Supported: 100rel, replaces
Referred-By: <sip:00002@sip.com>
Allow: INVITE, ACK, BYE, CANCEL, OPTIONS, PRACK, MESSAGE, REFER, NOTIFY
Content-Type: application/sdp
Accept: application/sdp, message/sipfrag
Content-Length: 175
```

```
v=0
o=- 476446 201 IN IP4 192.168.2.10
s=-
c=IN IP4 192.168.2.10
t=0 0
m=audio 5008 RTP/AVP 0 96
a=rtpmap:0 PCMU/8000
a=rtpmap:96 telephone-event/8000
a=fmtp:96 0-11
```

```
=====
F42      192.168.1.1:5062 (Server) -> 192.168.2.10:5060 (00003@sip.com)
```

```
SIP/2.0 100 Trying
Via: SIP/2.0/UDP 192.168.2.10:5060;branch=z9hG4bK-48381539-681107.486
From: <sip:00003@sip.com>;tag=25548f4d
To: <sip:00004@sip.com>
Call-ID: 786e223f@00003.192.168.1.1
CSeq: 1404494216 INVITE
Content-Length: 0
```

```
=====
F43      192.168.1.1:5062 (Server) -> 192.168.2.21:5060 (00004@sip.com)
```

```
INVITE sip:00004@192.168.2.21 SIP/2.0
Via: SIP/2.0/UDP 192.168.1.1:5060;branch=z9hG4bK-302.521167.1404494216
Via: SIP/2.0/UDP 192.168.2.10:5060;branch=z9hG4bK-48381539-681107.486
Record-Route: <sip:00004@192.168.1.1>
Route: <sip:192.168.1.1:5060>
From: 00003 <sip:00003@sip.com>;tag=25548f4d
To: <sip:00004@sip.com>
Call-ID: 786e223f@00003.192.168.1.1
CSeq: 1404494216 INVITE
Contact: <sip:00003@192.168.2.10>
```

```

max-forwards: 69
supported: 100rel
supported: replaces
referred-by: <sip:00002@sip.com>
Allow: INVITE, ACK, BYE, CANCEL, OPTIONS, PRACK, MESSAGE, REFER, NOTIFY
Content-Type: application/sdp
Accept: application/sdp, message/sipfrag
Content-Length: 175

```

```

v=0
o=- 476446 201 IN IP4 192.168.2.10
s=-
c=IN IP4 192.168.2.10
t=0 0
m=audio 5008 RTP/AVP 0 96
a=rtpmap:0 PCMU/8000
a=rtpmap:96 telephone-event/8000
a=fmtp:96 0-11

```

```
=====
```

F44 192.168.2.21:1025(00004@sip.com) -> 192.168.1.1:5060(Server)

```

SIP/2.0 100 Trying
Via: SIP/2.0/UDP 192.168.1.1:5060;branch=z9hG4bK-302.521167.1404494216
Via: SIP/2.0/UDP 192.168.2.10:5060;branch=z9hG4bK-48381539-681107.486
From: 00003 <sip:00003@sip.com>;tag=25548f4d
To: <sip:00004@sip.com>
Call-ID: 786e223f@00003.192.168.1.1
CSeq: 1404494216 INVITE
Content-Length: 0

```

```
=====
```

F45 192.168.2.21:1025(00004@sip.com) -> 192.168.1.1:5060(Server)

```

SIP/2.0 183 Session Progress
Via: SIP/2.0/UDP 192.168.1.1:5060;branch=z9hG4bK-302.521167.1404494216
Via: SIP/2.0/UDP 192.168.2.10:5060;branch=z9hG4bK-48381539-681107.486
Record-Route: <sip:00004@192.168.1.1>
From: 00003 <sip:00003@sip.com>;tag=25548f4d
To: <sip:00004@sip.com>;tag=33660403
Call-ID: 786e223f@00003.192.168.1.1
CSeq: 1404494216 INVITE
Contact: <sip:00004@192.168.2.21>
Require: 100rel
RSeq: 977863666
Content-Length: 0

```

```
=====
```

F46 192.168.1.1:5062(Server) -> 192.168.2.10:5060(00003@sip.com)

```

SIP/2.0 183 Session Progress
Via: SIP/2.0/UDP 192.168.2.10:5060;branch=z9hG4bK-48381539-681107.486
Record-Route: <sip:00004@192.168.1.1>
From: 00003 <sip:00003@sip.com>;tag=25548f4d
To: <sip:00004@sip.com>;tag=33660403
Call-ID: 786e223f@00003.192.168.1.1
CSeq: 1404494216 INVITE
Contact: <sip:00004@192.168.2.21>
require: 100rel
rseq: 977863666
Content-Length: 0

```

```
=====
```

F47 192.168.2.10:1025(00003@sip.com) -> 192.168.1.1:5060(Server)

```

PRACK sip:00004@192.168.1.1 SIP/2.0
Via: SIP/2.0/UDP 192.168.2.10:5060;branch=z9hG4bK-275be175-681124.099
Route: <sip:00004@192.168.2.21>
From: 00003 <sip:00003@sip.com>;tag=25548f4d
To: <sip:00004@sip.com>;tag=33660403
Call-ID: 786e223f@00003.192.168.1.1
CSeq: 1404494217 PRACK
Max-Forwards: 70
RAck: 977863666 1404494216 INVITE

```



Content-Length: 0

---

F48 192.168.2.21:1025(00004@sip.com) -> 192.168.1.1:5060(Server)

SIP/2.0 183 Session Progress  
 Via: SIP/2.0/UDP 192.168.1.1:5060;branch=z9hG4bK-302.521167.1404494216  
 Via: SIP/2.0/UDP 192.168.2.10:5060;branch=z9hG4bK-48381539-681107.486  
 Record-Route: <sip:00004@192.168.1.1>  
 From: 00003 <sip:00003@sip.com>;tag=25548f4d  
 To: <sip:00004@sip.com>;tag=33660403  
 Call-ID: 786e223f@00003.192.168.1.1  
 CSeq: 1404494216 INVITE  
 Contact: <sip:00004@192.168.2.21>  
 Require: 100rel  
 RSeq: 977863666  
 Content-Length: 0

---

F49 192.168.1.1:5062(Server) -> 192.168.2.21:5060(00004@sip.com)

PRACK sip:00004@192.168.2.21 SIP/2.0  
 Via: SIP/2.0/UDP 192.168.1.1:5060;branch=z9hG4bK-302.1085830398.1404494217  
 Via: SIP/2.0/UDP 192.168.2.10:5060;branch=z9hG4bK-275be175-681124.099  
 Route: <sip:00004@192.168.2.21>  
 From: 00003 <sip:00003@sip.com>;tag=25548f4d  
 To: <sip:00004@sip.com>;tag=33660403  
 Call-ID: 786e223f@00003.192.168.1.1  
 CSeq: 1404494217 PRACK  
 max-forwards: 69  
 rack: 977863666 1404494216 INVITE  
 Content-Length: 0

---

F50 192.168.1.1:5062(Server) -> 192.168.2.10:5060(00003@sip.com)

SIP/2.0 183 Session Progress  
 Via: SIP/2.0/UDP 192.168.2.10:5060;branch=z9hG4bK-48381539-681107.486  
 Record-Route: <sip:00004@192.168.1.1>  
 From: 00003 <sip:00003@sip.com>;tag=25548f4d  
 To: <sip:00004@sip.com>;tag=33660403  
 Call-ID: 786e223f@00003.192.168.1.1  
 CSeq: 1404494216 INVITE  
 Contact: <sip:00004@192.168.2.21>  
 require: 100rel  
 rseq: 977863666  
 Content-Length: 0

---

F51 192.168.2.21:1025(00004@sip.com) -> 192.168.1.1:5060(Server)

SIP/2.0 200 OK  
 Via: SIP/2.0/UDP 192.168.1.1:5060;branch=z9hG4bK-302.1085830398.1404494217  
 Via: SIP/2.0/UDP 192.168.2.10:5060;branch=z9hG4bK-275be175-681124.099  
 From: 00003 <sip:00003@sip.com>;tag=25548f4d  
 To: <sip:00004@sip.com>;tag=33660403  
 Call-ID: 786e223f@00003.192.168.1.1  
 CSeq: 1404494217 PRACK  
 Content-Length: 0

---

F52 192.168.1.1:5062(Server) -> 192.168.2.10:5060(00003@sip.com)

SIP/2.0 200 OK  
 Via: SIP/2.0/UDP 192.168.2.10:5060;branch=z9hG4bK-275be175-681124.099  
 From: 00003 <sip:00003@sip.com>;tag=25548f4d  
 To: <sip:00004@sip.com>;tag=33660403  
 Call-ID: 786e223f@00003.192.168.1.1  
 CSeq: 1404494217 PRACK  
 Content-Length: 0

F53 192.168.2.21:1025(00004@sip.com) -> 192.168.1.1:5060(Server)

SIP/2.0 180 Ringing  
Via: SIP/2.0/UDP 192.168.1.1:5060;branch=z9hG4bK-302.521167.1404494216  
Via: SIP/2.0/UDP 192.168.2.10:5060;branch=z9hG4bK-48381539-681107.486  
Record-Route: <sip:00004@192.168.1.1>  
From: 00003 <sip:00003@sip.com>;tag=25548f4d  
To: <sip:00004@sip.com>;tag=33660403  
Call-ID: 786e223f@00003.192.168.1.1  
CSeq: 1404494216 INVITE  
Contact: <sip:00004@192.168.2.21>  
Require: 100rel  
RSeq: 977863667  
Content-Length: 0

F54 192.168.1.1:5062(Server) -> 192.168.2.10:5060(00003@sip.com)

SIP/2.0 180 Ringing  
Via: SIP/2.0/UDP 192.168.2.10:5060;branch=z9hG4bK-48381539-681107.486  
Record-Route: <sip:00004@192.168.1.1>  
From: 00003 <sip:00003@sip.com>;tag=25548f4d  
To: <sip:00004@sip.com>;tag=33660403  
Call-ID: 786e223f@00003.192.168.1.1  
CSeq: 1404494216 INVITE  
Contact: <sip:00004@192.168.2.21>  
require: 100rel  
rseq: 977863667  
Content-Length: 0

F55 192.168.2.10:1025(00003@sip.com) -> 192.168.1.1:5060(Server)

PRACK sip:00004@192.168.1.1 SIP/2.0  
Via: SIP/2.0/UDP 192.168.2.10:5060;branch=z9hG4bK-23d0ac0-681124.753  
Route: <sip:00004@192.168.2.21>  
From: 00003 <sip:00003@sip.com>;tag=25548f4d  
To: <sip:00004@sip.com>;tag=33660403  
Call-ID: 786e223f@00003.192.168.1.1  
CSeq: 1404494218 PRACK  
Max-Forwards: 70  
Rack: 977863667 1404494216 INVITE  
Content-Length: 0

F56 192.168.1.1:5062(Server) -> 192.168.2.21:5060(00004@sip.com)

PRACK sip:00004@192.168.2.21 SIP/2.0  
Via: SIP/2.0/UDP 192.168.1.1:5060;branch=z9hG4bK-302.1085830398.1404494218  
Via: SIP/2.0/UDP 192.168.2.10:5060;branch=z9hG4bK-23d0ac0-681124.753  
Route: <sip:00004@192.168.2.21>  
From: 00003 <sip:00003@sip.com>;tag=25548f4d  
To: <sip:00004@sip.com>;tag=33660403  
Call-ID: 786e223f@00003.192.168.1.1  
CSeq: 1404494218 PRACK  
max-forwards: 69  
rack: 977863667 1404494216 INVITE  
Content-Length: 0

F57 192.168.2.21:1025(00004@sip.com) -> 192.168.1.1:5060(Server)

SIP/2.0 200 OK  
Via: SIP/2.0/UDP 192.168.1.1:5060;branch=z9hG4bK-302.1085830398.1404494218  
Via: SIP/2.0/UDP 192.168.2.10:5060;branch=z9hG4bK-23d0ac0-681124.753  
From: 00003 <sip:00003@sip.com>;tag=25548f4d  
To: <sip:00004@sip.com>;tag=33660403  
Call-ID: 786e223f@00003.192.168.1.1  
CSeq: 1404494218 PRACK  
Content-Length: 0

F58 192.168.1.1:5062 (Server) -> 192.168.2.10:5060 (00003@sip.com)

SIP/2.0 200 OK  
Via: SIP/2.0/UDP 192.168.2.10:5060;branch=z9hG4bK-23d0ac0-681124.753  
From: 00003 <sip:00003@sip.com>;tag=25548f4d  
To: <sip:00004@sip.com>;tag=33660403  
Call-ID: 786e223f@00003.192.168.1.1  
CSeq: 1404494218 PRACK  
Content-Length: 0

F59 192.168.2.21:1025 (00004@sip.com) -> 192.168.1.1:5060 (Server)

SIP/2.0 200 OK  
Via: SIP/2.0/UDP 192.168.1.1:5060;branch=z9hG4bK-302.521167.1404494216  
Via: SIP/2.0/UDP 192.168.2.10:5060;branch=z9hG4bK-48381539-681107.486  
Record-Route: <sip:00004@192.168.1.1>  
From: 00003 <sip:00003@sip.com>;tag=25548f4d  
To: <sip:00004@sip.com>;tag=33660403  
Call-ID: 786e223f@00003.192.168.1.1  
CSeq: 1404494216 INVITE  
Contact: <sip:00004@192.168.2.21>  
Supported: 100rel, replaces  
Allow: INVITE, ACK, BYE, CANCEL, OPTIONS, PRACK, MESSAGE, REFER, NOTIFY  
Content-Type: application/sdp  
Accept: application/sdp, message/sipfrag  
Content-Length: 177

v=0  
o=- 187828 12901 IN IP4 192.168.2.21  
s=-  
c=IN IP4 192.168.2.21  
t=0 0  
m=audio 5006 RTP/AVP 0 96  
a=rtpmap:0 PCMU/8000  
a=rtpmap:96 telephone-event/8000  
a=fmtp:96 0-11

F60 192.168.1.1:5062 (Server) -> 192.168.2.10:5060 (00003@sip.com)

SIP/2.0 200 OK  
Via: SIP/2.0/UDP 192.168.2.10:5060;branch=z9hG4bK-48381539-681107.486  
Record-Route: <sip:00004@192.168.1.1>  
From: 00003 <sip:00003@sip.com>;tag=25548f4d  
To: <sip:00004@sip.com>;tag=33660403  
Call-ID: 786e223f@00003.192.168.1.1  
CSeq: 1404494216 INVITE  
Contact: <sip:00004@192.168.2.21>  
supported: 100rel  
supported: replaces  
Allow: INVITE, ACK, BYE, CANCEL, OPTIONS, PRACK, MESSAGE, REFER, NOTIFY  
Content-Type: application/sdp  
Accept: application/sdp, message/sipfrag  
Content-Length: 177

v=0  
o=- 187828 12901 IN IP4 192.168.2.21  
s=-  
c=IN IP4 192.168.2.21  
t=0 0  
m=audio 5006 RTP/AVP 0 96  
a=rtpmap:0 PCMU/8000  
a=rtpmap:96 telephone-event/8000  
a=fmtp:96 0-11

F61 192.168.2.10:1025 (00003@sip.com) -> 192.168.1.1:5060 (Server)

ACK sip:00004@192.168.1.1 SIP/2.0  
Via: SIP/2.0/UDP 192.168.2.10:5060;branch=z9hG4bK-7e4c2351-681133.035  
Route: <sip:00004@192.168.2.21>  
From: 00003 <sip:00003@sip.com>;tag=25548f4d

To: <sip:00004@sip.com>;tag=33660403  
 Call-ID: 786e223f@00003.192.168.1.1  
 CSeq: 1404494216 ACK  
 Max-Forwards: 70  
 Content-Length: 0

F62 192.168.1.1:5062 (Server) -> 192.168.2.21:5060 (00004@sip.com)

ACK sip:00004@192.168.2.21 SIP/2.0  
 Via: SIP/2.0/UDP 192.168.1.1:5060;branch=z9hG4bK-302.1085830407.1404494216  
 Via: SIP/2.0/UDP 192.168.2.10:5060;branch=z9hG4bK-7e4c2351-681133.035  
 From: 00003 <sip:00003@sip.com>;tag=25548f4d  
 To: <sip:00004@sip.com>;tag=33660403  
 Call-ID: 786e223f@00003.192.168.1.1  
 CSeq: 1404494216 ACK  
 max-forwards: 69  
 Content-Length: 0

F63 192.168.2.10:1091 (1) -> 192.168.1.1:5060 (2)

NOTIFY sip:00004@192.168.1.1 SIP/2.0  
 Via: SIP/2.0/UDP 192.168.2.10:5060;branch=z9hG4bK-462c408-880775.943  
 Route: <sip:00002@192.168.2.19>  
 To: 00002 <sip:00002@sip.com>;tag=76752a3b  
 From: <sip:00003@sip.com>;tag=11d8bc01  
 Call-ID: 0a912031@00003.192.168.1.1  
 CSeq: 580532865 NOTIFY  
 Contact: <sip:00002@192.168.2.10>  
 Max-Forwards: 70  
 Event: refer  
 Subscription-State: terminated;reason=noresource  
 Content-Type: message/sipfrag  
 Content-Length: 14

SIP/2.0 200 OK

F64 192.168.1.1:5062 (2) -> 192.168.2.19:5060 (3)

NOTIFY sip:00004@192.168.2.15 SIP/2.0  
 Via: SIP/2.0/UDP 192.168.1.1:5060;branch=z9hG4bK-761.1084364153.1899349294  
 Via: SIP/2.0/UDP 192.168.2.10:5060;branch=z9hG4bK-462c408-880775.943  
 Route: <sip:00002@192.168.2.19>  
 To: 00002 <sip:00002@sip.com>;tag=76752a3b  
 From: <sip:00003@sip.com>;tag=11d8bc01  
 Call-ID: 0a912031@00003.192.168.1.1  
 CSeq: 580532865 NOTIFY  
 Contact: <sip:00002@192.168.2.10>  
 max-forwards: 69  
 event: refer  
 subscription-state: terminated;reason=noresource  
 Content-Type: message/sipfrag  
 Content-Length: 14

SIP/2.0 200 OK

F65 192.168.2.19:1025 (3) -> 192.168.1.1:5060 (2)

SIP/2.0 200 OK  
 Via: SIP/2.0/UDP 192.168.1.1:5060;branch=z9hG4bK-761.1084364153.1899349294  
 Via: SIP/2.0/UDP 192.168.2.10:5060;branch=z9hG4bK-462c408-880775.943  
 To: 00002 <sip:00002@sip.com>;tag=76752a3b  
 From: <sip:00003@sip.com>;tag=11d8bc01  
 Call-ID: 0a912031@00003.192.168.1.1  
 CSeq: 580532865 NOTIFY  
 Content-Length: 0

F66 192.168.1.1:5062 (2) -> 192.168.2.10:5060 (1)

SIP/2.0 200 OK  
 Via: SIP/2.0/UDP 192.168.2.10:5060;branch=z9hG4bK-462c408-880775.943

To: 00002 <sip:00002@sip.com>;tag=76752a3b  
From: <sip:00003@sip.com>;tag=11d8bc01  
Call-ID: 0a912031@00003.192.168.1.1  
CSeq: 580532865 NOTIFY  
Content-Length: 0

F67 192.168.2.10:1025(00003@sip.com) -> 192.168.1.1:5060(Server)

BYE sip:00004@192.168.1.1 SIP/2.0  
Via: SIP/2.0/UDP 192.168.2.10:5060;branch=z9hG4bK-fbaa44-681168.064  
Route: <sip:00004@192.168.2.21>  
From: 00003 <sip:00003@sip.com>;tag=25548f4d  
To: <sip:00004@sip.com>;tag=33660403  
Call-ID: 786e223f@00003.192.168.1.1  
CSeq: 1404494219 BYE  
Max-Forwards: 70  
Content-Length: 0

F68 192.168.1.1:5062(Server) -> 192.168.2.21:5060(00004@sip.com)

BYE sip:00004@192.168.2.21 SIP/2.0  
Via: SIP/2.0/UDP 192.168.1.1:5060;branch=z9hG4bK-302.1085830442.1404494219  
Via: SIP/2.0/UDP 192.168.2.10:5060;branch=z9hG4bK-fbaa44-681168.064  
Route: <sip:00004@192.168.2.21>  
From: 00003 <sip:00003@sip.com>;tag=25548f4d  
To: <sip:00004@sip.com>;tag=33660403  
Call-ID: 786e223f@00003.192.168.1.1  
CSeq: 1404494219 BYE  
max-forwards: 69  
Content-Length: 0

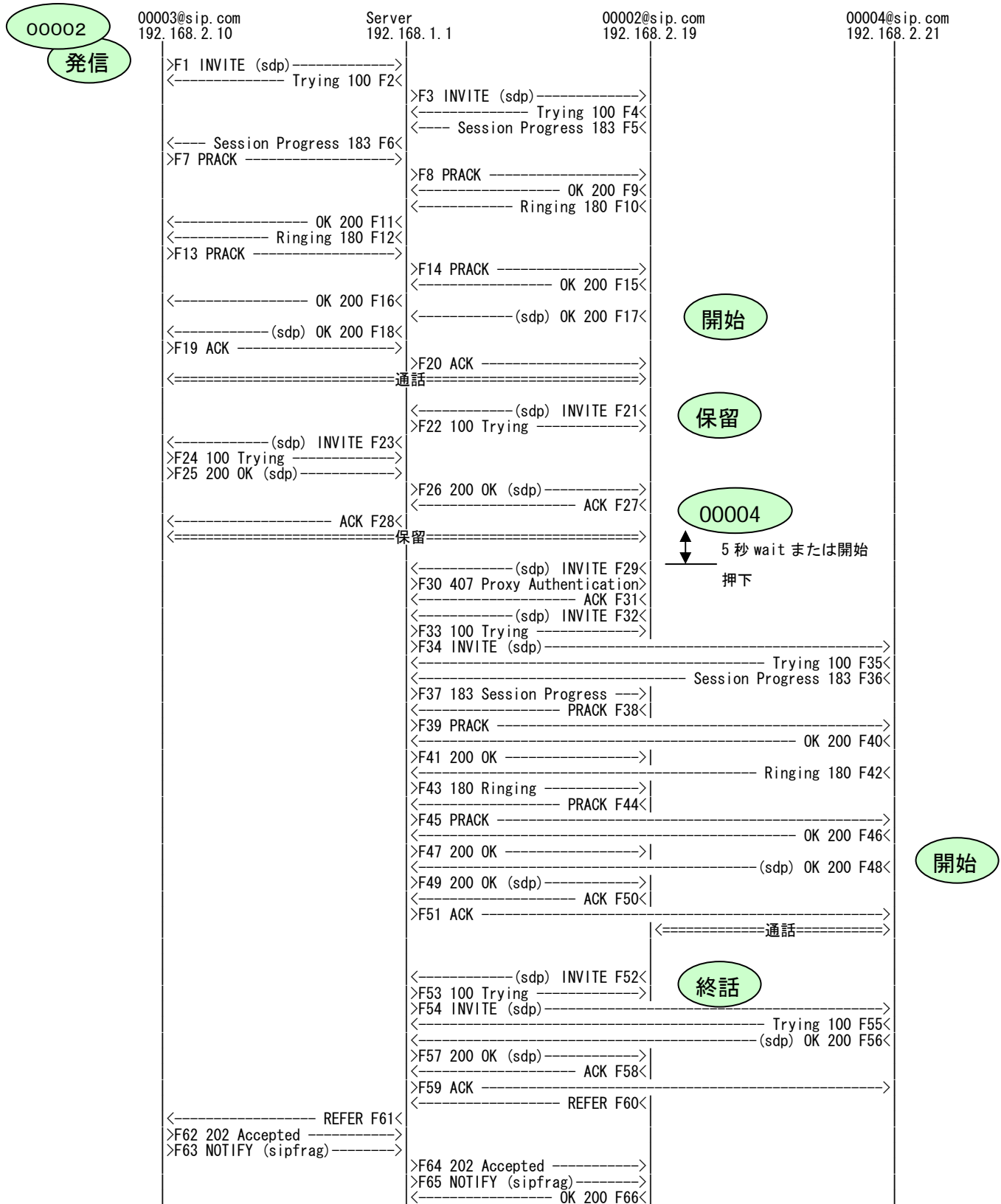
F69 192.168.2.21:1025(00004@sip.com) -> 192.168.1.1:5060(Server)

SIP/2.0 200 OK  
Via: SIP/2.0/UDP 192.168.1.1:5060;branch=z9hG4bK-302.1085830442.1404494219  
Via: SIP/2.0/UDP 192.168.2.10:5060;branch=z9hG4bK-fbaa44-681168.064  
From: 00003 <sip:00003@sip.com>;tag=25548f4d  
To: <sip:00004@sip.com>;tag=33660403  
Call-ID: 786e223f@00003.192.168.1.1  
CSeq: 1404494219 BYE  
Content-Length: 0

F70 192.168.1.1:5062(Server) -> 192.168.2.10:5060(00003@sip.com)

SIP/2.0 200 OK  
Via: SIP/2.0/UDP 192.168.2.10:5060;branch=z9hG4bK-fbaa44-681168.064  
From: 00003 <sip:00003@sip.com>;tag=25548f4d  
To: <sip:00004@sip.com>;tag=33660403  
Call-ID: 786e223f@00003.192.168.1.1  
CSeq: 1404494219 BYE  
Content-Length: 0

## 11.6.2. Attended Transfer



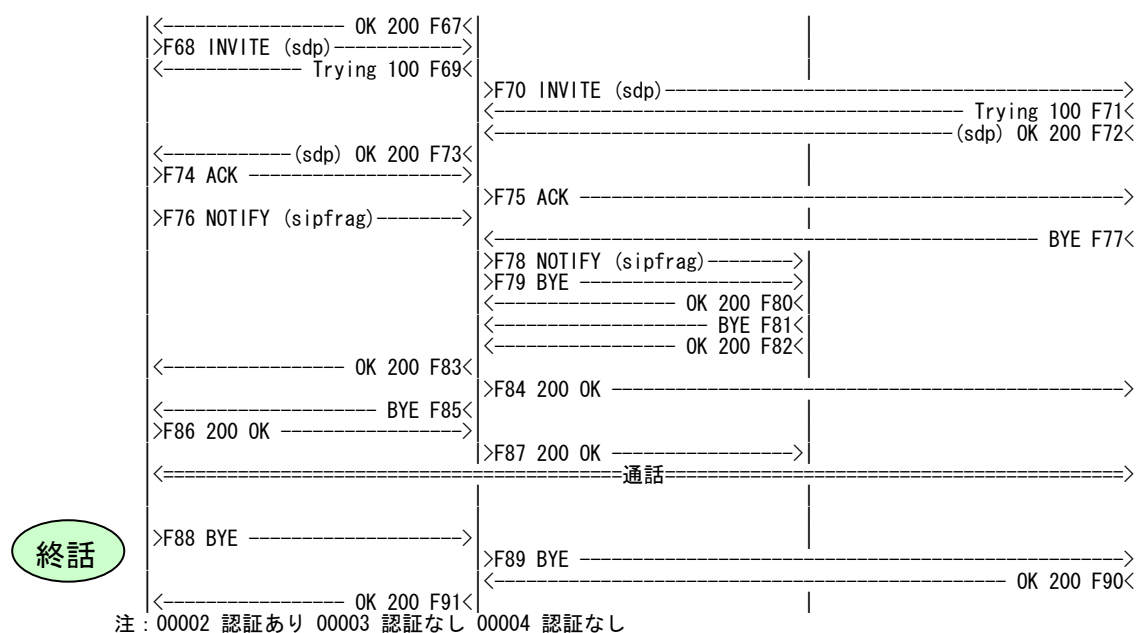


図 11-29 Attended Transfer

(※ N900iL では転送動作において、被転送者から転送元への F65 の Subscription-State:active の NOTIFY(100 trying)、および、転送先から被転送者への 180 Ringing が必要となる。)

また、Subscription-State:pending、および転送先から指定された 180 withSDP による Early Media 動作は行わない。)

F1 192.168.2.10:1025(00003@sip.com) -> 192.168.1.1:5060(Server)

```

INVITE sip:00002@sip.com SIP/2.0
Via: SIP/2.0/UDP 192.168.2.10:5060;branch=z9hG4bK-14e24171-681248.120
Route: <sip:192.168.1.1:5060>
From: <sip:00003@sip.com>;tag=4dc016ae
To: <sip:00002@sip.com>
Call-ID: 1fc2bda7@00003.192.168.1.1
CSeq: 682941032 INVITE
Contact: <sip:00003@192.168.2.10>
Max-Forwards: 70
Supported: 100rel, replaces
Allow: INVITE, ACK, BYE, CANCEL, OPTIONS, PRACK, MESSAGE, REFER, NOTIFY
Content-Type: application/sdp
Accept: application/sdp, message/sipfrag
Content-Length: 249

v=0
o=- 103679 401 IN IP4 192.168.2.10
s=-
c=IN IP4 192.168.2.10
t=0 0
m=audio 5006 RTP/AVP 0 8 4 18 96
a=rtpmap:0 PCMU/8000
a=rtpmap:8 PCMA/8000
a=rtpmap:4 G723/8000
a=rtpmap:18 G729/8000
a=rtpmap:96 telephone-event/8000
a=fmtp:96 0-11
  
```

F2 192.168.1.1:5062(Server) -> 192.168.2.10:5060(00003@sip.com)

```

SIP/2.0 100 Trying
Via: SIP/2.0/UDP 192.168.2.10:5060;branch=z9hG4bK-14e24171-681248.120
  
```

From: <sip:00003@sip.com>;tag=4dc016ae  
 To: <sip:00002@sip.com>  
 Call-ID: 1fc2bda7@00003.192.168.1.1  
 CSeq: 682941032 INVITE  
 Content-Length: 0

F3 192.168.1.1:5062(Server) -> 192.168.2.19:5060(00002@sip.com)

INVITE sip:00002@192.168.2.19 SIP/2.0  
 Via: SIP/2.0/UDP 192.168.1.1:5060;branch=z9hG4bK-314.141358.682941032  
 Via: SIP/2.0/UDP 192.168.2.10:5060;branch=z9hG4bK-14e24171-681248.120  
 Record-Route: <sip:00002@192.168.1.1>  
 Route: <sip:192.168.1.1:5060>  
 From: 00003 <sip:00003@sip.com>;tag=4dc016ae  
 To: <sip:00002@sip.com>  
 Call-ID: 1fc2bda7@00003.192.168.1.1  
 CSeq: 682941032 INVITE  
 Contact: <sip:00003@192.168.2.10>  
 max-forwards: 69  
 supported: 100rel  
 supported: replaces  
 Allow: INVITE, ACK, BYE, CANCEL, OPTIONS, PRACK, MESSAGE, REFER, NOTIFY  
 Content-Type: application/sdp  
 Accept: application/sdp, message/sipfrag  
 Content-Length: 249

v=0  
 o=- 103679 401 IN IP4 192.168.2.10  
 s=-  
 c=IN IP4 192.168.2.10  
 t=0 0  
 m=audio 5006 RTP/AVP 0 8 4 18 96  
 a=rtpmap:0 PCMU/8000  
 a=rtpmap:8 PCMA/8000  
 a=rtpmap:4 G723/8000  
 a=rtpmap:18 G729/8000  
 a=rtpmap:96 telephone-event/8000  
 a=fmtp:96 0-11

F4 192.168.2.19:1025(00002@sip.com) -> 192.168.1.1:5060(Server)

SIP/2.0 100 Trying  
 Via: SIP/2.0/UDP 192.168.1.1:5060;branch=z9hG4bK-314.141358.682941032  
 Via: SIP/2.0/UDP 192.168.2.10:5060;branch=z9hG4bK-14e24171-681248.120  
 From: 00003 <sip:00003@sip.com>;tag=4dc016ae  
 To: <sip:00002@sip.com>  
 Call-ID: 1fc2bda7@00003.192.168.1.1  
 CSeq: 682941032 INVITE  
 Content-Length: 0

F5 192.168.2.19:1025(00002@sip.com) -> 192.168.1.1:5060(Server)

SIP/2.0 183 Session Progress  
 Via: SIP/2.0/UDP 192.168.1.1:5060;branch=z9hG4bK-314.141358.682941032  
 Via: SIP/2.0/UDP 192.168.2.10:5060;branch=z9hG4bK-14e24171-681248.120  
 Record-Route: <sip:00002@192.168.1.1>  
 From: 00003 <sip:00003@sip.com>;tag=4dc016ae  
 To: <sip:00002@sip.com>;tag=566d55ea  
 Call-ID: 1fc2bda7@00003.192.168.1.1  
 CSeq: 682941032 INVITE  
 Contact: <sip:00002@192.168.2.19>  
 Require: 100rel  
 RSeq: 171555175  
 Content-Length: 0

F6 192.168.1.1:5062(Server) -> 192.168.2.10:5060(00003@sip.com)

SIP/2.0 183 Session Progress  
 Via: SIP/2.0/UDP 192.168.2.10:5060;branch=z9hG4bK-14e24171-681248.120  
 Record-Route: <sip:00002@192.168.1.1>



From: 00003 <sip:00003@sip.com>;tag=4dc016ae  
 To: <sip:00002@sip.com>;tag=566d55ea  
 Call-ID: 1fc2bda7@00003.192.168.1.1  
 CSeq: 682941032 INVITE  
 Contact: <sip:00002@192.168.2.19>  
 require: 100rel  
 rseq: 171555175  
 Content-Length: 0

F7 192.168.2.10:1025(00003@sip.com) -> 192.168.1.1:5060(Server)

PRACK sip:00002@192.168.1.1 SIP/2.0  
 Via: SIP/2.0/UDP 192.168.2.10:5060;branch=z9hG4bK-649d2127-681249.122  
 Route: <sip:00002@192.168.2.19>  
 From: 00003 <sip:00003@sip.com>;tag=4dc016ae  
 To: <sip:00002@sip.com>;tag=566d55ea  
 Call-ID: 1fc2bda7@00003.192.168.1.1  
 CSeq: 682941033 PRACK  
 Max-Forwards: 70  
 Rack: 171555175 682941032 INVITE  
 Content-Length: 0

F8 192.168.1.1:5062(Server) -> 192.168.2.19:5060(00002@sip.com)

PRACK sip:00002@192.168.2.19 SIP/2.0  
 Via: SIP/2.0/UDP 192.168.1.1:5060;branch=z9hG4bK-314.1085830523.682941033  
 Via: SIP/2.0/UDP 192.168.2.10:5060;branch=z9hG4bK-649d2127-681249.122  
 Route: <sip:00002@192.168.2.19>  
 From: 00003 <sip:00003@sip.com>;tag=4dc016ae  
 To: <sip:00002@sip.com>;tag=566d55ea  
 Call-ID: 1fc2bda7@00003.192.168.1.1  
 CSeq: 682941033 PRACK  
 max-forwards: 69  
 rack: 171555175 682941032 INVITE  
 Content-Length: 0

F9 192.168.2.19:1025(00002@sip.com) -> 192.168.1.1:5060(Server)

SIP/2.0 200 OK  
 Via: SIP/2.0/UDP 192.168.1.1:5060;branch=z9hG4bK-314.1085830523.682941033  
 Via: SIP/2.0/UDP 192.168.2.10:5060;branch=z9hG4bK-649d2127-681249.122  
 From: 00003 <sip:00003@sip.com>;tag=4dc016ae  
 To: <sip:00002@sip.com>;tag=566d55ea  
 Call-ID: 1fc2bda7@00003.192.168.1.1  
 CSeq: 682941033 PRACK  
 Content-Length: 0

F10 192.168.2.19:1025(00002@sip.com) -> 192.168.1.1:5060(Server)

SIP/2.0 180 Ringing  
 Via: SIP/2.0/UDP 192.168.1.1:5060;branch=z9hG4bK-314.141358.682941032  
 Via: SIP/2.0/UDP 192.168.2.10:5060;branch=z9hG4bK-14e24171-681248.120  
 Record-Route: <sip:00002@192.168.1.1>  
 From: 00003 <sip:00003@sip.com>;tag=4dc016ae  
 To: <sip:00002@sip.com>;tag=566d55ea  
 Call-ID: 1fc2bda7@00003.192.168.1.1  
 CSeq: 682941032 INVITE  
 Contact: <sip:00002@192.168.2.19>  
 Require: 100rel  
 RSeq: 171555176  
 Content-Length: 0

F11 192.168.1.1:5062(Server) -> 192.168.2.10:5060(00003@sip.com)

SIP/2.0 200 OK  
 Via: SIP/2.0/UDP 192.168.2.10:5060;branch=z9hG4bK-649d2127-681249.122

From: 00003 <sip:00003@sip.com>;tag=4dc016ae  
 To: <sip:00002@sip.com>;tag=566d55ea  
 Call-ID: 1fc2bda7@00003.192.168.1.1  
 CSeq: 682941033 PRACK  
 Content-Length: 0

F12 192.168.1.1:5062(Server) -> 192.168.2.10:5060(00003@sip.com)

SIP/2.0 180 Ringing  
 Via: SIP/2.0/UDP 192.168.2.10:5060;branch=z9hG4bK-14e24171-681248.120  
 Record-Route: <sip:00002@192.168.1.1>  
 From: 00003 <sip:00003@sip.com>;tag=4dc016ae  
 To: <sip:00002@sip.com>;tag=566d55ea  
 Call-ID: 1fc2bda7@00003.192.168.1.1  
 CSeq: 682941032 INVITE  
 Contact: <sip:00002@192.168.2.19>  
 require: 100rel  
 rseq: 171555176  
 Content-Length: 0

F13 192.168.2.10:1025(00003@sip.com) -> 192.168.1.1:5060(Server)

PRACK sip:00002@192.168.1.1 SIP/2.0  
 Via: SIP/2.0/UDP 192.168.2.10:5060;branch=z9hG4bK-484093f-681249.353  
 Route: <sip:00002@192.168.2.19>  
 From: 00003 <sip:00003@sip.com>;tag=4dc016ae  
 To: <sip:00002@sip.com>;tag=566d55ea  
 Call-ID: 1fc2bda7@00003.192.168.1.1  
 CSeq: 682941034 PRACK  
 Max-Forwards: 70  
 Rack: 171555176 682941032 INVITE  
 Content-Length: 0

F14 192.168.1.1:5062(Server) -> 192.168.2.19:5060(00002@sip.com)

PRACK sip:00002@192.168.2.19 SIP/2.0  
 Via: SIP/2.0/UDP 192.168.1.1:5060;branch=z9hG4bK-314.1085830523.682941034  
 Via: SIP/2.0/UDP 192.168.2.10:5060;branch=z9hG4bK-484093f-681249.353  
 Route: <sip:00002@192.168.2.19>  
 From: 00003 <sip:00003@sip.com>;tag=4dc016ae  
 To: <sip:00002@sip.com>;tag=566d55ea  
 Call-ID: 1fc2bda7@00003.192.168.1.1  
 CSeq: 682941034 PRACK  
 max-forwards: 69  
 rack: 171555176 682941032 INVITE  
 Content-Length: 0

F15 192.168.2.19:1025(00002@sip.com) -> 192.168.1.1:5060(Server)

SIP/2.0 200 OK  
 Via: SIP/2.0/UDP 192.168.1.1:5060;branch=z9hG4bK-314.1085830523.682941034  
 Via: SIP/2.0/UDP 192.168.2.10:5060;branch=z9hG4bK-484093f-681249.353  
 From: 00003 <sip:00003@sip.com>;tag=4dc016ae  
 To: <sip:00002@sip.com>;tag=566d55ea  
 Call-ID: 1fc2bda7@00003.192.168.1.1  
 CSeq: 682941034 PRACK  
 Content-Length: 0

F16 192.168.1.1:5062(Server) -> 192.168.2.10:5060(00003@sip.com)

SIP/2.0 200 OK  
 Via: SIP/2.0/UDP 192.168.2.10:5060;branch=z9hG4bK-484093f-681249.353  
 From: 00003 <sip:00003@sip.com>;tag=4dc016ae  
 To: <sip:00002@sip.com>;tag=566d55ea  
 Call-ID: 1fc2bda7@00003.192.168.1.1  
 CSeq: 682941034 PRACK

Content-Length: 0

```
=====
F17      192.168.2.19:1025(00002@sip.com) -> 192.168.1.1:5060(Server)
```

```
SIP/2.0 200 OK
Via: SIP/2.0/UDP 192.168.1.1:5060;branch=z9hG4bK-314.141358.682941032
Via: SIP/2.0/UDP 192.168.2.10:5060;branch=z9hG4bK-14e24171-681248.120
Record-Route: <sip:00002@192.168.1.1>
From: 00003 <sip:00003@sip.com>;tag=4dc016ae
To: <sip:00002@sip.com>;tag=566d55ea
Call-ID: 1fc2bda7@00003.192.168.1.1
CSeq: 682941032 INVITE
Contact: <sip:00002@192.168.2.19>
Supported: 100rel, replaces
Allow: INVITE, ACK, BYE, CANCEL, OPTIONS, PRACK, MESSAGE, REFER, NOTIFY
Content-Type: application/sdp
Accept: application/sdp, message/sipfrag
Content-Length: 177
```

```
v=0
o=- 443661 13001 IN IP4 192.168.2.19
s=-
c=IN IP4 192.168.2.19
t=0 0
m=audio 5008 RTP/AVP 0 96
a=rtpmap:0 PCMU/8000
a=rtpmap:96 telephone-event/8000
a=fmtp:96 0-11
```

```
=====
F18      192.168.1.1:5062(Server) -> 192.168.2.10:5060(00003@sip.com)
```

```
SIP/2.0 200 OK
Via: SIP/2.0/UDP 192.168.2.10:5060;branch=z9hG4bK-14e24171-681248.120
Record-Route: <sip:00002@192.168.1.1>
From: 00003 <sip:00003@sip.com>;tag=4dc016ae
To: <sip:00002@sip.com>;tag=566d55ea
Call-ID: 1fc2bda7@00003.192.168.1.1
CSeq: 682941032 INVITE
Contact: <sip:00002@192.168.2.19>
supported: 100rel
supported: replaces
Allow: INVITE, ACK, BYE, CANCEL, OPTIONS, PRACK, MESSAGE, REFER, NOTIFY
Content-Type: application/sdp
Accept: application/sdp, message/sipfrag
Content-Length: 177
```

```
v=0
o=- 443661 13001 IN IP4 192.168.2.19
s=-
c=IN IP4 192.168.2.19
t=0 0
m=audio 5008 RTP/AVP 0 96
a=rtpmap:0 PCMU/8000
a=rtpmap:96 telephone-event/8000
a=fmtp:96 0-11
```

```
=====
F19      192.168.2.10:1025(00003@sip.com) -> 192.168.1.1:5060(Server)
```

```
ACK sip:00002@192.168.1.1 SIP/2.0
Via: SIP/2.0/UDP 192.168.2.10:5060;branch=z9hG4bK-1c13e63-681251.939
Route: <sip:00002@192.168.2.19>
From: 00003 <sip:00003@sip.com>;tag=4dc016ae
To: <sip:00002@sip.com>;tag=566d55ea
Call-ID: 1fc2bda7@00003.192.168.1.1
CSeq: 682941032 ACK
Max-Forwards: 70
Content-Length: 0
```

```
=====
F20      192.168.1.1:5062(Server) -> 192.168.2.19:5060(00002@sip.com)
```

```
ACK sip:00002@192.168.2.19 SIP/2.0
```

# FOMA/WLAN デュアル端末に関する技術参考資料 第 1.2 版

Via: SIP/2.0/UDP 192.168.1.1:5060;branch=z9hG4bK-314.1085830525.682941032  
 Via: SIP/2.0/UDP 192.168.2.10:5060;branch=z9hG4bK-1c13e63-681251.939  
 From: 00003 <sip:00003@sip.com>;tag=4dc016ae  
 To: <sip:00002@sip.com>;tag=566d55ea  
 Call-ID: 1fc2bda7@00003.192.168.1.1  
 CSeq: 682941032 ACK  
 max-forwards: 69  
 Content-Length: 0

F21 192.168.2.19:1025(00002@sip.com) -> 192.168.1.1:5060(Server)

INVITE sip:00002@192.168.1.1 SIP/2.0  
 Via: SIP/2.0/UDP 192.168.2.19:5060;branch=z9hG4bK-619e4c54-529805.266  
 Route: <sip:00003@192.168.2.10>  
 From: <sip:00002@sip.com>;tag=566d55ea  
 To: 00003 <sip:00003@sip.com>;tag=4dc016ae  
 Call-ID: 1fc2bda7@00003.192.168.1.1  
 CSeq: 1337462763 INVITE  
 Contact: <sip:00002@192.168.2.19>  
 Max-Forwards: 70  
 Supported: 100rel, replaces  
 Allow: INVITE, ACK, BYE, CANCEL, OPTIONS, PRACK, MESSAGE, REFER, NOTIFY  
 Content-Type: application/sdp  
 Content-Length: 189

v=0  
 o=- 252684 13002 IN IP4 192.168.2.19  
 s=-  
 c=IN IP4 192.168.2.19  
 t=0 0  
 m=audio 5008 RTP/AVP 0 96  
 a=rtpmap:0 PCMU/8000  
 a=rtpmap:96 telephone-event/8000  
 a=fmtp:96 0-11  
 a=inactive

F22 192.168.1.1:5062(Server) -> 192.168.2.19:5060(00002@sip.com)

SIP/2.0 100 Trying  
 Via: SIP/2.0/UDP 192.168.2.19:5060;branch=z9hG4bK-619e4c54-529805.266  
 From: <sip:00002@sip.com>;tag=566d55ea  
 To: 00003 <sip:00003@sip.com>;tag=4dc016ae  
 Call-ID: 1fc2bda7@00003.192.168.1.1  
 CSeq: 1337462763 INVITE  
 Content-Length: 0

F23 192.168.1.1:5062(Server) -> 192.168.2.10:5060(00003@sip.com)

INVITE sip:00003@192.168.2.10 SIP/2.0  
 Via: SIP/2.0/UDP 192.168.1.1:5060;branch=z9hG4bK-313.141358.1337462763  
 Via: SIP/2.0/UDP 192.168.2.19:5060;branch=z9hG4bK-619e4c54-529805.266  
 Record-Route: <sip:00002@192.168.1.1>  
 Route: <sip:00003@192.168.2.10>  
 From: <sip:00002@sip.com>;tag=566d55ea  
 To: 00003 <sip:00003@sip.com>;tag=4dc016ae  
 Call-ID: 1fc2bda7@00003.192.168.1.1  
 CSeq: 1337462763 INVITE  
 Contact: <sip:00002@192.168.2.19>  
 max-forwards: 69  
 supported: 100rel  
 supported: replaces  
 Allow: INVITE, ACK, BYE, CANCEL, OPTIONS, PRACK, MESSAGE, REFER, NOTIFY  
 Content-Type: application/sdp  
 Content-Length: 189

v=0  
 o=- 252684 13002 IN IP4 192.168.2.19  
 s=-  
 c=IN IP4 192.168.2.19  
 t=0 0  
 m=audio 5008 RTP/AVP 0 96  
 a=rtpmap:0 PCMU/8000  
 a=rtpmap:96 telephone-event/8000

a=fmtp:96 0-11  
a=inactive

F24 192.168.2.10:1025(00003@sip.com) -> 192.168.1.1:5060(Server)

SIP/2.0 100 Trying  
Via: SIP/2.0/UDP 192.168.1.1:5060;branch=z9hG4bK-313.141358.1337462763  
Via: SIP/2.0/UDP 192.168.2.19:5060;branch=z9hG4bK-619e4c54-529805.266  
From: <sip:00002@sip.com>;tag=566d55ea  
To: 00003 <sip:00003@sip.com>;tag=4dc016ae  
Call-ID: 1fc2bda7@00003.192.168.1.1  
CSeq: 1337462763 INVITE  
Content-Length: 0

F25 192.168.2.10:1025(00003@sip.com) -> 192.168.1.1:5060(Server)

SIP/2.0 200 OK  
Via: SIP/2.0/UDP 192.168.1.1:5060;branch=z9hG4bK-313.141358.1337462763  
Via: SIP/2.0/UDP 192.168.2.19:5060;branch=z9hG4bK-619e4c54-529805.266  
Record-Route: <sip:00002@192.168.1.1>  
From: <sip:00002@sip.com>;tag=566d55ea  
To: 00003 <sip:00003@sip.com>;tag=4dc016ae  
Call-ID: 1fc2bda7@00003.192.168.1.1  
CSeq: 1337462763 INVITE  
Contact: <sip:00003@192.168.2.10>  
Supported: 100rel, replaces  
Allow: INVITE, ACK, BYE, CANCEL, OPTIONS, PRACK, MESSAGE, REFER, NOTIFY  
Content-Type: application/sdp  
Accept: application/sdp, message/sipfrag  
Content-Length: 187

v=0  
o=- 579541 402 IN IP4 192.168.2.10  
s=-  
c=IN IP4 192.168.2.10  
t=0 0  
m=audio 5006 RTP/AVP 0 96  
a=rtpmap:0 PCMU/8000  
a=rtpmap:96 telephone-event/8000  
a=fmtp:96 0-11  
a=inactive

F26 192.168.1.1:5062(Server) -> 192.168.2.19:5060(00002@sip.com)

SIP/2.0 200 OK  
Via: SIP/2.0/UDP 192.168.2.19:5060;branch=z9hG4bK-619e4c54-529805.266  
Record-Route: <sip:00002@192.168.1.1>  
From: <sip:00002@sip.com>;tag=566d55ea  
To: 00003 <sip:00003@sip.com>;tag=4dc016ae  
Call-ID: 1fc2bda7@00003.192.168.1.1  
CSeq: 1337462763 INVITE  
Contact: <sip:00003@192.168.2.10>  
supported: 100rel  
supported: replaces  
Allow: INVITE, ACK, BYE, CANCEL, OPTIONS, PRACK, MESSAGE, REFER, NOTIFY  
Content-Type: application/sdp  
Accept: application/sdp, message/sipfrag  
Content-Length: 187

v=0  
o=- 579541 402 IN IP4 192.168.2.10  
s=-  
c=IN IP4 192.168.2.10  
t=0 0  
m=audio 5006 RTP/AVP 0 96  
a=rtpmap:0 PCMU/8000  
a=rtpmap:96 telephone-event/8000  
a=fmtp:96 0-11  
a=inactive

F27 192.168.2.19:1025(00002@sip.com) -> 192.168.1.1:5060(Server)

```

ACK sip:00002@192.168.1.1 SIP/2.0
Via: SIP/2.0/UDP 192.168.2.19:5060;branch=z9hG4bK-616f7052-529805.645
Route: <sip:00003@192.168.2.10>
From: <sip:00002@sip.com>;tag=566d55ea
To: 00003 <sip:00003@sip.com>;tag=4dc016ae
Call-ID: 1fc2bda7@00003.192.168.1.1
CSeq: 1337462763 ACK
Max-Forwards: 70
Content-Length: 0

```

```
=====
```

F28        192.168.1.1:5062 (Server) -> 192.168.2.10:5060 (00003@sip.com)

```

ACK sip:00003@192.168.2.10 SIP/2.0
Via: SIP/2.0/UDP 192.168.1.1:5060;branch=z9hG4bK-313.1085830529.1337462763
Via: SIP/2.0/UDP 192.168.2.19:5060;branch=z9hG4bK-616f7052-529805.645
From: <sip:00002@sip.com>;tag=566d55ea
To: 00003 <sip:00003@sip.com>;tag=4dc016ae
Call-ID: 1fc2bda7@00003.192.168.1.1
CSeq: 1337462763 ACK
max-forwards: 69
Content-Length: 0

```

```
=====
```

F29        192.168.2.19:1025 (00002@sip.com) -> 192.168.1.1:5060 (Server)

```

INVITE sip:00004@sip.com SIP/2.0
Via: SIP/2.0/UDP 192.168.2.19:5060;branch=z9hG4bK-528b897b-529815.788
Route: <sip:192.168.1.1:5060>
From: <sip:00002@sip.com>;tag=6c9a6f08
To: <sip:00004@sip.com>
Call-ID: 5bca7759@00002.192.168.1.1
CSeq: 1628423340 INVITE
Contact: <sip:00002@192.168.2.19>
Proxy-Authorization: Digest username="00002", realm="heliossv2", nonce="dcf1cdeb8e6daab765551bf79017b793",
uri="sip:00004@sip.com", response="a54e47dcdae31f610864ada8a67abd80", algorithm=MD5, cnonce="0df5675e",
opaque="8b62e189248559966add987724fa4e14", qop=auth, nc=00000006
Max-Forwards: 70
Supported: 100rel, replaces
Allow: INVITE, ACK, BYE, CANCEL, OPTIONS, PRACK, MESSAGE, REFER, NOTIFY
Content-Type: application/sdp
Accept: application/sdp, message/sipfrag
Content-Length: 249

v=0
o=- 769191 101 IN IP4 192.168.2.19
s=-
c=IN IP4 192.168.2.19
t=0 0
m=audio 5006 RTP/AVP 0 8 4 18 96
a=rtpmap:0 PCMU/8000
a=rtpmap:8 PCMA/8000
a=rtpmap:4 G723/8000
a=rtpmap:18 G729/8000
a=rtpmap:96 telephone-event/8000
a=fmtp:96 0-11

```

```
=====
```

F30        192.168.1.1:5062 (Server) -> 192.168.2.19:5060 (00002@sip.com)

```

SIP/2.0 407 Proxy Authentication Required
Via: SIP/2.0/UDP 192.168.2.19:5060;branch=z9hG4bK-528b897b-529815.788
From: <sip:00002@sip.com>;tag=6c9a6f08
To: <sip:00004@sip.com>
Call-ID: 5bca7759@00002.192.168.1.1
CSeq: 1628423340 INVITE
Proxy-Authenticate: Digest realm="heliossv2", nonce="819b805e00a7ed6345f65d694b052d11",
opaque="d4d4f29a561297e1dd72835e51be32a9", stale=false, algorithm=MD5, qop="auth,auth-int"
Content-Length: 0

```

```
=====
```

F31        192.168.2.19:1025 (00002@sip.com) -> 192.168.1.1:5060 (Server)

```

ACK sip:00004@sip.com SIP/2.0

```

# FOMA/WLAN デュアル端末に関する技術参考資料 第 1.2 版

Via: SIP/2.0/UDP 192.168.2.19:5060;branch=z9hG4bK-528b897b-529815.788  
 Route: <sip:192.168.1.1:5060>  
 From: <sip:00002@sip.com>;tag=6c9a6f08  
 To: <sip:00004@sip.com>  
 Call-ID: 5bca7759@00002.192.168.1.1  
 CSeq: 1628423340 ACK  
 Content-Length: 0

---

F32 192.168.2.19:1025(00002@sip.com) -> 192.168.1.1:5060(Server)

INVITE sip:00004@sip.com SIP/2.0  
 Via: SIP/2.0/UDP 192.168.2.19:5060;branch=z9hG4bK-d88a0b-529816.128  
 Route: <sip:192.168.1.1:5060>  
 From: <sip:00002@sip.com>;tag=6c9a6f08  
 To: <sip:00004@sip.com>  
 Call-ID: 5bca7759@00002.192.168.1.1  
 CSeq: 1628423341 INVITE  
 Contact: <sip:00002@192.168.2.19>  
 Proxy-Authorization: Digest username="00002", realm="heliossv2", nonce="819b805e00a7ed6345f65d694b052d11",  
 uri="sip:00004@sip.com", response="638bedcb93ba8433514dade98812a65e", algorithm=MD5, cnonce="58974f7b",  
 opaque="d4d4f29a561297e1dd72835e51be32a9", qop=auth, nc=00000001  
 Max-Forwards: 70  
 Supported: 100rel, replaces  
 Allow: INVITE, ACK, BYE, CANCEL, OPTIONS, PRACK, MESSAGE, REFER, NOTIFY  
 Content-Type: application/sdp  
 Accept: application/sdp, message/sipfrag  
 Content-Length: 249

v=0  
 o=- 769191 101 IN IP4 192.168.2.19  
 s=-  
 c=IN IP4 192.168.2.19  
 t=0 0  
 m=audio 5006 RTP/AVP 0 8 4 18 96  
 a=rtpmap:0 PCMU/8000  
 a=rtpmap:8 PCMA/8000  
 a=rtpmap:4 G723/8000  
 a=rtpmap:18 G729/8000  
 a=rtpmap:96 telephone-event/8000  
 a=fmtp:96 0-11

---

F33 192.168.1.1:5062(Server) -> 192.168.2.19:5060(00002@sip.com)

SIP/2.0 100 Trying  
 Via: SIP/2.0/UDP 192.168.2.19:5060;branch=z9hG4bK-d88a0b-529816.128  
 From: <sip:00002@sip.com>;tag=6c9a6f08  
 To: <sip:00004@sip.com>  
 Call-ID: 5bca7759@00002.192.168.1.1  
 CSeq: 1628423341 INVITE  
 Content-Length: 0

---

F34 192.168.1.1:5062(Server) -> 192.168.2.21:5060(00004@sip.com)

INVITE sip:00004@192.168.2.21 SIP/2.0  
 Via: SIP/2.0/UDP 192.168.1.1:5060;branch=z9hG4bK-316.891048.1628423341  
 Via: SIP/2.0/UDP 192.168.2.19:5060;branch=z9hG4bK-d88a0b-529816.128  
 Record-Route: <sip:00004@192.168.1.1>  
 Route: <sip:192.168.1.1:5060>  
 From: 00002 <sip:00002@sip.com>;tag=6c9a6f08  
 To: <sip:00004@sip.com>  
 Call-ID: 5bca7759@00002.192.168.1.1  
 CSeq: 1628423341 INVITE  
 Contact: <sip:00002@192.168.2.19>  
 max-forwards: 69  
 supported: 100rel  
 supported: replaces  
 Allow: INVITE, ACK, BYE, CANCEL, OPTIONS, PRACK, MESSAGE, REFER, NOTIFY  
 Content-Type: application/sdp  
 Accept: application/sdp, message/sipfrag  
 Content-Length: 249

v=0  
 o=- 769191 101 IN IP4 192.168.2.19

```

S=-
c=IN IP4 192.168.2.19
t=0 0
m=audio 5006 RTP/AVP 0 8 4 18 96
a=rtpmap:0 PCMU/8000
a=rtpmap:8 PCMA/8000
a=rtpmap:4 G723/8000
a=rtpmap:18 G729/8000
a=rtpmap:96 telephone-event/8000
a=fmtp:96 0-11

```

```

=====
F35      192.168.2.21:1025(00004@sip.com) -> 192.168.1.1:5060(Server)

```

```

SIP/2.0 100 Trying
Via: SIP/2.0/UDP 192.168.1.1:5060;branch=z9hG4bK-316.891048.1628423341
Via: SIP/2.0/UDP 192.168.2.19:5060;branch=z9hG4bK-d88a0b-529816.128
From: 00002 <sip:00002@sip.com>;tag=6c9a6f08
To: <sip:00004@sip.com>
Call-ID: 5bca7759@00002.192.168.1.1
CSeq: 1628423341 INVITE
Content-Length: 0

```

```

=====
F36      192.168.2.21:1025(00004@sip.com) -> 192.168.1.1:5060(Server)

```

```

SIP/2.0 183 Session Progress
Via: SIP/2.0/UDP 192.168.1.1:5060;branch=z9hG4bK-316.891048.1628423341
Via: SIP/2.0/UDP 192.168.2.19:5060;branch=z9hG4bK-d88a0b-529816.128
Record-Route: <sip:00004@192.168.1.1>
From: 00002 <sip:00002@sip.com>;tag=6c9a6f08
To: <sip:00004@sip.com>;tag=5bba8a7b
Call-ID: 5bca7759@00002.192.168.1.1
CSeq: 1628423341 INVITE
Contact: <sip:00004@192.168.2.21>
Require: 100rel
RSeq: 774228230
Content-Length: 0

```

```

=====
F37      192.168.1.1:5062(Server) -> 192.168.2.19:5060(00002@sip.com)

```

```

SIP/2.0 183 Session Progress
Via: SIP/2.0/UDP 192.168.2.19:5060;branch=z9hG4bK-d88a0b-529816.128
Record-Route: <sip:00004@192.168.1.1>
From: 00002 <sip:00002@sip.com>;tag=6c9a6f08
To: <sip:00004@sip.com>;tag=5bba8a7b
Call-ID: 5bca7759@00002.192.168.1.1
CSeq: 1628423341 INVITE
Contact: <sip:00004@192.168.2.21>
require: 100rel
rseq: 774228230
Content-Length: 0

```

```

=====
F38      192.168.2.19:1025(00002@sip.com) -> 192.168.1.1:5060(Server)

```

```

PRACK sip:00004@192.168.1.1 SIP/2.0
Via: SIP/2.0/UDP 192.168.2.19:5060;branch=z9hG4bK-5b333af6-529816.582
Route: <sip:00004@192.168.2.21>
From: 00002 <sip:00002@sip.com>;tag=6c9a6f08
To: <sip:00004@sip.com>;tag=5bba8a7b
Call-ID: 5bca7759@00002.192.168.1.1
CSeq: 1628423342 PRACK
Proxy-Authorization: Digest username="00002", realm="heliossv2", nonce="819b805e00a7ed6345f65d694b052d11",
uri="sip:00004@192.168.1.1", response="77ecbe33655b0e8e9effa804b0073790", algorithm=MD5, cnonce="107a914e",
opaque="d4d4f29a561297e1dd72835e51be32a9", qop=auth, nc=00000002
Max-Forwards: 70
RAck: 774228230 1628423341 INVITE
Content-Length: 0

```



F39 192.168.1.1:5062(Server) -> 192.168.2.21:5060(00004@sip.com)

PRACK sip:00004@192.168.2.21 SIP/2.0  
 Via: SIP/2.0/UDP 192.168.1.1:5060;branch=z9hG4bK-316.1085830540.1628423342  
 Via: SIP/2.0/UDP 192.168.2.19:5060;branch=z9hG4bK-5b333af6-529816.582  
 Route: <sip:00004@192.168.2.21>  
 From: 00002 <sip:00002@sip.com>;tag=6c9a6f08  
 To: <sip:00004@sip.com>;tag=5bba8a7b  
 Call-ID: 5bca7759@00002.192.168.1.1  
 CSeq: 1628423342 PRACK  
 max-forwards: 69  
 rack: 774228230 1628423341 INVITE  
 Content-Length: 0

F40 192.168.2.21:1025(00004@sip.com) -> 192.168.1.1:5060(Server)

SIP/2.0 200 OK  
 Via: SIP/2.0/UDP 192.168.1.1:5060;branch=z9hG4bK-316.1085830540.1628423342  
 Via: SIP/2.0/UDP 192.168.2.19:5060;branch=z9hG4bK-5b333af6-529816.582  
 From: 00002 <sip:00002@sip.com>;tag=6c9a6f08  
 To: <sip:00004@sip.com>;tag=5bba8a7b  
 Call-ID: 5bca7759@00002.192.168.1.1  
 CSeq: 1628423342 PRACK  
 Content-Length: 0

F41 192.168.1.1:5062(Server) -> 192.168.2.19:5060(00002@sip.com)

SIP/2.0 200 OK  
 Via: SIP/2.0/UDP 192.168.2.19:5060;branch=z9hG4bK-5b333af6-529816.582  
 From: 00002 <sip:00002@sip.com>;tag=6c9a6f08  
 To: <sip:00004@sip.com>;tag=5bba8a7b  
 Call-ID: 5bca7759@00002.192.168.1.1  
 CSeq: 1628423342 PRACK  
 Content-Length: 0

F42 192.168.2.21:1025(00004@sip.com) -> 192.168.1.1:5060(Server)

SIP/2.0 180 Ringing  
 Via: SIP/2.0/UDP 192.168.1.1:5060;branch=z9hG4bK-316.891048.1628423341  
 Via: SIP/2.0/UDP 192.168.2.19:5060;branch=z9hG4bK-d88a0b-529816.128  
 Record-Route: <sip:00004@192.168.1.1>  
 From: 00002 <sip:00002@sip.com>;tag=6c9a6f08  
 To: <sip:00004@sip.com>;tag=5bba8a7b  
 Call-ID: 5bca7759@00002.192.168.1.1  
 CSeq: 1628423341 INVITE  
 Contact: <sip:00004@192.168.2.21>  
 Require: 100rel  
 RSeq: 774228231  
 Content-Length: 0

F43 192.168.1.1:5062(Server) -> 192.168.2.19:5060(00002@sip.com)

SIP/2.0 180 Ringing  
 Via: SIP/2.0/UDP 192.168.2.19:5060;branch=z9hG4bK-d88a0b-529816.128  
 Record-Route: <sip:00004@192.168.1.1>  
 From: 00002 <sip:00002@sip.com>;tag=6c9a6f08  
 To: <sip:00004@sip.com>;tag=5bba8a7b  
 Call-ID: 5bca7759@00002.192.168.1.1  
 CSeq: 1628423341 INVITE  
 Contact: <sip:00004@192.168.2.21>  
 require: 100rel  
 rseq: 774228231  
 Content-Length: 0

F44 192.168.2.19:1025(00002@sip.com) -> 192.168.1.1:5060(Server)

```

PRACK sip:00004@192.168.1.1 SIP/2.0
Via: SIP/2.0/UDP 192.168.2.19:5060;branch=z9hG4bK-210276f5-529816.892
Route: <sip:00004@192.168.2.21>
From: 00002 <sip:00002@sip.com>;tag=6c9a6f08
To: <sip:00004@sip.com>;tag=5bba8a7b
Call-ID: 5bca7759@00002.192.168.1.1
CSeq: 1628423343 PRACK
Proxy-Authorization: Digest username="00002", realm="heliossv2", nonce="819b805e00a7ed6345f65d694b052d11",
uri="sip:00004@192.168.1.1", response="c8dde3ea8388f9b341abadf6139714a8", algorithm=MD5, cnonce="1fed8f1a",
opaque="d4d4f29a561297e1dd72835e51be32a9", qop=auth, nc=00000003
Max-Forwards: 70
RAck: 774228231 1628423341 INVITE
Content-Length: 0

```

---

```

F45      192.168.1.1:5062 (Server) -> 192.168.2.21:5060 (00004@sip.com)

```

```

PRACK sip:00004@192.168.2.21 SIP/2.0
Via: SIP/2.0/UDP 192.168.1.1:5060;branch=z9hG4bK-316.1085830541.1628423343
Via: SIP/2.0/UDP 192.168.2.19:5060;branch=z9hG4bK-210276f5-529816.892
Route: <sip:00004@192.168.2.21>
From: 00002 <sip:00002@sip.com>;tag=6c9a6f08
To: <sip:00004@sip.com>;tag=5bba8a7b
Call-ID: 5bca7759@00002.192.168.1.1
CSeq: 1628423343 PRACK
max-forwards: 69
rack: 774228231 1628423341 INVITE
Content-Length: 0

```

---

```

F46      192.168.2.21:1025 (00004@sip.com) -> 192.168.1.1:5060 (Server)

```

```

SIP/2.0 200 OK
Via: SIP/2.0/UDP 192.168.1.1:5060;branch=z9hG4bK-316.1085830541.1628423343
Via: SIP/2.0/UDP 192.168.2.19:5060;branch=z9hG4bK-210276f5-529816.892
From: 00002 <sip:00002@sip.com>;tag=6c9a6f08
To: <sip:00004@sip.com>;tag=5bba8a7b
Call-ID: 5bca7759@00002.192.168.1.1
CSeq: 1628423343 PRACK
Content-Length: 0

```

---

```

F47      192.168.1.1:5062 (Server) -> 192.168.2.19:5060 (00002@sip.com)

```

```

SIP/2.0 200 OK
Via: SIP/2.0/UDP 192.168.2.19:5060;branch=z9hG4bK-210276f5-529816.892
From: 00002 <sip:00002@sip.com>;tag=6c9a6f08
To: <sip:00004@sip.com>;tag=5bba8a7b
Call-ID: 5bca7759@00002.192.168.1.1
CSeq: 1628423343 PRACK
Content-Length: 0

```

---

```

F48      192.168.2.21:1025 (00004@sip.com) -> 192.168.1.1:5060 (Server)

```

```

SIP/2.0 200 OK
Via: SIP/2.0/UDP 192.168.1.1:5060;branch=z9hG4bK-316.891048.1628423341
Via: SIP/2.0/UDP 192.168.2.19:5060;branch=z9hG4bK-d88a0b-529816.128
Record-Route: <sip:00004@192.168.1.1>
From: 00002 <sip:00002@sip.com>;tag=6c9a6f08
To: <sip:00004@sip.com>;tag=5bba8a7b
Call-ID: 5bca7759@00002.192.168.1.1
CSeq: 1628423341 INVITE
Contact: <sip:00004@192.168.2.21>
Supported: 100rel, replaces
Allow: INVITE, ACK, BYE, CANCEL, OPTIONS, PRACK, MESSAGE, REFER, NOTIFY
Content-Type: application/sdp
Accept: application/sdp, message/sipfrag
Content-Length: 177

```

```

v=0
o=- 572350 13201 IN IP4 192.168.2.21
s=-

```

c=IN IP4 192.168.2.21  
 t=0 0  
 m=audio 5008 RTP/AVP 0 96  
 a=rtpmap:0 PCMU/8000  
 a=rtpmap:96 telephone-event/8000  
 a=fmtp:96 0-11

F49 192.168.1.1:5062(Server) -> 192.168.2.19:5060(00002@sip.com)

SIP/2.0 200 OK  
 Via: SIP/2.0/UDP 192.168.2.19:5060;branch=z9hG4bK-d88a0b-529816.128  
 Record-Route: <sip:00004@192.168.1.1>  
 From: 00002 <sip:00002@sip.com>;tag=6c9a6f08  
 To: <sip:00004@sip.com>;tag=5bba8a7b  
 Call-ID: 5bca7759@00002.192.168.1.1  
 CSeq: 1628423341 INVITE  
 Contact: <sip:00004@192.168.2.21>  
 supported: 100rel  
 supported: replaces  
 Allow: INVITE, ACK, BYE, CANCEL, OPTIONS, PRACK, MESSAGE, REFER, NOTIFY  
 Content-Type: application/sdp  
 Accept: application/sdp, message/sipfrag  
 Content-Length: 177

v=0  
 o=- 572350 13201 IN IP4 192.168.2.21  
 s=-  
 c=IN IP4 192.168.2.21  
 t=0 0  
 m=audio 5008 RTP/AVP 0 96  
 a=rtpmap:0 PCMU/8000  
 a=rtpmap:96 telephone-event/8000  
 a=fmtp:96 0-11

F50 192.168.2.19:1025(00002@sip.com) -> 192.168.1.1:5060(Server)

ACK sip:00004@192.168.1.1 SIP/2.0  
 Via: SIP/2.0/UDP 192.168.2.19:5060;branch=z9hG4bK-265f52f8-529819.478  
 Route: <sip:00004@192.168.2.21>  
 From: 00002 <sip:00002@sip.com>;tag=6c9a6f08  
 To: <sip:00004@sip.com>;tag=5bba8a7b  
 Call-ID: 5bca7759@00002.192.168.1.1  
 CSeq: 1628423341 ACK  
 Proxy-Authorization: Digest username="00002", realm="heliossv2", nonce="819b805e00a7ed6345f65d694b052d11", uri="sip:00004@sip.com", response="638bedcb93ba8433514dade98812a65e", algorithm=MD5, cnonce="58974f7b", opaque="d4d4f29a561297e1dd72835e51be32a9", qop=auth, nc=00000001  
 Max-Forwards: 70  
 Content-Length: 0

F51 192.168.1.1:5062(Server) -> 192.168.2.21:5060(00004@sip.com)

ACK sip:00004@192.168.2.21 SIP/2.0  
 Via: SIP/2.0/UDP 192.168.1.1:5060;branch=z9hG4bK-316.1085830543.1628423341  
 Via: SIP/2.0/UDP 192.168.2.19:5060;branch=z9hG4bK-265f52f8-529819.478  
 From: 00002 <sip:00002@sip.com>;tag=6c9a6f08  
 To: <sip:00004@sip.com>;tag=5bba8a7b  
 Call-ID: 5bca7759@00002.192.168.1.1  
 CSeq: 1628423341 ACK  
 max-forwards: 69  
 Content-Length: 0

F52 192.168.2.19:1025(00002@sip.com) -> 192.168.1.1:5060(Server)

INVITE sip:00004@192.168.1.1 SIP/2.0  
 Via: SIP/2.0/UDP 192.168.2.19:5060;branch=z9hG4bK-6e37309c-529827.039  
 Route: <sip:00004@192.168.2.21>  
 From: 00002 <sip:00002@sip.com>;tag=6c9a6f08  
 To: <sip:00004@sip.com>;tag=5bba8a7b  
 Call-ID: 5bca7759@00002.192.168.1.1  
 CSeq: 1628423344 INVITE  
 Contact: <sip:00002@192.168.2.19>

Max-Forwards: 70  
 Supported: 100rel, replaces  
 Allow: INVITE, ACK, BYE, CANCEL, OPTIONS, PRACK, MESSAGE, REFER, NOTIFY  
 Content-Type: application/sdp  
 Content-Length: 186

v=0  
 o=- 32378 102 IN IP4 192.168.2.19  
 s=-  
 c=IN IP4 192.168.2.19  
 t=0 0  
 m=audio 5006 RTP/AVP 0 96  
 a=rtpmap:0 PCMU/8000  
 a=rtpmap:96 telephone-event/8000  
 a=fmtp:96 0-11  
 a=inactive

=====

F53 192.168.1.1:5062(Server) -> 192.168.2.19:5060(00002@sip.com)

SIP/2.0 100 Trying  
 Via: SIP/2.0/UDP 192.168.2.19:5060;branch=z9hG4bK-6e37309c-529827.039  
 From: 00002 <sip:00002@sip.com>;tag=6c9a6f08  
 To: <sip:00004@sip.com>;tag=5bba8a7b  
 Call-ID: 5bca7759@00002.192.168.1.1  
 CSeq: 1628423344 INVITE  
 Content-Length: 0

=====

F54 192.168.1.1:5062(Server) -> 192.168.2.21:5060(00004@sip.com)

INVITE sip:00004@192.168.2.21 SIP/2.0  
 Via: SIP/2.0/UDP 192.168.1.1:5060;branch=z9hG4bK-316.891048.1628423344  
 Via: SIP/2.0/UDP 192.168.2.19:5060;branch=z9hG4bK-6e37309c-529827.039  
 Record-Route: <sip:00004@192.168.1.1>  
 Route: <sip:00004@192.168.2.21>  
 From: 00002 <sip:00002@sip.com>;tag=6c9a6f08  
 To: <sip:00004@sip.com>;tag=5bba8a7b  
 Call-ID: 5bca7759@00002.192.168.1.1  
 CSeq: 1628423344 INVITE  
 Contact: <sip:00002@192.168.2.19>  
 max-forwards: 69  
 supported: 100rel  
 supported: replaces  
 Allow: INVITE, ACK, BYE, CANCEL, OPTIONS, PRACK, MESSAGE, REFER, NOTIFY  
 Content-Type: application/sdp  
 Content-Length: 186

v=0  
 o=- 32378 102 IN IP4 192.168.2.19  
 s=-  
 c=IN IP4 192.168.2.19  
 t=0 0  
 m=audio 5006 RTP/AVP 0 96  
 a=rtpmap:0 PCMU/8000  
 a=rtpmap:96 telephone-event/8000  
 a=fmtp:96 0-11  
 a=inactive

=====

F55 192.168.2.21:1025(00004@sip.com) -> 192.168.1.1:5060(Server)

SIP/2.0 100 Trying  
 Via: SIP/2.0/UDP 192.168.1.1:5060;branch=z9hG4bK-316.891048.1628423344  
 Via: SIP/2.0/UDP 192.168.2.19:5060;branch=z9hG4bK-6e37309c-529827.039  
 From: 00002 <sip:00002@sip.com>;tag=6c9a6f08  
 To: <sip:00004@sip.com>;tag=5bba8a7b  
 Call-ID: 5bca7759@00002.192.168.1.1  
 CSeq: 1628423344 INVITE  
 Content-Length: 0

=====

F56 192.168.2.21:1025(00004@sip.com) -> 192.168.1.1:5060(Server)

SIP/2.0 200 OK

## FOMA/WLAN デュアル端末に関する技術参考資料 第 1.2 版

Via: SIP/2.0/UDP 192.168.1.1:5060;branch=z9hG4bK-316.891048.1628423344  
Via: SIP/2.0/UDP 192.168.2.19:5060;branch=z9hG4bK-6e37309c-529827.039  
Record-Route: <sip:00004@192.168.1.1>  
From: 00002 <sip:00002@sip.com>;tag=6c9a6f08  
To: <sip:00004@sip.com>;tag=5bba8a7b  
Call-ID: 5bca7759@00002.192.168.1.1  
CSeq: 1628423344 INVITE  
Contact: <sip:00004@192.168.2.21>  
Supported: 100rel, replaces  
Allow: INVITE, ACK, BYE, CANCEL, OPTIONS, PRACK, MESSAGE, REFER, NOTIFY  
Content-Type: application/sdp  
Accept: application/sdp, message/sipfrag  
Content-Length: 189

v=0  
o=- 289311 13202 IN IP4 192.168.2.21  
s=-  
c=IN IP4 192.168.2.21  
t=0 0  
m=audio 5008 RTP/AVP 0 96  
a=rtpmap:0 PCMU/8000  
a=rtpmap:96 telephone-event/8000  
a=fmtp:96 0-11  
a=inactive

=====

F57 192.168.1.1:5062(Server) -> 192.168.2.19:5060(00002@sip.com)

SIP/2.0 200 OK  
Via: SIP/2.0/UDP 192.168.2.19:5060;branch=z9hG4bK-6e37309c-529827.039  
Record-Route: <sip:00004@192.168.1.1>  
From: 00002 <sip:00002@sip.com>;tag=6c9a6f08  
To: <sip:00004@sip.com>;tag=5bba8a7b  
Call-ID: 5bca7759@00002.192.168.1.1  
CSeq: 1628423344 INVITE  
Contact: <sip:00004@192.168.2.21>  
supported: 100rel  
supported: replaces  
Allow: INVITE, ACK, BYE, CANCEL, OPTIONS, PRACK, MESSAGE, REFER, NOTIFY  
Content-Type: application/sdp  
Accept: application/sdp, message/sipfrag  
Content-Length: 189

v=0  
o=- 289311 13202 IN IP4 192.168.2.21  
s=-  
c=IN IP4 192.168.2.21  
t=0 0  
m=audio 5008 RTP/AVP 0 96  
a=rtpmap:0 PCMU/8000  
a=rtpmap:96 telephone-event/8000  
a=fmtp:96 0-11  
a=inactive

=====

F58 192.168.2.19:1025(00002@sip.com) -> 192.168.1.1:5060(Server)

ACK sip:00004@192.168.1.1 SIP/2.0  
Via: SIP/2.0/UDP 192.168.2.19:5060;branch=z9hG4bK-1cf8f723-529827.742  
Route: <sip:00004@192.168.2.21>  
From: 00002 <sip:00002@sip.com>;tag=6c9a6f08  
To: <sip:00004@sip.com>;tag=5bba8a7b  
Call-ID: 5bca7759@00002.192.168.1.1  
CSeq: 1628423344 ACK  
Max-Forwards: 70  
Content-Length: 0

=====

F59 192.168.1.1:5062(Server) -> 192.168.2.21:5060(00004@sip.com)

ACK sip:00004@192.168.2.21 SIP/2.0  
Via: SIP/2.0/UDP 192.168.1.1:5060;branch=z9hG4bK-316.1085830551.1628423344  
Via: SIP/2.0/UDP 192.168.2.19:5060;branch=z9hG4bK-1cf8f723-529827.742  
From: 00002 <sip:00002@sip.com>;tag=6c9a6f08  
To: <sip:00004@sip.com>;tag=5bba8a7b  
Call-ID: 5bca7759@00002.192.168.1.1  
CSeq: 1628423344 ACK

max-forwards: 69  
Content-Length: 0

```
=====
F60      192.168.2.19:1025(00002@sip.com) -> 192.168.1.1:5060(Server)

REFER sip:00002@192.168.1.1 SIP/2.0
Via: SIP/2.0/UDP 192.168.2.19:5060;branch=z9hG4bK-28336e3e-529827.817
Route: <sip:00003@192.168.2.10>
From: <sip:00002@sip.com>;tag=566d55ea
To: 00003 <sip:00003@sip.com>;tag=4dc016ae
Call-ID: 1fc2bda7@00003.192.168.1.1
CSeq: 1337462764 REFER
Contact: <sip:00002@192.168.2.19>
Proxy-Authorization: Digest username="00002", realm="heliossv2", nonce="819b805e00a7ed6345f65d694b052d11",
uri="sip:00002@192.168.1.1", response="915e379b4f1f7580df363eb648211718", algorithm=MD5, cnonce="63ab544c",
opaque="d4d4f29a561297e1dd72835e51be32a9", qop=auth, nc=00000004
Max-Forwards: 70
Refer-To:
<sip:00004@192.168.2.21?Replaces=5bca7759@00002.192.168.1.1%3bto-tag%3d5bba8a7b%3bfrom-tag%3d6c9a6f08>
Referred-By: <sip:00002@sip.com>
Content-Length: 0
=====
```

```
=====
F61      192.168.1.1:5062(Server) -> 192.168.2.10:5060(00003@sip.com)

REFER sip:00003@192.168.2.10 SIP/2.0
Via: SIP/2.0/UDP 192.168.1.1:5060;branch=z9hG4bK-313.1085830551.1337462764
Via: SIP/2.0/UDP 192.168.2.19:5060;branch=z9hG4bK-28336e3e-529827.817
Route: <sip:00003@192.168.2.10>
From: <sip:00002@sip.com>;tag=566d55ea
To: 00003 <sip:00003@sip.com>;tag=4dc016ae
Call-ID: 1fc2bda7@00003.192.168.1.1
CSeq: 1337462764 REFER
Contact: <sip:00002@192.168.2.19>
max-forwards: 69
refer-to:
<sip:00004@192.168.2.21?Replaces=5bca7759@00002.192.168.1.1%3bto-tag%3d5bba8a7b%3bfrom-tag%3d6c9a6f08>
referred-by: <sip:00002@sip.com>
Content-Length: 0
=====
```

```
=====
F62      192.168.2.10:1025(00003@sip.com) -> 192.168.1.1:5060(Server)

SIP/2.0 202 Accepted
Via: SIP/2.0/UDP 192.168.1.1:5060;branch=z9hG4bK-313.1085830551.1337462764
Via: SIP/2.0/UDP 192.168.2.19:5060;branch=z9hG4bK-28336e3e-529827.817
From: <sip:00002@sip.com>;tag=566d55ea
To: 00003 <sip:00003@sip.com>;tag=4dc016ae
Call-ID: 1fc2bda7@00003.192.168.1.1
CSeq: 1337462764 REFER
Contact: <sip:00003@192.168.2.10>
Content-Length: 0
=====
```

```
=====
F63      192.168.2.10:1025(00003@sip.com) -> 192.168.1.1:5060(Server)

NOTIFY sip:00002@192.168.1.1 SIP/2.0
Via: SIP/2.0/UDP 192.168.2.10:5060;branch=z9hG4bK-166d715c-681278.021
Route: <sip:00002@192.168.2.19>
From: 00003 <sip:00003@sip.com>;tag=4dc016ae
To: <sip:00002@sip.com>;tag=566d55ea
Call-ID: 1fc2bda7@00003.192.168.1.1
CSeq: 682941035 NOTIFY
Contact: <sip:00003@192.168.2.10>
Max-Forwards: 70
Event: refer
Subscription-State: active;expires=30
Content-Type: message/sipfrag
Content-Length: 18

SIP/2.0 100 Trying
=====
```

F64 192.168.1.1:5062(Server) -> 192.168.2.19:5060(00002@sip.com)

SIP/2.0 202 Accepted  
 Via: SIP/2.0/UDP 192.168.2.19:5060;branch=z9hG4bK-28336e3e-529827.817  
 From: <sip:00002@sip.com>;tag=566d55ea  
 To: 00003 <sip:00003@sip.com>;tag=4dc016ae  
 Call-ID: 1fc2bda7@00003.192.168.1.1  
 CSeq: 1337462764 REFER  
 Contact: <sip:00003@192.168.2.10>  
 Content-Length: 0

F65 192.168.1.1:5062(Server) -> 192.168.2.19:5060(00002@sip.com)

NOTIFY sip:00002@192.168.2.19 SIP/2.0  
 Via: SIP/2.0/UDP 192.168.1.1:5060;branch=z9hG4bK-314.1085830552.682941035  
 Via: SIP/2.0/UDP 192.168.2.10:5060;branch=z9hG4bK-166d715c-681278.021  
 Route: <sip:00002@192.168.2.19>  
 From: 00003 <sip:00003@sip.com>;tag=4dc016ae  
 To: <sip:00002@sip.com>;tag=566d55ea  
 Call-ID: 1fc2bda7@00003.192.168.1.1  
 CSeq: 682941035 NOTIFY  
 Contact: <sip:00003@192.168.2.10>  
 max-forwards: 69  
 event: refer  
 subscription-state: active;expires=30  
 Content-Type: message/sipfrag  
 Content-Length: 18

SIP/2.0 100 Trying

F66 192.168.2.19:1025(00002@sip.com) -> 192.168.1.1:5060(Server)

SIP/2.0 200 OK  
 Via: SIP/2.0/UDP 192.168.1.1:5060;branch=z9hG4bK-314.1085830552.682941035  
 Via: SIP/2.0/UDP 192.168.2.10:5060;branch=z9hG4bK-166d715c-681278.021  
 From: 00003 <sip:00003@sip.com>;tag=4dc016ae  
 To: <sip:00002@sip.com>;tag=566d55ea  
 Call-ID: 1fc2bda7@00003.192.168.1.1  
 CSeq: 682941035 NOTIFY  
 Content-Length: 0

F67 192.168.1.1:5062(Server) -> 192.168.2.10:5060(00003@sip.com)

SIP/2.0 200 OK  
 Via: SIP/2.0/UDP 192.168.2.10:5060;branch=z9hG4bK-166d715c-681278.021  
 From: 00003 <sip:00003@sip.com>;tag=4dc016ae  
 To: <sip:00002@sip.com>;tag=566d55ea  
 Call-ID: 1fc2bda7@00003.192.168.1.1  
 CSeq: 682941035 NOTIFY  
 Content-Length: 0

F68 192.168.2.10:1025(00003@sip.com) -> 192.168.1.1:5060(Server)

INVITE sip:00004@192.168.2.21 SIP/2.0  
 Via: SIP/2.0/UDP 192.168.2.10:5060;branch=z9hG4bK-498d97e-681278.354  
 Route: <sip:192.168.1.1:5060>  
 From: <sip:00003@sip.com>;tag=5ab6a8c2  
 To: <sip:00004@192.168.2.21>  
 Call-ID: 7ca60c16@00003.192.168.1.1  
 CSeq: 1344138087 INVITE  
 Contact: <sip:00003@192.168.2.10>  
 Max-Forwards: 70  
 Supported: 100rel, replaces  
 Referred-By: <sip:00002@sip.com>  
 Replaces: 5bca7759@00002.192.168.1.1;to-tag=5bba8a7b;from-tag=6c9a6f08  
 Allow: INVITE, ACK, BYE, CANCEL, OPTIONS, PRACK, MESSAGE, REFER, NOTIFY  
 Content-Type: application/sdp  
 Accept: application/sdp, message/sipfrag  
 Content-Length: 175

```
v=0
o=- 344308 401 IN IP4 192.168.2.10
s=-
c=IN IP4 192.168.2.10
t=0 0
m=audio 5008 RTP/AVP 0 96
a=rtpmap:0 PCMU/8000
a=rtpmap:96 telephone-event/8000
a=fmtp:96 0-11
```

```
=====
F69      192.168.1.1:5062(Server) -> 192.168.2.10:5060(00003@sip.com)
```

```
SIP/2.0 100 Trying
Via: SIP/2.0/UDP 192.168.2.10:5060;branch=z9hG4bK-498d97e-681278.354
From: <sip:00003@sip.com>;tag=5ab6a8c2
To: <sip:00004@192.168.2.21>
Call-ID: 7ca60c16@00003.192.168.1.1
CSeq: 1344138087 INVITE
Content-Length: 0
```

```
=====
F70      192.168.1.1:5062(Server) -> 192.168.2.21:5060(00004@sip.com)
```

```
INVITE sip:00004@192.168.2.21 SIP/2.0
Via: SIP/2.0/UDP 192.168.1.1:5060;branch=z9hG4bK-318.381264.1344138087
Via: SIP/2.0/UDP 192.168.2.10:5060;branch=z9hG4bK-498d97e-681278.354
Record-Route: <sip:00004@192.168.1.1>
Route: <sip:192.168.1.1:5060>
From: 00003 <sip:00003@sip.com>;tag=5ab6a8c2
To: <sip:00004@192.168.2.21>
Call-ID: 7ca60c16@00003.192.168.1.1
CSeq: 1344138087 INVITE
Contact: <sip:00003@192.168.2.10>
max-forwards: 69
supported: 100rel
supported: replaces
referred-by: <sip:00002@sip.com>
replaces: 5bca7759@00002.192.168.1.1;to-tag=5bba8a7b;from-tag=6c9a6f08
Allow: INVITE, ACK, BYE, CANCEL, OPTIONS, PRACK, MESSAGE, REFER, NOTIFY
Content-Type: application/sdp
Accept: application/sdp, message/sipfrag
Content-Length: 175
```

```
v=0
o=- 344308 401 IN IP4 192.168.2.10
s=-
c=IN IP4 192.168.2.10
t=0 0
m=audio 5008 RTP/AVP 0 96
a=rtpmap:0 PCMU/8000
a=rtpmap:96 telephone-event/8000
a=fmtp:96 0-11
```

```
=====
F71      192.168.2.21:1025(00004@sip.com) -> 192.168.1.1:5060(Server)
```

```
SIP/2.0 100 Trying
Via: SIP/2.0/UDP 192.168.1.1:5060;branch=z9hG4bK-318.381264.1344138087
Via: SIP/2.0/UDP 192.168.2.10:5060;branch=z9hG4bK-498d97e-681278.354
From: 00003 <sip:00003@sip.com>;tag=5ab6a8c2
To: <sip:00004@192.168.2.21>
Call-ID: 7ca60c16@00003.192.168.1.1
CSeq: 1344138087 INVITE
Content-Length: 0
```

```
=====
F72      192.168.2.21:1025(00004@sip.com) -> 192.168.1.1:5060(Server)
```

```
SIP/2.0 200 OK
Via: SIP/2.0/UDP 192.168.1.1:5060;branch=z9hG4bK-318.381264.1344138087
Via: SIP/2.0/UDP 192.168.2.10:5060;branch=z9hG4bK-498d97e-681278.354
Record-Route: <sip:00004@192.168.1.1>
From: 00003 <sip:00003@sip.com>;tag=5ab6a8c2
To: <sip:00004@192.168.2.21>;tag=2c97d9bc
```



Call-ID: 7ca60c16@00003.192.168.1.1  
 CSeq: 1344138087 INVITE  
 Contact: <sip:00004@192.168.2.21>  
 Supported: 100rel, replaces  
 Allow: INVITE, ACK, BYE, CANCEL, OPTIONS, PRACK, MESSAGE, REFER, NOTIFY  
 Content-Type: application/sdp  
 Accept: application/sdp, message/sipfrag  
 Content-Length: 177

v=0  
 o=- 460728 13201 IN IP4 192.168.2.21  
 s=-  
 c=IN IP4 192.168.2.21  
 t=0 0  
 m=audio 5006 RTP/AVP 0 96  
 a=rtpmap:0 PCMU/8000  
 a=rtpmap:96 telephone-event/8000  
 a=fmtp:96 0-11

=====

F73 192.168.1.1:5062(Server) -> 192.168.2.10:5060(00003@sip.com)

SIP/2.0 200 OK  
 Via: SIP/2.0/UDP 192.168.2.10:5060;branch=z9hG4bK-498d97e-681278.354  
 Record-Route: <sip:00004@192.168.1.1>  
 From: 00003 <sip:00003@sip.com>;tag=5ab6a8c2  
 To: <sip:00004@192.168.2.21>;tag=2c97d9bc  
 Call-ID: 7ca60c16@00003.192.168.1.1  
 CSeq: 1344138087 INVITE  
 Contact: <sip:00004@192.168.2.21>  
 supported: 100rel  
 supported: replaces  
 Allow: INVITE, ACK, BYE, CANCEL, OPTIONS, PRACK, MESSAGE, REFER, NOTIFY  
 Content-Type: application/sdp  
 Accept: application/sdp, message/sipfrag  
 Content-Length: 177

v=0  
 o=- 460728 13201 IN IP4 192.168.2.21  
 s=-  
 c=IN IP4 192.168.2.21  
 t=0 0  
 m=audio 5006 RTP/AVP 0 96  
 a=rtpmap:0 PCMU/8000  
 a=rtpmap:96 telephone-event/8000  
 a=fmtp:96 0-11

=====

F74 192.168.2.10:1025(00003@sip.com) -> 192.168.1.1:5060(Server)

ACK sip:00004@192.168.1.1 SIP/2.0  
 Via: SIP/2.0/UDP 192.168.2.10:5060;branch=z9hG4bK-759a2652-681279.315  
 Route: <sip:00004@192.168.2.21>  
 From: 00003 <sip:00003@sip.com>;tag=5ab6a8c2  
 To: <sip:00004@192.168.2.21>;tag=2c97d9bc  
 Call-ID: 7ca60c16@00003.192.168.1.1  
 CSeq: 1344138087 ACK  
 Max-Forwards: 70  
 Content-Length: 0

=====

F75 192.168.1.1:5062(Server) -> 192.168.2.21:5060(00004@sip.com)

ACK sip:00004@192.168.2.21 SIP/2.0  
 Via: SIP/2.0/UDP 192.168.1.1:5060;branch=z9hG4bK-318.1085830553.1344138087  
 Via: SIP/2.0/UDP 192.168.2.10:5060;branch=z9hG4bK-759a2652-681279.315  
 From: 00003 <sip:00003@sip.com>;tag=5ab6a8c2  
 To: <sip:00004@192.168.2.21>;tag=2c97d9bc  
 Call-ID: 7ca60c16@00003.192.168.1.1  
 CSeq: 1344138087 ACK  
 max-forwards: 69  
 Content-Length: 0

=====

F76 192.168.2.10:1025(00003@sip.com) -> 192.168.1.1:5060(Server)

NOTIFY sip:00002@192.168.1.1 SIP/2.0  
Via: SIP/2.0/UDP 192.168.2.10:5060;branch=z9hG4bK-160b9a9c-681279.415  
Route: <sip:00002@192.168.2.19>  
From: 00003 <sip:00003@sip.com>;tag=4dc016ae  
To: <sip:00002@sip.com>;tag=566d55ea  
Call-ID: 1fc2bda7@00003.192.168.1.1  
CSeq: 682941036 NOTIFY  
Contact: <sip:00003@192.168.2.10>  
Max-Forwards: 70  
Event: refer  
Subscription-State: terminated;reason=noresource  
Content-Type: message/sipfrag  
Content-Length: 14

SIP/2.0 200 OK

F77 192.168.2.21:1025(00004@sip.com) -> 192.168.1.1:5060(Server)

BYE sip:00004@192.168.1.1 SIP/2.0  
Via: SIP/2.0/UDP 192.168.2.21:5060;branch=z9hG4bK-4e43ec76-032586.039  
Route: <sip:00002@192.168.2.19>  
From: <sip:00004@sip.com>;tag=5bba8a7b  
To: 00002 <sip:00002@sip.com>;tag=6c9a6f08  
Call-ID: 5bca7759@00002.192.168.1.1  
CSeq: 678163017 BYE  
Max-Forwards: 70  
Content-Length: 0

F78 192.168.1.1:5062(Server) -> 192.168.2.19:5060(00002@sip.com)

NOTIFY sip:00002@192.168.2.19 SIP/2.0  
Via: SIP/2.0/UDP 192.168.1.1:5060;branch=z9hG4bK-314.1085830553.682941036  
Via: SIP/2.0/UDP 192.168.2.10:5060;branch=z9hG4bK-160b9a9c-681279.415  
Route: <sip:00002@192.168.2.19>  
From: 00003 <sip:00003@sip.com>;tag=4dc016ae  
To: <sip:00002@sip.com>;tag=566d55ea  
Call-ID: 1fc2bda7@00003.192.168.1.1  
CSeq: 682941036 NOTIFY  
Contact: <sip:00003@192.168.2.10>  
max-forwards: 69  
event: refer  
subscription-state: terminated;reason=noresource  
Content-Type: message/sipfrag  
Content-Length: 14

SIP/2.0 200 OK

F79 192.168.1.1:5062(Server) -> 192.168.2.19:5060(00002@sip.com)

BYE sip:00002@192.168.2.19 SIP/2.0  
Via: SIP/2.0/UDP 192.168.1.1:5060;branch=z9hG4bK-315.1085830553.678163017  
Via: SIP/2.0/UDP 192.168.2.21:5060;branch=z9hG4bK-4e43ec76-032586.039  
Route: <sip:00002@192.168.2.19>  
From: <sip:00004@sip.com>;tag=5bba8a7b  
To: 00002 <sip:00002@sip.com>;tag=6c9a6f08  
Call-ID: 5bca7759@00002.192.168.1.1  
CSeq: 678163017 BYE  
max-forwards: 69  
Content-Length: 0

F80 192.168.2.19:1025(00002@sip.com) -> 192.168.1.1:5060(Server)

SIP/2.0 200 OK  
Via: SIP/2.0/UDP 192.168.1.1:5060;branch=z9hG4bK-314.1085830553.682941036  
Via: SIP/2.0/UDP 192.168.2.10:5060;branch=z9hG4bK-160b9a9c-681279.415  
From: 00003 <sip:00003@sip.com>;tag=4dc016ae  
To: <sip:00002@sip.com>;tag=566d55ea  
Call-ID: 1fc2bda7@00003.192.168.1.1  
CSeq: 682941036 NOTIFY  
Content-Length: 0

F81 192.168.2.19:1025(00002@sip.com) -> 192.168.1.1:5060(Server)

BYE sip:00002@192.168.1.1 SIP/2.0  
Via: SIP/2.0/UDP 192.168.2.19:5060;branch=z9hG4bK-5f2de22a-529829.507  
Route: <sip:00003@192.168.2.10>  
From: <sip:00002@sip.com>;tag=566d55ea  
To: 00003 <sip:00003@sip.com>;tag=4dc016ae  
Call-ID: 1fc2bda7@00003.192.168.1.1  
CSeq: 1337462765 BYE  
Proxy-Authorization: Digest username="00002", realm="heliossv2", nonce="819b805e00a7ed6345f65d694b052d11", uri="sip:00002@192.168.1.1", response="4f91b90ab186ac9d9eb8283e89eee877", algorithm=MD5, cnonce="59780e4c", opaque="d4d4f29a561297e1dd72835e51be32a9", qop=auth, nc=00000005  
Max-Forwards: 70  
Content-Length: 0

F82 192.168.2.19:1025(00002@sip.com) -> 192.168.1.1:5060(Server)

SIP/2.0 200 OK  
Via: SIP/2.0/UDP 192.168.1.1:5060;branch=z9hG4bK-315.1085830553.678163017  
Via: SIP/2.0/UDP 192.168.2.21:5060;branch=z9hG4bK-4e43ec76-032586.039  
From: <sip:00004@sip.com>;tag=5bba8a7b  
To: 00002 <sip:00002@sip.com>;tag=6c9a6f08  
Call-ID: 5bca7759@00002.192.168.1.1  
CSeq: 678163017 BYE  
Content-Length: 0

F83 192.168.1.1:5062(Server) -> 192.168.2.10:5060(00003@sip.com)

SIP/2.0 200 OK  
Via: SIP/2.0/UDP 192.168.2.10:5060;branch=z9hG4bK-160b9a9c-681279.415  
From: 00003 <sip:00003@sip.com>;tag=4dc016ae  
To: <sip:00002@sip.com>;tag=566d55ea  
Call-ID: 1fc2bda7@00003.192.168.1.1  
CSeq: 682941036 NOTIFY  
Content-Length: 0

F84 192.168.1.1:5062(Server) -> 192.168.2.21:5060(00004@sip.com)

SIP/2.0 200 OK  
Via: SIP/2.0/UDP 192.168.2.21:5060;branch=z9hG4bK-4e43ec76-032586.039  
From: <sip:00004@sip.com>;tag=5bba8a7b  
To: 00002 <sip:00002@sip.com>;tag=6c9a6f08  
Call-ID: 5bca7759@00002.192.168.1.1  
CSeq: 678163017 BYE  
Content-Length: 0

F85 192.168.1.1:5062(Server) -> 192.168.2.10:5060(00003@sip.com)

BYE sip:00003@192.168.2.10 SIP/2.0  
Via: SIP/2.0/UDP 192.168.1.1:5060;branch=z9hG4bK-313.1085830553.1337462765  
Via: SIP/2.0/UDP 192.168.2.19:5060;branch=z9hG4bK-5f2de22a-529829.507  
Route: <sip:00003@192.168.2.10>  
From: <sip:00002@sip.com>;tag=566d55ea  
To: 00003 <sip:00003@sip.com>;tag=4dc016ae  
Call-ID: 1fc2bda7@00003.192.168.1.1  
CSeq: 1337462765 BYE  
max-forwards: 69  
Content-Length: 0

F86 192.168.2.10:1025(00003@sip.com) -> 192.168.1.1:5060(Server)

SIP/2.0 200 OK  
Via: SIP/2.0/UDP 192.168.1.1:5060;branch=z9hG4bK-313.1085830553.1337462765  
Via: SIP/2.0/UDP 192.168.2.19:5060;branch=z9hG4bK-5f2de22a-529829.507

FOMA/WLAN デュアル端末に関する技術参考資料 第 1.2 版

From: <sip:00002@sip.com>;tag=566d55ea  
To: 00003 <sip:00003@sip.com>;tag=4dc016ae  
Call-ID: 1fc2bda7@00003.192.168.1.1  
CSeq: 1337462765 BYE  
Content-Length: 0

---

F87 192.168.1.1:5062(Server) -> 192.168.2.19:5060(00002@sip.com)

SIP/2.0 200 OK  
Via: SIP/2.0/UDP 192.168.2.19:5060;branch=z9hG4bK-5f2de22a-529829.507  
From: <sip:00002@sip.com>;tag=566d55ea  
To: 00003 <sip:00003@sip.com>;tag=4dc016ae  
Call-ID: 1fc2bda7@00003.192.168.1.1  
CSeq: 1337462765 BYE  
Content-Length: 0

---

F88 192.168.2.10:1025(00003@sip.com) -> 192.168.1.1:5060(Server)

BYE sip:00004@192.168.1.1 SIP/2.0  
Via: SIP/2.0/UDP 192.168.2.10:5060;branch=z9hG4bK-70d0ebbe-681286.581  
Route: <sip:00004@192.168.2.21>  
From: 00003 <sip:00003@sip.com>;tag=5ab6a8c2  
To: <sip:00004@192.168.2.21>;tag=2c97d9bc  
Call-ID: 7ca60c16@00003.192.168.1.1  
CSeq: 1344138088 BYE  
Max-Forwards: 70  
Content-Length: 0

---

F89 192.168.1.1:5062(Server) -> 192.168.2.21:5060(00004@sip.com)

BYE sip:00004@192.168.2.21 SIP/2.0  
Via: SIP/2.0/UDP 192.168.1.1:5060;branch=z9hG4bK-318.1085830560.1344138088  
Via: SIP/2.0/UDP 192.168.2.10:5060;branch=z9hG4bK-70d0ebbe-681286.581  
Route: <sip:00004@192.168.2.21>  
From: 00003 <sip:00003@sip.com>;tag=5ab6a8c2  
To: <sip:00004@192.168.2.21>;tag=2c97d9bc  
Call-ID: 7ca60c16@00003.192.168.1.1  
CSeq: 1344138088 BYE  
max-forwards: 69  
Content-Length: 0

---

F90 192.168.2.21:1025(00004@sip.com) -> 192.168.1.1:5060(Server)

SIP/2.0 200 OK  
Via: SIP/2.0/UDP 192.168.1.1:5060;branch=z9hG4bK-318.1085830560.1344138088  
Via: SIP/2.0/UDP 192.168.2.10:5060;branch=z9hG4bK-70d0ebbe-681286.581  
From: 00003 <sip:00003@sip.com>;tag=5ab6a8c2  
To: <sip:00004@192.168.2.21>;tag=2c97d9bc  
Call-ID: 7ca60c16@00003.192.168.1.1  
CSeq: 1344138088 BYE  
Content-Length: 0

---

F91 192.168.1.1:5062(Server) -> 192.168.2.10:5060(00003@sip.com)

SIP/2.0 200 OK  
Via: SIP/2.0/UDP 192.168.2.10:5060;branch=z9hG4bK-70d0ebbe-681286.581  
From: 00003 <sip:00003@sip.com>;tag=5ab6a8c2  
To: <sip:00004@192.168.2.21>;tag=2c97d9bc  
Call-ID: 7ca60c16@00003.192.168.1.1  
CSeq: 1344138088 BYE  
Content-Length: 0

## 11.6.3. 転送相手が圏外

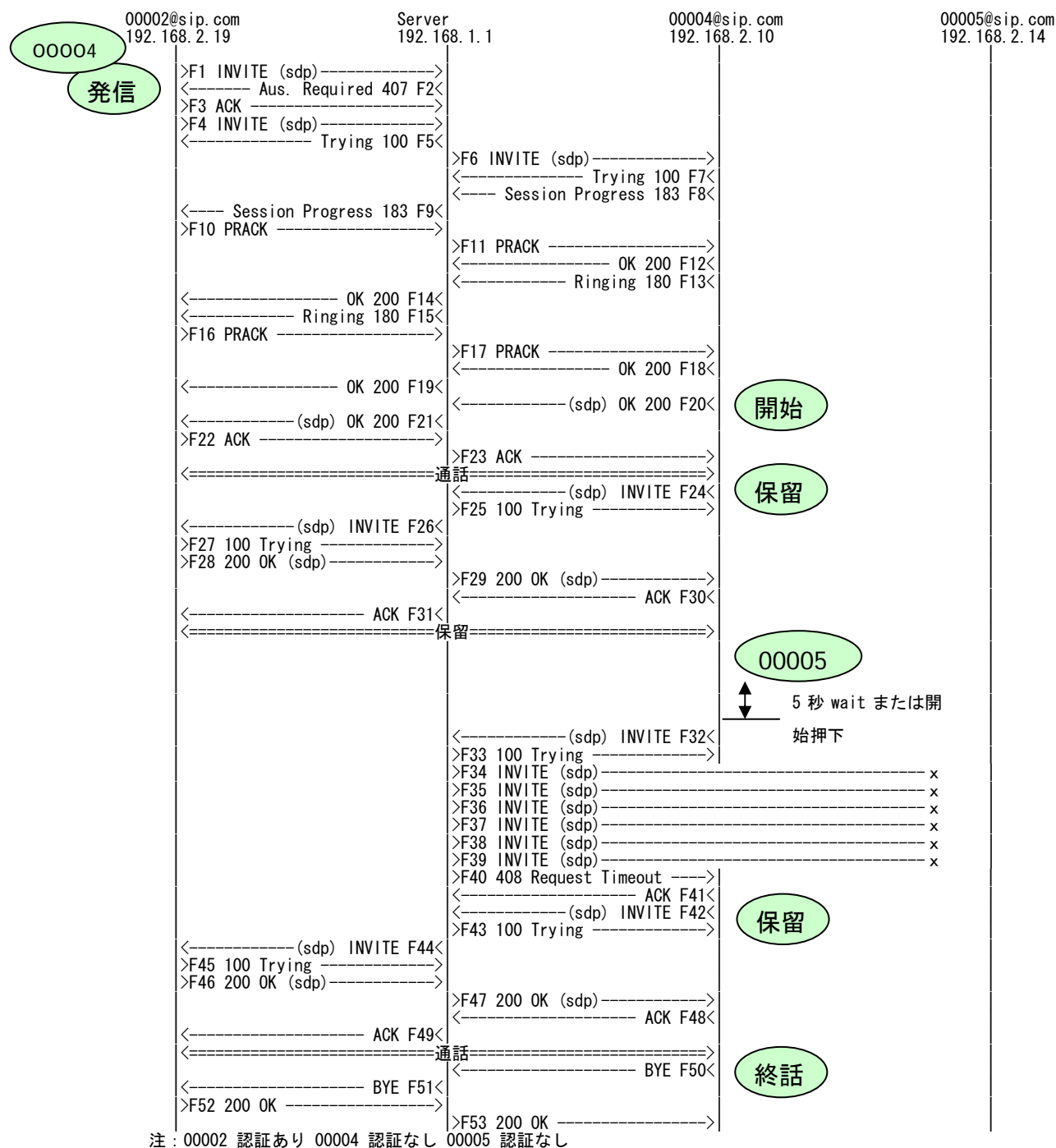


図 11-30 転送相手が圏外

F1 192.168.2.19:1053(00002@sip.com) → 192.168.1.1:5060(Server)

INVITE sip:00004@sip.com SIP/2.0  
 Via: SIP/2.0/UDP 192.168.2.19:5060;branch=z9hG4bK-c6591e2-778521.616  
 Route: <sip:192.168.1.1:5060>

# FOMA/WLAN デュアル端末に関する技術参考資料 第 1.2 版

From: <sip:00002@sip.com>;tag=5b5ed5ef  
 To: <sip:00004@sip.com>  
 Call-ID: 6a5cb9a9@00002.192.168.1.1  
 CSeq: 722729698 INVITE  
 Contact: <sip:00002@192.168.2.19>  
 Proxy-Authorization: Digest username="00002", realm="heliossv2", uri="sip:00004@sip.com", nonce="4cffb8a151c8d4dc8c33c2263752837", response="35b306608e3173292d1b8d84d61adb28", algorithm=MD5, opaque="e0eab7006383aa8a849a3e062e0415d2", qop=auth, nc=00000004  
 Max-Forwards: 70  
 Supported: 100rel, replaces  
 Allow: INVITE, ACK, BYE, CANCEL, OPTIONS, PRACK, MESSAGE, REFER, NOTIFY  
 Content-Type: application/sdp  
 Accept: application/sdp, message/sipfrag  
 Content-Length: 249

v=0  
 o=- 587319 601 IN IP4 192.168.2.19  
 s=-  
 c=IN IP4 192.168.2.19  
 t=0 0  
 m=audio 5006 RTP/AVP 0 8 4 18 96  
 a=rtpmap:0 PCMU/8000  
 a=rtpmap:8 PCMA/8000  
 a=rtpmap:4 G723/8000  
 a=rtpmap:18 G729/8000  
 a=rtpmap:96 telephone-event/8000  
 a=fmtp:96 0-11

F2 192.168.1.1:5062(Server) -> 192.168.2.19:5060(00002@sip.com)

SIP/2.0 407 Proxy Authentication Required  
 Via: SIP/2.0/UDP 192.168.2.19:5060;branch=z9hG4bK-c6591e2-778521.616  
 From: <sip:00002@sip.com>;tag=5b5ed5ef  
 To: <sip:00004@sip.com>  
 Call-ID: 6a5cb9a9@00002.192.168.1.1  
 CSeq: 722729698 INVITE  
 Proxy-Authenticate: Digest realm="heliossv2", nonce="4c3d940448812a651d14f89d2fe3da4b", opaque="c09f2f8417d262cde524e6b314eedc16", stale=false, algorithm=MD5, qop="auth,auth-int"  
 Content-Length: 0

F3 192.168.2.19:1053(00002@sip.com) -> 192.168.1.1:5060(Server)

ACK sip:00004@sip.com SIP/2.0  
 Via: SIP/2.0/UDP 192.168.2.19:5060;branch=z9hG4bK-c6591e2-778521.616  
 Route: <sip:192.168.1.1:5060>  
 From: <sip:00002@sip.com>;tag=5b5ed5ef  
 To: <sip:00004@sip.com>  
 Call-ID: 6a5cb9a9@00002.192.168.1.1  
 CSeq: 722729698 ACK  
 Content-Length: 0

F4 192.168.2.19:1053(00002@sip.com) -> 192.168.1.1:5060(Server)

INVITE sip:00004@sip.com SIP/2.0  
 Via: SIP/2.0/UDP 192.168.2.19:5060;branch=z9hG4bK-27e1f34e-778522.156  
 Route: <sip:192.168.1.1:5060>  
 From: <sip:00002@sip.com>;tag=5b5ed5ef  
 To: <sip:00004@sip.com>  
 Call-ID: 6a5cb9a9@00002.192.168.1.1  
 CSeq: 722729699 INVITE  
 Contact: <sip:00002@192.168.2.19>  
 Proxy-Authorization: Digest username="00002", realm="heliossv2", uri="sip:00004@sip.com", nonce="4c3d940448812a651d14f89d2fe3da4b", response="038dba896f00a1aff157ed4ae474a545", algorithm=MD5, opaque="c09f2f8417d262cde524e6b314eedc16", qop=auth, nc=00000001  
 Max-Forwards: 70  
 Supported: 100rel, replaces  
 Allow: INVITE, ACK, BYE, CANCEL, OPTIONS, PRACK, MESSAGE, REFER, NOTIFY  
 Content-Type: application/sdp  
 Accept: application/sdp, message/sipfrag  
 Content-Length: 249

```
v=0
o=- 587319 601 IN IP4 192.168.2.19
s=-
c=IN IP4 192.168.2.19
t=0 0
m=audio 5006 RTP/AVP 0 8 4 18 96
a=rtpmap:0 PCMU/8000
a=rtpmap:8 PCMA/8000
a=rtpmap:4 G723/8000
a=rtpmap:18 G729/8000
a=rtpmap:96 telephone-event/8000
a=fmtp:96 0-11
```

```
=====
F5      192.168.1.1:5062(Server) -> 192.168.2.19:5060(00002@sip.com)
```

```
SIP/2.0 100 Trying
Via: SIP/2.0/UDP 192.168.2.19:5060;branch=z9hG4bK-27e1f34e-778522.156
From: <sip:00002@sip.com>;tag=5b5ed5ef
To: <sip:00004@sip.com>
Call-ID: 6a5cbaa9@00002.192.168.1.1
CSeq: 722729699 INVITE
Content-Length: 0
```

```
=====
F6      192.168.1.1:5062(Server) -> 192.168.2.10:5060(00004@sip.com)
```

```
INVITE sip:00004@192.168.2.10 SIP/2.0
Via: SIP/2.0/UDP 192.168.1.1:5060;branch=z9hG4bK-458.693546.722729699
Via: SIP/2.0/UDP 192.168.2.19:5060;branch=z9hG4bK-27e1f34e-778522.156
Record-Route: <sip:00004@192.168.1.1>
Route: <sip:192.168.1.1:5060>
From: 00002 <sip:00002@sip.com>;tag=5b5ed5ef
To: <sip:00004@sip.com>
Call-ID: 6a5cbaa9@00002.192.168.1.1
CSeq: 722729699 INVITE
Contact: <sip:00002@192.168.2.19>
max-forwards: 69
supported: 100rel
supported: replaces
Allow: INVITE, ACK, BYE, CANCEL, OPTIONS, PRACK, MESSAGE, REFER, NOTIFY
Content-Type: application/sdp
Accept: application/sdp, message/sipfrag
Content-Length: 249
```

```
v=0
o=- 587319 601 IN IP4 192.168.2.19
s=-
c=IN IP4 192.168.2.19
t=0 0
m=audio 5006 RTP/AVP 0 8 4 18 96
a=rtpmap:0 PCMU/8000
a=rtpmap:8 PCMA/8000
a=rtpmap:4 G723/8000
a=rtpmap:18 G729/8000
a=rtpmap:96 telephone-event/8000
a=fmtp:96 0-11
```

```
=====
F7      192.168.2.10:1080(00004@sip.com) -> 192.168.1.1:5060(Server)
```

```
SIP/2.0 100 Trying
Via: SIP/2.0/UDP 192.168.1.1:5060;branch=z9hG4bK-458.693546.722729699
Via: SIP/2.0/UDP 192.168.2.19:5060;branch=z9hG4bK-27e1f34e-778522.156
From: 00002 <sip:00002@sip.com>;tag=5b5ed5ef
To: <sip:00004@sip.com>
Call-ID: 6a5cbaa9@00002.192.168.1.1
CSeq: 722729699 INVITE
Content-Length: 0
```

```
=====
F8      192.168.2.10:1080(00004@sip.com) -> 192.168.1.1:5060(Server)
```

```
SIP/2.0 183 Session Progress
Via: SIP/2.0/UDP 192.168.1.1:5060;branch=z9hG4bK-458.693546.722729699
```

## FOMA/WLAN デュアル端末に関する技術参考資料 第 1.2 版

Via: SIP/2.0/UDP 192.168.2.19:5060;branch=z9hG4bK-27e1f34e-778522.156  
Record-Route: <sip:00004@192.168.1.1>  
From: 00002 <sip:00002@sip.com>;tag=5b5ed5ef  
To: <sip:00004@sip.com>;tag=18aa38d0  
Call-ID: 6a5cbaa9@00002.192.168.1.1  
CSeq: 722729699 INVITE  
Contact: <sip:00004@192.168.2.10>  
Require: 100rel  
RSeq: 136456111  
Content-Length: 0

F9 192.168.1.1:5062(Server) -> 192.168.2.19:5060(00002@sip.com)

SIP/2.0 183 Session Progress  
Via: SIP/2.0/UDP 192.168.2.19:5060;branch=z9hG4bK-27e1f34e-778522.156  
Record-Route: <sip:00004@192.168.1.1>  
From: 00002 <sip:00002@sip.com>;tag=5b5ed5ef  
To: <sip:00004@sip.com>;tag=18aa38d0  
Call-ID: 6a5cbaa9@00002.192.168.1.1  
CSeq: 722729699 INVITE  
Contact: <sip:00004@192.168.2.10>  
require: 100rel  
rseq: 136456111  
Content-Length: 0

F10 192.168.2.19:1053(00002@sip.com) -> 192.168.1.1:5060(Server)

PRACK sip:00004@192.168.1.1 SIP/2.0  
Via: SIP/2.0/UDP 192.168.2.19:5060;branch=z9hG4bK-7a90a5f1-778522.622  
Route: <sip:00004@192.168.2.10>  
From: 00002 <sip:00002@sip.com>;tag=5b5ed5ef  
To: <sip:00004@sip.com>;tag=18aa38d0  
Call-ID: 6a5cbaa9@00002.192.168.1.1  
CSeq: 722729700 PRACK  
Proxy-Authorization: Digest username="00002", realm="heliossv2",  
nonce="4c3d940448812a651d14f89d2fe3da4b", uri="sip:00004@192.168.1.1",  
response="1786c3afc8fafa98f1fd3d0dda2f7e6b", algorithm=MD5, cnonce="22a7b002",  
opaque="c09f2f8417d262cde524e6b314eedc16", qop=auth, nc=00000002  
Max-Forwards: 70  
RAck: 136456111 722729699 INVITE  
Content-Length: 0

F11 192.168.1.1:5062(Server) -> 192.168.2.10:5060(00004@sip.com)

PRACK sip:00004@192.168.2.10 SIP/2.0  
Via: SIP/2.0/UDP 192.168.1.1:5060;branch=z9hG4bK-458.1084261906.722729700  
Via: SIP/2.0/UDP 192.168.2.19:5060;branch=z9hG4bK-7a90a5f1-778522.622  
Route: <sip:00004@192.168.2.10>  
From: 00002 <sip:00002@sip.com>;tag=5b5ed5ef  
To: <sip:00004@sip.com>;tag=18aa38d0  
Call-ID: 6a5cbaa9@00002.192.168.1.1  
CSeq: 722729700 PRACK  
max-forwards: 69  
rack: 136456111 722729699 INVITE  
Content-Length: 0

F12 192.168.2.10:1080(00004@sip.com) -> 192.168.1.1:5060(Server)

SIP/2.0 200 OK  
Via: SIP/2.0/UDP 192.168.1.1:5060;branch=z9hG4bK-458.1084261906.722729700  
Via: SIP/2.0/UDP 192.168.2.19:5060;branch=z9hG4bK-7a90a5f1-778522.622  
From: 00002 <sip:00002@sip.com>;tag=5b5ed5ef  
To: <sip:00004@sip.com>;tag=18aa38d0  
Call-ID: 6a5cbaa9@00002.192.168.1.1  
CSeq: 722729700 PRACK  
Content-Length: 0



F13 192.168.2.10:1080(00004@sip.com) -> 192.168.1.1:5060(Server)

SIP/2.0 180 Ringing  
 Via: SIP/2.0/UDP 192.168.1.1:5060;branch=z9hG4bK-458.693546.722729699  
 Via: SIP/2.0/UDP 192.168.2.19:5060;branch=z9hG4bK-27e1f34e-778522.156  
 Record-Route: <sip:00004@192.168.1.1>  
 From: 00002 <sip:00002@sip.com>;tag=5b5ed5ef  
 To: <sip:00004@sip.com>;tag=18aa38d0  
 Call-ID: 6a5cbaa9@00002.192.168.1.1  
 CSeq: 722729699 INVITE  
 Contact: <sip:00004@192.168.2.10>  
 Require: 100rel  
 RSeq: 136456112  
 Content-Length: 0

F14 192.168.1.1:5062(Server) -> 192.168.2.19:5060(00002@sip.com)

SIP/2.0 200 OK  
 Via: SIP/2.0/UDP 192.168.2.19:5060;branch=z9hG4bK-7a90a5f1-778522.622  
 From: 00002 <sip:00002@sip.com>;tag=5b5ed5ef  
 To: <sip:00004@sip.com>;tag=18aa38d0  
 Call-ID: 6a5cbaa9@00002.192.168.1.1  
 CSeq: 722729700 PRACK  
 Content-Length: 0

F15 192.168.1.1:5062(Server) -> 192.168.2.19:5060(00002@sip.com)

SIP/2.0 180 Ringing  
 Via: SIP/2.0/UDP 192.168.2.19:5060;branch=z9hG4bK-27e1f34e-778522.156  
 Record-Route: <sip:00004@192.168.1.1>  
 From: 00002 <sip:00002@sip.com>;tag=5b5ed5ef  
 To: <sip:00004@sip.com>;tag=18aa38d0  
 Call-ID: 6a5cbaa9@00002.192.168.1.1  
 CSeq: 722729699 INVITE  
 Contact: <sip:00004@192.168.2.10>  
 require: 100rel  
 rseq: 136456112  
 Content-Length: 0

F16 192.168.2.19:1053(00002@sip.com) -> 192.168.1.1:5060(Server)

PRACK sip:00004@192.168.1.1 SIP/2.0  
 Via: SIP/2.0/UDP 192.168.2.19:5060;branch=z9hG4bK-2b80edaf-778522.714  
 Route: <sip:00004@192.168.2.10>  
 From: 00002 <sip:00002@sip.com>;tag=5b5ed5ef  
 To: <sip:00004@sip.com>;tag=18aa38d0  
 Call-ID: 6a5cbaa9@00002.192.168.1.1  
 CSeq: 722729701 PRACK  
 Proxy-Authorization: Digest username="00002", realm="heliossv2",  
 nonce="4c3d940448812a651d14f89d2fe3da4b", uri="sip:00004@192.168.1.1",  
 response="d28f906c414d0eb6c42cf1668e1d049e", algorithm=MD5,  
 opaque="c09f2f8417d262cde524e6b314eedc16", qop=auth, nc=00000003,  
 Max-Forwards: 70  
 Rack: 136456112 722729699 INVITE  
 Content-Length: 0

F17 192.168.1.1:5062(Server) -> 192.168.2.10:5060(00004@sip.com)

PRACK sip:00004@192.168.2.10 SIP/2.0  
 Via: SIP/2.0/UDP 192.168.1.1:5060;branch=z9hG4bK-458.1084261906.722729701  
 Via: SIP/2.0/UDP 192.168.2.19:5060;branch=z9hG4bK-2b80edaf-778522.714  
 Route: <sip:00004@192.168.2.10>  
 From: 00002 <sip:00002@sip.com>;tag=5b5ed5ef  
 To: <sip:00004@sip.com>;tag=18aa38d0  
 Call-ID: 6a5cbaa9@00002.192.168.1.1  
 CSeq: 722729701 PRACK  
 max-forwards: 69  
 rack: 136456112 722729699 INVITE

Content-Length: 0

---

F18 192.168.2.10:1080(00004@sip.com) -> 192.168.1.1:5060(Server)

SIP/2.0 200 OK  
 Via: SIP/2.0/UDP 192.168.1.1:5060;branch=z9hG4bK-458.1084261906.722729701  
 Via: SIP/2.0/UDP 192.168.2.19:5060;branch=z9hG4bK-2b80edaf-778522.714  
 From: 00002 <sip:00002@sip.com>;tag=5b5ed5ef  
 To: <sip:00004@sip.com>;tag=18aa38d0  
 Call-ID: 6a5cbaa9@00002.192.168.1.1  
 CSeq: 722729701 PRACK  
 Content-Length: 0

---

F19 192.168.1.1:5062(Server) -> 192.168.2.19:5060(00002@sip.com)

SIP/2.0 200 OK  
 Via: SIP/2.0/UDP 192.168.2.19:5060;branch=z9hG4bK-2b80edaf-778522.714  
 From: 00002 <sip:00002@sip.com>;tag=5b5ed5ef  
 To: <sip:00004@sip.com>;tag=18aa38d0  
 Call-ID: 6a5cbaa9@00002.192.168.1.1  
 CSeq: 722729701 PRACK  
 Content-Length: 0

---

F20 192.168.2.10:1080(00004@sip.com) -> 192.168.1.1:5060(Server)

SIP/2.0 200 OK  
 Via: SIP/2.0/UDP 192.168.1.1:5060;branch=z9hG4bK-458.693546.722729699  
 Via: SIP/2.0/UDP 192.168.2.19:5060;branch=z9hG4bK-27e1f34e-778522.156  
 Record-Route: <sip:00004@192.168.1.1>  
 From: 00002 <sip:00002@sip.com>;tag=5b5ed5ef  
 To: <sip:00004@sip.com>;tag=18aa38d0  
 Call-ID: 6a5cbaa9@00002.192.168.1.1  
 CSeq: 722729699 INVITE  
 Contact: <sip:00004@192.168.2.10>  
 Supported: 100rel, replaces  
 Allow: INVITE, ACK, BYE, CANCEL, OPTIONS, PRACK, MESSAGE, REFER, NOTIFY  
 Content-Type: application/sdp  
 Accept: application/sdp, message/sipfrag  
 Content-Length: 177

v=0  
 o=- 178252 13101 IN IP4 192.168.2.10  
 s=-  
 c=IN IP4 192.168.2.10  
 t=0 0  
 m=audio 5006 RTP/AVP 0 96  
 a=rtpmap:0 PCMU/8000  
 a=rtpmap:96 telephone-event/8000  
 a=fmtp:96 0-11

---

F21 192.168.1.1:5062(Server) -> 192.168.2.19:5060(00002@sip.com)

SIP/2.0 200 OK  
 Via: SIP/2.0/UDP 192.168.2.19:5060;branch=z9hG4bK-27e1f34e-778522.156  
 Record-Route: <sip:00004@192.168.1.1>  
 From: 00002 <sip:00002@sip.com>;tag=5b5ed5ef  
 To: <sip:00004@sip.com>;tag=18aa38d0  
 Call-ID: 6a5cbaa9@00002.192.168.1.1  
 CSeq: 722729699 INVITE  
 Contact: <sip:00004@192.168.2.10>  
 supported: 100rel  
 supported: replaces  
 Allow: INVITE, ACK, BYE, CANCEL, OPTIONS, PRACK, MESSAGE, REFER, NOTIFY  
 Content-Type: application/sdp  
 Accept: application/sdp, message/sipfrag  
 Content-Length: 177

v=0  
 o=- 178252 13101 IN IP4 192.168.2.10  
 s=-

```
c=IN IP4 192.168.2.10
t=0 0
m=audio 5006 RTP/AVP 0 96
a=rtpmap:0 PCMU/8000
a=rtpmap:96 telephone-event/8000
a=fmtp:96 0-11
```

```
F22      192.168.2.19:1053(00002@sip.com) -> 192.168.1.1:5060(Server)
```

```
ACK sip:00004@192.168.1.1 SIP/2.0
Via: SIP/2.0/UDP 192.168.2.19:5060;branch=z9hG4bK-18a9de42-778525.423
Route: <sip:00004@192.168.2.10>
From: 00002 <sip:00002@sip.com>;tag=5b5ed5ef
To: <sip:00004@sip.com>;tag=18aa38d0
Call-ID: 6a5cbaa9@00002.192.168.1.1
CSeq: 722729699 ACK
Proxy-Authorization: Digest username="00002",
                           nonce="4c3d940448812a651d14f89d2fe3da4b",
                           response="038dba896f00a1aff157ed4ae474a545",
                           algorithm=MD5,
                           opaque="c09f2f8417d262cde524e6b314eedc16", qop=auth, nc=00000001
Max-Forwards: 70
Content-Length: 0
```

```
F23      192.168.1.1:5062(Server) -> 192.168.2.10:5060(00004@sip.com)
```

```
ACK sip:00004@192.168.2.10 SIP/2.0
Via: SIP/2.0/UDP 192.168.1.1:5060;branch=z9hG4bK-458.1084261909.722729699
Via: SIP/2.0/UDP 192.168.2.19:5060;branch=z9hG4bK-18a9de42-778525.423
From: 00002 <sip:00002@sip.com>;tag=5b5ed5ef
To: <sip:00004@sip.com>;tag=18aa38d0
Call-ID: 6a5cbaa9@00002.192.168.1.1
CSeq: 722729699 ACK
max-forwards: 69
Content-Length: 0
```

```
F24      192.168.2.10:1080(00004@sip.com) -> 192.168.1.1:5060(Server)
```

```
INVITE sip:00004@192.168.1.1 SIP/2.0
Via: SIP/2.0/UDP 192.168.2.10:5060;branch=z9hG4bK-7e63a4dd-778362.215
Route: <sip:00002@192.168.2.19>
From: <sip:00004@sip.com>;tag=18aa38d0
To: 00002 <sip:00002@sip.com>;tag=5b5ed5ef
Call-ID: 6a5cbaa9@00002.192.168.1.1
CSeq: 752703251 INVITE
Contact: <sip:00004@192.168.2.10>
Max-Forwards: 70
Supported: 100rel, replaces
Allow: INVITE, ACK, BYE, CANCEL, OPTIONS, PRACK, MESSAGE, REFER, NOTIFY
Content-Type: application/sdp
Content-Length: 189
```

```
v=0
o=- 203262 13102 IN IP4 192.168.2.10
s=-
c=IN IP4 192.168.2.10
t=0 0
m=audio 5006 RTP/AVP 0 96
a=rtpmap:0 PCMU/8000
a=rtpmap:96 telephone-event/8000
a=fmtp:96 0-11
a=inactive
```

```
F25      192.168.1.1:5062(Server) -> 192.168.2.10:5060(00004@sip.com)
```

```
SIP/2.0 100 Trying
Via: SIP/2.0/UDP 192.168.2.10:5060;branch=z9hG4bK-7e63a4dd-778362.215
From: <sip:00004@sip.com>;tag=18aa38d0
To: 00002 <sip:00002@sip.com>;tag=5b5ed5ef
Call-ID: 6a5cbaa9@00002.192.168.1.1
CSeq: 752703251 INVITE
Content-Length: 0
```

```
=====
F26      192.168.1.1:5062(Server) -> 192.168.2.19:5060(00002@sip.com)

INVITE sip:00002@192.168.2.19 SIP/2.0
Via: SIP/2.0/UDP 192.168.1.1:5060;branch=z9hG4bK-457.693546.752703251
Via: SIP/2.0/UDP 192.168.2.10:5060;branch=z9hG4bK-7e63a4dd-778362.215
Record-Route: <sip:00004@192.168.1.1>
Route: <sip:00002@192.168.2.19>
From: <sip:00004@sip.com>;tag=18aa38d0
To: 00002 <sip:00002@sip.com>;tag=5b5ed5ef
Call-ID: 6a5cbaa9@00002.192.168.1.1
CSeq: 752703251 INVITE
Contact: <sip:00004@192.168.2.10>
max-forwards: 69
supported: 100rel
supported: replaces
Allow: INVITE, ACK, BYE, CANCEL, OPTIONS, PRACK, MESSAGE, REFER, NOTIFY
Content-Type: application/sdp
Content-Length: 189

v=0
o=- 203262 13102 IN IP4 192.168.2.10
s=-
c=IN IP4 192.168.2.10
t=0 0
m=audio 5006 RTP/AVP 0 96
a=rtpmap:0 PCMU/8000
a=rtpmap:96 telephone-event/8000
a=fmtp:96 0-11
a=inactive
=====

F27      192.168.2.19:1053(00002@sip.com) -> 192.168.1.1:5060(Server)

SIP/2.0 100 Trying
Via: SIP/2.0/UDP 192.168.1.1:5060;branch=z9hG4bK-457.693546.752703251
Via: SIP/2.0/UDP 192.168.2.10:5060;branch=z9hG4bK-7e63a4dd-778362.215
From: <sip:00004@sip.com>;tag=18aa38d0
To: 00002 <sip:00002@sip.com>;tag=5b5ed5ef
Call-ID: 6a5cbaa9@00002.192.168.1.1
CSeq: 752703251 INVITE
Content-Length: 0
=====

F28      192.168.2.19:1053(00002@sip.com) -> 192.168.1.1:5060(Server)

SIP/2.0 200 OK
Via: SIP/2.0/UDP 192.168.1.1:5060;branch=z9hG4bK-457.693546.752703251
Via: SIP/2.0/UDP 192.168.2.10:5060;branch=z9hG4bK-7e63a4dd-778362.215
Record-Route: <sip:00004@192.168.1.1>
From: <sip:00004@sip.com>;tag=18aa38d0
To: 00002 <sip:00002@sip.com>;tag=5b5ed5ef
Call-ID: 6a5cbaa9@00002.192.168.1.1
CSeq: 752703251 INVITE
Contact: <sip:00002@192.168.2.19>
Supported: 100rel, replaces
Allow: INVITE, ACK, BYE, CANCEL, OPTIONS, PRACK, MESSAGE, REFER, NOTIFY
Content-Type: application/sdp
Accept: application/sdp, message/sipfrag
Content-Length: 187

v=0
o=- 318246 602 IN IP4 192.168.2.19
s=-
c=IN IP4 192.168.2.19
t=0 0
m=audio 5006 RTP/AVP 0 96
a=rtpmap:0 PCMU/8000
a=rtpmap:96 telephone-event/8000
a=fmtp:96 0-11
a=inactive
=====

F29      192.168.1.1:5062(Server) -> 192.168.2.10:5060(00004@sip.com)
```

SIP/2.0 200 OK  
 Via: SIP/2.0/UDP 192.168.2.10:5060;branch=z9hG4bK-7e63a4dd-778362.215  
 Record-Route: <sip:00004@192.168.1.1>  
 From: <sip:00004@sip.com>;tag=18aa38d0  
 To: 00002 <sip:00002@sip.com>;tag=5b5ed5ef  
 Call-ID: 6a5cbaa9@00002.192.168.1.1  
 CSeq: 752703251 INVITE  
 Contact: <sip:00002@192.168.2.19>  
 supported: 100rel  
 supported: replaces  
 Allow: INVITE, ACK, BYE, CANCEL, OPTIONS, PRACK, MESSAGE, REFER, NOTIFY  
 Content-Type: application/sdp  
 Accept: application/sdp, message/sipfrag  
 Content-Length: 187

v=0  
 o=- 318246 602 IN IP4 192.168.2.19  
 s=-  
 c=IN IP4 192.168.2.19  
 t=0 0  
 m=audio 5006 RTP/AVP 0 96  
 a=rtpmap:0 PCMU/8000  
 a=rtpmap:96 telephone-event/8000  
 a=fmtp:96 0-11  
 a=inactive

---

F30 192.168.2.10:1080(00004@sip.com) -> 192.168.1.1:5060(Server)

ACK sip:00004@192.168.1.1 SIP/2.0  
 Via: SIP/2.0/UDP 192.168.2.10:5060;branch=z9hG4bK-4e06a068-778362.478  
 Route: <sip:00002@192.168.2.19>  
 From: <sip:00004@sip.com>;tag=18aa38d0  
 To: 00002 <sip:00002@sip.com>;tag=5b5ed5ef  
 Call-ID: 6a5cbaa9@00002.192.168.1.1  
 CSeq: 752703251 ACK  
 Max-Forwards: 70  
 Content-Length: 0

---

F31 192.168.1.1:5062(Server) -> 192.168.2.19:5060(00002@sip.com)

ACK sip:00002@192.168.2.19 SIP/2.0  
 Via: SIP/2.0/UDP 192.168.1.1:5060;branch=z9hG4bK-457.1084261911.752703251  
 Via: SIP/2.0/UDP 192.168.2.10:5060;branch=z9hG4bK-4e06a068-778362.478  
 From: <sip:00004@sip.com>;tag=18aa38d0  
 To: 00002 <sip:00002@sip.com>;tag=5b5ed5ef  
 Call-ID: 6a5cbaa9@00002.192.168.1.1  
 CSeq: 752703251 ACK  
 max-forwards: 69  
 Content-Length: 0

---

F32 192.168.2.10:1080(00004@sip.com) -> 192.168.1.1:5060(Server)

INVITE sip:00005@sip.com SIP/2.0  
 Via: SIP/2.0/UDP 192.168.2.10:5060;branch=z9hG4bK-140f781f-778371.568  
 Route: <sip:192.168.1.1:5060>  
 From: <sip:00004@sip.com>;tag=11c0c8fb  
 To: <sip:00005@sip.com>  
 Call-ID: 3c3b6f6d@00004.192.168.1.1  
 CSeq: 1917682530 INVITE  
 Contact: <sip:00004@192.168.2.10>  
 Max-Forwards: 70  
 Supported: 100rel, replaces  
 Allow: INVITE, ACK, BYE, CANCEL, OPTIONS, PRACK, MESSAGE, REFER, NOTIFY  
 Content-Type: application/sdp  
 Accept: application/sdp, message/sipfrag  
 Content-Length: 250

v=0  
 o=- 558832 2501 IN IP4 192.168.2.10  
 s=-  
 c=IN IP4 192.168.2.10  
 t=0 0

```

m=audio 5008 RTP/AVP 0 8 4 18 96
a=rtpmap:0 PCMU/8000
a=rtpmap:8 PCMA/8000
a=rtpmap:4 G723/8000
a=rtpmap:18 G729/8000
a=rtpmap:96 telephone-event/8000
a=fmtp:96 0-11

```

---

```

F33      192.168.1.1:5062(Server) -> 192.168.2.10:5060(00004@sip.com)

```

```

SIP/2.0 100 Trying
Via: SIP/2.0/UDP 192.168.2.10:5060;branch=z9hG4bK-140f781f-778371.568
From: <sip:00004@sip.com>;tag=11c0c8fb
To: <sip:00005@sip.com>
Call-ID: 3c3b6f6d@00004.192.168.1.1
CSeq: 1917682530 INVITE
Content-Length: 0

```

---

```

F34      192.168.1.1:5062(Server) -> 192.168.2.14:5060(00005@sip.com)

```

```

INVITE sip:00005@192.168.2.14 SIP/2.0
Via: SIP/2.0/UDP 192.168.1.1:5060;branch=z9hG4bK-460.451465.1917682530
Via: SIP/2.0/UDP 192.168.2.10:5060;branch=z9hG4bK-140f781f-778371.568
Record-Route: <sip:00005@192.168.1.1>
Route: <sip:192.168.1.1:5060>
From: 00004 <sip:00004@sip.com>;tag=11c0c8fb
To: <sip:00005@sip.com>
Call-ID: 3c3b6f6d@00004.192.168.1.1
CSeq: 1917682530 INVITE
Contact: <sip:00004@192.168.2.10>
max-forwards: 69
supported: 100rel
supported: replaces
Allow: INVITE, ACK, BYE, CANCEL, OPTIONS, PRACK, MESSAGE, REFER, NOTIFY
Content-Type: application/sdp
Accept: application/sdp, message/sipfrag
Content-Length: 250

```

```

v=0
o=- 558832 2501 IN IP4 192.168.2.10
s=-
c=IN IP4 192.168.2.10
t=0 0
m=audio 5008 RTP/AVP 0 8 4 18 96
a=rtpmap:0 PCMU/8000
a=rtpmap:8 PCMA/8000
a=rtpmap:4 G723/8000
a=rtpmap:18 G729/8000
a=rtpmap:96 telephone-event/8000
a=fmtp:96 0-11

```

---

```

F35      192.168.1.1:5062(Server) -> 192.168.2.14:5060(00005@sip.com)

```

```

INVITE sip:00005@192.168.2.14 SIP/2.0
Via: SIP/2.0/UDP 192.168.1.1:5060;branch=z9hG4bK-460.451465.1917682530
Via: SIP/2.0/UDP 192.168.2.10:5060;branch=z9hG4bK-140f781f-778371.568
Record-Route: <sip:00005@192.168.1.1>
Route: <sip:192.168.1.1:5060>
From: 00004 <sip:00004@sip.com>;tag=11c0c8fb
To: <sip:00005@sip.com>
Call-ID: 3c3b6f6d@00004.192.168.1.1
CSeq: 1917682530 INVITE
Contact: <sip:00004@192.168.2.10>
max-forwards: 69
supported: 100rel
supported: replaces
Allow: INVITE, ACK, BYE, CANCEL, OPTIONS, PRACK, MESSAGE, REFER, NOTIFY
Content-Type: application/sdp
Accept: application/sdp, message/sipfrag
Content-Length: 250

```

```

v=0
o=- 558832 2501 IN IP4 192.168.2.10
s=-

```

```

c=IN IP4 192.168.2.10
t=0 0
m=audio 5008 RTP/AVP 0 8 4 18 96
a=rtpmap:0 PCMU/8000
a=rtpmap:8 PCMA/8000
a=rtpmap:4 G723/8000
a=rtpmap:18 G729/8000
a=rtpmap:96 telephone-event/8000
a=fmtp:96 0-11

```

```
=====
```

```

F36          192.168.1.1:5062(Server) -> 192.168.2.14:5060(00005@sip.com)

```

```

INVITE sip:00005@192.168.2.14 SIP/2.0
Via: SIP/2.0/UDP 192.168.1.1:5060;branch=z9hG4bK-460.451465.1917682530
Via: SIP/2.0/UDP 192.168.2.10:5060;branch=z9hG4bK-140f781f-778371.568
Record-Route: <sip:00005@192.168.1.1>
Route: <sip:192.168.1.1:5060>
From: 00004 <sip:00004@sip.com>;tag=11c0c8fb
To: <sip:00005@sip.com>
Call-ID: 3c3b6f6d@00004.192.168.1.1
CSeq: 1917682530 INVITE
Contact: <sip:00004@192.168.2.10>
max-forwards: 69
supported: 100rel
supported: replaces
Allow: INVITE, ACK, BYE, CANCEL, OPTIONS, PRACK, MESSAGE, REFER, NOTIFY
Content-Type: application/sdp
Accept: application/sdp, message/sipfrag
Content-Length: 250

```

```

v=0
o=- 558832 2501 IN IP4 192.168.2.10
s=-
c=IN IP4 192.168.2.10
t=0 0
m=audio 5008 RTP/AVP 0 8 4 18 96
a=rtpmap:0 PCMU/8000
a=rtpmap:8 PCMA/8000
a=rtpmap:4 G723/8000
a=rtpmap:18 G729/8000
a=rtpmap:96 telephone-event/8000
a=fmtp:96 0-11

```

```
=====
```

```

F37          192.168.1.1:5062(Server) -> 192.168.2.14:5060(00005@sip.com)

```

```

INVITE sip:00005@192.168.2.14 SIP/2.0
Via: SIP/2.0/UDP 192.168.1.1:5060;branch=z9hG4bK-460.451465.1917682530
Via: SIP/2.0/UDP 192.168.2.10:5060;branch=z9hG4bK-140f781f-778371.568
Record-Route: <sip:00005@192.168.1.1>
Route: <sip:192.168.1.1:5060>
From: 00004 <sip:00004@sip.com>;tag=11c0c8fb
To: <sip:00005@sip.com>
Call-ID: 3c3b6f6d@00004.192.168.1.1
CSeq: 1917682530 INVITE
Contact: <sip:00004@192.168.2.10>
max-forwards: 69
supported: 100rel
supported: replaces
Allow: INVITE, ACK, BYE, CANCEL, OPTIONS, PRACK, MESSAGE, REFER, NOTIFY
Content-Type: application/sdp
Accept: application/sdp, message/sipfrag
Content-Length: 250

```

```

v=0
o=- 558832 2501 IN IP4 192.168.2.10
s=-
c=IN IP4 192.168.2.10
t=0 0
m=audio 5008 RTP/AVP 0 8 4 18 96
a=rtpmap:0 PCMU/8000
a=rtpmap:8 PCMA/8000
a=rtpmap:4 G723/8000
a=rtpmap:18 G729/8000
a=rtpmap:96 telephone-event/8000
a=fmtp:96 0-11

```

F38 192.168.1.1:5062(Server) -> 192.168.2.14:5060(00005@sip.com)

```

INVITE sip:00005@192.168.2.14 SIP/2.0
Via: SIP/2.0/UDP 192.168.1.1:5060;branch=z9hG4bK-460.451465.1917682530
Via: SIP/2.0/UDP 192.168.2.10:5060;branch=z9hG4bK-140f781f-778371.568
Record-Route: <sip:00005@192.168.1.1>
Route: <sip:192.168.1.1:5060>
From: 00004 <sip:00004@sip.com>;tag=11c0c8fb
To: <sip:00005@sip.com>
Call-ID: 3c3b6f6d@00004.192.168.1.1
CSeq: 1917682530 INVITE
Contact: <sip:00004@192.168.2.10>
max-forwards: 69
supported: 100rel
supported: replaces
Allow: INVITE, ACK, BYE, CANCEL, OPTIONS, PRACK, MESSAGE, REFER, NOTIFY
Content-Type: application/sdp
Accept: application/sdp, message/sipfrag
Content-Length: 250

```

```

v=0
o=- 558832 2501 IN IP4 192.168.2.10
s=-
c=IN IP4 192.168.2.10
t=0 0
m=audio 5008 RTP/AVP 0 8 4 18 96
a=rtpmap:0 PCMU/8000
a=rtpmap:8 PCMA/8000
a=rtpmap:4 G723/8000
a=rtpmap:18 G729/8000
a=rtpmap:96 telephone-event/8000
a=fmtp:96 0-11

```

F39 192.168.1.1:5062(Server) -> 192.168.2.14:5060(00005@sip.com)

```

INVITE sip:00005@192.168.2.14 SIP/2.0
Via: SIP/2.0/UDP 192.168.1.1:5060;branch=z9hG4bK-460.451465.1917682530
Via: SIP/2.0/UDP 192.168.2.10:5060;branch=z9hG4bK-140f781f-778371.568
Record-Route: <sip:00005@192.168.1.1>
Route: <sip:192.168.1.1:5060>
From: 00004 <sip:00004@sip.com>;tag=11c0c8fb
To: <sip:00005@sip.com>
Call-ID: 3c3b6f6d@00004.192.168.1.1
CSeq: 1917682530 INVITE
Contact: <sip:00004@192.168.2.10>
max-forwards: 69
supported: 100rel
supported: replaces
Allow: INVITE, ACK, BYE, CANCEL, OPTIONS, PRACK, MESSAGE, REFER, NOTIFY
Content-Type: application/sdp
Accept: application/sdp, message/sipfrag
Content-Length: 250

```

```

v=0
o=- 558832 2501 IN IP4 192.168.2.10
s=-
c=IN IP4 192.168.2.10
t=0 0
m=audio 5008 RTP/AVP 0 8 4 18 96
a=rtpmap:0 PCMU/8000
a=rtpmap:8 PCMA/8000
a=rtpmap:4 G723/8000
a=rtpmap:18 G729/8000
a=rtpmap:96 telephone-event/8000
a=fmtp:96 0-11

```

F40 192.168.1.1:5062(Server) -> 192.168.2.10:5060(00004@sip.com)

```

SIP/2.0 408 Request Timeout
Via: SIP/2.0/UDP 192.168.2.10:5060;branch=z9hG4bK-140f781f-778371.568
From: 00004 <sip:00004@sip.com>;tag=11c0c8fb
To: <sip:00005@sip.com>
Call-ID: 3c3b6f6d@00004.192.168.1.1
CSeq: 1917682530 INVITE
Content-Length: 0

```



F41 192.168.2.10:1080(00004@sip.com) -> 192.168.1.1:5060(Server)

ACK sip:00005@sip.com SIP/2.0  
Via: SIP/2.0/UDP 192.168.2.10:5060;branch=z9hG4bK-140f781f-778371.568  
Route: <sip:192.168.1.1:5060>  
From: 00004 <sip:00004@sip.com>;tag=11c0c8fb  
To: <sip:00005@sip.com>  
Call-ID: 3c3b6f6d@00004.192.168.1.1  
CSeq: 1917682530 ACK  
Content-Length: 0

F42 192.168.2.10:1080(00004@sip.com) -> 192.168.1.1:5060(Server)

INVITE sip:00004@192.168.1.1 SIP/2.0  
Via: SIP/2.0/UDP 192.168.2.10:5060;branch=z9hG4bK-7b894b7b-778405.203  
Route: <sip:00002@192.168.2.19>  
From: <sip:00004@sip.com>;tag=18aa38d0  
To: 00002 <sip:00002@sip.com>;tag=5b5ed5ef  
Call-ID: 6a5cbaa9@00002.192.168.1.1  
CSeq: 752703252 INVITE  
Contact: <sip:00004@192.168.2.10>  
Max-Forwards: 70  
Supported: 100rel, replaces  
Allow: INVITE, ACK, BYE, CANCEL, OPTIONS, PRACK, MESSAGE, REFER, NOTIFY  
Content-Type: application/sdp  
Content-Length: 177

v=0  
o=- 196250 13103 IN IP4 192.168.2.10  
s=-  
c=IN IP4 192.168.2.10  
t=0 0  
m=audio 5006 RTP/AVP 0 96  
a=rtpmap:0 PCMU/8000  
a=rtpmap:96 telephone-event/8000  
a=fmtp:96 0-11

F43 192.168.1.1:5062(Server) -> 192.168.2.10:5060(00004@sip.com)

SIP/2.0 100 Trying  
Via: SIP/2.0/UDP 192.168.2.10:5060;branch=z9hG4bK-7b894b7b-778405.203  
From: <sip:00004@sip.com>;tag=18aa38d0  
To: 00002 <sip:00002@sip.com>;tag=5b5ed5ef  
Call-ID: 6a5cbaa9@00002.192.168.1.1  
CSeq: 752703252 INVITE  
Content-Length: 0

F44 192.168.1.1:5062(Server) -> 192.168.2.19:5060(00002@sip.com)

INVITE sip:00002@192.168.2.19 SIP/2.0  
Via: SIP/2.0/UDP 192.168.1.1:5060;branch=z9hG4bK-457.693546.752703252  
Via: SIP/2.0/UDP 192.168.2.10:5060;branch=z9hG4bK-7b894b7b-778405.203  
Record-Route: <sip:00004@192.168.1.1>  
Route: <sip:00002@192.168.2.19>  
From: <sip:00004@sip.com>;tag=18aa38d0  
To: 00002 <sip:00002@sip.com>;tag=5b5ed5ef  
Call-ID: 6a5cbaa9@00002.192.168.1.1  
CSeq: 752703252 INVITE  
Contact: <sip:00004@192.168.2.10>  
max-forwards: 69  
supported: 100rel  
supported: replaces  
Allow: INVITE, ACK, BYE, CANCEL, OPTIONS, PRACK, MESSAGE, REFER, NOTIFY  
Content-Type: application/sdp  
Content-Length: 177

v=0  
o=- 196250 13103 IN IP4 192.168.2.10  
s=-  
c=IN IP4 192.168.2.10

```
t=0 0
m=audio 5006 RTP/AVP 0 96
a=rtpmap:0 PCMU/8000
a=rtpmap:96 telephone-event/8000
a=fmtp:96 0-11
```

```
=====
F45      192.168.2.19:1053(00002@sip.com) -> 192.168.1.1:5060(Server)
```

```
SIP/2.0 100 Trying
Via: SIP/2.0/UDP 192.168.1.1:5060;branch=z9hG4bK-457.693546.752703252
Via: SIP/2.0/UDP 192.168.2.10:5060;branch=z9hG4bK-7b894b7b-778405.203
From: <sip:00004@sip.com>;tag=18aa38d0
To: 00002 <sip:00002@sip.com>;tag=5b5ed5ef
Call-ID: 6a5cbaa9@00002.192.168.1.1
CSeq: 752703252 INVITE
Content-Length: 0
```

```
=====
F46      192.168.2.19:1053(00002@sip.com) -> 192.168.1.1:5060(Server)
```

```
SIP/2.0 200 OK
Via: SIP/2.0/UDP 192.168.1.1:5060;branch=z9hG4bK-457.693546.752703252
Via: SIP/2.0/UDP 192.168.2.10:5060;branch=z9hG4bK-7b894b7b-778405.203
Record-Route: <sip:00004@192.168.1.1>
From: <sip:00004@sip.com>;tag=18aa38d0
To: 00002 <sip:00002@sip.com>;tag=5b5ed5ef
Call-ID: 6a5cbaa9@00002.192.168.1.1
CSeq: 752703252 INVITE
Contact: <sip:00002@192.168.2.19>
Supported: 100rel, replaces
Allow: INVITE, ACK, BYE, CANCEL, OPTIONS, PRACK, MESSAGE, REFER, NOTIFY
Content-Type: application/sdp
Accept: application/sdp, message/sipfrag
Content-Length: 249
```

```
v=0
o=- 287012 603 IN IP4 192.168.2.19
s=-
c=IN IP4 192.168.2.19
t=0 0
m=audio 5006 RTP/AVP 0 8 4 18 96
a=rtpmap:0 PCMU/8000
a=rtpmap:8 PCMA/8000
a=rtpmap:4 G723/8000
a=rtpmap:18 G729/8000
a=rtpmap:96 telephone-event/8000
a=fmtp:96 0-11
```

```
=====
F47      192.168.1.1:5062(Server) -> 192.168.2.10:5060(00004@sip.com)
```

```
SIP/2.0 200 OK
Via: SIP/2.0/UDP 192.168.2.10:5060;branch=z9hG4bK-7b894b7b-778405.203
Record-Route: <sip:00004@192.168.1.1>
From: <sip:00004@sip.com>;tag=18aa38d0
To: 00002 <sip:00002@sip.com>;tag=5b5ed5ef
Call-ID: 6a5cbaa9@00002.192.168.1.1
CSeq: 752703252 INVITE
Contact: <sip:00002@192.168.2.19>
supported: 100rel
supported: replaces
Allow: INVITE, ACK, BYE, CANCEL, OPTIONS, PRACK, MESSAGE, REFER, NOTIFY
Content-Type: application/sdp
Accept: application/sdp, message/sipfrag
Content-Length: 249
```

```
v=0
o=- 287012 603 IN IP4 192.168.2.19
s=-
c=IN IP4 192.168.2.19
t=0 0
m=audio 5006 RTP/AVP 0 8 4 18 96
a=rtpmap:0 PCMU/8000
a=rtpmap:8 PCMA/8000
a=rtpmap:4 G723/8000
a=rtpmap:18 G729/8000
```

a=rtpmap:96 telephone-event/8000  
a=fmtp:96 0-11

F48 192.168.2.10:1080(00004@sip.com) -> 192.168.1.1:5060(Server)

ACK sip:00004@192.168.1.1 SIP/2.0  
Via: SIP/2.0/UDP 192.168.2.10:5060;branch=z9hG4bK-16e879f5-778405.435  
Route: <sip:00002@192.168.2.19>  
From: <sip:00004@sip.com>;tag=18aa38d0  
To: 00002 <sip:00002@sip.com>;tag=5b5ed5ef  
Call-ID: 6a5cbaa9@00002.192.168.1.1  
CSeq: 752703252 ACK  
Max-Forwards: 70  
Content-Length: 0

F49 192.168.1.1:5062(Server) -> 192.168.2.19:5060(00002@sip.com)

ACK sip:00002@192.168.2.19 SIP/2.0  
Via: SIP/2.0/UDP 192.168.1.1:5060;branch=z9hG4bK-457.1084261954.752703252  
Via: SIP/2.0/UDP 192.168.2.10:5060;branch=z9hG4bK-16e879f5-778405.435  
From: <sip:00004@sip.com>;tag=18aa38d0  
To: 00002 <sip:00002@sip.com>;tag=5b5ed5ef  
Call-ID: 6a5cbaa9@00002.192.168.1.1  
CSeq: 752703252 ACK  
max-forwards: 69  
Content-Length: 0

F50 192.168.2.10:1080(00004@sip.com) -> 192.168.1.1:5060(Server)

BYE sip:00004@192.168.1.1 SIP/2.0  
Via: SIP/2.0/UDP 192.168.2.10:5060;branch=z9hG4bK-74bb354e-778424.152  
Route: <sip:00002@192.168.2.19>  
From: <sip:00004@sip.com>;tag=18aa38d0  
To: 00002 <sip:00002@sip.com>;tag=5b5ed5ef  
Call-ID: 6a5cbaa9@00002.192.168.1.1  
CSeq: 752703253 BYE  
Max-Forwards: 70  
Content-Length: 0

F51 192.168.1.1:5062(Server) -> 192.168.2.19:5060(00002@sip.com)

BYE sip:00002@192.168.2.19 SIP/2.0  
Via: SIP/2.0/UDP 192.168.1.1:5060;branch=z9hG4bK-457.1084261973.752703253  
Via: SIP/2.0/UDP 192.168.2.10:5060;branch=z9hG4bK-74bb354e-778424.152  
Route: <sip:00002@192.168.2.19>  
From: <sip:00004@sip.com>;tag=18aa38d0  
To: 00002 <sip:00002@sip.com>;tag=5b5ed5ef  
Call-ID: 6a5cbaa9@00002.192.168.1.1  
CSeq: 752703253 BYE  
max-forwards: 69  
Content-Length: 0

F52 192.168.2.19:1053(00002@sip.com) -> 192.168.1.1:5060(Server)

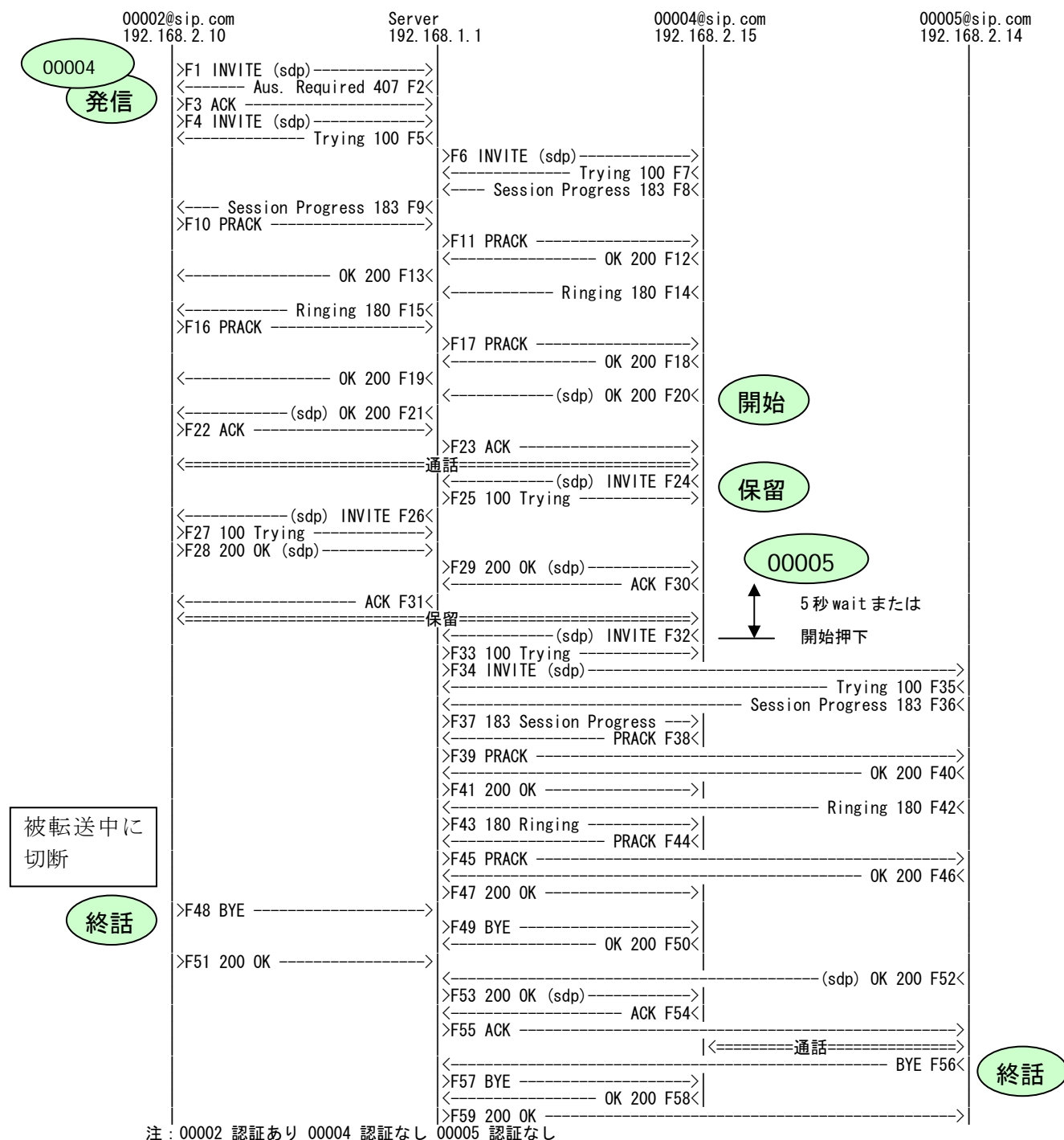
SIP/2.0 200 OK  
Via: SIP/2.0/UDP 192.168.1.1:5060;branch=z9hG4bK-457.1084261973.752703253  
Via: SIP/2.0/UDP 192.168.2.10:5060;branch=z9hG4bK-74bb354e-778424.152  
From: <sip:00004@sip.com>;tag=18aa38d0  
To: 00002 <sip:00002@sip.com>;tag=5b5ed5ef  
Call-ID: 6a5cbaa9@00002.192.168.1.1  
CSeq: 752703253 BYE  
Content-Length: 0

F53 192.168.1.1:5062(Server) -> 192.168.2.10:5060(00004@sip.com)

SIP/2.0 200 OK  
Via: SIP/2.0/UDP 192.168.2.10:5060;branch=z9hG4bK-74bb354e-778424.152  
From: <sip:00004@sip.com>;tag=18aa38d0  
To: 00002 <sip:00002@sip.com>;tag=5b5ed5ef  
Call-ID: 6a5cbaa9@00002.192.168.1.1  
CSeq: 752703253 BYE  
Content-Length: 0

=====

## 11.6.4.被転送中に被転送者が切断



終話時に RTCP で Goodbye を送出するためタイミングによって BYE を送出するシーケンスが逆方向になる場合がある。

図 11-31 被転送中に被転送者が切断

F1 192.168.2.10:1062(00004@sip.com) -> 192.168.1.1:5060(Server)  
INVITE sip:00004@sip.com SIP/2.0

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Via: SIP/2.0/UDP 192.168.2.10:5060;branch=z9hG4bK-2c3c825f-792045.799  
Route: <sip:192.168.1.1:5060>  
From: <sip:00002@sip.com>;tag=5a1bbf13  
To: <sip:00004@sip.com>  
Call-ID: 376f0cdf@00002.192.168.1.1  
CSeq: 1550834174 INVITE  
Contact: <sip:00002@192.168.2.10>  
Proxy-Authorization: Digest username="00002", realm="heliossv2",  
nonce="2114b5d6086602d9f409c4eb25fc96c2", uri="sip:00004@sip.com",  
response="e083946d216cc28ffe2ebd09c04aa467", algorithm=MD5,  
opaque="c76ca906063654a16a7cfb506800ff4c", qop=auth, nc=00000005, cnonce="59057853",  
Max-Forwards: 70  
Supported: 100rel, replaces  
Allow: INVITE, ACK, BYE, CANCEL, OPTIONS, PRACK, MESSAGE, REFER, NOTIFY  
Content-Type: application/sdp  
Accept: application/sdp, message/sipfrag  
Content-Length: 250

v=0  
o=- 788080 1001 IN IP4 192.168.2.10  
s=-  
c=IN IP4 192.168.2.10  
t=0 0  
m=audio 5006 RTP/AVP 0 8 4 18 96  
a=rtpmap:0 PCMU/8000  
a=rtpmap:8 PCMA/8000  
a=rtpmap:4 G723/8000  
a=rtpmap:18 G729/8000  
a=rtpmap:96 telephone-event/8000  
a=fmtp:96 0-11

=====

F2 192.168.1.1:5062(Server) -> 192.168.2.10:5060(00004@sip.com)

SIP/2.0 407 Proxy Authentication Required  
Via: SIP/2.0/UDP 192.168.2.10:5060;branch=z9hG4bK-2c3c825f-792045.799  
From: <sip:00002@sip.com>;tag=5a1bbf13  
To: <sip:00004@sip.com>  
Call-ID: 376f0cdf@00002.192.168.1.1  
CSeq: 1550834174 INVITE  
Proxy-Authenticate: Digest realm="heliossv2", nonce="f452ce4b4af5a6612374d32243a0cd0b",  
opaque="1e4f914333118dd65478e7e36a51bbfa", stale=false, algorithm=MD5, qop="auth,auth-int"  
Content-Length: 0

=====

F3 192.168.2.10:1062(00004@sip.com) -> 192.168.1.1:5060(Server)

ACK sip:00004@sip.com SIP/2.0  
Via: SIP/2.0/UDP 192.168.2.10:5060;branch=z9hG4bK-2c3c825f-792045.799  
Route: <sip:192.168.1.1:5060>  
From: <sip:00002@sip.com>;tag=5a1bbf13  
To: <sip:00004@sip.com>  
Call-ID: 376f0cdf@00002.192.168.1.1  
CSeq: 1550834174 ACK  
Content-Length: 0

=====

F4 192.168.2.10:1062(00004@sip.com) -> 192.168.1.1:5060(Server)

INVITE sip:00004@sip.com SIP/2.0  
Via: SIP/2.0/UDP 192.168.2.10:5060;branch=z9hG4bK-4e63c324-792046.215  
Route: <sip:192.168.1.1:5060>  
From: <sip:00002@sip.com>;tag=5a1bbf13  
To: <sip:00004@sip.com>  
Call-ID: 376f0cdf@00002.192.168.1.1  
CSeq: 1550834175 INVITE  
Contact: <sip:00002@192.168.2.10>  
Proxy-Authorization: Digest username="00002", realm="heliossv2",  
nonce="f452ce4b4af5a6612374d32243a0cd0b", uri="sip:00004@sip.com",  
response="68370816bdf71f34fdd49dfa99601491", algorithm=MD5,  
opaque="1e4f914333118dd65478e7e36a51bbfa", qop=auth, nc=00000001, cnonce="22ee4476",  
Max-Forwards: 70  
Supported: 100rel, replaces  
Allow: INVITE, ACK, BYE, CANCEL, OPTIONS, PRACK, MESSAGE, REFER, NOTIFY  
Content-Type: application/sdp  
Accept: application/sdp, message/sipfrag

Content-Length: 250

v=0  
o=- 788080 1001 IN IP4 192.168.2.10  
s=-  
c=IN IP4 192.168.2.10  
t=0 0  
m=audio 5006 RTP/AVP 0 8 4 18 96  
a=rtpmap:0 PCMU/8000  
a=rtpmap:8 PCMA/8000  
a=rtpmap:4 G723/8000  
a=rtpmap:18 G729/8000  
a=rtpmap:96 telephone-event/8000  
a=fmtp:96 0-11

F5 192.168.1.1:5062(Server) -> 192.168.2.10:5060(00004@sip.com)

SIP/2.0 100 Trying  
Via: SIP/2.0/UDP 192.168.2.10:5060;branch=z9hG4bK-4e63c324-792046.215  
From: <sip:00002@sip.com>;tag=5a1bbf13  
To: <sip:00004@sip.com>  
Call-ID: 376f0cdf@00002.192.168.1.1  
CSeq: 1550834175 INVITE  
Content-Length: 0

F6 192.168.1.1:5062(Server) -> 192.168.2.15:5060()

INVITE sip:00004@192.168.2.15 SIP/2.0  
Via: SIP/2.0/UDP 192.168.1.1:5060;branch=z9hG4bK-506.911167.1550834175  
Via: SIP/2.0/UDP 192.168.2.10:5060;branch=z9hG4bK-4e63c324-792046.215  
Record-Route: <sip:00004@192.168.1.1>  
Route: <sip:192.168.1.1:5060>  
From: 00002 <sip:00002@sip.com>;tag=5a1bbf13  
To: <sip:00004@sip.com>  
Call-ID: 376f0cdf@00002.192.168.1.1  
CSeq: 1550834175 INVITE  
Contact: <sip:00002@192.168.2.10>  
max-forwards: 69  
supported: 100rel  
supported: replaces  
Allow: INVITE, ACK, BYE, CANCEL, OPTIONS, PRACK, MESSAGE, REFER, NOTIFY  
Content-Type: application/sdp  
Accept: application/sdp, message/sipfrag  
Content-Length: 250

v=0  
o=- 788080 1001 IN IP4 192.168.2.10  
s=-  
c=IN IP4 192.168.2.10  
t=0 0  
m=audio 5006 RTP/AVP 0 8 4 18 96  
a=rtpmap:0 PCMU/8000  
a=rtpmap:8 PCMA/8000  
a=rtpmap:4 G723/8000  
a=rtpmap:18 G729/8000  
a=rtpmap:96 telephone-event/8000  
a=fmtp:96 0-11

F7 192.168.2.15:1091() -> 192.168.1.1:5060(Server)

SIP/2.0 100 Trying  
Via: SIP/2.0/UDP 192.168.1.1:5060;branch=z9hG4bK-506.911167.1550834175  
Via: SIP/2.0/UDP 192.168.2.10:5060;branch=z9hG4bK-4e63c324-792046.215  
From: 00002 <sip:00002@sip.com>;tag=5a1bbf13  
To: <sip:00004@sip.com>  
Call-ID: 376f0cdf@00002.192.168.1.1  
CSeq: 1550834175 INVITE  
Content-Length: 0

F8 192.168.2.15:1091() -> 192.168.1.1:5060(Server)

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SIP/2.0 183 Session Progress  
 Via: SIP/2.0/UDP 192.168.1.1:5060;branch=z9hG4bK-506.911167.1550834175  
 Via: SIP/2.0/UDP 192.168.2.10:5060;branch=z9hG4bK-4e63c324-792046.215  
 Record-Route: <sip:00004@192.168.1.1>  
 From: 00002 <sip:00002@sip.com>;tag=5a1bbf13  
 To: <sip:00004@sip.com>;tag=32b9021a  
 Call-ID: 376f0cdf@00002.192.168.1.1  
 CSeq: 1550834175 INVITE  
 Contact: <sip:00004@192.168.2.15>  
 Require: 100rel  
 RSeq: 1304835958  
 Content-Length: 0

F9 192.168.1.1:5062(Server) -> 192.168.2.10:5060(00004@sip.com)

SIP/2.0 183 Session Progress  
 Via: SIP/2.0/UDP 192.168.2.10:5060;branch=z9hG4bK-4e63c324-792046.215  
 Record-Route: <sip:00004@192.168.1.1>  
 From: 00002 <sip:00002@sip.com>;tag=5a1bbf13  
 To: <sip:00004@sip.com>;tag=32b9021a  
 Call-ID: 376f0cdf@00002.192.168.1.1  
 CSeq: 1550834175 INVITE  
 Contact: <sip:00004@192.168.2.15>  
 require: 100rel  
 rseq: 1304835958  
 Content-Length: 0

F10 192.168.2.10:1062(00004@sip.com) -> 192.168.1.1:5060(Server)

PRACK sip:00004@192.168.1.1 SIP/2.0  
 Via: SIP/2.0/UDP 192.168.2.10:5060;branch=z9hG4bK-68296078-792046.905  
 Route: <sip:00004@192.168.2.15>  
 From: 00002 <sip:00002@sip.com>;tag=5a1bbf13  
 To: <sip:00004@sip.com>;tag=32b9021a  
 Call-ID: 376f0cdf@00002.192.168.1.1  
 CSeq: 1550834176 PRACK  
 Proxy-Authorization: Digest username="00002", realm="heliossv2",  
 nonce="f452ce4b4af5a6612374d32243a0cd0b", uri="sip:00004@192.168.1.1",  
 response="92ef1832bb769bdb2f02a014b1c67384", algorithm=MD5,  
 opaque="1e4f914333118dd65478e7e36a51bbfa", qop=auth, nc=00000002  
 Max-Forwards: 70  
 RAck: 1304835958 1550834175 INVITE  
 Content-Length: 0

F11 192.168.1.1:5062(Server) -> 192.168.2.15:5060()

PRACK sip:00004@192.168.2.15 SIP/2.0  
 Via: SIP/2.0/UDP 192.168.1.1:5060;branch=z9hG4bK-506.1084275430.1550834176  
 Via: SIP/2.0/UDP 192.168.2.10:5060;branch=z9hG4bK-68296078-792046.905  
 Route: <sip:00004@192.168.2.15>  
 From: 00002 <sip:00002@sip.com>;tag=5a1bbf13  
 To: <sip:00004@sip.com>;tag=32b9021a  
 Call-ID: 376f0cdf@00002.192.168.1.1  
 CSeq: 1550834176 PRACK  
 max-forwards: 69  
 rack: 1304835958 1550834175 INVITE  
 Content-Length: 0

F12 192.168.2.15:1091() -> 192.168.1.1:5060(Server)

SIP/2.0 200 OK  
 Via: SIP/2.0/UDP 192.168.1.1:5060;branch=z9hG4bK-506.1084275430.1550834176  
 Via: SIP/2.0/UDP 192.168.2.10:5060;branch=z9hG4bK-68296078-792046.905  
 From: 00002 <sip:00002@sip.com>;tag=5a1bbf13  
 To: <sip:00004@sip.com>;tag=32b9021a  
 Call-ID: 376f0cdf@00002.192.168.1.1  
 CSeq: 1550834176 PRACK  
 Content-Length: 0



F13 192.168.1.1:5062(Server) -> 192.168.2.10:5060(00004@sip.com)

SIP/2.0 200 OK  
Via: SIP/2.0/UDP 192.168.2.10:5060;branch=z9hG4bK-68296078-792046.905  
From: 00002 <sip:00002@sip.com>;tag=5a1bbf13  
To: <sip:00004@sip.com>;tag=32b9021a  
Call-ID: 376f0cdf@00002.192.168.1.1  
CSeq: 1550834176 PRACK  
Content-Length: 0

F14 192.168.2.15:1091() -> 192.168.1.1:5060(Server)

SIP/2.0 180 Ringing  
Via: SIP/2.0/UDP 192.168.1.1:5060;branch=z9hG4bK-506.911167.1550834175  
Via: SIP/2.0/UDP 192.168.2.10:5060;branch=z9hG4bK-4e63c324-792046.215  
Record-Route: <sip:00004@192.168.1.1>  
From: 00002 <sip:00002@sip.com>;tag=5a1bbf13  
To: <sip:00004@sip.com>;tag=32b9021a  
Call-ID: 376f0cdf@00002.192.168.1.1  
CSeq: 1550834175 INVITE  
Contact: <sip:00004@192.168.2.15>  
Require: 100rel  
RSeq: 1304835959  
Content-Length: 0

F15 192.168.1.1:5062(Server) -> 192.168.2.10:5060(00004@sip.com)

SIP/2.0 180 Ringing  
Via: SIP/2.0/UDP 192.168.2.10:5060;branch=z9hG4bK-4e63c324-792046.215  
Record-Route: <sip:00004@192.168.1.1>  
From: 00002 <sip:00002@sip.com>;tag=5a1bbf13  
To: <sip:00004@sip.com>;tag=32b9021a  
Call-ID: 376f0cdf@00002.192.168.1.1  
CSeq: 1550834175 INVITE  
Contact: <sip:00004@192.168.2.15>  
require: 100rel  
rseq: 1304835959  
Content-Length: 0

F16 192.168.2.10:1062(00004@sip.com) -> 192.168.1.1:5060(Server)

PRACK sip:00004@192.168.1.1 SIP/2.0  
Via: SIP/2.0/UDP 192.168.2.10:5060;branch=z9hG4bK-1268259c-792047.497  
Route: <sip:00004@192.168.2.15>  
From: 00002 <sip:00002@sip.com>;tag=5a1bbf13  
To: <sip:00004@sip.com>;tag=32b9021a  
Call-ID: 376f0cdf@00002.192.168.1.1  
CSeq: 1550834177 PRACK  
Proxy-Authorization: Digest username="00002", realm="heliossv2",  
nonce="f452ce4b4af5a6612374d32243a0cd0b", uri="sip:00004@192.168.1.1",  
response="d3d77eb319cbcdadb8aae96042a9e3f5", algorithm=MD5,  
opaque="1e4f914333118dd65478e7e36a51bbfa", qop=auth, nc=00000003  
Max-Forwards: 70  
RAck: 1304835959 1550834175 INVITE  
Content-Length: 0

F17 192.168.1.1:5062(Server) -> 192.168.2.15:5060()

PRACK sip:00004@192.168.2.15 SIP/2.0  
Via: SIP/2.0/UDP 192.168.1.1:5060;branch=z9hG4bK-506.1084275430.1550834177  
Via: SIP/2.0/UDP 192.168.2.10:5060;branch=z9hG4bK-1268259c-792047.497  
Route: <sip:00004@192.168.2.15>  
From: 00002 <sip:00002@sip.com>;tag=5a1bbf13  
To: <sip:00004@sip.com>;tag=32b9021a  
Call-ID: 376f0cdf@00002.192.168.1.1  
CSeq: 1550834177 PRACK

max-forwards: 69  
 rack: 1304835959 1550834175 INVITE  
 Content-Length: 0

F18 192.168.2.15:1091() -> 192.168.1.1:5060(Server)

SIP/2.0 200 OK  
 Via: SIP/2.0/UDP 192.168.1.1:5060;branch=z9hG4bK-506.1084275430.1550834177  
 Via: SIP/2.0/UDP 192.168.2.10:5060;branch=z9hG4bK-1268259c-792047.497  
 From: 00002 <sip:00002@sip.com>;tag=5a1bbf13  
 To: <sip:00004@sip.com>;tag=32b9021a  
 Call-ID: 376f0cdf@00002.192.168.1.1  
 CSeq: 1550834177 PRACK  
 Content-Length: 0

F19 192.168.1.1:5062(Server) -> 192.168.2.10:5060(00004@sip.com)

SIP/2.0 200 OK  
 Via: SIP/2.0/UDP 192.168.2.10:5060;branch=z9hG4bK-1268259c-792047.497  
 From: 00002 <sip:00002@sip.com>;tag=5a1bbf13  
 To: <sip:00004@sip.com>;tag=32b9021a  
 Call-ID: 376f0cdf@00002.192.168.1.1  
 CSeq: 1550834177 PRACK  
 Content-Length: 0

F20 192.168.2.15:1091() -> 192.168.1.1:5060(Server)

SIP/2.0 200 OK  
 Via: SIP/2.0/UDP 192.168.1.1:5060;branch=z9hG4bK-506.911167.1550834175  
 Via: SIP/2.0/UDP 192.168.2.10:5060;branch=z9hG4bK-4e63c324-792046.215  
 Record-Route: <sip:00004@192.168.1.1>  
 From: 00002 <sip:00002@sip.com>;tag=5a1bbf13  
 To: <sip:00004@sip.com>;tag=32b9021a  
 Call-ID: 376f0cdf@00002.192.168.1.1  
 CSeq: 1550834175 INVITE  
 Contact: <sip:00004@192.168.2.15>  
 Supported: 100rel, replaces  
 Allow: INVITE, ACK, BYE, CANCEL, OPTIONS, PRACK, MESSAGE, REFER, NOTIFY  
 Content-Type: application/sdp  
 Accept: application/sdp, message/sipfrag  
 Content-Length: 177

v=0  
 o=- 692793 13501 IN IP4 192.168.2.15  
 s=-  
 c=IN IP4 192.168.2.15  
 t=0 0  
 m=audio 5006 RTP/AVP 0 96  
 a=rtpmap:0 PCMU/8000  
 a=rtpmap:96 telephone-event/8000  
 a=fmtp:96 0-11

F21 192.168.1.1:5062(Server) -> 192.168.2.10:5060(00004@sip.com)

SIP/2.0 200 OK  
 Via: SIP/2.0/UDP 192.168.2.10:5060;branch=z9hG4bK-4e63c324-792046.215  
 Record-Route: <sip:00004@192.168.1.1>  
 From: 00002 <sip:00002@sip.com>;tag=5a1bbf13  
 To: <sip:00004@sip.com>;tag=32b9021a  
 Call-ID: 376f0cdf@00002.192.168.1.1  
 CSeq: 1550834175 INVITE  
 Contact: <sip:00004@192.168.2.15>  
 supported: 100rel  
 supported: replaces  
 Allow: INVITE, ACK, BYE, CANCEL, OPTIONS, PRACK, MESSAGE, REFER, NOTIFY  
 Content-Type: application/sdp  
 Accept: application/sdp, message/sipfrag  
 Content-Length: 177

v=0

```

o=- 692793 13501 IN IP4 192.168.2.15
s=-
c=IN IP4 192.168.2.15
t=0 0
m=audio 5006 RTP/AVP 0 96
a=rtpmap:0 PCMU/8000
a=rtpmap:96 telephone-event/8000
a=fmtp:96 0-11

```

```
=====
```

F22 192.168.2.10:1062(00004@sip.com) -> 192.168.1.1:5060(Server)

```

ACK sip:00004@192.168.1.1 SIP/2.0
Via: SIP/2.0/UDP 192.168.2.10:5060;branch=z9hG4bK-5de10088-792049.905
Route: <sip:00004@192.168.2.15>
From: 00002 <sip:00002@sip.com>;tag=5a1bbf13
To: <sip:00004@sip.com>;tag=32b9021a
Call-ID: 376f0cdf@00002.192.168.1.1
CSeq: 1550834175 ACK
Proxy-Authorization: Digest username="00002", realm="heliossv2",
nonce="f452ce4b4af5a6612374d32243a0cd0b", uri="sip:00004@sip.com",
response="68370816bdf71f34fdd49dfa99601491", algorithm=MD5, cnonce="22ee4476",
opaque="1e4f914333118dd65478e7e36a51bbfa", qop=auth, nc=00000001
Max-Forwards: 70
Content-Length: 0

```

```
=====
```

F23 192.168.1.1:5062(Server) -> 192.168.2.15:5060()

```

ACK sip:00004@192.168.2.15 SIP/2.0
Via: SIP/2.0/UDP 192.168.1.1:5060;branch=z9hG4bK-506.1084275433.1550834175
Via: SIP/2.0/UDP 192.168.2.10:5060;branch=z9hG4bK-5de10088-792049.905
From: 00002 <sip:00002@sip.com>;tag=5a1bbf13
To: <sip:00004@sip.com>;tag=32b9021a
Call-ID: 376f0cdf@00002.192.168.1.1
CSeq: 1550834175 ACK
max-forwards: 69
Content-Length: 0

```

```
=====
```

F24 192.168.2.15:1091() -> 192.168.1.1:5060(Server)

```

INVITE sip:00004@192.168.1.1 SIP/2.0
Via: SIP/2.0/UDP 192.168.2.15:5060;branch=z9hG4bK-618a2019-791888.516
Route: <sip:00002@192.168.2.10>
From: <sip:00004@sip.com>;tag=32b9021a
To: 00002 <sip:00002@sip.com>;tag=5a1bbf13
Call-ID: 376f0cdf@00002.192.168.1.1
CSeq: 1260217009 INVITE
Contact: <sip:00004@192.168.2.15>
Max-Forwards: 70
Supported: 100rel, replaces
Allow: INVITE, ACK, BYE, CANCEL, OPTIONS, PRACK, MESSAGE, REFER, NOTIFY
Content-Type: application/sdp
Content-Length: 189

```

```

v=0
o=- 503122 13502 IN IP4 192.168.2.15
s=-
c=IN IP4 192.168.2.15
t=0 0
m=audio 5006 RTP/AVP 0 96
a=rtpmap:0 PCMU/8000
a=rtpmap:96 telephone-event/8000
a=fmtp:96 0-11
a=inactive

```

```
=====
```

F25 192.168.1.1:5062(Server) -> 192.168.2.15:5060()

```

SIP/2.0 100 Trying
Via: SIP/2.0/UDP 192.168.2.15:5060;branch=z9hG4bK-618a2019-791888.516
From: <sip:00004@sip.com>;tag=32b9021a
To: 00002 <sip:00002@sip.com>;tag=5a1bbf13
Call-ID: 376f0cdf@00002.192.168.1.1

```

CSeq: 1260217009 INVITE  
Content-Length: 0

```
=====
F26      192.168.1.1:5062(Server) -> 192.168.2.10:5060(00004@sip.com)

INVITE sip:00002@192.168.2.10 SIP/2.0
Via: SIP/2.0/UDP 192.168.1.1:5060;branch=z9hG4bK-505.911167.1260217009
Via: SIP/2.0/UDP 192.168.2.15:5060;branch=z9hG4bK-618a2019-791888.516
Record-Route: <sip:00004@192.168.1.1>
Route: <sip:00002@192.168.2.10>
From: <sip:00004@sip.com>;tag=32b9021a
To: 00002 <sip:00002@sip.com>;tag=5a1bbf13
Call-ID: 376f0cdf@00002.192.168.1.1
CSeq: 1260217009 INVITE
Contact: <sip:00004@192.168.2.15>
max-forwards: 69
supported: 100rel
supported: replaces
Allow: INVITE, ACK, BYE, CANCEL, OPTIONS, PRACK, MESSAGE, REFER, NOTIFY
Content-Type: application/sdp
Content-Length: 189

v=0
o=- 503122 13502 IN IP4 192.168.2.15
s=-
c=IN IP4 192.168.2.15
t=0 0
m=audio 5006 RTP/AVP 0 96
a=rtpmap:0 PCMU/8000
a=rtpmap:96 telephone-event/8000
a=fmtp:96 0-11
a=inactive
```

```
=====
F27      192.168.2.10:1062(00004@sip.com) -> 192.168.1.1:5060(Server)

SIP/2.0 100 Trying
Via: SIP/2.0/UDP 192.168.1.1:5060;branch=z9hG4bK-505.911167.1260217009
Via: SIP/2.0/UDP 192.168.2.15:5060;branch=z9hG4bK-618a2019-791888.516
From: <sip:00004@sip.com>;tag=32b9021a
To: 00002 <sip:00002@sip.com>;tag=5a1bbf13
Call-ID: 376f0cdf@00002.192.168.1.1
CSeq: 1260217009 INVITE
Content-Length: 0
```

```
=====
F28      192.168.2.10:1062(00004@sip.com) -> 192.168.1.1:5060(Server)

SIP/2.0 200 OK
Via: SIP/2.0/UDP 192.168.1.1:5060;branch=z9hG4bK-505.911167.1260217009
Via: SIP/2.0/UDP 192.168.2.15:5060;branch=z9hG4bK-618a2019-791888.516
Record-Route: <sip:00004@192.168.1.1>
From: <sip:00004@sip.com>;tag=32b9021a
To: 00002 <sip:00002@sip.com>;tag=5a1bbf13
Call-ID: 376f0cdf@00002.192.168.1.1
CSeq: 1260217009 INVITE
Contact: <sip:00002@192.168.2.10>
Supported: 100rel, replaces
Allow: INVITE, ACK, BYE, CANCEL, OPTIONS, PRACK, MESSAGE, REFER, NOTIFY
Content-Type: application/sdp
Accept: application/sdp, message/sipfrag
Content-Length: 188

v=0
o=- 598977 1002 IN IP4 192.168.2.10
s=-
c=IN IP4 192.168.2.10
t=0 0
m=audio 5006 RTP/AVP 0 96
a=rtpmap:0 PCMU/8000
a=rtpmap:96 telephone-event/8000
a=fmtp:96 0-11
a=inactive
```

F29 192.168.1.1:5062(Server) -> 192.168.2.15:5060()

SIP/2.0 200 OK  
 Via: SIP/2.0/UDP 192.168.2.15:5060;branch=z9hG4bK-618a2019-791888.516  
 Record-Route: <sip:00004@192.168.1.1>  
 From: <sip:00004@sip.com>;tag=32b9021a  
 To: 00002 <sip:00002@sip.com>;tag=5a1bbf13  
 Call-ID: 376f0cdf@00002.192.168.1.1  
 CSeq: 1260217009 INVITE  
 Contact: <sip:00002@192.168.2.10>  
 supported: 100rel  
 supported: replaces  
 Allow: INVITE, ACK, BYE, CANCEL, OPTIONS, PRACK, MESSAGE, REFER, NOTIFY  
 Content-Type: application/sdp  
 Accept: application/sdp, message/sipfrag  
 Content-Length: 188

v=0  
 o=- 598977 1002 IN IP4 192.168.2.10  
 s=-  
 c=IN IP4 192.168.2.10  
 t=0 0  
 m=audio 5006 RTP/AVP 0 96  
 a=rtpmap:0 PCMU/8000  
 a=rtpmap:96 telephone-event/8000  
 a=fmtp:96 0-11  
 a=inactive

F30 192.168.2.15:1091() -> 192.168.1.1:5060(Server)

ACK sip:00004@192.168.1.1 SIP/2.0  
 Via: SIP/2.0/UDP 192.168.2.15:5060;branch=z9hG4bK-63f71c23-791888.764  
 Route: <sip:00002@192.168.2.10>  
 From: <sip:00004@sip.com>;tag=32b9021a  
 To: 00002 <sip:00002@sip.com>;tag=5a1bbf13  
 Call-ID: 376f0cdf@00002.192.168.1.1  
 CSeq: 1260217009 ACK  
 Max-Forwards: 70  
 Content-Length: 0

F31 192.168.1.1:5062(Server) -> 192.168.2.10:5060(00004@sip.com)

ACK sip:00002@192.168.2.10 SIP/2.0  
 Via: SIP/2.0/UDP 192.168.1.1:5060;branch=z9hG4bK-505.1084275436.1260217009  
 Via: SIP/2.0/UDP 192.168.2.15:5060;branch=z9hG4bK-63f71c23-791888.764  
 From: <sip:00004@sip.com>;tag=32b9021a  
 To: 00002 <sip:00002@sip.com>;tag=5a1bbf13  
 Call-ID: 376f0cdf@00002.192.168.1.1  
 CSeq: 1260217009 ACK  
 max-forwards: 69  
 Content-Length: 0

F32 192.168.2.15:1091() -> 192.168.1.1:5060(Server)

INVITE sip:00005@sip.com SIP/2.0  
 Via: SIP/2.0/UDP 192.168.2.15:5060;branch=z9hG4bK-52ec8212-791900.085  
 Route: <sip:192.168.1.1:5060>  
 From: <sip:00004@sip.com>;tag=3fe6eb18  
 To: <sip:00005@sip.com>  
 Call-ID: 04930260@00004.192.168.1.1  
 CSeq: 803055598 INVITE  
 Contact: <sip:00004@192.168.2.15>  
 Max-Forwards: 70  
 Supported: 100rel, replaces  
 Allow: INVITE, ACK, BYE, CANCEL, OPTIONS, PRACK, MESSAGE, REFER, NOTIFY  
 Content-Type: application/sdp  
 Accept: application/sdp, message/sipfrag  
 Content-Length: 249

v=0  
 o=- 68514 2901 IN IP4 192.168.2.15  
 s=-

```
c=IN IP4 192.168.2.15
t=0 0
m=audio 5008 RTP/AVP 0 8 4 18 96
a=rtpmap:0 PCMU/8000
a=rtpmap:8 PCMA/8000
a=rtpmap:4 G723/8000
a=rtpmap:18 G729/8000
a=rtpmap:96 telephone-event/8000
a=fmtp:96 0-11
```

```
=====
```

```
F33      192.168.1.1:5062(Server) -> 192.168.2.15:5060()
```

```
SIP/2.0 100 Trying
Via: SIP/2.0/UDP 192.168.2.15:5060;branch=z9hG4bK-52ec8212-791900.085
From: <sip:00004@sip.com>;tag=3fe6eb18
To: <sip:00005@sip.com>
Call-ID: 04930260@00004.192.168.1.1
CSeq: 803055598 INVITE
Content-Length: 0
```

```
=====
```

```
F34      192.168.1.1:5062(Server) -> 192.168.2.14:5060(00005@sip.com)
```

```
INVITE sip:00005@192.168.2.14 SIP/2.0
Via: SIP/2.0/UDP 192.168.1.1:5060;branch=z9hG4bK-508.061062.803055598
Via: SIP/2.0/UDP 192.168.2.15:5060;branch=z9hG4bK-52ec8212-791900.085
Record-Route: <sip:00005@192.168.1.1>
Route: <sip:192.168.1.1:5060>
From: 00004 <sip:00004@sip.com>;tag=3fe6eb18
To: <sip:00005@sip.com>
Call-ID: 04930260@00004.192.168.1.1
CSeq: 803055598 INVITE
Contact: <sip:00004@192.168.2.15>
max-forwards: 69
supported: 100rel
supported: replaces
Allow: INVITE, ACK, BYE, CANCEL, OPTIONS, PRACK, MESSAGE, REFER, NOTIFY
Content-Type: application/sdp
Accept: application/sdp, message/sipfrag
Content-Length: 249
```

```
v=0
o=- 68514 2901 IN IP4 192.168.2.15
s=-
c=IN IP4 192.168.2.15
t=0 0
m=audio 5008 RTP/AVP 0 8 4 18 96
a=rtpmap:0 PCMU/8000
a=rtpmap:8 PCMA/8000
a=rtpmap:4 G723/8000
a=rtpmap:18 G729/8000
a=rtpmap:96 telephone-event/8000
a=fmtp:96 0-11
```

```
=====
```

```
F35      192.168.2.14:1025(00005@sip.com) -> 192.168.1.1:5060(Server)
```

```
SIP/2.0 100 Trying
Via: SIP/2.0/UDP 192.168.1.1:5060;branch=z9hG4bK-508.061062.803055598
Via: SIP/2.0/UDP 192.168.2.15:5060;branch=z9hG4bK-52ec8212-791900.085
From: 00004 <sip:00004@sip.com>;tag=3fe6eb18
To: <sip:00005@sip.com>
Call-ID: 04930260@00004.192.168.1.1
CSeq: 803055598 INVITE
Content-Length: 0
```

```
=====
```

```
F36      192.168.2.14:1025(00005@sip.com) -> 192.168.1.1:5060(Server)
```

```
SIP/2.0 183 Session Progress
Via: SIP/2.0/UDP 192.168.1.1:5060;branch=z9hG4bK-508.061062.803055598
Via: SIP/2.0/UDP 192.168.2.15:5060;branch=z9hG4bK-52ec8212-791900.085
Record-Route: <sip:00005@192.168.1.1>
From: 00004 <sip:00004@sip.com>;tag=3fe6eb18
```

To: <sip:00005@sip.com>;tag=2049ae72  
 Call-ID: 04930260@00004.192.168.1.1  
 CSeq: 803055598 INVITE  
 Contact: <sip:00005@192.168.2.14>  
 Require: 100rel  
 RSeq: 476657195  
 Content-Length: 0

F37 192.168.1.1:5062(Server) -> 192.168.2.15:5060()

SIP/2.0 183 Session Progress  
 Via: SIP/2.0/UDP 192.168.2.15:5060;branch=z9hG4bK-52ec8212-791900.085  
 Record-Route: <sip:00005@192.168.1.1>  
 From: 00004 <sip:00004@sip.com>;tag=3fe6eb18  
 To: <sip:00005@sip.com>;tag=2049ae72  
 Call-ID: 04930260@00004.192.168.1.1  
 CSeq: 803055598 INVITE  
 Contact: <sip:00005@192.168.2.14>  
 require: 100rel  
 rseq: 476657195  
 Content-Length: 0

F38 192.168.2.15:1091() -> 192.168.1.1:5060(Server)

PRACK sip:00005@192.168.1.1 SIP/2.0  
 Via: SIP/2.0/UDP 192.168.2.15:5060;branch=z9hG4bK-52e65ea9-791904.508  
 Route: <sip:00005@192.168.2.14>  
 From: 00004 <sip:00004@sip.com>;tag=3fe6eb18  
 To: <sip:00005@sip.com>;tag=2049ae72  
 Call-ID: 04930260@00004.192.168.1.1  
 CSeq: 803055599 PRACK  
 Max-Forwards: 70  
 RAck: 476657195 803055598 INVITE  
 Content-Length: 0

F39 192.168.1.1:5062(Server) -> 192.168.2.14:5060(00005@sip.com)

PRACK sip:00005@192.168.2.14 SIP/2.0  
 Via: SIP/2.0/UDP 192.168.1.1:5060;branch=z9hG4bK-508.1084275452.803055599  
 Via: SIP/2.0/UDP 192.168.2.15:5060;branch=z9hG4bK-52e65ea9-791904.508  
 Route: <sip:00005@192.168.2.14>  
 From: 00004 <sip:00004@sip.com>;tag=3fe6eb18  
 To: <sip:00005@sip.com>;tag=2049ae72  
 Call-ID: 04930260@00004.192.168.1.1  
 CSeq: 803055599 PRACK  
 max-forwards: 69  
 rack: 476657195 803055598 INVITE  
 Content-Length: 0

F40 192.168.2.14:1025(00005@sip.com) -> 192.168.1.1:5060(Server)

SIP/2.0 200 OK  
 Via: SIP/2.0/UDP 192.168.1.1:5060;branch=z9hG4bK-508.1084275452.803055599  
 Via: SIP/2.0/UDP 192.168.2.15:5060;branch=z9hG4bK-52e65ea9-791904.508  
 From: 00004 <sip:00004@sip.com>;tag=3fe6eb18  
 To: <sip:00005@sip.com>;tag=2049ae72  
 Call-ID: 04930260@00004.192.168.1.1  
 CSeq: 803055599 PRACK  
 Content-Length: 0

F41 192.168.1.1:5062(Server) -> 192.168.2.15:5060()

SIP/2.0 200 OK  
 Via: SIP/2.0/UDP 192.168.2.15:5060;branch=z9hG4bK-52e65ea9-791904.508  
 From: 00004 <sip:00004@sip.com>;tag=3fe6eb18  
 To: <sip:00005@sip.com>;tag=2049ae72

Call-ID: 04930260@00004.192.168.1.1  
 CSeq: 803055599 PRACK  
 Content-Length: 0

F42 192.168.2.14:1025(00005@sip.com) -> 192.168.1.1:5060(Server)

SIP/2.0 180 Ringing  
 Via: SIP/2.0/UDP 192.168.1.1:5060;branch=z9hG4bK-508.061062.803055598  
 Via: SIP/2.0/UDP 192.168.2.15:5060;branch=z9hG4bK-52ec8212-791900.085  
 Record-Route: <sip:00005@192.168.1.1>  
 From: 00004 <sip:00004@sip.com>;tag=3fe6eb18  
 To: <sip:00005@sip.com>;tag=2049ae72  
 Call-ID: 04930260@00004.192.168.1.1  
 CSeq: 803055598 INVITE  
 Contact: <sip:00005@192.168.2.14>  
 Require: 100rel  
 RSeq: 476657196  
 Content-Length: 0

F43 192.168.1.1:5062(Server) -> 192.168.2.15:5060()

SIP/2.0 180 Ringing  
 Via: SIP/2.0/UDP 192.168.2.15:5060;branch=z9hG4bK-52ec8212-791900.085  
 Record-Route: <sip:00005@192.168.1.1>  
 From: 00004 <sip:00004@sip.com>;tag=3fe6eb18  
 To: <sip:00005@sip.com>;tag=2049ae72  
 Call-ID: 04930260@00004.192.168.1.1  
 CSeq: 803055598 INVITE  
 Contact: <sip:00005@192.168.2.14>  
 require: 100rel  
 rseq: 476657196  
 Content-Length: 0

F44 192.168.2.15:1091() -> 192.168.1.1:5060(Server)

PRACK sip:00005@192.168.1.1 SIP/2.0  
 Via: SIP/2.0/UDP 192.168.2.15:5060;branch=z9hG4bK-3a1d55d7-791905.092  
 Route: <sip:00005@192.168.2.14>  
 From: 00004 <sip:00004@sip.com>;tag=3fe6eb18  
 To: <sip:00005@sip.com>;tag=2049ae72  
 Call-ID: 04930260@00004.192.168.1.1  
 CSeq: 803055600 PRACK  
 Max-Forwards: 70  
 Rack: 476657196 803055598 INVITE  
 Content-Length: 0

F45 192.168.1.1:5062(Server) -> 192.168.2.14:5060(00005@sip.com)

PRACK sip:00005@192.168.2.14 SIP/2.0  
 Via: SIP/2.0/UDP 192.168.1.1:5060;branch=z9hG4bK-508.1084275453.803055600  
 Via: SIP/2.0/UDP 192.168.2.15:5060;branch=z9hG4bK-3a1d55d7-791905.092  
 Route: <sip:00005@192.168.2.14>  
 From: 00004 <sip:00004@sip.com>;tag=3fe6eb18  
 To: <sip:00005@sip.com>;tag=2049ae72  
 Call-ID: 04930260@00004.192.168.1.1  
 CSeq: 803055600 PRACK  
 max-forwards: 69  
 rack: 476657196 803055598 INVITE  
 Content-Length: 0

F46 192.168.2.14:1025(00005@sip.com) -> 192.168.1.1:5060(Server)

SIP/2.0 200 OK  
 Via: SIP/2.0/UDP 192.168.1.1:5060;branch=z9hG4bK-508.1084275453.803055600  
 Via: SIP/2.0/UDP 192.168.2.15:5060;branch=z9hG4bK-3a1d55d7-791905.092  
 From: 00004 <sip:00004@sip.com>;tag=3fe6eb18



To: <sip:00005@sip.com>;tag=2049ae72  
 Call-ID: 04930260@00004.192.168.1.1  
 CSeq: 803055600 PRACK  
 Content-Length: 0

F47 192.168.1.1:5062(Server) -> 192.168.2.15:5060()

SIP/2.0 200 OK  
 Via: SIP/2.0/UDP 192.168.2.15:5060;branch=z9hG4bK-3a1d55d7-791905.092  
 From: 00004 <sip:00004@sip.com>;tag=3fe6eb18  
 To: <sip:00005@sip.com>;tag=2049ae72  
 Call-ID: 04930260@00004.192.168.1.1  
 CSeq: 803055600 PRACK  
 Content-Length: 0

F48 192.168.2.10:1062(00004@sip.com) -> 192.168.1.1:5060(Server)

BYE sip:00004@192.168.1.1 SIP/2.0  
 Via: SIP/2.0/UDP 192.168.2.10:5060;branch=z9hG4bK-6b46b098-792075.343  
 Route: <sip:00004@192.168.2.15>  
 From: 00002 <sip:00002@sip.com>;tag=5a1bbf13  
 To: <sip:00004@sip.com>;tag=32b9021a  
 Call-ID: 376f0cdf@00002.192.168.1.1  
 CSeq: 1550834178 BYE  
 Proxy-Authorization: Digest username="00002", realm="heliossv2",  
 nonce="f452ce4b4af5a6612374d32243a0cd0b", uri="sip:00004@192.168.1.1",  
 response="f5f438028e79427b0d022cafd83cf50d", algorithm=MD5, cnonce="773d8c61",  
 opaque="1e4f914333118dd65478e7e36a51bbfa", qop=auth, nc=00000004  
 Max-Forwards: 70  
 Content-Length: 0

F49 192.168.1.1:5062(Server) -> 192.168.2.15:5060()

BYE sip:00004@192.168.2.15 SIP/2.0  
 Via: SIP/2.0/UDP 192.168.1.1:5060;branch=z9hG4bK-506.1084275458.1550834178  
 Via: SIP/2.0/UDP 192.168.2.10:5060;branch=z9hG4bK-6b46b098-792075.343  
 Route: <sip:00004@192.168.2.15>  
 From: 00002 <sip:00002@sip.com>;tag=5a1bbf13  
 To: <sip:00004@sip.com>;tag=32b9021a  
 Call-ID: 376f0cdf@00002.192.168.1.1  
 CSeq: 1550834178 BYE  
 max-forwards: 69  
 Content-Length: 0

F50 192.168.2.15:1091() -> 192.168.1.1:5060(Server)

SIP/2.0 200 OK  
 Via: SIP/2.0/UDP 192.168.1.1:5060;branch=z9hG4bK-506.1084275458.1550834178  
 Via: SIP/2.0/UDP 192.168.2.10:5060;branch=z9hG4bK-6b46b098-792075.343  
 From: 00002 <sip:00002@sip.com>;tag=5a1bbf13  
 To: <sip:00004@sip.com>;tag=32b9021a  
 Call-ID: 376f0cdf@00002.192.168.1.1  
 CSeq: 1550834178 BYE  
 Content-Length: 0

F51 192.168.2.10:1062(00004@sip.com) -> 192.168.1.1:5060(Server)

SIP/2.0 200 OK  
 Via: SIP/2.0/UDP 192.168.1.1:5060;branch=z9hG4bK-505.1084275458.1260217010  
 Via: SIP/2.0/UDP 192.168.2.15:5060;branch=z9hG4bK-3cc3a7e3-791910.448  
 From: <sip:00004@sip.com>;tag=32b9021a  
 To: 00002 <sip:00002@sip.com>;tag=5a1bbf13  
 Call-ID: 376f0cdf@00002.192.168.1.1  
 CSeq: 1260217010 BYE  
 Content-Length: 0

=====

F52            192.168.2.14:1025(00005@sip.com) -> 192.168.1.1:5060(Server)

SIP/2.0 200 OK  
Via: SIP/2.0/UDP 192.168.1.1:5060;branch=z9hG4bK-508.061062.803055598  
Via: SIP/2.0/UDP 192.168.2.15:5060;branch=z9hG4bK-52ec8212-791900.085  
Record-Route: <sip:00005@192.168.1.1>  
From: 00004 <sip:00004@sip.com>;tag=3fe6eb18  
To: <sip:00005@sip.com>;tag=2049ae72  
Call-ID: 04930260@00004.192.168.1.1  
CSeq: 803055598 INVITE  
Contact: <sip:00005@192.168.2.14>  
Supported: 100rel, replaces  
Allow: INVITE, ACK, BYE, CANCEL, OPTIONS, PRACK, MESSAGE, REFER, NOTIFY  
Content-Type: application/sdp  
Accept: application/sdp, message/sipfrag  
Content-Length: 176

v=0  
o=- 94577 12901 IN IP4 192.168.2.14  
s=-  
c=IN IP4 192.168.2.14  
t=0 0  
m=audio 5006 RTP/AVP 0 96  
a=rtpmap:0 PCMU/8000  
a=rtpmap:96 telephone-event/8000  
a=fmtp:96 0-11

=====

F53            192.168.1.1:5062(Server) -> 192.168.2.15:5060()

SIP/2.0 200 OK  
Via: SIP/2.0/UDP 192.168.2.15:5060;branch=z9hG4bK-52ec8212-791900.085  
Record-Route: <sip:00005@192.168.1.1>  
From: 00004 <sip:00004@sip.com>;tag=3fe6eb18  
To: <sip:00005@sip.com>;tag=2049ae72  
Call-ID: 04930260@00004.192.168.1.1  
CSeq: 803055598 INVITE  
Contact: <sip:00005@192.168.2.14>  
supported: 100rel  
supported: replaces  
Allow: INVITE, ACK, BYE, CANCEL, OPTIONS, PRACK, MESSAGE, REFER, NOTIFY  
Content-Type: application/sdp  
Accept: application/sdp, message/sipfrag  
Content-Length: 176

v=0  
o=- 94577 12901 IN IP4 192.168.2.14  
s=-  
c=IN IP4 192.168.2.14  
t=0 0  
m=audio 5006 RTP/AVP 0 96  
a=rtpmap:0 PCMU/8000  
a=rtpmap:96 telephone-event/8000  
a=fmtp:96 0-11

=====

F54            192.168.2.15:1091() -> 192.168.1.1:5060(Server)

ACK sip:00005@192.168.1.1 SIP/2.0  
Via: SIP/2.0/UDP 192.168.2.15:5060;branch=z9hG4bK-47650c16-791915.086  
Route: <sip:00005@192.168.2.14>  
From: 00004 <sip:00004@sip.com>;tag=3fe6eb18  
To: <sip:00005@sip.com>;tag=2049ae72  
Call-ID: 04930260@00004.192.168.1.1  
CSeq: 803055598 ACK  
Max-Forwards: 70  
Content-Length: 0

=====

F55            192.168.1.1:5062(Server) -> 192.168.2.14:5060(00005@sip.com)

ACK sip:00005@192.168.2.14 SIP/2.0  
Via: SIP/2.0/UDP 192.168.1.1:5060;branch=z9hG4bK-508.1084275463.803055598  
Via: SIP/2.0/UDP 192.168.2.15:5060;branch=z9hG4bK-47650c16-791915.086

From: 00004 <sip:00004@sip.com>;tag=3fe6eb18  
 To: <sip:00005@sip.com>;tag=2049ae72  
 Call-ID: 04930260@00004.192.168.1.1  
 CSeq: 803055598 ACK  
 max-forwards: 69  
 Content-Length: 0

F56 192.168.2.14:1025 (00005@sip.com) -> 192.168.1.1:5060 (Server)

BYE sip:00005@192.168.1.1 SIP/2.0  
 Via: SIP/2.0/UDP 192.168.2.14:5060;branch=z9hG4bK-2dc0aea-791872.396  
 Route: <sip:00004@192.168.2.15>  
 From: <sip:00005@sip.com>;tag=2049ae72  
 To: 00004 <sip:00004@sip.com>;tag=3fe6eb18  
 Call-ID: 04930260@00004.192.168.1.1  
 CSeq: 1729318312 BYE  
 Max-Forwards: 70  
 Content-Length: 0

F57 192.168.1.1:5062 (Server) -> 192.168.2.15:5060 ()

BYE sip:00004@192.168.2.15 SIP/2.0  
 Via: SIP/2.0/UDP 192.168.1.1:5060;branch=z9hG4bK-507.1084275495.1729318312  
 Via: SIP/2.0/UDP 192.168.2.14:5060;branch=z9hG4bK-2dc0aea-791872.396  
 Route: <sip:00004@192.168.2.15>  
 From: <sip:00005@sip.com>;tag=2049ae72  
 To: 00004 <sip:00004@sip.com>;tag=3fe6eb18  
 Call-ID: 04930260@00004.192.168.1.1  
 CSeq: 1729318312 BYE  
 max-forwards: 69  
 Content-Length: 0

F58 192.168.2.15:1091 () -> 192.168.1.1:5060 (Server)

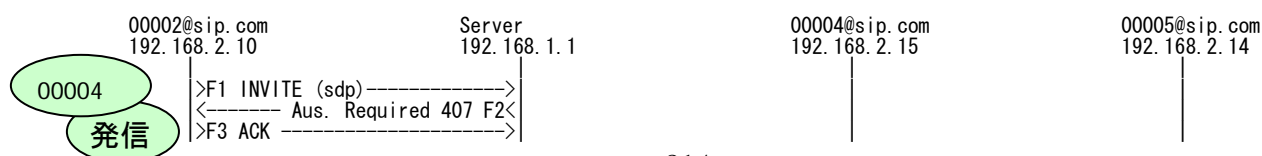
SIP/2.0 200 OK  
 Via: SIP/2.0/UDP 192.168.1.1:5060;branch=z9hG4bK-507.1084275495.1729318312  
 Via: SIP/2.0/UDP 192.168.2.14:5060;branch=z9hG4bK-2dc0aea-791872.396  
 From: <sip:00005@sip.com>;tag=2049ae72  
 To: 00004 <sip:00004@sip.com>;tag=3fe6eb18  
 Call-ID: 04930260@00004.192.168.1.1  
 CSeq: 1729318312 BYE  
 Content-Length: 0

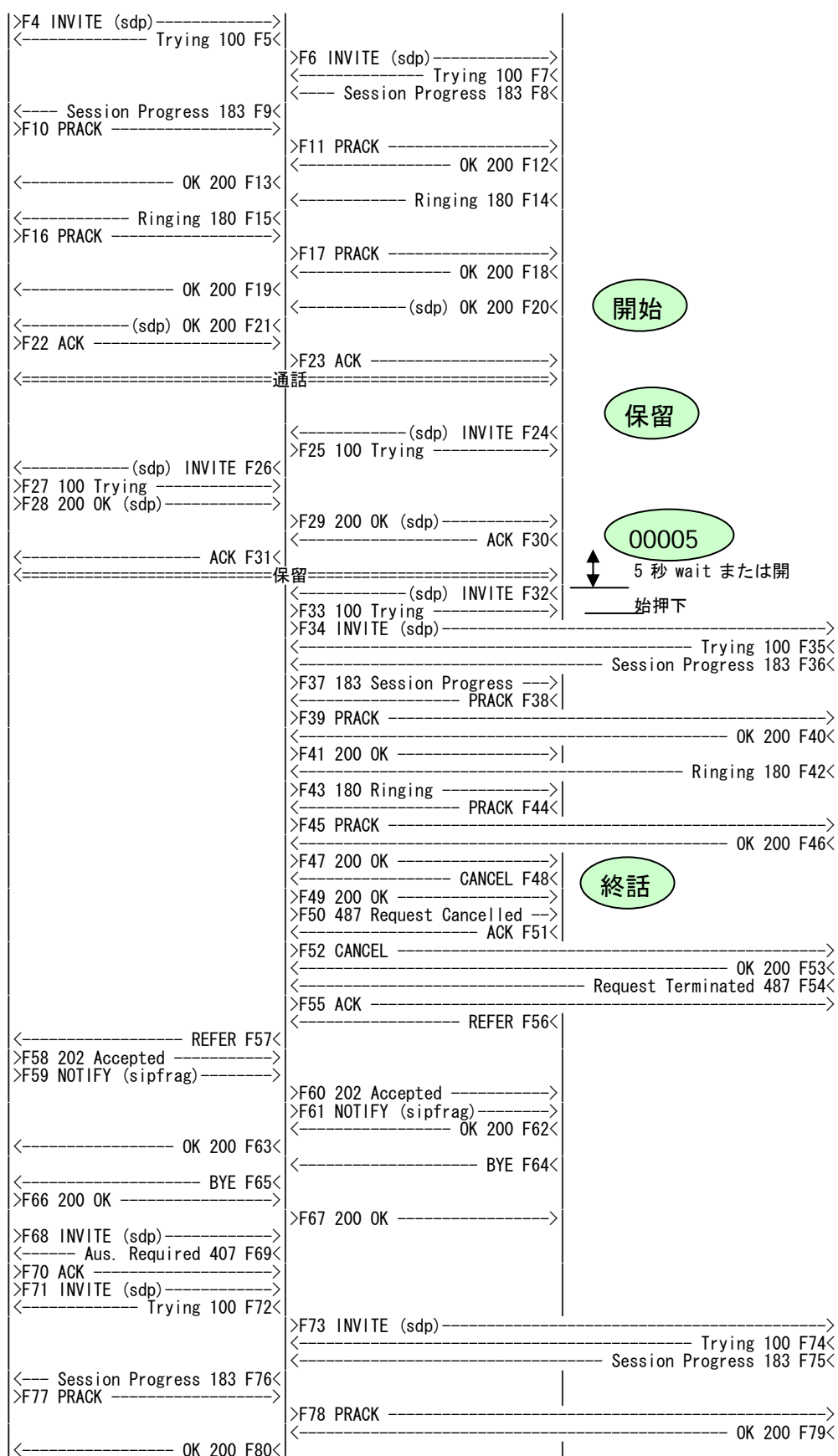
F59 192.168.1.1:5062 (Server) -> 192.168.2.14:5060 (00005@sip.com)

SIP/2.0 200 OK  
 Via: SIP/2.0/UDP 192.168.2.14:5060;branch=z9hG4bK-2dc0aea-791872.396  
 From: <sip:00005@sip.com>;tag=2049ae72  
 To: 00004 <sip:00004@sip.com>;tag=3fe6eb18  
 Call-ID: 04930260@00004.192.168.1.1  
 CSeq: 1729318312 BYE  
 Content-Length: 0

### 11.6.5. Attended Transfer を取りやめて UnAttended Transfer

転送先を呼び出しているときに転送者が切断をすると UnAttended Transfer の動作に移移する。





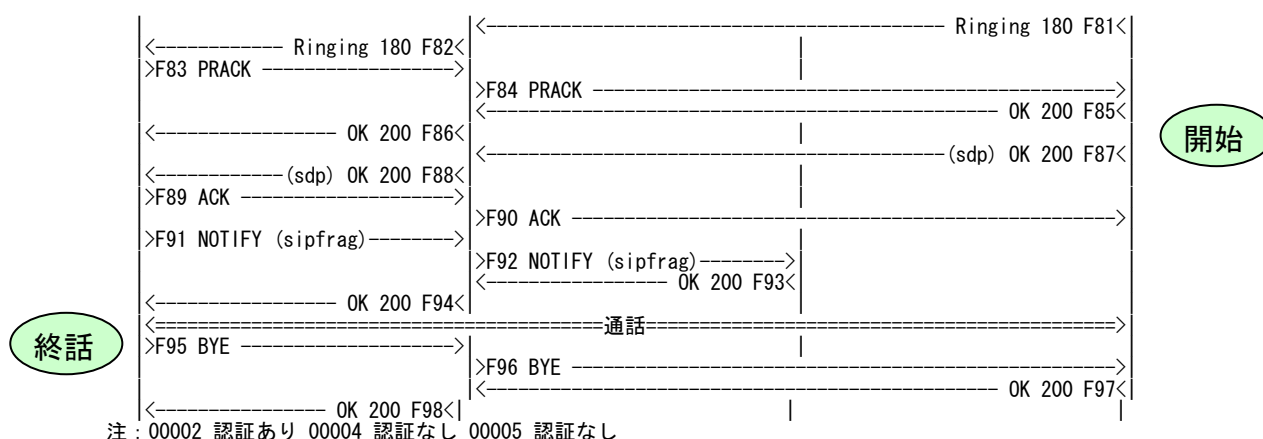


図 11-32 Attended Transfer を取りやめて UnAttended Transfer

(※N900iL では第 2 呼び出しを取りやめる事は出来ない。)

```
=====
F1      192.168.2.10:1091(1) -> 192.168.1.1:5060(2)

INVITE sip:00004@sip.com SIP/2.0
Via: SIP/2.0/UDP 192.168.2.10:5060;branch=z9hG4bK-323362a5-880731.187
Route: <sip:192.168.1.1:5060>
From: <sip:00002@sip.com>;tag=0ef53d14
To: <sip:00004@sip.com>
Call-ID: 33b71606@00002.192.168.1.1
CSeq: 1899349289 INVITE
Contact: <sip:00002@192.168.2.10>
Proxy-Authentication: Digest username="00002",
nonce="5f269569560f02e3aa55008197d545b3",
response="6ccb63f184f3c2ed22a4a2fb009d1f47", algorithm=MD5,
opaque="526e56ae1b5d94b459b91ea6485824e4", qop=auth, nc=00000002
Max-Forwards: 70
Supported: 100rel, replaces
Allow: INVITE, ACK, BYE, CANCEL, OPTIONS, PRACK, MESSAGE, REFER, NOTIFY
Content-Type: application/sdp
Accept: application/sdp, message/sipfrag
Content-Length: 250

v=0
o=- 168889 3501 IN IP4 192.168.2.10
s=-
c=IN IP4 192.168.2.10
t=0 0
m=audio 5008 RTP/AVP 0 8 4 18 96
a=rtpmap:0 PCMU/8000
a=rtpmap:8 PCMA/8000
a=rtpmap:4 G723/8000
a=rtpmap:18 G729/8000
a=rtpmap:96 telephone-event/8000
a=fmtp:96 0-11

=====
F2      192.168.1.1:5062(2) -> 192.168.2.10:5060(1)

SIP/2.0 407 Proxy Authentication Required
Via: SIP/2.0/UDP 192.168.2.10:5060;branch=z9hG4bK-323362a5-880731.187
From: <sip:00002@sip.com>;tag=0ef53d14
To: <sip:00004@sip.com>
Call-ID: 33b71606@00002.192.168.1.1
CSeq: 1899349289 INVITE
Proxy-Authenticate: Digest realm="heliossv2", nonce="3f2889f5153f5addfd77fe6ab9d77726",
opaque="fadef271857c7a6fbecba80c92205e50", stale=false, algorithm=MD5, qop="auth,auth-int"
Content-Length: 0

=====
F3      192.168.2.10:1091(1) -> 192.168.1.1:5060(2)
```

ACK sip:00004@sip.com SIP/2.0  
 Via: SIP/2.0/UDP 192.168.2.10:5060;branch=z9hG4bK-323362a5-880731.187  
 Route: <sip:192.168.1.1:5060>  
 From: <sip:00002@sip.com>;tag=0ef53d14  
 To: <sip:00004@sip.com>  
 Call-ID: 33b71606@00002.192.168.1.1  
 CSeq: 1899349289 ACK  
 Content-Length: 0

=====

F4 192.168.2.10:1091(1) -> 192.168.1.1:5060(2)

INVITE sip:00004@sip.com SIP/2.0  
 Via: SIP/2.0/UDP 192.168.2.10:5060;branch=z9hG4bK-14b896a7-880731.464  
 Route: <sip:192.168.1.1:5060>  
 From: <sip:00002@sip.com>;tag=0ef53d14  
 To: <sip:00004@sip.com>  
 Call-ID: 33b71606@00002.192.168.1.1  
 CSeq: 1899349290 INVITE  
 Contact: <sip:00002@192.168.2.10>  
 Proxy-Authorization: Digest username="00002",  
 nonce="3f2889f5153f5addfd77fe6ab9d77726", realm="heliossv2",  
 response="dd6df5bd8c875d7a3cb937f028d85fa3", uri="sip:00004@sip.com",  
 opaque="fedef271857c7a6fbebca80c92205e50", algorithm=MD5, cnonce="401320bf",  
 qop=auth, nc=00000001  
 Max-Forwards: 70  
 Supported: 100rel, replaces  
 Allow: INVITE, ACK, BYE, CANCEL, OPTIONS, PRACK, MESSAGE, REFER, NOTIFY  
 Content-Type: application/sdp  
 Accept: application/sdp, message/sipfrag  
 Content-Length: 250

v=0  
 o=- 168889 3501 IN IP4 192.168.2.10  
 s=-  
 c=IN IP4 192.168.2.10  
 t=0 0  
 m=audio 5008 RTP/AVP 0 8 4 18 96  
 a=rtpmap:0 PCMU/8000  
 a=rtpmap:8 PCMA/8000  
 a=rtpmap:4 G723/8000  
 a=rtpmap:18 G729/8000  
 a=rtpmap:96 telephone-event/8000  
 a=fmtp:96 0-11

=====

F5 192.168.1.1:5062(2) -> 192.168.2.10:5060(1)

SIP/2.0 100 Trying  
 Via: SIP/2.0/UDP 192.168.2.10:5060;branch=z9hG4bK-14b896a7-880731.464  
 From: <sip:00002@sip.com>;tag=0ef53d14  
 To: <sip:00004@sip.com>  
 Call-ID: 33b71606@00002.192.168.1.1  
 CSeq: 1899349290 INVITE  
 Content-Length: 0

=====

F6 192.168.1.1:5062(2) -> 192.168.2.15:5060(3)

INVITE sip:00004@192.168.2.15 SIP/2.0  
 Via: SIP/2.0/UDP 192.168.1.1:5060;branch=z9hG4bK-755.531143.1899349290  
 Via: SIP/2.0/UDP 192.168.2.10:5060;branch=z9hG4bK-14b896a7-880731.464  
 Record-Route: <sip:00004@192.168.1.1>  
 Route: <sip:192.168.1.1:5060>  
 From: 00002 <sip:00002@sip.com>;tag=0ef53d14  
 To: <sip:00004@sip.com>  
 Call-ID: 33b71606@00002.192.168.1.1  
 CSeq: 1899349290 INVITE  
 Contact: <sip:00002@192.168.2.10>  
 max-forwards: 69  
 supported: 100rel  
 supported: replaces  
 Allow: INVITE, ACK, BYE, CANCEL, OPTIONS, PRACK, MESSAGE, REFER, NOTIFY  
 Content-Type: application/sdp  
 Accept: application/sdp, message/sipfrag  
 Content-Length: 250

```
v=0
o=- 168889 3501 IN IP4 192.168.2.10
s=-
c=IN IP4 192.168.2.10
t=0 0
m=audio 5008 RTP/AVP 0 8 4 18 96
a=rtpmap:0 PCMU/8000
a=rtpmap:8 PCMA/8000
a=rtpmap:4 G723/8000
a=rtpmap:18 G729/8000
a=rtpmap:96 telephone-event/8000
a=fmtp:96 0-11
```

```
=====
F7          192.168.2.15:1135(3) -> 192.168.1.1:5060(2)
```

```
SIP/2.0 100 Trying
Via: SIP/2.0/UDP 192.168.1.1:5060;branch=z9hG4bK-755.531143.1899349290
Via: SIP/2.0/UDP 192.168.2.10:5060;branch=z9hG4bK-14b896a7-880731.464
From: 00002 <sip:00002@sip.com>;tag=0ef53d14
To: <sip:00004@sip.com>
Call-ID: 33b71606@00002.192.168.1.1
CSeq: 1899349290 INVITE
Content-Length: 0
```

```
=====
F8          192.168.2.15:1135(3) -> 192.168.1.1:5060(2)
```

```
SIP/2.0 183 Session Progress
Via: SIP/2.0/UDP 192.168.1.1:5060;branch=z9hG4bK-755.531143.1899349290
Via: SIP/2.0/UDP 192.168.2.10:5060;branch=z9hG4bK-14b896a7-880731.464
Record-Route: <sip:00004@192.168.1.1>
From: 00002 <sip:00002@sip.com>;tag=0ef53d14
To: <sip:00004@sip.com>;tag=168fef63
Call-ID: 33b71606@00002.192.168.1.1
CSeq: 1899349290 INVITE
Contact: <sip:00004@192.168.2.15>
Require: 100rel
RSeq: 666512512
Content-Length: 0
```

```
=====
F9          192.168.1.1:5062(2) -> 192.168.2.10:5060(1)
```

```
SIP/2.0 183 Session Progress
Via: SIP/2.0/UDP 192.168.2.10:5060;branch=z9hG4bK-14b896a7-880731.464
Record-Route: <sip:00004@192.168.1.1>
From: 00002 <sip:00002@sip.com>;tag=0ef53d14
To: <sip:00004@sip.com>;tag=168fef63
Call-ID: 33b71606@00002.192.168.1.1
CSeq: 1899349290 INVITE
Contact: <sip:00004@192.168.2.15>
require: 100rel
rseq: 666512512
Content-Length: 0
```

```
=====
F10         192.168.2.10:1091(1) -> 192.168.1.1:5060(2)
```

```
PRACK sip:00004@192.168.1.1 SIP/2.0
Via: SIP/2.0/UDP 192.168.2.10:5060;branch=z9hG4bK-71ab701-880732.003
Route: <sip:00004@192.168.2.15>
From: 00002 <sip:00002@sip.com>;tag=0ef53d14
To: <sip:00004@sip.com>;tag=168fef63
Call-ID: 33b71606@00002.192.168.1.1
CSeq: 1899349291 PRACK
Proxy-Authorization: Digest username="00002", realm="heliossv2",
nonce="3f2889f5153f5addfd77fe6ab9d77726", uri="sip:00004@192.168.1.1",
response="571c2c4cb6cbe80c24fc03581615e7c6", algorithm=MD5, cnonce="5f2a8c16",
opaque="fadedf271857c7a6fbecba80c92205e50", qop=auth, nc=00000002
Max-Forwards: 70
RAck: 666512512 1899349290 INVITE
Content-Length: 0
```

```
=====
F11      192.168.1.1:5062(2) -> 192.168.2.15:5060(3)

PRACK sip:00004@192.168.2.15 SIP/2.0
Via: SIP/2.0/UDP 192.168.1.1:5060;branch=z9hG4bK-755.1084364109.1899349291
Via: SIP/2.0/UDP 192.168.2.10:5060;branch=z9hG4bK-71ab701-880732.003
Route: <sip:00004@192.168.2.15>
From: 00002 <sip:00002@sip.com>;tag=0ef53d14
To: <sip:00004@sip.com>;tag=168fef63
Call-ID: 33b71606@00002.192.168.1.1
CSeq: 1899349291 PRACK
max-forwards: 69
rack: 666512512 1899349290 INVITE
Content-Length: 0
=====
```

```
=====
F12      192.168.2.15:1135(3) -> 192.168.1.1:5060(2)

SIP/2.0 200 OK
Via: SIP/2.0/UDP 192.168.1.1:5060;branch=z9hG4bK-755.1084364109.1899349291
Via: SIP/2.0/UDP 192.168.2.10:5060;branch=z9hG4bK-71ab701-880732.003
From: 00002 <sip:00002@sip.com>;tag=0ef53d14
To: <sip:00004@sip.com>;tag=168fef63
Call-ID: 33b71606@00002.192.168.1.1
CSeq: 1899349291 PRACK
Content-Length: 0
=====
```

```
=====
F13      192.168.1.1:5062(2) -> 192.168.2.10:5060(1)

SIP/2.0 200 OK
Via: SIP/2.0/UDP 192.168.2.10:5060;branch=z9hG4bK-71ab701-880732.003
From: 00002 <sip:00002@sip.com>;tag=0ef53d14
To: <sip:00004@sip.com>;tag=168fef63
Call-ID: 33b71606@00002.192.168.1.1
CSeq: 1899349291 PRACK
Content-Length: 0
=====
```

```
=====
F14      192.168.2.15:1135(3) -> 192.168.1.1:5060(2)

SIP/2.0 180 Ringing
Via: SIP/2.0/UDP 192.168.1.1:5060;branch=z9hG4bK-755.531143.1899349290
Via: SIP/2.0/UDP 192.168.2.10:5060;branch=z9hG4bK-14b896a7-880731.464
Record-Route: <sip:00004@192.168.1.1>
From: 00002 <sip:00002@sip.com>;tag=0ef53d14
To: <sip:00004@sip.com>;tag=168fef63
Call-ID: 33b71606@00002.192.168.1.1
CSeq: 1899349290 INVITE
Contact: <sip:00004@192.168.2.15>
Require: 100rel
RSeq: 666512513
Content-Length: 0
=====
```

```
=====
F15      192.168.1.1:5062(2) -> 192.168.2.10:5060(1)

SIP/2.0 180 Ringing
Via: SIP/2.0/UDP 192.168.2.10:5060;branch=z9hG4bK-14b896a7-880731.464
Record-Route: <sip:00004@192.168.1.1>
From: 00002 <sip:00002@sip.com>;tag=0ef53d14
To: <sip:00004@sip.com>;tag=168fef63
Call-ID: 33b71606@00002.192.168.1.1
CSeq: 1899349290 INVITE
Contact: <sip:00004@192.168.2.15>
require: 100rel
rseq: 666512513
Content-Length: 0
=====
```



F16 192.168.2.10:1091(1) -> 192.168.1.1:5060(2)

PRACK sip:00004@192.168.1.1 SIP/2.0  
Via: SIP/2.0/UDP 192.168.2.10:5060;branch=z9hG4bK-7482b28b-880732.603  
Route: <sip:00004@192.168.2.15>  
From: 00002 <sip:00002@sip.com>;tag=0ef53d14  
To: <sip:00004@sip.com>;tag=168fef63  
Call-ID: 33b71606@00002.192.168.1.1  
CSeq: 1899349292 PRACK  
Proxy-Authorization: Digest username="00002", realm="heliossv2",  
nonce="3f2889f5153f5addfd77fe6ab9d77726", uri="sip:00004@192.168.1.1",  
response="17bde4e591301ff99832a97d6b7b9956", algorithm=MD5, cnonce="3a1beca5",  
opaque="fadef271857c7a6fbeca80c92205e50", qop=auth, nc=00000003  
Max-Forwards: 70  
RAck: 666512513 1899349290 INVITE  
Content-Length: 0

F17 192.168.1.1:5062(2) -> 192.168.2.15:5060(3)

PRACK sip:00004@192.168.2.15 SIP/2.0  
Via: SIP/2.0/UDP 192.168.1.1:5060;branch=z9hG4bK-755.1084364109.1899349292  
Via: SIP/2.0/UDP 192.168.2.10:5060;branch=z9hG4bK-7482b28b-880732.603  
Route: <sip:00004@192.168.2.15>  
From: 00002 <sip:00002@sip.com>;tag=0ef53d14  
To: <sip:00004@sip.com>;tag=168fef63  
Call-ID: 33b71606@00002.192.168.1.1  
CSeq: 1899349292 PRACK  
max-forwards: 69  
rack: 666512513 1899349290 INVITE  
Content-Length: 0

F18 192.168.2.15:1135(3) -> 192.168.1.1:5060(2)

SIP/2.0 200 OK  
Via: SIP/2.0/UDP 192.168.1.1:5060;branch=z9hG4bK-755.1084364109.1899349292  
Via: SIP/2.0/UDP 192.168.2.10:5060;branch=z9hG4bK-7482b28b-880732.603  
From: 00002 <sip:00002@sip.com>;tag=0ef53d14  
To: <sip:00004@sip.com>;tag=168fef63  
Call-ID: 33b71606@00002.192.168.1.1  
CSeq: 1899349292 PRACK  
Content-Length: 0

F19 192.168.1.1:5062(2) -> 192.168.2.10:5060(1)

SIP/2.0 200 OK  
Via: SIP/2.0/UDP 192.168.2.10:5060;branch=z9hG4bK-7482b28b-880732.603  
From: 00002 <sip:00002@sip.com>;tag=0ef53d14  
To: <sip:00004@sip.com>;tag=168fef63  
Call-ID: 33b71606@00002.192.168.1.1  
CSeq: 1899349292 PRACK  
Content-Length: 0

F20 192.168.2.15:1135(3) -> 192.168.1.1:5060(2)

SIP/2.0 200 OK  
Via: SIP/2.0/UDP 192.168.1.1:5060;branch=z9hG4bK-755.531143.1899349290  
Via: SIP/2.0/UDP 192.168.2.10:5060;branch=z9hG4bK-14b896a7-880731.464  
Record-Route: <sip:00004@192.168.1.1>  
From: 00002 <sip:00002@sip.com>;tag=0ef53d14  
To: <sip:00004@sip.com>;tag=168fef63  
Call-ID: 33b71606@00002.192.168.1.1  
CSeq: 1899349290 INVITE  
Contact: <sip:00004@192.168.2.15>  
Supported: 100rel, replaces  
Allow: INVITE, ACK, BYE, CANCEL, OPTIONS, PRACK, MESSAGE, REFER, NOTIFY  
Content-Type: application/sdp  
Accept: application/sdp, message/sipfrag

Content-Length: 176

v=0  
 o=- 39216 12801 IN IP4 192.168.2.15  
 s=-  
 c=IN IP4 192.168.2.15  
 t=0 0  
 m=audio 5008 RTP/AVP 0 96  
 a=rtpmap:0 PCMU/8000  
 a=rtpmap:96 telephone-event/8000  
 a=fmtp:96 0-11

=====

F21 192.168.1.1:5062(2) -> 192.168.2.10:5060(1)

SIP/2.0 200 OK  
 Via: SIP/2.0/UDP 192.168.2.10:5060;branch=z9hG4bK-14b896a7-880731.464  
 Record-Route: <sip:00004@192.168.1.1>  
 From: 00002 <sip:00002@sip.com>;tag=0ef53d14  
 To: <sip:00004@sip.com>;tag=168fef63  
 Call-ID: 33b71606@00002.192.168.1.1  
 CSeq: 1899349290 INVITE  
 Contact: <sip:00004@192.168.2.15>  
 supported: 100rel  
 supported: replaces  
 Allow: INVITE, ACK, BYE, CANCEL, OPTIONS, PRACK, MESSAGE, REFER, NOTIFY  
 Content-Type: application/sdp  
 Accept: application/sdp, message/sipfrag  
 Content-Length: 176

v=0  
 o=- 39216 12801 IN IP4 192.168.2.15  
 s=-  
 c=IN IP4 192.168.2.15  
 t=0 0  
 m=audio 5008 RTP/AVP 0 96  
 a=rtpmap:0 PCMU/8000  
 a=rtpmap:96 telephone-event/8000  
 a=fmtp:96 0-11

=====

F22 192.168.2.10:1091(1) -> 192.168.1.1:5060(2)

ACK sip:00004@192.168.1.1 SIP/2.0  
 Via: SIP/2.0/UDP 192.168.2.10:5060;branch=z9hG4bK-44a89ab7-880736.097  
 Route: <sip:00004@192.168.2.15>  
 From: 00002 <sip:00002@sip.com>;tag=0ef53d14  
 To: <sip:00004@sip.com>;tag=168fef63  
 Call-ID: 33b71606@00002.192.168.1.1  
 CSeq: 1899349290 ACK  
 Proxy-Authorization: Digest username="00002", realm="heliossv2",  
 nonce="3f2889f5153f5addfd77fe6ab9d77726", uri="sip:00004@sip.com",  
 response="dd6df5bd8c875d7a3cb937f028d85fa3", algorithm=MD5,  
 opaque="fade7271857c7a6fbebca80c92205e50", qop=auth, nc=00000001  
 Max-Forwards: 70  
 Content-Length: 0

=====

F23 192.168.1.1:5062(2) -> 192.168.2.15:5060(3)

ACK sip:00004@192.168.2.15 SIP/2.0  
 Via: SIP/2.0/UDP 192.168.1.1:5060;branch=z9hG4bK-755.1084364113.1899349290  
 Via: SIP/2.0/UDP 192.168.2.10:5060;branch=z9hG4bK-44a89ab7-880736.097  
 From: 00002 <sip:00002@sip.com>;tag=0ef53d14  
 To: <sip:00004@sip.com>;tag=168fef63  
 Call-ID: 33b71606@00002.192.168.1.1  
 CSeq: 1899349290 ACK  
 max-forwards: 69  
 Content-Length: 0

=====

F24 192.168.2.15:1135(3) -> 192.168.1.1:5060(2)

INVITE sip:00004@192.168.1.1 SIP/2.0  
 Via: SIP/2.0/UDP 192.168.2.15:5060;branch=z9hG4bK-219d7c15-880578.095

Route: <sip:00002@192.168.2.10>  
 From: <sip:00004@sip.com>;tag=168fef63  
 To: 00002 <sip:00002@sip.com>;tag=0ef53d14  
 Call-ID: 33b71606@00002.192.168.1.1  
 CSeq: 765719507 INVITE  
 Contact: <sip:00004@192.168.2.15>  
 Max-Forwards: 70  
 Supported: 100rel, replaces  
 Allow: INVITE, ACK, BYE, CANCEL, OPTIONS, PRACK, MESSAGE, REFER, NOTIFY  
 Content-Type: application/sdp  
 Content-Length: 188

v=0  
 o=- 66738 12802 IN IP4 192.168.2.15  
 s=-  
 c=IN IP4 192.168.2.15  
 t=0 0  
 m=audio 5008 RTP/AVP 0 96  
 a=rtpmap:0 PCMU/8000  
 a=rtpmap:96 telephone-event/8000  
 a=fmtp:96 0-11  
 a=inactive

---

F25 192.168.1.1:5062(2) -> 192.168.2.15:5060(3)

SIP/2.0 100 Trying  
 Via: SIP/2.0/UDP 192.168.2.15:5060;branch=z9hG4bK-219d7c15-880578.095  
 From: <sip:00004@sip.com>;tag=168fef63  
 To: 00002 <sip:00002@sip.com>;tag=0ef53d14  
 Call-ID: 33b71606@00002.192.168.1.1  
 CSeq: 765719507 INVITE  
 Content-Length: 0

---

F26 192.168.1.1:5062(2) -> 192.168.2.10:5060(1)

INVITE sip:00002@192.168.2.10 SIP/2.0  
 Via: SIP/2.0/UDP 192.168.1.1:5060;branch=z9hG4bK-754.531143.765719507  
 Via: SIP/2.0/UDP 192.168.2.15:5060;branch=z9hG4bK-219d7c15-880578.095  
 Record-Route: <sip:00004@192.168.1.1>  
 Route: <sip:00002@192.168.2.10>  
 From: <sip:00004@sip.com>;tag=168fef63  
 To: 00002 <sip:00002@sip.com>;tag=0ef53d14  
 Call-ID: 33b71606@00002.192.168.1.1  
 CSeq: 765719507 INVITE  
 Contact: <sip:00004@192.168.2.15>  
 max-forwards: 69  
 supported: 100rel  
 supported: replaces  
 Allow: INVITE, ACK, BYE, CANCEL, OPTIONS, PRACK, MESSAGE, REFER, NOTIFY  
 Content-Type: application/sdp  
 Content-Length: 188

v=0  
 o=- 66738 12802 IN IP4 192.168.2.15  
 s=-  
 c=IN IP4 192.168.2.15  
 t=0 0  
 m=audio 5008 RTP/AVP 0 96  
 a=rtpmap:0 PCMU/8000  
 a=rtpmap:96 telephone-event/8000  
 a=fmtp:96 0-11  
 a=inactive

---

F27 192.168.2.10:1091(1) -> 192.168.1.1:5060(2)

SIP/2.0 100 Trying  
 Via: SIP/2.0/UDP 192.168.1.1:5060;branch=z9hG4bK-754.531143.765719507  
 Via: SIP/2.0/UDP 192.168.2.15:5060;branch=z9hG4bK-219d7c15-880578.095  
 From: <sip:00004@sip.com>;tag=168fef63  
 To: 00002 <sip:00002@sip.com>;tag=0ef53d14  
 Call-ID: 33b71606@00002.192.168.1.1  
 CSeq: 765719507 INVITE  
 Content-Length: 0

```
=====
F28      192.168.2.10:1091(1) -> 192.168.1.1:5060(2)

SIP/2.0 200 OK
Via: SIP/2.0/UDP 192.168.1.1:5060;branch=z9hG4bK-754.531143.765719507
Via: SIP/2.0/UDP 192.168.2.15:5060;branch=z9hG4bK-219d7c15-880578.095
Record-Route: <sip:00004@192.168.1.1>
From: <sip:00004@sip.com>;tag=168fef63
To: 00002 <sip:00002@sip.com>;tag=0ef53d14
Call-ID: 33b71606@00002.192.168.1.1
CSeq: 765719507 INVITE
Contact: <sip:00002@192.168.2.10>
Supported: 100rel, replaces
Allow: INVITE, ACK, BYE, CANCEL, OPTIONS, PRACK, MESSAGE, REFER, NOTIFY
Content-Type: application/sdp
Accept: application/sdp, message/sipfrag
Content-Length: 187

v=0
o=- 61471 3502 IN IP4 192.168.2.10
s=-
c=IN IP4 192.168.2.10
t=0 0
m=audio 5008 RTP/AVP 0 96
a=rtpmap:0 PCMU/8000
a=rtpmap:96 telephone-event/8000
a=fmtp:96 0-11
a=inactive
=====
```

```
=====
F29      192.168.1.1:5062(2) -> 192.168.2.15:5060(3)

SIP/2.0 200 OK
Via: SIP/2.0/UDP 192.168.2.15:5060;branch=z9hG4bK-219d7c15-880578.095
Record-Route: <sip:00004@192.168.1.1>
From: <sip:00004@sip.com>;tag=168fef63
To: 00002 <sip:00002@sip.com>;tag=0ef53d14
Call-ID: 33b71606@00002.192.168.1.1
CSeq: 765719507 INVITE
Contact: <sip:00002@192.168.2.10>
supported: 100rel
supported: replaces
Allow: INVITE, ACK, BYE, CANCEL, OPTIONS, PRACK, MESSAGE, REFER, NOTIFY
Content-Type: application/sdp
Accept: application/sdp, message/sipfrag
Content-Length: 187

v=0
o=- 61471 3502 IN IP4 192.168.2.10
s=-
c=IN IP4 192.168.2.10
t=0 0
m=audio 5008 RTP/AVP 0 96
a=rtpmap:0 PCMU/8000
a=rtpmap:96 telephone-event/8000
a=fmtp:96 0-11
a=inactive
=====
```

```
=====
F30      192.168.2.15:1135(3) -> 192.168.1.1:5060(2)

ACK sip:00004@192.168.1.1 SIP/2.0
Via: SIP/2.0/UDP 192.168.2.15:5060;branch=z9hG4bK-aeceeb4-880578.400
Route: <sip:00002@192.168.2.10>
From: <sip:00004@sip.com>;tag=168fef63
To: 00002 <sip:00002@sip.com>;tag=0ef53d14
Call-ID: 33b71606@00002.192.168.1.1
CSeq: 765719507 ACK
Max-Forwards: 70
Content-Length: 0
=====
```

```
=====
F31      192.168.1.1:5062(2) -> 192.168.2.10:5060(1)

ACK sip:00002@192.168.2.10 SIP/2.0
=====
```

## FOMA/WLAN デュアル端末に関する技術参考資料 第 1.2 版

Via: SIP/2.0/UDP 192.168.1.1:5060;branch=z9hG4bK-754.1084364121.765719507  
Via: SIP/2.0/UDP 192.168.2.15:5060;branch=z9hG4bK-aeceeb4-880578.400  
From: <sip:00004@sip.com>;tag=168fef63  
To: 00002 <sip:00002@sip.com>;tag=0ef53d14  
Call-ID: 33b71606@00002.192.168.1.1  
CSeq: 765719507 ACK  
max-forwards: 69  
Content-Length: 0

=====

F32 192.168.2.15:1135(3) -> 192.168.1.1:5060(2)

INVITE sip:00005@sip.com SIP/2.0  
Via: SIP/2.0/UDP 192.168.2.15:5060;branch=z9hG4bK-4f0f570b-880595.545  
Route: <sip:192.168.1.1:5060>  
From: <sip:00004@sip.com>;tag=3738c58f  
To: <sip:00005@sip.com>  
Call-ID: 1abab41e@00004.192.168.1.1  
CSeq: 748124132 INVITE  
Contact: <sip:00004@192.168.2.15>  
Max-Forwards: 70  
Supported: 100rel, replaces  
Allow: INVITE, ACK, BYE, CANCEL, OPTIONS, PRACK, MESSAGE, REFER, NOTIFY  
Content-Type: application/sdp  
Accept: application/sdp, message/sipfrag  
Content-Length: 252

v=0  
o=- 516735 516735 IN IP4 192.168.2.15  
s=-  
c=IN IP4 192.168.2.15  
t=0 0  
m=audio 5006 RTP/AVP 0 8 4 18 96  
a=rtpmap:0 PCMU/8000  
a=rtpmap:8 PCMA/8000  
a=rtpmap:4 G723/8000  
a=rtpmap:18 G729/8000  
a=rtpmap:96 telephone-event/8000  
a=fmtp:96 0-11

=====

F33 192.168.1.1:5062(2) -> 192.168.2.15:5060(3)

SIP/2.0 100 Trying  
Via: SIP/2.0/UDP 192.168.2.15:5060;branch=z9hG4bK-4f0f570b-880595.545  
From: <sip:00004@sip.com>;tag=3738c58f  
To: <sip:00005@sip.com>  
Call-ID: 1abab41e@00004.192.168.1.1  
CSeq: 748124132 INVITE  
Content-Length: 0

=====

F34 192.168.1.1:5062(2) -> 192.168.2.14:5060(4)

INVITE sip:00005@192.168.2.14 SIP/2.0  
Via: SIP/2.0/UDP 192.168.1.1:5060;branch=z9hG4bK-757.711244.748124132  
Via: SIP/2.0/UDP 192.168.2.15:5060;branch=z9hG4bK-4f0f570b-880595.545  
Record-Route: <sip:00005@192.168.1.1>  
Route: <sip:192.168.1.1:5060>  
From: 00004 <sip:00004@sip.com>;tag=3738c58f  
To: <sip:00005@sip.com>  
Call-ID: 1abab41e@00004.192.168.1.1  
CSeq: 748124132 INVITE  
Contact: <sip:00004@192.168.2.15>  
max-forwards: 69  
supported: 100rel  
supported: replaces  
Allow: INVITE, ACK, BYE, CANCEL, OPTIONS, PRACK, MESSAGE, REFER, NOTIFY  
Content-Type: application/sdp  
Accept: application/sdp, message/sipfrag  
Content-Length: 252

v=0  
o=- 516735 516735 IN IP4 192.168.2.15  
s=-  
c=IN IP4 192.168.2.15

```
t=0 0
m=audio 5006 RTP/AVP 0 8 4 18 96
a=rtpmap:0 PCMU/8000
a=rtpmap:8 PCMA/8000
a=rtpmap:4 G723/8000
a=rtpmap:18 G729/8000
a=rtpmap:96 telephone-event/8000
a=fmtp:96 0-11
```

```
=====
F35      192.168.2.14:1057(4) -> 192.168.1.1:5060(2)
```

```
SIP/2.0 100 Trying
Via: SIP/2.0/UDP 192.168.1.1:5060;branch=z9hG4bK-757.711244.748124132
Via: SIP/2.0/UDP 192.168.2.15:5060;branch=z9hG4bK-4f0f570b-880595.545
From: 00004 <sip:00004@sip.com>;tag=3738c58f
To: <sip:00005@sip.com>
Call-ID: 1abab41e@00004.192.168.1.1
CSeq: 748124132 INVITE
Content-Length: 0
```

```
=====
F36      192.168.2.14:1057(4) -> 192.168.1.1:5060(2)
```

```
SIP/2.0 183 Session Progress
Via: SIP/2.0/UDP 192.168.1.1:5060;branch=z9hG4bK-757.711244.748124132
Via: SIP/2.0/UDP 192.168.2.15:5060;branch=z9hG4bK-4f0f570b-880595.545
Record-Route: <sip:00005@192.168.1.1>
From: 00004 <sip:00004@sip.com>;tag=3738c58f
To: <sip:00005@sip.com>;tag=3e29ab2a
Call-ID: 1abab41e@00004.192.168.1.1
CSeq: 748124132 INVITE
Contact: <sip:00005@192.168.2.14>
Require: 100rel
RSeq: 970735273
Content-Length: 0
```

```
=====
F37      192.168.1.1:5062(2) -> 192.168.2.15:5060(3)
```

```
SIP/2.0 183 Session Progress
Via: SIP/2.0/UDP 192.168.2.15:5060;branch=z9hG4bK-4f0f570b-880595.545
Record-Route: <sip:00005@192.168.1.1>
From: 00004 <sip:00004@sip.com>;tag=3738c58f
To: <sip:00005@sip.com>;tag=3e29ab2a
Call-ID: 1abab41e@00004.192.168.1.1
CSeq: 748124132 INVITE
Contact: <sip:00005@192.168.2.14>
require: 100rel
rseq: 970735273
Content-Length: 0
```

```
=====
F38      192.168.2.15:1135(3) -> 192.168.1.1:5060(2)
```

```
PRACK sip:00005@192.168.1.1 SIP/2.0
Via: SIP/2.0/UDP 192.168.2.15:5060;branch=z9hG4bK-4be1c732-880596.841
Route: <sip:00005@192.168.2.14>
From: 00004 <sip:00004@sip.com>;tag=3738c58f
To: <sip:00005@sip.com>;tag=3e29ab2a
Call-ID: 1abab41e@00004.192.168.1.1
CSeq: 748124133 PRACK
Max-Forwards: 70
RAck: 970735273 748124132 INVITE
Content-Length: 0
```

```
=====
F39      192.168.1.1:5062(2) -> 192.168.2.14:5060(4)
```

```
PRACK sip:00005@192.168.2.14 SIP/2.0
Via: SIP/2.0/UDP 192.168.1.1:5060;branch=z9hG4bK-757.1084364139.748124133
Via: SIP/2.0/UDP 192.168.2.15:5060;branch=z9hG4bK-4be1c732-880596.841
```

Route: <sip:00005@192.168.2.14>  
 From: 00004 <sip:00004@sip.com>;tag=3738c58f  
 To: <sip:00005@sip.com>;tag=3e29ab2a  
 Call-ID: 1abab41e@00004.192.168.1.1  
 CSeq: 748124133 PRACK  
 max-forwards: 69  
 rack: 970735273 748124132 INVITE  
 Content-Length: 0

F40 192.168.2.14:1057(4) -> 192.168.1.1:5060(2)

SIP/2.0 200 OK  
 Via: SIP/2.0/UDP 192.168.1.1:5060;branch=z9hG4bK-757.1084364139.748124133  
 Via: SIP/2.0/UDP 192.168.2.15:5060;branch=z9hG4bK-4be1c732-880596.841  
 From: 00004 <sip:00004@sip.com>;tag=3738c58f  
 To: <sip:00005@sip.com>;tag=3e29ab2a  
 Call-ID: 1abab41e@00004.192.168.1.1  
 CSeq: 748124133 PRACK  
 Content-Length: 0

F41 192.168.1.1:5062(2) -> 192.168.2.15:5060(3)

SIP/2.0 200 OK  
 Via: SIP/2.0/UDP 192.168.2.15:5060;branch=z9hG4bK-4be1c732-880596.841  
 From: 00004 <sip:00004@sip.com>;tag=3738c58f  
 To: <sip:00005@sip.com>;tag=3e29ab2a  
 Call-ID: 1abab41e@00004.192.168.1.1  
 CSeq: 748124133 PRACK  
 Content-Length: 0

F42 192.168.2.14:1057(4) -> 192.168.1.1:5060(2)

SIP/2.0 180 Ringing  
 Via: SIP/2.0/UDP 192.168.1.1:5060;branch=z9hG4bK-757.711244.748124132  
 Via: SIP/2.0/UDP 192.168.2.15:5060;branch=z9hG4bK-4f0f570b-880595.545  
 Record-Route: <sip:00005@192.168.1.1>  
 From: 00004 <sip:00004@sip.com>;tag=3738c58f  
 To: <sip:00005@sip.com>;tag=3e29ab2a  
 Call-ID: 1abab41e@00004.192.168.1.1  
 CSeq: 748124132 INVITE  
 Contact: <sip:00005@192.168.2.14>  
 Require: 100rel  
 RSeq: 970735274  
 Content-Length: 0

F43 192.168.1.1:5062(2) -> 192.168.2.15:5060(3)

SIP/2.0 180 Ringing  
 Via: SIP/2.0/UDP 192.168.2.15:5060;branch=z9hG4bK-4f0f570b-880595.545  
 Record-Route: <sip:00005@192.168.1.1>  
 From: 00004 <sip:00004@sip.com>;tag=3738c58f  
 To: <sip:00005@sip.com>;tag=3e29ab2a  
 Call-ID: 1abab41e@00004.192.168.1.1  
 CSeq: 748124132 INVITE  
 Contact: <sip:00005@192.168.2.14>  
 require: 100rel  
 rseq: 970735274  
 Content-Length: 0

F44 192.168.2.15:1135(3) -> 192.168.1.1:5060(2)

PRACK sip:00005@192.168.1.1 SIP/2.0  
 Via: SIP/2.0/UDP 192.168.2.15:5060;branch=z9hG4bK-7e34cd07-880597.433  
 Route: <sip:00005@192.168.2.14>  
 From: 00004 <sip:00004@sip.com>;tag=3738c58f  
 To: <sip:00005@sip.com>;tag=3e29ab2a

Call-ID: 1abab41e@00004.192.168.1.1  
CSeq: 748124134 PRACK  
Max-Forwards: 70  
RAck: 970735274 748124132 INVITE  
Content-Length: 0

F45 192.168.1.1:5062(2) -> 192.168.2.14:5060(4)

PRACK sip:00005@192.168.2.14 SIP/2.0  
Via: SIP/2.0/UDP 192.168.1.1:5060;branch=z9hG4bK-757.1084364139.748124134  
Via: SIP/2.0/UDP 192.168.2.15:5060;branch=z9hG4bK-7e34cd07-880597.433  
Route: <sip:00005@192.168.2.14>  
From: 00004 <sip:00004@sip.com>;tag=3738c58f  
To: <sip:00005@sip.com>;tag=3e29ab2a  
Call-ID: 1abab41e@00004.192.168.1.1  
CSeq: 748124134 PRACK  
max-forwards: 69  
rack: 970735274 748124132 INVITE  
Content-Length: 0

F46 192.168.2.14:1057(4) -> 192.168.1.1:5060(2)

SIP/2.0 200 OK  
Via: SIP/2.0/UDP 192.168.1.1:5060;branch=z9hG4bK-757.1084364139.748124134  
Via: SIP/2.0/UDP 192.168.2.15:5060;branch=z9hG4bK-7e34cd07-880597.433  
From: 00004 <sip:00004@sip.com>;tag=3738c58f  
To: <sip:00005@sip.com>;tag=3e29ab2a  
Call-ID: 1abab41e@00004.192.168.1.1  
CSeq: 748124134 PRACK  
Content-Length: 0

F47 192.168.1.1:5062(2) -> 192.168.2.15:5060(3)

SIP/2.0 200 OK  
Via: SIP/2.0/UDP 192.168.2.15:5060;branch=z9hG4bK-7e34cd07-880597.433  
From: 00004 <sip:00004@sip.com>;tag=3738c58f  
To: <sip:00005@sip.com>;tag=3e29ab2a  
Call-ID: 1abab41e@00004.192.168.1.1  
CSeq: 748124134 PRACK  
Content-Length: 0

F48 192.168.2.15:1135(3) -> 192.168.1.1:5060(2)

CANCEL sip:00005@sip.com SIP/2.0  
Via: SIP/2.0/UDP 192.168.2.15:5060;branch=z9hG4bK-4f0f570b-880595.545  
Route: <sip:192.168.1.1:5060>  
From: <sip:00004@sip.com>;tag=3738c58f  
To: <sip:00005@sip.com>  
Call-ID: 1abab41e@00004.192.168.1.1  
CSeq: 748124132 CANCEL  
Content-Length: 0

F49 192.168.1.1:5062(2) -> 192.168.2.15:5060(3)

SIP/2.0 200 OK  
Via: SIP/2.0/UDP 192.168.2.15:5060;branch=z9hG4bK-4f0f570b-880595.545  
From: <sip:00004@sip.com>;tag=3738c58f  
To: <sip:00005@sip.com>  
Call-ID: 1abab41e@00004.192.168.1.1  
CSeq: 748124132 CANCEL  
Content-Length: 0

F50 192.168.1.1:5062(2) -> 192.168.2.15:5060(3)



SIP/2.0 487 Request Cancelled  
Via: SIP/2.0/UDP 192.168.2.15:5060;branch=z9hG4bK-4f0f570b-880595.545  
From: <sip:00004@sip.com>;tag=3738c58f  
To: <sip:00005@sip.com>  
Call-ID: 1abab41e@00004.192.168.1.1  
CSeq: 748124132 INVITE  
Content-Length: 0

=====

F51            192.168.2.15:1135 (3) -> 192.168.1.1:5060 (2)

ACK sip:00005@sip.com SIP/2.0  
Via: SIP/2.0/UDP 192.168.2.15:5060;branch=z9hG4bK-4f0f570b-880595.545  
Route: <sip:192.168.1.1:5060>  
From: <sip:00004@sip.com>;tag=3738c58f  
To: <sip:00005@sip.com>  
Call-ID: 1abab41e@00004.192.168.1.1  
CSeq: 748124132 ACK  
Content-Length: 0

=====

F52            192.168.1.1:5062 (2) -> 192.168.2.14:5060 (4)

CANCEL sip:00005@192.168.2.14 SIP/2.0  
Via: SIP/2.0/UDP 192.168.1.1:5060;branch=z9hG4bK-757.711244.748124132  
Record-Route: <sip:00005@192.168.1.1>  
Route: <sip:192.168.1.1:5060>  
From: <sip:00004@sip.com>;tag=3738c58f  
To: <sip:00005@sip.com>  
Call-ID: 1abab41e@00004.192.168.1.1  
CSeq: 748124132 CANCEL  
Content-Length: 0

=====

F53            192.168.2.14:1057 (4) -> 192.168.1.1:5060 (2)

SIP/2.0 200 OK  
Via: SIP/2.0/UDP 192.168.1.1:5060;branch=z9hG4bK-757.711244.748124132  
From: <sip:00004@sip.com>;tag=3738c58f  
To: <sip:00005@sip.com>  
Call-ID: 1abab41e@00004.192.168.1.1  
CSeq: 748124132 CANCEL  
Content-Length: 0

=====

F54            192.168.2.14:1057 (4) -> 192.168.1.1:5060 (2)

SIP/2.0 487 Request Terminated  
Via: SIP/2.0/UDP 192.168.1.1:5060;branch=z9hG4bK-757.711244.748124132  
Via: SIP/2.0/UDP 192.168.2.15:5060;branch=z9hG4bK-4f0f570b-880595.545  
From: 00004 <sip:00004@sip.com>;tag=3738c58f  
To: <sip:00005@sip.com>;tag=3e29ab2a  
Call-ID: 1abab41e@00004.192.168.1.1  
CSeq: 748124132 INVITE  
Content-Length: 0

=====

F55            192.168.1.1:5062 (2) -> 192.168.2.14:5060 (4)

ACK sip:00005@192.168.2.14 SIP/2.0  
Via: SIP/2.0/UDP 192.168.1.1:5060;branch=z9hG4bK-757.711244.748124132  
Route: <sip:192.168.1.1:5060>  
From: 00004 <sip:00004@sip.com>;tag=3738c58f  
To: <sip:00005@sip.com>;tag=3e29ab2a  
Call-ID: 1abab41e@00004.192.168.1.1  
CSeq: 748124132 ACK  
Content-Length: 0

=====

F56 192.168.2.15:1135(3) -> 192.168.1.1:5060(2)

REFER sip:00004@192.168.1.1 SIP/2.0  
 Via: SIP/2.0/UDP 192.168.2.15:5060;branch=z9hG4bK-57b58e9b-880599.775  
 Route: <sip:00002@192.168.2.10>  
 From: <sip:00004@sip.com>;tag=168fef63  
 To: 00002 <sip:00002@sip.com>;tag=0ef53d14  
 Call-ID: 33b71606@00002.192.168.1.1  
 CSeq: 765719508 REFER  
 Contact: <sip:00004@192.168.2.15>  
 Max-Forwards: 70  
 Refer-To: <sip:00005@sip.com>  
 Referred-By: <sip:00004@sip.com>  
 Content-Length: 0

F57 192.168.1.1:5062(2) -> 192.168.2.10:5060(1)

REFER sip:00002@192.168.2.10 SIP/2.0  
 Via: SIP/2.0/UDP 192.168.1.1:5060;branch=z9hG4bK-754.1084364141.765719508  
 Via: SIP/2.0/UDP 192.168.2.15:5060;branch=z9hG4bK-57b58e9b-880599.775  
 Route: <sip:00002@192.168.2.10>  
 From: <sip:00004@sip.com>;tag=168fef63  
 To: 00002 <sip:00002@sip.com>;tag=0ef53d14  
 Call-ID: 33b71606@00002.192.168.1.1  
 CSeq: 765719508 REFER  
 Contact: <sip:00004@192.168.2.15>  
 max-forwards: 69  
 refer-to: <sip:00005@sip.com>  
 referred-by: <sip:00004@sip.com>  
 Content-Length: 0

F58 192.168.2.10:1091(1) -> 192.168.1.1:5060(2)

SIP/2.0 202 Accepted  
 Via: SIP/2.0/UDP 192.168.1.1:5060;branch=z9hG4bK-754.1084364141.765719508  
 Via: SIP/2.0/UDP 192.168.2.15:5060;branch=z9hG4bK-57b58e9b-880599.775  
 From: <sip:00004@sip.com>;tag=168fef63  
 To: 00002 <sip:00002@sip.com>;tag=0ef53d14  
 Call-ID: 33b71606@00002.192.168.1.1  
 CSeq: 765719508 REFER  
 Contact: <sip:00002@192.168.2.10>  
 Content-Length: 0

F59 192.168.2.10:1091(1) -> 192.168.1.1:5060(2)

NOTIFY sip:00004@192.168.1.1 SIP/2.0  
 Via: SIP/2.0/UDP 192.168.2.10:5060;branch=z9hG4bK-682e1229-880764.656  
 Route: <sip:00004@192.168.2.15>  
 From: 00002 <sip:00002@sip.com>;tag=0ef53d14  
 To: <sip:00004@sip.com>;tag=168fef63  
 Call-ID: 33b71606@00002.192.168.1.1  
 CSeq: 1899349293 NOTIFY  
 Contact: <sip:00002@192.168.2.10>  
 Proxy-Authorization: Digest username="00002", realm="heliossv2",  
 nonce="3f2889f5153f5addfd77fe6ab9d77726", uri="sip:00004@192.168.1.1",  
 response="bbd9fe41237499a210854eb91f6e82d0", algorithm=MD5, cnonce="008e8b4f",  
 opaque="fade7271857c7a6fbecba80c92205e50", qop=auth, nc=00000004  
 Max-Forwards: 70  
 Event: refer  
 Subscription-State: active;expires=30  
 Content-Type: message/sipfrag  
 Content-Length: 18

SIP/2.0 100 Trying

F60 192.168.1.1:5062(2) -> 192.168.2.15:5060(3)

SIP/2.0 202 Accepted  
 Via: SIP/2.0/UDP 192.168.2.15:5060;branch=z9hG4bK-57b58e9b-880599.775  
 From: <sip:00004@sip.com>;tag=168fef63

To: 00002 <sip:00002@sip.com>;tag=0ef53d14  
 Call-ID: 33b71606@00002.192.168.1.1  
 CSeq: 765719508 REFER  
 Contact: <sip:00002@192.168.2.10>  
 Content-Length: 0

F61 192.168.1.1:5062(2) -> 192.168.2.15:5060(3)

NOTIFY sip:00004@192.168.2.15 SIP/2.0  
 Via: SIP/2.0/UDP 192.168.1.1:5060;branch=z9hG4bK-755.1084364142.1899349293  
 Via: SIP/2.0/UDP 192.168.2.10:5060;branch=z9hG4bK-682e1229-880764.656  
 Route: <sip:00004@192.168.2.15>  
 From: 00002 <sip:00002@sip.com>;tag=0ef53d14  
 To: <sip:00004@sip.com>;tag=168fef63  
 Call-ID: 33b71606@00002.192.168.1.1  
 CSeq: 1899349293 NOTIFY  
 Contact: <sip:00002@192.168.2.10>  
 max-forwards: 69  
 event: refer  
 subscription-state: active;expires=30  
 Content-Type: message/sipfrag  
 Content-Length: 18

SIP/2.0 100 Trying

F62 192.168.2.15:1135(3) -> 192.168.1.1:5060(2)

SIP/2.0 200 OK  
 Via: SIP/2.0/UDP 192.168.1.1:5060;branch=z9hG4bK-755.1084364142.1899349293  
 Via: SIP/2.0/UDP 192.168.2.10:5060;branch=z9hG4bK-682e1229-880764.656  
 From: 00002 <sip:00002@sip.com>;tag=0ef53d14  
 To: <sip:00004@sip.com>;tag=168fef63  
 Call-ID: 33b71606@00002.192.168.1.1  
 CSeq: 1899349293 NOTIFY  
 Content-Length: 0

F63 192.168.1.1:5062(2) -> 192.168.2.10:5060(1)

SIP/2.0 200 OK  
 Via: SIP/2.0/UDP 192.168.2.10:5060;branch=z9hG4bK-682e1229-880764.656  
 From: 00002 <sip:00002@sip.com>;tag=0ef53d14  
 To: <sip:00004@sip.com>;tag=168fef63  
 Call-ID: 33b71606@00002.192.168.1.1  
 CSeq: 1899349293 NOTIFY  
 Content-Length: 0

F64 192.168.2.15:1135(3) -> 192.168.1.1:5060(2)

BYE sip:00004@192.168.1.1 SIP/2.0  
 Via: SIP/2.0/UDP 192.168.2.15:5060;branch=z9hG4bK-7c60b6ec-880599.888  
 Route: <sip:00002@192.168.2.10>  
 From: <sip:00004@sip.com>;tag=168fef63  
 To: 00002 <sip:00002@sip.com>;tag=0ef53d14  
 Call-ID: 33b71606@00002.192.168.1.1  
 CSeq: 765719509 BYE  
 Max-Forwards: 70  
 Content-Length: 0

F65 192.168.1.1:5062(2) -> 192.168.2.10:5060(1)

BYE sip:00002@192.168.2.10 SIP/2.0  
 Via: SIP/2.0/UDP 192.168.1.1:5060;branch=z9hG4bK-754.1084364142.765719509  
 Via: SIP/2.0/UDP 192.168.2.15:5060;branch=z9hG4bK-7c60b6ec-880599.888  
 Route: <sip:00002@192.168.2.10>  
 From: <sip:00004@sip.com>;tag=168fef63  
 To: 00002 <sip:00002@sip.com>;tag=0ef53d14  
 Call-ID: 33b71606@00002.192.168.1.1  
 CSeq: 765719509 BYE

max-forwards: 69  
Content-Length: 0

F66 192.168.2.10:1091(1) -> 192.168.1.1:5060(2)

SIP/2.0 200 OK  
Via: SIP/2.0/UDP 192.168.1.1:5060;branch=z9hG4bK-754.1084364142.765719509  
Via: SIP/2.0/UDP 192.168.2.15:5060;branch=z9hG4bK-7c60b6ec-880599.888  
From: <sip:00004@sip.com>;tag=168fef63  
To: 00002 <sip:00002@sip.com>;tag=0ef53d14  
Call-ID: 33b71606@00002.192.168.1.1  
CSeq: 765719509 BYE  
Content-Length: 0

F67 192.168.1.1:5062(2) -> 192.168.2.15:5060(3)

SIP/2.0 200 OK  
Via: SIP/2.0/UDP 192.168.2.15:5060;branch=z9hG4bK-7c60b6ec-880599.888  
From: <sip:00004@sip.com>;tag=168fef63  
To: 00002 <sip:00002@sip.com>;tag=0ef53d14  
Call-ID: 33b71606@00002.192.168.1.1  
CSeq: 765719509 BYE  
Content-Length: 0

F68 192.168.2.10:1091(1) -> 192.168.1.1:5060(2)

INVITE sip:00005@sip.com SIP/2.0  
Via: SIP/2.0/UDP 192.168.2.10:5060;branch=z9hG4bK-1f84b084-880765.303  
Route: <sip:192.168.1.1:5060>  
From: <sip:00002@sip.com>;tag=38d9f447  
To: <sip:00005@sip.com>  
Call-ID: 39f549f2@00002.192.168.1.1  
CSeq: 945209855 INVITE  
Contact: <sip:00002@192.168.2.10>  
Proxy-Authorization: Digest username="00002", realm="heliossv2",  
nonce="3f2889f5153f5addfd77fe6ab9d77726", uri="sip:00005@sip.com",  
response="bea702383c3b28457eb4d6bec9a88d1b", algorithm=MD5,  
opaque="fadef271857c7a6fbebca80c92205e50", qop=auth, nc=00000005,  
cnonce="0ab55cd4",  
Max-Forwards: 70  
Supported: 100rel, replaces  
Referred-By: <sip:00004@sip.com>  
Allow: INVITE, ACK, BYE, CANCEL, OPTIONS, PRACK, MESSAGE, REFER, NOTIFY  
Content-Type: application/sdp  
Accept: application/sdp, message/sipfrag  
Content-Length: 176

v=0  
o=- 294443 3501 IN IP4 192.168.2.10  
s=-  
c=IN IP4 192.168.2.10  
t=0 0  
m=audio 5006 RTP/AVP 0 96  
a=rtpmap:0 PCMU/8000  
a=rtpmap:96 telephone-event/8000  
a=fmtp:96 0-11

F69 192.168.1.1:5062(2) -> 192.168.2.10:5060(1)

SIP/2.0 407 Proxy Authentication Required  
Via: SIP/2.0/UDP 192.168.2.10:5060;branch=z9hG4bK-1f84b084-880765.303  
From: <sip:00002@sip.com>;tag=38d9f447  
To: <sip:00005@sip.com>  
Call-ID: 39f549f2@00002.192.168.1.1  
CSeq: 945209855 INVITE  
Proxy-Authenticate: Digest realm="heliossv2", nonce="722eabb42b8386e3f453cd953104c1d5",  
opaque="41f59b286a71d2f175d7af7caeb90bcf", stale=false, algorithm=MD5, qop="auth,auth-int",  
Content-Length: 0

F70 192.168.2.10:1091(1) -> 192.168.1.1:5060(2)

ACK sip:00005@sip.com SIP/2.0  
 Via: SIP/2.0/UDP 192.168.2.10:5060;branch=z9hG4bK-1f84b084-880765.303  
 Route: <sip:192.168.1.1:5060>  
 From: <sip:00002@sip.com>;tag=38d9f447  
 To: <sip:00005@sip.com>  
 Call-ID: 39f549f2@00002.192.168.1.1  
 CSeq: 945209855 ACK  
 Content-Length: 0

F71 192.168.2.10:1091(1) -> 192.168.1.1:5060(2)

INVITE sip:00005@sip.com SIP/2.0  
 Via: SIP/2.0/UDP 192.168.2.10:5060;branch=z9hG4bK-78e8ce85-880765.545  
 Route: <sip:192.168.1.1:5060>  
 From: <sip:00002@sip.com>;tag=38d9f447  
 To: <sip:00005@sip.com>  
 Call-ID: 39f549f2@00002.192.168.1.1  
 CSeq: 945209856 INVITE  
 Contact: <sip:00002@192.168.2.10>  
 Proxy-Authorization: Digest username="00002", realm="heliossv2",  
 nonce="722eabb42b8386e3f453cd953104c1d5", uri="sip:00005@sip.com",  
 response="e5f1551ab105c4bca70211c32a0dfcd4", algorithm=MD5,  
 opaque="41f59b286a71d2f175d7af7cae90bcf", qop=auth, nc=00000001  
 Max-Forwards: 70  
 Supported: 100rel, replaces  
 Referred-By: <sip:00004@sip.com>  
 Allow: INVITE, ACK, BYE, CANCEL, OPTIONS, PRACK, MESSAGE, REFER, NOTIFY  
 Content-Type: application/sdp  
 Accept: application/sdp, message/sipfrag  
 Content-Length: 176

v=0  
 o=- 294443 3501 IN IP4 192.168.2.10  
 s=-  
 c=IN IP4 192.168.2.10  
 t=0 0  
 m=audio 5006 RTP/AVP 0 96  
 a=rtpmap:0 PCMU/8000  
 a=rtpmap:96 telephone-event/8000  
 a=fmtp:96 0-11

F72 192.168.1.1:5062(2) -> 192.168.2.10:5060(1)

SIP/2.0 100 Trying  
 Via: SIP/2.0/UDP 192.168.2.10:5060;branch=z9hG4bK-78e8ce85-880765.545  
 From: <sip:00002@sip.com>;tag=38d9f447  
 To: <sip:00005@sip.com>  
 Call-ID: 39f549f2@00002.192.168.1.1  
 CSeq: 945209856 INVITE  
 Content-Length: 0

F73 192.168.1.1:5062(2) -> 192.168.2.14:5060(4)

INVITE sip:00005@192.168.2.14 SIP/2.0  
 Via: SIP/2.0/UDP 192.168.1.1:5060;branch=z9hG4bK-759.643241.945209856  
 Via: SIP/2.0/UDP 192.168.2.10:5060;branch=z9hG4bK-78e8ce85-880765.545  
 Record-Route: <sip:00005@192.168.1.1>  
 Route: <sip:192.168.1.1:5060>  
 From: 00002 <sip:00002@sip.com>;tag=38d9f447  
 To: <sip:00005@sip.com>  
 Call-ID: 39f549f2@00002.192.168.1.1  
 CSeq: 945209856 INVITE  
 Contact: <sip:00002@192.168.2.10>  
 max-forwards: 69  
 supported: 100rel  
 supported: replaces  
 referred-by: <sip:00004@sip.com>  
 Allow: INVITE, ACK, BYE, CANCEL, OPTIONS, PRACK, MESSAGE, REFER, NOTIFY  
 Content-Type: application/sdp  
 Accept: application/sdp, message/sipfrag

Content-Length: 176

v=0  
 o=- 294443 3501 IN IP4 192.168.2.10  
 s=-  
 c=IN IP4 192.168.2.10  
 t=0 0  
 m=audio 5006 RTP/AVP 0 96  
 a=rtpmap:0 PCMU/8000  
 a=rtpmap:96 telephone-event/8000  
 a=fmtp:96 0-11

=====

F74 192.168.2.14:1057(4) -> 192.168.1.1:5060(2)

SIP/2.0 100 Trying  
 Via: SIP/2.0/UDP 192.168.1.1:5060;branch=z9hG4bK-759.643241.945209856  
 Via: SIP/2.0/UDP 192.168.2.10:5060;branch=z9hG4bK-78e8ce85-880765.545  
 From: 00002 <sip:00002@sip.com>;tag=38d9f447  
 To: <sip:00005@sip.com>  
 Call-ID: 39f549f2@00002.192.168.1.1  
 CSeq: 945209856 INVITE  
 Content-Length: 0

=====

F75 192.168.2.14:1057(4) -> 192.168.1.1:5060(2)

SIP/2.0 183 Session Progress  
 Via: SIP/2.0/UDP 192.168.1.1:5060;branch=z9hG4bK-759.643241.945209856  
 Via: SIP/2.0/UDP 192.168.2.10:5060;branch=z9hG4bK-78e8ce85-880765.545  
 Record-Route: <sip:00005@192.168.1.1>  
 From: 00002 <sip:00002@sip.com>;tag=38d9f447  
 To: <sip:00005@sip.com>;tag=0d6b60da  
 Call-ID: 39f549f2@00002.192.168.1.1  
 CSeq: 945209856 INVITE  
 Contact: <sip:00005@192.168.2.14>  
 Require: 100rel  
 RSeq: 329942308  
 Content-Length: 0

=====

F76 192.168.1.1:5062(2) -> 192.168.2.10:5060(1)

SIP/2.0 183 Session Progress  
 Via: SIP/2.0/UDP 192.168.2.10:5060;branch=z9hG4bK-78e8ce85-880765.545  
 Record-Route: <sip:00005@192.168.1.1>  
 From: 00002 <sip:00002@sip.com>;tag=38d9f447  
 To: <sip:00005@sip.com>;tag=0d6b60da  
 Call-ID: 39f549f2@00002.192.168.1.1  
 CSeq: 945209856 INVITE  
 Contact: <sip:00005@192.168.2.14>  
 require: 100rel  
 rseq: 329942308  
 Content-Length: 0

=====

F77 192.168.2.10:1091(1) -> 192.168.1.1:5060(2)

PRACK sip:00005@192.168.1.1 SIP/2.0  
 Via: SIP/2.0/UDP 192.168.2.10:5060;branch=z9hG4bK-87ac716-880766.784  
 Route: <sip:00005@192.168.2.14>  
 From: 00002 <sip:00002@sip.com>;tag=38d9f447  
 To: <sip:00005@sip.com>;tag=0d6b60da  
 Call-ID: 39f549f2@00002.192.168.1.1  
 CSeq: 945209857 PRACK  
 Proxy-Authorization: Digest username="00002",  
 nonce="722eabb42b8386e3f453cd953104c1d5", realm="heliossv2",  
 response="8b54ae1a2e0a32165b3fd2a8582901fe", uri="sip:00005@192.168.1.1",  
 opaque="41f59b286a71d2f175d7af7caeb90bcf", algorithm=MD5, cnonce="5bc55d09",  
 qop=auth, nc=00000002  
 Max-Forwards: 70  
 RAck: 329942308 945209856 INVITE  
 Content-Length: 0

F78 192.168.1.1:5062(2) -> 192.168.2.14:5060(4)

PRACK sip:00005@192.168.2.14 SIP/2.0  
Via: SIP/2.0/UDP 192.168.1.1:5060;branch=z9hG4bK-759.1084364144.945209857  
Via: SIP/2.0/UDP 192.168.2.10:5060;branch=z9hG4bK-87ac716-880766.784  
Route: <sip:00005@192.168.2.14>  
From: 00002 <sip:00002@sip.com>;tag=38d9f447  
To: <sip:00005@sip.com>;tag=0d6b60da  
Call-ID: 39f549f2@00002.192.168.1.1  
CSeq: 945209857 PRACK  
max-forwards: 69  
rack: 329942308 945209856 INVITE  
Content-Length: 0

F89 192.168.2.14:1057(4) -> 192.168.1.1:5060(2)

SIP/2.0 200 OK  
Via: SIP/2.0/UDP 192.168.1.1:5060;branch=z9hG4bK-759.1084364144.945209857  
Via: SIP/2.0/UDP 192.168.2.10:5060;branch=z9hG4bK-87ac716-880766.784  
From: 00002 <sip:00002@sip.com>;tag=38d9f447  
To: <sip:00005@sip.com>;tag=0d6b60da  
Call-ID: 39f549f2@00002.192.168.1.1  
CSeq: 945209857 PRACK  
Content-Length: 0

F80 192.168.1.1:5062(2) -> 192.168.2.10:5060(1)

SIP/2.0 200 OK  
Via: SIP/2.0/UDP 192.168.2.10:5060;branch=z9hG4bK-87ac716-880766.784  
From: 00002 <sip:00002@sip.com>;tag=38d9f447  
To: <sip:00005@sip.com>;tag=0d6b60da  
Call-ID: 39f549f2@00002.192.168.1.1  
CSeq: 945209857 PRACK  
Content-Length: 0

F81 192.168.2.14:1057(4) -> 192.168.1.1:5060(2)

SIP/2.0 180 Ringing  
Via: SIP/2.0/UDP 192.168.1.1:5060;branch=z9hG4bK-759.643241.945209856  
Via: SIP/2.0/UDP 192.168.2.10:5060;branch=z9hG4bK-78e8ce85-880765.545  
Record-Route: <sip:00005@192.168.1.1>  
From: 00002 <sip:00002@sip.com>;tag=38d9f447  
To: <sip:00005@sip.com>;tag=0d6b60da  
Call-ID: 39f549f2@00002.192.168.1.1  
CSeq: 945209856 INVITE  
Contact: <sip:00005@192.168.2.14>  
Require: 100rel  
RSeq: 329942309  
Content-Length: 0

F82 192.168.1.1:5062(2) -> 192.168.2.10:5060(1)

SIP/2.0 180 Ringing  
Via: SIP/2.0/UDP 192.168.2.10:5060;branch=z9hG4bK-78e8ce85-880765.545  
Record-Route: <sip:00005@192.168.1.1>  
From: 00002 <sip:00002@sip.com>;tag=38d9f447  
To: <sip:00005@sip.com>;tag=0d6b60da  
Call-ID: 39f549f2@00002.192.168.1.1  
CSeq: 945209856 INVITE  
Contact: <sip:00005@192.168.2.14>  
require: 100rel  
rseq: 329942309  
Content-Length: 0

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F83 192.168.2.10:1091(1) -&gt; 192.168.1.1:5060(2)

PRACK sip:00005@192.168.1.1 SIP/2.0  
Via: SIP/2.0/UDP 192.168.2.10:5060;branch=z9hG4bK-2e96fb1e-880767.549  
Route: <sip:00005@192.168.2.14>  
From: 00002 <sip:00002@sip.com>;tag=38d9f447  
To: <sip:00005@sip.com>;tag=0d6b60da  
Call-ID: 39f549f2@00002.192.168.1.1  
CSeq: 945209858 PRACK  
Proxy-Authorization: Digest username="00002", realm="heliossv2",  
nonce="722eabb42b8386e3f453cd953104c1d5", uri="sip:00005@192.168.1.1",  
response="679cb53f01d4c3e72ab3107356feac9d", algorithm=MD5, cnonce="63efb799",  
opaque="41f59b286a71d2f175d7af7caeb90bcf", qop=auth, nc=00000003  
Max-Forwards: 70  
RAck: 329942309 945209856 INVITE  
Content-Length: 0

F84 192.168.1.1:5062(2) -&gt; 192.168.2.14:5060(4)

PRACK sip:00005@192.168.2.14 SIP/2.0  
Via: SIP/2.0/UDP 192.168.1.1:5060;branch=z9hG4bK-759.1084364144.945209858  
Via: SIP/2.0/UDP 192.168.2.10:5060;branch=z9hG4bK-2e96fb1e-880767.549  
Route: <sip:00005@192.168.2.14>  
From: 00002 <sip:00002@sip.com>;tag=38d9f447  
To: <sip:00005@sip.com>;tag=0d6b60da  
Call-ID: 39f549f2@00002.192.168.1.1  
CSeq: 945209858 PRACK  
max-forwards: 69  
rack: 329942309 945209856 INVITE  
Content-Length: 0

F85 192.168.2.14:1057(4) -&gt; 192.168.1.1:5060(2)

SIP/2.0 200 OK  
Via: SIP/2.0/UDP 192.168.1.1:5060;branch=z9hG4bK-759.1084364144.945209858  
Via: SIP/2.0/UDP 192.168.2.10:5060;branch=z9hG4bK-2e96fb1e-880767.549  
From: 00002 <sip:00002@sip.com>;tag=38d9f447  
To: <sip:00005@sip.com>;tag=0d6b60da  
Call-ID: 39f549f2@00002.192.168.1.1  
CSeq: 945209858 PRACK  
Content-Length: 0

F86 192.168.1.1:5062(2) -&gt; 192.168.2.10:5060(1)

SIP/2.0 200 OK  
Via: SIP/2.0/UDP 192.168.2.10:5060;branch=z9hG4bK-2e96fb1e-880767.549  
From: 00002 <sip:00002@sip.com>;tag=38d9f447  
To: <sip:00005@sip.com>;tag=0d6b60da  
Call-ID: 39f549f2@00002.192.168.1.1  
CSeq: 945209858 PRACK  
Content-Length: 0

F87 192.168.2.14:1057(4) -&gt; 192.168.1.1:5060(2)

SIP/2.0 200 OK  
Via: SIP/2.0/UDP 192.168.1.1:5060;branch=z9hG4bK-759.643241.945209856  
Via: SIP/2.0/UDP 192.168.2.10:5060;branch=z9hG4bK-78e8ce85-880765.545  
Record-Route: <sip:00005@192.168.1.1>  
From: 00002 <sip:00002@sip.com>;tag=38d9f447  
To: <sip:00005@sip.com>;tag=0d6b60da  
Call-ID: 39f549f2@00002.192.168.1.1  
CSeq: 945209856 INVITE  
Contact: <sip:00005@192.168.2.14>  
Supported: 100rel, replaces  
Allow: INVITE, ACK, BYE, CANCEL, OPTIONS, PRACK, MESSAGE, REFER, NOTIFY  
Content-Type: application/sdp  
Accept: application/sdp, message/sipfrag  
Content-Length: 177



```
v=0
o=- 829543 14901 IN IP4 192.168.2.14
s=-
c=IN IP4 192.168.2.14
t=0 0
m=audio 5006 RTP/AVP 0 96
a=rtpmap:0 PCMU/8000
a=rtpmap:96 telephone-event/8000
a=fmtp:96 0-11
```

```
=====
F88      192.168.1.1:5062(2) -> 192.168.2.10:5060(1)
```

```
SIP/2.0 200 OK
Via: SIP/2.0/UDP 192.168.2.10:5060;branch=z9hG4bK-78e8ce85-880765.545
Record-Route: <sip:00005@192.168.1.1>
From: 00002 <sip:00002@sip.com>;tag=38d9f447
To: <sip:00005@sip.com>;tag=0d6b60da
Call-ID: 39f549f2@00002.192.168.1.1
CSeq: 945209856 INVITE
Contact: <sip:00005@192.168.2.14>
supported: 100rel
supported: replaces
Allow: INVITE, ACK, BYE, CANCEL, OPTIONS, PRACK, MESSAGE, REFER, NOTIFY
Content-Type: application/sdp
Accept: application/sdp, message/sipfrag
Content-Length: 177
```

```
v=0
o=- 829543 14901 IN IP4 192.168.2.14
s=-
c=IN IP4 192.168.2.14
t=0 0
m=audio 5006 RTP/AVP 0 96
a=rtpmap:0 PCMU/8000
a=rtpmap:96 telephone-event/8000
a=fmtp:96 0-11
```

```
=====
F89      192.168.2.10:1091(1) -> 192.168.1.1:5060(2)
```

```
ACK sip:00005@192.168.1.1 SIP/2.0
Via: SIP/2.0/UDP 192.168.2.10:5060;branch=z9hG4bK-88e5d14-880775.844
Route: <sip:00005@192.168.2.14>
From: 00002 <sip:00002@sip.com>;tag=38d9f447
To: <sip:00005@sip.com>;tag=0d6b60da
Call-ID: 39f549f2@00002.192.168.1.1
CSeq: 945209856 ACK
Proxy-Authentication: Digest username="00002", realm="heliossv2",
                           nonce="722eabb42b8386e3f453cd953104c1d5", uri="sip:00005@sip.com",
                           response="e5f1551ab105c4bca70211c32a0dfcd4", algorithm=MD5,
                           opaque="41f59b286a71d2f175d7af7caeb90bcf", qop=auth, nc=00000001
Max-Forwards: 70
Content-Length: 0
```

```
=====
F90      192.168.1.1:5062(2) -> 192.168.2.14:5060(4)
```

```
ACK sip:00005@192.168.2.14 SIP/2.0
Via: SIP/2.0/UDP 192.168.1.1:5060;branch=z9hG4bK-759.1084364153.945209856
Via: SIP/2.0/UDP 192.168.2.10:5060;branch=z9hG4bK-88e5d14-880775.844
From: 00002 <sip:00002@sip.com>;tag=38d9f447
To: <sip:00005@sip.com>;tag=0d6b60da
Call-ID: 39f549f2@00002.192.168.1.1
CSeq: 945209856 ACK
max-forwards: 69
Content-Length: 0
```

```
=====
F91      192.168.2.10:1091(1) -> 192.168.1.1:5060(2)
```

```
NOTIFY sip:00004@192.168.1.1 SIP/2.0
Via: SIP/2.0/UDP 192.168.2.10:5060;branch=z9hG4bK-462c408-880775.943
Route: <sip:00004@192.168.2.15>
From: 00002 <sip:00002@sip.com>;tag=0ef53d14
```

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To: <sip:00004@sip.com>;tag=168fef63  
Call-ID: 33b71606@00002.192.168.1.1  
CSeq: 1899349294 NOTIFY  
Contact: <sip:00002@192.168.2.10>  
Proxy-Authentication: Digest username="00002", realm="heliossv2",  
nonce="722eabb42b8386e3f453cd953104c1d5", uri="sip:00004@192.168.1.1",  
response="9f00f28919b4c0844c30c19468a4ee9e", algorithm=MD5, cnonce="1eca2fee",  
opaque="41f59b286a71d2f175d7af7caeb90bcf", qop=auth, nc=00000004  
Max-Forwards: 70  
Event: refer  
Subscription-State: terminated:reason=noresource  
Content-Type: message/sipfrag  
Content-Length: 14

SIP/2.0 200 OK

F92 192.168.1.1:5062(2) -> 192.168.2.15:5060(3)

NOTIFY sip:00004@192.168.2.15 SIP/2.0  
Via: SIP/2.0/UDP 192.168.1.1:5060:branch=z9hG4bK-761.1084364153.1899349294  
Via: SIP/2.0/UDP 192.168.2.10:5060:branch=z9hG4bK-462c408-880775.943  
Route: <sip:00004@192.168.2.15>  
From: 00002 <sip:00002@sip.com>;tag=0ef53d14  
To: <sip:00004@sip.com>;tag=168fef63  
Call-ID: 33b71606@00002.192.168.1.1  
CSeq: 1899349294 NOTIFY  
Contact: <sip:00002@192.168.2.10>  
max-forwards: 69  
event: refer  
subscription-state: terminated:reason=noresource  
Content-Type: message/sipfrag  
Content-Length: 14

SIP/2.0 200 OK

F93 192.168.2.15:1135(3) -> 192.168.1.1:5060(2)

SIP/2.0 200 OK  
Via: SIP/2.0/UDP 192.168.1.1:5060:branch=z9hG4bK-761.1084364153.1899349294  
Via: SIP/2.0/UDP 192.168.2.10:5060:branch=z9hG4bK-462c408-880775.943  
From: 00002 <sip:00002@sip.com>;tag=0ef53d14  
To: <sip:00004@sip.com>;tag=168fef63  
Call-ID: 33b71606@00002.192.168.1.1  
CSeq: 1899349294 NOTIFY  
Content-Length: 0

F94 192.168.1.1:5062(2) -> 192.168.2.10:5060(1)

SIP/2.0 200 OK  
Via: SIP/2.0/UDP 192.168.2.10:5060:branch=z9hG4bK-462c408-880775.943  
From: 00002 <sip:00002@sip.com>;tag=0ef53d14  
To: <sip:00004@sip.com>;tag=168fef63  
Call-ID: 33b71606@00002.192.168.1.1  
CSeq: 1899349294 NOTIFY  
Content-Length: 0

F95 192.168.2.10:1091(1) -> 192.168.1.1:5060(2)

BYE sip:00005@192.168.1.1 SIP/2.0  
Via: SIP/2.0/UDP 192.168.2.10:5060:branch=z9hG4bK-664e6bbb-880787.295  
Route: <sip:00005@192.168.2.14>  
From: 00002 <sip:00002@sip.com>;tag=38d9f447  
To: <sip:00005@sip.com>;tag=0d6b60da  
Call-ID: 39f549f2@00002.192.168.1.1  
CSeq: 945209859 BYE  
Proxy-Authentication: Digest username="00002", realm="heliossv2",  
nonce="722eabb42b8386e3f453cd953104c1d5", uri="sip:00005@192.168.1.1",  
response="360143a33c9c0da2c7f9d6c668d9d566", algorithm=MD5, cnonce="695fb511",  
opaque="41f59b286a71d2f175d7af7caeb90bcf", qop=auth, nc=00000005  
Max-Forwards: 70  
Content-Length: 0

=====

F96            192.168.1.1:5062(2) -> 192.168.2.14:5060(4)

BYE sip:00005@192.168.2.14 SIP/2.0  
Via: SIP/2.0/UDP 192.168.1.1:5060;branch=z9hG4bK-759.1084364164.945209859  
Via: SIP/2.0/UDP 192.168.2.10:5060;branch=z9hG4bK-664e6bbb-880787.295  
Route: <sip:00005@192.168.2.14>  
From: 00002 <sip:00002@sip.com>;tag=38d9f447  
To: <sip:00005@sip.com>;tag=0d6b60da  
Call-ID: 39f549f2@00002.192.168.1.1  
CSeq: 945209859 BYE  
max-forwards: 69  
Content-Length: 0

=====

F97            192.168.2.14:1057(4) -> 192.168.1.1:5060(2)

SIP/2.0 200 OK  
Via: SIP/2.0/UDP 192.168.1.1:5060;branch=z9hG4bK-759.1084364164.945209859  
Via: SIP/2.0/UDP 192.168.2.10:5060;branch=z9hG4bK-664e6bbb-880787.295  
From: 00002 <sip:00002@sip.com>;tag=38d9f447  
To: <sip:00005@sip.com>;tag=0d6b60da  
Call-ID: 39f549f2@00002.192.168.1.1  
CSeq: 945209859 BYE  
Content-Length: 0

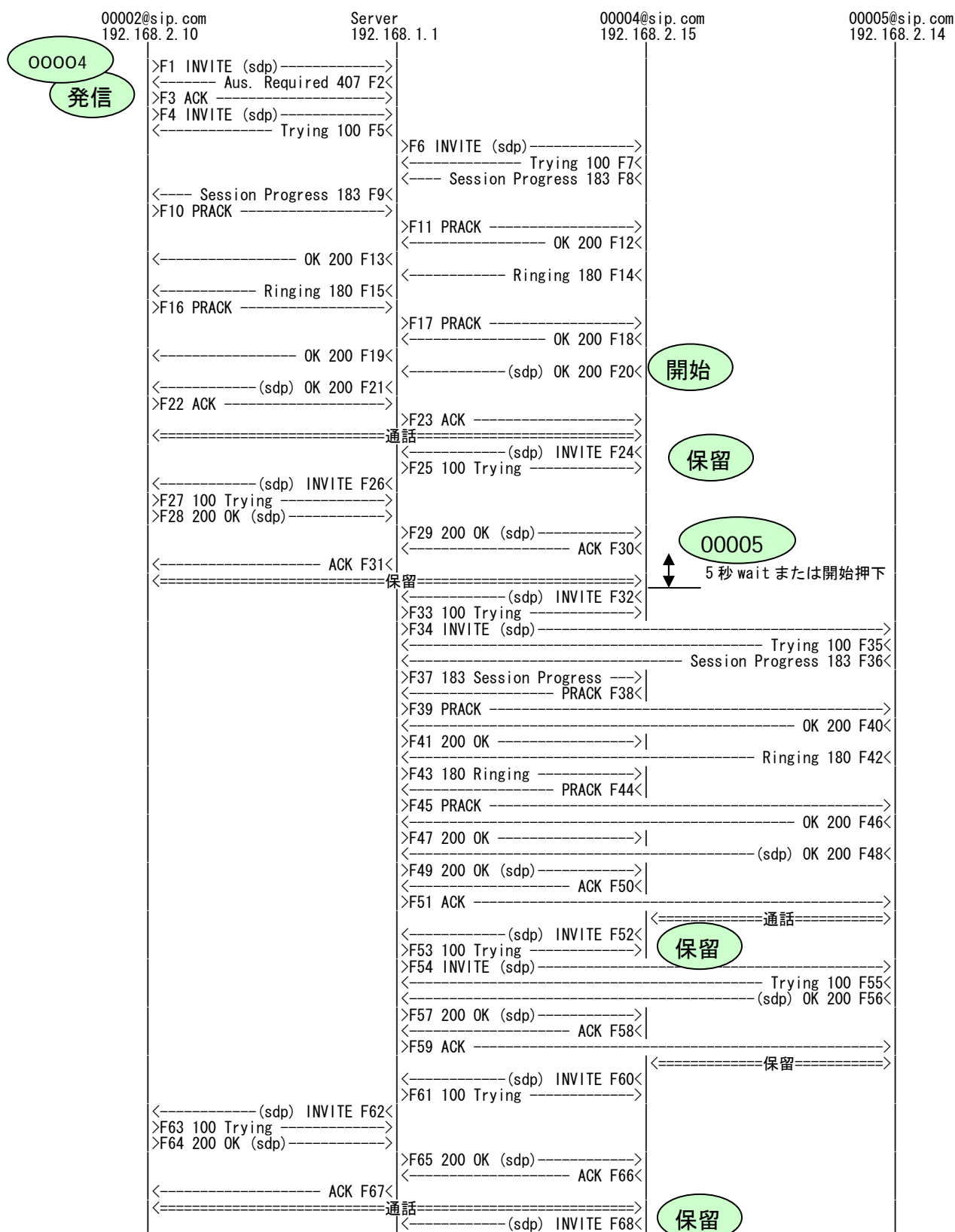
=====

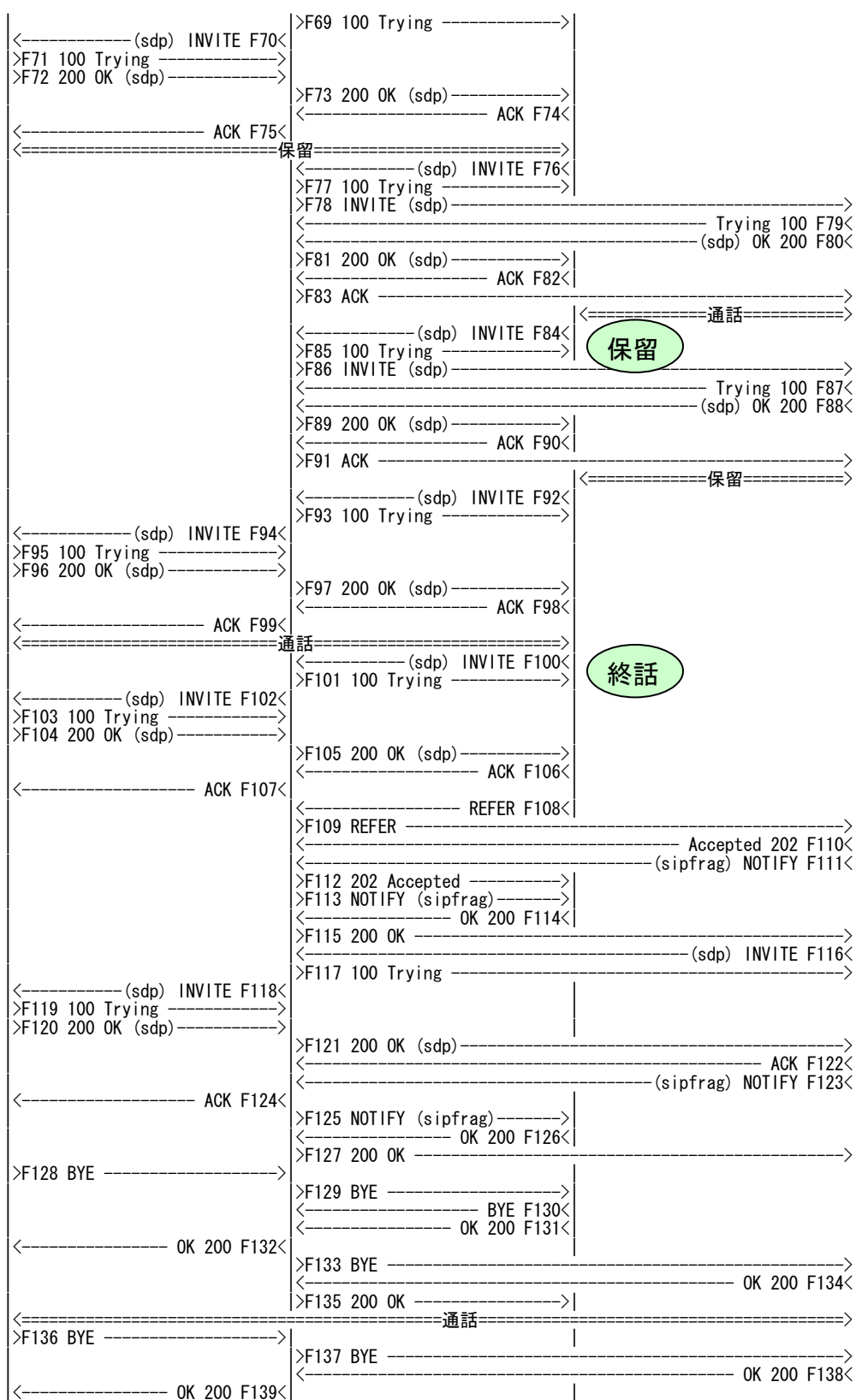
F98            192.168.1.1:5062(2) -> 192.168.2.10:5060(1)

SIP/2.0 200 OK  
Via: SIP/2.0/UDP 192.168.2.10:5060;branch=z9hG4bK-664e6bbb-880787.295  
From: 00002 <sip:00002@sip.com>;tag=38d9f447  
To: <sip:00005@sip.com>;tag=0d6b60da  
Call-ID: 39f549f2@00002.192.168.1.1  
CSeq: 945209859 BYE  
Content-Length: 0

=====

## 11.6.6.通話呼と保留呼の入れ替え





注：本シーケンスでは通話呼と保留呼入れ替え、および転送を行っている。  
 注：00002 認証あり 00004 認証なし 00005 認証なし

図 11-33 通話呼と保留呼の入れ替え

F1 192.168.2.10:1091(1) -> 192.168.1.1:5060(2)

```
INVITE sip:00004@sip.com SIP/2.0
Via: SIP/2.0/UDP 192.168.2.10:5060;branch=z9hG4bK-27f0a630-880903.822
Route: <sip:192.168.1.1:5060>
From: <sip:00002@sip.com>;tag=1576039b
To: <sip:00004@sip.com>
Call-ID: 32916bdd@00002.192.168.1.1
CSeq: 233289000 INVITE
Contact: <sip:00002@192.168.2.10>
Proxy-Authorization: Digest username="00002", realm="heliossv2",
nonce="722eabb42b8386e3f453cd953104c1d5", uri="sip:00004@sip.com",
response="d9541a67ba2ff496ce50403da08da54a", algorithm=MD5, cnonce="364eac42",
opaque="41f59b286a71d2f175d7af7cae90bcf", qop=auth, nc=00000006
Max-Forwards: 70
Supported: 100rel, replaces
Allow: INVITE, ACK, BYE, CANCEL, OPTIONS, PRACK, MESSAGE, REFER, NOTIFY
Content-Type: application/sdp
Accept: application/sdp, message/sipfrag
Content-Length: 250

v=0
o=- 803801 3601 IN IP4 192.168.2.10
s=-
c=IN IP4 192.168.2.10
t=0 0
m=audio 5008 RTP/AVP 0 8 4 18 96
a=rtpmap:0 PCMU/8000
a=rtpmap:8 PCMA/8000
a=rtpmap:4 G723/8000
a=rtpmap:18 G729/8000
a=rtpmap:96 telephone-event/8000
a=fmtp:96 0-11
```

F2 192.168.1.1:5062(2) -> 192.168.2.10:5060(1)

```
SIP/2.0 407 Proxy Authentication Required
Via: SIP/2.0/UDP 192.168.2.10:5060;branch=z9hG4bK-27f0a630-880903.822
From: <sip:00002@sip.com>;tag=1576039b
To: <sip:00004@sip.com>
Call-ID: 32916bdd@00002.192.168.1.1
CSeq: 233289000 INVITE
Proxy-Authorization: Digest realm="heliossv2", nonce="9fa6c53b946631caf9c9b7a7ea9e5f0d",
opaque="e01289fc77b69626b29b8744a85277b4", stale=false, algorithm=MD5, qop="auth,auth-int"
Content-Length: 0
```

F3 192.168.2.10:1091(1) -> 192.168.1.1:5060(2)

```
ACK sip:00004@sip.com SIP/2.0
Via: SIP/2.0/UDP 192.168.2.10:5060;branch=z9hG4bK-27f0a630-880903.822
Route: <sip:192.168.1.1:5060>
From: <sip:00002@sip.com>;tag=1576039b
To: <sip:00004@sip.com>
Call-ID: 32916bdd@00002.192.168.1.1
CSeq: 233289000 ACK
Content-Length: 0
```

F4 192.168.2.10:1091(1) -> 192.168.1.1:5060(2)

```
INVITE sip:00004@sip.com SIP/2.0
Via: SIP/2.0/UDP 192.168.2.10:5060;branch=z9hG4bK-504dc1d0-880904.039
Route: <sip:192.168.1.1:5060>
From: <sip:00002@sip.com>;tag=1576039b
To: <sip:00004@sip.com>
Call-ID: 32916bdd@00002.192.168.1.1
CSeq: 233289001 INVITE
Contact: <sip:00002@192.168.2.10>
Proxy-Authorization: Digest username="00002", realm="heliossv2",
nonce="9fa6c53b946631caf9c9b7a7ea9e5f0d", uri="sip:00004@sip.com",
response="f78115b89233aa0ceb4eec365afb950", algorithm=MD5, cnonce="0731b4eb",
```

```
opaque="e01289fc77b69626b29b8744a85277b4", qop=auth, nc=00000001
Max-Forwards: 70
Supported: 100rel, replaces
Allow: INVITE, ACK, BYE, CANCEL, OPTIONS, PRACK, MESSAGE, REFER, NOTIFY
Content-Type: application/sdp
Accept: application/sdp, message/sipfrag
Content-Length: 250
```

```
v=0
o=- 803801 3601 IN IP4 192.168.2.10
s=-
c=IN IP4 192.168.2.10
t=0 0
m=audio 5008 RTP/AVP 0 8 4 18 96
a=rtpmap:0 PCMU/8000
a=rtpmap:8 PCMA/8000
a=rtpmap:4 G723/8000
a=rtpmap:18 G729/8000
a=rtpmap:96 telephone-event/8000
a=fmtp:96 0-11
```

```
=====
F5          192.168.1.1:5062(2) -> 192.168.2.10:5060(1)
```

```
SIP/2.0 100 Trying
Via: SIP/2.0/UDP 192.168.2.10:5060;branch=z9hG4bK-504dc1d0-880904.039
From: <sip:00002@sip.com>;tag=1576039b
To: <sip:00004@sip.com>
Call-ID: 32916bdd@00002.192.168.1.1
CSeq: 233289001 INVITE
Content-Length: 0
```

```
=====
F6          192.168.1.1:5062(2) -> 192.168.2.15:5060(3)
```

```
INVITE sip:00004@192.168.2.15 SIP/2.0
Via: SIP/2.0/UDP 192.168.1.1:5060;branch=z9hG4bK-763.151351.233289001
Via: SIP/2.0/UDP 192.168.2.10:5060;branch=z9hG4bK-504dc1d0-880904.039
Record-Route: <sip:00004@192.168.1.1>
Route: <sip:192.168.1.1:5060>
From: 00002 <sip:00002@sip.com>;tag=1576039b
To: <sip:00004@sip.com>
Call-ID: 32916bdd@00002.192.168.1.1
CSeq: 233289001 INVITE
Contact: <sip:00002@192.168.2.10>
max-forwards: 69
supported: 100rel
supported: replaces
Allow: INVITE, ACK, BYE, CANCEL, OPTIONS, PRACK, MESSAGE, REFER, NOTIFY
Content-Type: application/sdp
Accept: application/sdp, message/sipfrag
Content-Length: 250
```

```
v=0
o=- 803801 3601 IN IP4 192.168.2.10
s=-
c=IN IP4 192.168.2.10
t=0 0
m=audio 5008 RTP/AVP 0 8 4 18 96
a=rtpmap:0 PCMU/8000
a=rtpmap:8 PCMA/8000
a=rtpmap:4 G723/8000
a=rtpmap:18 G729/8000
a=rtpmap:96 telephone-event/8000
a=fmtp:96 0-11
```

```
=====
F7          192.168.2.15:1135(3) -> 192.168.1.1:5060(2)
```

```
SIP/2.0 100 Trying
Via: SIP/2.0/UDP 192.168.1.1:5060;branch=z9hG4bK-763.151351.233289001
Via: SIP/2.0/UDP 192.168.2.10:5060;branch=z9hG4bK-504dc1d0-880904.039
From: 00002 <sip:00002@sip.com>;tag=1576039b
To: <sip:00004@sip.com>
Call-ID: 32916bdd@00002.192.168.1.1
CSeq: 233289001 INVITE
Content-Length: 0
```

F8 192.168.2.15:1135(3) -> 192.168.1.1:5060(2)

SIP/2.0 183 Session Progress  
 Via: SIP/2.0/UDP 192.168.1.1:5060;branch=z9hG4bK-763.151351.233289001  
 Via: SIP/2.0/UDP 192.168.2.10:5060;branch=z9hG4bK-504dc1d0-880904.039  
 Record-Route: <sip:00004@192.168.1.1>  
 From: 00002 <sip:00002@sip.com>;tag=1576039b  
 To: <sip:00004@sip.com>;tag=342a8563  
 Call-ID: 32916bdd@00002.192.168.1.1  
 CSeq: 233289001 INVITE  
 Contact: <sip:00004@192.168.2.15>  
 Require: 100rel  
 RSeq: 1042194748  
 Content-Length: 0

F9 192.168.1.1:5062(2) -> 192.168.2.10:5060(1)

SIP/2.0 183 Session Progress  
 Via: SIP/2.0/UDP 192.168.2.10:5060;branch=z9hG4bK-504dc1d0-880904.039  
 Record-Route: <sip:00004@192.168.1.1>  
 From: 00002 <sip:00002@sip.com>;tag=1576039b  
 To: <sip:00004@sip.com>;tag=342a8563  
 Call-ID: 32916bdd@00002.192.168.1.1  
 CSeq: 233289001 INVITE  
 Contact: <sip:00004@192.168.2.15>  
 require: 100rel  
 rseq: 1042194748  
 Content-Length: 0

F10 192.168.2.10:1091(1) -> 192.168.1.1:5060(2)

PRACK sip:00004@192.168.1.1 SIP/2.0  
 Via: SIP/2.0/UDP 192.168.2.10:5060;branch=z9hG4bK-13b65534-880904.959  
 Route: <sip:00004@192.168.2.15>  
 From: 00002 <sip:00002@sip.com>;tag=1576039b  
 To: <sip:00004@sip.com>;tag=342a8563  
 Call-ID: 32916bdd@00002.192.168.1.1  
 CSeq: 233289002 PRACK  
 Proxy-Authorization: Digest username="00002", realm="heliossv2",  
 nonce="9fa6c53b946631caf9c9b7a7ea9e5f0d", uri="sip:00004@192.168.1.1",  
 response="fd4846c97b6d9bea28184dc0bb4615d3", algorithm=MD5,  
 opaque="e01289fc77b69626b29b8744a85277b4", qop=auth, nc=00000002  
 Max-Forwards: 70  
 RAck: 1042194748 233289001 INVITE  
 Content-Length: 0

F11 192.168.1.1:5062(2) -> 192.168.2.15:5060(3)

PRACK sip:00004@192.168.2.15 SIP/2.0  
 Via: SIP/2.0/UDP 192.168.1.1:5060;branch=z9hG4bK-763.1084364282.233289002  
 Via: SIP/2.0/UDP 192.168.2.10:5060;branch=z9hG4bK-13b65534-880904.959  
 Route: <sip:00004@192.168.2.15>  
 From: 00002 <sip:00002@sip.com>;tag=1576039b  
 To: <sip:00004@sip.com>;tag=342a8563  
 Call-ID: 32916bdd@00002.192.168.1.1  
 CSeq: 233289002 PRACK  
 max-forwards: 69  
 rack: 1042194748 233289001 INVITE  
 Content-Length: 0

F12 192.168.2.15:1135(3) -> 192.168.1.1:5060(2)

SIP/2.0 200 OK  
 Via: SIP/2.0/UDP 192.168.1.1:5060;branch=z9hG4bK-763.1084364282.233289002  
 Via: SIP/2.0/UDP 192.168.2.10:5060;branch=z9hG4bK-13b65534-880904.959



# FOMA/WLAN デュアル端末に関する技術参考資料 第 1.2 版

From: 00002 <sip:00002@sip.com>;tag=1576039b  
 To: <sip:00004@sip.com>;tag=342a8563  
 Call-ID: 32916bdd@00002.192.168.1.1  
 CSeq: 233289002 PRACK  
 Content-Length: 0

F13 192.168.1.1:5062(2) -> 192.168.2.10:5060(1)

SIP/2.0 200 OK  
 Via: SIP/2.0/UDP 192.168.2.10:5060;branch=z9hG4bK-13b65534-880904.959  
 From: 00002 <sip:00002@sip.com>;tag=1576039b  
 To: <sip:00004@sip.com>;tag=342a8563  
 Call-ID: 32916bdd@00002.192.168.1.1  
 CSeq: 233289002 PRACK  
 Content-Length: 0

F14 192.168.2.15:1135(3) -> 192.168.1.1:5060(2)

SIP/2.0 180 Ringing  
 Via: SIP/2.0/UDP 192.168.1.1:5060;branch=z9hG4bK-763.151351.233289001  
 Via: SIP/2.0/UDP 192.168.2.10:5060;branch=z9hG4bK-504dc1d0-880904.039  
 Record-Route: <sip:00004@192.168.1.1>  
 From: 00002 <sip:00002@sip.com>;tag=1576039b  
 To: <sip:00004@sip.com>;tag=342a8563  
 Call-ID: 32916bdd@00002.192.168.1.1  
 CSeq: 233289001 INVITE  
 Contact: <sip:00004@192.168.2.15>  
 Require: 100rel  
 RSeq: 1042194749  
 Content-Length: 0

F15 192.168.1.1:5062(2) -> 192.168.2.10:5060(1)

SIP/2.0 180 Ringing  
 Via: SIP/2.0/UDP 192.168.2.10:5060;branch=z9hG4bK-504dc1d0-880904.039  
 Record-Route: <sip:00004@192.168.1.1>  
 From: 00002 <sip:00002@sip.com>;tag=1576039b  
 To: <sip:00004@sip.com>;tag=342a8563  
 Call-ID: 32916bdd@00002.192.168.1.1  
 CSeq: 233289001 INVITE  
 Contact: <sip:00004@192.168.2.15>  
 require: 100rel  
 rseq: 1042194749  
 Content-Length: 0

F16 192.168.2.10:1091(1) -> 192.168.1.1:5060(2)

PRACK sip:00004@192.168.1.1 SIP/2.0  
 Via: SIP/2.0/UDP 192.168.2.10:5060;branch=z9hG4bK-14f418dd-880905.603  
 Route: <sip:00004@192.168.2.15>  
 From: 00002 <sip:00002@sip.com>;tag=1576039b  
 To: <sip:00004@sip.com>;tag=342a8563  
 Call-ID: 32916bdd@00002.192.168.1.1  
 CSeq: 233289003 PRACK  
 Proxy-Authorization: Digest username="00002", realm="heliossv2",  
 nonce="9fa6c53b946631caf9c9b7a7ea9e5f0d", uri="sip:00004@192.168.1.1",  
 response="8753d501797e3c3f15cf65545cd625d5", algorithm=MD5,  
 opaque="e01289fc77b69626b29b8744a85277b4", qop=auth, nc=00000003  
 Max-Forwards: 70  
 RAck: 1042194749 233289001 INVITE  
 Content-Length: 0

F17 192.168.1.1:5062(2) -> 192.168.2.15:5060(3)

PRACK sip:00004@192.168.2.15 SIP/2.0  
 Via: SIP/2.0/UDP 192.168.1.1:5060;branch=z9hG4bK-763.1084364282.233289003

# FOMA/WLAN デュアル端末に関する技術参考資料 第 1.2 版

Via: SIP/2.0/UDP 192.168.2.10:5060;branch=z9hG4bK-14f418dd-880905.603  
Route: <sip:00004@192.168.2.15>  
From: 00002 <sip:00002@sip.com>;tag=1576039b  
To: <sip:00004@sip.com>;tag=342a8563  
Call-ID: 32916bdd@00002.192.168.1.1  
CSeq: 233289003 PRACK  
max-forwards: 69  
rack: 1042194749 233289001 INVITE  
Content-Length: 0

---

F18 192.168.2.15:1135(3) -> 192.168.1.1:5060(2)

SIP/2.0 200 OK  
Via: SIP/2.0/UDP 192.168.1.1:5060;branch=z9hG4bK-763.1084364282.233289003  
Via: SIP/2.0/UDP 192.168.2.10:5060;branch=z9hG4bK-14f418dd-880905.603  
From: 00002 <sip:00002@sip.com>;tag=1576039b  
To: <sip:00004@sip.com>;tag=342a8563  
Call-ID: 32916bdd@00002.192.168.1.1  
CSeq: 233289003 PRACK  
Content-Length: 0

---

F19 192.168.1.1:5062(2) -> 192.168.2.10:5060(1)

SIP/2.0 200 OK  
Via: SIP/2.0/UDP 192.168.2.10:5060;branch=z9hG4bK-14f418dd-880905.603  
From: 00002 <sip:00002@sip.com>;tag=1576039b  
To: <sip:00004@sip.com>;tag=342a8563  
Call-ID: 32916bdd@00002.192.168.1.1  
CSeq: 233289003 PRACK  
Content-Length: 0

---

F20 192.168.2.15:1135(3) -> 192.168.1.1:5060(2)

SIP/2.0 200 OK  
Via: SIP/2.0/UDP 192.168.1.1:5060;branch=z9hG4bK-763.151351.233289001  
Via: SIP/2.0/UDP 192.168.2.10:5060;branch=z9hG4bK-504dc1d0-880904.039  
Record-Route: <sip:00004@192.168.1.1>  
From: 00002 <sip:00002@sip.com>;tag=1576039b  
To: <sip:00004@sip.com>;tag=342a8563  
Call-ID: 32916bdd@00002.192.168.1.1  
CSeq: 233289001 INVITE  
Contact: <sip:00004@192.168.2.15>  
Supported: 100rel, replaces  
Allow: INVITE, ACK, BYE, CANCEL, OPTIONS, PRACK, MESSAGE, REFER, NOTIFY  
Content-Type: application/sdp  
Accept: application/sdp, message/sipfrag  
Content-Length: 177

v=0  
o= 270477 12901 IN IP4 192.168.2.15  
s=  
c=IN IP4 192.168.2.15  
t=0 0  
m=audio 5008 RTP/AVP 0 96  
a=rtpmap:0 PCMU/8000  
a=rtpmap:96 telephone-event/8000  
a=fmtp:96 0-11

---

F21 192.168.1.1:5062(2) -> 192.168.2.10:5060(1)

SIP/2.0 200 OK  
Via: SIP/2.0/UDP 192.168.2.10:5060;branch=z9hG4bK-504dc1d0-880904.039  
Record-Route: <sip:00004@192.168.1.1>  
From: 00002 <sip:00002@sip.com>;tag=1576039b  
To: <sip:00004@sip.com>;tag=342a8563  
Call-ID: 32916bdd@00002.192.168.1.1  
CSeq: 233289001 INVITE  
Contact: <sip:00004@192.168.2.15>  
supported: 100rel  
supported: replaces

## FOMA/WLAN デュアル端末に関する技術参考資料 第 1.2 版

Allow: INVITE, ACK, BYE, CANCEL, OPTIONS, PRACK, MESSAGE, REFER, NOTIFY  
 Content-Type: application/sdp  
 Accept: application/sdp, message/sipfrag  
 Content-Length: 177

v=0  
 o=- 270477 12901 IN IP4 192.168.2.15  
 s=-  
 c=IN IP4 192.168.2.15  
 t=0 0  
 m=audio 5008 RTP/AVP 0 96  
 a=rtpmap:0 PCMU/8000  
 a=rtpmap:96 telephone-event/8000  
 a=fmtp:96 0-11

F22 192.168.2.10:1091(1) -> 192.168.1.1:5060(2)

ACK sip:00004@192.168.1.1 SIP/2.0  
 Via: SIP/2.0/UDP 192.168.2.10:5060;branch=z9hG4bK-2ef68baf-880908.461  
 Route: <sip:00004@192.168.2.15>  
 From: 00002 <sip:00002@sip.com>;tag=1576039b  
 To: <sip:00004@sip.com>;tag=342a8563  
 Call-ID: 32916bdd@00002.192.168.1.1  
 CSeq: 233289001 ACK  
 Proxy-Authorization: Digest username="00002",  
 nonce="9fa6c53b946631caf9c9b7a7ea9e5f0d",  
 response="f78115b89233aa0ceb4eec365afb950",  
 opaque="e01289fc77b69626b29b8744a85277b4", qop=auth, nc=00000001  
 algorithm=MD5,  
 uri="sip:00004@sip.com",  
 cnonce="0731b4eb",  
 Max-Forwards: 70  
 Content-Length: 0

F23 192.168.1.1:5062(2) -> 192.168.2.15:5060(3)

ACK sip:00004@192.168.2.15 SIP/2.0  
 Via: SIP/2.0/UDP 192.168.1.1:5060;branch=z9hG4bK-763.1084364285.233289001  
 Via: SIP/2.0/UDP 192.168.2.10:5060;branch=z9hG4bK-2ef68baf-880908.461  
 From: 00002 <sip:00002@sip.com>;tag=1576039b  
 To: <sip:00004@sip.com>;tag=342a8563  
 Call-ID: 32916bdd@00002.192.168.1.1  
 CSeq: 233289001 ACK  
 max-forwards: 69  
 Content-Length: 0

F24 192.168.2.15:1135(3) -> 192.168.1.1:5060(2)

INVITE sip:00004@192.168.1.1 SIP/2.0  
 Via: SIP/2.0/UDP 192.168.2.15:5060;branch=z9hG4bK-12acba37-880746.972  
 Route: <sip:00002@192.168.2.10>  
 From: <sip:00004@sip.com>;tag=342a8563  
 To: 00002 <sip:00002@sip.com>;tag=1576039b  
 Call-ID: 32916bdd@00002.192.168.1.1  
 CSeq: 1431703571 INVITE  
 Contact: <sip:00004@192.168.2.15>  
 Max-Forwards: 70  
 Supported: 100rel, replaces  
 Allow: INVITE, ACK, BYE, CANCEL, OPTIONS, PRACK, MESSAGE, REFER, NOTIFY  
 Content-Type: application/sdp  
 Content-Length: 189

v=0  
 o=- 956607 12902 IN IP4 192.168.2.15  
 s=-  
 c=IN IP4 192.168.2.15  
 t=0 0  
 m=audio 5008 RTP/AVP 0 96  
 a=rtpmap:0 PCMU/8000  
 a=rtpmap:96 telephone-event/8000  
 a=fmtp:96 0-11  
 a=inactive

F25 192.168.1.1:5062(2) -> 192.168.2.15:5060(3)

SIP/2.0 100 Trying  
 Via: SIP/2.0/UDP 192.168.2.15:5060;branch=z9hG4bK-12acba37-880746.972  
 From: <sip:00004@sip.com>;tag=342a8563  
 To: 00002 <sip:00002@sip.com>;tag=1576039b  
 Call-ID: 32916bdd@00002.192.168.1.1  
 CSeq: 1431703571 INVITE  
 Content-Length: 0

=====

F26            192.168.1.1:5062(2) -> 192.168.2.10:5060(1)

INVITE sip:00002@192.168.2.10 SIP/2.0  
 Via: SIP/2.0/UDP 192.168.1.1:5060;branch=z9hG4bK-762.151351.1431703571  
 Via: SIP/2.0/UDP 192.168.2.15:5060;branch=z9hG4bK-12acba37-880746.972  
 Record-Route: <sip:00004@192.168.1.1>  
 Route: <sip:00002@192.168.2.10>  
 From: <sip:00004@sip.com>;tag=342a8563  
 To: 00002 <sip:00002@sip.com>;tag=1576039b  
 Call-ID: 32916bdd@00002.192.168.1.1  
 CSeq: 1431703571 INVITE  
 Contact: <sip:00004@192.168.2.15>  
 max-forwards: 69  
 supported: 100rel  
 supported: replaces  
 Allow: INVITE, ACK, BYE, CANCEL, OPTIONS, PRACK, MESSAGE, REFER, NOTIFY  
 Content-Type: application/sdp  
 Content-Length: 189

v=0  
 o=- 956607 12902 IN IP4 192.168.2.15  
 s=-  
 c=IN IP4 192.168.2.15  
 t=0 0  
 m=audio 5008 RTP/AVP 0 96  
 a=rtpmap:0 PCMU/8000  
 a=rtpmap:96 telephone-event/8000  
 a=fmtp:96 0-11  
 a=inactive

=====

F27            192.168.2.10:1091(1) -> 192.168.1.1:5060(2)

SIP/2.0 100 Trying  
 Via: SIP/2.0/UDP 192.168.1.1:5060;branch=z9hG4bK-762.151351.1431703571  
 Via: SIP/2.0/UDP 192.168.2.15:5060;branch=z9hG4bK-12acba37-880746.972  
 From: <sip:00004@sip.com>;tag=342a8563  
 To: 00002 <sip:00002@sip.com>;tag=1576039b  
 Call-ID: 32916bdd@00002.192.168.1.1  
 CSeq: 1431703571 INVITE  
 Content-Length: 0

=====

F28            192.168.2.10:1091(1) -> 192.168.1.1:5060(2)

SIP/2.0 200 OK  
 Via: SIP/2.0/UDP 192.168.1.1:5060;branch=z9hG4bK-762.151351.1431703571  
 Via: SIP/2.0/UDP 192.168.2.15:5060;branch=z9hG4bK-12acba37-880746.972  
 Record-Route: <sip:00004@192.168.1.1>  
 From: <sip:00004@sip.com>;tag=342a8563  
 To: 00002 <sip:00002@sip.com>;tag=1576039b  
 Call-ID: 32916bdd@00002.192.168.1.1  
 CSeq: 1431703571 INVITE  
 Contact: <sip:00002@192.168.2.10>  
 Supported: 100rel, replaces  
 Allow: INVITE, ACK, BYE, CANCEL, OPTIONS, PRACK, MESSAGE, REFER, NOTIFY  
 Content-Type: application/sdp  
 Accept: application/sdp, message/sipfrag  
 Content-Length: 187

v=0  
 o=- 13601 3602 IN IP4 192.168.2.10  
 s=-  
 c=IN IP4 192.168.2.10  
 t=0 0  
 m=audio 5008 RTP/AVP 0 96

```

a=rtpmap:0 PCMU/8000
a=rtpmap:96 telephone-event/8000
a=fmtp:96 0-11
a=inactive

```

---

F29 192.168.1.1:5062(2) -> 192.168.2.15:5060(3)

```

SIP/2.0 200 OK
Via: SIP/2.0/UDP 192.168.2.15:5060;branch=z9hG4bK-12acba37-880746.972
Record-Route: <sip:00004@192.168.1.1>
From: <sip:00004@sip.com>;tag=342a8563
To: 00002 <sip:00002@sip.com>;tag=1576039b
Call-ID: 32916bdd@00002.192.168.1.1
CSeq: 1431703571 INVITE
Contact: <sip:00002@192.168.2.10>
supported: 100rel
supported: replaces
Allow: INVITE, ACK, BYE, CANCEL, OPTIONS, PRACK, MESSAGE, REFER, NOTIFY
Content-Type: application/sdp
Accept: application/sdp, message/sipfrag
Content-Length: 187

```

```

v=0
o=- 13601 3602 IN IP4 192.168.2.10
s=-
c=IN IP4 192.168.2.10
t=0 0
m=audio 5008 RTP/AVP 0 96
a=rtpmap:0 PCMU/8000
a=rtpmap:96 telephone-event/8000
a=fmtp:96 0-11
a=inactive

```

---

F30 192.168.2.15:1135(3) -> 192.168.1.1:5060(2)

```

ACK sip:00004@192.168.1.1 SIP/2.0
Via: SIP/2.0/UDP 192.168.2.15:5060;branch=z9hG4bK-752f8c04-880747.221
Route: <sip:00002@192.168.2.10>
From: <sip:00004@sip.com>;tag=342a8563
To: 00002 <sip:00002@sip.com>;tag=1576039b
Call-ID: 32916bdd@00002.192.168.1.1
CSeq: 1431703571 ACK
Max-Forwards: 70
Content-Length: 0

```

---

F31 192.168.1.1:5062(2) -> 192.168.2.10:5060(1)

```

ACK sip:00002@192.168.2.10 SIP/2.0
Via: SIP/2.0/UDP 192.168.1.1:5060;branch=z9hG4bK-762.1084364289.1431703571
Via: SIP/2.0/UDP 192.168.2.15:5060;branch=z9hG4bK-752f8c04-880747.221
From: <sip:00004@sip.com>;tag=342a8563
To: 00002 <sip:00002@sip.com>;tag=1576039b
Call-ID: 32916bdd@00002.192.168.1.1
CSeq: 1431703571 ACK
max-forwards: 69
Content-Length: 0

```

---

F32 192.168.2.15:1135(3) -> 192.168.1.1:5060(2)

```

INVITE sip:00005@sip.com SIP/2.0
Via: SIP/2.0/UDP 192.168.2.15:5060;branch=z9hG4bK-606e6d5d-880757.685
Route: <sip:192.168.1.1:5060>
From: <sip:00004@sip.com>;tag=45d480e2
To: <sip:00005@sip.com>
Call-ID: 471b3560@00004.192.168.1.1
CSeq: 1502071419 INVITE
Contact: <sip:00004@192.168.2.15>
Max-Forwards: 70
Supported: 100rel, replaces
Allow: INVITE, ACK, BYE, CANCEL, OPTIONS, PRACK, MESSAGE, REFER, NOTIFY
Content-Type: application/sdp

```

Accept: application/sdp, message/sipfrag  
Content-Length: 249

v=0  
o=- 675651 101 IN IP4 192.168.2.15  
s=-  
c=IN IP4 192.168.2.15  
t=0 0  
m=audio 5006 RTP/AVP 0 8 4 18 96  
a=rtpmap:0 PCMU/8000  
a=rtpmap:8 PCMA/8000  
a=rtpmap:4 G723/8000  
a=rtpmap:18 G729/8000  
a=rtpmap:96 telephone-event/8000  
a=fmtp:96 0-11

F33 192.168.1.1:5062(2) -> 192.168.2.15:5060(3)

SIP/2.0 100 Trying  
Via: SIP/2.0/UDP 192.168.2.15:5060;branch=z9hG4bK-606e6d5d-880757.685  
From: <sip:00004@sip.com>;tag=45d480e2  
To: <sip:00005@sip.com>  
Call-ID: 471b3560@00004.192.168.1.1  
CSeq: 1502071419 INVITE  
Content-Length: 0

F34 192.168.1.1:5062(2) -> 192.168.2.14:5060(4)

INVITE sip:00005@192.168.2.14 SIP/2.0  
Via: SIP/2.0/UDP 192.168.1.1:5060;branch=z9hG4bK-765.842255.1502071419  
Via: SIP/2.0/UDP 192.168.2.15:5060;branch=z9hG4bK-606e6d5d-880757.685  
Record-Route: <sip:00005@192.168.1.1>  
Route: <sip:192.168.1.1:5060>  
From: 00004 <sip:00004@sip.com>;tag=45d480e2  
To: <sip:00005@sip.com>  
Call-ID: 471b3560@00004.192.168.1.1  
CSeq: 1502071419 INVITE  
Contact: <sip:00004@192.168.2.15>  
max-forwards: 69  
supported: 100rel  
supported: replaces  
Allow: INVITE, ACK, BYE, CANCEL, OPTIONS, PRACK, MESSAGE, REFER, NOTIFY  
Content-Type: application/sdp  
Accept: application/sdp, message/sipfrag  
Content-Length: 249

v=0  
o=- 675651 101 IN IP4 192.168.2.15  
s=-  
c=IN IP4 192.168.2.15  
t=0 0  
m=audio 5006 RTP/AVP 0 8 4 18 96  
a=rtpmap:0 PCMU/8000  
a=rtpmap:8 PCMA/8000  
a=rtpmap:4 G723/8000  
a=rtpmap:18 G729/8000  
a=rtpmap:96 telephone-event/8000  
a=fmtp:96 0-11

F35 192.168.2.14:1057(4) -> 192.168.1.1:5060(2)

SIP/2.0 100 Trying  
Via: SIP/2.0/UDP 192.168.1.1:5060;branch=z9hG4bK-765.842255.1502071419  
Via: SIP/2.0/UDP 192.168.2.15:5060;branch=z9hG4bK-606e6d5d-880757.685  
From: 00004 <sip:00004@sip.com>;tag=45d480e2  
To: <sip:00005@sip.com>  
Call-ID: 471b3560@00004.192.168.1.1  
CSeq: 1502071419 INVITE  
Content-Length: 0

F36 192.168.2.14:1057(4) -> 192.168.1.1:5060(2)

SIP/2.0 183 Session Progress  
 Via: SIP/2.0/UDP 192.168.1.1:5060;branch=z9hG4bK-765.842255.1502071419  
 Via: SIP/2.0/UDP 192.168.2.15:5060;branch=z9hG4bK-606e6d5d-880757.685  
 Record-Route: <sip:00005@192.168.1.1>  
 From: 00004 <sip:00004@sip.com>;tag=45d480e2  
 To: <sip:00005@sip.com>;tag=3292ae5a  
 Call-ID: 471b3560@00004.192.168.1.1  
 CSeq: 1502071419 INVITE  
 Contact: <sip:00005@192.168.2.14>  
 Require: 100rel  
 RSeq: 1233637685  
 Content-Length: 0

=====

F37 192.168.1.1:5062(2) -> 192.168.2.15:5060(3)

SIP/2.0 183 Session Progress  
 Via: SIP/2.0/UDP 192.168.2.15:5060;branch=z9hG4bK-606e6d5d-880757.685  
 Record-Route: <sip:00005@192.168.1.1>  
 From: 00004 <sip:00004@sip.com>;tag=45d480e2  
 To: <sip:00005@sip.com>;tag=3292ae5a  
 Call-ID: 471b3560@00004.192.168.1.1  
 CSeq: 1502071419 INVITE  
 Contact: <sip:00005@192.168.2.14>  
 require: 100rel  
 rseq: 1233637685  
 Content-Length: 0

=====

F38 192.168.2.15:1135(3) -> 192.168.1.1:5060(2)

PRACK sip:00005@192.168.1.1 SIP/2.0  
 Via: SIP/2.0/UDP 192.168.2.15:5060;branch=z9hG4bK-17e7fef9-880758.559  
 Route: <sip:00005@192.168.2.14>  
 From: 00004 <sip:00004@sip.com>;tag=45d480e2  
 To: <sip:00005@sip.com>;tag=3292ae5a  
 Call-ID: 471b3560@00004.192.168.1.1  
 CSeq: 1502071420 PRACK  
 Max-Forwards: 70  
 RAck: 1233637685 1502071419 INVITE  
 Content-Length: 0

=====

F39 192.168.1.1:5062(2) -> 192.168.2.14:5060(4)

PRACK sip:00005@192.168.2.14 SIP/2.0  
 Via: SIP/2.0/UDP 192.168.1.1:5060;branch=z9hG4bK-765.1084364300.1502071420  
 Via: SIP/2.0/UDP 192.168.2.15:5060;branch=z9hG4bK-17e7fef9-880758.559  
 Route: <sip:00005@192.168.2.14>  
 From: 00004 <sip:00004@sip.com>;tag=45d480e2  
 To: <sip:00005@sip.com>;tag=3292ae5a  
 Call-ID: 471b3560@00004.192.168.1.1  
 CSeq: 1502071420 PRACK  
 max-forwards: 69  
 rack: 1233637685 1502071419 INVITE  
 Content-Length: 0

=====

F40 192.168.2.14:1057(4) -> 192.168.1.1:5060(2)

SIP/2.0 200 OK  
 Via: SIP/2.0/UDP 192.168.1.1:5060;branch=z9hG4bK-765.1084364300.1502071420  
 Via: SIP/2.0/UDP 192.168.2.15:5060;branch=z9hG4bK-17e7fef9-880758.559  
 From: 00004 <sip:00004@sip.com>;tag=45d480e2  
 To: <sip:00005@sip.com>;tag=3292ae5a  
 Call-ID: 471b3560@00004.192.168.1.1  
 CSeq: 1502071420 PRACK  
 Content-Length: 0

F41 192.168.1.1:5062(2) -> 192.168.2.15:5060(3)

SIP/2.0 200 OK  
 Via: SIP/2.0/UDP 192.168.2.15:5060;branch=z9hG4bK-17e7fef9-880758.559  
 From: 00004 <sip:00004@sip.com>;tag=45d480e2  
 To: <sip:00005@sip.com>;tag=3292ae5a  
 Call-ID: 471b3560@00004.192.168.1.1  
 CSeq: 1502071420 PRACK  
 Content-Length: 0

F42 192.168.2.14:1057(4) -> 192.168.1.1:5060(2)

SIP/2.0 180 Ringing  
 Via: SIP/2.0/UDP 192.168.1.1:5060;branch=z9hG4bK-765.842255.1502071419  
 Via: SIP/2.0/UDP 192.168.2.15:5060;branch=z9hG4bK-606e6d5d-880757.685  
 Record-Route: <sip:00005@192.168.1.1>  
 From: 00004 <sip:00004@sip.com>;tag=45d480e2  
 To: <sip:00005@sip.com>;tag=3292ae5a  
 Call-ID: 471b3560@00004.192.168.1.1  
 CSeq: 1502071419 INVITE  
 Contact: <sip:00005@192.168.2.14>  
 Require: 100rel  
 RSeq: 1233637686  
 Content-Length: 0

F43 192.168.1.1:5062(2) -> 192.168.2.15:5060(3)

SIP/2.0 180 Ringing  
 Via: SIP/2.0/UDP 192.168.2.15:5060;branch=z9hG4bK-606e6d5d-880757.685  
 Record-Route: <sip:00005@192.168.1.1>  
 From: 00004 <sip:00004@sip.com>;tag=45d480e2  
 To: <sip:00005@sip.com>;tag=3292ae5a  
 Call-ID: 471b3560@00004.192.168.1.1  
 CSeq: 1502071419 INVITE  
 Contact: <sip:00005@192.168.2.14>  
 require: 100rel  
 rseq: 1233637686  
 Content-Length: 0

F44 192.168.2.15:1135(3) -> 192.168.1.1:5060(2)

PRACK sip:00005@192.168.1.1 SIP/2.0  
 Via: SIP/2.0/UDP 192.168.2.15:5060;branch=z9hG4bK-2603081f-880759.161  
 Route: <sip:00005@192.168.2.14>  
 From: 00004 <sip:00004@sip.com>;tag=45d480e2  
 To: <sip:00005@sip.com>;tag=3292ae5a  
 Call-ID: 471b3560@00004.192.168.1.1  
 CSeq: 1502071421 PRACK  
 Max-Forwards: 70  
 Rack: 1233637686 1502071419 INVITE  
 Content-Length: 0

F45 192.168.1.1:5062(2) -> 192.168.2.14:5060(4)

PRACK sip:00005@192.168.2.14 SIP/2.0  
 Via: SIP/2.0/UDP 192.168.1.1:5060;branch=z9hG4bK-765.1084364301.1502071421  
 Via: SIP/2.0/UDP 192.168.2.15:5060;branch=z9hG4bK-2603081f-880759.161  
 Route: <sip:00005@192.168.2.14>  
 From: 00004 <sip:00004@sip.com>;tag=45d480e2  
 To: <sip:00005@sip.com>;tag=3292ae5a  
 Call-ID: 471b3560@00004.192.168.1.1  
 CSeq: 1502071421 PRACK  
 max-forwards: 69  
 rack: 1233637686 1502071419 INVITE  
 Content-Length: 0



F46 192.168.2.14:1057(4) -> 192.168.1.1:5060(2)

SIP/2.0 200 OK  
 Via: SIP/2.0/UDP 192.168.1.1:5060;branch=z9hG4bK-765.1084364301.1502071421  
 Via: SIP/2.0/UDP 192.168.2.15:5060;branch=z9hG4bK-2603081f-880759.161  
 From: 00004 <sip:00004@sip.com>;tag=45d480e2  
 To: <sip:00005@sip.com>;tag=3292ae5a  
 Call-ID: 471b3560@00004.192.168.1.1  
 CSeq: 1502071421 PRACK  
 Content-Length: 0

F47 192.168.1.1:5062(2) -> 192.168.2.15:5060(3)

SIP/2.0 200 OK  
 Via: SIP/2.0/UDP 192.168.2.15:5060;branch=z9hG4bK-2603081f-880759.161  
 From: 00004 <sip:00004@sip.com>;tag=45d480e2  
 To: <sip:00005@sip.com>;tag=3292ae5a  
 Call-ID: 471b3560@00004.192.168.1.1  
 CSeq: 1502071421 PRACK  
 Content-Length: 0

F48 192.168.2.14:1057(4) -> 192.168.1.1:5060(2)

SIP/2.0 200 OK  
 Via: SIP/2.0/UDP 192.168.1.1:5060;branch=z9hG4bK-765.842255.1502071419  
 Via: SIP/2.0/UDP 192.168.2.15:5060;branch=z9hG4bK-606e6d5d-880757.685  
 Record-Route: <sip:00005@192.168.1.1>  
 From: 00004 <sip:00004@sip.com>;tag=45d480e2  
 To: <sip:00005@sip.com>;tag=3292ae5a  
 Call-ID: 471b3560@00004.192.168.1.1  
 CSeq: 1502071419 INVITE  
 Contact: <sip:00005@192.168.2.14>  
 Supported: 100rel, replaces  
 Allow: INVITE, ACK, BYE, CANCEL, OPTIONS, PRACK, MESSAGE, REFER, NOTIFY  
 Content-Type: application/sdp  
 Accept: application/sdp, message/sipfrag  
 Content-Length: 177

v=0  
 o=- 405923 15001 IN IP4 192.168.2.14  
 s=-  
 c=IN IP4 192.168.2.14  
 t=0 0  
 m=audio 5008 RTP/AVP 0 96  
 a=rtpmap:0 PCMU/8000  
 a=rtpmap:96 telephone-event/8000  
 a=fmtp:96 0-11

F49 192.168.1.1:5062(2) -> 192.168.2.15:5060(3)

SIP/2.0 200 OK  
 Via: SIP/2.0/UDP 192.168.2.15:5060;branch=z9hG4bK-606e6d5d-880757.685  
 Record-Route: <sip:00005@192.168.1.1>  
 From: 00004 <sip:00004@sip.com>;tag=45d480e2  
 To: <sip:00005@sip.com>;tag=3292ae5a  
 Call-ID: 471b3560@00004.192.168.1.1  
 CSeq: 1502071419 INVITE  
 Contact: <sip:00005@192.168.2.14>  
 supported: 100rel  
 supported: replaces  
 Allow: INVITE, ACK, BYE, CANCEL, OPTIONS, PRACK, MESSAGE, REFER, NOTIFY  
 Content-Type: application/sdp  
 Accept: application/sdp, message/sipfrag  
 Content-Length: 177

v=0  
 o=- 405923 15001 IN IP4 192.168.2.14  
 s=-  
 c=IN IP4 192.168.2.14  
 t=0 0  
 m=audio 5008 RTP/AVP 0 96  
 a=rtpmap:0 PCMU/8000  
 a=rtpmap:96 telephone-event/8000

a=fmtp:96 0-11

```
=====
F50      192.168.2.15:1135(3) -> 192.168.1.1:5060(2)

ACK sip:00005@192.168.1.1 SIP/2.0
Via: SIP/2.0/UDP 192.168.2.15:5060;branch=z9hG4bK-3fd840fe-880761.576
Route: <sip:00005@192.168.2.14>
From: 00004 <sip:00004@sip.com>;tag=45d480e2
To: <sip:00005@sip.com>;tag=3292ae5a
Call-ID: 471b3560@00004.192.168.1.1
CSeq: 1502071419 ACK
Max-Forwards: 70
Content-Length: 0
=====
```

```
=====
F51      192.168.1.1:5062(2) -> 192.168.2.14:5060(4)

ACK sip:00005@192.168.2.14 SIP/2.0
Via: SIP/2.0/UDP 192.168.1.1:5060;branch=z9hG4bK-765.1084364303.1502071419
Via: SIP/2.0/UDP 192.168.2.15:5060;branch=z9hG4bK-3fd840fe-880761.576
From: 00004 <sip:00004@sip.com>;tag=45d480e2
To: <sip:00005@sip.com>;tag=3292ae5a
Call-ID: 471b3560@00004.192.168.1.1
CSeq: 1502071419 ACK
max-forwards: 69
Content-Length: 0
=====
```

```
=====
F52      192.168.2.15:1135(3) -> 192.168.1.1:5060(2)

INVITE sip:00005@192.168.1.1 SIP/2.0
Via: SIP/2.0/UDP 192.168.2.15:5060;branch=z9hG4bK-122b45aa-880765.145
Route: <sip:00005@192.168.2.14>
From: 00004 <sip:00004@sip.com>;tag=45d480e2
To: <sip:00005@sip.com>;tag=3292ae5a
Call-ID: 471b3560@00004.192.168.1.1
CSeq: 1502071422 INVITE
Contact: <sip:00004@192.168.2.15>
Max-Forwards: 70
Supported: 100rel, replaces
Allow: INVITE, ACK, BYE, CANCEL, OPTIONS, PRACK, MESSAGE, REFER, NOTIFY
Content-Type: application/sdp
Content-Length: 187

v=0
o=- 138129 102 IN IP4 192.168.2.15
s=-
c=IN IP4 192.168.2.15
t=0 0
m=audio 5006 RTP/AVP 0 96
a=rtpmap:0 PCMU/8000
a=rtpmap:96 telephone-event/8000
a=fmtp:96 0-11
a=inactive
=====
```

```
=====
F53      192.168.1.1:5062(2) -> 192.168.2.15:5060(3)

SIP/2.0 100 Trying
Via: SIP/2.0/UDP 192.168.2.15:5060;branch=z9hG4bK-122b45aa-880765.145
From: 00004 <sip:00004@sip.com>;tag=45d480e2
To: <sip:00005@sip.com>;tag=3292ae5a
Call-ID: 471b3560@00004.192.168.1.1
CSeq: 1502071422 INVITE
Content-Length: 0
=====
```

```
=====
F54      192.168.1.1:5062(2) -> 192.168.2.14:5060(4)

INVITE sip:00005@192.168.2.14 SIP/2.0
Via: SIP/2.0/UDP 192.168.1.1:5060;branch=z9hG4bK-765.842255.1502071422
Via: SIP/2.0/UDP 192.168.2.15:5060;branch=z9hG4bK-122b45aa-880765.145
=====
```

Record-Route: <sip:00005@192.168.1.1>  
 Route: <sip:00005@192.168.2.14>  
 From: 00004 <sip:00004@sip.com>;tag=45d480e2  
 To: <sip:00005@sip.com>;tag=3292ae5a  
 Call-ID: 471b3560@00004.192.168.1.1  
 CSeq: 1502071422 INVITE  
 Contact: <sip:00004@192.168.2.15>  
 max-forwards: 69  
 supported: 100rel  
 supported: replaces  
 Allow: INVITE, ACK, BYE, CANCEL, OPTIONS, PRACK, MESSAGE, REFER, NOTIFY  
 Content-Type: application/sdp  
 Content-Length: 187

v=0  
 o=- 138129 102 IN IP4 192.168.2.15  
 s=-  
 c=IN IP4 192.168.2.15  
 t=0 0  
 m=audio 5006 RTP/AVP 0 96  
 a=rtpmap:0 PCMU/8000  
 a=rtpmap:96 telephone-event/8000  
 a=fmtp:96 0-11  
 a=inactive

=====

F55 192.168.2.14:1057(4) -> 192.168.1.1:5060(2)

SIP/2.0 100 Trying  
 Via: SIP/2.0/UDP 192.168.1.1:5060;branch=z9hG4bK-765.842255.1502071422  
 Via: SIP/2.0/UDP 192.168.2.15:5060;branch=z9hG4bK-122b45aa-880765.145  
 From: 00004 <sip:00004@sip.com>;tag=45d480e2  
 To: <sip:00005@sip.com>;tag=3292ae5a  
 Call-ID: 471b3560@00004.192.168.1.1  
 CSeq: 1502071422 INVITE  
 Content-Length: 0

=====

F56 192.168.2.14:1057(4) -> 192.168.1.1:5060(2)

SIP/2.0 200 OK  
 Via: SIP/2.0/UDP 192.168.1.1:5060;branch=z9hG4bK-765.842255.1502071422  
 Via: SIP/2.0/UDP 192.168.2.15:5060;branch=z9hG4bK-122b45aa-880765.145  
 Record-Route: <sip:00005@192.168.1.1>  
 From: 00004 <sip:00004@sip.com>;tag=45d480e2  
 To: <sip:00005@sip.com>;tag=3292ae5a  
 Call-ID: 471b3560@00004.192.168.1.1  
 CSeq: 1502071422 INVITE  
 Contact: <sip:00005@192.168.2.14>  
 Supported: 100rel, replaces  
 Allow: INVITE, ACK, BYE, CANCEL, OPTIONS, PRACK, MESSAGE, REFER, NOTIFY  
 Content-Type: application/sdp  
 Accept: application/sdp, message/sipfrag  
 Content-Length: 189

v=0  
 o=- 828444 15002 IN IP4 192.168.2.14  
 s=-  
 c=IN IP4 192.168.2.14  
 t=0 0  
 m=audio 5008 RTP/AVP 0 96  
 a=rtpmap:0 PCMU/8000  
 a=rtpmap:96 telephone-event/8000  
 a=fmtp:96 0-11  
 a=inactive

=====

F57 192.168.1.1:5062(2) -> 192.168.2.15:5060(3)

SIP/2.0 200 OK  
 Via: SIP/2.0/UDP 192.168.2.15:5060;branch=z9hG4bK-122b45aa-880765.145  
 Record-Route: <sip:00005@192.168.1.1>  
 From: 00004 <sip:00004@sip.com>;tag=45d480e2  
 To: <sip:00005@sip.com>;tag=3292ae5a  
 Call-ID: 471b3560@00004.192.168.1.1  
 CSeq: 1502071422 INVITE  
 Contact: <sip:00005@192.168.2.14>

```
supported: 100rel
supported: replaces
Allow: INVITE, ACK, BYE, CANCEL, OPTIONS, PRACK, MESSAGE, REFER, NOTIFY
Content-Type: application/sdp
Accept: application/sdp, message/sipfrag
Content-Length: 189
```

```
v=0
o=- 828444 15002 IN IP4 192.168.2.14
s=-
c=IN IP4 192.168.2.14
t=0 0
m=audio 5008 RTP/AVP 0 96
a=rtpmap:0 PCMU/8000
a=rtpmap:96 telephone-event/8000
a=fmtp:96 0-11
a=inactive
```

```
=====
F58      192.168.2.15:1135(3) -> 192.168.1.1:5060(2)
```

```
ACK sip:00005@192.168.1.1 SIP/2.0
Via: SIP/2.0/UDP 192.168.2.15:5060;branch=z9hG4bK-3bbbec0a-880765.705
Route: <sip:00005@192.168.2.14>
From: 00004 <sip:00004@sip.com>;tag=45d480e2
To: <sip:00005@sip.com>;tag=3292ae5a
Call-ID: 471b3560@00004.192.168.1.1
CSeq: 1502071422 ACK
Max-Forwards: 70
Content-Length: 0
```

```
=====
F59      192.168.1.1:5062(2) -> 192.168.2.14:5060(4)
```

```
ACK sip:00005@192.168.2.14 SIP/2.0
Via: SIP/2.0/UDP 192.168.1.1:5060;branch=z9hG4bK-765.1084364307.1502071422
Via: SIP/2.0/UDP 192.168.2.15:5060;branch=z9hG4bK-3bbbec0a-880765.705
From: 00004 <sip:00004@sip.com>;tag=45d480e2
To: <sip:00005@sip.com>;tag=3292ae5a
Call-ID: 471b3560@00004.192.168.1.1
CSeq: 1502071422 ACK
max-forwards: 69
Content-Length: 0
```

```
=====
F60      192.168.2.15:1135(3) -> 192.168.1.1:5060(2)
```

```
INVITE sip:00004@192.168.1.1 SIP/2.0
Via: SIP/2.0/UDP 192.168.2.15:5060;branch=z9hG4bK-54fd7e62-880765.765
Route: <sip:00002@192.168.2.10>
From: <sip:00004@sip.com>;tag=342a8563
To: 00002 <sip:00002@sip.com>;tag=1576039b
Call-ID: 32916bdd@00002.192.168.1.1
CSeq: 1431703572 INVITE
Contact: <sip:00004@192.168.2.15>
Max-Forwards: 70
Supported: 100rel, replaces
Allow: INVITE, ACK, BYE, CANCEL, OPTIONS, PRACK, MESSAGE, REFER, NOTIFY
Content-Type: application/sdp
Content-Length: 177
```

```
v=0
o=- 757603 12903 IN IP4 192.168.2.15
s=-
c=IN IP4 192.168.2.15
t=0 0
m=audio 5008 RTP/AVP 0 96
a=rtpmap:0 PCMU/8000
a=rtpmap:96 telephone-event/8000
a=fmtp:96 0-11
```

```
=====
F61      192.168.1.1:5062(2) -> 192.168.2.15:5060(3)
```

```
SIP/2.0 100 Trying
```

Via: SIP/2.0/UDP 192.168.2.15:5060;branch=z9hG4bK-54fd7e62-880765.765  
 From: <sip:00004@sip.com>;tag=342a8563  
 To: 00002 <sip:00002@sip.com>;tag=1576039b  
 Call-ID: 32916bdd@00002.192.168.1.1  
 CSeq: 1431703572 INVITE  
 Content-Length: 0

=====

F62            192.168.1.1:5062(2) -> 192.168.2.10:5060(1)

INVITE sip:00002@192.168.2.10 SIP/2.0  
 Via: SIP/2.0/UDP 192.168.1.1:5060;branch=z9hG4bK-762.151351.1431703572  
 Via: SIP/2.0/UDP 192.168.2.15:5060;branch=z9hG4bK-54fd7e62-880765.765  
 Record-Route: <sip:00004@192.168.1.1>  
 Route: <sip:00002@192.168.2.10>  
 From: <sip:00004@sip.com>;tag=342a8563  
 To: 00002 <sip:00002@sip.com>;tag=1576039b  
 Call-ID: 32916bdd@00002.192.168.1.1  
 CSeq: 1431703572 INVITE  
 Contact: <sip:00004@192.168.2.15>  
 max-forwards: 69  
 supported: 100rel  
 supported: replaces  
 Allow: INVITE, ACK, BYE, CANCEL, OPTIONS, PRACK, MESSAGE, REFER, NOTIFY  
 Content-Type: application/sdp  
 Content-Length: 177

v=0  
 o=- 757603 12903 IN IP4 192.168.2.15  
 s=-  
 c=IN IP4 192.168.2.15  
 t=0 0  
 m=audio 5008 RTP/AVP 0 96  
 a=rtpmap:0 PCMU/8000  
 a=rtpmap:96 telephone-event/8000  
 a=fmtp:96 0-11

=====

F63            192.168.2.10:1091(1) -> 192.168.1.1:5060(2)

SIP/2.0 100 Trying  
 Via: SIP/2.0/UDP 192.168.1.1:5060;branch=z9hG4bK-762.151351.1431703572  
 Via: SIP/2.0/UDP 192.168.2.15:5060;branch=z9hG4bK-54fd7e62-880765.765  
 From: <sip:00004@sip.com>;tag=342a8563  
 To: 00002 <sip:00002@sip.com>;tag=1576039b  
 Call-ID: 32916bdd@00002.192.168.1.1  
 CSeq: 1431703572 INVITE  
 Content-Length: 0

=====

F64            192.168.2.10:1091(1) -> 192.168.1.1:5060(2)

SIP/2.0 200 OK  
 Via: SIP/2.0/UDP 192.168.1.1:5060;branch=z9hG4bK-762.151351.1431703572  
 Via: SIP/2.0/UDP 192.168.2.15:5060;branch=z9hG4bK-54fd7e62-880765.765  
 Record-Route: <sip:00004@192.168.1.1>  
 From: <sip:00004@sip.com>;tag=342a8563  
 To: 00002 <sip:00002@sip.com>;tag=1576039b  
 Call-ID: 32916bdd@00002.192.168.1.1  
 CSeq: 1431703572 INVITE  
 Contact: <sip:00002@192.168.2.10>  
 Supported: 100rel, replaces  
 Allow: INVITE, ACK, BYE, CANCEL, OPTIONS, PRACK, MESSAGE, REFER, NOTIFY  
 Content-Type: application/sdp  
 Accept: application/sdp, message/sipfrag  
 Content-Length: 250

v=0  
 o=- 769018 3603 IN IP4 192.168.2.10  
 s=-  
 c=IN IP4 192.168.2.10  
 t=0 0  
 m=audio 5008 RTP/AVP 0 8 4 18 96  
 a=rtpmap:0 PCMU/8000  
 a=rtpmap:8 PCMA/8000  
 a=rtpmap:4 G723/8000

a=rtpmap:18 G729/8000  
a=rtpmap:96 telephone-event/8000  
a=fmtp:96 0-11

F65 192.168.1.1:5062(2) -> 192.168.2.15:5060(3)

SIP/2.0 200 OK  
Via: SIP/2.0/UDP 192.168.2.15:5060;branch=z9hG4bK-54fd7e62-880765.765  
Record-Route: <sip:00004@192.168.1.1>  
From: <sip:00004@sip.com>;tag=342a8563  
To: 00002 <sip:00002@sip.com>;tag=1576039b  
Call-ID: 32916bdd@00002.192.168.1.1  
CSeq: 1431703572 INVITE  
Contact: <sip:00002@192.168.2.10>  
supported: 100rel  
supported: replaces  
Allow: INVITE, ACK, BYE, CANCEL, OPTIONS, PRACK, MESSAGE, REFER, NOTIFY  
Content-Type: application/sdp  
Accept: application/sdp, message/sipfrag  
Content-Length: 250

v=0  
o=- 769018 3603 IN IP4 192.168.2.10  
s=-  
c=IN IP4 192.168.2.10  
t=0 0  
m=audio 5008 RTP/AVP 0 8 4 18 96  
a=rtpmap:0 PCMU/8000  
a=rtpmap:8 PCMA/8000  
a=rtpmap:4 G723/8000  
a=rtpmap:18 G729/8000  
a=rtpmap:96 telephone-event/8000  
a=fmtp:96 0-11

F66 192.168.2.15:1135(3) -> 192.168.1.1:5060(2)

ACK sip:00004@192.168.1.1 SIP/2.0  
Via: SIP/2.0/UDP 192.168.2.15:5060;branch=z9hG4bK-56d8fb15-880765.983  
Route: <sip:00002@192.168.2.10>  
From: <sip:00004@sip.com>;tag=342a8563  
To: 00002 <sip:00002@sip.com>;tag=1576039b  
Call-ID: 32916bdd@00002.192.168.1.1  
CSeq: 1431703572 ACK  
Max-Forwards: 70  
Content-Length: 0

F67 192.168.1.1:5062(2) -> 192.168.2.10:5060(1)

ACK sip:00002@192.168.2.10 SIP/2.0  
Via: SIP/2.0/UDP 192.168.1.1:5060;branch=z9hG4bK-762.1084364308.1431703572  
Via: SIP/2.0/UDP 192.168.2.15:5060;branch=z9hG4bK-56d8fb15-880765.983  
From: <sip:00004@sip.com>;tag=342a8563  
To: 00002 <sip:00002@sip.com>;tag=1576039b  
Call-ID: 32916bdd@00002.192.168.1.1  
CSeq: 1431703572 ACK  
max-forwards: 69  
Content-Length: 0

F68 192.168.2.15:1135(3) -> 192.168.1.1:5060(2)

INVITE sip:00004@192.168.1.1 SIP/2.0  
Via: SIP/2.0/UDP 192.168.2.15:5060;branch=z9hG4bK-2a013025-880770.006  
Route: <sip:00002@192.168.2.10>  
From: <sip:00004@sip.com>;tag=342a8563  
To: 00002 <sip:00002@sip.com>;tag=1576039b  
Call-ID: 32916bdd@00002.192.168.1.1  
CSeq: 1431703573 INVITE  
Contact: <sip:00004@192.168.2.15>  
Max-Forwards: 70  
Supported: 100rel, replaces  
Allow: INVITE, ACK, BYE, CANCEL, OPTIONS, PRACK, MESSAGE, REFER, NOTIFY

Content-Type: application/sdp  
Content-Length: 189

v=0  
o=- 994868 12904 IN IP4 192.168.2.15  
s=-  
c=IN IP4 192.168.2.15  
t=0 0  
m=audio 5008 RTP/AVP 0 96  
a=rtpmap:0 PCMU/8000  
a=rtpmap:96 telephone-event/8000  
a=fmtp:96 0-11  
a=inactive

F69 192.168.1.1:5062(2) -> 192.168.2.15:5060(3)

SIP/2.0 100 Trying  
Via: SIP/2.0/UDP 192.168.2.15:5060;branch=z9hG4bK-2a013025-880770.006  
From: <sip:00004@sip.com>;tag=342a8563  
To: 00002 <sip:00002@sip.com>;tag=1576039b  
Call-ID: 32916bdd@00002.192.168.1.1  
CSeq: 1431703573 INVITE  
Content-Length: 0

F70 192.168.1.1:5062(2) -> 192.168.2.10:5060(1)

INVITE sip:00002@192.168.2.10 SIP/2.0  
Via: SIP/2.0/UDP 192.168.1.1:5060;branch=z9hG4bK-762.151351.1431703573  
Via: SIP/2.0/UDP 192.168.2.15:5060;branch=z9hG4bK-2a013025-880770.006  
Record-Route: <sip:00004@192.168.1.1>  
Route: <sip:00002@192.168.2.10>  
From: <sip:00004@sip.com>;tag=342a8563  
To: 00002 <sip:00002@sip.com>;tag=1576039b  
Call-ID: 32916bdd@00002.192.168.1.1  
CSeq: 1431703573 INVITE  
Contact: <sip:00004@192.168.2.15>  
max-forwards: 69  
supported: 100rel  
supported: replaces  
Allow: INVITE, ACK, BYE, CANCEL, OPTIONS, PRACK, MESSAGE, REFER, NOTIFY  
Content-Type: application/sdp  
Content-Length: 189

v=0  
o=- 994868 12904 IN IP4 192.168.2.15  
s=-  
c=IN IP4 192.168.2.15  
t=0 0  
m=audio 5008 RTP/AVP 0 96  
a=rtpmap:0 PCMU/8000  
a=rtpmap:96 telephone-event/8000  
a=fmtp:96 0-11  
a=inactive

F71 192.168.2.10:1091(1) -> 192.168.1.1:5060(2)

SIP/2.0 100 Trying  
Via: SIP/2.0/UDP 192.168.1.1:5060;branch=z9hG4bK-762.151351.1431703573  
Via: SIP/2.0/UDP 192.168.2.15:5060;branch=z9hG4bK-2a013025-880770.006  
From: <sip:00004@sip.com>;tag=342a8563  
To: 00002 <sip:00002@sip.com>;tag=1576039b  
Call-ID: 32916bdd@00002.192.168.1.1  
CSeq: 1431703573 INVITE  
Content-Length: 0

F72 192.168.2.10:1091(1) -> 192.168.1.1:5060(2)

SIP/2.0 200 OK  
Via: SIP/2.0/UDP 192.168.1.1:5060;branch=z9hG4bK-762.151351.1431703573  
Via: SIP/2.0/UDP 192.168.2.15:5060;branch=z9hG4bK-2a013025-880770.006  
Record-Route: <sip:00004@192.168.1.1>

From: <sip:00004@sip.com>;tag=342a8563  
 To: 00002 <sip:00002@sip.com>;tag=1576039b  
 Call-ID: 32916bdd@00002.192.168.1.1  
 CSeq: 1431703573 INVITE  
 Contact: <sip:00002@192.168.2.10>  
 Supported: 100rel, replaces  
 Allow: INVITE, ACK, BYE, CANCEL, OPTIONS, PRACK, MESSAGE, REFER, NOTIFY  
 Content-Type: application/sdp  
 Accept: application/sdp, message/sipfrag  
 Content-Length: 188

v=0  
 o=- 306116 3604 IN IP4 192.168.2.10  
 s=-  
 c=IN IP4 192.168.2.10  
 t=0 0  
 m=audio 5008 RTP/AVP 0 96  
 a=rtpmap:0 PCMU/8000  
 a=rtpmap:96 telephone-event/8000  
 a=fmtp:96 0-11  
 a=inactive

=====

F73 192.168.1.1:5062(2) -> 192.168.2.15:5060(3)

SIP/2.0 200 OK  
 Via: SIP/2.0/UDP 192.168.2.15:5060;branch=z9hG4bK-2a013025-880770.006  
 Record-Route: <sip:00004@192.168.1.1>  
 From: <sip:00004@sip.com>;tag=342a8563  
 To: 00002 <sip:00002@sip.com>;tag=1576039b  
 Call-ID: 32916bdd@00002.192.168.1.1  
 CSeq: 1431703573 INVITE  
 Contact: <sip:00002@192.168.2.10>  
 supported: 100rel  
 supported: replaces  
 Allow: INVITE, ACK, BYE, CANCEL, OPTIONS, PRACK, MESSAGE, REFER, NOTIFY  
 Content-Type: application/sdp  
 Accept: application/sdp, message/sipfrag  
 Content-Length: 188

v=0  
 o=- 306116 3604 IN IP4 192.168.2.10  
 s=-  
 c=IN IP4 192.168.2.10  
 t=0 0  
 m=audio 5008 RTP/AVP 0 96  
 a=rtpmap:0 PCMU/8000  
 a=rtpmap:96 telephone-event/8000  
 a=fmtp:96 0-11  
 a=inactive

=====

F74 192.168.2.15:1135(3) -> 192.168.1.1:5060(2)

ACK sip:00004@192.168.1.1 SIP/2.0  
 Via: SIP/2.0/UDP 192.168.2.15:5060;branch=z9hG4bK-18bfc5a6-880770.513  
 Route: <sip:00002@192.168.2.10>  
 From: <sip:00004@sip.com>;tag=342a8563  
 To: 00002 <sip:00002@sip.com>;tag=1576039b  
 Call-ID: 32916bdd@00002.192.168.1.1  
 CSeq: 1431703573 ACK  
 Max-Forwards: 70  
 Content-Length: 0

=====

F75 192.168.1.1:5062(2) -> 192.168.2.10:5060(1)

ACK sip:00002@192.168.2.10 SIP/2.0  
 Via: SIP/2.0/UDP 192.168.1.1:5060;branch=z9hG4bK-762.1084364312.1431703573  
 Via: SIP/2.0/UDP 192.168.2.15:5060;branch=z9hG4bK-18bfc5a6-880770.513  
 From: <sip:00004@sip.com>;tag=342a8563  
 To: 00002 <sip:00002@sip.com>;tag=1576039b  
 Call-ID: 32916bdd@00002.192.168.1.1  
 CSeq: 1431703573 ACK  
 max-forwards: 69  
 Content-Length: 0



F76 192.168.2.15:1135(3) -> 192.168.1.1:5060(2)

INVITE sip:00005@192.168.1.1 SIP/2.0  
Via: SIP/2.0/UDP 192.168.2.15:5060;branch=z9hG4bK-747f89b7-880770.534  
Route: <sip:00005@192.168.2.14>  
From: 00004 <sip:00004@sip.com>;tag=45d480e2  
To: <sip:00005@sip.com>;tag=3292ae5a  
Call-ID: 471b3560@00004.192.168.1.1  
CSeq: 1502071423 INVITE  
Contact: <sip:00004@192.168.2.15>  
Max-Forwards: 70  
Supported: 100rel, replaces  
Allow: INVITE, ACK, BYE, CANCEL, OPTIONS, PRACK, MESSAGE, REFER, NOTIFY  
Content-Type: application/sdp  
Content-Length: 249

v=0  
o=- 526963 103 IN IP4 192.168.2.15  
s=-  
c=IN IP4 192.168.2.15  
t=0 0  
m=audio 5006 RTP/AVP 0 8 4 18 96  
a=rtpmap:0 PCMU/8000  
a=rtpmap:8 PCMA/8000  
a=rtpmap:4 G723/8000  
a=rtpmap:18 G729/8000  
a=rtpmap:96 telephone-event/8000  
a=fmtp:96 0-11

F77 192.168.1.1:5062(2) -> 192.168.2.15:5060(3)

SIP/2.0 100 Trying  
Via: SIP/2.0/UDP 192.168.2.15:5060;branch=z9hG4bK-747f89b7-880770.534  
From: 00004 <sip:00004@sip.com>;tag=45d480e2  
To: <sip:00005@sip.com>;tag=3292ae5a  
Call-ID: 471b3560@00004.192.168.1.1  
CSeq: 1502071423 INVITE  
Content-Length: 0

F78 192.168.1.1:5062(2) -> 192.168.2.14:5060(4)

INVITE sip:00005@192.168.2.14 SIP/2.0  
Via: SIP/2.0/UDP 192.168.1.1:5060;branch=z9hG4bK-765.842255.1502071423  
Via: SIP/2.0/UDP 192.168.2.15:5060;branch=z9hG4bK-747f89b7-880770.534  
Record-Route: <sip:00005@192.168.1.1>  
Route: <sip:00005@192.168.2.14>  
From: 00004 <sip:00004@sip.com>;tag=45d480e2  
To: <sip:00005@sip.com>;tag=3292ae5a  
Call-ID: 471b3560@00004.192.168.1.1  
CSeq: 1502071423 INVITE  
Contact: <sip:00004@192.168.2.15>  
max-forwards: 69  
supported: 100rel  
supported: replaces  
Allow: INVITE, ACK, BYE, CANCEL, OPTIONS, PRACK, MESSAGE, REFER, NOTIFY  
Content-Type: application/sdp  
Content-Length: 249

v=0  
o=- 526963 103 IN IP4 192.168.2.15  
s=-  
c=IN IP4 192.168.2.15  
t=0 0  
m=audio 5006 RTP/AVP 0 8 4 18 96  
a=rtpmap:0 PCMU/8000  
a=rtpmap:8 PCMA/8000  
a=rtpmap:4 G723/8000  
a=rtpmap:18 G729/8000  
a=rtpmap:96 telephone-event/8000  
a=fmtp:96 0-11

F79 192.168.2.14:1057(4) -> 192.168.1.1:5060(2)

SIP/2.0 100 Trying  
 Via: SIP/2.0/UDP 192.168.1.1:5060;branch=z9hG4bK-765.842255.1502071423  
 Via: SIP/2.0/UDP 192.168.2.15:5060;branch=z9hG4bK-747f89b7-880770.534  
 From: 00004 <sip:00004@sip.com>;tag=45d480e2  
 To: <sip:00005@sip.com>;tag=3292ae5a  
 Call-ID: 471b3560@00004.192.168.1.1  
 CSeq: 1502071423 INVITE  
 Content-Length: 0

F80 192.168.2.14:1057(4) -> 192.168.1.1:5060(2)

SIP/2.0 200 OK  
 Via: SIP/2.0/UDP 192.168.1.1:5060;branch=z9hG4bK-765.842255.1502071423  
 Via: SIP/2.0/UDP 192.168.2.15:5060;branch=z9hG4bK-747f89b7-880770.534  
 Record-Route: <sip:00005@192.168.1.1>  
 From: 00004 <sip:00004@sip.com>;tag=45d480e2  
 To: <sip:00005@sip.com>;tag=3292ae5a  
 Call-ID: 471b3560@00004.192.168.1.1  
 CSeq: 1502071423 INVITE  
 Contact: <sip:00005@192.168.2.14>  
 Supported: 100rel, replaces  
 Allow: INVITE, ACK, BYE, CANCEL, OPTIONS, PRACK, MESSAGE, REFER, NOTIFY  
 Content-Type: application/sdp  
 Accept: application/sdp, message/sipfrag  
 Content-Length: 176

v=0  
 o=- 75927 15003 IN IP4 192.168.2.14  
 s=-  
 c=IN IP4 192.168.2.14  
 t=0 0  
 m=audio 5008 RTP/AVP 0 96  
 a=rtpmap:0 PCMU/8000  
 a=rtpmap:96 telephone-event/8000  
 a=fmtp:96 0-11

F81 192.168.1.1:5062(2) -> 192.168.2.15:5060(3)

SIP/2.0 200 OK  
 Via: SIP/2.0/UDP 192.168.2.15:5060;branch=z9hG4bK-747f89b7-880770.534  
 Record-Route: <sip:00005@192.168.1.1>  
 From: 00004 <sip:00004@sip.com>;tag=45d480e2  
 To: <sip:00005@sip.com>;tag=3292ae5a  
 Call-ID: 471b3560@00004.192.168.1.1  
 CSeq: 1502071423 INVITE  
 Contact: <sip:00005@192.168.2.14>  
 supported: 100rel  
 supported: replaces  
 Allow: INVITE, ACK, BYE, CANCEL, OPTIONS, PRACK, MESSAGE, REFER, NOTIFY  
 Content-Type: application/sdp  
 Accept: application/sdp, message/sipfrag  
 Content-Length: 176

v=0  
 o=- 75927 15003 IN IP4 192.168.2.14  
 s=-  
 c=IN IP4 192.168.2.14  
 t=0 0  
 m=audio 5008 RTP/AVP 0 96  
 a=rtpmap:0 PCMU/8000  
 a=rtpmap:96 telephone-event/8000  
 a=fmtp:96 0-11

F82 192.168.2.15:1135(3) -> 192.168.1.1:5060(2)

ACK sip:00005@192.168.1.1 SIP/2.0  
 Via: SIP/2.0/UDP 192.168.2.15:5060;branch=z9hG4bK-5e729ad0-880770.945  
 Route: <sip:00005@192.168.2.14>  
 From: 00004 <sip:00004@sip.com>;tag=45d480e2  
 To: <sip:00005@sip.com>;tag=3292ae5a  
 Call-ID: 471b3560@00004.192.168.1.1  
 CSeq: 1502071423 ACK

Max-Forwards: 70  
Content-Length: 0

F83 192.168.1.1:5062(2) -> 192.168.2.14:5060(4)

ACK sip:00005@192.168.2.14 SIP/2.0  
Via: SIP/2.0/UDP 192.168.1.1:5060;branch=z9hG4bK-765.1084364313.1502071423  
Via: SIP/2.0/UDP 192.168.2.15:5060;branch=z9hG4bK-5e729ad0-880770.945  
From: 00004 <sip:00004@sip.com>;tag=45d480e2  
To: <sip:00005@sip.com>;tag=3292ae5a  
Call-ID: 471b3560@00004.192.168.1.1  
CSeq: 1502071423 ACK  
max-forwards: 69  
Content-Length: 0

F84 192.168.2.15:1135(3) -> 192.168.1.1:5060(2)

INVITE sip:00005@192.168.1.1 SIP/2.0  
Via: SIP/2.0/UDP 192.168.2.15:5060;branch=z9hG4bK-153339b6-880780.842  
Route: <sip:00005@192.168.2.14>  
From: 00004 <sip:00004@sip.com>;tag=45d480e2  
To: <sip:00005@sip.com>;tag=3292ae5a  
Call-ID: 471b3560@00004.192.168.1.1  
CSeq: 1502071424 INVITE  
Contact: <sip:00004@192.168.2.15>  
Max-Forwards: 70  
Supported: 100rel, replaces  
Allow: INVITE, ACK, BYE, CANCEL, OPTIONS, PRACK, MESSAGE, REFER, NOTIFY  
Content-Type: application/sdp  
Content-Length: 187

v=0  
o=- 829319 104 IN IP4 192.168.2.15  
s=-  
c=IN IP4 192.168.2.15  
t=0 0  
m=audio 5006 RTP/AVP 0 96  
a=rtpmap:0 PCMU/8000  
a=rtpmap:96 telephone-event/8000  
a=fmtp:96 0-11  
a=inactive

F85 192.168.1.1:5062(2) -> 192.168.2.15:5060(3)

SIP/2.0 100 Trying  
Via: SIP/2.0/UDP 192.168.2.15:5060;branch=z9hG4bK-153339b6-880780.842  
From: 00004 <sip:00004@sip.com>;tag=45d480e2  
To: <sip:00005@sip.com>;tag=3292ae5a  
Call-ID: 471b3560@00004.192.168.1.1  
CSeq: 1502071424 INVITE  
Content-Length: 0

F86 192.168.1.1:5062(2) -> 192.168.2.14:5060(4)

INVITE sip:00005@192.168.2.14 SIP/2.0  
Via: SIP/2.0/UDP 192.168.1.1:5060;branch=z9hG4bK-765.842255.1502071424  
Via: SIP/2.0/UDP 192.168.2.15:5060;branch=z9hG4bK-153339b6-880780.842  
Record-Route: <sip:00005@192.168.1.1>  
Route: <sip:00005@192.168.2.14>  
From: 00004 <sip:00004@sip.com>;tag=45d480e2  
To: <sip:00005@sip.com>;tag=3292ae5a  
Call-ID: 471b3560@00004.192.168.1.1  
CSeq: 1502071424 INVITE  
Contact: <sip:00004@192.168.2.15>  
max-forwards: 69  
supported: 100rel  
supported: replaces  
Allow: INVITE, ACK, BYE, CANCEL, OPTIONS, PRACK, MESSAGE, REFER, NOTIFY  
Content-Type: application/sdp  
Content-Length: 187

```

v=0
o=- 829319 104 IN IP4 192.168.2.15
s=-
c=IN IP4 192.168.2.15
t=0 0
m=audio 5006 RTP/AVP 0 96
a=rtpmap:0 PCMU/8000
a=rtpmap:96 telephone-event/8000
a=fmtp:96 0-11
a=inactive

```

```
=====
```

F87        192.168.2.14:1057(4) -> 192.168.1.1:5060(2)

```

SIP/2.0 100 Trying
Via: SIP/2.0/UDP 192.168.1.1:5060;branch=z9hG4bK-765.842255.1502071424
Via: SIP/2.0/UDP 192.168.2.15:5060;branch=z9hG4bK-153339b6-880780.842
From: 00004 <sip:00004@sip.com>;tag=45d480e2
To: <sip:00005@sip.com>;tag=3292ae5a
Call-ID: 471b3560@00004.192.168.1.1
CSeq: 1502071424 INVITE
Content-Length: 0

```

```
=====
```

F88        192.168.2.14:1057(4) -> 192.168.1.1:5060(2)

```

SIP/2.0 200 OK
Via: SIP/2.0/UDP 192.168.1.1:5060;branch=z9hG4bK-765.842255.1502071424
Via: SIP/2.0/UDP 192.168.2.15:5060;branch=z9hG4bK-153339b6-880780.842
Record-Route: <sip:00005@192.168.1.1>
From: 00004 <sip:00004@sip.com>;tag=45d480e2
To: <sip:00005@sip.com>;tag=3292ae5a
Call-ID: 471b3560@00004.192.168.1.1
CSeq: 1502071424 INVITE
Contact: <sip:00005@192.168.2.14>
Supported: 100rel, replaces
Allow: INVITE, ACK, BYE, CANCEL, OPTIONS, PRACK, MESSAGE, REFER, NOTIFY
Content-Type: application/sdp
Accept: application/sdp, message/sipfrag
Content-Length: 189

```

```

v=0
o=- 229345 15004 IN IP4 192.168.2.14
s=-
c=IN IP4 192.168.2.14
t=0 0
m=audio 5008 RTP/AVP 0 96
a=rtpmap:0 PCMU/8000
a=rtpmap:96 telephone-event/8000
a=fmtp:96 0-11
a=inactive

```

```
=====
```

F89        192.168.1.1:5062(2) -> 192.168.2.15:5060(3)

```

SIP/2.0 200 OK
Via: SIP/2.0/UDP 192.168.2.15:5060;branch=z9hG4bK-153339b6-880780.842
Record-Route: <sip:00005@192.168.1.1>
From: 00004 <sip:00004@sip.com>;tag=45d480e2
To: <sip:00005@sip.com>;tag=3292ae5a
Call-ID: 471b3560@00004.192.168.1.1
CSeq: 1502071424 INVITE
Contact: <sip:00005@192.168.2.14>
supported: 100rel
supported: replaces
Allow: INVITE, ACK, BYE, CANCEL, OPTIONS, PRACK, MESSAGE, REFER, NOTIFY
Content-Type: application/sdp
Accept: application/sdp, message/sipfrag
Content-Length: 189

```

```

v=0
o=- 229345 15004 IN IP4 192.168.2.14
s=-
c=IN IP4 192.168.2.14
t=0 0
m=audio 5008 RTP/AVP 0 96

```

```

a=rtpmap:0 PCMU/8000
a=rtpmap:96 telephone-event/8000
a=fmtp:96 0-11
a=inactive

```

```
=====
```

F90        192.168.2.15:1135(3) -> 192.168.1.1:5060(2)

```

ACK sip:00005@192.168.1.1 SIP/2.0
Via: SIP/2.0/UDP 192.168.2.15:5060;branch=z9hG4bK-15d2f457-880781.107
Route: <sip:00005@192.168.2.14>
From: 00004 <sip:00004@sip.com>;tag=45d480e2
To: <sip:00005@sip.com>;tag=3292ae5a
Call-ID: 471b3560@00004.192.168.1.1
CSeq: 1502071424 ACK
Max-Forwards: 70
Content-Length: 0

```

```
=====
```

F91        192.168.1.1:5062(2) -> 192.168.2.14:5060(4)

```

ACK sip:00005@192.168.2.14 SIP/2.0
Via: SIP/2.0/UDP 192.168.1.1:5060;branch=z9hG4bK-765.1084364323.1502071424
Via: SIP/2.0/UDP 192.168.2.15:5060;branch=z9hG4bK-15d2f457-880781.107
From: 00004 <sip:00004@sip.com>;tag=45d480e2
To: <sip:00005@sip.com>;tag=3292ae5a
Call-ID: 471b3560@00004.192.168.1.1
CSeq: 1502071424 ACK
max-forwards: 69
Content-Length: 0

```

```
=====
```

F92        192.168.2.15:1135(3) -> 192.168.1.1:5060(2)

```

INVITE sip:00004@192.168.1.1 SIP/2.0
Via: SIP/2.0/UDP 192.168.2.15:5060;branch=z9hG4bK-2f4eb788-880781.127
Route: <sip:00002@192.168.2.10>
From: <sip:00004@sip.com>;tag=342a8563
To: 00002 <sip:00002@sip.com>;tag=1576039b
Call-ID: 32916bdd@00002.192.168.1.1
CSeq: 1431703574 INVITE
Contact: <sip:00004@192.168.2.15>
Max-Forwards: 70
Supported: 100rel, replaces
Allow: INVITE, ACK, BYE, CANCEL, OPTIONS, PRACK, MESSAGE, REFER, NOTIFY
Content-Type: application/sdp
Content-Length: 177

```

```

v=0
o=- 120547 12905 IN IP4 192.168.2.15
s=-
c=IN IP4 192.168.2.15
t=0 0
m=audio 5008 RTP/AVP 0 96
a=rtpmap:0 PCMU/8000
a=rtpmap:96 telephone-event/8000
a=fmtp:96 0-11

```

```
=====
```

F93        192.168.1.1:5062(2) -> 192.168.2.15:5060(3)

```

SIP/2.0 100 Trying
Via: SIP/2.0/UDP 192.168.2.15:5060;branch=z9hG4bK-2f4eb788-880781.127
From: <sip:00004@sip.com>;tag=342a8563
To: 00002 <sip:00002@sip.com>;tag=1576039b
Call-ID: 32916bdd@00002.192.168.1.1
CSeq: 1431703574 INVITE
Content-Length: 0

```

```
=====
```

F94        192.168.1.1:5062(2) -> 192.168.2.10:5060(1)

```

INVITE sip:00002@192.168.2.10 SIP/2.0

```

# FOMA/WLAN デュアル端末に関する技術参考資料 第 1.2 版

Via: SIP/2.0/UDP 192.168.1.1:5060;branch=z9hG4bK-762.151351.1431703574  
 Via: SIP/2.0/UDP 192.168.2.15:5060;branch=z9hG4bK-2f4eb788-880781.127  
 Record-Route: <sip:00004@192.168.1.1>  
 Route: <sip:00002@192.168.2.10>  
 From: <sip:00004@sip.com>;tag=342a8563  
 To: 00002 <sip:00002@sip.com>;tag=1576039b  
 Call-ID: 32916bdd@00002.192.168.1.1  
 CSeq: 1431703574 INVITE  
 Contact: <sip:00004@192.168.2.15>  
 max-forwards: 69  
 supported: 100rel  
 supported: replaces  
 Allow: INVITE, ACK, BYE, CANCEL, OPTIONS, PRACK, MESSAGE, REFER, NOTIFY  
 Content-Type: application/sdp  
 Content-Length: 177

v=0  
 o=- 120547 12905 IN IP4 192.168.2.15  
 s=-  
 c=IN IP4 192.168.2.15  
 t=0 0  
 m=audio 5008 RTP/AVP 0 96  
 a=rtpmap:0 PCMU/8000  
 a=rtpmap:96 telephone-event/8000  
 a=fmtp:96 0-11

---

F95 192.168.2.10:1091(1) -> 192.168.1.1:5060(2)

SIP/2.0 100 Trying  
 Via: SIP/2.0/UDP 192.168.1.1:5060;branch=z9hG4bK-762.151351.1431703574  
 Via: SIP/2.0/UDP 192.168.2.15:5060;branch=z9hG4bK-2f4eb788-880781.127  
 From: <sip:00004@sip.com>;tag=342a8563  
 To: 00002 <sip:00002@sip.com>;tag=1576039b  
 Call-ID: 32916bdd@00002.192.168.1.1  
 CSeq: 1431703574 INVITE  
 Content-Length: 0

---

F96 192.168.2.10:1091(1) -> 192.168.1.1:5060(2)

SIP/2.0 200 OK  
 Via: SIP/2.0/UDP 192.168.1.1:5060;branch=z9hG4bK-762.151351.1431703574  
 Via: SIP/2.0/UDP 192.168.2.15:5060;branch=z9hG4bK-2f4eb788-880781.127  
 Record-Route: <sip:00004@192.168.1.1>  
 From: <sip:00004@sip.com>;tag=342a8563  
 To: 00002 <sip:00002@sip.com>;tag=1576039b  
 Call-ID: 32916bdd@00002.192.168.1.1  
 CSeq: 1431703574 INVITE  
 Contact: <sip:00002@192.168.2.10>  
 Supported: 100rel, replaces  
 Allow: INVITE, ACK, BYE, CANCEL, OPTIONS, PRACK, MESSAGE, REFER, NOTIFY  
 Content-Type: application/sdp  
 Accept: application/sdp, message/sipfrag  
 Content-Length: 250

v=0  
 o=- 115290 3605 IN IP4 192.168.2.10  
 s=-  
 c=IN IP4 192.168.2.10  
 t=0 0  
 m=audio 5008 RTP/AVP 0 8 4 18 96  
 a=rtpmap:0 PCMU/8000  
 a=rtpmap:8 PCMA/8000  
 a=rtpmap:4 G723/8000  
 a=rtpmap:18 G729/8000  
 a=rtpmap:96 telephone-event/8000  
 a=fmtp:96 0-11

---

F97 192.168.1.1:5062(2) -> 192.168.2.15:5060(3)

SIP/2.0 200 OK  
 Via: SIP/2.0/UDP 192.168.2.15:5060;branch=z9hG4bK-2f4eb788-880781.127  
 Record-Route: <sip:00004@192.168.1.1>  
 From: <sip:00004@sip.com>;tag=342a8563  
 To: 00002 <sip:00002@sip.com>;tag=1576039b

Call-ID: 32916bdd@00002.192.168.1.1  
 CSeq: 1431703574 INVITE  
 Contact: <sip:00002@192.168.2.10>  
 supported: 100rel  
 supported: replaces  
 Allow: INVITE, ACK, BYE, CANCEL, OPTIONS, PRACK, MESSAGE, REFER, NOTIFY  
 Content-Type: application/sdp  
 Accept: application/sdp, message/sipfrag  
 Content-Length: 250

v=0  
 o=- 115290 3605 IN IP4 192.168.2.10  
 s=-  
 c=IN IP4 192.168.2.10  
 t=0 0  
 m=audio 5008 RTP/AVP 0 8 4 18 96  
 a=rtpmap:0 PCMU/8000  
 a=rtpmap:8 PCMA/8000  
 a=rtpmap:4 G723/8000  
 a=rtpmap:18 G729/8000  
 a=rtpmap:96 telephone-event/8000  
 a=fmtp:96 0-11

---

F98 192.168.2.15:1135(3) -> 192.168.1.1:5060(2)

ACK sip:00004@192.168.1.1 SIP/2.0  
 Via: SIP/2.0/UDP 192.168.2.15:5060;branch=z9hG4bK-7edc3a58-880781.333  
 Route: <sip:00002@192.168.2.10>  
 From: <sip:00004@sip.com>;tag=342a8563  
 To: 00002 <sip:00002@sip.com>;tag=1576039b  
 Call-ID: 32916bdd@00002.192.168.1.1  
 CSeq: 1431703574 ACK  
 Max-Forwards: 70  
 Content-Length: 0

---

F99 192.168.1.1:5062(2) -> 192.168.2.10:5060(1)

ACK sip:00002@192.168.2.10 SIP/2.0  
 Via: SIP/2.0/UDP 192.168.1.1:5060;branch=z9hG4bK-762.1084364323.1431703574  
 Via: SIP/2.0/UDP 192.168.2.15:5060;branch=z9hG4bK-7edc3a58-880781.333  
 From: <sip:00004@sip.com>;tag=342a8563  
 To: 00002 <sip:00002@sip.com>;tag=1576039b  
 Call-ID: 32916bdd@00002.192.168.1.1  
 CSeq: 1431703574 ACK  
 max-forwards: 69  
 Content-Length: 0

---

F100 192.168.2.15:1135(3) -> 192.168.1.1:5060(2)

INVITE sip:00004@192.168.1.1 SIP/2.0  
 Via: SIP/2.0/UDP 192.168.2.15:5060;branch=z9hG4bK-727c0cb0-880785.165  
 Route: <sip:00002@192.168.2.10>  
 From: <sip:00004@sip.com>;tag=342a8563  
 To: 00002 <sip:00002@sip.com>;tag=1576039b  
 Call-ID: 32916bdd@00002.192.168.1.1  
 CSeq: 1431703575 INVITE  
 Contact: <sip:00004@192.168.2.15>  
 Max-Forwards: 70  
 Supported: 100rel, replaces  
 Allow: INVITE, ACK, BYE, CANCEL, OPTIONS, PRACK, MESSAGE, REFER, NOTIFY  
 Content-Type: application/sdp  
 Content-Length: 189

v=0  
 o=- 160408 12906 IN IP4 192.168.2.15  
 s=-  
 c=IN IP4 192.168.2.15  
 t=0 0  
 m=audio 5008 RTP/AVP 0 96  
 a=rtpmap:0 PCMU/8000  
 a=rtpmap:96 telephone-event/8000  
 a=fmtp:96 0-11  
 a=inactive

F101 192.168.1.1:5062(2) -> 192.168.2.15:5060(3)

SIP/2.0 100 Trying  
Via: SIP/2.0/UDP 192.168.2.15:5060;branch=z9hG4bK-727c0cb0-880785.165  
From: <sip:00004@sip.com>;tag=342a8563  
To: 00002 <sip:00002@sip.com>;tag=1576039b  
Call-ID: 32916bdd@00002.192.168.1.1  
CSeq: 1431703575 INVITE  
Content-Length: 0

F102 192.168.1.1:5062(2) -> 192.168.2.10:5060(1)

INVITE sip:00002@192.168.2.10 SIP/2.0  
Via: SIP/2.0/UDP 192.168.1.1:5060;branch=z9hG4bK-762.151351.1431703575  
Via: SIP/2.0/UDP 192.168.2.15:5060;branch=z9hG4bK-727c0cb0-880785.165  
Record-Route: <sip:00004@192.168.1.1>  
Route: <sip:00002@192.168.2.10>  
From: <sip:00004@sip.com>;tag=342a8563  
To: 00002 <sip:00002@sip.com>;tag=1576039b  
Call-ID: 32916bdd@00002.192.168.1.1  
CSeq: 1431703575 INVITE  
Contact: <sip:00004@192.168.2.15>  
max-forwards: 69  
supported: 100rel  
supported: replaces  
Allow: INVITE, ACK, BYE, CANCEL, OPTIONS, PRACK, MESSAGE, REFER, NOTIFY  
Content-Type: application/sdp  
Content-Length: 189

v=0  
o=- 160408 12906 IN IP4 192.168.2.15  
s=-  
c=IN IP4 192.168.2.15  
t=0 0  
m=audio 5008 RTP/AVP 0 96  
a=rtpmap:0 PCMU/8000  
a=rtpmap:96 telephone-event/8000  
a=fmtp:96 0-11  
a=inactive

F103 192.168.2.10:1091(1) -> 192.168.1.1:5060(2)

SIP/2.0 100 Trying  
Via: SIP/2.0/UDP 192.168.1.1:5060;branch=z9hG4bK-762.151351.1431703575  
Via: SIP/2.0/UDP 192.168.2.15:5060;branch=z9hG4bK-727c0cb0-880785.165  
From: <sip:00004@sip.com>;tag=342a8563  
To: 00002 <sip:00002@sip.com>;tag=1576039b  
Call-ID: 32916bdd@00002.192.168.1.1  
CSeq: 1431703575 INVITE  
Content-Length: 0

F104 192.168.2.10:1091(1) -> 192.168.1.1:5060(2)

SIP/2.0 200 OK  
Via: SIP/2.0/UDP 192.168.1.1:5060;branch=z9hG4bK-762.151351.1431703575  
Via: SIP/2.0/UDP 192.168.2.15:5060;branch=z9hG4bK-727c0cb0-880785.165  
Record-Route: <sip:00004@192.168.1.1>  
From: <sip:00004@sip.com>;tag=342a8563  
To: 00002 <sip:00002@sip.com>;tag=1576039b  
Call-ID: 32916bdd@00002.192.168.1.1  
CSeq: 1431703575 INVITE  
Contact: <sip:00002@192.168.2.10>  
Supported: 100rel, replaces  
Allow: INVITE, ACK, BYE, CANCEL, OPTIONS, PRACK, MESSAGE, REFER, NOTIFY  
Content-Type: application/sdp  
Accept: application/sdp, message/sipfrag  
Content-Length: 188

v=0  
o=- 231481 3606 IN IP4 192.168.2.10



```

s=-
c=IN IP4 192.168.2.10
t=0 0
m=audio 5008 RTP/AVP 0 96
a=rtpmap:0 PCMU/8000
a=rtpmap:96 telephone-event/8000
a=fmtp:96 0-11
a=inactive

```

---

F105 192.168.1.1:5062(2) -> 192.168.2.15:5060(3)

```

SIP/2.0 200 OK
Via: SIP/2.0/UDP 192.168.2.15:5060;branch=z9hG4bK-727c0cb0-880785.165
Record-Route: <sip:00004@192.168.1.1>
From: <sip:00004@sip.com>;tag=342a8563
To: 00002 <sip:00002@sip.com>;tag=1576039b
Call-ID: 32916bdd@00002.192.168.1.1
CSeq: 1431703575 INVITE
Contact: <sip:00002@192.168.2.10>
supported: 100rel
supported: replaces
Allow: INVITE, ACK, BYE, CANCEL, OPTIONS, PRACK, MESSAGE, REFER, NOTIFY
Content-Type: application/sdp
Accept: application/sdp, message/sipfrag
Content-Length: 188

```

```

v=0
o=- 231481 3606 IN IP4 192.168.2.10
s=-
c=IN IP4 192.168.2.10
t=0 0
m=audio 5008 RTP/AVP 0 96
a=rtpmap:0 PCMU/8000
a=rtpmap:96 telephone-event/8000
a=fmtp:96 0-11
a=inactive

```

---

F106 192.168.2.15:1135(3) -> 192.168.1.1:5060(2)

```

ACK sip:00004@192.168.1.1 SIP/2.0
Via: SIP/2.0/UDP 192.168.2.15:5060;branch=z9hG4bK-78da44f2-880785.446
Route: <sip:00002@192.168.2.10>
From: <sip:00004@sip.com>;tag=342a8563
To: 00002 <sip:00002@sip.com>;tag=1576039b
Call-ID: 32916bdd@00002.192.168.1.1
CSeq: 1431703575 ACK
Max-Forwards: 70
Content-Length: 0

```

---

F107 192.168.1.1:5062(2) -> 192.168.2.10:5060(1)

```

ACK sip:00002@192.168.2.10 SIP/2.0
Via: SIP/2.0/UDP 192.168.1.1:5060;branch=z9hG4bK-762.1084364327.1431703575
Via: SIP/2.0/UDP 192.168.2.15:5060;branch=z9hG4bK-78da44f2-880785.446
From: <sip:00004@sip.com>;tag=342a8563
To: 00002 <sip:00002@sip.com>;tag=1576039b
Call-ID: 32916bdd@00002.192.168.1.1
CSeq: 1431703575 ACK
max-forwards: 69
Content-Length: 0

```

---

F108 192.168.2.15:1135(3) -> 192.168.1.1:5060(2)

```

REFER sip:00005@192.168.1.1 SIP/2.0
Via: SIP/2.0/UDP 192.168.2.15:5060;branch=z9hG4bK-7c54c13d-880785.525
Route: <sip:00005@192.168.2.14>
From: 00004 <sip:00004@sip.com>;tag=45d480e2
To: <sip:00005@sip.com>;tag=3292ae5a
Call-ID: 471b3560@00004.192.168.1.1
CSeq: 1502071425 REFER
Contact: <sip:00004@192.168.2.15>

```

Max-Forwards: 70  
 Refer-To:  
 <sip:00002@192.168.2.10?Replaces=32916bdd@00002.192.168.1.1%3bto-tag%3d1576039b%3bfrom-tag%3d342a8563>  
 Referred-By: <sip:00004@sip.com>  
 Content-Length: 0

F109 192.168.1.1:5062(2) -> 192.168.2.14:5060(4)

REFER sip:00005@192.168.2.14 SIP/2.0  
 Via: SIP/2.0/UDP 192.168.1.1:5060;branch=z9hG4bK-765.1084364327.1502071425  
 Via: SIP/2.0/UDP 192.168.2.15:5060;branch=z9hG4bK-7c54c13d-880785.525  
 Route: <sip:00005@192.168.2.14>  
 From: 00004 <sip:00004@sip.com>;tag=45d480e2  
 To: <sip:00005@sip.com>;tag=3292ae5a  
 Call-ID: 471b3560@00004.192.168.1.1  
 CSeq: 1502071425 REFER  
 Contact: <sip:00004@192.168.2.15>  
 max-forwards: 69  
 refer-to:  
 <sip:00002@192.168.2.10?Replaces=32916bdd@00002.192.168.1.1%3bto-tag%3d1576039b%3bfrom-tag%3d342a8563>  
 referred-by: <sip:00004@sip.com>  
 Content-Length: 0

F110 192.168.2.14:1057(4) -> 192.168.1.1:5060(2)

SIP/2.0 202 Accepted  
 Via: SIP/2.0/UDP 192.168.1.1:5060;branch=z9hG4bK-765.1084364327.1502071425  
 Via: SIP/2.0/UDP 192.168.2.15:5060;branch=z9hG4bK-7c54c13d-880785.525  
 From: 00004 <sip:00004@sip.com>;tag=45d480e2  
 To: <sip:00005@sip.com>;tag=3292ae5a  
 Call-ID: 471b3560@00004.192.168.1.1  
 CSeq: 1502071425 REFER  
 Contact: <sip:00005@192.168.2.14>  
 Content-Length: 0

F111 192.168.2.14:1057(4) -> 192.168.1.1:5060(2)

NOTIFY sip:00005@192.168.1.1 SIP/2.0  
 Via: SIP/2.0/UDP 192.168.2.14:5060;branch=z9hG4bK-16aaddf6-880710.742  
 Route: <sip:00004@192.168.2.15>  
 From: <sip:00005@sip.com>;tag=3292ae5a  
 To: 00004 <sip:00004@sip.com>;tag=45d480e2  
 Call-ID: 471b3560@00004.192.168.1.1  
 CSeq: 2100821371 NOTIFY  
 Contact: <sip:00005@192.168.2.14>  
 Max-Forwards: 70  
 Event: refer  
 Subscription-State: active;expires=30  
 Content-Type: message/sipfrag  
 Content-Length: 18

SIP/2.0 100 Trying

F112 192.168.1.1:5062(2) -> 192.168.2.15:5060(3)

SIP/2.0 202 Accepted  
 Via: SIP/2.0/UDP 192.168.2.15:5060;branch=z9hG4bK-7c54c13d-880785.525  
 From: 00004 <sip:00004@sip.com>;tag=45d480e2  
 To: <sip:00005@sip.com>;tag=3292ae5a  
 Call-ID: 471b3560@00004.192.168.1.1  
 CSeq: 1502071425 REFER  
 Contact: <sip:00005@192.168.2.14>  
 Content-Length: 0

F113 192.168.1.1:5062(2) -> 192.168.2.15:5060(3)

NOTIFY sip:00004@192.168.2.15 SIP/2.0  
 Via: SIP/2.0/UDP 192.168.1.1:5060;branch=z9hG4bK-764.1084364327.2100821371

Via: SIP/2.0/UDP 192.168.2.14:5060;branch=z9hG4bK-16aaddf6-880710.742  
 Route: <sip:00004@192.168.2.15>  
 From: <sip:00005@sip.com>;tag=3292ae5a  
 To: 00004 <sip:00004@sip.com>;tag=45d480e2  
 Call-ID: 471b3560@00004.192.168.1.1  
 CSeq: 2100821371 NOTIFY  
 Contact: <sip:00005@192.168.2.14>  
 max-forwards: 69  
 event: refer  
 subscription-state: active;expires=30  
 Content-Type: message/sipfrag  
 Content-Length: 18

SIP/2.0 100 Trying

F114 192.168.2.15:1135(3) -> 192.168.1.1:5060(2)

SIP/2.0 200 OK  
 Via: SIP/2.0/UDP 192.168.1.1:5060;branch=z9hG4bK-764.1084364327.2100821371  
 Via: SIP/2.0/UDP 192.168.2.14:5060;branch=z9hG4bK-16aaddf6-880710.742  
 From: <sip:00005@sip.com>;tag=3292ae5a  
 To: 00004 <sip:00004@sip.com>;tag=45d480e2  
 Call-ID: 471b3560@00004.192.168.1.1  
 CSeq: 2100821371 NOTIFY  
 Content-Length: 0

F115 192.168.1.1:5062(2) -> 192.168.2.14:5060(4)

SIP/2.0 200 OK  
 Via: SIP/2.0/UDP 192.168.2.14:5060;branch=z9hG4bK-16aaddf6-880710.742  
 From: <sip:00005@sip.com>;tag=3292ae5a  
 To: 00004 <sip:00004@sip.com>;tag=45d480e2  
 Call-ID: 471b3560@00004.192.168.1.1  
 CSeq: 2100821371 NOTIFY  
 Content-Length: 0

F116 192.168.2.14:1057(4) -> 192.168.1.1:5060(2)

INVITE sip:00002@192.168.2.10 SIP/2.0  
 Via: SIP/2.0/UDP 192.168.2.14:5060;branch=z9hG4bK-3fd88923-880711.020  
 Route: <sip:192.168.1.1:5060>  
 From: <sip:00005@sip.com>;tag=5b9125e6  
 To: <sip:00002@192.168.2.10>  
 Call-ID: 26174900@00005.192.168.1.1  
 CSeq: 787210888 INVITE  
 Contact: <sip:00005@192.168.2.14>  
 Max-Forwards: 70  
 Supported: 100rel, replaces  
 Referred-By: <sip:00004@sip.com>  
 Replaces: 32916bdd@00002.192.168.1.1;to-tag=1576039b;from-tag=342a8563  
 Allow: INVITE, ACK, BYE, CANCEL, OPTIONS, PRACK, MESSAGE, REFER, NOTIFY  
 Content-Type: application/sdp  
 Accept: application/sdp, message/sipfrag  
 Content-Length: 176

v=0  
 o=- 13268 15001 IN IP4 192.168.2.14  
 s=-  
 c=IN IP4 192.168.2.14  
 t=0 0  
 m=audio 5006 RTP/AVP 0 96  
 a=rtpmap:0 PCMU/8000  
 a=rtpmap:96 telephone-event/8000  
 a=fmtp:96 0-11

F117 192.168.1.1:5062(2) -> 192.168.2.14:5060(4)

SIP/2.0 100 Trying  
 Via: SIP/2.0/UDP 192.168.2.14:5060;branch=z9hG4bK-3fd88923-880711.020  
 From: <sip:00005@sip.com>;tag=5b9125e6  
 To: <sip:00002@192.168.2.10>  
 Call-ID: 26174900@00005.192.168.1.1

CSeq: 787210888 INVITE  
Content-Length: 0

```
=====
F118      192.168.1.1:5062(2) -> 192.168.2.10:5060(1)

INVITE sip:00002@192.168.2.10 SIP/2.0
Via: SIP/2.0/UDP 192.168.1.1:5060;branch=z9hG4bK-767.011228.787210888
Via: SIP/2.0/UDP 192.168.2.14:5060;branch=z9hG4bK-3fd88923-880711.020
Record-Route: <sip:00002@192.168.1.1>
Route: <sip:192.168.1.1:5060>
From: 00005 <sip:00005@sip.com>;tag=5b9125e6
To: <sip:00002@192.168.2.10>
Call-ID: 26174900@00005.192.168.1.1
CSeq: 787210888 INVITE
Contact: <sip:00005@192.168.2.14>
max-forwards: 69
supported: 100rel
supported: replaces
referred-by: <sip:00004@sip.com>
replaces: 32916bdd@00002.192.168.1.1;to-tag=1576039b;from-tag=342a8563
Allow: INVITE, ACK, BYE, CANCEL, OPTIONS, PRACK, MESSAGE, REFER, NOTIFY
Content-Type: application/sdp
Accept: application/sdp, message/sipfrag
Content-Length: 176

v=0
o=- 13268 15001 IN IP4 192.168.2.14
s=-
c=IN IP4 192.168.2.14
t=0 0
m=audio 5006 RTP/AVP 0 96
a=rtpmap:0 PCMU/8000
a=rtpmap:96 telephone-event/8000
a=fmtp:96 0-11
=====
```

```
F119      192.168.2.10:1091(1) -> 192.168.1.1:5060(2)

SIP/2.0 100 Trying
Via: SIP/2.0/UDP 192.168.1.1:5060;branch=z9hG4bK-767.011228.787210888
Via: SIP/2.0/UDP 192.168.2.14:5060;branch=z9hG4bK-3fd88923-880711.020
From: 00005 <sip:00005@sip.com>;tag=5b9125e6
To: <sip:00002@192.168.2.10>
Call-ID: 26174900@00005.192.168.1.1
CSeq: 787210888 INVITE
Content-Length: 0
=====
```

```
F120      192.168.2.10:1091(1) -> 192.168.1.1:5060(2)

SIP/2.0 200 OK
Via: SIP/2.0/UDP 192.168.1.1:5060;branch=z9hG4bK-767.011228.787210888
Via: SIP/2.0/UDP 192.168.2.14:5060;branch=z9hG4bK-3fd88923-880711.020
Record-Route: <sip:00002@192.168.1.1>
From: 00005 <sip:00005@sip.com>;tag=5b9125e6
To: <sip:00002@192.168.2.10>;tag=57590cb4
Call-ID: 26174900@00005.192.168.1.1
CSeq: 787210888 INVITE
Contact: <sip:00002@192.168.2.10>
Supported: 100rel, replaces
Allow: INVITE, ACK, BYE, CANCEL, OPTIONS, PRACK, MESSAGE, REFER, NOTIFY
Content-Type: application/sdp
Accept: application/sdp, message/sipfrag
Content-Length: 176

v=0
o=- 108223 3601 IN IP4 192.168.2.10
s=-
c=IN IP4 192.168.2.10
t=0 0
m=audio 5006 RTP/AVP 0 96
a=rtpmap:0 PCMU/8000
a=rtpmap:96 telephone-event/8000
a=fmtp:96 0-11
```

---

F121 192.168.1.1:5062(2) -> 192.168.2.14:5060(4)

SIP/2.0 200 OK  
Via: SIP/2.0/UDP 192.168.2.14:5060;branch=z9hG4bK-3fd88923-880711.020  
Record-Route: <sip:00002@192.168.1.1>  
From: 00005 <sip:00005@sip.com>;tag=5b9125e6  
To: <sip:00002@192.168.2.10>;tag=57590cb4  
Call-ID: 26174900@00005.192.168.1.1  
CSeq: 787210888 INVITE  
Contact: <sip:00002@192.168.2.10>  
supported: 100rel  
supported: replaces  
Allow: INVITE, ACK, BYE, CANCEL, OPTIONS, PRACK, MESSAGE, REFER, NOTIFY  
Content-Type: application/sdp  
Accept: application/sdp, message/sipfrag  
Content-Length: 176

v=0  
o=- 108223 3601 IN IP4 192.168.2.10  
s=-  
c=IN IP4 192.168.2.10  
t=0 0  
m=audio 5006 RTP/AVP 0 96  
a=rtpmap:0 PCMU/8000  
a=rtpmap:96 telephone-event/8000  
a=fmtp:96 0-11

---

F122 192.168.2.14:1057(4) -> 192.168.1.1:5060(2)

ACK sip:00002@192.168.1.1 SIP/2.0  
Via: SIP/2.0/UDP 192.168.2.14:5060;branch=z9hG4bK-2f6de024-880711.818  
Route: <sip:00002@192.168.2.10>  
From: 00005 <sip:00005@sip.com>;tag=5b9125e6  
To: <sip:00002@192.168.2.10>;tag=57590cb4  
Call-ID: 26174900@00005.192.168.1.1  
CSeq: 787210888 ACK  
Max-Forwards: 70  
Content-Length: 0

---

F123 192.168.2.14:1057(4) -> 192.168.1.1:5060(2)

NOTIFY sip:00005@192.168.1.1 SIP/2.0  
Via: SIP/2.0/UDP 192.168.2.14:5060;branch=z9hG4bK-5de0826b-880711.925  
Route: <sip:00004@192.168.2.15>  
From: <sip:00005@sip.com>;tag=3292ae5a  
To: 00004 <sip:00004@sip.com>;tag=45d480e2  
Call-ID: 471b3560@00004.192.168.1.1  
CSeq: 2100821372 NOTIFY  
Contact: <sip:00005@192.168.2.14>  
Max-Forwards: 70  
Event: refer  
Subscription-State: terminated;reason=noresource  
Content-Type: message/sipfrag  
Content-Length: 14

SIP/2.0 200 OK

---

F124 192.168.1.1:5062(2) -> 192.168.2.10:5060(1)

ACK sip:00002@192.168.2.10 SIP/2.0  
Via: SIP/2.0/UDP 192.168.1.1:5060;branch=z9hG4bK-767.1084364328.787210888  
Via: SIP/2.0/UDP 192.168.2.14:5060;branch=z9hG4bK-2f6de024-880711.818  
From: 00005 <sip:00005@sip.com>;tag=5b9125e6  
To: <sip:00002@192.168.2.10>;tag=57590cb4  
Call-ID: 26174900@00005.192.168.1.1  
CSeq: 787210888 ACK  
max-forwards: 69  
Content-Length: 0

---

F125 192.168.1.1:5062(2) -> 192.168.2.15:5060(3)

NOTIFY sip:00004@192.168.2.15 SIP/2.0  
 Via: SIP/2.0/UDP 192.168.1.1:5060;branch=z9hG4bK-764.1084364328.2100821372  
 Via: SIP/2.0/UDP 192.168.2.14:5060;branch=z9hG4bK-5de0826b-880711.925  
 Route: <sip:00004@192.168.2.15>  
 From: <sip:00005@sip.com>;tag=3292ae5a  
 To: 00004 <sip:00004@sip.com>;tag=45d480e2  
 Call-ID: 471b3560@00004.192.168.1.1  
 CSeq: 2100821372 NOTIFY  
 Contact: <sip:00005@192.168.2.14>  
 max-forwards: 69  
 event: refer  
 subscription-state: terminated;reason=noresource  
 Content-Type: message/sipfrag  
 Content-Length: 14

SIP/2.0 200 OK

F126 192.168.2.15:1135(3) -> 192.168.1.1:5060(2)

SIP/2.0 200 OK  
 Via: SIP/2.0/UDP 192.168.1.1:5060;branch=z9hG4bK-764.1084364328.2100821372  
 Via: SIP/2.0/UDP 192.168.2.14:5060;branch=z9hG4bK-5de0826b-880711.925  
 From: <sip:00005@sip.com>;tag=3292ae5a  
 To: 00004 <sip:00004@sip.com>;tag=45d480e2  
 Call-ID: 471b3560@00004.192.168.1.1  
 CSeq: 2100821372 NOTIFY  
 Content-Length: 0

F127 192.168.1.1:5062(2) -> 192.168.2.14:5060(4)

SIP/2.0 200 OK  
 Via: SIP/2.0/UDP 192.168.2.14:5060;branch=z9hG4bK-5de0826b-880711.925  
 From: <sip:00005@sip.com>;tag=3292ae5a  
 To: 00004 <sip:00004@sip.com>;tag=45d480e2  
 Call-ID: 471b3560@00004.192.168.1.1  
 CSeq: 2100821372 NOTIFY  
 Content-Length: 0

F128 192.168.2.10:1091(1) -> 192.168.1.1:5060(2)

BYE sip:00004@192.168.1.1 SIP/2.0  
 Via: SIP/2.0/UDP 192.168.2.10:5060;branch=z9hG4bK-55b8535a-880951.665  
 Route: <sip:00004@192.168.2.15>  
 From: 00002 <sip:00002@sip.com>;tag=1576039b  
 To: <sip:00004@sip.com>;tag=342a8563  
 Call-ID: 32916bdd@00002.192.168.1.1  
 CSeq: 233289004 BYE  
 Proxy-Authorization: Digest username="00002", realm="heliossv2",  
 nonce="9fa6c53b946631caf9c9b7a7ea9e5f0d", uri="sip:00004@192.168.1.1",  
 response="005e17037df6b4d99a33dc8f13d772b5", algorithm=MD5, cnonce="6f0999af",  
 opaque="e01289fc77b69626b29b8744a85277b4", qop=auth, nc=00000004  
 Max-Forwards: 70  
 Content-Length: 0

F129 192.168.1.1:5062(2) -> 192.168.2.15:5060(3)

BYE sip:00004@192.168.2.15 SIP/2.0  
 Via: SIP/2.0/UDP 192.168.1.1:5060;branch=z9hG4bK-763.1084364329.233289004  
 Via: SIP/2.0/UDP 192.168.2.10:5060;branch=z9hG4bK-55b8535a-880951.665  
 Route: <sip:00004@192.168.2.15>  
 From: 00002 <sip:00002@sip.com>;tag=1576039b  
 To: <sip:00004@sip.com>;tag=342a8563  
 Call-ID: 32916bdd@00002.192.168.1.1  
 CSeq: 233289004 BYE  
 max-forwards: 69  
 Content-Length: 0

F130 192.168.2.15:1135(3) -> 192.168.1.1:5060(2)

BYE sip:00005@192.168.1.1 SIP/2.0  
Via: SIP/2.0/UDP 192.168.2.15:5060;branch=z9hG4bK-309be30d-880786.821  
Route: <sip:00005@192.168.2.14>  
From: 00004 <sip:00004@sip.com>;tag=45d480e2  
To: <sip:00005@sip.com>;tag=3292ae5a  
Call-ID: 471b3560@00004.192.168.1.1  
CSeq: 1502071426 BYE  
Max-Forwards: 70  
Content-Length: 0

F131 192.168.2.15:1135(3) -> 192.168.1.1:5060(2)

SIP/2.0 200 OK  
Via: SIP/2.0/UDP 192.168.1.1:5060;branch=z9hG4bK-763.1084364329.233289004  
Via: SIP/2.0/UDP 192.168.2.10:5060;branch=z9hG4bK-55b8535a-880951.665  
From: 00002 <sip:00002@sip.com>;tag=1576039b  
To: <sip:00004@sip.com>;tag=342a8563  
Call-ID: 32916bdd@00002.192.168.1.1  
CSeq: 233289004 BYE  
Content-Length: 0

F132 192.168.1.1:5062(2) -> 192.168.2.10:5060(1)

SIP/2.0 200 OK  
Via: SIP/2.0/UDP 192.168.2.10:5060;branch=z9hG4bK-55b8535a-880951.665  
From: 00002 <sip:00002@sip.com>;tag=1576039b  
To: <sip:00004@sip.com>;tag=342a8563  
Call-ID: 32916bdd@00002.192.168.1.1  
CSeq: 233289004 BYE  
Content-Length: 0

F133 192.168.1.1:5062(2) -> 192.168.2.14:5060(4)

BYE sip:00005@192.168.2.14 SIP/2.0  
Via: SIP/2.0/UDP 192.168.1.1:5060;branch=z9hG4bK-765.1084364329.1502071426  
Via: SIP/2.0/UDP 192.168.2.15:5060;branch=z9hG4bK-309be30d-880786.821  
Route: <sip:00005@192.168.2.14>  
From: 00004 <sip:00004@sip.com>;tag=45d480e2  
To: <sip:00005@sip.com>;tag=3292ae5a  
Call-ID: 471b3560@00004.192.168.1.1  
CSeq: 1502071426 BYE  
max-forwards: 69  
Content-Length: 0

F134 192.168.2.14:1057(4) -> 192.168.1.1:5060(2)

SIP/2.0 200 OK  
Via: SIP/2.0/UDP 192.168.1.1:5060;branch=z9hG4bK-765.1084364329.1502071426  
Via: SIP/2.0/UDP 192.168.2.15:5060;branch=z9hG4bK-309be30d-880786.821  
From: 00004 <sip:00004@sip.com>;tag=45d480e2  
To: <sip:00005@sip.com>;tag=3292ae5a  
Call-ID: 471b3560@00004.192.168.1.1  
CSeq: 1502071426 BYE  
Content-Length: 0

F135 192.168.1.1:5062(2) -> 192.168.2.15:5060(3)

SIP/2.0 200 OK  
Via: SIP/2.0/UDP 192.168.2.15:5060;branch=z9hG4bK-309be30d-880786.821  
From: 00004 <sip:00004@sip.com>;tag=45d480e2  
To: <sip:00005@sip.com>;tag=3292ae5a  
Call-ID: 471b3560@00004.192.168.1.1  
CSeq: 1502071426 BYE  
Content-Length: 0

=====

F136      192.168.2.10:1091(1) -> 192.168.1.1:5060(2)

BYE sip:00002@192.168.1.1 SIP/2.0  
Via: SIP/2.0/UDP 192.168.2.10:5060:branch=z9hG4bK-2021ca89-880960.115  
Route: <sip:00005@192.168.2.14>  
From: <sip:00002@192.168.2.10>;tag=57590cb4  
To: 00005 <sip:00005@sip.com>;tag=5b9125e6  
Call-ID: 26174900@00005.192.168.1.1  
CSeq: 67445844 BYE  
Proxy-Authorization: Digest username="00002", realm="heliossv2",  
nonce="9fa6c53b946631caf9c9b7a7ea9e5f0d", uri="sip:00002@192.168.1.1",  
response="5cc09bf9875d2791877bbe9150c2d832", algorithm=MD5, cnonce="7605623c",  
opaque="e01289fc77b69626b29b8744a85277b4", qop=auth, nc=00000005  
Max-Forwards: 70  
Content-Length: 0

=====

F137      192.168.1.1:5062(2) -> 192.168.2.14:5060(4)

BYE sip:00005@192.168.2.14 SIP/2.0  
Via: SIP/2.0/UDP 192.168.1.1:5060:branch=z9hG4bK-766.1084364337.67445844  
Via: SIP/2.0/UDP 192.168.2.10:5060:branch=z9hG4bK-2021ca89-880960.115  
Route: <sip:00005@192.168.2.14>  
From: <sip:00002@192.168.2.10>;tag=57590cb4  
To: 00005 <sip:00005@sip.com>;tag=5b9125e6  
Call-ID: 26174900@00005.192.168.1.1  
CSeq: 67445844 BYE  
max-forwards: 69  
Content-Length: 0

=====

F138      192.168.2.14:1057(4) -> 192.168.1.1:5060(2)

SIP/2.0 200 OK  
Via: SIP/2.0/UDP 192.168.1.1:5060:branch=z9hG4bK-766.1084364337.67445844  
Via: SIP/2.0/UDP 192.168.2.10:5060:branch=z9hG4bK-2021ca89-880960.115  
From: <sip:00002@192.168.2.10>;tag=57590cb4  
To: 00005 <sip:00005@sip.com>;tag=5b9125e6  
Call-ID: 26174900@00005.192.168.1.1  
CSeq: 67445844 BYE  
Content-Length: 0

=====

F139      192.168.1.1:5062(2) -> 192.168.2.10:5060(1)

SIP/2.0 200 OK  
Via: SIP/2.0/UDP 192.168.2.10:5060:branch=z9hG4bK-2021ca89-880960.115  
From: <sip:00002@192.168.2.10>;tag=57590cb4  
To: 00005 <sip:00005@sip.com>;tag=5b9125e6  
Call-ID: 26174900@00005.192.168.1.1  
CSeq: 67445844 BYE  
Content-Length: 0

=====



## 11.6.7. Attend-Transfer 時に転送先が話中

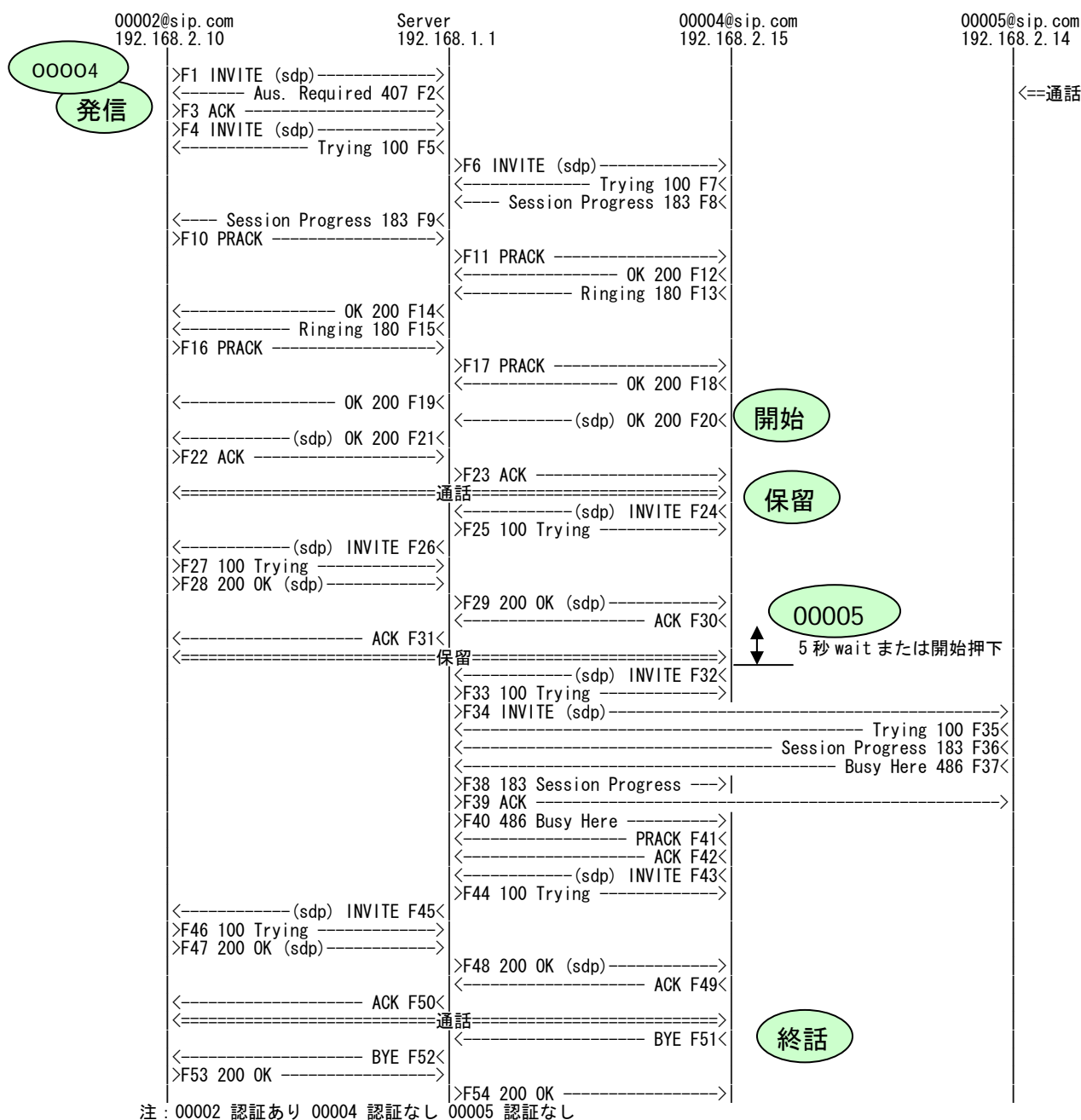


図 11-34 Attend-Transfer 時に転送先が話中

F1 192.168.2.10:1091(1) -&gt; 192.168.1.1:5060(2)

INVITE sip:00004@sip.com SIP/2.0  
 Via: SIP/2.0/UDP 192.168.2.10:5060;branch=z9hG4bK-5462a971-881294.394  
 Route: <sip:192.168.1.1:5060>  
 From: <sip:00002@sip.com>;tag=43516cb7  
 To: <sip:00004@sip.com>  
 Call-ID: 19ab5ac3@00002.192.168.1.1  
 CSeq: 1014515599 INVITE  
 Contact: <sip:00002@192.168.2.10>  
 Proxy-Authorization: Digest

username="00002",

realm="heliossv2",

# FOMA/WLAN デュアル端末に関する技術参考資料 第 1.2 版

```

nonce="d0a3dc4765dd5ae472d90b77734ff3f9",
response="d1b3773f3f01874a4639e4ff63213428",
opaque="8cdba13b8545514ce302847706515baf", qop=auth, nc=00000004,
uri="sip:00004@sip.com",
algorithm=MD5,
cnonce="75b77cc0",
Max-Forwards: 70
Supported: 100rel, replaces
Allow: INVITE, ACK, BYE, CANCEL, OPTIONS, PRACK, MESSAGE, REFER, NOTIFY
Content-Type: application/sdp
Accept: application/sdp, message/sipfrag
Content-Length: 250

```

```

v=0
o=- 382785 3901 IN IP4 192.168.2.10
s=-
c=IN IP4 192.168.2.10
t=0 0
m=audio 5008 RTP/AVP 0 8 4 18 96
a=rtpmap:0 PCMU/8000
a=rtpmap:8 PCMA/8000
a=rtpmap:4 G723/8000
a=rtpmap:18 G729/8000
a=rtpmap:96 telephone-event/8000
a=fmtp:96 0-11

```

---

F2 192.168.1.1:5062(2) -> 192.168.2.10:5060(1)

```

SIP/2.0 407 Proxy Authentication Required
Via: SIP/2.0/UDP 192.168.2.10:5060;branch=z9hG4bK-5462a971-881294.394
From: <sip:00002@sip.com>;tag=43516cb7
To: <sip:00004@sip.com>
Call-ID: 19ab5ac3@00002.192.168.1.1
CSeq: 1014515599 INVITE
Proxy-Authenticate: Digest realm="heliossv2", nonce="81eedea450ad52c0f53333849766bdfb",
opaque="5360aab6f51568a7dee8ffc5c1fd0499", stale=false, algorithm=MD5, qop="auth,auth-int"
Content-Length: 0

```

---

F3 192.168.2.10:1091(1) -> 192.168.1.1:5060(2)

```

ACK sip:00004@sip.com SIP/2.0
Via: SIP/2.0/UDP 192.168.2.10:5060;branch=z9hG4bK-5462a971-881294.394
Route: <sip:192.168.1.1:5060>
From: <sip:00002@sip.com>;tag=43516cb7
To: <sip:00004@sip.com>
Call-ID: 19ab5ac3@00002.192.168.1.1
CSeq: 1014515599 ACK
Content-Length: 0

```

---

F4 192.168.2.10:1091(1) -> 192.168.1.1:5060(2)

```

INVITE sip:00004@sip.com SIP/2.0
Via: SIP/2.0/UDP 192.168.2.10:5060;branch=z9hG4bK-130d98d8-881294.728
Route: <sip:192.168.1.1:5060>
From: <sip:00002@sip.com>;tag=43516cb7
To: <sip:00004@sip.com>
Call-ID: 19ab5ac3@00002.192.168.1.1
CSeq: 1014515600 INVITE
Contact: <sip:00002@192.168.2.10>
Proxy-Authorization: Digest username="00002", realm="heliossv2",
nonce="81eedea450ad52c0f53333849766bdfb", uri="sip:00004@sip.com",
response="4de8afa765dbc4314e11ac7cf32acdb5", algorithm=MD5, cnonce="0fbedc36",
opaque="5360aab6f51568a7dee8ffc5c1fd0499", qop=auth, nc=00000001
Max-Forwards: 70
Supported: 100rel, replaces
Allow: INVITE, ACK, BYE, CANCEL, OPTIONS, PRACK, MESSAGE, REFER, NOTIFY
Content-Type: application/sdp
Accept: application/sdp, message/sipfrag
Content-Length: 250

```

```

v=0
o=- 382785 3901 IN IP4 192.168.2.10
s=-
c=IN IP4 192.168.2.10
t=0 0
m=audio 5008 RTP/AVP 0 8 4 18 96

```

```

a=rtpmap:0 PCMU/8000
a=rtpmap:8 PCMA/8000
a=rtpmap:4 G723/8000
a=rtpmap:18 G729/8000
a=rtpmap:96 telephone-event/8000
a=fmtp:96 0-11

```

---

F5            192.168.1.1:5062(2) -> 192.168.2.10:5060(1)

```

SIP/2.0 100 Trying
Via: SIP/2.0/UDP 192.168.2.10:5060;branch=z9hG4bK-130d98d8-881294.728
From: <sip:00002@sip.com>;tag=43516cb7
To: <sip:00004@sip.com>
Call-ID: 19ab5ac3@00002.192.168.1.1
CSeq: 1014515600 INVITE
Content-Length: 0

```

---

F6            192.168.1.1:5062(2) -> 192.168.2.15:5060(3)

```

INVITE sip:00004@192.168.2.15 SIP/2.0
Via: SIP/2.0/UDP 192.168.1.1:5060;branch=z9hG4bK-773.701225.1014515600
Via: SIP/2.0/UDP 192.168.2.10:5060;branch=z9hG4bK-130d98d8-881294.728
Record-Route: <sip:00004@192.168.1.1>
Route: <sip:192.168.1.1:5060>
From: 00002 <sip:00002@sip.com>;tag=43516cb7
To: <sip:00004@sip.com>
Call-ID: 19ab5ac3@00002.192.168.1.1
CSeq: 1014515600 INVITE
Contact: <sip:00002@192.168.2.10>
max-forwards: 69
supported: 100rel
supported: replaces
Allow: INVITE, ACK, BYE, CANCEL, OPTIONS, PRACK, MESSAGE, REFER, NOTIFY
Content-Type: application/sdp
Accept: application/sdp, message/sipfrag
Content-Length: 250

```

```

v=0
o=- 382785 3901 IN IP4 192.168.2.10
s=-
c=IN IP4 192.168.2.10
t=0 0
m=audio 5008 RTP/AVP 0 8 4 18 96
a=rtpmap:0 PCMU/8000
a=rtpmap:8 PCMA/8000
a=rtpmap:4 G723/8000
a=rtpmap:18 G729/8000
a=rtpmap:96 telephone-event/8000
a=fmtp:96 0-11

```

---

F7            192.168.2.15:1135(3) -> 192.168.1.1:5060(2)

```

SIP/2.0 100 Trying
Via: SIP/2.0/UDP 192.168.1.1:5060;branch=z9hG4bK-773.701225.1014515600
Via: SIP/2.0/UDP 192.168.2.10:5060;branch=z9hG4bK-130d98d8-881294.728
From: 00002 <sip:00002@sip.com>;tag=43516cb7
To: <sip:00004@sip.com>
Call-ID: 19ab5ac3@00002.192.168.1.1
CSeq: 1014515600 INVITE
Content-Length: 0

```

---

F8            192.168.2.15:1135(3) -> 192.168.1.1:5060(2)

```

SIP/2.0 183 Session Progress
Via: SIP/2.0/UDP 192.168.1.1:5060;branch=z9hG4bK-773.701225.1014515600
Via: SIP/2.0/UDP 192.168.2.10:5060;branch=z9hG4bK-130d98d8-881294.728
Record-Route: <sip:00004@192.168.1.1>
From: 00002 <sip:00002@sip.com>;tag=43516cb7
To: <sip:00004@sip.com>;tag=66d53e42
Call-ID: 19ab5ac3@00002.192.168.1.1
CSeq: 1014515600 INVITE

```

Contact: <sip:00004@192.168.2.15>  
Require: 100rel  
RSeq: 1687227490  
Content-Length: 0

F9 192.168.1.1:5062(2) -> 192.168.2.10:5060(1)

SIP/2.0 183 Session Progress  
Via: SIP/2.0/UDP 192.168.2.10:5060;branch=z9hG4bK-130d98d8-881294.728  
Record-Route: <sip:00004@192.168.1.1>  
From: 00002 <sip:00002@sip.com>;tag=43516cb7  
To: <sip:00004@sip.com>;tag=66d53e42  
Call-ID: 19ab5ac3@00002.192.168.1.1  
CSeq: 1014515600 INVITE  
Contact: <sip:00004@192.168.2.15>  
require: 100rel  
rseq: 1687227490  
Content-Length: 0

F10 192.168.2.10:1091(1) -> 192.168.1.1:5060(2)

PRACK sip:00004@192.168.1.1 SIP/2.0  
Via: SIP/2.0/UDP 192.168.2.10:5060;branch=z9hG4bK-678bd033-881295.320  
Route: <sip:00004@192.168.2.15>  
From: 00002 <sip:00002@sip.com>;tag=43516cb7  
To: <sip:00004@sip.com>;tag=66d53e42  
Call-ID: 19ab5ac3@00002.192.168.1.1  
CSeq: 1014515601 PRACK  
Proxy-Authorization: Digest username="00002", realm="heliossv2",  
nonce="81eedea450ad52c0f5333849766bdfb", uri="sip:00004@192.168.1.1",  
response="24e98e7874020b2064ced7293f5ec410", algorithm=MD5, cnonce="6dc0cc5a",  
opaque="5360aab6f51568a7dee8ffc5c1fd0499", qop=auth, nc=00000002  
Max-Forwards: 70  
Rack: 1687227490 1014515600 INVITE  
Content-Length: 0

F11 192.168.1.1:5062(2) -> 192.168.2.15:5060(3)

PRACK sip:00004@192.168.2.15 SIP/2.0  
Via: SIP/2.0/UDP 192.168.1.1:5060;branch=z9hG4bK-773.1084364672.1014515601  
Via: SIP/2.0/UDP 192.168.2.10:5060;branch=z9hG4bK-678bd033-881295.320  
Route: <sip:00004@192.168.2.15>  
From: 00002 <sip:00002@sip.com>;tag=43516cb7  
To: <sip:00004@sip.com>;tag=66d53e42  
Call-ID: 19ab5ac3@00002.192.168.1.1  
CSeq: 1014515601 PRACK  
max-forwards: 69  
rack: 1687227490 1014515600 INVITE  
Content-Length: 0

F12 192.168.2.15:1135(3) -> 192.168.1.1:5060(2)

SIP/2.0 200 OK  
Via: SIP/2.0/UDP 192.168.1.1:5060;branch=z9hG4bK-773.1084364672.1014515601  
Via: SIP/2.0/UDP 192.168.2.10:5060;branch=z9hG4bK-678bd033-881295.320  
From: 00002 <sip:00002@sip.com>;tag=43516cb7  
To: <sip:00004@sip.com>;tag=66d53e42  
Call-ID: 19ab5ac3@00002.192.168.1.1  
CSeq: 1014515601 PRACK  
Content-Length: 0

F13 192.168.2.15:1135(3) -> 192.168.1.1:5060(2)

SIP/2.0 180 Ringing  
Via: SIP/2.0/UDP 192.168.1.1:5060;branch=z9hG4bK-773.701225.1014515600  
Via: SIP/2.0/UDP 192.168.2.10:5060;branch=z9hG4bK-130d98d8-881294.728

Record-Route: <sip:00004@192.168.1.1>  
 From: 00002 <sip:00002@sip.com>;tag=43516cb7  
 To: <sip:00004@sip.com>;tag=66d53e42  
 Call-ID: 19ab5ac3@00002.192.168.1.1  
 CSeq: 1014515600 INVITE  
 Contact: <sip:00004@192.168.2.15>  
 Require: 100rel  
 RSeq: 1687227491  
 Content-Length: 0

F14 192.168.1.1:5062(2) -> 192.168.2.10:5060(1)

SIP/2.0 200 OK  
 Via: SIP/2.0/UDP 192.168.2.10:5060;branch=z9hG4bK-678bd033-881295.320  
 From: 00002 <sip:00002@sip.com>;tag=43516cb7  
 To: <sip:00004@sip.com>;tag=66d53e42  
 Call-ID: 19ab5ac3@00002.192.168.1.1  
 CSeq: 1014515601 PRACK  
 Content-Length: 0

F15 192.168.1.1:5062(2) -> 192.168.2.10:5060(1)

SIP/2.0 180 Ringing  
 Via: SIP/2.0/UDP 192.168.2.10:5060;branch=z9hG4bK-130d98d8-881294.728  
 Record-Route: <sip:00004@192.168.1.1>  
 From: 00002 <sip:00002@sip.com>;tag=43516cb7  
 To: <sip:00004@sip.com>;tag=66d53e42  
 Call-ID: 19ab5ac3@00002.192.168.1.1  
 CSeq: 1014515600 INVITE  
 Contact: <sip:00004@192.168.2.15>  
 require: 100rel  
 rseq: 1687227491  
 Content-Length: 0

F16 192.168.2.10:1091(1) -> 192.168.1.1:5060(2)

PRACK sip:00004@192.168.1.1 SIP/2.0  
 Via: SIP/2.0/UDP 192.168.2.10:5060;branch=z9hG4bK-38df03d5-881295.550  
 Route: <sip:00004@192.168.2.15>  
 From: 00002 <sip:00002@sip.com>;tag=43516cb7  
 To: <sip:00004@sip.com>;tag=66d53e42  
 Call-ID: 19ab5ac3@00002.192.168.1.1  
 CSeq: 1014515602 PRACK  
 Proxy-Authorization: Digest username="00002", realm="heliossv2",  
 nonce="81eedea450ad52c0f5333849766bdfb", uri="sip:00004@192.168.1.1",  
 response="478245fbb8b4373021165e3f024b8f55", algorithm=MD5,  
 opaque="5360aab6f51568a7dee8ffc5c1fd0499", qop=auth, nc=00000003  
 Max-Forwards: 70  
 Rack: 1687227491 1014515600 INVITE  
 Content-Length: 0

F17 192.168.1.1:5062(2) -> 192.168.2.15:5060(3)

PRACK sip:00004@192.168.2.15 SIP/2.0  
 Via: SIP/2.0/UDP 192.168.1.1:5060;branch=z9hG4bK-773.1084364672.1014515602  
 Via: SIP/2.0/UDP 192.168.2.10:5060;branch=z9hG4bK-38df03d5-881295.550  
 Route: <sip:00004@192.168.2.15>  
 From: 00002 <sip:00002@sip.com>;tag=43516cb7  
 To: <sip:00004@sip.com>;tag=66d53e42  
 Call-ID: 19ab5ac3@00002.192.168.1.1  
 CSeq: 1014515602 PRACK  
 max-forwards: 69  
 rack: 1687227491 1014515600 INVITE  
 Content-Length: 0

F18 192.168.2.15:1135(3) -> 192.168.1.1:5060(2)

```
SIP/2.0 200 OK
Via: SIP/2.0/UDP 192.168.1.1:5060;branch=z9hG4bK-773.1084364672.1014515602
Via: SIP/2.0/UDP 192.168.2.10:5060;branch=z9hG4bK-38df03d5-881295.550
From: 00002 <sip:00002@sip.com>;tag=43516cb7
To: <sip:00004@sip.com>;tag=66d53e42
Call-ID: 19ab5ac3@00002.192.168.1.1
CSeq: 1014515602 PRACK
Content-Length: 0
```

---

F19 192.168.1.1:5062(2) -> 192.168.2.10:5060(1)

```
SIP/2.0 200 OK
Via: SIP/2.0/UDP 192.168.2.10:5060;branch=z9hG4bK-38df03d5-881295.550
From: 00002 <sip:00002@sip.com>;tag=43516cb7
To: <sip:00004@sip.com>;tag=66d53e42
Call-ID: 19ab5ac3@00002.192.168.1.1
CSeq: 1014515602 PRACK
Content-Length: 0
```

---

F20 192.168.2.15:1135(3) -> 192.168.1.1:5060(2)

```
SIP/2.0 200 OK
Via: SIP/2.0/UDP 192.168.1.1:5060;branch=z9hG4bK-773.701225.1014515600
Via: SIP/2.0/UDP 192.168.2.10:5060;branch=z9hG4bK-130d98d8-881294.728
Record-Route: <sip:00004@192.168.1.1>
From: 00002 <sip:00002@sip.com>;tag=43516cb7
To: <sip:00004@sip.com>;tag=66d53e42
Call-ID: 19ab5ac3@00002.192.168.1.1
CSeq: 1014515600 INVITE
Contact: <sip:00004@192.168.2.15>
Supported: 100rel, replaces
Allow: INVITE, ACK, BYE, CANCEL, OPTIONS, PRACK, MESSAGE, REFER, NOTIFY
Content-Type: application/sdp
Accept: application/sdp, message/sipfrag
Content-Length: 177
```

```
v=0
o=- 422435 13201 IN IP4 192.168.2.15
s=-
c=IN IP4 192.168.2.15
t=0 0
m=audio 5008 RTP/AVP 0 96
a=rtpmap:0 PCMU/8000
a=rtpmap:96 telephone-event/8000
a=fmtp:96 0-11
```

---

F21 192.168.1.1:5062(2) -> 192.168.2.10:5060(1)

```
SIP/2.0 200 OK
Via: SIP/2.0/UDP 192.168.2.10:5060;branch=z9hG4bK-130d98d8-881294.728
Record-Route: <sip:00004@192.168.1.1>
From: 00002 <sip:00002@sip.com>;tag=43516cb7
To: <sip:00004@sip.com>;tag=66d53e42
Call-ID: 19ab5ac3@00002.192.168.1.1
CSeq: 1014515600 INVITE
Contact: <sip:00004@192.168.2.15>
supported: 100rel
supported: replaces
Allow: INVITE, ACK, BYE, CANCEL, OPTIONS, PRACK, MESSAGE, REFER, NOTIFY
Content-Type: application/sdp
Accept: application/sdp, message/sipfrag
Content-Length: 177
```

```
v=0
o=- 422435 13201 IN IP4 192.168.2.15
s=-
c=IN IP4 192.168.2.15
t=0 0
m=audio 5008 RTP/AVP 0 96
a=rtpmap:0 PCMU/8000
a=rtpmap:96 telephone-event/8000
a=fmtp:96 0-11
```

F22 192.168.2.10:1091(1) -> 192.168.1.1:5060(2)

ACK sip:00004@192.168.1.1 SIP/2.0  
Via: SIP/2.0/UDP 192.168.2.10:5060;branch=z9hG4bK-4339cced-881298.604  
Route: <sip:00004@192.168.2.15>  
From: 00002 <sip:00002@sip.com>;tag=43516cb7  
To: <sip:00004@sip.com>;tag=66d53e42  
Call-ID: 19ab5ac3@00002.192.168.1.1  
CSeq: 1014515600 ACK  
Proxy-Authorization: Digest username="00002",  
nonce="81eedea450ad52c0f5333849766bdfb", realm="heliossv2",  
response="4de8afa765dbc4314e11ac7cf32acdb5", uri="sip:00004@sip.com",  
opaque="5360aab6f51568a7dee8ffc5c1fd0499", algorithm=MD5, cnonce="0fbedc36",  
qop=auth, nc=00000001  
Max-Forwards: 70  
Content-Length: 0

F23 192.168.1.1:5062(2) -> 192.168.2.15:5060(3)

ACK sip:00004@192.168.2.15 SIP/2.0  
Via: SIP/2.0/UDP 192.168.1.1:5060;branch=z9hG4bK-773.1084364675.1014515600  
Via: SIP/2.0/UDP 192.168.2.10:5060;branch=z9hG4bK-4339cced-881298.604  
From: 00002 <sip:00002@sip.com>;tag=43516cb7  
To: <sip:00004@sip.com>;tag=66d53e42  
Call-ID: 19ab5ac3@00002.192.168.1.1  
CSeq: 1014515600 ACK  
max-forwards: 69  
Content-Length: 0

F24 192.168.2.15:1135(3) -> 192.168.1.1:5060(2)

INVITE sip:00004@192.168.1.1 SIP/2.0  
Via: SIP/2.0/UDP 192.168.2.15:5060;branch=z9hG4bK-6799d772-881135.586  
Route: <sip:00002@192.168.2.10>  
From: <sip:00004@sip.com>;tag=66d53e42  
To: 00002 <sip:00002@sip.com>;tag=43516cb7  
Call-ID: 19ab5ac3@00002.192.168.1.1  
CSeq: 1976575973 INVITE  
Contact: <sip:00004@192.168.2.15>  
Max-Forwards: 70  
Supported: 100rel, replaces  
Allow: INVITE, ACK, BYE, CANCEL, OPTIONS, PRACK, MESSAGE, REFER, NOTIFY  
Content-Type: application/sdp  
Content-Length: 189

v=0  
o=- 575490 13202 IN IP4 192.168.2.15  
s=-  
c=IN IP4 192.168.2.15  
t=0 0  
m=audio 5008 RTP/AVP 0 96  
a=rtpmap:0 PCMU/8000  
a=rtpmap:96 telephone-event/8000  
a=fmtp:96 0-11  
a=inactive

F25 192.168.1.1:5062(2) -> 192.168.2.15:5060(3)

SIP/2.0 100 Trying  
Via: SIP/2.0/UDP 192.168.2.15:5060;branch=z9hG4bK-6799d772-881135.586  
From: <sip:00004@sip.com>;tag=66d53e42  
To: 00002 <sip:00002@sip.com>;tag=43516cb7  
Call-ID: 19ab5ac3@00002.192.168.1.1  
CSeq: 1976575973 INVITE  
Content-Length: 0

F26 192.168.1.1:5062(2) -> 192.168.2.10:5060(1)

INVITE sip:00002@192.168.2.10 SIP/2.0  
 Via: SIP/2.0/UDP 192.168.1.1:5060;branch=z9hG4bK-772.701225.1976575973  
 Via: SIP/2.0/UDP 192.168.2.15:5060;branch=z9hG4bK-6799d772-881135.586  
 Record-Route: <sip:00004@192.168.1.1>  
 Route: <sip:00002@192.168.2.10>  
 From: <sip:00004@sip.com>;tag=66d53e42  
 To: 00002 <sip:00002@sip.com>;tag=43516cb7  
 Call-ID: 19ab5ac3@00002.192.168.1.1  
 CSeq: 1976575973 INVITE  
 Contact: <sip:00004@192.168.2.15>  
 max-forwards: 69  
 supported: 100rel  
 supported: replaces  
 Allow: INVITE, ACK, BYE, CANCEL, OPTIONS, PRACK, MESSAGE, REFER, NOTIFY  
 Content-Type: application/sdp  
 Content-Length: 189

v=0  
 o=- 575490 13202 IN IP4 192.168.2.15  
 s=-  
 c=IN IP4 192.168.2.15  
 t=0 0  
 m=audio 5008 RTP/AVP 0 96  
 a=rtpmap:0 PCMU/8000  
 a=rtpmap:96 telephone-event/8000  
 a=fmtp:96 0-11  
 a=inactive

=====

F27 192.168.2.10:1091 (1) -> 192.168.1.1:5060 (2)

SIP/2.0 100 Trying  
 Via: SIP/2.0/UDP 192.168.1.1:5060;branch=z9hG4bK-772.701225.1976575973  
 Via: SIP/2.0/UDP 192.168.2.15:5060;branch=z9hG4bK-6799d772-881135.586  
 From: <sip:00004@sip.com>;tag=66d53e42  
 To: 00002 <sip:00002@sip.com>;tag=43516cb7  
 Call-ID: 19ab5ac3@00002.192.168.1.1  
 CSeq: 1976575973 INVITE  
 Content-Length: 0

=====

F28 192.168.2.10:1091 (1) -> 192.168.1.1:5060 (2)

SIP/2.0 200 OK  
 Via: SIP/2.0/UDP 192.168.1.1:5060;branch=z9hG4bK-772.701225.1976575973  
 Via: SIP/2.0/UDP 192.168.2.15:5060;branch=z9hG4bK-6799d772-881135.586  
 Record-Route: <sip:00004@192.168.1.1>  
 From: <sip:00004@sip.com>;tag=66d53e42  
 To: 00002 <sip:00002@sip.com>;tag=43516cb7  
 Call-ID: 19ab5ac3@00002.192.168.1.1  
 CSeq: 1976575973 INVITE  
 Contact: <sip:00002@192.168.2.10>  
 Supported: 100rel, replaces  
 Allow: INVITE, ACK, BYE, CANCEL, OPTIONS, PRACK, MESSAGE, REFER, NOTIFY  
 Content-Type: application/sdp  
 Accept: application/sdp, message/sipfrag  
 Content-Length: 188

v=0  
 o=- 901965 3902 IN IP4 192.168.2.10  
 s=-  
 c=IN IP4 192.168.2.10  
 t=0 0  
 m=audio 5008 RTP/AVP 0 96  
 a=rtpmap:0 PCMU/8000  
 a=rtpmap:96 telephone-event/8000  
 a=fmtp:96 0-11  
 a=inactive

=====

F29 192.168.1.1:5062 (2) -> 192.168.2.15:5060 (3)

SIP/2.0 200 OK  
 Via: SIP/2.0/UDP 192.168.2.15:5060;branch=z9hG4bK-6799d772-881135.586  
 Record-Route: <sip:00004@192.168.1.1>  
 From: <sip:00004@sip.com>;tag=66d53e42  
 To: 00002 <sip:00002@sip.com>;tag=43516cb7



Call-ID: 19ab5ac3@00002.192.168.1.1  
 CSeq: 1976575973 INVITE  
 Contact: <sip:00002@192.168.2.10>  
 supported: 100rel  
 supported: replaces  
 Allow: INVITE, ACK, BYE, CANCEL, OPTIONS, PRACK, MESSAGE, REFER, NOTIFY  
 Content-Type: application/sdp  
 Accept: application/sdp, message/sipfrag  
 Content-Length: 188

v=0  
 o=- 901965 3902 IN IP4 192.168.2.10  
 s=-  
 c=IN IP4 192.168.2.10  
 t=0 0  
 m=audio 5008 RTP/AVP 0 96  
 a=rtpmap:0 PCMU/8000  
 a=rtpmap:96 telephone-event/8000  
 a=fmtp:96 0-11  
 a=inactive

---

F30 192.168.2.15:1135(3) -> 192.168.1.1:5060(2)

ACK sip:00004@192.168.1.1 SIP/2.0  
 Via: SIP/2.0/UDP 192.168.2.15:5060;branch=z9hG4bK-31bdc73a-881136.116  
 Route: <sip:00002@192.168.2.10>  
 From: <sip:00004@sip.com>;tag=66d53e42  
 To: 00002 <sip:00002@sip.com>;tag=43516cb7  
 Call-ID: 19ab5ac3@00002.192.168.1.1  
 CSeq: 1976575973 ACK  
 Max-Forwards: 70  
 Content-Length: 0

---

F31 192.168.1.1:5062(2) -> 192.168.2.10:5060(1)

ACK sip:00002@192.168.2.10 SIP/2.0  
 Via: SIP/2.0/UDP 192.168.1.1:5060;branch=z9hG4bK-772.1084364678.1976575973  
 Via: SIP/2.0/UDP 192.168.2.15:5060;branch=z9hG4bK-31bdc73a-881136.116  
 From: <sip:00004@sip.com>;tag=66d53e42  
 To: 00002 <sip:00002@sip.com>;tag=43516cb7  
 Call-ID: 19ab5ac3@00002.192.168.1.1  
 CSeq: 1976575973 ACK  
 max-forwards: 69  
 Content-Length: 0

---

F32 192.168.2.15:1135(3) -> 192.168.1.1:5060(2)

INVITE sip:00005@sip.com SIP/2.0  
 Via: SIP/2.0/UDP 192.168.2.15:5060;branch=z9hG4bK-37a1320d-881147.262  
 Route: <sip:192.168.1.1:5060>  
 From: <sip:00004@sip.com>;tag=5850ae0b  
 To: <sip:00005@sip.com>  
 Call-ID: 672c56dd@00004.192.168.1.1  
 CSeq: 746733283 INVITE  
 Contact: <sip:00004@192.168.2.15>  
 Max-Forwards: 70  
 Supported: 100rel, replaces  
 Allow: INVITE, ACK, BYE, CANCEL, OPTIONS, PRACK, MESSAGE, REFER, NOTIFY  
 Content-Type: application/sdp  
 Accept: application/sdp, message/sipfrag  
 Content-Length: 249

v=0  
 o=- 244990 201 IN IP4 192.168.2.15  
 s=-  
 c=IN IP4 192.168.2.15  
 t=0 0  
 m=audio 5006 RTP/AVP 0 8 4 18 96  
 a=rtpmap:0 PCMU/8000  
 a=rtpmap:8 PCMA/8000  
 a=rtpmap:4 G723/8000  
 a=rtpmap:18 G729/8000  
 a=rtpmap:96 telephone-event/8000

a=fmtp:96 0-11

---

F33 192.168.1.1:5062(2) -> 192.168.2.15:5060(3)

SIP/2.0 100 Trying  
Via: SIP/2.0/UDP 192.168.2.15:5060;branch=z9hG4bK-37a1320d-881147.262  
From: <sip:00004@sip.com>;tag=5850ae0b  
To: <sip:00005@sip.com>  
Call-ID: 672c56dd@00004.192.168.1.1  
CSeq: 746733283 INVITE  
Content-Length: 0

---

F34 192.168.1.1:5062(2) -> 192.168.2.14:5060(4)

INVITE sip:00005@192.168.2.14 SIP/2.0  
Via: SIP/2.0/UDP 192.168.1.1:5060;branch=z9hG4bK-775.391301.746733283  
Via: SIP/2.0/UDP 192.168.2.15:5060;branch=z9hG4bK-37a1320d-881147.262  
Record-Route: <sip:00005@192.168.1.1>  
Route: <sip:192.168.1.1:5060>  
From: 00004 <sip:00004@sip.com>;tag=5850ae0b  
To: <sip:00005@sip.com>  
Call-ID: 672c56dd@00004.192.168.1.1  
CSeq: 746733283 INVITE  
Contact: <sip:00004@192.168.2.15>  
max-forwards: 69  
supported: 100rel  
supported: replaces  
Allow: INVITE, ACK, BYE, CANCEL, OPTIONS, PRACK, MESSAGE, REFER, NOTIFY  
Content-Type: application/sdp  
Accept: application/sdp, message/sipfrag  
Content-Length: 249

v=0  
o=- 244990 201 IN IP4 192.168.2.15  
s=-  
c=IN IP4 192.168.2.15  
t=0 0  
m=audio 5006 RTP/AVP 0 8 4 18 96  
a=rtpmap:0 PCMU/8000  
a=rtpmap:8 PCMA/8000  
a=rtpmap:4 G723/8000  
a=rtpmap:18 G729/8000  
a=rtpmap:96 telephone-event/8000  
a=fmtp:96 0-11

---

F35 192.168.2.14:1057(4) -> 192.168.1.1:5060(2)

SIP/2.0 100 Trying  
Via: SIP/2.0/UDP 192.168.1.1:5060;branch=z9hG4bK-775.391301.746733283  
Via: SIP/2.0/UDP 192.168.2.15:5060;branch=z9hG4bK-37a1320d-881147.262  
From: 00004 <sip:00004@sip.com>;tag=5850ae0b  
To: <sip:00005@sip.com>  
Call-ID: 672c56dd@00004.192.168.1.1  
CSeq: 746733283 INVITE  
Content-Length: 0

---

F36 192.168.2.14:1057(4) -> 192.168.1.1:5060(2)

SIP/2.0 183 Session Progress  
Via: SIP/2.0/UDP 192.168.1.1:5060;branch=z9hG4bK-775.391301.746733283  
Via: SIP/2.0/UDP 192.168.2.15:5060;branch=z9hG4bK-37a1320d-881147.262  
Record-Route: <sip:00005@192.168.1.1>  
From: 00004 <sip:00004@sip.com>;tag=5850ae0b  
To: <sip:00005@sip.com>;tag=21078815  
Call-ID: 672c56dd@00004.192.168.1.1  
CSeq: 746733283 INVITE  
Contact: <sip:00005@192.168.2.14>  
Require: 100rel  
RSeq: 1933364135  
Content-Length: 0

F37 192.168.2.14:1057(4) -> 192.168.1.1:5060(2)

SIP/2.0 486 Busy Here  
Via: SIP/2.0/UDP 192.168.1.1:5060;branch=z9hG4bK-775.391301.746733283  
Via: SIP/2.0/UDP 192.168.2.15:5060;branch=z9hG4bK-37a1320d-881147.262  
From: 00004 <sip:00004@sip.com>;tag=5850ae0b  
To: <sip:00005@sip.com>;tag=21078815  
Call-ID: 672c56dd@00004.192.168.1.1  
CSeq: 746733283 INVITE  
Content-Length: 0

F38 192.168.1.1:5062(2) -> 192.168.2.15:5060(3)

SIP/2.0 183 Session Progress  
Via: SIP/2.0/UDP 192.168.2.15:5060;branch=z9hG4bK-37a1320d-881147.262  
Record-Route: <sip:00005@192.168.1.1>  
From: 00004 <sip:00004@sip.com>;tag=5850ae0b  
To: <sip:00005@sip.com>;tag=21078815  
Call-ID: 672c56dd@00004.192.168.1.1  
CSeq: 746733283 INVITE  
Contact: <sip:00005@192.168.2.14>  
require: 100rel  
rseq: 1933364135  
Content-Length: 0

F39 192.168.1.1:5062(2) -> 192.168.2.14:5060(4)

ACK sip:00005@192.168.2.14 SIP/2.0  
Via: SIP/2.0/UDP 192.168.1.1:5060;branch=z9hG4bK-775.391301.746733283  
Route: <sip:192.168.1.1:5060>  
From: 00004 <sip:00004@sip.com>;tag=5850ae0b  
To: <sip:00005@sip.com>;tag=21078815  
Call-ID: 672c56dd@00004.192.168.1.1  
CSeq: 746733283 ACK  
Content-Length: 0

F40 192.168.1.1:5062(2) -> 192.168.2.15:5060(3)

SIP/2.0 486 Busy Here  
Via: SIP/2.0/UDP 192.168.2.15:5060;branch=z9hG4bK-37a1320d-881147.262  
From: 00004 <sip:00004@sip.com>;tag=5850ae0b  
To: <sip:00005@sip.com>;tag=21078815  
Call-ID: 672c56dd@00004.192.168.1.1  
CSeq: 746733283 INVITE  
Content-Length: 0

F41 192.168.2.15:1135(3) -> 192.168.1.1:5060(2)

PRACK sip:00005@192.168.1.1 SIP/2.0  
Via: SIP/2.0/UDP 192.168.2.15:5060;branch=z9hG4bK-7862946b-881147.537  
Route: <sip:00005@192.168.2.14>  
From: 00004 <sip:00004@sip.com>;tag=5850ae0b  
To: <sip:00005@sip.com>;tag=21078815  
Call-ID: 672c56dd@00004.192.168.1.1  
CSeq: 746733284 PRACK  
Max-Forwards: 70  
RAck: 1933364135 746733283 INVITE  
Content-Length: 0

F42 192.168.2.15:1135(3) -> 192.168.1.1:5060(2)

ACK sip:00005@sip.com SIP/2.0  
Via: SIP/2.0/UDP 192.168.2.15:5060;branch=z9hG4bK-37a1320d-881147.262

```

Route: <sip:192.168.1.1:5060>
From: 00004 <sip:00004@sip.com>;tag=5850ae0b
To: <sip:00005@sip.com>;tag=21078815
Call-ID: 672c56dd@00004.192.168.1.1
CSeq: 746733283 ACK
Content-Length: 0

```

```

=====
F43      192.168.2.15:1135(3) -> 192.168.1.1:5060(2)

```

```

INVITE sip:00004@192.168.1.1 SIP/2.0
Via: SIP/2.0/UDP 192.168.2.15:5060;branch=z9hG4bK-272702b3-881148.472
Route: <sip:00002@192.168.2.10>
From: <sip:00004@sip.com>;tag=66d53e42
To: 00002 <sip:00002@sip.com>;tag=43516cb7
Call-ID: 19ab5ac3@00002.192.168.1.1
CSeq: 1976575974 INVITE
Contact: <sip:00004@192.168.2.15>
Max-Forwards: 70
Supported: 100rel, replaces
Allow: INVITE, ACK, BYE, CANCEL, OPTIONS, PRACK, MESSAGE, REFER, NOTIFY
Content-Type: application/sdp
Content-Length: 177

```

```

v=0
o=- 464918 13203 IN IP4 192.168.2.15
s=-
c=IN IP4 192.168.2.15
t=0 0
m=audio 5008 RTP/AVP 0 96
a=rtpmap:0 PCMU/8000
a=rtpmap:96 telephone-event/8000
a=fmtp:96 0-11

```

```

=====
F44      192.168.1.1:5062(2) -> 192.168.2.15:5060(3)

```

```

SIP/2.0 100 Trying
Via: SIP/2.0/UDP 192.168.2.15:5060;branch=z9hG4bK-272702b3-881148.472
From: <sip:00004@sip.com>;tag=66d53e42
To: 00002 <sip:00002@sip.com>;tag=43516cb7
Call-ID: 19ab5ac3@00002.192.168.1.1
CSeq: 1976575974 INVITE
Content-Length: 0

```

```

=====
F45      192.168.1.1:5062(2) -> 192.168.2.10:5060(1)

```

```

INVITE sip:00002@192.168.2.10 SIP/2.0
Via: SIP/2.0/UDP 192.168.1.1:5060;branch=z9hG4bK-772.701225.1976575974
Via: SIP/2.0/UDP 192.168.2.15:5060;branch=z9hG4bK-272702b3-881148.472
Record-Route: <sip:00004@192.168.1.1>
Route: <sip:00002@192.168.2.10>
From: <sip:00004@sip.com>;tag=66d53e42
To: 00002 <sip:00002@sip.com>;tag=43516cb7
Call-ID: 19ab5ac3@00002.192.168.1.1
CSeq: 1976575974 INVITE
Contact: <sip:00004@192.168.2.15>
max-forwards: 69
supported: 100rel
supported: replaces
Allow: INVITE, ACK, BYE, CANCEL, OPTIONS, PRACK, MESSAGE, REFER, NOTIFY
Content-Type: application/sdp
Content-Length: 177

```

```

v=0
o=- 464918 13203 IN IP4 192.168.2.15
s=-
c=IN IP4 192.168.2.15
t=0 0
m=audio 5008 RTP/AVP 0 96
a=rtpmap:0 PCMU/8000
a=rtpmap:96 telephone-event/8000
a=fmtp:96 0-11

```

F46 192.168.2.10:1091(1) -> 192.168.1.1:5060(2)

SIP/2.0 100 Trying  
 Via: SIP/2.0/UDP 192.168.1.1:5060;branch=z9hG4bK-772.701225.1976575974  
 Via: SIP/2.0/UDP 192.168.2.15:5060;branch=z9hG4bK-272702b3-881148.472  
 From: <sip:00004@sip.com>;tag=66d53e42  
 To: 00002 <sip:00002@sip.com>;tag=43516cb7  
 Call-ID: 19ab5ac3@00002.192.168.1.1  
 CSeq: 1976575974 INVITE  
 Content-Length: 0

F47 192.168.2.10:1091(1) -> 192.168.1.1:5060(2)

SIP/2.0 200 OK  
 Via: SIP/2.0/UDP 192.168.1.1:5060;branch=z9hG4bK-772.701225.1976575974  
 Via: SIP/2.0/UDP 192.168.2.15:5060;branch=z9hG4bK-272702b3-881148.472  
 Record-Route: <sip:00004@192.168.1.1>  
 From: <sip:00004@sip.com>;tag=66d53e42  
 To: 00002 <sip:00002@sip.com>;tag=43516cb7  
 Call-ID: 19ab5ac3@00002.192.168.1.1  
 CSeq: 1976575974 INVITE  
 Contact: <sip:00002@192.168.2.10>  
 Supported: 100rel, replaces  
 Allow: INVITE, ACK, BYE, CANCEL, OPTIONS, PRACK, MESSAGE, REFER, NOTIFY  
 Content-Type: application/sdp  
 Accept: application/sdp, message/sipfrag  
 Content-Length: 250

v=0  
 o=- 485272 3903 IN IP4 192.168.2.10  
 s=-  
 c=IN IP4 192.168.2.10  
 t=0 0  
 m=audio 5008 RTP/AVP 0 8 4 18 96  
 a=rtpmap:0 PCMU/8000  
 a=rtpmap:8 PCMA/8000  
 a=rtpmap:4 G723/8000  
 a=rtpmap:18 G729/8000  
 a=rtpmap:96 telephone-event/8000  
 a=fmtp:96 0-11

F48 192.168.1.1:5062(2) -> 192.168.2.15:5060(3)

SIP/2.0 200 OK  
 Via: SIP/2.0/UDP 192.168.2.15:5060;branch=z9hG4bK-272702b3-881148.472  
 Record-Route: <sip:00004@192.168.1.1>  
 From: <sip:00004@sip.com>;tag=66d53e42  
 To: 00002 <sip:00002@sip.com>;tag=43516cb7  
 Call-ID: 19ab5ac3@00002.192.168.1.1  
 CSeq: 1976575974 INVITE  
 Contact: <sip:00002@192.168.2.10>  
 supported: 100rel  
 supported: replaces  
 Allow: INVITE, ACK, BYE, CANCEL, OPTIONS, PRACK, MESSAGE, REFER, NOTIFY  
 Content-Type: application/sdp  
 Accept: application/sdp, message/sipfrag  
 Content-Length: 250

v=0  
 o=- 485272 3903 IN IP4 192.168.2.10  
 s=-  
 c=IN IP4 192.168.2.10  
 t=0 0  
 m=audio 5008 RTP/AVP 0 8 4 18 96  
 a=rtpmap:0 PCMU/8000  
 a=rtpmap:8 PCMA/8000  
 a=rtpmap:4 G723/8000  
 a=rtpmap:18 G729/8000  
 a=rtpmap:96 telephone-event/8000  
 a=fmtp:96 0-11

F49 192.168.2.15:1135(3) -> 192.168.1.1:5060(2)

## FOMA/WLAN デュアル端末に関する技術参考資料 第 1.2 版

ACK sip:00004@192.168.1.1 SIP/2.0  
Via: SIP/2.0/UDP 192.168.2.15:5060;branch=z9hG4bK-3ab3bbb6-881148.709  
Route: <sip:00002@192.168.2.10>  
From: <sip:00004@sip.com>;tag=66d53e42  
To: 00002 <sip:00002@sip.com>;tag=43516cb7  
Call-ID: 19ab5ac3@00002.192.168.1.1  
CSeq: 1976575974 ACK  
Max-Forwards: 70  
Content-Length: 0

=====

F50 192.168.1.1:5062(2) -> 192.168.2.10:5060(1)

ACK sip:00002@192.168.2.10 SIP/2.0  
Via: SIP/2.0/UDP 192.168.1.1:5060;branch=z9hG4bK-772.1084364690.1976575974  
Via: SIP/2.0/UDP 192.168.2.15:5060;branch=z9hG4bK-3ab3bbb6-881148.709  
From: <sip:00004@sip.com>;tag=66d53e42  
To: 00002 <sip:00002@sip.com>;tag=43516cb7  
Call-ID: 19ab5ac3@00002.192.168.1.1  
CSeq: 1976575974 ACK  
max-forwards: 69  
Content-Length: 0

=====

F51 192.168.2.15:1135(3) -> 192.168.1.1:5060(2)

BYE sip:00004@192.168.1.1 SIP/2.0  
Via: SIP/2.0/UDP 192.168.2.15:5060;branch=z9hG4bK-324e7be3-881157.647  
Route: <sip:00002@192.168.2.10>  
From: <sip:00004@sip.com>;tag=66d53e42  
To: 00002 <sip:00002@sip.com>;tag=43516cb7  
Call-ID: 19ab5ac3@00002.192.168.1.1  
CSeq: 1976575975 BYE  
Max-Forwards: 70  
Content-Length: 0

=====

F52 192.168.1.1:5062(2) -> 192.168.2.10:5060(1)

BYE sip:00002@192.168.2.10 SIP/2.0  
Via: SIP/2.0/UDP 192.168.1.1:5060;branch=z9hG4bK-772.1084364699.1976575975  
Via: SIP/2.0/UDP 192.168.2.15:5060;branch=z9hG4bK-324e7be3-881157.647  
Route: <sip:00002@192.168.2.10>  
From: <sip:00004@sip.com>;tag=66d53e42  
To: 00002 <sip:00002@sip.com>;tag=43516cb7  
Call-ID: 19ab5ac3@00002.192.168.1.1  
CSeq: 1976575975 BYE  
max-forwards: 69  
Content-Length: 0

=====

F53 192.168.2.10:1091(1) -> 192.168.1.1:5060(2)

SIP/2.0 200 OK  
Via: SIP/2.0/UDP 192.168.1.1:5060;branch=z9hG4bK-772.1084364699.1976575975  
Via: SIP/2.0/UDP 192.168.2.15:5060;branch=z9hG4bK-324e7be3-881157.647  
From: <sip:00004@sip.com>;tag=66d53e42  
To: 00002 <sip:00002@sip.com>;tag=43516cb7  
Call-ID: 19ab5ac3@00002.192.168.1.1  
CSeq: 1976575975 BYE  
Content-Length: 0

=====

F54 192.168.1.1:5062(2) -> 192.168.2.15:5060(3)

SIP/2.0 200 OK  
Via: SIP/2.0/UDP 192.168.2.15:5060;branch=z9hG4bK-324e7be3-881157.647  
From: <sip:00004@sip.com>;tag=66d53e42  
To: 00002 <sip:00002@sip.com>;tag=43516cb7  
Call-ID: 19ab5ac3@00002.192.168.1.1  
CSeq: 1976575975 BYE

Content-Length: 0

---

## 11.6.8.Attend-Transfer 時に転送先で着信拒否

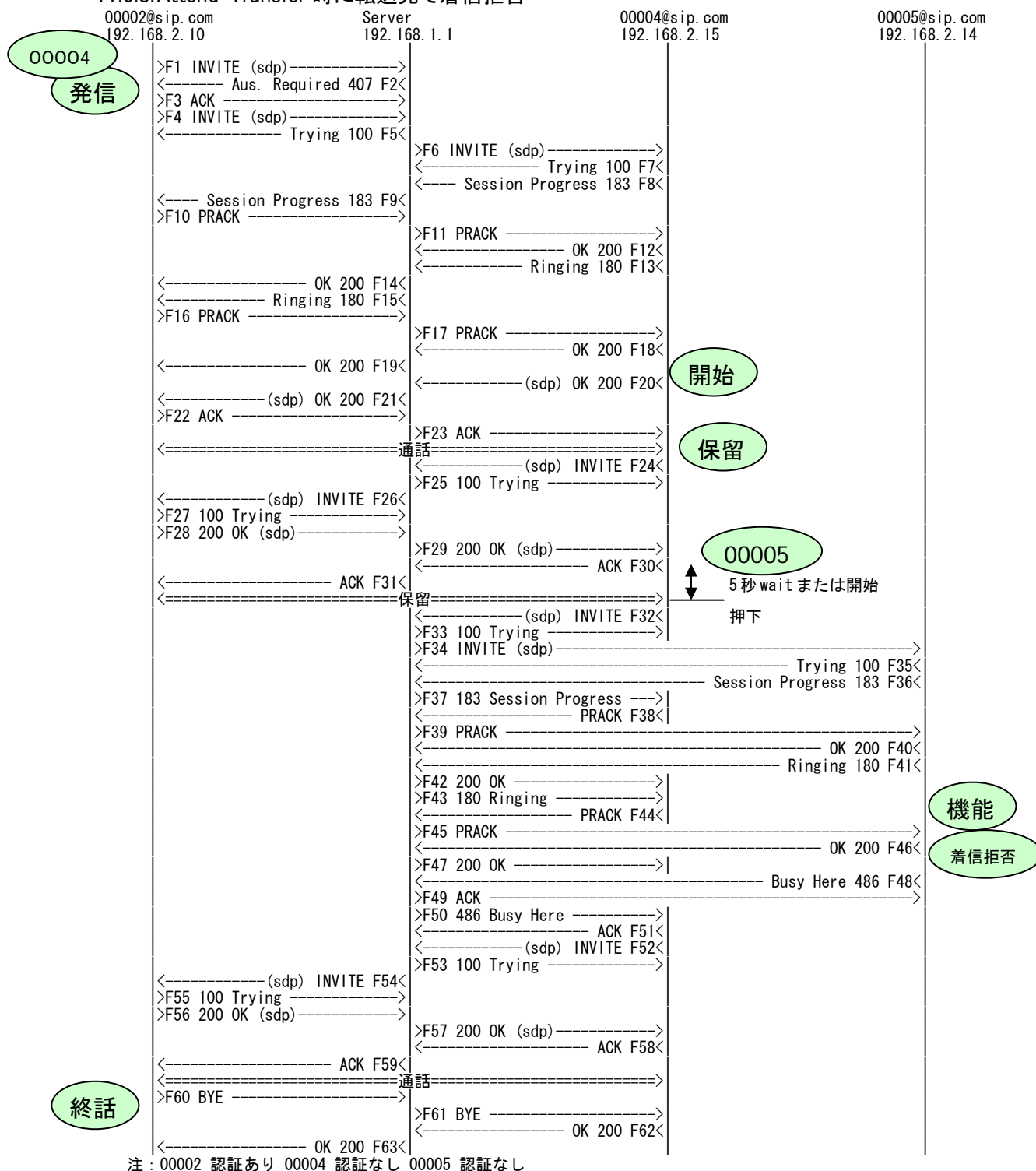


図 11-35 Attend-Transfer 時に転送先で着信拒否

F1 192.168.2.10:1091(1) -&gt; 192.168.1.1:5060(2)

INVITE sip:00004@sip.com SIP/2.0



## FOMA/WLAN デュアル端末に関する技術参考資料 第 1.2 版

Via: SIP/2.0/UDP 192.168.2.10:5060;branch=z9hG4bK-6037b682-881535.475  
Route: <sip:192.168.1.1:5060>  
From: <sip:00002@sip.com>;tag=349ae296  
To: <sip:00004@sip.com>  
Call-ID: 6afc2512@00002.192.168.1.1  
CSeq: 464798398 INVITE  
Contact: <sip:00002@192.168.2.10>  
Proxy-Authorization: Digest username="00002", realm="heliossv2",  
nonce="164d64f7486d1212cf078c5d57d0a09d", uri="sip:00004@sip.com",  
response="47ad1a65aba164174ad9fa443ab6fddb", algorithm=MD5,  
opaque="1251cae98ed1321b5ed69baf239cdca4", qop=auth, nc=00000004, cnonce="253f7650",  
Max-Forwards: 70  
Supported: 100rel, replaces  
Allow: INVITE, ACK, BYE, CANCEL, OPTIONS, PRACK, MESSAGE, REFER, NOTIFY  
Content-Type: application/sdp  
Accept: application/sdp, message/sipfrag  
Content-Length: 250

v=0  
o=- 460379 4401 IN IP4 192.168.2.10  
s=-  
c=IN IP4 192.168.2.10  
t=0 0  
m=audio 5006 RTP/AVP 0 8 4 18 96  
a=rtpmap:0 PCMU/8000  
a=rtpmap:8 PCMA/8000  
a=rtpmap:4 G723/8000  
a=rtpmap:18 G729/8000  
a=rtpmap:96 telephone-event/8000  
a=fmtp:96 0-11

=====

F2 192.168.1.1:5062(2) -> 192.168.2.10:5060(1)

SIP/2.0 407 Proxy Authentication Required  
Via: SIP/2.0/UDP 192.168.2.10:5060;branch=z9hG4bK-6037b682-881535.475  
From: <sip:00002@sip.com>;tag=349ae296  
To: <sip:00004@sip.com>  
Call-ID: 6afc2512@00002.192.168.1.1  
CSeq: 464798398 INVITE  
Proxy-Authenticate: Digest realm="heliossv2", nonce="a8b53c6eac2b1b5288e4e4779272e8b0",  
opaque="d73924ebdac3b0df54737e7641c0d753", stale=false, algorithm=MD5, qop="auth,auth-int"  
Content-Length: 0

=====

F3 192.168.2.10:1091(1) -> 192.168.1.1:5060(2)

ACK sip:00004@sip.com SIP/2.0  
Via: SIP/2.0/UDP 192.168.2.10:5060;branch=z9hG4bK-6037b682-881535.475  
Route: <sip:192.168.1.1:5060>  
From: <sip:00002@sip.com>;tag=349ae296  
To: <sip:00004@sip.com>  
Call-ID: 6afc2512@00002.192.168.1.1  
CSeq: 464798398 ACK  
Content-Length: 0

=====

F4 192.168.2.10:1091(1) -> 192.168.1.1:5060(2)

INVITE sip:00004@sip.com SIP/2.0  
Via: SIP/2.0/UDP 192.168.2.10:5060;branch=z9hG4bK-28e6f199-881535.744  
Route: <sip:192.168.1.1:5060>  
From: <sip:00002@sip.com>;tag=349ae296  
To: <sip:00004@sip.com>  
Call-ID: 6afc2512@00002.192.168.1.1  
CSeq: 464798399 INVITE  
Contact: <sip:00002@192.168.2.10>  
Proxy-Authorization: Digest username="00002", realm="heliossv2",  
nonce="a8b53c6eac2b1b5288e4e4779272e8b0", uri="sip:00004@sip.com",  
response="874329a1a3494d316ffcebb79b192a99", algorithm=MD5,  
opaque="d73924ebdac3b0df54737e7641c0d753", qop=auth, nc=00000001, cnonce="28bec5e0",  
Max-Forwards: 70  
Supported: 100rel, replaces  
Allow: INVITE, ACK, BYE, CANCEL, OPTIONS, PRACK, MESSAGE, REFER, NOTIFY  
Content-Type: application/sdp  
Accept: application/sdp, message/sipfrag

Content-Length: 250

```

v=0
o=- 460379 4401 IN IP4 192.168.2.10
s=-
c=IN IP4 192.168.2.10
t=0 0
m=audio 5006 RTP/AVP 0 8 4 18 96
a=rtpmap:0 PCMU/8000
a=rtpmap:8 PCMA/8000
a=rtpmap:4 G723/8000
a=rtpmap:18 G729/8000
a=rtpmap:96 telephone-event/8000
a=fmtp:96 0-11

```

```
=====
```

F5 192.168.1.1:5062(2) -> 192.168.2.10:5060(1)

```

SIP/2.0 100 Trying
Via: SIP/2.0/UDP 192.168.2.10:5060;branch=z9hG4bK-28e6f199-881535.744
From: <sip:00002@sip.com>;tag=349ae296
To: <sip:00004@sip.com>
Call-ID: 6afc2512@00002.192.168.1.1
CSeq: 464798399 INVITE
Content-Length: 0

```

```
=====
```

F6 192.168.1.1:5062(2) -> 192.168.2.15:5060(3)

```

INVITE sip:00004@192.168.2.15 SIP/2.0
Via: SIP/2.0/UDP 192.168.1.1:5060;branch=z9hG4bK-790.761410.464798399
Via: SIP/2.0/UDP 192.168.2.10:5060;branch=z9hG4bK-28e6f199-881535.744
Record-Route: <sip:00004@192.168.1.1>
Route: <sip:192.168.1.1:5060>
From: 00002 <sip:00002@sip.com>;tag=349ae296
To: <sip:00004@sip.com>
Call-ID: 6afc2512@00002.192.168.1.1
CSeq: 464798399 INVITE
Contact: <sip:00002@192.168.2.10>
max-forwards: 69
supported: 100rel
supported: replaces
Allow: INVITE, ACK, BYE, CANCEL, OPTIONS, PRACK, MESSAGE, REFER, NOTIFY
Content-Type: application/sdp
Accept: application/sdp, message/sipfrag
Content-Length: 250

```

```

v=0
o=- 460379 4401 IN IP4 192.168.2.10
s=-
c=IN IP4 192.168.2.10
t=0 0
m=audio 5006 RTP/AVP 0 8 4 18 96
a=rtpmap:0 PCMU/8000
a=rtpmap:8 PCMA/8000
a=rtpmap:4 G723/8000
a=rtpmap:18 G729/8000
a=rtpmap:96 telephone-event/8000
a=fmtp:96 0-11

```

```
=====
```

F7 192.168.2.15:1135(3) -> 192.168.1.1:5060(2)

```

SIP/2.0 100 Trying
Via: SIP/2.0/UDP 192.168.1.1:5060;branch=z9hG4bK-790.761410.464798399
Via: SIP/2.0/UDP 192.168.2.10:5060;branch=z9hG4bK-28e6f199-881535.744
From: 00002 <sip:00002@sip.com>;tag=349ae296
To: <sip:00004@sip.com>
Call-ID: 6afc2512@00002.192.168.1.1
CSeq: 464798399 INVITE
Content-Length: 0

```

```
=====
```

F8 192.168.2.15:1135(3) -> 192.168.1.1:5060(2)

SIP/2.0 183 Session Progress  
 Via: SIP/2.0/UDP 192.168.1.1:5060;branch=z9hG4bK-790.761410.464798399  
 Via: SIP/2.0/UDP 192.168.2.10:5060;branch=z9hG4bK-28e6f199-881535.744  
 Record-Route: <sip:00004@192.168.1.1>  
 From: 00002 <sip:00002@sip.com>;tag=349ae296  
 To: <sip:00004@sip.com>;tag=75e25c21  
 Call-ID: 6afc2512@00002.192.168.1.1  
 CSeq: 464798399 INVITE  
 Contact: <sip:00004@192.168.2.15>  
 Require: 100rel  
 RSeq: 1678739818  
 Content-Length: 0

F9 192.168.1.1:5062(2) -> 192.168.2.10:5060(1)

SIP/2.0 183 Session Progress  
 Via: SIP/2.0/UDP 192.168.2.10:5060;branch=z9hG4bK-28e6f199-881535.744  
 Record-Route: <sip:00004@192.168.1.1>  
 From: 00002 <sip:00002@sip.com>;tag=349ae296  
 To: <sip:00004@sip.com>;tag=75e25c21  
 Call-ID: 6afc2512@00002.192.168.1.1  
 CSeq: 464798399 INVITE  
 Contact: <sip:00004@192.168.2.15>  
 require: 100rel  
 rseq: 1678739818  
 Content-Length: 0

F10 192.168.2.10:1091(1) -> 192.168.1.1:5060(2)

PRACK sip:00004@192.168.1.1 SIP/2.0  
 Via: SIP/2.0/UDP 192.168.2.10:5060;branch=z9hG4bK-1c7e6900-881536.872  
 Route: <sip:00004@192.168.2.15>  
 From: 00002 <sip:00002@sip.com>;tag=349ae296  
 To: <sip:00004@sip.com>;tag=75e25c21  
 Call-ID: 6afc2512@00002.192.168.1.1  
 CSeq: 464798400 PRACK  
 Proxy-Authorization: Digest username="00002", realm="heliossv2",  
 nonce="a8b53c6eac2b1b5288e4e4779272e8b0", uri="sip:00004@192.168.1.1",  
 response="61c60bcb0126136e53aa27c0c0e8b0", algorithm=MD5,  
 opaque="d73924ebdac3b0df54737e7641c0d753", qop=auth, nc=00000002  
 Max-Forwards: 70  
 RAck: 1678739818 464798399 INVITE  
 Content-Length: 0

F11 192.168.1.1:5062(2) -> 192.168.2.15:5060(3)

PRACK sip:00004@192.168.2.15 SIP/2.0  
 Via: SIP/2.0/UDP 192.168.1.1:5060;branch=z9hG4bK-790.1084364914.464798400  
 Via: SIP/2.0/UDP 192.168.2.10:5060;branch=z9hG4bK-1c7e6900-881536.872  
 Route: <sip:00004@192.168.2.15>  
 From: 00002 <sip:00002@sip.com>;tag=349ae296  
 To: <sip:00004@sip.com>;tag=75e25c21  
 Call-ID: 6afc2512@00002.192.168.1.1  
 CSeq: 464798400 PRACK  
 max-forwards: 69  
 rack: 1678739818 464798399 INVITE  
 Content-Length: 0

F12 192.168.2.15:1135(3) -> 192.168.1.1:5060(2)

SIP/2.0 200 OK  
 Via: SIP/2.0/UDP 192.168.1.1:5060;branch=z9hG4bK-790.1084364914.464798400  
 Via: SIP/2.0/UDP 192.168.2.10:5060;branch=z9hG4bK-1c7e6900-881536.872  
 From: 00002 <sip:00002@sip.com>;tag=349ae296  
 To: <sip:00004@sip.com>;tag=75e25c21  
 Call-ID: 6afc2512@00002.192.168.1.1  
 CSeq: 464798400 PRACK  
 Content-Length: 0

F13 192.168.2.15:1135(3) -> 192.168.1.1:5060(2)

SIP/2.0 180 Ringing  
Via: SIP/2.0/UDP 192.168.1.1:5060;branch=z9hG4bK-790.761410.464798399  
Via: SIP/2.0/UDP 192.168.2.10:5060;branch=z9hG4bK-28e6f199-881535.744  
Record-Route: <sip:00004@192.168.1.1>  
From: 00002 <sip:00002@sip.com>;tag=349ae296  
To: <sip:00004@sip.com>;tag=75e25c21  
Call-ID: 6afcf2512@00002.192.168.1.1  
CSeq: 464798399 INVITE  
Contact: <sip:00004@192.168.2.15>  
Require: 100rel  
RSeq: 1678739819  
Content-Length: 0

F14 192.168.1.1:5062(2) -> 192.168.2.10:5060(1)

SIP/2.0 200 OK  
Via: SIP/2.0/UDP 192.168.2.10:5060;branch=z9hG4bK-1c7e6900-881536.872  
From: 00002 <sip:00002@sip.com>;tag=349ae296  
To: <sip:00004@sip.com>;tag=75e25c21  
Call-ID: 6afcf2512@00002.192.168.1.1  
CSeq: 464798400 PRACK  
Content-Length: 0

F15 192.168.1.1:5062(2) -> 192.168.2.10:5060(1)

SIP/2.0 180 Ringing  
Via: SIP/2.0/UDP 192.168.2.10:5060;branch=z9hG4bK-28e6f199-881535.744  
Record-Route: <sip:00004@192.168.1.1>  
From: 00002 <sip:00002@sip.com>;tag=349ae296  
To: <sip:00004@sip.com>;tag=75e25c21  
Call-ID: 6afcf2512@00002.192.168.1.1  
CSeq: 464798399 INVITE  
Contact: <sip:00004@192.168.2.15>  
require: 100rel  
rseq: 1678739819  
Content-Length: 0

F16 192.168.2.10:1091(1) -> 192.168.1.1:5060(2)

PRACK sip:00004@192.168.1.1 SIP/2.0  
Via: SIP/2.0/UDP 192.168.2.10:5060;branch=z9hG4bK-1ed3ff6e-881536.974  
Route: <sip:00004@192.168.2.15>  
From: 00002 <sip:00002@sip.com>;tag=349ae296  
To: <sip:00004@sip.com>;tag=75e25c21  
Call-ID: 6afcf2512@00002.192.168.1.1  
CSeq: 464798401 PRACK  
Proxy-Authorization: Digest username="00002", realm="heliossv2",  
nonce="a8b53c6eac2b1b5288e4e4779272e8b0", uri="sip:00004@192.168.1.1",  
response="c7a211409d3cf013e07119c97a4241b2", algorithm=MD5,  
opaque="d73924ebdac3b0df54737e7641c0d753", qop=auth, nc=00000003  
Max-Forwards: 70  
RAck: 1678739819 464798399 INVITE  
Content-Length: 0

F17 192.168.1.1:5062(2) -> 192.168.2.15:5060(3)

PRACK sip:00004@192.168.2.15 SIP/2.0  
Via: SIP/2.0/UDP 192.168.1.1:5060;branch=z9hG4bK-790.1084364914.464798401  
Via: SIP/2.0/UDP 192.168.2.10:5060;branch=z9hG4bK-1ed3ff6e-881536.974  
Route: <sip:00004@192.168.2.15>  
From: 00002 <sip:00002@sip.com>;tag=349ae296  
To: <sip:00004@sip.com>;tag=75e25c21  
Call-ID: 6afcf2512@00002.192.168.1.1  
CSeq: 464798401 PRACK

max-forwards: 69  
rack: 1678739819 464798399 INVITE  
Content-Length: 0

F18 192.168.2.15:1135(3) -> 192.168.1.1:5060(2)

SIP/2.0 200 OK  
Via: SIP/2.0/UDP 192.168.1.1:5060;branch=z9hG4bK-790.1084364914.464798401  
Via: SIP/2.0/UDP 192.168.2.10:5060;branch=z9hG4bK-1ed3ff6e-881536.974  
From: 00002 <sip:00002@sip.com>;tag=349ae296  
To: <sip:00004@sip.com>;tag=75e25c21  
Call-ID: 6afcf2512@00002.192.168.1.1  
CSeq: 464798401 PRACK  
Content-Length: 0

F19 192.168.1.1:5062(2) -> 192.168.2.10:5060(1)

SIP/2.0 200 OK  
Via: SIP/2.0/UDP 192.168.2.10:5060;branch=z9hG4bK-1ed3ff6e-881536.974  
From: 00002 <sip:00002@sip.com>;tag=349ae296  
To: <sip:00004@sip.com>;tag=75e25c21  
Call-ID: 6afcf2512@00002.192.168.1.1  
CSeq: 464798401 PRACK  
Content-Length: 0

F20 192.168.2.15:1135(3) -> 192.168.1.1:5060(2)

SIP/2.0 200 OK  
Via: SIP/2.0/UDP 192.168.1.1:5060;branch=z9hG4bK-790.761410.464798399  
Via: SIP/2.0/UDP 192.168.2.10:5060;branch=z9hG4bK-28e6f199-881535.744  
Record-Route: <sip:00004@192.168.1.1>  
From: 00002 <sip:00002@sip.com>;tag=349ae296  
To: <sip:00004@sip.com>;tag=75e25c21  
Call-ID: 6afcf2512@00002.192.168.1.1  
CSeq: 464798399 INVITE  
Contact: <sip:00004@192.168.2.15>  
Supported: 100rel, replaces  
Allow: INVITE, ACK, BYE, CANCEL, OPTIONS, PRACK, MESSAGE, REFER, NOTIFY  
Content-Type: application/sdp  
Accept: application/sdp, message/sipfrag  
Content-Length: 177

v=0  
o=- 966302 13701 IN IP4 192.168.2.15  
s=-  
c=IN IP4 192.168.2.15  
t=0 0  
m=audio 5006 RTP/AVP 0 96  
a=rtpmap:0 PCMU/8000  
a=rtpmap:96 telephone-event/8000  
a=fmtp:96 0-11

F21 192.168.1.1:5062(2) -> 192.168.2.10:5060(1)

SIP/2.0 200 OK  
Via: SIP/2.0/UDP 192.168.2.10:5060;branch=z9hG4bK-28e6f199-881535.744  
Record-Route: <sip:00004@192.168.1.1>  
From: 00002 <sip:00002@sip.com>;tag=349ae296  
To: <sip:00004@sip.com>;tag=75e25c21  
Call-ID: 6afcf2512@00002.192.168.1.1  
CSeq: 464798399 INVITE  
Contact: <sip:00004@192.168.2.15>  
supported: 100rel  
supported: replaces  
Allow: INVITE, ACK, BYE, CANCEL, OPTIONS, PRACK, MESSAGE, REFER, NOTIFY  
Content-Type: application/sdp  
Accept: application/sdp, message/sipfrag  
Content-Length: 177

v=0

```

o=- 966302 13701 IN IP4 192.168.2.15
s=-
c=IN IP4 192.168.2.15
t=0 0
m=audio 5006 RTP/AVP 0 96
a=rtpmap:0 PCMU/8000
a=rtpmap:96 telephone-event/8000
a=fmtp:96 0-11

```

```
=====
```

F22 192.168.2.10:1091(1) -> 192.168.1.1:5060(2)

```

ACK sip:00004@192.168.1.1 SIP/2.0
Via: SIP/2.0/UDP 192.168.2.10:5060;branch=z9hG4bK-7f0f24bc-881541.163
Route: <sip:00004@192.168.2.15>
From: 00002 <sip:00002@sip.com>;tag=349ae296
To: <sip:00004@sip.com>;tag=75e25c21
Call-ID: 6afcf2512@00002.192.168.1.1
CSeq: 464798399 ACK
Proxy-Authorization: Digest username="00002", realm="heliossv2",
                           uri="sip:00004@sip.com", cnonce="28bec5e0",
                           nonce="a8b53c6eac2b1b5288e4e4779272e8b0",
                           response="874329a1a3494d316ffcebb79b192a99",
                           opaque="d73924ebdac3b0df54737e7641c0d753", qop=auth, nc=00000001,
                           algorithm=MD5,
Max-Forwards: 70
Content-Length: 0

```

```
=====
```

F23 192.168.1.1:5062(2) -> 192.168.2.15:5060(3)

```

ACK sip:00004@192.168.2.15 SIP/2.0
Via: SIP/2.0/UDP 192.168.1.1:5060;branch=z9hG4bK-790.1084364918.464798399
Via: SIP/2.0/UDP 192.168.2.10:5060;branch=z9hG4bK-7f0f24bc-881541.163
From: 00002 <sip:00002@sip.com>;tag=349ae296
To: <sip:00004@sip.com>;tag=75e25c21
Call-ID: 6afcf2512@00002.192.168.1.1
CSeq: 464798399 ACK
max-forwards: 69
Content-Length: 0

```

```
=====
```

F24 192.168.2.15:1135(3) -> 192.168.1.1:5060(2)

```

INVITE sip:00004@192.168.1.1 SIP/2.0
Via: SIP/2.0/UDP 192.168.2.15:5060;branch=z9hG4bK-690758e0-881378.593
Route: <sip:00002@192.168.2.10>
From: <sip:00004@sip.com>;tag=75e25c21
To: 00002 <sip:00002@sip.com>;tag=349ae296
Call-ID: 6afcf2512@00002.192.168.1.1
CSeq: 1266424315 INVITE
Contact: <sip:00004@192.168.2.15>
Max-Forwards: 70
Supported: 100rel, replaces
Allow: INVITE, ACK, BYE, CANCEL, OPTIONS, PRACK, MESSAGE, REFER, NOTIFY
Content-Type: application/sdp
Content-Length: 189

```

```

v=0
o=- 585309 13702 IN IP4 192.168.2.15
s=-
c=IN IP4 192.168.2.15
t=0 0
m=audio 5006 RTP/AVP 0 96
a=rtpmap:0 PCMU/8000
a=rtpmap:96 telephone-event/8000
a=fmtp:96 0-11
a=inactive

```

```
=====
```

F25 192.168.1.1:5062(2) -> 192.168.2.15:5060(3)

```

SIP/2.0 100 Trying
Via: SIP/2.0/UDP 192.168.2.15:5060;branch=z9hG4bK-690758e0-881378.593
From: <sip:00004@sip.com>;tag=75e25c21
To: 00002 <sip:00002@sip.com>;tag=349ae296
Call-ID: 6afcf2512@00002.192.168.1.1

```

CSeq: 1266424315 INVITE  
Content-Length: 0

F26 192.168.1.1:5062(2) -> 192.168.2.10:5060(1)

INVITE sip:00002@192.168.2.10 SIP/2.0  
Via: SIP/2.0/UDP 192.168.1.1:5060;branch=z9hG4bK-789.761410.1266424315  
Via: SIP/2.0/UDP 192.168.2.15:5060;branch=z9hG4bK-690758e0-881378.593  
Record-Route: <sip:00004@192.168.1.1>  
Route: <sip:00002@192.168.2.10>  
From: <sip:00004@sip.com>;tag=75e25c21  
To: 00002 <sip:00002@sip.com>;tag=349ae296  
Call-ID: 6afc2512@00002.192.168.1.1  
CSeq: 1266424315 INVITE  
Contact: <sip:00004@192.168.2.15>  
max-forwards: 69  
supported: 100rel  
supported: replaces  
Allow: INVITE, ACK, BYE, CANCEL, OPTIONS, PRACK, MESSAGE, REFER, NOTIFY  
Content-Type: application/sdp  
Content-Length: 189

v=0  
o=- 585309 13702 IN IP4 192.168.2.15  
s=-  
c=IN IP4 192.168.2.15  
t=0 0  
m=audio 5006 RTP/AVP 0 96  
a=rtpmap:0 PCMU/8000  
a=rtpmap:96 telephone-event/8000  
a=fmtp:96 0-11  
a=inactive

F27 192.168.2.10:1091(1) -> 192.168.1.1:5060(2)

SIP/2.0 100 Trying  
Via: SIP/2.0/UDP 192.168.1.1:5060;branch=z9hG4bK-789.761410.1266424315  
Via: SIP/2.0/UDP 192.168.2.15:5060;branch=z9hG4bK-690758e0-881378.593  
From: <sip:00004@sip.com>;tag=75e25c21  
To: 00002 <sip:00002@sip.com>;tag=349ae296  
Call-ID: 6afc2512@00002.192.168.1.1  
CSeq: 1266424315 INVITE  
Content-Length: 0

F28 192.168.2.10:1091(1) -> 192.168.1.1:5060(2)

SIP/2.0 200 OK  
Via: SIP/2.0/UDP 192.168.1.1:5060;branch=z9hG4bK-789.761410.1266424315  
Via: SIP/2.0/UDP 192.168.2.15:5060;branch=z9hG4bK-690758e0-881378.593  
Record-Route: <sip:00004@192.168.1.1>  
From: <sip:00004@sip.com>;tag=75e25c21  
To: 00002 <sip:00002@sip.com>;tag=349ae296  
Call-ID: 6afc2512@00002.192.168.1.1  
CSeq: 1266424315 INVITE  
Contact: <sip:00002@192.168.2.10>  
Supported: 100rel, replaces  
Allow: INVITE, ACK, BYE, CANCEL, OPTIONS, PRACK, MESSAGE, REFER, NOTIFY  
Content-Type: application/sdp  
Accept: application/sdp, message/sipfrag  
Content-Length: 188

v=0  
o=- 629287 4402 IN IP4 192.168.2.10  
s=-  
c=IN IP4 192.168.2.10  
t=0 0  
m=audio 5006 RTP/AVP 0 96  
a=rtpmap:0 PCMU/8000  
a=rtpmap:96 telephone-event/8000  
a=fmtp:96 0-11  
a=inactive

F29 192.168.1.1:5062(2) -> 192.168.2.15:5060(3)

SIP/2.0 200 OK  
 Via: SIP/2.0/UDP 192.168.2.15:5060;branch=z9hG4bK-690758e0-881378.593  
 Record-Route: <sip:00004@192.168.1.1>  
 From: <sip:00004@sip.com>;tag=75e25c21  
 To: 00002 <sip:00002@sip.com>;tag=349ae296  
 Call-ID: 6afc2512@00002.192.168.1.1  
 CSeq: 1266424315 INVITE  
 Contact: <sip:00002@192.168.2.10>  
 supported: 100rel  
 supported: replaces  
 Allow: INVITE, ACK, BYE, CANCEL, OPTIONS, PRACK, MESSAGE, REFER, NOTIFY  
 Content-Type: application/sdp  
 Accept: application/sdp, message/sipfrag  
 Content-Length: 188

v=0  
 o=- 629287 4402 IN IP4 192.168.2.10  
 s=-  
 c=IN IP4 192.168.2.10  
 t=0 0  
 m=audio 5006 RTP/AVP 0 96  
 a=rtpmap:0 PCMU/8000  
 a=rtpmap:96 telephone-event/8000  
 a=fmtp:96 0-11  
 a=inactive

F30 192.168.2.15:1135(3) -> 192.168.1.1:5060(2)

ACK sip:00004@192.168.1.1 SIP/2.0  
 Via: SIP/2.0/UDP 192.168.2.15:5060;branch=z9hG4bK-404eef8c-881378.860  
 Route: <sip:00002@192.168.2.10>  
 From: <sip:00004@sip.com>;tag=75e25c21  
 To: 00002 <sip:00002@sip.com>;tag=349ae296  
 Call-ID: 6afc2512@00002.192.168.1.1  
 CSeq: 1266424315 ACK  
 Max-Forwards: 70  
 Content-Length: 0

F31 192.168.1.1:5062(2) -> 192.168.2.10:5060(1)

ACK sip:00002@192.168.2.10 SIP/2.0  
 Via: SIP/2.0/UDP 192.168.1.1:5060;branch=z9hG4bK-789.1084364920.1266424315  
 Via: SIP/2.0/UDP 192.168.2.15:5060;branch=z9hG4bK-404eef8c-881378.860  
 From: <sip:00004@sip.com>;tag=75e25c21  
 To: 00002 <sip:00002@sip.com>;tag=349ae296  
 Call-ID: 6afc2512@00002.192.168.1.1  
 CSeq: 1266424315 ACK  
 max-forwards: 69  
 Content-Length: 0

F32 192.168.2.15:1135(3) -> 192.168.1.1:5060(2)

INVITE sip:00005@sip.com SIP/2.0  
 Via: SIP/2.0/UDP 192.168.2.15:5060;branch=z9hG4bK-167a0714-881388.412  
 Route: <sip:192.168.1.1:5060>  
 From: <sip:00004@sip.com>;tag=63173028  
 To: <sip:00005@sip.com>  
 Call-ID: 6752a396@00004.192.168.1.1  
 CSeq: 869610086 INVITE  
 Contact: <sip:00004@192.168.2.15>  
 Max-Forwards: 70  
 Supported: 100rel, replaces  
 Allow: INVITE, ACK, BYE, CANCEL, OPTIONS, PRACK, MESSAGE, REFER, NOTIFY  
 Content-Type: application/sdp  
 Accept: application/sdp, message/sipfrag  
 Content-Length: 249

v=0  
 o=- 384327 401 IN IP4 192.168.2.15  
 s=-



```
c=IN IP4 192.168.2.15
t=0 0
m=audio 5008 RTP/AVP 0 8 4 18 96
a=rtpmap:0 PCMU/8000
a=rtpmap:8 PCMA/8000
a=rtpmap:4 G723/8000
a=rtpmap:18 G729/8000
a=rtpmap:96 telephone-event/8000
a=fmtp:96 0-11
```

```
=====
F33      192.168.1.1:5062(2) -> 192.168.2.15:5060(3)
```

```
SIP/2.0 100 Trying
Via: SIP/2.0/UDP 192.168.2.15:5060;branch=z9hG4bK-167a0714-881388.412
From: <sip:00004@sip.com>;tag=63173028
To: <sip:00005@sip.com>
Call-ID: 6752a396@00004.192.168.1.1
CSeq: 869610086 INVITE
Content-Length: 0
```

```
=====
F34      192.168.1.1:5062(2) -> 192.168.2.14:5060(4)
```

```
INVITE sip:00005@192.168.2.14 SIP/2.0
Via: SIP/2.0/UDP 192.168.1.1:5060;branch=z9hG4bK-792.531056.869610086
Via: SIP/2.0/UDP 192.168.2.15:5060;branch=z9hG4bK-167a0714-881388.412
Record-Route: <sip:00005@192.168.1.1>
Route: <sip:192.168.1.1:5060>
From: 00004 <sip:00004@sip.com>;tag=63173028
To: <sip:00005@sip.com>
Call-ID: 6752a396@00004.192.168.1.1
CSeq: 869610086 INVITE
Contact: <sip:00004@192.168.2.15>
max-forwards: 69
supported: 100rel
supported: replaces
Allow: INVITE, ACK, BYE, CANCEL, OPTIONS, PRACK, MESSAGE, REFER, NOTIFY
Content-Type: application/sdp
Accept: application/sdp, message/sipfrag
Content-Length: 249
```

```
v=0
o=- 384327 401 IN IP4 192.168.2.15
s=-
c=IN IP4 192.168.2.15
t=0 0
m=audio 5008 RTP/AVP 0 8 4 18 96
a=rtpmap:0 PCMU/8000
a=rtpmap:8 PCMA/8000
a=rtpmap:4 G723/8000
a=rtpmap:18 G729/8000
a=rtpmap:96 telephone-event/8000
a=fmtp:96 0-11
```

```
=====
F35      192.168.2.14:1058(4) -> 192.168.1.1:5060(2)
```

```
SIP/2.0 100 Trying
Via: SIP/2.0/UDP 192.168.1.1:5060;branch=z9hG4bK-792.531056.869610086
Via: SIP/2.0/UDP 192.168.2.15:5060;branch=z9hG4bK-167a0714-881388.412
From: 00004 <sip:00004@sip.com>;tag=63173028
To: <sip:00005@sip.com>
Call-ID: 6752a396@00004.192.168.1.1
CSeq: 869610086 INVITE
Content-Length: 0
```

```
=====
F36      192.168.2.14:1058(4) -> 192.168.1.1:5060(2)
```

```
SIP/2.0 183 Session Progress
Via: SIP/2.0/UDP 192.168.1.1:5060;branch=z9hG4bK-792.531056.869610086
Via: SIP/2.0/UDP 192.168.2.15:5060;branch=z9hG4bK-167a0714-881388.412
Record-Route: <sip:00005@192.168.1.1>
From: 00004 <sip:00004@sip.com>;tag=63173028
```

To: <sip:00005@sip.com>;tag=6fb505ab  
 Call-ID: 6752a396@00004.192.168.1.1  
 CSeq: 869610086 INVITE  
 Contact: <sip:00005@192.168.2.14>  
 Require: 100rel  
 RSeq: 516278819  
 Content-Length: 0

F37 192.168.1.1:5062(2) -> 192.168.2.15:5060(3)

SIP/2.0 183 Session Progress  
 Via: SIP/2.0/UDP 192.168.2.15:5060;branch=z9hG4bK-167a0714-881388.412  
 Record-Route: <sip:00005@192.168.1.1>  
 From: 00004 <sip:00004@sip.com>;tag=63173028  
 To: <sip:00005@sip.com>;tag=6fb505ab  
 Call-ID: 6752a396@00004.192.168.1.1  
 CSeq: 869610086 INVITE  
 Contact: <sip:00005@192.168.2.14>  
 require: 100rel  
 rseq: 516278819  
 Content-Length: 0

F38 192.168.2.15:1135(3) -> 192.168.1.1:5060(2)

PRACK sip:00005@192.168.1.1 SIP/2.0  
 Via: SIP/2.0/UDP 192.168.2.15:5060;branch=z9hG4bK-7d3a6f8a-881390.165  
 Route: <sip:00005@192.168.2.14>  
 From: 00004 <sip:00004@sip.com>;tag=63173028  
 To: <sip:00005@sip.com>;tag=6fb505ab  
 Call-ID: 6752a396@00004.192.168.1.1  
 CSeq: 869610087 PRACK  
 Max-Forwards: 70  
 RAck: 516278819 869610086 INVITE  
 Content-Length: 0

F39 192.168.1.1:5062(2) -> 192.168.2.14:5060(4)

PRACK sip:00005@192.168.2.14 SIP/2.0  
 Via: SIP/2.0/UDP 192.168.1.1:5060;branch=z9hG4bK-792.1084364932.869610087  
 Via: SIP/2.0/UDP 192.168.2.15:5060;branch=z9hG4bK-7d3a6f8a-881390.165  
 Route: <sip:00005@192.168.2.14>  
 From: 00004 <sip:00004@sip.com>;tag=63173028  
 To: <sip:00005@sip.com>;tag=6fb505ab  
 Call-ID: 6752a396@00004.192.168.1.1  
 CSeq: 869610087 PRACK  
 max-forwards: 69  
 rack: 516278819 869610086 INVITE  
 Content-Length: 0

F40 192.168.2.14:1058(4) -> 192.168.1.1:5060(2)

SIP/2.0 200 OK  
 Via: SIP/2.0/UDP 192.168.1.1:5060;branch=z9hG4bK-792.1084364932.869610087  
 Via: SIP/2.0/UDP 192.168.2.15:5060;branch=z9hG4bK-7d3a6f8a-881390.165  
 From: 00004 <sip:00004@sip.com>;tag=63173028  
 To: <sip:00005@sip.com>;tag=6fb505ab  
 Call-ID: 6752a396@00004.192.168.1.1  
 CSeq: 869610087 PRACK  
 Content-Length: 0

F41 192.168.2.14:1058(4) -> 192.168.1.1:5060(2)

SIP/2.0 180 Ringing  
 Via: SIP/2.0/UDP 192.168.1.1:5060;branch=z9hG4bK-792.531056.869610086  
 Via: SIP/2.0/UDP 192.168.2.15:5060;branch=z9hG4bK-167a0714-881388.412  
 Record-Route: <sip:00005@192.168.1.1>

From: 00004 <sip:00004@sip.com>;tag=63173028  
 To: <sip:00005@sip.com>;tag=6fb505ab  
 Call-ID: 6752a396@00004.192.168.1.1  
 CSeq: 869610086 INVITE  
 Contact: <sip:00005@192.168.2.14>  
 Require: 100rel  
 RSeq: 516278820  
 Content-Length: 0

F42 192.168.1.1:5062(2) -> 192.168.2.15:5060(3)

SIP/2.0 200 OK  
 Via: SIP/2.0/UDP 192.168.2.15:5060;branch=z9hG4bK-7d3a6f8a-881390.165  
 From: 00004 <sip:00004@sip.com>;tag=63173028  
 To: <sip:00005@sip.com>;tag=6fb505ab  
 Call-ID: 6752a396@00004.192.168.1.1  
 CSeq: 869610087 PRACK  
 Content-Length: 0

F43 192.168.1.1:5062(2) -> 192.168.2.15:5060(3)

SIP/2.0 180 Ringing  
 Via: SIP/2.0/UDP 192.168.2.15:5060;branch=z9hG4bK-167a0714-881388.412  
 Record-Route: <sip:00005@192.168.1.1>  
 From: 00004 <sip:00004@sip.com>;tag=63173028  
 To: <sip:00005@sip.com>;tag=6fb505ab  
 Call-ID: 6752a396@00004.192.168.1.1  
 CSeq: 869610086 INVITE  
 Contact: <sip:00005@192.168.2.14>  
 require: 100rel  
 rseq: 516278820  
 Content-Length: 0

F44 192.168.2.15:1135(3) -> 192.168.1.1:5060(2)

PRACK sip:00005@192.168.1.1 SIP/2.0  
 Via: SIP/2.0/UDP 192.168.2.15:5060;branch=z9hG4bK-903ffb-881390.256  
 Route: <sip:00005@192.168.2.14>  
 From: 00004 <sip:00004@sip.com>;tag=63173028  
 To: <sip:00005@sip.com>;tag=6fb505ab  
 Call-ID: 6752a396@00004.192.168.1.1  
 CSeq: 869610088 PRACK  
 Max-Forwards: 70  
 RAck: 516278820 869610086 INVITE  
 Content-Length: 0

F45 192.168.1.1:5062(2) -> 192.168.2.14:5060(4)

PRACK sip:00005@192.168.2.14 SIP/2.0  
 Via: SIP/2.0/UDP 192.168.1.1:5060;branch=z9hG4bK-792.1084364932.869610088  
 Via: SIP/2.0/UDP 192.168.2.15:5060;branch=z9hG4bK-903ffb-881390.256  
 Route: <sip:00005@192.168.2.14>  
 From: 00004 <sip:00004@sip.com>;tag=63173028  
 To: <sip:00005@sip.com>;tag=6fb505ab  
 Call-ID: 6752a396@00004.192.168.1.1  
 CSeq: 869610088 PRACK  
 max-forwards: 69  
 rack: 516278820 869610086 INVITE  
 Content-Length: 0

F46 192.168.2.14:1058(4) -> 192.168.1.1:5060(2)

SIP/2.0 200 OK  
 Via: SIP/2.0/UDP 192.168.1.1:5060;branch=z9hG4bK-792.1084364932.869610088  
 Via: SIP/2.0/UDP 192.168.2.15:5060;branch=z9hG4bK-903ffb-881390.256  
 From: 00004 <sip:00004@sip.com>;tag=63173028

To: <sip:00005@sip.com>;tag=6fb505ab  
 Call-ID: 6752a396@00004.192.168.1.1  
 CSeq: 869610088 PRACK  
 Content-Length: 0

F47 192.168.1.1:5062(2) -> 192.168.2.15:5060(3)

SIP/2.0 200 OK  
 Via: SIP/2.0/UDP 192.168.2.15:5060;branch=z9hG4bK-903ffb-881390.256  
 From: 00004 <sip:00004@sip.com>;tag=63173028  
 To: <sip:00005@sip.com>;tag=6fb505ab  
 Call-ID: 6752a396@00004.192.168.1.1  
 CSeq: 869610088 PRACK  
 Content-Length: 0

F48 192.168.2.14:1058(4) -> 192.168.1.1:5060(2)

SIP/2.0 486 Busy Here  
 Via: SIP/2.0/UDP 192.168.1.1:5060;branch=z9hG4bK-792.531056.869610086  
 Via: SIP/2.0/UDP 192.168.2.15:5060;branch=z9hG4bK-167a0714-881388.412  
 From: 00004 <sip:00004@sip.com>;tag=63173028  
 To: <sip:00005@sip.com>;tag=6fb505ab  
 Call-ID: 6752a396@00004.192.168.1.1  
 CSeq: 869610086 INVITE  
 Content-Length: 0

F49 192.168.1.1:5062(2) -> 192.168.2.14:5060(4)

ACK sip:00005@192.168.2.14 SIP/2.0  
 Via: SIP/2.0/UDP 192.168.1.1:5060;branch=z9hG4bK-792.531056.869610086  
 Route: <sip:192.168.1.1:5060>  
 From: 00004 <sip:00004@sip.com>;tag=63173028  
 To: <sip:00005@sip.com>;tag=6fb505ab  
 Call-ID: 6752a396@00004.192.168.1.1  
 CSeq: 869610086 ACK  
 Content-Length: 0

F50 192.168.1.1:5062(2) -> 192.168.2.15:5060(3)

SIP/2.0 486 Busy Here  
 Via: SIP/2.0/UDP 192.168.2.15:5060;branch=z9hG4bK-167a0714-881388.412  
 From: 00004 <sip:00004@sip.com>;tag=63173028  
 To: <sip:00005@sip.com>;tag=6fb505ab  
 Call-ID: 6752a396@00004.192.168.1.1  
 CSeq: 869610086 INVITE  
 Content-Length: 0

F51 192.168.2.15:1135(3) -> 192.168.1.1:5060(2)

ACK sip:00005@sip.com SIP/2.0  
 Via: SIP/2.0/UDP 192.168.2.15:5060;branch=z9hG4bK-167a0714-881388.412  
 Route: <sip:192.168.1.1:5060>  
 From: 00004 <sip:00004@sip.com>;tag=63173028  
 To: <sip:00005@sip.com>;tag=6fb505ab  
 Call-ID: 6752a396@00004.192.168.1.1  
 CSeq: 869610086 ACK  
 Content-Length: 0

F52 192.168.2.15:1135(3) -> 192.168.1.1:5060(2)

INVITE sip:00004@192.168.1.1 SIP/2.0  
 Via: SIP/2.0/UDP 192.168.2.15:5060;branch=z9hG4bK-130960c8-881395.188  
 Route: <sip:00002@192.168.2.10>

From: <sip:00004@sip.com>;tag=75e25c21  
 To: 00002 <sip:00002@sip.com>;tag=349ae296  
 Call-ID: 6afc2512@00002.192.168.1.1  
 CSeq: 1266424316 INVITE  
 Contact: <sip:00004@192.168.2.15>  
 Max-Forwards: 70  
 Supported: 100rel, replaces  
 Allow: INVITE, ACK, BYE, CANCEL, OPTIONS, PRACK, MESSAGE, REFER, NOTIFY  
 Content-Type: application/sdp  
 Content-Length: 177

v=0  
 o=- 180598 13703 IN IP4 192.168.2.15  
 s=-  
 c=IN IP4 192.168.2.15  
 t=0 0  
 m=audio 5006 RTP/AVP 0 96  
 a=rtpmap:0 PCMU/8000  
 a=rtpmap:96 telephone-event/8000  
 a=fmtp:96 0-11

=====

F53            192.168.1.1:5062(2) -> 192.168.2.15:5060(3)

SIP/2.0 100 Trying  
 Via: SIP/2.0/UDP 192.168.2.15:5060;branch=z9hG4bK-130960c8-881395.188  
 From: <sip:00004@sip.com>;tag=75e25c21  
 To: 00002 <sip:00002@sip.com>;tag=349ae296  
 Call-ID: 6afc2512@00002.192.168.1.1  
 CSeq: 1266424316 INVITE  
 Content-Length: 0

=====

F54            192.168.1.1:5062(2) -> 192.168.2.10:5060(1)

INVITE sip:00002@192.168.2.10 SIP/2.0  
 Via: SIP/2.0/UDP 192.168.1.1:5060;branch=z9hG4bK-789.761410.1266424316  
 Via: SIP/2.0/UDP 192.168.2.15:5060;branch=z9hG4bK-130960c8-881395.188  
 Record-Route: <sip:00004@192.168.1.1>  
 Route: <sip:00002@192.168.2.10>  
 From: <sip:00004@sip.com>;tag=75e25c21  
 To: 00002 <sip:00002@sip.com>;tag=349ae296  
 Call-ID: 6afc2512@00002.192.168.1.1  
 CSeq: 1266424316 INVITE  
 Contact: <sip:00004@192.168.2.15>  
 max-forwards: 69  
 supported: 100rel  
 supported: replaces  
 Allow: INVITE, ACK, BYE, CANCEL, OPTIONS, PRACK, MESSAGE, REFER, NOTIFY  
 Content-Type: application/sdp  
 Content-Length: 177

v=0  
 o=- 180598 13703 IN IP4 192.168.2.15  
 s=-  
 c=IN IP4 192.168.2.15  
 t=0 0  
 m=audio 5006 RTP/AVP 0 96  
 a=rtpmap:0 PCMU/8000  
 a=rtpmap:96 telephone-event/8000  
 a=fmtp:96 0-11

=====

F55            192.168.2.10:1091(1) -> 192.168.1.1:5060(2)

SIP/2.0 100 Trying  
 Via: SIP/2.0/UDP 192.168.1.1:5060;branch=z9hG4bK-789.761410.1266424316  
 Via: SIP/2.0/UDP 192.168.2.15:5060;branch=z9hG4bK-130960c8-881395.188  
 From: <sip:00004@sip.com>;tag=75e25c21  
 To: 00002 <sip:00002@sip.com>;tag=349ae296  
 Call-ID: 6afc2512@00002.192.168.1.1  
 CSeq: 1266424316 INVITE  
 Content-Length: 0

F56 192.168.2.10:1091(1) -&gt; 192.168.1.1:5060(2)

SIP/2.0 200 OK  
 Via: SIP/2.0/UDP 192.168.1.1:5060;branch=z9hG4bK-789.761410.1266424316  
 Via: SIP/2.0/UDP 192.168.2.15:5060;branch=z9hG4bK-130960c8-881395.188  
 Record-Route: <sip:00004@192.168.1.1>  
 From: <sip:00004@192.168.1.1>  
 To: 00002 <sip:00002@192.168.1.1>;tag=75e25c21  
 Call-ID: 6afc2512@00002.192.168.1.1  
 CSeq: 1266424316 INVITE  
 Contact: <sip:00002@192.168.2.10>  
 Supported: 100rel, replaces  
 Allow: INVITE, ACK, BYE, CANCEL, OPTIONS, PRACK, MESSAGE, REFER, NOTIFY  
 Content-Type: application/sdp  
 Accept: application/sdp, message/sipfrag  
 Content-Length: 250

v=0  
 o=- 175339 4403 IN IP4 192.168.2.10  
 s=-  
 c=IN IP4 192.168.2.10  
 t=0 0  
 m=audio 5006 RTP/AVP 0 8 4 18 96  
 a=rtpmap:0 PCMU/8000  
 a=rtpmap:8 PCMA/8000  
 a=rtpmap:4 G723/8000  
 a=rtpmap:18 G729/8000  
 a=rtpmap:96 telephone-event/8000  
 a=fmtp:96 0-11

F57 192.168.1.1:5062(2) -&gt; 192.168.2.15:5060(3)

SIP/2.0 200 OK  
 Via: SIP/2.0/UDP 192.168.2.15:5060;branch=z9hG4bK-130960c8-881395.188  
 Record-Route: <sip:00004@192.168.1.1>  
 From: <sip:00004@192.168.1.1>  
 To: 00002 <sip:00002@192.168.1.1>;tag=75e25c21  
 Call-ID: 6afc2512@00002.192.168.1.1  
 CSeq: 1266424316 INVITE  
 Contact: <sip:00002@192.168.2.10>  
 supported: 100rel  
 supported: replaces  
 Allow: INVITE, ACK, BYE, CANCEL, OPTIONS, PRACK, MESSAGE, REFER, NOTIFY  
 Content-Type: application/sdp  
 Accept: application/sdp, message/sipfrag  
 Content-Length: 250

v=0  
 o=- 175339 4403 IN IP4 192.168.2.10  
 s=-  
 c=IN IP4 192.168.2.10  
 t=0 0  
 m=audio 5006 RTP/AVP 0 8 4 18 96  
 a=rtpmap:0 PCMU/8000  
 a=rtpmap:8 PCMA/8000  
 a=rtpmap:4 G723/8000  
 a=rtpmap:18 G729/8000  
 a=rtpmap:96 telephone-event/8000  
 a=fmtp:96 0-11

F58 192.168.2.15:1135(3) -&gt; 192.168.1.1:5060(2)

ACK sip:00004@192.168.1.1 SIP/2.0  
 Via: SIP/2.0/UDP 192.168.2.15:5060;branch=z9hG4bK-419733d-881395.396  
 Route: <sip:00002@192.168.2.10>  
 From: <sip:00004@192.168.1.1>  
 To: 00002 <sip:00002@192.168.1.1>;tag=75e25c21  
 Call-ID: 6afc2512@00002.192.168.1.1  
 CSeq: 1266424316 ACK  
 Max-Forwards: 70  
 Content-Length: 0

F59 192.168.1.1:5062(2) -&gt; 192.168.2.10:5060(1)

## FOMA/WLAN デュアル端末に関する技術参考資料 第 1.2 版

ACK sip:00002@192.168.2.10 SIP/2.0  
Via: SIP/2.0/UDP 192.168.1.1:5060;branch=z9hG4bK-789.1084364937.1266424316  
Via: SIP/2.0/UDP 192.168.2.15:5060;branch=z9hG4bK-419733d-881395.396  
From: <sip:00004@sip.com>;tag=75e25c21  
To: 00002 <sip:00002@sip.com>;tag=349ae296  
Call-ID: 6afc2512@00002.192.168.1.1  
CSeq: 1266424316 ACK  
max-forwards: 69  
Content-Length: 0

=====

F60 192.168.2.10:1091(1) -> 192.168.1.1:5060(2)

BYE sip:00004@192.168.1.1 SIP/2.0  
Via: SIP/2.0/UDP 192.168.2.10:5060;branch=z9hG4bK-3335bacd-881569.691  
Route: <sip:00004@192.168.2.15>  
From: 00002 <sip:00002@sip.com>;tag=349ae296  
To: <sip:00004@sip.com>;tag=75e25c21  
Call-ID: 6afc2512@00002.192.168.1.1  
CSeq: 464798402 BYE  
Proxy-Authorization: Digest username="00002", realm="heliossv2",  
nonce="a8b53c6eac2b1b5288e4e4779272e8b0", uri="sip:00004@192.168.1.1",  
response="13269e6d8e45222e360d02fd4eda6fab", algorithm=MD5,  
opaque="d73924ebdac3b0df54737e7641c0d753", qop=auth, nc=00000004  
Max-Forwards: 70  
Content-Length: 0

=====

F61 192.168.1.1:5062(2) -> 192.168.2.15:5060(3)

BYE sip:00004@192.168.2.15 SIP/2.0  
Via: SIP/2.0/UDP 192.168.1.1:5060;branch=z9hG4bK-790.1084364946.464798402  
Via: SIP/2.0/UDP 192.168.2.10:5060;branch=z9hG4bK-3335bacd-881569.691  
Route: <sip:00004@192.168.2.15>  
From: 00002 <sip:00002@sip.com>;tag=349ae296  
To: <sip:00004@sip.com>;tag=75e25c21  
Call-ID: 6afc2512@00002.192.168.1.1  
CSeq: 464798402 BYE  
max-forwards: 69  
Content-Length: 0

=====

F62 192.168.2.15:1135(3) -> 192.168.1.1:5060(2)

SIP/2.0 200 OK  
Via: SIP/2.0/UDP 192.168.1.1:5060;branch=z9hG4bK-790.1084364946.464798402  
Via: SIP/2.0/UDP 192.168.2.10:5060;branch=z9hG4bK-3335bacd-881569.691  
From: 00002 <sip:00002@sip.com>;tag=349ae296  
To: <sip:00004@sip.com>;tag=75e25c21  
Call-ID: 6afc2512@00002.192.168.1.1  
CSeq: 464798402 BYE  
Content-Length: 0

=====

F63 192.168.1.1:5062(2) -> 192.168.2.10:5060(1)

SIP/2.0 200 OK  
Via: SIP/2.0/UDP 192.168.2.10:5060;branch=z9hG4bK-3335bacd-881569.691  
From: 00002 <sip:00002@sip.com>;tag=349ae296  
To: <sip:00004@sip.com>;tag=75e25c21  
Call-ID: 6afc2512@00002.192.168.1.1  
CSeq: 464798402 BYE  
Content-Length: 0

=====

## 11.6.9.Un-attend-Transfer 時に転送先が話中

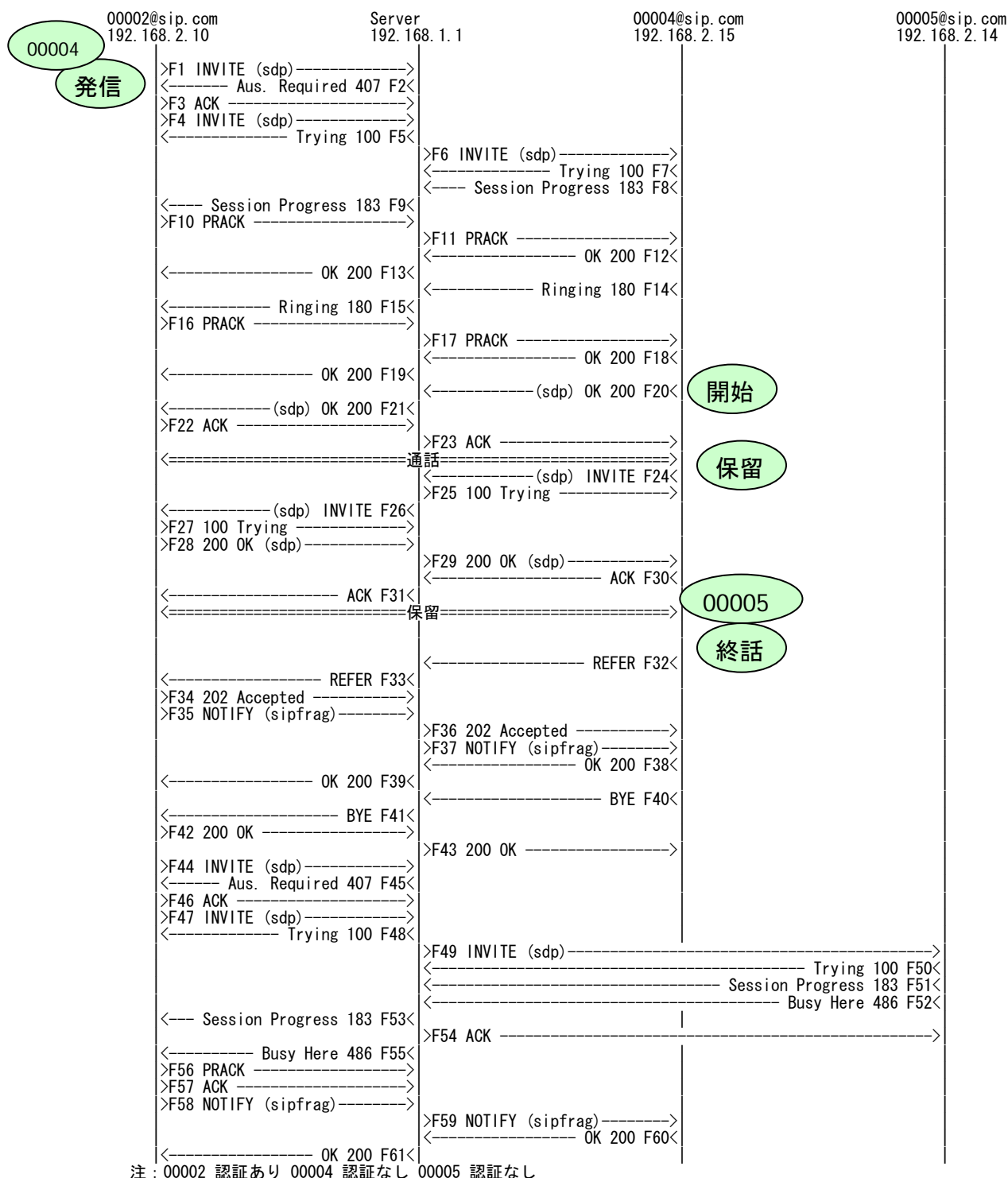


図 11-36 Un-attend-Transfer 時に転送先が話中

F1 192.168.2.10:1091(1) -&gt; 192.168.1.1:5060(2)



```

INVITE sip:00004@sip.com SIP/2.0
Via: SIP/2.0/UDP 192.168.2.10:5060;branch=z9hG4bK-310a4ae6-881641.801
Route: <sip:192.168.1.1:5060>
From: <sip:00002@sip.com>;tag=6ee414a7
To: <sip:00004@sip.com>
Call-ID: 14af068a@00002.192.168.1.1
CSeq: 1512934929 INVITE
Contact: <sip:00002@192.168.2.10>
Proxy-Authorization: Digest username="00002", realm="heliossv2",
nonce="a8b53c6eac2b1b5288e4e4779272e8b0", uri="sip:00004@sip.com",
response="852ee062d793ab5e605a3fd760ec430f", algorithm=MD5,
opaque="d73924ebdac3b0df54737e7641c0d753", qop=auth, nc=00000005
Max-Forwards: 70
Supported: 100rel, replaces
Allow: INVITE, ACK, BYE, CANCEL, OPTIONS, PRACK, MESSAGE, REFER, NOTIFY
Content-Type: application/sdp
Accept: application/sdp, message/sipfrag
Content-Length: 250

```

```

v=0
o=- 786058 4501 IN IP4 192.168.2.10
s=-
c=IN IP4 192.168.2.10
t=0 0
m=audio 5008 RTP/AVP 0 8 4 18 96
a=rtpmap:0 PCMU/8000
a=rtpmap:8 PCMA/8000
a=rtpmap:4 G723/8000
a=rtpmap:18 G729/8000
a=rtpmap:96 telephone-event/8000
a=fmtp:96 0-11

```

---

F2 192.168.1.1:5062(2) -> 192.168.2.10:5060(1)

```

SIP/2.0 407 Proxy Authentication Required
Via: SIP/2.0/UDP 192.168.2.10:5060;branch=z9hG4bK-310a4ae6-881641.801
From: <sip:00002@sip.com>;tag=6ee414a7
To: <sip:00004@sip.com>
Call-ID: 14af068a@00002.192.168.1.1
CSeq: 1512934929 INVITE
Proxy-Authenticate: Digest realm="heliossv2", nonce="b6b1b6ffa8d1194b019b131a06f2ad40",
opaque="0f6f8f513b033a7a3b2df78f98b7c056", stale=false, algorithm=MD5, qop="auth,auth-int"
Content-Length: 0

```

---

F3 192.168.2.10:1091(1) -> 192.168.1.1:5060(2)

```

ACK sip:00004@sip.com SIP/2.0
Via: SIP/2.0/UDP 192.168.2.10:5060;branch=z9hG4bK-310a4ae6-881641.801
Route: <sip:192.168.1.1:5060>
From: <sip:00002@sip.com>;tag=6ee414a7
To: <sip:00004@sip.com>
Call-ID: 14af068a@00002.192.168.1.1
CSeq: 1512934929 ACK
Content-Length: 0

```

---

F4 192.168.2.10:1091(1) -> 192.168.1.1:5060(2)

```

INVITE sip:00004@sip.com SIP/2.0
Via: SIP/2.0/UDP 192.168.2.10:5060;branch=z9hG4bK-7366dbb-881642.061
Route: <sip:192.168.1.1:5060>
From: <sip:00002@sip.com>;tag=6ee414a7
To: <sip:00004@sip.com>
Call-ID: 14af068a@00002.192.168.1.1
CSeq: 1512934930 INVITE
Contact: <sip:00002@192.168.2.10>
Proxy-Authorization: Digest username="00002", realm="heliossv2",
nonce="b6b1b6ffa8d1194b019b131a06f2ad40", uri="sip:00004@sip.com",
response="0af1c3e918f0b14a4dae7503835df064", algorithm=MD5,
opaque="0f6f8f513b033a7a3b2df78f98b7c056", qop=auth, nc=00000001
Max-Forwards: 70
Supported: 100rel, replaces
Allow: INVITE, ACK, BYE, CANCEL, OPTIONS, PRACK, MESSAGE, REFER, NOTIFY

```

Content-Type: application/sdp  
 Accept: application/sdp, message/sipfrag  
 Content-Length: 250

v=0  
 o=- 786058 4501 IN IP4 192.168.2.10  
 s=-  
 c=IN IP4 192.168.2.10  
 t=0 0  
 m=audio 5008 RTP/AVP 0 8 4 18 96  
 a=rtpmap:0 PCMU/8000  
 a=rtpmap:8 PCMA/8000  
 a=rtpmap:4 G723/8000  
 a=rtpmap:18 G729/8000  
 a=rtpmap:96 telephone-event/8000  
 a=fmtp:96 0-11

F5 192.168.1.1:5062(2) -> 192.168.2.10:5060(1)

SIP/2.0 100 Trying  
 Via: SIP/2.0/UDP 192.168.2.10:5060;branch=z9hG4bK-7366dbb-881642.061  
 From: <sip:00002@sip.com>;tag=6ee414a7  
 To: <sip:00004@sip.com>  
 Call-ID: 14af068a@00002.192.168.1.1  
 CSeq: 1512934930 INVITE  
 Content-Length: 0

F6 192.168.1.1:5062(2) -> 192.168.2.15:5060(3)

INVITE sip:00004@192.168.2.15 SIP/2.0  
 Via: SIP/2.0/UDP 192.168.1.1:5060;branch=z9hG4bK-794.083318.1512934930  
 Via: SIP/2.0/UDP 192.168.2.10:5060;branch=z9hG4bK-7366dbb-881642.061  
 Record-Route: <sip:00004@192.168.1.1>  
 Route: <sip:192.168.1.1:5060>  
 From: 00002 <sip:00002@sip.com>;tag=6ee414a7  
 To: <sip:00004@sip.com>  
 Call-ID: 14af068a@00002.192.168.1.1  
 CSeq: 1512934930 INVITE  
 Contact: <sip:00002@192.168.2.10>  
 max-forwards: 69  
 supported: 100rel  
 supported: replaces  
 Allow: INVITE, ACK, BYE, CANCEL, OPTIONS, PRACK, MESSAGE, REFER, NOTIFY  
 Content-Type: application/sdp  
 Accept: application/sdp, message/sipfrag  
 Content-Length: 250

v=0  
 o=- 786058 4501 IN IP4 192.168.2.10  
 s=-  
 c=IN IP4 192.168.2.10  
 t=0 0  
 m=audio 5008 RTP/AVP 0 8 4 18 96  
 a=rtpmap:0 PCMU/8000  
 a=rtpmap:8 PCMA/8000  
 a=rtpmap:4 G723/8000  
 a=rtpmap:18 G729/8000  
 a=rtpmap:96 telephone-event/8000  
 a=fmtp:96 0-11

F7 192.168.2.15:1135(3) -> 192.168.1.1:5060(2)

SIP/2.0 100 Trying  
 Via: SIP/2.0/UDP 192.168.1.1:5060;branch=z9hG4bK-794.083318.1512934930  
 Via: SIP/2.0/UDP 192.168.2.10:5060;branch=z9hG4bK-7366dbb-881642.061  
 From: 00002 <sip:00002@sip.com>;tag=6ee414a7  
 To: <sip:00004@sip.com>  
 Call-ID: 14af068a@00002.192.168.1.1  
 CSeq: 1512934930 INVITE  
 Content-Length: 0

F8 192.168.2.15:1135(3) -&gt; 192.168.1.1:5060(2)

SIP/2.0 183 Session Progress  
 Via: SIP/2.0/UDP 192.168.1.1:5060;branch=z9hG4bK-794.083318.1512934930  
 Via: SIP/2.0/UDP 192.168.2.10:5060;branch=z9hG4bK-7366dbb-881642.061  
 Record-Route: <sip:00004@192.168.1.1>  
 From: 00002 <sip:00002@sip.com>;tag=6ee414a7  
 To: <sip:00004@sip.com>;tag=666b9ca9  
 Call-ID: 14af068a@00002.192.168.1.1  
 CSeq: 1512934930 INVITE  
 Contact: <sip:00004@192.168.2.15>  
 Require: 100rel  
 RSeq: 225398616  
 Content-Length: 0

F9 192.168.1.1:5062(2) -&gt; 192.168.2.10:5060(1)

SIP/2.0 183 Session Progress  
 Via: SIP/2.0/UDP 192.168.2.10:5060;branch=z9hG4bK-7366dbb-881642.061  
 Record-Route: <sip:00004@192.168.1.1>  
 From: 00002 <sip:00002@sip.com>;tag=6ee414a7  
 To: <sip:00004@sip.com>;tag=666b9ca9  
 Call-ID: 14af068a@00002.192.168.1.1  
 CSeq: 1512934930 INVITE  
 Contact: <sip:00004@192.168.2.15>  
 require: 100rel  
 rseq: 225398616  
 Content-Length: 0

F10 192.168.2.10:1091(1) -&gt; 192.168.1.1:5060(2)

PRACK sip:00004@192.168.1.1 SIP/2.0  
 Via: SIP/2.0/UDP 192.168.2.10:5060;branch=z9hG4bK-1f4432b6-881643.270  
 Route: <sip:00004@192.168.2.15>  
 From: 00002 <sip:00002@sip.com>;tag=6ee414a7  
 To: <sip:00004@sip.com>;tag=666b9ca9  
 Call-ID: 14af068a@00002.192.168.1.1  
 CSeq: 1512934931 PRACK  
 Proxy-Authorization: Digest username="00002", realm="heliossv2",  
 nonce="b6b1b6ffa8d1194b019b131a06f2ad40", uri="sip:00004@192.168.1.1",  
 response="38317fd27c25473d0928c67a945ac1d3", algorithm=MD5, cnonce="7ca6b04a",  
 opaque="0f6f8f513b033a7a3b2df78f98b7c056", qop=auth, nc=00000002  
 Max-Forwards: 70  
 RAck: 225398616 1512934930 INVITE  
 Content-Length: 0

F11 192.168.1.1:5062(2) -&gt; 192.168.2.15:5060(3)

PRACK sip:00004@192.168.2.15 SIP/2.0  
 Via: SIP/2.0/UDP 192.168.1.1:5060;branch=z9hG4bK-794.1084365020.1512934931  
 Via: SIP/2.0/UDP 192.168.2.10:5060;branch=z9hG4bK-1f4432b6-881643.270  
 Route: <sip:00004@192.168.2.15>  
 From: 00002 <sip:00002@sip.com>;tag=6ee414a7  
 To: <sip:00004@sip.com>;tag=666b9ca9  
 Call-ID: 14af068a@00002.192.168.1.1  
 CSeq: 1512934931 PRACK  
 max-forwards: 69  
 rack: 225398616 1512934930 INVITE  
 Content-Length: 0

F12 192.168.2.15:1135(3) -&gt; 192.168.1.1:5060(2)

SIP/2.0 200 OK  
 Via: SIP/2.0/UDP 192.168.1.1:5060;branch=z9hG4bK-794.1084365020.1512934931  
 Via: SIP/2.0/UDP 192.168.2.10:5060;branch=z9hG4bK-1f4432b6-881643.270  
 From: 00002 <sip:00002@sip.com>;tag=6ee414a7  
 To: <sip:00004@sip.com>;tag=666b9ca9  
 Call-ID: 14af068a@00002.192.168.1.1  
 CSeq: 1512934931 PRACK

Content-Length: 0

=====

F13 192.168.1.1:5062(2) -&gt; 192.168.2.10:5060(1)

SIP/2.0 200 OK  
 Via: SIP/2.0/UDP 192.168.2.10:5060;branch=z9hG4bK-1f4432b6-881643.270  
 From: 00002 <sip:00002@sip.com>;tag=6ee414a7  
 To: <sip:00004@sip.com>;tag=666b9ca9  
 Call-ID: 14af068a@00002.192.168.1.1  
 CSeq: 1512934931 PRACK  
 Content-Length: 0

=====

F14 192.168.2.15:1135(3) -&gt; 192.168.1.1:5060(2)

SIP/2.0 180 Ringing  
 Via: SIP/2.0/UDP 192.168.1.1:5060;branch=z9hG4bK-794.083318.1512934930  
 Via: SIP/2.0/UDP 192.168.2.10:5060;branch=z9hG4bK-7366dbb-881642.061  
 Record-Route: <sip:00004@192.168.1.1>  
 From: 00002 <sip:00002@sip.com>;tag=6ee414a7  
 To: <sip:00004@sip.com>;tag=666b9ca9  
 Call-ID: 14af068a@00002.192.168.1.1  
 CSeq: 1512934930 INVITE  
 Contact: <sip:00004@192.168.2.15>  
 Require: 100rel  
 RSeq: 225398617  
 Content-Length: 0

=====

F15 192.168.1.1:5062(2) -&gt; 192.168.2.10:5060(1)

SIP/2.0 180 Ringing  
 Via: SIP/2.0/UDP 192.168.2.10:5060;branch=z9hG4bK-7366dbb-881642.061  
 Record-Route: <sip:00004@192.168.1.1>  
 From: 00002 <sip:00002@sip.com>;tag=6ee414a7  
 To: <sip:00004@sip.com>;tag=666b9ca9  
 Call-ID: 14af068a@00002.192.168.1.1  
 CSeq: 1512934930 INVITE  
 Contact: <sip:00004@192.168.2.15>  
 require: 100rel  
 rseq: 225398617  
 Content-Length: 0

=====

F16 192.168.2.10:1091(1) -&gt; 192.168.1.1:5060(2)

PRACK sip:00004@192.168.1.1 SIP/2.0  
 Via: SIP/2.0/UDP 192.168.2.10:5060;branch=z9hG4bK-36aa82df-881643.973  
 Route: <sip:00004@192.168.2.15>  
 From: 00002 <sip:00002@sip.com>;tag=6ee414a7  
 To: <sip:00004@sip.com>;tag=666b9ca9  
 Call-ID: 14af068a@00002.192.168.1.1  
 CSeq: 1512934932 PRACK  
 Proxy-Authorization: Digest username="00002",  
 nonce="b6b1b6ffa8d1194b019b131a06f2ad40", uri="sip:00004@192.168.1.1",  
 response="8fb8a8c823b2b0f7da1dbeb11c0e2576", algorithm=MD5, cnonce="224cbb3d",  
 opaque="0f6f8f513b033a7a3b2df78f98b7c056", qop=auth, nc=00000003  
 Max-Forwards: 70  
 Rack: 225398617 1512934930 INVITE  
 Content-Length: 0

=====

F17 192.168.1.1:5062(2) -&gt; 192.168.2.15:5060(3)

PRACK sip:00004@192.168.2.15 SIP/2.0  
 Via: SIP/2.0/UDP 192.168.1.1:5060;branch=z9hG4bK-794.1084365021.1512934932  
 Via: SIP/2.0/UDP 192.168.2.10:5060;branch=z9hG4bK-36aa82df-881643.973  
 Route: <sip:00004@192.168.2.15>  
 From: 00002 <sip:00002@sip.com>;tag=6ee414a7  
 To: <sip:00004@sip.com>;tag=666b9ca9

Call-ID: 14af068a@00002.192.168.1.1  
 CSeq: 1512934932 PRACK  
 max-forwards: 69  
 rack: 225398617 1512934930 INVITE  
 Content-Length: 0

F18 192.168.2.15:1135(3) -> 192.168.1.1:5060(2)

SIP/2.0 200 OK  
 Via: SIP/2.0/UDP 192.168.1.1:5060;branch=z9hG4bK-794.1084365021.1512934932  
 Via: SIP/2.0/UDP 192.168.2.10:5060;branch=z9hG4bK-36aa82df-881643.973  
 From: 00002 <sip:00002@sip.com>;tag=6ee414a7  
 To: <sip:00004@sip.com>;tag=666b9ca9  
 Call-ID: 14af068a@00002.192.168.1.1  
 CSeq: 1512934932 PRACK  
 Content-Length: 0

F19 192.168.1.1:5062(2) -> 192.168.2.10:5060(1)

SIP/2.0 200 OK  
 Via: SIP/2.0/UDP 192.168.2.10:5060;branch=z9hG4bK-36aa82df-881643.973  
 From: 00002 <sip:00002@sip.com>;tag=6ee414a7  
 To: <sip:00004@sip.com>;tag=666b9ca9  
 Call-ID: 14af068a@00002.192.168.1.1  
 CSeq: 1512934932 PRACK  
 Content-Length: 0

F20 192.168.2.15:1135(3) -> 192.168.1.1:5060(2)

SIP/2.0 200 OK  
 Via: SIP/2.0/UDP 192.168.1.1:5060;branch=z9hG4bK-794.083318.1512934930  
 Via: SIP/2.0/UDP 192.168.2.10:5060;branch=z9hG4bK-7366dbb-881642.061  
 Record-Route: <sip:00004@192.168.1.1>  
 From: 00002 <sip:00002@sip.com>;tag=6ee414a7  
 To: <sip:00004@sip.com>;tag=666b9ca9  
 Call-ID: 14af068a@00002.192.168.1.1  
 CSeq: 1512934930 INVITE  
 Contact: <sip:00004@192.168.2.15>  
 Supported: 100rel, replaces  
 Allow: INVITE, ACK, BYE, CANCEL, OPTIONS, PRACK, MESSAGE, REFER, NOTIFY  
 Content-Type: application/sdp  
 Accept: application/sdp, message/sipfrag  
 Content-Length: 177

v=0  
 o=- 497402 13801 IN IP4 192.168.2.15  
 s=-  
 c=IN IP4 192.168.2.15  
 t=0 0  
 m=audio 5006 RTP/AVP 0 96  
 a=rtpmap:0 PCMU/8000  
 a=rtpmap:96 telephone-event/8000  
 a=fmtp:96 0-11

F21 192.168.1.1:5062(2) -> 192.168.2.10:5060(1)

SIP/2.0 200 OK  
 Via: SIP/2.0/UDP 192.168.2.10:5060;branch=z9hG4bK-7366dbb-881642.061  
 Record-Route: <sip:00004@192.168.1.1>  
 From: 00002 <sip:00002@sip.com>;tag=6ee414a7  
 To: <sip:00004@sip.com>;tag=666b9ca9  
 Call-ID: 14af068a@00002.192.168.1.1  
 CSeq: 1512934930 INVITE  
 Contact: <sip:00004@192.168.2.15>  
 supported: 100rel  
 supported: replaces  
 Allow: INVITE, ACK, BYE, CANCEL, OPTIONS, PRACK, MESSAGE, REFER, NOTIFY  
 Content-Type: application/sdp  
 Accept: application/sdp, message/sipfrag  
 Content-Length: 177

```
v=0
o=- 497402 13801 IN IP4 192.168.2.15
s=-
c=IN IP4 192.168.2.15
t=0 0
m=audio 5006 RTP/AVP 0 96
a=rtpmap:0 PCMU/8000
a=rtpmap:96 telephone-event/8000
a=fmtp:96 0-11
```

```
=====
F22      192.168.2.10:1091(1) -> 192.168.1.1:5060(2)
```

```
ACK sip:00004@192.168.1.1 SIP/2.0
Via: SIP/2.0/UDP 192.168.2.10:5060;branch=z9hG4bK-5a764092-881646.681
Route: <sip:00004@192.168.2.15>
From: 00002 <sip:00002@sip.com>;tag=6ee414a7
To: <sip:00004@sip.com>;tag=666b9ca9
Call-ID: 14af068a@00002.192.168.1.1
CSeq: 1512934930 ACK
Proxy-Authorization: Digest username="00002", realm="heliossv2",
nonce="b6b1b6ffa8d1194b019b131a06f2ad40", uri="sip:00004@sip.com",
response="0af1c3e918f0b14a4dae7503835df064", algorithm=MD5, cnonce="2d39f6a3",
opaque="0f6f8f513b033a7a3b2df78f98b7c056", qop=auth, nc=00000001
Max-Forwards: 70
Content-Length: 0
```

```
=====
F23      192.168.1.1:5062(2) -> 192.168.2.15:5060(3)
```

```
ACK sip:00004@192.168.2.15 SIP/2.0
Via: SIP/2.0/UDP 192.168.1.1:5060;branch=z9hG4bK-794.1084365023.1512934930
Via: SIP/2.0/UDP 192.168.2.10:5060;branch=z9hG4bK-5a764092-881646.681
From: 00002 <sip:00002@sip.com>;tag=6ee414a7
To: <sip:00004@sip.com>;tag=666b9ca9
Call-ID: 14af068a@00002.192.168.1.1
CSeq: 1512934930 ACK
max-forwards: 69
Content-Length: 0
```

```
=====
F24      192.168.2.15:1135(3) -> 192.168.1.1:5060(2)
```

```
INVITE sip:00004@192.168.1.1 SIP/2.0
Via: SIP/2.0/UDP 192.168.2.15:5060;branch=z9hG4bK-72985ae3-881484.482
Route: <sip:00002@192.168.2.10>
From: <sip:00004@sip.com>;tag=666b9ca9
To: 00002 <sip:00002@sip.com>;tag=6ee414a7
Call-ID: 14af068a@00002.192.168.1.1
CSeq: 1610396106 INVITE
Contact: <sip:00004@192.168.2.15>
Max-Forwards: 70
Supported: 100rel, replaces
Allow: INVITE, ACK, BYE, CANCEL, OPTIONS, PRACK, MESSAGE, REFER, NOTIFY
Content-Type: application/sdp
Content-Length: 189
```

```
v=0
o=- 473606 13802 IN IP4 192.168.2.15
s=-
c=IN IP4 192.168.2.15
t=0 0
m=audio 5006 RTP/AVP 0 96
a=rtpmap:0 PCMU/8000
a=rtpmap:96 telephone-event/8000
a=fmtp:96 0-11
a=inactive
```

```
=====
F25      192.168.1.1:5062(2) -> 192.168.2.15:5060(3)
```

```
SIP/2.0 100 Trying
Via: SIP/2.0/UDP 192.168.2.15:5060;branch=z9hG4bK-72985ae3-881484.482
From: <sip:00004@sip.com>;tag=666b9ca9
```

To: 00002 <sip:00002@sip.com>;tag=6ee414a7  
 Call-ID: 14af068a@00002.192.168.1.1  
 CSeq: 1610396106 INVITE  
 Content-Length: 0

F26 192.168.1.1:5062(2) -> 192.168.2.10:5060(1)

INVITE sip:00002@192.168.2.10 SIP/2.0  
 Via: SIP/2.0/UDP 192.168.1.1:5060;branch=z9hG4bK-793.083318.1610396106  
 Via: SIP/2.0/UDP 192.168.2.15:5060;branch=z9hG4bK-72985ae3-881484.482  
 Record-Route: <sip:00004@192.168.1.1>  
 Route: <sip:00002@192.168.2.10>  
 From: <sip:00004@sip.com>;tag=666b9ca9  
 To: 00002 <sip:00002@sip.com>;tag=6ee414a7  
 Call-ID: 14af068a@00002.192.168.1.1  
 CSeq: 1610396106 INVITE  
 Contact: <sip:00004@192.168.2.15>  
 max-forwards: 69  
 supported: 100rel  
 supported: replaces  
 Allow: INVITE, ACK, BYE, CANCEL, OPTIONS, PRACK, MESSAGE, REFER, NOTIFY  
 Content-Type: application/sdp  
 Content-Length: 189

v=0  
 o=- 473606 13802 IN IP4 192.168.2.15  
 s=-  
 c=IN IP4 192.168.2.15  
 t=0 0  
 m=audio 5006 RTP/AVP 0 96  
 a=rtpmap:0 PCMU/8000  
 a=rtpmap:96 telephone-event/8000  
 a=fmtp:96 0-11  
 a=inactive

F27 192.168.2.10:1091(1) -> 192.168.1.1:5060(2)

SIP/2.0 100 Trying  
 Via: SIP/2.0/UDP 192.168.1.1:5060;branch=z9hG4bK-793.083318.1610396106  
 Via: SIP/2.0/UDP 192.168.2.15:5060;branch=z9hG4bK-72985ae3-881484.482  
 From: <sip:00004@sip.com>;tag=666b9ca9  
 To: 00002 <sip:00002@sip.com>;tag=6ee414a7  
 Call-ID: 14af068a@00002.192.168.1.1  
 CSeq: 1610396106 INVITE  
 Content-Length: 0

F28 192.168.2.10:1091(1) -> 192.168.1.1:5060(2)

SIP/2.0 200 OK  
 Via: SIP/2.0/UDP 192.168.1.1:5060;branch=z9hG4bK-793.083318.1610396106  
 Via: SIP/2.0/UDP 192.168.2.15:5060;branch=z9hG4bK-72985ae3-881484.482  
 Record-Route: <sip:00004@192.168.1.1>  
 From: <sip:00004@sip.com>;tag=666b9ca9  
 To: 00002 <sip:00002@sip.com>;tag=6ee414a7  
 Call-ID: 14af068a@00002.192.168.1.1  
 CSeq: 1610396106 INVITE  
 Contact: <sip:00002@192.168.2.10>  
 Supported: 100rel, replaces  
 Allow: INVITE, ACK, BYE, CANCEL, OPTIONS, PRACK, MESSAGE, REFER, NOTIFY  
 Content-Type: application/sdp  
 Accept: application/sdp, message/sipfrag  
 Content-Length: 188

v=0  
 o=- 527564 4502 IN IP4 192.168.2.10  
 s=-  
 c=IN IP4 192.168.2.10  
 t=0 0  
 m=audio 5008 RTP/AVP 0 96  
 a=rtpmap:0 PCMU/8000  
 a=rtpmap:96 telephone-event/8000  
 a=fmtp:96 0-11  
 a=inactive

F29 192.168.1.1:5062(2) -> 192.168.2.15:5060(3)

SIP/2.0 200 OK  
Via: SIP/2.0/UDP 192.168.2.15:5060;branch=z9hG4bK-72985ae3-881484.482  
Record-Route: <sip:00004@192.168.1.1>  
From: <sip:00004@sip.com>;tag=666b9ca9  
To: 00002 <sip:00002@sip.com>;tag=6ee414a7  
Call-ID: 14af068a@00002.192.168.1.1  
CSeq: 1610396106 INVITE  
Contact: <sip:00002@192.168.2.10>  
supported: 100rel  
supported: replaces  
Allow: INVITE, ACK, BYE, CANCEL, OPTIONS, PRACK, MESSAGE, REFER, NOTIFY  
Content-Type: application/sdp  
Accept: application/sdp, message/sipfrag  
Content-Length: 188

v=0  
o=- 527564 4502 IN IP4 192.168.2.10  
s=-  
c=IN IP4 192.168.2.10  
t=0 0  
m=audio 5008 RTP/AVP 0 96  
a=rtpmap:0 PCMU/8000  
a=rtpmap:96 telephone-event/8000  
a=fmtp:96 0-11  
a=inactive

F30 192.168.2.15:1135(3) -> 192.168.1.1:5060(2)

ACK sip:00004@192.168.1.1 SIP/2.0  
Via: SIP/2.0/UDP 192.168.2.15:5060;branch=z9hG4bK-72d352e6-881484.819  
Route: <sip:00002@192.168.2.10>  
From: <sip:00004@sip.com>;tag=666b9ca9  
To: 00002 <sip:00002@sip.com>;tag=6ee414a7  
Call-ID: 14af068a@00002.192.168.1.1  
CSeq: 1610396106 ACK  
Max-Forwards: 70  
Content-Length: 0

F31 192.168.1.1:5062(2) -> 192.168.2.10:5060(1)

ACK sip:00002@192.168.2.10 SIP/2.0  
Via: SIP/2.0/UDP 192.168.1.1:5060;branch=z9hG4bK-793.1084365026.1610396106  
Via: SIP/2.0/UDP 192.168.2.15:5060;branch=z9hG4bK-72d352e6-881484.819  
From: <sip:00004@sip.com>;tag=666b9ca9  
To: 00002 <sip:00002@sip.com>;tag=6ee414a7  
Call-ID: 14af068a@00002.192.168.1.1  
CSeq: 1610396106 ACK  
max-forwards: 69  
Content-Length: 0

F32 192.168.2.15:1135(3) -> 192.168.1.1:5060(2)

REFER sip:00004@192.168.1.1 SIP/2.0  
Via: SIP/2.0/UDP 192.168.2.15:5060;branch=z9hG4bK-3ba324ba-881491.725  
Route: <sip:00002@192.168.2.10>  
From: <sip:00004@sip.com>;tag=666b9ca9  
To: 00002 <sip:00002@sip.com>;tag=6ee414a7  
Call-ID: 14af068a@00002.192.168.1.1  
CSeq: 1610396107 REFER  
Contact: <sip:00004@192.168.2.15>  
Max-Forwards: 70  
Refer-To: <sip:00005@sip.com>  
Referred-By: <sip:00004@sip.com>  
Content-Length: 0



F33 192.168.1.1:5062(2) -> 192.168.2.10:5060(1)

REFER sip:00002@192.168.2.10 SIP/2.0  
 Via: SIP/2.0/UDP 192.168.1.1:5060:branch=z9hG4bK-793.1084365033.1610396107  
 Via: SIP/2.0/UDP 192.168.2.15:5060:branch=z9hG4bK-3ba324ba-881491.725  
 Route: <sip:00002@192.168.2.10>  
 From: <sip:00004@sip.com>;tag=666b9ca9  
 To: 00002 <sip:00002@sip.com>;tag=6ee414a7  
 Call-ID: 14af068a@00002.192.168.1.1  
 CSeq: 1610396107 REFER  
 Contact: <sip:00004@192.168.2.15>  
 max-forwards: 69  
 refer-to: <sip:00005@sip.com>  
 referred-by: <sip:00004@sip.com>  
 Content-Length: 0

F34 192.168.2.10:1091(1) -> 192.168.1.1:5060(2)

SIP/2.0 202 Accepted  
 Via: SIP/2.0/UDP 192.168.1.1:5060:branch=z9hG4bK-793.1084365033.1610396107  
 Via: SIP/2.0/UDP 192.168.2.15:5060:branch=z9hG4bK-3ba324ba-881491.725  
 From: <sip:00004@sip.com>;tag=666b9ca9  
 To: 00002 <sip:00002@sip.com>;tag=6ee414a7  
 Call-ID: 14af068a@00002.192.168.1.1  
 CSeq: 1610396107 REFER  
 Contact: <sip:00002@192.168.2.10>  
 Content-Length: 0

F35 192.168.2.10:1091(1) -> 192.168.1.1:5060(2)

NOTIFY sip:00004@192.168.1.1 SIP/2.0  
 Via: SIP/2.0/UDP 192.168.2.10:5060:branch=z9hG4bK-3e6c73e-881656.601  
 Route: <sip:00004@192.168.2.15>  
 From: 00002 <sip:00002@sip.com>;tag=6ee414a7  
 To: <sip:00004@sip.com>;tag=666b9ca9  
 Call-ID: 14af068a@00002.192.168.1.1  
 CSeq: 1512934933 NOTIFY  
 Contact: <sip:00002@192.168.2.10>  
 Proxy-Authorization: Digest username="00002", realm="heliossv2",  
 nonce="b6b1b6ffa8d1194b019b131a06f2ad40", uri="sip:00004@192.168.1.1",  
 response="892272a18cbaf834627c2341b2234bb2", algorithm=MD5, cnonce="35e1fbb1",  
 opaque="0f6f8f513b033a7a3b2df78f98b7c056", qop=auth, nc=00000004  
 Max-Forwards: 70  
 Event: refer  
 Subscription-State: active;expires=30  
 Content-Type: message/sipfrag  
 Content-Length: 18

SIP/2.0 100 Trying

F36 192.168.1.1:5062(2) -> 192.168.2.15:5060(3)

SIP/2.0 202 Accepted  
 Via: SIP/2.0/UDP 192.168.2.15:5060:branch=z9hG4bK-3ba324ba-881491.725  
 From: <sip:00004@sip.com>;tag=666b9ca9  
 To: 00002 <sip:00002@sip.com>;tag=6ee414a7  
 Call-ID: 14af068a@00002.192.168.1.1  
 CSeq: 1610396107 REFER  
 Contact: <sip:00002@192.168.2.10>  
 Content-Length: 0

F37 192.168.1.1:5062(2) -> 192.168.2.15:5060(3)

NOTIFY sip:00004@192.168.2.15 SIP/2.0  
 Via: SIP/2.0/UDP 192.168.1.1:5060:branch=z9hG4bK-794.1084365033.1512934933  
 Via: SIP/2.0/UDP 192.168.2.10:5060:branch=z9hG4bK-3e6c73e-881656.601  
 Route: <sip:00004@192.168.2.15>  
 From: 00002 <sip:00002@sip.com>;tag=6ee414a7  
 To: <sip:00004@sip.com>;tag=666b9ca9  
 Call-ID: 14af068a@00002.192.168.1.1  
 CSeq: 1512934933 NOTIFY

Contact: <sip:00002@192.168.2.10>  
max-forwards: 69  
event: refer  
subscription-state: active:expires=30  
Content-Type: message/sipfrag  
Content-Length: 18

SIP/2.0 100 Trying

F38 192.168.2.15:1135(3) -> 192.168.1.1:5060(2)

SIP/2.0 200 OK  
Via: SIP/2.0/UDP 192.168.1.1:5060;branch=z9hG4bK-794.1084365033.1512934933  
Via: SIP/2.0/UDP 192.168.2.10:5060;branch=z9hG4bK-3e6c73e-881656.601  
From: 00002 <sip:00002@sip.com>;tag=6ee414a7  
To: <sip:00004@sip.com>;tag=666b9ca9  
Call-ID: 14af068a@00002.192.168.1.1  
CSeq: 1512934933 NOTIFY  
Content-Length: 0

F39 192.168.1.1:5062(2) -> 192.168.2.10:5060(1)

SIP/2.0 200 OK  
Via: SIP/2.0/UDP 192.168.2.10:5060;branch=z9hG4bK-3e6c73e-881656.601  
From: 00002 <sip:00002@sip.com>;tag=6ee414a7  
To: <sip:00004@sip.com>;tag=666b9ca9  
Call-ID: 14af068a@00002.192.168.1.1  
CSeq: 1512934933 NOTIFY  
Content-Length: 0

F40 192.168.2.15:1135(3) -> 192.168.1.1:5060(2)

BYE sip:00004@192.168.1.1 SIP/2.0  
Via: SIP/2.0/UDP 192.168.2.15:5060;branch=z9hG4bK-2cccc59-881491.843  
Route: <sip:00002@192.168.2.10>  
From: <sip:00004@sip.com>;tag=666b9ca9  
To: 00002 <sip:00002@sip.com>;tag=6ee414a7  
Call-ID: 14af068a@00002.192.168.1.1  
CSeq: 1610396108 BYE  
Max-Forwards: 70  
Content-Length: 0

F41 192.168.1.1:5062(2) -> 192.168.2.10:5060(1)

BYE sip:00002@192.168.2.10 SIP/2.0  
Via: SIP/2.0/UDP 192.168.1.1:5060;branch=z9hG4bK-793.1084365034.1610396108  
Via: SIP/2.0/UDP 192.168.2.15:5060;branch=z9hG4bK-2cccc59-881491.843  
Route: <sip:00002@192.168.2.10>  
From: <sip:00004@sip.com>;tag=666b9ca9  
To: 00002 <sip:00002@sip.com>;tag=6ee414a7  
Call-ID: 14af068a@00002.192.168.1.1  
CSeq: 1610396108 BYE  
max-forwards: 69  
Content-Length: 0

F42 192.168.2.10:1091(1) -> 192.168.1.1:5060(2)

SIP/2.0 200 OK  
Via: SIP/2.0/UDP 192.168.1.1:5060;branch=z9hG4bK-793.1084365034.1610396108  
Via: SIP/2.0/UDP 192.168.2.15:5060;branch=z9hG4bK-2cccc59-881491.843  
From: <sip:00004@sip.com>;tag=666b9ca9  
To: 00002 <sip:00002@sip.com>;tag=6ee414a7  
Call-ID: 14af068a@00002.192.168.1.1  
CSeq: 1610396108 BYE  
Content-Length: 0

F43 192.168.1.1:5062(2) -> 192.168.2.15:5060(3)

SIP/2.0 200 OK  
 Via: SIP/2.0/UDP 192.168.2.15:5060;branch=z9hG4bK-2ccccc59-881491.843  
 From: <sip:00004@sip.com>;tag=666b9ca9  
 To: 00002 <sip:00002@sip.com>;tag=6ee414a7  
 Call-ID: 14af068a@00002.192.168.1.1  
 CSeq: 1610396108 BYE  
 Content-Length: 0

F44 192.168.2.10:1091(1) -> 192.168.1.1:5060(2)

INVITE sip:00005@sip.com SIP/2.0  
 Via: SIP/2.0/UDP 192.168.2.10:5060;branch=z9hG4bK-5714e76c-881657.286  
 Route: <sip:192.168.1.1:5060>  
 From: <sip:00002@sip.com>;tag=1de1fd83  
 To: <sip:00005@sip.com>  
 Call-ID: 7930fb0f@00002.192.168.1.1  
 CSeq: 1575194065 INVITE  
 Contact: <sip:00002@192.168.2.10>  
 Proxy-Authorization: Digest username="00002", realm="heliossv2",  
 nonce="b6b1b6ffa8d1194b019b131a06f2ad40", uri="sip:00005@sip.com",  
 response="1048b886d7b0280da74ebcf1e8b59bbe", algorithm=MD5, cnonce="302e0126",  
 opaque="0f6f8f513b033a7a3b2df78f98b7c056", qop=auth, nc=00000005  
 Max-Forwards: 70  
 Supported: 100rel, replaces  
 Referred-By: <sip:00004@sip.com>  
 Allow: INVITE, ACK, BYE, CANCEL, OPTIONS, PRACK, MESSAGE, REFER, NOTIFY  
 Content-Type: application/sdp  
 Accept: application/sdp, message/sipfrag  
 Content-Length: 176

v=0  
 o=- 252700 4501 IN IP4 192.168.2.10  
 s=-  
 c=IN IP4 192.168.2.10  
 t=0 0  
 m=audio 5006 RTP/AVP 0 96  
 a=rtpmap:0 PCMU/8000  
 a=rtpmap:96 telephone-event/8000  
 a=fmtp:96 0-11

F45 192.168.1.1:5062(2) -> 192.168.2.10:5060(1)

SIP/2.0 407 Proxy Authentication Required  
 Via: SIP/2.0/UDP 192.168.2.10:5060;branch=z9hG4bK-5714e76c-881657.286  
 From: <sip:00002@sip.com>;tag=1de1fd83  
 To: <sip:00005@sip.com>  
 Call-ID: 7930fb0f@00002.192.168.1.1  
 CSeq: 1575194065 INVITE  
 Proxy-Authenticate: Digest realm="heliossv2", nonce="01fc6f649239d0c0848c59cbf9d963c1",  
 opaque="a733d8cde6ce20e6a888fdcaf8c55899", stale=false, algorithm=MD5, qop="auth,auth-int"  
 Content-Length: 0

F46 192.168.2.10:1091(1) -> 192.168.1.1:5060(2)

ACK sip:00005@sip.com SIP/2.0  
 Via: SIP/2.0/UDP 192.168.2.10:5060;branch=z9hG4bK-5714e76c-881657.286  
 Route: <sip:192.168.1.1:5060>  
 From: <sip:00002@sip.com>;tag=1de1fd83  
 To: <sip:00005@sip.com>  
 Call-ID: 7930fb0f@00002.192.168.1.1  
 CSeq: 1575194065 ACK  
 Content-Length: 0

F47 192.168.2.10:1091(1) -> 192.168.1.1:5060(2)

INVITE sip:00005@sip.com SIP/2.0  
 Via: SIP/2.0/UDP 192.168.2.10:5060;branch=z9hG4bK-5d788ba6-881657.501

```

Route: <sip:192.168.1.1:5060>
From: <sip:00002@sip.com>;tag=1de1fd83
To: <sip:00005@sip.com>
Call-ID: 7930fb0f@00002.192.168.1.1
CSeq: 1575194066 INVITE
Contact: <sip:00002@192.168.2.10>
Proxy-Authorization: Digest username="00002", realm="heliossv2",
nonce="01fc6f649239d0c0848c59cbf9d963c1", uri="sip:00005@sip.com",
response="eb5957a429cba1c07efd5a88266119f3", algorithm=MD5,
opaque="a733d8cde6ce20e6a888fdcaf8c55899", qop=auth, nc=00000001
Max-Forwards: 70
Supported: 100rel, replaces
Referred-By: <sip:00004@sip.com>
Allow: INVITE, ACK, BYE, CANCEL, OPTIONS, PRACK, MESSAGE, REFER, NOTIFY
Content-Type: application/sdp
Accept: application/sdp, message/sipfrag
Content-Length: 176

```

```

v=0
o=- 252700 4501 IN IP4 192.168.2.10
s=-
c=IN IP4 192.168.2.10
t=0 0
m=audio 5006 RTP/AVP 0 96
a=rtpmap:0 PCMU/8000
a=rtpmap:96 telephone-event/8000
a=fmtp:96 0-11

```

```
=====
```

F48 192.168.1.1:5062(2) -> 192.168.2.10:5060(1)

```

SIP/2.0 100 Trying
Via: SIP/2.0/UDP 192.168.2.10:5060;branch=z9hG4bK-5d788ba6-881657.501
From: <sip:00002@sip.com>;tag=1de1fd83
To: <sip:00005@sip.com>
Call-ID: 7930fb0f@00002.192.168.1.1
CSeq: 1575194066 INVITE
Content-Length: 0

```

```
=====
```

F49 192.168.1.1:5062(2) -> 192.168.2.14:5060(4)

```

INVITE sip:00005@192.168.2.14 SIP/2.0
Via: SIP/2.0/UDP 192.168.1.1:5060;branch=z9hG4bK-796.571363.1575194066
Via: SIP/2.0/UDP 192.168.2.10:5060;branch=z9hG4bK-5d788ba6-881657.501
Record-Route: <sip:00005@192.168.1.1>
Route: <sip:192.168.1.1:5060>
From: 00002 <sip:00002@sip.com>;tag=1de1fd83
To: <sip:00005@sip.com>
Call-ID: 7930fb0f@00002.192.168.1.1
CSeq: 1575194066 INVITE
Contact: <sip:00002@192.168.2.10>
max-forwards: 69
supported: 100rel
supported: replaces
referred-by: <sip:00004@sip.com>
Allow: INVITE, ACK, BYE, CANCEL, OPTIONS, PRACK, MESSAGE, REFER, NOTIFY
Content-Type: application/sdp
Accept: application/sdp, message/sipfrag
Content-Length: 176

```

```

v=0
o=- 252700 4501 IN IP4 192.168.2.10
s=-
c=IN IP4 192.168.2.10
t=0 0
m=audio 5006 RTP/AVP 0 96
a=rtpmap:0 PCMU/8000
a=rtpmap:96 telephone-event/8000
a=fmtp:96 0-11

```

```
=====
```

F50 192.168.2.14:1058(4) -> 192.168.1.1:5060(2)

```

SIP/2.0 100 Trying
Via: SIP/2.0/UDP 192.168.1.1:5060;branch=z9hG4bK-796.571363.1575194066
Via: SIP/2.0/UDP 192.168.2.10:5060;branch=z9hG4bK-5d788ba6-881657.501

```

# FOMA/WLAN デュアル端末に関する技術参考資料 第 1.2 版

From: 00002 <sip:00002@sip.com>;tag=1de1fd83  
To: <sip:00005@sip.com>  
Call-ID: 7930fb0f@00002.192.168.1.1  
CSeq: 1575194066 INVITE  
Content-Length: 0

F51 192.168.2.14:1058(4) -> 192.168.1.1:5060(2)

SIP/2.0 183 Session Progress  
Via: SIP/2.0/UDP 192.168.1.1:5060;branch=z9hG4bK-796.571363.1575194066  
Via: SIP/2.0/UDP 192.168.2.10:5060;branch=z9hG4bK-5d788ba6-881657.501  
Record-Route: <sip:00005@192.168.1.1>  
From: 00002 <sip:00002@sip.com>;tag=1de1fd83  
To: <sip:00005@sip.com>;tag=70b70d0e  
Call-ID: 7930fb0f@00002.192.168.1.1  
CSeq: 1575194066 INVITE  
Contact: <sip:00005@192.168.2.14>  
Require: 100rel  
RSeq: 205744828  
Content-Length: 0

F52 192.168.2.14:1058(4) -> 192.168.1.1:5060(2)

SIP/2.0 486 Busy Here  
Via: SIP/2.0/UDP 192.168.1.1:5060;branch=z9hG4bK-796.571363.1575194066  
Via: SIP/2.0/UDP 192.168.2.10:5060;branch=z9hG4bK-5d788ba6-881657.501  
From: 00002 <sip:00002@sip.com>;tag=1de1fd83  
To: <sip:00005@sip.com>;tag=70b70d0e  
Call-ID: 7930fb0f@00002.192.168.1.1  
CSeq: 1575194066 INVITE  
Content-Length: 0

F53 192.168.1.1:5062(2) -> 192.168.2.10:5060(1)

SIP/2.0 183 Session Progress  
Via: SIP/2.0/UDP 192.168.2.10:5060;branch=z9hG4bK-5d788ba6-881657.501  
Record-Route: <sip:00005@192.168.1.1>  
From: 00002 <sip:00002@sip.com>;tag=1de1fd83  
To: <sip:00005@sip.com>;tag=70b70d0e  
Call-ID: 7930fb0f@00002.192.168.1.1  
CSeq: 1575194066 INVITE  
Contact: <sip:00005@192.168.2.14>  
require: 100rel  
rseq: 205744828  
Content-Length: 0

F54 192.168.1.1:5062(2) -> 192.168.2.14:5060(4)

ACK sip:00005@192.168.2.14 SIP/2.0  
Via: SIP/2.0/UDP 192.168.1.1:5060;branch=z9hG4bK-796.571363.1575194066  
Route: <sip:192.168.1.1:5060>  
From: 00002 <sip:00002@sip.com>;tag=1de1fd83  
To: <sip:00005@sip.com>;tag=70b70d0e  
Call-ID: 7930fb0f@00002.192.168.1.1  
CSeq: 1575194066 ACK  
Content-Length: 0

F55 192.168.1.1:5062(2) -> 192.168.2.10:5060(1)

SIP/2.0 486 Busy Here  
Via: SIP/2.0/UDP 192.168.2.10:5060;branch=z9hG4bK-5d788ba6-881657.501  
From: 00002 <sip:00002@sip.com>;tag=1de1fd83  
To: <sip:00005@sip.com>;tag=70b70d0e  
Call-ID: 7930fb0f@00002.192.168.1.1  
CSeq: 1575194066 INVITE  
Content-Length: 0

F56 192.168.2.10:1091(1) -> 192.168.1.1:5060(2)

PRACK sip:00005@192.168.1.1 SIP/2.0  
Via: SIP/2.0/UDP 192.168.2.10:5060;branch=z9hG4bK-21a548e6-881658.481  
Route: <sip:00005@192.168.2.14>  
From: 00002 <sip:00002@sip.com>;tag=1de1fd83  
To: <sip:00005@sip.com>;tag=70b70d0e  
Call-ID: 7930fb0f@00002.192.168.1.1  
CSeq: 1575194067 PRACK  
Proxy-Authorization: Digest username="00002", realm="heliossv2",  
nonce="01fc6f649239d0c0848c59cbf9d963c1", uri="sip:00005@192.168.1.1",  
response="5fc29f5ec972e5a36c1bbda6aa8fa2c3", algorithm=MD5, cnonce="00062dea",  
opaque="a733d8cde6ce20e6a888fdcaf8c55899", qop=auth, nc=00000002  
Max-Forwards: 70  
Rack: 205744828 1575194066 INVITE  
Content-Length: 0

F57 192.168.2.10:1091(1) -> 192.168.1.1:5060(2)

ACK sip:00005@sip.com SIP/2.0  
Via: SIP/2.0/UDP 192.168.2.10:5060;branch=z9hG4bK-5d788ba6-881657.501  
Route: <sip:192.168.1.1:5060>  
From: 00002 <sip:00002@sip.com>;tag=1de1fd83  
To: <sip:00005@sip.com>;tag=70b70d0e  
Call-ID: 7930fb0f@00002.192.168.1.1  
CSeq: 1575194066 ACK  
Content-Length: 0

F58 192.168.2.10:1091(1) -> 192.168.1.1:5060(2)

NOTIFY sip:00004@192.168.1.1 SIP/2.0  
Via: SIP/2.0/UDP 192.168.2.10:5060;branch=z9hG4bK-9b69d72-881658.537  
Route: <sip:00004@192.168.2.15>  
From: 00002 <sip:00002@sip.com>;tag=6ee414a7  
To: <sip:00004@sip.com>;tag=666b9ca9  
Call-ID: 14af068a@00002.192.168.1.1  
CSeq: 1512934934 NOTIFY  
Contact: <sip:00002@192.168.2.10>  
Proxy-Authorization: Digest username="00002", realm="heliossv2",  
nonce="01fc6f649239d0c0848c59cbf9d963c1", uri="sip:00004@192.168.1.1",  
response="bd26cb9e7cef675fdbcc697c595b998a", algorithm=MD5, cnonce="5daa67fb",  
opaque="a733d8cde6ce20e6a888fdcaf8c55899", qop=auth, nc=00000003  
Max-Forwards: 70  
Event: refer  
Subscription-State: terminated:reason=noresource  
Content-Type: message/sipfrag  
Content-Length: 21

SIP/2.0 486 Busy Here

F59 192.168.1.1:5062(2) -> 192.168.2.15:5060(3)

NOTIFY sip:00004@192.168.2.15 SIP/2.0  
Via: SIP/2.0/UDP 192.168.1.1:5060;branch=z9hG4bK-797.1084365035.1512934934  
Via: SIP/2.0/UDP 192.168.2.10:5060;branch=z9hG4bK-9b69d72-881658.537  
Route: <sip:00004@192.168.2.15>  
From: 00002 <sip:00002@sip.com>;tag=6ee414a7  
To: <sip:00004@sip.com>;tag=666b9ca9  
Call-ID: 14af068a@00002.192.168.1.1  
CSeq: 1512934934 NOTIFY  
Contact: <sip:00002@192.168.2.10>  
max-forwards: 69  
event: refer  
subscription-state: terminated:reason=noresource  
Content-Type: message/sipfrag  
Content-Length: 21

SIP/2.0 486 Busy Here

F60 192.168.2.15:1135(3) -> 192.168.1.1:5060(2)

SIP/2.0 200 OK  
Via: SIP/2.0/UDP 192.168.1.1:5060;branch=z9hG4bK-797.1084365035.1512934934  
Via: SIP/2.0/UDP 192.168.2.10:5060;branch=z9hG4bK-9b69d72-881658.537  
From: 00002 <sip:00002@sip.com>;tag=6ee414a7  
To: <sip:00004@sip.com>;tag=666b9ca9  
Call-ID: 14af068a@00002.192.168.1.1  
CSeq: 1512934934 NOTIFY  
Content-Length: 0

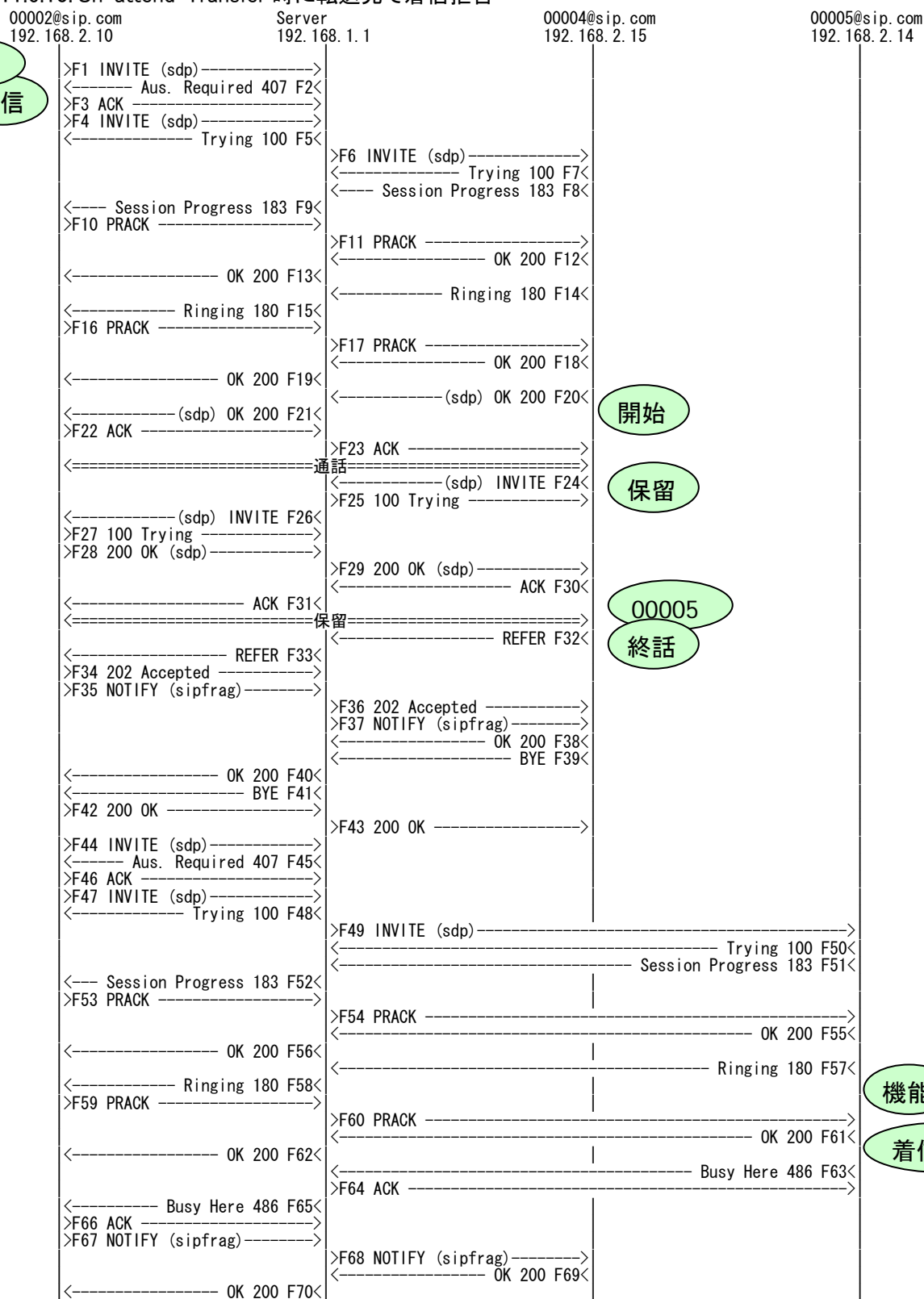
=====

F61 192.168.1.1:5062(2) -> 192.168.2.10:5060(1)

SIP/2.0 200 OK  
Via: SIP/2.0/UDP 192.168.2.10:5060;branch=z9hG4bK-9b69d72-881658.537  
From: 00002 <sip:00002@sip.com>;tag=6ee414a7  
To: <sip:00004@sip.com>;tag=666b9ca9  
Call-ID: 14af068a@00002.192.168.1.1  
CSeq: 1512934934 NOTIFY  
Content-Length: 0

=====

## 11.6.10. Un-attend-Transfer 時に転送先で着信拒否



注：00002 認証あり 00004 認証なし 00005 認証なし



図 11-37 Un-attend-Transfer 時に転送先で着信拒否

```

=====
F1      192.168.2.10:1091(1) -> 192.168.1.1:5060(2)

INVITE sip:00004@sip.com SIP/2.0
Via: SIP/2.0/UDP 192.168.2.10:5060;branch=z9hG4bK-6410306c-881797.097
Route: <sip:192.168.1.1:5060>
From: <sip:00002@sip.com>;tag=274fb87c
To: <sip:00004@sip.com>
Call-ID: 71bee37a@00002.192.168.1.1
CSeq: 106123108 INVITE
Contact: <sip:00002@192.168.2.10>
Proxy-Authorization: Digest username="00002", realm="heliossv2",
nonce="c4337ad769b64638a038b4bd8df810f6", uri="sip:00004@sip.com",
response="59754ff9b64072d1630e38d7523b084d", algorithm=MD5, cnonce="4c147418",
opaque="f61fe3747113504df3b6400608068923", qop=auth, nc=00000005
Max-Forwards: 70
Supported: 100rel, replaces
Allow: INVITE, ACK, BYE, CANCEL, OPTIONS, PRACK, MESSAGE, REFER, NOTIFY
Content-Type: application/sdp
Accept: application/sdp, message/sipfrag
Content-Length: 249

v=0
o=- 85451 4701 IN IP4 192.168.2.10
s=-
c=IN IP4 192.168.2.10
t=0 0
m=audio 5008 RTP/AVP 0 8 4 18 96
a=rtpmap:0 PCMU/8000
a=rtpmap:8 PCMA/8000
a=rtpmap:4 G723/8000
a=rtpmap:18 G729/8000
a=rtpmap:96 telephone-event/8000
a=fmtp:96 0-11

=====
F2      192.168.1.1:5062(2) -> 192.168.2.10:5060(1)

SIP/2.0 407 Proxy Authentication Required
Via: SIP/2.0/UDP 192.168.2.10:5060;branch=z9hG4bK-6410306c-881797.097
From: <sip:00002@sip.com>;tag=274fb87c
To: <sip:00004@sip.com>
Call-ID: 71bee37a@00002.192.168.1.1
CSeq: 106123108 INVITE
Proxy-Authenticate: Digest realm="heliossv2", nonce="0bb8807fa83ddb06fa5fd4fe5147f32c",
opaque="3de687565911eba5b32ed1aac9fc66d5", stale=false, algorithm=MD5, qop="auth,auth-int"
Content-Length: 0

=====
F3      192.168.2.10:1091(1) -> 192.168.1.1:5060(2)

ACK sip:00004@sip.com SIP/2.0
Via: SIP/2.0/UDP 192.168.2.10:5060;branch=z9hG4bK-6410306c-881797.097
Route: <sip:192.168.1.1:5060>
From: <sip:00002@sip.com>;tag=274fb87c
To: <sip:00004@sip.com>
Call-ID: 71bee37a@00002.192.168.1.1
CSeq: 106123108 ACK
Content-Length: 0

=====
F4      192.168.2.10:1091(1) -> 192.168.1.1:5060(2)

INVITE sip:00004@sip.com SIP/2.0
Via: SIP/2.0/UDP 192.168.2.10:5060;branch=z9hG4bK-79c38da1-881797.474
Route: <sip:192.168.1.1:5060>
From: <sip:00002@sip.com>;tag=274fb87c
To: <sip:00004@sip.com>
Call-ID: 71bee37a@00002.192.168.1.1
CSeq: 106123109 INVITE
Contact: <sip:00002@192.168.2.10>
Proxy-Authorization: Digest username="00002", realm="heliossv2",
nonce="0bb8807fa83ddb06fa5fd4fe5147f32c", uri="sip:00004@sip.com",

```

# FOMA/WLAN デュアル端末に関する技術参考資料 第 1.2 版

```
response="2c231cb40c186bac7f1d3a4019cab89a", algorithm=MD5, cnonce="0ee27932",
opaque="3de687565911eba5b32ed1aac9fc66d5", qop=auth, nc=00000001
Max-Forwards: 70
Supported: 100rel, replaces
Allow: INVITE, ACK, BYE, CANCEL, OPTIONS, PRACK, MESSAGE, REFER, NOTIFY
Content-Type: application/sdp
Accept: application/sdp, message/sipfrag
Content-Length: 249
```

```
v=0
o=- 85451 4701 IN IP4 192.168.2.10
s=-
c=IN IP4 192.168.2.10
t=0 0
m=audio 5008 RTP/AVP 0 8 4 18 96
a=rtpmap:0 PCMU/8000
a=rtpmap:8 PCMA/8000
a=rtpmap:4 G723/8000
a=rtpmap:18 G729/8000
a=rtpmap:96 telephone-event/8000
a=fmtp:96 0-11
```

---

F5 192.168.1.1:5062(2) -> 192.168.2.10:5060(1)

```
SIP/2.0 100 Trying
Via: SIP/2.0/UDP 192.168.2.10:5060;branch=z9hG4bK-79c38da1-881797.474
From: <sip:00002@sip.com>;tag=274fb87c
To: <sip:00004@sip.com>
Call-ID: 71bee37a@00002.192.168.1.1
CSeq: 106123109 INVITE
Content-Length: 0
```

---

F6 192.168.1.1:5062(2) -> 192.168.2.15:5060(3)

```
INVITE sip:00004@192.168.2.15 SIP/2.0
Via: SIP/2.0/UDP 192.168.1.1:5060;branch=z9hG4bK-805.371295.106123109
Via: SIP/2.0/UDP 192.168.2.10:5060;branch=z9hG4bK-79c38da1-881797.474
Record-Route: <sip:00004@192.168.1.1>
Route: <sip:192.168.1.1:5060>
From: 00002 <sip:00002@sip.com>;tag=274fb87c
To: <sip:00004@sip.com>
Call-ID: 71bee37a@00002.192.168.1.1
CSeq: 106123109 INVITE
Contact: <sip:00002@192.168.2.10>
max-forwards: 69
supported: 100rel
supported: replaces
Allow: INVITE, ACK, BYE, CANCEL, OPTIONS, PRACK, MESSAGE, REFER, NOTIFY
Content-Type: application/sdp
Accept: application/sdp, message/sipfrag
Content-Length: 249
```

```
v=0
o=- 85451 4701 IN IP4 192.168.2.10
s=-
c=IN IP4 192.168.2.10
t=0 0
m=audio 5008 RTP/AVP 0 8 4 18 96
a=rtpmap:0 PCMU/8000
a=rtpmap:8 PCMA/8000
a=rtpmap:4 G723/8000
a=rtpmap:18 G729/8000
a=rtpmap:96 telephone-event/8000
a=fmtp:96 0-11
```

---

F7 192.168.2.15:1135(3) -> 192.168.1.1:5060(2)

```
SIP/2.0 100 Trying
Via: SIP/2.0/UDP 192.168.1.1:5060;branch=z9hG4bK-805.371295.106123109
Via: SIP/2.0/UDP 192.168.2.10:5060;branch=z9hG4bK-79c38da1-881797.474
From: 00002 <sip:00002@sip.com>;tag=274fb87c
To: <sip:00004@sip.com>
Call-ID: 71bee37a@00002.192.168.1.1
CSeq: 106123109 INVITE
```

Content-Length: 0

---

F8 192.168.2.15:1135(3) -> 192.168.1.1:5060(2)

SIP/2.0 183 Session Progress  
 Via: SIP/2.0/UDP 192.168.1.1:5060;branch=z9hG4bK-805.371295.106123109  
 Via: SIP/2.0/UDP 192.168.2.10:5060;branch=z9hG4bK-79c38da1-881797.474  
 Record-Route: <sip:00004@192.168.1.1>  
 From: 00002 <sip:00002@sip.com>;tag=274fb87c  
 To: <sip:00004@sip.com>;tag=413fcd92  
 Call-ID: 71bee37a@00002.192.168.1.1  
 CSeq: 106123109 INVITE  
 Contact: <sip:00004@192.168.2.15>  
 Require: 100rel  
 RSeq: 1993438511  
 Content-Length: 0

---



---

F9 192.168.1.1:5062(2) -> 192.168.2.10:5060(1)

SIP/2.0 183 Session Progress  
 Via: SIP/2.0/UDP 192.168.2.10:5060;branch=z9hG4bK-79c38da1-881797.474  
 Record-Route: <sip:00004@192.168.1.1>  
 From: 00002 <sip:00002@sip.com>;tag=274fb87c  
 To: <sip:00004@sip.com>;tag=413fcd92  
 Call-ID: 71bee37a@00002.192.168.1.1  
 CSeq: 106123109 INVITE  
 Contact: <sip:00004@192.168.2.15>  
 require: 100rel  
 rseq: 1993438511  
 Content-Length: 0

---



---

F10 192.168.2.10:1091(1) -> 192.168.1.1:5060(2)

PRACK sip:00004@192.168.1.1 SIP/2.0  
 Via: SIP/2.0/UDP 192.168.2.10:5060;branch=z9hG4bK-3e6cb7f-881797.982  
 Route: <sip:00004@192.168.2.15>  
 From: 00002 <sip:00002@sip.com>;tag=274fb87c  
 To: <sip:00004@sip.com>;tag=413fcd92  
 Call-ID: 71bee37a@00002.192.168.1.1  
 CSeq: 106123110 PRACK  
 Proxy-Authorization: Digest username="00002", realm="heliossv2",  
 nonce="0bb8807fa83ddb06fa5fd4fe5147f32c", uri="sip:00004@192.168.1.1",  
 response="033019f78368b1723f3ccc73f5da3d58", algorithm=MD5,  
 opaque="3de687565911eba5b32ed1aac9fc66d5", qop=auth, nc=00000002  
 Max-Forwards: 70  
 Rack: 1993438511 106123109 INVITE  
 Content-Length: 0

---



---

F11 192.168.1.1:5062(2) -> 192.168.2.15:5060(3)

PRACK sip:00004@192.168.2.15 SIP/2.0  
 Via: SIP/2.0/UDP 192.168.1.1:5060;branch=z9hG4bK-805.1084365175.106123110  
 Via: SIP/2.0/UDP 192.168.2.10:5060;branch=z9hG4bK-3e6cb7f-881797.982  
 Route: <sip:00004@192.168.2.15>  
 From: 00002 <sip:00002@sip.com>;tag=274fb87c  
 To: <sip:00004@sip.com>;tag=413fcd92  
 Call-ID: 71bee37a@00002.192.168.1.1  
 CSeq: 106123110 PRACK  
 max-forwards: 69  
 rack: 1993438511 106123109 INVITE  
 Content-Length: 0

---



---

F12 192.168.2.15:1135(3) -> 192.168.1.1:5060(2)

SIP/2.0 200 OK  
 Via: SIP/2.0/UDP 192.168.1.1:5060;branch=z9hG4bK-805.1084365175.106123110

# FOMA/WLAN デュアル端末に関する技術参考資料 第 1.2 版

Via: SIP/2.0/UDP 192.168.2.10:5060;branch=z9hG4bK-3e6cb7f-881797.982  
 From: 00002 <sip:00002@sip.com>;tag=274fb87c  
 To: <sip:00004@sip.com>;tag=413fcd92  
 Call-ID: 71bee37a@00002.192.168.1.1  
 CSeq: 106123110 PRACK  
 Content-Length: 0

---

F13 192.168.1.1:5062(2) -> 192.168.2.10:5060(1)

SIP/2.0 200 OK  
 Via: SIP/2.0/UDP 192.168.2.10:5060;branch=z9hG4bK-3e6cb7f-881797.982  
 From: 00002 <sip:00002@sip.com>;tag=274fb87c  
 To: <sip:00004@sip.com>;tag=413fcd92  
 Call-ID: 71bee37a@00002.192.168.1.1  
 CSeq: 106123110 PRACK  
 Content-Length: 0

---

F14 192.168.2.15:1135(3) -> 192.168.1.1:5060(2)

SIP/2.0 180 Ringing  
 Via: SIP/2.0/UDP 192.168.1.1:5060;branch=z9hG4bK-805.371295.106123109  
 Via: SIP/2.0/UDP 192.168.2.10:5060;branch=z9hG4bK-79c38da1-881797.474  
 Record-Route: <sip:00004@192.168.1.1>  
 From: 00002 <sip:00002@sip.com>;tag=274fb87c  
 To: <sip:00004@sip.com>;tag=413fcd92  
 Call-ID: 71bee37a@00002.192.168.1.1  
 CSeq: 106123109 INVITE  
 Contact: <sip:00004@192.168.2.15>  
 Require: 100rel  
 RSeq: 1993438512  
 Content-Length: 0

---

F15 192.168.1.1:5062(2) -> 192.168.2.10:5060(1)

SIP/2.0 180 Ringing  
 Via: SIP/2.0/UDP 192.168.2.10:5060;branch=z9hG4bK-79c38da1-881797.474  
 Record-Route: <sip:00004@192.168.1.1>  
 From: 00002 <sip:00002@sip.com>;tag=274fb87c  
 To: <sip:00004@sip.com>;tag=413fcd92  
 Call-ID: 71bee37a@00002.192.168.1.1  
 CSeq: 106123109 INVITE  
 Contact: <sip:00004@192.168.2.15>  
 require: 100rel  
 rseq: 1993438512  
 Content-Length: 0

---

F16 192.168.2.10:1091(1) -> 192.168.1.1:5060(2)

PRACK sip:00004@192.168.1.1 SIP/2.0  
 Via: SIP/2.0/UDP 192.168.2.10:5060;branch=z9hG4bK-3814871b-881798.565  
 Route: <sip:00004@192.168.2.15>  
 From: 00002 <sip:00002@sip.com>;tag=274fb87c  
 To: <sip:00004@sip.com>;tag=413fcd92  
 Call-ID: 71bee37a@00002.192.168.1.1  
 CSeq: 106123111 PRACK  
 Proxy-Authorization: Digest username="00002", realm="heliossv2",  
 nonce="0bb8807fa83ddb06fa5fd4fe5147f32c", uri="sip:00004@192.168.1.1",  
 response="e6ac9fed163cafb41557efd8aa2e9b27", algorithm=MD5,  
 opaque="3de687565911eba5b32ed1aac9fc66d5", qop=auth, nc=00000003  
 Max-Forwards: 70  
 RAck: 1993438512 106123109 INVITE  
 Content-Length: 0

---

F17 192.168.1.1:5062(2) -> 192.168.2.15:5060(3)

PRACK sip:00004@192.168.2.15 SIP/2.0

# FOMA/WLAN デュアル端末に関する技術参考資料 第 1.2 版

Via: SIP/2.0/UDP 192.168.1.1:5060;branch=z9hG4bK-805.1084365175.106123111  
 Via: SIP/2.0/UDP 192.168.2.10:5060;branch=z9hG4bK-3814871b-881798.565  
 Route: <sip:00004@192.168.2.15>  
 From: 00002 <sip:00002@sip.com>;tag=274fb87c  
 To: <sip:00004@sip.com>;tag=413fcd92  
 Call-ID: 71bee37a@00002.192.168.1.1  
 CSeq: 106123111 PRACK  
 max-forwards: 69  
 rack: 1993438512 106123109 INVITE  
 Content-Length: 0

---

F18 192.168.2.15:1135(3) -> 192.168.1.1:5060(2)

SIP/2.0 200 OK  
 Via: SIP/2.0/UDP 192.168.1.1:5060;branch=z9hG4bK-805.1084365175.106123111  
 Via: SIP/2.0/UDP 192.168.2.10:5060;branch=z9hG4bK-3814871b-881798.565  
 From: 00002 <sip:00002@sip.com>;tag=274fb87c  
 To: <sip:00004@sip.com>;tag=413fcd92  
 Call-ID: 71bee37a@00002.192.168.1.1  
 CSeq: 106123111 PRACK  
 Content-Length: 0

---

F19 192.168.1.1:5062(2) -> 192.168.2.10:5060(1)

SIP/2.0 200 OK  
 Via: SIP/2.0/UDP 192.168.2.10:5060;branch=z9hG4bK-3814871b-881798.565  
 From: 00002 <sip:00002@sip.com>;tag=274fb87c  
 To: <sip:00004@sip.com>;tag=413fcd92  
 Call-ID: 71bee37a@00002.192.168.1.1  
 CSeq: 106123111 PRACK  
 Content-Length: 0

---

F20 192.168.2.15:1135(3) -> 192.168.1.1:5060(2)

SIP/2.0 200 OK  
 Via: SIP/2.0/UDP 192.168.1.1:5060;branch=z9hG4bK-805.371295.106123109  
 Via: SIP/2.0/UDP 192.168.2.10:5060;branch=z9hG4bK-79c38da1-881797.474  
 Record-Route: <sip:00004@192.168.1.1>  
 From: 00002 <sip:00002@sip.com>;tag=274fb87c  
 To: <sip:00004@sip.com>;tag=413fcd92  
 Call-ID: 71bee37a@00002.192.168.1.1  
 CSeq: 106123109 INVITE  
 Contact: <sip:00004@192.168.2.15>  
 Supported: 100rel, replaces  
 Allow: INVITE, ACK, BYE, CANCEL, OPTIONS, PRACK, MESSAGE, REFER, NOTIFY  
 Content-Type: application/sdp  
 Accept: application/sdp, message/sipfrag  
 Content-Length: 177

v=0  
 o=- 339127 14001 IN IP4 192.168.2.15  
 s=-  
 c=IN IP4 192.168.2.15  
 t=0 0  
 m=audio 5006 RTP/AVP 0 96  
 a=rtpmap:0 PCMU/8000  
 a=rtpmap:96 telephone-event/8000  
 a=fmtp:96 0-11

---

F21 192.168.1.1:5062(2) -> 192.168.2.10:5060(1)

SIP/2.0 200 OK  
 Via: SIP/2.0/UDP 192.168.2.10:5060;branch=z9hG4bK-79c38da1-881797.474  
 Record-Route: <sip:00004@192.168.1.1>  
 From: 00002 <sip:00002@sip.com>;tag=274fb87c  
 To: <sip:00004@sip.com>;tag=413fcd92  
 Call-ID: 71bee37a@00002.192.168.1.1  
 CSeq: 106123109 INVITE  
 Contact: <sip:00004@192.168.2.15>  
 supported: 100rel

supported: replaces  
 Allow: INVITE, ACK, BYE, CANCEL, OPTIONS, PRACK, MESSAGE, REFER, NOTIFY  
 Content-Type: application/sdp  
 Accept: application/sdp, message/sipfrag  
 Content-Length: 177

v=0  
 o=- 339127 14001 IN IP4 192.168.2.15  
 s=-  
 c=IN IP4 192.168.2.15  
 t=0 0  
 m=audio 5006 RTP/AVP 0 96  
 a=rtpmap:0 PCMU/8000  
 a=rtpmap:96 telephone-event/8000  
 a=fmtp:96 0-11

F22 192.168.2.10:1091(1) -> 192.168.1.1:5060(2)

ACK sip:00004@192.168.1.1 SIP/2.0  
 Via: SIP/2.0/UDP 192.168.2.10:5060;branch=z9hG4bK-7b68044c-881802.534  
 Route: <sip:00004@192.168.2.15>  
 From: 00002 <sip:00002@sip.com>;tag=274fb87c  
 To: <sip:00004@sip.com>;tag=413fcd92  
 Call-ID: 71bee37a@00002.192.168.1.1  
 CSeq: 106123109 ACK  
 Proxy-Authorization: Digest username="00002",  
 nonce="0bb8807fa83ddb06fa5fd4fe5147f32c",  
 response="2c231cb40c186bac7f1d3a4019cab89a",  
 opaque="3de687565911eba5b32ed1aac9fc66d5", qop=auth, nc=00000001  
 algorithm=MD5,  
 uri="sip:00004@sip.com",  
 cnonce="0ee27932",  
 Max-Forwards: 70  
 Content-Length: 0

F23 192.168.1.1:5062(2) -> 192.168.2.15:5060(3)

ACK sip:00004@192.168.2.15 SIP/2.0  
 Via: SIP/2.0/UDP 192.168.1.1:5060;branch=z9hG4bK-805.1084365179.106123109  
 Via: SIP/2.0/UDP 192.168.2.10:5060;branch=z9hG4bK-7b68044c-881802.534  
 From: 00002 <sip:00002@sip.com>;tag=274fb87c  
 To: <sip:00004@sip.com>;tag=413fcd92  
 Call-ID: 71bee37a@00002.192.168.1.1  
 CSeq: 106123109 ACK  
 max-forwards: 69  
 Content-Length: 0

F24 192.168.2.15:1135(3) -> 192.168.1.1:5060(2)

INVITE sip:00004@192.168.1.1 SIP/2.0  
 Via: SIP/2.0/UDP 192.168.2.15:5060;branch=z9hG4bK-6b214e94-881639.903  
 Route: <sip:00002@192.168.2.10>  
 From: <sip:00004@sip.com>;tag=413fcd92  
 To: 00002 <sip:00002@sip.com>;tag=274fb87c  
 Call-ID: 71bee37a@00002.192.168.1.1  
 CSeq: 9616302 INVITE  
 Contact: <sip:00004@192.168.2.15>  
 Max-Forwards: 70  
 Supported: 100rel, replaces  
 Allow: INVITE, ACK, BYE, CANCEL, OPTIONS, PRACK, MESSAGE, REFER, NOTIFY  
 Content-Type: application/sdp  
 Content-Length: 189

v=0  
 o=- 890733 14002 IN IP4 192.168.2.15  
 s=-  
 c=IN IP4 192.168.2.15  
 t=0 0  
 m=audio 5006 RTP/AVP 0 96  
 a=rtpmap:0 PCMU/8000  
 a=rtpmap:96 telephone-event/8000  
 a=fmtp:96 0-11  
 a=inactive

F25 192.168.1.1:5062(2) -> 192.168.2.15:5060(3)

SIP/2.0 100 Trying  
 Via: SIP/2.0/UDP 192.168.2.15:5060;branch=z9hG4bK-6b214e94-881639.903  
 From: <sip:00004@sip.com>;tag=413fcd92  
 To: 00002 <sip:00002@sip.com>;tag=274fb87c  
 Call-ID: 71bee37a@00002.192.168.1.1  
 CSeq: 9616302 INVITE  
 Content-Length: 0

F26 192.168.1.1:5062(2) -> 192.168.2.10:5060(1)

INVITE sip:00002@192.168.2.10 SIP/2.0  
 Via: SIP/2.0/UDP 192.168.1.1:5060;branch=z9hG4bK-804.371295.9616302  
 Via: SIP/2.0/UDP 192.168.2.15:5060;branch=z9hG4bK-6b214e94-881639.903  
 Record-Route: <sip:00004@192.168.1.1>  
 Route: <sip:00002@192.168.2.10>  
 From: <sip:00004@sip.com>;tag=413fcd92  
 To: 00002 <sip:00002@sip.com>;tag=274fb87c  
 Call-ID: 71bee37a@00002.192.168.1.1  
 CSeq: 9616302 INVITE  
 Contact: <sip:00004@192.168.2.15>  
 max-forwards: 69  
 supported: 100rel  
 supported: replaces  
 Allow: INVITE, ACK, BYE, CANCEL, OPTIONS, PRACK, MESSAGE, REFER, NOTIFY  
 Content-Type: application/sdp  
 Content-Length: 189

v=0  
 o=- 890733 14002 IN IP4 192.168.2.15  
 s=-  
 c=IN IP4 192.168.2.15  
 t=0 0  
 m=audio 5006 RTP/AVP 0 96  
 a=rtpmap:0 PCMU/8000  
 a=rtpmap:96 telephone-event/8000  
 a=fmtp:96 0-11  
 a=inactive

F27 192.168.2.10:1091(1) -> 192.168.1.1:5060(2)

SIP/2.0 100 Trying  
 Via: SIP/2.0/UDP 192.168.1.1:5060;branch=z9hG4bK-804.371295.9616302  
 Via: SIP/2.0/UDP 192.168.2.15:5060;branch=z9hG4bK-6b214e94-881639.903  
 From: <sip:00004@sip.com>;tag=413fcd92  
 To: 00002 <sip:00002@sip.com>;tag=274fb87c  
 Call-ID: 71bee37a@00002.192.168.1.1  
 CSeq: 9616302 INVITE  
 Content-Length: 0

F28 192.168.2.10:1091(1) -> 192.168.1.1:5060(2)

SIP/2.0 200 OK  
 Via: SIP/2.0/UDP 192.168.1.1:5060;branch=z9hG4bK-804.371295.9616302  
 Via: SIP/2.0/UDP 192.168.2.15:5060;branch=z9hG4bK-6b214e94-881639.903  
 Record-Route: <sip:00004@192.168.1.1>  
 From: <sip:00004@sip.com>;tag=413fcd92  
 To: 00002 <sip:00002@sip.com>;tag=274fb87c  
 Call-ID: 71bee37a@00002.192.168.1.1  
 CSeq: 9616302 INVITE  
 Contact: <sip:00002@192.168.2.10>  
 Supported: 100rel, replaces  
 Allow: INVITE, ACK, BYE, CANCEL, OPTIONS, PRACK, MESSAGE, REFER, NOTIFY  
 Content-Type: application/sdp  
 Accept: application/sdp, message/sipfrag  
 Content-Length: 188

v=0  
 o=- 938356 4702 IN IP4 192.168.2.10  
 s=-  
 c=IN IP4 192.168.2.10  
 t=0 0

m=audio 5008 RTP/AVP 0 96  
a=rtpmap:0 PCMU/8000  
a=rtpmap:96 telephone-event/8000  
a=fmtp:96 0-11  
a=inactive

---

F29 192.168.1.1:5062(2) -> 192.168.2.15:5060(3)

SIP/2.0 200 OK  
Via: SIP/2.0/UDP 192.168.2.15:5060;branch=z9hG4bK-6b214e94-881639.903  
Record-Route: <sip:00004@192.168.1.1>  
From: <sip:00004@sip.com>;tag=413fcd92  
To: 00002 <sip:00002@sip.com>;tag=274fb87c  
Call-ID: 71bee37a@00002.192.168.1.1  
CSeq: 9616302 INVITE  
Contact: <sip:00002@192.168.2.10>  
supported: 100rel  
supported: replaces  
Allow: INVITE, ACK, BYE, CANCEL, OPTIONS, PRACK, MESSAGE, REFER, NOTIFY  
Content-Type: application/sdp  
Accept: application/sdp, message/sipfrag  
Content-Length: 188

v=0  
o=- 938356 4702 IN IP4 192.168.2.10  
s=-  
c=IN IP4 192.168.2.10  
t=0 0  
m=audio 5008 RTP/AVP 0 96  
a=rtpmap:0 PCMU/8000  
a=rtpmap:96 telephone-event/8000  
a=fmtp:96 0-11  
a=inactive

---

F30 192.168.2.15:1135(3) -> 192.168.1.1:5060(2)

ACK sip:00004@192.168.1.1 SIP/2.0  
Via: SIP/2.0/UDP 192.168.2.15:5060;branch=z9hG4bK-3cfbeff-881640.166  
Route: <sip:00002@192.168.2.10>  
From: <sip:00004@sip.com>;tag=413fcd92  
To: 00002 <sip:00002@sip.com>;tag=274fb87c  
Call-ID: 71bee37a@00002.192.168.1.1  
CSeq: 9616302 ACK  
Max-Forwards: 70  
Content-Length: 0

---

F31 192.168.1.1:5062(2) -> 192.168.2.10:5060(1)

ACK sip:00002@192.168.2.10 SIP/2.0  
Via: SIP/2.0/UDP 192.168.1.1:5060;branch=z9hG4bK-804.1084365182.9616302  
Via: SIP/2.0/UDP 192.168.2.15:5060;branch=z9hG4bK-3cfbeff-881640.166  
From: <sip:00004@sip.com>;tag=413fcd92  
To: 00002 <sip:00002@sip.com>;tag=274fb87c  
Call-ID: 71bee37a@00002.192.168.1.1  
CSeq: 9616302 ACK  
max-forwards: 69  
Content-Length: 0

---

F32 192.168.2.15:1135(3) -> 192.168.1.1:5060(2)

REFER sip:00004@192.168.1.1 SIP/2.0  
Via: SIP/2.0/UDP 192.168.2.15:5060;branch=z9hG4bK-6ab461fc-881646.720  
Route: <sip:00002@192.168.2.10>  
From: <sip:00004@sip.com>;tag=413fcd92  
To: 00002 <sip:00002@sip.com>;tag=274fb87c  
Call-ID: 71bee37a@00002.192.168.1.1  
CSeq: 9616303 REFER  
Contact: <sip:00004@192.168.2.15>  
Max-Forwards: 70  
Refer-To: <sip:00005@sip.com>  
Referred-By: <sip:00004@sip.com>



Content-Length: 0

---

F33 192.168.1.1:5062(2) -> 192.168.2.10:5060(1)

REFER sip:00002@192.168.2.10 SIP/2.0  
 Via: SIP/2.0/UDP 192.168.1.1:5060;branch=z9hG4bK-804.1084365188.9616303  
 Via: SIP/2.0/UDP 192.168.2.15:5060;branch=z9hG4bK-6ab461fc-881646.720  
 Route: <sip:00002@192.168.2.10>  
 From: <sip:00004@sip.com>;tag=413fcd92  
 To: 00002 <sip:00002@sip.com>;tag=274fb87c  
 Call-ID: 71bee37a@00002.192.168.1.1  
 CSeq: 9616303 REFER  
 Contact: <sip:00004@192.168.2.15>  
 max-forwards: 69  
 refer-to: <sip:00005@sip.com>  
 referred-by: <sip:00004@sip.com>  
 Content-Length: 0

---

F34 192.168.2.10:1091(1) -> 192.168.1.1:5060(2)

SIP/2.0 202 Accepted  
 Via: SIP/2.0/UDP 192.168.1.1:5060;branch=z9hG4bK-804.1084365188.9616303  
 Via: SIP/2.0/UDP 192.168.2.15:5060;branch=z9hG4bK-6ab461fc-881646.720  
 From: <sip:00004@sip.com>;tag=413fcd92  
 To: 00002 <sip:00002@sip.com>;tag=274fb87c  
 Call-ID: 71bee37a@00002.192.168.1.1  
 CSeq: 9616303 REFER  
 Contact: <sip:00002@192.168.2.10>  
 Content-Length: 0

---

F35 192.168.2.10:1091(1) -> 192.168.1.1:5060(2)

NOTIFY sip:00004@192.168.1.1 SIP/2.0  
 Via: SIP/2.0/UDP 192.168.2.10:5060;branch=z9hG4bK-4bc3a465-881811.597  
 Route: <sip:00004@192.168.2.15>  
 From: 00002 <sip:00002@sip.com>;tag=274fb87c  
 To: <sip:00004@sip.com>;tag=413fcd92  
 Call-ID: 71bee37a@00002.192.168.1.1  
 CSeq: 106123112 NOTIFY  
 Contact: <sip:00002@192.168.2.10>  
 Proxy-Authorization: Digest username="00002", realm="heliossv2",  
 nonce="0bb8807fa83ddb06fa5fd4fe5147f32c", uri="sip:00004@192.168.1.1",  
 response="c04923308832b74f66ce60972730d1e1", algorithm=MD5,  
 opaque="3de687565911eba5b32ed1aac9fc66d5", qop=auth, nc=00000004, cnonce="314ce5ea",  
 Max-Forwards: 70  
 Event: refer  
 Subscription-State: active;expires=30  
 Content-Type: message/sipfrag  
 Content-Length: 18

SIP/2.0 100 Trying

---

F36 192.168.1.1:5062(2) -> 192.168.2.15:5060(3)

SIP/2.0 202 Accepted  
 Via: SIP/2.0/UDP 192.168.2.15:5060;branch=z9hG4bK-6ab461fc-881646.720  
 From: <sip:00004@sip.com>;tag=413fcd92  
 To: 00002 <sip:00002@sip.com>;tag=274fb87c  
 Call-ID: 71bee37a@00002.192.168.1.1  
 CSeq: 9616303 REFER  
 Contact: <sip:00002@192.168.2.10>  
 Content-Length: 0

---

F37 192.168.1.1:5062(2) -> 192.168.2.15:5060(3)

NOTIFY sip:00004@192.168.2.15 SIP/2.0  
 Via: SIP/2.0/UDP 192.168.1.1:5060;branch=z9hG4bK-805.1084365188.106123112  
 Via: SIP/2.0/UDP 192.168.2.10:5060;branch=z9hG4bK-4bc3a465-881811.597

```

Route: <sip:00004@192.168.2.15>
From: 00002 <sip:00002@sip.com>;tag=274fb87c
To: <sip:00004@sip.com>;tag=413fcd92
Call-ID: 71bee37a@00002.192.168.1.1
CSeq: 106123112 NOTIFY
Contact: <sip:00002@192.168.2.10>
max-forwards: 69
event: refer
subscription-state: active;expires=30
Content-Type: message/sipfrag
Content-Length: 18

```

SIP/2.0 100 Trying

F38 192.168.2.15:1135(3) -> 192.168.1.1:5060(2)

```

SIP/2.0 200 OK
Via: SIP/2.0/UDP 192.168.1.1:5060;branch=z9hG4bK-805.1084365188.106123112
Via: SIP/2.0/UDP 192.168.2.10:5060;branch=z9hG4bK-4bc3a465-881811.597
From: 00002 <sip:00002@sip.com>;tag=274fb87c
To: <sip:00004@sip.com>;tag=413fcd92
Call-ID: 71bee37a@00002.192.168.1.1
CSeq: 106123112 NOTIFY
Content-Length: 0

```

F39 192.168.2.15:1135(3) -> 192.168.1.1:5060(2)

```

BYE sip:00004@192.168.1.1 SIP/2.0
Via: SIP/2.0/UDP 192.168.2.15:5060;branch=z9hG4bK-1fa79a2-881646.843
Route: <sip:00002@192.168.2.10>
From: <sip:00004@sip.com>;tag=413fcd92
To: 00002 <sip:00002@sip.com>;tag=274fb87c
Call-ID: 71bee37a@00002.192.168.1.1
CSeq: 9616304 BYE
Max-Forwards: 70
Content-Length: 0

```

F40 192.168.1.1:5062(2) -> 192.168.2.10:5060(1)

```

SIP/2.0 200 OK
Via: SIP/2.0/UDP 192.168.2.10:5060;branch=z9hG4bK-4bc3a465-881811.597
From: 00002 <sip:00002@sip.com>;tag=274fb87c
To: <sip:00004@sip.com>;tag=413fcd92
Call-ID: 71bee37a@00002.192.168.1.1
CSeq: 106123112 NOTIFY
Content-Length: 0

```

F41 192.168.1.1:5062(2) -> 192.168.2.10:5060(1)

```

BYE sip:00002@192.168.2.10 SIP/2.0
Via: SIP/2.0/UDP 192.168.1.1:5060;branch=z9hG4bK-804.1084365188.9616304
Via: SIP/2.0/UDP 192.168.2.15:5060;branch=z9hG4bK-1fa79a2-881646.843
Route: <sip:00002@192.168.2.10>
From: <sip:00004@sip.com>;tag=413fcd92
To: 00002 <sip:00002@sip.com>;tag=274fb87c
Call-ID: 71bee37a@00002.192.168.1.1
CSeq: 9616304 BYE
max-forwards: 69
Content-Length: 0

```

F42 192.168.2.10:1091(1) -> 192.168.1.1:5060(2)

```

SIP/2.0 200 OK
Via: SIP/2.0/UDP 192.168.1.1:5060;branch=z9hG4bK-804.1084365188.9616304
Via: SIP/2.0/UDP 192.168.2.15:5060;branch=z9hG4bK-1fa79a2-881646.843
From: <sip:00004@sip.com>;tag=413fcd92
To: 00002 <sip:00002@sip.com>;tag=274fb87c
Call-ID: 71bee37a@00002.192.168.1.1

```

CSeq: 9616304 BYE  
Content-Length: 0

F43 192.168.1.1:5062(2) -> 192.168.2.15:5060(3)

SIP/2.0 200 OK  
Via: SIP/2.0/UDP 192.168.2.15:5060;branch=z9hG4bK-1fa79a2-881646.843  
From: <sip:00004@sip.com>;tag=413fcd92  
To: 00002 <sip:00002@sip.com>;tag=274fb87c  
Call-ID: 71bee37a@00002.192.168.1.1  
CSeq: 9616304 BYE  
Content-Length: 0

F44 192.168.2.10:1091(1) -> 192.168.1.1:5060(2)

INVITE sip:00005@sip.com SIP/2.0  
Via: SIP/2.0/UDP 192.168.2.10:5060;branch=z9hG4bK-5a41446d-881811.764  
Route: <sip:192.168.1.1:5060>  
From: <sip:00002@sip.com>;tag=4c8196ca  
To: <sip:00005@sip.com>  
Call-ID: 76dfb1e9@00002.192.168.1.1  
CSeq: 1110893435 INVITE  
Contact: <sip:00002@192.168.2.10>  
Proxy-Authorization: Digest username="00002", realm="heliossv2",  
nonce="0bb8807fa83ddb06fa5fd4fe5147f32c", uri="sip:00005@sip.com",  
response="1b1d325470b4a2abb44b2b87b0dffbf9", algorithm=MD5, cnonce="6d91f623",  
opaque="3de687565911eba5b32ed1aac9fc66d5", qop=auth, nc=00000005  
Max-Forwards: 70  
Supported: 100rel, replaces  
Referred-By: <sip:00004@sip.com>  
Allow: INVITE, ACK, BYE, CANCEL, OPTIONS, PRACK, MESSAGE, REFER, NOTIFY  
Content-Type: application/sdp  
Accept: application/sdp, message/sipfrag  
Content-Length: 176

v=0  
o=- 755942 4701 IN IP4 192.168.2.10  
s=-  
c=IN IP4 192.168.2.10  
t=0 0  
m=audio 5006 RTP/AVP 0 96  
a=rtpmap:0 PCMU/8000  
a=rtpmap:96 telephone-event/8000  
a=fmtp:96 0-11

F45 192.168.1.1:5062(2) -> 192.168.2.10:5060(1)

SIP/2.0 407 Proxy Authentication Required  
Via: SIP/2.0/UDP 192.168.2.10:5060;branch=z9hG4bK-5a41446d-881811.764  
From: <sip:00002@sip.com>;tag=4c8196ca  
To: <sip:00005@sip.com>  
Call-ID: 76dfb1e9@00002.192.168.1.1  
CSeq: 1110893435 INVITE  
Proxy-Authenticate: Digest realm="heliossv2", nonce="613029399a88be260e0d881574c85b1f",  
opaque="0bb9f37f2c8120f6ad604c001a088c2f", stale=false, algorithm=MD5, qop="auth,auth-int"  
Content-Length: 0

F46 192.168.2.10:1091(1) -> 192.168.1.1:5060(2)

ACK sip:00005@sip.com SIP/2.0  
Via: SIP/2.0/UDP 192.168.2.10:5060;branch=z9hG4bK-5a41446d-881811.764  
Route: <sip:192.168.1.1:5060>  
From: <sip:00002@sip.com>;tag=4c8196ca  
To: <sip:00005@sip.com>  
Call-ID: 76dfb1e9@00002.192.168.1.1  
CSeq: 1110893435 ACK  
Content-Length: 0

F47 192.168.2.10:1091(1) -> 192.168.1.1:5060(2)

```

INVITE sip:00005@sip.com SIP/2.0
Via: SIP/2.0/UDP 192.168.2.10:5060:branch=z9hG4bK-74961777-881811.974
Route: <sip:192.168.1.1:5060>
From: <sip:00002@sip.com>;tag=4c8196ca
To: <sip:00005@sip.com>
Call-ID: 76dfb1e9@00002.192.168.1.1
CSeq: 1110893436 INVITE
Contact: <sip:00002@192.168.2.10>
Proxy-Authorization: Digest username="00002", realm="heliossv2",
nonce="613029399a88be260e0d881574c85b1f", uri="sip:00005@sip.com",
response="28f6aead61992e405f79b4e34a70c019", algorithm=MD5,
opaque="0bb9f37f2c8120f6ad604c001a088c2f", qop=auth, nc=00000001
Max-Forwards: 70
Supported: 100rel, replaces
Referred-By: <sip:00004@sip.com>
Allow: INVITE, ACK, BYE, CANCEL, OPTIONS, PRACK, MESSAGE, REFER, NOTIFY
Content-Type: application/sdp
Accept: application/sdp, message/sipfrag
Content-Length: 176

v=0
o=- 755942 4701 IN IP4 192.168.2.10
s=-
c=IN IP4 192.168.2.10
t=0 0
m=audio 5006 RTP/AVP 0 96
a=rtpmap:0 PCMU/8000
a=rtpmap:96 telephone-event/8000
a=fmtp:96 0-11

```

F48 192.168.1.1:5062(2) -> 192.168.2.10:5060(1)

```

SIP/2.0 100 Trying
Via: SIP/2.0/UDP 192.168.2.10:5060:branch=z9hG4bK-74961777-881811.974
From: <sip:00002@sip.com>;tag=4c8196ca
To: <sip:00005@sip.com>
Call-ID: 76dfb1e9@00002.192.168.1.1
CSeq: 1110893436 INVITE
Content-Length: 0

```

F49 192.168.1.1:5062(2) -> 192.168.2.14:5060(4)

```

INVITE sip:00005@192.168.2.14 SIP/2.0
Via: SIP/2.0/UDP 192.168.1.1:5060:branch=z9hG4bK-807.041336.1110893436
Via: SIP/2.0/UDP 192.168.2.10:5060:branch=z9hG4bK-74961777-881811.974
Record-Route: <sip:00005@192.168.1.1>
Route: <sip:192.168.1.1:5060>
From: 00002 <sip:00002@sip.com>;tag=4c8196ca
To: <sip:00005@sip.com>
Call-ID: 76dfb1e9@00002.192.168.1.1
CSeq: 1110893436 INVITE
Contact: <sip:00002@192.168.2.10>
max-forwards: 69
supported: 100rel
supported: replaces
referred-by: <sip:00004@sip.com>
Allow: INVITE, ACK, BYE, CANCEL, OPTIONS, PRACK, MESSAGE, REFER, NOTIFY
Content-Type: application/sdp
Accept: application/sdp, message/sipfrag
Content-Length: 176

v=0
o=- 755942 4701 IN IP4 192.168.2.10
s=-
c=IN IP4 192.168.2.10
t=0 0
m=audio 5006 RTP/AVP 0 96
a=rtpmap:0 PCMU/8000
a=rtpmap:96 telephone-event/8000
a=fmtp:96 0-11

```

F50 192.168.2.14:1058(4) -> 192.168.1.1:5060(2)

SIP/2.0 100 Trying  
 Via: SIP/2.0/UDP 192.168.1.1:5060;branch=z9hG4bK-807.041336.1110893436  
 Via: SIP/2.0/UDP 192.168.2.10:5060;branch=z9hG4bK-74961777-881811.974  
 From: 00002 <sip:00002@sip.com>;tag=4c8196ca  
 To: <sip:00005@sip.com>  
 Call-ID: 76dfb1e9@00002.192.168.1.1  
 CSeq: 1110893436 INVITE  
 Content-Length: 0

F51 192.168.2.14:1058(4) -> 192.168.1.1:5060(2)

SIP/2.0 183 Session Progress  
 Via: SIP/2.0/UDP 192.168.1.1:5060;branch=z9hG4bK-807.041336.1110893436  
 Via: SIP/2.0/UDP 192.168.2.10:5060;branch=z9hG4bK-74961777-881811.974  
 Record-Route: <sip:00005@192.168.1.1>  
 From: 00002 <sip:00002@sip.com>;tag=4c8196ca  
 To: <sip:00005@sip.com>;tag=2dcc2b59  
 Call-ID: 76dfb1e9@00002.192.168.1.1  
 CSeq: 1110893436 INVITE  
 Contact: <sip:00005@192.168.2.14>  
 Require: 100rel  
 RSeq: 367903454  
 Content-Length: 0

F52 192.168.1.1:5062(2) -> 192.168.2.10:5060(1)

SIP/2.0 183 Session Progress  
 Via: SIP/2.0/UDP 192.168.2.10:5060;branch=z9hG4bK-74961777-881811.974  
 Record-Route: <sip:00005@192.168.1.1>  
 From: 00002 <sip:00002@sip.com>;tag=4c8196ca  
 To: <sip:00005@sip.com>;tag=2dcc2b59  
 Call-ID: 76dfb1e9@00002.192.168.1.1  
 CSeq: 1110893436 INVITE  
 Contact: <sip:00005@192.168.2.14>  
 require: 100rel  
 rseq: 367903454  
 Content-Length: 0

F53 192.168.2.10:1091(1) -> 192.168.1.1:5060(2)

PRACK sip:00005@192.168.1.1 SIP/2.0  
 Via: SIP/2.0/UDP 192.168.2.10:5060;branch=z9hG4bK-51da6d89-881813.296  
 Route: <sip:00005@192.168.2.14>  
 From: 00002 <sip:00002@sip.com>;tag=4c8196ca  
 To: <sip:00005@sip.com>;tag=2dcc2b59  
 Call-ID: 76dfb1e9@00002.192.168.1.1  
 CSeq: 1110893437 PRACK  
 Proxy-Authorization: Digest username="00002", realm="heliossv2",  
 nonce="613029399a88be260e0d881574c85b1f", uri="sip:00005@192.168.1.1",  
 response="186910d3d3b1157c67870ef3ec458d3d", algorithm=MD5,  
 opaque="0bb9f37f2c8120f6ad604c001a088c2f", qop=auth, nc=00000002  
 Max-Forwards: 70  
 Rack: 367903454 1110893436 INVITE  
 Content-Length: 0

F54 192.168.1.1:5062(2) -> 192.168.2.14:5060(4)

PRACK sip:00005@192.168.2.14 SIP/2.0  
 Via: SIP/2.0/UDP 192.168.1.1:5060;branch=z9hG4bK-807.1084365190.1110893437  
 Via: SIP/2.0/UDP 192.168.2.10:5060;branch=z9hG4bK-51da6d89-881813.296  
 Route: <sip:00005@192.168.2.14>  
 From: 00002 <sip:00002@sip.com>;tag=4c8196ca  
 To: <sip:00005@sip.com>;tag=2dcc2b59  
 Call-ID: 76dfb1e9@00002.192.168.1.1  
 CSeq: 1110893437 PRACK  
 max-forwards: 69  
 rack: 367903454 1110893436 INVITE

Content-Length: 0

=====

F55 192.168.2.14:1058(4) -&gt; 192.168.1.1:5060(2)

SIP/2.0 200 OK  
 Via: SIP/2.0/UDP 192.168.1.1:5060;branch=z9hG4bK-807.1084365190.1110893437  
 Via: SIP/2.0/UDP 192.168.2.10:5060;branch=z9hG4bK-51da6d89-881813.296  
 From: 00002 <sip:00002@sip.com>;tag=4c8196ca  
 To: <sip:00005@sip.com>;tag=2dcc2b59  
 Call-ID: 76dfb1e9@00002.192.168.1.1  
 CSeq: 1110893437 PRACK  
 Content-Length: 0

=====

F56 192.168.1.1:5062(2) -&gt; 192.168.2.10:5060(1)

SIP/2.0 200 OK  
 Via: SIP/2.0/UDP 192.168.2.10:5060;branch=z9hG4bK-51da6d89-881813.296  
 From: 00002 <sip:00002@sip.com>;tag=4c8196ca  
 To: <sip:00005@sip.com>;tag=2dcc2b59  
 Call-ID: 76dfb1e9@00002.192.168.1.1  
 CSeq: 1110893437 PRACK  
 Content-Length: 0

=====

F57 192.168.2.14:1058(4) -&gt; 192.168.1.1:5060(2)

SIP/2.0 180 Ringing  
 Via: SIP/2.0/UDP 192.168.1.1:5060;branch=z9hG4bK-807.041336.1110893436  
 Via: SIP/2.0/UDP 192.168.2.10:5060;branch=z9hG4bK-74961777-881811.974  
 Record-Route: <sip:00005@192.168.1.1>  
 From: 00002 <sip:00002@sip.com>;tag=4c8196ca  
 To: <sip:00005@sip.com>;tag=2dcc2b59  
 Call-ID: 76dfb1e9@00002.192.168.1.1  
 CSeq: 1110893436 INVITE  
 Contact: <sip:00005@192.168.2.14>  
 Require: 100rel  
 RSeq: 367903455  
 Content-Length: 0

=====

F58 192.168.1.1:5062(2) -&gt; 192.168.2.10:5060(1)

SIP/2.0 180 Ringing  
 Via: SIP/2.0/UDP 192.168.2.10:5060;branch=z9hG4bK-74961777-881811.974  
 Record-Route: <sip:00005@192.168.1.1>  
 From: 00002 <sip:00002@sip.com>;tag=4c8196ca  
 To: <sip:00005@sip.com>;tag=2dcc2b59  
 Call-ID: 76dfb1e9@00002.192.168.1.1  
 CSeq: 1110893436 INVITE  
 Contact: <sip:00005@192.168.2.14>  
 require: 100rel  
 rseq: 367903455  
 Content-Length: 0

=====

F59 192.168.2.10:1091(1) -&gt; 192.168.1.1:5060(2)

PRACK sip:00005@192.168.1.1 SIP/2.0  
 Via: SIP/2.0/UDP 192.168.2.10:5060;branch=z9hG4bK-6104981d-881813.875  
 Route: <sip:00005@192.168.2.14>  
 From: 00002 <sip:00002@sip.com>;tag=4c8196ca  
 To: <sip:00005@sip.com>;tag=2dcc2b59  
 Call-ID: 76dfb1e9@00002.192.168.1.1  
 CSeq: 1110893438 PRACK  
 Proxy-Authorization: Digest username="00002", realm="heliossv2",  
 nonce="613029399a88be260e0d881574c85b1f", uri="sip:00005@192.168.1.1",  
 response="8e336359ed53cc2b0f82e6211120e818", algorithm=MD5, cnonce="6b1ec640",  
 opaque="0bb9f37f2c8120f6ad604c001a088c2f", qop=auth, nc=00000003  
 Max-Forwards: 70

RAck: 367903455 1110893436 INVITE  
Content-Length: 0

F60 192.168.1.1:5062(2) -> 192.168.2.14:5060(4)

PRACK sip:00005@192.168.2.14 SIP/2.0  
Via: SIP/2.0/UDP 192.168.1.1:5060;branch=z9hG4bK-807.1084365191.1110893438  
Via: SIP/2.0/UDP 192.168.2.10:5060;branch=z9hG4bK-6104981d-881813.875  
Route: <sip:00005@192.168.2.14>  
From: 00002 <sip:00002@sip.com>;tag=4c8196ca  
To: <sip:00005@sip.com>;tag=2dcc2b59  
Call-ID: 76dfb1e9@00002.192.168.1.1  
CSeq: 1110893438 PRACK  
max-forwards: 69  
rack: 367903455 1110893436 INVITE  
Content-Length: 0

F61 192.168.2.14:1058(4) -> 192.168.1.1:5060(2)

SIP/2.0 200 OK  
Via: SIP/2.0/UDP 192.168.1.1:5060;branch=z9hG4bK-807.1084365191.1110893438  
Via: SIP/2.0/UDP 192.168.2.10:5060;branch=z9hG4bK-6104981d-881813.875  
From: 00002 <sip:00002@sip.com>;tag=4c8196ca  
To: <sip:00005@sip.com>;tag=2dcc2b59  
Call-ID: 76dfb1e9@00002.192.168.1.1  
CSeq: 1110893438 PRACK  
Content-Length: 0

F62 192.168.1.1:5062(2) -> 192.168.2.10:5060(1)

SIP/2.0 200 OK  
Via: SIP/2.0/UDP 192.168.2.10:5060;branch=z9hG4bK-6104981d-881813.875  
From: 00002 <sip:00002@sip.com>;tag=4c8196ca  
To: <sip:00005@sip.com>;tag=2dcc2b59  
Call-ID: 76dfb1e9@00002.192.168.1.1  
CSeq: 1110893438 PRACK  
Content-Length: 0

F63 192.168.2.14:1058(4) -> 192.168.1.1:5060(2)

SIP/2.0 486 Busy Here  
Via: SIP/2.0/UDP 192.168.1.1:5060;branch=z9hG4bK-807.041336.1110893436  
Via: SIP/2.0/UDP 192.168.2.10:5060;branch=z9hG4bK-74961777-881811.974  
From: 00002 <sip:00002@sip.com>;tag=4c8196ca  
To: <sip:00005@sip.com>;tag=2dcc2b59  
Call-ID: 76dfb1e9@00002.192.168.1.1  
CSeq: 1110893436 INVITE  
Content-Length: 0

F64 192.168.1.1:5062(2) -> 192.168.2.14:5060(4)

ACK sip:00005@192.168.2.14 SIP/2.0  
Via: SIP/2.0/UDP 192.168.1.1:5060;branch=z9hG4bK-807.041336.1110893436  
Route: <sip:192.168.1.1:5060>  
From: 00002 <sip:00002@sip.com>;tag=4c8196ca  
To: <sip:00005@sip.com>;tag=2dcc2b59  
Call-ID: 76dfb1e9@00002.192.168.1.1  
CSeq: 1110893436 ACK  
Content-Length: 0

F65 192.168.1.1:5062(2) -> 192.168.2.10:5060(1)

SIP/2.0 486 Busy Here

# FOMA/WLAN デュアル端末に関する技術参考資料 第 1.2 版

Via: SIP/2.0/UDP 192.168.2.10:5060;branch=z9hG4bK-74961777-881811.974  
 From: 00002 <sip:00002@sip.com>;tag=4c8196ca  
 To: <sip:00005@sip.com>;tag=2dcc2b59  
 Call-ID: 76dfb1e9@00002.192.168.1.1  
 CSeq: 1110893436 INVITE  
 Content-Length: 0

F66 192.168.2.10:1091(1) -> 192.168.1.1:5060(2)

ACK sip:00005@sip.com SIP/2.0  
 Via: SIP/2.0/UDP 192.168.2.10:5060;branch=z9hG4bK-74961777-881811.974  
 Route: <sip:192.168.1.1:5060>  
 From: 00002 <sip:00002@sip.com>;tag=4c8196ca  
 To: <sip:00005@sip.com>;tag=2dcc2b59  
 Call-ID: 76dfb1e9@00002.192.168.1.1  
 CSeq: 1110893436 ACK  
 Content-Length: 0

F67 192.168.2.10:1091(1) -> 192.168.1.1:5060(2)

NOTIFY sip:00004@192.168.1.1 SIP/2.0  
 Via: SIP/2.0/UDP 192.168.2.10:5060;branch=z9hG4bK-6ba56667-881818.195  
 Route: <sip:00004@192.168.2.15>  
 From: 00002 <sip:00002@sip.com>;tag=274fb87c  
 To: <sip:00004@sip.com>;tag=413fcd92  
 Call-ID: 71bee37a@00002.192.168.1.1  
 CSeq: 106123113 NOTIFY  
 Contact: <sip:00002@192.168.2.10>  
 Proxy-Authorization: Digest username="00002", realm="heliossv2",  
 nonce="613029399a88be260e0d881574c85b1f", uri="sip:00004@192.168.1.1",  
 response="43aa73552f5063174669e3949036a31d", algorithm=MD5,  
 opaque="0bb9f37f2c8120f6ad604c001a088c2f", qop=auth, nc=00000004,  
 cnonce="625792e6",  
 Max-Forwards: 70  
 Event: refer  
 Subscription-State: terminated;reason=noresource  
 Content-Type: message/sipfrag  
 Content-Length: 21

SIP/2.0 486 Busy Here

F68 192.168.1.1:5062(2) -> 192.168.2.15:5060(3)

NOTIFY sip:00004@192.168.2.15 SIP/2.0  
 Via: SIP/2.0/UDP 192.168.1.1:5060;branch=z9hG4bK-809.1084365195.106123113  
 Via: SIP/2.0/UDP 192.168.2.10:5060;branch=z9hG4bK-6ba56667-881818.195  
 Route: <sip:00004@192.168.2.15>  
 From: 00002 <sip:00002@sip.com>;tag=274fb87c  
 To: <sip:00004@sip.com>;tag=413fcd92  
 Call-ID: 71bee37a@00002.192.168.1.1  
 CSeq: 106123113 NOTIFY  
 Contact: <sip:00002@192.168.2.10>  
 max-forwards: 69  
 event: refer  
 subscription-state: terminated;reason=noresource  
 Content-Type: message/sipfrag  
 Content-Length: 21

SIP/2.0 486 Busy Here

F69 192.168.2.15:1135(3) -> 192.168.1.1:5060(2)

SIP/2.0 200 OK  
 Via: SIP/2.0/UDP 192.168.1.1:5060;branch=z9hG4bK-809.1084365195.106123113  
 Via: SIP/2.0/UDP 192.168.2.10:5060;branch=z9hG4bK-6ba56667-881818.195  
 From: 00002 <sip:00002@sip.com>;tag=274fb87c  
 To: <sip:00004@sip.com>;tag=413fcd92  
 Call-ID: 71bee37a@00002.192.168.1.1  
 CSeq: 106123113 NOTIFY  
 Content-Length: 0

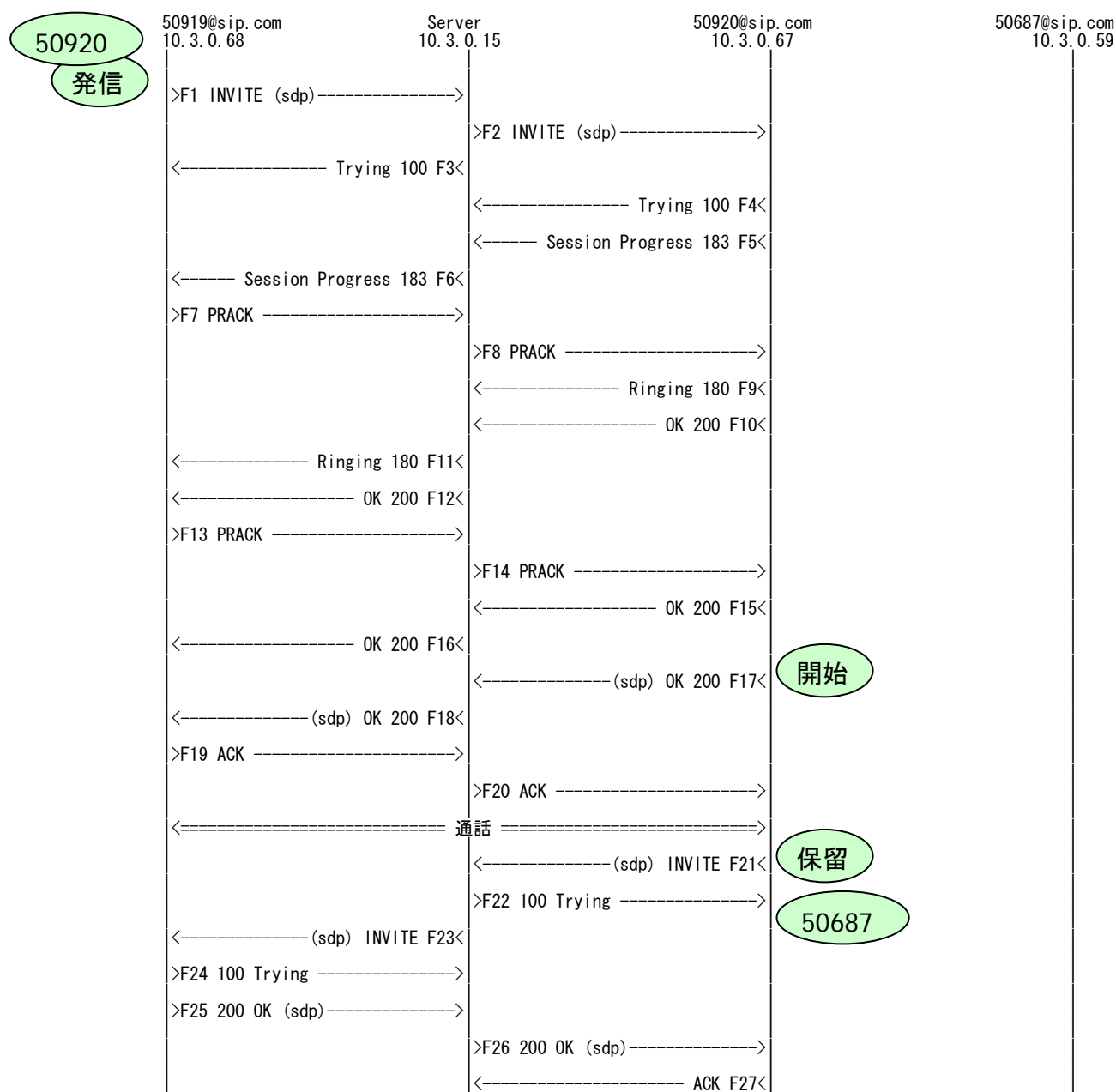


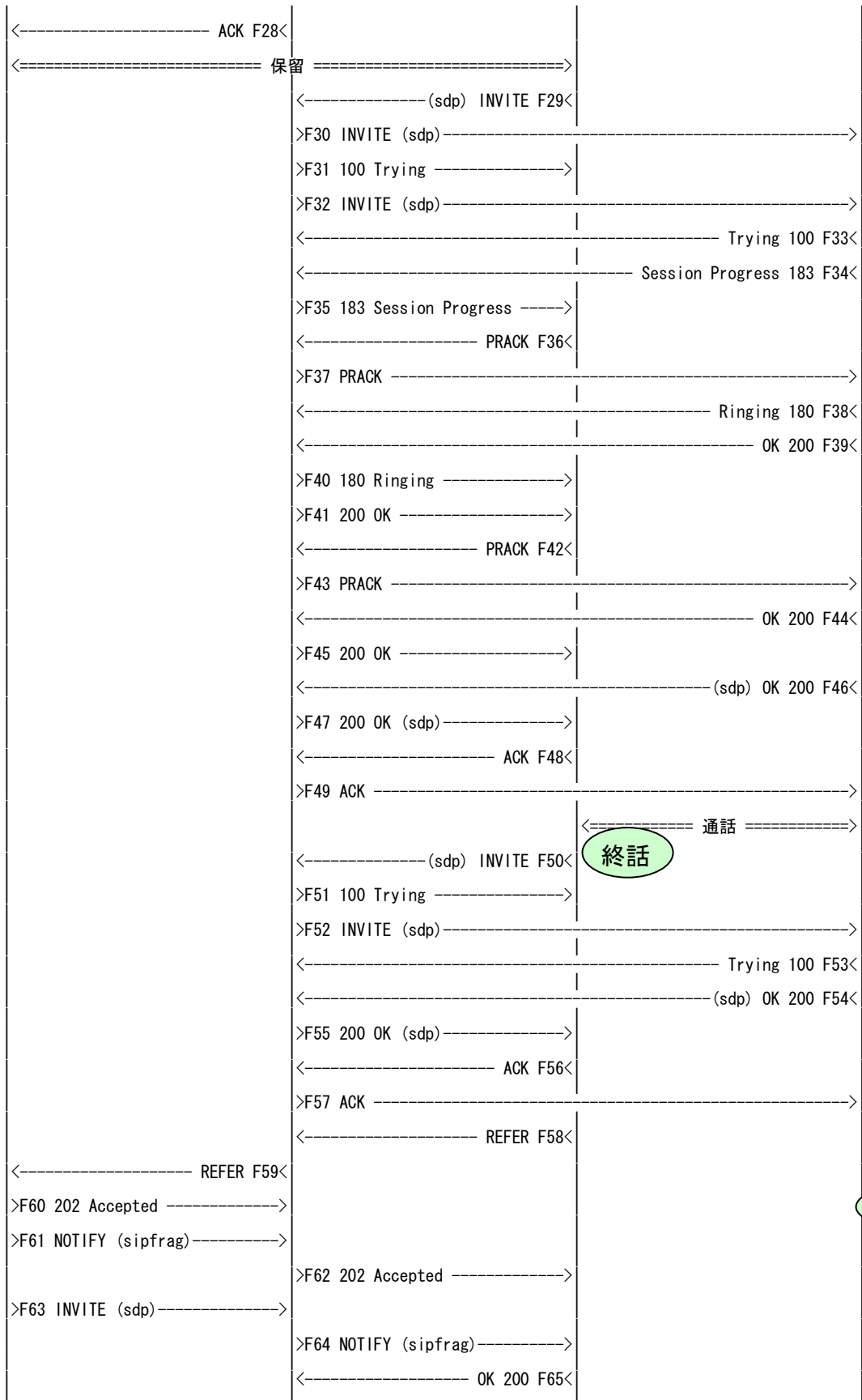
F70 192.168.1.1:5062(2) -&gt; 192.168.2.10:5060(1)

SIP/2.0 200 OK  
 Via: SIP/2.0/UDP 192.168.2.10:5060;branch=z9hG4bK-6ba56667-881818.195  
 From: 00002 <sip:00002@sip.com>;tag=274fb87c  
 To: <sip:00004@sip.com>;tag=413fcd92  
 Call-ID: 71bee37a@00002.192.168.1.1  
 CSeq: 106123113 NOTIFY  
 Content-Length: 0

## 11.6.11. 転送失敗時の呼び戻し(※N900iL では非対応)

被転送端末において転送中にエラーが発生した場合には、第1呼の呼び戻しを行う。





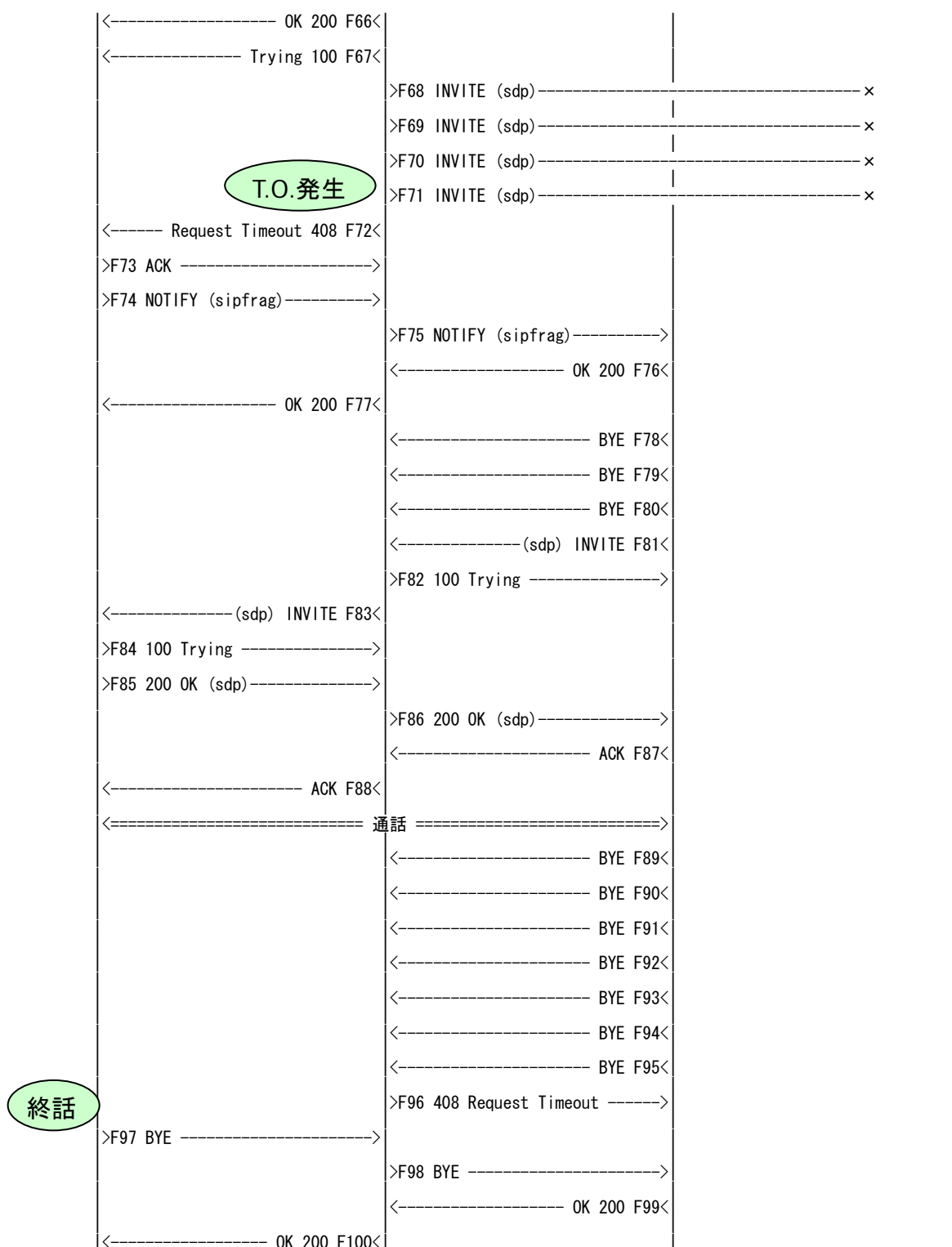


図 11-38 転送失敗時の呼び戻し

F1 10.3.0.68:1024(50919@sip.com) -> 10.3.0.15:5060(Server)

INVITE sip:50920@sip.com SIP/2.0  
 Via: SIP/2.0/UDP 10.3.0.68:5060;branch=z9hG4bK-5c7092c3-605915.982  
 From: <sip:50919@sip.com>;tag=298f7927

To: <sip:50920@sip.com>  
 Call-ID: 49e148d3bea7a564@50919.10.3.0.68  
 CSeq: 1056706920 INVITE  
 Contact: <sip:50919@10.3.0.68>  
 Max-Forwards: 70  
 Supported: 100rel, replaces, timer  
 Session-Expires: 300;refresher=uac  
 Allow: INVITE, ACK, BYE, CANCEL, OPTIONS, PRACK, MESSAGE, REFER, NOTIFY, UPDATE  
 Content-Type: application/sdp  
 Accept: application/sdp, message/sipfrag, multipart/mixed  
 Content-Length: 266

v=0  
 o=- 1164605915980122 1164605915980122 IN IP4 10.3.0.68  
 s=-  
 c=IN IP4 10.3.0.68  
 t=0 0  
 m=audio 5008 RTP/AVP 0 8 4 18 96  
 a=rtpmap:0 PCMU/8000  
 a=rtpmap:8 PCMA/8000  
 a=rtpmap:4 G723/8000  
 a=rtpmap:18 G729/8000  
 a=rtpmap:96 telephone-event/8000  
 a=fmtp:96 0-11

F2 10.3.0.15:5062(Server) -> 10.3.0.67:5060(50920@sip.com)

INVITE sip:50920@10.3.0.67 SIP/2.0  
 Via: SIP/2.0/UDP 10.3.0.15:5060;branch=z9hG4bK-814.448219.1056706920  
 Via: SIP/2.0/UDP 10.3.0.68:5060;branch=z9hG4bK-5c7092c3-605915.982  
 Record-Route: <sip:50920@10.3.0.15>  
 From: 50919 <sip:50919@sip.com>;tag=298f7927  
 To: <sip:50920@sip.com>  
 Call-ID: 49e148d3bea7a564@50919.10.3.0.68  
 CSeq: 1056706920 INVITE  
 Contact: <sip:50919@10.3.0.68>  
 max-forwards: 69  
 supported: 100rel  
 supported: replaces  
 supported: timer  
 session-expires: 300;refresher=uac  
 Allow: INVITE, ACK, BYE, CANCEL, OPTIONS, PRACK, MESSAGE, REFER, NOTIFY, UPDATE  
 Content-Type: application/sdp  
 Accept: application/sdp, message/sipfrag, multipart/mixed  
 Content-Length: 266

v=0  
 o=- 1164605915980122 1164605915980122 IN IP4 10.3.0.68  
 s=-  
 c=IN IP4 10.3.0.68  
 t=0 0  
 m=audio 5008 RTP/AVP 0 8 4 18 96  
 a=rtpmap:0 PCMU/8000  
 a=rtpmap:8 PCMA/8000  
 a=rtpmap:4 G723/8000  
 a=rtpmap:18 G729/8000  
 a=rtpmap:96 telephone-event/8000  
 a=fmtp:96 0-11

F3 10.3.0.15:5062(Server) -> 10.3.0.68:5060(50919@sip.com)

SIP/2.0 100 Trying  
 Via: SIP/2.0/UDP 10.3.0.68:5060;branch=z9hG4bK-5c7092c3-605915.982  
 From: <sip:50919@sip.com>;tag=298f7927  
 To: <sip:50920@sip.com>  
 Call-ID: 49e148d3bea7a564@50919.10.3.0.68  
 CSeq: 1056706920 INVITE  
 Content-Length: 0

F4 10.3.0.67:1024(50920@sip.com) -> 10.3.0.15:5060(Server)

SIP/2.0 100 Trying  
 Via: SIP/2.0/UDP 10.3.0.15:5060;branch=z9hG4bK-814.448219.1056706920  
 Via: SIP/2.0/UDP 10.3.0.68:5060;branch=z9hG4bK-5c7092c3-605915.982

From: 50919 <sip:50919@sip.com>;tag=298f7927  
 To: <sip:50920@sip.com>  
 Call-ID: 49e148d3bea7a564@50919.10.3.0.68  
 CSeq: 1056706920 INVITE  
 Content-Length: 0

F5 10.3.0.67:1024(50920@sip.com) -> 10.3.0.15:5060(Server)

SIP/2.0 183 Session Progress  
 Via: SIP/2.0/UDP 10.3.0.15:5060;branch=z9hG4bK-814.448219.1056706920  
 Via: SIP/2.0/UDP 10.3.0.68:5060;branch=z9hG4bK-5c7092c3-605915.982  
 Record-Route: <sip:50920@10.3.0.15>  
 From: 50919 <sip:50919@sip.com>;tag=298f7927  
 To: <sip:50920@sip.com>;tag=7e813a99  
 Call-ID: 49e148d3bea7a564@50919.10.3.0.68  
 CSeq: 1056706920 INVITE  
 Contact: <sip:50920@10.3.0.67>  
 Require: 100rel  
 RSeq: 1549381080  
 Content-Length: 0

F6 10.3.0.15:5062(Server) -> 10.3.0.68:5060(50919@sip.com)

SIP/2.0 183 Session Progress  
 Via: SIP/2.0/UDP 10.3.0.68:5060;branch=z9hG4bK-5c7092c3-605915.982  
 Record-Route: <sip:50920@10.3.0.15>  
 From: 50919 <sip:50919@sip.com>;tag=298f7927  
 To: <sip:50920@sip.com>;tag=7e813a99  
 Call-ID: 49e148d3bea7a564@50919.10.3.0.68  
 CSeq: 1056706920 INVITE  
 Contact: <sip:50920@10.3.0.67>  
 require: 100rel  
 rseq: 1549381080  
 Content-Length: 0

F7 10.3.0.68:1024(50919@sip.com) -> 10.3.0.15:5060(Server)

PRACK sip:50920@10.3.0.15 SIP/2.0  
 Via: SIP/2.0/UDP 10.3.0.68:5060;branch=z9hG4bK-44f75f7c-605917.225  
 Route: <sip:50920@10.3.0.67>  
 From: 50919 <sip:50919@sip.com>;tag=298f7927  
 To: <sip:50920@sip.com>;tag=7e813a99  
 Call-ID: 49e148d3bea7a564@50919.10.3.0.68  
 CSeq: 1056706921 PRACK  
 Max-Forwards: 70  
 Rack: 1549381080 1056706920 INVITE  
 Content-Length: 0

F8 10.3.0.15:5062(Server) -> 10.3.0.67:5060(50920@sip.com)

PRACK sip:50920@10.3.0.67 SIP/2.0  
 Via: SIP/2.0/UDP 10.3.0.15:5060;branch=z9hG4bK-814.1083771480.1056706921  
 Via: SIP/2.0/UDP 10.3.0.68:5060;branch=z9hG4bK-44f75f7c-605917.225  
 Route: <sip:50920@10.3.0.67>  
 From: 50919 <sip:50919@sip.com>;tag=298f7927  
 To: <sip:50920@sip.com>;tag=7e813a99  
 Call-ID: 49e148d3bea7a564@50919.10.3.0.68  
 CSeq: 1056706921 PRACK  
 max-forwards: 69  
 rack: 1549381080 1056706920 INVITE  
 Content-Length: 0

F9 10.3.0.67:1024(50920@sip.com) -> 10.3.0.15:5060(Server)

SIP/2.0 180 Ringing  
 Via: SIP/2.0/UDP 10.3.0.15:5060;branch=z9hG4bK-814.448219.1056706920

# FOMA/WLAN デュアル端末に関する技術参考資料 第 1.2 版

Via: SIP/2.0/UDP 10.3.0.68:5060;branch=z9hG4bK-5c7092c3-605915.982  
 Record-Route: <sip:50920@10.3.0.15>  
 From: 50919 <sip:50919@sip.com>;tag=298f7927  
 To: <sip:50920@sip.com>;tag=7e813a99  
 Call-ID: 49e148d3bea7a564@50919.10.3.0.68  
 CSeq: 1056706920 INVITE  
 Contact: <sip:50920@10.3.0.67>  
 Require: 100rel  
 RSeq: 1549381081  
 Content-Length: 0

---

F10 10.3.0.67:1024(50920@sip.com) -> 10.3.0.15:5060(Server)

SIP/2.0 200 OK  
 Via: SIP/2.0/UDP 10.3.0.15:5060;branch=z9hG4bK-814.1083771480.1056706921  
 Via: SIP/2.0/UDP 10.3.0.68:5060;branch=z9hG4bK-44f75f7c-605917.225  
 From: 50919 <sip:50919@sip.com>;tag=298f7927  
 To: <sip:50920@sip.com>;tag=7e813a99  
 Call-ID: 49e148d3bea7a564@50919.10.3.0.68  
 CSeq: 1056706921 PRACK  
 Content-Length: 0

---

F11 10.3.0.15:5062(Server) -> 10.3.0.68:5060(50919@sip.com)

SIP/2.0 180 Ringing  
 Via: SIP/2.0/UDP 10.3.0.68:5060;branch=z9hG4bK-5c7092c3-605915.982  
 Record-Route: <sip:50920@10.3.0.15>  
 From: 50919 <sip:50919@sip.com>;tag=298f7927  
 To: <sip:50920@sip.com>;tag=7e813a99  
 Call-ID: 49e148d3bea7a564@50919.10.3.0.68  
 CSeq: 1056706920 INVITE  
 Contact: <sip:50920@10.3.0.67>  
 require: 100rel  
 rseq: 1549381081  
 Content-Length: 0

---

F12 10.3.0.15:5062(Server) -> 10.3.0.68:5060(50919@sip.com)

SIP/2.0 200 OK  
 Via: SIP/2.0/UDP 10.3.0.68:5060;branch=z9hG4bK-44f75f7c-605917.225  
 From: 50919 <sip:50919@sip.com>;tag=298f7927  
 To: <sip:50920@sip.com>;tag=7e813a99  
 Call-ID: 49e148d3bea7a564@50919.10.3.0.68  
 CSeq: 1056706921 PRACK  
 Content-Length: 0

---

F13 10.3.0.68:1024(50919@sip.com) -> 10.3.0.15:5060(Server)

PRACK sip:50920@10.3.0.15 SIP/2.0  
 Via: SIP/2.0/UDP 10.3.0.68:5060;branch=z9hG4bK-339b4b7-605917.350  
 Route: <sip:50920@10.3.0.67>  
 From: 50919 <sip:50919@sip.com>;tag=298f7927  
 To: <sip:50920@sip.com>;tag=7e813a99  
 Call-ID: 49e148d3bea7a564@50919.10.3.0.68  
 CSeq: 1056706922 PRACK  
 Max-Forwards: 70  
 RACK: 1549381081 1056706920 INVITE  
 Content-Length: 0

---

F14 10.3.0.15:5062(Server) -> 10.3.0.67:5060(50920@sip.com)

PRACK sip:50920@10.3.0.67 SIP/2.0  
 Via: SIP/2.0/UDP 10.3.0.15:5060;branch=z9hG4bK-814.1083771480.1056706922  
 Via: SIP/2.0/UDP 10.3.0.68:5060;branch=z9hG4bK-339b4b7-605917.350  
 Route: <sip:50920@10.3.0.67>  
 From: 50919 <sip:50919@sip.com>;tag=298f7927

To: <sip:50920@sip.com>;tag=7e813a99  
 Call-ID: 49e148d3bea7a564@50919.10.3.0.68  
 CSeq: 1056706922 PRACK  
 max-forwards: 69  
 rack: 1549381081 1056706920 INVITE  
 Content-Length: 0

F15 10.3.0.67:1024(50920@sip.com) -> 10.3.0.15:5060(Server)

SIP/2.0 200 OK  
 Via: SIP/2.0/UDP 10.3.0.15:5060;branch=z9hG4bK-814.1083771480.1056706922  
 Via: SIP/2.0/UDP 10.3.0.68:5060;branch=z9hG4bK-339b4b7-605917.350  
 From: 50919 <sip:50919@sip.com>;tag=298f7927  
 To: <sip:50920@sip.com>;tag=7e813a99  
 Call-ID: 49e148d3bea7a564@50919.10.3.0.68  
 CSeq: 1056706922 PRACK  
 Content-Length: 0

F16 10.3.0.15:5062(Server) -> 10.3.0.68:5060(50919@sip.com)

SIP/2.0 200 OK  
 Via: SIP/2.0/UDP 10.3.0.68:5060;branch=z9hG4bK-339b4b7-605917.350  
 From: 50919 <sip:50919@sip.com>;tag=298f7927  
 To: <sip:50920@sip.com>;tag=7e813a99  
 Call-ID: 49e148d3bea7a564@50919.10.3.0.68  
 CSeq: 1056706922 PRACK  
 Content-Length: 0

F17 10.3.0.67:1024(50920@sip.com) -> 10.3.0.15:5060(Server)

SIP/2.0 200 OK  
 Via: SIP/2.0/UDP 10.3.0.15:5060;branch=z9hG4bK-814.448219.1056706920  
 Via: SIP/2.0/UDP 10.3.0.68:5060;branch=z9hG4bK-5c7092c3-605915.982  
 Record-Route: <sip:50920@10.3.0.15>  
 From: 50919 <sip:50919@sip.com>;tag=298f7927  
 To: <sip:50920@sip.com>;tag=7e813a99  
 Call-ID: 49e148d3bea7a564@50919.10.3.0.68  
 CSeq: 1056706920 INVITE  
 Contact: <sip:50920@10.3.0.67>  
 Supported: 100rel, replaces, timer  
 Require: timer  
 Session-Expires: 300;refresher=uac  
 Allow: INVITE, ACK, BYE, CANCEL, OPTIONS, PRACK, MESSAGE, REFER, NOTIFY, UPDATE  
 Content-Type: application/sdp  
 Accept: application/sdp, message/sipfrag, multipart/mixed  
 Content-Length: 204

v=0  
 o=- 1164606200976835 1164606200976835 IN IP4 10.3.0.67  
 s=-  
 c=IN IP4 10.3.0.67  
 t=0 0  
 m=audio 5008 RTP/AVP 0 96  
 a=rtpmap:0 PCMU/8000  
 a=rtpmap:96 telephone-event/8000  
 a=fmtp:96 0-11  
 a=ptime:20

F18 10.3.0.15:5062(Server) -> 10.3.0.68:5060(50919@sip.com)

SIP/2.0 200 OK  
 Via: SIP/2.0/UDP 10.3.0.68:5060;branch=z9hG4bK-5c7092c3-605915.982  
 Record-Route: <sip:50920@10.3.0.15>  
 From: 50919 <sip:50919@sip.com>;tag=298f7927  
 To: <sip:50920@sip.com>;tag=7e813a99  
 Call-ID: 49e148d3bea7a564@50919.10.3.0.68  
 CSeq: 1056706920 INVITE  
 Contact: <sip:50920@10.3.0.67>  
 supported: 100rel  
 supported: replaces

```
supported: timer
require: timer
session-expires: 300;refresher=uac
Allow: INVITE, ACK, BYE, CANCEL, OPTIONS, PRACK, MESSAGE, REFER, NOTIFY, UPDATE
Content-Type: application/sdp
Accept: application/sdp, message/sipfrag, multipart/mixed
Content-Length: 204
```

```
v=0
o=- 1164606200976835 1164606200976835 IN IP4 10.3.0.67
s=-
c=IN IP4 10.3.0.67
t=0 0
m=audio 5008 RTP/AVP 0 96
a=rtpmap:0 PCMU/8000
a=rtpmap:96 telephone-event/8000
a=fmtp:96 0-11
a=ptime:20
```

```
=====
F19      10.3.0.68:1024(50919@sip.com) -> 10.3.0.15:5060(Server)
```

```
ACK sip:50920@10.3.0.15 SIP/2.0
Via: SIP/2.0/UDP 10.3.0.68:5060;branch=z9hG4bK-3b22f572-605920.497
Route: <sip:50920@10.3.0.67>
From: 50919 <sip:50919@sip.com>;tag=298f7927
To: <sip:50920@sip.com>;tag=7e813a99
Call-ID: 49e148d3bea7a564@50919.10.3.0.68
CSeq: 1056706920 ACK
Max-Forwards: 70
Content-Length: 0
```

```
=====
F20      10.3.0.15:5062(Server) -> 10.3.0.67:5060(50920@sip.com)
```

```
ACK sip:50920@10.3.0.67 SIP/2.0
Via: SIP/2.0/UDP 10.3.0.15:5060;branch=z9hG4bK-814.1083771483.1056706920
Via: SIP/2.0/UDP 10.3.0.68:5060;branch=z9hG4bK-3b22f572-605920.497
From: 50919 <sip:50919@sip.com>;tag=298f7927
To: <sip:50920@sip.com>;tag=7e813a99
Call-ID: 49e148d3bea7a564@50919.10.3.0.68
CSeq: 1056706920 ACK
max-forwards: 69
Content-Length: 0
```

```
=====
F21      10.3.0.67:1024(50920@sip.com) -> 10.3.0.15:5060(Server)
```

```
INVITE sip:50920@10.3.0.15 SIP/2.0
Via: SIP/2.0/UDP 10.3.0.67:5060;branch=z9hG4bK-18c30a37-606204.033
Route: <sip:50919@10.3.0.68>
From: <sip:50920@sip.com>;tag=7e813a99
To: 50919 <sip:50919@sip.com>;tag=298f7927
Call-ID: 49e148d3bea7a564@50919.10.3.0.68
CSeq: 896948665 INVITE
Contact: <sip:50920@10.3.0.67>
Max-Forwards: 70
Supported: 100rel, replaces, timer
Session-Expires: 300;refresher=uac
Allow: INVITE, ACK, BYE, CANCEL, OPTIONS, PRACK, MESSAGE, REFER, NOTIFY, UPDATE
Content-Type: application/sdp
Content-Length: 216
```

```
v=0
o=- 1164606200976835 1164606200976836 IN IP4 10.3.0.67
s=-
c=IN IP4 10.3.0.67
t=0 0
m=audio 5008 RTP/AVP 0 96
a=rtpmap:0 PCMU/8000
a=rtpmap:96 telephone-event/8000
a=fmtp:96 0-11
a=inactive
a=ptime:20
=====
```



F22 10.3.0.15:5062(Server) -> 10.3.0.67:5060(50920@sip.com)

SIP/2.0 100 Trying  
 Via: SIP/2.0/UDP 10.3.0.67:5060;branch=z9hG4bK-18c30a37-606204.033  
 From: <50920@sip.com>;tag=7e813a99  
 To: 50919 <50919@sip.com>;tag=298f7927  
 Call-ID: 49e148d3bea7a564@50919.10.3.0.68  
 CSeq: 896948665 INVITE  
 Content-Length: 0

F23 10.3.0.15:5062(Server) -> 10.3.0.68:5060(50919@sip.com)

INVITE sip:50919@10.3.0.68 SIP/2.0  
 Via: SIP/2.0/UDP 10.3.0.15:5060;branch=z9hG4bK-813.448219.896948665  
 Via: SIP/2.0/UDP 10.3.0.67:5060;branch=z9hG4bK-18c30a37-606204.033  
 Record-Route: <50920@10.3.0.15>  
 Route: <50919@10.3.0.68>  
 From: <50920@sip.com>;tag=7e813a99  
 To: 50919 <50919@sip.com>;tag=298f7927  
 Call-ID: 49e148d3bea7a564@50919.10.3.0.68  
 CSeq: 896948665 INVITE  
 Contact: <50920@10.3.0.67>  
 max-forwards: 69  
 supported: 100rel  
 supported: replaces  
 supported: timer  
 session-expires: 300;refresher=uac  
 Allow: INVITE, ACK, BYE, CANCEL, OPTIONS, PRACK, MESSAGE, REFER, NOTIFY, UPDATE  
 Content-Type: application/sdp  
 Content-Length: 216

v=0  
 o=- 1164606200976835 1164606200976836 IN IP4 10.3.0.67  
 s=-  
 c=IN IP4 10.3.0.67  
 t=0 0  
 m=audio 5008 RTP/AVP 0 96  
 a=rtpmap:0 PCMU/8000  
 a=rtpmap:96 telephone-event/8000  
 a=fmtp:96 0-11  
 a=inactive  
 a=ptime:20

F24 10.3.0.68:1024(50919@sip.com) -> 10.3.0.15:5060(Server)

SIP/2.0 100 Trying  
 Via: SIP/2.0/UDP 10.3.0.15:5060;branch=z9hG4bK-813.448219.896948665  
 Via: SIP/2.0/UDP 10.3.0.67:5060;branch=z9hG4bK-18c30a37-606204.033  
 From: <50920@sip.com>;tag=7e813a99  
 To: 50919 <50919@sip.com>;tag=298f7927  
 Call-ID: 49e148d3bea7a564@50919.10.3.0.68  
 CSeq: 896948665 INVITE  
 Content-Length: 0

F25 10.3.0.68:1024(50919@sip.com) -> 10.3.0.15:5060(Server)

SIP/2.0 200 OK  
 Via: SIP/2.0/UDP 10.3.0.15:5060;branch=z9hG4bK-813.448219.896948665  
 Via: SIP/2.0/UDP 10.3.0.67:5060;branch=z9hG4bK-18c30a37-606204.033  
 Record-Route: <50920@10.3.0.15>  
 From: <50920@sip.com>;tag=7e813a99  
 To: 50919 <50919@sip.com>;tag=298f7927  
 Call-ID: 49e148d3bea7a564@50919.10.3.0.68  
 CSeq: 896948665 INVITE  
 Contact: <50919@10.3.0.68>  
 Supported: 100rel, replaces, timer  
 Require: timer  
 Session-Expires: 300;refresher=uac  
 Allow: INVITE, ACK, BYE, CANCEL, OPTIONS, PRACK, MESSAGE, REFER, NOTIFY, UPDATE  
 Content-Type: application/sdp  
 Accept: application/sdp, message/sipfrag, multipart/mixed  
 Content-Length: 216

```
v=0
o=- 1164605915980122 1164605915980124 IN IP4 10.3.0.68
s=-
c=IN IP4 10.3.0.68
t=0 0
m=audio 5008 RTP/AVP 0 96
a=rtpmap:0 PCMU/8000
a=rtpmap:96 telephone-event/8000
a=fmtp:96 0-11
a=inactive
a=ptime:20
```

```
=====
F26      10.3.0.15:5062(Server) -> 10.3.0.67:5060(50920@sip.com)
```

```
SIP/2.0 200 OK
Via: SIP/2.0/UDP 10.3.0.67:5060;branch=z9hG4bK-18c30a37-606204.033
Record-Route: <sip:50920@10.3.0.15>
From: <sip:50920@sip.com>;tag=7e813a99
To: 50919 <sip:50919@sip.com>;tag=298f7927
Call-ID: 49e148d3bea7a564@50919.10.3.0.68
CSeq: 896948665 INVITE
Contact: <sip:50919@10.3.0.68>
supported: 100rel
supported: replaces
supported: timer
require: timer
session-expires: 300;refresher=uac
Allow: INVITE, ACK, BYE, CANCEL, OPTIONS, PRACK, MESSAGE, REFER, NOTIFY, UPDATE
Content-Type: application/sdp
Accept: application/sdp, message/sipfrag, multipart/mixed
Content-Length: 216
```

```
v=0
o=- 1164605915980122 1164605915980124 IN IP4 10.3.0.68
s=-
c=IN IP4 10.3.0.68
t=0 0
m=audio 5008 RTP/AVP 0 96
a=rtpmap:0 PCMU/8000
a=rtpmap:96 telephone-event/8000
a=fmtp:96 0-11
a=inactive
a=ptime:20
```

```
=====
F27      10.3.0.67:1024(50920@sip.com) -> 10.3.0.15:5060(Server)
```

```
ACK sip:50920@10.3.0.15 SIP/2.0
Via: SIP/2.0/UDP 10.3.0.67:5060;branch=z9hG4bK-67db88ab-606204.616
Route: <sip:50919@10.3.0.68>
From: <sip:50920@sip.com>;tag=7e813a99
To: 50919 <sip:50919@sip.com>;tag=298f7927
Call-ID: 49e148d3bea7a564@50919.10.3.0.68
CSeq: 896948665 ACK
Max-Forwards: 70
Content-Length: 0
```

```
=====
F28      10.3.0.15:5062(Server) -> 10.3.0.68:5060(50919@sip.com)
```

```
ACK sip:50919@10.3.0.68 SIP/2.0
Via: SIP/2.0/UDP 10.3.0.15:5060;branch=z9hG4bK-813.1083771487.896948665
Via: SIP/2.0/UDP 10.3.0.67:5060;branch=z9hG4bK-67db88ab-606204.616
From: <sip:50920@sip.com>;tag=7e813a99
To: 50919 <sip:50919@sip.com>;tag=298f7927
Call-ID: 49e148d3bea7a564@50919.10.3.0.68
CSeq: 896948665 ACK
max-forwards: 69
Content-Length: 0
```

```
=====
F29      10.3.0.67:1024(50920@sip.com) -> 10.3.0.15:5060(Server)
```

```

INVITE sip:50687@sip.com SIP/2.0
Via: SIP/2.0/UDP 10.3.0.67:5060;branch=z9hG4bK-26a1ad3a-606209.595
From: <sip:50920@sip.com>;tag=4005c961
To: <sip:50687@sip.com>
Call-ID: 665c676ed887c344@50920.10.3.0.67
CSeq: 250047632 INVITE
Contact: <sip:50920@10.3.0.67>
Max-Forwards: 70
Supported: 100rel, replaces, timer
Session-Expires: 300;refresher=uac
Allow: INVITE, ACK, BYE, CANCEL, OPTIONS, PRACK, MESSAGE, REFER, NOTIFY, UPDATE
Content-Type: application/sdp
Accept: application/sdp, message/sipfrag, multipart/mixed
Content-Length: 266

```

```

v=0
o=- 1164606209593021 1164606209593021 IN IP4 10.3.0.67
s=-
c=IN IP4 10.3.0.67
t=0 0
m=audio 5006 RTP/AVP 0 8 4 18 96
a=rtpmap:0 PCMU/8000
a=rtpmap:8 PCMA/8000
a=rtpmap:4 G723/8000
a=rtpmap:18 G729/8000
a=rtpmap:96 telephone-event/8000
a=fmtp:96 0-11

```

```
=====
```

F30 10.3.0.15:5062(Server) -> 10.3.0.59:5060(50687@sip.com)

```

INVITE sip:50687@10.3.0.59 SIP/2.0
Via: SIP/2.0/UDP 10.3.0.15:5060;branch=z9hG4bK-816.198257.250047632
Via: SIP/2.0/UDP 10.3.0.67:5060;branch=z9hG4bK-26a1ad3a-606209.595
Record-Route: <sip:50687@10.3.0.15>
From: 50920 <sip:50920@sip.com>;tag=4005c961
To: <sip:50687@sip.com>
Call-ID: 665c676ed887c344@50920.10.3.0.67
CSeq: 250047632 INVITE
Contact: <sip:50920@10.3.0.67>
max-forwards: 69
supported: 100rel
supported: replaces
supported: timer
session-expires: 300;refresher=uac
Allow: INVITE, ACK, BYE, CANCEL, OPTIONS, PRACK, MESSAGE, REFER, NOTIFY, UPDATE
Content-Type: application/sdp
Accept: application/sdp, message/sipfrag, multipart/mixed
Content-Length: 266

```

```

v=0
o=- 1164606209593021 1164606209593021 IN IP4 10.3.0.67
s=-
c=IN IP4 10.3.0.67
t=0 0
m=audio 5006 RTP/AVP 0 8 4 18 96
a=rtpmap:0 PCMU/8000
a=rtpmap:8 PCMA/8000
a=rtpmap:4 G723/8000
a=rtpmap:18 G729/8000
a=rtpmap:96 telephone-event/8000
a=fmtp:96 0-11

```

```
=====
```

F31 10.3.0.15:5062(Server) -> 10.3.0.67:5060(50920@sip.com)

```

SIP/2.0 100 Trying
Via: SIP/2.0/UDP 10.3.0.67:5060;branch=z9hG4bK-26a1ad3a-606209.595
From: <sip:50920@sip.com>;tag=4005c961
To: <sip:50687@sip.com>
Call-ID: 665c676ed887c344@50920.10.3.0.67
CSeq: 250047632 INVITE
Content-Length: 0

```

```
=====
```

F32 10.3.0.15:5062(Server) -> 10.3.0.59:5060(50687@sip.com)

```

INVITE sip:50687@10.3.0.59 SIP/2.0
Via: SIP/2.0/UDP 10.3.0.15:5060;branch=z9hG4bK-816.198257.250047632
Via: SIP/2.0/UDP 10.3.0.67:5060;branch=z9hG4bK-26a1ad3a-606209.595
Record-Route: <sip:50687@10.3.0.15>
From: 50920 <sip:50920@sip.com>;tag=4005c961
To: <sip:50687@sip.com>
Call-ID: 665c676ed887c344@50920.10.3.0.67
CSeq: 250047632 INVITE
Contact: <sip:50920@10.3.0.67>
max-forwards: 69
supported: 100rel
supported: replaces
supported: timer
session-expires: 300;refresher=uac
Allow: INVITE, ACK, BYE, CANCEL, OPTIONS, PRACK, MESSAGE, REFER, NOTIFY, UPDATE
Content-Type: application/sdp
Accept: application/sdp, message/sipfrag, multipart/mixed
Content-Length: 266

```

```

v=0
o=- 1164606209593021 1164606209593021 IN IP4 10.3.0.67
s=-
c=IN IP4 10.3.0.67
t=0 0
m=audio 5006 RTP/AVP 0 8 4 18 96
a=rtpmap:0 PCMU/8000
a=rtpmap:8 PCMA/8000
a=rtpmap:4 G723/8000
a=rtpmap:18 G729/8000
a=rtpmap:96 telephone-event/8000
a=fmtp:96 0-11

```

```
=====
```

F33            10.3.0.59:1026(50687@sip.com) -> 10.3.0.15:5060(Server)

```

SIP/2.0 100 Trying
Via: SIP/2.0/UDP 10.3.0.15:5060;branch=z9hG4bK-816.198257.250047632
Via: SIP/2.0/UDP 10.3.0.67:5060;branch=z9hG4bK-26a1ad3a-606209.595
From: 50920 <sip:50920@sip.com>;tag=4005c961
To: <sip:50687@sip.com>
Call-ID: 665c676ed887c344@50920.10.3.0.67
CSeq: 250047632 INVITE
Content-Length: 0

```

```
=====
```

F34            10.3.0.59:1026(50687@sip.com) -> 10.3.0.15:5060(Server)

```

SIP/2.0 183 Session Progress
Via: SIP/2.0/UDP 10.3.0.15:5060;branch=z9hG4bK-816.198257.250047632
Via: SIP/2.0/UDP 10.3.0.67:5060;branch=z9hG4bK-26a1ad3a-606209.595
Record-Route: <sip:50687@10.3.0.15>
From: 50920 <sip:50920@sip.com>;tag=4005c961
To: <sip:50687@sip.com>;tag=0711d03d
Call-ID: 665c676ed887c344@50920.10.3.0.67
CSeq: 250047632 INVITE
Contact: <sip:50687@10.3.0.59>
Require: 100rel
RSeq: 462711819
Content-Length: 0

```

```
=====
```

F35            10.3.0.15:5062(Server) -> 10.3.0.67:5060(50920@sip.com)

```

SIP/2.0 183 Session Progress
Via: SIP/2.0/UDP 10.3.0.67:5060;branch=z9hG4bK-26a1ad3a-606209.595
Record-Route: <sip:50687@10.3.0.15>
From: 50920 <sip:50920@sip.com>;tag=4005c961
To: <sip:50687@sip.com>;tag=0711d03d
Call-ID: 665c676ed887c344@50920.10.3.0.67
CSeq: 250047632 INVITE
Contact: <sip:50687@10.3.0.59>
require: 100rel
rseq: 462711819
Content-Length: 0

```

---

F36 10.3.0.67:1024(50920@sip.com) -> 10.3.0.15:5060(Server)

PRACK sip:50687@10.3.0.15 SIP/2.0  
Via: SIP/2.0/UDP 10.3.0.67:5060;branch=z9hG4bK-12e56dfe-606212.398  
Route: <sip:50687@10.3.0.59>  
From: 50920 <sip:50920@sip.com>;tag=4005c961  
To: <sip:50687@sip.com>;tag=0711d03d  
Call-ID: 665c676ed887c344@50920.10.3.0.67  
CSeq: 250047633 PRACK  
Max-Forwards: 70  
RAck: 462711819 250047632 INVITE  
Content-Length: 0

---

F37 10.3.0.15:5062(Server) -> 10.3.0.59:5060(50687@sip.com)

PRACK sip:50687@10.3.0.59 SIP/2.0  
Via: SIP/2.0/UDP 10.3.0.15:5060;branch=z9hG4bK-816.1083771495.250047633  
Via: SIP/2.0/UDP 10.3.0.67:5060;branch=z9hG4bK-12e56dfe-606212.398  
Route: <sip:50687@10.3.0.59>  
From: 50920 <sip:50920@sip.com>;tag=4005c961  
To: <sip:50687@sip.com>;tag=0711d03d  
Call-ID: 665c676ed887c344@50920.10.3.0.67  
CSeq: 250047633 PRACK  
max-forwards: 69  
rack: 462711819 250047632 INVITE  
Content-Length: 0

---

F38 10.3.0.59:1026(50687@sip.com) -> 10.3.0.15:5060(Server)

SIP/2.0 180 Ringing  
Via: SIP/2.0/UDP 10.3.0.15:5060;branch=z9hG4bK-816.198257.250047632  
Via: SIP/2.0/UDP 10.3.0.67:5060;branch=z9hG4bK-26a1ad3a-606209.595  
Record-Route: <sip:50687@10.3.0.15>  
From: 50920 <sip:50920@sip.com>;tag=4005c961  
To: <sip:50687@sip.com>;tag=0711d03d  
Call-ID: 665c676ed887c344@50920.10.3.0.67  
CSeq: 250047632 INVITE  
Contact: <sip:50687@10.3.0.59>  
Require: 100rel  
RSeq: 462711820  
Content-Length: 0

---

F39 10.3.0.59:1026(50687@sip.com) -> 10.3.0.15:5060(Server)

SIP/2.0 200 OK  
Via: SIP/2.0/UDP 10.3.0.15:5060;branch=z9hG4bK-816.1083771495.250047633  
Via: SIP/2.0/UDP 10.3.0.67:5060;branch=z9hG4bK-12e56dfe-606212.398  
From: 50920 <sip:50920@sip.com>;tag=4005c961  
To: <sip:50687@sip.com>;tag=0711d03d  
Call-ID: 665c676ed887c344@50920.10.3.0.67  
CSeq: 250047633 PRACK  
Content-Length: 0

---

F40 10.3.0.15:5062(Server) -> 10.3.0.67:5060(50920@sip.com)

SIP/2.0 180 Ringing  
Via: SIP/2.0/UDP 10.3.0.67:5060;branch=z9hG4bK-26a1ad3a-606209.595  
Record-Route: <sip:50687@10.3.0.15>  
From: 50920 <sip:50920@sip.com>;tag=4005c961  
To: <sip:50687@sip.com>;tag=0711d03d  
Call-ID: 665c676ed887c344@50920.10.3.0.67  
CSeq: 250047632 INVITE  
Contact: <sip:50687@10.3.0.59>  
require: 100rel  
rseq: 462711820  
Content-Length: 0

F41 10.3.0.15:5062(Server) -> 10.3.0.67:5060(50920@sip.com)

SIP/2.0 200 OK  
Via: SIP/2.0/UDP 10.3.0.67:5060;branch=z9hG4bK-12e56dfe-606212.398  
From: 50920 <sip:50920@sip.com>;tag=4005c961  
To: <sip:50687@sip.com>;tag=0711d03d  
Call-ID: 665c676ed887c344@50920.10.3.0.67  
CSeq: 250047633 PRACK  
Content-Length: 0

F42 10.3.0.67:1024(50920@sip.com) -> 10.3.0.15:5060(Server)

PRACK sip:50687@10.3.0.15 SIP/2.0  
Via: SIP/2.0/UDP 10.3.0.67:5060;branch=z9hG4bK-27971656-606212.502  
Route: <sip:50687@10.3.0.59>  
From: 50920 <sip:50920@sip.com>;tag=4005c961  
To: <sip:50687@sip.com>;tag=0711d03d  
Call-ID: 665c676ed887c344@50920.10.3.0.67  
CSeq: 250047634 PRACK  
Max-Forwards: 70  
RAck: 462711820 250047632 INVITE  
Content-Length: 0

F43 10.3.0.15:5062(Server) -> 10.3.0.59:5060(50687@sip.com)

PRACK sip:50687@10.3.0.59 SIP/2.0  
Via: SIP/2.0/UDP 10.3.0.15:5060;branch=z9hG4bK-816.1083771495.250047634  
Via: SIP/2.0/UDP 10.3.0.67:5060;branch=z9hG4bK-27971656-606212.502  
Route: <sip:50687@10.3.0.59>  
From: 50920 <sip:50920@sip.com>;tag=4005c961  
To: <sip:50687@sip.com>;tag=0711d03d  
Call-ID: 665c676ed887c344@50920.10.3.0.67  
CSeq: 250047634 PRACK  
max-forwards: 69  
rack: 462711820 250047632 INVITE  
Content-Length: 0

F44 10.3.0.59:1026(50687@sip.com) -> 10.3.0.15:5060(Server)

SIP/2.0 200 OK  
Via: SIP/2.0/UDP 10.3.0.15:5060;branch=z9hG4bK-816.1083771495.250047634  
Via: SIP/2.0/UDP 10.3.0.67:5060;branch=z9hG4bK-27971656-606212.502  
From: 50920 <sip:50920@sip.com>;tag=4005c961  
To: <sip:50687@sip.com>;tag=0711d03d  
Call-ID: 665c676ed887c344@50920.10.3.0.67  
CSeq: 250047634 PRACK  
Content-Length: 0

F45 10.3.0.15:5062(Server) -> 10.3.0.67:5060(50920@sip.com)

SIP/2.0 200 OK  
Via: SIP/2.0/UDP 10.3.0.67:5060;branch=z9hG4bK-27971656-606212.502  
From: 50920 <sip:50920@sip.com>;tag=4005c961  
To: <sip:50687@sip.com>;tag=0711d03d  
Call-ID: 665c676ed887c344@50920.10.3.0.67  
CSeq: 250047634 PRACK  
Content-Length: 0

F46 10.3.0.59:1026(50687@sip.com) -> 10.3.0.15:5060(Server)

SIP/2.0 200 OK  
Via: SIP/2.0/UDP 10.3.0.15:5060;branch=z9hG4bK-816.198257.250047632  
Via: SIP/2.0/UDP 10.3.0.67:5060;branch=z9hG4bK-26a1ad3a-606209.595

Record-Route: <sip:50687@10.3.0.15>  
 From: 50920 <sip:50920@sip.com>;tag=4005c961  
 To: <sip:50687@sip.com>;tag=0711d03d  
 Call-ID: 665c676ed887c344@50920.10.3.0.67  
 CSeq: 250047632 INVITE  
 Contact: <sip:50687@10.3.0.59>  
 Supported: 100rel, replaces, timer  
 Require: timer  
 Session-Expires: 300;refresher=uac  
 Allow: INVITE, ACK, BYE, CANCEL, OPTIONS, PRACK, MESSAGE, REFER, NOTIFY, UPDATE  
 Content-Type: application/sdp  
 Accept: application/sdp, message/sipfrag, multipart/mixed  
 Content-Length: 204

v=0  
 o=- 1164606312485706 1164606312485706 IN IP4 10.3.0.59  
 s=-  
 c=IN IP4 10.3.0.59  
 t=0 0  
 m=audio 5008 RTP/AVP 0 96  
 a=rtpmap:0 PCMU/8000  
 a=rtpmap:96 telephone-event/8000  
 a=fmtp:96 0-11  
 a=ptime:20

=====

F47 10.3.0.15:5062(Server) -> 10.3.0.67:5060(50920@sip.com)

SIP/2.0 200 OK  
 Via: SIP/2.0/UDP 10.3.0.67:5060;branch=z9hG4bK-26a1ad3a-606209.595  
 Record-Route: <sip:50687@10.3.0.15>  
 From: 50920 <sip:50920@sip.com>;tag=4005c961  
 To: <sip:50687@sip.com>;tag=0711d03d  
 Call-ID: 665c676ed887c344@50920.10.3.0.67  
 CSeq: 250047632 INVITE  
 Contact: <sip:50687@10.3.0.59>  
 supported: 100rel  
 supported: replaces  
 supported: timer  
 require: timer  
 session-expires: 300;refresher=uac  
 Allow: INVITE, ACK, BYE, CANCEL, OPTIONS, PRACK, MESSAGE, REFER, NOTIFY, UPDATE  
 Content-Type: application/sdp  
 Accept: application/sdp, message/sipfrag, multipart/mixed  
 Content-Length: 204

v=0  
 o=- 1164606312485706 1164606312485706 IN IP4 10.3.0.59  
 s=-  
 c=IN IP4 10.3.0.59  
 t=0 0  
 m=audio 5008 RTP/AVP 0 96  
 a=rtpmap:0 PCMU/8000  
 a=rtpmap:96 telephone-event/8000  
 a=fmtp:96 0-11  
 a=ptime:20

=====

F48 10.3.0.67:1024(50920@sip.com) -> 10.3.0.15:5060(Server)

ACK sip:50687@10.3.0.15 SIP/2.0  
 Via: SIP/2.0/UDP 10.3.0.67:5060;branch=z9hG4bK-70a74e56-606217.884  
 Route: <sip:50687@10.3.0.59>  
 From: 50920 <sip:50920@sip.com>;tag=4005c961  
 To: <sip:50687@sip.com>;tag=0711d03d  
 Call-ID: 665c676ed887c344@50920.10.3.0.67  
 CSeq: 250047632 ACK  
 Max-Forwards: 70  
 Content-Length: 0

=====

F49 10.3.0.15:5062(Server) -> 10.3.0.59:5060(50687@sip.com)

ACK sip:50687@10.3.0.59 SIP/2.0  
 Via: SIP/2.0/UDP 10.3.0.15:5060;branch=z9hG4bK-816.1083771500.250047632  
 Via: SIP/2.0/UDP 10.3.0.67:5060;branch=z9hG4bK-70a74e56-606217.884  
 From: 50920 <sip:50920@sip.com>;tag=4005c961

To: <sip:50687@sip.com>;tag=0711d03d  
 Call-ID: 665c676ed887c344@50920.10.3.0.67  
 CSeq: 250047632 ACK  
 max-forwards: 69  
 Content-Length: 0

F50 10.3.0.67:1024(50920@sip.com) -> 10.3.0.15:5060(Server)

INVITE sip:50687@10.3.0.15 SIP/2.0  
 Via: SIP/2.0/UDP 10.3.0.67:5060;branch=z9hG4bK-38a82567-606228.148  
 Route: <sip:50687@10.3.0.59>  
 From: 50920 <sip:50920@sip.com>;tag=4005c961  
 To: <sip:50687@sip.com>;tag=0711d03d  
 Call-ID: 665c676ed887c344@50920.10.3.0.67  
 CSeq: 250047635 INVITE  
 Contact: <sip:50920@10.3.0.67>  
 Max-Forwards: 70  
 Supported: 100rel, replaces, timer  
 Session-Expires: 300;refresher=uac  
 Allow: INVITE, ACK, BYE, CANCEL, OPTIONS, PRACK, MESSAGE, REFER, NOTIFY, UPDATE  
 Content-Type: application/sdp  
 Content-Length: 216

v=0  
 o=- 1164606209593021 1164606209593023 IN IP4 10.3.0.67  
 s=-  
 c=IN IP4 10.3.0.67  
 t=0 0  
 m=audio 5006 RTP/AVP 0 96  
 a=rtpmap:0 PCMU/8000  
 a=rtpmap:96 telephone-event/8000  
 a=fmtp:96 0-11  
 a=inactive  
 a=ptime:20

F51 10.3.0.15:5062(Server) -> 10.3.0.67:5060(50920@sip.com)

SIP/2.0 100 Trying  
 Via: SIP/2.0/UDP 10.3.0.67:5060;branch=z9hG4bK-38a82567-606228.148  
 From: 50920 <sip:50920@sip.com>;tag=4005c961  
 To: <sip:50687@sip.com>;tag=0711d03d  
 Call-ID: 665c676ed887c344@50920.10.3.0.67  
 CSeq: 250047635 INVITE  
 Content-Length: 0

F52 10.3.0.15:5062(Server) -> 10.3.0.59:5060(50687@sip.com)

INVITE sip:50687@10.3.0.59 SIP/2.0  
 Via: SIP/2.0/UDP 10.3.0.15:5060;branch=z9hG4bK-816.198257.250047635  
 Via: SIP/2.0/UDP 10.3.0.67:5060;branch=z9hG4bK-38a82567-606228.148  
 Record-Route: <sip:50687@10.3.0.15>  
 Route: <sip:50687@10.3.0.59>  
 From: 50920 <sip:50920@sip.com>;tag=4005c961  
 To: <sip:50687@sip.com>;tag=0711d03d  
 Call-ID: 665c676ed887c344@50920.10.3.0.67  
 CSeq: 250047635 INVITE  
 Contact: <sip:50920@10.3.0.67>  
 max-forwards: 69  
 supported: 100rel  
 supported: replaces  
 supported: timer  
 session-expires: 300;refresher=uac  
 Allow: INVITE, ACK, BYE, CANCEL, OPTIONS, PRACK, MESSAGE, REFER, NOTIFY, UPDATE  
 Content-Type: application/sdp  
 Content-Length: 216

v=0  
 o=- 1164606209593021 1164606209593023 IN IP4 10.3.0.67  
 s=-  
 c=IN IP4 10.3.0.67  
 t=0 0  
 m=audio 5006 RTP/AVP 0 96  
 a=rtpmap:0 PCMU/8000



a=rtpmap:96 telephone-event/8000  
a=fmtp:96 0-11  
a=inactive  
a=ptime:20

F53 10.3.0.59:1026(50687@sip.com) -> 10.3.0.15:5060 (Server)

SIP/2.0 100 Trying  
Via: SIP/2.0/UDP 10.3.0.15:5060;branch=z9hG4bK-816.198257.250047635  
Via: SIP/2.0/UDP 10.3.0.67:5060;branch=z9hG4bK-38a82567-606228.148  
From: 50920 <sip:50920@sip.com>;tag=4005c961  
To: <sip:50687@sip.com>;tag=0711d03d  
Call-ID: 665c676ed887c344@50920.10.3.0.67  
CSeq: 250047635 INVITE  
Content-Length: 0

F54 10.3.0.59:1026(50687@sip.com) -> 10.3.0.15:5060 (Server)

SIP/2.0 200 OK  
Via: SIP/2.0/UDP 10.3.0.15:5060;branch=z9hG4bK-816.198257.250047635  
Via: SIP/2.0/UDP 10.3.0.67:5060;branch=z9hG4bK-38a82567-606228.148  
Record-Route: <sip:50687@10.3.0.15>  
From: 50920 <sip:50920@sip.com>;tag=4005c961  
To: <sip:50687@sip.com>;tag=0711d03d  
Call-ID: 665c676ed887c344@50920.10.3.0.67  
CSeq: 250047635 INVITE  
Contact: <sip:50687@10.3.0.59>  
Supported: 100rel, replaces, timer  
Require: timer  
Session-Expires: 300;refresher=uac  
Allow: INVITE, ACK, BYE, CANCEL, OPTIONS, PRACK, MESSAGE, REFER, NOTIFY, UPDATE  
Content-Type: application/sdp  
Accept: application/sdp, message/sipfrag, multipart/mixed  
Content-Length: 216

v=0  
o=- 1164606312485706 1164606312485707 IN IP4 10.3.0.59  
s=-  
c=IN IP4 10.3.0.59  
t=0 0  
m=audio 5008 RTP/AVP 0 96  
a=rtpmap:0 PCMU/8000  
a=rtpmap:96 telephone-event/8000  
a=fmtp:96 0-11  
a=inactive  
a=ptime:20

F55 10.3.0.15:5062 (Server) -> 10.3.0.67:5060 (50920@sip.com)

SIP/2.0 200 OK  
Via: SIP/2.0/UDP 10.3.0.67:5060;branch=z9hG4bK-38a82567-606228.148  
Record-Route: <sip:50687@10.3.0.15>  
From: 50920 <sip:50920@sip.com>;tag=4005c961  
To: <sip:50687@sip.com>;tag=0711d03d  
Call-ID: 665c676ed887c344@50920.10.3.0.67  
CSeq: 250047635 INVITE  
Contact: <sip:50687@10.3.0.59>  
supported: 100rel  
supported: replaces  
supported: timer  
require: timer  
session-expires: 300;refresher=uac  
Allow: INVITE, ACK, BYE, CANCEL, OPTIONS, PRACK, MESSAGE, REFER, NOTIFY, UPDATE  
Content-Type: application/sdp  
Accept: application/sdp, message/sipfrag, multipart/mixed  
Content-Length: 216

v=0  
o=- 1164606312485706 1164606312485707 IN IP4 10.3.0.59  
s=-  
c=IN IP4 10.3.0.59  
t=0 0  
m=audio 5008 RTP/AVP 0 96  
a=rtpmap:0 PCMU/8000

a=rtpmap:96 telephone-event/8000  
a=fmtp:96 0-11  
a=inactive  
a=ptime:20

F56 10.3.0.67:1024(50920@sip.com) -> 10.3.0.15:5060(Server)

ACK sip:50687@10.3.0.15 SIP/2.0  
Via: SIP/2.0/UDP 10.3.0.67:5060:branch=z9hG4bK-32d0f601-606228.421  
Route: <sip:50687@10.3.0.59>  
From: 50920 <sip:50920@sip.com>;tag=4005c961  
To: <sip:50687@sip.com>;tag=0711d03d  
Call-ID: 665c676ed887c344@50920.10.3.0.67  
CSeq: 250047635 ACK  
Max-Forwards: 70  
Content-Length: 0

F57 10.3.0.15:5062(Server) -> 10.3.0.59:5060(50687@sip.com)

ACK sip:50687@10.3.0.59 SIP/2.0  
Via: SIP/2.0/UDP 10.3.0.15:5060:branch=z9hG4bK-816.1083771511.250047635  
Via: SIP/2.0/UDP 10.3.0.67:5060:branch=z9hG4bK-32d0f601-606228.421  
From: 50920 <sip:50920@sip.com>;tag=4005c961  
To: <sip:50687@sip.com>;tag=0711d03d  
Call-ID: 665c676ed887c344@50920.10.3.0.67  
CSeq: 250047635 ACK  
max-forwards: 69  
Content-Length: 0

F58 10.3.0.67:1024(50920@sip.com) -> 10.3.0.15:5060(Server)

REFER sip:50920@10.3.0.15 SIP/2.0  
Via: SIP/2.0/UDP 10.3.0.67:5060:branch=z9hG4bK-309c95-606228.447  
Route: <sip:50919@10.3.0.68>  
From: <sip:50920@sip.com>;tag=7e813a99  
To: 50919 <sip:50919@sip.com>;tag=298f7927  
Call-ID: 49e148d3bea7a564@50919.10.3.0.68  
CSeq: 896948666 REFER  
Contact: <sip:50920@10.3.0.67>  
Max-Forwards: 70  
Refer-To:  
<sip:50687@10.3.0.59?Replaces=665c676ed887c344%4050920.10.3.0.67%3Bto-tag%3D0711d03d%3Bfrom-tag%3D4005c961>  
Referred-By: <sip:50920@sip.com>  
Content-Length: 0

F59 10.3.0.15:5062(Server) -> 10.3.0.68:5060(50919@sip.com)

REFER sip:50919@10.3.0.68 SIP/2.0  
Via: SIP/2.0/UDP 10.3.0.15:5060:branch=z9hG4bK-813.1083771511.896948666  
Via: SIP/2.0/UDP 10.3.0.67:5060:branch=z9hG4bK-309c95-606228.447  
Route: <sip:50919@10.3.0.68>  
From: <sip:50920@sip.com>;tag=7e813a99  
To: 50919 <sip:50919@sip.com>;tag=298f7927  
Call-ID: 49e148d3bea7a564@50919.10.3.0.68  
CSeq: 896948666 REFER  
Contact: <sip:50920@10.3.0.67>  
max-forwards: 69  
refer-to:  
<sip:50687@10.3.0.59?Replaces=665c676ed887c344%4050920.10.3.0.67%3Bto-tag%3D0711d03d%3Bfrom-tag%3D4005c961>  
referred-by: <sip:50920@sip.com>  
Content-Length: 0

F60 10.3.0.68:1024(50919@sip.com) -> 10.3.0.15:5060(Server)

SIP/2.0 202 Accepted

FOMA/WLAN デュアル端末に関する技術参考資料 第 1.2 版

Via: SIP/2.0/UDP 10.3.0.15:5060;branch=z9hG4bK-813.1083771511.896948666  
 Via: SIP/2.0/UDP 10.3.0.67:5060;branch=z9hG4bK-309c95-606228.447  
 From: <sip:50920@sip.com>;tag=7e813a99  
 To: 50919 <sip:50919@sip.com>;tag=298f7927  
 Call-ID: 49e148d3bea7a564@50919.10.3.0.68  
 CSeq: 896948666 REFER  
 Contact: <sip:50919@10.3.0.68>  
 Content-Length: 0

F61 10.3.0.68:1024(50919@sip.com) -> 10.3.0.15:5060(Server)

NOTIFY sip:50920@10.3.0.15 SIP/2.0  
 Via: SIP/2.0/UDP 10.3.0.68:5060;branch=z9hG4bK-2f8324a1-605947.712  
 Route: <sip:50920@10.3.0.67>  
 From: 50919 <sip:50919@sip.com>;tag=298f7927  
 To: <sip:50920@sip.com>;tag=7e813a99  
 Call-ID: 49e148d3bea7a564@50919.10.3.0.68  
 CSeq: 1056706923 NOTIFY  
 Contact: <sip:50919@10.3.0.68>  
 Max-Forwards: 70  
 Event: refer:id=896948666  
 Subscription-State: active;expires=35  
 Content-Type: message/sipfrag  
 Content-Length: 20

SIP/2.0 100 Trying

F62 10.3.0.15:5062(Server) -> 10.3.0.67:5060(50920@sip.com)

SIP/2.0 202 Accepted  
 Via: SIP/2.0/UDP 10.3.0.67:5060;branch=z9hG4bK-309c95-606228.447  
 From: <sip:50920@sip.com>;tag=7e813a99  
 To: 50919 <sip:50919@sip.com>;tag=298f7927  
 Call-ID: 49e148d3bea7a564@50919.10.3.0.68  
 CSeq: 896948666 REFER  
 Contact: <sip:50919@10.3.0.68>  
 Content-Length: 0

F63 10.3.0.68:1024(50919@sip.com) -> 10.3.0.15:5060(Server)

INVITE sip:50687@10.3.0.59 SIP/2.0  
 Via: SIP/2.0/UDP 10.3.0.68:5060;branch=z9hG4bK-5c7ea07e-605947.743  
 From: <sip:50919@sip.com>;tag=1a8aea93  
 To: <sip:50687@10.3.0.59>  
 Call-ID: 45a34491551c4edf@50919.10.3.0.68  
 CSeq: 207935390 INVITE  
 Contact: <sip:50919@10.3.0.68>  
 Max-Forwards: 70  
 Supported: 100rel,replaces,timer  
 Session-Expires: 300;refresher=uac  
 Referred-By: <sip:50920@sip.com>  
 Replaces: 665c676ed887c344@50920.10.3.0.67;to-tag=0711d03d;from-tag=4005c961  
 Allow: INVITE, ACK, BYE, CANCEL, OPTIONS, PRACK, MESSAGE, REFER, NOTIFY, UPDATE  
 Content-Type: application/sdp  
 Accept: application/sdp,message/sipfrag,multipart/mixed  
 Content-Length: 266

v=0  
 o=- 1164605947740396 1164605947740396 IN IP4 10.3.0.68  
 s=-  
 c=IN IP4 10.3.0.68  
 t=0 0  
 m=audio 5006 RTP/AVP 0 8 4 18 96  
 a=rtpmap:0 PCMU/8000  
 a=rtpmap:8 PCMA/8000  
 a=rtpmap:4 G723/8000  
 a=rtpmap:18 G729/8000  
 a=rtpmap:96 telephone-event/8000  
 a=fmtp:96 0-11

F64 10.3.0.15:5062(Server) -> 10.3.0.67:5060(50920@sip.com)

NOTIFY sip:50920@10.3.0.67 SIP/2.0  
 Via: SIP/2.0/UDP 10.3.0.15:5060;branch=z9hG4bK-814.1083771511.1056706923  
 Via: SIP/2.0/UDP 10.3.0.68:5060;branch=z9hG4bK-2f8324a1-605947.712  
 Route: <sip:50920@10.3.0.67>  
 From: 50919 <sip:50919@sip.com>;tag=298f7927  
 To: <sip:50920@sip.com>;tag=7e813a99  
 Call-ID: 49e148d3bea7a564@50919.10.3.0.68  
 CSeq: 1056706923 NOTIFY  
 Contact: <sip:50919@10.3.0.68>  
 max-forwards: 69  
 event: refer:id=896948666  
 subscription-state: active;expires=35  
 Content-Type: message/sipfrag  
 Content-Length: 20

SIP/2.0 100 Trying

F65 10.3.0.67:1024(50920@sip.com) -> 10.3.0.15:5060(Server)

SIP/2.0 200 OK  
 Via: SIP/2.0/UDP 10.3.0.15:5060;branch=z9hG4bK-814.1083771511.1056706923  
 Via: SIP/2.0/UDP 10.3.0.68:5060;branch=z9hG4bK-2f8324a1-605947.712  
 From: 50919 <sip:50919@sip.com>;tag=298f7927  
 To: <sip:50920@sip.com>;tag=7e813a99  
 Call-ID: 49e148d3bea7a564@50919.10.3.0.68  
 CSeq: 1056706923 NOTIFY  
 Content-Length: 0

F66 10.3.0.15:5062(Server) -> 10.3.0.68:5060(50919@sip.com)

SIP/2.0 200 OK  
 Via: SIP/2.0/UDP 10.3.0.68:5060;branch=z9hG4bK-2f8324a1-605947.712  
 From: 50919 <sip:50919@sip.com>;tag=298f7927  
 To: <sip:50920@sip.com>;tag=7e813a99  
 Call-ID: 49e148d3bea7a564@50919.10.3.0.68  
 CSeq: 1056706923 NOTIFY  
 Content-Length: 0

F67 10.3.0.15:5062(Server) -> 10.3.0.68:5060(50919@sip.com)

SIP/2.0 100 Trying  
 Via: SIP/2.0/UDP 10.3.0.68:5060;branch=z9hG4bK-5c7ea07e-605947.743  
 From: <sip:50919@sip.com>;tag=1a8aea93  
 To: <sip:50687@10.3.0.59>  
 Call-ID: 45a34491551c4edf@50919.10.3.0.68  
 CSeq: 207935390 INVITE  
 Content-Length: 0

F68 10.3.0.15:5062(Server) -> 10.3.0.59:5060(50687@sip.com)

INVITE sip:50687@10.3.0.59 SIP/2.0  
 Via: SIP/2.0/UDP 10.3.0.15:5060;branch=z9hG4bK-818.158274.207935390  
 Via: SIP/2.0/UDP 10.3.0.68:5060;branch=z9hG4bK-5c7ea07e-605947.743  
 Record-Route: <sip:50687@10.3.0.15>  
 From: 50919 <sip:50919@sip.com>;tag=1a8aea93  
 To: <sip:50687@10.3.0.59>  
 Call-ID: 45a34491551c4edf@50919.10.3.0.68  
 CSeq: 207935390 INVITE  
 Contact: <sip:50919@10.3.0.68>  
 max-forwards: 69  
 supported: 100rel  
 supported: replaces  
 supported: timer  
 session-expires: 300;refresher=uac  
 referred-by: <sip:50920@sip.com>  
 replaces: 665c676ed887c344@50920.10.3.0.67;to-tag=0711d03d;from-tag=4005c961  
 Allow: INVITE, ACK, BYE, CANCEL, OPTIONS, PRACK, MESSAGE, REFER, NOTIFY, UPDATE  
 Content-Type: application/sdp  
 Accept: application/sdp, message/sipfrag, multipart/mixed

Content-Length: 266

```

v=0
o=- 1164605947740396 1164605947740396 IN IP4 10.3.0.68
s=-
c=IN IP4 10.3.0.68
t=0 0
m=audio 5006 RTP/AVP 0 8 4 18 96
a=rtpmap:0 PCMU/8000
a=rtpmap:8 PCMA/8000
a=rtpmap:4 G723/8000
a=rtpmap:18 G729/8000
a=rtpmap:96 telephone-event/8000
a=fmtp:96 0-11

```

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F69 10.3.0.15:5062(Server) -> 10.3.0.59:5060(50687@sip.com)

```

INVITE sip:50687@10.3.0.59 SIP/2.0
Via: SIP/2.0/UDP 10.3.0.15:5060;branch=z9hG4bK-818.158274.207935390
Via: SIP/2.0/UDP 10.3.0.68:5060;branch=z9hG4bK-5c7ea07e-605947.743
Record-Route: <sip:50687@10.3.0.15>
From: 50919 <sip:50919@sip.com>;tag=1a8aea93
To: <sip:50687@10.3.0.59>
Call-ID: 45a34491551c4edf@50919.10.3.0.68
CSeq: 207935390 INVITE
Contact: <sip:50919@10.3.0.68>
max-forwards: 69
supported: 100rel
supported: replaces
supported: timer
session-expires: 300;refresher=uac
referred-by: <sip:50920@sip.com>
replaces: 665c676ed887c344@50920.10.3.0.67;to-tag=0711d03d;from-tag=4005c961
Allow: INVITE, ACK, BYE, CANCEL, OPTIONS, PRACK, MESSAGE, REFER, NOTIFY, UPDATE
Content-Type: application/sdp
Accept: application/sdp, message/sipfrag, multipart/mixed
Content-Length: 266

```

```

v=0
o=- 1164605947740396 1164605947740396 IN IP4 10.3.0.68
s=-
c=IN IP4 10.3.0.68
t=0 0
m=audio 5006 RTP/AVP 0 8 4 18 96
a=rtpmap:0 PCMU/8000
a=rtpmap:8 PCMA/8000
a=rtpmap:4 G723/8000
a=rtpmap:18 G729/8000
a=rtpmap:96 telephone-event/8000
a=fmtp:96 0-11

```

---

F70 10.3.0.15:5062(Server) -> 10.3.0.59:5060(50687@sip.com)

```

INVITE sip:50687@10.3.0.59 SIP/2.0
Via: SIP/2.0/UDP 10.3.0.15:5060;branch=z9hG4bK-818.158274.207935390
Via: SIP/2.0/UDP 10.3.0.68:5060;branch=z9hG4bK-5c7ea07e-605947.743
Record-Route: <sip:50687@10.3.0.15>
From: 50919 <sip:50919@sip.com>;tag=1a8aea93
To: <sip:50687@10.3.0.59>
Call-ID: 45a34491551c4edf@50919.10.3.0.68
CSeq: 207935390 INVITE
Contact: <sip:50919@10.3.0.68>
max-forwards: 69
supported: 100rel
supported: replaces
supported: timer
session-expires: 300;refresher=uac
referred-by: <sip:50920@sip.com>
replaces: 665c676ed887c344@50920.10.3.0.67;to-tag=0711d03d;from-tag=4005c961
Allow: INVITE, ACK, BYE, CANCEL, OPTIONS, PRACK, MESSAGE, REFER, NOTIFY, UPDATE
Content-Type: application/sdp
Accept: application/sdp, message/sipfrag, multipart/mixed
Content-Length: 266

```

```

v=0
o=- 1164605947740396 1164605947740396 IN IP4 10.3.0.68
s=-

```

```
c=IN IP4 10.3.0.68
t=0 0
m=audio 5006 RTP/AVP 0 8 4 18 96
a=rtpmap:0 PCMU/8000
a=rtpmap:8 PCMA/8000
a=rtpmap:4 G723/8000
a=rtpmap:18 G729/8000
a=rtpmap:96 telephone-event/8000
a=fmtp:96 0-11
```

```
=====
F71      10.3.0.15:5062(Server) -> 10.3.0.59:5060(50687@sip.com)
```

```
INVITE sip:50687@10.3.0.59 SIP/2.0
Via: SIP/2.0/UDP 10.3.0.15:5060;branch=z9hG4bK-818.158274.207935390
Via: SIP/2.0/UDP 10.3.0.68:5060;branch=z9hG4bK-5c7ea07e-605947.743
Record-Route: <sip:50687@10.3.0.15>
From: 50919 <sip:50919@sip.com>;tag=1a8aea93
To: <sip:50687@10.3.0.59>
Call-ID: 45a34491551c4edf@50919.10.3.0.68
CSeq: 207935390 INVITE
Contact: <sip:50919@10.3.0.68>
max-forwards: 69
supported: 100rel
supported: replaces
supported: timer
session-expires: 300;refresher=uac
referred-by: <sip:50920@sip.com>
replaces: 665c676ed887c344@50920.10.3.0.67;to-tag=0711d03d;from-tag=4005c961
Allow: INVITE, ACK, BYE, CANCEL, OPTIONS, PRACK, MESSAGE, REFER, NOTIFY, UPDATE
Content-Type: application/sdp
Accept: application/sdp, message/sipfrag, multipart/mixed
Content-Length: 266
```

```
v=0
o=- 1164605947740396 1164605947740396 IN IP4 10.3.0.68
s=-
c=IN IP4 10.3.0.68
t=0 0
m=audio 5006 RTP/AVP 0 8 4 18 96
a=rtpmap:0 PCMU/8000
a=rtpmap:8 PCMA/8000
a=rtpmap:4 G723/8000
a=rtpmap:18 G729/8000
a=rtpmap:96 telephone-event/8000
a=fmtp:96 0-11
```

```
=====
F72      10.3.0.15:5062(Server) -> 10.3.0.68:5060(50919@sip.com)
```

```
SIP/2.0 408 Request Timeout
Via: SIP/2.0/UDP 10.3.0.68:5060;branch=z9hG4bK-5c7ea07e-605947.743
From: 50919 <sip:50919@sip.com>;tag=1a8aea93
To: <sip:50687@10.3.0.59>
Call-ID: 45a34491551c4edf@50919.10.3.0.68
CSeq: 207935390 INVITE
Content-Length: 0
```

```
=====
F73      10.3.0.68:1024(50919@sip.com) -> 10.3.0.15:5060(Server)
```

```
ACK sip:50687@10.3.0.59 SIP/2.0
Via: SIP/2.0/UDP 10.3.0.68:5060;branch=z9hG4bK-5c7ea07e-605947.743
From: 50919 <sip:50919@sip.com>;tag=1a8aea93
To: <sip:50687@10.3.0.59>
Call-ID: 45a34491551c4edf@50919.10.3.0.68
CSeq: 207935390 ACK
Max-Forwards: 70
Content-Length: 0
```

```
=====
F74      10.3.0.68:1024(50919@sip.com) -> 10.3.0.15:5060(Server)
```

```
NOTIFY sip:50920@10.3.0.15 SIP/2.0
Via: SIP/2.0/UDP 10.3.0.68:5060;branch=z9hG4bK-6ffb3157-605980.793
```

Route: <sip:50920@10.3.0.67>  
 From: 50919 <sip:50919@sip.com>;tag=298f7927  
 To: <sip:50920@sip.com>;tag=7e813a99  
 Call-ID: 49e148d3bea7a564@50919.10.3.0.68  
 CSeq: 1056706924 NOTIFY  
 Contact: <sip:50919@10.3.0.68>  
 Max-Forwards: 70  
 Event: refer;id=896948666  
 Subscription-State: terminated;reason=noresource  
 Content-Type: message/sipfrag  
 Content-Length: 29

SIP/2.0 408 Request Timeout

F75 10.3.0.15:5062(Server) -> 10.3.0.67:5060(50920@sip.com)

NOTIFY sip:50920@10.3.0.67 SIP/2.0  
 Via: SIP/2.0/UDP 10.3.0.15:5060;branch=z9hG4bK-814.1083771544.1056706924  
 Via: SIP/2.0/UDP 10.3.0.68:5060;branch=z9hG4bK-6ffb3157-605980.793  
 Route: <sip:50920@10.3.0.67>  
 From: 50919 <sip:50919@sip.com>;tag=298f7927  
 To: <sip:50920@sip.com>;tag=7e813a99  
 Call-ID: 49e148d3bea7a564@50919.10.3.0.68  
 CSeq: 1056706924 NOTIFY  
 Contact: <sip:50919@10.3.0.68>  
 max-forwards: 69  
 event: refer;id=896948666  
 subscription-state: terminated;reason=noresource  
 Content-Type: message/sipfrag  
 Content-Length: 29

SIP/2.0 408 Request Timeout

F76 10.3.0.67:1024(50920@sip.com) -> 10.3.0.15:5060(Server)

SIP/2.0 200 OK  
 Via: SIP/2.0/UDP 10.3.0.15:5060;branch=z9hG4bK-814.1083771544.1056706924  
 Via: SIP/2.0/UDP 10.3.0.68:5060;branch=z9hG4bK-6ffb3157-605980.793  
 From: 50919 <sip:50919@sip.com>;tag=298f7927  
 To: <sip:50920@sip.com>;tag=7e813a99  
 Call-ID: 49e148d3bea7a564@50919.10.3.0.68  
 CSeq: 1056706924 NOTIFY  
 Content-Length: 0

F77 10.3.0.15:5062(Server) -> 10.3.0.68:5060(50919@sip.com)

SIP/2.0 200 OK  
 Via: SIP/2.0/UDP 10.3.0.68:5060;branch=z9hG4bK-6ffb3157-605980.793  
 From: 50919 <sip:50919@sip.com>;tag=298f7927  
 To: <sip:50920@sip.com>;tag=7e813a99  
 Call-ID: 49e148d3bea7a564@50919.10.3.0.68  
 CSeq: 1056706924 NOTIFY  
 Content-Length: 0

F78 10.3.0.67:1024(50920@sip.com) -> 10.3.0.15:5060(Server)

BYE sip:50687@10.3.0.15 SIP/2.0  
 Via: SIP/2.0/UDP 10.3.0.67:5060;branch=z9hG4bK-21b6fa00-606262.588  
 Route: <sip:50687@10.3.0.59>  
 From: 50920 <sip:50920@sip.com>;tag=4005c961  
 To: <sip:50687@sip.com>;tag=0711d03d  
 Call-ID: 665c676ed887c344@50920.10.3.0.67  
 CSeq: 250047636 BYE  
 Max-Forwards: 70  
 Content-Length: 0

F79 10.3.0.67:1024(50920@sip.com) -> 10.3.0.15:5060(Server)

BYE sip:50687@10.3.0.15 SIP/2.0  
 Via: SIP/2.0/UDP 10.3.0.67:5060:branch=z9hG4bK-21b6fa00-606262.588  
 Route: <sip:50687@10.3.0.59>  
 From: 50920 <sip:50920@sip.com>;tag=4005c961  
 To: <sip:50687@sip.com>;tag=0711d03d  
 Call-ID: 665c676ed887c344@50920.10.3.0.67  
 CSeq: 250047636 BYE  
 Max-Forwards: 70  
 Content-Length: 0

=====

F80        10.3.0.67:1024(50920@sip.com) -> 10.3.0.15:5060(Server)

BYE sip:50687@10.3.0.15 SIP/2.0  
 Via: SIP/2.0/UDP 10.3.0.67:5060:branch=z9hG4bK-21b6fa00-606262.588  
 Route: <sip:50687@10.3.0.59>  
 From: 50920 <sip:50920@sip.com>;tag=4005c961  
 To: <sip:50687@sip.com>;tag=0711d03d  
 Call-ID: 665c676ed887c344@50920.10.3.0.67  
 CSeq: 250047636 BYE  
 Max-Forwards: 70  
 Content-Length: 0

=====

F81        10.3.0.67:1024(50920@sip.com) -> 10.3.0.15:5060(Server)

INVITE sip:50920@10.3.0.15 SIP/2.0  
 Via: SIP/2.0/UDP 10.3.0.67:5060:branch=z9hG4bK-584a6e47-606266.645  
 Route: <sip:50919@10.3.0.68>  
 From: <sip:50920@sip.com>;tag=7e813a99  
 To: 50919 <sip:50919@sip.com>;tag=298f7927  
 Call-ID: 49e148d3bea7a564@50919.10.3.0.68  
 CSeq: 896948667 INVITE  
 Contact: <sip:50920@10.3.0.67>  
 Max-Forwards: 70  
 Supported: 100rel, replaces, timer  
 Session-Expires: 300;refresher=uac  
 Allow: INVITE, ACK, BYE, CANCEL, OPTIONS, PRACK, MESSAGE, REFER, NOTIFY, UPDATE  
 Content-Type: application/sdp  
 Content-Length: 266

v=0  
 o=- 1164606200976835 1164606200976837 IN IP4 10.3.0.67  
 s=-  
 c=IN IP4 10.3.0.67  
 t=0 0  
 m=audio 5008 RTP/AVP 0 8 4 18 96  
 a=rtpmap:0 PCMU/8000  
 a=rtpmap:8 PCMA/8000  
 a=rtpmap:4 G723/8000  
 a=rtpmap:18 G729/8000  
 a=rtpmap:96 telephone-event/8000  
 a=fmtp:96 0-11

=====

F82        10.3.0.15:5062(Server) -> 10.3.0.67:5060(50920@sip.com)

SIP/2.0 100 Trying  
 Via: SIP/2.0/UDP 10.3.0.67:5060:branch=z9hG4bK-584a6e47-606266.645  
 From: <sip:50920@sip.com>;tag=7e813a99  
 To: 50919 <sip:50919@sip.com>;tag=298f7927  
 Call-ID: 49e148d3bea7a564@50919.10.3.0.68  
 CSeq: 896948667 INVITE  
 Content-Length: 0

=====

F83        10.3.0.15:5062(Server) -> 10.3.0.68:5060(50919@sip.com)

INVITE sip:50919@10.3.0.68 SIP/2.0  
 Via: SIP/2.0/UDP 10.3.0.15:5060:branch=z9hG4bK-813.448219.896948667  
 Via: SIP/2.0/UDP 10.3.0.67:5060:branch=z9hG4bK-584a6e47-606266.645  
 Record-Route: <sip:50920@10.3.0.15>  
 Route: <sip:50919@10.3.0.68>  
 From: <sip:50920@sip.com>;tag=7e813a99



To: 50919 <sip:50919@sip.com>;tag=298f7927  
 Call-ID: 49e148d3bea7a564@50919.10.3.0.68  
 CSeq: 896948667 INVITE  
 Contact: <sip:50920@10.3.0.67>  
 max-forwards: 69  
 supported: 100rel  
 supported: replaces  
 supported: timer  
 session-expires: 300;refresher=uac  
 Allow: INVITE, ACK, BYE, CANCEL, OPTIONS, PRACK, MESSAGE, REFER, NOTIFY, UPDATE  
 Content-Type: application/sdp  
 Content-Length: 266

v=0  
 o=- 1164606200976835 1164606200976837 IN IP4 10.3.0.67  
 s=-  
 c=IN IP4 10.3.0.67  
 t=0 0  
 m=audio 5008 RTP/AVP 0 8 4 18 96  
 a=rtpmap:0 PCMU/8000  
 a=rtpmap:8 PCMA/8000  
 a=rtpmap:4 G723/8000  
 a=rtpmap:18 G729/8000  
 a=rtpmap:96 telephone-event/8000  
 a=fmtp:96 0-11

=====

F84 10.3.0.68:1024(50919@sip.com) -> 10.3.0.15:5060(Server)

SIP/2.0 100 Trying  
 Via: SIP/2.0/UDP 10.3.0.15:5060;branch=z9hG4bK-813.448219.896948667  
 Via: SIP/2.0/UDP 10.3.0.67:5060;branch=z9hG4bK-584a6e47-606266.645  
 From: <sip:50920@sip.com>;tag=7e813a99  
 To: 50919 <sip:50919@sip.com>;tag=298f7927  
 Call-ID: 49e148d3bea7a564@50919.10.3.0.68  
 CSeq: 896948667 INVITE  
 Content-Length: 0

=====

F85 10.3.0.68:1024(50919@sip.com) -> 10.3.0.15:5060(Server)

SIP/2.0 200 OK  
 Via: SIP/2.0/UDP 10.3.0.15:5060;branch=z9hG4bK-813.448219.896948667  
 Via: SIP/2.0/UDP 10.3.0.67:5060;branch=z9hG4bK-584a6e47-606266.645  
 Record-Route: <sip:50920@10.3.0.15>  
 From: <sip:50920@sip.com>;tag=7e813a99  
 To: 50919 <sip:50919@sip.com>;tag=298f7927  
 Call-ID: 49e148d3bea7a564@50919.10.3.0.68  
 CSeq: 896948667 INVITE  
 Contact: <sip:50919@10.3.0.68>  
 Supported: 100rel,replaces,timer  
 Require: timer  
 Session-Expires: 300;refresher=uac  
 Allow: INVITE, ACK, BYE, CANCEL, OPTIONS, PRACK, MESSAGE, REFER, NOTIFY, UPDATE  
 Content-Type: application/sdp  
 Accept: application/sdp,message/sipfrag,multipart/mixed  
 Content-Length: 204

v=0  
 o=- 1164605915980122 1164605915980125 IN IP4 10.3.0.68  
 s=-  
 c=IN IP4 10.3.0.68  
 t=0 0  
 m=audio 5008 RTP/AVP 0 96  
 a=rtpmap:0 PCMU/8000  
 a=rtpmap:96 telephone-event/8000  
 a=fmtp:96 0-11  
 a=ptime:20

=====

F86 10.3.0.15:5062(Server) -> 10.3.0.67:5060(50920@sip.com)

SIP/2.0 200 OK  
 Via: SIP/2.0/UDP 10.3.0.67:5060;branch=z9hG4bK-584a6e47-606266.645  
 Record-Route: <sip:50920@10.3.0.15>  
 From: <sip:50920@sip.com>;tag=7e813a99  
 To: 50919 <sip:50919@sip.com>;tag=298f7927

Call-ID: 49e148d3bea7a564@50919.10.3.0.68  
 CSeq: 896948667 INVITE  
 Contact: <sip:50919@10.3.0.68>  
 supported: 100rel  
 supported: replaces  
 supported: timer  
 require: timer  
 session-expires: 300;refresher=uac  
 Allow: INVITE, ACK, BYE, CANCEL, OPTIONS, PRACK, MESSAGE, REFER, NOTIFY, UPDATE  
 Content-Type: application/sdp  
 Accept: application/sdp, message/sipfrag, multipart/mixed  
 Content-Length: 204

v=0  
 o=- 1164605915980122 1164605915980125 IN IP4 10.3.0.68  
 s=-  
 c=IN IP4 10.3.0.68  
 t=0 0  
 m=audio 5008 RTP/AVP 0 96  
 a=rtpmap:0 PCMU/8000  
 a=rtpmap:96 telephone-event/8000  
 a=fmtp:96 0-11  
 a=ptime:20

---

F87 10.3.0.67:1024(50920@sip.com) -> 10.3.0.15:5060(Server)

ACK sip:50920@10.3.0.15 SIP/2.0  
 Via: SIP/2.0/UDP 10.3.0.67:5060;branch=z9hG4bK-4c2256b9-606267.184  
 Route: <sip:50919@10.3.0.68>  
 From: <sip:50920@sip.com>;tag=7e813a99  
 To: 50919 <sip:50919@sip.com>;tag=298f7927  
 Call-ID: 49e148d3bea7a564@50919.10.3.0.68  
 CSeq: 896948667 ACK  
 Max-Forwards: 70  
 Content-Length: 0

---

F88 10.3.0.15:5062(Server) -> 10.3.0.68:5060(50919@sip.com)

ACK sip:50919@10.3.0.68 SIP/2.0  
 Via: SIP/2.0/UDP 10.3.0.15:5060;branch=z9hG4bK-813.1083771549.896948667  
 Via: SIP/2.0/UDP 10.3.0.67:5060;branch=z9hG4bK-4c2256b9-606267.184  
 From: <sip:50920@sip.com>;tag=7e813a99  
 To: 50919 <sip:50919@sip.com>;tag=298f7927  
 Call-ID: 49e148d3bea7a564@50919.10.3.0.68  
 CSeq: 896948667 ACK  
 max-forwards: 69  
 Content-Length: 0

---

F89 10.3.0.67:1024(50920@sip.com) -> 10.3.0.15:5060(Server)

BYE sip:50687@10.3.0.15 SIP/2.0  
 Via: SIP/2.0/UDP 10.3.0.67:5060;branch=z9hG4bK-21b6fa00-606262.588  
 Route: <sip:50687@10.3.0.59>  
 From: 50920 <sip:50920@sip.com>;tag=4005c961  
 To: <sip:50687@sip.com>;tag=0711d03d  
 Call-ID: 665c676ed887c344@50920.10.3.0.67  
 CSeq: 250047636 BYE  
 Max-Forwards: 70  
 Content-Length: 0

---

F90 10.3.0.67:1024(50920@sip.com) -> 10.3.0.15:5060(Server)

BYE sip:50687@10.3.0.15 SIP/2.0  
 Via: SIP/2.0/UDP 10.3.0.67:5060;branch=z9hG4bK-21b6fa00-606262.588  
 Route: <sip:50687@10.3.0.59>  
 From: 50920 <sip:50920@sip.com>;tag=4005c961  
 To: <sip:50687@sip.com>;tag=0711d03d  
 Call-ID: 665c676ed887c344@50920.10.3.0.67  
 CSeq: 250047636 BYE  
 Max-Forwards: 70

Content-Length: 0

```
=====
F91      10.3.0.67:1024(50920@sip.com) -> 10.3.0.15:5060(Server)

BYE sip:50687@10.3.0.15 SIP/2.0
Via: SIP/2.0/UDP 10.3.0.67:5060;branch=z9hG4bK-21b6fa00-606262.588
Route: <sip:50687@10.3.0.59>
From: 50920 <sip:50920@sip.com>;tag=4005c961
To: <sip:50687@sip.com>;tag=0711d03d
Call-ID: 665c676ed887c344@50920.10.3.0.67
CSeq: 250047636 BYE
Max-Forwards: 70
Content-Length: 0
=====
```

```
=====
F92      10.3.0.67:1024(50920@sip.com) -> 10.3.0.15:5060(Server)

BYE sip:50687@10.3.0.15 SIP/2.0
Via: SIP/2.0/UDP 10.3.0.67:5060;branch=z9hG4bK-21b6fa00-606262.588
Route: <sip:50687@10.3.0.59>
From: 50920 <sip:50920@sip.com>;tag=4005c961
To: <sip:50687@sip.com>;tag=0711d03d
Call-ID: 665c676ed887c344@50920.10.3.0.67
CSeq: 250047636 BYE
Max-Forwards: 70
Content-Length: 0
=====
```

```
=====
F93      10.3.0.67:1024(50920@sip.com) -> 10.3.0.15:5060(Server)

BYE sip:50687@10.3.0.15 SIP/2.0
Via: SIP/2.0/UDP 10.3.0.67:5060;branch=z9hG4bK-21b6fa00-606262.588
Route: <sip:50687@10.3.0.59>
From: 50920 <sip:50920@sip.com>;tag=4005c961
To: <sip:50687@sip.com>;tag=0711d03d
Call-ID: 665c676ed887c344@50920.10.3.0.67
CSeq: 250047636 BYE
Max-Forwards: 70
Content-Length: 0
=====
```

```
=====
F94      10.3.0.67:1024(50920@sip.com) -> 10.3.0.15:5060(Server)

BYE sip:50687@10.3.0.15 SIP/2.0
Via: SIP/2.0/UDP 10.3.0.67:5060;branch=z9hG4bK-21b6fa00-606262.588
Route: <sip:50687@10.3.0.59>
From: 50920 <sip:50920@sip.com>;tag=4005c961
To: <sip:50687@sip.com>;tag=0711d03d
Call-ID: 665c676ed887c344@50920.10.3.0.67
CSeq: 250047636 BYE
Max-Forwards: 70
Content-Length: 0
=====
```

```
=====
F95      10.3.0.67:1024(50920@sip.com) -> 10.3.0.15:5060(Server)

BYE sip:50687@10.3.0.15 SIP/2.0
Via: SIP/2.0/UDP 10.3.0.67:5060;branch=z9hG4bK-21b6fa00-606262.588
Route: <sip:50687@10.3.0.59>
From: 50920 <sip:50920@sip.com>;tag=4005c961
To: <sip:50687@sip.com>;tag=0711d03d
Call-ID: 665c676ed887c344@50920.10.3.0.67
CSeq: 250047636 BYE
Max-Forwards: 70
Content-Length: 0
=====
```

```
=====
F96      10.3.0.15:5062(Server) -> 10.3.0.67:5060(50920@sip.com)
=====
```

SIP/2.0 408 Request Timeout  
 Via: SIP/2.0/UDP 10.3.0.67:5060;branch=z9hG4bK-21b6fa00-606262.588  
 From: 50920 <sip:50920@sip.com>;tag=4005c961  
 To: <sip:50687@sip.com>;tag=0711d03d  
 Call-ID: 665c676ed887c344@50920.10.3.0.67  
 CSeq: 250047636 BYE  
 Content-Length: 0

=====

F97           10.3.0.68:1024(50919@sip.com) -> 10.3.0.15:5060(Server)

BYE sip:50920@10.3.0.15 SIP/2.0  
 Via: SIP/2.0/UDP 10.3.0.68:5060;branch=z9hG4bK-7b84838-606022.020  
 Route: <sip:50920@10.3.0.67>  
 From: 50919 <sip:50919@sip.com>;tag=298f7927  
 To: <sip:50920@sip.com>;tag=7e813a99  
 Call-ID: 49e148d3bea7a564@50919.10.3.0.68  
 CSeq: 1056706925 BYE  
 Max-Forwards: 70  
 Content-Length: 0

=====

F98           10.3.0.15:5062(Server) -> 10.3.0.67:5060(50920@sip.com)

BYE sip:50920@10.3.0.67 SIP/2.0  
 Via: SIP/2.0/UDP 10.3.0.15:5060;branch=z9hG4bK-814.1083771585.1056706925  
 Via: SIP/2.0/UDP 10.3.0.68:5060;branch=z9hG4bK-7b84838-606022.020  
 Route: <sip:50920@10.3.0.67>  
 From: 50919 <sip:50919@sip.com>;tag=298f7927  
 To: <sip:50920@sip.com>;tag=7e813a99  
 Call-ID: 49e148d3bea7a564@50919.10.3.0.68  
 CSeq: 1056706925 BYE  
 max-forwards: 69  
 Content-Length: 0

=====

F99           10.3.0.67:1024(50920@sip.com) -> 10.3.0.15:5060(Server)

SIP/2.0 200 OK  
 Via: SIP/2.0/UDP 10.3.0.15:5060;branch=z9hG4bK-814.1083771585.1056706925  
 Via: SIP/2.0/UDP 10.3.0.68:5060;branch=z9hG4bK-7b84838-606022.020  
 From: 50919 <sip:50919@sip.com>;tag=298f7927  
 To: <sip:50920@sip.com>;tag=7e813a99  
 Call-ID: 49e148d3bea7a564@50919.10.3.0.68  
 CSeq: 1056706925 BYE  
 Content-Length: 0

=====

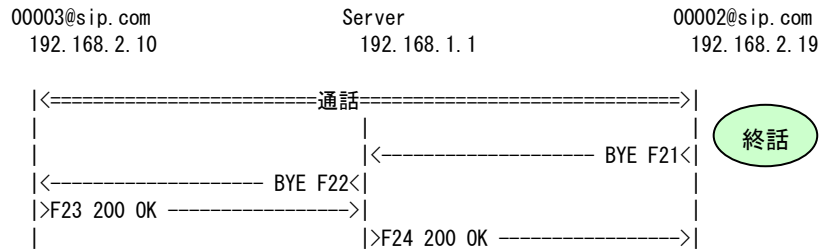
F100          10.3.0.15:5062(Server) -> 10.3.0.68:5060(50919@sip.com)

SIP/2.0 200 OK  
 Via: SIP/2.0/UDP 10.3.0.68:5060;branch=z9hG4bK-7b84838-606022.020  
 From: 50919 <sip:50919@sip.com>;tag=298f7927  
 To: <sip:50920@sip.com>;tag=7e813a99  
 Call-ID: 49e148d3bea7a564@50919.10.3.0.68  
 CSeq: 1056706925 BYE  
 Content-Length: 0

=====

## 11.7. 終話

### 11.7.1. 通常終話



終話時に RTCP で Goodbye を送出するためタイミングによって BYE を送出するシーケンスが逆方向になる場合がある。

図 11-39 通常終話

シーケンスは 11.2.1 を参照。

### 11.7.2. 終話中 NW より応答なし(端末タイマによる呼切断)

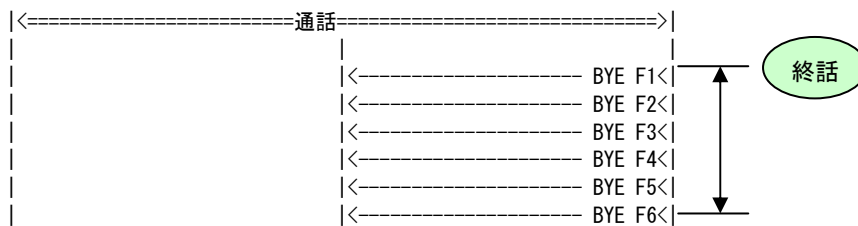
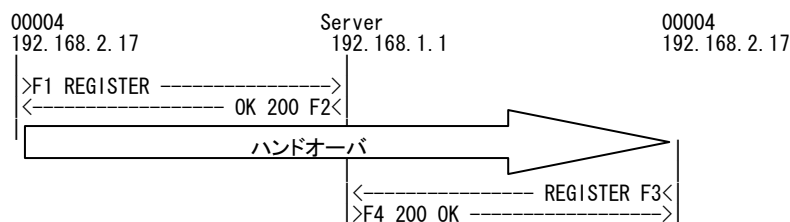


図 11-40 終話中 NW より応答なし(端末タイマによる呼切断)

## 11.8. ハンドオーバー

## 11.8.1. 待ち受け中ハンドオーバー(IP アドレスの変更なし)

IP アドレスの変更を伴わないハンドオーバーを契機として、新たに SIP メッセージが送出されることはない。ただしプロファイルが変更されるハンドオーバーでは REGISTER が送出される。その場合のシーケンスを以下に示す。



注：00004 認証なし

図 11-41 待ち受け中ハンドオーバー(IP アドレスの変更なし)

```

=====
F1      192.168.2.17:1029() -> 192.168.1.1:5060(Server)

REGISTER sip:192.168.1.1 SIP/2.0
Via: SIP/2.0/UDP 192.168.2.17:5060;branch=z9hG4bK-2a15298e-289886.042
From: <sip:00004@sip.com>
To: <sip:00004@sip.com>
Call-ID: 2a1c33b2@00004.192.168.1.1
CSeq: 0 REGISTER
Contact: <sip:00004@192.168.2.17>;expires=3600
Max-Forwards: 70
User-Agent: △△△△△△ //端末種別
Content-Length: 0
  
```

```

=====
F2      192.168.1.1:5062(Server) -> 192.168.2.17:5060()

SIP/2.0 200 OK
Via: SIP/2.0/UDP 192.168.2.17:5060;branch=z9hG4bK-2a15298e-289886.042
From: <sip:00004@sip.com>
To: <sip:00004@sip.com>
Call-ID: 2a1c33b2@00004.192.168.1.1
CSeq: 0 REGISTER
Contact: <sip:00004@192.168.2.17>;expires=3600
Content-Length: 0
  
```

```

=====
F3      192.168.2.17:1031() -> 192.168.1.1:5060(Server)

REGISTER sip:192.168.1.1 SIP/2.0
Via: SIP/2.0/UDP 192.168.2.17:5060;branch=z9hG4bK-38c57792-289921.491
From: <sip:00004@sip.com>
To: <sip:00004@sip.com>
Call-ID: 2a1c33b2@00004.192.168.1.1
CSeq: 1 REGISTER
Contact: <sip:00004@192.168.2.17>;expires=3600
Max-Forwards: 70
User-Agent: △△△△△△ //端末種別
Content-Length: 0
  
```

```

=====
F4      192.168.1.1:5062(Server) -> 192.168.2.17:5060()

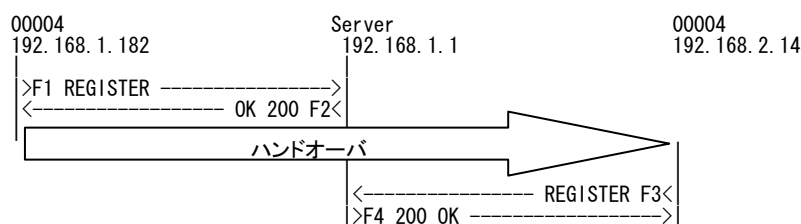
SIP/2.0 200 OK
Via: SIP/2.0/UDP 192.168.2.17:5060;branch=z9hG4bK-38c57792-289921.491
  
```

FOMA/WLAN デュアル端末に関する技術参考資料 第 1.2 版

From: <sip:00004@sip.com>  
To: <sip:00004@sip.com>  
Call-ID: 2a1c33b2@00004.192.168.1.1  
CSeq: 1 REGISTER  
Contact: <sip:00004@192.168.2.17>;expires=3600  
Content-Length: 0

=====

## 11.8.2. 待ち受け中ハンドオーバー(IP アドレスの変更有)



注：00004 認証なし

図 11-42 待ち受け中ハンドオーバー(IP アドレスの変更有)

F1 192.168.1.182:1168 () -&gt; 192.168.1.1:5060 (Server)

```

REGISTER sip:192.168.1.1 SIP/2.0
Via: SIP/2.0/UDP 192.168.1.182:5060;branch=z9hG4bK-228f8694-270652.873
From: <sip:00004@sip.com>
To: <sip:00004@sip.com>
Call-ID: 4e694e01@00004.192.168.1.1
CSeq: 10 REGISTER
Contact: <sip:00004@192.168.1.182>;expires=3600
Max-Forwards: 70
User-Agent: △△△△△△ //端末種別
Content-Length: 0
  
```

F2 192.168.1.1:5062 (Server) -&gt; 192.168.1.182:5060 ()

```

SIP/2.0 200 OK
Via: SIP/2.0/UDP 192.168.1.182:5060;branch=z9hG4bK-228f8694-270652.873
From: <sip:00004@sip.com>
To: <sip:00004@sip.com>
Call-ID: 4e694e01@00004.192.168.1.1
CSeq: 10 REGISTER
Contact: <sip:00004@192.168.1.182>;expires=3600
Content-Length: 0
  
```

F3 192.168.2.14:1169 () -&gt; 192.168.1.1:5060 (Server)

```

REGISTER sip:192.168.1.1 SIP/2.0
Via: SIP/2.0/UDP 192.168.2.14:5060;branch=z9hG4bK-3ad0ec4-270823.459
From: <sip:00004@sip.com>
To: <sip:00004@sip.com>
Call-ID: 4e694e01@00004.192.168.1.1
CSeq: 11 REGISTER
Contact: <sip:00004@192.168.2.14>;expires=3600
Max-Forwards: 70
User-Agent: △△△△△△ //端末種別
Content-Length: 0
  
```

F4 192.168.1.1:5062 (Server) -&gt; 192.168.2.14:5060 ()

```

SIP/2.0 200 OK
Via: SIP/2.0/UDP 192.168.2.14:5060;branch=z9hG4bK-3ad0ec4-270823.459
From: <sip:00004@sip.com>
To: <sip:00004@sip.com>
Call-ID: 4e694e01@00004.192.168.1.1
CSeq: 11 REGISTER
Contact: <sip:00004@192.168.2.14>;expires=3600
Content-Length: 0
  
```



## 11.8.3. 待ち受けハンドオーバー中端末電源 OFF

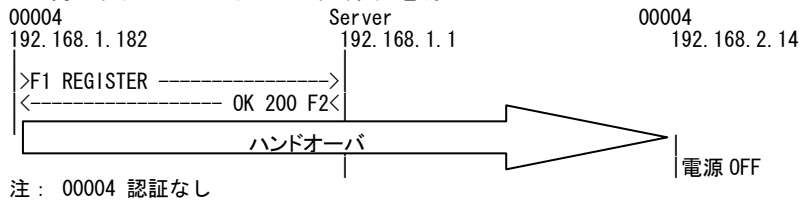


図 11-43 待ち受けハンドオーバー中端末電源 OFF

注: 待ち受けハンドオーバー中に電源 OFF した場合は un-REGISTER を送信しない。

```
=====
F1      192.168.1.182:1168() -> 192.168.1.1:5060(Server)

REGISTER sip:192.168.1.1 SIP/2.0
Via: SIP/2.0/UDP 192.168.1.182:5060;branch=z9hG4bK-228f8694-270652.873
From: <sip:00004@sip.com>
To: <sip:00004@sip.com>
Call-ID: 4e694e01@00004.192.168.1.1
CSeq: 10 REGISTER
Contact: <sip:00004@192.168.1.182>;expires=3600
Max-Forwards: 70
User-Agent: △△△△△△ //端末種別
Content-Length: 0
=====
```

```
=====
F2      192.168.1.1:5062(Server) -> 192.168.1.182:5060()

SIP/2.0 200 OK
Via: SIP/2.0/UDP 192.168.1.182:5060;branch=z9hG4bK-228f8694-270652.873
From: <sip:00004@sip.com>
To: <sip:00004@sip.com>
Call-ID: 4e694e01@00004.192.168.1.1
CSeq: 10 REGISTER
Contact: <sip:00004@192.168.1.182>;expires=3600
Content-Length: 0
=====
```

## 11.8.4. ハンドオーバー中 NW 登録失敗 (IP アドレス登録失敗)

IP アドレス登録失敗すると AP を再スキャンし、再帰属を試行する。

## 11.8.5. 発信中発信者ハンドオーバー (IP アドレスの変更なし)

IP アドレスの変更を伴わないハンドオーバーでは REGISTER は発生しないが、プロフィールが変更されるハンドオーバーでは REGISTER が送出される。

この場合のシーケンスを以下に示す。

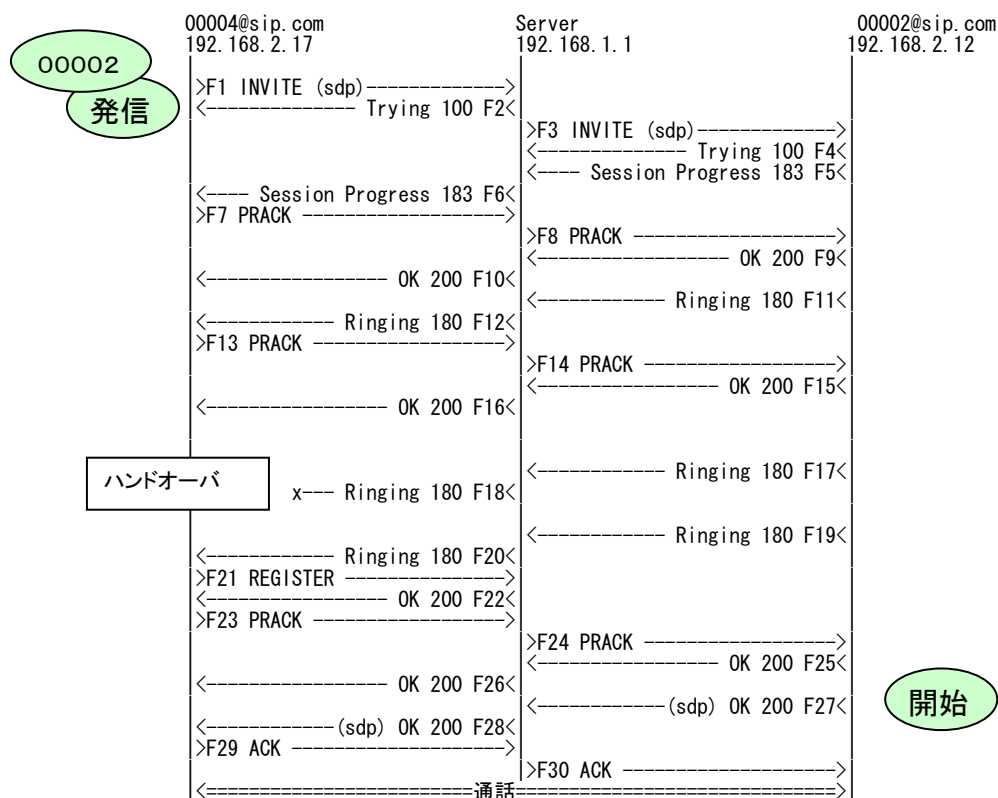


図 11-44 発信中発信者ハンドオーバー (IP アドレスの変更なし)

F1 192.168.2.17:1036() -> 192.168.1.1:5060(Server)

```
INVITE sip:00002@sip.com SIP/2.0
Via: SIP/2.0/UDP 192.168.2.17:5060;branch=z9hG4bK-7bce1415-290525.390
Route: <sip:192.168.1.1:5060>
From: <sip:00004@sip.com>;tag=554aa12c
To: <sip:00002@sip.com>
Call-ID: 7a870622@00004.192.168.1.1
CSeq: 258488392 INVITE
Contact: <sip:00004@192.168.2.17>
Max-Forwards: 70
Supported: 100rel, replaces
Allow: INVITE, ACK, BYE, CANCEL, OPTIONS, PRACK, MESSAGE, REFER, NOTIFY
Content-Type: application/sdp
Accept: application/sdp, message/sipfrag
Content-Length: 249
```

```
v=0
o=- 375298 101 IN IP4 192.168.2.17
s=-
c=IN IP4 192.168.2.17
t=0 0
m=audio 5006 RTP/AVP 0 8 4 18 96
a=rtpmap:0 PCMU/8000
a=rtpmap:8 PCMA/8000
a=rtpmap:4 G723/8000
```

a=rtpmap:18 G729/8000  
a=rtpmap:96 telephone-event/8000  
a=fmtp:96 0-11

F2 192.168.1.1:5062(Server) -> 192.168.2.17:5060()

SIP/2.0 100 Trying  
Via: SIP/2.0/UDP 192.168.2.17:5060;branch=z9hG4bK-7bce1415-290525.390  
From: <sip:00004@sip.com>;tag=554aa12c  
To: <sip:00002@sip.com>  
Call-ID: 7a870622@00004.192.168.1.1  
CSeq: 258488392 INVITE  
Content-Length: 0

F3 192.168.1.1:5062(Server) -> 192.168.2.12:5060()

INVITE sip:00002@192.168.2.12 SIP/2.0  
Via: SIP/2.0/UDP 192.168.1.1:5060;branch=z9hG4bK-813.781482.258488392  
Via: SIP/2.0/UDP 192.168.2.17:5060;branch=z9hG4bK-7bce1415-290525.390  
Record-Route: <sip:00002@192.168.1.1>  
Route: <sip:192.168.1.1:5060>  
From: 00004 <sip:00004@sip.com>;tag=554aa12c  
To: <sip:00002@sip.com>  
Call-ID: 7a870622@00004.192.168.1.1  
CSeq: 258488392 INVITE  
Contact: <sip:00004@192.168.2.17>  
max-forwards: 69  
supported: 100rel  
supported: replaces  
Allow: INVITE, ACK, BYE, CANCEL, OPTIONS, PRACK, MESSAGE, REFER, NOTIFY  
Content-Type: application/sdp  
Accept: application/sdp, message/sipfrag  
Content-Length: 249

v=0  
o=- 375298 101 IN IP4 192.168.2.17  
s=-  
c=IN IP4 192.168.2.17  
t=0 0  
m=audio 5006 RTP/AVP 0 8 4 18 96  
a=rtpmap:0 PCMU/8000  
a=rtpmap:8 PCMA/8000  
a=rtpmap:4 G723/8000  
a=rtpmap:18 G729/8000  
a=rtpmap:96 telephone-event/8000  
a=fmtp:96 0-11

F4 192.168.2.12:1192() -> 192.168.1.1:5060(Server)

SIP/2.0 100 Trying  
Via: SIP/2.0/UDP 192.168.1.1:5060;branch=z9hG4bK-813.781482.258488392  
Via: SIP/2.0/UDP 192.168.2.17:5060;branch=z9hG4bK-7bce1415-290525.390  
From: 00004 <sip:00004@sip.com>;tag=554aa12c  
To: <sip:00002@sip.com>  
Call-ID: 7a870622@00004.192.168.1.1  
CSeq: 258488392 INVITE  
Content-Length: 0

F5 192.168.2.12:1192() -> 192.168.1.1:5060(Server)

SIP/2.0 183 Session Progress  
Via: SIP/2.0/UDP 192.168.1.1:5060;branch=z9hG4bK-813.781482.258488392  
Via: SIP/2.0/UDP 192.168.2.17:5060;branch=z9hG4bK-7bce1415-290525.390  
Record-Route: <sip:00002@192.168.1.1>  
From: 00004 <sip:00004@sip.com>;tag=554aa12c  
To: <sip:00002@sip.com>;tag=3d0e80b0  
Call-ID: 7a870622@00004.192.168.1.1  
CSeq: 258488392 INVITE  
Contact: <sip:00002@192.168.2.12>  
Require: 100rel  
RSeq: 735171110

Content-Length: 0

=====

F6 192.168.1.1:5062 (Server) -&gt; 192.168.2.17:5060 ()

SIP/2.0 183 Session Progress  
Via: SIP/2.0/UDP 192.168.2.17:5060;branch=z9hG4bK-7bce1415-290525.390  
Record-Route: <sip:00002@192.168.1.1>  
From: 00004 <sip:00004@sip.com>;tag=554aa12c  
To: <sip:00002@sip.com>;tag=3d0e80b0  
Call-ID: 7a870622@00004.192.168.1.1  
CSeq: 258488392 INVITE  
Contact: <sip:00002@192.168.2.12>  
require: 100rel  
rseq: 735171110  
Content-Length: 0

=====

F7 192.168.2.17:1036 () -&gt; 192.168.1.1:5060 (Server)

PRACK sip:00002@192.168.1.1 SIP/2.0  
Via: SIP/2.0/UDP 192.168.2.17:5060;branch=z9hG4bK-40362e37-290525.888  
Route: <sip:00002@192.168.2.12>  
From: 00004 <sip:00004@sip.com>;tag=554aa12c  
To: <sip:00002@sip.com>;tag=3d0e80b0  
Call-ID: 7a870622@00004.192.168.1.1  
CSeq: 258488393 PRACK  
Max-Forwards: 70  
RAck: 735171110 258488392 INVITE  
Content-Length: 0

=====

F8 192.168.1.1:5062 (Server) -&gt; 192.168.2.12:5060 ()

PRACK sip:00002@192.168.2.12 SIP/2.0  
Via: SIP/2.0/UDP 192.168.1.1:5060;branch=z9hG4bK-813.1083413574.258488393  
Via: SIP/2.0/UDP 192.168.2.17:5060;branch=z9hG4bK-40362e37-290525.888  
Route: <sip:00002@192.168.2.12>  
From: 00004 <sip:00004@sip.com>;tag=554aa12c  
To: <sip:00002@sip.com>;tag=3d0e80b0  
Call-ID: 7a870622@00004.192.168.1.1  
CSeq: 258488393 PRACK  
max-forwards: 69  
rack: 735171110 258488392 INVITE  
Content-Length: 0

=====

F9 192.168.2.12:1192 () -&gt; 192.168.1.1:5060 (Server)

SIP/2.0 200 OK  
Via: SIP/2.0/UDP 192.168.1.1:5060;branch=z9hG4bK-813.1083413574.258488393  
Via: SIP/2.0/UDP 192.168.2.17:5060;branch=z9hG4bK-40362e37-290525.888  
From: 00004 <sip:00004@sip.com>;tag=554aa12c  
To: <sip:00002@sip.com>;tag=3d0e80b0  
Call-ID: 7a870622@00004.192.168.1.1  
CSeq: 258488393 PRACK  
Content-Length: 0

=====

F10 192.168.1.1:5062 (Server) -&gt; 192.168.2.17:5060 ()

SIP/2.0 200 OK  
Via: SIP/2.0/UDP 192.168.2.17:5060;branch=z9hG4bK-40362e37-290525.888  
From: 00004 <sip:00004@sip.com>;tag=554aa12c  
To: <sip:00002@sip.com>;tag=3d0e80b0  
Call-ID: 7a870622@00004.192.168.1.1  
CSeq: 258488393 PRACK  
Content-Length: 0

F11 192.168.2.12:1192() -> 192.168.1.1:5060(Server)

SIP/2.0 180 Ringing  
 Via: SIP/2.0/UDP 192.168.1.1:5060;branch=z9hG4bK-813.781482.258488392  
 Via: SIP/2.0/UDP 192.168.2.17:5060;branch=z9hG4bK-7bce1415-290525.390  
 Record-Route: <sip:00002@192.168.1.1>  
 From: 00004 <sip:00004@sip.com>;tag=554aa12c  
 To: <sip:00002@sip.com>;tag=3d0e80b0  
 Call-ID: 7a870622@00004.192.168.1.1  
 CSeq: 258488392 INVITE  
 Contact: <sip:00002@192.168.2.12>  
 Require: 100rel  
 RSeq: 735171111  
 Content-Length: 0

F12 192.168.1.1:5062(Server) -> 192.168.2.17:5060()

SIP/2.0 180 Ringing  
 Via: SIP/2.0/UDP 192.168.2.17:5060;branch=z9hG4bK-7bce1415-290525.390  
 Record-Route: <sip:00002@192.168.1.1>  
 From: 00004 <sip:00004@sip.com>;tag=554aa12c  
 To: <sip:00002@sip.com>;tag=3d0e80b0  
 Call-ID: 7a870622@00004.192.168.1.1  
 CSeq: 258488392 INVITE  
 Contact: <sip:00002@192.168.2.12>  
 require: 100rel  
 rseq: 735171111  
 Content-Length: 0

F13 192.168.2.17:1036() -> 192.168.1.1:5060(Server)

PRACK sip:00002@192.168.1.1 SIP/2.0  
 Via: SIP/2.0/UDP 192.168.2.17:5060;branch=z9hG4bK-5bf9e6ef-290526.485  
 Route: <sip:00002@192.168.2.12>  
 From: 00004 <sip:00004@sip.com>;tag=554aa12c  
 To: <sip:00002@sip.com>;tag=3d0e80b0  
 Call-ID: 7a870622@00004.192.168.1.1  
 CSeq: 258488394 PRACK  
 Max-Forwards: 70  
 RAck: 735171111 258488392 INVITE  
 Content-Length: 0

F14 192.168.1.1:5062(Server) -> 192.168.2.12:5060()

PRACK sip:00002@192.168.2.12 SIP/2.0  
 Via: SIP/2.0/UDP 192.168.1.1:5060;branch=z9hG4bK-813.1083413574.258488394  
 Via: SIP/2.0/UDP 192.168.2.17:5060;branch=z9hG4bK-5bf9e6ef-290526.485  
 Route: <sip:00002@192.168.2.12>  
 From: 00004 <sip:00004@sip.com>;tag=554aa12c  
 To: <sip:00002@sip.com>;tag=3d0e80b0  
 Call-ID: 7a870622@00004.192.168.1.1  
 CSeq: 258488394 PRACK  
 max-forwards: 69  
 rack: 735171111 258488392 INVITE  
 Content-Length: 0

F15 192.168.2.12:1192() -> 192.168.1.1:5060(Server)

SIP/2.0 200 OK  
 Via: SIP/2.0/UDP 192.168.1.1:5060;branch=z9hG4bK-813.1083413574.258488394  
 Via: SIP/2.0/UDP 192.168.2.17:5060;branch=z9hG4bK-5bf9e6ef-290526.485  
 From: 00004 <sip:00004@sip.com>;tag=554aa12c  
 To: <sip:00002@sip.com>;tag=3d0e80b0  
 Call-ID: 7a870622@00004.192.168.1.1  
 CSeq: 258488394 PRACK  
 Content-Length: 0

F16 192.168.1.1:5062 (Server) -> 192.168.2.17:5060 ()

SIP/2.0 200 OK  
Via: SIP/2.0/UDP 192.168.2.17:5060;branch=z9hG4bK-5bf9e6ef-290526.485  
From: 00004 <sip:00004@sip.com>;tag=554aa12c  
To: <sip:00002@sip.com>;tag=3d0e80b0  
Call-ID: 7a870622@00004.192.168.1.1  
CSeq: 258488394 PRACK  
Content-Length: 0

F17 192.168.2.12:1192 () -> 192.168.1.1:5060 (Server)

SIP/2.0 180 Ringing  
Via: SIP/2.0/UDP 192.168.1.1:5060;branch=z9hG4bK-813.781482.258488392  
Via: SIP/2.0/UDP 192.168.2.17:5060;branch=z9hG4bK-7bce1415-290525.390  
Record-Route: <sip:00002@192.168.1.1>  
From: 00004 <sip:00004@sip.com>;tag=554aa12c  
To: <sip:00002@sip.com>;tag=3d0e80b0  
Call-ID: 7a870622@00004.192.168.1.1  
CSeq: 258488392 INVITE  
Contact: <sip:00002@192.168.2.12>  
Require: 100rel  
RSeq: 735171112  
Content-Length: 0

F18 192.168.1.1:5062 (Server) -> 192.168.2.17:5060 ()

SIP/2.0 180 Ringing  
Via: SIP/2.0/UDP 192.168.2.17:5060;branch=z9hG4bK-7bce1415-290525.390  
Record-Route: <sip:00002@192.168.1.1>  
From: 00004 <sip:00004@sip.com>;tag=554aa12c  
To: <sip:00002@sip.com>;tag=3d0e80b0  
Call-ID: 7a870622@00004.192.168.1.1  
CSeq: 258488392 INVITE  
Contact: <sip:00002@192.168.2.12>  
require: 100rel  
rseq: 735171112  
Content-Length: 0

F19 192.168.2.12:1192 () -> 192.168.1.1:5060 (Server)

SIP/2.0 180 Ringing  
Via: SIP/2.0/UDP 192.168.1.1:5060;branch=z9hG4bK-813.781482.258488392  
Via: SIP/2.0/UDP 192.168.2.17:5060;branch=z9hG4bK-7bce1415-290525.390  
Record-Route: <sip:00002@192.168.1.1>  
From: 00004 <sip:00004@sip.com>;tag=554aa12c  
To: <sip:00002@sip.com>;tag=3d0e80b0  
Call-ID: 7a870622@00004.192.168.1.1  
CSeq: 258488392 INVITE  
Contact: <sip:00002@192.168.2.12>  
Require: 100rel  
RSeq: 735171112  
Content-Length: 0

F20 192.168.1.1:5062 (Server) -> 192.168.2.17:5060 ()

SIP/2.0 180 Ringing  
Via: SIP/2.0/UDP 192.168.2.17:5060;branch=z9hG4bK-7bce1415-290525.390  
Record-Route: <sip:00002@192.168.1.1>  
From: 00004 <sip:00004@sip.com>;tag=554aa12c  
To: <sip:00002@sip.com>;tag=3d0e80b0  
Call-ID: 7a870622@00004.192.168.1.1  
CSeq: 258488392 INVITE  
Contact: <sip:00002@192.168.2.12>  
require: 100rel  
rseq: 735171112  
Content-Length: 0

```
=====
F21      192.168.2.17:1039() -> 192.168.1.1:5060(Server)

REGISTER sip:192.168.1.1 SIP/2.0
Via: SIP/2.0/UDP 192.168.2.17:5060;branch=z9hG4bK-72b3232d-290537.912
From: <sip:00004@sip.com>
To: <sip:00004@sip.com>
Call-ID: 1a196654@00004.192.168.1.1
CSeq: 1 REGISTER
Contact: <sip:00004@192.168.2.17>;expires=3600
Max-Forwards: 70
User-Agent: △△△△△△ //端末種別
Content-Length: 0
=====
```

```
=====
F22      192.168.1.1:5062(Server) -> 192.168.2.17:5060()

SIP/2.0 200 OK
Via: SIP/2.0/UDP 192.168.2.17:5060;branch=z9hG4bK-72b3232d-290537.912
From: <sip:00004@sip.com>
To: <sip:00004@sip.com>
Call-ID: 1a196654@00004.192.168.1.1
CSeq: 1 REGISTER
Contact: <sip:00004@192.168.2.17>;expires=3600
Content-Length: 0
=====
```

```
=====
F23      192.168.2.17:1039() -> 192.168.1.1:5060(Server)

PRACK sip:00002@192.168.1.1 SIP/2.0
Via: SIP/2.0/UDP 192.168.2.17:5060;branch=z9hG4bK-26b9bf12-290537.977
Route: <sip:00002@192.168.2.12>
From: 00004 <sip:00004@sip.com>;tag=554aa12c
To: <sip:00002@sip.com>;tag=3d0e80b0
Call-ID: 7a870622@00004.192.168.1.1
CSeq: 258488395 PRACK
Max-Forwards: 70
RAck: 735171112 258488392 INVITE
Content-Length: 0
=====
```

```
=====
F24      192.168.1.1:5062(Server) -> 192.168.2.12:5060()

PRACK sip:00002@192.168.2.12 SIP/2.0
Via: SIP/2.0/UDP 192.168.1.1:5060;branch=z9hG4bK-813.1083413586.258488395
Via: SIP/2.0/UDP 192.168.2.17:5060;branch=z9hG4bK-26b9bf12-290537.977
Route: <sip:00002@192.168.2.12>
From: 00004 <sip:00004@sip.com>;tag=554aa12c
To: <sip:00002@sip.com>;tag=3d0e80b0
Call-ID: 7a870622@00004.192.168.1.1
CSeq: 258488395 PRACK
max-forwards: 69
rack: 735171112 258488392 INVITE
Content-Length: 0
=====
```

```
=====
F25      192.168.2.12:1192() -> 192.168.1.1:5060(Server)

SIP/2.0 200 OK
Via: SIP/2.0/UDP 192.168.1.1:5060;branch=z9hG4bK-813.1083413586.258488395
Via: SIP/2.0/UDP 192.168.2.17:5060;branch=z9hG4bK-26b9bf12-290537.977
From: 00004 <sip:00004@sip.com>;tag=554aa12c
To: <sip:00002@sip.com>;tag=3d0e80b0
Call-ID: 7a870622@00004.192.168.1.1
CSeq: 258488395 PRACK
Content-Length: 0
=====
```

F26 192.168.1.1:5062(Server) -> 192.168.2.17:5060()

SIP/2.0 200 OK  
 Via: SIP/2.0/UDP 192.168.2.17:5060;branch=z9hG4bK-26b9bf12-290537.977  
 From: 00004 <sip:00004@sip.com>;tag=554aa12c  
 To: <sip:00002@sip.com>;tag=3d0e80b0  
 Call-ID: 7a870622@00004.192.168.1.1  
 CSeq: 258488395 PRACK  
 Content-Length: 0

F27 192.168.2.12:1192() -> 192.168.1.1:5060(Server)

SIP/2.0 200 OK  
 Via: SIP/2.0/UDP 192.168.1.1:5060;branch=z9hG4bK-813.781482.258488392  
 Via: SIP/2.0/UDP 192.168.2.17:5060;branch=z9hG4bK-7bce1415-290525.390  
 Record-Route: <sip:00002@192.168.1.1>  
 From: 00004 <sip:00004@sip.com>;tag=554aa12c  
 To: <sip:00002@sip.com>;tag=3d0e80b0  
 Call-ID: 7a870622@00004.192.168.1.1  
 CSeq: 258488392 INVITE  
 Contact: <sip:00002@192.168.2.12>  
 Supported: 100rel, replaces  
 Allow: INVITE, ACK, BYE, CANCEL, OPTIONS, PRACK, MESSAGE, REFER, NOTIFY  
 Content-Type: application/sdp  
 Accept: application/sdp, message/sipfrag  
 Content-Length: 177

v=0  
 o=- 883172 12901 IN IP4 192.168.2.12  
 s=-  
 c=IN IP4 192.168.2.12  
 t=0 0  
 m=audio 5008 RTP/AVP 0 96  
 a=rtpmap:0 PCMU/8000  
 a=rtpmap:96 telephone-event/8000  
 a=fmtp:96 0-11

F28 192.168.1.1:5062(Server) -> 192.168.2.17:5060()

SIP/2.0 200 OK  
 Via: SIP/2.0/UDP 192.168.2.17:5060;branch=z9hG4bK-7bce1415-290525.390  
 Record-Route: <sip:00002@192.168.1.1>  
 From: 00004 <sip:00004@sip.com>;tag=554aa12c  
 To: <sip:00002@sip.com>;tag=3d0e80b0  
 Call-ID: 7a870622@00004.192.168.1.1  
 CSeq: 258488392 INVITE  
 Contact: <sip:00002@192.168.2.12>  
 supported: 100rel  
 supported: replaces  
 Allow: INVITE, ACK, BYE, CANCEL, OPTIONS, PRACK, MESSAGE, REFER, NOTIFY  
 Content-Type: application/sdp  
 Accept: application/sdp, message/sipfrag  
 Content-Length: 177

v=0  
 o=- 883172 12901 IN IP4 192.168.2.12  
 s=-  
 c=IN IP4 192.168.2.12  
 t=0 0  
 m=audio 5008 RTP/AVP 0 96  
 a=rtpmap:0 PCMU/8000  
 a=rtpmap:96 telephone-event/8000  
 a=fmtp:96 0-11

F29 192.168.2.17:1039() -> 192.168.1.1:5060(Server)

ACK sip:00002@192.168.1.1 SIP/2.0  
 Via: SIP/2.0/UDP 192.168.2.17:5060;branch=z9hG4bK-1b06f419-290544.368  
 Route: <sip:00002@192.168.2.12>  
 From: 00004 <sip:00004@sip.com>;tag=554aa12c  
 To: <sip:00002@sip.com>;tag=3d0e80b0  
 Call-ID: 7a870622@00004.192.168.1.1  
 CSeq: 258488392 ACK  
 Max-Forwards: 70

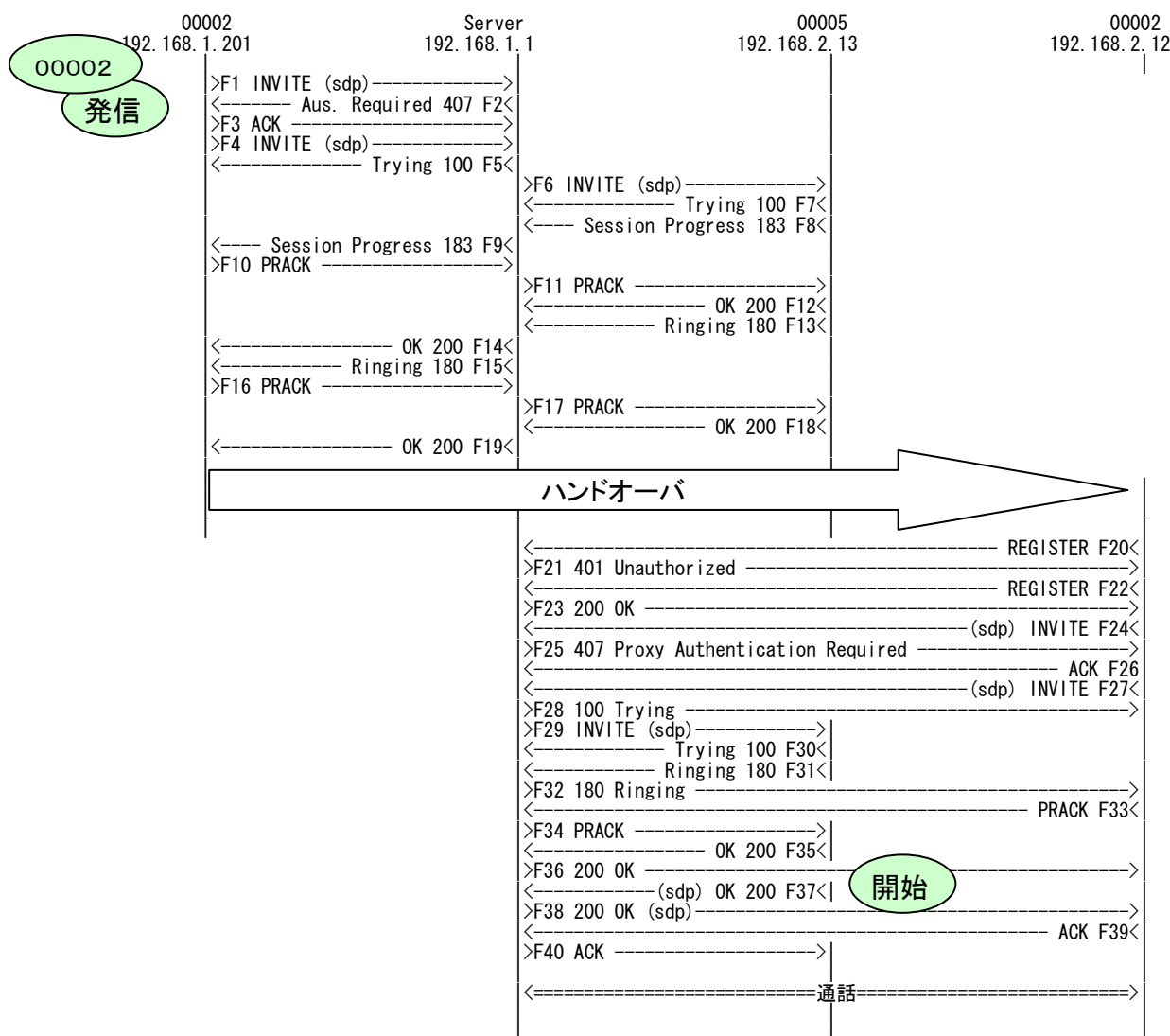


Content-Length: 0

```
=====
F30      192.168.1.1:5062(Server) -> 192.168.2.12:5060()

ACK sip:00002@192.168.2.12 SIP/2.0
Via: SIP/2.0/UDP 192.168.1.1:5060;branch=z9hG4bK-813.1083413592.258488392
Via: SIP/2.0/UDP 192.168.2.17:5060;branch=z9hG4bK-1b06f419-290544.368
From: 00004 <sip:00004@sip.com>;tag=554aa12c
To: <sip:00002@sip.com>;tag=3d0e80b0
Call-ID: 7a870622@00004.192.168.1.1
CSeq: 258488392 ACK
max-forwards: 69
Content-Length: 0
=====
```

## 11.8.6. 発信中発信者ハンドオーバ(IP アドレスの変更有)



注：00002 認証あり 00005 認証なし

図 11-45 発信中発信者ハンドオーバ(IP アドレスの変更有)

発信中にハンドオーバした場合、発信側の端末は 1xx 受信で形成されたダイアログを使用せず、新規 INVITE を送信する場合がある。この場合はハンドオーバ前に形成された既存のダイアログへの CANCEL 送信は行わず、ダイアログを破棄する。

着信側の端末は INVITE を受信後、183 を返信してから ACK を受信するまでの間に同じ SIP アドレスからの新規 INVITE が受信可能である。この時、ハンドオーバ前に形成された既存のダイアログは破棄する。

F1 192.168.1.201:1198() -> 192.168.1.1:5060(Server)

INVITE sip:00005@sip.com SIP/2.0

Via: SIP/2.0/UDP 192.168.1.201:5060;branch=z9hG4bK-1b21bab9-041040.579

Route: <sip:192.168.1.1:5060>

From: <sip:00002@sip.com>;tag=54440c4d  
 To: <sip:00005@sip.com>  
 Call-ID: 52910547@00002.192.168.1.1  
 CSeq: 751727943 INVITE  
 Contact: <sip:00002@192.168.1.201>  
 Max-Forwards: 70  
 Supported: 100rel, replaces  
 Allow: INVITE, ACK, BYE, CANCEL, OPTIONS, PRACK, MESSAGE, REFER, NOTIFY  
 Content-Type: application/sdp  
 Accept: application/sdp, message/sipfrag  
 Content-Length: 251

v=0  
 o=- 564955 101 IN IP4 192.168.1.201  
 s=-  
 c=IN IP4 192.168.1.201  
 t=0 0  
 m=audio 5006 RTP/AVP 0 8 4 18 96  
 a=rtpmap:0 PCMU/8000  
 a=rtpmap:8 PCMA/8000  
 a=rtpmap:4 G723/8000  
 a=rtpmap:18 G729/8000  
 a=rtpmap:96 telephone-event/8000  
 a=fmtp:96 0-11

=====

F2 192.168.1.1:5062(Server) -> 192.168.1.201:5060()

SIP/2.0 407 Proxy Authentication Required  
 Via: SIP/2.0/UDP 192.168.1.201:5060;branch=z9hG4bK-1b21bab9-041040.579  
 From: <sip:00002@sip.com>;tag=54440c4d  
 To: <sip:00005@sip.com>  
 Call-ID: 52910547@00002.192.168.1.1  
 CSeq: 751727943 INVITE  
 Proxy-Authenticate: Digest realm="heliossv2", nonce="e0789fc2cc299a0050417d955fa700a7",  
 opaque="023e4d3b420f08fbcfe1dcb4b0588975", stale=false, algorithm=MD5, qop="auth,auth-int"  
 Content-Length: 0

=====

F3 192.168.1.201:1198() -> 192.168.1.1:5060(Server)

ACK sip:00005@sip.com SIP/2.0  
 Via: SIP/2.0/UDP 192.168.1.201:5060;branch=z9hG4bK-1b21bab9-041040.579  
 Route: <sip:192.168.1.1:5060>  
 From: <sip:00002@sip.com>;tag=54440c4d  
 To: <sip:00005@sip.com>  
 Call-ID: 52910547@00002.192.168.1.1  
 CSeq: 751727943 ACK  
 Content-Length: 0

=====

F4 192.168.1.201:1198() -> 192.168.1.1:5060(Server)

INVITE sip:00005@sip.com SIP/2.0  
 Via: SIP/2.0/UDP 192.168.1.201:5060;branch=z9hG4bK-4eb2a1f1-041050.713  
 Route: <sip:192.168.1.1:5060>  
 From: <sip:00002@sip.com>;tag=54440c4d  
 To: <sip:00005@sip.com>  
 Call-ID: 52910547@00002.192.168.1.1  
 CSeq: 751727944 INVITE  
 Contact: <sip:00002@192.168.1.201>  
 Proxy-Authorization: Digest username="00002", realm="heliossv2", nonce="e0789fc2cc299a0050417d955fa700a7",  
 uri="sip:00005@sip.com", response="7001a01f6c965713aff81f2f16750c1a", algorithm=MD5, cnonce="6a0d5786",  
 opaque="023e4d3b420f08fbcfe1dcb4b0588975", qop=auth, nc=00000001  
 Max-Forwards: 70  
 Supported: 100rel, replaces  
 Allow: INVITE, ACK, BYE, CANCEL, OPTIONS, PRACK, MESSAGE, REFER, NOTIFY  
 Content-Type: application/sdp  
 Accept: application/sdp, message/sipfrag  
 Content-Length: 251

v=0  
 o=- 564955 101 IN IP4 192.168.1.201  
 s=-  
 c=IN IP4 192.168.1.201  
 t=0 0

```

m=audio 5006 RTP/AVP 0 8 4 18 96
a=rtpmap:0 PCMU/8000
a=rtpmap:8 PCMA/8000
a=rtpmap:4 G723/8000
a=rtpmap:18 G729/8000
a=rtpmap:96 telephone-event/8000
a=fmtp:96 0-11

```

---

F5 192.168.1.1:5062(Server) -> 192.168.1.201:5060()

```

SIP/2.0 100 Trying
Via: SIP/2.0/UDP 192.168.1.201:5060;branch=z9hG4bK-4eb2a1f1-041050.713
From: <sip:00002@sip.com>;tag=54440c4d
To: <sip:00005@sip.com>
Call-ID: 52910547@00002.192.168.1.1
CSeq: 751727944 INVITE
Content-Length: 0

```

---

F6 192.168.1.1:5062(Server) -> 192.168.2.13:5060()

```

INVITE sip:00005@sip.com SIP/2.0
Via: SIP/2.0/UDP 192.168.1.1:5060;branch=z9hG4bK-1080.401216.751727944
Via: SIP/2.0/UDP 192.168.1.201:5060;branch=z9hG4bK-4eb2a1f1-041050.713
Record-Route: <sip:00002@192.168.1.1>
Route: <sip:192.168.1.1:5060>
From: <sip:00002@sip.com>;tag=54440c4d
To: <sip:00005@sip.com>
Call-ID: 52910547@00002.192.168.1.1
CSeq: 751727944 INVITE
Contact: <sip:00002@192.168.1.201>
Proxy-Authorization: Digest username="00002", realm="heliossv2", nonce="e0789fc2cc299a0050417d955fa700a7",
uri="sip:00005@sip.com", response="7001a01f6c965713aff81f2f16750c1a", algorithm=MD5, cnonce="6a0d5786",
opaque="023e4d3b420f08fbcfe1dcb4b0588975", qop=auth, nc=00000001
max-Forwards: 69
supported: 100rel
supported: replaces
Allow: INVITE, ACK, BYE, CANCEL, OPTIONS, PRACK, MESSAGE, REFER, NOTIFY
Content-Type: application/sdp
Accept: application/sdp, message/sipfrag
Content-Length: 251

v=0
o=- 564955 101 IN IP4 192.168.1.201
s=-
c=IN IP4 192.168.1.201
t=0 0
m=audio 5006 RTP/AVP 0 8 4 18 96
a=rtpmap:0 PCMU/8000
a=rtpmap:8 PCMA/8000
a=rtpmap:4 G723/8000
a=rtpmap:18 G729/8000
a=rtpmap:96 telephone-event/8000
a=fmtp:96 0-11

```

---

F7 192.168.2.13:1061() -> 192.168.1.1:5060(Server)

```

SIP/2.0 100 Trying
Via: SIP/2.0/UDP 192.168.1.1:5060;branch=z9hG4bK-1080.401216.751727944
Via: SIP/2.0/UDP 192.168.1.201:5060;branch=z9hG4bK-4eb2a1f1-041050.713
From: 00002 <sip:00002@sip.com>;tag=54440c4d
To: <sip:00005@sip.com>
Call-ID: 52910547@00002.192.168.1.1
CSeq: 751727944 INVITE
Content-Length: 0

```

---

F8 192.168.2.13:1061() -> 192.168.1.1:5060(Server)

```

SIP/2.0 183 Session Progress
Via: SIP/2.0/UDP 192.168.1.1:5060;branch=z9hG4bK-1080.401216.751727944
Via: SIP/2.0/UDP 192.168.1.201:5060;branch=z9hG4bK-4eb2a1f1-041050.713
Record-Route: <sip:00005@192.168.1.1>

```

From: 00002 <sip:00002@sip.com>;tag=54440c4d  
 To: <sip:00005@sip.com>;tag=2007621a  
 Call-ID: 52910547@00002.192.168.1.1  
 CSeq: 751727944 INVITE  
 Contact: <sip:00005@192.168.2.13>  
 Require: 100rel  
 RSeq: 1937040699  
 Content-Length: 0

F9 192.168.1.1:5062(Server) -> 192.168.1.201:5060()

SIP/2.0 183 Session Progress  
 Via: SIP/2.0/UDP 192.168.1.201:5060;branch=z9hG4bK-4eb2a1f1-041050.713  
 Record-Route: <sip:00005@192.168.1.1>  
 From: 00002 <sip:00002@sip.com>;tag=54440c4d  
 To: <sip:00005@sip.com>;tag=2007621a  
 Call-ID: 52910547@00002.192.168.1.1  
 CSeq: 751727944 INVITE  
 Contact: <sip:00005@192.168.2.13>  
 require: 100rel  
 rseq: 1937040699  
 Content-Length: 0

F10 192.168.1.201:1198() -> 192.168.1.1:5060(Server)

PRACK sip:00005@192.168.1.1 SIP/2.0  
 Via: SIP/2.0/UDP 192.168.1.201:5060;branch=z9hG4bK-67814ee8-041052.764  
 Route: <sip:00005@192.168.2.13>  
 From: 00002 <sip:00002@sip.com>;tag=54440c4d  
 To: <sip:00005@sip.com>;tag=2007621a  
 Call-ID: 52910547@00002.192.168.1.1  
 CSeq: 751727945 PRACK  
 Proxy-Authorization: Digest username="00002", realm="heliossv2", nonce="e0789fc2cc299a0050417d955fa700a7",  
 uri="sip:00005@192.168.1.1", response="695e24557448774faf64eb6cda779404", algorithm=MD5, cnonce="5179bd35",  
 opaque="023e4d3b420f08fbcfe1dcb4b0588975", qop=auth, nc=00000002  
 Max-Forwards: 70  
 Rack: 1937040699 751727944 INVITE  
 Content-Length: 0

F11 192.168.1.1:5062(Server) -> 192.168.2.13:5060()

PRACK sip:00005@192.168.2.13 SIP/2.0  
 Via: SIP/2.0/UDP 192.168.1.1:5060;branch=z9hG4bK-1080.1083569428.751727945  
 Via: SIP/2.0/UDP 192.168.1.201:5060;branch=z9hG4bK-67814ee8-041052.764  
 Route: <sip:00005@192.168.2.13>  
 From: 00002 <sip:00002@sip.com>;tag=54440c4d  
 To: <sip:00005@sip.com>;tag=2007621a  
 Call-ID: 52910547@00002.192.168.1.1  
 CSeq: 751727945 PRACK  
 max-forwards: 69  
 rack: 1937040699 751727944 INVITE  
 Content-Length: 0

F12 192.168.2.13:1061() -> 192.168.1.1:5060(Server)

SIP/2.0 200 OK  
 Via: SIP/2.0/UDP 192.168.1.1:5060;branch=z9hG4bK-1080.1083569428.751727945  
 Via: SIP/2.0/UDP 192.168.1.201:5060;branch=z9hG4bK-67814ee8-041052.764  
 From: 00002 <sip:00002@sip.com>;tag=54440c4d  
 To: <sip:00005@sip.com>;tag=2007621a  
 Call-ID: 52910547@00002.192.168.1.1  
 CSeq: 751727945 PRACK  
 Content-Length: 0

F13 192.168.2.13:1061() -> 192.168.1.1:5060(Server)

SIP/2.0 180 Ringing  
 Via: SIP/2.0/UDP 192.168.1.1:5060;branch=z9hG4bK-1080.401216.751727944  
 Via: SIP/2.0/UDP 192.168.1.201:5060;branch=z9hG4bK-4eb2a1f1-041050.713  
 Record-Route: <sip:00005@192.168.1.1>  
 From: 00002 <sip:00002@sip.com>;tag=54440c4d  
 To: <sip:00005@sip.com>;tag=2007621a  
 Call-ID: 52910547@00002.192.168.1.1  
 CSeq: 751727944 INVITE  
 Contact: <sip:00005@192.168.2.13>  
 Require: 100rel  
 RSeq: 1937040700  
 Content-Length: 0

=====

F14 192.168.1.1:5062(Server) -> 192.168.1.201:5060()

SIP/2.0 200 OK  
 Via: SIP/2.0/UDP 192.168.1.201:5060;branch=z9hG4bK-67814ee8-041052.764  
 From: 00002 <sip:00002@sip.com>;tag=54440c4d  
 To: <sip:00005@sip.com>;tag=2007621a  
 Call-ID: 52910547@00002.192.168.1.1  
 CSeq: 751727945 PRACK  
 Content-Length: 0

=====

F15 192.168.1.1:5062(Server) -> 192.168.1.201:5060()

SIP/2.0 180 Ringing  
 Via: SIP/2.0/UDP 192.168.1.201:5060;branch=z9hG4bK-4eb2a1f1-041050.713  
 Record-Route: <sip:00005@192.168.1.1>  
 From: 00002 <sip:00002@sip.com>;tag=54440c4d  
 To: <sip:00005@sip.com>;tag=2007621a  
 Call-ID: 52910547@00002.192.168.1.1  
 CSeq: 751727944 INVITE  
 Contact: <sip:00005@192.168.2.13>  
 require: 100rel  
 rseq: 1937040700  
 Content-Length: 0

=====

F16 192.168.1.201:1198() -> 192.168.1.1:5060(Server)

PRACK sip:00005@192.168.1.1 SIP/2.0  
 Via: SIP/2.0/UDP 192.168.1.201:5060;branch=z9hG4bK-1981e15d-041052.895  
 Route: <sip:00005@192.168.2.13>  
 From: 00002 <sip:00002@sip.com>;tag=54440c4d  
 To: <sip:00005@sip.com>;tag=2007621a  
 Call-ID: 52910547@00002.192.168.1.1  
 CSeq: 751727946 PRACK  
 Proxy-Authorization: Digest username="00002", realm="heliossv2", nonce="e0789fc2cc299a0050417d955fa700a7",  
 uri="sip:00005@192.168.1.1", response="877b6df40ff21160af78d1070d568fb0", algorithm=MD5, cnonce="0508099f",  
 opaque="023e4d3b420f08fbcfe1dcb4b0588975", qop=auth, nc=00000003  
 Max-Forwards: 70  
 Rack: 1937040700 751727944 INVITE  
 Content-Length: 0

=====

F17 192.168.1.1:5062(Server) -> 192.168.2.13:5060()

PRACK sip:00005@192.168.2.13 SIP/2.0  
 Via: SIP/2.0/UDP 192.168.1.1:5060;branch=z9hG4bK-1080.1083569428.751727946  
 Via: SIP/2.0/UDP 192.168.1.201:5060;branch=z9hG4bK-1981e15d-041052.895  
 Route: <sip:00005@192.168.2.13>  
 From: 00002 <sip:00002@sip.com>;tag=54440c4d  
 To: <sip:00005@sip.com>;tag=2007621a  
 Call-ID: 52910547@00002.192.168.1.1  
 CSeq: 751727946 PRACK  
 max-forwards: 69  
 rack: 1937040700 751727944 INVITE  
 Content-Length: 0

F18 192.168.2.13:1061() -> 192.168.1.1:5060(Server)

SIP/2.0 200 OK  
 Via: SIP/2.0/UDP 192.168.1.1:5060;branch=z9hG4bK-1080.1083569428.751727946  
 Via: SIP/2.0/UDP 192.168.1.201:5060;branch=z9hG4bK-1981e15d-041052.895  
 From: 00002 <sip:00002@sip.com>;tag=54440c4d  
 To: <sip:00005@sip.com>;tag=2007621a  
 Call-ID: 52910547@00002.192.168.1.1  
 CSeq: 751727946 PRACK  
 Content-Length: 0

F19 192.168.1.1:5062(Server) -> 192.168.1.201:5060()

SIP/2.0 200 OK  
 Via: SIP/2.0/UDP 192.168.1.201:5060;branch=z9hG4bK-1981e15d-041052.895  
 From: 00002 <sip:00002@sip.com>;tag=54440c4d  
 To: <sip:00005@sip.com>;tag=2007621a  
 Call-ID: 52910547@00002.192.168.1.1  
 CSeq: 751727946 PRACK  
 Content-Length: 0

F20 192.168.2.12:1200() -> 192.168.1.1:5060(Server)

REGISTER sip:192.168.1.1 SIP/2.0  
 Via: SIP/2.0/UDP 192.168.2.12:5060;branch=z9hG4bK-4a4043aa-041070.501  
 From: <sip:00002@sip.com>  
 To: <sip:00002@sip.com>  
 Call-ID: 05bd7f93@00002.192.168.1.1  
 CSeq: 2 REGISTER  
 Contact: <sip:00002@192.168.2.12>;expires=3600  
 Authorization: Digest username="00002", realm="heliossv2", nonce="b1e121fc57cf7e9f2691c4f8f74c10d9",  
 uri="sip:192.168.1.1", response="c72de1fc89e3f38609242e5f7bdb9e5e", algorithm=MD5, cnonce="55170193",  
 opaque="fb6737232330cdfec5c221521b08b060", qop=auth, nc=00000002  
 Max-Forwards: 70  
 User-Agent: △△△△△△ //端末種別

Content-Length: 0

F21 192.168.1.1:5062(Server) -> 192.168.2.12:5060()

SIP/2.0 401 Unauthorized  
 Via: SIP/2.0/UDP 192.168.2.12:5060;branch=z9hG4bK-4a4043aa-041070.501  
 From: <sip:00002@sip.com>  
 To: <sip:00002@sip.com>  
 Call-ID: 05bd7f93@00002.192.168.1.1  
 CSeq: 2 REGISTER  
 WWW-Authenticate: Digest realm="heliossv2", nonce="ffa21d894864e680559f6f1ce64e4a5b",  
 opaque="3168e00bf020b85049fc6a327a08aef0", stale=false, algorithm=MD5, qop="auth,auth-int"  
 Content-Length: 0

F22 192.168.2.12:1200() -> 192.168.1.1:5060(Server)

REGISTER sip:192.168.1.1 SIP/2.0  
 Via: SIP/2.0/UDP 192.168.2.12:5060;branch=z9hG4bK-21fa25a9-041070.866  
 From: <sip:00002@sip.com>  
 To: <sip:00002@sip.com>  
 Call-ID: 05bd7f93@00002.192.168.1.1  
 CSeq: 3 REGISTER  
 Contact: <sip:00002@192.168.2.12>;expires=3600  
 Authorization: Digest username="00002", realm="heliossv2", nonce="ffa21d894864e680559f6f1ce64e4a5b",  
 uri="sip:192.168.1.1", response="746bcb8fae13252af196a5da3bbac41e", algorithm=MD5, cnonce="1fd61e27",  
 opaque="3168e00bf020b85049fc6a327a08aef0", qop=auth, nc=00000001  
 Max-Forwards: 70  
 User-Agent: △△△△△△ //端末種別  
 Content-Length: 0

F23 192.168.1.1:5062(Server) -> 192.168.2.12:5060()

SIP/2.0 200 OK  
 Via: SIP/2.0/UDP 192.168.2.12:5060:branch=z9hG4bK-21fa25a9-041070.866  
 From: <sip:00002@sip.com>  
 To: <sip:00002@sip.com>  
 Call-ID: 05bd7f93@00002.192.168.1.1  
 CSeq: 3 REGISTER  
 Contact: <sip:00002@192.168.2.12>;expires=3600  
 Date: Mon, 03 May 2004 07:30:46 GMT  
 Content-Length: 0

F24 192.168.2.12:1200() -> 192.168.1.1:5060(Server)

INVITE sip:00005@sip.com SIP/2.0  
 Via: SIP/2.0/UDP 192.168.2.12:5060:branch=z9hG4bK-31b819b3-041070.957  
 Route: <sip:192.168.1.1:5060>  
 From: <sip:00002@sip.com>;tag=6fbae884  
 To: <sip:00005@sip.com>  
 Call-ID: 118172a4@00002.192.168.1.1  
 CSeq: 1697530658 INVITE  
 Contact: <sip:00002@192.168.2.12>  
 Proxy-Authentication: Digest username="00002", realm="heliossv2", nonce="e0789fc2cc299a0050417d955fa700a7",  
 uri="sip:00005@sip.com", response="2786585a7ccb6d69ca8a19d436550a5a", algorithm=MD5, cnonce="57e6306e",  
 opaque="023e4d3b420f08fbcfedcb4b0588975", qop=auth, nc=00000005  
 Max-Forwards: 70  
 Supported: 100rel, replaces  
 Allow: INVITE, ACK, BYE, CANCEL, OPTIONS, PRACK, MESSAGE, REFER, NOTIFY  
 Content-Type: application/sdp  
 Accept: application/sdp, message/sipfrag  
 Content-Length: 249

v=0  
 o=- 941268 102 IN IP4 192.168.2.12  
 s=-  
 c=IN IP4 192.168.2.12  
 t=0 0  
 m=audio 5006 RTP/AVP 0 8 4 18 96  
 a=rtpmap:0 PCMU/8000  
 a=rtpmap:8 PCMA/8000  
 a=rtpmap:4 G723/8000  
 a=rtpmap:18 G729/8000  
 a=rtpmap:96 telephone-event/8000  
 a=fmtp:96 0-11

F25 192.168.1.1:5062(Server) -> 192.168.2.12:5060()

SIP/2.0 407 Proxy Authentication Required  
 Via: SIP/2.0/UDP 192.168.2.12:5060:branch=z9hG4bK-31b819b3-041070.957  
 From: <sip:00002@sip.com>;tag=6fbae884  
 To: <sip:00005@sip.com>  
 Call-ID: 118172a4@00002.192.168.1.1  
 CSeq: 1697530658 INVITE  
 Proxy-Authenticate: Digest realm="heliossv2", nonce="bbd51432800dbb9d61ac002c2765268d",  
 opaque="ce48814b793c8b5e416952efefa239c4", stale=false, algorithm=MD5, qop="auth,auth-int"  
 Content-Length: 0

F26 192.168.2.12:1200() -> 192.168.1.1:5060(Server)

ACK sip:00005@sip.com SIP/2.0  
 Via: SIP/2.0/UDP 192.168.2.12:5060:branch=z9hG4bK-31b819b3-041070.957  
 Route: <sip:192.168.1.1:5060>  
 From: <sip:00002@sip.com>;tag=6fbae884  
 To: <sip:00005@sip.com>  
 Call-ID: 118172a4@00002.192.168.1.1  
 CSeq: 1697530658 ACK  
 Content-Length: 0

F27 192.168.2.12:1200() -> 192.168.1.1:5060(Server)



```

INVITE sip:00005@sip.com SIP/2.0
Via: SIP/2.0/UDP 192.168.2.12:5060;branch=z9hG4bK-1bac68a0-041071.629
Route: <sip:192.168.1.1:5060>
From: <sip:00002@sip.com>;tag=6fbae884
To: <sip:00005@sip.com>
Call-ID: 118172a4@00002.192.168.1.1
CSeq: 1697530659 INVITE
Contact: <sip:00002@192.168.2.12>
Proxy-Authorization: Digest username="00002", realm="heliossv2", nonce="bbd51432800dbb9d61ac002c2765268d",
uri="sip:00005@sip.com", response="ef04b5bd930747e75f2b492690677787", algorithm=MD5, cnonce="7a12e90c",
opaque="ce48814b793c8b5e416952efefa239c4", qop=auth, nc=00000001
Max-Forwards: 70
Supported: 100rel, replaces
Allow: INVITE, ACK, BYE, CANCEL, OPTIONS, PRACK, MESSAGE, REFER, NOTIFY
Content-Type: application/sdp
Accept: application/sdp, message/sipfrag
Content-Length: 249

```

```

v=0
o=- 941268 102 IN IP4 192.168.2.12
s=-
c=IN IP4 192.168.2.12
t=0 0
m=audio 5006 RTP/AVP 0 8 4 18 96
a=rtpmap:0 PCMU/8000
a=rtpmap:8 PCMA/8000
a=rtpmap:4 G723/8000
a=rtpmap:18 G729/8000
a=rtpmap:96 telephone-event/8000
a=fmtp:96 0-11

```

```
=====
```

F28 192.168.1.1:5062(Server) -> 192.168.2.12:5060()

```

SIP/2.0 100 Trying
Via: SIP/2.0/UDP 192.168.2.12:5060;branch=z9hG4bK-1bac68a0-041071.629
From: <sip:00002@sip.com>;tag=6fbae884
To: <sip:00005@sip.com>
Call-ID: 118172a4@00002.192.168.1.1
CSeq: 1697530659 INVITE
Content-Length: 0

```

```
=====
```

F29 192.168.1.1:5062(Server) -> 192.168.2.13:5060()

```

INVITE sip:00005@192.168.2.13 SIP/2.0
Via: SIP/2.0/UDP 192.168.1.1:5060;branch=z9hG4bK-1084.081376.1697530659
Via: SIP/2.0/UDP 192.168.2.12:5060;branch=z9hG4bK-1bac68a0-041071.629
Record-Route: <sip:00005@192.168.1.1>
Route: <sip:192.168.1.1:5060>
From: 00002 <sip:00002@sip.com>;tag=6fbae884
To: <sip:00005@sip.com>
Call-ID: 118172a4@00002.192.168.1.1
CSeq: 1697530659 INVITE
Contact: <sip:00002@192.168.2.12>
max-forwards: 69
supported: 100rel
supported: replaces
Allow: INVITE, ACK, BYE, CANCEL, OPTIONS, PRACK, MESSAGE, REFER, NOTIFY
Content-Type: application/sdp
Accept: application/sdp, message/sipfrag
Content-Length: 249

```

```

v=0
o=- 941268 102 IN IP4 192.168.2.12
s=-
c=IN IP4 192.168.2.12
t=0 0
m=audio 5006 RTP/AVP 0 8 4 18 96
a=rtpmap:0 PCMU/8000
a=rtpmap:8 PCMA/8000
a=rtpmap:4 G723/8000
a=rtpmap:18 G729/8000
a=rtpmap:96 telephone-event/8000
a=fmtp:96 0-11

```

F30 192.168.2.13:1061() -> 192.168.1.1:5060(Server)

SIP/2.0 100 Trying  
 Via: SIP/2.0/UDP 192.168.1.1:5060;branch=z9hG4bK-1084.081376.1697530659  
 Via: SIP/2.0/UDP 192.168.2.12:5060;branch=z9hG4bK-1bac68a0-041071.629  
 From: 00002 <sip:00002@sip.com>;tag=6fbae884  
 To: <sip:00005@sip.com>  
 Call-ID: 118172a4@00002.192.168.1.1  
 CSeq: 1697530659 INVITE  
 Content-Length: 0

F31 192.168.2.13:1061() -> 192.168.1.1:5060(Server)

SIP/2.0 180 Ringing  
 Via: SIP/2.0/UDP 192.168.1.1:5060;branch=z9hG4bK-1084.081376.1697530659  
 Via: SIP/2.0/UDP 192.168.2.12:5060;branch=z9hG4bK-1bac68a0-041071.629  
 Record-Route: <sip:00005@192.168.1.1>  
 From: 00002 <sip:00002@sip.com>;tag=6fbae884  
 To: <sip:00005@sip.com>;tag=122562ce  
 Call-ID: 118172a4@00002.192.168.1.1  
 CSeq: 1697530659 INVITE  
 Contact: <sip:00005@192.168.2.13>  
 Require: 100rel  
 RSeq: 474125896  
 Content-Length: 0

F32 192.168.1.1:5062(Server) -> 192.168.2.12:5060()

SIP/2.0 180 Ringing  
 Via: SIP/2.0/UDP 192.168.2.12:5060;branch=z9hG4bK-1bac68a0-041071.629  
 Record-Route: <sip:00005@192.168.1.1>  
 From: 00002 <sip:00002@sip.com>;tag=6fbae884  
 To: <sip:00005@sip.com>;tag=122562ce  
 Call-ID: 118172a4@00002.192.168.1.1  
 CSeq: 1697530659 INVITE  
 Contact: <sip:00005@192.168.2.13>  
 require: 100rel  
 rseq: 474125896  
 Content-Length: 0

F33 192.168.2.12:1200() -> 192.168.1.1:5060(Server)

PRACK sip:00005@192.168.1.1 SIP/2.0  
 Via: SIP/2.0/UDP 192.168.2.12:5060;branch=z9hG4bK-61ad6d44-041071.774  
 Route: <sip:00005@192.168.2.13>  
 From: 00002 <sip:00002@sip.com>;tag=6fbae884  
 To: <sip:00005@sip.com>;tag=122562ce  
 Call-ID: 118172a4@00002.192.168.1.1  
 CSeq: 1697530660 PRACK  
 Proxy-Authorization: Digest username="00002", realm="heliossv2", nonce="bbd51432800dbb9d61ac002c2765268d",  
 uri="sip:00005@192.168.1.1", response="78e05854c77e4ee3cc66b2f42b4d7a78", algorithm=MD5, cnonce="6ffcbe6d",  
 opaque="ce48814b793c8b5e416952efefa239c4", qop=auth, nc=00000002  
 Max-Forwards: 70  
 Rack: 474125896 1697530659 INVITE  
 Content-Length: 0

F34 192.168.1.1:5062(Server) -> 192.168.2.13:5060()

PRACK sip:00005@192.168.2.13 SIP/2.0  
 Via: SIP/2.0/UDP 192.168.1.1:5060;branch=z9hG4bK-1084.1083569447.1697530660  
 Via: SIP/2.0/UDP 192.168.2.12:5060;branch=z9hG4bK-61ad6d44-041071.774  
 Route: <sip:00005@192.168.2.13>  
 From: 00002 <sip:00002@sip.com>;tag=6fbae884  
 To: <sip:00005@sip.com>;tag=122562ce  
 Call-ID: 118172a4@00002.192.168.1.1  
 CSeq: 1697530660 PRACK  
 max-forwards: 69  
 rack: 474125896 1697530659 INVITE

Content-Length: 0

F35 192.168.2.13:1061() -&gt; 192.168.1.1:5060(Server)

```
SIP/2.0 200 OK
Via: SIP/2.0/UDP 192.168.1.1:5060;branch=z9hG4bK-1084.1083569447.1697530660
Via: SIP/2.0/UDP 192.168.2.12:5060;branch=z9hG4bK-61ad6d44-041071.774
From: 00002 <sip:00002@sip.com>;tag=6fbae884
To: <sip:00005@sip.com>;tag=122562ce
Call-ID: 118172a4@00002.192.168.1.1
CSeq: 1697530660 PRACK
Content-Length: 0
```

F36 192.168.1.1:5062(Server) -&gt; 192.168.2.12:5060()

```
SIP/2.0 200 OK
Via: SIP/2.0/UDP 192.168.2.12:5060;branch=z9hG4bK-61ad6d44-041071.774
From: 00002 <sip:00002@sip.com>;tag=6fbae884
To: <sip:00005@sip.com>;tag=122562ce
Call-ID: 118172a4@00002.192.168.1.1
CSeq: 1697530660 PRACK
Content-Length: 0
```

F37 192.168.2.13:1061() -&gt; 192.168.1.1:5060(Server)

```
SIP/2.0 200 OK
Via: SIP/2.0/UDP 192.168.1.1:5060;branch=z9hG4bK-1084.081376.1697530659
Via: SIP/2.0/UDP 192.168.2.12:5060;branch=z9hG4bK-1bac68a0-041071.629
Record-Route: <sip:00005@192.168.1.1>
From: 00002 <sip:00002@sip.com>;tag=6fbae884
To: <sip:00005@sip.com>;tag=122562ce
Call-ID: 118172a4@00002.192.168.1.1
CSeq: 1697530659 INVITE
Contact: <sip:00005@192.168.2.13>
Supported: 100rel, replaces
Allow: INVITE, ACK, BYE, CANCEL, OPTIONS, PRACK, MESSAGE, REFER, NOTIFY
Content-Type: application/sdp
Accept: application/sdp, message/sipfrag
Content-Length: 177
```

```
v=0
o=- 874538 12901 IN IP4 192.168.2.13
s=-
c=IN IP4 192.168.2.13
t=0 0
m=audio 5008 RTP/AVP 0 96
a=rtpmap:0 PCMU/8000
a=rtpmap:96 telephone-event/8000
a=fmtp:96 0-11
```

F38 192.168.1.1:5062(Server) -&gt; 192.168.2.12:5060()

```
SIP/2.0 200 OK
Via: SIP/2.0/UDP 192.168.2.12:5060;branch=z9hG4bK-1bac68a0-041071.629
Record-Route: <sip:00005@192.168.1.1>
From: 00002 <sip:00002@sip.com>;tag=6fbae884
To: <sip:00005@sip.com>;tag=122562ce
Call-ID: 118172a4@00002.192.168.1.1
CSeq: 1697530659 INVITE
Contact: <sip:00005@192.168.2.13>
supported: 100rel
supported: replaces
Allow: INVITE, ACK, BYE, CANCEL, OPTIONS, PRACK, MESSAGE, REFER, NOTIFY
Content-Type: application/sdp
Accept: application/sdp, message/sipfrag
Content-Length: 177
```

```
v=0
o=- 874538 12901 IN IP4 192.168.2.13
s=-
```

c=IN IP4 192.168.2.13  
t=0 0  
m=audio 5008 RTP/AVP 0 96  
a=rtpmap:0 PCMU/8000  
a=rtpmap:96 telephone-event/8000  
a=fmtp:96 0-11

=====

F39 192.168.2.12:1200() -> 192.168.1.1:5060(Server)

ACK sip:00005@192.168.1.1 SIP/2.0  
Via: SIP/2.0/UDP 192.168.2.12:5060;branch=z9hG4bK-54a712e7-041085.158  
Route: <sip:00005@192.168.2.13>  
From: 00002 <sip:00002@sip.com>;tag=6fbae884  
To: <sip:00005@sip.com>;tag=122562ce  
Call-ID: 118172a4@00002.192.168.1.1  
CSeq: 1697530659 ACK  
Proxy-Authorization: Digest username="00002", realm="heliossv2", nonce="bbd51432800dbb9d61ac002c2765268d",  
uri="sip:00005@sip.com", response="ef04b5bd930747e75f2b492690677787", algorithm=MD5, cnonce="7a12e90c",  
opaque="ce48814b793c8b5e416952efefa239c4", qop=auth, nc=00000001  
Max-Forwards: 70  
Content-Length: 0

=====

F40 192.168.1.1:5062(Server) -> 192.168.2.13:5060()

ACK sip:00005@192.168.2.13 SIP/2.0  
Via: SIP/2.0/UDP 192.168.1.1:5060;branch=z9hG4bK-1084.1083569460.1697530659  
Via: SIP/2.0/UDP 192.168.2.12:5060;branch=z9hG4bK-54a712e7-041085.158  
From: 00002 <sip:00002@sip.com>;tag=6fbae884  
To: <sip:00005@sip.com>;tag=122562ce  
Call-ID: 118172a4@00002.192.168.1.1  
CSeq: 1697530659 ACK  
max-forwards: 69  
Content-Length: 0

## 11.8.7. 発信中発信者ハンドオーバ(IP アドレスの再登録失敗)

IP アドレス登録失敗(DHCP 失敗)することで帰属を解除し、再スキャンを行う。

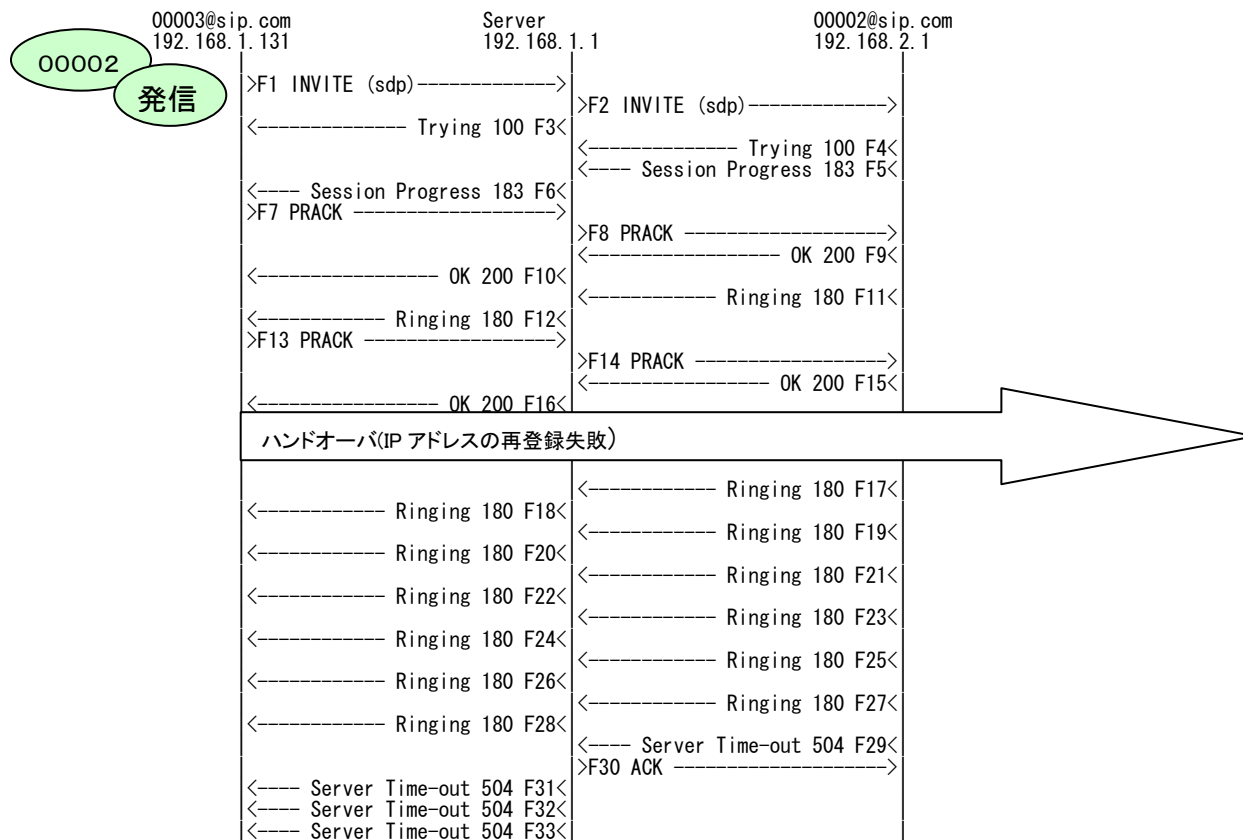


図 11-46 発信中発信者ハンドオーバ(IP アドレスの再登録失敗)

F1 192.168.1.131:1024(00003@sip.com) -&gt; 192.168.1.1:5060(Server)

```

INVITE sip:00002@sip.com SIP/2.0
Via: SIP/2.0/UDP 192.168.1.131:5060;branch=z9hG4bK-6fb834f-242392.725
Route: <sip:192.168.1.1:5060>
From: <sip:00003@sip.com>;tag=51894e80
To: <sip:00002@sip.com>
Call-ID: 253d735c00003.192.168.1.1
CSeq: 1677373693 INVITE
Contact: <sip:00003@192.168.1.131>
Max-Forwards: 70
Supported: 100rel, replaces
Allow: INVITE, ACK, BYE, CANCEL, OPTIONS, PRACK, MESSAGE, REFER, NOTIFY
Content-Type: application/sdp
Accept: application/sdp, message/sipfrag
Content-Length: 251

```

```

v=0
o=- 709798 201 IN IP4 192.168.1.131
s=-
c=IN IP4 192.168.1.131
t=0 0
m=audio 5006 RTP/AVP 0 8 4 18 96
a=rtpmap:0 PCMU/8000
a=rtpmap:8 PCMA/8000
a=rtpmap:4 G723/8000
a=rtpmap:18 G729/8000
a=rtpmap:96 telephone-event/8000
a=fmtp:96 0-11

```

F2 192.168.1.1:5062 (Server) -> 192.168.2.1:5060 (00002@sip.com)

```
INVITE sip:00002@192.168.2.1 SIP/2.0
Via: SIP/2.0/UDP 192.168.1.1:5060;branch=z9hG4bK-563.987584.1677373693
Via: SIP/2.0/UDP 192.168.1.131:5060;branch=z9hG4bK-6fb834f-242392.725
Record-Route: <sip:00002@192.168.1.1>
Route: <sip:192.168.1.1:5060>
From: 00003 <sip:00003@sip.com>;tag=51894e80
To: <sip:00002@sip.com>
Call-ID: 253d735c@00003.192.168.1.1
CSeq: 1677373693 INVITE
Contact: <sip:00003@192.168.1.131>
max-forwards: 69
supported: 100rel
supported: replaces
Allow: INVITE, ACK, BYE, CANCEL, OPTIONS, PRACK, MESSAGE, REFER, NOTIFY
Content-Type: application/sdp
Accept: application/sdp, message/sipfrag
Content-Length: 251
```

```
v=0
o=- 709798 201 IN IP4 192.168.1.131
s=-
c=IN IP4 192.168.1.131
t=0 0
m=audio 5006 RTP/AVP 0 8 4 18 96
a=rtpmap:0 PCMU/8000
a=rtpmap:8 PCMA/8000
a=rtpmap:4 G723/8000
a=rtpmap:18 G729/8000
a=rtpmap:96 telephone-event/8000
a=fmtp:96 0-11
```

F3 192.168.1.1:5062 (Server) -> 192.168.1.131:5060 (00003@sip.com)

```
SIP/2.0 100 Trying
Via: SIP/2.0/UDP 192.168.1.131:5060;branch=z9hG4bK-6fb834f-242392.725
From: <sip:00003@sip.com>;tag=51894e80
To: <sip:00002@sip.com>
Call-ID: 253d735c@00003.192.168.1.1
CSeq: 1677373693 INVITE
Content-Length: 0
```

F4 192.168.2.1:1049 (00002@sip.com) -> 192.168.1.1:5060 (Server)

```
SIP/2.0 100 Trying
Via: SIP/2.0/UDP 192.168.1.1:5060;branch=z9hG4bK-563.987584.1677373693
Via: SIP/2.0/UDP 192.168.1.131:5060;branch=z9hG4bK-6fb834f-242392.725
From: 00003 <sip:00003@sip.com>;tag=51894e80
To: <sip:00002@sip.com>
Call-ID: 253d735c@00003.192.168.1.1
CSeq: 1677373693 INVITE
Content-Length: 0
```

F5 192.168.2.1:1049 (00002@sip.com) -> 192.168.1.1:5060 (Server)

```
SIP/2.0 183 Session Progress
Via: SIP/2.0/UDP 192.168.1.1:5060;branch=z9hG4bK-563.987584.1677373693
Via: SIP/2.0/UDP 192.168.1.131:5060;branch=z9hG4bK-6fb834f-242392.725
Record-Route: <sip:00002@192.168.1.1>
From: 00003 <sip:00003@sip.com>;tag=51894e80
To: <sip:00002@sip.com>;tag=306f3373
Call-ID: 253d735c@00003.192.168.1.1
CSeq: 1677373693 INVITE
Contact: <sip:00002@192.168.2.1>
Require: 100rel
RSeq: 1796206123
Content-Length: 0
```

F6 192.168.1.1:5062(Server) -> 192.168.1.131:5060(00003@sip.com)

SIP/2.0 183 Session Progress  
Via: SIP/2.0/UDP 192.168.1.131:5060;branch=z9hG4bK-6fb834f-242392.725  
Record-Route: <sip:00002@192.168.1.1>  
From: 00003 <sip:00003@sip.com>;tag=51894e80  
To: <sip:00002@sip.com>;tag=306f3373  
Call-ID: 253d735c@00003.192.168.1.1  
CSeq: 1677373693 INVITE  
Contact: <sip:00002@192.168.2.1>  
require: 100rel  
rseq: 1796206123  
Content-Length: 0

F7 192.168.1.131:1024(00003@sip.com) -> 192.168.1.1:5060(Server)

PRACK sip:00002@192.168.1.1 SIP/2.0  
Via: SIP/2.0/UDP 192.168.1.131:5060;branch=z9hG4bK-62658735-242393.208  
Route: <sip:00002@192.168.2.1>  
From: 00003 <sip:00003@sip.com>;tag=51894e80  
To: <sip:00002@sip.com>;tag=306f3373  
Call-ID: 253d735c@00003.192.168.1.1  
CSeq: 1677373694 PRACK  
Max-Forwards: 70  
Rack: 1796206123 1677373693 INVITE  
Content-Length: 0

F8 192.168.1.1:5062(Server) -> 192.168.2.1:5060(00002@sip.com)

PRACK sip:00002@192.168.2.1 SIP/2.0  
Via: SIP/2.0/UDP 192.168.1.1:5060;branch=z9hG4bK-563.1109090538.1677373694  
Via: SIP/2.0/UDP 192.168.1.131:5060;branch=z9hG4bK-62658735-242393.208  
Route: <sip:00002@192.168.2.1>  
From: 00003 <sip:00003@sip.com>;tag=51894e80  
To: <sip:00002@sip.com>;tag=306f3373  
Call-ID: 253d735c@00003.192.168.1.1  
CSeq: 1677373694 PRACK  
max-forwards: 69  
rack: 1796206123 1677373693 INVITE  
Content-Length: 0

F9 192.168.2.1:1049(00002@sip.com) -> 192.168.1.1:5060(Server)

SIP/2.0 200 OK  
Via: SIP/2.0/UDP 192.168.1.1:5060;branch=z9hG4bK-563.1109090538.1677373694  
Via: SIP/2.0/UDP 192.168.1.131:5060;branch=z9hG4bK-62658735-242393.208  
From: 00003 <sip:00003@sip.com>;tag=51894e80  
To: <sip:00002@sip.com>;tag=306f3373  
Call-ID: 253d735c@00003.192.168.1.1  
CSeq: 1677373694 PRACK  
Content-Length: 0

F10 192.168.1.1:5062(Server) -> 192.168.1.131:5060(00003@sip.com)

SIP/2.0 200 OK  
Via: SIP/2.0/UDP 192.168.1.131:5060;branch=z9hG4bK-62658735-242393.208  
From: 00003 <sip:00003@sip.com>;tag=51894e80  
To: <sip:00002@sip.com>;tag=306f3373  
Call-ID: 253d735c@00003.192.168.1.1  
CSeq: 1677373694 PRACK  
Content-Length: 0

F11 192.168.2.1:1049(00002@sip.com) -> 192.168.1.1:5060(Server)

SIP/2.0 180 Ringing  
Via: SIP/2.0/UDP 192.168.1.1:5060;branch=z9hG4bK-563.987584.1677373693

# FOMA/WLAN デュアル端末に関する技術参考資料 第 1.2 版

Via: SIP/2.0/UDP 192.168.1.131:5060;branch=z9hG4bK-6fb834f-242392.725  
 Record-Route: <sip:00002@192.168.1.1>  
 From: 00003 <sip:00003@sip.com>;tag=51894e80  
 To: <sip:00002@sip.com>;tag=306f3373  
 Call-ID: 253d735c@00003.192.168.1.1  
 CSeq: 1677373693 INVITE  
 Contact: <sip:00002@192.168.2.1>  
 Require: 100rel  
 RSeq: 1796206124  
 Content-Length: 0

---

F12 192.168.1.1:5062 (Server) -> 192.168.1.131:5060 (00003@sip.com)

SIP/2.0 180 Ringing  
 Via: SIP/2.0/UDP 192.168.1.131:5060;branch=z9hG4bK-6fb834f-242392.725  
 Record-Route: <sip:00002@192.168.1.1>  
 From: 00003 <sip:00003@sip.com>;tag=51894e80  
 To: <sip:00002@sip.com>;tag=306f3373  
 Call-ID: 253d735c@00003.192.168.1.1  
 CSeq: 1677373693 INVITE  
 Contact: <sip:00002@192.168.2.1>  
 require: 100rel  
 rseq: 1796206124  
 Content-Length: 0

---

F13 192.168.1.131:1024 (00003@sip.com) -> 192.168.1.1:5060 (Server)

PRACK sip:00002@192.168.1.1 SIP/2.0  
 Via: SIP/2.0/UDP 192.168.1.131:5060;branch=z9hG4bK-642db513-242393.819  
 Route: <sip:00002@192.168.2.1>  
 From: 00003 <sip:00003@sip.com>;tag=51894e80  
 To: <sip:00002@sip.com>;tag=306f3373  
 Call-ID: 253d735c@00003.192.168.1.1  
 CSeq: 1677373695 PRACK  
 Max-Forwards: 70  
 Rack: 1796206124 1677373693 INVITE  
 Content-Length: 0

---

F14 192.168.1.1:5062 (Server) -> 192.168.2.1:5060 (00002@sip.com)

PRACK sip:00002@192.168.2.1 SIP/2.0  
 Via: SIP/2.0/UDP 192.168.1.1:5060;branch=z9hG4bK-563.1109090539.1677373695  
 Via: SIP/2.0/UDP 192.168.1.131:5060;branch=z9hG4bK-642db513-242393.819  
 Route: <sip:00002@192.168.2.1>  
 From: 00003 <sip:00003@sip.com>;tag=51894e80  
 To: <sip:00002@sip.com>;tag=306f3373  
 Call-ID: 253d735c@00003.192.168.1.1  
 CSeq: 1677373695 PRACK  
 max-forwards: 69  
 rack: 1796206124 1677373693 INVITE  
 Content-Length: 0

---

F15 192.168.2.1:1049 (00002@sip.com) -> 192.168.1.1:5060 (Server)

SIP/2.0 200 OK  
 Via: SIP/2.0/UDP 192.168.1.1:5060;branch=z9hG4bK-563.1109090539.1677373695  
 Via: SIP/2.0/UDP 192.168.1.131:5060;branch=z9hG4bK-642db513-242393.819  
 From: 00003 <sip:00003@sip.com>;tag=51894e80  
 To: <sip:00002@sip.com>;tag=306f3373  
 Call-ID: 253d735c@00003.192.168.1.1  
 CSeq: 1677373695 PRACK  
 Content-Length: 0

---

F16 192.168.1.1:5062 (Server) -> 192.168.1.131:5060 (00003@sip.com)

SIP/2.0 200 OK



## FOMA/WLAN デュアル端末に関する技術参考資料 第 1.2 版

Via: SIP/2.0/UDP 192.168.1.131:5060;branch=z9hG4bK-642db513-242393.819  
From: 00003 <sip:00003@sip.com>;tag=51894e80  
To: <sip:00002@sip.com>;tag=306f3373  
Call-ID: 253d735c@00003.192.168.1.1  
CSeq: 1677373695 PRACK  
Content-Length: 0

---

F17 192.168.2.1:1049 (00002@sip.com) -> 192.168.1.1:5060 (Server)

SIP/2.0 180 Ringing  
Via: SIP/2.0/UDP 192.168.1.1:5060;branch=z9hG4bK-563.987584.1677373693  
Via: SIP/2.0/UDP 192.168.1.131:5060;branch=z9hG4bK-6fb834f-242392.725  
Record-Route: <sip:00002@192.168.1.1>  
From: 00003 <sip:00003@sip.com>;tag=51894e80  
To: <sip:00002@sip.com>;tag=306f3373  
Call-ID: 253d735c@00003.192.168.1.1  
CSeq: 1677373693 INVITE  
Contact: <sip:00002@192.168.2.1>  
Require: 100rel  
RSeq: 1796206125  
Content-Length: 0

---

F18 192.168.1.1:5062 (Server) -> 192.168.1.131:5060 (00003@sip.com)

SIP/2.0 180 Ringing  
Via: SIP/2.0/UDP 192.168.1.131:5060;branch=z9hG4bK-6fb834f-242392.725  
Record-Route: <sip:00002@192.168.1.1>  
From: 00003 <sip:00003@sip.com>;tag=51894e80  
To: <sip:00002@sip.com>;tag=306f3373  
Call-ID: 253d735c@00003.192.168.1.1  
CSeq: 1677373693 INVITE  
Contact: <sip:00002@192.168.2.1>  
require: 100rel  
rseq: 1796206125  
Content-Length: 0

---

F19 192.168.2.1:1049 (00002@sip.com) -> 192.168.1.1:5060 (Server)

SIP/2.0 180 Ringing  
Via: SIP/2.0/UDP 192.168.1.1:5060;branch=z9hG4bK-563.987584.1677373693  
Via: SIP/2.0/UDP 192.168.1.131:5060;branch=z9hG4bK-6fb834f-242392.725  
Record-Route: <sip:00002@192.168.1.1>  
From: 00003 <sip:00003@sip.com>;tag=51894e80  
To: <sip:00002@sip.com>;tag=306f3373  
Call-ID: 253d735c@00003.192.168.1.1  
CSeq: 1677373693 INVITE  
Contact: <sip:00002@192.168.2.1>  
Require: 100rel  
RSeq: 1796206125  
Content-Length: 0

---

F20 192.168.1.1:5062 (Server) -> 192.168.1.131:5060 (00003@sip.com)

SIP/2.0 180 Ringing  
Via: SIP/2.0/UDP 192.168.1.131:5060;branch=z9hG4bK-6fb834f-242392.725  
Record-Route: <sip:00002@192.168.1.1>  
From: 00003 <sip:00003@sip.com>;tag=51894e80  
To: <sip:00002@sip.com>;tag=306f3373  
Call-ID: 253d735c@00003.192.168.1.1  
CSeq: 1677373693 INVITE  
Contact: <sip:00002@192.168.2.1>  
require: 100rel  
rseq: 1796206125  
Content-Length: 0

---

F21 192.168.2.1:1049 (00002@sip.com) -> 192.168.1.1:5060 (Server)

SIP/2.0 180 Ringing  
 Via: SIP/2.0/UDP 192.168.1.1:5060;branch=z9hG4bK-563.987584.1677373693  
 Via: SIP/2.0/UDP 192.168.1.131:5060;branch=z9hG4bK-6fb834f-242392.725  
 Record-Route: <sip:00002@192.168.1.1>  
 From: 00003 <sip:00003@sip.com>;tag=51894e80  
 To: <sip:00002@sip.com>;tag=306f3373  
 Call-ID: 253d735c@00003.192.168.1.1  
 CSeq: 1677373693 INVITE  
 Contact: <sip:00002@192.168.2.1>  
 Require: 100rel  
 RSeq: 1796206125  
 Content-Length: 0

F22 192.168.1.1:5062 (Server) -> 192.168.1.131:5060 (00003@sip.com)

SIP/2.0 180 Ringing  
 Via: SIP/2.0/UDP 192.168.1.131:5060;branch=z9hG4bK-6fb834f-242392.725  
 Record-Route: <sip:00002@192.168.1.1>  
 From: 00003 <sip:00003@sip.com>;tag=51894e80  
 To: <sip:00002@sip.com>;tag=306f3373  
 Call-ID: 253d735c@00003.192.168.1.1  
 CSeq: 1677373693 INVITE  
 Contact: <sip:00002@192.168.2.1>  
 require: 100rel  
 rseq: 1796206125  
 Content-Length: 0

F23 192.168.2.1:1049 (00002@sip.com) -> 192.168.1.1:5060 (Server)

SIP/2.0 180 Ringing  
 Via: SIP/2.0/UDP 192.168.1.1:5060;branch=z9hG4bK-563.987584.1677373693  
 Via: SIP/2.0/UDP 192.168.1.131:5060;branch=z9hG4bK-6fb834f-242392.725  
 Record-Route: <sip:00002@192.168.1.1>  
 From: 00003 <sip:00003@sip.com>;tag=51894e80  
 To: <sip:00002@sip.com>;tag=306f3373  
 Call-ID: 253d735c@00003.192.168.1.1  
 CSeq: 1677373693 INVITE  
 Contact: <sip:00002@192.168.2.1>  
 Require: 100rel  
 RSeq: 1796206125  
 Content-Length: 0

F24 192.168.1.1:5062 (Server) -> 192.168.1.131:5060 (00003@sip.com)

SIP/2.0 180 Ringing  
 Via: SIP/2.0/UDP 192.168.1.131:5060;branch=z9hG4bK-6fb834f-242392.725  
 Record-Route: <sip:00002@192.168.1.1>  
 From: 00003 <sip:00003@sip.com>;tag=51894e80  
 To: <sip:00002@sip.com>;tag=306f3373  
 Call-ID: 253d735c@00003.192.168.1.1  
 CSeq: 1677373693 INVITE  
 Contact: <sip:00002@192.168.2.1>  
 require: 100rel  
 rseq: 1796206125  
 Content-Length: 0

F25 192.168.2.1:1049 (00002@sip.com) -> 192.168.1.1:5060 (Server)

SIP/2.0 180 Ringing  
 Via: SIP/2.0/UDP 192.168.1.1:5060;branch=z9hG4bK-563.987584.1677373693  
 Via: SIP/2.0/UDP 192.168.1.131:5060;branch=z9hG4bK-6fb834f-242392.725  
 Record-Route: <sip:00002@192.168.1.1>  
 From: 00003 <sip:00003@sip.com>;tag=51894e80  
 To: <sip:00002@sip.com>;tag=306f3373  
 Call-ID: 253d735c@00003.192.168.1.1  
 CSeq: 1677373693 INVITE  
 Contact: <sip:00002@192.168.2.1>  
 Require: 100rel

RSeq: 1796206125  
Content-Length: 0

F26 192.168.1.1:5062 (Server) -> 192.168.1.131:5060 (00003@sip.com)

SIP/2.0 180 Ringing  
Via: SIP/2.0/UDP 192.168.1.131:5060;branch=z9hG4bK-6fb834f-242392.725  
Record-Route: <sip:00002@192.168.1.1>  
From: 00003 <sip:00003@sip.com>;tag=51894e80  
To: <sip:00002@sip.com>;tag=306f3373  
Call-ID: 253d735c@00003.192.168.1.1  
CSeq: 1677373693 INVITE  
Contact: <sip:00002@192.168.2.1>  
require: 100rel  
rseq: 1796206125  
Content-Length: 0

F27 192.168.2.1:1049 (00002@sip.com) -> 192.168.1.1:5060 (Server)

SIP/2.0 180 Ringing  
Via: SIP/2.0/UDP 192.168.1.1:5060;branch=z9hG4bK-563.987584.1677373693  
Via: SIP/2.0/UDP 192.168.1.131:5060;branch=z9hG4bK-6fb834f-242392.725  
Record-Route: <sip:00002@192.168.1.1>  
From: 00003 <sip:00003@sip.com>;tag=51894e80  
To: <sip:00002@sip.com>;tag=306f3373  
Call-ID: 253d735c@00003.192.168.1.1  
CSeq: 1677373693 INVITE  
Contact: <sip:00002@192.168.2.1>  
Require: 100rel  
RSeq: 1796206125  
Content-Length: 0

F28 192.168.1.1:5062 (Server) -> 192.168.1.131:5060 (00003@sip.com)

SIP/2.0 180 Ringing  
Via: SIP/2.0/UDP 192.168.1.131:5060;branch=z9hG4bK-6fb834f-242392.725  
Record-Route: <sip:00002@192.168.1.1>  
From: 00003 <sip:00003@sip.com>;tag=51894e80  
To: <sip:00002@sip.com>;tag=306f3373  
Call-ID: 253d735c@00003.192.168.1.1  
CSeq: 1677373693 INVITE  
Contact: <sip:00002@192.168.2.1>  
require: 100rel  
rseq: 1796206125  
Content-Length: 0

F29 192.168.2.1:1049 (00002@sip.com) -> 192.168.1.1:5060 (Server)

SIP/2.0 504 Server Time-out  
Via: SIP/2.0/UDP 192.168.1.1:5060;branch=z9hG4bK-563.987584.1677373693  
Via: SIP/2.0/UDP 192.168.1.131:5060;branch=z9hG4bK-6fb834f-242392.725  
From: 00003 <sip:00003@sip.com>;tag=51894e80  
To: <sip:00002@sip.com>;tag=306f3373  
Call-ID: 253d735c@00003.192.168.1.1  
CSeq: 1677373693 INVITE  
Content-Length: 0

F30 192.168.1.1:5062 (Server) -> 192.168.2.1:5060 (00002@sip.com)

ACK sip:00002@192.168.2.1 SIP/2.0  
Via: SIP/2.0/UDP 192.168.1.1:5060;branch=z9hG4bK-563.987584.1677373693  
Route: <sip:192.168.1.1:5060>  
From: 00003 <sip:00003@sip.com>;tag=51894e80  
To: <sip:00002@sip.com>;tag=306f3373  
Call-ID: 253d735c@00003.192.168.1.1  
CSeq: 1677373693 ACK

Content-Length: 0

```
=====
F31      192.168.1.1:5062 (Server) -> 192.168.1.131:5060 (00003@sip.com)

SIP/2.0 504 Server Time-out
Via: SIP/2.0/UDP 192.168.1.131:5060;branch=z9hG4bK-6fb834f-242392.725
From: 00003 <sip:00003@sip.com>;tag=51894e80
To: <sip:00002@sip.com>;tag=306f3373
Call-ID: 253d735c@00003.192.168.1.1
CSeq: 1677373693 INVITE
Content-Length: 0
=====
```

```
=====
F32      192.168.1.1:5062 (Server) -> 192.168.1.131:5060 (00003@sip.com)

SIP/2.0 504 Server Time-out
Via: SIP/2.0/UDP 192.168.1.131:5060;branch=z9hG4bK-6fb834f-242392.725
From: 00003 <sip:00003@sip.com>;tag=51894e80
To: <sip:00002@sip.com>;tag=306f3373
Call-ID: 253d735c@00003.192.168.1.1
CSeq: 1677373693 INVITE
Content-Length: 0
=====
```

```
=====
F33      192.168.1.1:5062 (Server) -> 192.168.1.131:5060 (00003@sip.com)

SIP/2.0 504 Server Time-out
Via: SIP/2.0/UDP 192.168.1.131:5060;branch=z9hG4bK-6fb834f-242392.725
From: 00003 <sip:00003@sip.com>;tag=51894e80
To: <sip:00002@sip.com>;tag=306f3373
Call-ID: 253d735c@00003.192.168.1.1
CSeq: 1677373693 INVITE
Content-Length: 0
=====
```



```

a=rtpmap:8 PCMA/8000
a=rtpmap:4 G723/8000
a=rtpmap:18 G729/8000
a=rtpmap:96 telephone-event/8000
a=fmtp:96 0-11

```

---

F2 192.168.1.1:5062 (Server) -> 192.168.1.131:5060 (00003@sip.com)

```

INVITE sip:00003@192.168.1.131 SIP/2.0
Via: SIP/2.0/UDP 192.168.1.1:5060;branch=z9hG4bK-397.367448.118176420
Via: SIP/2.0/UDP 192.168.1.199:5060;branch=z9hG4bK-3dbd969b-838079.239
Record-Route: <sip:00003@192.168.1.1>
Route: <sip:192.168.1.1:5060>
From: 00002 <sip:00002@sip.com>;tag=4bfe3670
To: <sip:00003@sip.com>
Call-ID: 48d03131@00002.192.168.1.1
CSeq: 118176420 INVITE
Contact: <sip:00002@192.168.1.199>
max-forwards: 69
supported: 100rel
supported: replaces
Allow: INVITE, ACK, BYE, CANCEL, OPTIONS, PRACK, MESSAGE, REFER, NOTIFY
Content-Type: application/sdp
Accept: application/sdp, message/sipfrag
Content-Length: 252

```

```

v=0
o=- 222912 1601 IN IP4 192.168.1.199
s=-
c=IN IP4 192.168.1.199
t=0 0
m=audio 5008 RTP/AVP 0 8 4 18 96
a=rtpmap:0 PCMU/8000
a=rtpmap:8 PCMA/8000
a=rtpmap:4 G723/8000
a=rtpmap:18 G729/8000
a=rtpmap:96 telephone-event/8000
a=fmtp:96 0-11

```

---

F3 192.168.1.1:5062 (Server) -> 192.168.1.199:5060 (00002@sip.com)

```

SIP/2.0 100 Trying
Via: SIP/2.0/UDP 192.168.1.199:5060;branch=z9hG4bK-3dbd969b-838079.239
From: <sip:00002@sip.com>;tag=4bfe3670
To: <sip:00003@sip.com>
Call-ID: 48d03131@00002.192.168.1.1
CSeq: 118176420 INVITE
Content-Length: 0

```

---

F4 192.168.1.131:1025 (00003@sip.com) -> 192.168.1.1:5060 (Server)

```

SIP/2.0 100 Trying
Via: SIP/2.0/UDP 192.168.1.1:5060;branch=z9hG4bK-397.367448.118176420
Via: SIP/2.0/UDP 192.168.1.199:5060;branch=z9hG4bK-3dbd969b-838079.239
From: 00002 <sip:00002@sip.com>;tag=4bfe3670
To: <sip:00003@sip.com>
Call-ID: 48d03131@00002.192.168.1.1
CSeq: 118176420 INVITE
Content-Length: 0

```

---

F5 192.168.1.131:1025 (00003@sip.com) -> 192.168.1.1:5060 (Server)

```

SIP/2.0 183 Session Progress
Via: SIP/2.0/UDP 192.168.1.1:5060;branch=z9hG4bK-397.367448.118176420
Via: SIP/2.0/UDP 192.168.1.199:5060;branch=z9hG4bK-3dbd969b-838079.239
Record-Route: <sip:00003@192.168.1.1>
From: 00002 <sip:00002@sip.com>;tag=4bfe3670
To: <sip:00003@sip.com>;tag=2e34944a
Call-ID: 48d03131@00002.192.168.1.1
CSeq: 118176420 INVITE
Contact: <sip:00003@192.168.1.131>

```

Require: 100rel  
RSeq: 1705962753  
Content-Length: 0

F6 192.168.1.1:5062 (Server) -> 192.168.1.199:5060 (00002@sip.com)

SIP/2.0 183 Session Progress  
Via: SIP/2.0/UDP 192.168.1.199:5060;branch=z9hG4bK-3dbd969b-838079.239  
Record-Route: <sip:00003@192.168.1.1>  
From: 00002 <sip:00002@sip.com>;tag=4bfe3670  
To: <sip:00003@sip.com>;tag=2e34944a  
Call-ID: 48d03131@00002.192.168.1.1  
CSeq: 118176420 INVITE  
Contact: <sip:00003@192.168.1.131>  
require: 100rel  
rseq: 1705962753  
Content-Length: 0

F7 192.168.1.199:1026 (00002@sip.com) -> 192.168.1.1:5060 (Server)

PRACK sip:00003@192.168.1.1 SIP/2.0  
Via: SIP/2.0/UDP 192.168.1.199:5060;branch=z9hG4bK-746e8ef9-838079.936  
Route: <sip:00003@192.168.1.131>  
From: 00002 <sip:00002@sip.com>;tag=4bfe3670  
To: <sip:00003@sip.com>;tag=2e34944a  
Call-ID: 48d03131@00002.192.168.1.1  
CSeq: 118176421 PRACK  
Max-Forwards: 70  
RAck: 1705962753 118176420 INVITE  
Content-Length: 0

F8 192.168.1.1:5062 (Server) -> 192.168.1.131:5060 (00003@sip.com)

PRACK sip:00003@192.168.1.131 SIP/2.0  
Via: SIP/2.0/UDP 192.168.1.1:5060;branch=z9hG4bK-397.1109081276.118176421  
Via: SIP/2.0/UDP 192.168.1.199:5060;branch=z9hG4bK-746e8ef9-838079.936  
Route: <sip:00003@192.168.1.131>  
From: 00002 <sip:00002@sip.com>;tag=4bfe3670  
To: <sip:00003@sip.com>;tag=2e34944a  
Call-ID: 48d03131@00002.192.168.1.1  
CSeq: 118176421 PRACK  
max-forwards: 69  
rack: 1705962753 118176420 INVITE  
Content-Length: 0

F9 192.168.1.131:1025 (00003@sip.com) -> 192.168.1.1:5060 (Server)

SIP/2.0 200 OK  
Via: SIP/2.0/UDP 192.168.1.1:5060;branch=z9hG4bK-397.1109081276.118176421  
Via: SIP/2.0/UDP 192.168.1.199:5060;branch=z9hG4bK-746e8ef9-838079.936  
From: 00002 <sip:00002@sip.com>;tag=4bfe3670  
To: <sip:00003@sip.com>;tag=2e34944a  
Call-ID: 48d03131@00002.192.168.1.1  
CSeq: 118176421 PRACK  
Content-Length: 0

F10 192.168.1.1:5062 (Server) -> 192.168.1.199:5060 (00002@sip.com)

SIP/2.0 200 OK  
Via: SIP/2.0/UDP 192.168.1.199:5060;branch=z9hG4bK-746e8ef9-838079.936  
From: 00002 <sip:00002@sip.com>;tag=4bfe3670  
To: <sip:00003@sip.com>;tag=2e34944a  
Call-ID: 48d03131@00002.192.168.1.1  
CSeq: 118176421 PRACK  
Content-Length: 0

F 11 192.168.1.131:1025(00003@sip.com) -> 192.168.1.1:5060(Server)

SIP/2.0 180 Ringing  
Via: SIP/2.0/UDP 192.168.1.1:5060;branch=z9hG4bK-397.367448.118176420  
Via: SIP/2.0/UDP 192.168.1.199:5060;branch=z9hG4bK-3dbd969b-838079.239  
Record-Route: <sip:00003@192.168.1.1>  
From: 00002 <sip:00002@sip.com>;tag=4bfe3670  
To: <sip:00003@sip.com>;tag=2e34944a  
Call-ID: 48d03131@00002.192.168.1.1  
CSeq: 118176420 INVITE  
Contact: <sip:00003@192.168.1.131>  
Require: 100rel  
RSeq: 1705962754  
Content-Length: 0

F 12 192.168.1.1:5062(Server) -> 192.168.1.199:5060(00002@sip.com)

SIP/2.0 180 Ringing  
Via: SIP/2.0/UDP 192.168.1.199:5060;branch=z9hG4bK-3dbd969b-838079.239  
Record-Route: <sip:00003@192.168.1.1>  
From: 00002 <sip:00002@sip.com>;tag=4bfe3670  
To: <sip:00003@sip.com>;tag=2e34944a  
Call-ID: 48d03131@00002.192.168.1.1  
CSeq: 118176420 INVITE  
Contact: <sip:00003@192.168.1.131>  
require: 100rel  
rseq: 1705962754  
Content-Length: 0

F13 192.168.1.199:1026(00002@sip.com) -> 192.168.1.1:5060(Server)

PRACK sip:00003@192.168.1.1 SIP/2.0  
Via: SIP/2.0/UDP 192.168.1.199:5060;branch=z9hG4bK-1065474d-838080.528  
Route: <sip:00003@192.168.1.131>  
From: 00002 <sip:00002@sip.com>;tag=4bfe3670  
To: <sip:00003@sip.com>;tag=2e34944a  
Call-ID: 48d03131@00002.192.168.1.1  
CSeq: 118176422 PRACK  
Max-Forwards: 70  
Rack: 1705962754 118176420 INVITE  
Content-Length: 0

F14 192.168.1.1:5062(Server) -> 192.168.1.131:5060(00003@sip.com)

PRACK sip:00003@192.168.1.131 SIP/2.0  
Via: SIP/2.0/UDP 192.168.1.1:5060;branch=z9hG4bK-397.1109081276.118176422  
Via: SIP/2.0/UDP 192.168.1.199:5060;branch=z9hG4bK-1065474d-838080.528  
Route: <sip:00003@192.168.1.131>  
From: 00002 <sip:00002@sip.com>;tag=4bfe3670  
To: <sip:00003@sip.com>;tag=2e34944a  
Call-ID: 48d03131@00002.192.168.1.1  
CSeq: 118176422 PRACK  
max-forwards: 69  
rack: 1705962754 118176420 INVITE  
Content-Length: 0

F15 192.168.1.131:1025(00003@sip.com) -> 192.168.1.1:5060(Server)

SIP/2.0 200 OK  
Via: SIP/2.0/UDP 192.168.1.1:5060;branch=z9hG4bK-397.1109081276.118176422  
Via: SIP/2.0/UDP 192.168.1.199:5060;branch=z9hG4bK-1065474d-838080.528  
From: 00002 <sip:00002@sip.com>;tag=4bfe3670  
To: <sip:00003@sip.com>;tag=2e34944a  
Call-ID: 48d03131@00002.192.168.1.1  
CSeq: 118176422 PRACK  
Content-Length: 0



```
=====
F16      192.168.1.1:5062 (Server) -> 192.168.1.199:5060 (00002@sip.com)

SIP/2.0 200 OK
Via: SIP/2.0/UDP 192.168.1.199:5060;branch=z9hG4bK-1065474d-838080.528
From: 00002 <sip:00002@sip.com>;tag=4bfe3670
To: <sip:00003@sip.com>;tag=2e34944a
Call-ID: 48d03131@00002.192.168.1.1
CSeq: 118176422 PRACK
Content-Length: 0
=====
```

```
=====
F17      192.168.1.131:1026 (00003@sip.com) -> 192.168.1.1:5060 (Server)

REGISTER sip:192.168.1.1 SIP/2.0
Via: SIP/2.0/UDP 192.168.1.131:5060;branch=z9hG4bK-388f023d-233146.731
From: <sip:00003@sip.com>
To: <sip:00003@sip.com>
Call-ID: 7be246cd@00003.192.168.1.1
CSeq: 2 REGISTER
Contact: <sip:00003@192.168.1.131>;expires=3600
Max-Forwards: 70
User-Agent: △△△△△△ //端末種別

Content-Length: 0
=====
```

```
=====
F18      192.168.1.1:5062 (Server) -> 192.168.1.131:5060 (00003@sip.com)

SIP/2.0 200 OK
Via: SIP/2.0/UDP 192.168.1.131:5060;branch=z9hG4bK-388f023d-233146.731
From: <sip:00003@sip.com>
To: <sip:00003@sip.com>
Call-ID: 7be246cd@00003.192.168.1.1
CSeq: 2 REGISTER
Contact: <sip:00003@192.168.1.131>;expires=3600
Date: Tue, 22 Feb 2005 14:08:12 GMT
Content-Length: 0
=====
```

```
=====
F19      192.168.1.131:1026 (00003@sip.com) -> 192.168.1.1:5060 (Server)

SIP/2.0 180 Ringing
Via: SIP/2.0/UDP 192.168.1.1:5060;branch=z9hG4bK-397.367448.118176420
Via: SIP/2.0/UDP 192.168.1.199:5060;branch=z9hG4bK-3dbd969b-838079.239
Record-Route: <sip:00003@192.168.1.1>
From: 00002 <sip:00002@sip.com>;tag=4bfe3670
To: <sip:00003@sip.com>;tag=2e34944a
Call-ID: 48d03131@00002.192.168.1.1
CSeq: 118176420 INVITE
Contact: <sip:00003@192.168.1.131>
Require: 100rel
RSeq: 1705962756
Content-Length: 0
=====
```

```
=====
F20      192.168.1.1:5062 (Server) -> 192.168.1.199:5060 (00002@sip.com)

SIP/2.0 180 Ringing
Via: SIP/2.0/UDP 192.168.1.199:5060;branch=z9hG4bK-3dbd969b-838079.239
Record-Route: <sip:00003@192.168.1.1>
From: 00002 <sip:00002@sip.com>;tag=4bfe3670
To: <sip:00003@sip.com>;tag=2e34944a
Call-ID: 48d03131@00002.192.168.1.1
CSeq: 118176420 INVITE
Contact: <sip:00003@192.168.1.131>
require: 100rel
rseq: 1705962756
Content-Length: 0
=====
```

```
=====
F21      192.168.1.199:1026(00002@sip.com) -> 192.168.1.1:5060(Server)

PRACK sip:00003@192.168.1.1 SIP/2.0
Via: SIP/2.0/UDP 192.168.1.199:5060;branch=z9hG4bK-7276ea01-838101.226
Route: <sip:00003@192.168.1.131>
From: 00002 <sip:00002@sip.com>;tag=4bfe3670
To: <sip:00003@sip.com>;tag=2e34944a
Call-ID: 48d03131@00002.192.168.1.1
CSeq: 118176424 PRACK
Max-Forwards: 70
RAck: 1705962756 118176420 INVITE
Content-Length: 0
=====
```

```
=====
F22      192.168.1.1:5062(Server) -> 192.168.1.131:5060(00003@sip.com)

PRACK sip:00003@192.168.1.131 SIP/2.0
Via: SIP/2.0/UDP 192.168.1.1:5060;branch=z9hG4bK-397.1109081297.118176424
Via: SIP/2.0/UDP 192.168.1.199:5060;branch=z9hG4bK-7276ea01-838101.226
Route: <sip:00003@192.168.1.131>
From: 00002 <sip:00002@sip.com>;tag=4bfe3670
To: <sip:00003@sip.com>;tag=2e34944a
Call-ID: 48d03131@00002.192.168.1.1
CSeq: 118176424 PRACK
max-forwards: 69
rack: 1705962756 118176420 INVITE
Content-Length: 0
=====
```

```
=====
F23      192.168.1.131:1026(00003@sip.com) -> 192.168.1.1:5060(Server)

SIP/2.0 200 OK
Via: SIP/2.0/UDP 192.168.1.1:5060;branch=z9hG4bK-397.1109081297.118176424
Via: SIP/2.0/UDP 192.168.1.199:5060;branch=z9hG4bK-7276ea01-838101.226
From: 00002 <sip:00002@sip.com>;tag=4bfe3670
To: <sip:00003@sip.com>;tag=2e34944a
Call-ID: 48d03131@00002.192.168.1.1
CSeq: 118176424 PRACK
Content-Length: 0
=====
```

```
=====
F24      192.168.1.1:5062(Server) -> 192.168.1.199:5060(00002@sip.com)

SIP/2.0 200 OK
Via: SIP/2.0/UDP 192.168.1.199:5060;branch=z9hG4bK-7276ea01-838101.226
From: 00002 <sip:00002@sip.com>;tag=4bfe3670
To: <sip:00003@sip.com>;tag=2e34944a
Call-ID: 48d03131@00002.192.168.1.1
CSeq: 118176424 PRACK
Content-Length: 0
=====
```

```
=====
F25      192.168.1.131:1026(00003@sip.com) -> 192.168.1.1:5060(Server)

SIP/2.0 200 OK
Via: SIP/2.0/UDP 192.168.1.1:5060;branch=z9hG4bK-397.367448.118176420
Via: SIP/2.0/UDP 192.168.1.199:5060;branch=z9hG4bK-3dbd969b-838079.239
Record-Route: <sip:00003@192.168.1.1>
From: 00002 <sip:00002@sip.com>;tag=4bfe3670
To: <sip:00003@sip.com>;tag=2e34944a
Call-ID: 48d03131@00002.192.168.1.1
CSeq: 118176420 INVITE
Contact: <sip:00003@192.168.1.131>
Supported: 100rel, replaces
Allow: INVITE, ACK, BYE, CANCEL, OPTIONS, PRACK, MESSAGE, REFER, NOTIFY
Content-Type: application/sdp
Accept: application/sdp, message/sipfrag
Content-Length: 179
=====
```

v=0

o=- 368466 13001 IN IP4 192.168.1.131  
s=-  
c=IN IP4 192.168.1.131  
t=0 0  
m=audio 5006 RTP/AVP 0 96  
a=rtpmap:0 PCMU/8000  
a=rtpmap:96 telephone-event/8000  
a=fmtp:96 0-11

=====

F26 192.168.1.1:5062(Server) -> 192.168.1.199:5060(00002@sip.com)

SIP/2.0 200 OK  
Via: SIP/2.0/UDP 192.168.1.199:5060;branch=z9hG4bK-3dbd969b-838079.239  
Record-Route: <sip:00003@192.168.1.1>  
From: 00002 <sip:00002@sip.com>;tag=4bfe3670  
To: <sip:00003@sip.com>;tag=2e34944a  
Call-ID: 48d03131@00002.192.168.1.1  
CSeq: 118176420 INVITE  
Contact: <sip:00003@192.168.1.131>  
supported: 100rel  
supported: replaces  
Allow: INVITE, ACK, BYE, CANCEL, OPTIONS, PRACK, MESSAGE, REFER, NOTIFY  
Content-Type: application/sdp  
Accept: application/sdp, message/sipfrag  
Content-Length: 179

v=0  
o=- 368466 13001 IN IP4 192.168.1.131  
s=-  
c=IN IP4 192.168.1.131  
t=0 0  
m=audio 5006 RTP/AVP 0 96  
a=rtpmap:0 PCMU/8000  
a=rtpmap:96 telephone-event/8000  
a=fmtp:96 0-11

=====

F27 192.168.1.199:1026(00002@sip.com) -> 192.168.1.1:5060(Server)

ACK sip:00003@192.168.1.1 SIP/2.0  
Via: SIP/2.0/UDP 192.168.1.199:5060;branch=z9hG4bK-add5031-838105.114  
Route: <sip:00003@192.168.1.131>  
From: 00002 <sip:00002@sip.com>;tag=4bfe3670  
To: <sip:00003@sip.com>;tag=2e34944a  
Call-ID: 48d03131@00002.192.168.1.1  
CSeq: 118176420 ACK  
Max-Forwards: 70  
Content-Length: 0

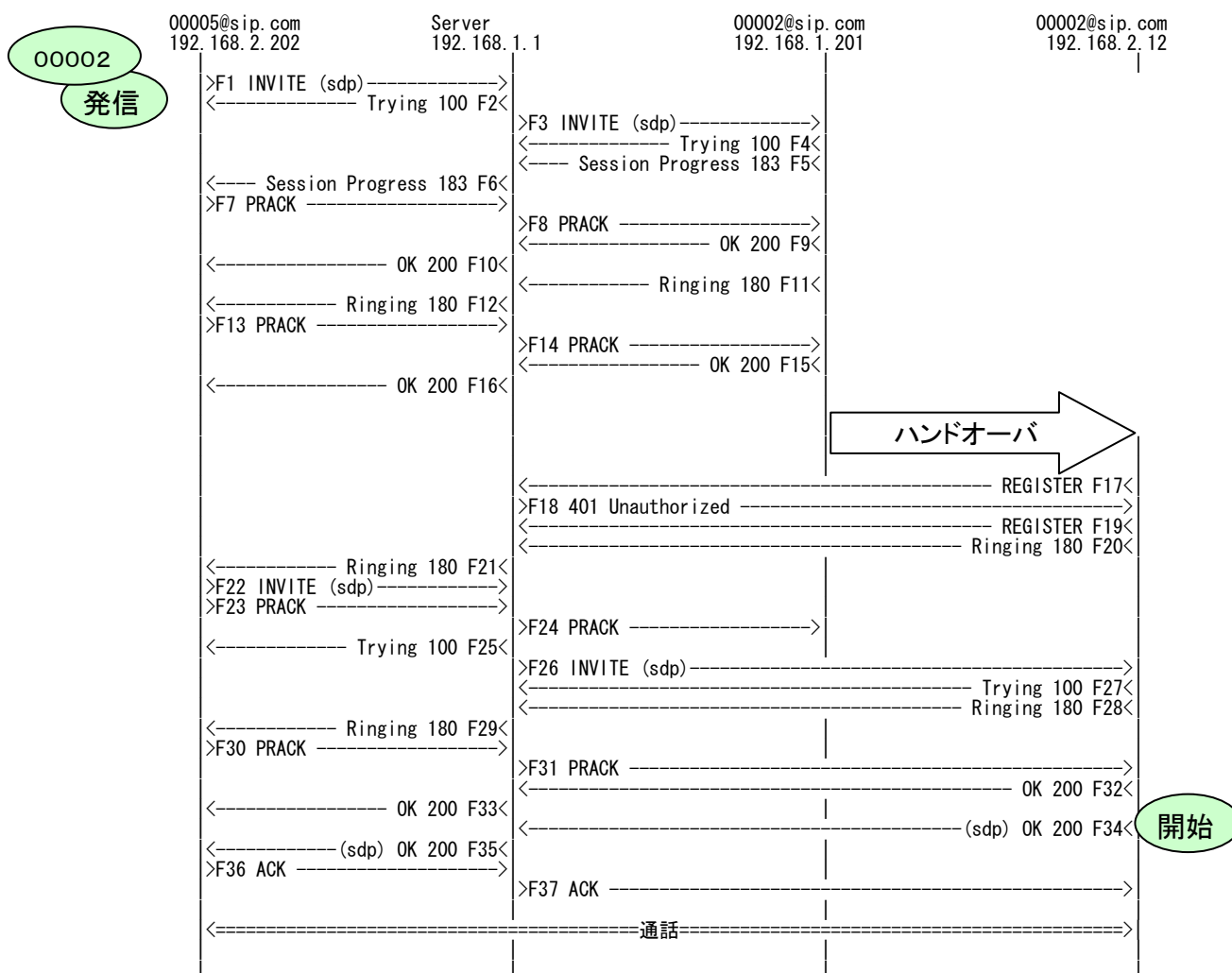
=====

F 28 192.168.1.1:5062(Server) -> 192.168.1.131:5060(00003@sip.com)

ACK sip:00003@192.168.1.131 SIP/2.0  
Via: SIP/2.0/UDP 192.168.1.1:5060;branch=z9hG4bK-397.1109081301.118176420  
Via: SIP/2.0/UDP 192.168.1.199:5060;branch=z9hG4bK-add5031-838105.114  
From: 00002 <sip:00002@sip.com>;tag=4bfe3670  
To: <sip:00003@sip.com>;tag=2e34944a  
Call-ID: 48d03131@00002.192.168.1.1  
CSeq: 118176420 ACK  
max-forwards: 69  
Content-Length: 0

=====

## 11.8.9.発信後呼び出し中に着信者ハンドオーバー(IP アドレスの変更あり)



注 : 00002 認証あり 00005 認証なし

図 11-48 発信後呼び出し中に着信者ハンドオーバー(IP アドレスの変更あり)

```

F1      192.168.2.202:1153() -> 192.168.1.1:5060(Server)

INVITE sip:00002@sip.com SIP/2.0
Via: SIP/2.0/UDP 192.168.2.202:5060;branch=z9hG4bK-2e712956-624708.867
Route: <sip:192.168.1.1:5060>
From: <sip:00005@sip.com>;tag=77e4d68d
To: <sip:00002@sip.com>
Call-ID: 28f7ddf200005.192.168.1.1
CSeq: 451373549 INVITE
Contact: <sip:00005@192.168.2.202>
Max-Forwards: 70
Supported: 100rel, replaces
Allow: INVITE, ACK, BYE, CANCEL, OPTIONS, PRACK, MESSAGE, REFER, NOTIFY
Content-Type: application/sdp
Accept: application/sdp, message/sipfrag
Content-Length: 251

v=0
o=- 853924 701 IN IP4 192.168.2.202
s=-
c=IN IP4 192.168.2.202
t=0 0

```

```

m=audio 5008 RTP/AVP 0 8 4 18 96
a=rtpmap:0 PCMU/8000
a=rtpmap:8 PCMA/8000
a=rtpmap:4 G723/8000
a=rtpmap:18 G729/8000
a=rtpmap:96 telephone-event/8000
a=fmtp:96 0-11

```

```
=====
```

F2            192.168.1.1:5062 (Server) -> 192.168.2.202:5060 ()

```

SIP/2.0 100 Trying
Via: SIP/2.0/UDP 192.168.2.202:5060;branch=z9hG4bK-2e712956-624708.867
From: <sip:00005@sip.com>;tag=77e4d68d
To: <sip:00002@sip.com>
Call-ID: 28f7ddf2@00005.192.168.1.1
CSeq: 451373549 INVITE
Content-Length: 0

```

```
=====
```

F3            192.168.1.1:5062 (Server) -> 192.168.1.201:5060 ()

```

INVITE sip:00002@192.168.1.201 SIP/2.0
Via: SIP/2.0/UDP 192.168.1.1:5060;branch=z9hG4bK-1274.891227.451373549
Via: SIP/2.0/UDP 192.168.2.202:5060;branch=z9hG4bK-2e712956-624708.867
Record-Route: <sip:00002@192.168.1.1>
Route: <sip:192.168.1.1:5060>
From: 00005 <sip:00005@sip.com>;tag=77e4d68d
To: <sip:00002@sip.com>
Call-ID: 28f7ddf2@00005.192.168.1.1
CSeq: 451373549 INVITE
Contact: <sip:00005@192.168.2.202>
max-forwards: 69
supported: 100rel
supported: replaces
Allow: INVITE, ACK, BYE, CANCEL, OPTIONS, PRACK, MESSAGE, REFER, NOTIFY
Content-Type: application/sdp
Accept: application/sdp, message/sipfrag
Content-Length: 251

```

```

v=0
o=- 853924 701 IN IP4 192.168.2.202
s=-
c=IN IP4 192.168.2.202
t=0 0
m=audio 5008 RTP/AVP 0 8 4 18 96
a=rtpmap:0 PCMU/8000
a=rtpmap:8 PCMA/8000
a=rtpmap:4 G723/8000
a=rtpmap:18 G729/8000
a=rtpmap:96 telephone-event/8000
a=fmtp:96 0-11

```

```
=====
```

F4            192.168.1.201:1212 () -> 192.168.1.1:5060 (Server)

```

SIP/2.0 100 Trying
Via: SIP/2.0/UDP 192.168.1.1:5060;branch=z9hG4bK-1274.891227.451373549
Via: SIP/2.0/UDP 192.168.2.202:5060;branch=z9hG4bK-2e712956-624708.867
From: 00005 <sip:00005@sip.com>;tag=77e4d68d
To: <sip:00002@sip.com>
Call-ID: 28f7ddf2@00005.192.168.1.1
CSeq: 451373549 INVITE
Content-Length: 0

```

```
=====
```

F5            192.168.1.201:1212 () -> 192.168.1.1:5060 (Server)

```

SIP/2.0 183 Session Progress
Via: SIP/2.0/UDP 192.168.1.1:5060;branch=z9hG4bK-1274.891227.451373549
Via: SIP/2.0/UDP 192.168.2.202:5060;branch=z9hG4bK-2e712956-624708.867
Record-Route: <sip:00002@192.168.1.1>
From: 00005 <sip:00005@sip.com>;tag=77e4d68d
To: <sip:00002@sip.com>;tag=05836f49
Call-ID: 28f7ddf2@00005.192.168.1.1

```

CSeq: 451373549 INVITE  
 Contact: <sip:00002@192.168.1.201>  
 Require: 100rel  
 RSeq: 1822255510  
 Content-Length: 0

F6 192.168.1.1:5062 (Server) -> 192.168.2.202:5060 ()

SIP/2.0 183 Session Progress  
 Via: SIP/2.0/UDP 192.168.2.202:5060;branch=z9hG4bK-2e712956-624708.867  
 Record-Route: <sip:00002@192.168.1.1>  
 From: 00005 <sip:00005@sip.com>;tag=77e4d68d  
 To: <sip:00002@sip.com>;tag=05836f49  
 Call-ID: 28f7ddf2@00005.192.168.1.1  
 CSeq: 451373549 INVITE  
 Contact: <sip:00002@192.168.1.201>  
 require: 100rel  
 rseq: 1822255510  
 Content-Length: 0

F7 192.168.2.202:1153 () -> 192.168.1.1:5060 (Server)

PRACK sip:00002@192.168.1.1 SIP/2.0  
 Via: SIP/2.0/UDP 192.168.2.202:5060;branch=z9hG4bK-7c5f0470-624709.226  
 Route: <sip:00002@192.168.1.201>  
 From: 00005 <sip:00005@sip.com>;tag=77e4d68d  
 To: <sip:00002@sip.com>;tag=05836f49  
 Call-ID: 28f7ddf2@00005.192.168.1.1  
 CSeq: 451373550 PRACK  
 Max-Forwards: 70  
 Rack: 1822255510 451373549 INVITE  
 Content-Length: 0

F8 192.168.1.1:5062 (Server) -> 192.168.1.201:5060 ()

PRACK sip:00002@192.168.1.201 SIP/2.0  
 Via: SIP/2.0/UDP 192.168.1.1:5060;branch=z9hG4bK-1274.1083747798.451373550  
 Via: SIP/2.0/UDP 192.168.2.202:5060;branch=z9hG4bK-7c5f0470-624709.226  
 Route: <sip:00002@192.168.1.201>  
 From: 00005 <sip:00005@sip.com>;tag=77e4d68d  
 To: <sip:00002@sip.com>;tag=05836f49  
 Call-ID: 28f7ddf2@00005.192.168.1.1  
 CSeq: 451373550 PRACK  
 max-forwards: 69  
 rack: 1822255510 451373549 INVITE  
 Content-Length: 0

F9 192.168.1.201:1212 () -> 192.168.1.1:5060 (Server)

SIP/2.0 200 OK  
 Via: SIP/2.0/UDP 192.168.1.1:5060;branch=z9hG4bK-1274.1083747798.451373550  
 Via: SIP/2.0/UDP 192.168.2.202:5060;branch=z9hG4bK-7c5f0470-624709.226  
 From: 00005 <sip:00005@sip.com>;tag=77e4d68d  
 To: <sip:00002@sip.com>;tag=05836f49  
 Call-ID: 28f7ddf2@00005.192.168.1.1  
 CSeq: 451373550 PRACK  
 Content-Length: 0

F10 192.168.1.1:5062 (Server) -> 192.168.2.202:5060 ()

SIP/2.0 200 OK  
 Via: SIP/2.0/UDP 192.168.2.202:5060;branch=z9hG4bK-7c5f0470-624709.226  
 From: 00005 <sip:00005@sip.com>;tag=77e4d68d  
 To: <sip:00002@sip.com>;tag=05836f49  
 Call-ID: 28f7ddf2@00005.192.168.1.1  
 CSeq: 451373550 PRACK

Content-Length: 0

---

F11 192.168.1.201:1212() -> 192.168.1.1:5060(Server)

SIP/2.0 180 Ringing  
 Via: SIP/2.0/UDP 192.168.1.1:5060;branch=z9hG4bK-1274.891227.451373549  
 Via: SIP/2.0/UDP 192.168.2.202:5060;branch=z9hG4bK-2e712956-624708.867  
 Record-Route: <sip:00002@192.168.1.1>  
 From: 00005 <sip:00005@sip.com>;tag=77e4d68d  
 To: <sip:00002@sip.com>;tag=05836f49  
 Call-ID: 28f7ddf2@00005.192.168.1.1  
 CSeq: 451373549 INVITE  
 Contact: <sip:00002@192.168.1.201>  
 Require: 100rel  
 RSeq: 1822255511  
 Content-Length: 0

---

F12 192.168.1.1:5062(Server) -&gt; 192.168.2.202:5060()

SIP/2.0 180 Ringing  
 Via: SIP/2.0/UDP 192.168.2.202:5060;branch=z9hG4bK-2e712956-624708.867  
 Record-Route: <sip:00002@192.168.1.1>  
 From: 00005 <sip:00005@sip.com>;tag=77e4d68d  
 To: <sip:00002@sip.com>;tag=05836f49  
 Call-ID: 28f7ddf2@00005.192.168.1.1  
 CSeq: 451373549 INVITE  
 Contact: <sip:00002@192.168.1.201>  
 require: 100rel  
 rseq: 1822255511  
 Content-Length: 0

---

F13 192.168.2.202:1153() -&gt; 192.168.1.1:5060(Server)

PRACK sip:00002@192.168.1.1 SIP/2.0  
 Via: SIP/2.0/UDP 192.168.2.202:5060;branch=z9hG4bK-4a62b537-624709.345  
 Route: <sip:00002@192.168.1.201>  
 From: 00005 <sip:00005@sip.com>;tag=77e4d68d  
 To: <sip:00002@sip.com>;tag=05836f49  
 Call-ID: 28f7ddf2@00005.192.168.1.1  
 CSeq: 451373551 PRACK  
 Max-Forwards: 70  
 RAck: 1822255511 451373549 INVITE  
 Content-Length: 0

---

F14 192.168.1.1:5062(Server) -&gt; 192.168.1.201:5060()

PRACK sip:00002@192.168.1.201 SIP/2.0  
 Via: SIP/2.0/UDP 192.168.1.1:5060;branch=z9hG4bK-1274.1083747798.451373551  
 Via: SIP/2.0/UDP 192.168.2.202:5060;branch=z9hG4bK-4a62b537-624709.345  
 Route: <sip:00002@192.168.1.201>  
 From: 00005 <sip:00005@sip.com>;tag=77e4d68d  
 To: <sip:00002@sip.com>;tag=05836f49  
 Call-ID: 28f7ddf2@00005.192.168.1.1  
 CSeq: 451373551 PRACK  
 max-forwards: 69  
 rack: 1822255511 451373549 INVITE  
 Content-Length: 0

---

F15 192.168.1.201:1212() -&gt; 192.168.1.1:5060(Server)

SIP/2.0 200 OK  
 Via: SIP/2.0/UDP 192.168.1.1:5060;branch=z9hG4bK-1274.1083747798.451373551  
 Via: SIP/2.0/UDP 192.168.2.202:5060;branch=z9hG4bK-4a62b537-624709.345  
 From: 00005 <sip:00005@sip.com>;tag=77e4d68d  
 To: <sip:00002@sip.com>;tag=05836f49  
 Call-ID: 28f7ddf2@00005.192.168.1.1

CSeq: 451373551 PRACK  
Content-Length: 0

F16 192.168.1.1:5062(Server) -> 192.168.2.202:5060()

SIP/2.0 200 OK  
Via: SIP/2.0/UDP 192.168.2.202:5060;branch=z9hG4bK-4a62b537-624709.345  
From: 00005 <sip:00005@sip.com>;tag=77e4d68d  
To: <sip:00002@sip.com>;tag=05836f49  
Call-ID: 28f7ddf2@00005.192.168.1.1  
CSeq: 451373551 PRACK  
Content-Length: 0

F17 192.168.2.12:1214() -> 192.168.1.1:5060(Server)

REGISTER sip:192.168.1.1 SIP/2.0  
Via: SIP/2.0/UDP 192.168.2.12:5060;branch=z9hG4bK-4104cf7d-219448.316  
From: <sip:00002@sip.com>  
To: <sip:00002@sip.com>  
Call-ID: 1bb25c80@00002.192.168.1.1  
CSeq: 2 REGISTER  
Contact: <sip:00002@192.168.2.12>;expires=3600  
Authorization: Digest username="00002", realm="heliossv2", nonce="938d9a992dd504d80b5bfc99a6d474ee",  
uri="sip:192.168.1.1", response="c42a4c304f60c1bfcdad02d79ba7d999", algorithm=MD5, cnonce="2f7eff2d",  
opaque="4ec3df13f2be7a03acaf34e57778ef1e", qop=auth, nc=00000002  
Max-Forwards: 70  
User-Agent: △△△△△△ //端末種別

Content-Length: 0

F18 192.168.1.1:5062(Server) -> 192.168.2.12:5060()

SIP/2.0 401 Unauthorized  
Via: SIP/2.0/UDP 192.168.2.12:5060;branch=z9hG4bK-4104cf7d-219448.316  
From: <sip:00002@sip.com>  
To: <sip:00002@sip.com>  
Call-ID: 1bb25c80@00002.192.168.1.1  
CSeq: 2 REGISTER  
WWW-Authenticate: Digest realm="heliossv2", nonce="4c1b6003ed0f528ef63b3ca16ec38480",  
opaque="25da364033c6cb29f63297ff93c46938", stale=false, algorithm=MD5, qop="auth,auth-int"  
Content-Length: 0

F19 192.168.2.12:1214() -> 192.168.1.1:5060(Server)

REGISTER sip:192.168.1.1 SIP/2.0  
Via: SIP/2.0/UDP 192.168.2.12:5060;branch=z9hG4bK-4310a2b1-219448.587  
From: <sip:00002@sip.com>  
To: <sip:00002@sip.com>  
Call-ID: 1bb25c80@00002.192.168.1.1  
CSeq: 3 REGISTER  
Contact: <sip:00002@192.168.2.12>;expires=3600  
Authorization: Digest username="00002", realm="heliossv2", nonce="4c1b6003ed0f528ef63b3ca16ec38480",  
uri="sip:192.168.1.1", response="324fbf5beca070226189d7df6ac0d0ae", algorithm=MD5, cnonce="1702ad32",  
opaque="25da364033c6cb29f63297ff93c46938", qop=auth, nc=00000001  
Max-Forwards: 70  
User-Agent: △△△△△△ //端末種別

Content-Length: 0

F20 192.168.2.12:1214() -> 192.168.1.1:5060(Server)

SIP/2.0 180 Ringing  
Via: SIP/2.0/UDP 192.168.1.1:5060;branch=z9hG4bK-1274.891227.451373549  
Via: SIP/2.0/UDP 192.168.2.202:5060;branch=z9hG4bK-2e712956-624708.867  
Record-Route: <sip:00002@192.168.1.1>  
From: 00005 <sip:00005@sip.com>;tag=77e4d68d



To: <sip:00002@sip.com>;tag=05836f49  
 Call-ID: 28f7ddf2@00005.192.168.1.1  
 CSeq: 451373549 INVITE  
 Contact: <sip:00002@192.168.2.12>  
 Require: 100rel  
 RSeq: 182225513  
 Content-Length: 0

F21 192.168.1.1:5062 (Server) -> 192.168.2.202:5060 ()

SIP/2.0 180 Ringing  
 Via: SIP/2.0/UDP 192.168.2.202:5060;branch=z9hG4bK-2e712956-624708.867  
 Record-Route: <sip:00002@192.168.1.1>  
 From: 00005 <sip:00005@sip.com>;tag=77e4d68d  
 To: <sip:00002@sip.com>;tag=05836f49  
 Call-ID: 28f7ddf2@00005.192.168.1.1  
 CSeq: 451373549 INVITE  
 Contact: <sip:00002@192.168.2.12>  
 require: 100rel  
 rseq: 182225513  
 Content-Length: 0

F22 192.168.2.202:1153 () -> 192.168.1.1:5060 (Server)

INVITE sip:00002@sip.com SIP/2.0  
 Via: SIP/2.0/UDP 192.168.2.202:5060;branch=z9hG4bK-59ddc18c-624724.266  
 Route: <sip:192.168.1.1:5060>  
 From: <sip:00005@sip.com>;tag=74d82f13  
 To: <sip:00002@sip.com>  
 Call-ID: 2d5cff36@00005.192.168.1.1  
 CSeq: 846474134 INVITE  
 Contact: <sip:00005@192.168.2.202>  
 Max-Forwards: 70  
 Supported: 100rel, replaces  
 Allow: INVITE, ACK, BYE, CANCEL, OPTIONS, PRACK, MESSAGE, REFER, NOTIFY  
 Content-Type: application/sdp  
 Accept: application/sdp, message/sipfrag  
 Content-Length: 251

v=0  
 o=- 257354 702 IN IP4 192.168.2.202  
 s=-  
 c=IN IP4 192.168.2.202  
 t=0 0  
 m=audio 5008 RTP/AVP 0 8 4 18 96  
 a=rtpmap:0 PCMU/8000  
 a=rtpmap:8 PCMA/8000  
 a=rtpmap:4 G723/8000  
 a=rtpmap:18 G729/8000  
 a=rtpmap:96 telephone-event/8000  
 a=fmtp:96 0-11

F23 192.168.2.202:1153 () -> 192.168.1.1:5060 (Server)

PRACK sip:00002@192.168.1.1 SIP/2.0  
 Via: SIP/2.0/UDP 192.168.2.202:5060;branch=z9hG4bK-323d1ed8-624724.255  
 Route: <sip:00002@192.168.2.12>  
 From: 00005 <sip:00005@sip.com>;tag=77e4d68d  
 To: <sip:00002@sip.com>;tag=05836f49  
 Call-ID: 28f7ddf2@00005.192.168.1.1  
 CSeq: 451373553 PRACK  
 Max-Forwards: 70  
 RAck: 182225513 451373549 INVITE  
 Content-Length: 0

F24 192.168.1.1:5062 (Server) -> 192.168.1.201:5060 ()

PRACK sip:00002@192.168.1.201 SIP/2.0  
 Via: SIP/2.0/UDP 192.168.1.1:5060;branch=z9hG4bK-1274.1083747813.451373553  
 Via: SIP/2.0/UDP 192.168.2.202:5060;branch=z9hG4bK-323d1ed8-624724.255

Route: <sip:00002@192.168.2.12>  
 From: 00005 <sip:00005@sip.com>;tag=77e4d68d  
 To: <sip:00002@sip.com>;tag=05836f49  
 Call-ID: 28f7ddf2@00005.192.168.1.1  
 CSeq: 451373553 PRACK  
 max-forwards: 69  
 rack: 1822255513 451373549 INVITE  
 Content-Length: 0

F25 192.168.1.1:5062(Server) -> 192.168.2.202:5060()

SIP/2.0 100 Trying  
 Via: SIP/2.0/UDP 192.168.2.202:5060;branch=z9hG4bK-59ddc18c-624724.266  
 From: <sip:00005@sip.com>;tag=74d82f13  
 To: <sip:00002@sip.com>  
 Call-ID: 2d5cff36@00005.192.168.1.1  
 CSeq: 846474134 INVITE  
 Content-Length: 0

F26 192.168.1.1:5062(Server) -> 192.168.2.12:5060()

INVITE sip:00002@192.168.2.12 SIP/2.0  
 Via: SIP/2.0/UDP 192.168.1.1:5060;branch=z9hG4bK-1278.281518.846474134  
 Via: SIP/2.0/UDP 192.168.2.202:5060;branch=z9hG4bK-59ddc18c-624724.266  
 Record-Route: <sip:00002@192.168.1.1>  
 Route: <sip:192.168.1.1:5060>  
 From: 00005 <sip:00005@sip.com>;tag=74d82f13  
 To: <sip:00002@sip.com>  
 Call-ID: 2d5cff36@00005.192.168.1.1  
 CSeq: 846474134 INVITE  
 Contact: <sip:00005@192.168.2.202>  
 max-forwards: 69  
 supported: 100rel  
 supported: replaces  
 Allow: INVITE, ACK, BYE, CANCEL, OPTIONS, PRACK, MESSAGE, REFER, NOTIFY  
 Content-Type: application/sdp  
 Accept: application/sdp, message/sipfrag  
 Content-Length: 251

v=0  
 o=- 257354 702 IN IP4 192.168.2.202  
 s=-  
 c=IN IP4 192.168.2.202  
 t=0 0  
 m=audio 5008 RTP/AVP 0 8 4 18 96  
 a=rtpmap:0 PCMU/8000  
 a=rtpmap:8 PCMA/8000  
 a=rtpmap:4 G723/8000  
 a=rtpmap:18 G729/8000  
 a=rtpmap:96 telephone-event/8000  
 a=fmtp:96 0-11

F27 192.168.2.12:1214() -> 192.168.1.1:5060(Server)

SIP/2.0 100 Trying  
 Via: SIP/2.0/UDP 192.168.1.1:5060;branch=z9hG4bK-1278.281518.846474134  
 Via: SIP/2.0/UDP 192.168.2.202:5060;branch=z9hG4bK-59ddc18c-624724.266  
 From: 00005 <sip:00005@sip.com>;tag=74d82f13  
 To: <sip:00002@sip.com>  
 Call-ID: 2d5cff36@00005.192.168.1.1  
 CSeq: 846474134 INVITE  
 Content-Length: 0

F28 192.168.2.12:1214() -> 192.168.1.1:5060(Server)

SIP/2.0 180 Ringing  
 Via: SIP/2.0/UDP 192.168.1.1:5060;branch=z9hG4bK-1278.281518.846474134  
 Via: SIP/2.0/UDP 192.168.2.202:5060;branch=z9hG4bK-59ddc18c-624724.266  
 Record-Route: <sip:00002@192.168.1.1>  
 From: 00005 <sip:00005@sip.com>;tag=74d82f13

To: <sip:00002@sip.com>;tag=2db627a5  
 Call-ID: 2d5cff36@00005.192.168.1.1  
 CSeq: 846474134 INVITE  
 Contact: <sip:00002@192.168.2.12>  
 Require: 100rel  
 RSeq: 428681283  
 Content-Length: 0

F29 192.168.1.1:5062 (Server) -> 192.168.2.202:5060 ()

SIP/2.0 180 Ringing  
 Via: SIP/2.0/UDP 192.168.2.202:5060;branch=z9hG4bK-59ddc18c-624724.266  
 Record-Route: <sip:00002@192.168.1.1>  
 From: 00005 <sip:00005@sip.com>;tag=74d82f13  
 To: <sip:00002@sip.com>;tag=2db627a5  
 Call-ID: 2d5cff36@00005.192.168.1.1  
 CSeq: 846474134 INVITE  
 Contact: <sip:00002@192.168.2.12>  
 require: 100rel  
 rseq: 428681283  
 Content-Length: 0

F30 192.168.2.202:1153 () -> 192.168.1.1:5060 (Server)

PRACK sip:00002@192.168.1.1 SIP/2.0  
 Via: SIP/2.0/UDP 192.168.2.202:5060;branch=z9hG4bK-54173f0b-624724.595  
 Route: <sip:00002@192.168.2.12>  
 From: 00005 <sip:00005@sip.com>;tag=74d82f13  
 To: <sip:00002@sip.com>;tag=2db627a5  
 Call-ID: 2d5cff36@00005.192.168.1.1  
 CSeq: 846474135 PRACK  
 Max-Forwards: 70  
 Rack: 428681283 846474134 INVITE  
 Content-Length: 0

F31 192.168.1.1:5062 (Server) -> 192.168.2.12:5060 ()

PRACK sip:00002@192.168.2.12 SIP/2.0  
 Via: SIP/2.0/UDP 192.168.1.1:5060;branch=z9hG4bK-1278.1083747813.846474135  
 Via: SIP/2.0/UDP 192.168.2.202:5060;branch=z9hG4bK-54173f0b-624724.595  
 Route: <sip:00002@192.168.2.12>  
 From: 00005 <sip:00005@sip.com>;tag=74d82f13  
 To: <sip:00002@sip.com>;tag=2db627a5  
 Call-ID: 2d5cff36@00005.192.168.1.1  
 CSeq: 846474135 PRACK  
 max-forwards: 69  
 rack: 428681283 846474134 INVITE  
 Content-Length: 0

F32 192.168.2.12:1214 () -> 192.168.1.1:5060 (Server)

SIP/2.0 200 OK  
 Via: SIP/2.0/UDP 192.168.1.1:5060;branch=z9hG4bK-1278.1083747813.846474135  
 Via: SIP/2.0/UDP 192.168.2.202:5060;branch=z9hG4bK-54173f0b-624724.595  
 From: 00005 <sip:00005@sip.com>;tag=74d82f13  
 To: <sip:00002@sip.com>;tag=2db627a5  
 Call-ID: 2d5cff36@00005.192.168.1.1  
 CSeq: 846474135 PRACK  
 Content-Length: 0

F33 192.168.1.1:5062 (Server) -> 192.168.2.202:5060 ()

SIP/2.0 200 OK  
 Via: SIP/2.0/UDP 192.168.2.202:5060;branch=z9hG4bK-54173f0b-624724.595  
 From: 00005 <sip:00005@sip.com>;tag=74d82f13  
 To: <sip:00002@sip.com>;tag=2db627a5

Call-ID: 2d5cff36@00005.192.168.1.1  
 CSeq: 846474135 PRACK  
 Content-Length: 0

F34 192.168.2.12:1214() -> 192.168.1.1:5060(Server)

SIP/2.0 200 OK  
 Via: SIP/2.0/UDP 192.168.1.1:5060;branch=z9hG4bK-1278.281518.846474134  
 Via: SIP/2.0/UDP 192.168.2.202:5060;branch=z9hG4bK-59ddc18c-624724.266  
 Record-Route: <sip:00002@192.168.1.1>  
 From: 00005 <sip:00005@sip.com>;tag=74d82f13  
 To: <sip:00002@sip.com>;tag=2db627a5  
 Call-ID: 2d5cff36@00005.192.168.1.1  
 CSeq: 846474134 INVITE  
 Contact: <sip:00002@192.168.2.12>  
 Supported: 100rel, replaces  
 Allow: INVITE, ACK, BYE, CANCEL, OPTIONS, PRACK, MESSAGE, REFER, NOTIFY  
 Content-Type: application/sdp  
 Accept: application/sdp, message/sipfrag  
 Content-Length: 177

v=0  
 o=- 619244 12801 IN IP4 192.168.2.12  
 s=-  
 c=IN IP4 192.168.2.12  
 t=0 0  
 m=audio 5008 RTP/AVP 0 96  
 a=rtpmap:0 PCMU/8000  
 a=rtpmap:96 telephone-event/8000  
 a=fmtp:96 0-11

F35 192.168.1.1:5062(Server) -> 192.168.2.202:5060()

SIP/2.0 200 OK  
 Via: SIP/2.0/UDP 192.168.2.202:5060;branch=z9hG4bK-59ddc18c-624724.266  
 Record-Route: <sip:00002@192.168.1.1>  
 From: 00005 <sip:00005@sip.com>;tag=74d82f13  
 To: <sip:00002@sip.com>;tag=2db627a5  
 Call-ID: 2d5cff36@00005.192.168.1.1  
 CSeq: 846474134 INVITE  
 Contact: <sip:00002@192.168.2.12>  
 supported: 100rel  
 supported: replaces  
 Allow: INVITE, ACK, BYE, CANCEL, OPTIONS, PRACK, MESSAGE, REFER, NOTIFY  
 Content-Type: application/sdp  
 Accept: application/sdp, message/sipfrag  
 Content-Length: 177

v=0  
 o=- 619244 12801 IN IP4 192.168.2.12  
 s=-  
 c=IN IP4 192.168.2.12  
 t=0 0  
 m=audio 5008 RTP/AVP 0 96  
 a=rtpmap:0 PCMU/8000  
 a=rtpmap:96 telephone-event/8000  
 a=fmtp:96 0-11

F36 192.168.2.202:1153() -> 192.168.1.1:5060(Server)

ACK sip:00002@192.168.1.1 SIP/2.0  
 Via: SIP/2.0/UDP 192.168.2.202:5060;branch=z9hG4bK-671eb8d4-624735.457  
 Route: <sip:00002@192.168.2.12>  
 From: 00005 <sip:00005@sip.com>;tag=74d82f13  
 To: <sip:00002@sip.com>;tag=2db627a5  
 Call-ID: 2d5cff36@00005.192.168.1.1  
 CSeq: 846474134 ACK  
 Max-Forwards: 70  
 Content-Length: 0

F37 192.168.1.1:5062(Server) -> 192.168.2.12:5060()

ACK sip:00002@192.168.2.12 SIP/2.0  
Via: SIP/2.0/UDP 192.168.1.1:5060;branch=z9hG4bK-1278.1083747824.846474134  
Via: SIP/2.0/UDP 192.168.2.202:5060;branch=z9hG4bK-671eb8d4-624735.457  
From: 00005 <sip:00005@sip.com>;tag=74d82f13  
To: <sip:00002@sip.com>;tag=2db627a5  
Call-ID: 2d5cff36@00005.192.168.1.1  
CSeq: 846474134 ACK  
max-forwards: 69  
Content-Length: 0

=====

## 11.8.10. 発信後呼び出し中に着信者ハンドオーバー(IP アドレスの再登録失敗)

IP アドレス登録失敗(DHCP 失敗)することで帰属を解除し、再スキャンを行う。

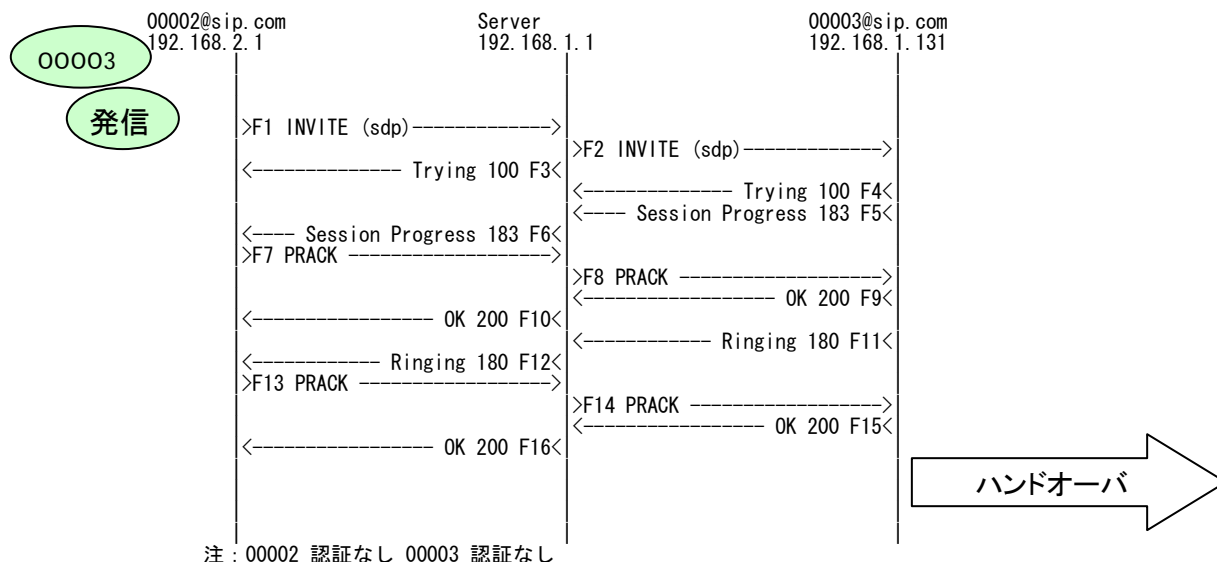


図 11-49 発信後呼び出し中に着信者ハンドオーバー(IP アドレスの再登録失敗)

F1 192.168.2.1:1049(00002@sip.com) -&gt; 192.168.1.1:5060(Server)

```

INVITE sip:00003@sip.com SIP/2.0
Via: SIP/2.0/UDP 192.168.2.1:5060;branch=z9hG4bK-13ca2657-847180.964
Route: <sip:192.168.1.1:5060>
From: <sip:00002@sip.com>;tag=5224e3b5
To: <sip:00003@sip.com>
Call-ID: 0e10d4f9@00002.192.168.1.1
CSeq: 1987172965 INVITE
Contact: <sip:00002@192.168.2.1>
Max-Forwards: 70
Supported: 100rel, replaces
Allow: INVITE, ACK, BYE, CANCEL, OPTIONS, PRACK, MESSAGE, REFER, NOTIFY
Content-Type: application/sdp
Accept: application/sdp, message/sipfrag
Content-Length: 248

```

```

v=0
o=- 947791 3501 IN IP4 192.168.2.1
s=-
c=IN IP4 192.168.2.1
t=0 0
m=audio 5006 RTP/AVP 0 8 4 18 96
a=rtpmap:0 PCMU/8000
a=rtpmap:8 PCMA/8000
a=rtpmap:4 G723/8000
a=rtpmap:18 G729/8000
a=rtpmap:96 telephone-event/8000
a=fmtp:96 0-11

```

F2 192.168.1.1:5062(Server) -&gt; 192.168.1.131:5060(00003@sip.com)

```

INVITE sip:00003@192.168.1.131 SIP/2.0
Via: SIP/2.0/UDP 192.168.1.1:5060;branch=z9hG4bK-558.837543.1987172965
Via: SIP/2.0/UDP 192.168.2.1:5060;branch=z9hG4bK-13ca2657-847180.964
Record-Route: <sip:00003@192.168.1.1>
Route: <sip:192.168.1.1:5060>
From: 00002 <sip:00002@sip.com>;tag=5224e3b5
To: <sip:00003@sip.com>
Call-ID: 0e10d4f9@00002.192.168.1.1
CSeq: 1987172965 INVITE
Contact: <sip:00002@192.168.2.1>

```

```

max-forwards: 69
supported: 100rel
supported: replaces
Allow: INVITE, ACK, BYE, CANCEL, OPTIONS, PRACK, MESSAGE, REFER, NOTIFY
Content-Type: application/sdp
Accept: application/sdp, message/sipfrag
Content-Length: 248

```

```

v=0
o=- 947791 3501 IN IP4 192.168.2.1
s=-
c=IN IP4 192.168.2.1
t=0 0
m=audio 5006 RTP/AVP 0 8 4 18 96
a=rtpmap:0 PCMU/8000
a=rtpmap:8 PCMA/8000
a=rtpmap:4 G723/8000
a=rtpmap:18 G729/8000
a=rtpmap:96 telephone-event/8000
a=fmtp:96 0-11

```

```
=====
```

F3            192.168.1.1:5062 (Server) -> 192.168.2.1:5060 (00002@sip.com)

```

SIP/2.0 100 Trying
Via: SIP/2.0/UDP 192.168.2.1:5060;branch=z9hG4bK-13ca2657-847180.964
From: <sip:00002@sip.com>;tag=5224e3b5
To: <sip:00003@sip.com>
Call-ID: 0e10d4f9@00002.192.168.1.1
CSeq: 1987172965 INVITE
Content-Length: 0

```

```
=====
```

F4            192.168.1.131:1024 (00003@sip.com) -> 192.168.1.1:5060 (Server)

```

SIP/2.0 100 Trying
Via: SIP/2.0/UDP 192.168.1.1:5060;branch=z9hG4bK-558.837543.1987172965
Via: SIP/2.0/UDP 192.168.2.1:5060;branch=z9hG4bK-13ca2657-847180.964
From: 00002 <sip:00002@sip.com>;tag=5224e3b5
To: <sip:00003@sip.com>
Call-ID: 0e10d4f9@00002.192.168.1.1
CSeq: 1987172965 INVITE
Content-Length: 0

```

```
=====
```

F5            192.168.1.131:1024 (00003@sip.com) -> 192.168.1.1:5060 (Server)

```

SIP/2.0 183 Session Progress
Via: SIP/2.0/UDP 192.168.1.1:5060;branch=z9hG4bK-558.837543.1987172965
Via: SIP/2.0/UDP 192.168.2.1:5060;branch=z9hG4bK-13ca2657-847180.964
Record-Route: <sip:00003@192.168.1.1>
From: 00002 <sip:00002@sip.com>;tag=5224e3b5
To: <sip:00003@sip.com>;tag=43a1bbb9
Call-ID: 0e10d4f9@00002.192.168.1.1
CSeq: 1987172965 INVITE
Contact: <sip:00003@192.168.1.131>
Require: 100rel
RSeq: 909310331
Content-Length: 0

```

```
=====
```

F6            192.168.1.1:5062 (Server) -> 192.168.2.1:5060 (00002@sip.com)

```

SIP/2.0 183 Session Progress
Via: SIP/2.0/UDP 192.168.2.1:5060;branch=z9hG4bK-13ca2657-847180.964
Record-Route: <sip:00003@192.168.1.1>
From: 00002 <sip:00002@sip.com>;tag=5224e3b5
To: <sip:00003@sip.com>;tag=43a1bbb9
Call-ID: 0e10d4f9@00002.192.168.1.1
CSeq: 1987172965 INVITE
Contact: <sip:00003@192.168.1.131>
require: 100rel
rseq: 909310331
Content-Length: 0

```

F7 192.168.2.1:1049(00002@sip.com) -> 192.168.1.1:5060(Server)

PRACK sip:00003@192.168.1.1 SIP/2.0  
Via: SIP/2.0/UDP 192.168.2.1:5060;branch=z9hG4bK-23a84426-847181.881  
Route: <sip:00003@192.168.1.131>  
From: 00002 <sip:00002@sip.com>;tag=5224e3b5  
To: <sip:00003@sip.com>;tag=43a1bbb9  
Call-ID: 0e10d4f9@00002.192.168.1.1  
CSeq: 1987172966 PRACK  
Max-Forwards: 70  
RAck: 909310331 1987172965 INVITE  
Content-Length: 0

F8 192.168.1.1:5062(Server) -> 192.168.1.131:5060(00003@sip.com)

PRACK sip:00003@192.168.1.131 SIP/2.0  
Via: SIP/2.0/UDP 192.168.1.1:5060;branch=z9hG4bK-558.1109090377.1987172966  
Via: SIP/2.0/UDP 192.168.2.1:5060;branch=z9hG4bK-23a84426-847181.881  
Route: <sip:00003@192.168.1.131>  
From: 00002 <sip:00002@sip.com>;tag=5224e3b5  
To: <sip:00003@sip.com>;tag=43a1bbb9  
Call-ID: 0e10d4f9@00002.192.168.1.1  
CSeq: 1987172966 PRACK  
max-forwards: 69  
rack: 909310331 1987172965 INVITE  
Content-Length: 0

F9 192.168.1.131:1024(00003@sip.com) -> 192.168.1.1:5060(Server)

SIP/2.0 200 OK  
Via: SIP/2.0/UDP 192.168.1.1:5060;branch=z9hG4bK-558.1109090377.1987172966  
Via: SIP/2.0/UDP 192.168.2.1:5060;branch=z9hG4bK-23a84426-847181.881  
From: 00002 <sip:00002@sip.com>;tag=5224e3b5  
To: <sip:00003@sip.com>;tag=43a1bbb9  
Call-ID: 0e10d4f9@00002.192.168.1.1  
CSeq: 1987172966 PRACK  
Content-Length: 0

F10 192.168.1.1:5062(Server) -> 192.168.2.1:5060(00002@sip.com)

SIP/2.0 200 OK  
Via: SIP/2.0/UDP 192.168.2.1:5060;branch=z9hG4bK-23a84426-847181.881  
From: 00002 <sip:00002@sip.com>;tag=5224e3b5  
To: <sip:00003@sip.com>;tag=43a1bbb9  
Call-ID: 0e10d4f9@00002.192.168.1.1  
CSeq: 1987172966 PRACK  
Content-Length: 0

F11 192.168.1.131:1024(00003@sip.com) -> 192.168.1.1:5060(Server)

SIP/2.0 180 Ringing  
Via: SIP/2.0/UDP 192.168.1.1:5060;branch=z9hG4bK-558.837543.1987172965  
Via: SIP/2.0/UDP 192.168.2.1:5060;branch=z9hG4bK-13ca2657-847180.964  
Record-Route: <sip:00003@192.168.1.1>  
From: 00002 <sip:00002@sip.com>;tag=5224e3b5  
To: <sip:00003@sip.com>;tag=43a1bbb9  
Call-ID: 0e10d4f9@00002.192.168.1.1  
CSeq: 1987172965 INVITE  
Contact: <sip:00003@192.168.1.131>  
Require: 100rel  
RSeq: 909310332  
Content-Length: 0



F12 192.168.1.1:5062 (Server) -> 192.168.2.1:5060 (00002@sip.com)

SIP/2.0 180 Ringing  
 Via: SIP/2.0/UDP 192.168.2.1:5060;branch=z9hG4bK-13ca2657-847180.964  
 Record-Route: <sip:00003@192.168.1.1>  
 From: 00002 <sip:00002@sip.com>;tag=5224e3b5  
 To: <sip:00003@sip.com>;tag=43a1bbb9  
 Call-ID: 0e10d4f9@00002.192.168.1.1  
 CSeq: 1987172965 INVITE  
 Contact: <sip:00003@192.168.1.131>  
 require: 100rel  
 rseq: 909310332  
 Content-Length: 0

F13 192.168.2.1:1049 (00002@sip.com) -> 192.168.1.1:5060 (Server)

PRACK sip:00003@192.168.1.1 SIP/2.0  
 Via: SIP/2.0/UDP 192.168.2.1:5060;branch=z9hG4bK-3c0c9bc1-847182.591  
 Route: <sip:00003@192.168.1.131>  
 From: 00002 <sip:00002@sip.com>;tag=5224e3b5  
 To: <sip:00003@sip.com>;tag=43a1bbb9  
 Call-ID: 0e10d4f9@00002.192.168.1.1  
 CSeq: 1987172967 PRACK  
 Max-Forwards: 70  
 Rack: 909310332 1987172965 INVITE  
 Content-Length: 0

F14 192.168.1.1:5062 (Server) -> 192.168.1.131:5060 (00003@sip.com)

PRACK sip:00003@192.168.1.131 SIP/2.0  
 Via: SIP/2.0/UDP 192.168.1.1:5060;branch=z9hG4bK-558.1109090378.1987172967  
 Via: SIP/2.0/UDP 192.168.2.1:5060;branch=z9hG4bK-3c0c9bc1-847182.591  
 Route: <sip:00003@192.168.1.131>  
 From: 00002 <sip:00002@sip.com>;tag=5224e3b5  
 To: <sip:00003@sip.com>;tag=43a1bbb9  
 Call-ID: 0e10d4f9@00002.192.168.1.1  
 CSeq: 1987172967 PRACK  
 max-forwards: 69  
 rack: 909310332 1987172965 INVITE  
 Content-Length: 0

F15 192.168.1.131:1024 (00003@sip.com) -> 192.168.1.1:5060 (Server)

SIP/2.0 200 OK  
 Via: SIP/2.0/UDP 192.168.1.1:5060;branch=z9hG4bK-558.1109090378.1987172967  
 Via: SIP/2.0/UDP 192.168.2.1:5060;branch=z9hG4bK-3c0c9bc1-847182.591  
 From: 00002 <sip:00002@sip.com>;tag=5224e3b5  
 To: <sip:00003@sip.com>;tag=43a1bbb9  
 Call-ID: 0e10d4f9@00002.192.168.1.1  
 CSeq: 1987172967 PRACK  
 Content-Length: 0

F16 192.168.1.1:5062 (Server) -> 192.168.2.1:5060 (00002@sip.com)

SIP/2.0 200 OK  
 Via: SIP/2.0/UDP 192.168.2.1:5060;branch=z9hG4bK-3c0c9bc1-847182.591  
 From: 00002 <sip:00002@sip.com>;tag=5224e3b5  
 To: <sip:00003@sip.com>;tag=43a1bbb9  
 Call-ID: 0e10d4f9@00002.192.168.1.1  
 CSeq: 1987172967 PRACK  
 Content-Length: 0

11.8.11. 発信後呼び出し中に発信側/着信側ともにハンドオーバ(IP アドレスの変更なし)  
 IP アドレスの変更を伴わないハンドオーバでは REGISTER は発生しないが、プロフィールが  
 変更されるハンドオーバでは REGISTER が行われる。この場合のシーケンスを示す。

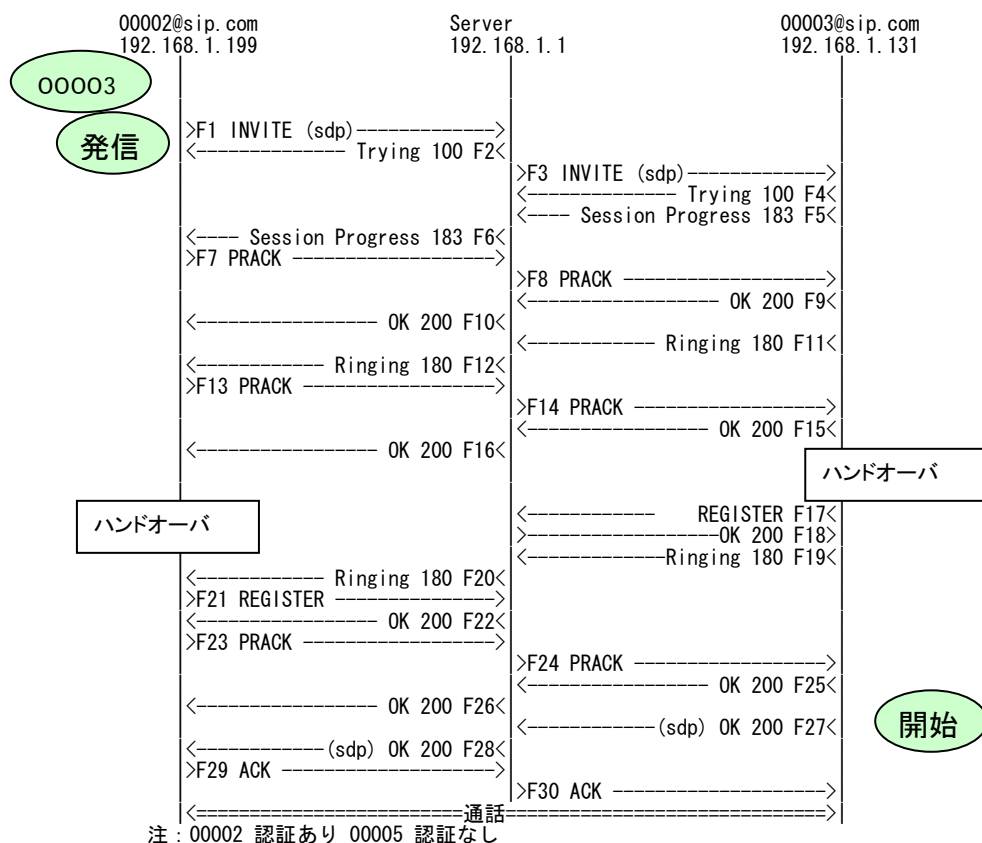


図 11-50 発信後呼び出し中に発信側/着信側ともにハンドオーバ(IP アドレスの変更なし)

```

F1      192.168.1.199:1031() -> 192.168.1.1:5060(Server)

INVITE sip:00003@sip.com SIP/2.0
Via: SIP/2.0/UDP 192.168.1.199:5060;branch=z9hG4bK-53a92acd-838449.356
Route: <sip:192.168.1.1:5060>
From: <sip:00002@sip.com>;tag=26f6b1de
To: <sip:00003@sip.com>
Call-ID: 0aa4a63a@00002.192.168.1.1
CSeq: 269240440 INVITE
Contact: <sip:00002@192.168.1.199>
Max-Forwards: 70
Supported: 100rel, replaces
Allow: INVITE, ACK, BYE, CANCEL, OPTIONS, PRACK, MESSAGE, REFER, NOTIFY
Content-Type: application/sdp
Accept: application/sdp, message/sipfrag
Content-Length: 252

v=0
o=- 339974 1901 IN IP4 192.168.1.199
s=-
c=IN IP4 192.168.1.199
t=0 0
m=audio 5006 RTP/AVP 0 8 4 18 96
a=rtpmap:0 PCMU/8000
a=rtpmap:8 PCMA/8000
a=rtpmap:4 G723/8000
a=rtpmap:18 G729/8000
a=rtpmap:96 telephone-event/8000
  
```

a=fmtp:96 0-11

```
=====
F2      192.168.1.1:5062 (Server) -> 192.168.1.199:5060 ()

SIP/2.0 100 Trying
Via: SIP/2.0/UDP 192.168.1.199:5060;branch=z9hG4bK-53a92acd-838449.356
From: <sip:00002@sip.com>;tag=26f6b1de
To: <sip:00003@sip.com>
Call-ID: 0aa4a63a@00002.192.168.1.1
CSeq: 269240440 INVITE
Content-Length: 0
```

```
=====
F3      192.168.1.1:5062 (Server) -> 192.168.1.131:5060 (00003@sip.com)

INVITE sip:00003@192.168.1.131 SIP/2.0
Via: SIP/2.0/UDP 192.168.1.1:5060;branch=z9hG4bK-419.477563.269240440
Via: SIP/2.0/UDP 192.168.1.199:5060;branch=z9hG4bK-53a92acd-838449.356
Record-Route: <sip:00003@192.168.1.1>
Route: <sip:192.168.1.1:5060>
From: 00002 <sip:00002@sip.com>;tag=26f6b1de
To: <sip:00003@sip.com>
Call-ID: 0aa4a63a@00002.192.168.1.1
CSeq: 269240440 INVITE
Contact: <sip:00002@192.168.1.199>
max-forwards: 69
supported: 100rel
supported: replaces
Allow: INVITE, ACK, BYE, CANCEL, OPTIONS, PRACK, MESSAGE, REFER, NOTIFY
Content-Type: application/sdp
Accept: application/sdp, message/sipfrag
Content-Length: 252

v=0
o=- 339974 1901 IN IP4 192.168.1.199
s=-
c=IN IP4 192.168.1.199
t=0 0
m=audio 5006 RTP/AVP 0 8 4 18 96
a=rtpmap:0 PCMU/8000
a=rtpmap:8 PCMA/8000
a=rtpmap:4 G723/8000
a=rtpmap:18 G729/8000
a=rtpmap:96 telephone-event/8000
a=fmtp:96 0-11
```

```
=====
F4      192.168.1.131:1028 (00003@sip.com) -> 192.168.1.1:5060 (Server)

SIP/2.0 100 Trying
Via: SIP/2.0/UDP 192.168.1.1:5060;branch=z9hG4bK-419.477563.269240440
Via: SIP/2.0/UDP 192.168.1.199:5060;branch=z9hG4bK-53a92acd-838449.356
From: 00002 <sip:00002@sip.com>;tag=26f6b1de
To: <sip:00003@sip.com>
Call-ID: 0aa4a63a@00002.192.168.1.1
CSeq: 269240440 INVITE
Content-Length: 0
```

```
=====
F5      192.168.1.131:1028 (00003@sip.com) -> 192.168.1.1:5060 (Server)

SIP/2.0 183 Session Progress
Via: SIP/2.0/UDP 192.168.1.1:5060;branch=z9hG4bK-419.477563.269240440
Via: SIP/2.0/UDP 192.168.1.199:5060;branch=z9hG4bK-53a92acd-838449.356
Record-Route: <sip:00003@192.168.1.1>
From: 00002 <sip:00002@sip.com>;tag=26f6b1de
To: <sip:00003@sip.com>;tag=611ada4c
Call-ID: 0aa4a63a@00002.192.168.1.1
CSeq: 269240440 INVITE
Contact: <sip:00003@192.168.1.131>
Require: 100rel
RSeq: 957444022
Content-Length: 0
```

F6 192.168.1.1:5062(Server) -> 192.168.1.199:5060()

SIP/2.0 183 Session Progress  
Via: SIP/2.0/UDP 192.168.1.199:5060;branch=z9hG4bK-53a92acd-838449.356  
Record-Route: <sip:00003@192.168.1.1>  
From: 00002 <sip:00002@sip.com>;tag=26f6b1de  
To: <sip:00003@sip.com>;tag=611ada4c  
Call-ID: 0aa4a63a@00002.192.168.1.1  
CSeq: 269240440 INVITE  
Contact: <sip:00003@192.168.1.131>  
require: 100rel  
rseq: 957444022  
Content-Length: 0

F7 192.168.1.199:1031() -> 192.168.1.1:5060(Server)

PRACK sip:00003@192.168.1.1 SIP/2.0  
Via: SIP/2.0/UDP 192.168.1.199:5060;branch=z9hG4bK-48086ee4-838450.466  
Route: <sip:00003@192.168.1.131>  
From: 00002 <sip:00002@sip.com>;tag=26f6b1de  
To: <sip:00003@sip.com>;tag=611ada4c  
Call-ID: 0aa4a63a@00002.192.168.1.1  
CSeq: 269240441 PRACK  
Max-Forwards: 70  
Rack: 957444022 269240440 INVITE  
Content-Length: 0

F8 192.168.1.1:5062(Server) -> 192.168.1.131:5060(00003@sip.com)

PRACK sip:00003@192.168.1.131 SIP/2.0  
Via: SIP/2.0/UDP 192.168.1.1:5060;branch=z9hG4bK-419.1109081646.269240441  
Via: SIP/2.0/UDP 192.168.1.199:5060;branch=z9hG4bK-48086ee4-838450.466  
Route: <sip:00003@192.168.1.131>  
From: 00002 <sip:00002@sip.com>;tag=26f6b1de  
To: <sip:00003@sip.com>;tag=611ada4c  
Call-ID: 0aa4a63a@00002.192.168.1.1  
CSeq: 269240441 PRACK  
max-forwards: 69  
rack: 957444022 269240440 INVITE  
Content-Length: 0

F9 192.168.1.131:1028(00003@sip.com) -> 192.168.1.1:5060(Server)

SIP/2.0 200 OK  
Via: SIP/2.0/UDP 192.168.1.1:5060;branch=z9hG4bK-419.1109081646.269240441  
Via: SIP/2.0/UDP 192.168.1.199:5060;branch=z9hG4bK-48086ee4-838450.466  
From: 00002 <sip:00002@sip.com>;tag=26f6b1de  
To: <sip:00003@sip.com>;tag=611ada4c  
Call-ID: 0aa4a63a@00002.192.168.1.1  
CSeq: 269240441 PRACK  
Content-Length: 0

F10 192.168.1.1:5062(Server) -> 192.168.1.199:5060()

SIP/2.0 200 OK  
Via: SIP/2.0/UDP 192.168.1.199:5060;branch=z9hG4bK-48086ee4-838450.466  
From: 00002 <sip:00002@sip.com>;tag=26f6b1de  
To: <sip:00003@sip.com>;tag=611ada4c  
Call-ID: 0aa4a63a@00002.192.168.1.1  
CSeq: 269240441 PRACK  
Content-Length: 0

F11 192.168.1.131:1028(00003@sip.com) -> 192.168.1.1:5060(Server)

```
SIP/2.0 180 Ringing
Via: SIP/2.0/UDP 192.168.1.1:5060;branch=z9hG4bK-419.477563.269240440
Via: SIP/2.0/UDP 192.168.1.199:5060;branch=z9hG4bK-53a92acd-838449.356
Record-Route: <sip:00003@192.168.1.1>
From: 00002 <sip:00002@sip.com>;tag=26f6b1de
To: <sip:00003@sip.com>;tag=611ada4c
Call-ID: 0aa4a63a@00002.192.168.1.1
CSeq: 269240440 INVITE
Contact: <sip:00003@192.168.1.131>
Require: 100rel
RSeq: 957444023
Content-Length: 0
```

```
=====
F12      192.168.1.1:5062 (Server) -> 192.168.1.199:5060 ()
```

```
SIP/2.0 180 Ringing
Via: SIP/2.0/UDP 192.168.1.199:5060;branch=z9hG4bK-53a92acd-838449.356
Record-Route: <sip:00003@192.168.1.1>
From: 00002 <sip:00002@sip.com>;tag=26f6b1de
To: <sip:00003@sip.com>;tag=611ada4c
Call-ID: 0aa4a63a@00002.192.168.1.1
CSeq: 269240440 INVITE
Contact: <sip:00003@192.168.1.131>
require: 100rel
rseq: 957444023
Content-Length: 0
```

```
=====
F13      192.168.1.199:1031 () -> 192.168.1.1:5060 (Server)
```

```
PRACK sip:00003@192.168.1.1 SIP/2.0
Via: SIP/2.0/UDP 192.168.1.199:5060;branch=z9hG4bK-591c8dd9-838451.058
Route: <sip:00003@192.168.1.131>
From: 00002 <sip:00002@sip.com>;tag=26f6b1de
To: <sip:00003@sip.com>;tag=611ada4c
Call-ID: 0aa4a63a@00002.192.168.1.1
CSeq: 269240442 PRACK
Max-Forwards: 70
RAck: 957444023 269240440 INVITE
Content-Length: 0
```

```
=====
F14      192.168.1.1:5062 (Server) -> 192.168.1.131:5060 (00003@sip.com)
```

```
PRACK sip:00003@192.168.1.131 SIP/2.0
Via: SIP/2.0/UDP 192.168.1.1:5060;branch=z9hG4bK-419.1109081647.269240442
Via: SIP/2.0/UDP 192.168.1.199:5060;branch=z9hG4bK-591c8dd9-838451.058
Route: <sip:00003@192.168.1.131>
From: 00002 <sip:00002@sip.com>;tag=26f6b1de
To: <sip:00003@sip.com>;tag=611ada4c
Call-ID: 0aa4a63a@00002.192.168.1.1
CSeq: 269240442 PRACK
max-forwards: 69
rack: 957444023 269240440 INVITE
Content-Length: 0
```

```
=====
F15      192.168.1.131:1028 (00003@sip.com) -> 192.168.1.1:5060 (Server)
```

```
SIP/2.0 200 OK
Via: SIP/2.0/UDP 192.168.1.1:5060;branch=z9hG4bK-419.1109081647.269240442
Via: SIP/2.0/UDP 192.168.1.199:5060;branch=z9hG4bK-591c8dd9-838451.058
From: 00002 <sip:00002@sip.com>;tag=26f6b1de
To: <sip:00003@sip.com>;tag=611ada4c
Call-ID: 0aa4a63a@00002.192.168.1.1
CSeq: 269240442 PRACK
Content-Length: 0
```

F16 192.168.1.1:5062(Server) -> 192.168.1.199:5060()

SIP/2.0 200 OK  
 Via: SIP/2.0/UDP 192.168.1.199:5060;branch=z9hG4bK-591c8dd9-838451.058  
 From: 00002 <sip:00002@sip.com>;tag=26f6b1de  
 To: <sip:00003@sip.com>;tag=611ada4c  
 Call-ID: 0aa4a63a@00002.192.168.1.1  
 CSeq: 269240442 PRACK  
 Content-Length: 0

F17 192.168.1.199:1033() -> 192.168.1.1:5060(Server)

REGISTER sip:192.168.1.1 SIP/2.0  
 Via: SIP/2.0/UDP 192.168.1.199:5060;branch=z9hG4bK-6ceb7c8b-838461.486  
 From: <sip:00002@sip.com>  
 To: <sip:00002@sip.com>  
 Call-ID: 7242eddf@00002.192.168.1.1  
 CSeq: 1 REGISTER  
 Contact: <sip:00002@192.168.1.199>;expires=3600  
 Max-Forwards: 70  
 User-Agent: △△△△△△ //端末種別  
 Content-Length: 0

F18 192.168.1.1:5062(Server) -> 192.168.1.199:5060()

SIP/2.0 200 OK  
 Via: SIP/2.0/UDP 192.168.1.199:5060;branch=z9hG4bK-6ceb7c8b-838461.486  
 From: <sip:00002@sip.com>  
 To: <sip:00002@sip.com>  
 Call-ID: 7242eddf@00002.192.168.1.1  
 CSeq: 1 REGISTER  
 Contact: <sip:00002@192.168.1.199>;expires=3600  
 Date: Tue, 22 Feb 2005 14:14:17 GMT  
 Content-Length: 0

F19 192.168.1.131:1029(00003@sip.com) -> 192.168.1.1:5060(Server)

REGISTER sip:192.168.1.1 SIP/2.0  
 Via: SIP/2.0/UDP 192.168.1.131:5060;branch=z9hG4bK-50425831-233513.072  
 From: <sip:00003@sip.com>  
 To: <sip:00003@sip.com>  
 Call-ID: 7285381a@00003.192.168.1.1  
 CSeq: 1 REGISTER  
 Contact: <sip:00003@192.168.1.131>;expires=3600  
 Max-Forwards: 70  
 User-Agent: △△△△△△ //端末種別  
 Content-Length: 0

F20 192.168.1.1:5062(Server) -> 192.168.1.131:5060(00003@sip.com)

SIP/2.0 200 OK  
 Via: SIP/2.0/UDP 192.168.1.131:5060;branch=z9hG4bK-50425831-233513.072  
 From: <sip:00003@sip.com>  
 To: <sip:00003@sip.com>  
 Call-ID: 7285381a@00003.192.168.1.1  
 CSeq: 1 REGISTER  
 Contact: <sip:00003@192.168.1.131>;expires=3600  
 Date: Tue, 22 Feb 2005 14:14:18 GMT  
 Content-Length: 0

F21 192.168.1.131:1029(00003@sip.com) -> 192.168.1.1:5060(Server)

SIP/2.0 180 Ringing  
 Via: SIP/2.0/UDP 192.168.1.1:5060;branch=z9hG4bK-419.477563.269240440  
 Via: SIP/2.0/UDP 192.168.1.199:5060;branch=z9hG4bK-53a92acd-838449.356

Record-Route: <sip:00003@192.168.1.1>  
 From: 00002 <sip:00002@sip.com>;tag=26f6b1de  
 To: <sip:00003@sip.com>;tag=611ada4c  
 Call-ID: 0aa4a63a@00002.192.168.1.1  
 CSeq: 269240440 INVITE  
 Contact: <sip:00003@192.168.1.131>  
 Require: 100rel  
 RSeq: 957444024  
 Content-Length: 0

=====

F22        192.168.1.1:5062 (Server) -> 192.168.1.199:5060 ()

SIP/2.0 180 Ringing  
 Via: SIP/2.0/UDP 192.168.1.199:5060;branch=z9hG4bK-53a92acd-838449.356  
 Record-Route: <sip:00003@192.168.1.1>  
 From: 00002 <sip:00002@sip.com>;tag=26f6b1de  
 To: <sip:00003@sip.com>;tag=611ada4c  
 Call-ID: 0aa4a63a@00002.192.168.1.1  
 CSeq: 269240440 INVITE  
 Contact: <sip:00003@192.168.1.131>  
 require: 100rel  
 rseq: 957444024  
 Content-Length: 0

=====

F23        192.168.1.199:1033 () -> 192.168.1.1:5060 (Server)

PRACK sip:00003@192.168.1.1 SIP/2.0  
 Via: SIP/2.0/UDP 192.168.1.199:5060;branch=z9hG4bK-24965a57-838462.556  
 Route: <sip:00003@192.168.1.131>  
 From: 00002 <sip:00002@sip.com>;tag=26f6b1de  
 To: <sip:00003@sip.com>;tag=611ada4c  
 Call-ID: 0aa4a63a@00002.192.168.1.1  
 CSeq: 269240443 PRACK  
 Max-Forwards: 70  
 Rack: 957444024 269240440 INVITE  
 Content-Length: 0

=====

F24        192.168.1.1:5062 (Server) -> 192.168.1.131:5060 (00003@sip.com)

PRACK sip:00003@192.168.1.131 SIP/2.0  
 Via: SIP/2.0/UDP 192.168.1.1:5060;branch=z9hG4bK-419.1109081658.269240443  
 Via: SIP/2.0/UDP 192.168.1.199:5060;branch=z9hG4bK-24965a57-838462.556  
 Route: <sip:00003@192.168.1.131>  
 From: 00002 <sip:00002@sip.com>;tag=26f6b1de  
 To: <sip:00003@sip.com>;tag=611ada4c  
 Call-ID: 0aa4a63a@00002.192.168.1.1  
 CSeq: 269240443 PRACK  
 max-forwards: 69  
 rack: 957444024 269240440 INVITE  
 Content-Length: 0

=====

F25        192.168.1.131:1029 (00003@sip.com) -> 192.168.1.1:5060 (Server)

SIP/2.0 200 OK  
 Via: SIP/2.0/UDP 192.168.1.1:5060;branch=z9hG4bK-419.1109081658.269240443  
 Via: SIP/2.0/UDP 192.168.1.199:5060;branch=z9hG4bK-24965a57-838462.556  
 From: 00002 <sip:00002@sip.com>;tag=26f6b1de  
 To: <sip:00003@sip.com>;tag=611ada4c  
 Call-ID: 0aa4a63a@00002.192.168.1.1  
 CSeq: 269240443 PRACK  
 Content-Length: 0

=====

F26        192.168.1.1:5062 (Server) -> 192.168.1.199:5060 ()

SIP/2.0 200 OK  
 Via: SIP/2.0/UDP 192.168.1.199:5060;branch=z9hG4bK-24965a57-838462.556

From: 00002 <sip:00002@sip.com>;tag=26f6b1de  
 To: <sip:00003@sip.com>;tag=611ada4c  
 Call-ID: 0aa4a63a@00002.192.168.1.1  
 CSeq: 269240443 PRACK  
 Content-Length: 0

F27 192.168.1.131:1029(00003@sip.com) -> 192.168.1.1:5060(Server)

SIP/2.0 200 OK  
 Via: SIP/2.0/UDP 192.168.1.1:5060;branch=z9hG4bK-419.477563.269240440  
 Via: SIP/2.0/UDP 192.168.1.199:5060;branch=z9hG4bK-53a92acd-838449.356  
 Record-Route: <sip:00003@192.168.1.1>  
 From: 00002 <sip:00002@sip.com>;tag=26f6b1de  
 To: <sip:00003@sip.com>;tag=611ada4c  
 Call-ID: 0aa4a63a@00002.192.168.1.1  
 CSeq: 269240440 INVITE  
 Contact: <sip:00003@192.168.1.131>  
 Supported: 100rel, replaces  
 Allow: INVITE, ACK, BYE, CANCEL, OPTIONS, PRACK, MESSAGE, REFER, NOTIFY  
 Content-Type: application/sdp  
 Accept: application/sdp, message/sipfrag  
 Content-Length: 179

v=0  
 o=- 243801 12801 IN IP4 192.168.1.131  
 s=-  
 c=IN IP4 192.168.1.131  
 t=0 0  
 m=audio 5008 RTP/AVP 0 96  
 a=rtpmap:0 PCMU/8000  
 a=rtpmap:96 telephone-event/8000  
 a=fmtp:96 0-11

F28 192.168.1.1:5062(Server) -> 192.168.1.199:5060()

SIP/2.0 200 OK  
 Via: SIP/2.0/UDP 192.168.1.199:5060;branch=z9hG4bK-53a92acd-838449.356  
 Record-Route: <sip:00003@192.168.1.1>  
 From: 00002 <sip:00002@sip.com>;tag=26f6b1de  
 To: <sip:00003@sip.com>;tag=611ada4c  
 Call-ID: 0aa4a63a@00002.192.168.1.1  
 CSeq: 269240440 INVITE  
 Contact: <sip:00003@192.168.1.131>  
 supported: 100rel  
 supported: replaces  
 Allow: INVITE, ACK, BYE, CANCEL, OPTIONS, PRACK, MESSAGE, REFER, NOTIFY  
 Content-Type: application/sdp  
 Accept: application/sdp, message/sipfrag  
 Content-Length: 179

v=0  
 o=- 243801 12801 IN IP4 192.168.1.131  
 s=-  
 c=IN IP4 192.168.1.131  
 t=0 0  
 m=audio 5008 RTP/AVP 0 96  
 a=rtpmap:0 PCMU/8000  
 a=rtpmap:96 telephone-event/8000  
 a=fmtp:96 0-11

F29 192.168.1.199:1033() -> 192.168.1.1:5060(Server)

ACK sip:00003@192.168.1.1 SIP/2.0  
 Via: SIP/2.0/UDP 192.168.1.199:5060;branch=z9hG4bK-7d9fcd6a-838467.200  
 Route: <sip:00003@192.168.1.131>  
 From: 00002 <sip:00002@sip.com>;tag=26f6b1de  
 To: <sip:00003@sip.com>;tag=611ada4c  
 Call-ID: 0aa4a63a@00002.192.168.1.1  
 CSeq: 269240440 ACK  
 Max-Forwards: 70  
 Content-Length: 0



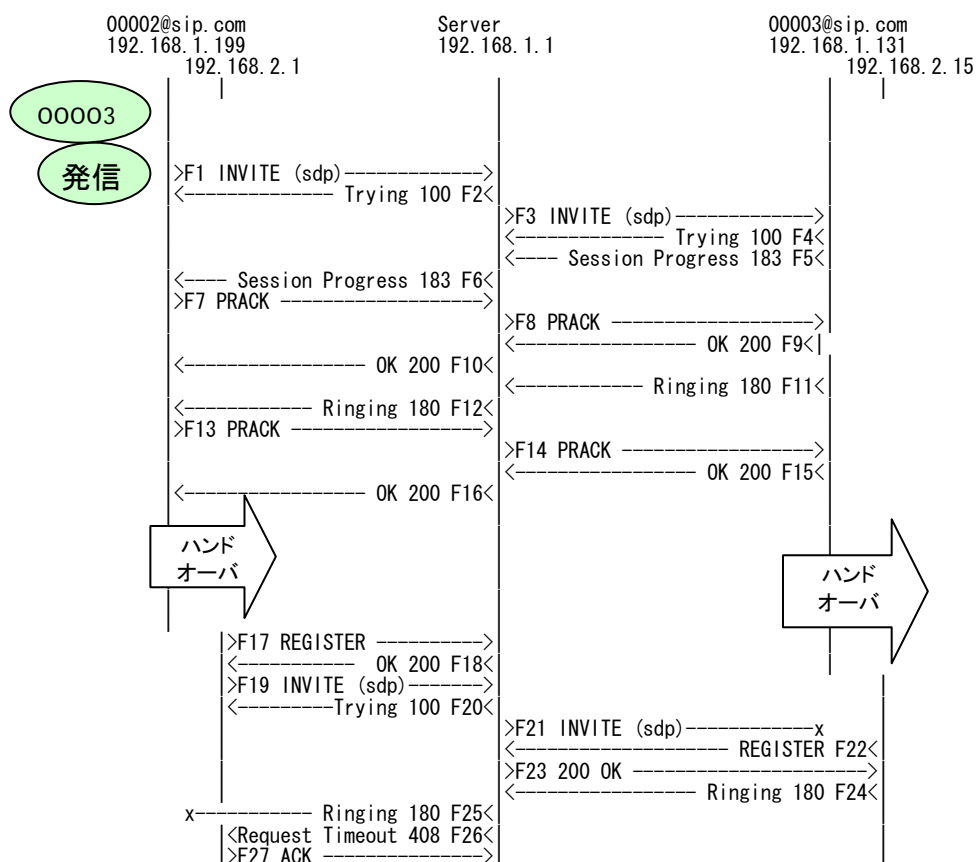
FOMA/WLAN デュアル端末に関する技術参考資料 第 1.2 版

F30 192.168.1.1:5062 (Server) -> 192.168.1.131:5060 (00003@sip.com)

ACK sip:00003@192.168.1.131 SIP/2.0  
Via: SIP/2.0/UDP 192.168.1.1:5060;branch=z9hG4bK-419.1109081663.269240440  
Via: SIP/2.0/UDP 192.168.1.199:5060;branch=z9hG4bK-7d9fcd6a-838467.200  
From: 00002 <sip:00002@sip.com>;tag=26f6b1de  
To: <sip:00003@sip.com>;tag=611ada4c  
Call-ID: 0aa4a63a@00002.192.168.1.1  
CSeq: 269240440 ACK  
max-forwards: 69  
Content-Length: 0

=====

## 11.8.12. 発信後呼び出し中に発信側/着信側ともにハンドオーバ(IP アドレスの変更有)



注：00002 認証なし 00003 認証なし

図 11-51 発信後呼び出し中に発信側/着信側ともにハンドオーバ(IP アドレスの変更有)

注：呼び出し中に発信側着信側ともハンドオーバした場合は呼び出しを維持出来ず、待ち受けに戻る。

```

=====
F1          192.168.1.199:1047(00002@sip.com) -> 192.168.1.1:5060(Server)

INVITE sip:00003@sip.com SIP/2.0
Via: SIP/2.0/UDP 192.168.1.199:5060;branch=z9hG4bK-207b71d2-847019.808
Route: <sip:192.168.1.1:5060>
From: <sip:00002@sip.com>;tag=5411d320
To: <sip:00003@sip.com>
Call-ID: 52db19a6@00002.192.168.1.1
CSeq: 513136221 INVITE
Contact: <sip:00002@192.168.1.199>
Max-Forwards: 70
Supported: 100rel, replaces
Allow: INVITE, ACK, BYE, CANCEL, OPTIONS, PRACK, MESSAGE, REFER, NOTIFY
Content-Type: application/sdp
Accept: application/sdp, message/sipfrag
Content-Length: 252

v=0
o=- 799229 3401 IN IP4 192.168.1.199
s=-
c=IN IP4 192.168.1.199
  
```

```

t=0 0
m=audio 5008 RTP/AVP 0 8 4 18 96
a=rtpmap:0 PCMU/8000
a=rtpmap:8 PCMA/8000
a=rtpmap:4 G723/8000
a=rtpmap:18 G729/8000
a=rtpmap:96 telephone-event/8000
a=fmtp:96 0-11

```

```
=====
```

F2            192.168.1.1:5062 (Server) -> 192.168.1.199:5060 (00002@sip.com)

```

SIP/2.0 100 Trying
Via: SIP/2.0/UDP 192.168.1.199:5060;branch=z9hG4bK-207b71d2-847019.808
From: <sip:00002@sip.com>;tag=5411d320
To: <sip:00003@sip.com>
Call-ID: 52db19a6@00002.192.168.1.1
CSeq: 513136221 INVITE
Content-Length: 0

```

```
=====
```

F3            192.168.1.1:5062 (Server) -> 192.168.1.131:5060 (00003@sip.com)

```

INVITE sip:00003@192.168.1.131 SIP/2.0
Via: SIP/2.0/UDP 192.168.1.1:5060;branch=z9hG4bK-552.687541.513136221
Via: SIP/2.0/UDP 192.168.1.199:5060;branch=z9hG4bK-207b71d2-847019.808
Record-Route: <sip:00003@192.168.1.1>
Route: <sip:192.168.1.1:5060>
From: 00002 <sip:00002@sip.com>;tag=5411d320
To: <sip:00003@sip.com>
Call-ID: 52db19a6@00002.192.168.1.1
CSeq: 513136221 INVITE
Contact: <sip:00002@192.168.1.199>
max-forwards: 69
supported: 100rel
supported: replaces
Allow: INVITE, ACK, BYE, CANCEL, OPTIONS, PRACK, MESSAGE, REFER, NOTIFY
Content-Type: application/sdp
Accept: application/sdp, message/sipfrag
Content-Length: 252

```

```

v=0
o=- 799229 3401 IN IP4 192.168.1.199
s=-
c=IN IP4 192.168.1.199
t=0 0
m=audio 5008 RTP/AVP 0 8 4 18 96
a=rtpmap:0 PCMU/8000
a=rtpmap:8 PCMA/8000
a=rtpmap:4 G723/8000
a=rtpmap:18 G729/8000
a=rtpmap:96 telephone-event/8000
a=fmtp:96 0-11

```

```
=====
```

F4            192.168.1.131:1024 (00003@sip.com) -> 192.168.1.1:5060 (Server)

```

SIP/2.0 100 Trying
Via: SIP/2.0/UDP 192.168.1.1:5060;branch=z9hG4bK-552.687541.513136221
Via: SIP/2.0/UDP 192.168.1.199:5060;branch=z9hG4bK-207b71d2-847019.808
From: 00002 <sip:00002@sip.com>;tag=5411d320
To: <sip:00003@sip.com>
Call-ID: 52db19a6@00002.192.168.1.1
CSeq: 513136221 INVITE
Content-Length: 0

```

```
=====
```

F5            192.168.1.131:1024 (00003@sip.com) -> 192.168.1.1:5060 (Server)

```

SIP/2.0 183 Session Progress
Via: SIP/2.0/UDP 192.168.1.1:5060;branch=z9hG4bK-552.687541.513136221
Via: SIP/2.0/UDP 192.168.1.199:5060;branch=z9hG4bK-207b71d2-847019.808
Record-Route: <sip:00003@192.168.1.1>
From: 00002 <sip:00002@sip.com>;tag=5411d320
To: <sip:00003@sip.com>;tag=5e6ea1f7

```

Call-ID: 52db19a6@00002.192.168.1.1  
 CSeq: 513136221 INVITE  
 Contact: <sip:00003@192.168.1.131>  
 Require: 100rel  
 RSeq: 367757301  
 Content-Length: 0

=====

F6 192.168.1.1:5062 (Server) -> 192.168.1.199:5060 (00002@sip.com)

SIP/2.0 183 Session Progress  
 Via: SIP/2.0/UDP 192.168.1.199:5060;branch=z9hG4bK-207b71d2-847019.808  
 Record-Route: <sip:00003@192.168.1.1>  
 From: 00002 <sip:00002@sip.com>;tag=5411d320  
 To: <sip:00003@sip.com>;tag=5e6ea1f7  
 Call-ID: 52db19a6@00002.192.168.1.1  
 CSeq: 513136221 INVITE  
 Contact: <sip:00003@192.168.1.131>  
 require: 100rel  
 rseq: 367757301  
 Content-Length: 0

=====

F7 192.168.1.199:1047 (00002@sip.com) -> 192.168.1.1:5060 (Server)

PRACK sip:00003@192.168.1.1 SIP/2.0  
 Via: SIP/2.0/UDP 192.168.1.199:5060;branch=z9hG4bK-390d7516-847021.416  
 Route: <sip:00003@192.168.1.131>  
 From: 00002 <sip:00002@sip.com>;tag=5411d320  
 To: <sip:00003@sip.com>;tag=5e6ea1f7  
 Call-ID: 52db19a6@00002.192.168.1.1  
 CSeq: 513136222 PRACK  
 Max-Forwards: 70  
 Rack: 367757301 513136221 INVITE  
 Content-Length: 0

=====

F8 192.168.1.1:5062 (Server) -> 192.168.1.131:5060 (00003@sip.com)

PRACK sip:00003@192.168.1.131 SIP/2.0  
 Via: SIP/2.0/UDP 192.168.1.1:5060;branch=z9hG4bK-552.1109090217.513136222  
 Via: SIP/2.0/UDP 192.168.1.199:5060;branch=z9hG4bK-390d7516-847021.416  
 Route: <sip:00003@192.168.1.131>  
 From: 00002 <sip:00002@sip.com>;tag=5411d320  
 To: <sip:00003@sip.com>;tag=5e6ea1f7  
 Call-ID: 52db19a6@00002.192.168.1.1  
 CSeq: 513136222 PRACK  
 max-forwards: 69  
 rack: 367757301 513136221 INVITE  
 Content-Length: 0

=====

F9 192.168.1.131:1024 (00003@sip.com) -> 192.168.1.1:5060 (Server)

SIP/2.0 200 OK  
 Via: SIP/2.0/UDP 192.168.1.1:5060;branch=z9hG4bK-552.1109090217.513136222  
 Via: SIP/2.0/UDP 192.168.1.199:5060;branch=z9hG4bK-390d7516-847021.416  
 From: 00002 <sip:00002@sip.com>;tag=5411d320  
 To: <sip:00003@sip.com>;tag=5e6ea1f7  
 Call-ID: 52db19a6@00002.192.168.1.1  
 CSeq: 513136222 PRACK  
 Content-Length: 0

=====

F10 192.168.1.1:5062 (Server) -> 192.168.1.199:5060 (00002@sip.com)

SIP/2.0 200 OK  
 Via: SIP/2.0/UDP 192.168.1.199:5060;branch=z9hG4bK-390d7516-847021.416  
 From: 00002 <sip:00002@sip.com>;tag=5411d320  
 To: <sip:00003@sip.com>;tag=5e6ea1f7  
 Call-ID: 52db19a6@00002.192.168.1.1

CSeq: 513136222 PRACK  
Content-Length: 0

F11 192.168.1.131:1024(00003@sip.com) -> 192.168.1.1:5060(Server)

SIP/2.0 180 Ringing  
Via: SIP/2.0/UDP 192.168.1.1:5060;branch=z9hG4bK-552.687541.513136221  
Via: SIP/2.0/UDP 192.168.1.199:5060;branch=z9hG4bK-207b71d2-847019.808  
Record-Route: <sip:00003@192.168.1.1>  
From: 00002 <sip:00002@sip.com>;tag=5411d320  
To: <sip:00003@sip.com>;tag=5e6ea1f7  
Call-ID: 52db19a6@00002.192.168.1.1  
CSeq: 513136221 INVITE  
Contact: <sip:00003@192.168.1.131>  
Require: 100rel  
RSeq: 367757302  
Content-Length: 0

F12 192.168.1.1:5062(Server) -> 192.168.1.199:5060(00002@sip.com)

SIP/2.0 180 Ringing  
Via: SIP/2.0/UDP 192.168.1.199:5060;branch=z9hG4bK-207b71d2-847019.808  
Record-Route: <sip:00003@192.168.1.1>  
From: 00002 <sip:00002@sip.com>;tag=5411d320  
To: <sip:00003@sip.com>;tag=5e6ea1f7  
Call-ID: 52db19a6@00002.192.168.1.1  
CSeq: 513136221 INVITE  
Contact: <sip:00003@192.168.1.131>  
require: 100rel  
rseq: 367757302  
Content-Length: 0

F13 192.168.1.199:1047(00002@sip.com) -> 192.168.1.1:5060(Server)

PRACK sip:00003@192.168.1.1 SIP/2.0  
Via: SIP/2.0/UDP 192.168.1.199:5060;branch=z9hG4bK-17a127eb-847022.019  
Route: <sip:00003@192.168.1.131>  
From: 00002 <sip:00002@sip.com>;tag=5411d320  
To: <sip:00003@sip.com>;tag=5e6ea1f7  
Call-ID: 52db19a6@00002.192.168.1.1  
CSeq: 513136223 PRACK  
Max-Forwards: 70  
Rack: 367757302 513136221 INVITE  
Content-Length: 0

F14 192.168.1.1:5062(Server) -> 192.168.1.131:5060(00003@sip.com)

PRACK sip:00003@192.168.1.131 SIP/2.0  
Via: SIP/2.0/UDP 192.168.1.1:5060;branch=z9hG4bK-552.1109090217.513136223  
Via: SIP/2.0/UDP 192.168.1.199:5060;branch=z9hG4bK-17a127eb-847022.019  
Route: <sip:00003@192.168.1.131>  
From: 00002 <sip:00002@sip.com>;tag=5411d320  
To: <sip:00003@sip.com>;tag=5e6ea1f7  
Call-ID: 52db19a6@00002.192.168.1.1  
CSeq: 513136223 PRACK  
max-forwards: 69  
rack: 367757302 513136221 INVITE  
Content-Length: 0

F15 192.168.1.131:1024(00003@sip.com) -> 192.168.1.1:5060(Server)

SIP/2.0 200 OK  
Via: SIP/2.0/UDP 192.168.1.1:5060;branch=z9hG4bK-552.1109090217.513136223  
Via: SIP/2.0/UDP 192.168.1.199:5060;branch=z9hG4bK-17a127eb-847022.019  
From: 00002 <sip:00002@sip.com>;tag=5411d320  
To: <sip:00003@sip.com>;tag=5e6ea1f7

Call-ID: 52db19a6@00002.192.168.1.1  
 CSeq: 513136223 PRACK  
 Content-Length: 0

F16 192.168.1.1:5062 (Server) -> 192.168.1.199:5060 (00002@sip.com)

SIP/2.0 200 OK  
 Via: SIP/2.0/UDP 192.168.1.199:5060;branch=z9hG4bK-17a127eb-847022.019  
 From: 00002 <sip:00002@sip.com>;tag=5411d320  
 To: <sip:00003@sip.com>;tag=5e6ea1f7  
 Call-ID: 52db19a6@00002.192.168.1.1  
 CSeq: 513136223 PRACK  
 Content-Length: 0

F17 192.168.2.1:1049 (00002@sip.com) -> 192.168.1.1:5060 (Server)

REGISTER sip:192.168.1.1 SIP/2.0  
 Via: SIP/2.0/UDP 192.168.2.1:5060;branch=z9hG4bK-7cb0b716-847033.234  
 From: <sip:00002@sip.com>  
 To: <sip:00002@sip.com>  
 Call-ID: 2bc54e9e@00002.192.168.1.1  
 CSeq: 2 REGISTER  
 Contact: <sip:00002@192.168.2.1>;expires=3600  
 Max-Forwards: 70  
 User-Agent: △△△△△△ //端末種別

Content-Length: 0

F18 192.168.1.1:5062 (Server) -> 192.168.2.1:5060 (00002@sip.com)

SIP/2.0 200 OK  
 Via: SIP/2.0/UDP 192.168.2.1:5060;branch=z9hG4bK-7cb0b716-847033.234  
 From: <sip:00002@sip.com>  
 To: <sip:00002@sip.com>  
 Call-ID: 2bc54e9e@00002.192.168.1.1  
 CSeq: 2 REGISTER  
 Contact: <sip:00002@192.168.2.1>;expires=3600  
 Date: Tue, 22 Feb 2005 16:37:09 GMT  
 Content-Length: 0

F19 192.168.2.1:1049 (00002@sip.com) -> 192.168.1.1:5060 (Server)

INVITE sip:00003@sip.com SIP/2.0  
 Via: SIP/2.0/UDP 192.168.2.1:5060;branch=z9hG4bK-323a92f2-847033.305  
 Route: <sip:192.168.1.1:5060>  
 From: <sip:00002@sip.com>;tag=1b2e40bf  
 To: <sip:00003@sip.com>  
 Call-ID: 6e9cb4f2@00002.192.168.1.1  
 CSeq: 1992868352 INVITE  
 Contact: <sip:00002@192.168.2.1>  
 Max-Forwards: 70  
 Supported: 100rel, replaces  
 Allow: INVITE, ACK, BYE, CANCEL, OPTIONS, PRACK, MESSAGE, REFER, NOTIFY  
 Content-Type: application/sdp  
 Accept: application/sdp, message/sipfrag  
 Content-Length: 248

v=0  
 o=- 295611 3402 IN IP4 192.168.2.1  
 s=-  
 c=IN IP4 192.168.2.1  
 t=0 0  
 m=audio 5008 RTP/AVP 0 8 4 18 96  
 a=rtpmap:0 PCMU/8000  
 a=rtpmap:8 PCMA/8000  
 a=rtpmap:4 G723/8000  
 a=rtpmap:18 G729/8000  
 a=rtpmap:96 telephone-event/8000  
 a=fmtp:96 0-11

=====

F20            192.168.1.1:5062 (Server) -> 192.168.2.1:5060 (00002@sip.com)

SIP/2.0 100 Trying  
Via: SIP/2.0/UDP 192.168.2.1:5060;branch=z9hG4bK-323a92f2-847033.305  
From: <sip:00002@sip.com>;tag=1b2e40bf  
To: <sip:00003@sip.com>  
Call-ID: 6e9cb4f2@00002.192.168.1.1  
CSeq: 1992868352 INVITE  
Content-Length: 0

=====

F21            192.168.1.1:5062 (Server) -> 192.168.1.131:5060 (00003@sip.com)

INVITE sip:00003@192.168.1.131 SIP/2.0  
Via: SIP/2.0/UDP 192.168.1.1:5060;branch=z9hG4bK-555.207611.1992868352  
Via: SIP/2.0/UDP 192.168.2.1:5060;branch=z9hG4bK-323a92f2-847033.305  
Record-Route: <sip:00003@192.168.1.1>  
Route: <sip:192.168.1.1:5060>  
From: 00002 <sip:00002@sip.com>;tag=1b2e40bf  
To: <sip:00003@sip.com>  
Call-ID: 6e9cb4f2@00002.192.168.1.1  
CSeq: 1992868352 INVITE  
Contact: <sip:00002@192.168.2.1>  
max-forwards: 69  
supported: 100rel  
supported: replaces  
Allow: INVITE, ACK, BYE, CANCEL, OPTIONS, PRACK, MESSAGE, REFER, NOTIFY  
Content-Type: application/sdp  
Accept: application/sdp, message/sipfrag  
Content-Length: 248

v=0  
o=- 295611 3402 IN IP4 192.168.2.1  
s=-  
c=IN IP4 192.168.2.1  
t=0 0  
m=audio 5008 RTP/AVP 0 8 4 18 96  
a=rtpmap:0 PCMU/8000  
a=rtpmap:8 PCMA/8000  
a=rtpmap:4 G723/8000  
a=rtpmap:18 G729/8000  
a=rtpmap:96 telephone-event/8000  
a=fmtp:96 0-11

=====

F22            192.168.2.15:1139 (00003@sip.com) -> 192.168.1.1:5060 (Server)

REGISTER sip:192.168.1.1 SIP/2.0  
Via: SIP/2.0/UDP 192.168.2.15:5060;branch=z9hG4bK-32ca523a-882498.356  
From: <sip:00003@sip.com>  
To: <sip:00003@sip.com>  
Call-ID: 282b6c6d@00003.192.168.1.1  
CSeq: 1 REGISTER  
Contact: <sip:00003@192.168.2.15>;expires=3600  
Max-Forwards: 70  
User-Agent: △△△△△△ //端末種別

Content-Length: 0

=====

F23            192.168.1.1:5062 (Server) -> 192.168.2.15:5060 (00003@sip.com)

SIP/2.0 200 OK  
Via: SIP/2.0/UDP 192.168.2.15:5060;branch=z9hG4bK-32ca523a-882498.356  
From: <sip:00003@sip.com>  
To: <sip:00003@sip.com>  
Call-ID: 282b6c6d@00003.192.168.1.1  
CSeq: 1 REGISTER  
Contact: <sip:00003@192.168.2.15>;expires=3600  
Date: Wed, 12 May 2004 12:47:20 GMT  
Content-Length: 0

F24 192.168.2.15:1139(00003@sip.com) -> 192.168.1.1:5060(Server)

SIP/2.0 180 Ringing  
Via: SIP/2.0/UDP 192.168.1.1:5060;branch=z9hG4bK-552.687541.513136221  
Via: SIP/2.0/UDP 192.168.1.199:5060;branch=z9hG4bK-207b71d2-847019.808  
Record-Route: <sip:00003@192.168.1.1>  
From: 00002 <sip:00002@sip.com>;tag=5411d320  
To: <sip:00003@sip.com>;tag=5e6ea1f7  
Call-ID: 52db19a6@00002.192.168.1.1  
CSeq: 513136221 INVITE  
Contact: <sip:00003@192.168.2.15>  
Require: 100rel  
RSeq: 1812308656  
Content-Length: 0

F25 192.168.1.1:5062(Server) -> 192.168.1.199:5060(00002@sip.com)

SIP/2.0 180 Ringing  
Via: SIP/2.0/UDP 192.168.1.199:5060;branch=z9hG4bK-207b71d2-847019.808  
Record-Route: <sip:00003@192.168.1.1>  
From: 00002 <sip:00002@sip.com>;tag=5411d320  
To: <sip:00003@sip.com>;tag=5e6ea1f7  
Call-ID: 52db19a6@00002.192.168.1.1  
CSeq: 513136221 INVITE  
Contact: <sip:00003@192.168.2.15>  
require: 100rel  
rseq: 1812308656  
Content-Length: 0

F26 192.168.1.1:5062(Server) -> 192.168.2.1:5060(00002@sip.com)

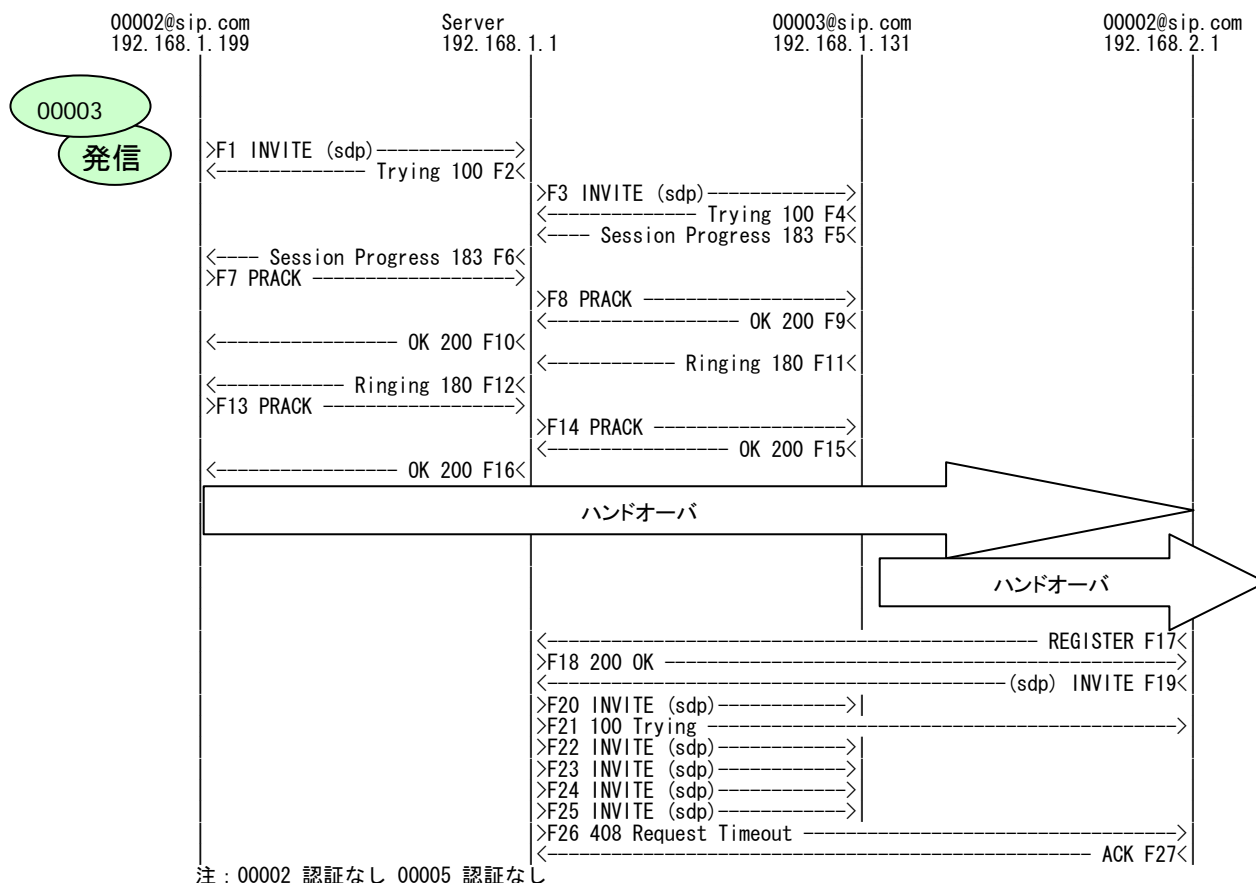
SIP/2.0 408 Request Timeout  
Via: SIP/2.0/UDP 192.168.2.1:5060;branch=z9hG4bK-323a92f2-847033.305  
From: 00002 <sip:00002@sip.com>;tag=1b2e40bf  
To: <sip:00003@sip.com>  
Call-ID: 6e9cb4f2@00002.192.168.1.1  
CSeq: 1992868352 INVITE  
Content-Length: 0

F27 192.168.2.1:1049(00002@sip.com) -> 192.168.1.1:5060(Server)

ACK sip:00003@sip.com SIP/2.0  
Via: SIP/2.0/UDP 192.168.2.1:5060;branch=z9hG4bK-323a92f2-847033.305  
Route: <sip:192.168.1.1:5060>  
From: 00002 <sip:00002@sip.com>;tag=1b2e40bf  
To: <sip:00003@sip.com>  
Call-ID: 6e9cb4f2@00002.192.168.1.1  
CSeq: 1992868352 ACK  
Content-Length: 0



11.8.13. 発信後呼び出し中に発信/着信側ともにハンドオーバー(片方がアドレス再登録失敗)  
IP アドレス登録失敗(DHCP 失敗)した端末は帰属を解除し、再スキャンを行う。



注：00002 認証なし 00005 認証なし

図 11-52 発信後呼び出し中に発信側/着信側ともにハンドオーバー(片方がアドレス再登録失敗)

F1 192.168.1.199:1047() -> 192.168.1.1:5060(Server)

```
INVITE sip:00003@sip.com SIP/2.0
Via: SIP/2.0/UDP 192.168.1.199:5060;branch=z9hG4bK-207b71d2-847019.808
Route: <sip:192.168.1.1:5060>
From: <sip:00002@sip.com>;tag=5411d320
To: <sip:00003@sip.com>
Call-ID: 52db19a6@00002.192.168.1.1
CSeq: 513136221 INVITE
Contact: <sip:00002@192.168.1.199>
Max-Forwards: 70
Supported: 100rel, replaces
Allow: INVITE, ACK, BYE, CANCEL, OPTIONS, PRACK, MESSAGE, REFER, NOTIFY
Content-Type: application/sdp
Accept: application/sdp, message/sipfrag
Content-Length: 252
```

```
v=0
o=- 799229 3401 IN IP4 192.168.1.199
s=-
c=IN IP4 192.168.1.199
t=0 0
m=audio 5008 RTP/AVP 0 8 4 18 96
a=rtpmap:0 PCMU/8000
a=rtpmap:8 PCMA/8000
a=rtpmap:4 G723/8000
a=rtpmap:18 G729/8000
a=rtpmap:96 telephone-event/8000
```

a=fmtp:96 0-11

```
=====
F2      192.168.1.1:5062 (Server) -> 192.168.1.199:5060 ()

SIP/2.0 100 Trying
Via: SIP/2.0/UDP 192.168.1.199:5060;branch=z9hG4bK-207b71d2-847019.808
From: <sip:00002@sip.com>;tag=5411d320
To: <sip:00003@sip.com>
Call-ID: 52db19a6@00002.192.168.1.1
CSeq: 513136221 INVITE
Content-Length: 0
```

```
=====
F3      192.168.1.1:5062 (Server) -> 192.168.1.131:5060 (00003@sip.com)

INVITE sip:00003@192.168.1.131 SIP/2.0
Via: SIP/2.0/UDP 192.168.1.1:5060;branch=z9hG4bK-552.687541.513136221
Via: SIP/2.0/UDP 192.168.1.199:5060;branch=z9hG4bK-207b71d2-847019.808
Record-Route: <sip:00003@192.168.1.1>
Route: <sip:192.168.1.1:5060>
From: 00002 <sip:00002@sip.com>;tag=5411d320
To: <sip:00003@sip.com>
Call-ID: 52db19a6@00002.192.168.1.1
CSeq: 513136221 INVITE
Contact: <sip:00002@192.168.1.199>
max-forwards: 69
supported: 100rel
supported: replaces
Allow: INVITE, ACK, BYE, CANCEL, OPTIONS, PRACK, MESSAGE, REFER, NOTIFY
Content-Type: application/sdp
Accept: application/sdp, message/sipfrag
Content-Length: 252

v=0
o=- 799229 3401 IN IP4 192.168.1.199
s=-
c=IN IP4 192.168.1.199
t=0 0
m=audio 5008 RTP/AVP 0 8 4 18 96
a=rtpmap:0 PCMU/8000
a=rtpmap:8 PCMA/8000
a=rtpmap:4 G723/8000
a=rtpmap:18 G729/8000
a=rtpmap:96 telephone-event/8000
a=fmtp:96 0-11
```

```
=====
F4      192.168.1.131:1024 (00003@sip.com) -> 192.168.1.1:5060 (Server)

SIP/2.0 100 Trying
Via: SIP/2.0/UDP 192.168.1.1:5060;branch=z9hG4bK-552.687541.513136221
Via: SIP/2.0/UDP 192.168.1.199:5060;branch=z9hG4bK-207b71d2-847019.808
From: 00002 <sip:00002@sip.com>;tag=5411d320
To: <sip:00003@sip.com>
Call-ID: 52db19a6@00002.192.168.1.1
CSeq: 513136221 INVITE
Content-Length: 0
```

```
=====
F5      192.168.1.131:1024 (00003@sip.com) -> 192.168.1.1:5060 (Server)

SIP/2.0 183 Session Progress
Via: SIP/2.0/UDP 192.168.1.1:5060;branch=z9hG4bK-552.687541.513136221
Via: SIP/2.0/UDP 192.168.1.199:5060;branch=z9hG4bK-207b71d2-847019.808
Record-Route: <sip:00003@192.168.1.1>
From: 00002 <sip:00002@sip.com>;tag=5411d320
To: <sip:00003@sip.com>;tag=5e6ea1f7
Call-ID: 52db19a6@00002.192.168.1.1
CSeq: 513136221 INVITE
Contact: <sip:00003@192.168.1.131>
Require: 100rel
RSeq: 367757301
Content-Length: 0
```

F6 192.168.1.1:5062(Server) -> 192.168.1.199:5060()

SIP/2.0 183 Session Progress  
Via: SIP/2.0/UDP 192.168.1.199:5060;branch=z9hG4bK-207b71d2-847019.808  
Record-Route: <sip:00003@192.168.1.1>  
From: 00002 <sip:00002@sip.com>;tag=5411d320  
To: <sip:00003@sip.com>;tag=5e6ea1f7  
Call-ID: 52db19a6@00002.192.168.1.1  
CSeq: 513136221 INVITE  
Contact: <sip:00003@192.168.1.131>  
require: 100rel  
rseq: 367757301  
Content-Length: 0

F7 192.168.1.199:1047() -> 192.168.1.1:5060(Server)

PRACK sip:00003@192.168.1.1 SIP/2.0  
Via: SIP/2.0/UDP 192.168.1.199:5060;branch=z9hG4bK-390d7516-847021.416  
Route: <sip:00003@192.168.1.131>  
From: 00002 <sip:00002@sip.com>;tag=5411d320  
To: <sip:00003@sip.com>;tag=5e6ea1f7  
Call-ID: 52db19a6@00002.192.168.1.1  
CSeq: 513136222 PRACK  
Max-Forwards: 70  
Rack: 367757301 513136221 INVITE  
Content-Length: 0

F8 192.168.1.1:5062(Server) -> 192.168.1.131:5060(00003@sip.com)

PRACK sip:00003@192.168.1.131 SIP/2.0  
Via: SIP/2.0/UDP 192.168.1.1:5060;branch=z9hG4bK-552.1109090217.513136222  
Via: SIP/2.0/UDP 192.168.1.199:5060;branch=z9hG4bK-390d7516-847021.416  
Route: <sip:00003@192.168.1.131>  
From: 00002 <sip:00002@sip.com>;tag=5411d320  
To: <sip:00003@sip.com>;tag=5e6ea1f7  
Call-ID: 52db19a6@00002.192.168.1.1  
CSeq: 513136222 PRACK  
max-forwards: 69  
rack: 367757301 513136221 INVITE  
Content-Length: 0

F9 192.168.1.131:1024(00003@sip.com) -> 192.168.1.1:5060(Server)

SIP/2.0 200 OK  
Via: SIP/2.0/UDP 192.168.1.1:5060;branch=z9hG4bK-552.1109090217.513136222  
Via: SIP/2.0/UDP 192.168.1.199:5060;branch=z9hG4bK-390d7516-847021.416  
From: 00002 <sip:00002@sip.com>;tag=5411d320  
To: <sip:00003@sip.com>;tag=5e6ea1f7  
Call-ID: 52db19a6@00002.192.168.1.1  
CSeq: 513136222 PRACK  
Content-Length: 0

F10 192.168.1.1:5062(Server) -> 192.168.1.199:5060()

SIP/2.0 200 OK  
Via: SIP/2.0/UDP 192.168.1.199:5060;branch=z9hG4bK-390d7516-847021.416  
From: 00002 <sip:00002@sip.com>;tag=5411d320  
To: <sip:00003@sip.com>;tag=5e6ea1f7  
Call-ID: 52db19a6@00002.192.168.1.1  
CSeq: 513136222 PRACK  
Content-Length: 0

F11 192.168.1.131:1024(00003@sip.com) -> 192.168.1.1:5060(Server)

SIP/2.0 180 Ringing  
 Via: SIP/2.0/UDP 192.168.1.1:5060;branch=z9hG4bK-552.687541.513136221  
 Via: SIP/2.0/UDP 192.168.1.199:5060;branch=z9hG4bK-207b71d2-847019.808  
 Record-Route: <sip:00003@192.168.1.1>  
 From: 00002 <sip:00002@sip.com>;tag=5411d320  
 To: <sip:00003@sip.com>;tag=5e6ea1f7  
 Call-ID: 52db19a6@00002.192.168.1.1  
 CSeq: 513136221 INVITE  
 Contact: <sip:00003@192.168.1.131>  
 Require: 100rel  
 RSeq: 367757302  
 Content-Length: 0

F12 192.168.1.1:5062 (Server) -> 192.168.1.199:5060 ()

SIP/2.0 180 Ringing  
 Via: SIP/2.0/UDP 192.168.1.199:5060;branch=z9hG4bK-207b71d2-847019.808  
 Record-Route: <sip:00003@192.168.1.1>  
 From: 00002 <sip:00002@sip.com>;tag=5411d320  
 To: <sip:00003@sip.com>;tag=5e6ea1f7  
 Call-ID: 52db19a6@00002.192.168.1.1  
 CSeq: 513136221 INVITE  
 Contact: <sip:00003@192.168.1.131>  
 require: 100rel  
 rseq: 367757302  
 Content-Length: 0

F13 192.168.1.199:1047 () -> 192.168.1.1:5060 (Server)

PRACK sip:00003@192.168.1.1 SIP/2.0  
 Via: SIP/2.0/UDP 192.168.1.199:5060;branch=z9hG4bK-17a127eb-847022.019  
 Route: <sip:00003@192.168.1.131>  
 From: 00002 <sip:00002@sip.com>;tag=5411d320  
 To: <sip:00003@sip.com>;tag=5e6ea1f7  
 Call-ID: 52db19a6@00002.192.168.1.1  
 CSeq: 513136223 PRACK  
 Max-Forwards: 70  
 Rack: 367757302 513136221 INVITE  
 Content-Length: 0

F14 192.168.1.1:5062 (Server) -> 192.168.1.131:5060 (00003@sip.com)

PRACK sip:00003@192.168.1.131 SIP/2.0  
 Via: SIP/2.0/UDP 192.168.1.1:5060;branch=z9hG4bK-552.1109090217.513136223  
 Via: SIP/2.0/UDP 192.168.1.199:5060;branch=z9hG4bK-17a127eb-847022.019  
 Route: <sip:00003@192.168.1.131>  
 From: 00002 <sip:00002@sip.com>;tag=5411d320  
 To: <sip:00003@sip.com>;tag=5e6ea1f7  
 Call-ID: 52db19a6@00002.192.168.1.1  
 CSeq: 513136223 PRACK  
 max-forwards: 69  
 rack: 367757302 513136221 INVITE  
 Content-Length: 0

F15 192.168.1.131:1024 (00003@sip.com) -> 192.168.1.1:5060 (Server)

SIP/2.0 200 OK  
 Via: SIP/2.0/UDP 192.168.1.1:5060;branch=z9hG4bK-552.1109090217.513136223  
 Via: SIP/2.0/UDP 192.168.1.199:5060;branch=z9hG4bK-17a127eb-847022.019  
 From: 00002 <sip:00002@sip.com>;tag=5411d320  
 To: <sip:00003@sip.com>;tag=5e6ea1f7  
 Call-ID: 52db19a6@00002.192.168.1.1  
 CSeq: 513136223 PRACK  
 Content-Length: 0

F16 192.168.1.1:5062(Server) -> 192.168.1.199:5060()

SIP/2.0 200 OK  
 Via: SIP/2.0/UDP 192.168.1.199:5060;branch=z9hG4bK-17a127eb-847022.019  
 From: 00002 <sip:00002@sip.com>;tag=5411d320  
 To: <sip:00003@sip.com>;tag=5e6ea1f7  
 Call-ID: 52db19a6@00002.192.168.1.1  
 CSeq: 513136223 PRACK  
 Content-Length: 0

F17 192.168.2.1:1049(00002@sip.com) -> 192.168.1.1:5060(Server)

REGISTER sip:192.168.1.1 SIP/2.0  
 Via: SIP/2.0/UDP 192.168.2.1:5060;branch=z9hG4bK-7cb0b716-847033.234  
 From: <sip:00002@sip.com>  
 To: <sip:00002@sip.com>  
 Call-ID: 2bc54e9e@00002.192.168.1.1  
 CSeq: 2 REGISTER  
 Contact: <sip:00002@192.168.2.1>;expires=3600  
 Max-Forwards: 70  
 User-Agent: △△△△△△ //端末種別

Content-Length: 0

F18 192.168.1.1:5062(Server) -> 192.168.2.1:5060(00002@sip.com)

SIP/2.0 200 OK  
 Via: SIP/2.0/UDP 192.168.2.1:5060;branch=z9hG4bK-7cb0b716-847033.234  
 From: <sip:00002@sip.com>  
 To: <sip:00002@sip.com>  
 Call-ID: 2bc54e9e@00002.192.168.1.1  
 CSeq: 2 REGISTER  
 Contact: <sip:00002@192.168.2.1>;expires=3600  
 Date: Tue, 22 Feb 2005 16:37:09 GMT  
 Content-Length: 0

F19 192.168.2.1:1049(00002@sip.com) -> 192.168.1.1:5060(Server)

INVITE sip:00003@sip.com SIP/2.0  
 Via: SIP/2.0/UDP 192.168.2.1:5060;branch=z9hG4bK-323a92f2-847033.305  
 Route: <sip:192.168.1.1:5060>  
 From: <sip:00002@sip.com>;tag=1b2e40bf  
 To: <sip:00003@sip.com>  
 Call-ID: 6e9cb4f2@00002.192.168.1.1  
 CSeq: 1992868352 INVITE  
 Contact: <sip:00002@192.168.2.1>  
 Max-Forwards: 70  
 Supported: 100rel, replaces  
 Allow: INVITE, ACK, BYE, CANCEL, OPTIONS, PRACK, MESSAGE, REFER, NOTIFY  
 Content-Type: application/sdp  
 Accept: application/sdp, message/sipfrag  
 Content-Length: 248

v=0  
 o=- 295611 3402 IN IP4 192.168.2.1  
 s=-  
 c=IN IP4 192.168.2.1  
 t=0 0  
 m=audio 5008 RTP/AVP 0 8 4 18 96  
 a=rtpmap:0 PCMU/8000  
 a=rtpmap:8 PCMA/8000  
 a=rtpmap:4 G723/8000  
 a=rtpmap:18 G729/8000  
 a=rtpmap:96 telephone-event/8000  
 a=fmtp:96 0-11

F20 192.168.1.1:5062(Server) -> 192.168.1.131:5060(00003@sip.com)

INVITE sip:00003@192.168.1.131 SIP/2.0  
 Via: SIP/2.0/UDP 192.168.1.1:5060;branch=z9hG4bK-555.207611.1992868352

Via: SIP/2.0/UDP 192.168.2.1:5060;branch=z9hG4bK-323a92f2-847033.305  
 Record-Route: <sip:00003@192.168.1.1>  
 Route: <sip:192.168.1.1:5060>  
 From: 00002 <sip:00002@sip.com>;tag=1b2e40bf  
 To: <sip:00003@sip.com>  
 Call-ID: 6e9cb4f2@00002.192.168.1.1  
 CSeq: 1992868352 INVITE  
 Contact: <sip:00002@192.168.2.1>  
 max-forwards: 69  
 supported: 100rel  
 supported: replaces  
 Allow: INVITE, ACK, BYE, CANCEL, OPTIONS, PRACK, MESSAGE, REFER, NOTIFY  
 Content-Type: application/sdp  
 Accept: application/sdp, message/sipfrag  
 Content-Length: 248

v=0  
 o=- 295611 3402 IN IP4 192.168.2.1  
 s=-  
 c=IN IP4 192.168.2.1  
 t=0 0  
 m=audio 5008 RTP/AVP 0 8 4 18 96  
 a=rtpmap:0 PCMU/8000  
 a=rtpmap:8 PCMA/8000  
 a=rtpmap:4 G723/8000  
 a=rtpmap:18 G729/8000  
 a=rtpmap:96 telephone-event/8000  
 a=fmtp:96 0-11

---

F21 192.168.1.1:5062 (Server) -> 192.168.2.1:5060 (00002@sip.com)

SIP/2.0 100 Trying  
 Via: SIP/2.0/UDP 192.168.2.1:5060;branch=z9hG4bK-323a92f2-847033.305  
 From: <sip:00002@sip.com>;tag=1b2e40bf  
 To: <sip:00003@sip.com>  
 Call-ID: 6e9cb4f2@00002.192.168.1.1  
 CSeq: 1992868352 INVITE  
 Content-Length: 0

---

F22 192.168.1.1:5062 (Server) -> 192.168.1.131:5060 (00003@sip.com)

INVITE sip:00003@192.168.1.131 SIP/2.0  
 Via: SIP/2.0/UDP 192.168.1.1:5060;branch=z9hG4bK-555.207611.1992868352  
 Via: SIP/2.0/UDP 192.168.2.1:5060;branch=z9hG4bK-323a92f2-847033.305  
 Record-Route: <sip:00003@192.168.1.1>  
 Route: <sip:192.168.1.1:5060>  
 From: 00002 <sip:00002@sip.com>;tag=1b2e40bf  
 To: <sip:00003@sip.com>  
 Call-ID: 6e9cb4f2@00002.192.168.1.1  
 CSeq: 1992868352 INVITE  
 Contact: <sip:00002@192.168.2.1>  
 max-forwards: 69  
 supported: 100rel  
 supported: replaces  
 Allow: INVITE, ACK, BYE, CANCEL, OPTIONS, PRACK, MESSAGE, REFER, NOTIFY  
 Content-Type: application/sdp  
 Accept: application/sdp, message/sipfrag  
 Content-Length: 248

v=0  
 o=- 295611 3402 IN IP4 192.168.2.1  
 s=-  
 c=IN IP4 192.168.2.1  
 t=0 0  
 m=audio 5008 RTP/AVP 0 8 4 18 96  
 a=rtpmap:0 PCMU/8000  
 a=rtpmap:8 PCMA/8000  
 a=rtpmap:4 G723/8000  
 a=rtpmap:18 G729/8000  
 a=rtpmap:96 telephone-event/8000  
 a=fmtp:96 0-11

---

F23 192.168.1.1:5062 (Server) -> 192.168.1.131:5060 (00003@sip.com)

```

INVITE sip:00003@192.168.1.131 SIP/2.0
Via: SIP/2.0/UDP 192.168.1.1:5060;branch=z9hG4bK-555.207611.1992868352
Via: SIP/2.0/UDP 192.168.2.1:5060;branch=z9hG4bK-323a92f2-847033.305
Record-Route: <sip:00003@192.168.1.1>
Route: <sip:192.168.1.1:5060>
From: 00002 <sip:00002@sip.com>;tag=1b2e40bf
To: <sip:00003@sip.com>
Call-ID: 6e9cb4f2@00002.192.168.1.1
CSeq: 1992868352 INVITE
Contact: <sip:00002@192.168.2.1>
max-forwards: 69
supported: 100rel
supported: replaces
Allow: INVITE, ACK, BYE, CANCEL, OPTIONS, PRACK, MESSAGE, REFER, NOTIFY
Content-Type: application/sdp
Accept: application/sdp, message/sipfrag
Content-Length: 248

```

```

v=0
o=- 295611 3402 IN IP4 192.168.2.1
s=-
c=IN IP4 192.168.2.1
t=0 0
m=audio 5008 RTP/AVP 0 8 4 18 96
a=rtpmap:0 PCMU/8000
a=rtpmap:8 PCMA/8000
a=rtpmap:4 G723/8000
a=rtpmap:18 G729/8000
a=rtpmap:96 telephone-event/8000
a=fmtp:96 0-11

```

=====

F24            192.168.1.1:5062 (Server) -> 192.168.1.131:5060 (00003@sip.com)

```

INVITE sip:00003@192.168.1.131 SIP/2.0
Via: SIP/2.0/UDP 192.168.1.1:5060;branch=z9hG4bK-555.207611.1992868352
Via: SIP/2.0/UDP 192.168.2.1:5060;branch=z9hG4bK-323a92f2-847033.305
Record-Route: <sip:00003@192.168.1.1>
Route: <sip:192.168.1.1:5060>
From: 00002 <sip:00002@sip.com>;tag=1b2e40bf
To: <sip:00003@sip.com>
Call-ID: 6e9cb4f2@00002.192.168.1.1
CSeq: 1992868352 INVITE
Contact: <sip:00002@192.168.2.1>
max-forwards: 69
supported: 100rel
supported: replaces
Allow: INVITE, ACK, BYE, CANCEL, OPTIONS, PRACK, MESSAGE, REFER, NOTIFY
Content-Type: application/sdp
Accept: application/sdp, message/sipfrag
Content-Length: 248

```

```

v=0
o=- 295611 3402 IN IP4 192.168.2.1
s=-
c=IN IP4 192.168.2.1
t=0 0
m=audio 5008 RTP/AVP 0 8 4 18 96
a=rtpmap:0 PCMU/8000
a=rtpmap:8 PCMA/8000
a=rtpmap:4 G723/8000
a=rtpmap:18 G729/8000
a=rtpmap:96 telephone-event/8000
a=fmtp:96 0-11

```

=====

F25            192.168.1.1:5062 (Server) -> 192.168.1.131:5060 (00003@sip.com)

```

INVITE sip:00003@192.168.1.131 SIP/2.0
Via: SIP/2.0/UDP 192.168.1.1:5060;branch=z9hG4bK-555.207611.1992868352
Via: SIP/2.0/UDP 192.168.2.1:5060;branch=z9hG4bK-323a92f2-847033.305
Record-Route: <sip:00003@192.168.1.1>
Route: <sip:192.168.1.1:5060>
From: 00002 <sip:00002@sip.com>;tag=1b2e40bf
To: <sip:00003@sip.com>
Call-ID: 6e9cb4f2@00002.192.168.1.1
CSeq: 1992868352 INVITE
Contact: <sip:00002@192.168.2.1>
max-forwards: 69

```

```

supported: 100rel
supported: replaces
Allow: INVITE, ACK, BYE, CANCEL, OPTIONS, PRACK, MESSAGE, REFER, NOTIFY
Content-Type: application/sdp
Accept: application/sdp, message/sipfrag
Content-Length: 248

```

```

v=0
o=- 295611 3402 IN IP4 192.168.2.1
s=-
c=IN IP4 192.168.2.1
t=0 0
m=audio 5008 RTP/AVP 0 8 4 18 96
a=rtpmap:0 PCMU/8000
a=rtpmap:8 PCMA/8000
a=rtpmap:4 G723/8000
a=rtpmap:18 G729/8000
a=rtpmap:96 telephone-event/8000
a=fmtp:96 0-11

```

```
=====
```

F26            192.168.1.1:5062 (Server) -> 192.168.2.1:5060 (00002@sip.com)

```

SIP/2.0 408 Request Timeout
Via: SIP/2.0/UDP 192.168.2.1:5060;branch=z9hG4bK-323a92f2-847033.305
From: 00002 <sip:00002@sip.com>;tag=1b2e40bf
To: <sip:00003@sip.com>
Call-ID: 6e9cb4f2@00002.192.168.1.1
CSeq: 1992868352 INVITE
Content-Length: 0

```

```
=====
```

F27            192.168.2.1:1049 (00002@sip.com) -> 192.168.1.1:5060 (Server)

```

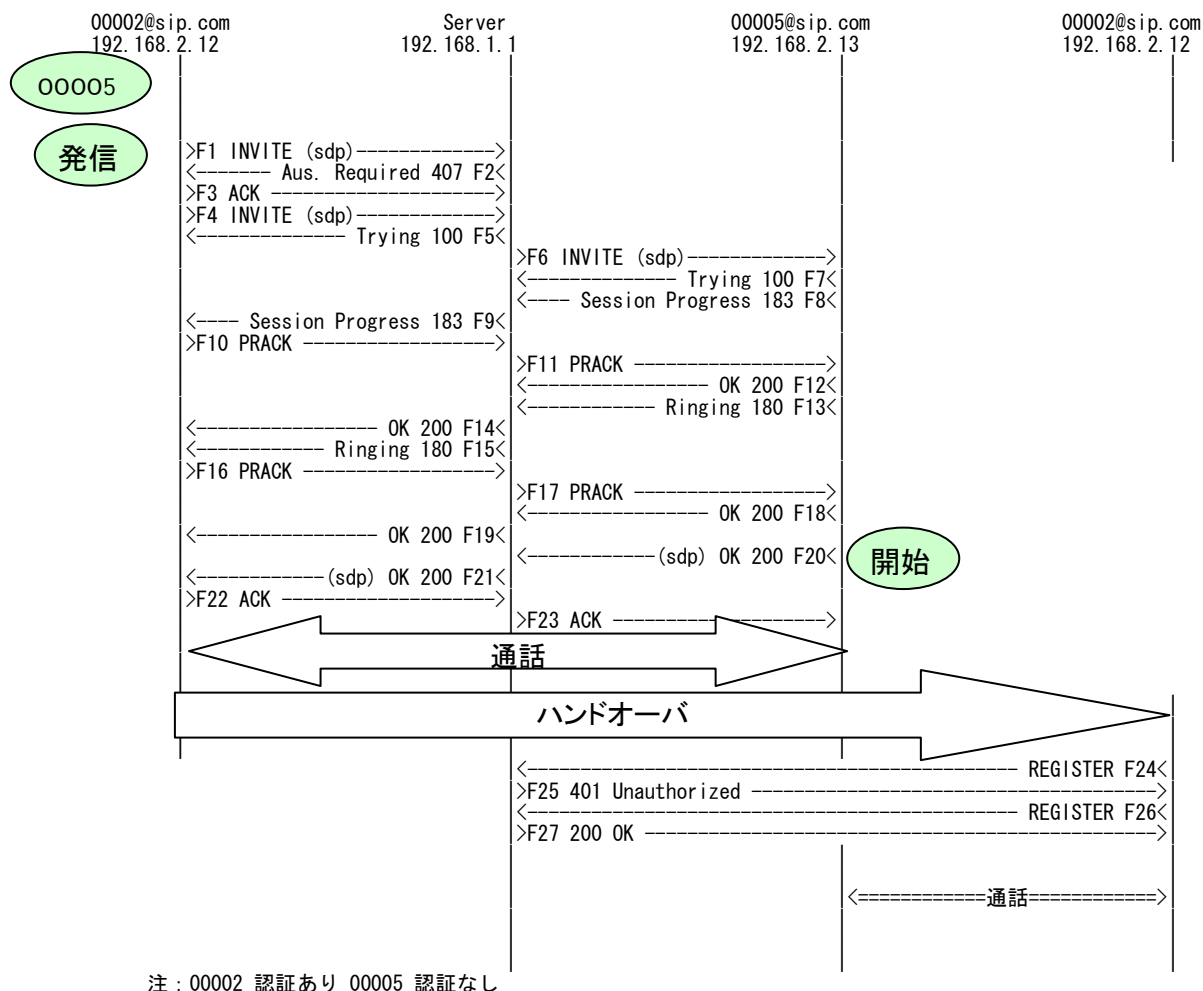
ACK sip:00003@sip.com SIP/2.0
Via: SIP/2.0/UDP 192.168.2.1:5060;branch=z9hG4bK-323a92f2-847033.305
Route: <sip:192.168.1.1:5060>
From: 00002 <sip:00002@sip.com>;tag=1b2e40bf
To: <sip:00003@sip.com>
Call-ID: 6e9cb4f2@00002.192.168.1.1
CSeq: 1992868352 ACK
Content-Length: 0

```



## 11.8.14. 通話中ハンドオーバ(IP アドレスの変更なし)

IP アドレスの変更を伴わないハンドオーバでは REGISTER は発生しないが、プロフィールが変更されるハンドオーバでは REGISTER が行われる。この場合のシーケンスを示す。



注：00002 認証あり 00005 認証なし

図 11-53 通話中ハンドオーバ (IP アドレスの変更なし)

F1 192.168.2.12:1204() -> 192.168.1.1:5060(Server)

```
INVITE sip:00005@sip.com SIP/2.0
Via: SIP/2.0/UDP 192.168.2.12:5060;branch=z9hG4bK-16e63660-149445.240
Route: <sip:192.168.1.1:5060>
From: <sip:00002@sip.com>;tag=59036cc6
To: <sip:00005@sip.com>
Call-ID: 76220a77@00002.192.168.1.1
CSeq: 1372859905 INVITE
Contact: <sip:00002@192.168.2.12>
Proxy-Authorization: Digest username="00002", realm="heliossv2", nonce="f9fe10ede30673e98ec110dbf01ab40b",
uri="sip:00005@sip.com", response="d5f83425c065a0010cb862cfca5425e4", algorithm=MD5, cnonce="552bdd7a",
opaque="d0c753c45331546b2ce13f5ee5e51993", qop=auth, nc=00000004
Max-Forwards: 70
Supported: 100rel, replaces
Allow: INVITE, ACK, BYE, CANCEL, OPTIONS, PRACK, MESSAGE, REFER, NOTIFY
Content-Type: application/sdp
Accept: application/sdp, message/sipfrag
Content-Length: 249
```

```
v=0
o=- 221358 701 IN IP4 192.168.2.12
```

```

S=-
c=IN IP4 192.168.2.12
t=0 0
m=audio 5006 RTP/AVP 0 8 4 18 96
a=rtpmap:0 PCMU/8000
a=rtpmap:8 PCMA/8000
a=rtpmap:4 G723/8000
a=rtpmap:18 G729/8000
a=rtpmap:96 telephone-event/8000
a=fmtp:96 0-11

```

```

=====
F2      192.168.1.1:5062(Server) -> 192.168.2.12:5060()

SIP/2.0 407 Proxy Authentication Required
Via: SIP/2.0/UDP 192.168.2.12:5060;branch=z9hG4bK-16e63660-149445.240
From: <sip:00002@sip.com>;tag=59036cc6
To: <sip:00005@sip.com>
Call-ID: 76220a77@00002.192.168.1.1
CSeq: 1372859905 INVITE
Proxy-Authenticate: Digest realm="heliossv2", nonce="e809bb7846b5ec99abe05ec7a7d0f99f",
opaque="db44b14bd3b75f21cb0e8ef74405da24", stale=false, algorithm=MD5, qop="auth,auth-int"
Content-Length: 0

```

```

=====
F3      192.168.2.12:1204() -> 192.168.1.1:5060(Server)

ACK sip:00005@sip.com SIP/2.0
Via: SIP/2.0/UDP 192.168.2.12:5060;branch=z9hG4bK-16e63660-149445.240
Route: <sip:192.168.1.1:5060>
From: <sip:00002@sip.com>;tag=59036cc6
To: <sip:00005@sip.com>
Call-ID: 76220a77@00002.192.168.1.1
CSeq: 1372859905 ACK
Content-Length: 0

```

```

=====
F4      192.168.2.12:1204() -> 192.168.1.1:5060(Server)

INVITE sip:00005@sip.com SIP/2.0
Via: SIP/2.0/UDP 192.168.2.12:5060;branch=z9hG4bK-6582a82a-149445.874
Route: <sip:192.168.1.1:5060>
From: <sip:00002@sip.com>;tag=59036cc6
To: <sip:00005@sip.com>
Call-ID: 76220a77@00002.192.168.1.1
CSeq: 1372859906 INVITE
Contact: <sip:00002@192.168.2.12>
Proxy-Authorization: Digest username="00002", realm="heliossv2", nonce="e809bb7846b5ec99abe05ec7a7d0f99f",
uri="sip:00005@sip.com", response="9b5ffcc487a1c0d86033bba1d46749a2", algorithm=MD5, cnonce="48c4dbf0",
opaque="db44b14bd3b75f21cb0e8ef74405da24", qop=auth, nc=00000001
Max-Forwards: 70
Supported: 100rel, replaces
Allow: INVITE, ACK, BYE, CANCEL, OPTIONS, PRACK, MESSAGE, REFER, NOTIFY
Content-Type: application/sdp
Accept: application/sdp, message/sipfrag
Content-Length: 249

v=0
o=- 221358 701 IN IP4 192.168.2.12
s=-
c=IN IP4 192.168.2.12
t=0 0
m=audio 5006 RTP/AVP 0 8 4 18 96
a=rtpmap:0 PCMU/8000
a=rtpmap:8 PCMA/8000
a=rtpmap:4 G723/8000
a=rtpmap:18 G729/8000
a=rtpmap:96 telephone-event/8000
a=fmtp:96 0-11

```

```

=====
F5      192.168.1.1:5062(Server) -> 192.168.2.12:5060()

SIP/2.0 100 Trying
Via: SIP/2.0/UDP 192.168.2.12:5060;branch=z9hG4bK-6582a82a-149445.874

```

From: <sip:00002@sip.com>;tag=59036cc6  
 To: <sip:00005@sip.com>  
 Call-ID: 76220a77@00002.192.168.1.1  
 CSeq: 1372859906 INVITE  
 Content-Length: 0

F6 192.168.1.1:5062(Server) -> 192.168.2.13:5060()

INVITE sip:00005@192.168.2.13 SIP/2.0  
 Via: SIP/2.0/UDP 192.168.1.1:5060;branch=z9hG4bK-1161.131543.1372859906  
 Via: SIP/2.0/UDP 192.168.2.12:5060;branch=z9hG4bK-6582a82a-149445.874  
 Record-Route: <sip:00005@192.168.1.1>  
 Route: <sip:192.168.1.1:5060>  
 From: 00002 <sip:00002@sip.com>;tag=59036cc6  
 To: <sip:00005@sip.com>  
 Call-ID: 76220a77@00002.192.168.1.1  
 CSeq: 1372859906 INVITE  
 Contact: <sip:00002@192.168.2.12>  
 max-forwards: 69  
 supported: 100rel  
 supported: replaces  
 Allow: INVITE, ACK, BYE, CANCEL, OPTIONS, PRACK, MESSAGE, REFER, NOTIFY  
 Content-Type: application/sdp  
 Accept: application/sdp, message/sipfrag  
 Content-Length: 249

v=0  
 o=- 221358 701 IN IP4 192.168.2.12  
 s=-  
 c=IN IP4 192.168.2.12  
 t=0 0  
 m=audio 5006 RTP/AVP 0 8 4 18 96  
 a=rtpmap:0 PCMU/8000  
 a=rtpmap:8 PCMA/8000  
 a=rtpmap:4 G723/8000  
 a=rtpmap:18 G729/8000  
 a=rtpmap:96 telephone-event/8000  
 a=fmtp:96 0-11

F7 192.168.2.13:1111() -> 192.168.1.1:5060(Server)

SIP/2.0 100 Trying  
 Via: SIP/2.0/UDP 192.168.1.1:5060;branch=z9hG4bK-1161.131543.1372859906  
 Via: SIP/2.0/UDP 192.168.2.12:5060;branch=z9hG4bK-6582a82a-149445.874  
 From: 00002 <sip:00002@sip.com>;tag=59036cc6  
 To: <sip:00005@sip.com>  
 Call-ID: 76220a77@00002.192.168.1.1  
 CSeq: 1372859906 INVITE  
 Content-Length: 0

F8 192.168.2.13:1111() -> 192.168.1.1:5060(Server)

SIP/2.0 183 Session Progress  
 Via: SIP/2.0/UDP 192.168.1.1:5060;branch=z9hG4bK-1161.131543.1372859906  
 Via: SIP/2.0/UDP 192.168.2.12:5060;branch=z9hG4bK-6582a82a-149445.874  
 Record-Route: <sip:00005@192.168.1.1>  
 From: 00002 <sip:00002@sip.com>;tag=59036cc6  
 To: <sip:00005@sip.com>;tag=5af6357d  
 Call-ID: 76220a77@00002.192.168.1.1  
 CSeq: 1372859906 INVITE  
 Contact: <sip:00005@192.168.2.13>  
 Require: 100rel  
 RSeq: 1308483263  
 Content-Length: 0

F9 192.168.2.13:1111() -> 192.168.1.1:5060(Server)

SIP/2.0 183 Session Progress  
 Via: SIP/2.0/UDP 192.168.1.1:5060;branch=z9hG4bK-1161.131543.1372859906  
 Via: SIP/2.0/UDP 192.168.2.12:5060;branch=z9hG4bK-6582a82a-149445.874

Record-Route: <sip:00005@192.168.1.1>  
 From: 00002 <sip:00002@sip.com>;tag=59036cc6  
 To: <sip:00005@sip.com>;tag=5af6357d  
 Call-ID: 76220a77@00002.192.168.1.1  
 CSeq: 1372859906 INVITE  
 Contact: <sip:00005@192.168.2.13>  
 Require: 100rel  
 RSeq: 1308483263  
 Content-Length: 0

F10 192.168.2.12:1204() -> 192.168.1.1:5060(Server)

PRACK sip:00005@192.168.1.1 SIP/2.0  
 Via: SIP/2.0/UDP 192.168.2.12:5060;branch=z9hG4bK-198fbaa7-149446.557  
 Route: <sip:00005@192.168.2.13>  
 From: 00002 <sip:00002@sip.com>;tag=59036cc6  
 To: <sip:00005@sip.com>;tag=5af6357d  
 Call-ID: 76220a77@00002.192.168.1.1  
 CSeq: 1372859907 PRACK  
 Proxy-Authorization: Digest username="00002", realm="heliossv2", nonce="e809bb7846b5ec99abe05ec7a7d0f99f",  
 uri="sip:00005@192.168.1.1", response="67baf30bf1bccb23d3ecc2ac26083ccb", algorithm=MD5, cnonce="6bd1df43",  
 opaque="db44b14bd3b75f21cb0e8ef74405da24", qop=auth, nc=00000002  
 Max-Forwards: 70  
 Rack: 1308483263 1372859906 INVITE  
 Content-Length: 0

F11 192.168.1.1:5062(Server) -> 192.168.2.13:5060()

PRACK sip:00005@192.168.2.13 SIP/2.0  
 Via: SIP/2.0/UDP 192.168.1.1:5060;branch=z9hG4bK-1161.1083677815.1372859907  
 Via: SIP/2.0/UDP 192.168.2.12:5060;branch=z9hG4bK-198fbaa7-149446.557  
 Route: <sip:00005@192.168.2.13>  
 From: 00002 <sip:00002@sip.com>;tag=59036cc6  
 To: <sip:00005@sip.com>;tag=5af6357d  
 Call-ID: 76220a77@00002.192.168.1.1  
 CSeq: 1372859907 PRACK  
 max-forwards: 69  
 rack: 1308483263 1372859906 INVITE  
 Content-Length: 0

F12 192.168.2.13:1111() -> 192.168.1.1:5060(Server)

SIP/2.0 200 OK  
 Via: SIP/2.0/UDP 192.168.1.1:5060;branch=z9hG4bK-1161.1083677815.1372859907  
 Via: SIP/2.0/UDP 192.168.2.12:5060;branch=z9hG4bK-198fbaa7-149446.557  
 From: 00002 <sip:00002@sip.com>;tag=59036cc6  
 To: <sip:00005@sip.com>;tag=5af6357d  
 Call-ID: 76220a77@00002.192.168.1.1  
 CSeq: 1372859907 PRACK  
 Content-Length: 0

F13 192.168.1.1:5062(Server) -> 192.168.2.12:5060()

SIP/2.0 200 OK  
 Via: SIP/2.0/UDP 192.168.2.12:5060;branch=z9hG4bK-198fbaa7-149446.557  
 From: 00002 <sip:00002@sip.com>;tag=59036cc6  
 To: <sip:00005@sip.com>;tag=5af6357d  
 Call-ID: 76220a77@00002.192.168.1.1  
 CSeq: 1372859907 PRACK  
 Content-Length: 0

F14 192.168.2.13:1111() -> 192.168.1.1:5060(Server)

SIP/2.0 180 Ringing  
 Via: SIP/2.0/UDP 192.168.1.1:5060;branch=z9hG4bK-1161.131543.1372859906  
 Via: SIP/2.0/UDP 192.168.2.12:5060;branch=z9hG4bK-6582a82a-149445.874

Record-Route: <sip:00005@192.168.1.1>  
 From: 00002 <sip:00002@sip.com>;tag=59036cc6  
 To: <sip:00005@sip.com>;tag=5af6357d  
 Call-ID: 76220a77@00002.192.168.1.1  
 CSeq: 1372859906 INVITE  
 Contact: <sip:00005@192.168.2.13>  
 Require: 100rel  
 RSeq: 1308483264  
 Content-Length: 0

F15 192.168.1.1:5062 (Server) -> 192.168.2.12:5060()

SIP/2.0 180 Ringing  
 Via: SIP/2.0/UDP 192.168.2.12:5060;branch=z9hG4bK-6582a82a-149445.874  
 Record-Route: <sip:00005@192.168.1.1>  
 From: 00002 <sip:00002@sip.com>;tag=59036cc6  
 To: <sip:00005@sip.com>;tag=5af6357d  
 Call-ID: 76220a77@00002.192.168.1.1  
 CSeq: 1372859906 INVITE  
 Contact: <sip:00005@192.168.2.13>  
 require: 100rel  
 rseq: 1308483264  
 Content-Length: 0

F16 192.168.2.12:1204() -> 192.168.1.1:5060 (Server)

PRACK sip:00005@192.168.1.1 SIP/2.0  
 Via: SIP/2.0/UDP 192.168.2.12:5060;branch=z9hG4bK-3a50f87-149446.824  
 Route: <sip:00005@192.168.2.13>  
 From: 00002 <sip:00002@sip.com>;tag=59036cc6  
 To: <sip:00005@sip.com>;tag=5af6357d  
 Call-ID: 76220a77@00002.192.168.1.1  
 CSeq: 1372859908 PRACK  
 Proxy-Authorization: Digest username="00002", realm="heliossv2", nonce="e809bb7846b5ec99abe05ec7a7d0f99f", uri="sip:00005@192.168.1.1", response="f0ace217c81cbdfef2fac0ae9a2ebc3f1", algorithm=MD5, cnonce="423244f1", opaque="db44b14bd3b75f21cb0e8ef74405da24", qop=auth, nc=00000003  
 Max-Forwards: 70  
 Rack: 1308483264 1372859906 INVITE  
 Content-Length: 0

F17 192.168.1.1:5062 (Server) -> 192.168.2.13:5060()

PRACK sip:00005@192.168.2.13 SIP/2.0  
 Via: SIP/2.0/UDP 192.168.1.1:5060;branch=z9hG4bK-1161.1083677815.1372859908  
 Via: SIP/2.0/UDP 192.168.2.12:5060;branch=z9hG4bK-3a50f87-149446.824  
 Route: <sip:00005@192.168.2.13>  
 From: 00002 <sip:00002@sip.com>;tag=59036cc6  
 To: <sip:00005@sip.com>;tag=5af6357d  
 Call-ID: 76220a77@00002.192.168.1.1  
 CSeq: 1372859908 PRACK  
 max-forwards: 69  
 rack: 1308483264 1372859906 INVITE  
 Content-Length: 0

F18 192.168.2.13:1111() -> 192.168.1.1:5060 (Server)

SIP/2.0 200 OK  
 Via: SIP/2.0/UDP 192.168.1.1:5060;branch=z9hG4bK-1161.1083677815.1372859908  
 Via: SIP/2.0/UDP 192.168.2.12:5060;branch=z9hG4bK-3a50f87-149446.824  
 From: 00002 <sip:00002@sip.com>;tag=59036cc6  
 To: <sip:00005@sip.com>;tag=5af6357d  
 Call-ID: 76220a77@00002.192.168.1.1  
 CSeq: 1372859908 PRACK  
 Content-Length: 0

F19 192.168.1.1:5062 (Server) -> 192.168.2.12:5060()

SIP/2.0 200 OK  
 Via: SIP/2.0/UDP 192.168.2.12:5060;branch=z9hG4bK-3a50f87-149446.824  
 From: 00002 <sip:00002@sip.com>;tag=59036cc6  
 To: <sip:00005@sip.com>;tag=5af6357d  
 Call-ID: 76220a77@00002.192.168.1.1  
 CSeq: 1372859908 PRACK  
 Content-Length: 0

F20 192.168.2.13:1111() -> 192.168.1.1:5060(Server)

SIP/2.0 200 OK  
 Via: SIP/2.0/UDP 192.168.1.1:5060;branch=z9hG4bK-1161.131543.1372859906  
 Via: SIP/2.0/UDP 192.168.2.12:5060;branch=z9hG4bK-6582a82a-149445.874  
 Record-Route: <sip:00005@192.168.1.1>  
 From: 00002 <sip:00002@sip.com>;tag=59036cc6  
 To: <sip:00005@sip.com>;tag=5af6357d  
 Call-ID: 76220a77@00002.192.168.1.1  
 CSeq: 1372859906 INVITE  
 Contact: <sip:00005@192.168.2.13>  
 Supported: 100rel, replaces  
 Allow: INVITE, ACK, BYE, CANCEL, OPTIONS, PRACK, MESSAGE, REFER, NOTIFY  
 Content-Type: application/sdp  
 Accept: application/sdp, message/sipfrag  
 Content-Length: 177

v=0  
 o=- 614219 13401 IN IP4 192.168.2.13  
 s=-  
 c=IN IP4 192.168.2.13  
 t=0 0  
 m=audio 5008 RTP/AVP 0 96  
 a=rtpmap:0 PCMU/8000  
 a=rtpmap:96 telephone-event/8000  
 a=fmtp:96 0-11

F21 192.168.1.1:5062(Server) -> 192.168.2.12:5060()

SIP/2.0 200 OK  
 Via: SIP/2.0/UDP 192.168.2.12:5060;branch=z9hG4bK-6582a82a-149445.874  
 Record-Route: <sip:00005@192.168.1.1>  
 From: 00002 <sip:00002@sip.com>;tag=59036cc6  
 To: <sip:00005@sip.com>;tag=5af6357d  
 Call-ID: 76220a77@00002.192.168.1.1  
 CSeq: 1372859906 INVITE  
 Contact: <sip:00005@192.168.2.13>  
 supported: 100rel  
 supported: replaces  
 Allow: INVITE, ACK, BYE, CANCEL, OPTIONS, PRACK, MESSAGE, REFER, NOTIFY  
 Content-Type: application/sdp  
 Accept: application/sdp, message/sipfrag  
 Content-Length: 177

v=0  
 o=- 614219 13401 IN IP4 192.168.2.13  
 s=-  
 c=IN IP4 192.168.2.13  
 t=0 0  
 m=audio 5008 RTP/AVP 0 96  
 a=rtpmap:0 PCMU/8000  
 a=rtpmap:96 telephone-event/8000  
 a=fmtp:96 0-11

F22 192.168.2.12:1204() -> 192.168.1.1:5060(Server)

ACK sip:00005@192.168.1.1 SIP/2.0  
 Via: SIP/2.0/UDP 192.168.2.12:5060;branch=z9hG4bK-786072f-149449.732  
 Route: <sip:00005@192.168.2.13>  
 From: 00002 <sip:00002@sip.com>;tag=59036cc6  
 To: <sip:00005@sip.com>;tag=5af6357d  
 Call-ID: 76220a77@00002.192.168.1.1  
 CSeq: 1372859906 ACK  
 Proxy-Authorization: Digest username="00002", realm="heliossv2", nonce="e809bb7846b5ec99abe05ec7a7d0f99f",  
 uri="sip:00005@sip.com", response="9b5ffcc487a1c0d86033bba1d46749a2", algorithm=MD5, cnonce="48c4dbf0",

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opaque="db44b14bd3b75f21cb0e8ef74405da24", qop=auth, nc=00000001  
 Max-Forwards: 70  
 Content-Length: 0

F23 192.168.1.1:5062 (Server) -> 192.168.2.13:5060()

ACK sip:00005@192.168.2.13 SIP/2.0  
 Via: SIP/2.0/UDP 192.168.1.1:5060:branch=z9hG4bK-1161.1083677818.1372859906  
 Via: SIP/2.0/UDP 192.168.2.12:5060:branch=z9hG4bK-786072f-149449.732  
 From: 00002 <sip:00002@sip.com>;tag=59036cc6  
 To: <sip:00005@sip.com>;tag=5af6357d  
 Call-ID: 76220a77@00002.192.168.1.1  
 CSeq: 1372859906 ACK  
 max-forwards: 69  
 Content-Length: 0

F24 192.168.2.12:1206() -> 192.168.1.1:5060 (Server)

REGISTER sip:192.168.1.1 SIP/2.0  
 Via: SIP/2.0/UDP 192.168.2.12:5060:branch=z9hG4bK-4a116935-149461.520  
 From: <sip:00002@sip.com>  
 To: <sip:00002@sip.com>  
 Call-ID: 5a91016c@00002.192.168.1.1  
 CSeq: 2 REGISTER  
 Contact: <sip:00002@192.168.2.12>;expires=3600  
 Authorization: Digest username="00002", realm="heliossv2", nonce="2cdeeca9e891f54f8c653ae3a653c09b",  
 uri="sip:192.168.1.1", response="43a3218a6970e7d650241e5382bb0fe7", algorithm=MD5, cnonce="776855b0",  
 opaque="6c7340b87ce4b65e532e2fc5fecf7ac2", qop=auth, nc=00000002  
 Max-Forwards: 70  
 User-Agent: △△△△△△ //端末種別

Content-Length: 0

F25 192.168.1.1:5062 (Server) -> 192.168.2.12:5060()

SIP/2.0 401 Unauthorized  
 Via: SIP/2.0/UDP 192.168.2.12:5060:branch=z9hG4bK-4a116935-149461.520  
 From: <sip:00002@sip.com>  
 To: <sip:00002@sip.com>  
 Call-ID: 5a91016c@00002.192.168.1.1  
 CSeq: 2 REGISTER  
 WWW-Authenticate: Digest realm="heliossv2", nonce="16bdce79fe518f5e39379f550f44d468",  
 opaque="543377352bbb0c00bd2b11f264766084", stale=false, algorithm=MD5, qop="auth,auth-int"  
 Content-Length: 0

F26 192.168.2.12:1206() -> 192.168.1.1:5060 (Server)

REGISTER sip:192.168.1.1 SIP/2.0  
 Via: SIP/2.0/UDP 192.168.2.12:5060:branch=z9hG4bK-51cf4fc7-149461.800  
 From: <sip:00002@sip.com>  
 To: <sip:00002@sip.com>  
 Call-ID: 5a91016c@00002.192.168.1.1  
 CSeq: 3 REGISTER  
 Contact: <sip:00002@192.168.2.12>;expires=3600  
 Authorization: Digest username="00002", realm="heliossv2", nonce="16bdce79fe518f5e39379f550f44d468",  
 uri="sip:192.168.1.1", response="c98eaac9af632a19acfa23e4aa49178e", algorithm=MD5, cnonce="616ee439",  
 opaque="543377352bbb0c00bd2b11f264766084", qop=auth, nc=00000001  
 Max-Forwards: 70  
 User-Agent: △△△△△△ //端末種別

Content-Length: 0

F27 192.168.1.1:5062 (Server) -> 192.168.2.12:5060()

SIP/2.0 200 OK  
 Via: SIP/2.0/UDP 192.168.2.12:5060:branch=z9hG4bK-51cf4fc7-149461.800

From: <sip:00002@sip.com>  
To: <sip:00002@sip.com>  
Call-ID: 5a91016c@00002.192.168.1.1  
CSeq: 3 REGISTER  
Contact: <sip:00002@192.168.2.12>;expires=3600  
Content-Length: 0

=====



## 11.8.15. 通話中ハンドオーバー(IP アドレスの変更あり)

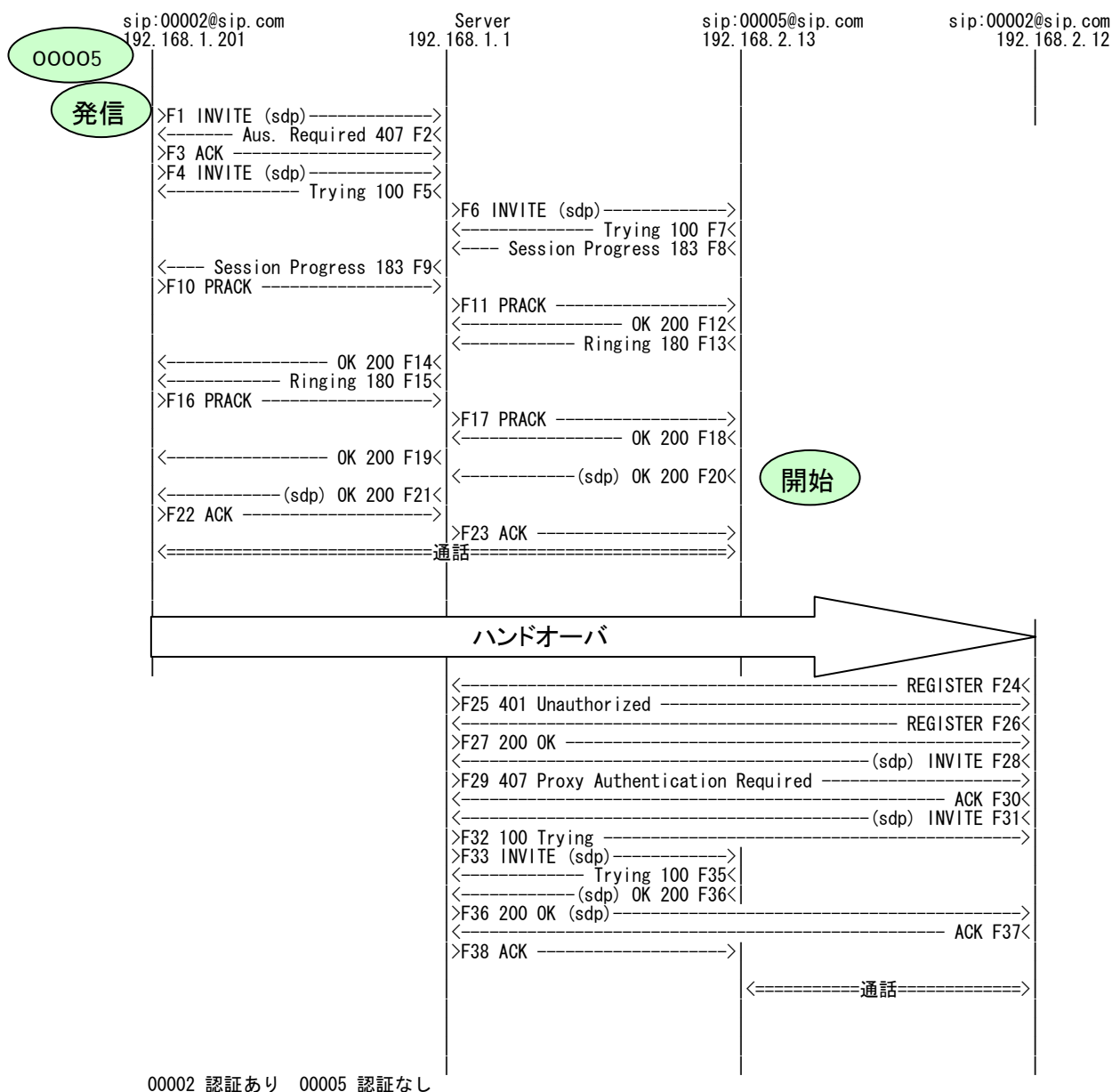


図 11-54 通話中ハンドオーバー (IP アドレスの変更あり)

F1 192.168.1.201:1201() -&gt; 192.168.1.1:5060(Server)

```

INVITE sip:00005@192.168.2.13 SIP/2.0
Via: SIP/2.0/UDP 192.168.1.201:5060;branch=z9hG4bK-4f51664a-147283.742
Route: <sip:192.168.1.1:5060>
From: <sip:00002@192.168.1.201>;tag=07b58f9b
To: <sip:00005@192.168.2.13>
Call-ID: 7ee37577@00002.192.168.1.1
CSeq: 1436024609 INVITE
Contact: <sip:00002@192.168.1.201>
Proxy-Authorization: Digest username="00002", realm="heliossv2", nonce="d35d5f88c1b648dea6dd41ab2c541228",
uri="sip:00005@192.168.2.13", response="d52c6e8f57d73095689b1801a7666785", algorithm=MD5, cnonce="0a679534",
opaque="b56cb7993f75ef6a410f35728bec407e", qop=auth, nc=00000004
Max-Forwards: 70
Supported: 100rel, replaces

```

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Allow: INVITE, ACK, BYE, CANCEL, OPTIONS, PRACK, MESSAGE, REFER, NOTIFY  
Content-Type: application/sdp  
Accept: application/sdp, message/sipfrag  
Content-Length: 251

v=0  
o=- 725192 501 IN IP4 192.168.1.201  
s=-  
c=IN IP4 192.168.1.201  
t=0 0  
m=audio 5006 RTP/AVP 0 8 4 18 96  
a=rtpmap:0 PCMU/8000  
a=rtpmap:8 PCMA/8000  
a=rtpmap:4 G723/8000  
a=rtpmap:18 G729/8000  
a=rtpmap:96 telephone-event/8000  
a=fmtp:96 0-11

---

F2 192.168.1.1:5062(Server) -> 192.168.1.201:5060()

SIP/2.0 407 Proxy Authentication Required  
Via: SIP/2.0/UDP 192.168.1.201:5060;branch=z9hG4bK-4f51664a-147283.742  
From: <sip:00002@sip.com>;tag=07b58f9b  
To: <sip:00005@sip.com>  
Call-ID: 7ee37577@00002.192.168.1.1  
CSeq: 1436024609 INVITE  
Proxy-Authenticate: Digest realm="heliossv2", nonce="333b11d58f36ae6ba1e4df64cab63bcf",  
opaque="0cde8c729ee09732d475036f6f2e7d89", stale=false, algorithm=MD5, qop="auth,auth-int"  
Content-Length: 0

---

F3 192.168.1.201:1201() -> 192.168.1.1:5060(Server)

ACK sip:00005@sip.com SIP/2.0  
Via: SIP/2.0/UDP 192.168.1.201:5060;branch=z9hG4bK-4f51664a-147283.742  
Route: <sip:192.168.1.1:5060>  
From: <sip:00002@sip.com>;tag=07b58f9b  
To: <sip:00005@sip.com>  
Call-ID: 7ee37577@00002.192.168.1.1  
CSeq: 1436024609 ACK  
Content-Length: 0

---

F4 192.168.1.201:1201() -> 192.168.1.1:5060(Server)

INVITE sip:00005@sip.com SIP/2.0  
Via: SIP/2.0/UDP 192.168.1.201:5060;branch=z9hG4bK-208900b4-147284.892  
Route: <sip:192.168.1.1:5060>  
From: <sip:00002@sip.com>;tag=07b58f9b  
To: <sip:00005@sip.com>  
Call-ID: 7ee37577@00002.192.168.1.1  
CSeq: 1436024610 INVITE  
Contact: <sip:00002@192.168.1.201>  
Proxy-Authorization: Digest username="00002", realm="heliossv2", nonce="333b11d58f36ae6ba1e4df64cab63bcf",  
uri="sip:00005@sip.com", response="ef0015c1b6d1ee5cb03297ce83e5e7eb", algorithm=MD5, cnonce="114b46e8",  
opaque="0cde8c729ee09732d475036f6f2e7d89", qop=auth, nc=00000001  
Max-Forwards: 70  
Supported: 100rel, replaces  
Allow: INVITE, ACK, BYE, CANCEL, OPTIONS, PRACK, MESSAGE, REFER, NOTIFY  
Content-Type: application/sdp  
Accept: application/sdp, message/sipfrag  
Content-Length: 251

v=0  
o=- 725192 501 IN IP4 192.168.1.201  
s=-  
c=IN IP4 192.168.1.201  
t=0 0  
m=audio 5006 RTP/AVP 0 8 4 18 96  
a=rtpmap:0 PCMU/8000  
a=rtpmap:8 PCMA/8000  
a=rtpmap:4 G723/8000  
a=rtpmap:18 G729/8000  
a=rtpmap:96 telephone-event/8000  
a=fmtp:96 0-11

```
=====
F5      192.168.1.1:5062(Server) -> 192.168.1.201:5060()

SIP/2.0 100 Trying
Via: SIP/2.0/UDP 192.168.1.201:5060;branch=z9hG4bK-208900b4-147284.892
From: <sip:00002@sip.com>;tag=07b58f9b
To: <sip:00005@sip.com>
Call-ID: 7ee37577@00002.192.168.1.1
CSeq: 1436024610 INVITE
Content-Length: 0
=====
```

```
=====
F6      192.168.1.1:5062(Server) -> 192.168.2.13:5060()

INVITE sip:00005@192.168.2.13 SIP/2.0
Via: SIP/2.0/UDP 192.168.1.1:5060;branch=z9hG4bK-1150.771589.1436024610
Via: SIP/2.0/UDP 192.168.1.201:5060;branch=z9hG4bK-208900b4-147284.892
Record-Route: <sip:00005@192.168.1.1>
Route: <sip:192.168.1.1:5060>
From: 00002 <sip:00002@sip.com>;tag=07b58f9b
To: <sip:00005@sip.com>
Call-ID: 7ee37577@00002.192.168.1.1
CSeq: 1436024610 INVITE
Contact: <sip:00002@192.168.1.201>
max-forwards: 69
supported: 100rel
supported: replaces
Allow: INVITE, ACK, BYE, CANCEL, OPTIONS, PRACK, MESSAGE, REFER, NOTIFY
Content-Type: application/sdp
Accept: application/sdp, message/sipfrag
Content-Length: 251

v=0
o=- 725192 501 IN IP4 192.168.1.201
s=-
c=IN IP4 192.168.1.201
t=0 0
m=audio 5006 RTP/AVP 0 8 4 18 96
a=rtpmap:0 PCMU/8000
a=rtpmap:8 PCMA/8000
a=rtpmap:4 G723/8000
a=rtpmap:18 G729/8000
a=rtpmap:96 telephone-event/8000
a=fmtp:96 0-11
=====
```

```
=====
F7      192.168.2.13:1109() -> 192.168.1.1:5060(Server)

SIP/2.0 100 Trying
Via: SIP/2.0/UDP 192.168.1.1:5060;branch=z9hG4bK-1150.771589.1436024610
Via: SIP/2.0/UDP 192.168.1.201:5060;branch=z9hG4bK-208900b4-147284.892
From: 00002 <sip:00002@sip.com>;tag=07b58f9b
To: <sip:00005@sip.com>
Call-ID: 7ee37577@00002.192.168.1.1
CSeq: 1436024610 INVITE
Content-Length: 0
=====
```

```
=====
F8      192.168.2.13:1109() -> 192.168.1.1:5060(Server)

SIP/2.0 183 Session Progress
Via: SIP/2.0/UDP 192.168.1.1:5060;branch=z9hG4bK-1150.771589.1436024610
Via: SIP/2.0/UDP 192.168.1.201:5060;branch=z9hG4bK-208900b4-147284.892
Record-Route: <sip:00005@192.168.1.1>
From: 00002 <sip:00002@sip.com>;tag=07b58f9b
To: <sip:00005@sip.com>;tag=1f87ab63
Call-ID: 7ee37577@00002.192.168.1.1
CSeq: 1436024610 INVITE
Contact: <sip:00005@192.168.2.13>
Require: 100rel
RSeq: 1299473118
Content-Length: 0
=====
```

F9 192.168.1.1:5062 (Server) -> 192.168.1.201:5060 ()

SIP/2.0 183 Session Progress  
Via: SIP/2.0/UDP 192.168.1.201:5060;branch=z9hG4bK-208900b4-147284.892  
Record-Route: <sip:00005@192.168.1.1>  
From: 00002 <sip:00002@sip.com>;tag=07b58f9b  
To: <sip:00005@sip.com>;tag=1f87ab63  
Call-ID: 7ee37577@00002.192.168.1.1  
CSeq: 1436024610 INVITE  
Contact: <sip:00005@192.168.2.13>  
require: 100rel  
rseq: 1299473118  
Content-Length: 0

F10 192.168.1.201:1201 () -> 192.168.1.1:5060 (Server)

PRACK sip:00005@192.168.1.1 SIP/2.0  
Via: SIP/2.0/UDP 192.168.1.201:5060;branch=z9hG4bK-17a0e98a-147285.588  
Route: <sip:00005@192.168.2.13>  
From: 00002 <sip:00002@sip.com>;tag=07b58f9b  
To: <sip:00005@sip.com>;tag=1f87ab63  
Call-ID: 7ee37577@00002.192.168.1.1  
CSeq: 1436024611 PRACK  
Proxy-Authorization: Digest username="00002", realm="heliossv2", nonce="333b11d58f36ae6ba1e4df64cab63bcf",  
uri="sip:00005@192.168.1.1", response="a000df99736794a77df533df22f7204d", algorithm=MD5, cnonce="32a64599",  
opaque="0cde8c729ee09732d475036f6f2e7d89", qop=auth, nc=00000002  
Max-Forwards: 70  
RAck: 1299473118 1436024610 INVITE  
Content-Length: 0

F11 192.168.1.1:5062 (Server) -> 192.168.2.13:5060 ()

PRACK sip:00005@192.168.2.13 SIP/2.0  
Via: SIP/2.0/UDP 192.168.1.1:5060;branch=z9hG4bK-1150.1083675654.1436024611  
Via: SIP/2.0/UDP 192.168.1.201:5060;branch=z9hG4bK-17a0e98a-147285.588  
Route: <sip:00005@192.168.2.13>  
From: 00002 <sip:00002@sip.com>;tag=07b58f9b  
To: <sip:00005@sip.com>;tag=1f87ab63  
Call-ID: 7ee37577@00002.192.168.1.1  
CSeq: 1436024611 PRACK  
max-forwards: 69  
rack: 1299473118 1436024610 INVITE  
Content-Length: 0

F12 192.168.2.13:1109 () -> 192.168.1.1:5060 (Server)

SIP/2.0 200 OK  
Via: SIP/2.0/UDP 192.168.1.1:5060;branch=z9hG4bK-1150.1083675654.1436024611  
Via: SIP/2.0/UDP 192.168.1.201:5060;branch=z9hG4bK-17a0e98a-147285.588  
From: 00002 <sip:00002@sip.com>;tag=07b58f9b  
To: <sip:00005@sip.com>;tag=1f87ab63  
Call-ID: 7ee37577@00002.192.168.1.1  
CSeq: 1436024611 PRACK  
Content-Length: 0

F13 192.168.2.13:1109 () -> 192.168.1.1:5060 (Server)

SIP/2.0 180 Ringing  
Via: SIP/2.0/UDP 192.168.1.1:5060;branch=z9hG4bK-1150.771589.1436024610  
Via: SIP/2.0/UDP 192.168.1.201:5060;branch=z9hG4bK-208900b4-147284.892  
Record-Route: <sip:00005@192.168.1.1>  
From: 00002 <sip:00002@sip.com>;tag=07b58f9b  
To: <sip:00005@sip.com>;tag=1f87ab63  
Call-ID: 7ee37577@00002.192.168.1.1  
CSeq: 1436024610 INVITE  
Contact: <sip:00005@192.168.2.13>  
Require: 100rel

RSeq: 1299473119  
Content-Length: 0

F14 192.168.1.1:5062(Server) -> 192.168.1.201:5060()

SIP/2.0 200 OK  
Via: SIP/2.0/UDP 192.168.1.201:5060;branch=z9hG4bK-17a0e98a-147285.588  
From: 00002 <sip:00002@sip.com>;tag=07b58f9b  
To: <sip:00005@sip.com>;tag=1f87ab63  
Call-ID: 7ee37577@00002.192.168.1.1  
CSeq: 1436024611 PRACK  
Content-Length: 0

F15 192.168.1.1:5062(Server) -> 192.168.1.201:5060()

SIP/2.0 180 Ringing  
Via: SIP/2.0/UDP 192.168.1.201:5060;branch=z9hG4bK-208900b4-147284.892  
Record-Route: <sip:00005@192.168.1.1>  
From: 00002 <sip:00002@sip.com>;tag=07b58f9b  
To: <sip:00005@sip.com>;tag=1f87ab63  
Call-ID: 7ee37577@00002.192.168.1.1  
CSeq: 1436024610 INVITE  
Contact: <sip:00005@192.168.2.13>  
require: 100rel  
rseq: 1299473119  
Content-Length: 0

F16 192.168.1.201:1201() -> 192.168.1.1:5060(Server)

PRACK sip:00005@192.168.1.1 SIP/2.0  
Via: SIP/2.0/UDP 192.168.1.201:5060;branch=z9hG4bK-5afd99f9-147285.701  
Route: <sip:00005@192.168.2.13>  
From: 00002 <sip:00002@sip.com>;tag=07b58f9b  
To: <sip:00005@sip.com>;tag=1f87ab63  
Call-ID: 7ee37577@00002.192.168.1.1  
CSeq: 1436024612 PRACK  
Proxy-Authorization: Digest username="00002", realm="heliossv2", nonce="333b11d58f36ae6ba1e4df64cab63bcf", uri="sip:00005@192.168.1.1", response="93c8e12a443f9d8cba78e95b40916fc2", algorithm=MD5, cnonce="2730ea62", opaque="0cde8c729ee09732d475036f6f2e7d89", qop=auth, nc=00000003  
Max-Forwards: 70  
RAck: 1299473119 1436024610 INVITE  
Content-Length: 0

F17 192.168.1.1:5062(Server) -> 192.168.2.13:5060()

PRACK sip:00005@192.168.2.13 SIP/2.0  
Via: SIP/2.0/UDP 192.168.1.1:5060;branch=z9hG4bK-1150.1083675654.1436024612  
Via: SIP/2.0/UDP 192.168.1.201:5060;branch=z9hG4bK-5afd99f9-147285.701  
Route: <sip:00005@192.168.2.13>  
From: 00002 <sip:00002@sip.com>;tag=07b58f9b  
To: <sip:00005@sip.com>;tag=1f87ab63  
Call-ID: 7ee37577@00002.192.168.1.1  
CSeq: 1436024612 PRACK  
max-forwards: 69  
rack: 1299473119 1436024610 INVITE  
Content-Length: 0

F18 192.168.2.13:1109() -> 192.168.1.1:5060(Server)

SIP/2.0 200 OK  
Via: SIP/2.0/UDP 192.168.1.1:5060;branch=z9hG4bK-1150.1083675654.1436024612  
Via: SIP/2.0/UDP 192.168.1.201:5060;branch=z9hG4bK-5afd99f9-147285.701  
From: 00002 <sip:00002@sip.com>;tag=07b58f9b  
To: <sip:00005@sip.com>;tag=1f87ab63  
Call-ID: 7ee37577@00002.192.168.1.1  
CSeq: 1436024612 PRACK

Content-Length: 0

=====

F19 192.168.1.1:5062 (Server) -&gt; 192.168.1.201:5060 ()

SIP/2.0 200 OK  
 Via: SIP/2.0/UDP 192.168.1.201:5060;branch=z9hG4bK-5afd99f9-147285.701  
 From: 00002 <sip:00002@sip.com>;tag=07b58f9b  
 To: <sip:00005@sip.com>;tag=1f87ab63  
 Call-ID: 7ee37577@00002.192.168.1.1  
 CSeq: 1436024612 PRACK  
 Content-Length: 0

=====

F20 192.168.2.13:1109 () -&gt; 192.168.1.1:5060 (Server)

SIP/2.0 200 OK  
 Via: SIP/2.0/UDP 192.168.1.1:5060;branch=z9hG4bK-1150.771589.1436024610  
 Via: SIP/2.0/UDP 192.168.1.201:5060;branch=z9hG4bK-208900b4-147284.892  
 Record-Route: <sip:00005@192.168.1.1>  
 From: 00002 <sip:00002@sip.com>;tag=07b58f9b  
 To: <sip:00005@sip.com>;tag=1f87ab63  
 Call-ID: 7ee37577@00002.192.168.1.1  
 CSeq: 1436024610 INVITE  
 Contact: <sip:00005@192.168.2.13>  
 Supported: 100rel, replaces  
 Allow: INVITE, ACK, BYE, CANCEL, OPTIONS, PRACK, MESSAGE, REFER, NOTIFY  
 Content-Type: application/sdp  
 Accept: application/sdp, message/sipfrag  
 Content-Length: 177

v=0  
 o=- 497392 13201 IN IP4 192.168.2.13  
 s=-  
 c=IN IP4 192.168.2.13  
 t=0 0  
 m=audio 5008 RTP/AVP 0 96  
 a=rtpmap:0 PCMU/8000  
 a=rtpmap:96 telephone-event/8000  
 a=fmtp:96 0-11

=====

F21 192.168.1.1:5062 (Server) -&gt; 192.168.1.201:5060 ()

SIP/2.0 200 OK  
 Via: SIP/2.0/UDP 192.168.1.201:5060;branch=z9hG4bK-208900b4-147284.892  
 Record-Route: <sip:00005@192.168.1.1>  
 From: 00002 <sip:00002@sip.com>;tag=07b58f9b  
 To: <sip:00005@sip.com>;tag=1f87ab63  
 Call-ID: 7ee37577@00002.192.168.1.1  
 CSeq: 1436024610 INVITE  
 Contact: <sip:00005@192.168.2.13>  
 supported: 100rel  
 supported: replaces  
 Allow: INVITE, ACK, BYE, CANCEL, OPTIONS, PRACK, MESSAGE, REFER, NOTIFY  
 Content-Type: application/sdp  
 Accept: application/sdp, message/sipfrag  
 Content-Length: 177

v=0  
 o=- 497392 13201 IN IP4 192.168.2.13  
 s=-  
 c=IN IP4 192.168.2.13  
 t=0 0  
 m=audio 5008 RTP/AVP 0 96  
 a=rtpmap:0 PCMU/8000  
 a=rtpmap:96 telephone-event/8000  
 a=fmtp:96 0-11

=====

F22 192.168.1.201:1201 () -&gt; 192.168.1.1:5060 (Server)

ACK sip:00005@192.168.1.1 SIP/2.0  
 Via: SIP/2.0/UDP 192.168.1.201:5060;branch=z9hG4bK-76ebc8ef-147289.609  
 Route: <sip:00005@192.168.2.13>

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From: 00002 <sip:00002@sip.com>;tag=07b58f9b  
To: <sip:00005@sip.com>;tag=1f87ab63  
Call-ID: 7ee37577@00002.192.168.1.1  
CSeq: 1436024610 ACK  
Proxy-Authorization: Digest username="00002", realm="heliossv2", nonce="333b11d58f36ae6ba1e4df64cab63bcf",  
uri="sip:00005@sip.com", response="ef0015c1b6d1ee5cb03297ce83e5e7eb", algorithm=MD5, cnonce="114b46e8",  
opaque="0cde8c729ee09732d475036f6f2e7d89", qop=auth, nc=00000001  
Max-Forwards: 70  
Content-Length: 0

F23 192.168.1.1:5062 (Server) -> 192.168.2.13:5060()

ACK sip:00005@192.168.2.13 SIP/2.0  
Via: SIP/2.0/UDP 192.168.1.1:5060;branch=z9hG4bK-1150.1083675658.1436024610  
Via: SIP/2.0/UDP 192.168.1.201:5060;branch=z9hG4bK-76ebc8ef-147289.609  
From: 00002 <sip:00002@sip.com>;tag=07b58f9b  
To: <sip:00005@sip.com>;tag=1f87ab63  
Call-ID: 7ee37577@00002.192.168.1.1  
CSeq: 1436024610 ACK  
max-forwards: 69  
Content-Length: 0

F24 192.168.2.12:1203() -> 192.168.1.1:5060 (Server)

REGISTER sip:192.168.1.1 SIP/2.0  
Via: SIP/2.0/UDP 192.168.2.12:5060;branch=z9hG4bK-6f267bdc-147300.817  
From: <sip:00002@sip.com>  
To: <sip:00002@sip.com>  
Call-ID: 0d1cd341@00002.192.168.1.1  
CSeq: 8 REGISTER  
Contact: <sip:00002@192.168.2.12>;expires=3600  
Authorization: Digest username="00002", realm="heliossv2", nonce="20d2dd42f9d907096389855aae86b65e",  
uri="sip:192.168.1.1", response="addf47525e8ebf055624e1572e941de5", algorithm=MD5, cnonce="1967f0b6",  
opaque="9e6a35ba8f90272c29ce2f480fa5d753", qop=auth, nc=00000002  
Max-Forwards: 70  
User-Agent: △△△△△△ //端末種別

Content-Length: 0

F25 192.168.1.1:5062 (Server) -> 192.168.2.12:5060()

SIP/2.0 401 Unauthorized  
Via: SIP/2.0/UDP 192.168.2.12:5060;branch=z9hG4bK-6f267bdc-147300.817  
From: <sip:00002@sip.com>  
To: <sip:00002@sip.com>  
Call-ID: 0d1cd341@00002.192.168.1.1  
CSeq: 8 REGISTER  
WWW-Authenticate: Digest realm="heliossv2", nonce="1d4c00d2427d997f12a1a1d664aeb183",  
opaque="1ad172d0acdaba1b0f3e7811b5d6bb3b", stale=false, algorithm=MD5, qop="auth,auth-int"  
Content-Length: 0

F26 192.168.2.12:1203() -> 192.168.1.1:5060 (Server)

REGISTER sip:192.168.1.1 SIP/2.0  
Via: SIP/2.0/UDP 192.168.2.12:5060;branch=z9hG4bK-52e88ffc-147301.031  
From: <sip:00002@sip.com>  
To: <sip:00002@sip.com>  
Call-ID: 0d1cd341@00002.192.168.1.1  
CSeq: 9 REGISTER  
Contact: <sip:00002@192.168.2.12>;expires=3600  
Authorization: Digest username="00002", realm="heliossv2", nonce="1d4c00d2427d997f12a1a1d664aeb183",  
uri="sip:192.168.1.1", response="08f37f0056eff195a1235a92b54be10d", algorithm=MD5, cnonce="6b138af4",  
opaque="1ad172d0acdaba1b0f3e7811b5d6bb3b", qop=auth, nc=00000001  
Max-Forwards: 70  
User-Agent: △△△△△△ //端末種別

Content-Length: 0

F27 192.168.1.1:5062(Server) -> 192.168.2.12:5060()

SIP/2.0 200 OK  
Via: SIP/2.0/UDP 192.168.2.12:5060;branch=z9hG4bK-52e88ffc-147301.031  
From: <sip:00002@sip.com>  
To: <sip:00002@sip.com>  
Call-ID: 0d1cd341@00002.192.168.1.1  
CSeq: 9 REGISTER  
Contact: <sip:00002@192.168.2.12>;expires=3600  
Date: Tue, 04 May 2004 13:01:10 GMT  
Content-Length: 0

F28 192.168.2.12:1203() -> 192.168.1.1:5060(Server)

INVITE sip:00005@192.168.1.1 SIP/2.0  
Via: SIP/2.0/UDP 192.168.2.12:5060;branch=z9hG4bK-6b6ae251-147301.118  
Route: <sip:00005@192.168.2.13>  
From: 00002 <sip:00002@sip.com>;tag=07b58f9b  
To: <sip:00005@sip.com>;tag=1f87ab63  
Call-ID: 7ee37577@00002.192.168.1.1  
CSeq: 1436024613 INVITE  
Contact: <sip:00002@192.168.2.12>  
Max-Forwards: 70  
Supported: 100rel, replaces  
Allow: INVITE, ACK, BYE, CANCEL, OPTIONS, PRACK, MESSAGE, REFER, NOTIFY  
Content-Type: application/sdp  
Content-Length: 249

v=0  
o=- 106637 502 IN IP4 192.168.2.12  
s=-  
c=IN IP4 192.168.2.12  
t=0 0  
m=audio 5006 RTP/AVP 0 8 4 18 96  
a=rtpmap:0 PCMU/8000  
a=rtpmap:8 PCMA/8000  
a=rtpmap:4 G723/8000  
a=rtpmap:18 G729/8000  
a=rtpmap:96 telephone-event/8000  
a=fmtp:96 0-11

F29 192.168.1.1:5062(Server) -> 192.168.2.12:5060()

SIP/2.0 407 Proxy Authentication Required  
Via: SIP/2.0/UDP 192.168.2.12:5060;branch=z9hG4bK-6b6ae251-147301.118  
From: 00002 <sip:00002@sip.com>;tag=07b58f9b  
To: <sip:00005@sip.com>;tag=1f87ab63  
Call-ID: 7ee37577@00002.192.168.1.1  
CSeq: 1436024613 INVITE  
Proxy-Authenticate: Digest realm="heliossv2", nonce="d8fb97e4545f07e01c9d3d72d0883f69",  
opaque="eb6705d948b4d805b43de04025baabd4", stale=false, algorithm=MD5, qop="auth,auth-int"  
Content-Length: 0

F30 192.168.2.12:1203() -> 192.168.1.1:5060(Server)

ACK sip:00005@192.168.1.1 SIP/2.0  
Via: SIP/2.0/UDP 192.168.2.12:5060;branch=z9hG4bK-6b6ae251-147301.118  
Route: <sip:00005@192.168.2.13>  
From: 00002 <sip:00002@sip.com>;tag=07b58f9b  
To: <sip:00005@sip.com>;tag=1f87ab63  
Call-ID: 7ee37577@00002.192.168.1.1  
CSeq: 1436024613 ACK  
Content-Length: 0

F31 192.168.2.12:1203() -> 192.168.1.1:5060(Server)

INVITE sip:00005@192.168.1.1 SIP/2.0  
Via: SIP/2.0/UDP 192.168.2.12:5060;branch=z9hG4bK-47e1eeb1-147301.545



Route: <sip:00005@192.168.2.13>  
 From: 00002 <sip:00002@sip.com>;tag=07b58f9b  
 To: <sip:00005@sip.com>;tag=1f87ab63  
 Call-ID: 7ee37577@00002.192.168.1.1  
 CSeq: 1436024614 INVITE  
 Contact: <sip:00002@192.168.2.12>  
 Proxy-Authorization: Digest username="00002", realm="heliossv2", nonce="d8fb97e4545f07e01c9d3d72d0883f69",  
 uri="sip:00005@192.168.1.1", response="2f4175e31df95332545d1ffefce29d0", algorithm=MD5, cnonce="1dd47bb7",  
 opaque="eb6705d948b4d805b43de04025baabd4", qop=auth, nc=00000001  
 Max-Forwards: 70  
 Supported: 100rel, replaces  
 Allow: INVITE, ACK, BYE, CANCEL, OPTIONS, PRACK, MESSAGE, REFER, NOTIFY  
 Content-Type: application/sdp  
 Content-Length: 249

v=0  
 o=- 106637 502 IN IP4 192.168.2.12  
 s=-  
 c=IN IP4 192.168.2.12  
 t=0 0  
 m=audio 5006 RTP/AVP 0 8 4 18 96  
 a=rtpmap:0 PCMU/8000  
 a=rtpmap:8 PCMA/8000  
 a=rtpmap:4 G723/8000  
 a=rtpmap:18 G729/8000  
 a=rtpmap:96 telephone-event/8000  
 a=fmtp:96 0-11

=====

F32 192.168.1.1:5062(Server) -> 192.168.2.12:5060()

SIP/2.0 100 Trying  
 Via: SIP/2.0/UDP 192.168.2.12:5060;branch=z9hG4bK-47e1eeb1-147301.545  
 From: 00002 <sip:00002@sip.com>;tag=07b58f9b  
 To: <sip:00005@sip.com>;tag=1f87ab63  
 Call-ID: 7ee37577@00002.192.168.1.1  
 CSeq: 1436024614 INVITE  
 Content-Length: 0

=====

F33 192.168.1.1:5062(Server) -> 192.168.2.13:5060()

INVITE sip:00005@192.168.2.13 SIP/2.0  
 Via: SIP/2.0/UDP 192.168.1.1:5060;branch=z9hG4bK-1154.321419.1436024614  
 Via: SIP/2.0/UDP 192.168.2.12:5060;branch=z9hG4bK-47e1eeb1-147301.545  
 Record-Route: <sip:00005@192.168.1.1>  
 Route: <sip:00005@192.168.2.13>  
 From: 00002 <sip:00002@sip.com>;tag=07b58f9b  
 To: <sip:00005@sip.com>;tag=1f87ab63  
 Call-ID: 7ee37577@00002.192.168.1.1  
 CSeq: 1436024614 INVITE  
 Contact: <sip:00002@192.168.2.12>  
 max-forwards: 69  
 supported: 100rel  
 supported: replaces  
 Allow: INVITE, ACK, BYE, CANCEL, OPTIONS, PRACK, MESSAGE, REFER, NOTIFY  
 Content-Type: application/sdp  
 Content-Length: 249

v=0  
 o=- 106637 502 IN IP4 192.168.2.12  
 s=-  
 c=IN IP4 192.168.2.12  
 t=0 0  
 m=audio 5006 RTP/AVP 0 8 4 18 96  
 a=rtpmap:0 PCMU/8000  
 a=rtpmap:8 PCMA/8000  
 a=rtpmap:4 G723/8000  
 a=rtpmap:18 G729/8000  
 a=rtpmap:96 telephone-event/8000  
 a=fmtp:96 0-11

=====

F34 192.168.2.13:1109() -> 192.168.1.1:5060(Server)

SIP/2.0 100 Trying  
 Via: SIP/2.0/UDP 192.168.1.1:5060;branch=z9hG4bK-1154.321419.1436024614

## FOMA/WLAN デュアル端末に関する技術参考資料 第 1.2 版

Via: SIP/2.0/UDP 192.168.2.12:5060;branch=z9hG4bK-47e1eeb1-147301.545  
From: 00002 <sip:00002@sip.com>;tag=07b58f9b  
To: <sip:00005@sip.com>;tag=1f87ab63  
Call-ID: 7ee37577@00002.192.168.1.1  
CSeq: 1436024614 INVITE  
Content-Length: 0

---

F35 192.168.2.13:1109() -> 192.168.1.1:5060(Server)

SIP/2.0 200 OK  
Via: SIP/2.0/UDP 192.168.1.1:5060;branch=z9hG4bK-1154.321419.1436024614  
Via: SIP/2.0/UDP 192.168.2.12:5060;branch=z9hG4bK-47e1eeb1-147301.545  
Record-Route: <sip:00005@192.168.1.1>  
From: 00002 <sip:00002@sip.com>;tag=07b58f9b  
To: <sip:00005@sip.com>;tag=1f87ab63  
Call-ID: 7ee37577@00002.192.168.1.1  
CSeq: 1436024614 INVITE  
Contact: <sip:00005@192.168.2.13>  
Supported: 100rel, replaces  
Allow: INVITE, ACK, BYE, CANCEL, OPTIONS, PRACK, MESSAGE, REFER, NOTIFY  
Content-Type: application/sdp  
Accept: application/sdp, message/sipfrag  
Content-Length: 177

v=0  
o=- 968534 13201 IN IP4 192.168.2.13  
s=-  
c=IN IP4 192.168.2.13  
t=0 0  
m=audio 5008 RTP/AVP 0 96  
a=rtpmap:0 PCMU/8000  
a=rtpmap:96 telephone-event/8000  
a=fmtp:96 0-11

---

F36 192.168.1.1:5062(Server) -> 192.168.2.12:5060()

SIP/2.0 200 OK  
Via: SIP/2.0/UDP 192.168.2.12:5060;branch=z9hG4bK-47e1eeb1-147301.545  
Record-Route: <sip:00005@192.168.1.1>  
From: 00002 <sip:00002@sip.com>;tag=07b58f9b  
To: <sip:00005@sip.com>;tag=1f87ab63  
Call-ID: 7ee37577@00002.192.168.1.1  
CSeq: 1436024614 INVITE  
Contact: <sip:00005@192.168.2.13>  
supported: 100rel  
supported: replaces  
Allow: INVITE, ACK, BYE, CANCEL, OPTIONS, PRACK, MESSAGE, REFER, NOTIFY  
Content-Type: application/sdp  
Accept: application/sdp, message/sipfrag  
Content-Length: 177

v=0  
o=- 968534 13201 IN IP4 192.168.2.13  
s=-  
c=IN IP4 192.168.2.13  
t=0 0  
m=audio 5008 RTP/AVP 0 96  
a=rtpmap:0 PCMU/8000  
a=rtpmap:96 telephone-event/8000  
a=fmtp:96 0-11

---

F37 192.168.2.12:1203() -> 192.168.1.1:5060(Server)

ACK sip:00005@192.168.1.1 SIP/2.0  
Via: SIP/2.0/UDP 192.168.2.12:5060;branch=z9hG4bK-4cb03be8-147301.727  
Route: <sip:00005@192.168.2.13>  
From: 00002 <sip:00002@sip.com>;tag=07b58f9b  
To: <sip:00005@sip.com>;tag=1f87ab63  
Call-ID: 7ee37577@00002.192.168.1.1  
CSeq: 1436024614 ACK  
Proxy-Authorization: Digest username="00002", realm="heliossv2", nonce="d8fb97e4545f07e01c9d3d72d0883f69",  
uri="sip:00005@192.168.1.1", response="2f4175e31df95332545d1ffefec29d0", algorithm=MD5, cnonce="1dd47bb7",  
opaque="eb6705d948b4d805b43de04025baabd4", qop=auth, nc=00000001  
Max-Forwards: 70

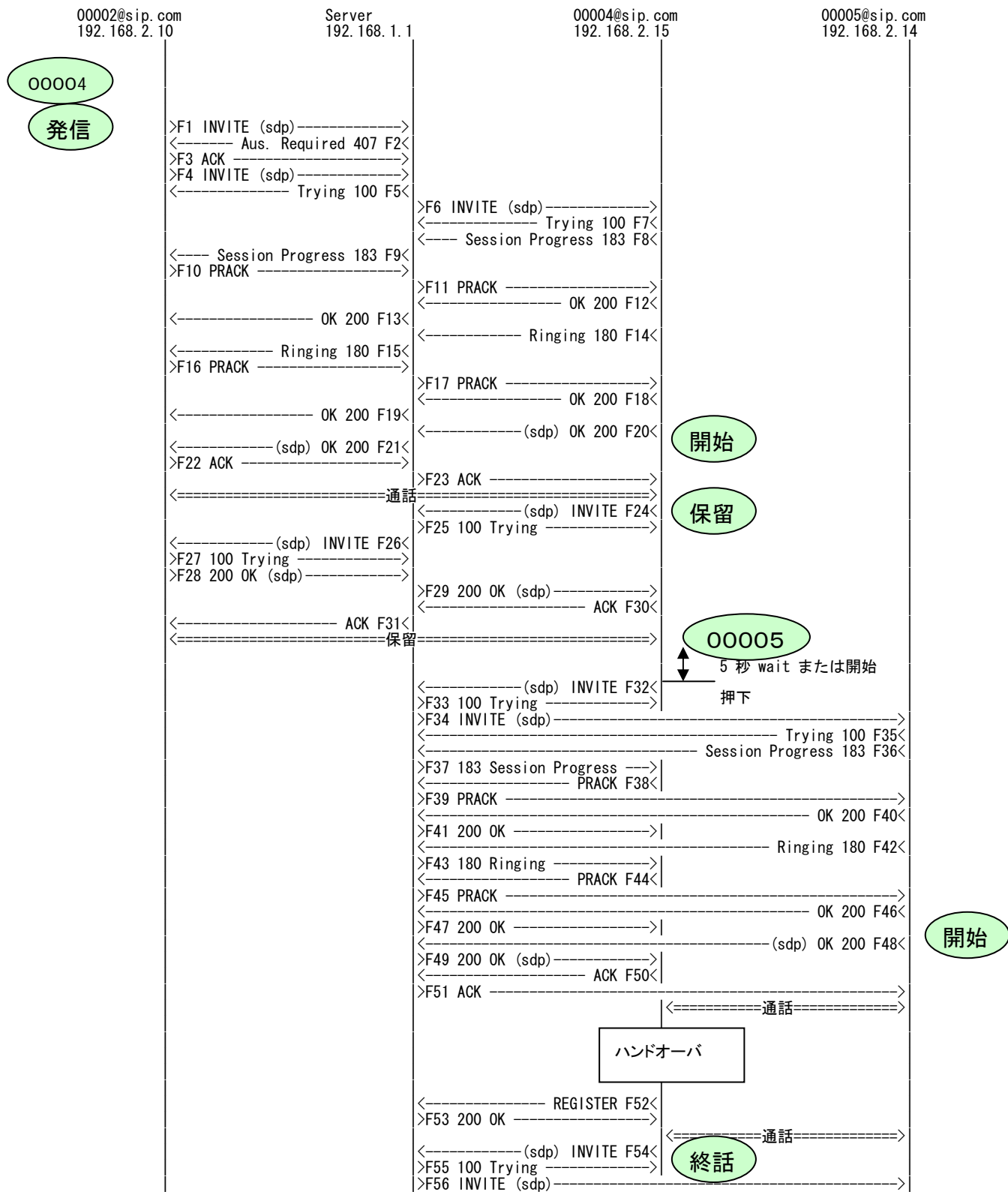
Content-Length: 0

```
=====
F38      192.168.1.1:5062(Server) -> 192.168.2.13:5060()

ACK sip:00005@192.168.2.13 SIP/2.0
Via: SIP/2.0/UDP 192.168.1.1:5060;branch=z9hG4bK-1154.1083675670.1436024614
Via: SIP/2.0/UDP 192.168.2.12:5060;branch=z9hG4bK-4cb03be8-147301.727
From: 00002 <sip:00002@sip.com>;tag=07b58f9b
To: <sip:00005@sip.com>;tag=1f87ab63
Call-ID: 7ee37577@00002.192.168.1.1
CSeq: 1436024614 ACK
max-forwards: 69
Content-Length: 0
=====
```

## 11.8.16. 転送中転送者ハンドオーバー(IP アドレスの変更なし)

IP アドレスの変更を伴わないハンドオーバーでは REGISTER は発生しないが、プロフィールが変更されるハンドオーバーでは REGISTER が行われる。この場合のシーケンスを示す。



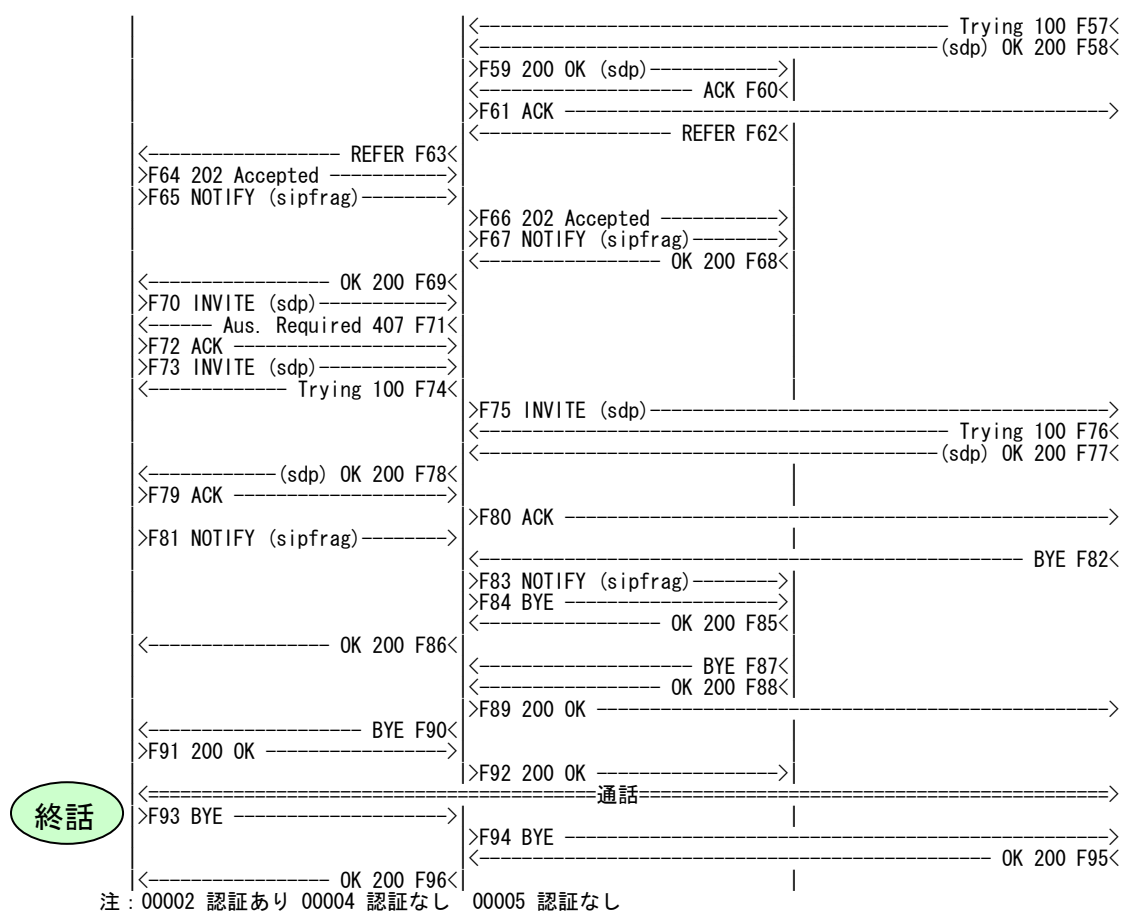


図 11-55 転送中転送者ハンドオーバー(IP アドレスの変更なし)

```

=====
F1          192.168.2.10:1105(1) -> 192.168.1.1:5060(2)

INVITE sip:00004@sip.com SIP/2.0
Via: SIP/2.0/UDP 192.168.2.10:5060;branch=z9hG4bK-5d9cf176-887375.139
Route: <sip:192.168.1.1:5060>
From: <sip:00002@sip.com>;tag=07ad2bec
To: <sip:00004@sip.com>
Call-ID: 7804e982@00002.192.168.1.1
CSeq: 316281173 INVITE
Contact: <sip:00002@192.168.2.10>
Proxy-Authorization: Digest username="00002", realm="heliossv2",
nonce="ddd63437d301f674bb827ab0547f26ef", uri="sip:00004@sip.com",
response="da5c3051897f30720a092faad028bb41", algorithm=MD5,
opaque="6fd00732a6bc327d5b447081e3c1bb1b", qop=auth, nc=00000004
Max-Forwards: 70
Supported: 100rel, replaces
Allow: INVITE, ACK, BYE, CANCEL, OPTIONS, PRACK, MESSAGE, REFER, NOTIFY
Content-Type: application/sdp
Accept: application/sdp, message/sipfrag
Content-Length: 250

v=0
o=- 124298 5301 IN IP4 192.168.2.10
s=-
c=IN IP4 192.168.2.10
t=0 0
m=audio 5008 RTP/AVP 0 8 4 18 96
a=rtpmap:0 PCMU/8000
a=rtpmap:8 PCMA/8000
a=rtpmap:4 G723/8000
a=rtpmap:18 G729/8000
a=rtpmap:96 telephone-event/8000
a=fmtp:96 0-11

```

F2 192.168.1.1:5062(2) -> 192.168.2.10:5060(1)

SIP/2.0 407 Proxy Authentication Required  
Via: SIP/2.0/UDP 192.168.2.10:5060;branch=z9hG4bK-5d9cf176-887375.139  
From: <sip:00002@sip.com>;tag=07ad2bec  
To: <sip:00004@sip.com>  
Call-ID: 7804e982@00002.192.168.1.1  
CSeq: 316281173 INVITE  
Proxy-Authenticate: Digest realm="heliossv2", nonce="2ff98618beddd8d000fbaee9d5a4e060",  
opaque="f93802f454ec8f5045dc5da529fe3186", stale=false, algorithm=MD5, qop="auth,auth-int"  
Content-Length: 0

F3 192.168.2.10:1105(1) -> 192.168.1.1:5060(2)

ACK sip:00004@sip.com SIP/2.0  
Via: SIP/2.0/UDP 192.168.2.10:5060;branch=z9hG4bK-5d9cf176-887375.139  
Route: <sip:192.168.1.1:5060>  
From: <sip:00002@sip.com>;tag=07ad2bec  
To: <sip:00004@sip.com>  
Call-ID: 7804e982@00002.192.168.1.1  
CSeq: 316281173 ACK  
Content-Length: 0

F4 192.168.2.10:1105(1) -> 192.168.1.1:5060(2)

INVITE sip:00004@sip.com SIP/2.0  
Via: SIP/2.0/UDP 192.168.2.10:5060;branch=z9hG4bK-26016902-887375.592  
Route: <sip:192.168.1.1:5060>  
From: <sip:00002@sip.com>;tag=07ad2bec  
To: <sip:00004@sip.com>  
Call-ID: 7804e982@00002.192.168.1.1  
CSeq: 316281174 INVITE  
Contact: <sip:00002@192.168.2.10>  
Proxy-Authorization: Digest username="00002", realm="heliossv2",  
nonce="2ff98618beddd8d000fbaee9d5a4e060", uri="sip:00004@sip.com",  
response="3dc4cfe94cc2e30cdfef300313718704", algorithm=MD5,  
opaque="f93802f454ec8f5045dc5da529fe3186", qop=auth, nc=00000001  
Max-Forwards: 70  
Supported: 100rel, replaces  
Allow: INVITE, ACK, BYE, CANCEL, OPTIONS, PRACK, MESSAGE, REFER, NOTIFY  
Content-Type: application/sdp  
Accept: application/sdp, message/sipfrag  
Content-Length: 250  
  
v=0  
o=- 124298 5301 IN IP4 192.168.2.10  
s=-  
c=IN IP4 192.168.2.10  
t=0 0  
m=audio 5008 RTP/AVP 0 8 4 18 96  
a=rtpmap:0 PCMU/8000  
a=rtpmap:8 PCMA/8000  
a=rtpmap:4 G723/8000  
a=rtpmap:18 G729/8000  
a=rtpmap:96 telephone-event/8000  
a=fmtp:96 0-11

F5 192.168.1.1:5062(2) -> 192.168.2.10:5060(1)

SIP/2.0 100 Trying  
Via: SIP/2.0/UDP 192.168.2.10:5060;branch=z9hG4bK-26016902-887375.592  
From: <sip:00002@sip.com>;tag=07ad2bec  
To: <sip:00004@sip.com>  
Call-ID: 7804e982@00002.192.168.1.1  
CSeq: 316281174 INVITE  
Content-Length: 0

F6 192.168.1.1:5062(2) -> 192.168.2.15:5060(3)

```

INVITE sip:00004@192.168.2.15 SIP/2.0
Via: SIP/2.0/UDP 192.168.1.1:5060;branch=z9hG4bK-866.141159.316281174
Via: SIP/2.0/UDP 192.168.2.10:5060;branch=z9hG4bK-26016902-887375.592
Record-Route: <sip:00004@192.168.1.1>
Route: <sip:192.168.1.1:5060>
From: 00002 <sip:00002@sip.com>;tag=07ad2bec
To: <sip:00004@sip.com>
Call-ID: 7804e982@00002.192.168.1.1
CSeq: 316281174 INVITE
Contact: <sip:00002@192.168.2.10>
max-forwards: 69
supported: 100rel
supported: replaces
Allow: INVITE, ACK, BYE, CANCEL, OPTIONS, PRACK, MESSAGE, REFER, NOTIFY
Content-Type: application/sdp
Accept: application/sdp, message/sipfrag
Content-Length: 250

```

```

v=0
o=- 124298 5301 IN IP4 192.168.2.10
s=-
c=IN IP4 192.168.2.10
t=0 0
m=audio 5008 RTP/AVP 0 8 4 18 96
a=rtpmap:0 PCMU/8000
a=rtpmap:8 PCMA/8000
a=rtpmap:4 G723/8000
a=rtpmap:18 G729/8000
a=rtpmap:96 telephone-event/8000
a=fmtp:96 0-11

```

```
=====
```

F7 192.168.2.15:1150(3) -> 192.168.1.1:5060(2)

```

SIP/2.0 100 Trying
Via: SIP/2.0/UDP 192.168.1.1:5060;branch=z9hG4bK-866.141159.316281174
Via: SIP/2.0/UDP 192.168.2.10:5060;branch=z9hG4bK-26016902-887375.592
From: 00002 <sip:00002@sip.com>;tag=07ad2bec
To: <sip:00004@sip.com>
Call-ID: 7804e982@00002.192.168.1.1
CSeq: 316281174 INVITE
Content-Length: 0

```

```
=====
```

F8 192.168.2.15:1150(3) -> 192.168.1.1:5060(2)

```

SIP/2.0 183 Session Progress
Via: SIP/2.0/UDP 192.168.1.1:5060;branch=z9hG4bK-866.141159.316281174
Via: SIP/2.0/UDP 192.168.2.10:5060;branch=z9hG4bK-26016902-887375.592
Record-Route: <sip:00004@192.168.1.1>
From: 00002 <sip:00002@sip.com>;tag=07ad2bec
To: <sip:00004@sip.com>;tag=71932467
Call-ID: 7804e982@00002.192.168.1.1
CSeq: 316281174 INVITE
Contact: <sip:00004@192.168.2.15>
Require: 100rel
RSeq: 1468694332
Content-Length: 0

```

```
=====
```

F9 192.168.1.1:5062(2) -> 192.168.2.10:5060(1)

```

SIP/2.0 183 Session Progress
Via: SIP/2.0/UDP 192.168.2.10:5060;branch=z9hG4bK-26016902-887375.592
Record-Route: <sip:00004@192.168.1.1>
From: 00002 <sip:00002@sip.com>;tag=07ad2bec
To: <sip:00004@sip.com>;tag=71932467
Call-ID: 7804e982@00002.192.168.1.1
CSeq: 316281174 INVITE
Contact: <sip:00004@192.168.2.15>
require: 100rel
rseq: 1468694332
Content-Length: 0

```

F10 192.168.2.10:1105(1) -> 192.168.1.1:5060(2)

PRACK sip:00004@192.168.1.1 SIP/2.0  
Via: SIP/2.0/UDP 192.168.2.10:5060;branch=z9hG4bK-2e57ac4d-887376.165  
Route: <sip:00004@192.168.2.15>  
From: 00002 <sip:00002@sip.com>;tag=07ad2bec  
To: <sip:00004@sip.com>;tag=71932467  
Call-ID: 7804e982@00002.192.168.1.1  
CSeq: 316281175 PRACK  
Proxy-Authorization: Digest username="00002", realm="heliossv2",  
nonce="2ff98618beddd8d000fbaee9d5a4e060", uri="sip:00004@192.168.1.1",  
response="195165f199d204b8b3b654e01f6c95dc", algorithm=MD5, cnonce="61417af5",  
opaque="f93802f454ec8f5045dc5da529fe3186", qop=auth, nc=00000002  
Max-Forwards: 70  
RAck: 1468694332 316281174 INVITE  
Content-Length: 0

F11 192.168.1.1:5062(2) -> 192.168.2.15:5060(3)

PRACK sip:00004@192.168.2.15 SIP/2.0  
Via: SIP/2.0/UDP 192.168.1.1:5060;branch=z9hG4bK-866.1084370753.316281175  
Via: SIP/2.0/UDP 192.168.2.10:5060;branch=z9hG4bK-2e57ac4d-887376.165  
Route: <sip:00004@192.168.2.15>  
From: 00002 <sip:00002@sip.com>;tag=07ad2bec  
To: <sip:00004@sip.com>;tag=71932467  
Call-ID: 7804e982@00002.192.168.1.1  
CSeq: 316281175 PRACK  
max-forwards: 69  
rack: 1468694332 316281174 INVITE  
Content-Length: 0

F12 192.168.2.15:1150(3) -> 192.168.1.1:5060(2)

SIP/2.0 200 OK  
Via: SIP/2.0/UDP 192.168.1.1:5060;branch=z9hG4bK-866.1084370753.316281175  
Via: SIP/2.0/UDP 192.168.2.10:5060;branch=z9hG4bK-2e57ac4d-887376.165  
From: 00002 <sip:00002@sip.com>;tag=07ad2bec  
To: <sip:00004@sip.com>;tag=71932467  
Call-ID: 7804e982@00002.192.168.1.1  
CSeq: 316281175 PRACK  
Content-Length: 0

F13 192.168.1.1:5062(2) -> 192.168.2.10:5060(1)

SIP/2.0 200 OK  
Via: SIP/2.0/UDP 192.168.2.10:5060;branch=z9hG4bK-2e57ac4d-887376.165  
From: 00002 <sip:00002@sip.com>;tag=07ad2bec  
To: <sip:00004@sip.com>;tag=71932467  
Call-ID: 7804e982@00002.192.168.1.1  
CSeq: 316281175 PRACK  
Content-Length: 0

F14 192.168.2.15:1150(3) -> 192.168.1.1:5060(2)

SIP/2.0 180 Ringing  
Via: SIP/2.0/UDP 192.168.1.1:5060;branch=z9hG4bK-866.141159.316281174  
Via: SIP/2.0/UDP 192.168.2.10:5060;branch=z9hG4bK-26016902-887375.592  
Record-Route: <sip:00004@192.168.1.1>  
From: 00002 <sip:00002@sip.com>;tag=07ad2bec  
To: <sip:00004@sip.com>;tag=71932467  
Call-ID: 7804e982@00002.192.168.1.1  
CSeq: 316281174 INVITE  
Contact: <sip:00004@192.168.2.15>  
Require: 100rel  
RSeq: 1468694333  
Content-Length: 0



F15 192.168.1.1:5062(2) -> 192.168.2.10:5060(1)

SIP/2.0 180 Ringing  
Via: SIP/2.0/UDP 192.168.2.10:5060;branch=z9hG4bK-26016902-887375.592  
Record-Route: <sip:00004@192.168.1.1>  
From: 00002 <sip:00002@sip.com>;tag=07ad2bec  
To: <sip:00004@sip.com>;tag=71932467  
Call-ID: 7804e982@00002.192.168.1.1  
CSeq: 316281174 INVITE  
Contact: <sip:00004@192.168.2.15>  
require: 100rel  
rseq: 1468694333  
Content-Length: 0

F16 192.168.2.10:1105(1) -> 192.168.1.1:5060(2)

PRACK sip:00004@192.168.1.1 SIP/2.0  
Via: SIP/2.0/UDP 192.168.2.10:5060;branch=z9hG4bK-14ee9d3c-887376.759  
Route: <sip:00004@192.168.2.15>  
From: 00002 <sip:00002@sip.com>;tag=07ad2bec  
To: <sip:00004@sip.com>;tag=71932467  
Call-ID: 7804e982@00002.192.168.1.1  
CSeq: 316281176 PRACK  
Proxy-Authorization: Digest username="00002", realm="heliossv2",  
nonce="2ff98618beddd8d000fbaee9d5a4e060", uri="sip:00004@192.168.1.1",  
response="eb72659e28e32495178c15d2fd9216c9", algorithm=MD5, cnonce="05f05c10",  
opaque="f93802f454ec8f5045dc5da529fe3186", qop=auth, nc=00000003  
Max-Forwards: 70  
RAck: 1468694333 316281174 INVITE  
Content-Length: 0

F17 192.168.1.1:5062(2) -> 192.168.2.15:5060(3)

PRACK sip:00004@192.168.2.15 SIP/2.0  
Via: SIP/2.0/UDP 192.168.1.1:5060;branch=z9hG4bK-866.1084370753.316281176  
Via: SIP/2.0/UDP 192.168.2.10:5060;branch=z9hG4bK-14ee9d3c-887376.759  
Route: <sip:00004@192.168.2.15>  
From: 00002 <sip:00002@sip.com>;tag=07ad2bec  
To: <sip:00004@sip.com>;tag=71932467  
Call-ID: 7804e982@00002.192.168.1.1  
CSeq: 316281176 PRACK  
max-forwards: 69  
rack: 1468694333 316281174 INVITE  
Content-Length: 0

F18 192.168.2.15:1150(3) -> 192.168.1.1:5060(2)

SIP/2.0 200 OK  
Via: SIP/2.0/UDP 192.168.1.1:5060;branch=z9hG4bK-866.1084370753.316281176  
Via: SIP/2.0/UDP 192.168.2.10:5060;branch=z9hG4bK-14ee9d3c-887376.759  
From: 00002 <sip:00002@sip.com>;tag=07ad2bec  
To: <sip:00004@sip.com>;tag=71932467  
Call-ID: 7804e982@00002.192.168.1.1  
CSeq: 316281176 PRACK  
Content-Length: 0

F19 192.168.1.1:5062(2) -> 192.168.2.10:5060(1)

SIP/2.0 200 OK  
Via: SIP/2.0/UDP 192.168.2.10:5060;branch=z9hG4bK-14ee9d3c-887376.759  
From: 00002 <sip:00002@sip.com>;tag=07ad2bec  
To: <sip:00004@sip.com>;tag=71932467  
Call-ID: 7804e982@00002.192.168.1.1  
CSeq: 316281176 PRACK  
Content-Length: 0

F20 192.168.2.15:1150(3) -> 192.168.1.1:5060(2)

SIP/2.0 200 OK  
Via: SIP/2.0/UDP 192.168.1.1:5060;branch=z9hG4bK-866.141159.316281174  
Via: SIP/2.0/UDP 192.168.2.10:5060;branch=z9hG4bK-26016902-887375.592  
Record-Route: <sip:00004@192.168.1.1>  
From: 00002 <sip:00002@sip.com>;tag=07ad2bec  
To: <sip:00004@sip.com>;tag=71932467  
Call-ID: 7804e982@00002.192.168.1.1  
CSeq: 316281174 INVITE  
Contact: <sip:00004@192.168.2.15>  
Supported: 100rel, replaces  
Allow: INVITE, ACK, BYE, CANCEL, OPTIONS, PRACK, MESSAGE, REFER, NOTIFY  
Content-Type: application/sdp  
Accept: application/sdp, message/sipfrag  
Content-Length: 177  
  
v=0  
o=- 351363 12801 IN IP4 192.168.2.15  
s=-  
c=IN IP4 192.168.2.15  
t=0 0  
m=audio 5008 RTP/AVP 0 96  
a=rtpmap:0 PCMU/8000  
a=rtpmap:96 telephone-event/8000  
a=fmtp:96 0-11

F21 192.168.1.1:5062(2) -> 192.168.2.10:5060(1)

SIP/2.0 200 OK  
Via: SIP/2.0/UDP 192.168.2.10:5060;branch=z9hG4bK-26016902-887375.592  
Record-Route: <sip:00004@192.168.1.1>  
From: 00002 <sip:00002@sip.com>;tag=07ad2bec  
To: <sip:00004@sip.com>;tag=71932467  
Call-ID: 7804e982@00002.192.168.1.1  
CSeq: 316281174 INVITE  
Contact: <sip:00004@192.168.2.15>  
supported: 100rel  
supported: replaces  
Allow: INVITE, ACK, BYE, CANCEL, OPTIONS, PRACK, MESSAGE, REFER, NOTIFY  
Content-Type: application/sdp  
Accept: application/sdp, message/sipfrag  
Content-Length: 177  
  
v=0  
o=- 351363 12801 IN IP4 192.168.2.15  
s=-  
c=IN IP4 192.168.2.15  
t=0 0  
m=audio 5008 RTP/AVP 0 96  
a=rtpmap:0 PCMU/8000  
a=rtpmap:96 telephone-event/8000  
a=fmtp:96 0-11

F22 192.168.2.10:1105(1) -> 192.168.1.1:5060(2)

ACK sip:00004@192.168.1.1 SIP/2.0  
Via: SIP/2.0/UDP 192.168.2.10:5060;branch=z9hG4bK-3bd1652a-887380.517  
Route: <sip:00004@192.168.2.15>  
From: 00002 <sip:00002@sip.com>;tag=07ad2bec  
To: <sip:00004@sip.com>;tag=71932467  
Call-ID: 7804e982@00002.192.168.1.1  
CSeq: 316281174 ACK  
Proxy-Authorization: Digest username="00002", realm="heliossv2",  
nonce="2ff98618beddd8d000fbaee9d5a4e060", uri="sip:00004@sip.com",  
response="3dc4cfe94cc2e30cdfb300313718704", algorithm=MD5, cnonce="60d3de2b",  
opaque="f93802f454ec8f5045dc5da529fe3186", qop=auth, nc=00000001  
Max-Forwards: 70  
Content-Length: 0

F23 192.168.1.1:5062(2) -> 192.168.2.15:5060(3)

```

ACK sip:00004@192.168.2.15 SIP/2.0
Via: SIP/2.0/UDP 192.168.1.1:5060;branch=z9hG4bK-866.1084370757.316281174
Via: SIP/2.0/UDP 192.168.2.10:5060;branch=z9hG4bK-3bd1652a-887380.517
From: 00002 <sip:00002@sip.com>;tag=07ad2bec
To: <sip:00004@sip.com>;tag=71932467
Call-ID: 7804e982@00002.192.168.1.1
CSeq: 316281174 ACK
max-forwards: 69
Content-Length: 0

```

```
=====
```

F24            192.168.2.15:1150(3) -> 192.168.1.1:5060(2)

```

INVITE sip:00004@192.168.1.1 SIP/2.0
Via: SIP/2.0/UDP 192.168.2.15:5060;branch=z9hG4bK-3f0c80d8-887219.858
Route: <sip:00002@192.168.2.10>
From: <sip:00004@sip.com>;tag=71932467
To: 00002 <sip:00002@sip.com>;tag=07ad2bec
Call-ID: 7804e982@00002.192.168.1.1
CSeq: 902710083 INVITE
Contact: <sip:00004@192.168.2.15>
Max-Forwards: 70
Supported: 100rel, replaces
Allow: INVITE, ACK, BYE, CANCEL, OPTIONS, PRACK, MESSAGE, REFER, NOTIFY
Content-Type: application/sdp
Content-Length: 189

```

```

v=0
o=- 842423 12802 IN IP4 192.168.2.15
s=-
c=IN IP4 192.168.2.15
t=0 0
m=audio 5008 RTP/AVP 0 96
a=rtpmap:0 PCMU/8000
a=rtpmap:96 telephone-event/8000
a=fmtp:96 0-11
a=inactive

```

```
=====
```

F25            192.168.1.1:5062(2) -> 192.168.2.15:5060(3)

```

SIP/2.0 100 Trying
Via: SIP/2.0/UDP 192.168.2.15:5060;branch=z9hG4bK-3f0c80d8-887219.858
From: <sip:00004@sip.com>;tag=71932467
To: 00002 <sip:00002@sip.com>;tag=07ad2bec
Call-ID: 7804e982@00002.192.168.1.1
CSeq: 902710083 INVITE
Content-Length: 0

```

```
=====
```

F26            192.168.1.1:5062(2) -> 192.168.2.10:5060(1)

```

INVITE sip:00002@192.168.2.10 SIP/2.0
Via: SIP/2.0/UDP 192.168.1.1:5060;branch=z9hG4bK-865.141159.902710083
Via: SIP/2.0/UDP 192.168.2.15:5060;branch=z9hG4bK-3f0c80d8-887219.858
Record-Route: <sip:00004@192.168.1.1>
Route: <sip:00002@192.168.2.10>
From: <sip:00004@sip.com>;tag=71932467
To: 00002 <sip:00002@sip.com>;tag=07ad2bec
Call-ID: 7804e982@00002.192.168.1.1
CSeq: 902710083 INVITE
Contact: <sip:00004@192.168.2.15>
max-forwards: 69
supported: 100rel
supported: replaces
Allow: INVITE, ACK, BYE, CANCEL, OPTIONS, PRACK, MESSAGE, REFER, NOTIFY
Content-Type: application/sdp
Content-Length: 189

```

```

v=0
o=- 842423 12802 IN IP4 192.168.2.15
s=-
c=IN IP4 192.168.2.15
t=0 0
m=audio 5008 RTP/AVP 0 96

```

a=rtpmap:0 PCMU/8000  
a=rtpmap:96 telephone-event/8000  
a=fmtp:96 0-11  
a=inactive

F27 192.168.2.10:1105(1) -> 192.168.1.1:5060(2)

SIP/2.0 100 Trying  
Via: SIP/2.0/UDP 192.168.1.1:5060;branch=z9hG4bK-865.141159.902710083  
Via: SIP/2.0/UDP 192.168.2.15:5060;branch=z9hG4bK-3f0c80d8-887219.858  
From: <sip:00004@sip.com>;tag=71932467  
To: 00002 <sip:00002@sip.com>;tag=07ad2bec  
Call-ID: 7804e982@00002.192.168.1.1  
CSeq: 902710083 INVITE  
Content-Length: 0

F28 192.168.2.10:1105(1) -> 192.168.1.1:5060(2)

SIP/2.0 200 OK  
Via: SIP/2.0/UDP 192.168.1.1:5060;branch=z9hG4bK-865.141159.902710083  
Via: SIP/2.0/UDP 192.168.2.15:5060;branch=z9hG4bK-3f0c80d8-887219.858  
Record-Route: <sip:00004@192.168.1.1>  
From: <sip:00004@sip.com>;tag=71932467  
To: 00002 <sip:00002@sip.com>;tag=07ad2bec  
Call-ID: 7804e982@00002.192.168.1.1  
CSeq: 902710083 INVITE  
Contact: <sip:00002@192.168.2.10>  
Supported: 100rel, replaces  
Allow: INVITE, ACK, BYE, CANCEL, OPTIONS, PRACK, MESSAGE, REFER, NOTIFY  
Content-Type: application/sdp  
Accept: application/sdp, message/sipfrag  
Content-Length: 188

v=0  
o=- 899392 5302 IN IP4 192.168.2.10  
s=-  
c=IN IP4 192.168.2.10  
t=0 0  
m=audio 5008 RTP/AVP 0 96  
a=rtpmap:0 PCMU/8000  
a=rtpmap:96 telephone-event/8000  
a=fmtp:96 0-11  
a=inactive

F29 192.168.1.1:5062(2) -> 192.168.2.15:5060(3)

SIP/2.0 200 OK  
Via: SIP/2.0/UDP 192.168.2.15:5060;branch=z9hG4bK-3f0c80d8-887219.858  
Record-Route: <sip:00004@192.168.1.1>  
From: <sip:00004@sip.com>;tag=71932467  
To: 00002 <sip:00002@sip.com>;tag=07ad2bec  
Call-ID: 7804e982@00002.192.168.1.1  
CSeq: 902710083 INVITE  
Contact: <sip:00002@192.168.2.10>  
supported: 100rel  
supported: replaces  
Allow: INVITE, ACK, BYE, CANCEL, OPTIONS, PRACK, MESSAGE, REFER, NOTIFY  
Content-Type: application/sdp  
Accept: application/sdp, message/sipfrag  
Content-Length: 188

v=0  
o=- 899392 5302 IN IP4 192.168.2.10  
s=-  
c=IN IP4 192.168.2.10  
t=0 0  
m=audio 5008 RTP/AVP 0 96  
a=rtpmap:0 PCMU/8000  
a=rtpmap:96 telephone-event/8000  
a=fmtp:96 0-11  
a=inactive

## FOMA/WLAN デュアル端末に関する技術参考資料 第 1.2 版

F30 192.168.2.15:1150(3) -&gt; 192.168.1.1:5060(2)

ACK sip:00004@192.168.1.1 SIP/2.0  
Via: SIP/2.0/UDP 192.168.2.15:5060;branch=z9hG4bK-b11ba61-887220.116  
Route: <sip:00002@192.168.2.10>  
From: <sip:00004@sip.com>;tag=71932467  
To: 00002 <sip:00002@sip.com>;tag=07ad2bec  
Call-ID: 7804e982@00002.192.168.1.1  
CSeq: 902710083 ACK  
Max-Forwards: 70  
Content-Length: 0

F31 192.168.1.1:5062(2) -&gt; 192.168.2.10:5060(1)

ACK sip:00002@192.168.2.10 SIP/2.0  
Via: SIP/2.0/UDP 192.168.1.1:5060;branch=z9hG4bK-865.1084370761.902710083  
Via: SIP/2.0/UDP 192.168.2.15:5060;branch=z9hG4bK-b11ba61-887220.116  
From: <sip:00004@sip.com>;tag=71932467  
To: 00002 <sip:00002@sip.com>;tag=07ad2bec  
Call-ID: 7804e982@00002.192.168.1.1  
CSeq: 902710083 ACK  
max-forwards: 69  
Content-Length: 0

F32 192.168.2.15:1150(3) -&gt; 192.168.1.1:5060(2)

INVITE sip:00005@sip.com SIP/2.0  
Via: SIP/2.0/UDP 192.168.2.15:5060;branch=z9hG4bK-48bcbe08-887228.587  
Route: <sip:192.168.1.1:5060>  
From: <sip:00004@sip.com>;tag=5f4f7d7b  
To: <sip:00005@sip.com>  
Call-ID: 16252088@00004.192.168.1.1  
CSeq: 1160027639 INVITE  
Contact: <sip:00004@192.168.2.15>  
Max-Forwards: 70  
Supported: 100rel, replaces  
Allow: INVITE, ACK, BYE, CANCEL, OPTIONS, PRACK, MESSAGE, REFER, NOTIFY  
Content-Type: application/sdp  
Accept: application/sdp, message/sipfrag  
Content-Length: 249

v=0  
o=- 570922 601 IN IP4 192.168.2.15  
s=-  
c=IN IP4 192.168.2.15  
t=0 0  
m=audio 5006 RTP/AVP 0 8 4 18 96  
a=rtpmap:0 PCMU/8000  
a=rtpmap:8 PCMA/8000  
a=rtpmap:4 G723/8000  
a=rtpmap:18 G729/8000  
a=rtpmap:96 telephone-event/8000  
a=fmtp:96 0-11

F33 192.168.1.1:5062(2) -&gt; 192.168.2.15:5060(3)

SIP/2.0 100 Trying  
Via: SIP/2.0/UDP 192.168.2.15:5060;branch=z9hG4bK-48bcbe08-887228.587  
From: <sip:00004@sip.com>;tag=5f4f7d7b  
To: <sip:00005@sip.com>  
Call-ID: 16252088@00004.192.168.1.1  
CSeq: 1160027639 INVITE  
Content-Length: 0

F34 192.168.1.1:5062(2) -&gt; 192.168.2.14:5060(4)

INVITE sip:00005@192.168.2.14 SIP/2.0  
Via: SIP/2.0/UDP 192.168.1.1:5060;branch=z9hG4bK-868.331105.1160027639  
Via: SIP/2.0/UDP 192.168.2.15:5060;branch=z9hG4bK-48bcbe08-887228.587  
Record-Route: <sip:00005@192.168.1.1>

```

Route: <sip:192.168.1.1:5060>
From: 00004 <sip:00004@sip.com>;tag=5f4f7d7b
To: <sip:00005@sip.com>
Call-ID: 16252088@00004.192.168.1.1
CSeq: 1160027639 INVITE
Contact: <sip:00004@192.168.2.15>
max-forwards: 69
supported: 100rel
supported: replaces
Allow: INVITE, ACK, BYE, CANCEL, OPTIONS, PRACK, MESSAGE, REFER, NOTIFY
Content-Type: application/sdp
Accept: application/sdp, message/sipfrag
Content-Length: 249

```

```

v=0
o=- 570922 601 IN IP4 192.168.2.15
s=-
c=IN IP4 192.168.2.15
t=0 0
m=audio 5006 RTP/AVP 0 8 4 18 96
a=rtpmap:0 PCMU/8000
a=rtpmap:8 PCMA/8000
a=rtpmap:4 G723/8000
a=rtpmap:18 G729/8000
a=rtpmap:96 telephone-event/8000
a=fmtp:96 0-11

```

```
=====
```

F35          192.168.2.14:1065(4) -> 192.168.1.1:5060(2)

```

SIP/2.0 100 Trying
Via: SIP/2.0/UDP 192.168.1.1:5060;branch=z9hG4bK-868.331105.1160027639
Via: SIP/2.0/UDP 192.168.2.15:5060;branch=z9hG4bK-48bcbe08-887228.587
From: 00004 <sip:00004@sip.com>;tag=5f4f7d7b
To: <sip:00005@sip.com>
Call-ID: 16252088@00004.192.168.1.1
CSeq: 1160027639 INVITE
Content-Length: 0

```

```
=====
```

F36          192.168.2.14:1065(4) -> 192.168.1.1:5060(2)

```

SIP/2.0 183 Session Progress
Via: SIP/2.0/UDP 192.168.1.1:5060;branch=z9hG4bK-868.331105.1160027639
Via: SIP/2.0/UDP 192.168.2.15:5060;branch=z9hG4bK-48bcbe08-887228.587
Record-Route: <sip:00005@192.168.1.1>
From: 00004 <sip:00004@sip.com>;tag=5f4f7d7b
To: <sip:00005@sip.com>;tag=07aaec46
Call-ID: 16252088@00004.192.168.1.1
CSeq: 1160027639 INVITE
Contact: <sip:00005@192.168.2.14>
Require: 100rel
RSeq: 1828443462
Content-Length: 0

```

```
=====
```

F37          192.168.1.1:5062(2) -> 192.168.2.15:5060(3)

```

SIP/2.0 183 Session Progress
Via: SIP/2.0/UDP 192.168.2.15:5060;branch=z9hG4bK-48bcbe08-887228.587
Record-Route: <sip:00005@192.168.1.1>
From: 00004 <sip:00004@sip.com>;tag=5f4f7d7b
To: <sip:00005@sip.com>;tag=07aaec46
Call-ID: 16252088@00004.192.168.1.1
CSeq: 1160027639 INVITE
Contact: <sip:00005@192.168.2.14>
require: 100rel
rseq: 1828443462
Content-Length: 0

```

```
=====
```

F38          192.168.2.15:1150(3) -> 192.168.1.1:5060(2)

PRACK sip:00005@192.168.1.1 SIP/2.0

FOMA/WLAN デュアル端末に関する技術参考資料 第 1.2 版

Via: SIP/2.0/UDP 192.168.2.15:5060;branch=z9hG4bK-456e6147-887229.926  
Route: <sip:00005@192.168.2.14>  
From: 00004 <sip:00004@sip.com>;tag=5f4f7d7b  
To: <sip:00005@sip.com>;tag=07aaec46  
Call-ID: 16252088@00004.192.168.1.1  
CSeq: 1160027640 PRACK  
Max-Forwards: 70  
RAck: 1828443462 1160027639 INVITE  
Content-Length: 0

F39 192.168.1.1:5062(2) -> 192.168.2.14:5060(4)

PRACK sip:00005@192.168.2.14 SIP/2.0  
Via: SIP/2.0/UDP 192.168.1.1:5060;branch=z9hG4bK-868.1084370771.1160027640  
Via: SIP/2.0/UDP 192.168.2.15:5060;branch=z9hG4bK-456e6147-887229.926  
Route: <sip:00005@192.168.2.14>  
From: 00004 <sip:00004@sip.com>;tag=5f4f7d7b  
To: <sip:00005@sip.com>;tag=07aaec46  
Call-ID: 16252088@00004.192.168.1.1  
CSeq: 1160027640 PRACK  
max-forwards: 69  
rack: 1828443462 1160027639 INVITE  
Content-Length: 0

F40 192.168.2.14:1065(4) -> 192.168.1.1:5060(2)

SIP/2.0 200 OK  
Via: SIP/2.0/UDP 192.168.1.1:5060;branch=z9hG4bK-868.1084370771.1160027640  
Via: SIP/2.0/UDP 192.168.2.15:5060;branch=z9hG4bK-456e6147-887229.926  
From: 00004 <sip:00004@sip.com>;tag=5f4f7d7b  
To: <sip:00005@sip.com>;tag=07aaec46  
Call-ID: 16252088@00004.192.168.1.1  
CSeq: 1160027640 PRACK  
Content-Length: 0

F41 192.168.1.1:5062(2) -> 192.168.2.15:5060(3)

SIP/2.0 200 OK  
Via: SIP/2.0/UDP 192.168.2.15:5060;branch=z9hG4bK-456e6147-887229.926  
From: 00004 <sip:00004@sip.com>;tag=5f4f7d7b  
To: <sip:00005@sip.com>;tag=07aaec46  
Call-ID: 16252088@00004.192.168.1.1  
CSeq: 1160027640 PRACK  
Content-Length: 0

F42 192.168.2.14:1065(4) -> 192.168.1.1:5060(2)

SIP/2.0 180 Ringing  
Via: SIP/2.0/UDP 192.168.1.1:5060;branch=z9hG4bK-868.331105.1160027639  
Via: SIP/2.0/UDP 192.168.2.15:5060;branch=z9hG4bK-48bcbe08-887228.587  
Record-Route: <sip:00005@192.168.1.1>  
From: 00004 <sip:00004@sip.com>;tag=5f4f7d7b  
To: <sip:00005@sip.com>;tag=07aaec46  
Call-ID: 16252088@00004.192.168.1.1  
CSeq: 1160027639 INVITE  
Contact: <sip:00005@192.168.2.14>  
Require: 100rel  
RSeq: 1828443463  
Content-Length: 0

F43 192.168.1.1:5062(2) -> 192.168.2.15:5060(3)

SIP/2.0 180 Ringing  
Via: SIP/2.0/UDP 192.168.2.15:5060;branch=z9hG4bK-48bcbe08-887228.587  
Record-Route: <sip:00005@192.168.1.1>  
From: 00004 <sip:00004@sip.com>;tag=5f4f7d7b

To: <sip:00005@sip.com>;tag=07aaec46  
 Call-ID: 16252088@00004.192.168.1.1  
 CSeq: 1160027639 INVITE  
 Contact: <sip:00005@192.168.2.14>  
 require: 100rel  
 rseq: 1828443463  
 Content-Length: 0

=====

F44 192.168.2.15:1150(3) -> 192.168.1.1:5060(2)

PRACK sip:00005@192.168.1.1 SIP/2.0  
 Via: SIP/2.0/UDP 192.168.2.15:5060;branch=z9hG4bK-178edbc4-887230.524  
 Route: <sip:00005@192.168.2.14>  
 From: 00004 <sip:00004@sip.com>;tag=5f4f7d7b  
 To: <sip:00005@sip.com>;tag=07aaec46  
 Call-ID: 16252088@00004.192.168.1.1  
 CSeq: 1160027641 PRACK  
 Max-Forwards: 70  
 RAck: 1828443463 1160027639 INVITE  
 Content-Length: 0

=====

F45 192.168.1.1:5062(2) -> 192.168.2.14:5060(4)

PRACK sip:00005@192.168.2.14 SIP/2.0  
 Via: SIP/2.0/UDP 192.168.1.1:5060;branch=z9hG4bK-868.1084370772.1160027641  
 Via: SIP/2.0/UDP 192.168.2.15:5060;branch=z9hG4bK-178edbc4-887230.524  
 Route: <sip:00005@192.168.2.14>  
 From: 00004 <sip:00004@sip.com>;tag=5f4f7d7b  
 To: <sip:00005@sip.com>;tag=07aaec46  
 Call-ID: 16252088@00004.192.168.1.1  
 CSeq: 1160027641 PRACK  
 max-forwards: 69  
 rack: 1828443463 1160027639 INVITE  
 Content-Length: 0

=====

F46 192.168.2.14:1065(4) -> 192.168.1.1:5060(2)

SIP/2.0 200 OK  
 Via: SIP/2.0/UDP 192.168.1.1:5060;branch=z9hG4bK-868.1084370772.1160027641  
 Via: SIP/2.0/UDP 192.168.2.15:5060;branch=z9hG4bK-178edbc4-887230.524  
 From: 00004 <sip:00004@sip.com>;tag=5f4f7d7b  
 To: <sip:00005@sip.com>;tag=07aaec46  
 Call-ID: 16252088@00004.192.168.1.1  
 CSeq: 1160027641 PRACK  
 Content-Length: 0

=====

F47 192.168.1.1:5062(2) -> 192.168.2.15:5060(3)

SIP/2.0 200 OK  
 Via: SIP/2.0/UDP 192.168.2.15:5060;branch=z9hG4bK-178edbc4-887230.524  
 From: 00004 <sip:00004@sip.com>;tag=5f4f7d7b  
 To: <sip:00005@sip.com>;tag=07aaec46  
 Call-ID: 16252088@00004.192.168.1.1  
 CSeq: 1160027641 PRACK  
 Content-Length: 0

=====

F48 192.168.2.14:1065(4) -> 192.168.1.1:5060(2)

SIP/2.0 200 OK  
 Via: SIP/2.0/UDP 192.168.1.1:5060;branch=z9hG4bK-868.331105.1160027639  
 Via: SIP/2.0/UDP 192.168.2.15:5060;branch=z9hG4bK-48bcbe08-887228.587  
 Record-Route: <sip:00005@192.168.1.1>  
 From: 00004 <sip:00004@sip.com>;tag=5f4f7d7b  
 To: <sip:00005@sip.com>;tag=07aaec46  
 Call-ID: 16252088@00004.192.168.1.1  
 CSeq: 1160027639 INVITE



Contact: <sip:00005@192.168.2.14>  
 Supported: 100rel, replaces  
 Allow: INVITE, ACK, BYE, CANCEL, OPTIONS, PRACK, MESSAGE, REFER, NOTIFY  
 Content-Type: application/sdp  
 Accept: application/sdp, message/sipfrag  
 Content-Length: 176

v=0  
 o=- 26445 13001 IN IP4 192.168.2.14  
 s=-  
 c=IN IP4 192.168.2.14  
 t=0 0  
 m=audio 5008 RTP/AVP 0 96  
 a=rtpmap:0 PCMU/8000  
 a=rtpmap:96 telephone-event/8000  
 a=fmtp:96 0-11

=====

F49 192.168.1.1:5062(2) -> 192.168.2.15:5060(3)

SIP/2.0 200 OK  
 Via: SIP/2.0/UDP 192.168.2.15:5060;branch=z9hG4bK-48bcbe08-887228.587  
 Record-Route: <sip:00005@192.168.1.1>  
 From: 00004 <sip:00004@sip.com>;tag=5f4f7d7b  
 To: <sip:00005@sip.com>;tag=07aaec46  
 Call-ID: 16252088@00004.192.168.1.1  
 CSeq: 1160027639 INVITE  
 Contact: <sip:00005@192.168.2.14>  
 supported: 100rel  
 supported: replaces  
 Allow: INVITE, ACK, BYE, CANCEL, OPTIONS, PRACK, MESSAGE, REFER, NOTIFY  
 Content-Type: application/sdp  
 Accept: application/sdp, message/sipfrag  
 Content-Length: 176

v=0  
 o=- 26445 13001 IN IP4 192.168.2.14  
 s=-  
 c=IN IP4 192.168.2.14  
 t=0 0  
 m=audio 5008 RTP/AVP 0 96  
 a=rtpmap:0 PCMU/8000  
 a=rtpmap:96 telephone-event/8000  
 a=fmtp:96 0-11

=====

F50 192.168.2.15:1150(3) -> 192.168.1.1:5060(2)

ACK sip:00005@192.168.1.1 SIP/2.0  
 Via: SIP/2.0/UDP 192.168.2.15:5060;branch=z9hG4bK-52e52424-887234.427  
 Route: <sip:00005@192.168.2.14>  
 From: 00004 <sip:00004@sip.com>;tag=5f4f7d7b  
 To: <sip:00005@sip.com>;tag=07aaec46  
 Call-ID: 16252088@00004.192.168.1.1  
 CSeq: 1160027639 ACK  
 Max-Forwards: 70  
 Content-Length: 0

=====

F51 192.168.1.1:5062(2) -> 192.168.2.14:5060(4)

ACK sip:00005@192.168.2.14 SIP/2.0  
 Via: SIP/2.0/UDP 192.168.1.1:5060;branch=z9hG4bK-868.1084370776.1160027639  
 Via: SIP/2.0/UDP 192.168.2.15:5060;branch=z9hG4bK-52e52424-887234.427  
 From: 00004 <sip:00004@sip.com>;tag=5f4f7d7b  
 To: <sip:00005@sip.com>;tag=07aaec46  
 Call-ID: 16252088@00004.192.168.1.1  
 CSeq: 1160027639 ACK  
 max-forwards: 69  
 Content-Length: 0

=====

F52 192.168.2.15:1152(3) -> 192.168.1.1:5060(2)

REGISTER sip:192.168.1.1 SIP/2.0

FOMA/WLAN デュアル端末に関する技術参考資料 第 1.2 版

Via: SIP/2.0/UDP 192.168.2.15:5060;branch=z9hG4bK-78389370-887243.032  
 From: <sip:00004@sip.com>  
 To: <sip:00004@sip.com>  
 Call-ID: 09dac662@00004.192.168.1.1  
 CSeq: 1 REGISTER  
 Contact: <sip:00004@192.168.2.15>;expires=3600  
 Max-Forwards: 70  
 User-Agent: △△△△△ //端末種別

Content-Length: 0

F53 192.168.1.1:5062(2) -> 192.168.2.15:5060(3)

SIP/2.0 200 OK  
 Via: SIP/2.0/UDP 192.168.2.15:5060;branch=z9hG4bK-78389370-887243.032  
 From: <sip:00004@sip.com>  
 To: <sip:00004@sip.com>  
 Call-ID: 09dac662@00004.192.168.1.1  
 CSeq: 1 REGISTER  
 Contact: <sip:00004@192.168.2.15>;expires=3600  
 Date: Wed, 12 May 2004 14:06:24 GMT  
 Content-Length: 0

F54 192.168.2.15:1152(3) -> 192.168.1.1:5060(2)

INVITE sip:00005@192.168.1.1 SIP/2.0  
 Via: SIP/2.0/UDP 192.168.2.15:5060;branch=z9hG4bK-7803a527-887253.832  
 Route: <sip:00005@192.168.2.14>  
 From: 00004 <sip:00004@sip.com>;tag=5f4f7d7b  
 To: <sip:00005@sip.com>;tag=07aaec46  
 Call-ID: 16252088@00004.192.168.1.1  
 CSeq: 1160027642 INVITE  
 Contact: <sip:00004@192.168.2.15>  
 Max-Forwards: 70  
 Supported: 100rel, replaces  
 Allow: INVITE, ACK, BYE, CANCEL, OPTIONS, PRACK, MESSAGE, REFER, NOTIFY  
 Content-Type: application/sdp  
 Content-Length: 187

v=0  
 o=- 826898 602 IN IP4 192.168.2.15  
 s=-  
 c=IN IP4 192.168.2.15  
 t=0 0  
 m=audio 5006 RTP/AVP 0 96  
 a=rtpmap:0 PCMU/8000  
 a=rtpmap:96 telephone-event/8000  
 a=fmtp:96 0-11  
 a=inactive

F55 192.168.1.1:5062(2) -> 192.168.2.15:5060(3)

SIP/2.0 100 Trying  
 Via: SIP/2.0/UDP 192.168.2.15:5060;branch=z9hG4bK-7803a527-887253.832  
 From: 00004 <sip:00004@sip.com>;tag=5f4f7d7b  
 To: <sip:00005@sip.com>;tag=07aaec46  
 Call-ID: 16252088@00004.192.168.1.1  
 CSeq: 1160027642 INVITE  
 Content-Length: 0

F56 192.168.1.1:5062(2) -> 192.168.2.14:5060(4)

INVITE sip:00005@192.168.2.14 SIP/2.0  
 Via: SIP/2.0/UDP 192.168.1.1:5060;branch=z9hG4bK-868.331105.1160027642  
 Via: SIP/2.0/UDP 192.168.2.15:5060;branch=z9hG4bK-7803a527-887253.832  
 Record-Route: <sip:00005@192.168.1.1>  
 Route: <sip:00005@192.168.2.14>  
 From: 00004 <sip:00004@sip.com>;tag=5f4f7d7b  
 To: <sip:00005@sip.com>;tag=07aaec46  
 Call-ID: 16252088@00004.192.168.1.1

CSeq: 1160027642 INVITE  
 Contact: <sip:00004@192.168.2.15>  
 max-forwards: 69  
 supported: 100rel  
 supported: replaces  
 Allow: INVITE, ACK, BYE, CANCEL, OPTIONS, PRACK, MESSAGE, REFER, NOTIFY  
 Content-Type: application/sdp  
 Content-Length: 187

v=0  
 o=- 826898 602 IN IP4 192.168.2.15  
 s=-  
 c=IN IP4 192.168.2.15  
 t=0 0  
 m=audio 5006 RTP/AVP 0 96  
 a=rtpmap:0 PCMU/8000  
 a=rtpmap:96 telephone-event/8000  
 a=fmtp:96 0-11  
 a=inactive

=====

F57 192.168.2.14:1065(4) -> 192.168.1.1:5060(2)

SIP/2.0 100 Trying  
 Via: SIP/2.0/UDP 192.168.1.1:5060;branch=z9hG4bK-868.331105.1160027642  
 Via: SIP/2.0/UDP 192.168.2.15:5060;branch=z9hG4bK-7803a527-887253.832  
 From: 00004 <sip:00004@sip.com>;tag=5f4f7d7b  
 To: <sip:00005@sip.com>;tag=07aaec46  
 Call-ID: 16252088@00004.192.168.1.1  
 CSeq: 1160027642 INVITE  
 Content-Length: 0

=====

F58 192.168.2.14:1065(4) -> 192.168.1.1:5060(2)

SIP/2.0 200 OK  
 Via: SIP/2.0/UDP 192.168.1.1:5060;branch=z9hG4bK-868.331105.1160027642  
 Via: SIP/2.0/UDP 192.168.2.15:5060;branch=z9hG4bK-7803a527-887253.832  
 Record-Route: <sip:00005@192.168.1.1>  
 From: 00004 <sip:00004@sip.com>;tag=5f4f7d7b  
 To: <sip:00005@sip.com>;tag=07aaec46  
 Call-ID: 16252088@00004.192.168.1.1  
 CSeq: 1160027642 INVITE  
 Contact: <sip:00005@192.168.2.14>  
 Supported: 100rel, replaces  
 Allow: INVITE, ACK, BYE, CANCEL, OPTIONS, PRACK, MESSAGE, REFER, NOTIFY  
 Content-Type: application/sdp  
 Accept: application/sdp, message/sipfrag  
 Content-Length: 189

v=0  
 o=- 219347 13002 IN IP4 192.168.2.14  
 s=-  
 c=IN IP4 192.168.2.14  
 t=0 0  
 m=audio 5008 RTP/AVP 0 96  
 a=rtpmap:0 PCMU/8000  
 a=rtpmap:96 telephone-event/8000  
 a=fmtp:96 0-11  
 a=inactive

=====

F59 192.168.1.1:5062(2) -> 192.168.2.15:5060(3)

SIP/2.0 200 OK  
 Via: SIP/2.0/UDP 192.168.2.15:5060;branch=z9hG4bK-7803a527-887253.832  
 Record-Route: <sip:00005@192.168.1.1>  
 From: 00004 <sip:00004@sip.com>;tag=5f4f7d7b  
 To: <sip:00005@sip.com>;tag=07aaec46  
 Call-ID: 16252088@00004.192.168.1.1  
 CSeq: 1160027642 INVITE  
 Contact: <sip:00005@192.168.2.14>  
 supported: 100rel  
 supported: replaces  
 Allow: INVITE, ACK, BYE, CANCEL, OPTIONS, PRACK, MESSAGE, REFER, NOTIFY  
 Content-Type: application/sdp  
 Accept: application/sdp, message/sipfrag

Content-Length: 189

```
v=0
o=- 219347 13002 IN IP4 192.168.2.14
s=-
c=IN IP4 192.168.2.14
t=0 0
m=audio 5008 RTP/AVP 0 96
a=rtpmap:0 PCMU/8000
a=rtpmap:96 telephone-event/8000
a=fmtp:96 0-11
a=inactive
```

```
=====
F60      192.168.2.15:1152(3) -> 192.168.1.1:5060(2)
```

```
ACK sip:00005@192.168.1.1 SIP/2.0
Via: SIP/2.0/UDP 192.168.2.15:5060;branch=z9hG4bK-2a6d66d5-887254.138
Route: <sip:00005@192.168.2.14>
From: 00004 <sip:00004@sip.com>;tag=5f4f7d7b
To: <sip:00005@sip.com>;tag=07aaec46
Call-ID: 16252088@00004.192.168.1.1
CSeq: 1160027642 ACK
Max-Forwards: 70
Content-Length: 0
```

```
=====
F61      192.168.1.1:5062(2) -> 192.168.2.14:5060(4)
```

```
ACK sip:00005@192.168.2.14 SIP/2.0
Via: SIP/2.0/UDP 192.168.1.1:5060;branch=z9hG4bK-868.1084370795.1160027642
Via: SIP/2.0/UDP 192.168.2.15:5060;branch=z9hG4bK-2a6d66d5-887254.138
From: 00004 <sip:00004@sip.com>;tag=5f4f7d7b
To: <sip:00005@sip.com>;tag=07aaec46
Call-ID: 16252088@00004.192.168.1.1
CSeq: 1160027642 ACK
max-forwards: 69
Content-Length: 0
```

```
=====
F62      192.168.2.15:1152(3) -> 192.168.1.1:5060(2)
```

```
REFER sip:00004@192.168.1.1 SIP/2.0
Via: SIP/2.0/UDP 192.168.2.15:5060;branch=z9hG4bK-282c70db-887254.181
Route: <sip:00002@192.168.2.10>
From: <sip:00004@sip.com>;tag=71932467
To: 00002 <sip:00002@sip.com>;tag=07ad2bec
Call-ID: 7804e982@00002.192.168.1.1
CSeq: 902710084 REFER
Contact: <sip:00004@192.168.2.15>
Max-Forwards: 70
Refer-To:
<sip:00005@192.168.2.14?Replaces=16252088@00004.192.168.1.1%3bto-tag%3d07aaec46%3bfrom-tag%3d5f4f7d7b>
Referred-By: <sip:00004@sip.com>
Content-Length: 0
```

```
=====
F63      192.168.1.1:5062(2) -> 192.168.2.10:5060(1)
```

```
REFER sip:00002@192.168.2.10 SIP/2.0
Via: SIP/2.0/UDP 192.168.1.1:5060;branch=z9hG4bK-865.1084370795.902710084
Via: SIP/2.0/UDP 192.168.2.15:5060;branch=z9hG4bK-282c70db-887254.181
Route: <sip:00002@192.168.2.10>
From: <sip:00004@sip.com>;tag=71932467
To: 00002 <sip:00002@sip.com>;tag=07ad2bec
Call-ID: 7804e982@00002.192.168.1.1
CSeq: 902710084 REFER
Contact: <sip:00004@192.168.2.15>
max-forwards: 69
refer-to:
<sip:00005@192.168.2.14?Replaces=16252088@00004.192.168.1.1%3bto-tag%3d07aaec46%3bfrom-tag%3d5f4f7d7b>
referred-by: <sip:00004@sip.com>
```

Content-Length: 0

```
=====
F64      192.168.2.10:1105(1) -> 192.168.1.1:5060(2)

SIP/2.0 202 Accepted
Via: SIP/2.0/UDP 192.168.1.1:5060;branch=z9hG4bK-865.1084370795.902710084
Via: SIP/2.0/UDP 192.168.2.15:5060;branch=z9hG4bK-282c70db-887254.181
From: <sip:00004@sip.com>;tag=71932467
To: 00002 <sip:00002@sip.com>;tag=07ad2bec
Call-ID: 7804e982@00002.192.168.1.1
CSeq: 902710084 REFER
Contact: <sip:00002@192.168.2.10>
Content-Length: 0
=====
```

```
=====
F65      192.168.2.10:1105(1) -> 192.168.1.1:5060(2)

NOTIFY sip:00004@192.168.1.1 SIP/2.0
Via: SIP/2.0/UDP 192.168.2.10:5060;branch=z9hG4bK-7046ed4-887419.082
Route: <sip:00004@192.168.2.15>
From: 00002 <sip:00002@sip.com>;tag=07ad2bec
To: <sip:00004@sip.com>;tag=71932467
Call-ID: 7804e982@00002.192.168.1.1
CSeq: 316281177 NOTIFY
Contact: <sip:00002@192.168.2.10>
Proxy-Authorization: Digest username="00002", realm="heliossv2",
nonce="2ff98618beddd8d000fbaee9d5a4e060", uri="sip:00004@192.168.1.1",
response="fcff259cd381004c9ad6cd054c2746c1", algorithm=MD5, cnonce="48de36ec",
opaque="f93802f454ec8f5045dc5da529fe3186", qop=auth, nc=00000004
Max-Forwards: 70
Event: refer
Subscription-State: active;expires=30
Content-Type: message/sipfrag
Content-Length: 18
=====
```

SIP/2.0 100 Trying

```
=====
F66      192.168.1.1:5062(2) -> 192.168.2.15:5060(3)

SIP/2.0 202 Accepted
Via: SIP/2.0/UDP 192.168.2.15:5060;branch=z9hG4bK-282c70db-887254.181
From: <sip:00004@sip.com>;tag=71932467
To: 00002 <sip:00002@sip.com>;tag=07ad2bec
Call-ID: 7804e982@00002.192.168.1.1
CSeq: 902710084 REFER
Contact: <sip:00002@192.168.2.10>
Content-Length: 0
=====
```

```
=====
F67      192.168.1.1:5062(2) -> 192.168.2.15:5060(3)

NOTIFY sip:00004@192.168.2.15 SIP/2.0
Via: SIP/2.0/UDP 192.168.1.1:5060;branch=z9hG4bK-866.1084370796.316281177
Via: SIP/2.0/UDP 192.168.2.10:5060;branch=z9hG4bK-7046ed4-887419.082
Route: <sip:00004@192.168.2.15>
From: 00002 <sip:00002@sip.com>;tag=07ad2bec
To: <sip:00004@sip.com>;tag=71932467
Call-ID: 7804e982@00002.192.168.1.1
CSeq: 316281177 NOTIFY
Contact: <sip:00002@192.168.2.10>
max-forwards: 69
event: refer
subscription-state: active;expires=30
Content-Type: message/sipfrag
Content-Length: 18
=====
```

SIP/2.0 100 Trying

```
=====
F68      192.168.2.15:1152(3) -> 192.168.1.1:5060(2)

SIP/2.0 200 OK
Via: SIP/2.0/UDP 192.168.1.1:5060;branch=z9hG4bK-866.1084370796.316281177
=====
```

## FOMA/WLAN デュアル端末に関する技術参考資料 第 1.2 版

Via: SIP/2.0/UDP 192.168.2.10:5060;branch=z9hG4bK-7046ed4-887419.082  
From: 00002 <sip:00002@sip.com>;tag=07ad2bec  
To: <sip:00004@sip.com>;tag=71932467  
Call-ID: 7804e982@00002.192.168.1.1  
CSeq: 316281177 NOTIFY  
Content-Length: 0

F69 192.168.1.1:5062(2) -> 192.168.2.10:5060(1)

SIP/2.0 200 OK  
Via: SIP/2.0/UDP 192.168.2.10:5060;branch=z9hG4bK-7046ed4-887419.082  
From: 00002 <sip:00002@sip.com>;tag=07ad2bec  
To: <sip:00004@sip.com>;tag=71932467  
Call-ID: 7804e982@00002.192.168.1.1  
CSeq: 316281177 NOTIFY  
Content-Length: 0

F70 192.168.2.10:1105(1) -> 192.168.1.1:5060(2)

INVITE sip:00005@192.168.2.14 SIP/2.0  
Via: SIP/2.0/UDP 192.168.2.10:5060;branch=z9hG4bK-40695c37-887419.249  
Route: <sip:192.168.1.1:5060>  
From: <sip:00002@sip.com>;tag=6646c9b9  
To: <sip:00005@192.168.2.14>  
Call-ID: 3d28f59f@00002.192.168.1.1  
CSeq: 871700327 INVITE  
Contact: <sip:00002@192.168.2.10>  
Proxy-Authorization: Digest username="00002", realm="heliossv2",  
nonce="2ff98618beddd8d000fbaee9d5a4e060", uri="sip:00005@192.168.2.14",  
response="722a8d53569e3607bfad42d752cb6fc9", algorithm=MD5, cnonce="5694a38d",  
opaque="f93802f454ec8f5045dc5da529fe3186", qop=auth, nc=00000005  
Max-Forwards: 70  
Supported: 100rel, replaces  
Referred-By: <sip:00004@sip.com>  
Replaces: 16252088@00004.192.168.1.1;to-tag=07aacc46;from-tag=5f4f7d7b  
Allow: INVITE, ACK, BYE, CANCEL, OPTIONS, PRACK, MESSAGE, REFER, NOTIFY  
Content-Type: application/sdp  
Accept: application/sdp, message/sipfrag  
Content-Length: 176  
  
v=0  
o=- 240940 5301 IN IP4 192.168.2.10  
s=-  
c=IN IP4 192.168.2.10  
t=0 0  
m=audio 5006 RTP/AVP 0 96  
a=rtpmap:0 PCMU/8000  
a=rtpmap:96 telephone-event/8000  
a=fmtp:96 0-11

F71 192.168.1.1:5062(2) -> 192.168.2.10:5060(1)

SIP/2.0 407 Proxy Authentication Required  
Via: SIP/2.0/UDP 192.168.2.10:5060;branch=z9hG4bK-40695c37-887419.249  
From: <sip:00002@sip.com>;tag=6646c9b9  
To: <sip:00005@192.168.2.14>  
Call-ID: 3d28f59f@00002.192.168.1.1  
CSeq: 871700327 INVITE  
Proxy-Authenticate: Digest realm="heliossv2", nonce="6ddc7aeea88b5e709291adf6fb2b20dc",  
opaque="f7b1e9a3303498887eafade0648f9b83", stale=false, algorithm=MD5, qop="auth,auth-int"  
Content-Length: 0

F72 192.168.2.10:1105(1) -> 192.168.1.1:5060(2)

ACK sip:00005@192.168.2.14 SIP/2.0  
Via: SIP/2.0/UDP 192.168.2.10:5060;branch=z9hG4bK-40695c37-887419.249  
Route: <sip:192.168.1.1:5060>  
From: <sip:00002@sip.com>;tag=6646c9b9  
To: <sip:00005@192.168.2.14>  
Call-ID: 3d28f59f@00002.192.168.1.1

CSeq: 871700327 ACK  
Content-Length: 0

=====

F73 192.168.2.10:1105(1) -> 192.168.1.1:5060(2)

INVITE sip:00005@192.168.2.14 SIP/2.0  
Via: SIP/2.0/UDP 192.168.2.10:5060;branch=z9hG4bK-6d3c949d-887419.464  
Route: <sip:192.168.1.1:5060>  
From: <sip:00002@sip.com>;tag=6646c9b9  
To: <sip:00005@192.168.2.14>  
Call-ID: 3d28f59f@00002.192.168.1.1  
CSeq: 871700328 INVITE  
Contact: <sip:00002@192.168.2.10>  
Proxy-Authorization: Digest username="00002", realm="heliossv2",  
nonce="6ddc7aeea88b5e709291adf6fb2b20dc", uri="sip:00005@192.168.2.14",  
response="59b096691bbdb81e3035bd1ec0c3bed8", algorithm=MD5, cnonce="70b3e7ed",  
opaque="f7b1e9a3303498887eafade0648f9b83", qop=auth, nc=00000001  
Max-Forwards: 70  
Supported: 100rel, replaces  
Referred-By: <sip:00004@sip.com>  
Replaces: 16252088@00004.192.168.1.1;to-tag=07aaec46;from-tag=5f4f7d7b  
Allow: INVITE, ACK, BYE, CANCEL, OPTIONS, PRACK, MESSAGE, REFER, NOTIFY  
Content-Type: application/sdp  
Accept: application/sdp, message/sipfrag  
Content-Length: 176

v=0  
o=- 240940 5301 IN IP4 192.168.2.10  
s=-  
c=IN IP4 192.168.2.10  
t=0 0  
m=audio 5006 RTP/AVP 0 96  
a=rtpmap:0 PCMU/8000  
a=rtpmap:96 telephone-event/8000  
a=fmtp:96 0-11

=====

F74 192.168.1.1:5062(2) -> 192.168.2.10:5060(1)

SIP/2.0 100 Trying  
Via: SIP/2.0/UDP 192.168.2.10:5060;branch=z9hG4bK-6d3c949d-887419.464  
From: <sip:00002@sip.com>;tag=6646c9b9  
To: <sip:00005@192.168.2.14>  
Call-ID: 3d28f59f@00002.192.168.1.1  
CSeq: 871700328 INVITE  
Content-Length: 0

=====

F75 192.168.1.1:5062(2) -> 192.168.2.14:5060(4)

INVITE sip:00005@192.168.2.14 SIP/2.0  
Via: SIP/2.0/UDP 192.168.1.1:5060;branch=z9hG4bK-871.161354.871700328  
Via: SIP/2.0/UDP 192.168.2.10:5060;branch=z9hG4bK-6d3c949d-887419.464  
Record-Route: <sip:00005@192.168.1.1>  
Route: <sip:192.168.1.1:5060>  
From: 00002 <sip:00002@sip.com>;tag=6646c9b9  
To: <sip:00005@192.168.2.14>  
Call-ID: 3d28f59f@00002.192.168.1.1  
CSeq: 871700328 INVITE  
Contact: <sip:00002@192.168.2.10>  
max-forwards: 69  
supported: 100rel  
supported: replaces  
referred-by: <sip:00004@sip.com>  
replaces: 16252088@00004.192.168.1.1;to-tag=07aaec46;from-tag=5f4f7d7b  
Allow: INVITE, ACK, BYE, CANCEL, OPTIONS, PRACK, MESSAGE, REFER, NOTIFY  
Content-Type: application/sdp  
Accept: application/sdp, message/sipfrag  
Content-Length: 176

v=0  
o=- 240940 5301 IN IP4 192.168.2.10  
s=-  
c=IN IP4 192.168.2.10  
t=0 0

m=audio 5006 RTP/AVP 0 96  
a=rtpmap:0 PCMU/8000  
a=rtpmap:96 telephone-event/8000  
a=fmtp:96 0-11

F76 192.168.2.14:1065(4) -> 192.168.1.1:5060(2)

SIP/2.0 100 Trying  
Via: SIP/2.0/UDP 192.168.1.1:5060;branch=z9hG4bK-871.161354.871700328  
Via: SIP/2.0/UDP 192.168.2.10:5060;branch=z9hG4bK-6d3c949d-887419.464  
From: 00002 <sip:00002@sip.com>;tag=6646c9b9  
To: <sip:00005@192.168.2.14>  
Call-ID: 3d28f59f@00002.192.168.1.1  
CSeq: 871700328 INVITE  
Content-Length: 0

F77 192.168.2.14:1065(4) -> 192.168.1.1:5060(2)

SIP/2.0 200 OK  
Via: SIP/2.0/UDP 192.168.1.1:5060;branch=z9hG4bK-871.161354.871700328  
Via: SIP/2.0/UDP 192.168.2.10:5060;branch=z9hG4bK-6d3c949d-887419.464  
Record-Route: <sip:00005@192.168.1.1>  
From: 00002 <sip:00002@sip.com>;tag=6646c9b9  
To: <sip:00005@192.168.2.14>;tag=232a94eb  
Call-ID: 3d28f59f@00002.192.168.1.1  
CSeq: 871700328 INVITE  
Contact: <sip:00005@192.168.2.14>  
Supported: 100rel, replaces  
Allow: INVITE, ACK, BYE, CANCEL, OPTIONS, PRACK, MESSAGE, REFER, NOTIFY  
Content-Type: application/sdp  
Accept: application/sdp, message/sipfrag  
Content-Length: 177

v=0  
o=- 239309 13001 IN IP4 192.168.2.14  
s=-  
c=IN IP4 192.168.2.14  
t=0 0  
m=audio 5006 RTP/AVP 0 96  
a=rtpmap:0 PCMU/8000  
a=rtpmap:96 telephone-event/8000  
a=fmtp:96 0-11

F78 192.168.1.1:5062(2) -> 192.168.2.10:5060(1)

SIP/2.0 200 OK  
Via: SIP/2.0/UDP 192.168.2.10:5060;branch=z9hG4bK-6d3c949d-887419.464  
Record-Route: <sip:00005@192.168.1.1>  
From: 00002 <sip:00002@sip.com>;tag=6646c9b9  
To: <sip:00005@192.168.2.14>;tag=232a94eb  
Call-ID: 3d28f59f@00002.192.168.1.1  
CSeq: 871700328 INVITE  
Contact: <sip:00005@192.168.2.14>  
supported: 100rel  
supported: replaces  
Allow: INVITE, ACK, BYE, CANCEL, OPTIONS, PRACK, MESSAGE, REFER, NOTIFY  
Content-Type: application/sdp  
Accept: application/sdp, message/sipfrag  
Content-Length: 177

v=0  
o=- 239309 13001 IN IP4 192.168.2.14  
s=-  
c=IN IP4 192.168.2.14  
t=0 0  
m=audio 5006 RTP/AVP 0 96  
a=rtpmap:0 PCMU/8000  
a=rtpmap:96 telephone-event/8000  
a=fmtp:96 0-11

F79 192.168.2.10:1105(1) -> 192.168.1.1:5060(2)



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ACK sip:00005@192.168.1.1 SIP/2.0  
Via: SIP/2.0/UDP 192.168.2.10:5060;branch=z9hG4bK-763be966-887420.327  
Route: <sip:00005@192.168.2.14>  
From: 00002 <sip:00002@sip.com>;tag=6646c9b9  
To: <sip:00005@192.168.2.14>;tag=232a94eb  
Call-ID: 3d28f59f@00002.192.168.1.1  
CSeq: 871700328 ACK  
Proxy-Authorization: Digest username="00002", realm="heliossv2",  
nonce="6ddc7aaea88b5e709291adf6fb2b20dc", uri="sip:00005@192.168.2.14",  
response="59b096691bbdb81e3035bd1ec0c3bed8", algorithm=MD5, cnonce="70b3e7ed",  
opaque="f7b1e9a3303498887eafade0648f9b83", qop=auth, nc=00000001  
Max-Forwards: 70  
Content-Length: 0

=====

F80 192.168.1.1:5062(2) -> 192.168.2.14:5060(4)

ACK sip:00005@192.168.2.14 SIP/2.0  
Via: SIP/2.0/UDP 192.168.1.1:5060;branch=z9hG4bK-871.1084370797.871700328  
Via: SIP/2.0/UDP 192.168.2.10:5060;branch=z9hG4bK-763be966-887420.327  
From: 00002 <sip:00002@sip.com>;tag=6646c9b9  
To: <sip:00005@192.168.2.14>;tag=232a94eb  
Call-ID: 3d28f59f@00002.192.168.1.1  
CSeq: 871700328 ACK  
max-forwards: 69  
Content-Length: 0

=====

F81 192.168.2.10:1105(1) -> 192.168.1.1:5060(2)

NOTIFY sip:00004@192.168.1.1 SIP/2.0  
Via: SIP/2.0/UDP 192.168.2.10:5060;branch=z9hG4bK-f8c87ac-887420.407  
Route: <sip:00004@192.168.2.15>  
From: 00002 <sip:00002@sip.com>;tag=07ad2bec  
To: <sip:00004@sip.com>;tag=71932467  
Call-ID: 7804e982@00002.192.168.1.1  
CSeq: 316281178 NOTIFY  
Contact: <sip:00002@192.168.2.10>  
Proxy-Authorization: Digest username="00002", realm="heliossv2",  
nonce="6ddc7aaea88b5e709291adf6fb2b20dc", uri="sip:00004@192.168.1.1",  
response="28df73f1f9b14df12cf9a1c74b98738f", algorithm=MD5, cnonce="3aca81a5",  
opaque="f7b1e9a3303498887eafade0648f9b83", qop=auth, nc=00000002  
Max-Forwards: 70  
Event: refer  
Subscription-State: terminated;reason=noresource  
Content-Type: message/sipfrag  
Content-Length: 14

SIP/2.0 200 OK

=====

F82 192.168.2.14:1065(4) -> 192.168.1.1:5060(2)

BYE sip:00005@192.168.1.1 SIP/2.0  
Via: SIP/2.0/UDP 192.168.2.14:5060;branch=z9hG4bK-47fe9bfd-887180.732  
Route: <sip:00004@192.168.2.15>  
From: <sip:00005@sip.com>;tag=07aaec46  
To: 00004 <sip:00004@sip.com>;tag=5f4f7d7b  
Call-ID: 16252088@00004.192.168.1.1  
CSeq: 903824017 BYE  
Max-Forwards: 70  
Content-Length: 0

=====

F83 192.168.1.1:5062(2) -> 192.168.2.15:5060(3)

NOTIFY sip:00004@192.168.2.15 SIP/2.0  
Via: SIP/2.0/UDP 192.168.1.1:5060;branch=z9hG4bK-866.1084370797.316281178  
Via: SIP/2.0/UDP 192.168.2.10:5060;branch=z9hG4bK-f8c87ac-887420.407  
Route: <sip:00004@192.168.2.15>  
From: 00002 <sip:00002@sip.com>;tag=07ad2bec  
To: <sip:00004@sip.com>;tag=71932467  
Call-ID: 7804e982@00002.192.168.1.1  
CSeq: 316281178 NOTIFY  
Contact: <sip:00002@192.168.2.10>

max-forwards: 69  
event: refer  
subscription-state: terminated;reason=noresource  
Content-Type: message/sipfrag  
Content-Length: 14

SIP/2.0 200 OK

F84 192.168.1.1:5062(2) -> 192.168.2.15:5060(3)

BYE sip:00004@192.168.2.15 SIP/2.0  
Via: SIP/2.0/UDP 192.168.1.1:5060;branch=z9hG4bK-867.1084370797.903824017  
Via: SIP/2.0/UDP 192.168.2.14:5060;branch=z9hG4bK-47fe9bfd-887180.732  
Route: <sip:00004@192.168.2.15>  
From: <sip:00005@sip.com>;tag=07aaec46  
To: 00004 <sip:00004@sip.com>;tag=5f4f7d7b  
Call-ID: 16252088@00004.192.168.1.1  
CSeq: 903824017 BYE  
max-forwards: 69  
Content-Length: 0

F85 192.168.2.15:1152(3) -> 192.168.1.1:5060(2)

SIP/2.0 200 OK  
Via: SIP/2.0/UDP 192.168.1.1:5060;branch=z9hG4bK-866.1084370797.316281178  
Via: SIP/2.0/UDP 192.168.2.10:5060;branch=z9hG4bK-f8c87ac-887420.407  
From: 00002 <sip:00002@sip.com>;tag=07ad2bec  
To: <sip:00004@sip.com>;tag=71932467  
Call-ID: 7804e982@00002.192.168.1.1  
CSeq: 316281178 NOTIFY  
Content-Length: 0

F86 192.168.1.1:5062(2) -> 192.168.2.10:5060(1)

SIP/2.0 200 OK  
Via: SIP/2.0/UDP 192.168.2.10:5060;branch=z9hG4bK-f8c87ac-887420.407  
From: 00002 <sip:00002@sip.com>;tag=07ad2bec  
To: <sip:00004@sip.com>;tag=71932467  
Call-ID: 7804e982@00002.192.168.1.1  
CSeq: 316281178 NOTIFY  
Content-Length: 0

F87 192.168.2.15:1152(3) -> 192.168.1.1:5060(2)

BYE sip:00004@192.168.1.1 SIP/2.0  
Via: SIP/2.0/UDP 192.168.2.15:5060;branch=z9hG4bK-5d40580d-887255.633  
Route: <sip:00002@192.168.2.10>  
From: <sip:00004@sip.com>;tag=71932467  
To: 00002 <sip:00002@sip.com>;tag=07ad2bec  
Call-ID: 7804e982@00002.192.168.1.1  
CSeq: 902710085 BYE  
Max-Forwards: 70  
Content-Length: 0

F88 192.168.2.15:1152(3) -> 192.168.1.1:5060(2)

SIP/2.0 200 OK  
Via: SIP/2.0/UDP 192.168.1.1:5060;branch=z9hG4bK-867.1084370797.903824017  
Via: SIP/2.0/UDP 192.168.2.14:5060;branch=z9hG4bK-47fe9bfd-887180.732  
From: <sip:00005@sip.com>;tag=07aaec46  
To: 00004 <sip:00004@sip.com>;tag=5f4f7d7b  
Call-ID: 16252088@00004.192.168.1.1  
CSeq: 903824017 BYE  
Content-Length: 0

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F89 192.168.1.1:5062(2) -&gt; 192.168.2.14:5060(4)

SIP/2.0 200 OK  
Via: SIP/2.0/UDP 192.168.2.14:5060;branch=z9hG4bK-47fe9bfd-887180.732  
From: <sip:00005@sip.com>;tag=07aaec46  
To: 00004 <sip:00004@sip.com>;tag=5f4f7d7b  
Call-ID: 16252088@00004.192.168.1.1  
CSeq: 903824017 BYE  
Content-Length: 0

F90 192.168.1.1:5062(2) -&gt; 192.168.2.10:5060(1)

BYE sip:00002@192.168.2.10 SIP/2.0  
Via: SIP/2.0/UDP 192.168.1.1:5060;branch=z9hG4bK-865.1084370797.902710085  
Via: SIP/2.0/UDP 192.168.2.15:5060;branch=z9hG4bK-5d40580d-887255.633  
Route: <sip:00002@192.168.2.10>  
From: <sip:00004@sip.com>;tag=71932467  
To: 00002 <sip:00002@sip.com>;tag=07ad2bec  
Call-ID: 7804e982@00002.192.168.1.1  
CSeq: 902710085 BYE  
max-forwards: 69  
Content-Length: 0

F91 192.168.2.10:1105(1) -&gt; 192.168.1.1:5060(2)

SIP/2.0 200 OK  
Via: SIP/2.0/UDP 192.168.1.1:5060;branch=z9hG4bK-865.1084370797.902710085  
Via: SIP/2.0/UDP 192.168.2.15:5060;branch=z9hG4bK-5d40580d-887255.633  
From: <sip:00004@sip.com>;tag=71932467  
To: 00002 <sip:00002@sip.com>;tag=07ad2bec  
Call-ID: 7804e982@00002.192.168.1.1  
CSeq: 902710085 BYE  
Content-Length: 0

F92 192.168.1.1:5062(2) -&gt; 192.168.2.15:5060(3)

SIP/2.0 200 OK  
Via: SIP/2.0/UDP 192.168.2.15:5060;branch=z9hG4bK-5d40580d-887255.633  
From: <sip:00004@sip.com>;tag=71932467  
To: 00002 <sip:00002@sip.com>;tag=07ad2bec  
Call-ID: 7804e982@00002.192.168.1.1  
CSeq: 902710085 BYE  
Content-Length: 0

F93 192.168.2.10:1105(1) -&gt; 192.168.1.1:5060(2)

BYE sip:00005@192.168.1.1 SIP/2.0  
Via: SIP/2.0/UDP 192.168.2.10:5060;branch=z9hG4bK-1379be67-887426.163  
Route: <sip:00005@192.168.2.14>  
From: 00002 <sip:00002@sip.com>;tag=6646c9b9  
To: <sip:00005@192.168.2.14>;tag=232a94eb  
Call-ID: 3d28f59f@00002.192.168.1.1  
CSeq: 871700329 BYE  
Proxy-Authorization: Digest username="00002", realm="heliossv2",  
nonce="6ddc7aeea88b5e709291adf6fb2b20dc", uri="sip:00005@192.168.1.1",  
response="a5cb862b334706a5b2c3f856cca73199", algorithm=MD5, cnonce="7dc6860d",  
opaque="f7b1e9a3303498887eafade0648f9b83", qop=auth, nc=00000003  
Max-Forwards: 70  
Content-Length: 0

F94 192.168.1.1:5062(2) -&gt; 192.168.2.14:5060(4)

BYE sip:00005@192.168.2.14 SIP/2.0  
Via: SIP/2.0/UDP 192.168.1.1:5060;branch=z9hG4bK-871.1084370803.871700329  
Via: SIP/2.0/UDP 192.168.2.10:5060;branch=z9hG4bK-1379be67-887426.163  
Route: <sip:00005@192.168.2.14>

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From: 00002 <sip:00002@sip.com>;tag=6646c9b9  
To: <sip:00005@192.168.2.14>;tag=232a94eb  
Call-ID: 3d28f59f@00002.192.168.1.1  
CSeq: 871700329 BYE  
max-forwards: 69  
Content-Length: 0

=====

F95            192.168.2.14:1065(4) -> 192.168.1.1:5060(2)

SIP/2.0 200 OK  
Via: SIP/2.0/UDP 192.168.1.1:5060;branch=z9hG4bK-871.1084370803.871700329  
Via: SIP/2.0/UDP 192.168.2.10:5060;branch=z9hG4bK-1379be67-887426.163  
From: 00002 <sip:00002@sip.com>;tag=6646c9b9  
To: <sip:00005@192.168.2.14>;tag=232a94eb  
Call-ID: 3d28f59f@00002.192.168.1.1  
CSeq: 871700329 BYE  
Content-Length: 0

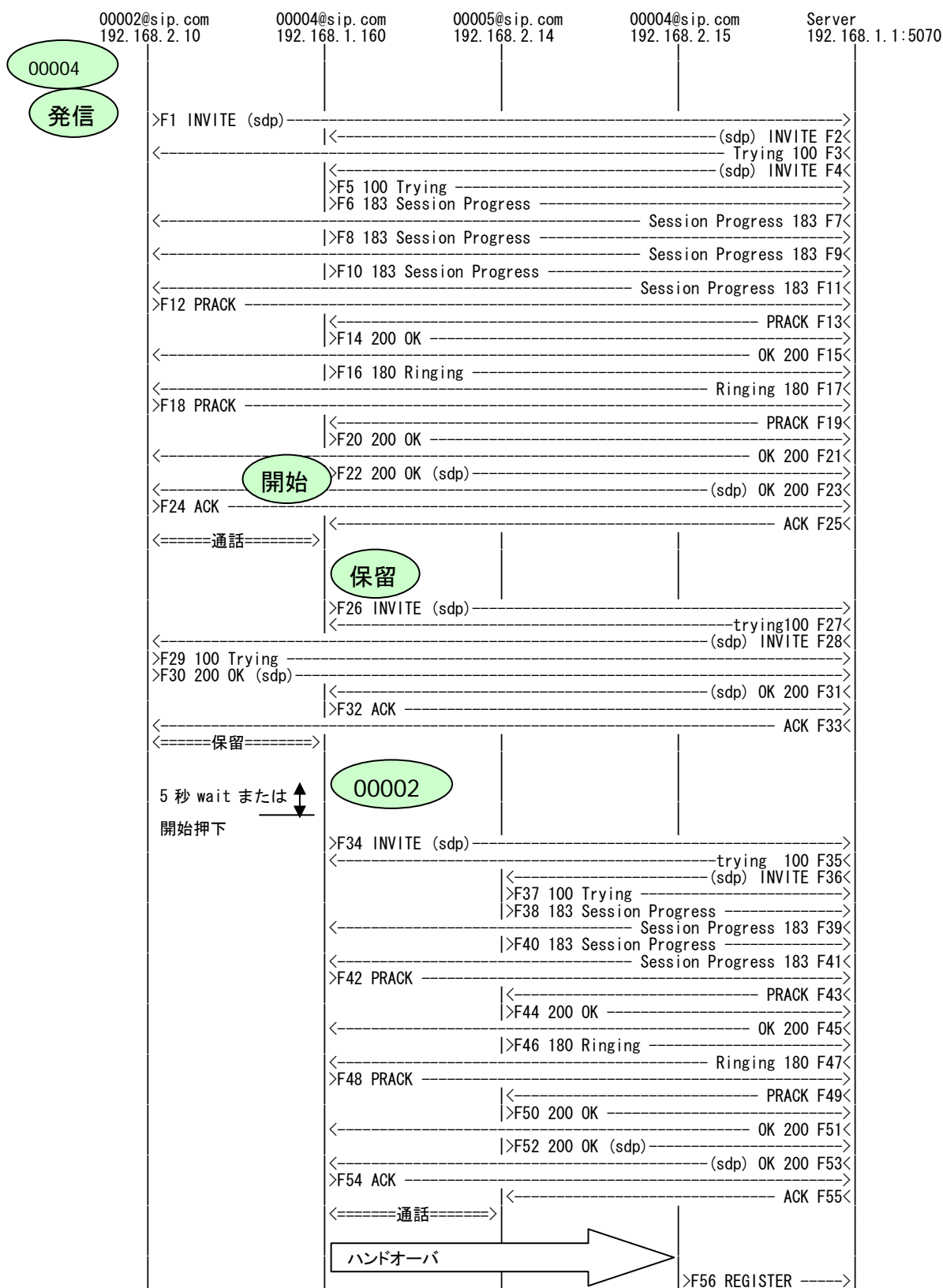
=====

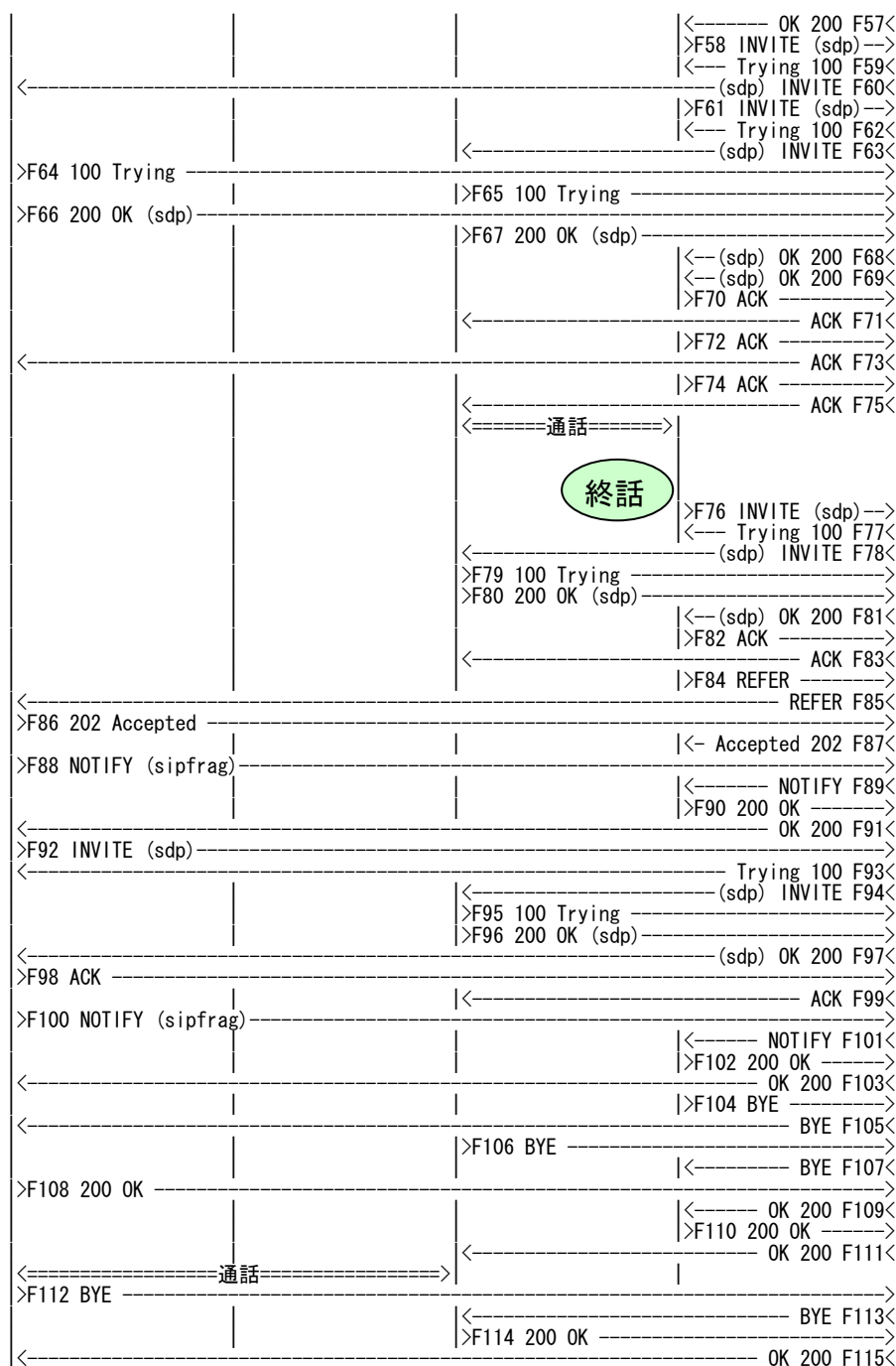
F96            192.168.1.1:5062(2) -> 192.168.2.10:5060(1)

SIP/2.0 200 OK  
Via: SIP/2.0/UDP 192.168.2.10:5060;branch=z9hG4bK-1379be67-887426.163  
From: 00002 <sip:00002@sip.com>;tag=6646c9b9  
To: <sip:00005@192.168.2.14>;tag=232a94eb  
Call-ID: 3d28f59f@00002.192.168.1.1  
CSeq: 871700329 BYE  
Content-Length: 0

=====

## 11.8.17. 転送中転送者ハンドオーバー(IP アドレスの変更あり)





注：00002 認証なし 00004 認証なし 00005 認証なし

図 11-56 転送中転送者ハンドオーバー(IP アドレスの変更あり)

```

F1      192.168.2.10:1107(1) -> 192.168.1.1:5070(5)

INVITE sip:00004@sip.com SIP/2.0
Via: SIP/2.0/UDP 192.168.2.10:5060;branch=z9hG4bK-514bda07-890050.074
Route: <sip:192.168.1.1:5070>
From: <sip:00002@sip.com>;tag=50126861
To: <sip:00004@sip.com>
Call-ID: 11bdc160@00002.192.168.1.1
CSeq: 780309692 INVITE
Contact: <sip:00002@192.168.2.10>
Max-Forwards: 70
  
```

Supported: 100rel, replaces  
 Allow: INVITE, ACK, BYE, CANCEL, OPTIONS, PRACK, MESSAGE, REFER, NOTIFY  
 Content-Type: application/sdp  
 Accept: application/sdp, message/sipfrag  
 Content-Length: 249

v=0  
 o=- 64711 6601 IN IP4 192.168.2.10  
 s=-  
 c=IN IP4 192.168.2.10  
 t=0 0  
 m=audio 5008 RTP/AVP 0 8 4 18 96  
 a=rtpmap:0 PCMU/8000  
 a=rtpmap:8 PCMA/8000  
 a=rtpmap:4 G723/8000  
 a=rtpmap:18 G729/8000  
 a=rtpmap:96 telephone-event/8000  
 a=fmtp:96 0-11

=====

F2 192.168.1.1:5070(5) -> 192.168.1.160:5060(2)

INVITE sip:00004@192.168.1.160 SIP/2.0  
 Record-Route: <sip:00004@192.168.1.1:5070;ftag=50126861;lr=on>  
 Via: SIP/2.0/UDP 192.168.1.1:5070;branch=z9hG4bK0207.cc4a20d1.0  
 Via: SIP/2.0/UDP 192.168.2.10:5060;branch=z9hG4bK-514bda07-890050.074  
 From: <sip:00002@sip.com>;tag=50126861  
 To: <sip:00004@sip.com>  
 Call-ID: 11bdc160@00002.192.168.1.1  
 CSeq: 780309692 INVITE  
 Contact: <sip:00002@192.168.2.10>  
 Max-Forwards: 69  
 Supported: 100rel, replaces  
 Allow: INVITE, ACK, BYE, CANCEL, OPTIONS, PRACK, MESSAGE, REFER, NOTIFY  
 Content-Type: application/sdp  
 Accept: application/sdp, message/sipfrag  
 Content-Length: 249

v=0  
 o=- 64711 6601 IN IP4 192.168.2.10  
 s=-  
 c=IN IP4 192.168.2.10  
 t=0 0  
 m=audio 5008 RTP/AVP 0 8 4 18 96  
 a=rtpmap:0 PCMU/8000  
 a=rtpmap:8 PCMA/8000  
 a=rtpmap:4 G723/8000  
 a=rtpmap:18 G729/8000  
 a=rtpmap:96 telephone-event/8000  
 a=fmtp:96 0-11

=====

F3 192.168.1.1:5070(5) -> 192.168.2.10:5060(1)

SIP/2.0 100 Trying  
 Via: SIP/2.0/UDP 192.168.2.10:5060;branch=z9hG4bK-514bda07-890050.074  
 From: <sip:00002@sip.com>;tag=50126861  
 To: <sip:00004@sip.com>  
 Call-ID: 11bdc160@00002.192.168.1.1  
 CSeq: 780309692 INVITE  
 Content-Length: 0

=====

F4 192.168.1.1:5070(5) -> 192.168.1.160:5060(2)

INVITE sip:00004@192.168.1.160 SIP/2.0  
 Record-Route: <sip:00004@192.168.1.1:5070;ftag=50126861;lr=on>  
 Via: SIP/2.0/UDP 192.168.1.1:5070;branch=z9hG4bK0207.cc4a20d1.0  
 Via: SIP/2.0/UDP 192.168.2.10:5060;branch=z9hG4bK-514bda07-890050.074  
 From: <sip:00002@sip.com>;tag=50126861  
 To: <sip:00004@sip.com>  
 Call-ID: 11bdc160@00002.192.168.1.1  
 CSeq: 780309692 INVITE  
 Contact: <sip:00002@192.168.2.10>  
 Max-Forwards: 69  
 Supported: 100rel, replaces  
 Allow: INVITE, ACK, BYE, CANCEL, OPTIONS, PRACK, MESSAGE, REFER, NOTIFY

Content-Type: application/sdp  
Accept: application/sdp, message/sipfrag  
Content-Length: 249

v=0  
o=- 64711 6601 IN IP4 192.168.2.10  
s=-  
c=IN IP4 192.168.2.10  
t=0 0  
m=audio 5008 RTP/AVP 0 8 4 18 96  
a=rtpmap:0 PCMU/8000  
a=rtpmap:8 PCMA/8000  
a=rtpmap:4 G723/8000  
a=rtpmap:18 G729/8000  
a=rtpmap:96 telephone-event/8000  
a=fmtp:96 0-11

=====

F5 192.168.1.160:1041 (2) -> 192.168.1.1:5070 (5)

SIP/2.0 100 Trying  
Via: SIP/2.0/UDP 192.168.1.1:5070;branch=z9hG4bK0207.cc4a20d1.0  
Via: SIP/2.0/UDP 192.168.2.10:5060;branch=z9hG4bK-514bda07-890050.074  
From: <sip:00002@sip.com>;tag=50126861  
To: <sip:00004@sip.com>  
Call-ID: 11bdc160@00002.192.168.1.1  
CSeq: 780309692 INVITE  
Content-Length: 0

=====

F6 192.168.1.160:1041 (2) -> 192.168.1.1:5070 (5)

SIP/2.0 183 Session Progress  
Via: SIP/2.0/UDP 192.168.1.1:5070;branch=z9hG4bK0207.cc4a20d1.0  
Via: SIP/2.0/UDP 192.168.2.10:5060;branch=z9hG4bK-514bda07-890050.074  
Record-Route: <sip:00004@192.168.1.1:5070;ftag=50126861;lr=on>  
From: <sip:00002@sip.com>;tag=50126861  
To: <sip:00004@sip.com>;tag=71c197a3  
Call-ID: 11bdc160@00002.192.168.1.1  
CSeq: 780309692 INVITE  
Contact: <sip:00004@192.168.1.160>  
Require: 100rel  
RSeq: 830685778  
Content-Length: 0

=====

F7 192.168.1.1:5070 (5) -> 192.168.2.10:5060 (1)

SIP/2.0 183 Session Progress  
Via: SIP/2.0/UDP 192.168.2.10:5060;branch=z9hG4bK-514bda07-890050.074  
Record-Route: <sip:00004@192.168.1.1:5070;ftag=50126861;lr=on>  
From: <sip:00002@sip.com>;tag=50126861  
To: <sip:00004@sip.com>;tag=71c197a3  
Call-ID: 11bdc160@00002.192.168.1.1  
CSeq: 780309692 INVITE  
Contact: <sip:00004@192.168.1.160>  
Require: 100rel  
RSeq: 830685778  
Content-Length: 0

=====

F8 192.168.1.160:1041 (2) -> 192.168.1.1:5070 (5)

SIP/2.0 183 Session Progress  
Via: SIP/2.0/UDP 192.168.1.1:5070;branch=z9hG4bK0207.cc4a20d1.0  
Via: SIP/2.0/UDP 192.168.2.10:5060;branch=z9hG4bK-514bda07-890050.074  
Record-Route: <sip:00004@192.168.1.1:5070;ftag=50126861;lr=on>  
From: <sip:00002@sip.com>;tag=50126861  
To: <sip:00004@sip.com>;tag=71c197a3  
Call-ID: 11bdc160@00002.192.168.1.1  
CSeq: 780309692 INVITE  
Contact: <sip:00004@192.168.1.160>  
Require: 100rel  
RSeq: 830685778



Content-Length: 0

F9 192.168.1.1:5070(5) -> 192.168.2.10:5060(1)

SIP/2.0 183 Session Progress  
 Via: SIP/2.0/UDP 192.168.2.10:5060;branch=z9hG4bK-514bda07-890050.074  
 Record-Route: <sip:00004@192.168.1.1:5070;ftag=50126861;lr=on>  
 From: <sip:00002@sip.com>;tag=50126861  
 To: <sip:00004@sip.com>;tag=71c197a3  
 Call-ID: 11bdc160@00002.192.168.1.1  
 CSeq: 780309692 INVITE  
 Contact: <sip:00004@192.168.1.160>  
 Require: 100rel  
 RSeq: 830685778  
 Content-Length: 0

F10 192.168.1.160:1041(2) -> 192.168.1.1:5070(5)

SIP/2.0 183 Session Progress  
 Via: SIP/2.0/UDP 192.168.1.1:5070;branch=z9hG4bK0207.cc4a20d1.0  
 Via: SIP/2.0/UDP 192.168.2.10:5060;branch=z9hG4bK-514bda07-890050.074  
 Record-Route: <sip:00004@192.168.1.1:5070;ftag=50126861;lr=on>  
 From: <sip:00002@sip.com>;tag=50126861  
 To: <sip:00004@sip.com>;tag=71c197a3  
 Call-ID: 11bdc160@00002.192.168.1.1  
 CSeq: 780309692 INVITE  
 Contact: <sip:00004@192.168.1.160>  
 Require: 100rel  
 RSeq: 830685778  
 Content-Length: 0

F11 192.168.1.1:5070(5) -> 192.168.2.10:5060(1)

SIP/2.0 183 Session Progress  
 Via: SIP/2.0/UDP 192.168.2.10:5060;branch=z9hG4bK-514bda07-890050.074  
 Record-Route: <sip:00004@192.168.1.1:5070;ftag=50126861;lr=on>  
 From: <sip:00002@sip.com>;tag=50126861  
 To: <sip:00004@sip.com>;tag=71c197a3  
 Call-ID: 11bdc160@00002.192.168.1.1  
 CSeq: 780309692 INVITE  
 Contact: <sip:00004@192.168.1.160>  
 Require: 100rel  
 RSeq: 830685778  
 Content-Length: 0

F12 192.168.2.10:1107(1) -> 192.168.1.1:5070(5)

PRACK sip:00004@192.168.1.160 SIP/2.0  
 Via: SIP/2.0/UDP 192.168.2.10:5060;branch=z9hG4bK-4f3a2c5f-890050.504  
 Route: <sip:00004@192.168.1.1:5070;ftag=50126861;lr=on>  
 From: <sip:00002@sip.com>;tag=50126861  
 To: <sip:00004@sip.com>;tag=71c197a3  
 Call-ID: 11bdc160@00002.192.168.1.1  
 CSeq: 780309693 PRACK  
 Max-Forwards: 70  
 RAck: 830685778 780309692 INVITE  
 Content-Length: 0

F13 192.168.1.1:5070(5) -> 192.168.1.160:5060(2)

PRACK sip:00004@192.168.1.160 SIP/2.0  
 Record-Route: <sip:00004@192.168.1.1:5070;ftag=50126861;lr=on>  
 Via: SIP/2.0/UDP 192.168.1.1:5070;branch=z9hG4bK1207.bbaf875.0  
 Via: SIP/2.0/UDP 192.168.2.10:5060;branch=z9hG4bK-4f3a2c5f-890050.504  
 From: <sip:00002@sip.com>;tag=50126861  
 To: <sip:00004@sip.com>;tag=71c197a3

## FOMA/WLAN デュアル端末に関する技術参考資料 第 1.2 版

Call-ID: 11bdc160@00002. 192. 168. 1. 1  
CSeq: 780309693 PRACK  
Max-Forwards: 69  
RAck: 830685778 780309692 INVITE  
Content-Length: 0

F14 192. 168. 1. 160:1041 (2) -> 192. 168. 1. 1:5070 (5)

SIP/2. 0 200 OK  
Via: SIP/2. 0/UDP 192. 168. 1. 1:5070;branch=z9hG4bK1207. bbaef875. 0  
Via: SIP/2. 0/UDP 192. 168. 2. 10:5060;branch=z9hG4bK-4f3a2c5f-890050. 504  
From: <sip:00002@sip.com>;tag=50126861  
To: <sip:00004@sip.com>;tag=71c197a3  
Call-ID: 11bdc160@00002. 192. 168. 1. 1  
CSeq: 780309693 PRACK  
Content-Length: 0

F15 192. 168. 1. 1:5070 (5) -> 192. 168. 2. 10:5060 (1)

SIP/2. 0 200 OK  
Via: SIP/2. 0/UDP 192. 168. 2. 10:5060;branch=z9hG4bK-4f3a2c5f-890050. 504  
From: <sip:00002@sip.com>;tag=50126861  
To: <sip:00004@sip.com>;tag=71c197a3  
Call-ID: 11bdc160@00002. 192. 168. 1. 1  
CSeq: 780309693 PRACK  
Content-Length: 0

F16 192. 168. 1. 160:1041 (2) -> 192. 168. 1. 1:5070 (5)

SIP/2. 0 180 Ringing  
Via: SIP/2. 0/UDP 192. 168. 1. 1:5070;branch=z9hG4bK0207. cc4a20d1. 0  
Via: SIP/2. 0/UDP 192. 168. 2. 10:5060;branch=z9hG4bK-514bda07-890050. 074  
Record-Route: <sip:00004@192. 168. 1. 1:5070;ftag=50126861;lr=on>  
From: <sip:00002@sip.com>;tag=50126861  
To: <sip:00004@sip.com>;tag=71c197a3  
Call-ID: 11bdc160@00002. 192. 168. 1. 1  
CSeq: 780309692 INVITE  
Contact: <sip:00004@192. 168. 1. 160>  
Require: 100rel  
RSeq: 830685779  
Content-Length: 0

F17 192. 168. 1. 1:5070 (5) -> 192. 168. 2. 10:5060 (1)

SIP/2. 0 180 Ringing  
Via: SIP/2. 0/UDP 192. 168. 2. 10:5060;branch=z9hG4bK-514bda07-890050. 074  
Record-Route: <sip:00004@192. 168. 1. 1:5070;ftag=50126861;lr=on>  
From: <sip:00002@sip.com>;tag=50126861  
To: <sip:00004@sip.com>;tag=71c197a3  
Call-ID: 11bdc160@00002. 192. 168. 1. 1  
CSeq: 780309692 INVITE  
Contact: <sip:00004@192. 168. 1. 160>  
Require: 100rel  
RSeq: 830685779  
Content-Length: 0

F18 192. 168. 2. 10:1107 (1) -> 192. 168. 1. 1:5070 (5)

PRACK sip:00004@192. 168. 1. 160 SIP/2. 0  
Via: SIP/2. 0/UDP 192. 168. 2. 10:5060;branch=z9hG4bK-7b00520c-890051. 096  
Route: <sip:00004@192. 168. 1. 1:5070;ftag=50126861;lr=on>  
From: <sip:00002@sip.com>;tag=50126861  
To: <sip:00004@sip.com>;tag=71c197a3  
Call-ID: 11bdc160@00002. 192. 168. 1. 1  
CSeq: 780309694 PRACK  
Max-Forwards: 70

RAck: 830685779 780309692 INVITE  
Content-Length: 0

F19 192.168.1.1:5070(5) -> 192.168.1.160:5060(2)

PRACK sip:00004@192.168.1.160 SIP/2.0  
Record-Route: <sip:00004@192.168.1.1:5070;ftag=50126861;lr=on>  
Via: SIP/2.0/UDP 192.168.1.1:5070;branch=z9hG4bKe107.c3663cd1.0  
Via: SIP/2.0/UDP 192.168.2.10:5060;branch=z9hG4bK-7b00520c-890051.096  
From: <sip:00002@sip.com>;tag=50126861  
To: <sip:00004@sip.com>;tag=71c197a3  
Call-ID: 11bdc160@00002.192.168.1.1  
CSeq: 780309694 PRACK  
Max-Forwards: 69  
RAck: 830685779 780309692 INVITE  
Content-Length: 0

F20 192.168.1.160:1041(2) -> 192.168.1.1:5070(5)

SIP/2.0 200 OK  
Via: SIP/2.0/UDP 192.168.1.1:5070;branch=z9hG4bKe107.c3663cd1.0  
Via: SIP/2.0/UDP 192.168.2.10:5060;branch=z9hG4bK-7b00520c-890051.096  
From: <sip:00002@sip.com>;tag=50126861  
To: <sip:00004@sip.com>;tag=71c197a3  
Call-ID: 11bdc160@00002.192.168.1.1  
CSeq: 780309694 PRACK  
Content-Length: 0

F21 192.168.1.1:5070(5) -> 192.168.2.10:5060(1)

SIP/2.0 200 OK  
Via: SIP/2.0/UDP 192.168.2.10:5060;branch=z9hG4bK-7b00520c-890051.096  
From: <sip:00002@sip.com>;tag=50126861  
To: <sip:00004@sip.com>;tag=71c197a3  
Call-ID: 11bdc160@00002.192.168.1.1  
CSeq: 780309694 PRACK  
Content-Length: 0

F22 192.168.1.160:1041(2) -> 192.168.1.1:5070(5)

SIP/2.0 200 OK  
Via: SIP/2.0/UDP 192.168.1.1:5070;branch=z9hG4bK0207.cc4a20d1.0  
Via: SIP/2.0/UDP 192.168.2.10:5060;branch=z9hG4bK-514bda07-890050.074  
Record-Route: <sip:00004@192.168.1.1:5070;ftag=50126861;lr=on>  
From: <sip:00002@sip.com>;tag=50126861  
To: <sip:00004@sip.com>;tag=71c197a3  
Call-ID: 11bdc160@00002.192.168.1.1  
CSeq: 780309692 INVITE  
Contact: <sip:00004@192.168.1.160>  
Supported: 100rel, replaces  
Allow: INVITE, ACK, BYE, CANCEL, OPTIONS, PRACK, MESSAGE, REFER, NOTIFY  
Content-Type: application/sdp  
Accept: application/sdp, message/sipfrag  
Content-Length: 179

v=0  
o=- 921838 12801 IN IP4 192.168.1.160  
s=-  
c=IN IP4 192.168.1.160  
t=0 0  
m=audio 5006 RTP/AVP 0 96  
a=rtpmap:0 PCMU/8000  
a=rtpmap:96 telephone-event/8000  
a=fmtp:96 0-11

F23 192.168.1.1:5070(5) -> 192.168.2.10:5060(1)

SIP/2.0 200 OK  
 Via: SIP/2.0/UDP 192.168.2.10:5060;branch=z9hG4bK-514bda07-890050.074  
 Record-Route: <sip:00004@192.168.1.1:5070;ftag=50126861;lr=on>  
 From: <sip:00002@sip.com>;tag=50126861  
 To: <sip:00004@sip.com>;tag=71c197a3  
 Call-ID: 11bdc160@00002.192.168.1.1  
 CSeq: 780309692 INVITE  
 Contact: <sip:00004@192.168.1.160>  
 Supported: 100rel, replaces  
 Allow: INVITE, ACK, BYE, CANCEL, OPTIONS, PRACK, MESSAGE, REFER, NOTIFY  
 Content-Type: application/sdp  
 Accept: application/sdp, message/sipfrag  
 Content-Length: 179

v=0  
 o=- 921838 12801 IN IP4 192.168.1.160  
 s=-  
 c=IN IP4 192.168.1.160  
 t=0 0  
 m=audio 5006 RTP/AVP 0 96  
 a=rtpmap:0 PCMU/8000  
 a=rtpmap:96 telephone-event/8000  
 a=fmtp:96 0-11

=====

F24 192.168.2.10:1107(1) -> 192.168.1.1:5070(5)

ACK sip:00004@192.168.1.160 SIP/2.0  
 Via: SIP/2.0/UDP 192.168.2.10:5060;branch=z9hG4bK-7c87d180-890055.085  
 Route: <sip:00004@192.168.1.1:5070;ftag=50126861;lr=on>  
 From: <sip:00002@sip.com>;tag=50126861  
 To: <sip:00004@sip.com>;tag=71c197a3  
 Call-ID: 11bdc160@00002.192.168.1.1  
 CSeq: 780309692 ACK  
 Max-Forwards: 70  
 Content-Length: 0

=====

F25 192.168.1.1:5070(5) -> 192.168.1.160:5060(2)

ACK sip:00004@192.168.1.160 SIP/2.0  
 Record-Route: <sip:00004@192.168.1.1:5070;ftag=50126861;lr=on>  
 Via: SIP/2.0/UDP 192.168.1.1:5070;branch=0  
 Via: SIP/2.0/UDP 192.168.2.10:5060;branch=z9hG4bK-7c87d180-890055.085  
 From: <sip:00002@sip.com>;tag=50126861  
 To: <sip:00004@sip.com>;tag=71c197a3  
 Call-ID: 11bdc160@00002.192.168.1.1  
 CSeq: 780309692 ACK  
 Max-Forwards: 69  
 Content-Length: 0

=====

F26 192.168.1.160:1041(2) -> 192.168.1.1:5070(5)

INVITE sip:00002@192.168.2.10 SIP/2.0  
 Via: SIP/2.0/UDP 192.168.1.160:5060;branch=z9hG4bK-79f4058a-889892.354  
 Route: <sip:00004@192.168.1.1:5070;ftag=50126861;lr=on>  
 From: <sip:00004@sip.com>;tag=71c197a3  
 To: <sip:00002@sip.com>;tag=50126861  
 Call-ID: 11bdc160@00002.192.168.1.1  
 CSeq: 1261618349 INVITE  
 Contact: <sip:00004@192.168.1.160>  
 Max-Forwards: 70  
 Supported: 100rel, replaces  
 Allow: INVITE, ACK, BYE, CANCEL, OPTIONS, PRACK, MESSAGE, REFER, NOTIFY  
 Content-Type: application/sdp  
 Content-Length: 191

v=0  
 o=- 336249 12802 IN IP4 192.168.1.160  
 s=-  
 c=IN IP4 192.168.1.160  
 t=0 0  
 m=audio 5006 RTP/AVP 0 96  
 a=rtpmap:0 PCMU/8000  
 a=rtpmap:96 telephone-event/8000

a=fmtp:96 0-11  
a=inactive

F27 192.168.1.1:5070(5) -> 192.168.1.160:5060(2)

SIP/2.0 100 Trying  
Via: SIP/2.0/UDP 192.168.1.160:5060;branch=z9hG4bK-79f4058a-889892.354  
From: <sip:00004@sip.com>;tag=71c197a3  
To: <sip:00002@sip.com>;tag=50126861  
Call-ID: 11bdc160@00002.192.168.1.1  
CSeq: 1261618349 INVITE  
Content-Length: 0

F28 192.168.1.1:5070(5) -> 192.168.2.10:5060(1)

INVITE sip:00002@192.168.2.10 SIP/2.0  
Record-Route: <sip:00002@192.168.1.1:5070;ftag=71c197a3;lr=on>  
Via: SIP/2.0/UDP 192.168.1.1:5070;branch=z9hG4bK6e8e.bca82e1.0  
Via: SIP/2.0/UDP 192.168.1.160:5060;branch=z9hG4bK-79f4058a-889892.354  
From: <sip:00004@sip.com>;tag=71c197a3  
To: <sip:00002@sip.com>;tag=50126861  
Call-ID: 11bdc160@00002.192.168.1.1  
CSeq: 1261618349 INVITE  
Contact: <sip:00004@192.168.1.160>  
Max-Forwards: 69  
Supported: 100rel, replaces  
Allow: INVITE, ACK, BYE, CANCEL, OPTIONS, PRACK, MESSAGE, REFER, NOTIFY  
Content-Type: application/sdp  
Content-Length: 191

v=0  
o=- 336249 12802 IN IP4 192.168.1.160  
s=-  
c=IN IP4 192.168.1.160  
t=0 0  
m=audio 5006 RTP/AVP 0 96  
a=rtpmap:0 PCMU/8000  
a=rtpmap:96 telephone-event/8000  
a=fmtp:96 0-11  
a=inactive

F29 192.168.2.10:1107(1) -> 192.168.1.1:5070(5)

SIP/2.0 100 Trying  
Via: SIP/2.0/UDP 192.168.1.1:5070;branch=z9hG4bK6e8e.bca82e1.0  
Via: SIP/2.0/UDP 192.168.1.160:5060;branch=z9hG4bK-79f4058a-889892.354  
From: <sip:00004@sip.com>;tag=71c197a3  
To: <sip:00002@sip.com>;tag=50126861  
Call-ID: 11bdc160@00002.192.168.1.1  
CSeq: 1261618349 INVITE  
Content-Length: 0

F30 192.168.2.10:1107(1) -> 192.168.1.1:5070(5)

SIP/2.0 200 OK  
Via: SIP/2.0/UDP 192.168.1.1:5070;branch=z9hG4bK6e8e.bca82e1.0  
Via: SIP/2.0/UDP 192.168.1.160:5060;branch=z9hG4bK-79f4058a-889892.354  
Record-Route: <sip:00002@192.168.1.1:5070;ftag=71c197a3;lr=on>  
From: <sip:00004@sip.com>;tag=71c197a3  
To: <sip:00002@sip.com>;tag=50126861  
Call-ID: 11bdc160@00002.192.168.1.1  
CSeq: 1261618349 INVITE  
Contact: <sip:00002@192.168.2.10>  
Supported: 100rel, replaces  
Allow: INVITE, ACK, BYE, CANCEL, OPTIONS, PRACK, MESSAGE, REFER, NOTIFY  
Content-Type: application/sdp  
Accept: application/sdp, message/sipfrag  
Content-Length: 188

v=0  
o=- 368417 6602 IN IP4 192.168.2.10

```
s=-
c=IN IP4 192.168.2.10
t=0 0
m=audio 5008 RTP/AVP 0 96
a=rtpmap:0 PCMU/8000
a=rtpmap:96 telephone-event/8000
a=fmtp:96 0-11
a=inactive
```

```
=====
F31      192.168.1.1:5070(5) -> 192.168.1.160:5060(2)
```

```
SIP/2.0 200 OK
Via: SIP/2.0/UDP 192.168.1.160:5060;branch=z9hG4bK-79f4058a-889892.354
Record-Route: <sip:00002@192.168.1.1:5070;ftag=71c197a3;lr=on>
From: <sip:00004@sip.com>;tag=71c197a3
To: <sip:00002@sip.com>;tag=50126861
Call-ID: 11bdc160@00002.192.168.1.1
CSeq: 1261618349 INVITE
Contact: <sip:00002@192.168.2.10>
Supported: 100rel, replaces
Allow: INVITE, ACK, BYE, CANCEL, OPTIONS, PRACK, MESSAGE, REFER, NOTIFY
Content-Type: application/sdp
Accept: application/sdp, message/sipfrag
Content-Length: 188
```

```
v=0
o=- 368417 6602 IN IP4 192.168.2.10
s=-
c=IN IP4 192.168.2.10
t=0 0
m=audio 5008 RTP/AVP 0 96
a=rtpmap:0 PCMU/8000
a=rtpmap:96 telephone-event/8000
a=fmtp:96 0-11
a=inactive
```

```
=====
F32      192.168.1.160:1041(2) -> 192.168.1.1:5070(5)
```

```
ACK sip:00002@192.168.2.10 SIP/2.0
Via: SIP/2.0/UDP 192.168.1.160:5060;branch=z9hG4bK-6d96b802-889892.587
Route: <sip:00004@192.168.1.1:5070;ftag=50126861;lr=on>
From: <sip:00004@sip.com>;tag=71c197a3
To: <sip:00002@sip.com>;tag=50126861
Call-ID: 11bdc160@00002.192.168.1.1
CSeq: 1261618349 ACK
Max-Forwards: 70
Content-Length: 0
```

```
=====
F33      192.168.1.1:5070(5) -> 192.168.2.10:5060(1)
```

```
ACK sip:00002@192.168.2.10 SIP/2.0
Record-Route: <sip:00002@192.168.1.1:5070;ftag=71c197a3;lr=on>
Via: SIP/2.0/UDP 192.168.1.1:5070;branch=0
Via: SIP/2.0/UDP 192.168.1.160:5060;branch=z9hG4bK-6d96b802-889892.587
From: <sip:00004@sip.com>;tag=71c197a3
To: <sip:00002@sip.com>;tag=50126861
Call-ID: 11bdc160@00002.192.168.1.1
CSeq: 1261618349 ACK
Max-Forwards: 69
Content-Length: 0
```

```
=====
F34      192.168.1.160:1041(2) -> 192.168.1.1:5070(5)
```

```
INVITE sip:00005@sip.com SIP/2.0
Via: SIP/2.0/UDP 192.168.1.160:5060;branch=z9hG4bK-3a6b02cd-889902.376
Route: <sip:192.168.1.1:5070>
From: <sip:00004@sip.com>;tag=20ceaa1b
To: <sip:00005@sip.com>
Call-ID: 3f1a2ee4@00004.192.168.1.1
CSeq: 1311696145 INVITE
Contact: <sip:00004@192.168.1.160>
```

Max-Forwards: 70  
 Supported: 100rel, replaces  
 Allow: INVITE, ACK, BYE, CANCEL, OPTIONS, PRACK, MESSAGE, REFER, NOTIFY  
 Content-Type: application/sdp  
 Accept: application/sdp, message/sipfrag  
 Content-Length: 251

v=0  
 o=- 348201 101 IN IP4 192.168.1.160  
 s=-  
 c=IN IP4 192.168.1.160  
 t=0 0  
 m=audio 5008 RTP/AVP 0 8 4 18 96  
 a=rtpmap:0 PCMU/8000  
 a=rtpmap:8 PCMA/8000  
 a=rtpmap:4 G723/8000  
 a=rtpmap:18 G729/8000  
 a=rtpmap:96 telephone-event/8000  
 a=fmtp:96 0-11

=====

F35 192.168.1.1:5070(5) -> 192.168.1.160:5060(2)

SIP/2.0 100 Trying  
 Via: SIP/2.0/UDP 192.168.1.160:5060;branch=z9hG4bK-3a6b02cd-889902.376  
 From: <sip:00004@sip.com>;tag=20ceaa1b  
 To: <sip:00005@sip.com>  
 Call-ID: 3f1a2ee4@00004.192.168.1.1  
 CSeq: 1311696145 INVITE  
 Content-Length: 0

=====

F36 192.168.1.1:5070(5) -> 192.168.2.14:5060(3)

INVITE sip:00005@192.168.2.14 SIP/2.0  
 Record-Route: <sip:00005@192.168.1.1:5070;ftag=20ceaa1b;lr=on>  
 Via: SIP/2.0/UDP 192.168.1.1:5070;branch=z9hG4bK7f1d.e86f7056.0  
 Via: SIP/2.0/UDP 192.168.1.160:5060;branch=z9hG4bK-3a6b02cd-889902.376  
 From: <sip:00004@sip.com>;tag=20ceaa1b  
 To: <sip:00005@sip.com>  
 Call-ID: 3f1a2ee4@00004.192.168.1.1  
 CSeq: 1311696145 INVITE  
 Contact: <sip:00004@192.168.1.160>  
 Max-Forwards: 69  
 Supported: 100rel, replaces  
 Allow: INVITE, ACK, BYE, CANCEL, OPTIONS, PRACK, MESSAGE, REFER, NOTIFY  
 Content-Type: application/sdp  
 Accept: application/sdp, message/sipfrag  
 Content-Length: 251

v=0  
 o=- 348201 101 IN IP4 192.168.1.160  
 s=-  
 c=IN IP4 192.168.1.160  
 t=0 0  
 m=audio 5008 RTP/AVP 0 8 4 18 96  
 a=rtpmap:0 PCMU/8000  
 a=rtpmap:8 PCMA/8000  
 a=rtpmap:4 G723/8000  
 a=rtpmap:18 G729/8000  
 a=rtpmap:96 telephone-event/8000  
 a=fmtp:96 0-11

=====

F37 192.168.2.14:1075(3) -> 192.168.1.1:5070(5)

SIP/2.0 100 Trying  
 Via: SIP/2.0/UDP 192.168.1.1:5070;branch=z9hG4bK7f1d.e86f7056.0  
 Via: SIP/2.0/UDP 192.168.1.160:5060;branch=z9hG4bK-3a6b02cd-889902.376  
 From: <sip:00004@sip.com>;tag=20ceaa1b  
 To: <sip:00005@sip.com>  
 Call-ID: 3f1a2ee4@00004.192.168.1.1  
 CSeq: 1311696145 INVITE  
 Content-Length: 0

F38 192.168.2.14:1075(3) -> 192.168.1.1:5070(5)

SIP/2.0 183 Session Progress  
 Via: SIP/2.0/UDP 192.168.1.1:5070;branch=z9hG4bK7f1d.e86f7056.0  
 Via: SIP/2.0/UDP 192.168.1.160:5060;branch=z9hG4bK-3a6b02cd-889902.376  
 Record-Route: <sip:00005@192.168.1.1:5070;ftag=20ceaa1b;lr=on>  
 From: <sip:00004@sip.com>;tag=20ceaa1b  
 To: <sip:00005@sip.com>;tag=10819503  
 Call-ID: 3f1a2ee4@00004.192.168.1.1  
 CSeq: 1311696145 INVITE  
 Contact: <sip:00005@192.168.2.14>  
 Require: 100rel  
 RSeq: 396998097  
 Content-Length: 0

F39 192.168.1.1:5070(5) -> 192.168.1.160:5060(2)

SIP/2.0 183 Session Progress  
 Via: SIP/2.0/UDP 192.168.1.160:5060;branch=z9hG4bK-3a6b02cd-889902.376  
 Record-Route: <sip:00005@192.168.1.1:5070;ftag=20ceaa1b;lr=on>  
 From: <sip:00004@sip.com>;tag=20ceaa1b  
 To: <sip:00005@sip.com>;tag=10819503  
 Call-ID: 3f1a2ee4@00004.192.168.1.1  
 CSeq: 1311696145 INVITE  
 Contact: <sip:00005@192.168.2.14>  
 Require: 100rel  
 RSeq: 396998097  
 Content-Length: 0

F40 192.168.2.14:1075(3) -> 192.168.1.1:5070(5)

SIP/2.0 183 Session Progress  
 Via: SIP/2.0/UDP 192.168.1.1:5070;branch=z9hG4bK7f1d.e86f7056.0  
 Via: SIP/2.0/UDP 192.168.1.160:5060;branch=z9hG4bK-3a6b02cd-889902.376  
 Record-Route: <sip:00005@192.168.1.1:5070;ftag=20ceaa1b;lr=on>  
 From: <sip:00004@sip.com>;tag=20ceaa1b  
 To: <sip:00005@sip.com>;tag=10819503  
 Call-ID: 3f1a2ee4@00004.192.168.1.1  
 CSeq: 1311696145 INVITE  
 Contact: <sip:00005@192.168.2.14>  
 Require: 100rel  
 RSeq: 396998097  
 Content-Length: 0

F41 192.168.1.1:5070(5) -> 192.168.1.160:5060(2)

SIP/2.0 183 Session Progress  
 Via: SIP/2.0/UDP 192.168.1.160:5060;branch=z9hG4bK-3a6b02cd-889902.376  
 Record-Route: <sip:00005@192.168.1.1:5070;ftag=20ceaa1b;lr=on>  
 From: <sip:00004@sip.com>;tag=20ceaa1b  
 To: <sip:00005@sip.com>;tag=10819503  
 Call-ID: 3f1a2ee4@00004.192.168.1.1  
 CSeq: 1311696145 INVITE  
 Contact: <sip:00005@192.168.2.14>  
 Require: 100rel  
 RSeq: 396998097  
 Content-Length: 0

F42 192.168.1.160:1041(2) -> 192.168.1.1:5070(5)

PRACK sip:00005@192.168.2.14 SIP/2.0  
 Via: SIP/2.0/UDP 192.168.1.160:5060;branch=z9hG4bK-7ee3a155-889902.822  
 Route: <sip:00005@192.168.1.1:5070;ftag=20ceaa1b;lr=on>  
 From: <sip:00004@sip.com>;tag=20ceaa1b  
 To: <sip:00005@sip.com>;tag=10819503  
 Call-ID: 3f1a2ee4@00004.192.168.1.1  
 CSeq: 1311696146 PRACK  
 Max-Forwards: 70



RAck: 396998097 1311696145 INVITE  
Content-Length: 0

F43 192.168.1.1:5070(5) -> 192.168.2.14:5060(3)

PRACK sip:00005@192.168.2.14 SIP/2.0  
Record-Route: <sip:00005@192.168.1.1:5070;ftag=20ceaa1b;lr=on>  
Via: SIP/2.0/UDP 192.168.1.1:5070;branch=z9hG4bK4f1d.98728002.0  
Via: SIP/2.0/UDP 192.168.1.160:5060;branch=z9hG4bK-7ee3a155-889902.822  
From: <sip:00004@sip.com>;tag=20ceaa1b  
To: <sip:00005@sip.com>;tag=10819503  
Call-ID: 3f1a2ee4@00004.192.168.1.1  
CSeq: 1311696146 PRACK  
Max-Forwards: 69  
RAck: 396998097 1311696145 INVITE  
Content-Length: 0

F44 192.168.2.14:1075(3) -> 192.168.1.1:5070(5)

SIP/2.0 200 OK  
Via: SIP/2.0/UDP 192.168.1.1:5070;branch=z9hG4bK4f1d.98728002.0  
Via: SIP/2.0/UDP 192.168.1.160:5060;branch=z9hG4bK-7ee3a155-889902.822  
From: <sip:00004@sip.com>;tag=20ceaa1b  
To: <sip:00005@sip.com>;tag=10819503  
Call-ID: 3f1a2ee4@00004.192.168.1.1  
CSeq: 1311696146 PRACK  
Content-Length: 0

F45 192.168.1.1:5070(5) -> 192.168.1.160:5060(2)

SIP/2.0 200 OK  
Via: SIP/2.0/UDP 192.168.1.160:5060;branch=z9hG4bK-7ee3a155-889902.822  
From: <sip:00004@sip.com>;tag=20ceaa1b  
To: <sip:00005@sip.com>;tag=10819503  
Call-ID: 3f1a2ee4@00004.192.168.1.1  
CSeq: 1311696146 PRACK  
Content-Length: 0

F46 192.168.2.14:1075(3) -> 192.168.1.1:5070(5)

SIP/2.0 180 Ringing  
Via: SIP/2.0/UDP 192.168.1.1:5070;branch=z9hG4bK7f1d.e86f7056.0  
Via: SIP/2.0/UDP 192.168.1.160:5060;branch=z9hG4bK-3a6b02cd-889902.376  
Record-Route: <sip:00005@192.168.1.1:5070;ftag=20ceaa1b;lr=on>  
From: <sip:00004@sip.com>;tag=20ceaa1b  
To: <sip:00005@sip.com>;tag=10819503  
Call-ID: 3f1a2ee4@00004.192.168.1.1  
CSeq: 1311696145 INVITE  
Contact: <sip:00005@192.168.2.14>  
Require: 100rel  
RSeq: 396998098  
Content-Length: 0

F47 192.168.1.1:5070(5) -> 192.168.1.160:5060(2)

SIP/2.0 180 Ringing  
Via: SIP/2.0/UDP 192.168.1.160:5060;branch=z9hG4bK-3a6b02cd-889902.376  
Record-Route: <sip:00005@192.168.1.1:5070;ftag=20ceaa1b;lr=on>  
From: <sip:00004@sip.com>;tag=20ceaa1b  
To: <sip:00005@sip.com>;tag=10819503  
Call-ID: 3f1a2ee4@00004.192.168.1.1  
CSeq: 1311696145 INVITE  
Contact: <sip:00005@192.168.2.14>  
Require: 100rel  
RSeq: 396998098  
Content-Length: 0

```
=====
F48      192.168.1.160:1041 (2) -> 192.168.1.1:5070 (5)

PRACK sip:00005@192.168.2.14 SIP/2.0
Via: SIP/2.0/UDP 192.168.1.160:5060;branch=z9hG4bK-ca772bd-889903.361
Route: <sip:00005@192.168.1.1:5070;ftag=20ceaa1b;lr=on>
From: <sip:00004@sip.com>;tag=20ceaa1b
To: <sip:00005@sip.com>;tag=10819503
Call-ID: 3f1a2ee4@00004.192.168.1.1
CSeq: 1311696147 PRACK
Max-Forwards: 70
RAck: 396998098 1311696145 INVITE
Content-Length: 0
=====
```

```
=====
F49      192.168.1.1:5070 (5) -> 192.168.2.14:5060 (3)

PRACK sip:00005@192.168.2.14 SIP/2.0
Record-Route: <sip:00005@192.168.1.1:5070;ftag=20ceaa1b;lr=on>
Via: SIP/2.0/UDP 192.168.1.1:5070;branch=z9hG4bK5f1d.6b169617.0
Via: SIP/2.0/UDP 192.168.1.160:5060;branch=z9hG4bK-ca772bd-889903.361
From: <sip:00004@sip.com>;tag=20ceaa1b
To: <sip:00005@sip.com>;tag=10819503
Call-ID: 3f1a2ee4@00004.192.168.1.1
CSeq: 1311696147 PRACK
Max-Forwards: 69
RAck: 396998098 1311696145 INVITE
Content-Length: 0
=====
```

```
=====
F50      192.168.2.14:1075 (3) -> 192.168.1.1:5070 (5)

SIP/2.0 200 OK
Via: SIP/2.0/UDP 192.168.1.1:5070;branch=z9hG4bK5f1d.6b169617.0
Via: SIP/2.0/UDP 192.168.1.160:5060;branch=z9hG4bK-ca772bd-889903.361
From: <sip:00004@sip.com>;tag=20ceaa1b
To: <sip:00005@sip.com>;tag=10819503
Call-ID: 3f1a2ee4@00004.192.168.1.1
CSeq: 1311696147 PRACK
Content-Length: 0
=====
```

```
=====
F51      192.168.1.1:5070 (5) -> 192.168.1.160:5060 (2)

SIP/2.0 200 OK
Via: SIP/2.0/UDP 192.168.1.160:5060;branch=z9hG4bK-ca772bd-889903.361
From: <sip:00004@sip.com>;tag=20ceaa1b
To: <sip:00005@sip.com>;tag=10819503
Call-ID: 3f1a2ee4@00004.192.168.1.1
CSeq: 1311696147 PRACK
Content-Length: 0
=====
```

```
=====
F52      192.168.2.14:1075 (3) -> 192.168.1.1:5070 (5)

SIP/2.0 200 OK
Via: SIP/2.0/UDP 192.168.1.1:5070;branch=z9hG4bK7f1d.e86f7056.0
Via: SIP/2.0/UDP 192.168.1.160:5060;branch=z9hG4bK-3a6b02cd-889902.376
Record-Route: <sip:00005@192.168.1.1:5070;ftag=20ceaa1b;lr=on>
From: <sip:00004@sip.com>;tag=20ceaa1b
To: <sip:00005@sip.com>;tag=10819503
Call-ID: 3f1a2ee4@00004.192.168.1.1
CSeq: 1311696145 INVITE
Contact: <sip:00005@192.168.2.14>
Supported: 100rel, replaces
Allow: INVITE, ACK, BYE, CANCEL, OPTIONS, PRACK, MESSAGE, REFER, NOTIFY
Content-Type: application/sdp
Accept: application/sdp, message/sipfrag
Content-Length: 177
=====
```

```
v=0
o=- 971469 13001 IN IP4 192.168.2.14
s=-
c=IN IP4 192.168.2.14
t=0 0
m=audio 5006 RTP/AVP 0 96
a=rtpmap:0 PCMU/8000
a=rtpmap:96 telephone-event/8000
a=fmtp:96 0-11
```

```
=====
F53      192.168.1.1:5070(5) -> 192.168.1.160:5060(2)
```

```
SIP/2.0 200 OK
Via: SIP/2.0/UDP 192.168.1.160:5060;branch=z9hG4bK-3a6b02cd-889902.376
Record-Route: <sip:00005@192.168.1.1:5070;ftag=20ceaa1b;lr=on>
From: <sip:00004@sip.com>;tag=20ceaa1b
To: <sip:00005@sip.com>;tag=10819503
Call-ID: 3f1a2ee4@00004.192.168.1.1
CSeq: 1311696145 INVITE
Contact: <sip:00005@192.168.2.14>
Supported: 100rel, replaces
Allow: INVITE, ACK, BYE, CANCEL, OPTIONS, PRACK, MESSAGE, REFER, NOTIFY
Content-Type: application/sdp
Accept: application/sdp, message/sipfrag
Content-Length: 177
```

```
v=0
o=- 971469 13001 IN IP4 192.168.2.14
s=-
c=IN IP4 192.168.2.14
t=0 0
m=audio 5006 RTP/AVP 0 96
a=rtpmap:0 PCMU/8000
a=rtpmap:96 telephone-event/8000
a=fmtp:96 0-11
```

```
=====
F54      192.168.1.160:1041(2) -> 192.168.1.1:5070(5)
```

```
ACK sip:00005@192.168.2.14 SIP/2.0
Via: SIP/2.0/UDP 192.168.1.160:5060;branch=z9hG4bK-62ce6187-889907.134
Route: <sip:00005@192.168.1.1:5070;ftag=20ceaa1b;lr=on>
From: <sip:00004@sip.com>;tag=20ceaa1b
To: <sip:00005@sip.com>;tag=10819503
Call-ID: 3f1a2ee4@00004.192.168.1.1
CSeq: 1311696145 ACK
Max-Forwards: 70
Content-Length: 0
```

```
=====
F55      192.168.1.1:5070(5) -> 192.168.2.14:5060(3)
```

```
ACK sip:00005@192.168.2.14 SIP/2.0
Record-Route: <sip:00005@192.168.1.1:5070;ftag=20ceaa1b;lr=on>
Via: SIP/2.0/UDP 192.168.1.1:5070;branch=0
Via: SIP/2.0/UDP 192.168.1.160:5060;branch=z9hG4bK-62ce6187-889907.134
From: <sip:00004@sip.com>;tag=20ceaa1b
To: <sip:00005@sip.com>;tag=10819503
Call-ID: 3f1a2ee4@00004.192.168.1.1
CSeq: 1311696145 ACK
Max-Forwards: 69
Content-Length: 0
```

```
=====
F56      192.168.2.15:1042(4) -> 192.168.1.1:5070(5)
```

```
REGISTER sip:192.168.1.1 SIP/2.0
Via: SIP/2.0/UDP 192.168.2.15:5060;branch=z9hG4bK-74aeb1d7-889917.904
From: <sip:00004@sip.com>
To: <sip:00004@sip.com>
Call-ID: 4d4f0262@00004.192.168.1.1
CSeq: 1 REGISTER
Contact: <sip:00004@192.168.2.15>;expires=3600
Max-Forwards: 70
```

User-Agent: △△△△△△ //端末種別  
Content-Length: 0

F57 192.168.1.1:5070(5) -> 192.168.2.15:5060(4)

SIP/2.0 200 OK  
Via: SIP/2.0/UDP 192.168.2.15:5060;branch=z9hG4bK-74aeb1d7-889917.904  
From: <sip:00004@sip.com>  
To: <sip:00004@sip.com>;tag=46a6e639fa023622ac1ba4fea686e961.6f21  
Call-ID: 4d4f0262@00004.192.168.1.1  
CSeq: 1 REGISTER  
Contact: <sip:00004@192.168.1.160>;q=0.00;expires=3556  
Contact: <sip:00004@192.168.2.15>;q=0.00;expires=3600  
Content-Length: 0

F58 192.168.2.15:1042(4) -> 192.168.1.1:5070(5)

INVITE sip:00002@192.168.2.10 SIP/2.0  
Via: SIP/2.0/UDP 192.168.2.15:5060;branch=z9hG4bK-25898ad8-889917.946  
Route: <sip:00004@192.168.1.1:5070;ftag=50126861;lr=on>  
From: <sip:00004@sip.com>;tag=71c197a3  
To: <sip:00002@sip.com>;tag=50126861  
Call-ID: 11bdc160@00002.192.168.1.1  
CSeq: 1261618350 INVITE  
Contact: <sip:00004@192.168.2.15>  
Max-Forwards: 70  
Supported: 100rel, replaces  
Allow: INVITE, ACK, BYE, CANCEL, OPTIONS, PRACK, MESSAGE, REFER, NOTIFY  
Content-Type: application/sdp  
Content-Length: 189

v=0  
o=- 937398 12803 IN IP4 192.168.2.15  
s=-  
c=IN IP4 192.168.2.15  
t=0 0  
m=audio 5006 RTP/AVP 0 96  
a=rtpmap:0 PCMU/8000  
a=rtpmap:96 telephone-event/8000  
a=fmtp:96 0-11  
a=inactive

F59 192.168.1.1:5070(5) -> 192.168.2.15:5060(4)

SIP/2.0 100 Trying  
Via: SIP/2.0/UDP 192.168.2.15:5060;branch=z9hG4bK-25898ad8-889917.946  
From: <sip:00004@sip.com>;tag=71c197a3  
To: <sip:00002@sip.com>;tag=50126861  
Call-ID: 11bdc160@00002.192.168.1.1  
CSeq: 1261618350 INVITE  
Content-Length: 0

F60 192.168.1.1:5070(5) -> 192.168.2.10:5060(1)

INVITE sip:00002@192.168.2.10 SIP/2.0  
Record-Route: <sip:00002@192.168.1.1:5070;ftag=71c197a3;lr=on>  
Via: SIP/2.0/UDP 192.168.1.1:5070;branch=z9hG4bKeb9e.697951a7.0  
Via: SIP/2.0/UDP 192.168.2.15:5060;branch=z9hG4bK-25898ad8-889917.946  
From: <sip:00004@sip.com>;tag=71c197a3  
To: <sip:00002@sip.com>;tag=50126861  
Call-ID: 11bdc160@00002.192.168.1.1  
CSeq: 1261618350 INVITE  
Contact: <sip:00004@192.168.2.15>  
Max-Forwards: 69  
Supported: 100rel, replaces  
Allow: INVITE, ACK, BYE, CANCEL, OPTIONS, PRACK, MESSAGE, REFER, NOTIFY  
Content-Type: application/sdp  
Content-Length: 189

v=0

```

o=- 937398 12803 IN IP4 192.168.2.15
s=-
c=IN IP4 192.168.2.15
t=0 0
m=audio 5006 RTP/AVP 0 96
a=rtpmap:0 PCMU/8000
a=rtpmap:96 telephone-event/8000
a=fmtp:96 0-11
a=inactive

```

```
=====
```

F61 192.168.2.15:1042(4) -> 192.168.1.1:5070(5)

```

INVITE sip:00005@192.168.2.14 SIP/2.0
Via: SIP/2.0/UDP 192.168.2.15:5060;branch=z9hG4bK-1ca8940a-889917.957
Route: <sip:00005@192.168.1.1:5070;ftag=20ceaa1b;lr=on>
From: <sip:00004@sip.com>;tag=20ceaa1b
To: <sip:00005@sip.com>;tag=10819503
Call-ID: 3f1a2ee4@00004.192.168.1.1
CSeq: 1311696148 INVITE
Contact: <sip:00004@192.168.2.15>
Max-Forwards: 70
Supported: 100rel, replaces
Allow: INVITE, ACK, BYE, CANCEL, OPTIONS, PRACK, MESSAGE, REFER, NOTIFY
Content-Type: application/sdp
Content-Length: 249

```

```

v=0
o=- 948723 102 IN IP4 192.168.2.15
s=-
c=IN IP4 192.168.2.15
t=0 0
m=audio 5008 RTP/AVP 0 8 4 18 96
a=rtpmap:0 PCMU/8000
a=rtpmap:8 PCMA/8000
a=rtpmap:4 G723/8000
a=rtpmap:18 G729/8000
a=rtpmap:96 telephone-event/8000
a=fmtp:96 0-11

```

```
=====
```

F62 192.168.1.1:5070(5) -> 192.168.2.15:5060(4)

```

SIP/2.0 100 Trying
Via: SIP/2.0/UDP 192.168.2.15:5060;branch=z9hG4bK-1ca8940a-889917.957
From: <sip:00004@sip.com>;tag=20ceaa1b
To: <sip:00005@sip.com>;tag=10819503
Call-ID: 3f1a2ee4@00004.192.168.1.1
CSeq: 1311696148 INVITE
Content-Length: 0

```

```
=====
```

F63 192.168.1.1:5070(5) -> 192.168.2.14:5060(3)

```

INVITE sip:00005@192.168.2.14 SIP/2.0
Record-Route: <sip:00005@192.168.1.1:5070;ftag=20ceaa1b;lr=on>
Via: SIP/2.0/UDP 192.168.1.1:5070;branch=z9hG4bK302d.fb6cb026.0
Via: SIP/2.0/UDP 192.168.2.15:5060;branch=z9hG4bK-1ca8940a-889917.957
From: <sip:00004@sip.com>;tag=20ceaa1b
To: <sip:00005@sip.com>;tag=10819503
Call-ID: 3f1a2ee4@00004.192.168.1.1
CSeq: 1311696148 INVITE
Contact: <sip:00004@192.168.2.15>
Max-Forwards: 69
Supported: 100rel, replaces
Allow: INVITE, ACK, BYE, CANCEL, OPTIONS, PRACK, MESSAGE, REFER, NOTIFY
Content-Type: application/sdp
Content-Length: 249

```

```

v=0
o=- 948723 102 IN IP4 192.168.2.15
s=-
c=IN IP4 192.168.2.15
t=0 0
m=audio 5008 RTP/AVP 0 8 4 18 96
a=rtpmap:0 PCMU/8000
a=rtpmap:8 PCMA/8000

```

a=rtpmap:4 G723/8000  
a=rtpmap:18 G729/8000  
a=rtpmap:96 telephone-event/8000  
a=fmtp:96 0-11

F64 192.168.2.10:1107(1) -> 192.168.1.1:5070(5)

SIP/2.0 100 Trying  
Via: SIP/2.0/UDP 192.168.1.1:5070;branch=z9hG4bKeb9e.697951a7.0  
Via: SIP/2.0/UDP 192.168.2.15:5060;branch=z9hG4bK-25898ad8-889917.946  
From: <sip:00004@sip.com>;tag=71c197a3  
To: <sip:00002@sip.com>;tag=50126861  
Call-ID: 11bdc160@00002.192.168.1.1  
CSeq: 1261618350 INVITE  
Content-Length: 0

F65 192.168.2.14:1075(3) -> 192.168.1.1:5070(5)

SIP/2.0 100 Trying  
Via: SIP/2.0/UDP 192.168.1.1:5070;branch=z9hG4bK302d.fb6cb026.0  
Via: SIP/2.0/UDP 192.168.2.15:5060;branch=z9hG4bK-1ca8940a-889917.957  
From: <sip:00004@sip.com>;tag=20ceaa1b  
To: <sip:00005@sip.com>;tag=10819503  
Call-ID: 3f1a2ee4@00004.192.168.1.1  
CSeq: 1311696148 INVITE  
Content-Length: 0

F66 192.168.2.10:1107(1) -> 192.168.1.1:5070(5)

SIP/2.0 200 OK  
Via: SIP/2.0/UDP 192.168.1.1:5070;branch=z9hG4bKeb9e.697951a7.0  
Via: SIP/2.0/UDP 192.168.2.15:5060;branch=z9hG4bK-25898ad8-889917.946  
Record-Route: <sip:00002@192.168.1.1:5070;ftag=71c197a3;lr=on>  
From: <sip:00004@sip.com>;tag=71c197a3  
To: <sip:00002@sip.com>;tag=50126861  
Call-ID: 11bdc160@00002.192.168.1.1  
CSeq: 1261618350 INVITE  
Contact: <sip:00002@192.168.2.10>  
Supported: 100rel, replaces  
Allow: INVITE, ACK, BYE, CANCEL, OPTIONS, PRACK, MESSAGE, REFER, NOTIFY  
Content-Type: application/sdp  
Accept: application/sdp, message/sipfrag  
Content-Length: 188

v=0  
o=- 863187 6603 IN IP4 192.168.2.10  
s=-  
c=IN IP4 192.168.2.10  
t=0 0  
m=audio 5008 RTP/AVP 0 96  
a=rtpmap:0 PCMU/8000  
a=rtpmap:96 telephone-event/8000  
a=fmtp:96 0-11  
a=inactive

F67 192.168.2.14:1075(3) -> 192.168.1.1:5070(5)

SIP/2.0 200 OK  
Via: SIP/2.0/UDP 192.168.1.1:5070;branch=z9hG4bK302d.fb6cb026.0  
Via: SIP/2.0/UDP 192.168.2.15:5060;branch=z9hG4bK-1ca8940a-889917.957  
Record-Route: <sip:00005@192.168.1.1:5070;ftag=20ceaa1b;lr=on>  
From: <sip:00004@sip.com>;tag=20ceaa1b  
To: <sip:00005@sip.com>;tag=10819503  
Call-ID: 3f1a2ee4@00004.192.168.1.1  
CSeq: 1311696148 INVITE  
Contact: <sip:00005@192.168.2.14>  
Supported: 100rel, replaces  
Allow: INVITE, ACK, BYE, CANCEL, OPTIONS, PRACK, MESSAGE, REFER, NOTIFY  
Content-Type: application/sdp  
Accept: application/sdp, message/sipfrag  
Content-Length: 177

```
v=0
o=- 195914 13001 IN IP4 192.168.2.14
s=-
c=IN IP4 192.168.2.14
t=0 0
m=audio 5006 RTP/AVP 0 96
a=rtpmap:0 PCMU/8000
a=rtpmap:96 telephone-event/8000
a=fmtp:96 0-11
```

```
=====
F68      192.168.1.1:5070(5) -> 192.168.2.15:5060(4)
```

```
SIP/2.0 200 OK
Via: SIP/2.0/UDP 192.168.2.15:5060;branch=z9hG4bK-25898ad8-889917.946
Record-Route: <sip:00002@192.168.1.1:5070;ftag=71c197a3;lr=on>
From: <sip:00004@sip.com>;tag=71c197a3
To: <sip:00002@sip.com>;tag=50126861
Call-ID: 11bdc160@00002.192.168.1.1
CSeq: 1261618350 INVITE
Contact: <sip:00002@192.168.2.10>
Supported: 100rel, replaces
Allow: INVITE, ACK, BYE, CANCEL, OPTIONS, PRACK, MESSAGE, REFER, NOTIFY
Content-Type: application/sdp
Accept: application/sdp, message/sipfrag
Content-Length: 188
```

```
v=0
o=- 863187 6603 IN IP4 192.168.2.10
s=-
c=IN IP4 192.168.2.10
t=0 0
m=audio 5008 RTP/AVP 0 96
a=rtpmap:0 PCMU/8000
a=rtpmap:96 telephone-event/8000
a=fmtp:96 0-11
a=inactive
```

```
=====
F69      192.168.1.1:5070(5) -> 192.168.2.15:5060(4)
```

```
SIP/2.0 200 OK
Via: SIP/2.0/UDP 192.168.2.15:5060;branch=z9hG4bK-1ca8940a-889917.957
Record-Route: <sip:00005@192.168.1.1:5070;ftag=20ceaa1b;lr=on>
From: <sip:00004@sip.com>;tag=20ceaa1b
To: <sip:00005@sip.com>;tag=10819503
Call-ID: 3f1a2ee4@00004.192.168.1.1
CSeq: 1311696148 INVITE
Contact: <sip:00005@192.168.2.14>
Supported: 100rel, replaces
Allow: INVITE, ACK, BYE, CANCEL, OPTIONS, PRACK, MESSAGE, REFER, NOTIFY
Content-Type: application/sdp
Accept: application/sdp, message/sipfrag
Content-Length: 177
```

```
v=0
o=- 195914 13001 IN IP4 192.168.2.14
s=-
c=IN IP4 192.168.2.14
t=0 0
m=audio 5006 RTP/AVP 0 96
a=rtpmap:0 PCMU/8000
a=rtpmap:96 telephone-event/8000
a=fmtp:96 0-11
```

```
=====
F70      192.168.2.15:1042(4) -> 192.168.1.1:5070(5)
```

```
ACK sip:00005@192.168.2.14 SIP/2.0
Via: SIP/2.0/UDP 192.168.2.15:5060;branch=z9hG4bK-6d1e9274-889918.038
Route: <sip:00005@192.168.1.1:5070;ftag=20ceaa1b;lr=on>
From: <sip:00004@sip.com>;tag=20ceaa1b
To: <sip:00005@sip.com>;tag=10819503
Call-ID: 3f1a2ee4@00004.192.168.1.1
CSeq: 1311696148 ACK
Max-Forwards: 70
Content-Length: 0
```

=====

F71            192.168.1.1:5070(5) -> 192.168.2.14:5060(3)

ACK sip:00005@192.168.2.14 SIP/2.0  
Record-Route: <sip:00005@192.168.1.1:5070;ftag=20ceaa1b;lr=on>  
Via: SIP/2.0/UDP 192.168.1.1:5070;branch=0  
Via: SIP/2.0/UDP 192.168.2.15:5060;branch=z9hG4bK-6d1e9274-889918.038  
From: <sip:00004@sip.com>;tag=20ceaa1b  
To: <sip:00005@sip.com>;tag=10819503  
Call-ID: 3f1a2ee4@00004.192.168.1.1  
CSeq: 1311696148 ACK  
Max-Forwards: 69  
Content-Length: 0

=====

F72            192.168.2.15:1042(4) -> 192.168.1.1:5070(5)

ACK sip:00002@192.168.2.10 SIP/2.0  
Via: SIP/2.0/UDP 192.168.2.15:5060;branch=z9hG4bK-5c439cf1-889918.736  
Route: <sip:00004@192.168.1.1:5070;ftag=50126861;lr=on>  
From: <sip:00004@sip.com>;tag=71c197a3  
To: <sip:00002@sip.com>;tag=50126861  
Call-ID: 11bdc160@00002.192.168.1.1  
CSeq: 1261618350 ACK  
Max-Forwards: 70  
Content-Length: 0

=====

F73            192.168.1.1:5070(5) -> 192.168.2.10:5060(1)

ACK sip:00002@192.168.2.10 SIP/2.0  
Record-Route: <sip:00002@192.168.1.1:5070;ftag=71c197a3;lr=on>  
Via: SIP/2.0/UDP 192.168.1.1:5070;branch=0  
Via: SIP/2.0/UDP 192.168.2.15:5060;branch=z9hG4bK-5c439cf1-889918.736  
From: <sip:00004@sip.com>;tag=71c197a3  
To: <sip:00002@sip.com>;tag=50126861  
Call-ID: 11bdc160@00002.192.168.1.1  
CSeq: 1261618350 ACK  
Max-Forwards: 69  
Content-Length: 0

=====

F74            192.168.2.15:1042(4) -> 192.168.1.1:5070(5)

ACK sip:00005@192.168.2.14 SIP/2.0  
Via: SIP/2.0/UDP 192.168.2.15:5060;branch=z9hG4bK-27ff8afe-889919.238  
Route: <sip:00005@192.168.1.1:5070;ftag=20ceaa1b;lr=on>  
From: <sip:00004@sip.com>;tag=20ceaa1b  
To: <sip:00005@sip.com>;tag=10819503  
Call-ID: 3f1a2ee4@00004.192.168.1.1  
CSeq: 1311696148 ACK  
Max-Forwards: 70  
Content-Type: application/sdp  
Content-Length: 0

=====

F75            192.168.1.1:5070(5) -> 192.168.2.14:5060(3)

ACK sip:00005@192.168.2.14 SIP/2.0  
Record-Route: <sip:00005@192.168.1.1:5070;ftag=20ceaa1b;lr=on>  
Via: SIP/2.0/UDP 192.168.1.1:5070;branch=0  
Via: SIP/2.0/UDP 192.168.2.15:5060;branch=z9hG4bK-27ff8afe-889919.238  
From: <sip:00004@sip.com>;tag=20ceaa1b  
To: <sip:00005@sip.com>;tag=10819503  
Call-ID: 3f1a2ee4@00004.192.168.1.1  
CSeq: 1311696148 ACK  
Max-Forwards: 69  
Content-Type: application/sdp  
Content-Length: 0



```
=====
F76      192.168.2.15:1042(4) -> 192.168.1.1:5070(5)

INVITE sip:00005@192.168.2.14 SIP/2.0
Via: SIP/2.0/UDP 192.168.2.15:5060;branch=z9hG4bK-336c3163-889925.136
Route: <sip:00005@192.168.1.1:5070;ftag=20ceaa1b;lr=on>
From: <sip:00004@sip.com>;tag=20ceaa1b
To: <sip:00005@sip.com>;tag=10819503
Call-ID: 3fla2ee4@00004.192.168.1.1
CSeq: 1311696149 INVITE
Contact: <sip:00004@192.168.2.15>
Max-Forwards: 70
Supported: 100rel, replaces
Allow: INVITE, ACK, BYE, CANCEL, OPTIONS, PRACK, MESSAGE, REFER, NOTIFY
Content-Type: application/sdp
Content-Length: 187

v=0
o=- 128243 102 IN IP4 192.168.2.15
s=-
c=IN IP4 192.168.2.15
t=0 0
m=audio 5008 RTP/AVP 0 96
a=rtpmap:0 PCMU/8000
a=rtpmap:96 telephone-event/8000
a=fmtp:96 0-11
a=inactive
=====
```

```
=====
F77      192.168.1.1:5070(5) -> 192.168.2.15:5060(4)

SIP/2.0 100 Trying
Via: SIP/2.0/UDP 192.168.2.15:5060;branch=z9hG4bK-336c3163-889925.136
From: <sip:00004@sip.com>;tag=20ceaa1b
To: <sip:00005@sip.com>;tag=10819503
Call-ID: 3fla2ee4@00004.192.168.1.1
CSeq: 1311696149 INVITE
Content-Length: 0
=====
```

```
=====
F78      192.168.1.1:5070(5) -> 192.168.2.14:5060(3)

INVITE sip:00005@192.168.2.14 SIP/2.0
Record-Route: <sip:00005@192.168.1.1:5070;ftag=20ceaa1b;lr=on>
Via: SIP/2.0/UDP 192.168.1.1:5070;branch=z9hG4bK202d.03041e41.0
Via: SIP/2.0/UDP 192.168.2.15:5060;branch=z9hG4bK-336c3163-889925.136
From: <sip:00004@sip.com>;tag=20ceaa1b
To: <sip:00005@sip.com>;tag=10819503
Call-ID: 3fla2ee4@00004.192.168.1.1
CSeq: 1311696149 INVITE
Contact: <sip:00004@192.168.2.15>
Max-Forwards: 69
Supported: 100rel, replaces
Allow: INVITE, ACK, BYE, CANCEL, OPTIONS, PRACK, MESSAGE, REFER, NOTIFY
Content-Type: application/sdp
Content-Length: 187

v=0
o=- 128243 102 IN IP4 192.168.2.15
s=-
c=IN IP4 192.168.2.15
t=0 0
m=audio 5008 RTP/AVP 0 96
a=rtpmap:0 PCMU/8000
a=rtpmap:96 telephone-event/8000
a=fmtp:96 0-11
a=inactive
=====
```

```
=====
F79      192.168.2.14:1075(3) -> 192.168.1.1:5070(5)

SIP/2.0 100 Trying
Via: SIP/2.0/UDP 192.168.1.1:5070;branch=z9hG4bK202d.03041e41.0
Via: SIP/2.0/UDP 192.168.2.15:5060;branch=z9hG4bK-336c3163-889925.136
From: <sip:00004@sip.com>;tag=20ceaa1b
=====
```

To: <sip:00005@sip.com>;tag=10819503  
Call-ID: 3f1a2ee4@00004.192.168.1.1  
CSeq: 1311696149 INVITE  
Content-Length: 0

F80 192.168.2.14:1075(3) -> 192.168.1.1:5070(5)

SIP/2.0 200 OK  
Via: SIP/2.0/UDP 192.168.1.1:5070;branch=z9hG4bK202d.03041e41.0  
Via: SIP/2.0/UDP 192.168.2.15:5060;branch=z9hG4bK-336c3163-889925.136  
Record-Route: <sip:00005@192.168.1.1:5070;ftag=20ceaa1b;lr=on>  
From: <sip:00004@sip.com>;tag=20ceaa1b  
To: <sip:00005@sip.com>;tag=10819503  
Call-ID: 3f1a2ee4@00004.192.168.1.1  
CSeq: 1311696149 INVITE  
Contact: <sip:00005@192.168.2.14>  
Supported: 100rel, replaces  
Allow: INVITE, ACK, BYE, CANCEL, OPTIONS, PRACK, MESSAGE, REFER, NOTIFY  
Content-Type: application/sdp  
Accept: application/sdp, message/sipfrag  
Content-Length: 189

v=0  
o=- 555917 13002 IN IP4 192.168.2.14  
s=-  
c=IN IP4 192.168.2.14  
t=0 0  
m=audio 5006 RTP/AVP 0 96  
a=rtpmap:0 PCMU/8000  
a=rtpmap:96 telephone-event/8000  
a=fmtp:96 0-11  
a=inactive

F81 192.168.1.1:5070(5) -> 192.168.2.15:5060(4)

SIP/2.0 200 OK  
Via: SIP/2.0/UDP 192.168.2.15:5060;branch=z9hG4bK-336c3163-889925.136  
Record-Route: <sip:00005@192.168.1.1:5070;ftag=20ceaa1b;lr=on>  
From: <sip:00004@sip.com>;tag=20ceaa1b  
To: <sip:00005@sip.com>;tag=10819503  
Call-ID: 3f1a2ee4@00004.192.168.1.1  
CSeq: 1311696149 INVITE  
Contact: <sip:00005@192.168.2.14>  
Supported: 100rel, replaces  
Allow: INVITE, ACK, BYE, CANCEL, OPTIONS, PRACK, MESSAGE, REFER, NOTIFY  
Content-Type: application/sdp  
Accept: application/sdp, message/sipfrag  
Content-Length: 189

v=0  
o=- 555917 13002 IN IP4 192.168.2.14  
s=-  
c=IN IP4 192.168.2.14  
t=0 0  
m=audio 5006 RTP/AVP 0 96  
a=rtpmap:0 PCMU/8000  
a=rtpmap:96 telephone-event/8000  
a=fmtp:96 0-11  
a=inactive

F82 192.168.2.15:1042(4) -> 192.168.1.1:5070(5)

ACK sip:00005@192.168.2.14 SIP/2.0  
Via: SIP/2.0/UDP 192.168.2.15:5060;branch=z9hG4bK-2fa744ea-889925.385  
Route: <sip:00005@192.168.1.1:5070;ftag=20ceaa1b;lr=on>  
From: <sip:00004@sip.com>;tag=20ceaa1b  
To: <sip:00005@sip.com>;tag=10819503  
Call-ID: 3f1a2ee4@00004.192.168.1.1  
CSeq: 1311696149 ACK  
Max-Forwards: 70  
Content-Length: 0

F83 192.168.1.1:5070(5) -> 192.168.2.14:5060(3)

ACK sip:00005@192.168.2.14 SIP/2.0  
 Record-Route: <sip:00005@192.168.1.1:5070;ftag=20ceaa1b;lr=on>  
 Via: SIP/2.0/UDP 192.168.1.1:5070;branch=0  
 Via: SIP/2.0/UDP 192.168.2.15:5060;branch=z9hG4bK-2fa744ea-889925.385  
 From: <sip:00004@sip.com>;tag=20ceaa1b  
 To: <sip:00005@sip.com>;tag=10819503  
 Call-ID: 3f1a2ee4@00004.192.168.1.1  
 CSeq: 1311696149 ACK  
 Max-Forwards: 69  
 Content-Length: 0

F84 192.168.2.15:1042(4) -> 192.168.1.1:5070(5)

REFER sip:00002@192.168.2.10 SIP/2.0  
 Via: SIP/2.0/UDP 192.168.2.15:5060;branch=z9hG4bK-7af50712-889925.458  
 Route: <sip:00004@192.168.1.1:5070;ftag=50126861;lr=on>  
 From: <sip:00004@sip.com>;tag=71c197a3  
 To: <sip:00002@sip.com>;tag=50126861  
 Call-ID: 11bdc160@00002.192.168.1.1  
 CSeq: 1261618351 REFER  
 Contact: <sip:00004@192.168.2.15>  
 Max-Forwards: 70  
 Refer-To:  
 <sip:00005@192.168.2.14?Replaces=3f1a2ee4@00004.192.168.1.1%3Bto-tag%3d10819503%3Bfrom-tag%3d20ceaa1b>  
 Referred-By: <sip:00004@sip.com>  
 Content-Length: 0

F85 192.168.1.1:5070(5) -> 192.168.2.10:5060(1)

REFER sip:00002@192.168.2.10 SIP/2.0  
 Record-Route: <sip:00002@192.168.1.1:5070;ftag=71c197a3;lr=on>  
 Via: SIP/2.0/UDP 192.168.1.1:5070;branch=z9hG4bKfb9e.39c899e3.0  
 Via: SIP/2.0/UDP 192.168.2.15:5060;branch=z9hG4bK-7af50712-889925.458  
 From: <sip:00004@sip.com>;tag=71c197a3  
 To: <sip:00002@sip.com>;tag=50126861  
 Call-ID: 11bdc160@00002.192.168.1.1  
 CSeq: 1261618351 REFER  
 Contact: <sip:00004@192.168.2.15>  
 Max-Forwards: 69  
 Refer-To:  
 <sip:00005@192.168.2.14?Replaces=3f1a2ee4@00004.192.168.1.1%3bto-tag%3d10819503%3bfrom-tag%3d20ceaa1b>  
 Referred-By: <sip:00004@sip.com>  
 Content-Length: 0

F86 192.168.2.10:1107(1) -> 192.168.1.1:5070(5)

SIP/2.0 202 Accepted  
 Via: SIP/2.0/UDP 192.168.1.1:5070;branch=z9hG4bKfb9e.39c899e3.0  
 Via: SIP/2.0/UDP 192.168.2.15:5060;branch=z9hG4bK-7af50712-889925.458  
 Record-Route: <sip:00002@192.168.1.1:5070;ftag=71c197a3;lr=on>  
 From: <sip:00004@sip.com>;tag=71c197a3  
 To: <sip:00002@sip.com>;tag=50126861  
 Call-ID: 11bdc160@00002.192.168.1.1  
 CSeq: 1261618351 REFER  
 Contact: <sip:00002@192.168.2.10>  
 Content-Length: 0

F87 192.168.1.1:5070(5) -> 192.168.2.15:5060(4)

SIP/2.0 202 Accepted  
 Via: SIP/2.0/UDP 192.168.2.15:5060;branch=z9hG4bK-7af50712-889925.458  
 Record-Route: <sip:00002@192.168.1.1:5070;ftag=71c197a3;lr=on>  
 From: <sip:00004@sip.com>;tag=71c197a3  
 To: <sip:00002@sip.com>;tag=50126861

Call-ID: 11bdc160@00002.192.168.1.1  
CSeq: 1261618351 REFER  
Contact: <sip:00002@192.168.2.10>  
Content-Length: 0

=====

F88            192.168.2.10:1107(1) -> 192.168.1.1:5070(5)

NOTIFY sip:00004@192.168.2.15 SIP/2.0  
Via: SIP/2.0/UDP 192.168.2.10:5060;branch=z9hG4bK-2a4d4976-890090.344  
Route: <sip:00004@192.168.1.1:5070;ftag=50126861;lr=on>  
From: <sip:00002@sip.com>;tag=50126861  
To: <sip:00004@sip.com>;tag=71c197a3  
Call-ID: 11bdc160@00002.192.168.1.1  
CSeq: 780309695 NOTIFY  
Contact: <sip:00002@192.168.2.10>  
Max-Forwards: 70  
Event: refer  
Subscription-State: active;expires=30  
Content-Type: message/sipfrag  
Content-Length: 18

SIP/2.0 100 Trying

=====

F89            192.168.1.1:5070(5) -> 192.168.2.15:5060(4)

NOTIFY sip:00004@192.168.2.15 SIP/2.0  
Record-Route: <sip:00004@192.168.1.1:5070;ftag=50126861;lr=on>  
Via: SIP/2.0/UDP 192.168.1.1:5070;branch=z9hG4bKf107.7575e8b3.0  
Via: SIP/2.0/UDP 192.168.2.10:5060;branch=z9hG4bK-2a4d4976-890090.344  
From: <sip:00002@sip.com>;tag=50126861  
To: <sip:00004@sip.com>;tag=71c197a3  
Call-ID: 11bdc160@00002.192.168.1.1  
CSeq: 780309695 NOTIFY  
Contact: <sip:00002@192.168.2.10>  
Max-Forwards: 69  
Event: refer  
Subscription-State: active;expires=30  
Content-Type: message/sipfrag  
Content-Length: 18

SIP/2.0 100 Trying

=====

F90            192.168.2.15:1042(4) -> 192.168.1.1:5070(5)

SIP/2.0 200 OK  
Via: SIP/2.0/UDP 192.168.1.1:5070;branch=z9hG4bKf107.7575e8b3.0  
Via: SIP/2.0/UDP 192.168.2.10:5060;branch=z9hG4bK-2a4d4976-890090.344  
From: <sip:00002@sip.com>;tag=50126861  
To: <sip:00004@sip.com>;tag=71c197a3  
Call-ID: 11bdc160@00002.192.168.1.1  
CSeq: 780309695 NOTIFY  
Content-Length: 0

=====

F91            192.168.1.1:5070(5) -> 192.168.2.10:5060(1)

SIP/2.0 200 OK  
Via: SIP/2.0/UDP 192.168.2.10:5060;branch=z9hG4bK-2a4d4976-890090.344  
From: <sip:00002@sip.com>;tag=50126861  
To: <sip:00004@sip.com>;tag=71c197a3  
Call-ID: 11bdc160@00002.192.168.1.1  
CSeq: 780309695 NOTIFY  
Content-Length: 0

=====

F92            192.168.2.10:1107(1) -> 192.168.1.1:5070(5)

INVITE sip:00005@192.168.2.14 SIP/2.0  
Via: SIP/2.0/UDP 192.168.2.10:5060;branch=z9hG4bK-650bc9fe-890090.430  
Route: <sip:192.168.1.1:5070>  
From: <sip:00002@sip.com>;tag=7331f00b  
To: <sip:00005@192.168.2.14>

Call-ID: 7014fd61@00002.192.168.1.1  
 CSeq: 401364094 INVITE  
 Contact: <sip:00002@192.168.2.10>  
 Max-Forwards: 70  
 Supported: 100rel, replaces  
 Referred-By: <sip:00004@sip.com>  
 Replaces: 3f1a2ee4@00004.192.168.1.1;to-tag=10819503;from-tag=20ceaa1b  
 Allow: INVITE, ACK, BYE, CANCEL, OPTIONS, PRACK, MESSAGE, REFER, NOTIFY  
 Content-Type: application/sdp  
 Accept: application/sdp, message/sipfrag  
 Content-Length: 176

v=0  
 o=- 423392 6601 IN IP4 192.168.2.10  
 s=-  
 c=IN IP4 192.168.2.10  
 t=0 0  
 m=audio 5006 RTP/AVP 0 96  
 a=rtpmap:0 PCMU/8000  
 a=rtpmap:96 telephone-event/8000  
 a=fmtp:96 0-11

=====

F93 192.168.1.1:5070(5) -> 192.168.2.10:5060(1)

SIP/2.0 100 Trying  
 Via: SIP/2.0/UDP 192.168.2.10:5060;branch=z9hG4bK-650bc9fe-890090.430  
 From: <sip:00002@sip.com>;tag=7331f00b  
 To: <sip:00005@192.168.2.14>  
 Call-ID: 7014fd61@00002.192.168.1.1  
 CSeq: 401364094 INVITE  
 Content-Length: 0

=====

F94 192.168.1.1:5070(5) -> 192.168.2.14:5060(3)

INVITE sip:00005@192.168.2.14 SIP/2.0  
 Record-Route: <sip:00005@192.168.1.1:5070;ftag=7331f00b;lr=on>  
 Via: SIP/2.0/UDP 192.168.1.1:5070;branch=z9hG4bK37f5.52745c65.0  
 Via: SIP/2.0/UDP 192.168.2.10:5060;branch=z9hG4bK-650bc9fe-890090.430  
 From: <sip:00002@sip.com>;tag=7331f00b  
 To: <sip:00005@192.168.2.14>  
 Call-ID: 7014fd61@00002.192.168.1.1  
 CSeq: 401364094 INVITE  
 Contact: <sip:00002@192.168.2.10>  
 Max-Forwards: 69  
 Supported: 100rel, replaces  
 Referred-By: <sip:00004@sip.com>  
 Replaces: 3f1a2ee4@00004.192.168.1.1;to-tag=10819503;from-tag=20ceaa1b  
 Allow: INVITE, ACK, BYE, CANCEL, OPTIONS, PRACK, MESSAGE, REFER, NOTIFY  
 Content-Type: application/sdp  
 Accept: application/sdp, message/sipfrag  
 Content-Length: 176

v=0  
 o=- 423392 6601 IN IP4 192.168.2.10  
 s=-  
 c=IN IP4 192.168.2.10  
 t=0 0  
 m=audio 5006 RTP/AVP 0 96  
 a=rtpmap:0 PCMU/8000  
 a=rtpmap:96 telephone-event/8000  
 a=fmtp:96 0-11

=====

F95 192.168.2.14:1075(3) -> 192.168.1.1:5070(5)

SIP/2.0 100 Trying  
 Via: SIP/2.0/UDP 192.168.1.1:5070;branch=z9hG4bK37f5.52745c65.0  
 Via: SIP/2.0/UDP 192.168.2.10:5060;branch=z9hG4bK-650bc9fe-890090.430  
 From: <sip:00002@sip.com>;tag=7331f00b  
 To: <sip:00005@192.168.2.14>  
 Call-ID: 7014fd61@00002.192.168.1.1  
 CSeq: 401364094 INVITE  
 Content-Length: 0

F96 192.168.2.14:1075(3) -> 192.168.1.1:5070(5)

SIP/2.0 200 OK  
Via: SIP/2.0/UDP 192.168.1.1:5070;branch=z9hG4bK37f5.52745c65.0  
Via: SIP/2.0/UDP 192.168.2.10:5060;branch=z9hG4bK-650bc9fe-890090.430  
Record-Route: <sip:00005@192.168.1.1:5070;ftag=7331f00b;lr=on>  
From: <sip:00002@sip.com>;tag=7331f00b  
To: <sip:00005@192.168.2.14>;tag=59bbb5bc  
Call-ID: 7014fd61@00002.192.168.1.1  
CSeq: 401364094 INVITE  
Contact: <sip:00005@192.168.2.14>  
Supported: 100rel, replaces  
Allow: INVITE, ACK, BYE, CANCEL, OPTIONS, PRACK, MESSAGE, REFER, NOTIFY  
Content-Type: application/sdp  
Accept: application/sdp, message/sipfrag  
Content-Length: 177

v=0  
o=- 180632 13001 IN IP4 192.168.2.14  
s=-  
c=IN IP4 192.168.2.14  
t=0 0  
m=audio 5008 RTP/AVP 0 96  
a=rtpmap:0 PCMU/8000  
a=rtpmap:96 telephone-event/8000  
a=fmtp:96 0-11

F97 192.168.1.1:5070(5) -> 192.168.2.10:5060(1)

SIP/2.0 200 OK  
Via: SIP/2.0/UDP 192.168.2.10:5060;branch=z9hG4bK-650bc9fe-890090.430  
Record-Route: <sip:00005@192.168.1.1:5070;ftag=7331f00b;lr=on>  
From: <sip:00002@sip.com>;tag=7331f00b  
To: <sip:00005@192.168.2.14>;tag=59bbb5bc  
Call-ID: 7014fd61@00002.192.168.1.1  
CSeq: 401364094 INVITE  
Contact: <sip:00005@192.168.2.14>  
Supported: 100rel, replaces  
Allow: INVITE, ACK, BYE, CANCEL, OPTIONS, PRACK, MESSAGE, REFER, NOTIFY  
Content-Type: application/sdp  
Accept: application/sdp, message/sipfrag  
Content-Length: 177

v=0  
o=- 180632 13001 IN IP4 192.168.2.14  
s=-  
c=IN IP4 192.168.2.14  
t=0 0  
m=audio 5008 RTP/AVP 0 96  
a=rtpmap:0 PCMU/8000  
a=rtpmap:96 telephone-event/8000  
a=fmtp:96 0-11

F98 192.168.2.10:1107(1) -> 192.168.1.1:5070(5)

ACK sip:00005@192.168.2.14 SIP/2.0  
Via: SIP/2.0/UDP 192.168.2.10:5060;branch=z9hG4bK-1be08161-890091.214  
Route: <sip:00005@192.168.1.1:5070;ftag=7331f00b;lr=on>  
From: <sip:00002@sip.com>;tag=7331f00b  
To: <sip:00005@192.168.2.14>;tag=59bbb5bc  
Call-ID: 7014fd61@00002.192.168.1.1  
CSeq: 401364094 ACK  
Max-Forwards: 70  
Content-Length: 0

F99 192.168.1.1:5070(5) -> 192.168.2.14:5060(3)

ACK sip:00005@192.168.2.14 SIP/2.0  
Record-Route: <sip:00005@192.168.1.1:5070;ftag=7331f00b;lr=on>  
Via: SIP/2.0/UDP 192.168.1.1:5070;branch=0  
Via: SIP/2.0/UDP 192.168.2.10:5060;branch=z9hG4bK-1be08161-890091.214  
From: <sip:00002@sip.com>;tag=7331f00b

To: <sip:00005@192.168.2.14>;tag=59bbb5bc  
Call-ID: 7014fd61@00002.192.168.1.1  
CSeq: 401364094 ACK  
Max-Forwards: 69  
Content-Length: 0

=====

F100        192.168.2.10:1107(1) -> 192.168.1.1:5070(5)

NOTIFY sip:00004@192.168.2.15 SIP/2.0  
Via: SIP/2.0/UDP 192.168.2.10:5060;branch=z9hG4bK-3d52ed53-890091.285  
Route: <sip:00004@192.168.1.1:5070;ftag=50126861;lr=on>  
From: <sip:00002@sip.com>;tag=50126861  
To: <sip:00004@sip.com>;tag=71c197a3  
Call-ID: 11bdc160@00002.192.168.1.1  
CSeq: 780309696 NOTIFY  
Contact: <sip:00002@192.168.2.10>  
Max-Forwards: 70  
Event: refer  
Subscription-State: terminated;reason=noresource  
Content-Type: message/sipfrag  
Content-Length: 14

SIP/2.0 200 OK

=====

F101        192.168.1.1:5070(5) -> 192.168.2.15:5060(4)

NOTIFY sip:00004@192.168.2.15 SIP/2.0  
Record-Route: <sip:00004@192.168.1.1:5070;ftag=50126861;lr=on>  
Via: SIP/2.0/UDP 192.168.1.1:5070;branch=z9hG4bKc107.013412f5.0  
Via: SIP/2.0/UDP 192.168.2.10:5060;branch=z9hG4bK-3d52ed53-890091.285  
From: <sip:00002@sip.com>;tag=50126861  
To: <sip:00004@sip.com>;tag=71c197a3  
Call-ID: 11bdc160@00002.192.168.1.1  
CSeq: 780309696 NOTIFY  
Contact: <sip:00002@192.168.2.10>  
Max-Forwards: 69  
Event: refer  
Subscription-State: terminated;reason=noresource  
Content-Type: message/sipfrag  
Content-Length: 14

SIP/2.0 200 OK

=====

F102        192.168.2.15:1042(4) -> 192.168.1.1:5070(5)

SIP/2.0 200 OK  
Via: SIP/2.0/UDP 192.168.1.1:5070;branch=z9hG4bKc107.013412f5.0  
Via: SIP/2.0/UDP 192.168.2.10:5060;branch=z9hG4bK-3d52ed53-890091.285  
From: <sip:00002@sip.com>;tag=50126861  
To: <sip:00004@sip.com>;tag=71c197a3  
Call-ID: 11bdc160@00002.192.168.1.1  
CSeq: 780309696 NOTIFY  
Content-Length: 0

=====

F103        192.168.1.1:5070(5) -> 192.168.2.10:5060(1)

SIP/2.0 200 OK  
Via: SIP/2.0/UDP 192.168.2.10:5060;branch=z9hG4bK-3d52ed53-890091.285  
From: <sip:00002@sip.com>;tag=50126861  
To: <sip:00004@sip.com>;tag=71c197a3  
Call-ID: 11bdc160@00002.192.168.1.1  
CSeq: 780309696 NOTIFY  
Content-Length: 0

=====

F104        192.168.2.15:1042(4) -> 192.168.1.1:5070(5)

BYE sip:00002@192.168.2.10 SIP/2.0  
Via: SIP/2.0/UDP 192.168.2.15:5060;branch=z9hG4bK-3b89a7cd-889926.441  
Route: <sip:00004@192.168.1.1:5070;ftag=50126861;lr=on>  
From: <sip:00004@sip.com>;tag=71c197a3

To: <sip:00002@sip.com>;tag=50126861  
Call-ID: 11bdc160@00002. 192. 168. 1. 1  
CSeq: 1261618352 BYE  
Max-Forwards: 70  
Content-Length: 0

F105 192. 168. 1. 1:5070 (5) -> 192. 168. 2. 10:5060 (1)

BYE sip:00002@192. 168. 2. 10 SIP/2. 0  
Record-Route: <sip:00002@192. 168. 1. 1:5070;ftag=71c197a3;lr=on>  
Via: SIP/2. 0/UDP 192. 168. 1. 1:5070;branch=z9hG4bKcb9e. 0ca79e74. 0  
Via: SIP/2. 0/UDP 192. 168. 2. 15:5060;branch=z9hG4bK-3b89a7cd-889926. 441  
From: <sip:00004@sip.com>;tag=71c197a3  
To: <sip:00002@sip.com>;tag=50126861  
Call-ID: 11bdc160@00002. 192. 168. 1. 1  
CSeq: 1261618352 BYE  
Max-Forwards: 69  
Content-Length: 0

F106 192. 168. 2. 14:1075 (3) -> 192. 168. 1. 1:5070 (5)

BYE sip:00004@192. 168. 2. 15 SIP/2. 0  
Via: SIP/2. 0/UDP 192. 168. 2. 14:5060;branch=z9hG4bK-5f2bdc02-889851. 642  
Route: <sip:00005@192. 168. 1. 1:5070;ftag=20ceaa1b;lr=on>  
From: <sip:00005@sip.com>;tag=10819503  
To: <sip:00004@sip.com>;tag=20ceaa1b  
Call-ID: 3f1a2ee4@00004. 192. 168. 1. 1  
CSeq: 1553404511 BYE  
Max-Forwards: 70  
Content-Length: 0

F107 192. 168. 1. 1:5070 (5) -> 192. 168. 2. 15:5060 (4)

BYE sip:00004@192. 168. 2. 15 SIP/2. 0  
Record-Route: <sip:00004@192. 168. 1. 1:5070;ftag=10819503;lr=on>  
Via: SIP/2. 0/UDP 192. 168. 1. 1:5070;branch=z9hG4bK7197. edb03b04. 0  
Via: SIP/2. 0/UDP 192. 168. 2. 14:5060;branch=z9hG4bK-5f2bdc02-889851. 642  
From: <sip:00005@sip.com>;tag=10819503  
To: <sip:00004@sip.com>;tag=20ceaa1b  
Call-ID: 3f1a2ee4@00004. 192. 168. 1. 1  
CSeq: 1553404511 BYE  
Max-Forwards: 69  
Content-Length: 0

F108 192. 168. 2. 10:1107 (1) -> 192. 168. 1. 1:5070 (5)

SIP/2. 0 200 OK  
Via: SIP/2. 0/UDP 192. 168. 1. 1:5070;branch=z9hG4bKcb9e. 0ca79e74. 0  
Via: SIP/2. 0/UDP 192. 168. 2. 15:5060;branch=z9hG4bK-3b89a7cd-889926. 441  
From: <sip:00004@sip.com>;tag=71c197a3  
To: <sip:00002@sip.com>;tag=50126861  
Call-ID: 11bdc160@00002. 192. 168. 1. 1  
CSeq: 1261618352 BYE  
Content-Length: 0

F109 192. 168. 1. 1:5070 (5) -> 192. 168. 2. 15:5060 (4)

SIP/2. 0 200 OK  
Via: SIP/2. 0/UDP 192. 168. 2. 15:5060;branch=z9hG4bK-3b89a7cd-889926. 441  
From: <sip:00004@sip.com>;tag=71c197a3  
To: <sip:00002@sip.com>;tag=50126861  
Call-ID: 11bdc160@00002. 192. 168. 1. 1  
CSeq: 1261618352 BYE  
Content-Length: 0



```
=====
F110      192.168.2.15:1042(4) -> 192.168.1.1:5070(5)

SIP/2.0 200 OK
Via: SIP/2.0/UDP 192.168.1.1:5070;branch=z9hG4bK7197.edb03b04.0
Via: SIP/2.0/UDP 192.168.2.14:5060;branch=z9hG4bK-5f2bdc02-889851.642
From: <sip:00005@sip.com>;tag=10819503
To: <sip:00004@sip.com>;tag=20ceaa1b
Call-ID: 3f1a2ee4@00004.192.168.1.1
CSeq: 1553404511 BYE
Content-Length: 0
=====
```

```
=====
F111      192.168.1.1:5070(5) -> 192.168.2.14:5060(3)

SIP/2.0 200 OK
Via: SIP/2.0/UDP 192.168.2.14:5060;branch=z9hG4bK-5f2bdc02-889851.642
From: <sip:00005@sip.com>;tag=10819503
To: <sip:00004@sip.com>;tag=20ceaa1b
Call-ID: 3f1a2ee4@00004.192.168.1.1
CSeq: 1553404511 BYE
Content-Length: 0
=====
```

```
=====
F112      192.168.2.10:1107(1) -> 192.168.1.1:5070(5)

BYE sip:00005@192.168.2.14 SIP/2.0
Via: SIP/2.0/UDP 192.168.2.10:5060;branch=z9hG4bK-1d15c3f8-890103.755
Route: <sip:00005@192.168.1.1:5070;ftag=7331f00b;lr=on>
From: <sip:00002@sip.com>;tag=7331f00b
To: <sip:00005@192.168.2.14>;tag=59bbb5bc
Call-ID: 7014fd61@00002.192.168.1.1
CSeq: 401364095 BYE
Max-Forwards: 70
Content-Length: 0
=====
```

```
=====
F113      192.168.1.1:5070(5) -> 192.168.2.14:5060(3)

BYE sip:00005@192.168.2.14 SIP/2.0
Record-Route: <sip:00005@192.168.1.1:5070;ftag=7331f00b;lr=on>
Via: SIP/2.0/UDP 192.168.1.1:5070;branch=z9hG4bK47f5.0a6fa2d.0
Via: SIP/2.0/UDP 192.168.2.10:5060;branch=z9hG4bK-1d15c3f8-890103.755
From: <sip:00002@sip.com>;tag=7331f00b
To: <sip:00005@192.168.2.14>;tag=59bbb5bc
Call-ID: 7014fd61@00002.192.168.1.1
CSeq: 401364095 BYE
Max-Forwards: 69
Content-Length: 0
=====
```

```
=====
F114      192.168.2.14:1075(3) -> 192.168.1.1:5070(5)

SIP/2.0 200 OK
Via: SIP/2.0/UDP 192.168.1.1:5070;branch=z9hG4bK47f5.0a6fa2d.0
Via: SIP/2.0/UDP 192.168.2.10:5060;branch=z9hG4bK-1d15c3f8-890103.755
From: <sip:00002@sip.com>;tag=7331f00b
To: <sip:00005@192.168.2.14>;tag=59bbb5bc
Call-ID: 7014fd61@00002.192.168.1.1
CSeq: 401364095 BYE
Content-Length: 0
=====
```

```
=====
F115      192.168.1.1:5070(5) -> 192.168.2.10:5060(1)

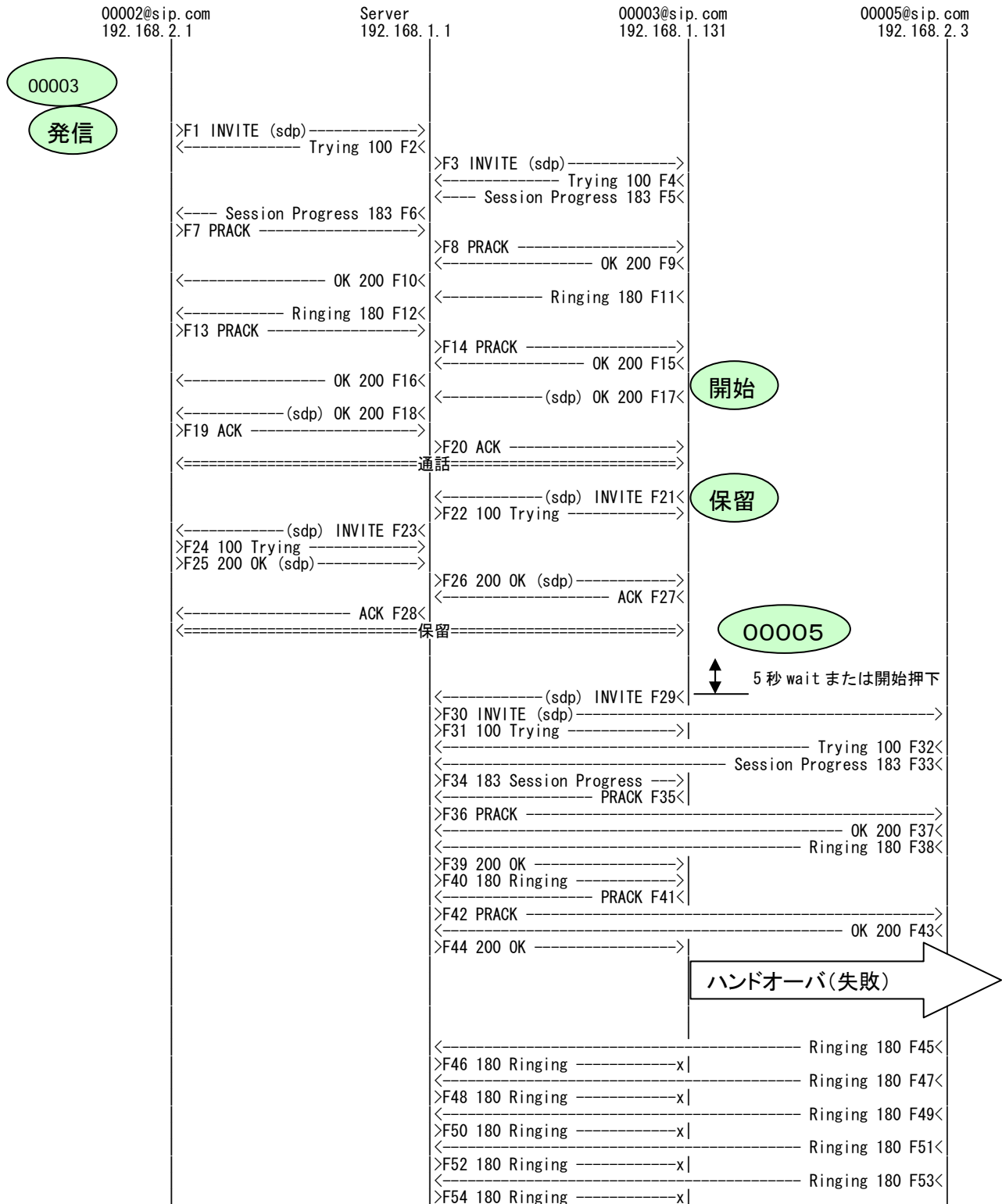
SIP/2.0 200 OK
Via: SIP/2.0/UDP 192.168.2.10:5060;branch=z9hG4bK-1d15c3f8-890103.755
From: <sip:00002@sip.com>;tag=7331f00b
To: <sip:00005@192.168.2.14>;tag=59bbb5bc
Call-ID: 7014fd61@00002.192.168.1.1
=====
```

CSeq: 401364095 BYE  
Content-Length: 0

=====

## 11.8.18. 転送中転送者ハンドオーバ(IP アドレスの再登録失敗)

IP アドレス登録失敗(DHCP 失敗)することで帰属を解除し、再スキャンを行う。(被転送端末、転送端末は状態を維持する。)



終話

```

<----- Ringing 180 F55<
<----- Server Time-out 504 F56<
>F57 ACK ----->
>F58 BYE ----->
>F59 BYE ----->
>F60 BYE ----->
>F61 BYE ----->
>F62 BYE ----->
>F63 BYE ----->
>F64 BYE ----->
<----- Request Timeout 408 F65<

```

注： 00002 認証なし 00003 認証なし 00005 認証なし

図 11-57 転送中転送者ハンドオーバー(IP アドレスの再登録失敗)

F1 192.168.2.1:1043(00002@sip.com) -> 192.168.1.1:5060 (Server)

```

INVITE sip:00003@sip.com SIP/2.0
Via: SIP/2.0/UDP 192.168.2.1:5060;branch=z9hG4bK-5a2d1e3f-846649.218
Route: <sip:192.168.1.1:5060>
From: <sip:00002@sip.com>;tag=7075484a
To: <sip:00003@sip.com>
Call-ID: 512c2042@00002.192.168.1.1
CSeq: 38101563 INVITE
Contact: <sip:00002@192.168.2.1>
Max-Forwards: 70
Supported: 100rel, replaces
Allow: INVITE, ACK, BYE, CANCEL, OPTIONS, PRACK, MESSAGE, REFER, NOTIFY
Content-Type: application/sdp
Accept: application/sdp, message/sipfrag
Content-Length: 248

```

```

v=0
o=- 205594 3201 IN IP4 192.168.2.1
s=-
c=IN IP4 192.168.2.1
t=0 0
m=audio 5008 RTP/AVP 0 8 4 18 96
a=rtpmap:0 PCMU/8000
a=rtpmap:8 PCMA/8000
a=rtpmap:4 G723/8000
a=rtpmap:18 G729/8000
a=rtpmap:96 telephone-event/8000
a=fmtp:96 0-11

```

F2 192.168.1.1:5062 (Server) -> 192.168.2.1:5060 (00002@sip.com)

```

SIP/2.0 100 Trying
Via: SIP/2.0/UDP 192.168.2.1:5060;branch=z9hG4bK-5a2d1e3f-846649.218
From: <sip:00002@sip.com>;tag=7075484a
To: <sip:00003@sip.com>
Call-ID: 512c2042@00002.192.168.1.1
CSeq: 38101563 INVITE
Content-Length: 0

```

F3 192.168.1.1:5062 (Server) -> 192.168.1.131:5060 (00003@sip.com)

```

INVITE sip:00003@192.168.1.131 SIP/2.0
Via: SIP/2.0/UDP 192.168.1.1:5060;branch=z9hG4bK-538.117493.38101563
Via: SIP/2.0/UDP 192.168.2.1:5060;branch=z9hG4bK-5a2d1e3f-846649.218
Record-Route: <sip:00003@192.168.1.1>
Route: <sip:192.168.1.1:5060>
From: 00002 <sip:00002@sip.com>;tag=7075484a
To: <sip:00003@sip.com>
Call-ID: 512c2042@00002.192.168.1.1
CSeq: 38101563 INVITE
Contact: <sip:00002@192.168.2.1>
max-forwards: 69
supported: 100rel
supported: replaces
Allow: INVITE, ACK, BYE, CANCEL, OPTIONS, PRACK, MESSAGE, REFER, NOTIFY
Content-Type: application/sdp
Accept: application/sdp, message/sipfrag
Content-Length: 248

```

```
v=0
o=- 205594 3201 IN IP4 192.168.2.1
s=-
c=IN IP4 192.168.2.1
t=0 0
m=audio 5008 RTP/AVP 0 8 4 18 96
a=rtpmap:0 PCMU/8000
a=rtpmap:8 PCMA/8000
a=rtpmap:4 G723/8000
a=rtpmap:18 G729/8000
a=rtpmap:96 telephone-event/8000
a=fmtp:96 0-11
```

```
=====
F4      192.168.1.131:1024(00003@sip.com) -> 192.168.1.1:5060(Server)
```

```
SIP/2.0 100 Trying
Via: SIP/2.0/UDP 192.168.1.1:5060;branch=z9hG4bK-538.117493.38101563
Via: SIP/2.0/UDP 192.168.2.1:5060;branch=z9hG4bK-5a2d1e3f-846649.218
From: 00002 <sip:00002@sip.com>;tag=7075484a
To: <sip:00003@sip.com>
Call-ID: 512c2042@00002.192.168.1.1
CSeq: 38101563 INVITE
Content-Length: 0
```

```
=====
F5      192.168.1.131:1024(00003@sip.com) -> 192.168.1.1:5060(Server)
```

```
SIP/2.0 183 Session Progress
Via: SIP/2.0/UDP 192.168.1.1:5060;branch=z9hG4bK-538.117493.38101563
Via: SIP/2.0/UDP 192.168.2.1:5060;branch=z9hG4bK-5a2d1e3f-846649.218
Record-Route: <sip:00003@192.168.1.1>
From: 00002 <sip:00002@sip.com>;tag=7075484a
To: <sip:00003@sip.com>;tag=499579b0
Call-ID: 512c2042@00002.192.168.1.1
CSeq: 38101563 INVITE
Contact: <sip:00003@192.168.1.131>
Require: 100rel
RSeq: 17929599
Content-Length: 0
```

```
=====
F6      192.168.1.1:5062(Server) -> 192.168.2.1:5060(00002@sip.com)
```

```
SIP/2.0 183 Session Progress
Via: SIP/2.0/UDP 192.168.2.1:5060;branch=z9hG4bK-5a2d1e3f-846649.218
Record-Route: <sip:00003@192.168.1.1>
From: 00002 <sip:00002@sip.com>;tag=7075484a
To: <sip:00003@sip.com>;tag=499579b0
Call-ID: 512c2042@00002.192.168.1.1
CSeq: 38101563 INVITE
Contact: <sip:00003@192.168.1.131>
require: 100rel
rseq: 17929599
Content-Length: 0
```

```
=====
F7      192.168.2.1:1043(00002@sip.com) -> 192.168.1.1:5060(Server)
```

```
PRACK sip:00003@192.168.1.1 SIP/2.0
Via: SIP/2.0/UDP 192.168.2.1:5060;branch=z9hG4bK-51180132-846649.457
Route: <sip:00003@192.168.1.131>
From: 00002 <sip:00002@sip.com>;tag=7075484a
To: <sip:00003@sip.com>;tag=499579b0
Call-ID: 512c2042@00002.192.168.1.1
CSeq: 38101564 PRACK
Max-Forwards: 70
RAck: 17929599 38101563 INVITE
Content-Length: 0
```

F8 192.168.1.1:5062 (Server) -> 192.168.1.131:5060 (00003@sip.com)

```
PRACK sip:00003@192.168.1.131 SIP/2.0
Via: SIP/2.0/UDP 192.168.1.1:5060;branch=z9hG4bK-538.1109089845.38101564
Via: SIP/2.0/UDP 192.168.2.1:5060;branch=z9hG4bK-51180132-846649.457
Route: <sip:00003@192.168.1.131>
From: 00002 <sip:00002@sip.com>;tag=7075484a
To: <sip:00003@sip.com>;tag=499579b0
Call-ID: 512c2042@00002.192.168.1.1
CSeq: 38101564 PRACK
max-forwards: 69
rack: 17929599 38101563 INVITE
Content-Length: 0
```

F9 192.168.1.131:1024 (00003@sip.com) -> 192.168.1.1:5060 (Server)

```
SIP/2.0 200 OK
Via: SIP/2.0/UDP 192.168.1.1:5060;branch=z9hG4bK-538.1109089845.38101564
Via: SIP/2.0/UDP 192.168.2.1:5060;branch=z9hG4bK-51180132-846649.457
From: 00002 <sip:00002@sip.com>;tag=7075484a
To: <sip:00003@sip.com>;tag=499579b0
Call-ID: 512c2042@00002.192.168.1.1
CSeq: 38101564 PRACK
Content-Length: 0
```

F10 192.168.1.1:5062 (Server) -> 192.168.2.1:5060 (00002@sip.com)

```
SIP/2.0 200 OK
Via: SIP/2.0/UDP 192.168.2.1:5060;branch=z9hG4bK-51180132-846649.457
From: 00002 <sip:00002@sip.com>;tag=7075484a
To: <sip:00003@sip.com>;tag=499579b0
Call-ID: 512c2042@00002.192.168.1.1
CSeq: 38101564 PRACK
Content-Length: 0
```

F11 192.168.1.131:1024 (00003@sip.com) -> 192.168.1.1:5060 (Server)

```
SIP/2.0 180 Ringing
Via: SIP/2.0/UDP 192.168.1.1:5060;branch=z9hG4bK-538.117493.38101563
Via: SIP/2.0/UDP 192.168.2.1:5060;branch=z9hG4bK-5a2d1e3f-846649.218
Record-Route: <sip:00003@192.168.1.1>
From: 00002 <sip:00002@sip.com>;tag=7075484a
To: <sip:00003@sip.com>;tag=499579b0
Call-ID: 512c2042@00002.192.168.1.1
CSeq: 38101563 INVITE
Contact: <sip:00003@192.168.1.131>
Require: 100rel
RSeq: 17929600
Content-Length: 0
```

F12 192.168.1.1:5062 (Server) -> 192.168.2.1:5060 (00002@sip.com)

```
SIP/2.0 180 Ringing
Via: SIP/2.0/UDP 192.168.2.1:5060;branch=z9hG4bK-5a2d1e3f-846649.218
Record-Route: <sip:00003@192.168.1.1>
From: 00002 <sip:00002@sip.com>;tag=7075484a
To: <sip:00003@sip.com>;tag=499579b0
Call-ID: 512c2042@00002.192.168.1.1
CSeq: 38101563 INVITE
Contact: <sip:00003@192.168.1.131>
require: 100rel
rseq: 17929600
Content-Length: 0
```

F13 192.168.2.1:1043 (00002@sip.com) -> 192.168.1.1:5060 (Server)

```

PRACK sip:00003@192.168.1.1 SIP/2.0
Via: SIP/2.0/UDP 192.168.2.1:5060;branch=z9hG4bK-4d48bbf6-846650.069
Route: <sip:00003@192.168.1.131>
From: 00002 <sip:00002@sip.com>;tag=7075484a
To: <sip:00003@sip.com>;tag=499579b0
Call-ID: 512c2042@00002.192.168.1.1
CSeq: 38101565 PRACK
Max-Forwards: 70
RAck: 17929600 38101563 INVITE
Content-Length: 0

```

```
=====
```

F14            192.168.1.1:5062 (Server) -> 192.168.1.131:5060 (00003@sip.com)

```

PRACK sip:00003@192.168.1.131 SIP/2.0
Via: SIP/2.0/UDP 192.168.1.1:5060;branch=z9hG4bK-538.1109089845.38101565
Via: SIP/2.0/UDP 192.168.2.1:5060;branch=z9hG4bK-4d48bbf6-846650.069
Route: <sip:00003@192.168.1.131>
From: 00002 <sip:00002@sip.com>;tag=7075484a
To: <sip:00003@sip.com>;tag=499579b0
Call-ID: 512c2042@00002.192.168.1.1
CSeq: 38101565 PRACK
max-forwards: 69
rack: 17929600 38101563 INVITE
Content-Length: 0

```

```
=====
```

F15            192.168.1.131:1024 (00003@sip.com) -> 192.168.1.1:5060 (Server)

```

SIP/2.0 200 OK
Via: SIP/2.0/UDP 192.168.1.1:5060;branch=z9hG4bK-538.1109089845.38101565
Via: SIP/2.0/UDP 192.168.2.1:5060;branch=z9hG4bK-4d48bbf6-846650.069
From: 00002 <sip:00002@sip.com>;tag=7075484a
To: <sip:00003@sip.com>;tag=499579b0
Call-ID: 512c2042@00002.192.168.1.1
CSeq: 38101565 PRACK
Content-Length: 0

```

```
=====
```

F16            192.168.1.1:5062 (Server) -> 192.168.2.1:5060 (00002@sip.com)

```

SIP/2.0 200 OK
Via: SIP/2.0/UDP 192.168.2.1:5060;branch=z9hG4bK-4d48bbf6-846650.069
From: 00002 <sip:00002@sip.com>;tag=7075484a
To: <sip:00003@sip.com>;tag=499579b0
Call-ID: 512c2042@00002.192.168.1.1
CSeq: 38101565 PRACK
Content-Length: 0

```

```
=====
```

F17            192.168.1.131:1024 (00003@sip.com) -> 192.168.1.1:5060 (Server)

```

SIP/2.0 200 OK
Via: SIP/2.0/UDP 192.168.1.1:5060;branch=z9hG4bK-538.117493.38101563
Via: SIP/2.0/UDP 192.168.2.1:5060;branch=z9hG4bK-5a2d1e3f-846649.218
Record-Route: <sip:00003@192.168.1.1>
From: 00002 <sip:00002@sip.com>;tag=7075484a
To: <sip:00003@sip.com>;tag=499579b0
Call-ID: 512c2042@00002.192.168.1.1
CSeq: 38101563 INVITE
Contact: <sip:00003@192.168.1.131>
Supported: 100rel, replaces
Allow: INVITE, ACK, BYE, CANCEL, OPTIONS, PRACK, MESSAGE, REFER, NOTIFY
Content-Type: application/sdp
Accept: application/sdp, message/sipfrag
Content-Length: 179

```

```

v=0
o=- 830471 12801 IN IP4 192.168.1.131
s=-
c=IN IP4 192.168.1.131
t=0 0
m=audio 5006 RTP/AVP 0 96

```

a=rtpmap:0 PCMU/8000  
a=rtpmap:96 telephone-event/8000  
a=fmtp:96 0-11

F18 192.168.1.1:5062(Server) -> 192.168.2.1:5060(00002@sip.com)

SIP/2.0 200 OK  
Via: SIP/2.0/UDP 192.168.2.1:5060;branch=z9hG4bK-5a2d1e3f-846649.218  
Record-Route: <sip:00003@192.168.1.1>  
From: 00002 <sip:00002@sip.com>;tag=7075484a  
To: <sip:00003@sip.com>;tag=499579b0  
Call-ID: 512c2042@00002.192.168.1.1  
CSeq: 38101563 INVITE  
Contact: <sip:00003@192.168.1.131>  
supported: 100rel  
supported: replaces  
Allow: INVITE, ACK, BYE, CANCEL, OPTIONS, PRACK, MESSAGE, REFER, NOTIFY  
Content-Type: application/sdp  
Accept: application/sdp, message/sipfrag  
Content-Length: 179

v=0  
o=- 830471 12801 IN IP4 192.168.1.131  
s=-  
c=IN IP4 192.168.1.131  
t=0 0  
m=audio 5006 RTP/AVP 0 96  
a=rtpmap:0 PCMU/8000  
a=rtpmap:96 telephone-event/8000  
a=fmtp:96 0-11

F19 192.168.2.1:1043(00002@sip.com) -> 192.168.1.1:5060(Server)

ACK sip:00003@192.168.1.1 SIP/2.0  
Via: SIP/2.0/UDP 192.168.2.1:5060;branch=z9hG4bK-26f64c0c-846653.908  
Route: <sip:00003@192.168.1.131>  
From: 00002 <sip:00002@sip.com>;tag=7075484a  
To: <sip:00003@sip.com>;tag=499579b0  
Call-ID: 512c2042@00002.192.168.1.1  
CSeq: 38101563 ACK  
Max-Forwards: 70  
Content-Length: 0

F20 192.168.1.1:5062(Server) -> 192.168.1.131:5060(00003@sip.com)

ACK sip:00003@192.168.1.131 SIP/2.0  
Via: SIP/2.0/UDP 192.168.1.1:5060;branch=z9hG4bK-538.1109089849.38101563  
Via: SIP/2.0/UDP 192.168.2.1:5060;branch=z9hG4bK-26f64c0c-846653.908  
From: 00002 <sip:00002@sip.com>;tag=7075484a  
To: <sip:00003@sip.com>;tag=499579b0  
Call-ID: 512c2042@00002.192.168.1.1  
CSeq: 38101563 ACK  
max-forwards: 69  
Content-Length: 0

F21 192.168.1.131:1024(00003@sip.com) -> 192.168.1.1:5060(Server)

INVITE sip:00003@192.168.1.1 SIP/2.0  
Via: SIP/2.0/UDP 192.168.1.131:5060;branch=z9hG4bK-fe1c0e6-241705.705  
Route: <sip:00002@192.168.2.1>  
From: <sip:00003@sip.com>;tag=499579b0  
To: 00002 <sip:00002@sip.com>;tag=7075484a  
Call-ID: 512c2042@00002.192.168.1.1  
CSeq: 217575692 INVITE  
Contact: <sip:00003@192.168.1.131>  
Max-Forwards: 70  
Supported: 100rel, replaces  
Allow: INVITE, ACK, BYE, CANCEL, OPTIONS, PRACK, MESSAGE, REFER, NOTIFY  
Content-Type: application/sdp  
Content-Length: 191



```
v=0
o=- 689893 12802 IN IP4 192.168.1.131
s=-
c=IN IP4 192.168.1.131
t=0 0
m=audio 5006 RTP/AVP 0 96
a=rtpmap:0 PCMU/8000
a=rtpmap:96 telephone-event/8000
a=fmtp:96 0-11
a=inactive
```

```
=====
F22      192.168.1.1:5062(Server) -> 192.168.1.131:5060(00003@sip.com)
```

```
SIP/2.0 100 Trying
Via: SIP/2.0/UDP 192.168.1.131:5060;branch=z9hG4bK-fe1c0e6-241705.705
From: <sip:00003@sip.com>;tag=499579b0
To: 00002 <sip:00002@sip.com>;tag=7075484a
Call-ID: 512c2042@00002.192.168.1.1
CSeq: 217575692 INVITE
Content-Length: 0
```

```
=====
F23      192.168.1.1:5062(Server) -> 192.168.2.1:5060(00002@sip.com)
```

```
INVITE sip:00002@192.168.2.1 SIP/2.0
Via: SIP/2.0/UDP 192.168.1.1:5060;branch=z9hG4bK-537.117493.217575692
Via: SIP/2.0/UDP 192.168.1.131:5060;branch=z9hG4bK-fe1c0e6-241705.705
Record-Route: <sip:00003@192.168.1.1>
Route: <sip:00002@192.168.2.1>
From: <sip:00003@sip.com>;tag=499579b0
To: 00002 <sip:00002@sip.com>;tag=7075484a
Call-ID: 512c2042@00002.192.168.1.1
CSeq: 217575692 INVITE
Contact: <sip:00003@192.168.1.131>
max-forwards: 69
supported: 100rel
supported: replaces
Allow: INVITE, ACK, BYE, CANCEL, OPTIONS, PRACK, MESSAGE, REFER, NOTIFY
Content-Type: application/sdp
Content-Length: 191
```

```
v=0
o=- 689893 12802 IN IP4 192.168.1.131
s=-
c=IN IP4 192.168.1.131
t=0 0
m=audio 5006 RTP/AVP 0 96
a=rtpmap:0 PCMU/8000
a=rtpmap:96 telephone-event/8000
a=fmtp:96 0-11
a=inactive
```

```
=====
F24      192.168.2.1:1043(00002@sip.com) -> 192.168.1.1:5060(Server)
```

```
SIP/2.0 100 Trying
Via: SIP/2.0/UDP 192.168.1.1:5060;branch=z9hG4bK-537.117493.217575692
Via: SIP/2.0/UDP 192.168.1.131:5060;branch=z9hG4bK-fe1c0e6-241705.705
From: <sip:00003@sip.com>;tag=499579b0
To: 00002 <sip:00002@sip.com>;tag=7075484a
Call-ID: 512c2042@00002.192.168.1.1
CSeq: 217575692 INVITE
Content-Length: 0
```

```
=====
F25      192.168.2.1:1043(00002@sip.com) -> 192.168.1.1:5060(Server)
```

```
SIP/2.0 200 OK
Via: SIP/2.0/UDP 192.168.1.1:5060;branch=z9hG4bK-537.117493.217575692
Via: SIP/2.0/UDP 192.168.1.131:5060;branch=z9hG4bK-fe1c0e6-241705.705
Record-Route: <sip:00003@192.168.1.1>
From: <sip:00003@sip.com>;tag=499579b0
To: 00002 <sip:00002@sip.com>;tag=7075484a
Call-ID: 512c2042@00002.192.168.1.1
```

```

CSseq: 217575692 INVITE
Contact: <sip:00002@192.168.2.1>
Supported: 100rel, replaces
Allow: INVITE, ACK, BYE, CANCEL, OPTIONS, PRACK, MESSAGE, REFER, NOTIFY
Content-Type: application/sdp
Accept: application/sdp, message/sipfrag
Content-Length: 186

```

```

v=0
o=- 289380 3202 IN IP4 192.168.2.1
s=-
c=IN IP4 192.168.2.1
t=0 0
m=audio 5008 RTP/AVP 0 96
a=rtpmap:0 PCMU/8000
a=rtpmap:96 telephone-event/8000
a=fmtp:96 0-11
a=inactive

```

```
=====
```

```

F26          192.168.1.1:5062(Server) -> 192.168.1.131:5060(00003@sip.com)

```

```

SIP/2.0 200 OK
Via: SIP/2.0/UDP 192.168.1.131:5060;branch=z9hG4bK-fe1c0e6-241705.705
Record-Route: <sip:00003@192.168.1.1>
From: <sip:00003@sip.com>;tag=499579b0
To: 00002 <sip:00002@sip.com>;tag=7075484a
Call-ID: 512c2042@00002.192.168.1.1
CSseq: 217575692 INVITE
Contact: <sip:00002@192.168.2.1>
supported: 100rel
supported: replaces
Allow: INVITE, ACK, BYE, CANCEL, OPTIONS, PRACK, MESSAGE, REFER, NOTIFY
Content-Type: application/sdp
Accept: application/sdp, message/sipfrag
Content-Length: 186

```

```

v=0
o=- 289380 3202 IN IP4 192.168.2.1
s=-
c=IN IP4 192.168.2.1
t=0 0
m=audio 5008 RTP/AVP 0 96
a=rtpmap:0 PCMU/8000
a=rtpmap:96 telephone-event/8000
a=fmtp:96 0-11
a=inactive

```

```
=====
```

```

F27          192.168.1.131:1024(00003@sip.com) -> 192.168.1.1:5060(Server)

```

```

ACK sip:00003@192.168.1.1 SIP/2.0
Via: SIP/2.0/UDP 192.168.1.131:5060;branch=z9hG4bK-1281349f-241705.965
Route: <sip:00002@192.168.2.1>
From: <sip:00003@sip.com>;tag=499579b0
To: 00002 <sip:00002@sip.com>;tag=7075484a
Call-ID: 512c2042@00002.192.168.1.1
CSseq: 217575692 ACK
Max-Forwards: 70
Content-Length: 0

```

```
=====
```

```

F28          192.168.1.1:5062(Server) -> 192.168.2.1:5060(00002@sip.com)

```

```

ACK sip:00002@192.168.2.1 SIP/2.0
Via: SIP/2.0/UDP 192.168.1.1:5060;branch=z9hG4bK-537.1109089851.217575692
Via: SIP/2.0/UDP 192.168.1.131:5060;branch=z9hG4bK-1281349f-241705.965
From: <sip:00003@sip.com>;tag=499579b0
To: 00002 <sip:00002@sip.com>;tag=7075484a
Call-ID: 512c2042@00002.192.168.1.1
CSseq: 217575692 ACK
max-forwards: 69
Content-Length: 0

```

F29 192.168.1.131:1024(00003@sip.com) -> 192.168.1.1:5060(Server)

```

INVITE sip:00005@sip.com SIP/2.0
Via: SIP/2.0/UDP 192.168.1.131:5060;branch=z9hG4bK-7b329fc0-241715.265
Route: <sip:192.168.1.1:5060>
From: <sip:00003@sip.com>;tag=3b0028dd
To: <sip:00005@sip.com>
Call-ID: 2b5c3829@00003.192.168.1.1
CSeq: 2119903566 INVITE
Contact: <sip:00003@192.168.1.131>
Max-Forwards: 70
Supported: 100rel, replaces
Allow: INVITE, ACK, BYE, CANCEL, OPTIONS, PRACK, MESSAGE, REFER, NOTIFY
Content-Type: application/sdp
Accept: application/sdp, message/sipfrag
Content-Length: 254

```

```

v=0
o=- 249360 249360 IN IP4 192.168.1.131
s=-
c=IN IP4 192.168.1.131
t=0 0
m=audio 5008 RTP/AVP 0 8 4 18 96
a=rtpmap:0 PCMU/8000
a=rtpmap:8 PCMA/8000
a=rtpmap:4 G723/8000
a=rtpmap:18 G729/8000
a=rtpmap:96 telephone-event/8000
a=fmtp:96 0-11

```

F30 192.168.1.1:5062(Server) -> 192.168.2.3:5060()

```

INVITE sip:00005@192.168.2.3 SIP/2.0
Via: SIP/2.0/UDP 192.168.1.1:5060;branch=z9hG4bK-540.537523.2119903566
Via: SIP/2.0/UDP 192.168.1.131:5060;branch=z9hG4bK-7b329fc0-241715.265
Record-Route: <sip:00005@192.168.1.1>
Route: <sip:192.168.1.1:5060>
From: 00003 <sip:00003@sip.com>;tag=3b0028dd
To: <sip:00005@sip.com>
Call-ID: 2b5c3829@00003.192.168.1.1
CSeq: 2119903566 INVITE
Contact: <sip:00003@192.168.1.131>
max-forwards: 69
supported: 100rel
supported: replaces
Allow: INVITE, ACK, BYE, CANCEL, OPTIONS, PRACK, MESSAGE, REFER, NOTIFY
Content-Type: application/sdp
Accept: application/sdp, message/sipfrag
Content-Length: 254

```

```

v=0
o=- 249360 249360 IN IP4 192.168.1.131
s=-
c=IN IP4 192.168.1.131
t=0 0
m=audio 5008 RTP/AVP 0 8 4 18 96
a=rtpmap:0 PCMU/8000
a=rtpmap:8 PCMA/8000
a=rtpmap:4 G723/8000
a=rtpmap:18 G729/8000
a=rtpmap:96 telephone-event/8000
a=fmtp:96 0-11

```

F31 192.168.1.1:5062(Server) -> 192.168.1.131:5060(00003@sip.com)

```

SIP/2.0 100 Trying
Via: SIP/2.0/UDP 192.168.1.131:5060;branch=z9hG4bK-7b329fc0-241715.265
From: <sip:00003@sip.com>;tag=3b0028dd
To: <sip:00005@sip.com>
Call-ID: 2b5c3829@00003.192.168.1.1
CSeq: 2119903566 INVITE
Content-Length: 0

```

F32 192.168.2.3:1193() -> 192.168.1.1:5060(Server)

```
SIP/2.0 100 Trying
Via: SIP/2.0/UDP 192.168.1.1:5060;branch=z9hG4bK-540.537523.2119903566
Via: SIP/2.0/UDP 192.168.1.131:5060;branch=z9hG4bK-7b329fc0-241715.265
From: 00003 <sip:00003@sip.com>;tag=3b0028dd
To: <sip:00005@sip.com>
Call-ID: 2b5c3829@00003.192.168.1.1
CSeq: 2119903566 INVITE
Content-Length: 0
```

```
=====
F33      192.168.2.3:1193() -> 192.168.1.1:5060(Server)
```

```
SIP/2.0 183 Session Progress
Via: SIP/2.0/UDP 192.168.1.1:5060;branch=z9hG4bK-540.537523.2119903566
Via: SIP/2.0/UDP 192.168.1.131:5060;branch=z9hG4bK-7b329fc0-241715.265
Record-Route: <sip:00005@192.168.1.1>
From: 00003 <sip:00003@sip.com>;tag=3b0028dd
To: <sip:00005@sip.com>;tag=471e09e6
Call-ID: 2b5c3829@00003.192.168.1.1
CSeq: 2119903566 INVITE
Contact: <sip:00005@192.168.2.3>
Require: 100rel
RSeq: 368890217
Content-Length: 0
```

```
=====
F34      192.168.1.1:5062(Server) -> 192.168.1.131:5060(00003@sip.com)
```

```
SIP/2.0 183 Session Progress
Via: SIP/2.0/UDP 192.168.1.131:5060;branch=z9hG4bK-7b329fc0-241715.265
Record-Route: <sip:00005@192.168.1.1>
From: 00003 <sip:00003@sip.com>;tag=3b0028dd
To: <sip:00005@sip.com>;tag=471e09e6
Call-ID: 2b5c3829@00003.192.168.1.1
CSeq: 2119903566 INVITE
Contact: <sip:00005@192.168.2.3>
require: 100rel
rseq: 368890217
Content-Length: 0
```

```
=====
F35      192.168.1.131:1024(00003@sip.com) -> 192.168.1.1:5060(Server)
```

```
PRACK sip:00005@192.168.1.1 SIP/2.0
Via: SIP/2.0/UDP 192.168.1.131:5060;branch=z9hG4bK-1cc59ae-241716.437
Route: <sip:00005@192.168.2.3>
From: 00003 <sip:00003@sip.com>;tag=3b0028dd
To: <sip:00005@sip.com>;tag=471e09e6
Call-ID: 2b5c3829@00003.192.168.1.1
CSeq: 2119903567 PRACK
Max-Forwards: 70
RAck: 368890217 2119903566 INVITE
Content-Length: 0
```

```
=====
F36      192.168.1.1:5062(Server) -> 192.168.2.3:5060()
```

```
PRACK sip:00005@192.168.2.3 SIP/2.0
Via: SIP/2.0/UDP 192.168.1.1:5060;branch=z9hG4bK-540.1109089861.2119903567
Via: SIP/2.0/UDP 192.168.1.131:5060;branch=z9hG4bK-1cc59ae-241716.437
Route: <sip:00005@192.168.2.3>
From: 00003 <sip:00003@sip.com>;tag=3b0028dd
To: <sip:00005@sip.com>;tag=471e09e6
Call-ID: 2b5c3829@00003.192.168.1.1
CSeq: 2119903567 PRACK
max-forwards: 69
rack: 368890217 2119903566 INVITE
Content-Length: 0
```

F37 192.168.2.3:1193() -> 192.168.1.1:5060(Server)

SIP/2.0 200 OK  
 Via: SIP/2.0/UDP 192.168.1.1:5060;branch=z9hG4bK-540.1109089861.2119903567  
 Via: SIP/2.0/UDP 192.168.1.131:5060;branch=z9hG4bK-1cc59ae-241716.437  
 From: 00003 <sip:00003@sip.com>;tag=3b0028dd  
 To: <sip:00005@sip.com>;tag=471e09e6  
 Call-ID: 2b5c3829@00003.192.168.1.1  
 CSeq: 2119903567 PRACK  
 Content-Length: 0

F38 192.168.2.3:1193() -> 192.168.1.1:5060(Server)

SIP/2.0 180 Ringing  
 Via: SIP/2.0/UDP 192.168.1.1:5060;branch=z9hG4bK-540.537523.2119903566  
 Via: SIP/2.0/UDP 192.168.1.131:5060;branch=z9hG4bK-7b329fc0-241715.265  
 Record-Route: <sip:00005@192.168.1.1>  
 From: 00003 <sip:00003@sip.com>;tag=3b0028dd  
 To: <sip:00005@sip.com>;tag=471e09e6  
 Call-ID: 2b5c3829@00003.192.168.1.1  
 CSeq: 2119903566 INVITE  
 Contact: <sip:00005@192.168.2.3>  
 Require: 100rel  
 RSeq: 368890218  
 Content-Length: 0

F39 192.168.1.1:5062(Server) -> 192.168.1.131:5060(00003@sip.com)

SIP/2.0 200 OK  
 Via: SIP/2.0/UDP 192.168.1.131:5060;branch=z9hG4bK-1cc59ae-241716.437  
 From: 00003 <sip:00003@sip.com>;tag=3b0028dd  
 To: <sip:00005@sip.com>;tag=471e09e6  
 Call-ID: 2b5c3829@00003.192.168.1.1  
 CSeq: 2119903567 PRACK  
 Content-Length: 0

F40 192.168.1.1:5062(Server) -> 192.168.1.131:5060(00003@sip.com)

SIP/2.0 180 Ringing  
 Via: SIP/2.0/UDP 192.168.1.131:5060;branch=z9hG4bK-7b329fc0-241715.265  
 Record-Route: <sip:00005@192.168.1.1>  
 From: 00003 <sip:00003@sip.com>;tag=3b0028dd  
 To: <sip:00005@sip.com>;tag=471e09e6  
 Call-ID: 2b5c3829@00003.192.168.1.1  
 CSeq: 2119903566 INVITE  
 Contact: <sip:00005@192.168.2.3>  
 require: 100rel  
 rseq: 368890218  
 Content-Length: 0

F41 192.168.1.131:1024(00003@sip.com) -> 192.168.1.1:5060(Server)

PRACK sip:00005@192.168.1.1 SIP/2.0  
 Via: SIP/2.0/UDP 192.168.1.131:5060;branch=z9hG4bK-488e99ad-241716.551  
 Route: <sip:00005@192.168.2.3>  
 From: 00003 <sip:00003@sip.com>;tag=3b0028dd  
 To: <sip:00005@sip.com>;tag=471e09e6  
 Call-ID: 2b5c3829@00003.192.168.1.1  
 CSeq: 2119903568 PRACK  
 Max-Forwards: 70  
 RAck: 368890218 2119903566 INVITE  
 Content-Length: 0

F42 192.168.1.1:5062(Server) -> 192.168.2.3:5060()

PRACK sip:00005@192.168.2.3 SIP/2.0

# FOMA/WLAN デュアル端末に関する技術参考資料 第 1.2 版

Via: SIP/2.0/UDP 192.168.1.1:5060;branch=z9hG4bK-540.1109089861.2119903568  
 Via: SIP/2.0/UDP 192.168.1.131:5060;branch=z9hG4bK-488e99ad-241716.551  
 Route: <sip:00005@192.168.2.3>  
 From: 00003 <sip:00003@sip.com>;tag=3b0028dd  
 To: <sip:00005@sip.com>;tag=471e09e6  
 Call-ID: 2b5c3829@00003.192.168.1.1  
 CSeq: 2119903568 PRACK  
 max-forwards: 69  
 rack: 368890218 2119903566 INVITE  
 Content-Length: 0

F43 192.168.2.3:1193() -> 192.168.1.1:5060(Server)

SIP/2.0 200 OK  
 Via: SIP/2.0/UDP 192.168.1.1:5060;branch=z9hG4bK-540.1109089861.2119903568  
 Via: SIP/2.0/UDP 192.168.1.131:5060;branch=z9hG4bK-488e99ad-241716.551  
 From: 00003 <sip:00003@sip.com>;tag=3b0028dd  
 To: <sip:00005@sip.com>;tag=471e09e6  
 Call-ID: 2b5c3829@00003.192.168.1.1  
 CSeq: 2119903568 PRACK  
 Content-Length: 0

F44 192.168.1.1:5062(Server) -> 192.168.1.131:5060(00003@sip.com)

SIP/2.0 200 OK  
 Via: SIP/2.0/UDP 192.168.1.131:5060;branch=z9hG4bK-488e99ad-241716.551  
 From: 00003 <sip:00003@sip.com>;tag=3b0028dd  
 To: <sip:00005@sip.com>;tag=471e09e6  
 Call-ID: 2b5c3829@00003.192.168.1.1  
 CSeq: 2119903568 PRACK  
 Content-Length: 0

F45 192.168.2.3:1193() -> 192.168.1.1:5060(Server)

SIP/2.0 180 Ringing  
 Via: SIP/2.0/UDP 192.168.1.1:5060;branch=z9hG4bK-540.537523.2119903566  
 Via: SIP/2.0/UDP 192.168.1.131:5060;branch=z9hG4bK-7b329fc0-241715.265  
 Record-Route: <sip:00005@192.168.1.1>  
 From: 00003 <sip:00003@sip.com>;tag=3b0028dd  
 To: <sip:00005@sip.com>;tag=471e09e6  
 Call-ID: 2b5c3829@00003.192.168.1.1  
 CSeq: 2119903566 INVITE  
 Contact: <sip:00005@192.168.2.3>  
 Require: 100rel  
 RSeq: 368890219  
 Content-Length: 0

F46 192.168.1.1:5062(Server) -> 192.168.1.131:5060(00003@sip.com)

SIP/2.0 180 Ringing  
 Via: SIP/2.0/UDP 192.168.1.131:5060;branch=z9hG4bK-7b329fc0-241715.265  
 Record-Route: <sip:00005@192.168.1.1>  
 From: 00003 <sip:00003@sip.com>;tag=3b0028dd  
 To: <sip:00005@sip.com>;tag=471e09e6  
 Call-ID: 2b5c3829@00003.192.168.1.1  
 CSeq: 2119903566 INVITE  
 Contact: <sip:00005@192.168.2.3>  
 require: 100rel  
 rseq: 368890219  
 Content-Length: 0

F47 192.168.2.3:1193() -> 192.168.1.1:5060(Server)

SIP/2.0 180 Ringing  
 Via: SIP/2.0/UDP 192.168.1.1:5060;branch=z9hG4bK-540.537523.2119903566  
 Via: SIP/2.0/UDP 192.168.1.131:5060;branch=z9hG4bK-7b329fc0-241715.265

Record-Route: <sip:00005@192.168.1.1>  
 From: 00003 <sip:00003@sip.com>;tag=3b0028dd  
 To: <sip:00005@sip.com>;tag=471e09e6  
 Call-ID: 2b5c3829@00003.192.168.1.1  
 CSeq: 2119903566 INVITE  
 Contact: <sip:00005@192.168.2.3>  
 Require: 100rel  
 RSeq: 368890219  
 Content-Length: 0

=====

F48            192.168.1.1:5062(Server) -> 192.168.1.131:5060(00003@sip.com)

SIP/2.0 180 Ringing  
 Via: SIP/2.0/UDP 192.168.1.131:5060;branch=z9hG4bK-7b329fc0-241715.265  
 Record-Route: <sip:00005@192.168.1.1>  
 From: 00003 <sip:00003@sip.com>;tag=3b0028dd  
 To: <sip:00005@sip.com>;tag=471e09e6  
 Call-ID: 2b5c3829@00003.192.168.1.1  
 CSeq: 2119903566 INVITE  
 Contact: <sip:00005@192.168.2.3>  
 require: 100rel  
 rseq: 368890219  
 Content-Length: 0

=====

F49            192.168.2.3:1193() -> 192.168.1.1:5060(Server)

SIP/2.0 180 Ringing  
 Via: SIP/2.0/UDP 192.168.1.1:5060;branch=z9hG4bK-540.537523.2119903566  
 Via: SIP/2.0/UDP 192.168.1.131:5060;branch=z9hG4bK-7b329fc0-241715.265  
 Record-Route: <sip:00005@192.168.1.1>  
 From: 00003 <sip:00003@sip.com>;tag=3b0028dd  
 To: <sip:00005@sip.com>;tag=471e09e6  
 Call-ID: 2b5c3829@00003.192.168.1.1  
 CSeq: 2119903566 INVITE  
 Contact: <sip:00005@192.168.2.3>  
 Require: 100rel  
 RSeq: 368890219  
 Content-Length: 0

=====

F50            192.168.1.1:5062(Server) -> 192.168.1.131:5060(00003@sip.com)

SIP/2.0 180 Ringing  
 Via: SIP/2.0/UDP 192.168.1.131:5060;branch=z9hG4bK-7b329fc0-241715.265  
 Record-Route: <sip:00005@192.168.1.1>  
 From: 00003 <sip:00003@sip.com>;tag=3b0028dd  
 To: <sip:00005@sip.com>;tag=471e09e6  
 Call-ID: 2b5c3829@00003.192.168.1.1  
 CSeq: 2119903566 INVITE  
 Contact: <sip:00005@192.168.2.3>  
 require: 100rel  
 rseq: 368890219  
 Content-Length: 0

=====

F51            192.168.2.3:1193() -> 192.168.1.1:5060(Server)

SIP/2.0 180 Ringing  
 Via: SIP/2.0/UDP 192.168.1.1:5060;branch=z9hG4bK-540.537523.2119903566  
 Via: SIP/2.0/UDP 192.168.1.131:5060;branch=z9hG4bK-7b329fc0-241715.265  
 Record-Route: <sip:00005@192.168.1.1>  
 From: 00003 <sip:00003@sip.com>;tag=3b0028dd  
 To: <sip:00005@sip.com>;tag=471e09e6  
 Call-ID: 2b5c3829@00003.192.168.1.1  
 CSeq: 2119903566 INVITE  
 Contact: <sip:00005@192.168.2.3>  
 Require: 100rel  
 RSeq: 368890219  
 Content-Length: 0

=====

F52            192.168.1.1:5062(Server) -> 192.168.1.131:5060(00003@sip.com)

SIP/2.0 180 Ringing  
Via: SIP/2.0/UDP 192.168.1.131:5060;branch=z9hG4bK-7b329fc0-241715.265  
Record-Route: <sip:00005@192.168.1.1>  
From: 00003 <sip:00003@sip.com>;tag=3b0028dd  
To: <sip:00005@sip.com>;tag=471e09e6  
Call-ID: 2b5c3829@00003.192.168.1.1  
CSeq: 2119903566 INVITE  
Contact: <sip:00005@192.168.2.3>  
require: 100rel  
rseq: 368890219  
Content-Length: 0

=====

F53            192.168.2.3:1193() -> 192.168.1.1:5060(Server)

SIP/2.0 180 Ringing  
Via: SIP/2.0/UDP 192.168.1.1:5060;branch=z9hG4bK-540.537523.2119903566  
Via: SIP/2.0/UDP 192.168.1.131:5060;branch=z9hG4bK-7b329fc0-241715.265  
Record-Route: <sip:00005@192.168.1.1>  
From: 00003 <sip:00003@sip.com>;tag=3b0028dd  
To: <sip:00005@sip.com>;tag=471e09e6  
Call-ID: 2b5c3829@00003.192.168.1.1  
CSeq: 2119903566 INVITE  
Contact: <sip:00005@192.168.2.3>  
Require: 100rel  
RSeq: 368890219  
Content-Length: 0

=====

F54            192.168.1.1:5062(Server) -> 192.168.1.131:5060(00003@sip.com)

SIP/2.0 180 Ringing  
Via: SIP/2.0/UDP 192.168.1.131:5060;branch=z9hG4bK-7b329fc0-241715.265  
Record-Route: <sip:00005@192.168.1.1>  
From: 00003 <sip:00003@sip.com>;tag=3b0028dd  
To: <sip:00005@sip.com>;tag=471e09e6  
Call-ID: 2b5c3829@00003.192.168.1.1  
CSeq: 2119903566 INVITE  
Contact: <sip:00005@192.168.2.3>  
require: 100rel  
rseq: 368890219  
Content-Length: 0

=====

F55            192.168.2.3:1193() -> 192.168.1.1:5060(Server)

SIP/2.0 180 Ringing  
Via: SIP/2.0/UDP 192.168.1.1:5060;branch=z9hG4bK-540.537523.2119903566  
Via: SIP/2.0/UDP 192.168.1.131:5060;branch=z9hG4bK-7b329fc0-241715.265  
Record-Route: <sip:00005@192.168.1.1>  
From: 00003 <sip:00003@sip.com>;tag=3b0028dd  
To: <sip:00005@sip.com>;tag=471e09e6  
Call-ID: 2b5c3829@00003.192.168.1.1  
CSeq: 2119903566 INVITE  
Contact: <sip:00005@192.168.2.3>  
Require: 100rel  
RSeq: 368890219  
Content-Length: 0

=====

F56            192.168.2.3:1193() -> 192.168.1.1:5060(Server)

SIP/2.0 504 Server Time-out  
Via: SIP/2.0/UDP 192.168.1.1:5060;branch=z9hG4bK-540.537523.2119903566  
Via: SIP/2.0/UDP 192.168.1.131:5060;branch=z9hG4bK-7b329fc0-241715.265  
From: 00003 <sip:00003@sip.com>;tag=3b0028dd  
To: <sip:00005@sip.com>;tag=471e09e6  
Call-ID: 2b5c3829@00003.192.168.1.1  
CSeq: 2119903566 INVITE



Content-Length: 0

=====

F57 192.168.1.1:5062 (Server) -> 192.168.2.3:5060 ()

ACK sip:00005@192.168.2.3 SIP/2.0  
Via: SIP/2.0/UDP 192.168.1.1:5060;branch=z9hG4bK-540.537523.2119903566  
Route: <sip:192.168.1.1:5060>  
From: 00003 <sip:00003@sip.com>;tag=3b0028dd  
To: <sip:00005@sip.com>;tag=471e09e6  
Call-ID: 2b5c3829@00003.192.168.1.1  
CSeq: 2119903566 ACK  
Content-Length: 0

=====

F58 192.168.2.1:1043 (00002@sip.com) -> 192.168.1.1:5060 (Server)

BYE sip:00003@192.168.1.1 SIP/2.0  
Via: SIP/2.0/UDP 192.168.2.1:5060;branch=z9hG4bK-2b4ba2d1-846755.477  
Route: <sip:00003@192.168.1.131>  
From: 00002 <sip:00002@sip.com>;tag=7075484a  
To: <sip:00003@sip.com>;tag=499579b0  
Call-ID: 512c2042@00002.192.168.1.1  
CSeq: 38101566 BYE  
Max-Forwards: 70  
Content-Length: 0

=====

F59 192.168.2.1:1043 (00002@sip.com) -> 192.168.1.1:5060 (Server)

BYE sip:00003@192.168.1.1 SIP/2.0  
Via: SIP/2.0/UDP 192.168.2.1:5060;branch=z9hG4bK-2b4ba2d1-846755.477  
Route: <sip:00003@192.168.1.131>  
From: 00002 <sip:00002@sip.com>;tag=7075484a  
To: <sip:00003@sip.com>;tag=499579b0  
Call-ID: 512c2042@00002.192.168.1.1  
CSeq: 38101566 BYE  
Max-Forwards: 70  
Content-Length: 0

=====

F60 192.168.2.1:1043 (00002@sip.com) -> 192.168.1.1:5060 (Server)

BYE sip:00003@192.168.1.1 SIP/2.0  
Via: SIP/2.0/UDP 192.168.2.1:5060;branch=z9hG4bK-2b4ba2d1-846755.477  
Route: <sip:00003@192.168.1.131>  
From: 00002 <sip:00002@sip.com>;tag=7075484a  
To: <sip:00003@sip.com>;tag=499579b0  
Call-ID: 512c2042@00002.192.168.1.1  
CSeq: 38101566 BYE  
Max-Forwards: 70  
Content-Length: 0

=====

F61 192.168.2.1:1043 (00002@sip.com) -> 192.168.1.1:5060 (Server)

BYE sip:00003@192.168.1.1 SIP/2.0  
Via: SIP/2.0/UDP 192.168.2.1:5060;branch=z9hG4bK-2b4ba2d1-846755.477  
Route: <sip:00003@192.168.1.131>  
From: 00002 <sip:00002@sip.com>;tag=7075484a  
To: <sip:00003@sip.com>;tag=499579b0  
Call-ID: 512c2042@00002.192.168.1.1  
CSeq: 38101566 BYE  
Max-Forwards: 70  
Content-Length: 0

=====

F62 192.168.2.1:1043 (00002@sip.com) -> 192.168.1.1:5060 (Server)

BYE sip:00003@192.168.1.1 SIP/2.0  
Via: SIP/2.0/UDP 192.168.2.1:5060;branch=z9hG4bK-2b4ba2d1-846755.477  
Route: <sip:00003@192.168.1.131>  
From: 00002 <sip:00002@sip.com>;tag=7075484a  
To: <sip:00003@sip.com>;tag=499579b0  
Call-ID: 512c2042@00002.192.168.1.1  
CSeq: 38101566 BYE  
Max-Forwards: 70  
Content-Length: 0

=====

F63            192.168.2.1:1043 (00002@sip.com) -> 192.168.1.1:5060 (Server)

BYE sip:00003@192.168.1.1 SIP/2.0  
Via: SIP/2.0/UDP 192.168.2.1:5060;branch=z9hG4bK-2b4ba2d1-846755.477  
Route: <sip:00003@192.168.1.131>  
From: 00002 <sip:00002@sip.com>;tag=7075484a  
To: <sip:00003@sip.com>;tag=499579b0  
Call-ID: 512c2042@00002.192.168.1.1  
CSeq: 38101566 BYE  
Max-Forwards: 70  
Content-Length: 0

=====

F64            192.168.2.1:1043 (00002@sip.com) -> 192.168.1.1:5060 (Server)

BYE sip:00003@192.168.1.1 SIP/2.0  
Via: SIP/2.0/UDP 192.168.2.1:5060;branch=z9hG4bK-2b4ba2d1-846755.477  
Route: <sip:00003@192.168.1.131>  
From: 00002 <sip:00002@sip.com>;tag=7075484a  
To: <sip:00003@sip.com>;tag=499579b0  
Call-ID: 512c2042@00002.192.168.1.1  
CSeq: 38101566 BYE  
Max-Forwards: 70  
Content-Length: 0

=====

F65            192.168.1.1:5062 (Server) -> 192.168.2.1:5060 (00002@sip.com)

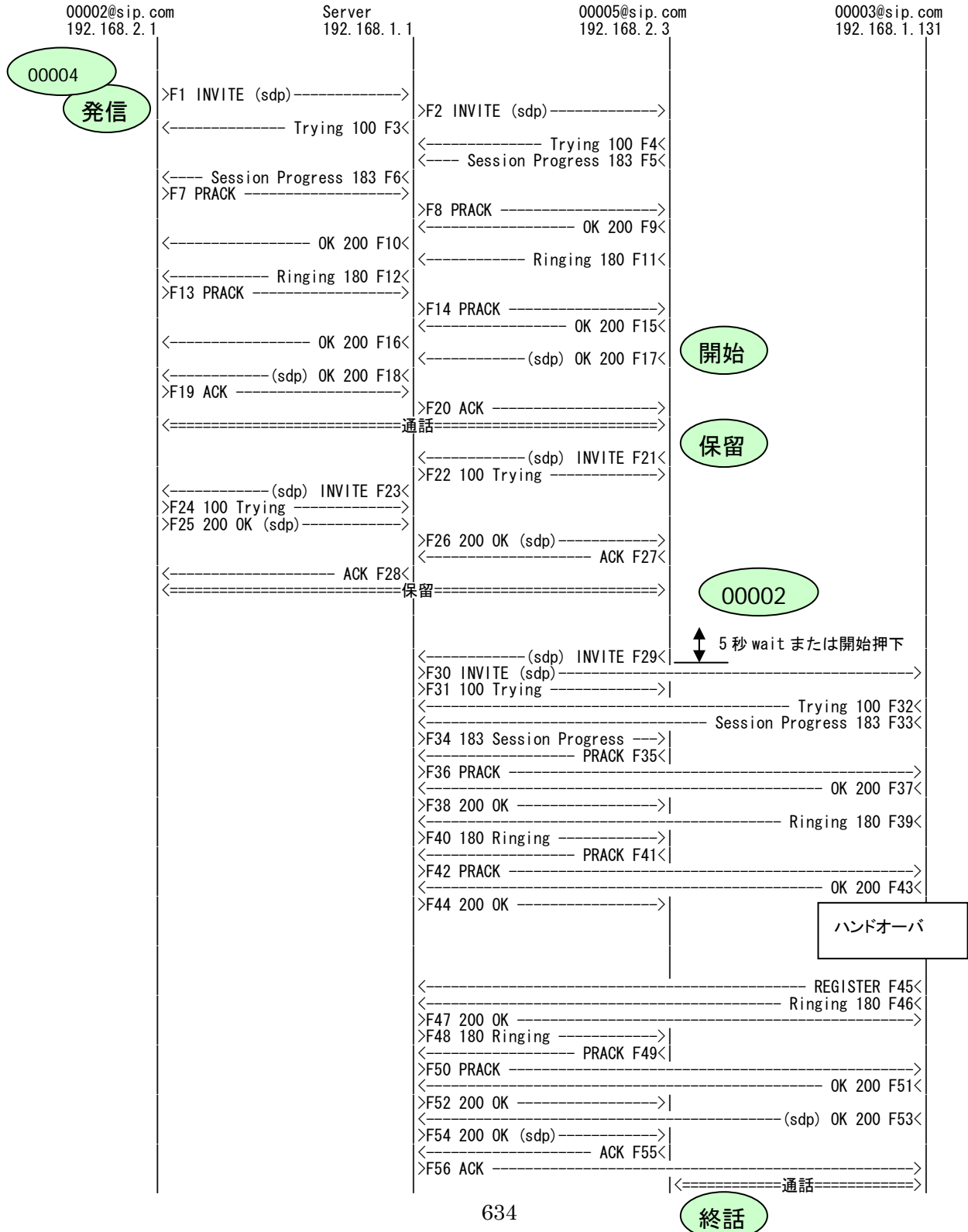
SIP/2.0 408 Request Timeout  
Via: SIP/2.0/UDP 192.168.2.1:5060;branch=z9hG4bK-2b4ba2d1-846755.477  
From: 00002 <sip:00002@sip.com>;tag=7075484a  
To: <sip:00003@sip.com>;tag=499579b0  
Call-ID: 512c2042@00002.192.168.1.1  
CSeq: 38101566 BYE  
Content-Length: 0

=====

## 11.8.19. 転送中転送先がハンドオーバー(IP アドレスの変更なし)

IP アドレスの変更を伴わないハンドオーバーでは REGISTER は発生しないが、プロフィールが変更されるハンドオーバーでは REGISTER が送出される。

この場合のシーケンスを以下に示す。



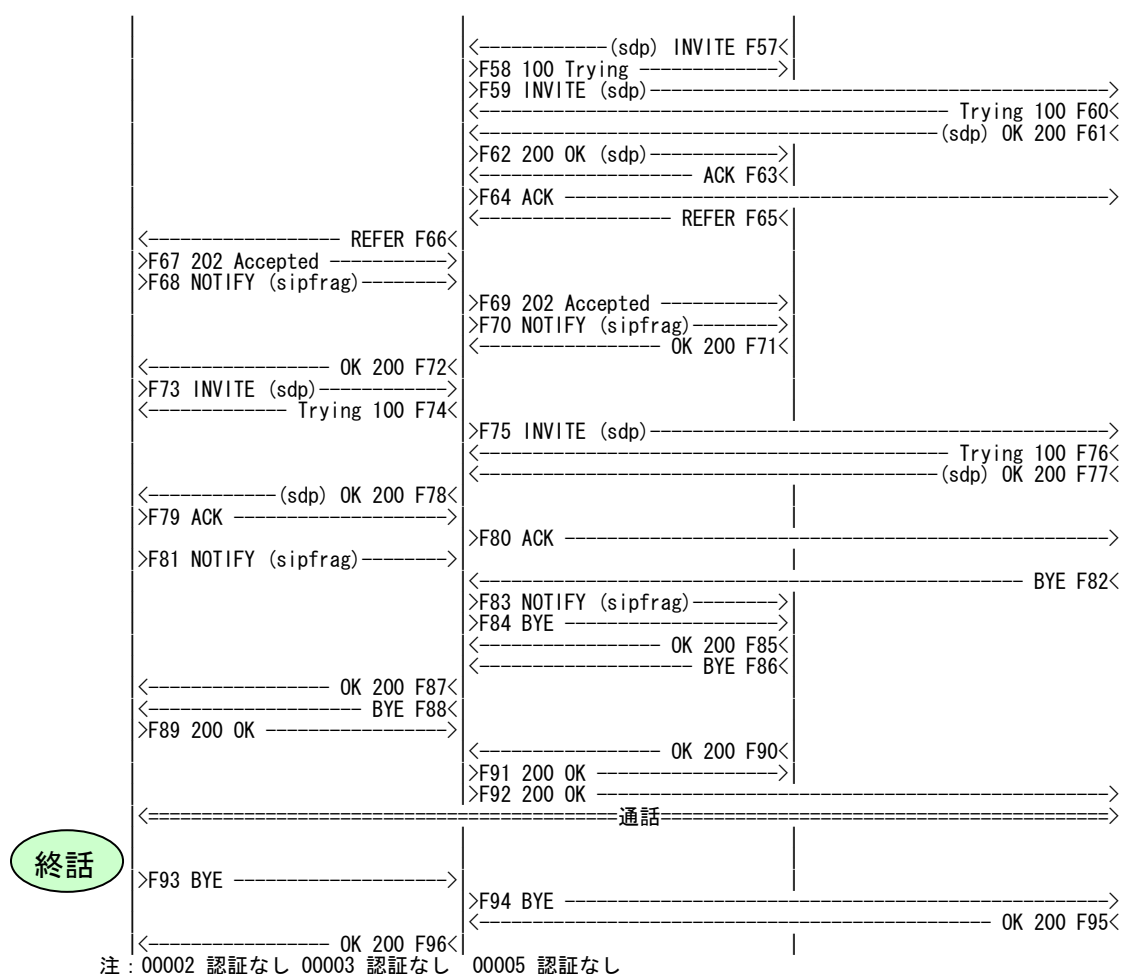


図 11-58 転送中転送先がハンドオーバー(IP アドレスの変更なし)

```

=====
F1          192.168.2.1:1043(00002@sip.com) -> 192.168.1.1:5060 (Server)

INVITE sip:00005@sip.com SIP/2.0
Via: SIP/2.0/UDP 192.168.2.1:5060;branch=z9hG4bK-7509c08-846130.192
Route: <sip:192.168.1.1:5060>
From: <sip:00002@sip.com>;tag=09e0f829
To: <sip:00005@sip.com>
Call-ID: 2d6458e7@00002.192.168.1.1
CSeq: 329376662 INVITE
Contact: <sip:00002@192.168.2.1>
Max-Forwards: 70
Supported: 100rel, replaces
Allow: INVITE, ACK, BYE, CANCEL, OPTIONS, PRACK, MESSAGE, REFER, NOTIFY
Content-Type: application/sdp
Accept: application/sdp, message/sipfrag
Content-Length: 248

v=0
o=- 179137 2901 IN IP4 192.168.2.1
s=-
c=IN IP4 192.168.2.1
t=0 0
m=audio 5008 RTP/AVP 0 8 4 18 96
a=rtpmap:0 PCMU/8000
a=rtpmap:8 PCMA/8000
a=rtpmap:4 G723/8000
a=rtpmap:18 G729/8000
a=rtpmap:96 telephone-event/8000
a=fmtp:96 0-11
=====

```

F2 192.168.1.1:5062(Server) -> 192.168.2.3:5060()

```

INVITE sip:00005@192.168.2.3 SIP/2.0
Via: SIP/2.0/UDP 192.168.1.1:5060;branch=z9hG4bK-522.097479.329376662
Via: SIP/2.0/UDP 192.168.2.1:5060;branch=z9hG4bK-7509c08-846130.192
Record-Route: <sip:00005@192.168.1.1>
Route: <sip:192.168.1.1:5060>
From: 00002 <sip:00002@sip.com>;tag=09e0f829
To: <sip:00005@sip.com>
Call-ID: 2d6458e7@00002.192.168.1.1
CSeq: 329376662 INVITE
Contact: <sip:00002@192.168.2.1>
max-forwards: 69
supported: 100rel
supported: replaces
Allow: INVITE, ACK, BYE, CANCEL, OPTIONS, PRACK, MESSAGE, REFER, NOTIFY
Content-Type: application/sdp
Accept: application/sdp, message/sipfrag
Content-Length: 248

```

```

v=0
o=- 179137 2901 IN IP4 192.168.2.1
s=-
c=IN IP4 192.168.2.1
t=0 0
m=audio 5008 RTP/AVP 0 8 4 18 96
a=rtpmap:0 PCMU/8000
a=rtpmap:8 PCMA/8000
a=rtpmap:4 G723/8000
a=rtpmap:18 G729/8000
a=rtpmap:96 telephone-event/8000
a=fmtp:96 0-11

```

F3 192.168.1.1:5062(Server) -> 192.168.2.1:5060(00002@sip.com)

```

SIP/2.0 100 Trying
Via: SIP/2.0/UDP 192.168.2.1:5060;branch=z9hG4bK-7509c08-846130.192
From: <sip:00002@sip.com>;tag=09e0f829
To: <sip:00005@sip.com>
Call-ID: 2d6458e7@00002.192.168.1.1
CSeq: 329376662 INVITE
Content-Length: 0

```

F4 192.168.2.3:1193() -> 192.168.1.1:5060(Server)

```

SIP/2.0 100 Trying
Via: SIP/2.0/UDP 192.168.1.1:5060;branch=z9hG4bK-522.097479.329376662
Via: SIP/2.0/UDP 192.168.2.1:5060;branch=z9hG4bK-7509c08-846130.192
From: 00002 <sip:00002@sip.com>;tag=09e0f829
To: <sip:00005@sip.com>
Call-ID: 2d6458e7@00002.192.168.1.1
CSeq: 329376662 INVITE
Content-Length: 0

```

F5 192.168.2.3:1193() -> 192.168.1.1:5060(Server)

```

SIP/2.0 183 Session Progress
Via: SIP/2.0/UDP 192.168.1.1:5060;branch=z9hG4bK-522.097479.329376662
Via: SIP/2.0/UDP 192.168.2.1:5060;branch=z9hG4bK-7509c08-846130.192
Record-Route: <sip:00005@192.168.1.1>
From: 00002 <sip:00002@sip.com>;tag=09e0f829
To: <sip:00005@sip.com>;tag=44579a06
Call-ID: 2d6458e7@00002.192.168.1.1
CSeq: 329376662 INVITE
Contact: <sip:00005@192.168.2.3>
Require: 100rel
RSeq: 1892173641
Content-Length: 0

```

# FOMA/WLAN デュアル端末に関する技術参考資料 第 1.2 版

F6 192.168.1.1:5062(Server) -> 192.168.2.1:5060(00002@sip.com)

SIP/2.0 183 Session Progress  
Via: SIP/2.0/UDP 192.168.2.1:5060;branch=z9hG4bK-7509c08-846130.192  
Record-Route: <sip:00005@192.168.1.1>  
From: 00002 <sip:00002@sip.com>;tag=09e0f829  
To: <sip:00005@sip.com>;tag=44579a06  
Call-ID: 2d6458e7@00002.192.168.1.1  
CSeq: 329376662 INVITE  
Contact: <sip:00005@192.168.2.3>  
require: 100rel  
rseq: 1892173641  
Content-Length: 0

F7 192.168.2.1:1043(00002@sip.com) -> 192.168.1.1:5060(Server)

PRACK sip:00005@192.168.1.1 SIP/2.0  
Via: SIP/2.0/UDP 192.168.2.1:5060;branch=z9hG4bK-1c50798a-846130.424  
Route: <sip:00005@192.168.2.3>  
From: 00002 <sip:00002@sip.com>;tag=09e0f829  
To: <sip:00005@sip.com>;tag=44579a06  
Call-ID: 2d6458e7@00002.192.168.1.1  
CSeq: 329376663 PRACK  
Max-Forwards: 70  
RAck: 1892173641 329376662 INVITE  
Content-Length: 0

F8 192.168.1.1:5062(Server) -> 192.168.2.3:5060()

PRACK sip:00005@192.168.2.3 SIP/2.0  
Via: SIP/2.0/UDP 192.168.1.1:5060;branch=z9hG4bK-522.1109089326.329376663  
Via: SIP/2.0/UDP 192.168.2.1:5060;branch=z9hG4bK-1c50798a-846130.424  
Route: <sip:00005@192.168.2.3>  
From: 00002 <sip:00002@sip.com>;tag=09e0f829  
To: <sip:00005@sip.com>;tag=44579a06  
Call-ID: 2d6458e7@00002.192.168.1.1  
CSeq: 329376663 PRACK  
max-forwards: 69  
rack: 1892173641 329376662 INVITE  
Content-Length: 0

F9 192.168.2.3:1193() -> 192.168.1.1:5060(Server)

SIP/2.0 200 OK  
Via: SIP/2.0/UDP 192.168.1.1:5060;branch=z9hG4bK-522.1109089326.329376663  
Via: SIP/2.0/UDP 192.168.2.1:5060;branch=z9hG4bK-1c50798a-846130.424  
From: 00002 <sip:00002@sip.com>;tag=09e0f829  
To: <sip:00005@sip.com>;tag=44579a06  
Call-ID: 2d6458e7@00002.192.168.1.1  
CSeq: 329376663 PRACK  
Content-Length: 0

F10 192.168.1.1:5062(Server) -> 192.168.2.1:5060(00002@sip.com)

SIP/2.0 200 OK  
Via: SIP/2.0/UDP 192.168.2.1:5060;branch=z9hG4bK-1c50798a-846130.424  
From: 00002 <sip:00002@sip.com>;tag=09e0f829  
To: <sip:00005@sip.com>;tag=44579a06  
Call-ID: 2d6458e7@00002.192.168.1.1  
CSeq: 329376663 PRACK  
Content-Length: 0

F11 192.168.2.3:1193() -> 192.168.1.1:5060(Server)

SIP/2.0 180 Ringing  
Via: SIP/2.0/UDP 192.168.1.1:5060;branch=z9hG4bK-522.097479.329376662

# FOMA/WLAN デュアル端末に関する技術参考資料 第 1.2 版

Via: SIP/2.0/UDP 192.168.2.1:5060;branch=z9hG4bK-7509c08-846130.192  
 Record-Route: <sip:00005@192.168.1.1>  
 From: 00002 <sip:00002@sip.com>;tag=09e0f829  
 To: <sip:00005@sip.com>;tag=44579a06  
 Call-ID: 2d6458e7@00002.192.168.1.1  
 CSeq: 329376662 INVITE  
 Contact: <sip:00005@192.168.2.3>  
 Require: 100rel  
 RSeq: 1892173642  
 Content-Length: 0

F12 192.168.1.1:5062(Server) -> 192.168.2.1:5060(00002@sip.com)

SIP/2.0 180 Ringing  
 Via: SIP/2.0/UDP 192.168.2.1:5060;branch=z9hG4bK-7509c08-846130.192  
 Record-Route: <sip:00005@192.168.1.1>  
 From: 00002 <sip:00002@sip.com>;tag=09e0f829  
 To: <sip:00005@sip.com>;tag=44579a06  
 Call-ID: 2d6458e7@00002.192.168.1.1  
 CSeq: 329376662 INVITE  
 Contact: <sip:00005@192.168.2.3>  
 require: 100rel  
 rseq: 1892173642  
 Content-Length: 0

F13 192.168.2.1:1043(00002@sip.com) -> 192.168.1.1:5060(Server)

PRACK sip:00005@192.168.1.1 SIP/2.0  
 Via: SIP/2.0/UDP 192.168.2.1:5060;branch=z9hG4bK-59bcf62b-846131.005  
 Route: <sip:00005@192.168.2.3>  
 From: 00002 <sip:00002@sip.com>;tag=09e0f829  
 To: <sip:00005@sip.com>;tag=44579a06  
 Call-ID: 2d6458e7@00002.192.168.1.1  
 CSeq: 329376664 PRACK  
 Max-Forwards: 70  
 Rack: 1892173642 329376662 INVITE  
 Content-Length: 0

F14 192.168.1.1:5062(Server) -> 192.168.2.3:5060()

PRACK sip:00005@192.168.2.3 SIP/2.0  
 Via: SIP/2.0/UDP 192.168.1.1:5060;branch=z9hG4bK-522.1109089326.329376664  
 Via: SIP/2.0/UDP 192.168.2.1:5060;branch=z9hG4bK-59bcf62b-846131.005  
 Route: <sip:00005@192.168.2.3>  
 From: 00002 <sip:00002@sip.com>;tag=09e0f829  
 To: <sip:00005@sip.com>;tag=44579a06  
 Call-ID: 2d6458e7@00002.192.168.1.1  
 CSeq: 329376664 PRACK  
 max-forwards: 69  
 rack: 1892173642 329376662 INVITE  
 Content-Length: 0

F15 192.168.2.3:1193() -> 192.168.1.1:5060(Server)

SIP/2.0 200 OK  
 Via: SIP/2.0/UDP 192.168.1.1:5060;branch=z9hG4bK-522.1109089326.329376664  
 Via: SIP/2.0/UDP 192.168.2.1:5060;branch=z9hG4bK-59bcf62b-846131.005  
 From: 00002 <sip:00002@sip.com>;tag=09e0f829  
 To: <sip:00005@sip.com>;tag=44579a06  
 Call-ID: 2d6458e7@00002.192.168.1.1  
 CSeq: 329376664 PRACK  
 Content-Length: 0

F16 192.168.1.1:5062(Server) -> 192.168.2.1:5060(00002@sip.com)

SIP/2.0 200 OK

## FOMA/WLAN デュアル端末に関する技術参考資料 第 1.2 版

Via: SIP/2.0/UDP 192.168.2.1:5060;branch=z9hG4bK-59bcf62b-846131.005  
From: 00002 <sip:00002@sip.com>;tag=09e0f829  
To: <sip:00005@sip.com>;tag=44579a06  
Call-ID: 2d6458e7@00002.192.168.1.1  
CSeq: 329376664 PRACK  
Content-Length: 0

F17 192.168.2.3:1193() -> 192.168.1.1:5060(Server)

SIP/2.0 200 OK  
Via: SIP/2.0/UDP 192.168.1.1:5060;branch=z9hG4bK-522.097479.329376662  
Via: SIP/2.0/UDP 192.168.2.1:5060;branch=z9hG4bK-7509c08-846130.192  
Record-Route: <sip:00005@192.168.1.1>  
From: 00002 <sip:00002@sip.com>;tag=09e0f829  
To: <sip:00005@sip.com>;tag=44579a06  
Call-ID: 2d6458e7@00002.192.168.1.1  
CSeq: 329376662 INVITE  
Contact: <sip:00005@192.168.2.3>  
Supported: 100rel, replaces  
Allow: INVITE, ACK, BYE, CANCEL, OPTIONS, PRACK, MESSAGE, REFER, NOTIFY  
Content-Type: application/sdp  
Accept: application/sdp, message/sipfrag  
Content-Length: 175

v=0  
o=- 954376 13201 IN IP4 192.168.2.3  
s=-  
c=IN IP4 192.168.2.3  
t=0 0  
m=audio 5008 RTP/AVP 0 96  
a=rtpmap:0 PCMU/8000  
a=rtpmap:96 telephone-event/8000  
a=fmtp:96 0-11

F18 192.168.1.1:5062(Server) -> 192.168.2.1:5060(00002@sip.com)

SIP/2.0 200 OK  
Via: SIP/2.0/UDP 192.168.2.1:5060;branch=z9hG4bK-7509c08-846130.192  
Record-Route: <sip:00005@192.168.1.1>  
From: 00002 <sip:00002@sip.com>;tag=09e0f829  
To: <sip:00005@sip.com>;tag=44579a06  
Call-ID: 2d6458e7@00002.192.168.1.1  
CSeq: 329376662 INVITE  
Contact: <sip:00005@192.168.2.3>  
supported: 100rel  
supported: replaces  
Allow: INVITE, ACK, BYE, CANCEL, OPTIONS, PRACK, MESSAGE, REFER, NOTIFY  
Content-Type: application/sdp  
Accept: application/sdp, message/sipfrag  
Content-Length: 175

v=0  
o=- 954376 13201 IN IP4 192.168.2.3  
s=-  
c=IN IP4 192.168.2.3  
t=0 0  
m=audio 5008 RTP/AVP 0 96  
a=rtpmap:0 PCMU/8000  
a=rtpmap:96 telephone-event/8000  
a=fmtp:96 0-11

F19 192.168.2.1:1043(00002@sip.com) -> 192.168.1.1:5060(Server)

ACK sip:00005@192.168.1.1 SIP/2.0  
Via: SIP/2.0/UDP 192.168.2.1:5060;branch=z9hG4bK-46e53ab2-846133.318  
Route: <sip:00005@192.168.2.3>  
From: 00002 <sip:00002@sip.com>;tag=09e0f829  
To: <sip:00005@sip.com>;tag=44579a06  
Call-ID: 2d6458e7@00002.192.168.1.1  
CSeq: 329376662 ACK  
Max-Forwards: 70  
Content-Length: 0



```
=====
F20      192.168.1.1:5062(Server) -> 192.168.2.3:5060()

ACK sip:00005@192.168.2.3 SIP/2.0
Via: SIP/2.0/UDP 192.168.1.1:5060;branch=z9hG4bK-522.1109089329.329376662
Via: SIP/2.0/UDP 192.168.2.1:5060;branch=z9hG4bK-46e53ab2-846133.318
From: 00002 <sip:00002@sip.com>;tag=09e0f829
To: <sip:00005@sip.com>;tag=44579a06
Call-ID: 2d6458e7@00002.192.168.1.1
CSeq: 329376662 ACK
max-forwards: 69
Content-Length: 0
=====
```

```
=====
F21      192.168.2.3:1193() -> 192.168.1.1:5060(Server)

INVITE sip:00005@192.168.1.1 SIP/2.0
Via: SIP/2.0/UDP 192.168.2.3:5060;branch=z9hG4bK-60244ba9-845893.490
Route: <sip:00002@192.168.2.1>
From: <sip:00005@sip.com>;tag=44579a06
To: 00002 <sip:00002@sip.com>;tag=09e0f829
Call-ID: 2d6458e7@00002.192.168.1.1
CSeq: 8363644 INVITE
Contact: <sip:00005@192.168.2.3>
Max-Forwards: 70
Supported: 100rel, replaces
Allow: INVITE, ACK, BYE, CANCEL, OPTIONS, PRACK, MESSAGE, REFER, NOTIFY
Content-Type: application/sdp
Content-Length: 187

v=0
o=- 483346 13202 IN IP4 192.168.2.3
s=-
c=IN IP4 192.168.2.3
t=0 0
m=audio 5008 RTP/AVP 0 96
a=rtpmap:0 PCMU/8000
a=rtpmap:96 telephone-event/8000
a=fmtp:96 0-11
a=inactive
=====
```

```
=====
F22      192.168.1.1:5062(Server) -> 192.168.2.3:5060()

SIP/2.0 100 Trying
Via: SIP/2.0/UDP 192.168.2.3:5060;branch=z9hG4bK-60244ba9-845893.490
From: <sip:00005@sip.com>;tag=44579a06
To: 00002 <sip:00002@sip.com>;tag=09e0f829
Call-ID: 2d6458e7@00002.192.168.1.1
CSeq: 8363644 INVITE
Content-Length: 0
=====
```

```
=====
F23      192.168.1.1:5062(Server) -> 192.168.2.1:5060(00002@sip.com)

INVITE sip:00002@192.168.2.1 SIP/2.0
Via: SIP/2.0/UDP 192.168.1.1:5060;branch=z9hG4bK-521.097479.8363644
Via: SIP/2.0/UDP 192.168.2.3:5060;branch=z9hG4bK-60244ba9-845893.490
Record-Route: <sip:00005@192.168.1.1>
Route: <sip:00002@192.168.2.1>
From: <sip:00005@sip.com>;tag=44579a06
To: 00002 <sip:00002@sip.com>;tag=09e0f829
Call-ID: 2d6458e7@00002.192.168.1.1
CSeq: 8363644 INVITE
Contact: <sip:00005@192.168.2.3>
max-forwards: 69
supported: 100rel
supported: replaces
Allow: INVITE, ACK, BYE, CANCEL, OPTIONS, PRACK, MESSAGE, REFER, NOTIFY
Content-Type: application/sdp
Content-Length: 187

v=0
o=- 483346 13202 IN IP4 192.168.2.3
s=-
=====
```

```

c=IN IP4 192.168.2.3
t=0 0
m=audio 5008 RTP/AVP 0 96
a=rtpmap:0 PCMU/8000
a=rtpmap:96 telephone-event/8000
a=fmtp:96 0-11
a=inactive

```

```

=====
F24      192.168.2.1:1043(00002@sip.com) -> 192.168.1.1:5060 (Server)

```

```

SIP/2.0 100 Trying
Via: SIP/2.0/UDP 192.168.1.1:5060;branch=z9hG4bK-521.097479.8363644
Via: SIP/2.0/UDP 192.168.2.3:5060;branch=z9hG4bK-60244ba9-845893.490
From: <sip:00005@sip.com>;tag=44579a06
To: 00002 <sip:00002@sip.com>;tag=09e0f829
Call-ID: 2d6458e7@00002.192.168.1.1
CSeq: 8363644 INVITE
Content-Length: 0

```

```

=====
F25      192.168.2.1:1043(00002@sip.com) -> 192.168.1.1:5060 (Server)

```

```

SIP/2.0 200 OK
Via: SIP/2.0/UDP 192.168.1.1:5060;branch=z9hG4bK-521.097479.8363644
Via: SIP/2.0/UDP 192.168.2.3:5060;branch=z9hG4bK-60244ba9-845893.490
Record-Route: <sip:00005@192.168.1.1>
From: <sip:00005@sip.com>;tag=44579a06
To: 00002 <sip:00002@sip.com>;tag=09e0f829
Call-ID: 2d6458e7@00002.192.168.1.1
CSeq: 8363644 INVITE
Contact: <sip:00002@192.168.2.1>
Supported: 100rel, replaces
Allow: INVITE, ACK, BYE, CANCEL, OPTIONS, PRACK, MESSAGE, REFER, NOTIFY
Content-Type: application/sdp
Accept: application/sdp, message/sipfrag
Content-Length: 186

```

```

v=0
o=- 690483 2902 IN IP4 192.168.2.1
s=-
c=IN IP4 192.168.2.1
t=0 0
m=audio 5008 RTP/AVP 0 96
a=rtpmap:0 PCMU/8000
a=rtpmap:96 telephone-event/8000
a=fmtp:96 0-11
a=inactive

```

```

=====
F26      192.168.1.1:5062 (Server) -> 192.168.2.3:5060 ()

```

```

SIP/2.0 200 OK
Via: SIP/2.0/UDP 192.168.2.3:5060;branch=z9hG4bK-60244ba9-845893.490
Record-Route: <sip:00005@192.168.1.1>
From: <sip:00005@sip.com>;tag=44579a06
To: 00002 <sip:00002@sip.com>;tag=09e0f829
Call-ID: 2d6458e7@00002.192.168.1.1
CSeq: 8363644 INVITE
Contact: <sip:00002@192.168.2.1>
supported: 100rel
supported: replaces
Allow: INVITE, ACK, BYE, CANCEL, OPTIONS, PRACK, MESSAGE, REFER, NOTIFY
Content-Type: application/sdp
Accept: application/sdp, message/sipfrag
Content-Length: 186

```

```

v=0
o=- 690483 2902 IN IP4 192.168.2.1
s=-
c=IN IP4 192.168.2.1
t=0 0
m=audio 5008 RTP/AVP 0 96
a=rtpmap:0 PCMU/8000
a=rtpmap:96 telephone-event/8000
a=fmtp:96 0-11
a=inactive

```

```
=====
F27      192.168.2.3:1193() -> 192.168.1.1:5060(Server)

ACK sip:00005@192.168.1.1 SIP/2.0
Via: SIP/2.0/UDP 192.168.2.3:5060;branch=z9hG4bK-4c7dad08-845893.742
Route: <sip:00002@192.168.2.1>
From: <sip:00005@sip.com>;tag=44579a06
To: 00002 <sip:00002@sip.com>;tag=09e0f829
Call-ID: 2d6458e7@00002.192.168.1.1
CSeq: 8363644 ACK
Max-Forwards: 70
Content-Length: 0
=====
```

```
=====
F28      192.168.1.1:5062(Server) -> 192.168.2.1:5060(00002@sip.com)

ACK sip:00002@192.168.2.1 SIP/2.0
Via: SIP/2.0/UDP 192.168.1.1:5060;branch=z9hG4bK-521.1109089330.8363644
Via: SIP/2.0/UDP 192.168.2.3:5060;branch=z9hG4bK-4c7dad08-845893.742
From: <sip:00005@sip.com>;tag=44579a06
To: 00002 <sip:00002@sip.com>;tag=09e0f829
Call-ID: 2d6458e7@00002.192.168.1.1
CSeq: 8363644 ACK
max-forwards: 69
Content-Length: 0
=====
```

```
=====
F29      192.168.2.3:1193() -> 192.168.1.1:5060(Server)

INVITE sip:00003@sip.com SIP/2.0
Via: SIP/2.0/UDP 192.168.2.3:5060;branch=z9hG4bK-30db77e7-845903.690
Route: <sip:192.168.1.1:5060>
From: <sip:00005@sip.com>;tag=1a3b40bd
To: <sip:00003@sip.com>
Call-ID: 2a8747dd@-.192.168.1.1
CSeq: 1929576121 INVITE
Contact: <sip:00005@192.168.2.3>
Max-Forwards: 70
Supported: 100rel, replaces
Allow: INVITE, ACK, BYE, CANCEL, OPTIONS, PRACK, MESSAGE, REFER, NOTIFY
Content-Type: application/sdp
Accept: application/sdp, message/sipfrag
Content-Length: 248

v=0
o=- 660933 2101 IN IP4 192.168.2.3
s=-
c=IN IP4 192.168.2.3
t=0 0
m=audio 5006 RTP/AVP 0 8 4 18 96
a=rtpmap:0 PCMU/8000
a=rtpmap:8 PCMA/8000
a=rtpmap:4 G723/8000
a=rtpmap:18 G729/8000
a=rtpmap:96 telephone-event/8000
a=fmtp:96 0-11
=====
```

```
=====
F30      192.168.1.1:5062(Server) -> 192.168.1.131:5060(00003@sip.com)

INVITE sip:00003@192.168.1.131 SIP/2.0
Via: SIP/2.0/UDP 192.168.1.1:5060;branch=z9hG4bK-524.587423.1929576121
Via: SIP/2.0/UDP 192.168.2.3:5060;branch=z9hG4bK-30db77e7-845903.690
Record-Route: <sip:00003@192.168.1.1>
Route: <sip:192.168.1.1:5060>
From: 00005 <sip:00005@sip.com>;tag=1a3b40bd
To: <sip:00003@sip.com>
Call-ID: 2a8747dd@-.192.168.1.1
CSeq: 1929576121 INVITE
Contact: <sip:00005@192.168.2.3>
max-forwards: 69
supported: 100rel
supported: replaces
Allow: INVITE, ACK, BYE, CANCEL, OPTIONS, PRACK, MESSAGE, REFER, NOTIFY
=====
```

Content-Type: application/sdp  
 Accept: application/sdp, message/sipfrag  
 Content-Length: 248

v=0  
 o=- 660933 2101 IN IP4 192.168.2.3  
 s=-  
 c=IN IP4 192.168.2.3  
 t=0 0  
 m=audio 5006 RTP/AVP 0 8 4 18 96  
 a=rtpmap:0 PCMU/8000  
 a=rtpmap:8 PCMA/8000  
 a=rtpmap:4 G723/8000  
 a=rtpmap:18 G729/8000  
 a=rtpmap:96 telephone-event/8000  
 a=fmtp:96 0-11

F31 192.168.1.1:5062(Server) -> 192.168.2.3:5060()

SIP/2.0 100 Trying  
 Via: SIP/2.0/UDP 192.168.2.3:5060;branch=z9hG4bK-30db77e7-845903.690  
 From: <sip:00005@sip.com>;tag=1a3b40bd  
 To: <sip:00003@sip.com>  
 Call-ID: 2a8747dd@-.192.168.1.1  
 CSeq: 1929576121 INVITE  
 Content-Length: 0

F32 192.168.1.131:1032(00003@sip.com) -> 192.168.1.1:5060(Server)

SIP/2.0 100 Trying  
 Via: SIP/2.0/UDP 192.168.1.1:5060;branch=z9hG4bK-524.587423.1929576121  
 Via: SIP/2.0/UDP 192.168.2.3:5060;branch=z9hG4bK-30db77e7-845903.690  
 From: 00005 <sip:00005@sip.com>;tag=1a3b40bd  
 To: <sip:00003@sip.com>  
 Call-ID: 2a8747dd@-.192.168.1.1  
 CSeq: 1929576121 INVITE  
 Content-Length: 0

F33 192.168.1.131:1032(00003@sip.com) -> 192.168.1.1:5060(Server)

SIP/2.0 183 Session Progress  
 Via: SIP/2.0/UDP 192.168.1.1:5060;branch=z9hG4bK-524.587423.1929576121  
 Via: SIP/2.0/UDP 192.168.2.3:5060;branch=z9hG4bK-30db77e7-845903.690  
 Record-Route: <sip:00003@192.168.1.1>  
 From: 00005 <sip:00005@sip.com>;tag=1a3b40bd  
 To: <sip:00003@sip.com>;tag=1a27c6b0  
 Call-ID: 2a8747dd@-.192.168.1.1  
 CSeq: 1929576121 INVITE  
 Contact: <sip:00003@192.168.1.131>  
 Require: 100rel  
 RSeq: 1427538525  
 Content-Length: 0

F34 192.168.1.1:5062(Server) -> 192.168.2.3:5060()

SIP/2.0 183 Session Progress  
 Via: SIP/2.0/UDP 192.168.2.3:5060;branch=z9hG4bK-30db77e7-845903.690  
 Record-Route: <sip:00003@192.168.1.1>  
 From: 00005 <sip:00005@sip.com>;tag=1a3b40bd  
 To: <sip:00003@sip.com>;tag=1a27c6b0  
 Call-ID: 2a8747dd@-.192.168.1.1  
 CSeq: 1929576121 INVITE  
 Contact: <sip:00003@192.168.1.131>  
 require: 100rel  
 rseq: 1427538525  
 Content-Length: 0

F35 192.168.2.3:1193() -> 192.168.1.1:5060(Server)

PRACK sip:00003@192.168.1.1 SIP/2.0  
 Via: SIP/2.0/UDP 192.168.2.3:5060;branch=z9hG4bK-5173e222-845903.938  
 Route: <sip:00003@192.168.1.131>  
 From: 00005 <sip:00005@sip.com>;tag=1a3b40bd  
 To: <sip:00003@sip.com>;tag=1a27c6b0  
 Call-ID: 2a8747dd@-.192.168.1.1  
 CSeq: 1929576122 PRACK  
 Max-Forwards: 70  
 Rack: 1427538525 1929576121 INVITE  
 Content-Length: 0

F36 192.168.1.1:5062(Server) -> 192.168.1.131:5060(00003@sip.com)

PRACK sip:00003@192.168.1.131 SIP/2.0  
 Via: SIP/2.0/UDP 192.168.1.1:5060;branch=z9hG4bK-524.1109089340.1929576122  
 Via: SIP/2.0/UDP 192.168.2.3:5060;branch=z9hG4bK-5173e222-845903.938  
 Route: <sip:00003@192.168.1.131>  
 From: 00005 <sip:00005@sip.com>;tag=1a3b40bd  
 To: <sip:00003@sip.com>;tag=1a27c6b0  
 Call-ID: 2a8747dd@-.192.168.1.1  
 CSeq: 1929576122 PRACK  
 max-forwards: 69  
 rack: 1427538525 1929576121 INVITE  
 Content-Length: 0

F37 192.168.1.131:1032(00003@sip.com) -> 192.168.1.1:5060(Server)

SIP/2.0 200 OK  
 Via: SIP/2.0/UDP 192.168.1.1:5060;branch=z9hG4bK-524.1109089340.1929576122  
 Via: SIP/2.0/UDP 192.168.2.3:5060;branch=z9hG4bK-5173e222-845903.938  
 From: 00005 <sip:00005@sip.com>;tag=1a3b40bd  
 To: <sip:00003@sip.com>;tag=1a27c6b0  
 Call-ID: 2a8747dd@-.192.168.1.1  
 CSeq: 1929576122 PRACK  
 Content-Length: 0

F38 192.168.1.1:5062(Server) -> 192.168.2.3:5060()

SIP/2.0 200 OK  
 Via: SIP/2.0/UDP 192.168.2.3:5060;branch=z9hG4bK-5173e222-845903.938  
 From: 00005 <sip:00005@sip.com>;tag=1a3b40bd  
 To: <sip:00003@sip.com>;tag=1a27c6b0  
 Call-ID: 2a8747dd@-.192.168.1.1  
 CSeq: 1929576122 PRACK  
 Content-Length: 0

F39 192.168.1.131:1032(00003@sip.com) -> 192.168.1.1:5060(Server)

SIP/2.0 180 Ringing  
 Via: SIP/2.0/UDP 192.168.1.1:5060;branch=z9hG4bK-524.587423.1929576121  
 Via: SIP/2.0/UDP 192.168.2.3:5060;branch=z9hG4bK-30db77e7-845903.690  
 Record-Route: <sip:00003@192.168.1.1>  
 From: 00005 <sip:00005@sip.com>;tag=1a3b40bd  
 To: <sip:00003@sip.com>;tag=1a27c6b0  
 Call-ID: 2a8747dd@-.192.168.1.1  
 CSeq: 1929576121 INVITE  
 Contact: <sip:00003@192.168.1.131>  
 Require: 100rel  
 RSeq: 1427538526  
 Content-Length: 0

F40 192.168.1.1:5062(Server) -> 192.168.2.3:5060()

SIP/2.0 180 Ringing

# FOMA/WLAN デュアル端末に関する技術参考資料 第 1.2 版

Via: SIP/2.0/UDP 192.168.2.3:5060;branch=z9hG4bK-30db77e7-845903.690  
 Record-Route: <sip:00003@192.168.1.1>  
 From: 00005 <sip:00005@sip.com>;tag=1a3b40bd  
 To: <sip:00003@sip.com>;tag=1a27c6b0  
 Call-ID: 2a8747dd@-.192.168.1.1  
 CSeq: 1929576121 INVITE  
 Contact: <sip:00003@192.168.1.131>  
 require: 100rel  
 rseq: 1427538526  
 Content-Length: 0

F41 192.168.2.3:1193() -> 192.168.1.1:5060(Server)

PRACK sip:00003@192.168.1.1 SIP/2.0  
 Via: SIP/2.0/UDP 192.168.2.3:5060;branch=z9hG4bK-b9994dd-845904.547  
 Route: <sip:00003@192.168.1.131>  
 From: 00005 <sip:00005@sip.com>;tag=1a3b40bd  
 To: <sip:00003@sip.com>;tag=1a27c6b0  
 Call-ID: 2a8747dd@-.192.168.1.1  
 CSeq: 1929576123 PRACK  
 Max-Forwards: 70  
 RAck: 1427538526 1929576121 INVITE  
 Content-Length: 0

F42 192.168.1.1:5062(Server) -> 192.168.1.131:5060(00003@sip.com)

PRACK sip:00003@192.168.1.131 SIP/2.0  
 Via: SIP/2.0/UDP 192.168.1.1:5060;branch=z9hG4bK-524.1109089341.1929576123  
 Via: SIP/2.0/UDP 192.168.2.3:5060;branch=z9hG4bK-b9994dd-845904.547  
 Route: <sip:00003@192.168.1.131>  
 From: 00005 <sip:00005@sip.com>;tag=1a3b40bd  
 To: <sip:00003@sip.com>;tag=1a27c6b0  
 Call-ID: 2a8747dd@-.192.168.1.1  
 CSeq: 1929576123 PRACK  
 max-forwards: 69  
 rack: 1427538526 1929576121 INVITE  
 Content-Length: 0

F43 192.168.1.131:1032(00003@sip.com) -> 192.168.1.1:5060(Server)

SIP/2.0 200 OK  
 Via: SIP/2.0/UDP 192.168.1.1:5060;branch=z9hG4bK-524.1109089341.1929576123  
 Via: SIP/2.0/UDP 192.168.2.3:5060;branch=z9hG4bK-b9994dd-845904.547  
 From: 00005 <sip:00005@sip.com>;tag=1a3b40bd  
 To: <sip:00003@sip.com>;tag=1a27c6b0  
 Call-ID: 2a8747dd@-.192.168.1.1  
 CSeq: 1929576123 PRACK  
 Content-Length: 0

F44 192.168.1.1:5062(Server) -> 192.168.2.3:5060()

SIP/2.0 200 OK  
 Via: SIP/2.0/UDP 192.168.2.3:5060;branch=z9hG4bK-b9994dd-845904.547  
 From: 00005 <sip:00005@sip.com>;tag=1a3b40bd  
 To: <sip:00003@sip.com>;tag=1a27c6b0  
 Call-ID: 2a8747dd@-.192.168.1.1  
 CSeq: 1929576123 PRACK  
 Content-Length: 0

F45 192.168.1.131:1033(00003@sip.com) -> 192.168.1.1:5060(Server)

REGISTER sip:192.168.1.1 SIP/2.0  
 Via: SIP/2.0/UDP 192.168.1.131:5060;branch=z9hG4bK-48cdab5f-241209.007  
 From: <sip:00003@sip.com>  
 To: <sip:00003@sip.com>  
 Call-ID: 3cd98344@00003.192.168.1.1

CSeq: 2 REGISTER  
 Contact: <sip:00003@192.168.1.131>;expires=3600  
 Max-Forwards: 70  
 User-Agent: △△△△△△ //端末種別

Content-Length: 0

F46 192.168.1.131:1033(00003@sip.com) -> 192.168.1.1:5060(Server)

SIP/2.0 180 Ringing  
 Via: SIP/2.0/UDP 192.168.1.1:5060;branch=z9hG4bK-524.587423.1929576121  
 Via: SIP/2.0/UDP 192.168.2.3:5060;branch=z9hG4bK-30db77e7-845903.690  
 Record-Route: <sip:00003@192.168.1.1>  
 From: 00005 <sip:00005@sip.com>;tag=1a3b40bd  
 To: <sip:00003@sip.com>;tag=1a27c6b0  
 Call-ID: 2a8747dd@-.192.168.1.1  
 CSeq: 1929576121 INVITE  
 Contact: <sip:00003@192.168.1.131>  
 Require: 100rel  
 RSeq: 1427538527  
 Content-Length: 0

F47 192.168.1.1:5062(Server) -> 192.168.1.131:5060(00003@sip.com)

SIP/2.0 200 OK  
 Via: SIP/2.0/UDP 192.168.1.131:5060;branch=z9hG4bK-48cdab5f-241209.007  
 From: <sip:00003@sip.com>  
 To: <sip:00003@sip.com>  
 Call-ID: 3cd98344@00003.192.168.1.1  
 CSeq: 2 REGISTER  
 Contact: <sip:00003@192.168.1.131>;expires=3600  
 Date: Tue, 22 Feb 2005 16:22:34 GMT  
 Content-Length: 0

F48 192.168.1.1:5062(Server) -> 192.168.2.3:5060()

SIP/2.0 180 Ringing  
 Via: SIP/2.0/UDP 192.168.2.3:5060;branch=z9hG4bK-30db77e7-845903.690  
 Record-Route: <sip:00003@192.168.1.1>  
 From: 00005 <sip:00005@sip.com>;tag=1a3b40bd  
 To: <sip:00003@sip.com>;tag=1a27c6b0  
 Call-ID: 2a8747dd@-.192.168.1.1  
 CSeq: 1929576121 INVITE  
 Contact: <sip:00003@192.168.1.131>  
 require: 100rel  
 rseq: 1427538527  
 Content-Length: 0

F49 192.168.2.3:1193() -> 192.168.1.1:5060(Server)

PRACK sip:00003@192.168.1.1 SIP/2.0  
 Via: SIP/2.0/UDP 192.168.2.3:5060;branch=z9hG4bK-4f5e1fe3-845917.489  
 Route: <sip:00003@192.168.1.131>  
 From: 00005 <sip:00005@sip.com>;tag=1a3b40bd  
 To: <sip:00003@sip.com>;tag=1a27c6b0  
 Call-ID: 2a8747dd@-.192.168.1.1  
 CSeq: 1929576124 PRACK  
 Max-Forwards: 70  
 RAck: 1427538527 1929576121 INVITE  
 Content-Length: 0

F50 192.168.1.1:5062(Server) -> 192.168.1.131:5060(00003@sip.com)

PRACK sip:00003@192.168.1.131 SIP/2.0  
 Via: SIP/2.0/UDP 192.168.1.1:5060;branch=z9hG4bK-524.1109089354.1929576124  
 Via: SIP/2.0/UDP 192.168.2.3:5060;branch=z9hG4bK-4f5e1fe3-845917.489

```

Route: <sip:00003@192.168.1.131>
From: 00005 <sip:00005@sip.com>;tag=1a3b40bd
To: <sip:00003@sip.com>;tag=1a27c6b0
Call-ID: 2a8747dd@-.192.168.1.1
CSeq: 1929576124 PRACK
max-forwards: 69
ack: 1427538527 1929576121 INVITE
Content-Length: 0

```

```
=====
```

F51            192.168.1.131:1033(00003@sip.com) -> 192.168.1.1:5060(Server)

```

SIP/2.0 200 OK
Via: SIP/2.0/UDP 192.168.1.1:5060;branch=z9hG4bK-524.1109089354.1929576124
Via: SIP/2.0/UDP 192.168.2.3:5060;branch=z9hG4bK-4f5e1fe3-845917.489
From: 00005 <sip:00005@sip.com>;tag=1a3b40bd
To: <sip:00003@sip.com>;tag=1a27c6b0
Call-ID: 2a8747dd@-.192.168.1.1
CSeq: 1929576124 PRACK
Content-Length: 0

```

```
=====
```

F52            192.168.1.1:5062(Server) -> 192.168.2.3:5060()

```

SIP/2.0 200 OK
Via: SIP/2.0/UDP 192.168.2.3:5060;branch=z9hG4bK-4f5e1fe3-845917.489
From: 00005 <sip:00005@sip.com>;tag=1a3b40bd
To: <sip:00003@sip.com>;tag=1a27c6b0
Call-ID: 2a8747dd@-.192.168.1.1
CSeq: 1929576124 PRACK
Content-Length: 0

```

```
=====
```

F53            192.168.1.131:1033(00003@sip.com) -> 192.168.1.1:5060(Server)

```

SIP/2.0 200 OK
Via: SIP/2.0/UDP 192.168.1.1:5060;branch=z9hG4bK-524.587423.1929576121
Via: SIP/2.0/UDP 192.168.2.3:5060;branch=z9hG4bK-30db77e7-845903.690
Record-Route: <sip:00003@192.168.1.1>
From: 00005 <sip:00005@sip.com>;tag=1a3b40bd
To: <sip:00003@sip.com>;tag=1a27c6b0
Call-ID: 2a8747dd@-.192.168.1.1
CSeq: 1929576121 INVITE
Contact: <sip:00003@192.168.1.131>
Supported: 100rel, replaces
Allow: INVITE, ACK, BYE, CANCEL, OPTIONS, PRACK, MESSAGE, REFER, NOTIFY
Content-Type: application/sdp
Accept: application/sdp, message/sipfrag
Content-Length: 178

```

```

v=0
o=- 74247 12801 IN IP4 192.168.1.131
s=-
c=IN IP4 192.168.1.131
t=0 0
m=audio 5006 RTP/AVP 0 96
a=rtpmap:0 PCMU/8000
a=rtpmap:96 telephone-event/8000
a=fmtp:96 0-11

```

```
=====
```

F54            192.168.1.1:5062(Server) -> 192.168.2.3:5060()

```

SIP/2.0 200 OK
Via: SIP/2.0/UDP 192.168.2.3:5060;branch=z9hG4bK-30db77e7-845903.690
Record-Route: <sip:00003@192.168.1.1>
From: 00005 <sip:00005@sip.com>;tag=1a3b40bd
To: <sip:00003@sip.com>;tag=1a27c6b0
Call-ID: 2a8747dd@-.192.168.1.1
CSeq: 1929576121 INVITE
Contact: <sip:00003@192.168.1.131>
supported: 100rel
supported: replaces
Allow: INVITE, ACK, BYE, CANCEL, OPTIONS, PRACK, MESSAGE, REFER, NOTIFY

```



Content-Type: application/sdp  
 Accept: application/sdp, message/sipfrag  
 Content-Length: 178

v=0  
 o=- 74247 12801 IN IP4 192.168.1.131  
 s=-  
 c=IN IP4 192.168.1.131  
 t=0 0  
 m=audio 5006 RTP/AVP 0 96  
 a=rtpmap:0 PCMU/8000  
 a=rtpmap:96 telephone-event/8000  
 a=fmtp:96 0-11

F55 192.168.2.3:1193() -> 192.168.1.1:5060(Server)

ACK sip:00003@192.168.1.1 SIP/2.0  
 Via: SIP/2.0/UDP 192.168.2.3:5060;branch=z9hG4bK-149a98b8-845924.832  
 Route: <sip:00003@192.168.1.131>  
 From: 00005 <sip:00005@sip.com>;tag=1a3b40bd  
 To: <sip:00003@sip.com>;tag=1a27c6b0  
 Call-ID: 2a8747dd@-.192.168.1.1  
 CSeq: 1929576121 ACK  
 Max-Forwards: 70  
 Content-Length: 0

F56 192.168.1.1:5062(Server) -> 192.168.1.131:5060(00003@sip.com)

ACK sip:00003@192.168.1.131 SIP/2.0  
 Via: SIP/2.0/UDP 192.168.1.1:5060;branch=z9hG4bK-524.1109089361.1929576121  
 Via: SIP/2.0/UDP 192.168.2.3:5060;branch=z9hG4bK-149a98b8-845924.832  
 From: 00005 <sip:00005@sip.com>;tag=1a3b40bd  
 To: <sip:00003@sip.com>;tag=1a27c6b0  
 Call-ID: 2a8747dd@-.192.168.1.1  
 CSeq: 1929576121 ACK  
 max-forwards: 69  
 Content-Length: 0

F57 192.168.2.3:1193() -> 192.168.1.1:5060(Server)

INVITE sip:00003@192.168.1.1 SIP/2.0  
 Via: SIP/2.0/UDP 192.168.2.3:5060;branch=z9hG4bK-357fcd73-845929.044  
 Route: <sip:00003@192.168.1.131>  
 From: 00005 <sip:00005@sip.com>;tag=1a3b40bd  
 To: <sip:00003@sip.com>;tag=1a27c6b0  
 Call-ID: 2a8747dd@-.192.168.1.1  
 CSeq: 1929576125 INVITE  
 Contact: <sip:00005@192.168.2.3>  
 Max-Forwards: 70  
 Supported: 100rel, replaces  
 Allow: INVITE, ACK, BYE, CANCEL, OPTIONS, PRACK, MESSAGE, REFER, NOTIFY  
 Content-Type: application/sdp  
 Content-Length: 185

v=0  
 o=- 39678 2102 IN IP4 192.168.2.3  
 s=-  
 c=IN IP4 192.168.2.3  
 t=0 0  
 m=audio 5006 RTP/AVP 0 96  
 a=rtpmap:0 PCMU/8000  
 a=rtpmap:96 telephone-event/8000  
 a=fmtp:96 0-11  
 a=inactive

F58 192.168.1.1:5062(Server) -> 192.168.2.3:5060()

SIP/2.0 100 Trying  
 Via: SIP/2.0/UDP 192.168.2.3:5060;branch=z9hG4bK-357fcd73-845929.044  
 From: 00005 <sip:00005@sip.com>;tag=1a3b40bd  
 To: <sip:00003@sip.com>;tag=1a27c6b0

Call-ID: 2a8747dd@-.192.168.1.1  
CSeq: 1929576125 INVITE  
Content-Length: 0

```
=====
F59      192.168.1.1:5062(Server) -> 192.168.1.131:5060(00003@sip.com)

INVITE sip:00003@192.168.1.131 SIP/2.0
Via: SIP/2.0/UDP 192.168.1.1:5060;branch=z9hG4bK-524.587423.1929576125
Via: SIP/2.0/UDP 192.168.2.3:5060;branch=z9hG4bK-357fcd73-845929.044
Record-Route: <sip:00003@192.168.1.1>
Route: <sip:00003@192.168.1.131>
From: 00005 <sip:00005@sip.com>;tag=1a3b40bd
To: <sip:00003@sip.com>;tag=1a27c6b0
Call-ID: 2a8747dd@-.192.168.1.1
CSeq: 1929576125 INVITE
Contact: <sip:00005@192.168.2.3>
max-forwards: 69
supported: 100rel
supported: replaces
Allow: INVITE, ACK, BYE, CANCEL, OPTIONS, PRACK, MESSAGE, REFER, NOTIFY
Content-Type: application/sdp
Content-Length: 185

v=0
o=- 39678 2102 IN IP4 192.168.2.3
s=-
c=IN IP4 192.168.2.3
t=0 0
m=audio 5006 RTP/AVP 0 96
a=rtpmap:0 PCMU/8000
a=rtpmap:96 telephone-event/8000
a=fmtp:96 0-11
a=inactive
```

```
=====
F60      192.168.1.131:1033(00003@sip.com) -> 192.168.1.1:5060(Server)

SIP/2.0 100 Trying
Via: SIP/2.0/UDP 192.168.1.1:5060;branch=z9hG4bK-524.587423.1929576125
Via: SIP/2.0/UDP 192.168.2.3:5060;branch=z9hG4bK-357fcd73-845929.044
From: 00005 <sip:00005@sip.com>;tag=1a3b40bd
To: <sip:00003@sip.com>;tag=1a27c6b0
Call-ID: 2a8747dd@-.192.168.1.1
CSeq: 1929576125 INVITE
Content-Length: 0
```

```
=====
F61      192.168.1.131:1033(00003@sip.com) -> 192.168.1.1:5060(Server)

SIP/2.0 200 OK
Via: SIP/2.0/UDP 192.168.1.1:5060;branch=z9hG4bK-524.587423.1929576125
Via: SIP/2.0/UDP 192.168.2.3:5060;branch=z9hG4bK-357fcd73-845929.044
Record-Route: <sip:00003@192.168.1.1>
From: 00005 <sip:00005@sip.com>;tag=1a3b40bd
To: <sip:00003@sip.com>;tag=1a27c6b0
Call-ID: 2a8747dd@-.192.168.1.1
CSeq: 1929576125 INVITE
Contact: <sip:00003@192.168.1.131>
Supported: 100rel, replaces
Allow: INVITE, ACK, BYE, CANCEL, OPTIONS, PRACK, MESSAGE, REFER, NOTIFY
Content-Type: application/sdp
Accept: application/sdp, message/sipfrag
Content-Length: 191

v=0
o=- 916620 12802 IN IP4 192.168.1.131
s=-
c=IN IP4 192.168.1.131
t=0 0
m=audio 5006 RTP/AVP 0 96
a=rtpmap:0 PCMU/8000
a=rtpmap:96 telephone-event/8000
a=fmtp:96 0-11
a=inactive
```

```
=====
F62      192.168.1.1:5062(Server) -> 192.168.2.3:5060()

SIP/2.0 200 OK
Via: SIP/2.0/UDP 192.168.2.3:5060;branch=z9hG4bK-357fcd73-845929.044
Record-Route: <sip:00003@192.168.1.1>
From: 00005 <sip:00005@sip.com>;tag=1a3b40bd
To: <sip:00003@sip.com>;tag=1a27c6b0
Call-ID: 2a8747dd@-.192.168.1.1
CSeq: 1929576125 INVITE
Contact: <sip:00003@192.168.1.131>
supported: 100rel
supported: replaces
Allow: INVITE, ACK, BYE, CANCEL, OPTIONS, PRACK, MESSAGE, REFER, NOTIFY
Content-Type: application/sdp
Accept: application/sdp, message/sipfrag
Content-Length: 191
```

```
v=0
o=- 916620 12802 IN IP4 192.168.1.131
s=-
c=IN IP4 192.168.1.131
t=0 0
m=audio 5006 RTP/AVP 0 96
a=rtpmap:0 PCMU/8000
a=rtpmap:96 telephone-event/8000
a=fmtp:96 0-11
a=inactive
```

```
=====
F63      192.168.2.3:1193() -> 192.168.1.1:5060(Server)

ACK sip:00003@192.168.1.1 SIP/2.0
Via: SIP/2.0/UDP 192.168.2.3:5060;branch=z9hG4bK-16c002a6-845929.346
Route: <sip:00003@192.168.1.131>
From: 00005 <sip:00005@sip.com>;tag=1a3b40bd
To: <sip:00003@sip.com>;tag=1a27c6b0
Call-ID: 2a8747dd@-.192.168.1.1
CSeq: 1929576125 ACK
Max-Forwards: 70
Content-Length: 0
```

```
=====
F64      192.168.1.1:5062(Server) -> 192.168.1.131:5060(00003@sip.com)

ACK sip:00003@192.168.1.131 SIP/2.0
Via: SIP/2.0/UDP 192.168.1.1:5060;branch=z9hG4bK-524.1109089366.1929576125
Via: SIP/2.0/UDP 192.168.2.3:5060;branch=z9hG4bK-16c002a6-845929.346
From: 00005 <sip:00005@sip.com>;tag=1a3b40bd
To: <sip:00003@sip.com>;tag=1a27c6b0
Call-ID: 2a8747dd@-.192.168.1.1
CSeq: 1929576125 ACK
max-forwards: 69
Content-Length: 0
```

```
=====
F65      192.168.2.3:1193() -> 192.168.1.1:5060(Server)

REFER sip:00005@192.168.1.1 SIP/2.0
Via: SIP/2.0/UDP 192.168.2.3:5060;branch=z9hG4bK-7b4ce64-845929.434
Route: <sip:00002@192.168.2.1>
From: <sip:00005@sip.com>;tag=44579a06
To: 00002 <sip:00002@sip.com>;tag=09e0f829
Call-ID: 2d6458e7@00002.192.168.1.1
CSeq: 8363645 REFER
Contact: <sip:00005@192.168.2.3>
Max-Forwards: 70
Refer-To:
<sip:00003@192.168.1.131?Replaces=2a8747dd@-.192.168.1.1%3bto-tag%3d1a27c6b0%3bfrom-tag%3d1a3b40bd>
Referred-By: <sip:00005@sip.com>
Content-Length: 0
```

F66 192.168.1.1:5062(Server) -> 192.168.2.1:5060(00002@sip.com)

```
REFER sip:00002@192.168.2.1 SIP/2.0
Via: SIP/2.0/UDP 192.168.1.1:5060;branch=z9hG4bK-521.1109089366.8363645
Via: SIP/2.0/UDP 192.168.2.3:5060;branch=z9hG4bK-7b4ce64-845929.434
Route: <sip:00002@192.168.2.1>
From: <sip:00005@sip.com>;tag=44579a06
To: 00002 <sip:00002@sip.com>;tag=09e0f829
Call-ID: 2d6458e7@00002.192.168.1.1
CSeq: 8363645 REFER
Contact: <sip:00005@192.168.2.3>
max-forwards: 69
refer-to:
<sip:00003@192.168.1.131?Replaces=2a8747dd@-.192.168.1.1%3bto-tag%3d1a27c6b0%3bfrom-tag%3d1a3b40
bd>
referred-by: <sip:00005@sip.com>
Content-Length: 0
```

F67 192.168.2.1:1043(00002@sip.com) -> 192.168.1.1:5060(Server)

```
SIP/2.0 202 Accepted
Via: SIP/2.0/UDP 192.168.1.1:5060;branch=z9hG4bK-521.1109089366.8363645
Via: SIP/2.0/UDP 192.168.2.3:5060;branch=z9hG4bK-7b4ce64-845929.434
From: <sip:00005@sip.com>;tag=44579a06
To: 00002 <sip:00002@sip.com>;tag=09e0f829
Call-ID: 2d6458e7@00002.192.168.1.1
CSeq: 8363645 REFER
Contact: <sip:00002@192.168.2.1>
Content-Length: 0
```

F68 192.168.2.1:1043(00002@sip.com) -> 192.168.1.1:5060(Server)

```
NOTIFY sip:00005@192.168.1.1 SIP/2.0
Via: SIP/2.0/UDP 192.168.2.1:5060;branch=z9hG4bK-693fa8da-846170.483
Route: <sip:00005@192.168.2.3>
From: 00002 <sip:00002@sip.com>;tag=09e0f829
To: <sip:00005@sip.com>;tag=44579a06
Call-ID: 2d6458e7@00002.192.168.1.1
CSeq: 329376665 NOTIFY
Contact: <sip:00002@192.168.2.1>
Max-Forwards: 70
Event: refer
Subscription-State: active;expires=30
Content-Type: message/sipfrag
Content-Length: 18
```

SIP/2.0 100 Trying

F69 192.168.1.1:5062(Server) -> 192.168.2.3:5060()

```
SIP/2.0 202 Accepted
Via: SIP/2.0/UDP 192.168.2.3:5060;branch=z9hG4bK-7b4ce64-845929.434
From: <sip:00005@sip.com>;tag=44579a06
To: 00002 <sip:00002@sip.com>;tag=09e0f829
Call-ID: 2d6458e7@00002.192.168.1.1
CSeq: 8363645 REFER
Contact: <sip:00002@192.168.2.1>
Content-Length: 0
```

F70 192.168.1.1:5062(Server) -> 192.168.2.3:5060()

```
NOTIFY sip:00005@192.168.2.3 SIP/2.0
Via: SIP/2.0/UDP 192.168.1.1:5060;branch=z9hG4bK-522.1109089366.329376665
Via: SIP/2.0/UDP 192.168.2.1:5060;branch=z9hG4bK-693fa8da-846170.483
Route: <sip:00005@192.168.2.3>
From: 00002 <sip:00002@sip.com>;tag=09e0f829
To: <sip:00005@sip.com>;tag=44579a06
Call-ID: 2d6458e7@00002.192.168.1.1
CSeq: 329376665 NOTIFY
Contact: <sip:00002@192.168.2.1>
```

max-forwards: 69  
event: refer  
subscription-state: active;expires=30  
Content-Type: message/sipfrag  
Content-Length: 18

SIP/2.0 100 Trying

F71 192.168.2.3:1193() -> 192.168.1.1:5060(Server)

SIP/2.0 200 OK  
Via: SIP/2.0/UDP 192.168.1.1:5060;branch=z9hG4bK-522.1109089366.329376665  
Via: SIP/2.0/UDP 192.168.2.1:5060;branch=z9hG4bK-693fa8da-846170.483  
From: 00002 <sip:00002@sip.com>;tag=09e0f829  
To: <sip:00005@sip.com>;tag=44579a06  
Call-ID: 2d6458e7@00002.192.168.1.1  
CSeq: 329376665 NOTIFY  
Content-Length: 0

F72 192.168.1.1:5062(Server) -> 192.168.2.1:5060(00002@sip.com)

SIP/2.0 200 OK  
Via: SIP/2.0/UDP 192.168.2.1:5060;branch=z9hG4bK-693fa8da-846170.483  
From: 00002 <sip:00002@sip.com>;tag=09e0f829  
To: <sip:00005@sip.com>;tag=44579a06  
Call-ID: 2d6458e7@00002.192.168.1.1  
CSeq: 329376665 NOTIFY  
Content-Length: 0

F73 192.168.2.1:1043(00002@sip.com) -> 192.168.1.1:5060(Server)

INVITE sip:00003@192.168.1.131 SIP/2.0  
Via: SIP/2.0/UDP 192.168.2.1:5060;branch=z9hG4bK-7b8b65a3-846170.603  
Route: <sip:192.168.1.1:5060>  
From: <sip:00002@sip.com>;tag=5b08c4bf  
To: <sip:00003@192.168.1.131>  
Call-ID: 39fb905f@00002.192.168.1.1  
CSeq: 1020901082 INVITE  
Contact: <sip:00002@192.168.2.1>  
Max-Forwards: 70  
Supported: 100rel, replaces  
Referred-By: <sip:00005@sip.com>  
Replaces: 2a8747dd@-.192.168.1.1:to-tag=1a27c6b0;from-tag=1a3b40bd  
Allow: INVITE, ACK, BYE, CANCEL, OPTIONS, PRACK, MESSAGE, REFER, NOTIFY  
Content-Type: application/sdp  
Accept: application/sdp, message/sipfrag  
Content-Length: 174

v=0  
o=- 595745 2901 IN IP4 192.168.2.1  
s=-  
c=IN IP4 192.168.2.1  
t=0 0  
m=audio 5006 RTP/AVP 0 96  
a=rtpmap:0 PCMU/8000  
a=rtpmap:96 telephone-event/8000  
a=fmtp:96 0-11

F74 192.168.1.1:5062(Server) -> 192.168.2.1:5060(00002@sip.com)

SIP/2.0 100 Trying  
Via: SIP/2.0/UDP 192.168.2.1:5060;branch=z9hG4bK-7b8b65a3-846170.603  
From: <sip:00002@sip.com>;tag=5b08c4bf  
To: <sip:00003@192.168.1.131>  
Call-ID: 39fb905f@00002.192.168.1.1  
CSeq: 1020901082 INVITE  
Content-Length: 0

F75 192.168.1.1:5062(Server) -> 192.168.1.131:5060(00003@sip.com)

```

INVITE sip:00003@192.168.1.131 SIP/2.0
Via: SIP/2.0/UDP 192.168.1.1:5060;branch=z9hG4bK-527.507441.1020901082
Via: SIP/2.0/UDP 192.168.2.1:5060;branch=z9hG4bK-7b8b65a3-846170.603
Record-Route: <sip:00003@192.168.1.1>
Route: <sip:192.168.1.1:5060>
From: 00002 <sip:00002@sip.com>;tag=5b08c4bf
To: <sip:00003@192.168.1.131>
Call-ID: 39fb905f@00002.192.168.1.1
CSeq: 1020901082 INVITE
Contact: <sip:00002@192.168.2.1>
max-forwards: 69
supported: 100rel
supported: replaces
referred-by: <sip:00005@sip.com>
replaces: 2a8747dd@-.192.168.1.1;to-tag=1a27c6b0;from-tag=1a3b40bd
Allow: INVITE, ACK, BYE, CANCEL, OPTIONS, PRACK, MESSAGE, REFER, NOTIFY
Content-Type: application/sdp
Accept: application/sdp, message/sipfrag
Content-Length: 174

```

```

v=0
o=- 595745 2901 IN IP4 192.168.2.1
s=-
c=IN IP4 192.168.2.1
t=0 0
m=audio 5006 RTP/AVP 0 96
a=rtpmap:0 PCMU/8000
a=rtpmap:96 telephone-event/8000
a=fmtp:96 0-11

```

```
=====
F76      192.168.1.131:1033(00003@sip.com) -> 192.168.1.1:5060(Server)
```

```

SIP/2.0 100 Trying
Via: SIP/2.0/UDP 192.168.1.1:5060;branch=z9hG4bK-527.507441.1020901082
Via: SIP/2.0/UDP 192.168.2.1:5060;branch=z9hG4bK-7b8b65a3-846170.603
From: 00002 <sip:00002@sip.com>;tag=5b08c4bf
To: <sip:00003@192.168.1.131>
Call-ID: 39fb905f@00002.192.168.1.1
CSeq: 1020901082 INVITE
Content-Length: 0

```

```
=====
F77      192.168.1.131:1033(00003@sip.com) -> 192.168.1.1:5060(Server)
```

```

SIP/2.0 200 OK
Via: SIP/2.0/UDP 192.168.1.1:5060;branch=z9hG4bK-527.507441.1020901082
Via: SIP/2.0/UDP 192.168.2.1:5060;branch=z9hG4bK-7b8b65a3-846170.603
Record-Route: <sip:00003@192.168.1.1>
From: 00002 <sip:00002@sip.com>;tag=5b08c4bf
To: <sip:00003@192.168.1.131>;tag=3a4c10de
Call-ID: 39fb905f@00002.192.168.1.1
CSeq: 1020901082 INVITE
Contact: <sip:00003@192.168.1.131>
Supported: 100rel, replaces
Allow: INVITE, ACK, BYE, CANCEL, OPTIONS, PRACK, MESSAGE, REFER, NOTIFY
Content-Type: application/sdp
Accept: application/sdp, message/sipfrag
Content-Length: 179

```

```

v=0
o=- 814624 12801 IN IP4 192.168.1.131
s=-
c=IN IP4 192.168.1.131
t=0 0
m=audio 5008 RTP/AVP 0 96
a=rtpmap:0 PCMU/8000
a=rtpmap:96 telephone-event/8000
a=fmtp:96 0-11

```

```
=====
F78      192.168.1.1:5062(Server) -> 192.168.2.1:5060(00002@sip.com)
```

```

SIP/2.0 200 OK
Via: SIP/2.0/UDP 192.168.2.1:5060;branch=z9hG4bK-7b8b65a3-846170.603
Record-Route: <sip:00003@192.168.1.1>

```

## FOMA/WLAN デュアル端末に関する技術参考資料 第 1.2 版

From: 00002 <sip:00002@sip.com>;tag=5b08c4bf  
 To: <sip:00003@192.168.1.131>;tag=3a4c10de  
 Call-ID: 39fb905f@00002.192.168.1.1  
 CSeq: 1020901082 INVITE  
 Contact: <sip:00003@192.168.1.131>  
 supported: 100rel  
 supported: replaces  
 Allow: INVITE, ACK, BYE, CANCEL, OPTIONS, PRACK, MESSAGE, REFER, NOTIFY  
 Content-Type: application/sdp  
 Accept: application/sdp, message/sipfrag  
 Content-Length: 179

v=0  
 o=- 814624 12801 IN IP4 192.168.1.131  
 s=-  
 c=IN IP4 192.168.1.131  
 t=0 0  
 m=audio 5008 RTP/AVP 0 96  
 a=rtpmap:0 PCMU/8000  
 a=rtpmap:96 telephone-event/8000  
 a=fmtp:96 0-11

F79 192.168.2.1:1043(00002@sip.com) -> 192.168.1.1:5060(Server)

ACK sip:00003@192.168.1.1 SIP/2.0  
 Via: SIP/2.0/UDP 192.168.2.1:5060;branch=z9hG4bK-2eb67941-846171.604  
 Route: <sip:00003@192.168.1.131>  
 From: 00002 <sip:00002@sip.com>;tag=5b08c4bf  
 To: <sip:00003@192.168.1.131>;tag=3a4c10de  
 Call-ID: 39fb905f@00002.192.168.1.1  
 CSeq: 1020901082 ACK  
 Max-Forwards: 70  
 Content-Length: 0

F80 192.168.1.1:5062(Server) -> 192.168.1.131:5060(00003@sip.com)

ACK sip:00003@192.168.1.131 SIP/2.0  
 Via: SIP/2.0/UDP 192.168.1.1:5060;branch=z9hG4bK-527.1109089367.1020901082  
 Via: SIP/2.0/UDP 192.168.2.1:5060;branch=z9hG4bK-2eb67941-846171.604  
 From: 00002 <sip:00002@sip.com>;tag=5b08c4bf  
 To: <sip:00003@192.168.1.131>;tag=3a4c10de  
 Call-ID: 39fb905f@00002.192.168.1.1  
 CSeq: 1020901082 ACK  
 max-forwards: 69  
 Content-Length: 0

F81 192.168.2.1:1043(00002@sip.com) -> 192.168.1.1:5060(Server)

NOTIFY sip:00005@192.168.1.1 SIP/2.0  
 Via: SIP/2.0/UDP 192.168.2.1:5060;branch=z9hG4bK-7b76710-846171.682  
 Route: <sip:00005@192.168.2.3>  
 From: 00002 <sip:00002@sip.com>;tag=09e0f829  
 To: <sip:00005@sip.com>;tag=44579a06  
 Call-ID: 2d6458e7@00002.192.168.1.1  
 CSeq: 329376666 NOTIFY  
 Contact: <sip:00002@192.168.2.1>  
 Max-Forwards: 70  
 Event: refer  
 Subscription-State: terminated;reason=noresource  
 Content-Type: message/sipfrag  
 Content-Length: 14

SIP/2.0 200 OK

F82 192.168.1.131:1033(00003@sip.com) -> 192.168.1.1:5060(Server)

BYE sip:00003@192.168.1.1 SIP/2.0  
 Via: SIP/2.0/UDP 192.168.1.131:5060;branch=z9hG4bK-5fcd952a-241222.326  
 Route: <sip:00005@192.168.2.3>  
 From: <sip:00003@sip.com>;tag=1a27c6b0  
 To: 00005 <sip:00005@sip.com>;tag=1a3b40bd  
 Call-ID: 2a8747dd@-.192.168.1.1

CSeq: 1413938748 BYE  
Max-Forwards: 70  
Content-Length: 0

```
=====
F83      192.168.1.1:5062(Server) -> 192.168.2.3:5060()

NOTIFY sip:00005@192.168.2.3 SIP/2.0
Via: SIP/2.0/UDP 192.168.1.1:5060;branch=z9hG4bK-522.1109089367.329376666
Via: SIP/2.0/UDP 192.168.2.1:5060;branch=z9hG4bK-7b76710-846171.682
Route: <sip:00005@192.168.2.3>
From: 00002 <sip:00002@sip.com>;tag=09e0f829
To: <sip:00005@sip.com>;tag=44579a06
Call-ID: 2d6458e7@00002.192.168.1.1
CSeq: 329376666 NOTIFY
Contact: <sip:00002@192.168.2.1>
max-forwards: 69
event: refer
subscription-state: terminated;reason=noresource
Content-Type: message/sipfrag
Content-Length: 14

SIP/2.0 200 OK
=====
```

```
=====
F84      192.168.1.1:5062(Server) -> 192.168.2.3:5060()

BYE sip:00005@192.168.2.3 SIP/2.0
Via: SIP/2.0/UDP 192.168.1.1:5060;branch=z9hG4bK-523.1109089367.1413938748
Via: SIP/2.0/UDP 192.168.1.131:5060;branch=z9hG4bK-5fcd952a-241222.326
Route: <sip:00005@192.168.2.3>
From: <sip:00003@sip.com>;tag=1a27c6b0
To: 00005 <sip:00005@sip.com>;tag=1a3b40bd
Call-ID: 2a8747dd@-.192.168.1.1
CSeq: 1413938748 BYE
max-forwards: 69
Content-Length: 0

=====
```

```
=====
F85      192.168.2.3:1193() -> 192.168.1.1:5060(Server)

SIP/2.0 200 OK
Via: SIP/2.0/UDP 192.168.1.1:5060;branch=z9hG4bK-522.1109089367.329376666
Via: SIP/2.0/UDP 192.168.2.1:5060;branch=z9hG4bK-7b76710-846171.682
From: 00002 <sip:00002@sip.com>;tag=09e0f829
To: <sip:00005@sip.com>;tag=44579a06
Call-ID: 2d6458e7@00002.192.168.1.1
CSeq: 329376666 NOTIFY
Content-Length: 0

=====
```

```
=====
F86      192.168.2.3:1193() -> 192.168.1.1:5060(Server)

BYE sip:00005@192.168.1.1 SIP/2.0
Via: SIP/2.0/UDP 192.168.2.3:5060;branch=z9hG4bK-65c807f2-845930.752
Route: <sip:00002@192.168.2.1>
From: <sip:00005@sip.com>;tag=44579a06
To: 00002 <sip:00002@sip.com>;tag=09e0f829
Call-ID: 2d6458e7@00002.192.168.1.1
CSeq: 8363646 BYE
Max-Forwards: 70
Content-Length: 0

=====
```

```
=====
F87      192.168.1.1:5062(Server) -> 192.168.2.1:5060(00002@sip.com)

SIP/2.0 200 OK
Via: SIP/2.0/UDP 192.168.2.1:5060;branch=z9hG4bK-7b76710-846171.682
From: 00002 <sip:00002@sip.com>;tag=09e0f829
To: <sip:00005@sip.com>;tag=44579a06
Call-ID: 2d6458e7@00002.192.168.1.1
CSeq: 329376666 NOTIFY
Content-Length: 0
```



```
=====
F88      192.168.1.1:5062(Server) -> 192.168.2.1:5060(00002@sip.com)

BYE sip:00002@192.168.2.1 SIP/2.0
Via: SIP/2.0/UDP 192.168.1.1:5060;branch=z9hG4bK-521.1109089367.8363646
Via: SIP/2.0/UDP 192.168.2.3:5060;branch=z9hG4bK-65c807f2-845930.752
Route: <sip:00002@192.168.2.1>
From: <sip:00005@sip.com>;tag=44579a06
To: 00002 <sip:00002@sip.com>;tag=09e0f829
Call-ID: 2d6458e7@00002.192.168.1.1
CSeq: 8363646 BYE
max-forwards: 69
Content-Length: 0
=====
```

```
=====
F89      192.168.2.1:1043(00002@sip.com) -> 192.168.1.1:5060(Server)

SIP/2.0 200 OK
Via: SIP/2.0/UDP 192.168.1.1:5060;branch=z9hG4bK-521.1109089367.8363646
Via: SIP/2.0/UDP 192.168.2.3:5060;branch=z9hG4bK-65c807f2-845930.752
From: <sip:00005@sip.com>;tag=44579a06
To: 00002 <sip:00002@sip.com>;tag=09e0f829
Call-ID: 2d6458e7@00002.192.168.1.1
CSeq: 8363646 BYE
Content-Length: 0
=====
```

```
=====
F90      192.168.2.3:1193() -> 192.168.1.1:5060(Server)

SIP/2.0 200 OK
Via: SIP/2.0/UDP 192.168.1.1:5060;branch=z9hG4bK-523.1109089367.1413938748
Via: SIP/2.0/UDP 192.168.1.131:5060;branch=z9hG4bK-5fcd952a-241222.326
From: <sip:00003@sip.com>;tag=1a27c6b0
To: 00005 <sip:00005@sip.com>;tag=1a3b40bd
Call-ID: 2a8747dd@-.192.168.1.1
CSeq: 1413938748 BYE
Content-Length: 0
=====
```

```
=====
F91      192.168.1.1:5062(Server) -> 192.168.2.3:5060()

SIP/2.0 200 OK
Via: SIP/2.0/UDP 192.168.2.3:5060;branch=z9hG4bK-65c807f2-845930.752
From: <sip:00005@sip.com>;tag=44579a06
To: 00002 <sip:00002@sip.com>;tag=09e0f829
Call-ID: 2d6458e7@00002.192.168.1.1
CSeq: 8363646 BYE
Content-Length: 0
=====
```

```
=====
F92      192.168.1.1:5062(Server) -> 192.168.1.131:5060(00003@sip.com)

SIP/2.0 200 OK
Via: SIP/2.0/UDP 192.168.1.131:5060;branch=z9hG4bK-5fcd952a-241222.326
From: <sip:00003@sip.com>;tag=1a27c6b0
To: 00005 <sip:00005@sip.com>;tag=1a3b40bd
Call-ID: 2a8747dd@-.192.168.1.1
CSeq: 1413938748 BYE
Content-Length: 0
=====
```

```
=====
F93      192.168.2.1:1043(00002@sip.com) -> 192.168.1.1:5060(Server)

BYE sip:00003@192.168.1.1 SIP/2.0
Via: SIP/2.0/UDP 192.168.2.1:5060;branch=z9hG4bK-10c24326-846178.716
Route: <sip:00003@192.168.1.131>
From: 00002 <sip:00002@sip.com>;tag=5b08c4bf
To: <sip:00003@192.168.1.131>;tag=3a4c10de
=====
```

FOMA/WLAN デュアル端末に関する技術参考資料 第 1.2 版

Call-ID: 39fb905f@00002.192.168.1.1  
 CSeq: 1020901083 BYE  
 Max-Forwards: 70  
 Content-Length: 0

```
=====
F94      192.168.1.1:5062(Server) -> 192.168.1.131:5060(00003@sip.com)

BYE sip:00003@192.168.1.131 SIP/2.0
Via: SIP/2.0/UDP 192.168.1.1:5060;branch=z9hG4bK-527.1109089374.1020901083
Via: SIP/2.0/UDP 192.168.2.1:5060;branch=z9hG4bK-10c24326-846178.716
Route: <sip:00003@192.168.1.131>
From: 00002 <sip:00002@sip.com>;tag=5b08c4bf
To: <sip:00003@192.168.1.131>;tag=3a4c10de
Call-ID: 39fb905f@00002.192.168.1.1
CSeq: 1020901083 BYE
max-forwards: 69
Content-Length: 0
```

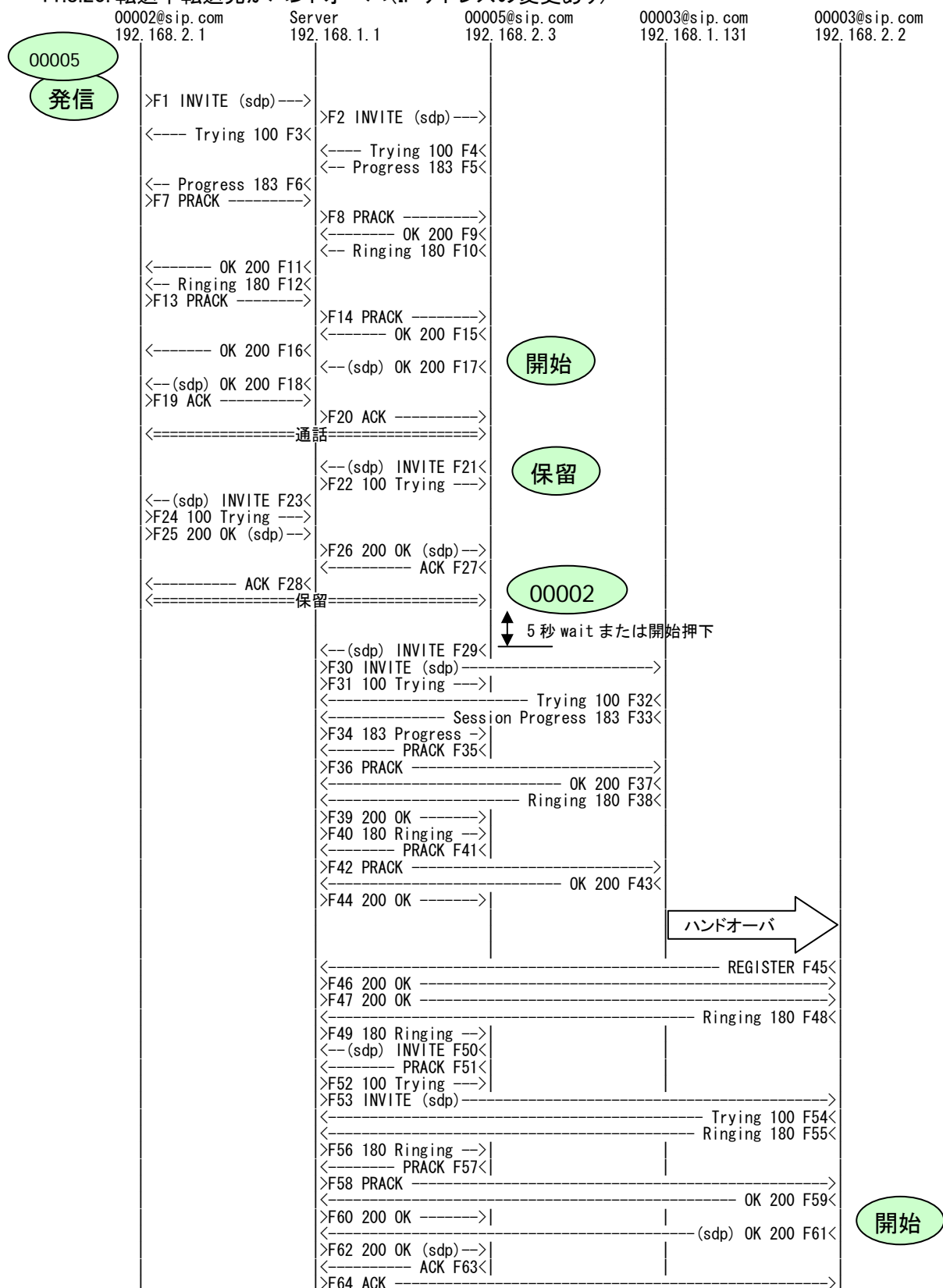
```
=====
F95      192.168.1.131:1033(00003@sip.com) -> 192.168.1.1:5060(Server)

SIP/2.0 200 OK
Via: SIP/2.0/UDP 192.168.1.1:5060;branch=z9hG4bK-527.1109089374.1020901083
Via: SIP/2.0/UDP 192.168.2.1:5060;branch=z9hG4bK-10c24326-846178.716
From: 00002 <sip:00002@sip.com>;tag=5b08c4bf
To: <sip:00003@192.168.1.131>;tag=3a4c10de
Call-ID: 39fb905f@00002.192.168.1.1
CSeq: 1020901083 BYE
Content-Length: 0
```

```
=====
F96      192.168.1.1:5062(Server) -> 192.168.2.1:5060(00002@sip.com)

SIP/2.0 200 OK
Via: SIP/2.0/UDP 192.168.2.1:5060;branch=z9hG4bK-10c24326-846178.716
From: 00002 <sip:00002@sip.com>;tag=5b08c4bf
To: <sip:00003@192.168.1.131>;tag=3a4c10de
Call-ID: 39fb905f@00002.192.168.1.1
CSeq: 1020901083 BYE
Content-Length: 0
```

## 11.8.20. 転送中転送先がハンドオーバー(IP アドレスの変更あり)



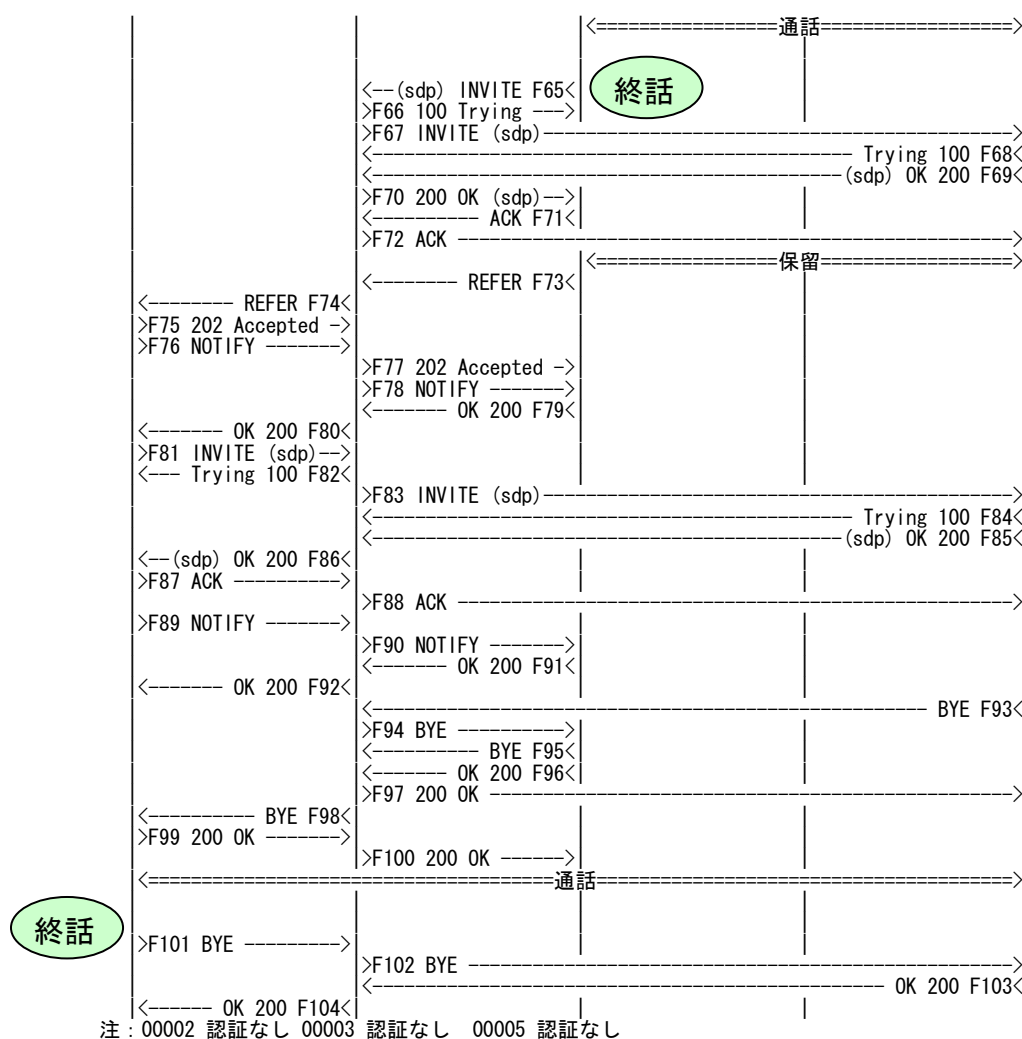


図 11-59 転送中転送先がハンドオーバー(IP アドレスの変更あり)

```

F1          192.168.2.1:1043(00002@sip.com) -> 192.168.1.1:5060 (Server)

INVITE sip:00005@sip.com SIP/2.0
Via: SIP/2.0/UDP 192.168.2.1:5060;branch=z9hG4bK-5742a8cb-845795.214
Route: <sip:192.168.1.1:5060>
From: <sip:00002@sip.com>;tag=648eaf06
To: <sip:00005@sip.com>
Call-ID: 3671cae8@00002.192.168.1.1
CSeq: 477244370 INVITE
Contact: <sip:00002@192.168.2.1>
Max-Forwards: 70
Supported: 100rel, replaces
Allow: INVITE, ACK, BYE, CANCEL, OPTIONS, PRACK, MESSAGE, REFER, NOTIFY
Content-Type: application/sdp
Accept: application/sdp, message/sipfrag
Content-Length: 248

v=0
o=- 204577 2701 IN IP4 192.168.2.1
s=-
c=IN IP4 192.168.2.1
t=0 0
m=audio 5006 RTP/AVP 0 8 4 18 96
a=rtpmap:0 PCMU/8000
a=rtpmap:8 PCMA/8000
a=rtpmap:4 G723/8000
a=rtpmap:18 G729/8000
a=rtpmap:96 telephone-event/8000

```

a=fmtp:96 0-11

```
=====
F2      192.168.1.1:5062(Server) -> 192.168.2.3:5060()

INVITE sip:00005@192.168.2.3 SIP/2.0
Via: SIP/2.0/UDP 192.168.1.1:5060;branch=z9hG4bK-508.137433.477244370
Via: SIP/2.0/UDP 192.168.2.1:5060;branch=z9hG4bK-5742a8cb-845795.214
Record-Route: <sip:00005@192.168.1.1>
Route: <sip:192.168.1.1:5060>
From: 00002 <sip:00002@sip.com>;tag=648eaf06
To: <sip:00005@sip.com>
Call-ID: 3671cae8@00002.192.168.1.1
CSeq: 477244370 INVITE
Contact: <sip:00002@192.168.2.1>
max-forwards: 69
supported: 100rel
supported: replaces
Allow: INVITE, ACK, BYE, CANCEL, OPTIONS, PRACK, MESSAGE, REFER, NOTIFY
Content-Type: application/sdp
Accept: application/sdp, message/sipfrag
Content-Length: 248

v=0
o=- 204577 2701 IN IP4 192.168.2.1
s=-
c=IN IP4 192.168.2.1
t=0 0
m=audio 5006 RTP/AVP 0 8 4 18 96
a=rtpmap:0 PCMU/8000
a=rtpmap:8 PCMA/8000
a=rtpmap:4 G723/8000
a=rtpmap:18 G729/8000
a=rtpmap:96 telephone-event/8000
a=fmtp:96 0-11
=====
```

```
=====
F3      192.168.1.1:5062(Server) -> 192.168.2.1:5060(00002@sip.com)

SIP/2.0 100 Trying
Via: SIP/2.0/UDP 192.168.2.1:5060;branch=z9hG4bK-5742a8cb-845795.214
From: <sip:00002@sip.com>;tag=648eaf06
To: <sip:00005@sip.com>
Call-ID: 3671cae8@00002.192.168.1.1
CSeq: 477244370 INVITE
Content-Length: 0
=====
```

```
=====
F4      192.168.2.3:1193() -> 192.168.1.1:5060(Server)

SIP/2.0 100 Trying
Via: SIP/2.0/UDP 192.168.1.1:5060;branch=z9hG4bK-508.137433.477244370
Via: SIP/2.0/UDP 192.168.2.1:5060;branch=z9hG4bK-5742a8cb-845795.214
From: 00002 <sip:00002@sip.com>;tag=648eaf06
To: <sip:00005@sip.com>
Call-ID: 3671cae8@00002.192.168.1.1
CSeq: 477244370 INVITE
Content-Length: 0
=====
```

```
=====
F5      192.168.2.3:1193() -> 192.168.1.1:5060(Server)

SIP/2.0 183 Session Progress
Via: SIP/2.0/UDP 192.168.1.1:5060;branch=z9hG4bK-508.137433.477244370
Via: SIP/2.0/UDP 192.168.2.1:5060;branch=z9hG4bK-5742a8cb-845795.214
Record-Route: <sip:00005@192.168.1.1>
From: 00002 <sip:00002@sip.com>;tag=648eaf06
To: <sip:00005@sip.com>;tag=1f1f5d3b
Call-ID: 3671cae8@00002.192.168.1.1
CSeq: 477244370 INVITE
Contact: <sip:00005@192.168.2.3>
Require: 100rel
RSeq: 1443296698
Content-Length: 0
=====
```

```
=====
F6      192.168.1.1:5062(Server) -> 192.168.2.1:5060(00002@sip.com)

SIP/2.0 183 Session Progress
Via: SIP/2.0/UDP 192.168.2.1:5060;branch=z9hG4bK-5742a8cb-845795.214
Record-Route: <sip:00005@192.168.1.1>
From: 00002 <sip:00002@sip.com>;tag=648eaf06
To: <sip:00005@sip.com>;tag=1f1f5d3b
Call-ID: 3671cae8@00002.192.168.1.1
CSeq: 477244370 INVITE
Contact: <sip:00005@192.168.2.3>
require: 100rel
rseq: 1443296698
Content-Length: 0
=====
```

```
=====
F7      192.168.2.1:1043(00002@sip.com) -> 192.168.1.1:5060(Server)

PRACK sip:00005@192.168.1.1 SIP/2.0
Via: SIP/2.0/UDP 192.168.2.1:5060;branch=z9hG4bK-1a03a8f0-845796.407
Route: <sip:00005@192.168.2.3>
From: 00002 <sip:00002@sip.com>;tag=648eaf06
To: <sip:00005@sip.com>;tag=1f1f5d3b
Call-ID: 3671cae8@00002.192.168.1.1
CSeq: 477244371 PRACK
Max-Forwards: 70
RAck: 1443296698 477244370 INVITE
Content-Length: 0
=====
```

```
=====
F8      192.168.1.1:5062(Server) -> 192.168.2.3:5060()

PRACK sip:00005@192.168.2.3 SIP/2.0
Via: SIP/2.0/UDP 192.168.1.1:5060;branch=z9hG4bK-508.1109088992.477244371
Via: SIP/2.0/UDP 192.168.2.1:5060;branch=z9hG4bK-1a03a8f0-845796.407
Route: <sip:00005@192.168.2.3>
From: 00002 <sip:00002@sip.com>;tag=648eaf06
To: <sip:00005@sip.com>;tag=1f1f5d3b
Call-ID: 3671cae8@00002.192.168.1.1
CSeq: 477244371 PRACK
max-forwards: 69
rack: 1443296698 477244370 INVITE
Content-Length: 0
=====
```

```
=====
F9      192.168.2.3:1193() -> 192.168.1.1:5060(Server)

SIP/2.0 200 OK
Via: SIP/2.0/UDP 192.168.1.1:5060;branch=z9hG4bK-508.1109088992.477244371
Via: SIP/2.0/UDP 192.168.2.1:5060;branch=z9hG4bK-1a03a8f0-845796.407
From: 00002 <sip:00002@sip.com>;tag=648eaf06
To: <sip:00005@sip.com>;tag=1f1f5d3b
Call-ID: 3671cae8@00002.192.168.1.1
CSeq: 477244371 PRACK
Content-Length: 0
=====
```

```
=====
F10     192.168.2.3:1193() -> 192.168.1.1:5060(Server)

SIP/2.0 180 Ringing
Via: SIP/2.0/UDP 192.168.1.1:5060;branch=z9hG4bK-508.137433.477244370
Via: SIP/2.0/UDP 192.168.2.1:5060;branch=z9hG4bK-5742a8cb-845795.214
Record-Route: <sip:00005@192.168.1.1>
From: 00002 <sip:00002@sip.com>;tag=648eaf06
To: <sip:00005@sip.com>;tag=1f1f5d3b
Call-ID: 3671cae8@00002.192.168.1.1
CSeq: 477244370 INVITE
Contact: <sip:00005@192.168.2.3>
Require: 100rel
RSeq: 1443296699
Content-Length: 0
=====
```

```
=====
F11      192.168.1.1:5062(Server) -> 192.168.2.1:5060(00002@sip.com)

SIP/2.0 200 OK
Via: SIP/2.0/UDP 192.168.2.1:5060;branch=z9hG4bK-1a03a8f0-845796.407
From: 00002 <sip:00002@sip.com>;tag=648eaf06
To: <sip:00005@sip.com>;tag=1f1f5d3b
Call-ID: 3671cae8@00002.192.168.1.1
CSeq: 477244371 PRACK
Content-Length: 0
=====
```

```
=====
F12      192.168.1.1:5062(Server) -> 192.168.2.1:5060(00002@sip.com)

SIP/2.0 180 Ringing
Via: SIP/2.0/UDP 192.168.2.1:5060;branch=z9hG4bK-5742a8cb-845795.214
Record-Route: <sip:00005@192.168.1.1>
From: 00002 <sip:00002@sip.com>;tag=648eaf06
To: <sip:00005@sip.com>;tag=1f1f5d3b
Call-ID: 3671cae8@00002.192.168.1.1
CSeq: 477244370 INVITE
Contact: <sip:00005@192.168.2.3>
require: 100rel
rseq: 1443296699
Content-Length: 0
=====
```

```
=====
F13      192.168.2.1:1043(00002@sip.com) -> 192.168.1.1:5060(Server)

PRACK sip:00005@192.168.1.1 SIP/2.0
Via: SIP/2.0/UDP 192.168.2.1:5060;branch=z9hG4bK-2b208c1-845796.514
Route: <sip:00005@192.168.2.3>
From: 00002 <sip:00002@sip.com>;tag=648eaf06
To: <sip:00005@sip.com>;tag=1f1f5d3b
Call-ID: 3671cae8@00002.192.168.1.1
CSeq: 477244372 PRACK
Max-Forwards: 70
RAck: 1443296699 477244370 INVITE
Content-Length: 0
=====
```

```
=====
F14      192.168.1.1:5062(Server) -> 192.168.2.3:5060()

PRACK sip:00005@192.168.2.3 SIP/2.0
Via: SIP/2.0/UDP 192.168.1.1:5060;branch=z9hG4bK-508.1109088992.477244372
Via: SIP/2.0/UDP 192.168.2.1:5060;branch=z9hG4bK-2b208c1-845796.514
Route: <sip:00005@192.168.2.3>
From: 00002 <sip:00002@sip.com>;tag=648eaf06
To: <sip:00005@sip.com>;tag=1f1f5d3b
Call-ID: 3671cae8@00002.192.168.1.1
CSeq: 477244372 PRACK
max-forwards: 69
rack: 1443296699 477244370 INVITE
Content-Length: 0
=====
```

```
=====
F15      192.168.2.3:1193() -> 192.168.1.1:5060(Server)

SIP/2.0 200 OK
Via: SIP/2.0/UDP 192.168.1.1:5060;branch=z9hG4bK-508.1109088992.477244372
Via: SIP/2.0/UDP 192.168.2.1:5060;branch=z9hG4bK-2b208c1-845796.514
From: 00002 <sip:00002@sip.com>;tag=648eaf06
To: <sip:00005@sip.com>;tag=1f1f5d3b
Call-ID: 3671cae8@00002.192.168.1.1
CSeq: 477244372 PRACK
Content-Length: 0
=====
```

F16 192.168.1.1:5062(Server) -> 192.168.2.1:5060(00002@sip.com)

SIP/2.0 200 OK  
 Via: SIP/2.0/UDP 192.168.2.1:5060;branch=z9hG4bK-2b208c1-845796.514  
 From: 00002 <sip:00002@sip.com>;tag=648eaf06  
 To: <sip:00005@sip.com>;tag=1f1f5d3b  
 Call-ID: 3671cae8@00002.192.168.1.1  
 CSeq: 477244372 PRACK  
 Content-Length: 0

F17 192.168.2.3:1193() -> 192.168.1.1:5060(Server)

SIP/2.0 200 OK  
 Via: SIP/2.0/UDP 192.168.1.1:5060;branch=z9hG4bK-508.137433.477244370  
 Via: SIP/2.0/UDP 192.168.2.1:5060;branch=z9hG4bK-5742a8cb-845795.214  
 Record-Route: <sip:00005@192.168.1.1>  
 From: 00002 <sip:00002@sip.com>;tag=648eaf06  
 To: <sip:00005@sip.com>;tag=1f1f5d3b  
 Call-ID: 3671cae8@00002.192.168.1.1  
 CSeq: 477244370 INVITE  
 Contact: <sip:00005@192.168.2.3>  
 Supported: 100rel, replaces  
 Allow: INVITE, ACK, BYE, CANCEL, OPTIONS, PRACK, MESSAGE, REFER, NOTIFY  
 Content-Type: application/sdp  
 Accept: application/sdp, message/sipfrag  
 Content-Length: 175

v=0  
 o=- 688648 13001 IN IP4 192.168.2.3  
 s=-  
 c=IN IP4 192.168.2.3  
 t=0 0  
 m=audio 5006 RTP/AVP 0 96  
 a=rtpmap:0 PCMU/8000  
 a=rtpmap:96 telephone-event/8000  
 a=fmtp:96 0-11

F18 192.168.1.1:5062(Server) -> 192.168.2.1:5060(00002@sip.com)

SIP/2.0 200 OK  
 Via: SIP/2.0/UDP 192.168.2.1:5060;branch=z9hG4bK-5742a8cb-845795.214  
 Record-Route: <sip:00005@192.168.1.1>  
 From: 00002 <sip:00002@sip.com>;tag=648eaf06  
 To: <sip:00005@sip.com>;tag=1f1f5d3b  
 Call-ID: 3671cae8@00002.192.168.1.1  
 CSeq: 477244370 INVITE  
 Contact: <sip:00005@192.168.2.3>  
 supported: 100rel  
 supported: replaces  
 Allow: INVITE, ACK, BYE, CANCEL, OPTIONS, PRACK, MESSAGE, REFER, NOTIFY  
 Content-Type: application/sdp  
 Accept: application/sdp, message/sipfrag  
 Content-Length: 175

v=0  
 o=- 688648 13001 IN IP4 192.168.2.3  
 s=-  
 c=IN IP4 192.168.2.3  
 t=0 0  
 m=audio 5006 RTP/AVP 0 96  
 a=rtpmap:0 PCMU/8000  
 a=rtpmap:96 telephone-event/8000  
 a=fmtp:96 0-11

F19 192.168.2.1:1043(00002@sip.com) -> 192.168.1.1:5060(Server)

ACK sip:00005@192.168.1.1 SIP/2.0  
 Via: SIP/2.0/UDP 192.168.2.1:5060;branch=z9hG4bK-746ecc17-845799.020  
 Route: <sip:00005@192.168.2.3>  
 From: 00002 <sip:00002@sip.com>;tag=648eaf06  
 To: <sip:00005@sip.com>;tag=1f1f5d3b  
 Call-ID: 3671cae8@00002.192.168.1.1  
 CSeq: 477244370 ACK  
 Max-Forwards: 70



Content-Length: 0

```
=====
F20      192.168.1.1:5062(Server) -> 192.168.2.3:5060()

ACK sip:00005@192.168.2.3 SIP/2.0
Via: SIP/2.0/UDP 192.168.1.1:5060;branch=z9hG4bK-508.1109088994.477244370
Via: SIP/2.0/UDP 192.168.2.1:5060;branch=z9hG4bK-746ecc17-845799.020
From: 00002 <sip:00002@sip.com>;tag=648eaf06
To: <sip:00005@sip.com>;tag=1f1f5d3b
Call-ID: 3671cae8@00002.192.168.1.1
CSeq: 477244370 ACK
max-forwards: 69
Content-Length: 0
=====
```

```
=====
F21      192.168.2.3:1193() -> 192.168.1.1:5060(Server)

INVITE sip:00005@192.168.1.1 SIP/2.0
Via: SIP/2.0/UDP 192.168.2.3:5060;branch=z9hG4bK-4abc3016-845559.058
Route: <sip:00002@192.168.2.1>
From: <sip:00005@sip.com>;tag=1f1f5d3b
To: 00002 <sip:00002@sip.com>;tag=648eaf06
Call-ID: 3671cae8@00002.192.168.1.1
CSeq: 850393622 INVITE
Contact: <sip:00005@192.168.2.3>
Max-Forwards: 70
Supported: 100rel, replaces
Allow: INVITE, ACK, BYE, CANCEL, OPTIONS, PRACK, MESSAGE, REFER, NOTIFY
Content-Type: application/sdp
Content-Length: 186

v=0
o=- 50668 13002 IN IP4 192.168.2.3
s=-
c=IN IP4 192.168.2.3
t=0 0
m=audio 5006 RTP/AVP 0 96
a=rtpmap:0 PCMU/8000
a=rtpmap:96 telephone-event/8000
a=fmtp:96 0-11
a=inactive
=====
```

```
=====
F22      192.168.1.1:5062(Server) -> 192.168.2.3:5060()

SIP/2.0 100 Trying
Via: SIP/2.0/UDP 192.168.2.3:5060;branch=z9hG4bK-4abc3016-845559.058
From: <sip:00005@sip.com>;tag=1f1f5d3b
To: 00002 <sip:00002@sip.com>;tag=648eaf06
Call-ID: 3671cae8@00002.192.168.1.1
CSeq: 850393622 INVITE
Content-Length: 0
=====
```

```
=====
F23      192.168.1.1:5062(Server) -> 192.168.2.1:5060(00002@sip.com)

INVITE sip:00002@192.168.2.1 SIP/2.0
Via: SIP/2.0/UDP 192.168.1.1:5060;branch=z9hG4bK-507.137433.850393622
Via: SIP/2.0/UDP 192.168.2.3:5060;branch=z9hG4bK-4abc3016-845559.058
Record-Route: <sip:00005@192.168.1.1>
Route: <sip:00002@192.168.2.1>
From: <sip:00005@sip.com>;tag=1f1f5d3b
To: 00002 <sip:00002@sip.com>;tag=648eaf06
Call-ID: 3671cae8@00002.192.168.1.1
CSeq: 850393622 INVITE
Contact: <sip:00005@192.168.2.3>
max-forwards: 69
supported: 100rel
supported: replaces
Allow: INVITE, ACK, BYE, CANCEL, OPTIONS, PRACK, MESSAGE, REFER, NOTIFY
Content-Type: application/sdp
Content-Length: 186
=====
```

```
v=0
o=- 50668 13002 IN IP4 192.168.2.3
s=-
c=IN IP4 192.168.2.3
t=0 0
m=audio 5006 RTP/AVP 0 96
a=rtpmap:0 PCMU/8000
a=rtpmap:96 telephone-event/8000
a=fmtp:96 0-11
a=inactive
```

```
=====
F24      192.168.2.1:1043(00002@sip.com) -> 192.168.1.1:5060(Server)
```

```
SIP/2.0 100 Trying
Via: SIP/2.0/UDP 192.168.1.1:5060;branch=z9hG4bK-507.137433.850393622
Via: SIP/2.0/UDP 192.168.2.3:5060;branch=z9hG4bK-4abc3016-845559.058
From: <sip:00005@sip.com>;tag=1f1f5d3b
To: 00002 <sip:00002@sip.com>;tag=648eaf06
Call-ID: 3671cae8@00002.192.168.1.1
CSeq: 850393622 INVITE
Content-Length: 0
```

```
=====
F25      192.168.2.1:1043(00002@sip.com) -> 192.168.1.1:5060(Server)
```

```
SIP/2.0 200 OK
Via: SIP/2.0/UDP 192.168.1.1:5060;branch=z9hG4bK-507.137433.850393622
Via: SIP/2.0/UDP 192.168.2.3:5060;branch=z9hG4bK-4abc3016-845559.058
Record-Route: <sip:00005@192.168.1.1>
From: <sip:00005@sip.com>;tag=1f1f5d3b
To: 00002 <sip:00002@sip.com>;tag=648eaf06
Call-ID: 3671cae8@00002.192.168.1.1
CSeq: 850393622 INVITE
Contact: <sip:00002@192.168.2.1>
Supported: 100rel, replaces
Allow: INVITE, ACK, BYE, CANCEL, OPTIONS, PRACK, MESSAGE, REFER, NOTIFY
Content-Type: application/sdp
Accept: application/sdp, message/sipfrag
Content-Length: 186
```

```
v=0
o=- 249437 2702 IN IP4 192.168.2.1
s=-
c=IN IP4 192.168.2.1
t=0 0
m=audio 5006 RTP/AVP 0 96
a=rtpmap:0 PCMU/8000
a=rtpmap:96 telephone-event/8000
a=fmtp:96 0-11
a=inactive
```

```
=====
F26      192.168.1.1:5062(Server) -> 192.168.2.3:5060()
```

```
SIP/2.0 200 OK
Via: SIP/2.0/UDP 192.168.2.3:5060;branch=z9hG4bK-4abc3016-845559.058
Record-Route: <sip:00005@192.168.1.1>
From: <sip:00005@sip.com>;tag=1f1f5d3b
To: 00002 <sip:00002@sip.com>;tag=648eaf06
Call-ID: 3671cae8@00002.192.168.1.1
CSeq: 850393622 INVITE
Contact: <sip:00002@192.168.2.1>
supported: 100rel
supported: replaces
Allow: INVITE, ACK, BYE, CANCEL, OPTIONS, PRACK, MESSAGE, REFER, NOTIFY
Content-Type: application/sdp
Accept: application/sdp, message/sipfrag
Content-Length: 186
```

```
v=0
o=- 249437 2702 IN IP4 192.168.2.1
s=-
c=IN IP4 192.168.2.1
t=0 0
m=audio 5006 RTP/AVP 0 96
a=rtpmap:0 PCMU/8000
```

a=rtpmap:96 telephone-event/8000  
a=fmtp:96 0-11  
a=inactive

F27 192.168.2.3:1193() -> 192.168.1.1:5060(Server)

ACK sip:00005@192.168.1.1 SIP/2.0  
Via: SIP/2.0/UDP 192.168.2.3:5060;branch=z9hG4bK-255554e5-845559.313  
Route: <sip:00002@192.168.2.1>  
From: <sip:00005@sip.com>;tag=1f1f5d3b  
To: 00002 <sip:00002@sip.com>;tag=648eaf06  
Call-ID: 3671cae8@00002.192.168.1.1  
CSeq: 850393622 ACK  
Max-Forwards: 70  
Content-Length: 0

F28 192.168.1.1:5062(Server) -> 192.168.2.1:5060(00002@sip.com)

ACK sip:00002@192.168.2.1 SIP/2.0  
Via: SIP/2.0/UDP 192.168.1.1:5060;branch=z9hG4bK-507.1109088996.850393622  
Via: SIP/2.0/UDP 192.168.2.3:5060;branch=z9hG4bK-255554e5-845559.313  
From: <sip:00005@sip.com>;tag=1f1f5d3b  
To: 00002 <sip:00002@sip.com>;tag=648eaf06  
Call-ID: 3671cae8@00002.192.168.1.1  
CSeq: 850393622 ACK  
max-forwards: 69  
Content-Length: 0

F29 192.168.2.3:1193() -> 192.168.1.1:5060(Server)

INVITE sip:00003@sip.com SIP/2.0  
Via: SIP/2.0/UDP 192.168.2.3:5060;branch=z9hG4bK-2b24511-845569.288  
Route: <sip:192.168.1.1:5060>  
From: <sip:00005@sip.com>;tag=2c1b7a58  
To: <sip:00003@sip.com>  
Call-ID: 2397b7c7@-.192.168.1.1  
CSeq: 280599665 INVITE  
Contact: <sip:00005@192.168.2.3>  
Max-Forwards: 70  
Supported: 100rel, replaces  
Allow: INVITE, ACK, BYE, CANCEL, OPTIONS, PRACK, MESSAGE, REFER, NOTIFY  
Content-Type: application/sdp  
Accept: application/sdp, message/sipfrag  
Content-Length: 248

v=0  
o=- 259881 2001 IN IP4 192.168.2.3  
s=-  
c=IN IP4 192.168.2.3  
t=0 0  
m=audio 5008 RTP/AVP 0 8 4 18 96  
a=rtpmap:0 PCMU/8000  
a=rtpmap:8 PCMA/8000  
a=rtpmap:4 G723/8000  
a=rtpmap:18 G729/8000  
a=rtpmap:96 telephone-event/8000  
a=fmtp:96 0-11

F30 192.168.1.1:5062(Server) -> 192.168.1.131:5060(00003@sip.com)

INVITE sip:00003@192.168.1.131 SIP/2.0  
Via: SIP/2.0/UDP 192.168.1.1:5060;branch=z9hG4bK-510.187409.280599665  
Via: SIP/2.0/UDP 192.168.2.3:5060;branch=z9hG4bK-2b24511-845569.288  
Record-Route: <sip:00003@192.168.1.1>  
Route: <sip:192.168.1.1:5060>  
From: 00005 <sip:00005@sip.com>;tag=2c1b7a58  
To: <sip:00003@sip.com>  
Call-ID: 2397b7c7@-.192.168.1.1  
CSeq: 280599665 INVITE  
Contact: <sip:00005@192.168.2.3>  
max-forwards: 69

```
supported: 100rel
supported: replaces
Allow: INVITE, ACK, BYE, CANCEL, OPTIONS, PRACK, MESSAGE, REFER, NOTIFY
Content-Type: application/sdp
Accept: application/sdp, message/sipfrag
Content-Length: 248
```

```
v=0
o=- 259881 2001 IN IP4 192.168.2.3
s=-
c=IN IP4 192.168.2.3
t=0 0
m=audio 5008 RTP/AVP 0 8 4 18 96
a=rtpmap:0 PCMU/8000
a=rtpmap:8 PCMA/8000
a=rtpmap:4 G723/8000
a=rtpmap:18 G729/8000
a=rtpmap:96 telephone-event/8000
a=fmtp:96 0-11
```

```
=====
F31      192.168.1.1:5062(Server) -> 192.168.2.3:5060()
```

```
SIP/2.0 100 Trying
Via: SIP/2.0/UDP 192.168.2.3:5060;branch=z9hG4bK-2b24511-845569.288
From: <sip:00005@sip.com>;tag=2c1b7a58
To: <sip:00003@sip.com>
Call-ID: 2397b7c7@-.192.168.1.1
CSeq: 280599665 INVITE
Content-Length: 0
```

```
=====
F32      192.168.1.131:1030(00003@sip.com) -> 192.168.1.1:5060(Server)
```

```
SIP/2.0 100 Trying
Via: SIP/2.0/UDP 192.168.1.1:5060;branch=z9hG4bK-510.187409.280599665
Via: SIP/2.0/UDP 192.168.2.3:5060;branch=z9hG4bK-2b24511-845569.288
From: 00005 <sip:00005@sip.com>;tag=2c1b7a58
To: <sip:00003@sip.com>
Call-ID: 2397b7c7@-.192.168.1.1
CSeq: 280599665 INVITE
Content-Length: 0
```

```
=====
F33      192.168.1.131:1030(00003@sip.com) -> 192.168.1.1:5060(Server)
```

```
SIP/2.0 183 Session Progress
Via: SIP/2.0/UDP 192.168.1.1:5060;branch=z9hG4bK-510.187409.280599665
Via: SIP/2.0/UDP 192.168.2.3:5060;branch=z9hG4bK-2b24511-845569.288
Record-Route: <sip:00003@192.168.1.1>
From: 00005 <sip:00005@sip.com>;tag=2c1b7a58
To: <sip:00003@sip.com>;tag=0d917dd9
Call-ID: 2397b7c7@-.192.168.1.1
CSeq: 280599665 INVITE
Contact: <sip:00003@192.168.1.131>
Require: 100rel
RSeq: 702638283
Content-Length: 0
```

```
=====
F34      192.168.1.1:5062(Server) -> 192.168.2.3:5060()
```

```
SIP/2.0 183 Session Progress
Via: SIP/2.0/UDP 192.168.2.3:5060;branch=z9hG4bK-2b24511-845569.288
Record-Route: <sip:00003@192.168.1.1>
From: 00005 <sip:00005@sip.com>;tag=2c1b7a58
To: <sip:00003@sip.com>;tag=0d917dd9
Call-ID: 2397b7c7@-.192.168.1.1
CSeq: 280599665 INVITE
Contact: <sip:00003@192.168.1.131>
require: 100rel
rseq: 702638283
Content-Length: 0
```

```
=====
F35      192.168.2.3:1193() -> 192.168.1.1:5060(Server)

PRACK sip:00003@192.168.1.1 SIP/2.0
Via: SIP/2.0/UDP 192.168.2.3:5060;branch=z9hG4bK-1bf21d68-845570.426
Route: <sip:00003@192.168.1.131>
From: 00005 <sip:00005@sip.com>;tag=2c1b7a58
To: <sip:00003@sip.com>;tag=0d917dd9
Call-ID: 2397b7c7@-.192.168.1.1
CSeq: 280599666 PRACK
Max-Forwards: 70
RAck: 702638283 280599665 INVITE
Content-Length: 0
=====
```

```
=====
F36      192.168.1.1:5062(Server) -> 192.168.1.131:5060(00003@sip.com)

PRACK sip:00003@192.168.1.131 SIP/2.0
Via: SIP/2.0/UDP 192.168.1.1:5060;branch=z9hG4bK-510.1109089007.280599666
Via: SIP/2.0/UDP 192.168.2.3:5060;branch=z9hG4bK-1bf21d68-845570.426
Route: <sip:00003@192.168.1.131>
From: 00005 <sip:00005@sip.com>;tag=2c1b7a58
To: <sip:00003@sip.com>;tag=0d917dd9
Call-ID: 2397b7c7@-.192.168.1.1
CSeq: 280599666 PRACK
max-forwards: 69
rack: 702638283 280599665 INVITE
Content-Length: 0
=====
```

```
=====
F37      192.168.1.131:1030(00003@sip.com) -> 192.168.1.1:5060(Server)

SIP/2.0 200 OK
Via: SIP/2.0/UDP 192.168.1.1:5060;branch=z9hG4bK-510.1109089007.280599666
Via: SIP/2.0/UDP 192.168.2.3:5060;branch=z9hG4bK-1bf21d68-845570.426
From: 00005 <sip:00005@sip.com>;tag=2c1b7a58
To: <sip:00003@sip.com>;tag=0d917dd9
Call-ID: 2397b7c7@-.192.168.1.1
CSeq: 280599666 PRACK
Content-Length: 0
=====
```

```
=====
F38      192.168.1.131:1030(00003@sip.com) -> 192.168.1.1:5060(Server)

SIP/2.0 180 Ringing
Via: SIP/2.0/UDP 192.168.1.1:5060;branch=z9hG4bK-510.187409.280599665
Via: SIP/2.0/UDP 192.168.2.3:5060;branch=z9hG4bK-2b24511-845569.288
Record-Route: <sip:00003@192.168.1.1>
From: 00005 <sip:00005@sip.com>;tag=2c1b7a58
To: <sip:00003@sip.com>;tag=0d917dd9
Call-ID: 2397b7c7@-.192.168.1.1
CSeq: 280599665 INVITE
Contact: <sip:00003@192.168.1.131>
Require: 100rel
RSeq: 702638284
Content-Length: 0
=====
```

```
=====
F39      192.168.1.1:5062(Server) -> 192.168.2.3:5060()

SIP/2.0 200 OK
Via: SIP/2.0/UDP 192.168.2.3:5060;branch=z9hG4bK-1bf21d68-845570.426
From: 00005 <sip:00005@sip.com>;tag=2c1b7a58
To: <sip:00003@sip.com>;tag=0d917dd9
Call-ID: 2397b7c7@-.192.168.1.1
CSeq: 280599666 PRACK
Content-Length: 0
=====
```

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F40 192.168.1.1:5062(Server) -> 192.168.2.3:5060()

SIP/2.0 180 Ringing  
Via: SIP/2.0/UDP 192.168.2.3:5060;branch=z9hG4bK-2b24511-845569.288  
Record-Route: <sip:00003@192.168.1.1>  
From: 00005 <sip:00005@sip.com>;tag=2c1b7a58  
To: <sip:00003@sip.com>;tag=0d917dd9  
Call-ID: 2397b7c7@-.192.168.1.1  
CSeq: 280599665 INVITE  
Contact: <sip:00003@192.168.1.131>  
require: 100rel  
rseq: 702638284  
Content-Length: 0

F41 192.168.2.3:1193() -> 192.168.1.1:5060(Server)

PRACK sip:00003@192.168.1.1 SIP/2.0  
Via: SIP/2.0/UDP 192.168.2.3:5060;branch=z9hG4bK-59cc5dec-845570.526  
Route: <sip:00003@192.168.1.131>  
From: 00005 <sip:00005@sip.com>;tag=2c1b7a58  
To: <sip:00003@sip.com>;tag=0d917dd9  
Call-ID: 2397b7c7@-.192.168.1.1  
CSeq: 280599667 PRACK  
Max-Forwards: 70  
RAck: 702638284 280599665 INVITE  
Content-Length: 0

F42 192.168.1.1:5062(Server) -> 192.168.1.131:5060(00003@sip.com)

PRACK sip:00003@192.168.1.131 SIP/2.0  
Via: SIP/2.0/UDP 192.168.1.1:5060;branch=z9hG4bK-510.1109089007.280599667  
Via: SIP/2.0/UDP 192.168.2.3:5060;branch=z9hG4bK-59cc5dec-845570.526  
Route: <sip:00003@192.168.1.131>  
From: 00005 <sip:00005@sip.com>;tag=2c1b7a58  
To: <sip:00003@sip.com>;tag=0d917dd9  
Call-ID: 2397b7c7@-.192.168.1.1  
CSeq: 280599667 PRACK  
max-forwards: 69  
rack: 702638284 280599665 INVITE  
Content-Length: 0

F43 192.168.1.131:1030(00003@sip.com) -> 192.168.1.1:5060(Server)

SIP/2.0 200 OK  
Via: SIP/2.0/UDP 192.168.1.1:5060;branch=z9hG4bK-510.1109089007.280599667  
Via: SIP/2.0/UDP 192.168.2.3:5060;branch=z9hG4bK-59cc5dec-845570.526  
From: 00005 <sip:00005@sip.com>;tag=2c1b7a58  
To: <sip:00003@sip.com>;tag=0d917dd9  
Call-ID: 2397b7c7@-.192.168.1.1  
CSeq: 280599667 PRACK  
Content-Length: 0

F44 192.168.1.1:5062(Server) -> 192.168.2.3:5060()

SIP/2.0 200 OK  
Via: SIP/2.0/UDP 192.168.2.3:5060;branch=z9hG4bK-59cc5dec-845570.526  
From: 00005 <sip:00005@sip.com>;tag=2c1b7a58  
To: <sip:00003@sip.com>;tag=0d917dd9  
Call-ID: 2397b7c7@-.192.168.1.1  
CSeq: 280599667 PRACK  
Content-Length: 0

F45 192.168.2.2:1031() -> 192.168.1.1:5060(Server)

REGISTER sip:192.168.1.1 SIP/2.0  
Via: SIP/2.0/UDP 192.168.2.2:5060;branch=z9hG4bK-58c7dc04-240873.772

From: <sip:00003@sip.com>  
 To: <sip:00003@sip.com>  
 Call-ID: 6eb6525f@00003. 192. 168. 1. 1  
 CSeq: 2 REGISTER  
 Contact: <sip:00003@192. 168. 2. 2>;expires=3600  
 Max-Forwards: 70  
 User-Agent: △△△△△△ //端末種別

Content-Length: 0

=====

F46            192. 168. 1. 1:5062 (Server) -> 192. 168. 2. 2:5060 ()

SIP/2.0 200 OK  
 Via: SIP/2.0/UDP 192. 168. 2. 2:5060;branch=z9hG4bK-58c7dc04-240873. 772  
 From: <sip:00003@sip.com>  
 To: <sip:00003@sip.com>  
 Call-ID: 6eb6525f@00003. 192. 168. 1. 1  
 CSeq: 2 REGISTER  
 Contact: <sip:00003@192. 168. 2. 2>;expires=3600  
 Date: Tue, 22 Feb 2005 16:16:59 GMT  
 Content-Length: 0

=====

F47            192. 168. 1. 1:5062 (Server) -> 192. 168. 2. 2:5060 ()

SIP/2.0 200 OK  
 Via: SIP/2.0/UDP 192. 168. 2. 2:5060;branch=z9hG4bK-58c7dc04-240873. 772  
 From: <sip:00003@sip.com>  
 To: <sip:00003@sip.com>  
 Call-ID: 6eb6525f@00003. 192. 168. 1. 1  
 CSeq: 2 REGISTER  
 Contact: <sip:00003@192. 168. 2. 2>;expires=3600  
 Date: Tue, 22 Feb 2005 16:16:59 GMT  
 Content-Length: 0

=====

F48            192. 168. 2. 2:1031 () -> 192. 168. 1. 1:5060 (Server)

SIP/2.0 180 Ringing  
 Via: SIP/2.0/UDP 192. 168. 1. 1:5060;branch=z9hG4bK-510. 187409. 280599665  
 Via: SIP/2.0/UDP 192. 168. 2. 3:5060;branch=z9hG4bK-2b24511-845569. 288  
 Record-Route: <sip:00003@192. 168. 1. 1>  
 From: 00005 <sip:00005@sip.com>;tag=2c1b7a58  
 To: <sip:00003@sip.com>;tag=0d917dd9  
 Call-ID: 2397b7c7@-. 192. 168. 1. 1  
 CSeq: 280599665 INVITE  
 Contact: <sip:00003@192. 168. 2. 2>  
 Require: 100rel  
 RSeq: 702638285  
 Content-Length: 0

=====

F49            192. 168. 1. 1:5062 (Server) -> 192. 168. 2. 3:5060 ()

SIP/2.0 180 Ringing  
 Via: SIP/2.0/UDP 192. 168. 2. 3:5060;branch=z9hG4bK-2b24511-845569. 288  
 Record-Route: <sip:00003@192. 168. 1. 1>  
 From: 00005 <sip:00005@sip.com>;tag=2c1b7a58  
 To: <sip:00003@sip.com>;tag=0d917dd9  
 Call-ID: 2397b7c7@-. 192. 168. 1. 1  
 CSeq: 280599665 INVITE  
 Contact: <sip:00003@192. 168. 2. 2>  
 require: 100rel  
 rseq: 702638285  
 Content-Length: 0

=====

F50            192. 168. 2. 3:1193 () -> 192. 168. 1. 1:5060 (Server)

INVITE sip:00003@sip.com SIP/2.0

# FOMA/WLAN デュアル端末に関する技術参考資料 第 1.2 版

Via: SIP/2.0/UDP 192.168.2.3:5060;branch=z9hG4bK-206bdc7d-845582.395  
 Route: <sip:192.168.1.1:5060>  
 From: <sip:00005@sip.com>;tag=42fe77d3  
 To: <sip:00003@sip.com>  
 Call-ID: 68fb9982@-.192.168.1.1  
 CSeq: 540709180 INVITE  
 Contact: <sip:00005@192.168.2.3>  
 Max-Forwards: 70  
 Supported: 100rel, replaces  
 Allow: INVITE, ACK, BYE, CANCEL, OPTIONS, PRACK, MESSAGE, REFER, NOTIFY  
 Content-Type: application/sdp  
 Accept: application/sdp, message/sipfrag  
 Content-Length: 248

v=0  
 o=- 386400 2002 IN IP4 192.168.2.3  
 s=-  
 c=IN IP4 192.168.2.3  
 t=0 0  
 m=audio 5008 RTP/AVP 0 8 4 18 96  
 a=rtpmap:0 PCMU/8000  
 a=rtpmap:8 PCMA/8000  
 a=rtpmap:4 G723/8000  
 a=rtpmap:18 G729/8000  
 a=rtpmap:96 telephone-event/8000  
 a=fmtp:96 0-11

F51 192.168.2.3:1193() -> 192.168.1.1:5060(Server)

PRACK sip:00003@192.168.1.1 SIP/2.0  
 Via: SIP/2.0/UDP 192.168.2.3:5060;branch=z9hG4bK-428413a3-845582.384  
 Route: <sip:00003@192.168.2.2>  
 From: 00005 <sip:00005@sip.com>;tag=2c1b7a58  
 To: <sip:00003@sip.com>;tag=0d917dd9  
 Call-ID: 2397b7c7@-.192.168.1.1  
 CSeq: 280599668 PRACK  
 Max-Forwards: 70  
 RAck: 702638285 280599665 INVITE  
 Content-Length: 0

F52 192.168.1.1:5062(Server) -> 192.168.2.3:5060()

SIP/2.0 100 Trying  
 Via: SIP/2.0/UDP 192.168.2.3:5060;branch=z9hG4bK-206bdc7d-845582.395  
 From: <sip:00005@sip.com>;tag=42fe77d3  
 To: <sip:00003@sip.com>  
 Call-ID: 68fb9982@-.192.168.1.1  
 CSeq: 540709180 INVITE  
 Content-Length: 0

F53 192.168.1.1:5062(Server) -> 192.168.2.2:5060()

INVITE sip:00003@192.168.2.2 SIP/2.0  
 Via: SIP/2.0/UDP 192.168.1.1:5060;branch=z9hG4bK-513.317439.540709180  
 Via: SIP/2.0/UDP 192.168.2.3:5060;branch=z9hG4bK-206bdc7d-845582.395  
 Record-Route: <sip:00003@192.168.1.1>  
 Route: <sip:192.168.1.1:5060>  
 From: 00005 <sip:00005@sip.com>;tag=42fe77d3  
 To: <sip:00003@sip.com>  
 Call-ID: 68fb9982@-.192.168.1.1  
 CSeq: 540709180 INVITE  
 Contact: <sip:00005@192.168.2.3>  
 max-forwards: 69  
 supported: 100rel  
 supported: replaces  
 Allow: INVITE, ACK, BYE, CANCEL, OPTIONS, PRACK, MESSAGE, REFER, NOTIFY  
 Content-Type: application/sdp  
 Accept: application/sdp, message/sipfrag  
 Content-Length: 248

v=0  
 o=- 386400 2002 IN IP4 192.168.2.3  
 s=-



```
c=IN IP4 192.168.2.3
t=0 0
m=audio 5008 RTP/AVP 0 8 4 18 96
a=rtpmap:0 PCMU/8000
a=rtpmap:8 PCMA/8000
a=rtpmap:4 G723/8000
a=rtpmap:18 G729/8000
a=rtpmap:96 telephone-event/8000
a=fmtp:96 0-11
```

```
=====
F54      192.168.2.2:1031() -> 192.168.1.1:5060(Server)
```

```
SIP/2.0 100 Trying
Via: SIP/2.0/UDP 192.168.1.1:5060;branch=z9hG4bK-513.317439.540709180
Via: SIP/2.0/UDP 192.168.2.3:5060;branch=z9hG4bK-206bdc7d-845582.395
From: 00005 <sip:00005@sip.com>;tag=42fe77d3
To: <sip:00003@sip.com>
Call-ID: 68fb9982@-.192.168.1.1
CSeq: 540709180 INVITE
Content-Length: 0
```

```
=====
F55      192.168.2.2:1031() -> 192.168.1.1:5060(Server)
```

```
SIP/2.0 180 Ringing
Via: SIP/2.0/UDP 192.168.1.1:5060;branch=z9hG4bK-513.317439.540709180
Via: SIP/2.0/UDP 192.168.2.3:5060;branch=z9hG4bK-206bdc7d-845582.395
Record-Route: <sip:00003@192.168.1.1>
From: 00005 <sip:00005@sip.com>;tag=42fe77d3
To: <sip:00003@sip.com>;tag=2d53d177
Call-ID: 68fb9982@-.192.168.1.1
CSeq: 540709180 INVITE
Contact: <sip:00003@192.168.2.2>
Require: 100rel
RSeq: 1359691343
Content-Length: 0
```

```
=====
F56      192.168.1.1:5062(Server) -> 192.168.2.3:5060()
```

```
SIP/2.0 180 Ringing
Via: SIP/2.0/UDP 192.168.2.3:5060;branch=z9hG4bK-206bdc7d-845582.395
Record-Route: <sip:00003@192.168.1.1>
From: 00005 <sip:00005@sip.com>;tag=42fe77d3
To: <sip:00003@sip.com>;tag=2d53d177
Call-ID: 68fb9982@-.192.168.1.1
CSeq: 540709180 INVITE
Contact: <sip:00003@192.168.2.2>
require: 100rel
rseq: 1359691343
Content-Length: 0
```

```
=====
F57      192.168.2.3:1193() -> 192.168.1.1:5060(Server)
```

```
PRACK sip:00003@192.168.1.1 SIP/2.0
Via: SIP/2.0/UDP 192.168.2.3:5060;branch=z9hG4bK-614bbea6-845582.556
Route: <sip:00003@192.168.2.2>
From: 00005 <sip:00005@sip.com>;tag=42fe77d3
To: <sip:00003@sip.com>;tag=2d53d177
Call-ID: 68fb9982@-.192.168.1.1
CSeq: 540709181 PRACK
Max-Forwards: 70
RAck: 1359691343 540709180 INVITE
Content-Length: 0
```

```
=====
F58      192.168.1.1:5062(Server) -> 192.168.2.2:5060()
```

```
PRACK sip:00003@192.168.2.2 SIP/2.0
Via: SIP/2.0/UDP 192.168.1.1:5060;branch=z9hG4bK-513.1109089019.540709181
```

# FOMA/WLAN デュアル端末に関する技術参考資料 第 1.2 版

Via: SIP/2.0/UDP 192.168.2.3:5060;branch=z9hG4bK-614bbea6-845582.556  
 Route: <sip:00003@192.168.2.2>  
 From: 00005 <sip:00005@sip.com>;tag=42fe77d3  
 To: <sip:00003@sip.com>;tag=2d53d177  
 Call-ID: 68fb9982@-.192.168.1.1  
 CSeq: 540709181 PRACK  
 max-forwards: 69  
 rack: 1359691343 540709180 INVITE  
 Content-Length: 0

F59 192.168.2.2:1031() -> 192.168.1.1:5060(Server)

SIP/2.0 200 OK  
 Via: SIP/2.0/UDP 192.168.1.1:5060;branch=z9hG4bK-513.1109089019.540709181  
 Via: SIP/2.0/UDP 192.168.2.3:5060;branch=z9hG4bK-614bbea6-845582.556  
 From: 00005 <sip:00005@sip.com>;tag=42fe77d3  
 To: <sip:00003@sip.com>;tag=2d53d177  
 Call-ID: 68fb9982@-.192.168.1.1  
 CSeq: 540709181 PRACK  
 Content-Length: 0

F60 192.168.1.1:5062(Server) -> 192.168.2.3:5060()

SIP/2.0 200 OK  
 Via: SIP/2.0/UDP 192.168.2.3:5060;branch=z9hG4bK-614bbea6-845582.556  
 From: 00005 <sip:00005@sip.com>;tag=42fe77d3  
 To: <sip:00003@sip.com>;tag=2d53d177  
 Call-ID: 68fb9982@-.192.168.1.1  
 CSeq: 540709181 PRACK  
 Content-Length: 0

F61 192.168.2.2:1031() -> 192.168.1.1:5060(Server)

SIP/2.0 200 OK  
 Via: SIP/2.0/UDP 192.168.1.1:5060;branch=z9hG4bK-513.317439.540709180  
 Via: SIP/2.0/UDP 192.168.2.3:5060;branch=z9hG4bK-206bdc7d-845582.395  
 Record-Route: <sip:00003@192.168.1.1>  
 From: 00005 <sip:00005@sip.com>;tag=42fe77d3  
 To: <sip:00003@sip.com>;tag=2d53d177  
 Call-ID: 68fb9982@-.192.168.1.1  
 CSeq: 540709180 INVITE  
 Contact: <sip:00003@192.168.2.2>  
 Supported: 100rel, replaces  
 Allow: INVITE, ACK, BYE, CANCEL, OPTIONS, PRACK, MESSAGE, REFER, NOTIFY  
 Content-Type: application/sdp  
 Accept: application/sdp, message/sipfrag  
 Content-Length: 175

v=0  
 o=- 726021 13001 IN IP4 192.168.2.2  
 s=-  
 c=IN IP4 192.168.2.2  
 t=0 0  
 m=audio 5006 RTP/AVP 0 96  
 a=rtpmap:0 PCMU/8000  
 a=rtpmap:96 telephone-event/8000  
 a=fmtp:96 0-11

F62 192.168.1.1:5062(Server) -> 192.168.2.3:5060()

SIP/2.0 200 OK  
 Via: SIP/2.0/UDP 192.168.2.3:5060;branch=z9hG4bK-206bdc7d-845582.395  
 Record-Route: <sip:00003@192.168.1.1>  
 From: 00005 <sip:00005@sip.com>;tag=42fe77d3  
 To: <sip:00003@sip.com>;tag=2d53d177  
 Call-ID: 68fb9982@-.192.168.1.1  
 CSeq: 540709180 INVITE  
 Contact: <sip:00003@192.168.2.2>  
 supported: 100rel  
 supported: replaces

# FOMA/WLAN デュアル端末に関する技術参考資料 第 1.2 版

Allow: INVITE, ACK, BYE, CANCEL, OPTIONS, PRACK, MESSAGE, REFER, NOTIFY  
Content-Type: application/sdp  
Accept: application/sdp, message/sipfrag  
Content-Length: 175

v=0  
o=- 726021 13001 IN IP4 192.168.2.2  
s=-  
c=IN IP4 192.168.2.2  
t=0 0  
m=audio 5006 RTP/AVP 0 96  
a=rtpmap:0 PCMU/8000  
a=rtpmap:96 telephone-event/8000  
a=fmtp:96 0-11

F63 192.168.2.3:1193() -> 192.168.1.1:5060(Server)

ACK sip:00003@192.168.1.1 SIP/2.0  
Via: SIP/2.0/UDP 192.168.2.3:5060;branch=z9hG4bK-c18bac5-845587.493  
Route: <sip:00003@192.168.2.2>  
From: 00005 <sip:00005@sip.com>;tag=42fe77d3  
To: <sip:00003@sip.com>;tag=2d53d177  
Call-ID: 68fb9982@-.192.168.1.1  
CSeq: 540709180 ACK  
Max-Forwards: 70  
Content-Length: 0

F64 192.168.1.1:5062(Server) -> 192.168.2.2:5060()

ACK sip:00003@192.168.2.2 SIP/2.0  
Via: SIP/2.0/UDP 192.168.1.1:5060;branch=z9hG4bK-513.1109089024.540709180  
Via: SIP/2.0/UDP 192.168.2.3:5060;branch=z9hG4bK-c18bac5-845587.493  
From: 00005 <sip:00005@sip.com>;tag=42fe77d3  
To: <sip:00003@sip.com>;tag=2d53d177  
Call-ID: 68fb9982@-.192.168.1.1  
CSeq: 540709180 ACK  
max-forwards: 69  
Content-Length: 0

F65 192.168.2.3:1193() -> 192.168.1.1:5060(Server)

INVITE sip:00003@192.168.1.1 SIP/2.0  
Via: SIP/2.0/UDP 192.168.2.3:5060;branch=z9hG4bK-2146fcf8-845596.491  
Route: <sip:00003@192.168.2.2>  
From: 00005 <sip:00005@sip.com>;tag=42fe77d3  
To: <sip:00003@sip.com>;tag=2d53d177  
Call-ID: 68fb9982@-.192.168.1.1  
CSeq: 540709182 INVITE  
Contact: <sip:00005@192.168.2.3>  
Max-Forwards: 70  
Supported: 100rel, replaces  
Allow: INVITE, ACK, BYE, CANCEL, OPTIONS, PRACK, MESSAGE, REFER, NOTIFY  
Content-Type: application/sdp  
Content-Length: 186

v=0  
o=- 486607 2003 IN IP4 192.168.2.3  
s=-  
c=IN IP4 192.168.2.3  
t=0 0  
m=audio 5008 RTP/AVP 0 96  
a=rtpmap:0 PCMU/8000  
a=rtpmap:96 telephone-event/8000  
a=fmtp:96 0-11  
a=inactive

F66 192.168.1.1:5062(Server) -> 192.168.2.3:5060()

SIP/2.0 100 Trying  
Via: SIP/2.0/UDP 192.168.2.3:5060;branch=z9hG4bK-2146fcf8-845596.491  
From: 00005 <sip:00005@sip.com>;tag=42fe77d3

To: <sip:00003@sip.com>;tag=2d53d177  
 Call-ID: 68fb9982@-.192.168.1.1  
 CSeq: 540709182 INVITE  
 Content-Length: 0

=====

F67            192.168.1.1:5062(Server) -> 192.168.2.2:5060()

INVITE sip:00003@192.168.2.2 SIP/2.0  
 Via: SIP/2.0/UDP 192.168.1.1:5060;branch=z9hG4bK-513.317439.540709182  
 Via: SIP/2.0/UDP 192.168.2.3:5060;branch=z9hG4bK-2146fcf8-845596.491  
 Record-Route: <sip:00003@192.168.1.1>  
 Route: <sip:00003@192.168.2.2>  
 From: 00005 <sip:00005@sip.com>;tag=42fe77d3  
 To: <sip:00003@sip.com>;tag=2d53d177  
 Call-ID: 68fb9982@-.192.168.1.1  
 CSeq: 540709182 INVITE  
 Contact: <sip:00005@192.168.2.3>  
 max-forwards: 69  
 supported: 100rel  
 supported: replaces  
 Allow: INVITE, ACK, BYE, CANCEL, OPTIONS, PRACK, MESSAGE, REFER, NOTIFY  
 Content-Type: application/sdp  
 Content-Length: 186

v=0  
 o=- 486607 2003 IN IP4 192.168.2.3  
 s=-  
 c=IN IP4 192.168.2.3  
 t=0 0  
 m=audio 5008 RTP/AVP 0 96  
 a=rtpmap:0 PCMU/8000  
 a=rtpmap:96 telephone-event/8000  
 a=fmtp:96 0-11  
 a=inactive

=====

F68            192.168.2.2:1031() -> 192.168.1.1:5060(Server)

SIP/2.0 100 Trying  
 Via: SIP/2.0/UDP 192.168.1.1:5060;branch=z9hG4bK-513.317439.540709182  
 Via: SIP/2.0/UDP 192.168.2.3:5060;branch=z9hG4bK-2146fcf8-845596.491  
 From: 00005 <sip:00005@sip.com>;tag=42fe77d3  
 To: <sip:00003@sip.com>;tag=2d53d177  
 Call-ID: 68fb9982@-.192.168.1.1  
 CSeq: 540709182 INVITE  
 Content-Length: 0

=====

F69            192.168.2.2:1031() -> 192.168.1.1:5060(Server)

SIP/2.0 200 OK  
 Via: SIP/2.0/UDP 192.168.1.1:5060;branch=z9hG4bK-513.317439.540709182  
 Via: SIP/2.0/UDP 192.168.2.3:5060;branch=z9hG4bK-2146fcf8-845596.491  
 Record-Route: <sip:00003@192.168.1.1>  
 From: 00005 <sip:00005@sip.com>;tag=42fe77d3  
 To: <sip:00003@sip.com>;tag=2d53d177  
 Call-ID: 68fb9982@-.192.168.1.1  
 CSeq: 540709182 INVITE  
 Contact: <sip:00003@192.168.2.2>  
 Supported: 100rel, replaces  
 Allow: INVITE, ACK, BYE, CANCEL, OPTIONS, PRACK, MESSAGE, REFER, NOTIFY  
 Content-Type: application/sdp  
 Accept: application/sdp, message/sipfrag  
 Content-Length: 187

v=0  
 o=- 605797 13002 IN IP4 192.168.2.2  
 s=-  
 c=IN IP4 192.168.2.2  
 t=0 0  
 m=audio 5006 RTP/AVP 0 96  
 a=rtpmap:0 PCMU/8000  
 a=rtpmap:96 telephone-event/8000  
 a=fmtp:96 0-11  
 a=inactive

```
=====
F70      192.168.1.1:5062(Server) -> 192.168.2.3:5060()

SIP/2.0 200 OK
Via: SIP/2.0/UDP 192.168.2.3:5060;branch=z9hG4bK-2146fcf8-845596.491
Record-Route: <sip:00003@192.168.1.1>
From: 00005 <sip:00005@sip.com>;tag=42fe77d3
To: <sip:00003@sip.com>;tag=2d53d177
Call-ID: 68fb9982@-.192.168.1.1
CSeq: 540709182 INVITE
Contact: <sip:00003@192.168.2.2>
supported: 100rel
supported: replaces
Allow: INVITE, ACK, BYE, CANCEL, OPTIONS, PRACK, MESSAGE, REFER, NOTIFY
Content-Type: application/sdp
Accept: application/sdp, message/sipfrag
Content-Length: 187

v=0
o=- 605797 13002 IN IP4 192.168.2.2
s=-
c=IN IP4 192.168.2.2
t=0 0
m=audio 5006 RTP/AVP 0 96
a=rtpmap:0 PCMU/8000
a=rtpmap:96 telephone-event/8000
a=fmtp:96 0-11
a=inactive
=====
```

```
=====
F71      192.168.2.3:1193() -> 192.168.1.1:5060(Server)

ACK sip:00003@192.168.1.1 SIP/2.0
Via: SIP/2.0/UDP 192.168.2.3:5060;branch=z9hG4bK-31a0925f-845597.058
Route: <sip:00003@192.168.2.2>
From: 00005 <sip:00005@sip.com>;tag=42fe77d3
To: <sip:00003@sip.com>;tag=2d53d177
Call-ID: 68fb9982@-.192.168.1.1
CSeq: 540709182 ACK
Max-Forwards: 70
Content-Length: 0
=====
```

```
=====
F72      192.168.1.1:5062(Server) -> 192.168.2.2:5060()

ACK sip:00003@192.168.2.2 SIP/2.0
Via: SIP/2.0/UDP 192.168.1.1:5060;branch=z9hG4bK-513.1109089033.540709182
Via: SIP/2.0/UDP 192.168.2.3:5060;branch=z9hG4bK-31a0925f-845597.058
From: 00005 <sip:00005@sip.com>;tag=42fe77d3
To: <sip:00003@sip.com>;tag=2d53d177
Call-ID: 68fb9982@-.192.168.1.1
CSeq: 540709182 ACK
max-forwards: 69
Content-Length: 0
=====
```

```
=====
F73      192.168.2.3:1193() -> 192.168.1.1:5060(Server)

REFER sip:00005@192.168.1.1 SIP/2.0
Via: SIP/2.0/UDP 192.168.2.3:5060;branch=z9hG4bK-7a83e199-845597.099
Route: <sip:00002@192.168.2.1>
From: <sip:00005@sip.com>;tag=1f1f5d3b
To: 00002 <sip:00002@sip.com>;tag=648eaf06
Call-ID: 3671cae8@00002.192.168.1.1
CSeq: 850393623 REFER
Contact: <sip:00005@192.168.2.3>
Max-Forwards: 70
Refer-To:
<sip:00003@192.168.2.2?Replaces=68fb9982@-.192.168.1.1%3bto-tag%3d2d53d177%3bfrom-tag%3d42fe77d3>
Referred-By: <sip:00005@sip.com>
Content-Length: 0
=====
```

```
=====
F74      192.168.1.1:5062(Server) -> 192.168.2.1:5060(00002@sip.com)

REFER sip:00002@192.168.2.1 SIP/2.0
Via: SIP/2.0/UDP 192.168.1.1:5060;branch=z9hG4bK-507.1109089034.850393623
Via: SIP/2.0/UDP 192.168.2.3:5060;branch=z9hG4bK-7a83e199-845597.099
Route: <sip:00002@192.168.2.1>
From: <sip:00005@sip.com>;tag=1f1f5d3b
To: 00002 <sip:00002@sip.com>;tag=648eaf06
Call-ID: 3671cae8@00002.192.168.1.1
CSeq: 850393623 REFER
Contact: <sip:00005@192.168.2.3>
max-forwards: 69
refer-to:
<sip:00003@192.168.2.2?Replaces=68fb9982@-.192.168.1.1%3bto-tag%3d2d53d177%3bfrom-tag%3d42fe77d3>
referred-by: <sip:00005@sip.com>
Content-Length: 0
=====
```

```
=====
F75      192.168.2.1:1043(00002@sip.com) -> 192.168.1.1:5060(Server)

SIP/2.0 202 Accepted
Via: SIP/2.0/UDP 192.168.1.1:5060;branch=z9hG4bK-507.1109089034.850393623
Via: SIP/2.0/UDP 192.168.2.3:5060;branch=z9hG4bK-7a83e199-845597.099
From: <sip:00005@sip.com>;tag=1f1f5d3b
To: 00002 <sip:00002@sip.com>;tag=648eaf06
Call-ID: 3671cae8@00002.192.168.1.1
CSeq: 850393623 REFER
Contact: <sip:00002@192.168.2.1>
Content-Length: 0
=====
```

```
=====
F76      192.168.2.1:1043(00002@sip.com) -> 192.168.1.1:5060(Server)

NOTIFY sip:00005@192.168.1.1 SIP/2.0
Via: SIP/2.0/UDP 192.168.2.1:5060;branch=z9hG4bK-64bed4b5-845838.137
Route: <sip:00005@192.168.2.3>
From: 00002 <sip:00002@sip.com>;tag=648eaf06
To: <sip:00005@sip.com>;tag=1f1f5d3b
Call-ID: 3671cae8@00002.192.168.1.1
CSeq: 477244373 NOTIFY
Contact: <sip:00002@192.168.2.1>
Max-Forwards: 70
Event: refer
Subscription-State: active;expires=30
Content-Type: message/sipfrag
Content-Length: 18
=====
```

SIP/2.0 100 Trying

```
=====
F77      192.168.1.1:5062(Server) -> 192.168.2.3:5060()

SIP/2.0 202 Accepted
Via: SIP/2.0/UDP 192.168.2.3:5060;branch=z9hG4bK-7a83e199-845597.099
From: <sip:00005@sip.com>;tag=1f1f5d3b
To: 00002 <sip:00002@sip.com>;tag=648eaf06
Call-ID: 3671cae8@00002.192.168.1.1
CSeq: 850393623 REFER
Contact: <sip:00002@192.168.2.1>
Content-Length: 0
=====
```

```
=====
F78      192.168.1.1:5062(Server) -> 192.168.2.3:5060()

NOTIFY sip:00005@192.168.2.3 SIP/2.0
Via: SIP/2.0/UDP 192.168.1.1:5060;branch=z9hG4bK-508.1109089034.477244373
Via: SIP/2.0/UDP 192.168.2.1:5060;branch=z9hG4bK-64bed4b5-845838.137
Route: <sip:00005@192.168.2.3>
From: 00002 <sip:00002@sip.com>;tag=648eaf06
To: <sip:00005@sip.com>;tag=1f1f5d3b
Call-ID: 3671cae8@00002.192.168.1.1
CSeq: 477244373 NOTIFY
=====
```

Contact: <sip:00002@192.168.2.1>  
max-forwards: 69  
event: refer  
subscription-state: active;expires=30  
Content-Type: message/sipfrag  
Content-Length: 18

SIP/2.0 100 Trying

F79 192.168.2.3:1193() -> 192.168.1.1:5060(Server)

SIP/2.0 200 OK  
Via: SIP/2.0/UDP 192.168.1.1:5060;branch=z9hG4bK-508.1109089034.477244373  
Via: SIP/2.0/UDP 192.168.2.1:5060;branch=z9hG4bK-64bed4b5-845838.137  
From: 00002 <sip:00002@sip.com>;tag=648eaf06  
To: <sip:00005@sip.com>;tag=1f1f5d3b  
Call-ID: 3671cae8@00002.192.168.1.1  
CSeq: 477244373 NOTIFY  
Content-Length: 0

F80 192.168.1.1:5062(Server) -> 192.168.2.1:5060(00002@sip.com)

SIP/2.0 200 OK  
Via: SIP/2.0/UDP 192.168.2.1:5060;branch=z9hG4bK-64bed4b5-845838.137  
From: 00002 <sip:00002@sip.com>;tag=648eaf06  
To: <sip:00005@sip.com>;tag=1f1f5d3b  
Call-ID: 3671cae8@00002.192.168.1.1  
CSeq: 477244373 NOTIFY  
Content-Length: 0

F81 192.168.2.1:1043(00002@sip.com) -> 192.168.1.1:5060(Server)

INVITE sip:00003@192.168.2.2 SIP/2.0  
Via: SIP/2.0/UDP 192.168.2.1:5060;branch=z9hG4bK-4048bedc-845838.267  
Route: <sip:192.168.1.1:5060>  
From: <sip:00002@sip.com>;tag=049a8b2d  
To: <sip:00003@192.168.2.2>  
Call-ID: 01067492@00002.192.168.1.1  
CSeq: 298119539 INVITE  
Contact: <sip:00002@192.168.2.1>  
Max-Forwards: 70  
Supported: 100rel, replaces  
Referred-By: <sip:00005@sip.com>  
Replaces: 68fb9982@-, 192.168.1.1;to-tag=2d53d177;from-tag=42fe77d3  
Allow: INVITE, ACK, BYE, CANCEL, OPTIONS, PRACK, MESSAGE, REFER, NOTIFY  
Content-Type: application/sdp  
Accept: application/sdp, message/sipfrag  
Content-Length: 174

v=0  
o=- 259857 2701 IN IP4 192.168.2.1  
s=-  
c=IN IP4 192.168.2.1  
t=0 0  
m=audio 5008 RTP/AVP 0 96  
a=rtpmap:0 PCMU/8000  
a=rtpmap:96 telephone-event/8000  
a=fmtp:96 0-11

F82 192.168.1.1:5062(Server) -> 192.168.2.1:5060(00002@sip.com)

SIP/2.0 100 Trying  
Via: SIP/2.0/UDP 192.168.2.1:5060;branch=z9hG4bK-4048bedc-845838.267  
From: <sip:00002@sip.com>;tag=049a8b2d  
To: <sip:00003@192.168.2.2>  
Call-ID: 01067492@00002.192.168.1.1  
CSeq: 298119539 INVITE  
Content-Length: 0

## FOMA/WLAN デュアル端末に関する技術参考資料 第 1.2 版

F83 192.168.1.1:5062(Server) -&gt; 192.168.2.2:5060()

```

INVITE sip:00003@192.168.2.2 SIP/2.0
Via: SIP/2.0/UDP 192.168.1.1:5060;branch=z9hG4bK-515.187349.298119539
Via: SIP/2.0/UDP 192.168.2.1:5060;branch=z9hG4bK-4048bedc-845838.267
Record-Route: <sip:00003@192.168.1.1>
Route: <sip:192.168.1.1:5060>
From: 00002 <sip:00002@sip.com>;tag=049a8b2d
To: <sip:00003@192.168.2.2>
Call-ID: 01067492@00002.192.168.1.1
CSeq: 298119539 INVITE
Contact: <sip:00002@192.168.2.1>
max-forwards: 69
supported: 100rel
supported: replaces
referred-by: <sip:00005@sip.com>
replaces: 68fb9982@-.192.168.1.1:to-tag=2d53d177;from-tag=42fe77d3
Allow: INVITE, ACK, BYE, CANCEL, OPTIONS, PRACK, MESSAGE, REFER, NOTIFY
Content-Type: application/sdp
Accept: application/sdp, message/sipfrag
Content-Length: 174

```

```

v=0
o=- 259857 2701 IN IP4 192.168.2.1
s=-
c=IN IP4 192.168.2.1
t=0 0
m=audio 5008 RTP/AVP 0 96
a=rtpmap:0 PCMU/8000
a=rtpmap:96 telephone-event/8000
a=fmtp:96 0-11

```

F84 192.168.2.2:1031() -&gt; 192.168.1.1:5060(Server)

```

SIP/2.0 100 Trying
Via: SIP/2.0/UDP 192.168.1.1:5060;branch=z9hG4bK-515.187349.298119539
Via: SIP/2.0/UDP 192.168.2.1:5060;branch=z9hG4bK-4048bedc-845838.267
From: 00002 <sip:00002@sip.com>;tag=049a8b2d
To: <sip:00003@192.168.2.2>
Call-ID: 01067492@00002.192.168.1.1
CSeq: 298119539 INVITE
Content-Length: 0

```

F85 192.168.2.2:1031() -&gt; 192.168.1.1:5060(Server)

```

SIP/2.0 200 OK
Via: SIP/2.0/UDP 192.168.1.1:5060;branch=z9hG4bK-515.187349.298119539
Via: SIP/2.0/UDP 192.168.2.1:5060;branch=z9hG4bK-4048bedc-845838.267
Record-Route: <sip:00003@192.168.1.1>
From: 00002 <sip:00002@sip.com>;tag=049a8b2d
To: <sip:00003@192.168.2.2>;tag=51b9ff47
Call-ID: 01067492@00002.192.168.1.1
CSeq: 298119539 INVITE
Contact: <sip:00003@192.168.2.2>
Supported: 100rel, replaces
Allow: INVITE, ACK, BYE, CANCEL, OPTIONS, PRACK, MESSAGE, REFER, NOTIFY
Content-Type: application/sdp
Accept: application/sdp, message/sipfrag
Content-Length: 175

```

```

v=0
o=- 391247 13001 IN IP4 192.168.2.2
s=-
c=IN IP4 192.168.2.2
t=0 0
m=audio 5008 RTP/AVP 0 96
a=rtpmap:0 PCMU/8000
a=rtpmap:96 telephone-event/8000
a=fmtp:96 0-11

```

F86 192.168.1.1:5062(Server) -&gt; 192.168.2.1:5060(00002@sip.com)

```

SIP/2.0 200 OK
Via: SIP/2.0/UDP 192.168.2.1:5060;branch=z9hG4bK-4048bedc-845838.267

```



Record-Route: <sip:00003@192.168.1.1>  
 From: 00002 <sip:00002@sip.com>;tag=049a8b2d  
 To: <sip:00003@192.168.2.2>;tag=51b9ff47  
 Call-ID: 01067492@00002.192.168.1.1  
 CSeq: 298119539 INVITE  
 Contact: <sip:00003@192.168.2.2>  
 supported: 100rel  
 supported: replaces  
 Allow: INVITE, ACK, BYE, CANCEL, OPTIONS, PRACK, MESSAGE, REFER, NOTIFY  
 Content-Type: application/sdp  
 Accept: application/sdp, message/sipfrag  
 Content-Length: 175

v=0  
 o=- 391247 13001 IN IP4 192.168.2.2  
 s=-  
 c=IN IP4 192.168.2.2  
 t=0 0  
 m=audio 5008 RTP/AVP 0 96  
 a=rtpmap:0 PCMU/8000  
 a=rtpmap:96 telephone-event/8000  
 a=fmtp:96 0-11

F87 192.168.2.1:1043(00002@sip.com) -> 192.168.1.1:5060(Server)

ACK sip:00003@192.168.1.1 SIP/2.0  
 Via: SIP/2.0/UDP 192.168.2.1:5060;branch=z9hG4bK-6b6b7608-845839.184  
 Route: <sip:00003@192.168.2.2>  
 From: 00002 <sip:00002@sip.com>;tag=049a8b2d  
 To: <sip:00003@192.168.2.2>;tag=51b9ff47  
 Call-ID: 01067492@00002.192.168.1.1  
 CSeq: 298119539 ACK  
 Max-Forwards: 70  
 Content-Length: 0

F88 192.168.1.1:5062(Server) -> 192.168.2.2:5060()

ACK sip:00003@192.168.2.2 SIP/2.0  
 Via: SIP/2.0/UDP 192.168.1.1:5060;branch=z9hG4bK-515.1109089035.298119539  
 Via: SIP/2.0/UDP 192.168.2.1:5060;branch=z9hG4bK-6b6b7608-845839.184  
 From: 00002 <sip:00002@sip.com>;tag=049a8b2d  
 To: <sip:00003@192.168.2.2>;tag=51b9ff47  
 Call-ID: 01067492@00002.192.168.1.1  
 CSeq: 298119539 ACK  
 max-forwards: 69  
 Content-Length: 0

F89 192.168.2.1:1043(00002@sip.com) -> 192.168.1.1:5060(Server)

NOTIFY sip:00005@192.168.1.1 SIP/2.0  
 Via: SIP/2.0/UDP 192.168.2.1:5060;branch=z9hG4bK-1fcdf09a-845839.252  
 Route: <sip:00005@192.168.2.3>  
 From: 00002 <sip:00002@sip.com>;tag=648eaf06  
 To: <sip:00005@sip.com>;tag=1f1f5d3b  
 Call-ID: 3671cae8@00002.192.168.1.1  
 CSeq: 477244374 NOTIFY  
 Contact: <sip:00002@192.168.2.1>  
 Max-Forwards: 70  
 Event: refer  
 Subscription-State: terminated;reason=noresource  
 Content-Type: message/sipfrag  
 Content-Length: 14

SIP/2.0 200 OK

F90 192.168.1.1:5062(Server) -> 192.168.2.3:5060()

NOTIFY sip:00005@192.168.2.3 SIP/2.0  
 Via: SIP/2.0/UDP 192.168.1.1:5060;branch=z9hG4bK-508.1109089035.477244374  
 Via: SIP/2.0/UDP 192.168.2.1:5060;branch=z9hG4bK-1fcdf09a-845839.252  
 Route: <sip:00005@192.168.2.3>  
 From: 00002 <sip:00002@sip.com>;tag=648eaf06

To: <sip:00005@sip.com>;tag=1f1f5d3b  
Call-ID: 3671cae8@00002.192.168.1.1  
CSeq: 477244374 NOTIFY  
Contact: <sip:00002@192.168.2.1>  
max-forwards: 69  
event: refer  
subscription-state: terminated;reason=noresource  
Content-Type: message/sipfrag  
Content-Length: 14

SIP/2.0 200 OK

F91 192.168.2.3:1193() -> 192.168.1.1:5060(Server)

SIP/2.0 200 OK  
Via: SIP/2.0/UDP 192.168.1.1:5060;branch=z9hG4bK-508.1109089035.477244374  
Via: SIP/2.0/UDP 192.168.2.1:5060;branch=z9hG4bK-1fcd09a-845839.252  
From: 00002 <sip:00002@sip.com>;tag=648eaf06  
To: <sip:00005@sip.com>;tag=1f1f5d3b  
Call-ID: 3671cae8@00002.192.168.1.1  
CSeq: 477244374 NOTIFY  
Content-Length: 0

F92 192.168.1.1:5062(Server) -> 192.168.2.1:5060(00002@sip.com)

SIP/2.0 200 OK  
Via: SIP/2.0/UDP 192.168.2.1:5060;branch=z9hG4bK-1fcd09a-845839.252  
From: 00002 <sip:00002@sip.com>;tag=648eaf06  
To: <sip:00005@sip.com>;tag=1f1f5d3b  
Call-ID: 3671cae8@00002.192.168.1.1  
CSeq: 477244374 NOTIFY  
Content-Length: 0

F93 192.168.2.2:1031() -> 192.168.1.1:5060(Server)

BYE sip:00003@192.168.1.1 SIP/2.0  
Via: SIP/2.0/UDP 192.168.2.2:5060;branch=z9hG4bK-58cfbe44-240889.923  
Route: <sip:00005@192.168.2.3>  
From: <sip:00003@sip.com>;tag=2d53d177  
To: 00005 <sip:00005@sip.com>;tag=42fe77d3  
Call-ID: 68fb9982@-.192.168.1.1  
CSeq: 1943727012 BYE  
Max-Forwards: 70  
Content-Length: 0

F94 192.168.1.1:5062(Server) -> 192.168.2.3:5060()

BYE sip:00005@192.168.2.3 SIP/2.0  
Via: SIP/2.0/UDP 192.168.1.1:5060;branch=z9hG4bK-512.1109089035.1943727012  
Via: SIP/2.0/UDP 192.168.2.2:5060;branch=z9hG4bK-58cfbe44-240889.923  
Route: <sip:00005@192.168.2.3>  
From: <sip:00003@sip.com>;tag=2d53d177  
To: 00005 <sip:00005@sip.com>;tag=42fe77d3  
Call-ID: 68fb9982@-.192.168.1.1  
CSeq: 1943727012 BYE  
max-forwards: 69  
Content-Length: 0

F95 192.168.2.3:1193() -> 192.168.1.1:5060(Server)

BYE sip:00005@192.168.1.1 SIP/2.0  
Via: SIP/2.0/UDP 192.168.2.3:5060;branch=z9hG4bK-51297951-845598.322  
Route: <sip:00002@192.168.2.1>  
From: <sip:00005@sip.com>;tag=1f1f5d3b  
To: 00002 <sip:00002@sip.com>;tag=648eaf06  
Call-ID: 3671cae8@00002.192.168.1.1  
CSeq: 850393624 BYE  
Max-Forwards: 70

Content-Length: 0

```
=====
F96      192.168.2.3:1193() -> 192.168.1.1:5060(Server)

SIP/2.0 200 OK
Via: SIP/2.0/UDP 192.168.1.1:5060;branch=z9hG4bK-512.1109089035.1943727012
Via: SIP/2.0/UDP 192.168.2.2:5060;branch=z9hG4bK-58cfbe44-240889.923
From: <sip:00003@sip.com>;tag=2d53d177
To: 00005 <sip:00005@sip.com>;tag=42fe77d3
Call-ID: 68fb9982@-.192.168.1.1
CSeq: 1943727012 BYE
Content-Length: 0
=====
```

```
=====
F97      192.168.1.1:5062(Server) -> 192.168.2.2:5060()

SIP/2.0 200 OK
Via: SIP/2.0/UDP 192.168.2.2:5060;branch=z9hG4bK-58cfbe44-240889.923
From: <sip:00003@sip.com>;tag=2d53d177
To: 00005 <sip:00005@sip.com>;tag=42fe77d3
Call-ID: 68fb9982@-.192.168.1.1
CSeq: 1943727012 BYE
Content-Length: 0
=====
```

```
=====
F98      192.168.1.1:5062(Server) -> 192.168.2.1:5060(00002@sip.com)

BYE sip:00002@192.168.2.1 SIP/2.0
Via: SIP/2.0/UDP 192.168.1.1:5060;branch=z9hG4bK-507.1109089035.850393624
Via: SIP/2.0/UDP 192.168.2.3:5060;branch=z9hG4bK-51297951-845598.322
Route: <sip:00002@192.168.2.1>
From: <sip:00005@sip.com>;tag=1f1f5d3b
To: 00002 <sip:00002@sip.com>;tag=648eaf06
Call-ID: 3671cae8@00002.192.168.1.1
CSeq: 850393624 BYE
max-forwards: 69
Content-Length: 0
=====
```

```
=====
F99      192.168.2.1:1043(00002@sip.com) -> 192.168.1.1:5060(Server)

SIP/2.0 200 OK
Via: SIP/2.0/UDP 192.168.1.1:5060;branch=z9hG4bK-507.1109089035.850393624
Via: SIP/2.0/UDP 192.168.2.3:5060;branch=z9hG4bK-51297951-845598.322
From: <sip:00005@sip.com>;tag=1f1f5d3b
To: 00002 <sip:00002@sip.com>;tag=648eaf06
Call-ID: 3671cae8@00002.192.168.1.1
CSeq: 850393624 BYE
Content-Length: 0
=====
```

```
=====
F100     192.168.1.1:5062(Server) -> 192.168.2.3:5060()

SIP/2.0 200 OK
Via: SIP/2.0/UDP 192.168.2.3:5060;branch=z9hG4bK-51297951-845598.322
From: <sip:00005@sip.com>;tag=1f1f5d3b
To: 00002 <sip:00002@sip.com>;tag=648eaf06
Call-ID: 3671cae8@00002.192.168.1.1
CSeq: 850393624 BYE
Content-Length: 0
=====
```

```
=====
F101     192.168.2.1:1043(00002@sip.com) -> 192.168.1.1:5060(Server)

BYE sip:00003@192.168.1.1 SIP/2.0
Via: SIP/2.0/UDP 192.168.2.1:5060;branch=z9hG4bK-14e205bb-845848.531
Route: <sip:00003@192.168.2.2>
From: 00002 <sip:00002@sip.com>;tag=049a8b2d
=====
```

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To: <sip:00003@192.168.2.2>;tag=51b9ff47  
 Call-ID: 01067492@00002.192.168.1.1  
 CSeq: 298119540 BYE  
 Max-Forwards: 70  
 Content-Length: 0

=====

F102 192.168.1.1:5062(Server) -> 192.168.2.2:5060()

BYE sip:00003@192.168.2.2 SIP/2.0  
 Via: SIP/2.0/UDP 192.168.1.1:5060;branch=z9hG4bK-515.1109089044.298119540  
 Via: SIP/2.0/UDP 192.168.2.1:5060;branch=z9hG4bK-14e205bb-845848.531  
 Route: <sip:00003@192.168.2.2>  
 From: 00002 <sip:00002@sip.com>;tag=049a8b2d  
 To: <sip:00003@192.168.2.2>;tag=51b9ff47  
 Call-ID: 01067492@00002.192.168.1.1  
 CSeq: 298119540 BYE  
 max-forwards: 69  
 Content-Length: 0

=====

F103 192.168.2.2:1031() -> 192.168.1.1:5060(Server)

SIP/2.0 200 OK  
 Via: SIP/2.0/UDP 192.168.1.1:5060;branch=z9hG4bK-515.1109089044.298119540  
 Via: SIP/2.0/UDP 192.168.2.1:5060;branch=z9hG4bK-14e205bb-845848.531  
 From: 00002 <sip:00002@sip.com>;tag=049a8b2d  
 To: <sip:00003@192.168.2.2>;tag=51b9ff47  
 Call-ID: 01067492@00002.192.168.1.1  
 CSeq: 298119540 BYE  
 Content-Length: 0

=====

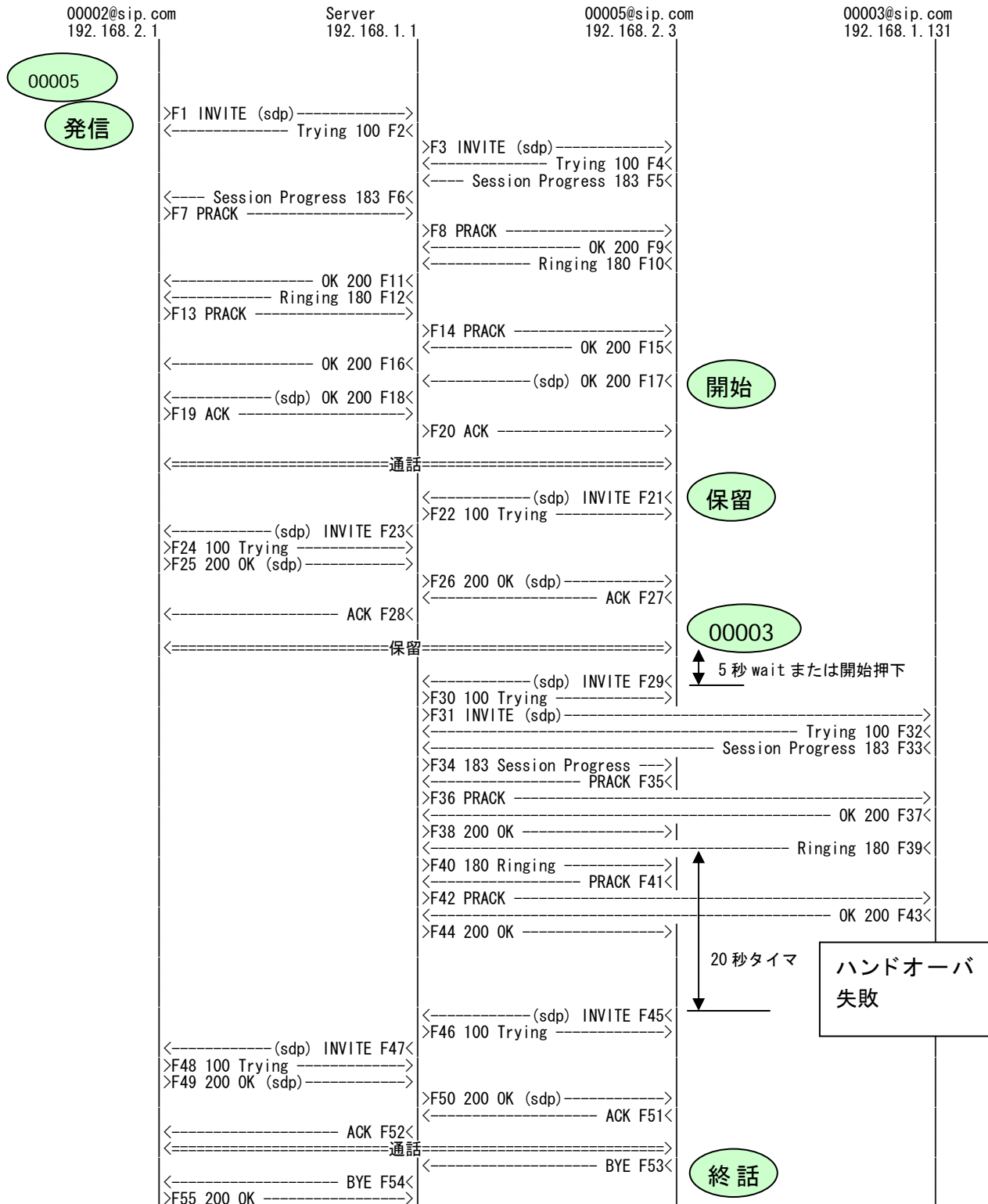
F104 192.168.1.1:5062(Server) -> 192.168.2.1:5060(00002@sip.com)

SIP/2.0 200 OK  
 Via: SIP/2.0/UDP 192.168.2.1:5060;branch=z9hG4bK-14e205bb-845848.531  
 From: 00002 <sip:00002@sip.com>;tag=049a8b2d  
 To: <sip:00003@192.168.2.2>;tag=51b9ff47  
 Call-ID: 01067492@00002.192.168.1.1  
 CSeq: 298119540 BYE  
 Content-Length: 0

=====

## 11.8.21. 転送中転送先がハンドオーバ(IP アドレスの再登録失敗)

IP アドレス登録失敗(DHCP 失敗)することで帰属を解除し、再スキャンを行う。



|>F56 200 OK ----->|  
 注: 00002 認証なし 00003 認証なし 00005 認証なし

図 11-60 転送中転送先がハンドオーバー(IP アドレスの再登録失敗)

```
=====
F1      192.168.2.1:1043(00002@sip.com) -> 192.168.1.1:5060(Server)

INVITE sip:00005@sip.com SIP/2.0
Via: SIP/2.0/UDP 192.168.2.1:5060;branch=z9hG4bK-5def57e4-846384.873
Route: <sip:192.168.1.1:5060>
From: <sip:00002@sip.com>;tag=5326cc67
To: <sip:00005@sip.com>
Call-ID: 0784add4@00002.192.168.1.1
CSeq: 1925607009 INVITE
Contact: <sip:00002@192.168.2.1>
Max-Forwards: 70
Supported: 100rel, replaces
Allow: INVITE, ACK, BYE, CANCEL, OPTIONS, PRACK, MESSAGE, REFER, NOTIFY
Content-Type: application/sdp
Accept: application/sdp, message/sipfrag
Content-Length: 248

v=0
o=- 861138 3101 IN IP4 192.168.2.1
s=-
c=IN IP4 192.168.2.1
t=0 0
m=audio 5006 RTP/AVP 0 8 4 18 96
a=rtpmap:0 PCMU/8000
a=rtpmap:8 PCMA/8000
a=rtpmap:4 G723/8000
a=rtpmap:18 G729/8000
a=rtpmap:96 telephone-event/8000
a=fmtp:96 0-11

=====
F2      192.168.1.1:5062(Server) -> 192.168.2.1:5060(00002@sip.com)

SIP/2.0 100 Trying
Via: SIP/2.0/UDP 192.168.2.1:5060;branch=z9hG4bK-5def57e4-846384.873
From: <sip:00002@sip.com>;tag=5326cc67
To: <sip:00005@sip.com>
Call-ID: 0784add4@00002.192.168.1.1
CSeq: 1925607009 INVITE
Content-Length: 0

=====
F3      192.168.1.1:5062(Server) -> 192.168.2.3:5060()

INVITE sip:00005@192.168.2.3 SIP/2.0
Via: SIP/2.0/UDP 192.168.1.1:5060;branch=z9hG4bK-531.767430.1925607009
Via: SIP/2.0/UDP 192.168.2.1:5060;branch=z9hG4bK-5def57e4-846384.873
Record-Route: <sip:00005@192.168.1.1>
Route: <sip:192.168.1.1:5060>
From: 00002 <sip:00002@sip.com>;tag=5326cc67
To: <sip:00005@sip.com>
Call-ID: 0784add4@00002.192.168.1.1
CSeq: 1925607009 INVITE
Contact: <sip:00002@192.168.2.1>
max-forwards: 69
supported: 100rel
supported: replaces
Allow: INVITE, ACK, BYE, CANCEL, OPTIONS, PRACK, MESSAGE, REFER, NOTIFY
Content-Type: application/sdp
Accept: application/sdp, message/sipfrag
Content-Length: 248

v=0
o=- 861138 3101 IN IP4 192.168.2.1
s=-
c=IN IP4 192.168.2.1
t=0 0
m=audio 5006 RTP/AVP 0 8 4 18 96
a=rtpmap:0 PCMU/8000
a=rtpmap:8 PCMA/8000
a=rtpmap:4 G723/8000
```

a=rtpmap:18 G729/8000  
a=rtpmap:96 telephone-event/8000  
a=fmtp:96 0-11

F4 192.168.2.3:1193() -> 192.168.1.1:5060(Server)

SIP/2.0 100 Trying  
Via: SIP/2.0/UDP 192.168.1.1:5060;branch=z9hG4bK-531.767430.1925607009  
Via: SIP/2.0/UDP 192.168.2.1:5060;branch=z9hG4bK-5def57e4-846384.873  
From: 00002 <sip:00002@sip.com>;tag=5326cc67  
To: <sip:00005@sip.com>  
Call-ID: 0784add4@00002.192.168.1.1  
CSeq: 1925607009 INVITE  
Content-Length: 0

F5 192.168.2.3:1193() -> 192.168.1.1:5060(Server)

SIP/2.0 183 Session Progress  
Via: SIP/2.0/UDP 192.168.1.1:5060;branch=z9hG4bK-531.767430.1925607009  
Via: SIP/2.0/UDP 192.168.2.1:5060;branch=z9hG4bK-5def57e4-846384.873  
Record-Route: <sip:00005@192.168.1.1>  
From: 00002 <sip:00002@sip.com>;tag=5326cc67  
To: <sip:00005@sip.com>;tag=39fd0630  
Call-ID: 0784add4@00002.192.168.1.1  
CSeq: 1925607009 INVITE  
Contact: <sip:00005@192.168.2.3>  
Require: 100rel  
RSeq: 1529015363  
Content-Length: 0

F6 192.168.1.1:5062(Server) -> 192.168.2.1:5060(00002@sip.com)

SIP/2.0 183 Session Progress  
Via: SIP/2.0/UDP 192.168.2.1:5060;branch=z9hG4bK-5def57e4-846384.873  
Record-Route: <sip:00005@192.168.1.1>  
From: 00002 <sip:00002@sip.com>;tag=5326cc67  
To: <sip:00005@sip.com>;tag=39fd0630  
Call-ID: 0784add4@00002.192.168.1.1  
CSeq: 1925607009 INVITE  
Contact: <sip:00005@192.168.2.3>  
require: 100rel  
rseq: 1529015363  
Content-Length: 0

F7 192.168.2.1:1043(00002@sip.com) -> 192.168.1.1:5060(Server)

PRACK sip:00005@192.168.1.1 SIP/2.0  
Via: SIP/2.0/UDP 192.168.2.1:5060;branch=z9hG4bK-564fae4e-846386.050  
Route: <sip:00005@192.168.2.3>  
From: 00002 <sip:00002@sip.com>;tag=5326cc67  
To: <sip:00005@sip.com>;tag=39fd0630  
Call-ID: 0784add4@00002.192.168.1.1  
CSeq: 1925607010 PRACK  
Max-Forwards: 70  
RAck: 1529015363 1925607009 INVITE  
Content-Length: 0

F8 192.168.1.1:5062(Server) -> 192.168.2.3:5060()

PRACK sip:00005@192.168.2.3 SIP/2.0  
Via: SIP/2.0/UDP 192.168.1.1:5060;branch=z9hG4bK-531.1109089581.1925607010  
Via: SIP/2.0/UDP 192.168.2.1:5060;branch=z9hG4bK-564fae4e-846386.050  
Route: <sip:00005@192.168.2.3>  
From: 00002 <sip:00002@sip.com>;tag=5326cc67  
To: <sip:00005@sip.com>;tag=39fd0630  
Call-ID: 0784add4@00002.192.168.1.1

CSeq: 1925607010 PRACK  
 max-forwards: 69  
 rack: 1529015363 1925607009 INVITE  
 Content-Length: 0

F9 192.168.2.3:1193() -> 192.168.1.1:5060(Server)

SIP/2.0 200 OK  
 Via: SIP/2.0/UDP 192.168.1.1:5060;branch=z9hG4bK-531.1109089581.1925607010  
 Via: SIP/2.0/UDP 192.168.2.1:5060;branch=z9hG4bK-564fae4e-846386.050  
 From: 00002 <sip:00002@sip.com>;tag=5326cc67  
 To: <sip:00005@sip.com>;tag=39fd0630  
 Call-ID: 0784add4@00002.192.168.1.1  
 CSeq: 1925607010 PRACK  
 Content-Length: 0

F10 192.168.2.3:1193() -> 192.168.1.1:5060(Server)

SIP/2.0 180 Ringing  
 Via: SIP/2.0/UDP 192.168.1.1:5060;branch=z9hG4bK-531.767430.1925607009  
 Via: SIP/2.0/UDP 192.168.2.1:5060;branch=z9hG4bK-5def57e4-846384.873  
 Record-Route: <sip:00005@192.168.1.1>  
 From: 00002 <sip:00002@sip.com>;tag=5326cc67  
 To: <sip:00005@sip.com>;tag=39fd0630  
 Call-ID: 0784add4@00002.192.168.1.1  
 CSeq: 1925607009 INVITE  
 Contact: <sip:00005@192.168.2.3>  
 Require: 100rel  
 RSeq: 1529015364  
 Content-Length: 0

F11 192.168.1.1:5062(Server) -> 192.168.2.1:5060(00002@sip.com)

SIP/2.0 200 OK  
 Via: SIP/2.0/UDP 192.168.2.1:5060;branch=z9hG4bK-564fae4e-846386.050  
 From: 00002 <sip:00002@sip.com>;tag=5326cc67  
 To: <sip:00005@sip.com>;tag=39fd0630  
 Call-ID: 0784add4@00002.192.168.1.1  
 CSeq: 1925607010 PRACK  
 Content-Length: 0

F12 192.168.1.1:5062(Server) -> 192.168.2.1:5060(00002@sip.com)

SIP/2.0 180 Ringing  
 Via: SIP/2.0/UDP 192.168.2.1:5060;branch=z9hG4bK-5def57e4-846384.873  
 Record-Route: <sip:00005@192.168.1.1>  
 From: 00002 <sip:00002@sip.com>;tag=5326cc67  
 To: <sip:00005@sip.com>;tag=39fd0630  
 Call-ID: 0784add4@00002.192.168.1.1  
 CSeq: 1925607009 INVITE  
 Contact: <sip:00005@192.168.2.3>  
 require: 100rel  
 rseq: 1529015364  
 Content-Length: 0

F13 192.168.2.1:1043(00002@sip.com) -> 192.168.1.1:5060(Server)

PRACK sip:00005@192.168.1.1 SIP/2.0  
 Via: SIP/2.0/UDP 192.168.2.1:5060;branch=z9hG4bK-2b0fa2a2-846386.143  
 Route: <sip:00005@192.168.2.3>  
 From: 00002 <sip:00002@sip.com>;tag=5326cc67  
 To: <sip:00005@sip.com>;tag=39fd0630  
 Call-ID: 0784add4@00002.192.168.1.1  
 CSeq: 1925607011 PRACK  
 Max-Forwards: 70  
 Rack: 1529015364 1925607009 INVITE



Content-Length: 0

=====

F14 192.168.1.1:5062(Server) -&gt; 192.168.2.3:5060()

PRACK sip:00005@192.168.2.3 SIP/2.0  
 Via: SIP/2.0/UDP 192.168.1.1:5060;branch=z9hG4bK-531.1109089582.1925607011  
 Via: SIP/2.0/UDP 192.168.2.1:5060;branch=z9hG4bK-2b0fa2a2-846386.143  
 Route: <sip:00005@192.168.2.3>  
 From: 00002 <sip:00002@sip.com>;tag=5326cc67  
 To: <sip:00005@sip.com>;tag=39fd0630  
 Call-ID: 0784add4@00002.192.168.1.1  
 CSeq: 1925607011 PRACK  
 max-forwards: 69  
 rack: 1529015364 1925607009 INVITE  
 Content-Length: 0

=====

F15 192.168.2.3:1193() -&gt; 192.168.1.1:5060(Server)

SIP/2.0 200 OK  
 Via: SIP/2.0/UDP 192.168.1.1:5060;branch=z9hG4bK-531.1109089582.1925607011  
 Via: SIP/2.0/UDP 192.168.2.1:5060;branch=z9hG4bK-2b0fa2a2-846386.143  
 From: 00002 <sip:00002@sip.com>;tag=5326cc67  
 To: <sip:00005@sip.com>;tag=39fd0630  
 Call-ID: 0784add4@00002.192.168.1.1  
 CSeq: 1925607011 PRACK  
 Content-Length: 0

=====

F16 192.168.1.1:5062(Server) -&gt; 192.168.2.1:5060(00002@sip.com)

SIP/2.0 200 OK  
 Via: SIP/2.0/UDP 192.168.2.1:5060;branch=z9hG4bK-2b0fa2a2-846386.143  
 From: 00002 <sip:00002@sip.com>;tag=5326cc67  
 To: <sip:00005@sip.com>;tag=39fd0630  
 Call-ID: 0784add4@00002.192.168.1.1  
 CSeq: 1925607011 PRACK  
 Content-Length: 0

=====

F17 192.168.2.3:1193() -&gt; 192.168.1.1:5060(Server)

SIP/2.0 200 OK  
 Via: SIP/2.0/UDP 192.168.1.1:5060;branch=z9hG4bK-531.767430.1925607009  
 Via: SIP/2.0/UDP 192.168.2.1:5060;branch=z9hG4bK-5def57e4-846384.873  
 Record-Route: <sip:00005@192.168.1.1>  
 From: 00002 <sip:00002@sip.com>;tag=5326cc67  
 To: <sip:00005@sip.com>;tag=39fd0630  
 Call-ID: 0784add4@00002.192.168.1.1  
 CSeq: 1925607009 INVITE  
 Contact: <sip:00005@192.168.2.3>  
 Supported: 100rel, replaces  
 Allow: INVITE, ACK, BYE, CANCEL, OPTIONS, PRACK, MESSAGE, REFER, NOTIFY  
 Content-Type: application/sdp  
 Accept: application/sdp, message/sipfrag  
 Content-Length: 175

v=0  
 o=- 837417 13401 IN IP4 192.168.2.3  
 s=-  
 c=IN IP4 192.168.2.3  
 t=0 0  
 m=audio 5006 RTP/AVP 0 96  
 a=rtpmap:0 PCMU/8000  
 a=rtpmap:96 telephone-event/8000  
 a=fmtp:96 0-11

=====

F18 192.168.1.1:5062(Server) -&gt; 192.168.2.1:5060(00002@sip.com)

SIP/2.0 200 OK

# FOMA/WLAN デュアル端末に関する技術参考資料 第 1.2 版

Via: SIP/2.0/UDP 192.168.2.1:5060;branch=z9hG4bK-5def57e4-846384.873  
 Record-Route: <sip:00005@192.168.1.1>  
 From: 00002 <sip:00002@sip.com>;tag=5326cc67  
 To: <sip:00005@sip.com>;tag=39fd0630  
 Call-ID: 0784add4@00002.192.168.1.1  
 CSeq: 1925607009 INVITE  
 Contact: <sip:00005@192.168.2.3>  
 supported: 100rel  
 supported: replaces  
 Allow: INVITE, ACK, BYE, CANCEL, OPTIONS, PRACK, MESSAGE, REFER, NOTIFY  
 Content-Type: application/sdp  
 Accept: application/sdp, message/sipfrag  
 Content-Length: 175

v=0  
 o=- 837417 13401 IN IP4 192.168.2.3  
 s=-  
 c=IN IP4 192.168.2.3  
 t=0 0  
 m=audio 5006 RTP/AVP 0 96  
 a=rtpmap:0 PCMU/8000  
 a=rtpmap:96 telephone-event/8000  
 a=fmtp:96 0-11

---

F19 192.168.2.1:1043(00002@sip.com) -> 192.168.1.1:5060(Server)

ACK sip:00005@192.168.1.1 SIP/2.0  
 Via: SIP/2.0/UDP 192.168.2.1:5060;branch=z9hG4bK-1a5fd599-846389.165  
 Route: <sip:00005@192.168.2.3>  
 From: 00002 <sip:00002@sip.com>;tag=5326cc67  
 To: <sip:00005@sip.com>;tag=39fd0630  
 Call-ID: 0784add4@00002.192.168.1.1  
 CSeq: 1925607009 ACK  
 Max-Forwards: 70  
 Content-Length: 0

---

F20 192.168.1.1:5062(Server) -> 192.168.2.3:5060()

ACK sip:00005@192.168.2.3 SIP/2.0  
 Via: SIP/2.0/UDP 192.168.1.1:5060;branch=z9hG4bK-531.1109089585.1925607009  
 Via: SIP/2.0/UDP 192.168.2.1:5060;branch=z9hG4bK-1a5fd599-846389.165  
 From: 00002 <sip:00002@sip.com>;tag=5326cc67  
 To: <sip:00005@sip.com>;tag=39fd0630  
 Call-ID: 0784add4@00002.192.168.1.1  
 CSeq: 1925607009 ACK  
 max-forwards: 69  
 Content-Length: 0

---

F21 192.168.2.3:1193() -> 192.168.1.1:5060(Server)

INVITE sip:00005@192.168.1.1 SIP/2.0  
 Via: SIP/2.0/UDP 192.168.2.3:5060;branch=z9hG4bK-5903b4f4-846150.773  
 Route: <sip:00002@192.168.2.1>  
 From: <sip:00005@sip.com>;tag=39fd0630  
 To: 00002 <sip:00002@sip.com>;tag=5326cc67  
 Call-ID: 0784add4@00002.192.168.1.1  
 CSeq: 1612635759 INVITE  
 Contact: <sip:00005@192.168.2.3>  
 Max-Forwards: 70  
 Supported: 100rel, replaces  
 Allow: INVITE, ACK, BYE, CANCEL, OPTIONS, PRACK, MESSAGE, REFER, NOTIFY  
 Content-Type: application/sdp  
 Content-Length: 187

v=0  
 o=- 760570 13402 IN IP4 192.168.2.3  
 s=-  
 c=IN IP4 192.168.2.3  
 t=0 0  
 m=audio 5006 RTP/AVP 0 96  
 a=rtpmap:0 PCMU/8000  
 a=rtpmap:96 telephone-event/8000  
 a=fmtp:96 0-11

a=inactive

=====

F22 192.168.1.1:5062(Server) -&gt; 192.168.2.3:5060()

SIP/2.0 100 Trying  
 Via: SIP/2.0/UDP 192.168.2.3:5060;branch=z9hG4bK-5903b4f4-846150.773  
 From: <sip:00005@sip.com>;tag=39fd0630  
 To: 00002 <sip:00002@sip.com>;tag=5326cc67  
 Call-ID: 0784add4@00002.192.168.1.1  
 CSeq: 1612635759 INVITE  
 Content-Length: 0

=====

F23 192.168.1.1:5062(Server) -&gt; 192.168.2.1:5060(00002@sip.com)

INVITE sip:00002@192.168.2.1 SIP/2.0  
 Via: SIP/2.0/UDP 192.168.1.1:5060;branch=z9hG4bK-530.767430.1612635759  
 Via: SIP/2.0/UDP 192.168.2.3:5060;branch=z9hG4bK-5903b4f4-846150.773  
 Record-Route: <sip:00005@192.168.1.1>  
 Route: <sip:00002@192.168.2.1>  
 From: <sip:00005@sip.com>;tag=39fd0630  
 To: 00002 <sip:00002@sip.com>;tag=5326cc67  
 Call-ID: 0784add4@00002.192.168.1.1  
 CSeq: 1612635759 INVITE  
 Contact: <sip:00005@192.168.2.3>  
 max-forwards: 69  
 supported: 100rel  
 supported: replaces  
 Allow: INVITE, ACK, BYE, CANCEL, OPTIONS, PRACK, MESSAGE, REFER, NOTIFY  
 Content-Type: application/sdp  
 Content-Length: 187

v=0  
 o=- 760570 13402 IN IP4 192.168.2.3  
 s=-  
 c=IN IP4 192.168.2.3  
 t=0 0  
 m=audio 5006 RTP/AVP 0 96  
 a=rtpmap:0 PCMU/8000  
 a=rtpmap:96 telephone-event/8000  
 a=fmtp:96 0-11  
 a=inactive

=====

F24 192.168.2.1:1043(00002@sip.com) -&gt; 192.168.1.1:5060(Server)

SIP/2.0 100 Trying  
 Via: SIP/2.0/UDP 192.168.1.1:5060;branch=z9hG4bK-530.767430.1612635759  
 Via: SIP/2.0/UDP 192.168.2.3:5060;branch=z9hG4bK-5903b4f4-846150.773  
 From: <sip:00005@sip.com>;tag=39fd0630  
 To: 00002 <sip:00002@sip.com>;tag=5326cc67  
 Call-ID: 0784add4@00002.192.168.1.1  
 CSeq: 1612635759 INVITE  
 Content-Length: 0

=====

F25 192.168.2.1:1043(00002@sip.com) -&gt; 192.168.1.1:5060(Server)

SIP/2.0 200 OK  
 Via: SIP/2.0/UDP 192.168.1.1:5060;branch=z9hG4bK-530.767430.1612635759  
 Via: SIP/2.0/UDP 192.168.2.3:5060;branch=z9hG4bK-5903b4f4-846150.773  
 Record-Route: <sip:00005@192.168.1.1>  
 From: <sip:00005@sip.com>;tag=39fd0630  
 To: 00002 <sip:00002@sip.com>;tag=5326cc67  
 Call-ID: 0784add4@00002.192.168.1.1  
 CSeq: 1612635759 INVITE  
 Contact: <sip:00002@192.168.2.1>  
 Supported: 100rel, replaces  
 Allow: INVITE, ACK, BYE, CANCEL, OPTIONS, PRACK, MESSAGE, REFER, NOTIFY  
 Content-Type: application/sdp  
 Accept: application/sdp, message/sipfrag  
 Content-Length: 186

v=0

```

o=- 345761 3102 IN IP4 192.168.2.1
s=-
c=IN IP4 192.168.2.1
t=0 0
m=audio 5006 RTP/AVP 0 96
a=rtpmap:0 PCMU/8000
a=rtpmap:96 telephone-event/8000
a=fmtp:96 0-11
a=inactive

```

```

=====
F26          192.168.1.1:5062(Server) -> 192.168.2.3:5060()

```

```

SIP/2.0 200 OK
Via: SIP/2.0/UDP 192.168.2.3:5060;branch=z9hG4bK-5903b4f4-846150.773
Record-Route: <sip:00005@192.168.1.1>
From: <sip:00005@sip.com>;tag=39fd0630
To: 00002 <sip:00002@sip.com>;tag=5326cc67
Call-ID: 0784add4@00002.192.168.1.1
CSeq: 1612635759 INVITE
Contact: <sip:00002@192.168.2.1>
supported: 100rel
supported: replaces
Allow: INVITE, ACK, BYE, CANCEL, OPTIONS, PRACK, MESSAGE, REFER, NOTIFY
Content-Type: application/sdp
Accept: application/sdp, message/sipfrag
Content-Length: 186

```

```

v=0
o=- 345761 3102 IN IP4 192.168.2.1
s=-
c=IN IP4 192.168.2.1
t=0 0
m=audio 5006 RTP/AVP 0 96
a=rtpmap:0 PCMU/8000
a=rtpmap:96 telephone-event/8000
a=fmtp:96 0-11
a=inactive

```

```

=====
F27          192.168.2.3:1193() -> 192.168.1.1:5060(Server)

```

```

ACK sip:00005@192.168.1.1 SIP/2.0
Via: SIP/2.0/UDP 192.168.2.3:5060;branch=z9hG4bK-5b3676ac-846151.402
Route: <sip:00002@192.168.2.1>
From: <sip:00005@sip.com>;tag=39fd0630
To: 00002 <sip:00002@sip.com>;tag=5326cc67
Call-ID: 0784add4@00002.192.168.1.1
CSeq: 1612635759 ACK
Max-Forwards: 70
Content-Length: 0

```

```

=====
F28          192.168.1.1:5062(Server) -> 192.168.2.1:5060(00002@sip.com)

```

```

ACK sip:00002@192.168.2.1 SIP/2.0
Via: SIP/2.0/UDP 192.168.1.1:5060;branch=z9hG4bK-530.1109089588.1612635759
Via: SIP/2.0/UDP 192.168.2.3:5060;branch=z9hG4bK-5b3676ac-846151.402
From: <sip:00005@sip.com>;tag=39fd0630
To: 00002 <sip:00002@sip.com>;tag=5326cc67
Call-ID: 0784add4@00002.192.168.1.1
CSeq: 1612635759 ACK
max-forwards: 69
Content-Length: 0

```

```

=====
F29          192.168.2.3:1193() -> 192.168.1.1:5060(Server)

```

```

INVITE sip:00003@sip.com SIP/2.0
Via: SIP/2.0/UDP 192.168.2.3:5060;branch=z9hG4bK-3a13c666-846160.034
Route: <sip:192.168.1.1:5060>
From: <sip:00005@sip.com>;tag=670d4f27
To: <sip:00003@sip.com>
Call-ID: 35268664@-.192.168.1.1
CSeq: 1814166029 INVITE

```

Contact: <sip:00005@192.168.2.3>  
 Max-Forwards: 70  
 Supported: 100rel, replaces  
 Allow: INVITE, ACK, BYE, CANCEL, OPTIONS, PRACK, MESSAGE, REFER, NOTIFY  
 Content-Type: application/sdp  
 Accept: application/sdp, message/sipfrag  
 Content-Length: 247

v=0  
 o=- 21873 2201 IN IP4 192.168.2.3  
 s=-  
 c=IN IP4 192.168.2.3  
 t=0 0  
 m=audio 5008 RTP/AVP 0 8 4 18 96  
 a=rtpmap:0 PCMU/8000  
 a=rtpmap:8 PCMA/8000  
 a=rtpmap:4 G723/8000  
 a=rtpmap:18 G729/8000  
 a=rtpmap:96 telephone-event/8000  
 a=fmtp:96 0-11

=====

F30 192.168.1.1:5062(Server) -> 192.168.2.3:5060()

SIP/2.0 100 Trying  
 Via: SIP/2.0/UDP 192.168.2.3:5060;branch=z9hG4bK-3a13c666-846160.034  
 From: <sip:00005@sip.com>;tag=670d4f27  
 To: <sip:00003@sip.com>  
 Call-ID: 35268664@-.192.168.1.1  
 CSeq: 1814166029 INVITE  
 Content-Length: 0

=====

F31 192.168.1.1:5062(Server) -> 192.168.1.131:5060(00003@sip.com)

INVITE sip:00003@192.168.1.131 SIP/2.0  
 Via: SIP/2.0/UDP 192.168.1.1:5060;branch=z9hG4bK-533.917526.1814166029  
 Via: SIP/2.0/UDP 192.168.2.3:5060;branch=z9hG4bK-3a13c666-846160.034  
 Record-Route: <sip:00003@192.168.1.1>  
 Route: <sip:192.168.1.1:5060>  
 From: 00005 <sip:00005@sip.com>;tag=670d4f27  
 To: <sip:00003@sip.com>  
 Call-ID: 35268664@-.192.168.1.1  
 CSeq: 1814166029 INVITE  
 Contact: <sip:00005@192.168.2.3>  
 max-forwards: 69  
 supported: 100rel  
 supported: replaces  
 Allow: INVITE, ACK, BYE, CANCEL, OPTIONS, PRACK, MESSAGE, REFER, NOTIFY  
 Content-Type: application/sdp  
 Accept: application/sdp, message/sipfrag  
 Content-Length: 247

v=0  
 o=- 21873 2201 IN IP4 192.168.2.3  
 s=-  
 c=IN IP4 192.168.2.3  
 t=0 0  
 m=audio 5008 RTP/AVP 0 8 4 18 96  
 a=rtpmap:0 PCMU/8000  
 a=rtpmap:8 PCMA/8000  
 a=rtpmap:4 G723/8000  
 a=rtpmap:18 G729/8000  
 a=rtpmap:96 telephone-event/8000  
 a=fmtp:96 0-11

=====

F32 192.168.1.131:1033(00003@sip.com) -> 192.168.1.1:5060(Server)

SIP/2.0 100 Trying  
 Via: SIP/2.0/UDP 192.168.1.1:5060;branch=z9hG4bK-533.917526.1814166029  
 Via: SIP/2.0/UDP 192.168.2.3:5060;branch=z9hG4bK-3a13c666-846160.034  
 From: 00005 <sip:00005@sip.com>;tag=670d4f27  
 To: <sip:00003@sip.com>  
 Call-ID: 35268664@-.192.168.1.1  
 CSeq: 1814166029 INVITE  
 Content-Length: 0

```
=====
F33      192.168.1.131:1033(00003@sip.com) -> 192.168.1.1:5060(Server)

SIP/2.0 183 Session Progress
Via: SIP/2.0/UDP 192.168.1.1:5060;branch=z9hG4bK-533.917526.1814166029
Via: SIP/2.0/UDP 192.168.2.3:5060;branch=z9hG4bK-3a13c666-846160.034
Record-Route: <sip:00003@192.168.1.1>
From: 00005 <sip:00005@sip.com>;tag=670d4f27
To: <sip:00003@sip.com>;tag=627e2553
Call-ID: 35268664@-.192.168.1.1
CSeq: 1814166029 INVITE
Contact: <sip:00003@192.168.1.131>
Require: 100rel
RSeq: 1558124776
Content-Length: 0
=====
```

```
=====
F34      192.168.1.1:5062(Server) -> 192.168.2.3:5060()

SIP/2.0 183 Session Progress
Via: SIP/2.0/UDP 192.168.2.3:5060;branch=z9hG4bK-3a13c666-846160.034
Record-Route: <sip:00003@192.168.1.1>
From: 00005 <sip:00005@sip.com>;tag=670d4f27
To: <sip:00003@sip.com>;tag=627e2553
Call-ID: 35268664@-.192.168.1.1
CSeq: 1814166029 INVITE
Contact: <sip:00003@192.168.1.131>
require: 100rel
rseq: 1558124776
Content-Length: 0
=====
```

```
=====
F35      192.168.2.3:1193() -> 192.168.1.1:5060(Server)

PRACK sip:00003@192.168.1.1 SIP/2.0
Via: SIP/2.0/UDP 192.168.2.3:5060;branch=z9hG4bK-1fbfe933-846161.339
Route: <sip:00003@192.168.1.131>
From: 00005 <sip:00005@sip.com>;tag=670d4f27
To: <sip:00003@sip.com>;tag=627e2553
Call-ID: 35268664@-.192.168.1.1
CSeq: 1814166030 PRACK
Max-Forwards: 70
RAck: 1558124776 1814166029 INVITE
Content-Length: 0
=====
```

```
=====
F36      192.168.1.1:5062(Server) -> 192.168.1.131:5060(00003@sip.com)

PRACK sip:00003@192.168.1.131 SIP/2.0
Via: SIP/2.0/UDP 192.168.1.1:5060;branch=z9hG4bK-533.1109089598.1814166030
Via: SIP/2.0/UDP 192.168.2.3:5060;branch=z9hG4bK-1fbfe933-846161.339
Route: <sip:00003@192.168.1.131>
From: 00005 <sip:00005@sip.com>;tag=670d4f27
To: <sip:00003@sip.com>;tag=627e2553
Call-ID: 35268664@-.192.168.1.1
CSeq: 1814166030 PRACK
max-forwards: 69
rack: 1558124776 1814166029 INVITE
Content-Length: 0
=====
```

```
=====
F37      192.168.1.131:1033(00003@sip.com) -> 192.168.1.1:5060(Server)

SIP/2.0 200 OK
Via: SIP/2.0/UDP 192.168.1.1:5060;branch=z9hG4bK-533.1109089598.1814166030
Via: SIP/2.0/UDP 192.168.2.3:5060;branch=z9hG4bK-1fbfe933-846161.339
From: 00005 <sip:00005@sip.com>;tag=670d4f27
To: <sip:00003@sip.com>;tag=627e2553
Call-ID: 35268664@-.192.168.1.1
CSeq: 1814166030 PRACK
=====
```

Content-Length: 0

=====

F38 192.168.1.1:5062(Server) -&gt; 192.168.2.3:5060()

SIP/2.0 200 OK  
 Via: SIP/2.0/UDP 192.168.2.3:5060;branch=z9hG4bK-1fbfe933-846161.339  
 From: 00005 <sip:00005@sip.com>;tag=670d4f27  
 To: <sip:00003@sip.com>;tag=627e2553  
 Call-ID: 35268664@-.192.168.1.1  
 CSeq: 1814166030 PRACK  
 Content-Length: 0

=====

F39 192.168.1.131:1033(00003@sip.com) -&gt; 192.168.1.1:5060(Server)

SIP/2.0 180 Ringing  
 Via: SIP/2.0/UDP 192.168.1.1:5060;branch=z9hG4bK-533.917526.1814166029  
 Via: SIP/2.0/UDP 192.168.2.3:5060;branch=z9hG4bK-3a13c666-846160.034  
 Record-Route: <sip:00003@192.168.1.1>  
 From: 00005 <sip:00005@sip.com>;tag=670d4f27  
 To: <sip:00003@sip.com>;tag=627e2553  
 Call-ID: 35268664@-.192.168.1.1  
 CSeq: 1814166029 INVITE  
 Contact: <sip:00003@192.168.1.131>  
 Require: 100rel  
 RSeq: 1558124777  
 Content-Length: 0

=====

F40 192.168.1.1:5062(Server) -&gt; 192.168.2.3:5060()

SIP/2.0 180 Ringing  
 Via: SIP/2.0/UDP 192.168.2.3:5060;branch=z9hG4bK-3a13c666-846160.034  
 Record-Route: <sip:00003@192.168.1.1>  
 From: 00005 <sip:00005@sip.com>;tag=670d4f27  
 To: <sip:00003@sip.com>;tag=627e2553  
 Call-ID: 35268664@-.192.168.1.1  
 CSeq: 1814166029 INVITE  
 Contact: <sip:00003@192.168.1.131>  
 require: 100rel  
 rseq: 1558124777  
 Content-Length: 0

=====

F41 192.168.2.3:1193() -&gt; 192.168.1.1:5060(Server)

PRACK sip:00003@192.168.1.1 SIP/2.0  
 Via: SIP/2.0/UDP 192.168.2.3:5060;branch=z9hG4bK-31173d37-846161.991  
 Route: <sip:00003@192.168.1.131>  
 From: 00005 <sip:00005@sip.com>;tag=670d4f27  
 To: <sip:00003@sip.com>;tag=627e2553  
 Call-ID: 35268664@-.192.168.1.1  
 CSeq: 1814166031 PRACK  
 Max-Forwards: 70  
 RAck: 1558124777 1814166029 INVITE  
 Content-Length: 0

=====

F42 192.168.1.1:5062(Server) -&gt; 192.168.1.131:5060(00003@sip.com)

PRACK sip:00003@192.168.1.131 SIP/2.0  
 Via: SIP/2.0/UDP 192.168.1.1:5060;branch=z9hG4bK-533.1109089598.1814166031  
 Via: SIP/2.0/UDP 192.168.2.3:5060;branch=z9hG4bK-31173d37-846161.991  
 Route: <sip:00003@192.168.1.131>  
 From: 00005 <sip:00005@sip.com>;tag=670d4f27  
 To: <sip:00003@sip.com>;tag=627e2553  
 Call-ID: 35268664@-.192.168.1.1  
 CSeq: 1814166031 PRACK  
 max-forwards: 69  
 rack: 1558124777 1814166029 INVITE

Content-Length: 0

```
=====
F43      192.168.1.131:1033(00003@sip.com) -> 192.168.1.1:5060(Server)

SIP/2.0 200 OK
Via: SIP/2.0/UDP 192.168.1.1:5060;branch=z9hG4bK-533.1109089598.1814166031
Via: SIP/2.0/UDP 192.168.2.3:5060;branch=z9hG4bK-31173d37-846161.991
From: 00005 <sip:00005@sip.com>;tag=670d4f27
To: <sip:00003@sip.com>;tag=627e2553
Call-ID: 35268664@-.192.168.1.1
CSeq: 1814166031 PRACK
Content-Length: 0
=====
```

```
=====
F44      192.168.1.1:5062(Server) -> 192.168.2.3:5060()

SIP/2.0 200 OK
Via: SIP/2.0/UDP 192.168.2.3:5060;branch=z9hG4bK-31173d37-846161.991
From: 00005 <sip:00005@sip.com>;tag=670d4f27
To: <sip:00003@sip.com>;tag=627e2553
Call-ID: 35268664@-.192.168.1.1
CSeq: 1814166031 PRACK
Content-Length: 0
=====
```

```
=====
F45      192.168.2.3:1193() -> 192.168.1.1:5060(Server)

INVITE sip:00005@192.168.1.1 SIP/2.0
Via: SIP/2.0/UDP 192.168.2.3:5060;branch=z9hG4bK-4551fb94-846182.624
Route: <sip:00002@192.168.2.1>
From: <sip:00005@sip.com>;tag=39fd0630
To: 00002 <sip:00002@sip.com>;tag=5326cc67
Call-ID: 0784add4@00002.192.168.1.1
CSeq: 1612635760 INVITE
Contact: <sip:00005@192.168.2.3>
Max-Forwards: 70
Supported: 100rel, replaces
Allow: INVITE, ACK, BYE, CANCEL, OPTIONS, PRACK, MESSAGE, REFER, NOTIFY
Content-Type: application/sdp
Content-Length: 175

v=0
o=- 616121 13403 IN IP4 192.168.2.3
s=-
c=IN IP4 192.168.2.3
t=0 0
m=audio 5006 RTP/AVP 0 96
a=rtpmap:0 PCMU/8000
a=rtpmap:96 telephone-event/8000
a=fmtp:96 0-11
=====
```

```
=====
F46      192.168.1.1:5062(Server) -> 192.168.2.3:5060()

SIP/2.0 100 Trying
Via: SIP/2.0/UDP 192.168.2.3:5060;branch=z9hG4bK-4551fb94-846182.624
From: <sip:00005@sip.com>;tag=39fd0630
To: 00002 <sip:00002@sip.com>;tag=5326cc67
Call-ID: 0784add4@00002.192.168.1.1
CSeq: 1612635760 INVITE
Content-Length: 0
=====
```

```
=====
F47      192.168.1.1:5062(Server) -> 192.168.2.1:5060(00002@sip.com)

INVITE sip:00002@192.168.2.1 SIP/2.0
Via: SIP/2.0/UDP 192.168.1.1:5060;branch=z9hG4bK-530.767430.1612635760
Via: SIP/2.0/UDP 192.168.2.3:5060;branch=z9hG4bK-4551fb94-846182.624
Record-Route: <sip:00005@192.168.1.1>
Route: <sip:00002@192.168.2.1>
From: <sip:00005@sip.com>;tag=39fd0630
=====
```



To: 00002 <sip:00002@sip.com>;tag=5326cc67  
 Call-ID: 0784add4@00002.192.168.1.1  
 CSeq: 1612635760 INVITE  
 Contact: <sip:00005@192.168.2.3>  
 max-forwards: 69  
 supported: 100rel  
 supported: replaces  
 Allow: INVITE, ACK, BYE, CANCEL, OPTIONS, PRACK, MESSAGE, REFER, NOTIFY  
 Content-Type: application/sdp  
 Content-Length: 175

v=0  
 o=- 616121 13403 IN IP4 192.168.2.3  
 s=-  
 c=IN IP4 192.168.2.3  
 t=0 0  
 m=audio 5006 RTP/AVP 0 96  
 a=rtpmap:0 PCMU/8000  
 a=rtpmap:96 telephone-event/8000  
 a=fmtp:96 0-11

=====

F48 192.168.2.1:1043(00002@sip.com) -> 192.168.1.1:5060(Server)

SIP/2.0 100 Trying  
 Via: SIP/2.0/UDP 192.168.1.1:5060;branch=z9hG4bK-530.767430.1612635760  
 Via: SIP/2.0/UDP 192.168.2.3:5060;branch=z9hG4bK-4551fb94-846182.624  
 From: <sip:00005@sip.com>;tag=39fd0630  
 To: 00002 <sip:00002@sip.com>;tag=5326cc67  
 Call-ID: 0784add4@00002.192.168.1.1  
 CSeq: 1612635760 INVITE  
 Content-Length: 0

=====

F49 192.168.2.1:1043(00002@sip.com) -> 192.168.1.1:5060(Server)

SIP/2.0 200 OK  
 Via: SIP/2.0/UDP 192.168.1.1:5060;branch=z9hG4bK-530.767430.1612635760  
 Via: SIP/2.0/UDP 192.168.2.3:5060;branch=z9hG4bK-4551fb94-846182.624  
 Record-Route: <sip:00005@192.168.1.1>  
 From: <sip:00005@sip.com>;tag=39fd0630  
 To: 00002 <sip:00002@sip.com>;tag=5326cc67  
 Call-ID: 0784add4@00002.192.168.1.1  
 CSeq: 1612635760 INVITE  
 Contact: <sip:00002@192.168.2.1>  
 Supported: 100rel, replaces  
 Allow: INVITE, ACK, BYE, CANCEL, OPTIONS, PRACK, MESSAGE, REFER, NOTIFY  
 Content-Type: application/sdp  
 Accept: application/sdp, message/sipfrag  
 Content-Length: 246

v=0  
 o=- 3952 3103 IN IP4 192.168.2.1  
 s=-  
 c=IN IP4 192.168.2.1  
 t=0 0  
 m=audio 5006 RTP/AVP 0 8 4 18 96  
 a=rtpmap:0 PCMU/8000  
 a=rtpmap:8 PCMA/8000  
 a=rtpmap:4 G723/8000  
 a=rtpmap:18 G729/8000  
 a=rtpmap:96 telephone-event/8000  
 a=fmtp:96 0-11

=====

F50 192.168.1.1:5062(Server) -> 192.168.2.3:5060()

SIP/2.0 200 OK  
 Via: SIP/2.0/UDP 192.168.2.3:5060;branch=z9hG4bK-4551fb94-846182.624  
 Record-Route: <sip:00005@192.168.1.1>  
 From: <sip:00005@sip.com>;tag=39fd0630  
 To: 00002 <sip:00002@sip.com>;tag=5326cc67  
 Call-ID: 0784add4@00002.192.168.1.1  
 CSeq: 1612635760 INVITE  
 Contact: <sip:00002@192.168.2.1>  
 supported: 100rel  
 supported: replaces

# FOMA/WLAN デュアル端末に関する技術参考資料 第 1.2 版

Allow: INVITE, ACK, BYE, CANCEL, OPTIONS, PRACK, MESSAGE, REFER, NOTIFY  
Content-Type: application/sdp  
Accept: application/sdp, message/sipfrag  
Content-Length: 246

v=0  
o=- 3952 3103 IN IP4 192.168.2.1  
s=-  
c=IN IP4 192.168.2.1  
t=0 0  
m=audio 5006 RTP/AVP 0 8 4 18 96  
a=rtpmap:0 PCMU/8000  
a=rtpmap:8 PCMA/8000  
a=rtpmap:4 G723/8000  
a=rtpmap:18 G729/8000  
a=rtpmap:96 telephone-event/8000  
a=fmtp:96 0-11

F51 192.168.2.3:1193() -> 192.168.1.1:5060(Server)

ACK sip:00005@192.168.1.1 SIP/2.0  
Via: SIP/2.0/UDP 192.168.2.3:5060;branch=z9hG4bK-2c08d3e1-846183.065  
Route: <sip:00002@192.168.2.1>  
From: <sip:00005@sip.com>;tag=39fd0630  
To: 00002 <sip:00002@sip.com>;tag=5326cc67  
Call-ID: 0784add4@00002.192.168.1.1  
CSeq: 1612635760 ACK  
Max-Forwards: 70  
Content-Length: 0

F52 192.168.1.1:5062(Server) -> 192.168.2.1:5060(00002@sip.com)

ACK sip:00002@192.168.2.1 SIP/2.0  
Via: SIP/2.0/UDP 192.168.1.1:5060;branch=z9hG4bK-530.1109089619.1612635760  
Via: SIP/2.0/UDP 192.168.2.3:5060;branch=z9hG4bK-2c08d3e1-846183.065  
From: <sip:00005@sip.com>;tag=39fd0630  
To: 00002 <sip:00002@sip.com>;tag=5326cc67  
Call-ID: 0784add4@00002.192.168.1.1  
CSeq: 1612635760 ACK  
max-forwards: 69  
Content-Length: 0

F53 192.168.2.3:1193() -> 192.168.1.1:5060(Server)

BYE sip:00005@192.168.1.1 SIP/2.0  
Via: SIP/2.0/UDP 192.168.1.1:5060;branch=z9hG4bK-51e7a29a-846215.432  
Route: <sip:00002@192.168.2.1>  
From: <sip:00005@sip.com>;tag=39fd0630  
To: 00002 <sip:00002@sip.com>;tag=5326cc67  
Call-ID: 0784add4@00002.192.168.1.1  
CSeq: 1612635761 BYE  
Max-Forwards: 70  
Content-Length: 0

F54 192.168.1.1:5062(Server) -> 192.168.2.1:5060(00002@sip.com)

BYE sip:00002@192.168.2.1 SIP/2.0  
Via: SIP/2.0/UDP 192.168.1.1:5060;branch=z9hG4bK-530.1109089652.1612635761  
Via: SIP/2.0/UDP 192.168.2.3:5060;branch=z9hG4bK-51e7a29a-846215.432  
Route: <sip:00002@192.168.2.1>  
From: <sip:00005@sip.com>;tag=39fd0630  
To: 00002 <sip:00002@sip.com>;tag=5326cc67  
Call-ID: 0784add4@00002.192.168.1.1  
CSeq: 1612635761 BYE  
max-forwards: 69  
Content-Length: 0

FOMA/WLAN デュアル端末に関する技術参考資料 第 1.2 版

F55 192.168.2.1:1043(00002@sip.com) -> 192.168.1.1:5060(Server)

SIP/2.0 200 OK  
Via: SIP/2.0/UDP 192.168.1.1:5060;branch=z9hG4bK-530.1109089652.1612635761  
Via: SIP/2.0/UDP 192.168.2.3:5060;branch=z9hG4bK-51e7a29a-846215.432  
From: <sip:00005@sip.com>;tag=39fd0630  
To: 00002 <sip:00002@sip.com>;tag=5326cc67  
Call-ID: 0784add4@00002.192.168.1.1  
CSeq: 1612635761 BYE  
Content-Length: 0

=====

F56 192.168.1.1:5062(Server) -> 192.168.2.3:5060()

SIP/2.0 200 OK  
Via: SIP/2.0/UDP 192.168.2.3:5060;branch=z9hG4bK-51e7a29a-846215.432  
From: <sip:00005@sip.com>;tag=39fd0630  
To: 00002 <sip:00002@sip.com>;tag=5326cc67  
Call-ID: 0784add4@00002.192.168.1.1  
CSeq: 1612635761 BYE  
Content-Length: 0

=====

## 12. インスタントメッセージシーケンス例

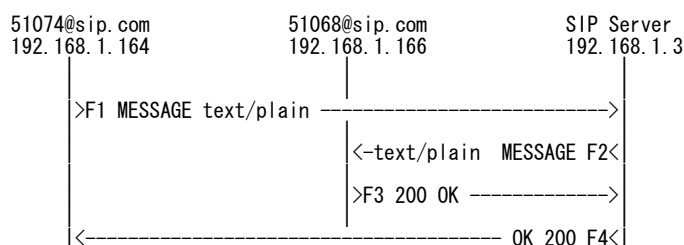


図 12-1 インスタントメッセージ

[illegible]

Call-ID: 604c27bb@-.192.168.1.164  
CSeq: 1 MESSAGE  
Content-Length: 0

## 13. プレゼンスシーケンス例

### 13.1. 起動時

起動時、REGISTER の期限切れによる再 REGISTER 時のシーケンスを示す。

端末が REGISTER を送出し、サーバーが各端末の状態を監視する。

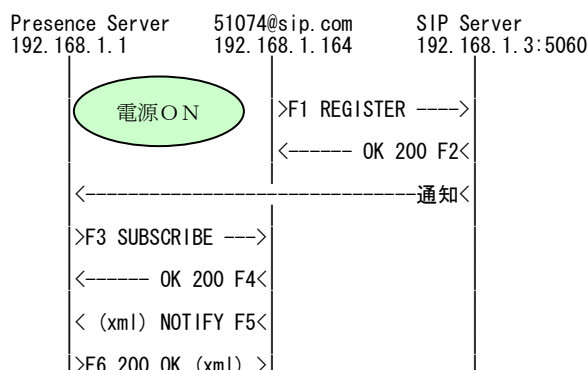


図 13-1 起動時

F1 192.168.1.164:1038 () -> 192.168.1.3:5060 ()

```

REGISTER sip:192.168.1.3 SIP/2.0
Via: SIP/2.0/UDP 192.168.1.164:5060;branch=z9hG4bK-b39774c-512538.514
From: <sip:51074@192.168.1.164>
To: <sip:51074@192.168.1.164>
Call-ID: 770cb31f@192.168.1.164
CSeq: 0 REGISTER
Contact: <sip:51074@192.168.1.164>;expires=3600
Max-Forwards: 70
User-Agent: △△△△△△ //端末種別

Content-Length: 0
  
```

F2 192.168.1.3:5060 () -> 192.168.1.164:5060 ()

```

SIP/2.0 200 OK
Via: SIP/2.0/UDP 192.168.1.164:5060;branch=z9hG4bK-b39774c-512538.514
From: <sip:51074@192.168.1.164>
To: <sip:51074@192.168.1.164>;tag=741cecf
Call-ID: 770cb31f@192.168.1.164
CSeq: 0 REGISTER
Contact: <sip:51074@192.168.1.164>
Expires: 3600
Date: Thu, 23 Jun 2005 03:04:43 GMT
Content-Length: 0
  
```

F3 192.168.1.1:3230 () -> 192.168.1.164:5060 ()

```

SUBSCRIBE sip:51074@192.168.1.164 SIP/2.0
Via: SIP/2.0/UDP 192.168.1.1:6060;branch=z9hG4bK-2f074531-511959.526
From: <sip:-@192.168.1.1:6060>;tag=776735ca
To: <sip:51074@192.168.1.164>;tag=26a27a23
Call-ID: 6675757c@192.168.1.1
CSeq: 6 SUBSCRIBE
Contact: <sip:-@192.168.1.1:6060>
Expires: 3600
  
```

Event: presence  
Content-Length: 0

F4 192.168.1.164:1039 () -> 192.168.1.1:6060 ()

SIP/2.0 200 OK  
Via: SIP/2.0/UDP 192.168.1.1:6060;branch=z9hG4bK-2f074531-511959.526  
From: <sip:-@sip.com>;tag=776735ca  
To: <sip:51074@sip.com>;tag=26a27a23  
Call-ID: 6675757c@192.168.1.1  
CSeq: 6 SUBSCRIBE  
Contact: <sip:51074@192.168.1.164>  
expires: 3600  
event: presence  
Supported:  
Allow: SUBSCRIBE, NOTIFY  
Content-Length: 0

F5 192.168.1.164:1039 () -> 192.168.1.1:6060 ()

NOTIFY sip:51074@192.168.1.164 SIP/2.0  
Via: SIP/2.0/UDP 192.168.1.164:5060;branch=z9hG4bK-2808e313-512542.327  
From: <sip:51074@sip.com>;tag=26a27a23  
To: <sip:-@sip.com>;tag=776735ca  
Call-ID: 6675757c@192.168.1.1  
CSeq: 1 NOTIFY  
Contact: <sip:51074@192.168.1.164>  
Max-Forwards: 70  
Supported:  
Subscription-State: active;expires=3600  
Event: presence  
Allow: SUBSCRIBE, NOTIFY  
Content-Type: application/cpim-pidf+xml  
Accept: application/cpim-pidf+xml  
Content-Length: 236

```
<?xml version="1.0" encoding="UTF-8"?>
<presence xmlns="urn:ietf:params:cpim-presence">
  <tuple id="mobile-phone">
    <status>
      <value>online</value>
    </status>
  </tuple>
  <tuple id="schedule">
    <status>
      <value>no_plan</value>
    </status>
  </tuple>
</presence>
```

F6 192.168.1.1:3230 () -> 192.168.1.164:5060 ()

SIP/2.0 200 OK  
Via: SIP/2.0/UDP 192.168.1.164:5060;branch=z9hG4bK-2808e313-512542.327  
From: <sip:51074@sip.com>;tag=26a27a23  
To: <sip:-@sip.com>;tag=776735ca  
Call-ID: 6675757c@192.168.1.1  
CSeq: 1 NOTIFY  
Contact: <sip:-@192.168.1.1:6060>  
max-forwards: 70  
supported:  
subscription-state: active;expires=3600  
event: presence  
Allow: SUBSCRIBE, NOTIFY  
Content-Type: application/cpim-pidf+xml  
Accept: application/cpim-pidf+xml  
Content-Length: 0

## 13.2. プレゼンスの監視

プレゼンスのバディリストに登録があった場合、監視を行う。電源 ON 時には 13.1 の F2 以降に本シーケンスを随時実行する。

```

Presence Server      51074@sip.com
192.168.1.1          192.168.1.164

|
|<--- SUBSCRIBE F1<
|
|>F2 200 OK ----->
|
|>F3 NOTIFY (xml) >
|
|< (xml) OK 200 F4<

```

図 13-2 プレゼンスの監視

```

=====

F1          192.168.1.164:1039 () -> 192.168.1.1:6060 ()

SUBSCRIBE sip:-@192.168.1.1:6060 SIP/2.0
Via: SIP/2.0/UDP 192.168.1.164:5060;branch=z9hG4bK-2e8d6c9d-512542.318
From: <sip:51074@sip.com>;tag=1b51a8c8
To: <sip:51070@sip.com>
Call-ID: 199cfbdf@-.192.168.1.164
CSeq: 1 SUBSCRIBE
Contact: <sip:51074@192.168.1.164>
Max-Forwards: 70
Supported:
Expires: 3600
Event: presence
Allow: SUBSCRIBE, NOTIFY
Accept: application/cpim-pidf+xml
Content-Length: 0

```

```

=====

F2          192.168.1.1:3230 () -> 192.168.1.164:5060 ()

SIP/2.0 200 OK
Via: SIP/2.0/UDP 192.168.1.164:5060;branch=z9hG4bK-2e8d6c9d-512542.318
From: <sip:51074@sip.com>;tag=1b51a8c8
To: <sip:51070@sip.com>;tag=56c9e2c2
Call-ID: 199cfbdf@-.192.168.1.164
CSeq: 1 SUBSCRIBE
Contact: <sip:-@192.168.1.1:6060>
max-forwards: 70
supported:
expires: 3600
event: presence
Allow: SUBSCRIBE, NOTIFY
Accept: application/cpim-pidf+xml
Content-Length: 0

```

```

=====

F3          192.168.1.1:3230 () -> 192.168.1.164:5060 ()

NOTIFY sip:51074@192.168.1.164 SIP/2.0
Via: SIP/2.0/UDP 192.168.1.1:6060;branch=z9hG4bK-54b596ac-511963.359
From: <sip:51070@sip.com>;tag=56c9e2c2
To: <sip:51074@sip.com>;tag=1b51a8c8
Call-ID: 199cfbdf@-.192.168.1.164
CSeq: 1 NOTIFY
Contact: <sip:-@192.168.1.1:6060>
Subscription-State: active;expires=3600
Event: presence
Content-Type: application/cpim-pidf+xml
Content-Length: 289

<?xml version="1.0" encoding="UTF-8"?>

```



```

<presence xmlns="urn:ietf:params:cpim-presence">
  <tuple id="mobile-phone">
    <status>
      <value>absence</value>
    </status>
    <contact priority="1">sip:51070@sip.com</contact>
  </tuple>
  <tuple id="schedule">
    <status>
      <value>step_out</value>
    </status>
  </tuple>
</presence>

```

```

=====
F4      192.168.1.164:1039 () -> 192.168.1.1:6060 ()

SIP/2.0 200 OK
Via: SIP/2.0/UDP 192.168.1.1:6060;branch=z9hG4bK-54b596ac-511963.359
From: <sip:51070@sip.com>;tag=56c9e2c2
To: <sip:51074@sip.com>;tag=1b51a8c8
Call-ID: 199cfbdf@-.192.168.1.164
CSeq: 1 NOTIFY
Contact: <sip:51074@192.168.1.164>
subscription-state: active:expires=3600
event: presence
Expires: 3600
Supported:
Allow: SUBSCRIBE, NOTIFY
Content-Type: application/cpim-pidf+xml
Content-Length: 0

```

### 13.3. プレゼンスの変更

プレゼンスの状態変更があった場合 NOTIFY を送出する。

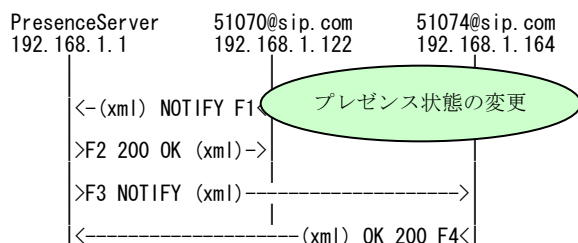


図 13-3 プレゼンスの変更

```

=====
F1      192.168.1.122:1037() -> 192.168.1.1:6060()

NOTIFY sip:51070@192.168.1.122 SIP/2.0
Via: SIP/2.0/UDP 192.168.1.122:5060;branch=z9hG4bK-64ebc4bc-512224.016
From: <sip:51070@sip.com>;tag=2c5a2e3a
To: <sip:@sip.com>;tag=12d9c352
Call-ID: 6772dade@192.168.1.1
CSeq: 4 NOTIFY
Contact: <sip:51070@192.168.1.122>
Max-Forwards: 70
Supported:
Subscription-State: active:expires=2536
Event: presence
Allow: SUBSCRIBE, NOTIFY
Content-Type: application/cpim-pidf+xml
Accept: application/cpim-pidf+xml
Content-Length: 238
  
```

```

<?xml version="1.0" encoding="UTF-8"?>
<presence xmlns="urn:ietf:params:cpim-presence">
  <tuple id="mobile-phone">
    <status>
      <value>absence</value>
    </status>
  </tuple>
  <tuple id="schedule">
    <status>
      <value>step_out</value>
    </status>
  </tuple>
</presence>
  
```

```

=====
F2      192.168.1.1:3238() -> 192.168.1.122:5060()

SIP/2.0 200 OK
Via: SIP/2.0/UDP 192.168.1.122:5060;branch=z9hG4bK-64ebc4bc-512224.016
From: <sip:51070@sip.com>;tag=2c5a2e3a
To: <sip:@sip.com>;tag=12d9c352
Call-ID: 6772dade@192.168.1.1
CSeq: 4 NOTIFY
Contact: <sip:@192.168.1.1:6060>
max-forwards: 70
supported:
subscription-state: active:expires=2536
event: presence
Allow: SUBSCRIBE, NOTIFY
Content-Type: application/cpim-pidf+xml
Accept: application/cpim-pidf+xml
Content-Length: 0
  
```

F3 192.168.1.1:3230() -> 192.168.1.164:5060()

NOTIFY sip:51074@192.168.1.164 SIP/2.0  
 Via: SIP/2.0/UDP 192.168.1.1:6060;branch=z9hG4bK-43af3eb-511582.076  
 From: <sip:51070@sip.com>;tag=022fc5ef  
 To: <sip:51074@sip.com>;tag=68986a9a  
 Call-ID: 065596f0@-.192.168.1.164  
 CSeq: 8 NOTIFY  
 Contact: <sip:-@192.168.1.1:6060>  
 Subscription-State: active:expires=3223  
 Event: presence  
 Content-Type: application/cpim-pidf+xml  
 Content-Length: 289

```
<?xml version="1.0" encoding="UTF-8"?>
<presence xmlns="urn:ietf:params:cpim-presence">
  <tuple id="mobile-phone">
    <status>
      <value>absence</value>
    </status>
    <contact priority="1">sip:51070@sip.com</contact>
  </tuple>
  <tuple id="schedule">
    <status>
      <value>step_out</value>
    </status>
  </tuple>
</presence>
```

F4 192.168.1.164:1036() -> 192.168.1.1:6060()

SIP/2.0 200 OK  
 Via: SIP/2.0/UDP 192.168.1.1:6060;branch=z9hG4bK-43af3eb-511582.076  
 From: <sip:51070@sip.com>;tag=022fc5ef  
 To: <sip:51074@sip.com>;tag=68986a9a  
 Call-ID: 065596f0@-.192.168.1.164  
 CSeq: 8 NOTIFY  
 Contact: <sip:51074@192.168.1.164>  
 subscription-state: active:expires=3223  
 event: presence  
 Expires: 3223  
 Supported:  
 Allow: SUBSCRIBE, NOTIFY  
 Content-Type: application/cpim-pidf+xml  
 Content-Length: 0

## 13.4. バディリスト削除

プレゼンスのバディリストの削除を行う場合 Expires: 0 を指定した SUBSCRIBE を送出する。

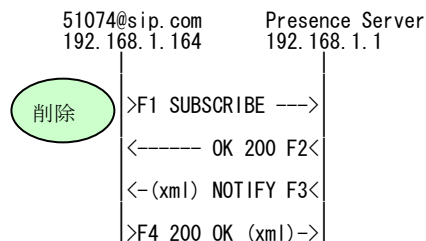


図 13-4 バディリスト削除

```

=====
F1      192.168.1.164:1036() -> 192.168.1.1:6060()

SUBSCRIBE sip:-@192.168.1.1:6060 SIP/2.0
Via: SIP/2.0/UDP 192.168.1.164:5060;branch=z9hG4bK-a1dc33a-512345.789
From: <sip:51074@sip.com>;tag=09e221c8
To: <sip:51051@sip.com>;tag=34dbfc9a
Call-ID: 6b37e5d8@-.192.168.1.164
CSeq: 12 SUBSCRIBE
Contact: <sip:51074@192.168.1.164>
Max-Forwards: 70
Supported:
Expires: 0
Event: presence
Allow: SUBSCRIBE, NOTIFY
Accept: application/cpim-pidf+xml
Content-Length: 0
  
```

```

=====
F2      192.168.1.1:3230() -> 192.168.1.164:5060()

SIP/2.0 200 OK
Via: SIP/2.0/UDP 192.168.1.164:5060;branch=z9hG4bK-a1dc33a-512345.789
From: <sip:51074@sip.com>;tag=09e221c8
To: <sip:51051@sip.com>;tag=34dbfc9a
Call-ID: 6b37e5d8@-.192.168.1.164
CSeq: 12 SUBSCRIBE
Contact: <sip:-@192.168.1.1:6060>
max-forwards: 70
supported:
expires: 0
event: presence
Allow: SUBSCRIBE, NOTIFY
Accept: application/cpim-pidf+xml
Content-Length: 0
  
```

```

=====
F3      192.168.1.1:3230() -> 192.168.1.164:5060()

NOTIFY sip:51074@192.168.1.164 SIP/2.0
Via: SIP/2.0/UDP 192.168.1.1:6060;branch=z9hG4bK-57f1dc53-511764.196
From: <sip:51051@sip.com>;tag=34dbfc9a
To: <sip:51074@sip.com>;tag=09e221c8
Call-ID: 6b37e5d8@-.192.168.1.164
CSeq: 13 NOTIFY
Contact: <sip:-@192.168.1.1:6060>
Subscription-State: active;expires=0
Event: presence
Content-Type: application/cpim-pidf+xml
Content-Length: 238

<?xml version="1.0" encoding="UTF-8"?>
<presence xmlns="urn:ietf:params:cpim-presence">
<tuple id="mobile-phone">
  
```

```

      <status>
        <value>online</value>
      </status>
    </tuple>
    <tuple id="schedule">
      <status>
        <value>no_plan</value>
      </status>
    </tuple>
  </presence>

```

```
=====
```

```
F4      192.168.1.164:1036() -> 192.168.1.1:6060()
```

```

SIP/2.0 200 OK
Via: SIP/2.0/UDP 192.168.1.1:6060;branch=z9hG4bK-57f1dc53-511764.196
From: <sip:51051@sip.com>;tag=34dbfc9a
To: <sip:51074@sip.com>;tag=09e221c8
Call-ID: 6b37e5d8@-.192.168.1.164
CSeq: 13 NOTIFY
Contact: <sip:51074@192.168.1.164>
subscription-state: active;expires=0
event: presence
Expires: 0
Supported:
Allow: SUBSCRIBE, NOTIFY
Content-Type: application/cpim-pidf+xml
Content-Length: 0

```

## 13.5. 電源 OFF

電源 OFF 時はオフライン状態を通知し、REGISTER(expires=0)を送信して終了する。

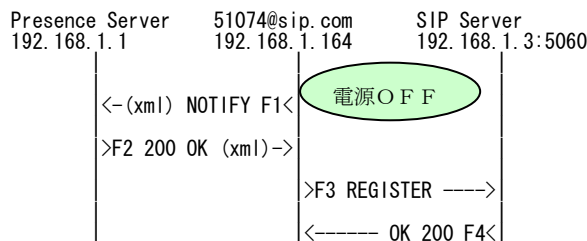


図 13-5 電源 OFF

```

=====
F1      192.168.1.164:1025 () -> 192.168.1.1:6060 ()

NOTIFY sip:51074@192.168.1.164 SIP/2.0
Via: SIP/2.0/UDP 192.168.1.164:5060;branch=z9hG4bK-5cf6d8f2-586773.687
From: <sip:51074@192.168.1.164>;tag=1c06aa75
To: <sip:-@192.168.1.164>;tag=7200af1c
Call-ID: 57b57643@192.168.1.1
CSeq: 4 NOTIFY
Contact: <sip:51074@192.168.1.164>
Max-Forwards: 70
Supported:
Subscription-State: active;expires=3089
Event: presence
Allow: SUBSCRIBE, NOTIFY
Content-Type: application/cpim-pidf+xml
Accept: application/cpim-pidf+xml
Content-Length: 169

<?xml version="1.0" encoding="UTF-8"?>
<presence xmlns="urn:ietf:params:cpim-presence">
  <tuple id="mobile-phone">
    <status>
      <value>offline</value>
    </status>
  </tuple>
</presence>
=====

```

```

=====
F2      192.168.1.1:3288 () -> 192.168.1.164:5060 ()

SIP/2.0 200 OK
Via: SIP/2.0/UDP 192.168.1.164:5060;branch=z9hG4bK-5cf6d8f2-586773.687
From: <sip:51074@192.168.1.164>;tag=1c06aa75
To: <sip:-@192.168.1.164>;tag=7200af1c
Call-ID: 57b57643@192.168.1.1
CSeq: 4 NOTIFY
Contact: <sip:-@192.168.1.1:6060>
max-forwards: 70
supported:
subscription-state: active;expires=3089
event: presence
Allow: SUBSCRIBE, NOTIFY
Content-Type: application/cpim-pidf+xml
Accept: application/cpim-pidf+xml
Content-Length: 0
=====

```

```

=====
F3      192.168.1.164:1026 () -> 192.168.1.3:5060 ()

REGISTER sip:192.168.1.3 SIP/2.0
Via: SIP/2.0/UDP 192.168.1.164:5060;branch=z9hG4bK-5cf1fc91-586775.773
From: <sip:51074@192.168.1.164>
=====

```

To: <sip:51074@sip.com>  
Call-ID: 53993404@-.192.168.1.164  
CSeq: 1 REGISTER  
Contact: <sip:51074@192.168.1.164>;expires=0  
Max-Forwards: 70  
User-Agent: DoCoMo/1.0 N902iL  
  
Content-Length: 0

=====

F4            192.168.1.3:5060() -> 192.168.1.164:5060()

SIP/2.0 200 OK  
Via: SIP/2.0/UDP 192.168.1.164:5060;branch=z9hG4bK-5cf1fc91-586775.773  
From: <sip:51074@sip.com>  
To: <sip:51074@sip.com>;tag=41603937  
Call-ID: 53993404@-.192.168.1.164  
CSeq: 1 REGISTER  
Contact: <sip:51074@192.168.1.164>  
Expires: 0  
Date: Thu, 23 Jun 2005 23:42:04 GMT  
Content-Length: 0

## 14. N900iL におけるその他注意事項

- ・ 転送シーケンスは例示のシーケンス以外には対応していません。
- ・ 転送先の電話番号には#を指定する事は出来ません。
- ・ ダイジェスト認証に関し
  - ・ 「Digest」は大文字小文字を区別します
  - ・ 「MD5」「MD5-sess」は大文字小文字を区別します
  - ・ 「auth」「auth-int」は大文字小文字を区別します
  - ・ nonce 値は大文字小文字を区別します
- ・ プレゼンスの SUBSCRIBE の更新時に to-tag は指定されません。
- ・ REGISTER 時に From-tag は指定されません。
- ・ SDP Answer 時の ptime は指定されません。
- ・ Accept ヘッダに multipart/mixed は指定されません。
- ・ 転送時の NOTIFY に対する 200OK に Contact ヘッダは指定されません。
- ・ CANCEL 時の CANCEL 及び ACK に Max-Forwards ヘッダは指定されません。
- ・ MESSAGE に対する 200OK に To-tag は指定されません。



ご注意

- (1) 本資料の内容の一部または全部を無断で転載および複製することは禁止されています。
- (2) 本資料に記載された動作等は、装置の機能追加などにより追加・変更されることがあります。
- (3) 本資料は予告なく改版されることがあります。

(不許複製・禁転載)

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FOMA/WLAN デュアル端末に関する技術参考資料 1.2 版

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別紙１ 状態遷移図

状態 遷移		待ち受け	オフフック入力	オンフック入力	発信	着信	応答保留	伝言メモ	通話	相手先保留	被保留	転送先入力（第1呼保留）	第2呼発信（第1呼保留）	第2呼通話（第1呼保留）	第1呼通話（第2呼保留）	その他	備考
		確認項目	確認項目	確認項目	確認項目	確認項目	確認項目	確認項目	確認項目	確認項目	確認項目	確認項目	確認項目	確認項目	確認項目	確認項目	
遷移後の動作		動作なし	動作なし	動作なし	INVITE送出	180 送出 Ring音鳴動	音声RTPへ応答保留 メッセージを送出	音声RTPへ伝言メモ メッセージを送出	動作なし	SPDT音を鳴動	保留音を鳴動	動作なし	INVITE送出	動作なし	動作なし	—	
タイムイベント	動作	expireする前に REGISTER送出	(DIGITキー入力後) 一定時間入力が無い 場合：発信動作を 開始 オフフック入力後 DIGITキー入力のない 場合：発信音鳴動 後、BT音送出 発信又は待ち受け	何もしない		180 ringingを定期的 に送出しPRACKを要求 した場合PRACKの受 信がない場合 504を送出し、着信 終了に遷移。 伝言メモを設定して いる場合は伝言メモ へ遷移。	RTP送出 RTP送出 RTP、RTPの受信が一 定期間ない場合、通 信終了へ遷移。	RTP送出 RTP送出 RTP、RTPの受信が一 定期間ない場合、通 信終了へ遷移。	RTP送出 RTP送出 RTP、RTPの受信が一 定期間ない場合、通 信終了へ遷移。	RTP送出 RTP送出 RTP、RTPの受信が一 定期間ない場合、通 信終了へ遷移。	RTP送出 RTP送出 RTP、RTPの受信が一 定期間ない場合、通 信終了へ遷移。	転送先の入力が一定時間ない場合 発信動作を開始	180 ringingもしくは183 session progressの 受信が一時間ない場合 CANCEL送出 reINVITE（通話）送出 200OK受信 ACK送出	RTP送出 RTP送出 一定期間RTP、RTPの受信がない場合、BYEを送 り、reINVITE（通話）送出、200OK受信、ACK送 出	RTP送出 RTP送出 一定期間RTP、RTPの受信がない場合、BYEを送 り、reINVITE（通話）送出、200OK受信、ACK送 出	—	
	遷移先	遷移なし	発信又は待ち受け	遷移なし	待ち受け	待ち受け又は伝 言メモ	待ち受け	待ち受け	待ち受け	待ち受け	待ち受け	第2呼発信	通話	通話	通話	—	INVITE受信（新規着信）とは ダイヤログ外の新規INVITEのことを指す。
INVITE受信 （新規着信）	動作	—	入力取消し 着信	入力取消し 着信	受信INVITEに対し、 486BUSYで応答 遷移なし	受信INVITEに対し、 486BUSYで応答 遷移なし	受信INVITEに対し、 486BUSYで応答 遷移なし	受信INVITEに対し、 486BUSYで応答 遷移なし	受信INVITEに対し、 486BUSYで応答 遷移なし	受信INVITEに対し、 486BUSYで応答 遷移なし	受信INVITEに対し、 486BUSYで応答 遷移なし	受信INVITEに対し、 486BUSYで応答 遷移なし	受信INVITEに対し、 486BUSYで応答 遷移なし	受信INVITEに対し、 486BUSYで応答 遷移なし	受信INVITEに対し、 486BUSYで応答 遷移なし	—	
INVITE受信 （refer）	動作	Unattendedは通常の 着信と同様の動作を 行う。	入力取消し 着信	入力取消し 着信	受信INVITEに対し、 486BUSYで応答 遷移なし	受信INVITEに対し、 486BUSYで応答 遷移なし	受信INVITEに対し、 486BUSYで応答 遷移なし	受信INVITEに対し、 486BUSYで応答 遷移なし	受信INVITEに対し、 486BUSYで応答 遷移なし	受信INVITEに対し、 486BUSYで応答 遷移なし	受信INVITEに対し、 486BUSYで応答 遷移なし	受信INVITEに対し、 486BUSYで応答 遷移なし	受信INVITEに対し、 486BUSYで応答 遷移なし	受信INVITEに対し、 486BUSYで応答 遷移なし	受信INVITEに対し、 486BUSYで応答 遷移なし	—	INVITE受信（refer）とは Referred-Byヘッダがあり、Replaceヘッダ の無い転送INVITEのことを指す。
INVITE受信 （replace）	動作	replaceするCallが存 在しないため、エラ ー（481）を応答。 遷移なし	replaceするCallが存 在しないため、エラ ー（481）を応答。 遷移なし	replaceするCallが存 在しないため、エラ ー（481）を応答。 遷移なし	ダイヤログIDが一致 する場合：486BUSY 応答 一致しない場合：481 応答 遷移なし	ダイヤログIDが一致 する場合：486BUSY 応答 一致しない場合：481 応答 遷移なし	200OK送出 ACK受信 第1呼BYE送出 遷移なし	200OK送出 ACK受信 第1呼BYE送出 遷移なし	200OK送出 ACK受信 第1呼BYE送出 通話	ダイヤログIDが一致 する場合：486BUSY 応答 一致しない場合：481 応答 遷移なし	200OK送出 ACK受信 第1呼BYE送出 通話	ダイヤログIDが一致する場合：486BUSY 一致しない場合：481 応答 遷移なし	ダイヤログIDが一致する場合：486BUSY 一致しない場合：481 応答 遷移なし	ダイヤログIDが一致する場合：486BUSY 一致しない場合：481 応答 遷移なし	ダイヤログIDが一致する場合：486BUSY 一致しない場合：481 応答 遷移なし	—	INVITE受信（replace）とは Referred-ByおよびReplaceヘッダがある転 送INVITEのことを指す。
reINVITE受信 （保留）	動作	エラー（481）を応答。 遷移なし	エラー（481）を応答。 遷移なし	エラー（481）を応答。 遷移なし	ダイヤログIDが一致 する場合：491応答 一致しない場合：481 応答 遷移なし	ダイヤログIDが一致 する場合：400応答 一致しない場合：481 応答 遷移なし	200OKを送出、ACK受 信 保留	BYEを送出し、待ち受 け状態へ戻る。	200OKを送出、ACK受 信 保留	H.0発生時処理 200OKを送出、ACK受 信 遷移なし	200OKを送出、ACK受 信 遷移なし	200OKを送出 ACK受信 遷移なし	保留呼側から受信した場合：200OK送出、ACK 受信。 第2呼側から受信した場合：491送信し、呼状 態は変更しない。 遷移なし	保留呼側から受信した場合：200OK送出、ACK 受信。 第2呼側から受信した場合：606送信し、呼状 態は変更しない。 遷移なし	保留呼側から受信した場合：200OK送出、ACK 受信。 第2呼側から受信した場合：606送信し、呼状 態は変更しない。 遷移なし	受け入れ不能なSDP情報を受信した場 合は、全呼を開放し、待ち受けに戻る。 待ち受け	
	遷移先	遷移なし	遷移なし	遷移なし	遷移なし	遷移なし	遷移なし	遷移なし	遷移なし	遷移なし	遷移なし	200OKを送出、ACK受信 遷移なし	200OKを送出、ACK受信 遷移なし	200OKを送出、ACK受信 遷移なし	200OKを送出、ACK受信 遷移なし	200OKを送出、ACK受信 遷移なし	
reINVITE受信 （通話）	動作	エラー（481）を応答 遷移なし	エラー（481）を応答。 遷移なし	エラー（481）を応答。 遷移なし	ダイヤログIDが一致 する場合：491返送 一致しない場合：481 返送 遷移なし	ダイヤログIDが一致 する場合：400返送 一致しない場合：481 返送 遷移なし	H.0発生時処理 セッション更新、 200OKを送出、ACK受 信 遷移なし	H.0発生時処理 セッション更新、 200OKを送出、ACK受 信 遷移なし	H.0発生時処理 セッション更新、 200OKを送出、ACK受 信 遷移なし	200OK送出 ACK受信 遷移なし	200OK送出 ACK受信 遷移なし	200OK送出 ACK受信 遷移なし	保留呼側から受信した場合：606返送 通話呼側から受信した場合：200OK送出、ACK 受信 遷移なし	保留呼側から受信した場合：606返送 通話呼側から受信した場合：200OK送出、ACK 受信 遷移なし	保留呼側から受信した場合：606返送 通話呼側から受信した場合：200OK送出、ACK 受信 遷移なし	受け入れ不能なSDP情報を受信した場 合は、全呼を開放。 待ち受け	
開始キー	動作	DT音鳴動	何もしない	何もしない	何もしない	INVITEに対し200OK 送信 ACK受信 音声通話開始	音声通話開始	音声通話開始	何もしない	何もしない	何もしない	発信動作を開始（N900ILは何もしない）	何もしない	何もしない	何もしない	—	
	遷移先	オフフック入力	発信	発信	遷移なし	通話	通話	通話	遷移なし	遷移なし	遷移なし	第2呼発信開始（N900ILは遷移なし）	遷移なし	通話	遷移なし	—	
終話キー	動作	何もしない	入力をキャンセル 待ち受け	入力をキャンセル 待ち受け	CANCELを送出し、発信 中断 待ち受け	200OK送出 応答保留	BYEを送出し、待ち受 け状態へ戻る。	BYEを送出し、待ち受 け状態へ戻る。	BYEを送出し、待ち受 け状態へ戻る。	BYEを送出し、待ち受 け状態へ戻る。	BYEを送出し、待ち受 け状態へ戻る。	200OKを送出、ACK受信 遷移なし	200OKを送出、ACK受信 遷移なし	200OKを送出、ACK受信 遷移なし	200OKを送出、ACK受信 遷移なし	待ち受け	
	遷移先	遷移なし	待ち受け	待ち受け	待ち受け	待ち受け	待ち受け	待ち受け	待ち受け	待ち受け	待ち受け	待ち受け	待ち受け	待ち受け	待ち受け	待ち受け	—
デジットキー	動作	何もしない	番号入力	番号入力	アーリーメディアか つ、条件が合致すれ ば、DTMF送出 通話	注1（エニーキー） 音声通話を開始す る。 MIMIに關し、ここでは 規定しない。	注1（エニーキー） 音声通話を開始す る。 何もしない。	何もしない	DTMF送出	何もしない	何もしない	番号入力	DTMF送出	DTMF	DTMF	—	注1 エニーキーアンサー設定時
	遷移先	オフフック入力	遷移なし	遷移なし	遷移なし	遷移なし	遷移なし	遷移なし	転送先入力	転送先入力	転送先入力	遷移なし	遷移なし	遷移なし	遷移なし	—	
クリアキー （保留）	動作	何もしない	何もしない	（—文字削除）	何もしない	注1（エニーキー） 音声通話を開始す る。 何もしない	注1（エニーキー） 音声通話を開始す る。 何もしない	何もしない	reINVITE（保留）送出 200OK受信 ACK送出	reINVITE（通話）送出 200OK受信 ACK送出	何もしない	保留呼にreINVITE（通話）送出 200OK受信 ACK送出	保留呼にreINVITE（通話）送出 200OK受信 ACK送出	保留呼にreINVITE（通話）送出 200OK受信 ACK送出	保留呼にreINVITE（通話）送出 200OK受信 ACK送出	—	注1 エニーキーアンサー設定時
	遷移先	遷移なし	遷移なし	遷移なし待ち受け	遷移なし	通話	通話	遷移なし	相手先保留	通話	遷移なし	通話	通話	通話	通話	—	
BYE受信	動作	エラー（481）応答 遷移なし	エラー（481）応答 遷移なし	エラー（481）応答 遷移なし	1xx（101以上）受信前 ：481応答を返す 1xx（101以上）受信後 ：400応答を返す 待ち受け	BYEに200OK応答す る。INVITEに対し 487（Request terminated）を返す。 待ち受け	通話を終了させ、BYE に対する200OKを送出 待ち受け	通話を終了させ、BYE に対する200OKを送出 待ち受け	通話を終了させ、BYE に対する200OKを送出 待ち受け	通話を終了させ、BYE に対する200OKを送出 待ち受け	通話を終了させ、BYE に対する200OKを送出 待ち受け	通話を終了させ、BYEに対する200OKを送出 待ち受け	通話を終了させ、BYEに対する200OKを送出 待ち受け	通話を終了させ、BYEに対する200OKを送出 待ち受け	通話を終了させ、BYEに対する200OKを送出 待ち受け	通話を終了させ、BYEに対する200OKを送出 待ち受け	・ダイヤログが無い場合：481応答 ・ダイヤログが存在するが想定外の場所で 受信する場合：400応答 —
	遷移先	遷移なし	遷移なし	遷移なし	遷移なし	遷移なし	遷移なし	遷移なし	遷移なし	遷移なし	遷移なし	遷移なし	遷移なし	遷移なし	遷移なし	遷移なし	
CANCEL受信	動作	エラー（400）を返す。 遷移なし	エラー（400）を返す。 遷移なし	エラー（400）を返す。 遷移なし	指定ダイヤログが存在 する場合：481エラ ーを返す その他：400エラーを 返す （着信を終了させる） 待ち受け	CANCELに200OKを返す INVITEに487を返す （着信を終了させる） 待ち受け	指定ダイヤログが存在 する場合：481エラ ーを返す その他：400エラーを 返す 待ち受け	指定ダイヤログが存在 する場合：481エラ ーを返す その他：400エラーを 返す 待ち受け	指定ダイヤログが存在 する場合：481エラ ーを返す その他：400エラーを 返す 待ち受け	指定ダイヤログが存在 する場合：481エラ ーを返す その他：400エラーを 返す 待ち受け	指定ダイヤログが存在 する場合：481エラ ーを返す その他：400エラーを 返す 待ち受け	指定ダイヤログが存在する場合：481エラーを 返す その他：400エラーを返す 待ち受け	指定ダイヤログが存在する場合：481エラーを 返す その他：400エラーを返す 待ち受け	指定ダイヤログが存在する場合：481エラーを 返す その他：400エラーを返す 待ち受け	指定ダイヤログが存在する場合：481エラーを 返す その他：400エラーを返す 待ち受け	指定ダイヤログが存在する場合：481エラーを 返す その他：400エラーを返す 待ち受け	・ダイヤログが無い場合：400応答 ・ダイヤログが存在するがトランザクシ ョンが無い場合：481応答 —
	遷移先	遷移なし	遷移なし	遷移なし	遷移なし	遷移なし	遷移なし	遷移なし	遷移なし	遷移なし	遷移なし	遷移なし	遷移なし	遷移なし	遷移なし	遷移なし	
200OK （INVITE）	動作	ACK送信 BYE送信 遷移なし	ACK送信 BYE送信 遷移なし	ACK送信 BYE送信 遷移なし	INVITEに対するACKを 送出する。 通話	ACK送信 BYE送信 遷移なし	ACK送信 BYE送信 遷移なし	ACK送信 BYE送信 遷移なし	ACK送信 BYE送信 遷移なし	ACK送信 BYE送信 遷移なし	ACK送信 BYE送信 遷移なし	ACK送信 BYE送信 遷移なし	ACK送信 BYE送信 遷移なし	ACK送信 BYE送信 遷移なし	ACK送信 BYE送信 遷移なし	発信時のINVITEに対する200OK受信以外に は、ACK、BYEを送信する。	
	遷移先	遷移なし	遷移なし	遷移なし	遷移なし	遷移なし	遷移なし	遷移なし	遷移なし	遷移なし	遷移なし	遷移なし	遷移なし	遷移なし	遷移なし	遷移なし	
4xx、5xx等エラ ー（INVITE）	動作	ACK送信 遷移なし	ACK送信 遷移なし	ACK送信 遷移なし	ACK送信 401、407、3xxの場合 ：再発信 待ち受け、又は、発信	ACK送信 遷移なし	ACK送信 遷移なし	ACK送信 遷移なし	ACK送信 遷移なし	ACK送信 遷移なし	ACK送信 遷移なし	ACK送信 遷移なし	ACK送信 遷移なし	ACK送信 遷移なし	ACK送信 遷移なし	ACK送信 遷移なし	—
	遷移先	遷移なし	遷移なし	遷移なし	遷移なし	遷移なし	遷移なし	遷移なし	遷移なし	遷移なし	遷移なし	遷移なし	遷移なし	遷移なし	遷移なし	遷移なし	
REFER	動作	エラー（481）を返す。 遷移なし	エラー（481）を返す 遷移なし	エラー（481）を返す 遷移なし	エラー（400）を返す 遷移なし	エラー（400）を返す 遷移なし	エラー（400）を返す 遷移なし	エラー（400）を返す 遷移なし	エラー（400）を返す 遷移なし	エラー（400）を返す 遷移なし	エラー（400）を返す 遷移なし	エラー（400）を返す 遷移なし	エラー（400）を返す 遷移なし	エラー（400）を返す 遷移なし	エラー（400）を返す 遷移なし	—	
	遷移先	遷移なし	遷移なし	遷移なし	遷移なし	遷移なし	遷移なし	遷移なし	遷移なし	遷移なし	遷移なし	遷移なし	遷移なし	遷移なし	遷移なし	遷移なし	
IP変更を伴うハ ンドオーバー	動作	REGISTER送出 遷移なし	REGISTER送出 遷移なし	REGISTER送出 遷移なし	REGISTER送出 reINVITEを送出 遷移なし	REGISTER送出 reINVITEを送出 遷移なし	REGISTER送出 reINVITEを送出 遷移なし	REGISTER送出 reINVITEを送出 遷移なし	REGISTER送出 reINVITEを送出 遷移なし	REGISTER送出 reINVITEを送出 遷移なし	REGISTER送出 reINVITEを送出 遷移なし	REGISTER送出 reINVITEを送出 遷移なし	REGISTER送出 reINVITEを送出 遷移なし	REGISTER送出 reINVITEを送出 遷移なし	REGISTER送出 reINVITEを送出 遷移なし	—	
	遷移先	遷移なし	遷移なし	遷移なし	遷移なし	遷移なし	遷移なし	遷移なし	遷移なし	遷移なし	遷移なし	遷移なし	遷移なし	遷移なし	遷移なし	遷移なし	
終話キー一押し （電源OFF）	動作	unREGISTER送出 電源OFF	unREGISTER送出 電源OFF	unREGISTER送出 電源OFF	CANCELを送出 unREGISTER送出 電源OFF	応答保留へ遷移した 後、BYEを送出 unREGISTER送出 電源OFF	BYEを送出 unREGISTER送出 電源OFF	BYEを送出 unREGISTER送出 電源OFF	BYEを送出 unREGISTER送出 電源OFF	BYEを送出 unREGISTER送出 電源OFF	BYEを送出 unREGISTER送出 電源OFF	第1呼を転送する REFER送出 REFER送出 NOTIFY（200OK）受信後、 第1呼BYE送出 unREGISTER送出 電源OFF	第1呼を転送する REFER送出 REFER送出 NOTIFY（200OK）受信後、 第1呼BYE送出 unREGISTER送出 電源OFF	第1呼を転送する REFER送出 REFER送出 NOTIFY（200OK）受信後、 第1呼BYE送出 unREGISTER送出 電源OFF	第1呼を転送する REFER送出 REFER送出 NOTIFY（200OK）受信後、 第1呼BYE送出 unREGISTER送出 電源OFF	—	
	遷移先	電源OFF	電源OFF	電源OFF	電源OFF	電源OFF	電源OFF	電源OFF	電源OFF	電源OFF	電源OFF	電源OFF	電源OFF	電源OFF	電源OFF	電源OFF	

## 別紙2

### FOMA/WLANデュアル端末対応SIPメッセージ一覧表

Request/Response		メッセージ	基本SIP		備考
			送信	受信	
SIP methods	SIP methods defined in the SIP RFC	INVITE	○	○	
		REGISTER	○	×	
		ACK	○	○	
		CANCEL	○	○	
		BYE	○	○	
		OPTIONS	×	○	
	SIP method extensions from other RFCs	INFO	×	×	
		NOTIFY	○	○	
		SUBSCRIBE	×	×	
		UPDATE	○	○	
		MESSAGE	×	×	
		REFER	○	○	
		PRACK	○	○	
SIP responses	class 1: Provisional messages	100 Trying	○	○	
		180 Ringing	○	○	
		181 Call Is Being Forwarded	×	○	183と同等に扱う
		182 Queued	×	○	183と同等に扱う
		183 Session Progress	○	○	
	class 2: Successful	200 OK	○	○	
		202 accepted	○	○	受信時、200と同等の処理を行う
	class 3: Redirection	300 Multiple Choices	×	○	3xxレスポンス受信時はredirectionを行う
		301 Moved Permanently	×	○	3xxレスポンス受信時はredirectionを行う
		302 Moved Temporarily	×	○	3xxレスポンス受信時はredirectionを行う
		305 Use Proxy	×	○	3xxレスポンス受信時はredirectionを行う
		380 Alternative Service	×	○	3xxレスポンス受信時はredirectionを行う
	class 4: Request failures	400 Bad Request	○	○	
		401 Unauthorized	×	○	
		402 Payment Required	×	○	404と同等に扱う
		403 Forbidden	○	○	
		404 Not Found	○	○	
		405 Method Not Allowed	○	○	
		406 Not Acceptable	○	○	
		407 Proxy Authentication Required	×	○	
		408 Request Timeout	○	○	
		410 Gone	○	○	
		413 Request Entity Too Large	×	○	
		414 Request-URI Too Long	×	○	
		415 Unsupported Media Type	○	○	
		416 Unsupported URI Scheme	○	○	
		420 Bad Extension	○	○	
		421 Extension Required	×	○	受信時、400と同等の処理を行う
		422 Session Interval Too Small	○	○	
		423 Interval Too Brief	×	○	受信時、400と同等の処理を行う 但し、Min-Expiresに対する処理は行なわな
		480 Temporarily Unavailable	○	○	再発信は行わない
		481 Call/Transaction Does Not Exist	○	○	
		482 Loop Detected	×	○	
		483 Too Many Hops	×	○	
		484 Address Incomplete	×	○	追加ダイヤルには対応しない
		485 Ambiguous	×	○	
		486 Busy Here	○	○	
		487 Request Terminated	○	○	
		488 Not Acceptable Here	×	○	
		489 Bad Event	○	○	受信時、400と同等の処理を行う
		491 Request Pending	○	○	受信時、reINVITE再発行処理を行う
		493 Undecipherable	×	○	受信時、400と同等の処理を行う
		494 Security Agreement Required	×	○	受信時、400と同等の処理を行う
	class 5: Server failures	500 Server Internal Error	○	○	
		501 Not Implemented	×	○	
		502 Bad Gateway	×	○	
		503 Service Unavailable	×	○	
		504 Server Time-out	○	○	
		505 Version Not Supported	×	○	
		513 Message Too Large	×	○	
		580 Precondition Failure	×	○	
	class 6: Global failures	600 Busy Everywhere	○	○	
		603 Decline	×	○	
		604 Does Not Exist Anywhere	×	○	
		606 Not Acceptable	○	○	

## 別紙 3 SIP ヘッダ記述の注意点

### 1.改行について

受信	1ヘッダ内に改行があっても受信可能
送信	改行しない

#### ・ヘッダ間の空白行

受信	空白行をヘッダとボディの分離と認識する
送信	ヘッダとボディの分離箇所へ空白行を挿入する。 その他の部分に空白行は使用しない。

#### ・サイズ

受信	1行の最大バイト数:特になし 1メッセージ最大バイト数:65535 バイト
送信	1行:256 バイト ※Authorization ヘッダや Refer-To ヘッダなどで超える場合がある SIP メッセージサイズ:8192 バイト ※基本的に 1300 バイトを超えるメッセージを出すことはない

#### ・SIP ヘッダ並び順

受信	SIP ヘッダの並び順は意識しない。 ※スタートライン、Via,Route,Record-Route の同じフィールド名で複数行設定するものは並び順(ノードの通過順)を変更できない。
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### 2 スペースについて

#### (1)受信側

受信	スペースを意識せず、複数個の空白を許容する。
送信	—

### (2)送信側

- ・ 各ヘッダは、ヘッダ名 (Via, Max-Forwards、Contact、...etc) とそれに続くコロン(:)及びフィールド値(アドレス、バージョン番号、任意値、等々)からなる。
- ・ ヘッダ名とコロン(:)間にスペースを入れず、コロン(:)とフィールド値の間に半角スペースを必ず 1 個使用する。

	端末動作	N900iL 動作差異
受信	—	—
送信	ヘッダ名＋コロンの後ろには空白文字を1個設定する。	ヘッダ名＋コロンの後ろには空白文字を1個設定する。  ※Content-Length ヘッダはオクテット数を表す数字列の前に複数個の空白文字を設定する。

例.  $\square$ : スペース

Content-Type: application/sdp

**Privacy:** ☐none

## フィールド値中の分離子

受信	—
送信	<p>・フィールド値の中で分離子(コロン(:)、セミコロン(;)、イコール(=)、左角括弧(&lt;)、右角括弧(&gt;)、スラッシュ(/)、二重引用符(“)、アスタリスク(*)、左括弧( ( ) , 右括弧( ) ))の前後にはスペースを入れない</p> <p>・カンマ(,)の後ろはスペースを入れる</p>

- ・ CSeq のフィールド値

受信	—
送信	シーケンス番号とメソッド名の間を半角スペース 1 個で区切る

例.

***CSeq: 2 BYE***

・ リクエストライン

受信	—
送信	・使用するメソッド名 (INVITE,REGISTER・・・etc)の後を半角スペース1個で区切る ・SIP-Version (SIP/2.0) の前を半角スペースで区切る

例.

**INVITE**□sip:08012345678@poc.docomo.ne.jp□SIP/2.0

・ ステータスライン

受信	—
送信	・SIP-Version (SIP/2.0) の後を半角スペース1個で区切る ・ステータスコードの応答コード (100,200,408・・・etc)と英語表記 (Ringing、Bad Request、Busy Here・・・etc)の間を半角スペース1個で区切る

例.

**SIP/2.0**□200□OK

・ Via

受信	—
送信	Via の SIP-Version (SIP/2.0/UDP) の後を半角スペース1個で区切る

・ Authorization

受信	—
送信	フィールド値の Digest の後を半角スペース1個で区切る

・

- 各ヘッダ部におけるユーザ名と SIP-URI 部の間には半角スペースを必ず 1 個使用する。

例.

**From:** □“SIPphone”□<sip:50919@sip.com>;tag=・・・

### 3 大文字/小文字について

#### (1) 受信側

	端末規定	N900iL 動作差異
受信	<p>大文字小文字を区別しない。</p> <p>※但し以下を除く</p> <ul style="list-style-type: none"> <li>・メソッド名</li> <li>・SDP 内のタイプ名 (c=.....の「c」など)</li> <li>・Call-ID</li> <li>・SIP-URI のユーザ部(@の前)</li> <li>・引用符で囲まれた部分</li> <li>・via-branch のマジッククッキー(z9hG4bK)</li> </ul>	<p>1) メソッド：大文字のみ許容</p> <p>※許容可能文字列</p> <ul style="list-style-type: none"> <li>・INVITE</li> <li>・ACK</li> <li>・BYE</li> <li>・OPTIONS</li> <li>・INFO</li> <li>・REFER</li> <li>・NOTIFY</li> <li>・PRACK</li> </ul> <p>2) ヘッダ名：大文字小文字を区別しない</p> <p>3) Accept ヘッダ：</p> <p>大文字小文字の区別をする。</p> <p>※認識可能文字列</p> <ul style="list-style-type: none"> <li>・application/sdp</li> <li>・application/X-PBXSIPUA</li> <li>・message/sipfrag</li> <li>・application/cpim-pidf+xml</li> <li>・application/X-PBXSIPUA</li> </ul> <p>4) Require, Supported：</p> <p>大文字小文字の区別をする。</p> <p>※認識可能文字列</p> <ul style="list-style-type: none"> <li>・100rel</li> <li>・replaces</li> </ul> <p>5) Content-Type ヘッダ：</p> <p>大文字小文字の区別をする。</p> <p>※認識可能文字列</p> <ul style="list-style-type: none"> <li>・application/sdp</li> <li>・application/X-PBXSIPUA</li> <li>・message/sipfrag</li> <li>・application/cpim-pidf+xml</li> <li>・application/X-PBXSIPUA</li> </ul> <p>6) リクエストラインの「SIP/2.0」</p> <p>大文字小文字の区別をしない</p> <p>7) Via の「SIP/2.0」</p> <p>大文字のみ認識可</p> <p>8) ステータスラインの「SIP/2.0」</p> <p>大文字のみ認識可能</p> <p>9) branch, tag, expires 等のパラメータ</p> <ul style="list-style-type: none"> <li>・“branch=”：小文字のみ認識可能</li> <li>・branch 値：大文字小文字を区別する</li> <li>・“tag=”：小文字のみ認識可能</li> <li>・tag 値：大文字小文字を区別する</li> </ul>

		<ul style="list-style-type: none"> <li>・“expires=”：小文字のみ認識可能</li> <li>・sent-by：大文字小文字を区別する</li> </ul> <p>10) SDP 中の文字列</p> <ul style="list-style-type: none"> <li>・〈タイプ〉=〈値〉の〈タイプ〉部分は小文字のみ認識可能</li> </ul> <p>Ex. 「m=audio ...」：認識可能 「M=audio ...」：認識できないタイプ行</p> <ul style="list-style-type: none"> <li>・c 行、o 行のネットワークタイプ「IN」は大文字のみ認識可能</li> <li>・c 行、o 行のアドレスタイプ「IP4」は大文字のみ認識可能</li> <li>・m 行のメディア「audio」は小文字のみ認識可能です。</li> <li>・m 行のトランスポート「RTP/AVP」は大文字のみ認識可能です。</li> <li>・a 行の属性「rtpmap」「fmt」「ptime」は小文字のみ認識可能です。</li> <li>・a 行のエンコーディングネーム「PCMU」等は内容参照しない。</li> <li>・「telephone-event」は小文字のみ認識可能</li> <li>・「sendonly」「recvonly」は小文字のみ認識可能</li> <li>・「inactive」は小文字のみ認識可能</li> </ul> <p>11) Allow ヘッダのパラメータ： 内容参照しない</p> <p>12) From： 非通知のユーザー名の Anonymous@Anonymous.invalid と anonymous@anonymous.invalid 以外は 非通知として認識しない</p> <p>13) Content-Encoding ヘッダ： 大文字小文字の区別をする。 ※認識可能文字列 ・identity</p> <p>14) Content-Language ヘッダ： 大文字小文字の区別をする。 ※認識可能文字列 ・en ・ja</p> <p>15) Content-Disposition ヘッダ： 内容参照しない</p> <p>16) ダイジェスト認証関連パラメータ</p> <ul style="list-style-type: none"> <li>・「Digest」「MD5」「MD5-sess」「auth」「auth-int」、nonce 値は大文字小文字を区別する</li> </ul>
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		17) スキーマ ・「sip:」のみ認識可能
送信	—	—

## (2)送信側

大文字/小文字 の表記は基本的に下記のポリシーに従う。

- ・ メソッド名 (NOTIFY、ACK・・・etc)は大文字で記述する。
- ・ SIP-Version の文字列は必ず大文字となる。