



## **Session Initiation Protocol (SIP) Line Messaging Guide (Standard) for Cisco Unified CallManager 5.0**

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## **CHAPTER 1**

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# Preface

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This document describes the implementation of the Session Initiation Protocol (SIP) for line side devices in Cisco Unified CallManager Release 5.0.

The preface covers these topics:

- [Audience](#)
- [Organization](#)
- [New and Changed Information](#)
- [Conventions](#)
- [Obtaining Documentation](#)
- [Documentation Feedback](#)
- [Cisco Product Security Overview](#)
- [Obtaining Technical Assistance](#)
- [Obtaining Additional Publications and Information](#)

## Audience

This document provides information for developers, vendors, and customers who are developing applications or products that integrate with Cisco Unified CallManager 5.0 using SIP messaging.

## Organization

This document consists of the following two chapters.

| Chapter                                                                  | Description                                                                                                     |
|--------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------|
| <a href="#">Chapter 1, “SIP Standard Line Interface for Release 5.0”</a> | Provides an overview of SIP line messages and standards compliance.                                             |
| <a href="#">Chapter 2, “SIP Basic Line Call Flows for Release 5.0”</a>   | Comprises a listing of all Release 5.0 SIP line messages, including sequence charts and examples of call flows. |

# New and Changed Information

This is the first release of the Cisco Unified CallManager SIP Messaging Guide (Line). Although there are no changes from previous releases for this guide, there may be new features introduced and enhancements or fixes made to the SIP line interface in this release that are changes from previous releases of Cisco Unified CallManager.

## Conventions

This document uses the following conventions:

| Convention                  | Description                                                                                                                                                        |
|-----------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>boldface font</b>        | Commands and keywords are in <b>boldface</b> .                                                                                                                     |
| <i>italic font</i>          | Arguments for which you supply values are in <i>italics</i> .                                                                                                      |
| [ ]                         | Elements in square brackets are optional.                                                                                                                          |
| { x   y   z }               | Alternative keywords are grouped in braces and separated by vertical bars.                                                                                         |
| [ x   y   z ]               | Optional alternative keywords are grouped in brackets and separated by vertical bars.                                                                              |
| string                      | A nonquoted set of characters. Do not use quotation marks around the string or the string will include the quotation marks.                                        |
| screen font                 | Terminal sessions and information the system displays are in <code>screen font</code> .                                                                            |
| <b>boldface screen font</b> | Information you must enter is in <b>boldface screen font</b> .                                                                                                     |
| <i>italic screen font</i>   | Arguments for which you supply values are in <i>italic screen font</i> .                                                                                           |
| →                           | This pointer highlights an important line of text in an example.                                                                                                   |
| ^                           | The symbol ^ represents the key labeled Control—for example, the key combination ^D in a screen display means hold down the Control key while you press the D key. |
| < >                         | Nonprinting characters, such as passwords are in angle brackets.                                                                                                   |

Notes use the following conventions:



### Note

Means *reader take note*. Notes contain helpful suggestions or references to material not covered in the publication.



### Caution

Means *reader be careful*. In this situation, you might do something that could result in equipment damage or loss of data.



### Tip

Means *the following information might help you solve a problem*.



### Timesaver

Means the *described action saves time*. You can save time by performing the action described in the paragraph.

# Obtaining Documentation

Cisco provides several ways to obtain documentation, technical assistance, and other technical resources. These sections explain how to obtain technical information from Cisco Systems.

## Cisco.com

You can access the most current Cisco documentation on the World Wide Web at this URL:

<http://www.cisco.com/univercd/home/home.htm>

You can access the Cisco website at this URL:

<http://www.cisco.com>

International Cisco websites can be accessed from this URL:

[http://www.cisco.com/public/countries\\_languages.shtml](http://www.cisco.com/public/countries_languages.shtml)

## Documentation CD-ROM

Cisco documentation and additional literature are available in a Cisco Documentation CD-ROM package, which may have shipped with your product. The Documentation CD-ROM is updated regularly and may be more current than printed documentation. The CD-ROM package is available as a single unit or through an annual or quarterly subscription.

Registered Cisco.com users can order a single Documentation CD-ROM (product number DOC-CONDOCCD=) through the Cisco Ordering tool:

[http://www.cisco.com/en/US/partner/ordering/ordering\\_place\\_order\\_ordering\\_tool\\_launch.html](http://www.cisco.com/en/US/partner/ordering/ordering_place_order_ordering_tool_launch.html)

All users can order annual or quarterly subscriptions through the online Subscription Store:

<http://www.cisco.com/go/subscription>

Click Subscriptions & Promotional Materials in the left navigation bar.

## Ordering Documentation

You can find instructions for ordering documentation at this URL:

[http://www.cisco.com/univercd/cc/td/doc/es\\_inpc/pdi.htm](http://www.cisco.com/univercd/cc/td/doc/es_inpc/pdi.htm)

You can order Cisco documentation in these ways:

- Registered Cisco.com users (Cisco direct customers) can order Cisco product documentation from the Networking Products Marketplace:

<http://www.cisco.com/en/US/partner/ordering/index.shtml>

- Nonregistered Cisco.com users can order documentation through a local account representative by calling Cisco Systems Corporate Headquarters (California, USA) at 408 526-7208 or, elsewhere in North America, by calling 800 553-NETS (6387).

# Documentation Feedback

You can submit e-mail comments about technical documentation to [bug-doc@cisco.com](mailto:bug-doc@cisco.com).

You can submit comments by using the response card (if present) behind the front cover of your document or by writing to the following address:

Cisco Systems  
Attn: Customer Document Ordering  
170 West Tasman Drive  
San Jose, CA 95134-9883

We appreciate your comments.

## Cisco Product Security Overview

Cisco provides a free online Security Vulnerability Policy portal at this URL:

[http://www.cisco.com/en/US/products/products\\_security\\_vulnerability\\_policy.html](http://www.cisco.com/en/US/products/products_security_vulnerability_policy.html)

From this site, you can perform these tasks:

- Report security vulnerabilities in Cisco products.
- Obtain assistance with security incidents that involve Cisco products.
- Register to receive security information from Cisco.

A current list of security advisories and notices for Cisco products is available at this URL:

<http://www.cisco.com/go/psirt>

If you prefer to see advisories and notices as they are updated in real time, you can access a Product Security Incident Response Team Really Simple Syndication (PSIRT RSS) feed from this URL:

[http://www.cisco.com/en/US/products/products\\_psirt\\_rss\\_feed.html](http://www.cisco.com/en/US/products/products_psirt_rss_feed.html)

This product contains cryptographic features and is subject to United States and local country laws governing import, export, transfer and use. Delivery of Cisco cryptographic products does not imply third-party authority to import, export, distribute or use encryption. Importers, exporters, distributors and users are responsible for compliance with U.S. and local country laws. By using this product you agree to comply with applicable laws and regulations. If you are unable to comply with U.S. and local laws, return this product immediately.

A summary of U.S. laws governing Cisco cryptographic products may be found at:

<http://www.cisco.com/wwl/export/crypto/tool/stqrg.html>.

If you require further assistance please contact us by sending email to [export@cisco.com](mailto:export@cisco.com).

## Reporting Security Problems in Cisco Products

Cisco is committed to delivering secure products. We test our products internally before we release them, and we strive to correct all vulnerabilities quickly. If you think that you might have identified a vulnerability in a Cisco product, contact PSIRT:

- Emergencies—[security-alert@cisco.com](mailto:security-alert@cisco.com)
- Nonemergencies—[psirt@cisco.com](mailto:psirt@cisco.com)

**Tip**

We encourage you to use Pretty Good Privacy (PGP) or a compatible product to encrypt any sensitive information that you send to Cisco. PSIRT can work from encrypted information that is compatible with PGP versions 2.x through 8.x.

Never use a revoked or an expired encryption key. The correct public key to use in your correspondence with PSIRT is the one that has the most recent creation date in this public key server list:

<http://pgp.mit.edu:11371/pks/lookup?search=psirt%40cisco.com&op=index&exact=on>

In an emergency, you can also reach PSIRT by telephone:

- 1 877 228-7302
- 1 408 525-6532

## Obtaining Technical Assistance

For all customers, partners, resellers, and distributors who hold valid Cisco service contracts, the Cisco Technical Assistance Center (TAC) provides 24-hour-a-day, award-winning technical support services, online and over the phone. Cisco.com features the Cisco TAC website as an online starting point for technical assistance. If you do not hold a valid Cisco service contract, please contact your reseller.

## Developer Support

The Developer Support Program provides formalized support for Cisco Systems interfaces to enable developers, customers, and partners in the Cisco Service Provider solutions Ecosystem and Cisco AVVID Partner programs to accelerate their delivery of compatible solutions.

The Developer Support Engineers are an extension of the product technology engineering teams. They have direct access to the resources necessary to provide expert support in a timely manner.

For additional information on this program, refer to the Developer Support Program Web Site at [www.cisco.com/go/developer support/](http://www.cisco.com/go/developer%20support/).

Developers using the *SIP Line Messaging Guide* are encouraged to join the Cisco Developer Support Program. This new program provides a consistent level of support while leveraging Cisco interfaces in development projects.

**Note**

Cisco Technical Assistance Center (TAC) support does not include SIP Developer support and is limited to Cisco AVVID installation/configuration and Cisco-developed applications. For more information about the Developer Support Program, please contact Cisco at [developer-support@cisco.com](mailto:developer-support@cisco.com).

## Cisco TAC Website

The Cisco TAC website provides online documents and tools for troubleshooting and resolving technical issues with Cisco products and technologies. The Cisco TAC website is available 24 hours a day, 365 days a year. The Cisco TAC website is located at this URL:

<http://www.cisco.com/tac>

Accessing all the tools on the Cisco TAC website requires a Cisco.com user ID and password. If you have a valid service contract but do not have a login ID or password, register at this URL:

<http://tools.cisco.com/RPF/register/register.do>

## Opening a TAC Case

Using the online TAC Case Open Tool is the fastest way to open P3 and P4 cases. (P3 and P4 cases are those in which your network is minimally impaired or for which you require product information.) After you describe your situation, the TAC Case Open Tool automatically recommends resources for an immediate solution. If your issue is not resolved using the recommended resources, your case will be assigned to a Cisco TAC engineer. The online TAC Case Open Tool is located at this URL:

<http://www.cisco.com/tac/caseopen>

For P1 or P2 cases (P1 and P2 cases are those in which your production network is down or severely degraded) or if you do not have Internet access, contact Cisco TAC by telephone. Cisco TAC engineers are assigned immediately to P1 and P2 cases to help keep your business operations running smoothly.

To open a case by telephone, use one of the following numbers:

Asia-Pacific: +61 2 8446 7411 (Australia: 1 800 805 227)

EMEA: +32 2 704 55 55

USA: 1 800 553-2447

For a complete listing of Cisco TAC contacts, go to this URL:

<http://www.cisco.com/warp/public/687/Directory/DirTAC.shtml>

## TAC Case Priority Definitions

To ensure that all cases are reported in a standard format, Cisco has established case priority definitions.

Priority 1 (P1)—Your network is “down” or there is a critical impact to your business operations. You and Cisco will commit all necessary resources around the clock to resolve the situation.

Priority 2 (P2)—Operation of an existing network is severely degraded, or significant aspects of your business operation are negatively affected by inadequate performance of Cisco products. You and Cisco will commit full-time resources during normal business hours to resolve the situation.

Priority 3 (P3)—Operational performance of your network is impaired, but most business operations remain functional. You and Cisco will commit resources during normal business hours to restore service to satisfactory levels.

Priority 4 (P4)—You require information or assistance with Cisco product capabilities, installation, or configuration. There is little or no effect on your business operations.

# Obtaining Additional Publications and Information

Information about Cisco products, technologies, and network solutions is available from various online and printed sources.

- The Cisco Product Catalog describes the networking products offered by Cisco Systems, as well as ordering and customer support services. Access the Cisco Product Catalog at this URL:

[http://www.cisco.com/en/US/products/products\\_catalog\\_links\\_launch.html](http://www.cisco.com/en/US/products/products_catalog_links_launch.html)

- Cisco Press publishes a wide range of general networking, training and certification titles. Both new and experienced users will benefit from these publications. For current Cisco Press titles and other information, go to Cisco Press online at this URL:

<http://www.ciscopress.com>

- Packet magazine is the Cisco quarterly publication that provides the latest networking trends, technology breakthroughs, and Cisco products and solutions to help industry professionals get the most from their networking investment. Included are networking deployment and troubleshooting tips, configuration examples, customer case studies, tutorials and training, certification information, and links to numerous in-depth online resources. You can access Packet magazine at this URL:

<http://www.cisco.com/packet>

- iQ Magazine is the Cisco bimonthly publication that delivers the latest information about Internet business strategies for executives. You can access iQ Magazine at this URL:

<http://www.cisco.com/go/iqmagazine>

- Internet Protocol Journal is a quarterly journal published by Cisco Systems for engineering professionals involved in designing, developing, and operating public and private internets and intranets. You can access the Internet Protocol Journal at this URL:

[http://www.cisco.com/en/US/about/ac123/ac147/about\\_cisco\\_the\\_internet\\_protocol\\_journal.html](http://www.cisco.com/en/US/about/ac123/ac147/about_cisco_the_internet_protocol_journal.html)

- Training—Cisco offers world-class networking training. Current offerings in network training are listed at this URL:

<http://www.cisco.com/en/US/learning/index.html>





# SIP Standard Line Interface for Release 5.0

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This document describes the external interface for Cisco Unified CallManager SIP line-side devices. It highlights the SIP primitives that are supported on the line-side interface and describes the call flow scenarios that can be used as a guide for technical support and future development considerations.

The purpose of this document is to describe the Cisco Unified CallManager SIP line interface from an external interface point of view. Chapter 2 provides call flow examples for the standard interface.

This chapter includes the following sections:

- [Definitions/Glossary, page 1-2](#)
- [SIP Phones References, page 1-2](#)
- [New and Changed Information, page 1-3](#)
- [Standard Interface Compliance Summary, page 1-3](#)
  - [Proprietary SIP Headers and Identification Services, page 1-6](#)
  - [Supported Media Types, page 1-9](#)
  - [Supported Event Packages, page 1-10](#)
  - [Supported Content Types, page 1-11](#)
- [SIP Message Fields, page 1-11](#)
  - [Request Messages, page 1-11](#)
  - [Response Messages, page 1-13](#)
  - [Message Timers, page 1-16](#)
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  - [Endpoint Returns 486 Busy, page 1-24](#)

# Definitions/Glossary

| Acronym/Word | Definition                                   |
|--------------|----------------------------------------------|
| BLF          | Busy Lamp Field                              |
| Cseq         | Call Sequence Number                         |
| CTI          | Computer Telephony Integration               |
| DNS          | Domain Name Server                           |
| DTMF         | Dual-Tone Multi Frequency                    |
| FECC         | Far-End Camera Control                       |
| FMTP         | Format-Specific Parameters                   |
| FQDN         | Fully Qualified Domain Name                  |
| KPML         | Key Pad Markup Language                      |
| MTP          | Media Termination Point                      |
| MWI          | Message Waiting Indication                   |
| OOB          | Out Of Band                                  |
| OOD          | Out of Dialog                                |
| PRACK        | Provisional Response ACKnowledgment          |
| RDNIS        | Redirected Dialed Number Information Service |
| RPID         | Remote Party Id                              |
| RTT          | Retransmission Time                          |
| SDP          | Session Description Protocol                 |
| SIP          | Session Initiated Protocol                   |
| TLS          | Transport Layer Security                     |
| UAC          | User Agent Client                            |
| UAS          | User Agent Server                            |
| URI          | Uniform Resource Identifier                  |
| URN          | Uniform Resource Name                        |
| VM           | Voice Mail                                   |

## SIP Phones References

In this document, references to “SIP Phones” refer specifically to these Cisco Unified IP Phone models:

- Cisco Unified IP Phones 7911G
- Cisco Unified IP Phone 7941G and 7941G-GE
- Cisco Unified IP Phone 7961G and 7961G-GE
- Cisco Unified IP Phone 7970G
- Cisco Unified IP Phone 7971G-GE

References to all other Cisco Unified IP Phones using SIP line messaging identify the phone by model and protocol; for example, SIP 7960.

# New and Changed Information

This is the first release of the Cisco Unified CallManager SIP Line Messaging Guide (Standard). Although there are no changes from any previous release of this guide, there may be new features introduced and enhancements or fixes made to the SIP line interface in this release that are changes from previous releases of Cisco Unified CallManager.

## Standard Interface Compliance Summary

This section provides details about Cisco Unified CallManager SIP line interface standards compliance. The [“Standard Feature Scenarios” section on page 1-17](#) provides a feature implementation-oriented view of how the system works relative to the SIP line-side implementation. Refer to [Chapter 2, “SIP Basic Line Call Flows for Release 5.0,”](#) for detailed call flows.

Refer to the following tables for SIP line interface compliance:

- [Table 1-1](#) identifies the applicable standards and drafts.
- [Table 1-2](#) and [Table 1-3](#) provide SIP line-side compliance for SIP messages.
- [Table 1-4](#) provides SIP line-side compliance for standard SIP headers.

**Table 1-1**      **Applicable Standards and Drafts - Standard Interface**

| Id                              | Notes                  |
|---------------------------------|------------------------|
| RFC 3261                        | SIP                    |
| RFC 3262                        | PRACK                  |
| RFC 3264                        | SDP offer/answer       |
| RFC 3311                        | UPDATE                 |
| RFC 3515                        | REFER                  |
| RFC 3842                        | MWI Package            |
| RFC 3891                        | Replaces Header        |
| RFC 3892                        | Referred-by Mechanism  |
| draft-levy-sip-diversion-08.txt | Diversion Header       |
| draft-ietf-sip-privacy-04.txt   | Remote-Party-Id Header |

**Table 1-2**      **Compliance to SIP Requests**

| SIP Message | CallManager Supported | Comments                                                                                                           |
|-------------|-----------------------|--------------------------------------------------------------------------------------------------------------------|
| INVITE      | Y                     | Re-INVITE also supported                                                                                           |
| ACK         | Y                     |                                                                                                                    |
| OPTIONS     | Y                     | Cisco Unified CallManager will respond to it if received. Cisco Unified CallManager does not send OPTIONS request. |
| INFO        | Y                     | INFO method is used for video support.                                                                             |
| BYE         | Y                     |                                                                                                                    |

**Table 1-2** *Compliance to SIP Requests (continued)*

| <b>SIP Message</b> | <b>CallManager Supported</b> | <b>Comments</b>                                                                                                                                                                                             |
|--------------------|------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| CANCEL             | Y                            |                                                                                                                                                                                                             |
| SUBSCRIBE          | Y                            | Refer to Supported Event Packages section.                                                                                                                                                                  |
| NOTIFY             | Y                            | Refer to Supported Event Packages section.                                                                                                                                                                  |
| REFER              | Y                            | Inbound REFER as it applies to transfer is supported.<br>Cisco Unified CallManager line side does not generate outbound REFER for transfer.<br><br>Bidirectional support of REFER for remotec is supported. |
| REGISTER           | Y                            |                                                                                                                                                                                                             |
| PRACK              | Y                            | Support for PRACK is configurable.                                                                                                                                                                          |
| UPDATE             | Y                            | Cisco Unified CallManager supports receiving and generating UPDATE.                                                                                                                                         |
| PUBLISH            | N                            |                                                                                                                                                                                                             |

**Table 1-3** *Compliance to SIP Responses*

| <b>SIP Message</b>     | <b>CallManager Supported</b> | <b>Comments</b>                                                                                                                                                                         |
|------------------------|------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 1xx Response           | Y                            |                                                                                                                                                                                         |
| 100 Trying             | Y                            |                                                                                                                                                                                         |
| 180 Ringing            | Y                            | Early media is supported.                                                                                                                                                               |
| 181 Call Forward       | N                            | Cisco Unified CallManager ignores this message.                                                                                                                                         |
| 182 Queued             | N                            | Cisco Unified CallManager ignores this message.                                                                                                                                         |
| 183 Progress           | Y                            | Early media is supported.                                                                                                                                                               |
| 2xx Response           | Y                            |                                                                                                                                                                                         |
| 200 OK                 | Y                            |                                                                                                                                                                                         |
| 202 OK                 | Y                            | For REFER                                                                                                                                                                               |
| 3xx Response           | Y                            |                                                                                                                                                                                         |
| 300-302, 305, 380, 385 | Y                            | Does not generate. Contacts new address in Contact header upon receiving.                                                                                                               |
| 4xx Response           | Y                            | Upon receiving, initiates graceful call disconnect.                                                                                                                                     |
| 401                    | Y                            | Cisco Unified CallManager SIP sends out 401 (Unauthorized) if authentication and authorization is enabled. Cisco Unified CallManager SIP also responds to inbound 401 challenges.       |
| 403                    | Y                            | Cisco Unified CallManager SIP sends out 403 (Forbidden) if a SIP method is not on the Access Control List. 403 can also be returned if a method is not supported in a particular state. |

**Table 1-3** *Compliance to SIP Responses (continued)*

| <b>SIP Message</b> | <b>CallManager Supported</b> | <b>Comments</b>                                                                                                  |
|--------------------|------------------------------|------------------------------------------------------------------------------------------------------------------|
| 407                | Y                            | Cisco Unified CallManager SIP responds to inbound 407 (Proxy Authentication Required) challenges.                |
| 5xx Response       | Y                            | Upon receiving, a new request is sent if additional address is present. Otherwise initiates graceful disconnect. |
| 6xx Response       | Y                            | Not generated. Upon receiving, graceful disconnect is initiated.                                                 |

**Table 1-4** *Standard SIP Header Fields*

| <b>SIP Headers</b>  | <b>CallManager Supported</b> | <b>Comments</b>                                                                                                |
|---------------------|------------------------------|----------------------------------------------------------------------------------------------------------------|
| Accept              | Yes                          |                                                                                                                |
| Accept-Encoding     | No                           |                                                                                                                |
| Accept-Language     | No                           |                                                                                                                |
| Alert-Info          | Yes                          | Cisco Unified CallManager sends Alert-Info to indicate internal versus external call.                          |
| Allow               | Yes                          |                                                                                                                |
| Authentication-Info | No                           |                                                                                                                |
| Authorization       | Yes                          |                                                                                                                |
| Call-ID             | Yes                          |                                                                                                                |
| Call-Info           | Yes                          |                                                                                                                |
| Contact             | Yes                          |                                                                                                                |
| Content-Disposition | No                           | Cisco Unified CallManager will ignore if received.<br>Cisco Unified CallManager does not generate this header. |
| Content-Encoding    | No                           |                                                                                                                |
| Content Language    | No                           |                                                                                                                |
| Content-Length      | Yes                          |                                                                                                                |
| Content-Type        | Yes                          | See Supported Content Types.                                                                                   |
| CSeq                | Yes                          |                                                                                                                |
| Date                | Yes                          |                                                                                                                |
| Error-Info          | No                           |                                                                                                                |
| Expires             | Yes                          |                                                                                                                |
| From                | Yes                          |                                                                                                                |
| Max-Forwards        | Yes                          | Cisco Unified CallManager sets to 70 for outgoing INVITE and does not increment/decrement it.                  |
| MIME-Version        | Yes                          | Used with REFER                                                                                                |
| Min-Expires         | Yes                          |                                                                                                                |
| Organization        | No                           |                                                                                                                |

**Table 1-4**      *Standard SIP Header Fields (continued)*

| SIP Headers         | CallManager Supported | Comments                                                                                                   |
|---------------------|-----------------------|------------------------------------------------------------------------------------------------------------|
| Priority            | No                    |                                                                                                            |
| Proxy-Authenticate  | Yes                   | Cisco Unified CallManager SIP supports receiving this header in 407 responses.                             |
| Proxy-Authorization | Yes                   | Cisco Unified CallManager SIP supports sending new request with this header after receiving 407 responses. |
| Proxy-Require       | No                    |                                                                                                            |
| Record-Route        | Yes                   |                                                                                                            |
| Reply-To            | No                    |                                                                                                            |
| Require             | Yes                   |                                                                                                            |
| Retry-After         | Yes                   | Send it but ignore receiving it.                                                                           |
| Route               | Yes                   |                                                                                                            |
| Server              | Yes                   |                                                                                                            |
| Subject             | No                    |                                                                                                            |
| Supported           | Yes                   |                                                                                                            |
| Timestamp           | Yes                   |                                                                                                            |
| To                  | Yes                   |                                                                                                            |
| Unsupported         | Yes                   |                                                                                                            |
| User-Agent          | Yes                   |                                                                                                            |
| Via                 | Yes                   |                                                                                                            |
| Warning             | Yes                   |                                                                                                            |
| WWW-Authenticate    | Yes                   |                                                                                                            |

## Proprietary SIP Headers and Identification Services

The following table lists the proprietary header fields for the standard SIP line-side interface. Refer to the [“Remote-Party-ID Header” section on page 1-7](#) for additional information.

**Table 1-5**      *Proprietary SIP Header Fields*

| SIP Headers     | CallManager Supported | Comments                                                                                                                                                                                                                                                                                   |
|-----------------|-----------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Diversion       | Yes                   | Used for RDNIS information. If it is present, it is always the Original Called Party info. The receiving side of this header always assumes it is the Original Called Party info if present. In case of chained-forwarding to a VM, the message will be left to the Original Called Party. |
| Remote-Party-ID | Yes                   | Used for ID services including Connected Name & ID. Nonstandard draft but included in Standard Feature Scenarios anyway.                                                                                                                                                                   |

## Remote-Party-ID Header

This section describes the SIP Identification Services in the Cisco Unified CallManager for the SIP line. This includes both Line and Name Identification Services:

- Line Identification Services include Calling Line and Connected Line Directory Number.
- Name identification Services include Calling Line Name, Alerting Line Name, and Connected Line Name.

The Remote-Party-ID header is used to provide ID services. This header is specified in draft-ietf-sip-privacy-03.txt.

The Cisco Unified CallManager provides flexible configuration options for the endpoint to provide both Alerting Line Name and/or the Connected Line Name. This section does not describe those configuration options; it only provides the details on how Cisco Unified CallManager sends and receives these ID services to and from the SIP endpoint. The Remote-Party-ID header contains a display name with an address specification followed by optional parameters. The display carries the name while the user part of the address carries the number.



### Note

Although Remote-Party-ID header is nonstandard, it is implemented by a large number of vendors and is included in most of Cisco's SIP products. Therefore, it is included in the standard section of this document even though it is effectively proprietary. Use of this header is not negotiated. It should be ignored if not understood.

[Table 1-6](#) captures support levels for various identification parameters. The following topics are covered in subsequent sections:

- [Calling Line and Name Identification Presentation, page 1-8](#)
- [Calling Line and Name Identification Restriction, page 1-8](#)
- [Connected Line and Name Identification Presentation, page 1-8](#)
- [Connected Line and Name Identification Restriction, page 1-9](#)

**Table 1-6 Identification Parameters Support**

| Parameter | Values     | Notes                                                                                                                                             |
|-----------|------------|---------------------------------------------------------------------------------------------------------------------------------------------------|
| party     | calling    | Ignored if received by Cisco Unified CallManager.                                                                                                 |
|           | called     | Set to called for outgoing INVITE or UPDATE from Cisco Unified CallManager. Set to calling for outgoing responses from Cisco Unified CallManager. |
| id-type   | subscriber | Ignored if received by Cisco Unified CallManager.                                                                                                 |
|           | user term  | Set to subscriber for outgoing requests and responses.                                                                                            |
| privacy   | full       | Supported if received by Cisco Unified CallManager.                                                                                               |
|           | name       | Cisco Unified CallManager will also support sending all values in either INVITE or UPDATE requests and responses for the same.                    |
|           | uri        |                                                                                                                                                   |
|           | off        |                                                                                                                                                   |
| screen    | no         | Ignored if received by Cisco Unified CallManager.                                                                                                 |
|           | yes        | Cisco Unified CallManager always sends yes when generating an Remote-Party-ID header.                                                             |

## Calling Line and Name Identification Presentation

The Calling Line (Number) and Name are included in both the From header and optionally in the Remote-Party-ID headers in the initial INVITE message from the endpoint. For example, an incoming INVITE from an endpoint with directory number, 69005, and a Caller Id, “sip line”, for an outbound call will have the following Remote-Party-ID and From headers:

```
Remote-Party-ID: "sip line"
<sip:69005@10.10.10.2>;party=calling;id-type=subscriber;privacy=off;screen=yes
From: "sip line" <sip:69005@10.10.10.2>;tag=1234
```

## Calling Line and Name Identification Restriction

The SIP Line (Number) and Name restrictions are conveyed using the privacy parameter. If neither is restricted, privacy is specified as off. The other values of privacy (name, uri, and full) are detailed below with their impact on the various values in the From and Remote-Party-ID headers:

### name

Name Restrict only – When name is restricted, the display field (Calling Name) in “From” header is set to “Anonymous”. The display field in the “Remote-Party-ID” header still includes the actual name but the privacy field is set to “name”. For example:

```
Remote-Party-ID: "Anonymous"
<sip:69005@10.10.10.2>;party=calling;id-type=subscriber;privacy=name;screen=yes
From: "Anonymous" <sip:69005@10.10.10.2>;tag=1234
```

### uri

Number Restrict only – When number is restricted, the calling Line is set to “Anonymous” out in the “From” header; however, it is still included in the “Remote-Party-ID” header with privacy=uri. For example:

```
Remote-Party-ID: "sip line"
<sip:69005@10.10.10.2>;party=calling;id-type=subscriber;privacy=uri;screen=yes
From: "sip line" <sip:Anonymous@10.10.10.2>;tag=1234
```

### full

Both Name and Number Restrict – When both name and number are restricted, the same principle applies with privacy=full.

```
Remote-Party-ID: "sip line"
<sip:69005@10.10.10.2>;party=calling;id-type=subscriber;privacy=full;screen=yes
From: "Anonymous" <sip:Anonymous@10.10.10.2>;tag=1234
```

## Connected Line and Name Identification Presentation

Connected Line/Name Identification is a supplementary service that provides the called or connected party number and name.

Cisco Unified CallManager uses the Remote-Party-ID header in 18x, 200, re-INVITE, and UPDATE messages to convey the connected name and number information. In this example, an endpoint placed a call to 9728135001. Cisco Unified CallManager determined that this number is for “Bob Jones” and sent that back to the originator in a 180 or 183.

```
Remote-Party-ID: "Bob Jones" <sip:
9728135001@10.10.10.2>;party=called;screen=yes;privacy=off
```

## Connected Line and Name Identification Restriction

Similar to Calling ID services, the RPID can restrict the connected number and/or the name independently.

### name

Name Restrict only – When name is restricted, the connected name is still included with privacy=name. For example:

```
Remote-Party-ID: "Bob Jones"<9728135001@localhost; user=phone>;
party=called;screen=no;privacy=name
```

### uri

Number Restrict only – When number is restricted, the connected number is still included with privacy=uri. For example:

```
Remote-Party-ID: "Bob Jones"<9728135001@localhost; user=phone>;
party=called;screen=no;privacy=uri
```

### full

Both Name and Number Restrict – When both name and number are restricted, both information parameters are included with privacy=full. For example:

```
Remote-Party-ID: "Bob Jones"<9728135001@localhost; user=phone>;
party=called;screen=no;privacy=full
```

## Supported Media Types

Refer to the following tables for supported media types at the SIP line interface:

- For supported audio media types, see [Table 1-7](#).
- For supported video media types, see [Table 1-8](#).
- For supported application media types, see [Table 1-9](#).
- For supported T38fax media types, see [Table 1-10](#).

**Table 1-7**      **Supported Audio Media Types**

| Type          | Encoding Name   | Payload Type         | Comments                                  |
|---------------|-----------------|----------------------|-------------------------------------------|
| G.711 u-law   | PCMU            | 0                    |                                           |
| GSM Full-rate | GSM             | 3                    |                                           |
| G.723.1       | G723            | 4                    |                                           |
| G.711 A-law   | PCMA            | 8                    |                                           |
| G.722         | G722            | 9                    |                                           |
| G.728         | G728            | 15                   |                                           |
| G.729         | G729            | 18                   | Support all combinations of annex A and B |
| RFC2833 DTMF  | Telephony-event | Dynamically Assigned | Acceptable range is 96-127                |

**Table 1-8 Supported Video Media Types**

| Types   | Encoding Name | Payload Type               |
|---------|---------------|----------------------------|
| H.261   | H261          | 31                         |
| H.263   | H263          | 34                         |
| H.263+  | H263-1998     | Acceptable range is 96-127 |
| H.263++ | H263-2000     | Acceptable range is 96-127 |
| H.264   | H264          | Acceptable range is 96-127 |

**Table 1-9 Supported Application Media Types**

| Types      | Encoding Name | Payload Type               |
|------------|---------------|----------------------------|
| H.224 FECC | H224          | Acceptable range is 96-127 |

**Table 1-10 Supported T38fax Payload Types**

| Types  | Encoding Name | Payload Type |
|--------|---------------|--------------|
| T38fax | Not applied   | Not applied  |

## Supported Event Packages

Table 1-11 provides supported event packages at the SIP line interface.

**Table 1-11 Supported Event Packages**

| Event Package   | Supported | Subscription or Unsolicited | Comments                                                                                                    |
|-----------------|-----------|-----------------------------|-------------------------------------------------------------------------------------------------------------|
| message-summary | Yes       | Unsolicited                 | Used for Message Waiting Indication notifications                                                           |
| kpml            | Yes       | Subscription                | Used for digit collection and DTMF relay                                                                    |
| dialog          | Yes       | Subscription                | Used for hook status (offhook and onhook only)<br>Used for shared line remote state notifications           |
| presence        | Yes       | Subscription                | Used for BLF speed dials<br>Used for missed, placed, and received calls as well as other directory services |
| refer           | Yes       | Subscription                | Used to carry sipfrag responses during call transfer<br>Used to carry remotec responses                     |
| service-control | Yes       | Unsolicited                 | Used to send service control notifications to the endpoint                                                  |

## Supported Content Types

Table 1-12 provides supported content types at the SIP line interface.

**Table 1-12**      **Supported Content Types**

| Content Type                              | Comments                                          |
|-------------------------------------------|---------------------------------------------------|
| text/plain                                | See message-summary and service-control packages. |
| message/sipfrag;version=2.0               | See refer package as used for transfer.           |
| application/pdf+xml                       | See presence package.                             |
| application/dialog-info+xml               | See dialog package.                               |
| application/kpml-request+xml              | See kpml package.                                 |
| application/kpml-response+xml             | See kpml package.                                 |
| application/x-cisco-remotecc-request+xml  | See refer package and remotecc.                   |
| application/x-cisco-remotecc-response+xml | See refer package and remotecc.                   |
| application/x-cisco-remotecc-cm+xml       | See refer package and remotecc.                   |
| application/x-cisco-servicecontrol        | See service-control package.                      |
| multipart/mixed                           | See refer package and remotecc.                   |

## SIP Message Fields

Cisco Unified CallManager SIP line supports request messages and response messages. The request messages include INVITE, ACK, OPTIONS, BYE, CANCEL, PRACK and UPDATE methods. The response message consists of the status line with various status codes (1xx, 2xx, 3xx, 4xx, 5xx and 6xx). SIP line supports all mandatory fields in the SIP standard interface.

## Request Messages

The following sections provide individual summaries for some types of SIP requests. These sections examine the dialog-initiating requests. The values used by midcall transactions can be deduced from these requests. Consult the call flows in [Chapter 2, “SIP Basic Line Call Flows for Release 5.0,”](#) for additional information.

The SIP Request messages detailed in this section include:

- [INVITE, page 1-12](#)
- [ACK, page 1-13](#)

## INVITE

**Table 1-13** *INVITE Message Fields*

| Message Lines                                                 | Variable | Incoming<br>(to Cisco Unified CallManager)     | Outgoing<br>(from Cisco Unified CallManager)       |
|---------------------------------------------------------------|----------|------------------------------------------------|----------------------------------------------------|
| <b>INVITE</b><br>sip:userpart@destIP:destPort SIP/2.0         | userpart | Called Party Number                            | Calling Party Number                               |
|                                                               | destIP   | Cisco Unified CallManager's IP address or FQDN | Endpoint's IP address                              |
|                                                               | destPort | Cisco Unified CallManager's SIP port           | Endpoint's SIP port                                |
| <b>Via:</b><br>SIP/2.0/UDP ip:port;Branch=number              | ip       | Endpoint's IP address                          | Cisco Unified CallManager's IP address             |
|                                                               | port     | Endpoint's SIP port                            | Cisco Unified CallManager's SIP port               |
|                                                               | number   | Endpoint's branch number                       | Cisco Unified CallManager's branch number          |
| <b>From:</b><br>"display" <sip:userpart@ip>;tag=from-tag      | display* | Calling Party Name                             | Calling Party Name                                 |
|                                                               | userpart | Calling Party Number                           | Calling Party Number                               |
|                                                               | ip       | Cisco Unified CallManager's IP address or FQDN | Cisco Unified CallManager's IP address             |
|                                                               | from-tag | Endpoint's local tag                           | Cisco Unified CallManager's local tag              |
| <b>To:</b> <sip:userpart@destIP>                              | userpart | Called Party Number                            | Called Party Number                                |
|                                                               | destIP   | Cisco Unified CallManager's IP address or FQDN | Endpoint's IP address                              |
| <b>Remote-Party-ID:</b><br>"display" <sip:userpart@ip>;params | display  | Calling Party Name                             | Calling Party Name                                 |
|                                                               | userpart | Calling Party Number                           | Calling Party Number                               |
|                                                               | ip       | Endpoint's IP address                          | Cisco Unified CallManager's IP address             |
|                                                               | params   | Varies per Endpoint                            | Varies per Cisco Unified CallManager configuration |
| <b>Call-ID:</b> string                                        | string   | Endpoint-generated string                      | Cisco Unified CallManager generated string         |
| <b>Contact:</b> <sip:userpart@ip:port >                       | userpart | Calling Party Number                           | Calling Party Number                               |
|                                                               | ip       | Endpoint's IP address                          | Cisco Unified CallManager's IP address             |
|                                                               | port     | Endpoint's port                                | Cisco Unified CallManager's port                   |
| <b>Cseq:</b> number method                                    | number   | sequence number                                | sequence number                                    |
|                                                               | method   | SIP method                                     | SIP method                                         |
| <b>Max-Forwards:</b> number                                   | number   | Max forwards                                   | Max forwards                                       |

**Table 1-13** *INVITE Message Fields (continued)*

| Message Lines | Variable | Incoming<br>(to Cisco Unified CallManager) | Outgoing<br>(from Cisco Unified CallManager)           |
|---------------|----------|--------------------------------------------|--------------------------------------------------------|
| SDP [sdp]     | sdp      | Endpoint's SDP                             | Cisco Unified CallManager typically uses delayed media |

\*. Any display field in any SIP header can be encoded as ASCII or Unicode.

## ACK

The ACK message values will reflect the values established by the INVITE/18x/200 message sequence. Note that the ACK may contain SDP and Remote-Party-ID header.

## Response Messages



### Note

The order of the outgoing and incoming columns are switched in the following table compared to the table above for the INVITE messages. This way the columns are aligned according to dialog across these tables; in other words, an incoming INVITE to Cisco Unified CallManager results in an outgoing 180.

The SIP Response messages detailed in this section include:

- [180 Ringing, page 1-13](#)
- [183 Session Progress, page 1-14](#)
- [2xx, page 1-14](#)

## 180 Ringing

**Table 1-14** *180 Ringing Message Fields*

| Message Lines                                 | Variable | Outgoing<br>(from Cisco Unified CallManager) | Incoming<br>(to Cisco Unified CallManager) |
|-----------------------------------------------|----------|----------------------------------------------|--------------------------------------------|
| <b>SIP/2.0 180 Ringing</b>                    |          |                                              |                                            |
| <b>Via:</b> SIP/2.0/UDP ip:port;Branch=number | ip       | Endpoint's IP address                        | Cisco Unified CallManager's IP address     |
|                                               | port     | Endpoint's SIP port                          | Cisco Unified CallManager's SIP port       |
|                                               | number   | Endpoint's branch number                     | Cisco Unified CallManager's branch number  |

**Table 1-14** 180 Ringing Message Fields (continued)

| Message Lines                                                 | Variable | Outgoing<br>(from Cisco Unified<br>CallManager)      | Incoming<br>(to Cisco Unified CallManager)                               |
|---------------------------------------------------------------|----------|------------------------------------------------------|--------------------------------------------------------------------------|
| <b>From:</b><br>"display"<sip:userpart@ip>;tag=from-tag       | display  | Calling Party Name                                   | Calling Party Name                                                       |
|                                                               | userpart | Calling Party Number                                 | Calling Party Number                                                     |
|                                                               | ip       | Cisco Unified CallManager's<br>IP address or FQDN    | Cisco Unified CallManager's<br>IP address                                |
|                                                               | from-tag | Endpoint's local tag                                 | Cisco Unified CallManager's<br>local tag                                 |
| <b>To:</b> <sip:userpart@destIP>;tag=to-tag                   | userpart | Called Party Number                                  | Called Party Number                                                      |
|                                                               | destIP   | Cisco Unified CallManager's<br>IP address or FQDN    | Endpoint's IP address                                                    |
|                                                               | to-tag   | Cisco Unified CallManager's<br>local tag             | Endpoint's local tag                                                     |
| <b>Remote-Party-ID:</b><br>"display" <sip:userpart@ip>;params | display  | Called Party Name                                    | Called Party Name                                                        |
|                                                               | userpart | Called Party Number                                  | Called Party Number                                                      |
|                                                               | ip       | Cisco Unified CallManager's<br>IP address            | Endpoint's IP address                                                    |
|                                                               | params   | Varies per Cisco Unified CM<br>processing            | Varies per endpoint processing                                           |
| <b>Call-ID:</b> string                                        | string   | Endpoint-generated string<br>from the initial INVITE | Cisco Unified<br>CallManager-generated string<br>from the initial INVITE |
| <b>Contact:</b> <sip:userpart@ip:port >                       | userpart | Called Party Number                                  | Called Party Number                                                      |
|                                                               | ip       | Cisco Unified CallManager's<br>IP address            | Endpoint's IP address                                                    |
|                                                               | port     | Cisco Unified CallManager's<br>port                  | Endpoint's port                                                          |
| <b>Cseq:</b> number INVITE                                    | number   | Sequence number from initial<br>INVITE               | Sequence number from initial<br>INVITE                                   |

## 183 Session Progress

The 183 is used to establish early media. Cisco Unified CallManager will include SDP in a 183 sent to an endpoint. The Remote-Party-ID header may have changed as well. Otherwise, a 183 has the same values as a 180.

## 2xx



### Note

Most of the 2XX values are the same as 180; except, of course, 200 carries SDP. Also, the Remote-Party-ID may have changed after 18x was sent.

Table 1-15 2XX Message Fields

| Message Lines                                           | Variable | Outgoing<br>(from Cisco Unified<br>CallManager)   | Incoming<br>(to Cisco Unified CallManager)                         |
|---------------------------------------------------------|----------|---------------------------------------------------|--------------------------------------------------------------------|
| <b>SIP/2.0 200 OK</b>                                   |          |                                                   |                                                                    |
| <b>Via:</b> SIP/2.0/UDP ip:port;Branch=number           | ip       | Endpoint's IP address                             | Cisco Unified CallManager's IP address                             |
|                                                         | port     | Endpoint's SIP port                               | Cisco Unified CallManager's SIP port                               |
|                                                         | number   | Endpoint's branch number                          | Cisco Unified CallManager's branch number                          |
| <b>From:</b><br>"display"<sip:userpart@ip>;tag=from-tag | display  | Calling Party Name                                | Calling Party Name                                                 |
|                                                         | userpart | Calling Party Number                              | Calling Party Number                                               |
|                                                         | ip       | Cisco Unified CallManager's IP address or FQDN    | Cisco Unified CallManager's IP address                             |
|                                                         | from-tag | Endpoint's local tag                              | Cisco Unified CallManager's local tag                              |
| <b>To:</b> <sip:userpart@destIP>;tag=to-tag             | userpart | Called Party Number                               | Called Party Number                                                |
|                                                         | destIP   | Cisco Unified CallManager's IP address or FQDN    | Endpoint's IP address                                              |
|                                                         | to-tag   | Cisco Unified CallManager's local tag             | Endpoint's local tag                                               |
| Remote-Party-ID:<br>"display" <sip:userpart@ip>;params  | display  | Called Party Name                                 | Called Party Name                                                  |
|                                                         | userpart | Called Party Number                               | Called Party Number                                                |
|                                                         | ip       | Cisco Unified CallManager's IP address            | Endpoint's IP address                                              |
|                                                         | params   | Varies per Cisco Unified CallManager processing   | Varies per endpoint processing                                     |
| <b>Call-ID:</b> string                                  | string   | Endpoint-generated string from the initial INVITE | Cisco Unified CallManager-generated string from the initial INVITE |
| <b>Contact:</b> <sip:userpart@ip:port >                 | userpart | Called Party Number                               | Called Party Number                                                |
|                                                         | ip       | Cisco Unified CallManager's IP address            | Endpoint's IP address                                              |
|                                                         | port     | Cisco Unified CallManager's port                  | Endpoint's port                                                    |
| <b>Cseq:</b> number INVITE                              | number   | Sequence number from initial INVITE               | Sequence number from initial INVITE                                |
| <b>SDP</b> [sdp]                                        | sdp      | Cisco Unified CallManager's SDP                   | Endpoint's SDP                                                     |

## Message Timers

The following timers are service parameters that are configurable in Cisco Unified CallManager Administration. Cisco Unified CallManager maintains the following configuration data for the SIP timers.

**Table 1-16**      *Message Timers*

| Message    | Value (Default/Range) | Definition                                                                                                      |
|------------|-----------------------|-----------------------------------------------------------------------------------------------------------------|
| trying     | 500 ms/100-1000ms     | The time to wait for a 100 response to an INVITE request                                                        |
| connect    | 500 ms / 100-1000ms   | The time to wait for a 200 response to an ACK request                                                           |
| disconnect | 500 ms / 100-1000ms   | The time to wait for a 200 response to a BYE request                                                            |
| expires    | 3 min/ 1-5 min        | Limits the time duration for which an INVITE is valid                                                           |
| rel1xx     | 500 ms / 100-1000ms   | The amount of time that Cisco Unified CallManager should wait before retransmitting the reliable 1xx responses. |
| prack      | 500 ms / 100-1000ms   | The amount of time that Cisco Unified CallManager should wait before retransmitting the PRACK request.          |
| notify     | 500 ms / 100-1000ms   | The amount of time that Cisco Unified CallManager should wait before retransmitting the Notify message.         |

## Message Retry Counts

All the following retry counts are service parameters that are configurable in Cisco Unified CallManager Administration. Cisco Unified CallManager maintains the following configuration data for the SIP retries. In case of TCP transportation type, the timers will still pop as usual. In the event of timeout, however, the stack won't retransmit; it will rely instead on TCP itself to do the retry.

**Table 1-17**      *Message Retry Counts*

| Counter              | Default Value | Suggested Range | Definition                              |
|----------------------|---------------|-----------------|-----------------------------------------|
| Invite retry count   | 5             | 1 – 10          | Number of INVITE retries                |
| Response retry count | 6             | 1 – 10          | Number of RESPONSE retries              |
| Bye retry count      | 10            | 1 – 10          | Number of BYE retries                   |
| Cancel retry count   | 10            | 1 – 10          | Number of Cancel retries                |
| PRACK retry count    | 6             | 1 – 10          | Number of PRACK retries                 |
| Rel1xx retry count   | 10            | 1 – 10          | Number of Reliable 1xx response retries |
| Notify retry count   | 6             | 1 – 10          | Number of NOTIFY retries                |

# Standard Feature Scenarios

This section provides details with respect to overall flow and handling of standard SIP features on the Cisco Unified CallManager line-side interface. This includes, but is not limited to, the following features:

- [Registration, page 1-17](#)
- [Basic Call, page 1-19](#)
- [Simple Hold and Resume, page 1-19](#)
- [Transfer, page 1-20](#)
- [Three-Way Calling, page 1-22](#)
- [Call Forwarding, page 1-22](#)
- [Message Waiting Indication, page 1-23](#)
- [Endpoint Returns 302 Redirect, page 1-23](#)
- [Endpoint Returns 486 Busy, page 1-24](#)

For scenario descriptions and associated call flows, refer to [Chapter 2, “SIP Basic Line Call Flows for Release 5.0.”](#)

## Registration

Cisco Unified CallManager supports standard RFC3261 registration from any compliant SIP phone. Because Cisco Unified CallManager is a B2BUA, however, it must be able to uniquely identify the registering device in order to match that device with a configuration entry in the database. Furthermore, Cisco Unified CallManager must be able to identify the originating device (and line) for all other SIP requests it receives (INVITE, REFER, SUBSCRIBE, and so on) in order to authorize, filter, and route the message. Since standard SIP does not provide a consistent and unambiguous mechanism for identifying the originating device, for standard registration, Cisco Unified CallManager relies on the HTTP digest user ID to identify the sending device.

Knowledge of the sending device and line allows Cisco Unified CallManager to apply various routing, authorization, and filtering logic to incoming registrations, subscriptions, and invites.

TCP and UDP transports are supported for Standard registration, but not TLS.

## Source Device ID for RFC3261-Compliant Phones

Cisco Unified CallManager needs to uniquely identify the device sending the REGISTER message in order to apply authentication, routing, and filtering. The Contact IP address cannot be used because it can change dynamically if DHCP is used. Instead, Cisco Unified CallManager uses the HTTP digest user ID. Each device configured in Cisco Unified CallManager requires a unique digest user ID. When the device sends the REGISTER, Cisco Unified CallManager will immediately respond with a 401 challenge in order to get the Authentication header. The user ID from the authentication header is used to find the configuration entry in the database. If the third-party phone is not configured with the correct user ID, or the user ID is not associated with the device in the Cisco Unified CallManager database, Cisco Unified CallManager will respond with a 404 Not Found.

## MultiLine Registration

Multiple lines can register with Cisco Unified CallManager as long as they each have a different directory number. The directory number must appear in the To and From header of the REGISTER and it must be numeric.

## REGISTER Refresh (Keepalive)

Cisco Unified CallManager uses REGISTER refreshes as keepalive messages to ensure the phone is still alive and connected. When the phone first registers with Cisco Unified CallManager, the 200OK response will include an Expires header with the configured keepalive interval. The phone must send a REGISTER refresh within this interval with the same Call ID, Contact IP address, and Contact port number. If Cisco Unified CallManager fails to receive a keepalive message within the configured interval (default 120 seconds), it will unregister the phone internally so no calls can originate from or terminate to the phone.

## Device Binding

Once the device has been identified by the digest user ID, a binding is created within Cisco Unified CallManager between that device ID and the transport address. This binding is created because Cisco Unified CallManager must identify the sending device for all subsequent requests from the phone (INVITE, REFER, SUBSCRIBE, etc.) and these requests do not contain the device ID. However, these requests do contain source transport information, so the binding is created between the device ID and the transport information. The transport information used is different for UDP and TCP.

For UDP, the binding is created between the device ID and the IP address and port number in the Contact header. After the first REGISTER message is sent, it is important that all subsequent requests use the same IP address and port number in the Contact header. If it changes, a 5xx error response will be returned because the message can not be routed by Cisco Unified CallManager.

For TCP, a combination of Contact binding and TCP connection binding is used. When a device registers over a TCP connection, Cisco Unified CallManager cannot determine whether the TCP connection will be transient (new connection used for each transaction) or persistent. Therefore, Cisco Unified CallManager initially binds the device ID to the Contact IP address and port number. After several transactions have been sent over the same TCP connection, it is considered “proved-in” and marked persistent. At this point, a binding is created between the device ID and the TCP connection.

## Multiple Bindings for the Same AOR

Cisco Unified CallManager has a minor deviation from RFC3261 for the case of multiple registration bindings for a single address of record. Under the Cisco Unified CallManager architecture, if three devices are configured to have a shared line at 321-1000, each will register a contact in the form of: 3211000@ip:port for that line. Each device will have its own unique IP address, and thus have a unique contact for that line. RFC3261 states that upon registration, all known contact bindings shall be returned to the registering entity in the 200OK response. Cisco Unified CallManager will only return the contact binding of the registering device during each registration; it will not enumerate other bindings it knows about for a given AOR during registration. A registering endpoint should not rely on the binding list returned in the 200OK as an exhaustive list for all bindings associated with the AOR. In addition, an endpoint cannot modify bindings for another device through Cisco Unified CallManager; it can only refresh or delete its own binding.

## Redundancy

The SIP phone should follow the DNS-SRV procedures described in RFC 3263 to achieve load balancing and redundancy. In order to work properly with Cisco Unified CallManager, the nodes listed in the SRV record must match the nodes configured in the Cisco Unified CallManager Group configuration assigned to the SIP device in the Cisco Unified CallManager database. It is the responsibility of the administrator to keep the SRV record synchronized with the Cisco Unified CallManager Group configuration. If the SRV query returns an address which is not part of the Cisco Unified CallManager Group for the device, and the phone attempts to register to that Cisco Unified CallManager, registration will fail. If an SRST node is configured in the Device Pool for the SIP phone, it can also be included in the SRV record, but only UDP is supported.

Cisco Unified CallManager uses a device-oriented approach to registration and redundancy. All lines on a single phone must register to the same Cisco Unified CallManager node, and when a failure is detected, all lines on the phone must fail over to the same secondary node. Registering the same line on more than one node is not allowed, nor is registering different lines from one physical device to different Cisco Unified CallManager nodes. Therefore, all lines on a given SIP phone must have the same DNS-SRV configuration. Load balancing is allowed on a device basis, so different SIP phones can have different DNS-SRV configurations.

A Cisco Unified CallManager node will not accept requests (other than REGISTER) from a SIP phone unless the phone is actively registered on that node. Therefore, the phone should send all non-REGISTER requests only to the actively registered node. If the active Cisco Unified CallManager fails and the phone is using UDP transport, there will be some delay (less than or equal to the registration refresh interval) until the phone detects the failure and re-registers with then next Cisco Unified CallManager in the SRV list. The Cisco Unified CallManager uses a short register refresh interval (default is 120 seconds), so it is likely that the failure will be detected before a call is attempted. However, if a shorter outage window is desired, the refresh interval can be changed in the SIP Station Keepalive Interval Service Parameter for the CallManager service. Note that this applies to all SIP stations and may affect call capacity.

Typically when DNS-SRV is used, the DNS-SRV FQDN is included in the Request-URI for requests sent from the SIP phone to the CCM. If this is the case, the Cluster Fully Qualified Domain Name Enterprise Parameter must be updated to include the SRV FQDN. Otherwise, the address in the Request-URI will not be recognized as belonging to the Cisco Unified CallManager cluster, and the request will be rejected.

## Basic Call

Cisco Unified CallManager follows the procedures described in RFC 3261, 3262, and 3264 to establish and clear down basic SIP calls. Note that often, on the outgoing side, Cisco Unified CallManager will send out INVITE without SDP. This allows Cisco Unified CallManager to learn the capabilities of both sides and provide media services in between if necessary (e.g. transcoding).

## Simple Hold and Resume

Cisco Unified CallManager SIP line side supports simple media hold as per RFC 2543 (a.k.a. c = 0) or as per RFCs 3261 and 3264 (a = sendonly or a = inactive).

## Transfer

SIP line-side Transfer uses the REFER message and REFER with an embedded Replaces header as per RFC 3515.

For call transfer, there are three actors: the person being transferred is known as the transferee; the person transferring the call is known as the transferor; and the person receiving the transfer is known as the transfer target or simply the target.

Cisco Unified CallManager supports three types of transfer:

- Attended (a.k.a. Consultative)
- Early Attended
- Blind

### Attended Transfer

With attended transfer, the transferor places the transferee on hold and calls the target. After conversing with the target, the transferor completes the transfer and drops out of the call. The transferee is automatically taken off of hold and connected to the target.

Attended transfer involves two somewhat independent dialogs at the transferor's device up until the time the device sends a REFER with embedded replaces header. When this message is received, Cisco Unified CallManager knows the calls are associated.

Because Cisco Unified CallManager is a B2BUA, a REFER with embedded replaces does not trigger an INVITE with replaces from the transferee to the transfer target. The dialogs between Cisco Unified CallManager and each phone are independent. Instead, Cisco Unified CallManager reINVITEs (and UPDATEs) the transferee and transfer target to connect them together. During this process, the transferor will receive sipfrag NOTIFY messages. After the connection is complete, both dialogs between Cisco Unified CallManager and transferor are BYE'd.

Here is a more detailed view of what happens when the REFER is received:

1. Split transferor and transferee call:
  - reINVITE to disconnect media
2. Split transferor and transfer target call:
  - reINVITE to disconnect media
3. Join transferee and transfer target call legs:
  - reINVITE to connect media
  - UPDATE display name and number via Remote-Party-ID header
4. Clear transferor dialogs

### Early Attended Transfer

With early attended transfer, the transferor places the original call on hold and calls the target. Upon hearing ringback tone, the transferor transfers the call to the target and drops out of both calls. The transferee hears ringback while the target's phone is alerting. When the target answers, a connection is established between transferee and target.

The transferor's call flow, which uses a REFER with embedded replaces header, is based on existing implementation of this feature on the SIP phones and gateways. The problem with this implementation in a peer-to-peer environment is that it doesn't support parallel forking to multiple targets. Version 04 of the replaces draft specifically precludes a UAS from accepting a replaces header that was not initiated by that UA. The receiving UAS is required to return a 481 in that situation. Instead the existing implementation honors the request and replaces the early dialog. That causes it to send a 487 back to the transferor.

**Note**

Please note that version 04 of the replaces draft came after the existing implementation. Nevertheless, we will continue to use this flow in a Cisco Unified CallManager environment for now.

Early attended transfer involves two somewhat independent dialogs at the transferor's device up until the time the device sends a REFER with embedded replaces header. When this message is received, Cisco Unified CallManager knows the calls are associated. Because Cisco Unified CallManager is a B2BUA, a REFER with replaces header does not trigger an INVITE with replaces from the transferee to the transfer target. The dialogs between Cisco Unified CallManager and each phone are independent. Instead, Cisco Unified CallManager reINVITEs (and UPDATES) the transferee and transfer target to connect them together. During this process, the transferor will receive sipfrag NOTIFY messages. After the connection is complete, both dialogs between Cisco Unified CallManager and transferor are BYE'd.

Here is a more detailed view of what happens when the REFER is received:

1. Split transferor and transferee call:
  - reINVITE to disconnect media
2. Split transferor and transfer target call:
  - reINVITE sent to transferor to disconnect media
3. Join transferee and transfer target call legs:
  - reINVITE to connect media
  - UPDATE display name and number via Remote-Party-ID header
  - Clear transferor dialogs

Note that the transferee will **not** hear ringback although the target is alerting.

## Blind Transfer

With blind transfer, the transferor places the original call on hold and dials the target. The transferor then uses SIP REFER to redirect the transferee to the target. No call is made to the target prior to transfer. The timing for when the transferor drops out of the call depends on the transferor's implementation of the feature, but, most likely, the drop occurs when the transferor is notified that the redirect operation was accepted and has begun.

Note that the REFER does not contain an embedded replaces as it does for attended and early attended transfer.

## Three-Way Calling

Many SIP phones support local mixing by the endpoint. For example, the existing SIP implementation on the 7960/40 supports it. And it will continue to work for Cisco Unified CallManager line-side SIP endpoints. In order to support local mixing on the phone, Cisco Unified CallManager must allow the endpoint to have multiple active calls. Cisco Unified CallManager will allow this for SIP endpoints. From Cisco Unified CallManager's perspective, a locally mixed three-way call (or n-way for that matter) just looks like individual active calls. Cisco Unified CallManager is not aware of local mixing. Note that Cisco Unified CallManager conference-related features like Conference List and Remove Last Party do **not** apply.

In a SIP environment, the endpoint hosting a three-way call can drop out and arrange to have the remaining two parties connected together. With SIP this is accomplished using REFER with embedded replaces. Prior to this, there are two calls with four dialogs.

1. A.1 to B call
  - A.1 to Cisco Unified CallManager dialog
  - Cisco Unified CallManager to B dialog
2. A.2 to C call
  - A.2 to Cisco Unified CallManager dialog
  - Cisco Unified CallManager to C dialog

Phone A can drop out of the call by sending an in-dialog REFER on dialog A.1 with an embedded replaces header that specifies dialog A.2. Cisco Unified CallManager will invoke its attended transfer feature, which results in the remaining parties being connected together. Refer to the [“Attended Transfer” section on page 1-20](#) for details regarding the operation of that feature.

## Call Forwarding

Call Forwarding occurs when a call is not answered by the original called party but, instead, is presented to one or more subsequent forwarded parties. There are three types of forwarding supported by Cisco Unified CallManager:

- Call Forward All (also known as Call Forward Unconditional)
- Call Forward No Answer
- Call Forward Busy

Only in the call forward no answer case is the call actually presented to the original called party. Call forward all and call forward busy are detected by Cisco Unified CallManager prior to sending an INVITE to the called party so forwarding bypasses that party. Call forward no answer will be detected via a timer in Cisco Unified CallManager so the canceling of the call to the original called party will be initiated by Cisco Unified CallManager.

Older Cisco SIP phones or third-party SIP phones may elect to implement forward all and forward busy locally on the phone, in which case they will need to use 302 (See [“Endpoint Returns 302 Redirect” section on page 1-23](#)) and 486 (See [“Endpoint Returns 486 Busy” section on page 1-24](#)) response codes, respectively, to the INVITE.

Cisco Unified CallManager informs the calling party that their call has been forwarded via “Remote-Party-ID:” headers in updated 180 messages. The type of forwarding is not communicated to the calling party.

For example:

Remote-Party-ID: "Line 1030 Name"

<sip:1030@172.18.203.78>;party=called;id-type=subscriber;privacy=off;screen=yes

Cisco Unified CallManager indicates forwarding to the called (or current forwarded-to) party using "Diversion:" headers in subsequent INVITEs. Cisco Unified CallManager will report at most two diversion headers. The first will indicate the last forwarding party and the second will indicate the original called party. In a single-hop forwarding case, only a single diversion header will be used since the original called party and last forwarding parties are the same. In a three-or-more-hop case the intermediate parties will not be communicated to the current forwarded-to party. For example:

Diversion: "Line 1020 Name" <sip:1020@172.18.203.99>;reason=**no-answer**;privacy=off;screen=yes

Diversion: "Line 2020 Name"

<sip:2020@172.18.203.99>;reason=**unconditional**;privacy=off;screen=yes

Diversion: "Line 3020 Name" <sip:3020@172.18.203.99>;reason=**user-busy**;privacy=off;screen=yes

The phone may activate Call Forward All via a softkey.

## Message Waiting Indication

Activation of Message Waiting Indication (MWI) on the phone is triggered via an unsolicited NOTIFY from Cisco Unified CallManager. The NOTIFY will have an event type of "message-summary" and a message body with content type of "application/simple-message-summary" and a body containing either "Messages-Waiting: yes" to instruct the phone to turn on its MWI or "Messages-Waiting: no" to instruct the phone to turn off its MWI.

This MWI Notify will be sent any time that Cisco Unified CallManager detects that the phone's MWI status should change. This could occur if a message is left for that subscriber on a connected Voice Mail server and that Voice Mail server informs Cisco Unified CallManager or if all messages are cleared. Additionally, this NOTIFY containing the current MWI state is always sent during registration of a line so that phones with flash memory can be assured of having the latest MWI state known to Cisco Unified CallManager.

## Endpoint Returns 302 Redirect

Because not all SIP phones will support the enhanced call forward all activation behavior to synchronize the call forward all state between the phone and Cisco Unified CallManager, some phones may allow the user to configure a call forward number on the phone locally and then return a 302 to an INVITE instead.

The 302 must contain a "Contact:" header indicating the party to which the call should be forwarded. A phone sending a 302 should also include a "Diversion:" header indicating its own name and number as well as the reason for forwarding.

When Cisco Unified CallManager receives a 302 from a phone, the call will be presented to the next party indicated in the contact header of that 302 with the diversion header from the 302 listed first (assuming the next party is also a SIP device). If that next party also forwards, the diversion header sent in the first 302 may be passed along to subsequent forwarded-to parties if the phone sending the 302 was the original called party.

## Endpoint Returns 486 Busy

All lines on Cisco Unified CallManager can be configured with a “busy trigger”. After the number of active calls to that line reaches the busy trigger, Cisco Unified CallManager will prevent further calls from being presented to that phone by initiating a call forward busy without sending another INVITE to the phone.

However, due to misconfiguration or the potential for calls to exist on the phone that Cisco Unified CallManager is not aware of (for example, a phone in a dialing state that hasn’t yet sent an INVITE), it may be necessary for the phone to manage its own “busy trigger” and autonomously throttle calls. This is accomplished by sending a 486 response code to an INVITE.

Although Cisco Unified CallManager may have Call Forward Busy behavior configured for a line (e.g., forward to DN or forward to voicemail), that behavior will not be exercised when a 486 is received from the phone. Instead, the 486 will be passed back to the original called party.



## SIP Basic Line Call Flows for Release 5.0

This document describes the external interface for Cisco Unified CallManager SIP line side devices. The purpose of this document is to describe the Cisco Unified CallManager SIP basic line side interface from an external interface point of view. It highlights the basic SIP primitives that are supported on the line side interface and also describes the call flow scenarios that can be used as a guide for technical support and future development considerations.

This chapter describes the SIP basic line side call flows introduced or modified in Cisco Unified CallManager Release 5.0. It shows the interfaces and interactions between Cisco Unified CallManager and SIP endpoints for basic calls and supplementary services. The new features and enhancements introduced in this release do not impose any backward compatibility implications on previous versions of the SIP line.

This chapter contains standard SIP call flow scenarios including registration and call processing for Cisco Unified CallManager Release 5.0(4). Each SIP call flow has the same format:

1. A description for the scenario that describes what is happening from the various phone user's perspective.
2. The message sequence charts including the phones and Cisco Unified CallManager nodes involved in the various SIP transactions. Each message sequence chart uses the following conventions:
  - a. Each message is preceded by a dialog identifier and message number relative to the scenario. For example "(d2) [3] INVITE..." indicates that the INVITE is the third message in the sequence and is in the second dialog. Other messages in the same dialog will also have (d2) at the beginning. Also, the message link color is the same for all messages within a dialog.
  - b. Phones are named with letters. For example, Phone A.
  - c. Nodes in the message sequence charts representing phones are labeled with the phone letter and the line number. For example, A 1100 represents line 1100 on phone A.
3. The detailed SIP messages associated with the message sequence chart.

Each message arrow (  ) is clickable. Clicking a message arrow will cause the document to display the detailed message.

Clicking [\[diagram\]](#) above the message will cause the document to display the page with the message sequence chart that contains that message.

## List of Scenarios:

1. Register
  - 1.1 [Register SIP 3rd-Party Phone With 1 Line](#)
  - 1.2 [Register SIP 3rd-Party Phone](#)
2. Basic\_Call
  - 2.1 [Basic Call - SIP Basic calls SIP Basic](#)
  - 2.2 [Basic Call - SIP Basic phone calls an SCCP phone](#)
  - 2.3 [Basic Call - SIP Basic calls SIP Basic - CallerId Restrictions](#)
  - 2.4 [Calling and Connected Name ID](#)
  - 2.5 [Calling and Connected Name ID](#)
  - 2.6 [Multiple Lines Per Phone](#)
  - 2.7 [Multiple Calls Per Line](#)
  - 2.8 [Call Screening \(Normal blocked\)](#)
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  - 2.10 [Basic Call - SIP Basic calls unknown number](#)
  - 2.11 [486 Busy Here](#)
3. Hold\_Resume
  - 3.1 [Basic Call - Call Hold and Resume \(SIP to SIP\)](#)
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4. Conference
  - 4.1 [Three Way Conference Calling \(SIP Basic Phones\)](#)
5. Transfer
  - 5.1 [Transfer Attended \(All SIP Basic phones\)](#)
  - 5.2 [Transfer Semi-Attended \(All SIP Basic phones\)](#)
  - 5.3 [Transfer Unattended \(SIP Basic phones\)](#)
6. Call\_Forwarding
  - 6.1 [Call Forward All](#)
  - 6.2 [Call Forward No Answer](#)
  - 6.3 [Call Forward Busy](#)
  - 6.4 [Call Forward Two Hops](#)
  - 6.5 [302 Redirect](#)
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  - 7.1 [Call Forking](#)
8. Distinctive\_Ringing
  - 8.1 [Alert Info - Internal](#)

## 8.2 [Alert Info - External](#)

### 9. Message\_Waiting\_Indicator

#### 9.1 [Message Waiting Indication On](#)

#### 9.2 [Message Waiting Indication Off](#)

#### 9.3 [Message Waiting Indication On at Registration](#)

#### 9.4 [Message Waiting Indication Off at Registration](#)

## 1. Register

### 1.1 Register SIP 3rd-Party Phone With 1 Line

Title: Register SIP 3rd-Party Phone With 1 Line

Description:

This is the register sequence for a Pingtel xpressa phone model PX-1 configured with 1 line. In order to find the device entry in the CallManager database, the phone must be identified by the HTTP digest user ID. Therefore, CallManager challenges the register to get the Authorization header containing the digest user ID (pingtel). This happens for all 3rd-party phones regardless of whether the SIP Phone Security Profile is configured with digest authorization. The digest user ID must be configured as an End User in the database and associated with the device in the Digest User field of the Phone Configuration page. Also note that each user ID can be associated with only one device when used for 3rd-party configuration.

Configuration:

Node = CCM, IP = 172.18.197.224

Phone = A, Line = 4005, IP = 172.18.197.41, Model = 3rd-Party

Scenario:

Line 4005 registers with CCM

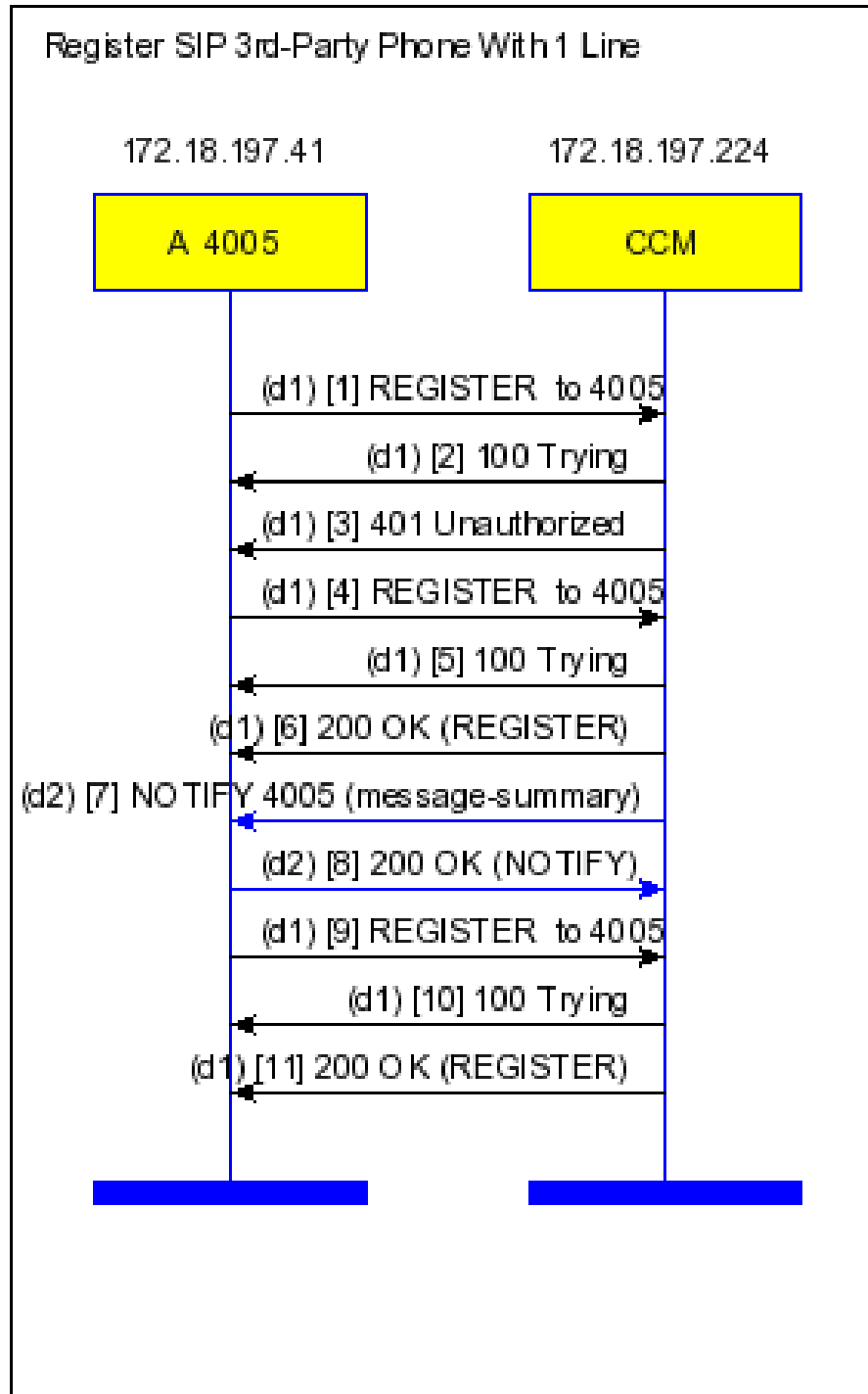
CCM challenges register with 401 response

Line 4005 re-registers with Authorization header

CCM responds with 200 OK

CCM sends MWI status in a NOTIFY request

After 120 sec, Line 4005 sends a register refresh to CCM (keepalive)



[[diagram](#)] [Call-ID: \[prev\]](#) [\[next\]](#)  
**[1] REGISTER sip:172.18.197.224 SIP/2.0**  
 From: sip:4005@172.18.197.224;tag=18222c18222  
 To: sip:4005@172.18.197.224  
 Call-ID: 218f69ff86140a9d87c3d9270638b52c  
 Cseq: 2 REGISTER  
 Contact: <sip:4005@172.18.197.41;LINEID=baecf0034a8caaebbe1e7419f0cbbbfbc>  
 Expires: 240  
 Date: Tue, 07 Nov 2000 05:01:06 GMT  
 Accept-Language: en  
 Supported: sip-cc, sip-cc-01, timer, replaces  
 User-Agent: Pingtel/2.1.10 (VxWorks)  
 Content-Length: 0  
 Via: SIP/2.0/UDP 172.18.197.41

[[diagram](#)] [Call-ID: \[prev\]](#) [\[next\]](#)  
**[2] SIP/2.0 100 Trying**  
 Via: SIP/2.0/UDP 172.18.197.41  
 From: sip:4005@172.18.197.224;tag=18222c18222  
 To: sip:4005@172.18.197.224  
 Date: Thu, 09 Mar 2006 21:48:54 GMT  
 Call-ID: 218f69ff86140a9d87c3d9270638b52c  
 CSeq: 2 REGISTER  
 Content-Length: 0

[[diagram](#)] [Call-ID: \[prev\]](#) [\[next\]](#)  
**[3] SIP/2.0 401 Unauthorized**  
 Via: SIP/2.0/UDP 172.18.197.41  
 From: sip:4005@172.18.197.224;tag=18222c18222  
 To: sip:4005@172.18.197.224;tag=1151178582  
 Date: Thu, 09 Mar 2006 21:48:54 GMT  
 Call-ID: 218f69ff86140a9d87c3d9270638b52c  
 CSeq: 2 REGISTER  
 WWW-Authenticate: DIGEST realm="ccmsipline", nonce="qRk+r8SAejD3gLpMefhVgpl7lnNZNcM", algorithm=MD5  
 Content-Length: 0

[[diagram](#)] [Call-ID: \[prev\]](#) [\[next\]](#)  
**[4] REGISTER sip:172.18.197.224 SIP/2.0**  
 From: sip:4005@172.18.197.224;tag=18222c18222  
 To: sip:4005@172.18.197.224  
 Call-ID: 218f69ff86140a9d87c3d9270638b52c  
 Cseq: 3 REGISTER  
 Contact: <sip:4005@172.18.197.41;LINEID=baecf0034a8caaebbe1e7419f0cbbbfbc>  
 Expires: 240  
 Date: Tue, 07 Nov 2000 05:01:06 GMT  
 Accept-Language: en  
 Supported: sip-cc, sip-cc-01, timer, replaces  
 User-Agent: Pingtel/2.1.10 (VxWorks)  
 Content-Length: 0  
 Authorization: DIGEST USERNAME="pingtel", REALM="ccmsipline", NONCE="qRk+r8SAejD3gLpMefhVgpl7lnNZNcM",  
 URI="sip:172.18.197.224", RESPONSE="8fade346702db699f745ec8b82a9b508", ALGORITHM=MD5  
 Via: SIP/2.0/UDP 172.18.197.41

[[diagram](#)] [Call-ID: \[prev\]](#) [\[next\]](#)  
**[5] SIP/2.0 100 Trying**  
 Via: SIP/2.0/UDP 172.18.197.41  
 From: sip:4005@172.18.197.224;tag=18222c18222  
 To: sip:4005@172.18.197.224;tag=1151178582  
 Date: Thu, 09 Mar 2006 21:48:54 GMT  
 Call-ID: 218f69ff86140a9d87c3d9270638b52c  
 CSeq: 3 REGISTER  
 Content-Length: 0

[[diagram](#)] [Call-ID: \[prev\]](#) [\[next\]](#)  
**[6] SIP/2.0 200 OK**  
 Via: SIP/2.0/UDP 172.18.197.41  
 From: sip:4005@172.18.197.224;tag=18222c18222  
 To: sip:4005@172.18.197.224;tag=1151178582  
 Date: Thu, 09 Mar 2006 21:48:54 GMT  
 Call-ID: 218f69ff86140a9d87c3d9270638b52c  
 CSeq: 3 REGISTER  
 Expires: 180  
 Contact: <sip:4005@172.18.197.41;LINEID=baecf0034a8caaebbe1e7419f0cbbbfbc>;x-cisco-newreg  
 Content-Length: 0

[[diagram](#)] [Call-ID: \[prev\]](#) [\[next\]](#)  
**[7] NOTIFY sip:4005@172.18.197.41:5060 SIP/2.0**  
 Via: SIP/2.0/UDP 172.18.197.224:5060;branch=z9hG4bK1593515d  
 From: <sip:4005@172.18.197.224>;tag=358890627  
 To: <sip:4005@172.18.197.41>

Call-ID: 80234300-4101a2c7-7a-e0c512ac@172.18.197.224  
 CSeq: 101 NOTIFY  
 Max-Forwards: 70  
 Date: Thu, 09 Mar 2006 21:48:55 GMT  
 User-Agent: Cisco-CCM5.0  
 Event: message-summary  
 Subscription-State: active;expires=168130376  
 Contact: <sip:4005@172.18.197.224:5060>  
 Content-Type: application/simple-message-summary  
 Content-Length: 22

Messages-Waiting: no

[\[diagram\]](#) Call-ID: [\[prev\]](#) [\[next\]](#)

**[8] SIP/2.0 200 OK**

From: <sip:4005@172.18.197.224>;tag=358890627  
 To: <sip:4005@172.18.197.41>  
 Call-ID: 80234300-4101a2c7-7a-e0c512ac@172.18.197.224  
 CSeq: 101 NOTIFY  
 Via: SIP/2.0/UDP 172.18.197.224:5060;branch=z9hG4bK1593515d  
 Contact: sip:172.18.197.41  
 Allow: INVITE, ACK, CANCEL, BYE, REFER, OPTIONS, NOTIFY, REGISTER, SUBSCRIBE  
 User-Agent: Pingtel/2.1.10 (VxWorks)  
 Date: Tue, 07 Nov 2000 05:01:08 GMT  
 Content-Length: 0

[\[diagram\]](#) Call-ID: [\[prev\]](#) [\[next\]](#)

**[9] REGISTER sip:172.18.197.224 SIP/2.0**

From: sip:4005@172.18.197.224;tag=18222c18222  
 To: sip:4005@172.18.197.224;tag=1151178582  
 Call-ID: 218f69ff86140a9d87c3d9270638b52c  
 CSeq: 4 REGISTER  
 Contact: <sip:4005@172.18.197.41;LINEID=baecf0034a8caaebbe1e7419f0cbbbfc>  
 Expires: 240  
 Date: Tue, 07 Nov 2000 05:02:34 GMT  
 Accept-Language: en  
 Supported: sip-cc, sip-cc-01, timer, replaces  
 User-Agent: Pingtel/2.1.10 (VxWorks)  
 Content-Length: 0  
 Via: SIP/2.0/UDP 172.18.197.41

[\[diagram\]](#) Call-ID: [\[prev\]](#) [\[next\]](#)

**[10] SIP/2.0 100 Trying**

Via: SIP/2.0/UDP 172.18.197.41  
 From: sip:4005@172.18.197.224;tag=18222c18222  
 To: sip:4005@172.18.197.224;tag=1151178582  
 Date: Thu, 09 Mar 2006 21:50:21 GMT  
 Call-ID: 218f69ff86140a9d87c3d9270638b52c  
 CSeq: 4 REGISTER  
 Content-Length: 0

[\[diagram\]](#) Call-ID: [\[prev\]](#) [\[next\]](#)

**[11] SIP/2.0 200 OK**

Via: SIP/2.0/UDP 172.18.197.41  
 From: sip:4005@172.18.197.224;tag=18222c18222  
 To: sip:4005@172.18.197.224;tag=1151178582  
 Date: Thu, 09 Mar 2006 21:50:21 GMT  
 Call-ID: 218f69ff86140a9d87c3d9270638b52c  
 CSeq: 4 REGISTER  
 Expires: 180  
 Contact: <sip:4005@172.18.197.41;LINEID=baecf0034a8caaebbe1e7419f0cbbbfc>  
 Content-Length: 0

## 1.2 Register SIP 3rd-Party Phone

Title: Register SIP 3rd-Party Phone

### Description:

This is the register sequence for a Polycom 3rd-party SIP phone configured with 6 lines. In order to find the device entry in the CallManager database, the phone must be identified by the HTTP digest user ID. Therefore, CallManager challenges the register to get the Authorization header containing the digest user ID (bluck). This happens for all 3rd-party phones regardless of whether the SIP Phone Security Profile is configured with digest authorization. The digest user ID must be configured as an End User in the database and associated with the device in the Digest User field of the Phone Configuration page. Also note that each user ID can be associated with only one device when used for 3rd-party configuration.

### Configuration:

Node = CCM, IP = 172.18.197.224

Phone = A, Line = 3051-3056, IP = 172.18.197.56, Model = 3rd-Party

### Scenario:

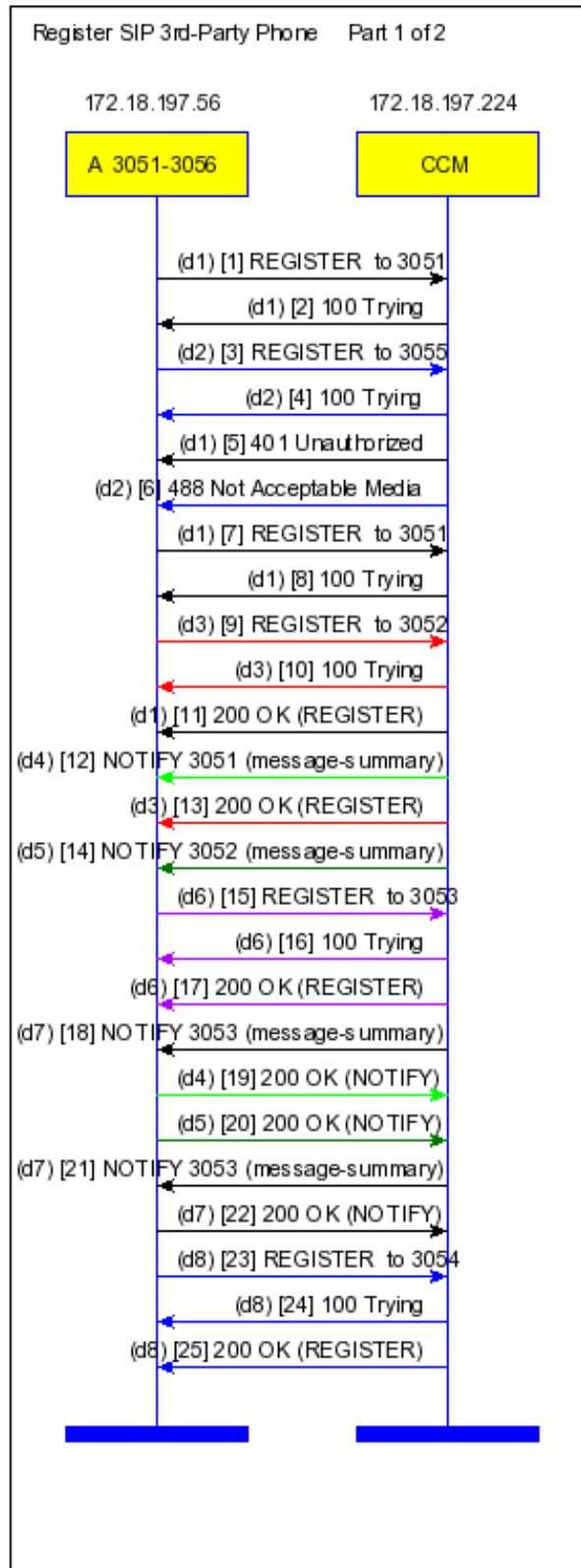
Lines 3051-3056 register with CCM

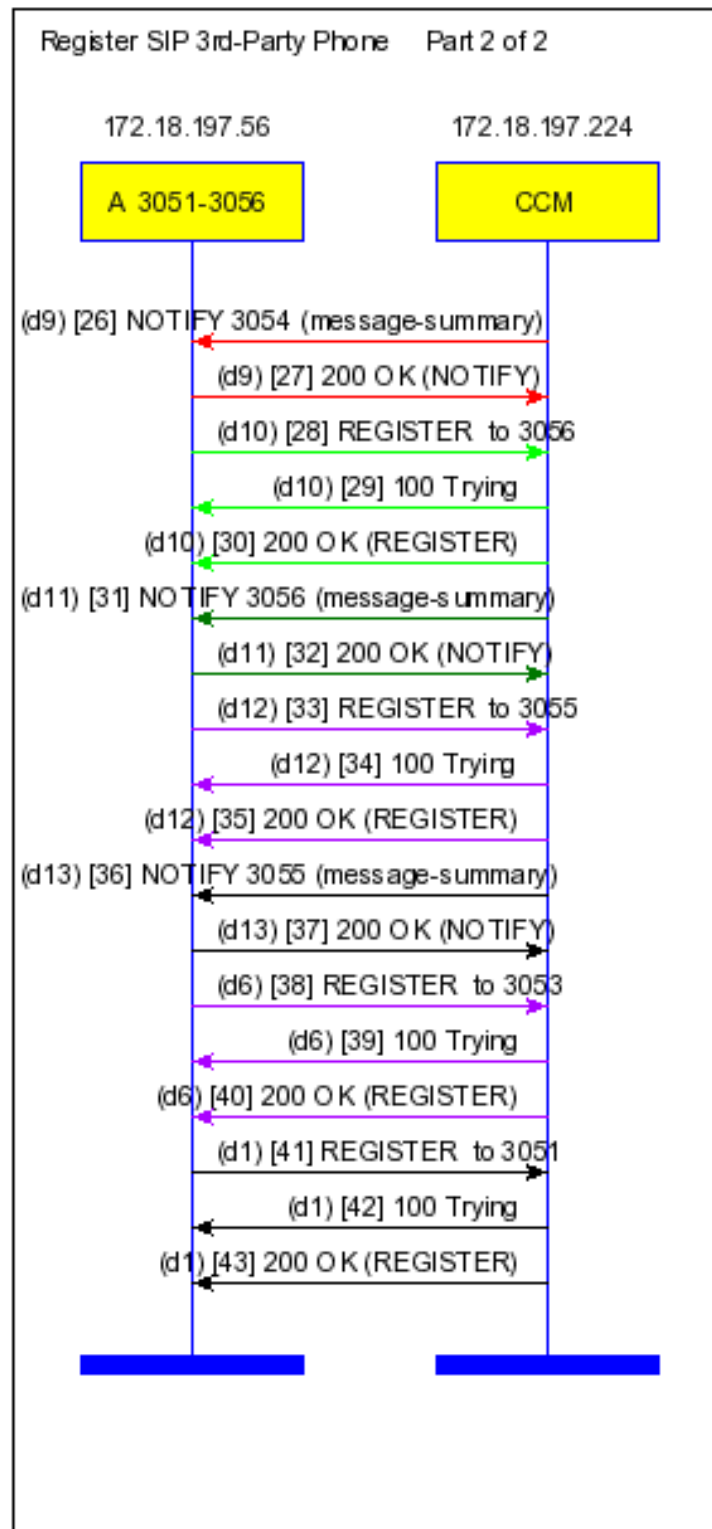
CCM challenges line 3051 register

CCM sends 488 for line 3052. This is an artifact due to the internal CallManager algorithm for handling multiline registrations with digest authorization.

CCM sends MWI status

After 120 sec, Line 3051 sends a register refresh to CCM (keepalive)





[\[diagram\]](#) [Call-ID: \[prev\]](#) [\[next\]](#)

**[1] REGISTER sip:172.18.197.224 SIP/2.0**

Via: SIP/2.0/UDP 172.18.197.56:5072;branch=z9hG4bKabda4bdeA9A70929  
 From: "3051" <sip:3051@172.18.197.224>;tag=851142C7-2A55668C  
 To: "3051" <sip:3051@172.18.197.224>  
 CSeq: 1 REGISTER  
 Call-ID: 7461e29a-9b991e08-9bf4a0c5@172.18.197.56  
 Contact:<sip:3051@172.18.197.56:5072>;methods="INVITE, ACK, BYE, CANCEL, OPTIONS, INFO, MESSAGE, SUBSCRIBE, NOTIFY, PRACK, UPDATE, REFER"  
 User-Agent: PolycomSoundPointIP-SPIP\_600-UA/1.1.0  
 Max-Forwards: 70  
 Expires: 3600  
 Content-Length: 0

[\[diagram\]](#) [Call-ID: \[prev\]](#) [\[next\]](#)

**[2] SIP/2.0 100 Trying**

Via: SIP/2.0/UDP 172.18.197.56:5072;branch=z9hG4bKabda4bdeA9A70929  
 From: "3051" <sip:3051@172.18.197.224>;tag=851142C7-2A55668C  
 To: "3051" <sip:3051@172.18.197.224>  
 Date: Mon, 23 Jan 2006 14:25:07 GMT  
 Call-ID: 7461e29a-9b991e08-9bf4a0c5@172.18.197.56  
 CSeq: 1 REGISTER  
 Content-Length: 0

[\[diagram\]](#) [Call-ID: \[prev\]](#) [\[next\]](#)

**[3] REGISTER sip:172.18.197.224:5060 SIP/2.0**

Via: SIP/2.0/UDP 172.18.197.56:5072;branch=z9hG4bK82daf123BB04D6D6  
 From: "3055" <sip:3055@172.18.197.224>;tag=C6AD2B04-CAB961E1  
 To: "3055" <sip:3055@172.18.197.224>  
 CSeq: 1 REGISTER  
 Call-ID: ae6e80ff-4aa03c7d-f2869892@172.18.197.56  
 Contact:<sip:3055@172.18.197.56:5072>;methods="INVITE, ACK, BYE, CANCEL, OPTIONS, INFO, MESSAGE, SUBSCRIBE, NOTIFY, PRACK, UPDATE, REFER"  
 User-Agent: PolycomSoundPointIP-SPIP\_600-UA/1.1.0  
 Max-Forwards: 70  
 Expires: 3600  
 Content-Length: 0

[\[diagram\]](#) [Call-ID: \[prev\]](#) [\[next\]](#)

**[4] SIP/2.0 100 Trying**

Via: SIP/2.0/UDP 172.18.197.56:5072;branch=z9hG4bK82daf123BB04D6D6  
 From: "3055" <sip:3055@172.18.197.224>;tag=C6AD2B04-CAB961E1  
 To: "3055" <sip:3055@172.18.197.224>  
 Date: Mon, 23 Jan 2006 14:25:08 GMT  
 Call-ID: ae6e80ff-4aa03c7d-f2869892@172.18.197.56  
 CSeq: 1 REGISTER  
 Content-Length: 0

[\[diagram\]](#) [Call-ID: \[prev\]](#) [\[next\]](#)

**[5] SIP/2.0 401 Unauthorized**

Via: SIP/2.0/UDP 172.18.197.56:5072;branch=z9hG4bKabda4bdeA9A70929  
 From: "3051" <sip:3051@172.18.197.224>;tag=851142C7-2A55668C  
 To: "3051" <sip:3051@172.18.197.224>;tag=1608187113  
 Date: Mon, 23 Jan 2006 14:25:07 GMT  
 Call-ID: 7461e29a-9b991e08-9bf4a0c5@172.18.197.56  
 CSeq: 1 REGISTER  
 WWW-Authenticate: DIGEST realm="ccmsipline", nonce="iRUYBR8rAVcDX9GKmCUuUihBesLWBAp3", algorithm=MD5  
 Content-Length: 0

[\[diagram\]](#) [Call-ID: \[prev\]](#) [\[next\]](#)

**[6] SIP/2.0 488 Not Acceptable Media**

Via: SIP/2.0/UDP 172.18.197.56:5072;branch=z9hG4bK82daf123BB04D6D6  
 From: "3055" <sip:3055@172.18.197.224>;tag=C6AD2B04-CAB961E1  
 To: "3055" <sip:3055@172.18.197.224>;tag=949567505  
 Date: Mon, 23 Jan 2006 14:25:08 GMT  
 Call-ID: ae6e80ff-4aa03c7d-f2869892@172.18.197.56  
 CSeq: 1 REGISTER  
 Content-Length: 0

[\[diagram\]](#) [Call-ID: \[prev\]](#) [\[next\]](#)

**[7] REGISTER sip:172.18.197.224 SIP/2.0**

Via: SIP/2.0/UDP 172.18.197.56:5072;branch=z9hG4bK977097ce6FCA2099  
 From: "3051" <sip:3051@172.18.197.224>;tag=851142C7-2A55668C  
 To: "3051" <sip:3051@172.18.197.224>  
 CSeq: 2 REGISTER  
 Call-ID: 7461e29a-9b991e08-9bf4a0c5@172.18.197.56  
 Contact:<sip:3051@172.18.197.56:5072>;methods="INVITE, ACK, BYE, CANCEL, OPTIONS, INFO, MESSAGE, SUBSCRIBE, NOTIFY, PRACK, UPDATE, REFER"  
 User-Agent: PolycomSoundPointIP-SPIP\_600-UA/1.1.0  
 Authorization: DIGEST username="bluck", realm="ccmsipline", nonce="iRUYBR8rAVcDX9GKmCUuUihBesLWBAp3",

```
uri="sip:3051@172.18.197.224", response="41de0eef67f1c1570d7766d621d7fc55", algorithm=MD5
Max-Forwards: 70
Expires: 3600
Content-Length: 0
```

[\[diagram\]](#) Call-ID: [\[prev\]](#) [\[next\]](#)

**[8] SIP/2.0 100 Trying**

```
Via: SIP/2.0/UDP 172.18.197.56:5072;branch=z9hG4bK977097ce6FCA2099
From: "3051" <sip:3051@172.18.197.224>;tag=851142C7-2A55668C
To: "3051" <sip:3051@172.18.197.224>;tag=1608187113
Date: Mon, 23 Jan 2006 14:25:08 GMT
Call-ID: 7461e29a-9b991e08-9bf4a0c5@172.18.197.56
CSeq: 2 REGISTER
Content-Length: 0
```

[\[diagram\]](#) Call-ID: [\[prev\]](#) [\[next\]](#)

**[9] REGISTER sip:172.18.197.224 SIP/2.0**

```
Via: SIP/2.0/UDP 172.18.197.56:5072;branch=z9hG4bK15a6057c5B010537
From: "3052" <sip:3052@172.18.197.224>;tag=1B8DFE35-CFD2448A
To: "3052" <sip:3052@172.18.197.224>
CSeq: 1 REGISTER
Call-ID: e799b2f8-63010ec6-fc1dd993@172.18.197.56
Contact:<sip:3052@172.18.197.56:5072>;methods="INVITE, ACK, BYE, CANCEL, OPTIONS, INFO, MESSAGE, SUBSCRIBE,
NOTIFY, PRACK, UPDATE, REFER"
User-Agent: PolycomSoundPointIP-SPIP_600-UA/1.1.0
Max-Forwards: 70
Expires: 3600
Content-Length: 0
```

[\[diagram\]](#) Call-ID: [\[prev\]](#) [\[next\]](#)

**[10] SIP/2.0 100 Trying**

```
Via: SIP/2.0/UDP 172.18.197.56:5072;branch=z9hG4bK15a6057c5B010537
From: "3052" <sip:3052@172.18.197.224>;tag=1B8DFE35-CFD2448A
To: "3052" <sip:3052@172.18.197.224>
Date: Mon, 23 Jan 2006 14:25:09 GMT
Call-ID: e799b2f8-63010ec6-fc1dd993@172.18.197.56
CSeq: 1 REGISTER
Content-Length: 0
```

[\[diagram\]](#) Call-ID: [\[prev\]](#) [\[next\]](#)

**[11] SIP/2.0 200 OK**

```
Via: SIP/2.0/UDP 172.18.197.56:5072;branch=z9hG4bK977097ce6FCA2099
From: "3051" <sip:3051@172.18.197.224>;tag=851142C7-2A55668C
To: "3051" <sip:3051@172.18.197.224>;tag=1608187113
Date: Mon, 23 Jan 2006 14:25:08 GMT
Call-ID: 7461e29a-9b991e08-9bf4a0c5@172.18.197.56
CSeq: 2 REGISTER
Expires: 120
Contact: <sip:3051@172.18.197.56:5072>;methods="INVITE, ACK, BYE, CANCEL, OPTIONS, INFO, MESSAGE, SUBSCRIBE,
NOTIFY, PRACK, UPDATE, REFER";x-cisco-newreg
Content-Length: 0
```

[\[diagram\]](#) Call-ID: [\[prev\]](#) [\[next\]](#)

**[12] NOTIFY sip:3051@172.18.197.56:5072 SIP/2.0**

```
Via: SIP/2.0/UDP 172.18.197.224:5060;branch=z9hG4bK124cf2b2
From: <sip:3051@172.18.197.224>;tag=2034039846
To: <sip:3051@172.18.197.56>
Call-ID: dcfec80-3d41e746-ba0-e0c512ac@172.18.197.224
CSeq: 101 NOTIFY
Max-Forwards: 70
Date: Mon, 23 Jan 2006 14:25:10 GMT
User-Agent: Cisco-CCM5.0
Event: message-summary
Subscription-State: active
Contact: <sip:3051@172.18.197.224:5060>
Content-Type: application/simple-message-summary
Content-Length: 22
```

Messages-Waiting: no

[\[diagram\]](#) Call-ID: [\[prev\]](#) [\[next\]](#)

**[13] SIP/2.0 200 OK**

```
Via: SIP/2.0/UDP 172.18.197.56:5072;branch=z9hG4bK15a6057c5B010537
From: "3052" <sip:3052@172.18.197.224>;tag=1B8DFE35-CFD2448A
To: "3052" <sip:3052@172.18.197.224>;tag=889962092
Date: Mon, 23 Jan 2006 14:25:09 GMT
Call-ID: e799b2f8-63010ec6-fc1dd993@172.18.197.56
CSeq: 1 REGISTER
Expires: 900
Contact: <sip:3052@172.18.197.56:5072>;methods="INVITE, ACK, BYE, CANCEL, OPTIONS, INFO, MESSAGE, SUBSCRIBE,
```

NOTIFY, PRACK, UPDATE, REFER"  
Content-Length: 0

[[diagram](#)] [Call-ID: \[prev\]](#) [[next](#)]  
[14] NOTIFY sip:3052@172.18.197.56:5072 SIP/2.0  
Via: SIP/2.0/UDP 172.18.197.224:5060;branch=z9hG4bK1ded5bda  
From: <sip:3052@172.18.197.224>;tag=1836549756  
To: <sip:3052@172.18.197.56>  
Call-ID: dcfec80-3d41e746-ba1-e0c512ac@172.18.197.224  
CSeq: 101 NOTIFY  
Max-Forwards: 70  
Date: Mon, 23 Jan 2006 14:25:10 GMT  
User-Agent: Cisco-CCM5.0  
Event: message-summary  
Subscription-State: active;expires=168129480  
Contact: <sip:3052@172.18.197.224:5060>  
Content-Type: application/simple-message-summary  
Content-Length: 22

Messages-Waiting: no

[[diagram](#)] [Call-ID: \[prev\]](#) [[next](#)]  
[15] REGISTER sip:172.18.197.224:5060 SIP/2.0  
Via: SIP/2.0/UDP 172.18.197.56:5072;branch=z9hG4bK2238c5517EFB75F4  
From: "3053" <sip:3053@172.18.197.224>;tag=9586682-96C04F6F  
To: "3053" <sip:3053@172.18.197.224>  
CSeq: 1 REGISTER  
Call-ID: c8cd65ed-38ee56cb-11be70@172.18.197.56  
Contact:<sip:3053@172.18.197.56:5072>;methods="INVITE, ACK, BYE, CANCEL, OPTIONS, INFO, MESSAGE, SUBSCRIBE, NOTIFY, PRACK, UPDATE, REFER"  
User-Agent: PolycomSoundPointIP-SPIP\_600-UA/1.1.0  
Max-Forwards: 70  
Expires: 3600  
Content-Length: 0

[[diagram](#)] [Call-ID: \[prev\]](#) [[next](#)]  
[16] SIP/2.0 100 Trying  
Via: SIP/2.0/UDP 172.18.197.56:5072;branch=z9hG4bK2238c5517EFB75F4  
From: "3053" <sip:3053@172.18.197.224>;tag=9586682-96C04F6F  
To: "3053" <sip:3053@172.18.197.224>  
Date: Mon, 23 Jan 2006 14:25:10 GMT  
Call-ID: c8cd65ed-38ee56cb-11be70@172.18.197.56  
CSeq: 1 REGISTER  
Content-Length: 0

[[diagram](#)] [Call-ID: \[prev\]](#) [[next](#)]  
[17] SIP/2.0 200 OK  
Via: SIP/2.0/UDP 172.18.197.56:5072;branch=z9hG4bK2238c5517EFB75F4  
From: "3053" <sip:3053@172.18.197.224>;tag=9586682-96C04F6F  
To: "3053" <sip:3053@172.18.197.224>;tag=1830793368  
Date: Mon, 23 Jan 2006 14:25:10 GMT  
Call-ID: c8cd65ed-38ee56cb-11be70@172.18.197.56  
CSeq: 1 REGISTER  
Expires: 900  
Contact: <sip:3053@172.18.197.56:5072>;methods="INVITE, ACK, BYE, CANCEL, OPTIONS, INFO, MESSAGE, SUBSCRIBE, NOTIFY, PRACK, UPDATE, REFER"  
Content-Length: 0

[[diagram](#)] [Call-ID: \[prev\]](#) [[next](#)]  
[18] NOTIFY sip:3053@172.18.197.56:5072 SIP/2.0  
Via: SIP/2.0/UDP 172.18.197.224:5060;branch=z9hG4bK202a7248  
From: <sip:3053@172.18.197.224>;tag=405414243  
To: <sip:3053@172.18.197.56>  
Call-ID: dcfec80-3d41e746-ba3-e0c512ac@172.18.197.224  
CSeq: 101 NOTIFY  
Max-Forwards: 70  
Date: Mon, 23 Jan 2006 14:25:10 GMT  
User-Agent: Cisco-CCM5.0  
Event: message-summary  
Subscription-State: active;expires=168129480  
Contact: <sip:3053@172.18.197.224:5060>  
Content-Type: application/simple-message-summary  
Content-Length: 22

Messages-Waiting: no

[[diagram](#)] [Call-ID: \[prev\]](#) [[next](#)]  
[19] SIP/2.0 200 OK  
Via: SIP/2.0/UDP 172.18.197.224:5060;branch=z9hG4bK124cf2b2  
From: <sip:3051@172.18.197.224>;tag=2034039846

To: <sip:3051@172.18.197.56>;tag=1B03DFA7-CC8FC6C;tag=D7CDF3A5-6C8C7E7A  
 CSeq: 101 NOTIFY  
 Call-ID: dcfec80-3d41e746-ba0-e0c512ac@172.18.197.224  
 Contact:<sip:3051@172.18.197.56:5072>  
 User-Agent: PolycomSoundPointIP-SPIP\_600-UA/1.1.0  
 Event: message-summary  
 Content-Length: 0

[\[diagram\]](#) Call-ID: [\[prev\]](#) [\[next\]](#)

**[20] SIP/2.0 200 OK**

Via: SIP/2.0/UDP 172.18.197.224:5060;branch=z9hG4bK1ded5bda  
 From: <sip:3052@172.18.197.224>;tag=1836549756  
 To: <sip:3052@172.18.197.56>;tag=B98DC0C1-ECFE1EB6;tag=68335DF-638A18E4  
 CSeq: 101 NOTIFY  
 Call-ID: dcfec80-3d41e746-ba1-e0c512ac@172.18.197.224  
 Contact:<sip:3052@172.18.197.56:5072>  
 User-Agent: PolycomSoundPointIP-SPIP\_600-UA/1.1.0  
 Event: message-summary  
 Content-Length: 0

[\[diagram\]](#) Call-ID: [\[prev\]](#) [\[next\]](#)

**[21] NOTIFY sip:3053@172.18.197.56:5072 SIP/2.0**

Via: SIP/2.0/UDP 172.18.197.224:5060;branch=z9hG4bK202a7248  
 From: <sip:3053@172.18.197.224>;tag=405414243  
 To: <sip:3053@172.18.197.56>  
 Call-ID: dcfec80-3d41e746-ba3-e0c512ac@172.18.197.224  
 CSeq: 101 NOTIFY  
 Max-Forwards: 70  
 Date: Mon, 23 Jan 2006 14:25:10 GMT  
 User-Agent: Cisco-CCM5.0  
 Event: message-summary  
 Subscription-State: active;expires=168129480  
 Contact: <sip:3053@172.18.197.224:5060>  
 Content-Type: application/simple-message-summary  
 Content-Length: 22

Messages-Waiting: no

[\[diagram\]](#) Call-ID: [\[prev\]](#) [\[next\]](#)

**[22] SIP/2.0 200 OK**

Via: SIP/2.0/UDP 172.18.197.224:5060;branch=z9hG4bK202a7248  
 From: <sip:3053@172.18.197.224>;tag=405414243  
 To: <sip:3053@172.18.197.56>;tag=7412E33B-476AD760;tag=3E131779-F511B7AE  
 CSeq: 101 NOTIFY  
 Call-ID: dcfec80-3d41e746-ba3-e0c512ac@172.18.197.224  
 Contact:<sip:3053@172.18.197.56:5072>  
 User-Agent: PolycomSoundPointIP-SPIP\_600-UA/1.1.0  
 Event: message-summary  
 Content-Length: 0

[\[diagram\]](#) Call-ID: [\[prev\]](#) [\[next\]](#)

**[23] REGISTER sip:172.18.197.224:5060 SIP/2.0**

Via: SIP/2.0/UDP 172.18.197.56:5072;branch=z9hG4bKba1a4b5c9555D217  
 From: "3054" <sip:3054@172.18.197.224>;tag=79B08115-C7AC906A  
 To: "3054" <sip:3054@172.18.197.224>  
 CSeq: 1 REGISTER  
 Call-ID: 2202e4d8-6f9806a6-9895f273@172.18.197.56  
 Contact:<sip:3054@172.18.197.56:5072>;methods="INVITE, ACK, BYE, CANCEL, OPTIONS, INFO, MESSAGE, SUBSCRIBE, NOTIFY, PRACK, UPDATE, REFER"  
 User-Agent: PolycomSoundPointIP-SPIP\_600-UA/1.1.0  
 Max-Forwards: 70  
 Expires: 3600  
 Content-Length: 0

[\[diagram\]](#) Call-ID: [\[prev\]](#) [\[next\]](#)

**[24] SIP/2.0 100 Trying**

Via: SIP/2.0/UDP 172.18.197.56:5072;branch=z9hG4bKba1a4b5c9555D217  
 From: "3054" <sip:3054@172.18.197.224>;tag=79B08115-C7AC906A  
 To: "3054" <sip:3054@172.18.197.224>  
 Date: Mon, 23 Jan 2006 14:25:12 GMT  
 Call-ID: 2202e4d8-6f9806a6-9895f273@172.18.197.56  
 CSeq: 1 REGISTER  
 Content-Length: 0

[\[diagram\]](#) Call-ID: [\[prev\]](#) [\[next\]](#)

**[25] SIP/2.0 200 OK**

Via: SIP/2.0/UDP 172.18.197.56:5072;branch=z9hG4bKba1a4b5c9555D217  
 From: "3054" <sip:3054@172.18.197.224>;tag=79B08115-C7AC906A  
 To: "3054" <sip:3054@172.18.197.224>;tag=1652300691  
 Date: Mon, 23 Jan 2006 14:25:12 GMT

Call-ID: 2202e4d8-6f9806a6-9895f273@172.18.197.56  
 CSeq: 1 REGISTER  
 Expires: 900  
 Contact: <sip:3054@172.18.197.56:5072>;methods="INVITE, ACK, BYE, CANCEL, OPTIONS, INFO, MESSAGE, SUBSCRIBE, NOTIFY, PRACK, UPDATE, REFER"  
 Content-Length: 0

[\[diagram\]](#) Call-ID: [\[prev\]](#) [\[next\]](#)  
**[26] NOTIFY sip:3054@172.18.197.56:5072 SIP/2.0**  
 Via: SIP/2.0/UDP 172.18.197.224:5060;branch=z9hG4bK6f892b8b  
 From: <sip:3054@172.18.197.224>;tag=1500611188  
 To: <sip:3054@172.18.197.56>  
 Call-ID: f011980-3d41e748-ba5-e0c512ac@172.18.197.224  
 CSeq: 101 NOTIFY  
 Max-Forwards: 70  
 Date: Mon, 23 Jan 2006 14:25:12 GMT  
 User-Agent: Cisco-CCM5.0  
 Event: message-summary  
 Subscription-State: active;expires=168129480  
 Contact: <sip:3054@172.18.197.224:5060>  
 Content-Type: application/simple-message-summary  
 Content-Length: 22

Messages-Waiting: no

[\[diagram\]](#) Call-ID: [\[prev\]](#) [\[next\]](#)  
**[27] SIP/2.0 200 OK**  
 Via: SIP/2.0/UDP 172.18.197.224:5060;branch=z9hG4bK6f892b8b  
 From: <sip:3054@172.18.197.224>;tag=1500611188  
 To: <sip:3054@172.18.197.56>;tag=A45F8A62-D8F3344F;tag=63A74850-85180CD  
 CSeq: 101 NOTIFY  
 Call-ID: f011980-3d41e748-ba5-e0c512ac@172.18.197.224  
 Contact:<sip:3054@172.18.197.56:5072>  
 User-Agent: PolycomSoundPointIP-SPIP\_600-UA/1.1.0  
 Event: message-summary  
 Content-Length: 0

[\[diagram\]](#) Call-ID: [\[prev\]](#) [\[next\]](#)  
**[28] REGISTER sip:172.18.197.224:5060 SIP/2.0**  
 Via: SIP/2.0/UDP 172.18.197.56:5072;branch=z9hG4bKc82387ab54548B9E  
 From: "3056" <sip:3056@172.18.197.224>;tag=EDF5F24C-E330F6E9  
 To: "3056" <sip:3056@172.18.197.224>  
 CSeq: 1 REGISTER  
 Call-ID: 7032dc87-6031a685-644e7a5a@172.18.197.56  
 Contact:<sip:3056@172.18.197.56:5072>;methods="INVITE, ACK, BYE, CANCEL, OPTIONS, INFO, MESSAGE, SUBSCRIBE, NOTIFY, PRACK, UPDATE, REFER"  
 User-Agent: PolycomSoundPointIP-SPIP\_600-UA/1.1.0  
 Max-Forwards: 70  
 Expires: 3600  
 Content-Length: 0

[\[diagram\]](#) Call-ID: [\[prev\]](#) [\[next\]](#)  
**[29] SIP/2.0 100 Trying**  
 Via: SIP/2.0/UDP 172.18.197.56:5072;branch=z9hG4bKc82387ab54548B9E  
 From: "3056" <sip:3056@172.18.197.224>;tag=EDF5F24C-E330F6E9  
 To: "3056" <sip:3056@172.18.197.224>  
 Date: Mon, 23 Jan 2006 14:25:13 GMT  
 Call-ID: 7032dc87-6031a685-644e7a5a@172.18.197.56  
 CSeq: 1 REGISTER  
 Content-Length: 0

[\[diagram\]](#) Call-ID: [\[prev\]](#) [\[next\]](#)  
**[30] SIP/2.0 200 OK**  
 Via: SIP/2.0/UDP 172.18.197.56:5072;branch=z9hG4bKc82387ab54548B9E  
 From: "3056" <sip:3056@172.18.197.224>;tag=EDF5F24C-E330F6E9  
 To: "3056" <sip:3056@172.18.197.224>;tag=1548027573  
 Date: Mon, 23 Jan 2006 14:25:13 GMT  
 Call-ID: 7032dc87-6031a685-644e7a5a@172.18.197.56  
 CSeq: 1 REGISTER  
 Expires: 900  
 Contact: <sip:3056@172.18.197.56:5072>;methods="INVITE, ACK, BYE, CANCEL, OPTIONS, INFO, MESSAGE, SUBSCRIBE, NOTIFY, PRACK, UPDATE, REFER"  
 Content-Length: 0

[\[diagram\]](#) Call-ID: [\[prev\]](#) [\[next\]](#)  
**[31] NOTIFY sip:3056@172.18.197.56:5072 SIP/2.0**  
 Via: SIP/2.0/UDP 172.18.197.224:5060;branch=z9hG4bK19152bd3  
 From: <sip:3056@172.18.197.224>;tag=1151167214  
 To: <sip:3056@172.18.197.56>  
 Call-ID: f99b000-3d41e749-ba7-e0c512ac@172.18.197.224

CSeq: 101 NOTIFY  
 Max-Forwards: 70  
 Date: Mon, 23 Jan 2006 14:25:13 GMT  
 User-Agent: Cisco-CCM5.0  
 Event: message-summary  
 Subscription-State: active;expires=168129480  
 Contact: <sip:3056@172.18.197.224:5060>  
 Content-Type: application/simple-message-summary  
 Content-Length: 22

Messages-Waiting: no

[\[diagram\]](#) Call-ID: [\[prev\]](#) [\[next\]](#)

**[32] SIP/2.0 200 OK**

Via: SIP/2.0/UDP 172.18.197.224:5060;branch=z9hG4bK19152bd3  
 From: <sip:3056@172.18.197.224>;tag=1151167214  
 To: <sip:3056@172.18.197.56>;tag=D7A87FA1-C76AC696;tag=3F4C4ABF-CCD866C4  
 CSeq: 101 NOTIFY  
 Call-ID: f99b000-3d41e749-ba7-e0c512ac@172.18.197.224  
 Contact: <sip:3056@172.18.197.56:5072>  
 User-Agent: PolycomSoundPointIP-SPIP\_600-UA/1.1.0  
 Event: message-summary  
 Content-Length: 0

[\[diagram\]](#) Call-ID: [\[prev\]](#) [\[next\]](#)

**[33] REGISTER sip:172.18.197.224:5060 SIP/2.0**

Via: SIP/2.0/UDP 172.18.197.56:5072;branch=z9hG4bKeeccce05247A0723D  
 From: "3055" <sip:3055@172.18.197.224>;tag=53DC441B-59A31140  
 To: "3055" <sip:3055@172.18.197.224>  
 CSeq: 1 REGISTER  
 Call-ID: 915e378e-9eb7f13c-99a6e59@172.18.197.56  
 Contact: <sip:3055@172.18.197.56:5072>;methods="INVITE, ACK, BYE, CANCEL, OPTIONS, INFO, MESSAGE, SUBSCRIBE, NOTIFY, PRACK, UPDATE, REFER"  
 User-Agent: PolycomSoundPointIP-SPIP\_600-UA/1.1.0  
 Max-Forwards: 70  
 Expires: 3600  
 Content-Length: 0

[\[diagram\]](#) Call-ID: [\[prev\]](#) [\[next\]](#)

**[34] SIP/2.0 100 Trying**

Via: SIP/2.0/UDP 172.18.197.56:5072;branch=z9hG4bKeeccce05247A0723D  
 From: "3055" <sip:3055@172.18.197.224>;tag=53DC441B-59A31140  
 To: "3055" <sip:3055@172.18.197.224>  
 Date: Mon, 23 Jan 2006 14:25:40 GMT  
 Call-ID: 915e378e-9eb7f13c-99a6e59@172.18.197.56  
 CSeq: 1 REGISTER  
 Content-Length: 0

[\[diagram\]](#) Call-ID: [\[prev\]](#) [\[next\]](#)

**[35] SIP/2.0 200 OK**

Via: SIP/2.0/UDP 172.18.197.56:5072;branch=z9hG4bKeeccce05247A0723D  
 From: "3055" <sip:3055@172.18.197.224>;tag=53DC441B-59A31140  
 To: "3055" <sip:3055@172.18.197.224>;tag=1730763632  
 Date: Mon, 23 Jan 2006 14:25:40 GMT  
 Call-ID: 915e378e-9eb7f13c-99a6e59@172.18.197.56  
 CSeq: 1 REGISTER  
 Expires: 900  
 Contact: <sip:3055@172.18.197.56:5072>;methods="INVITE, ACK, BYE, CANCEL, OPTIONS, INFO, MESSAGE, SUBSCRIBE, NOTIFY, PRACK, UPDATE, REFER"  
 Content-Length: 0

[\[diagram\]](#) Call-ID: [\[prev\]](#) [\[next\]](#)

**[36] NOTIFY sip:3055@172.18.197.56:5072 SIP/2.0**

Via: SIP/2.0/UDP 172.18.197.224:5060;branch=z9hG4bK38ac60bc  
 From: <sip:3055@172.18.197.224>;tag=1857112756  
 To: <sip:3055@172.18.197.56>  
 Call-ID: 1fb18f80-3d41e764-ba9-e0c512ac@172.18.197.224  
 CSeq: 101 NOTIFY  
 Max-Forwards: 70  
 Date: Mon, 23 Jan 2006 14:25:40 GMT  
 User-Agent: Cisco-CCM5.0  
 Event: message-summary  
 Subscription-State: active;expires=168129480  
 Contact: <sip:3055@172.18.197.224:5060>  
 Content-Type: application/simple-message-summary  
 Content-Length: 22

Messages-Waiting: no

[[diagram](#)] Call-ID: [[prev](#)] [[next](#)]  
**[37] SIP/2.0 200 OK**  
 Via: SIP/2.0/UDP 172.18.197.224:5060;branch=z9hG4bK38ac60bc  
 From: <sip:3055@172.18.197.224>;tag=1857112756  
 To: <sip:3055@172.18.197.56>;tag=ACB176B8-A04D63F5;tag=97125E86-21366B53  
 CSeq: 101 NOTIFY  
 Call-ID: 1fb18f80-3d41e764-ba9-e0c512ac@172.18.197.224  
 Contact:<sip:3055@172.18.197.56:5072>  
 User-Agent: PolycomSoundPointIP-SPIP\_600-UA/1.1.0  
 Event: message-summary  
 Content-Length: 0

[[diagram](#)] Call-ID: [[prev](#)] [[next](#)]  
**[38] REGISTER sip:172.18.197.224:5060 SIP/2.0**  
 Via: SIP/2.0/UDP 172.18.197.56:5072;branch=z9hG4bK9d664311FE5011B4  
 From: "3053" <sip:3053@172.18.197.224>;tag=9586682-96C04F6F  
 To: "3053" <sip:3053@172.18.197.224>  
 CSeq: 2 REGISTER  
 Call-ID: c8cd65ed-38ee56cb-11be70@172.18.197.56  
 Contact:<sip:3053@172.18.197.56:5072>;methods="INVITE, ACK, BYE, CANCEL, OPTIONS, INFO, MESSAGE, SUBSCRIBE, NOTIFY, PRACK, UPDATE, REFER"  
 User-Agent: PolycomSoundPointIP-SPIP\_600-UA/1.1.0  
 Max-Forwards: 70  
 Expires: 3600  
 Content-Length: 0

[[diagram](#)] Call-ID: [[prev](#)] [[next](#)]  
**[39] SIP/2.0 100 Trying**  
 Via: SIP/2.0/UDP 172.18.197.56:5072;branch=z9hG4bK9d664311FE5011B4  
 From: "3053" <sip:3053@172.18.197.224>;tag=9586682-96C04F6F  
 To: "3053" <sip:3053@172.18.197.224>;tag=1830793368  
 Date: Mon, 23 Jan 2006 14:25:42 GMT  
 Call-ID: c8cd65ed-38ee56cb-11be70@172.18.197.56  
 CSeq: 2 REGISTER  
 Content-Length: 0

[[diagram](#)] Call-ID: [[prev](#)] [[next](#)]  
**[40] SIP/2.0 200 OK**  
 Via: SIP/2.0/UDP 172.18.197.56:5072;branch=z9hG4bK9d664311FE5011B4  
 From: "3053" <sip:3053@172.18.197.224>;tag=9586682-96C04F6F  
 To: "3053" <sip:3053@172.18.197.224>;tag=1830793368  
 Date: Mon, 23 Jan 2006 14:25:42 GMT  
 Call-ID: c8cd65ed-38ee56cb-11be70@172.18.197.56  
 CSeq: 2 REGISTER  
 Expires: 900  
 Contact: <sip:3053@172.18.197.56:5072>;methods="INVITE, ACK, BYE, CANCEL, OPTIONS, INFO, MESSAGE, SUBSCRIBE, NOTIFY, PRACK, UPDATE, REFER"  
 Content-Length: 0

[[diagram](#)] Call-ID: [[prev](#)] [[next](#)]  
**[41] REGISTER sip:172.18.197.224 SIP/2.0**  
 Via: SIP/2.0/UDP 172.18.197.56:5072;branch=z9hG4bK51cabb7e66CB7DC9  
 From: "3051" <sip:3051@172.18.197.224>;tag=851142C7-2A55668C  
 To: "3051" <sip:3051@172.18.197.224>  
 CSeq: 3 REGISTER  
 Call-ID: 7461e29a-9b991e08-9bf4a0c5@172.18.197.56  
 Contact:<sip:3051@172.18.197.56:5072>;methods="INVITE, ACK, BYE, CANCEL, OPTIONS, INFO, MESSAGE, SUBSCRIBE, NOTIFY, PRACK, UPDATE, REFER"  
 User-Agent: PolycomSoundPointIP-SPIP\_600-UA/1.1.0  
 Authorization: DIGEST username="bluck", realm="ccmsipline", nonce="iRUYBR8rAVcDX9GKmCUuUiHBesLWBAP3", uri="sip:3051@172.18.197.224", response="41de0eef67f1c1570d7766d621d7fc55", algorithm=MD5  
 Max-Forwards: 70  
 Expires: 3600  
 Content-Length: 0

[[diagram](#)] Call-ID: [[prev](#)] [[next](#)]  
**[42] SIP/2.0 100 Trying**  
 Via: SIP/2.0/UDP 172.18.197.56:5072;branch=z9hG4bK51cabb7e66CB7DC9  
 From: "3051" <sip:3051@172.18.197.224>;tag=851142C7-2A55668C  
 To: "3051" <sip:3051@172.18.197.224>  
 Date: Mon, 23 Jan 2006 14:26:39 GMT  
 Call-ID: 7461e29a-9b991e08-9bf4a0c5@172.18.197.56  
 CSeq: 3 REGISTER  
 Content-Length: 0

[[diagram](#)] Call-ID: [[prev](#)] [[next](#)]  
**[43] SIP/2.0 200 OK**  
 Via: SIP/2.0/UDP 172.18.197.56:5072;branch=z9hG4bK51cabb7e66CB7DC9  
 From: "3051" <sip:3051@172.18.197.224>;tag=851142C7-2A55668C  
 To: "3051" <sip:3051@172.18.197.224>;tag=1643557350

■  
Date: Mon, 23 Jan 2006 14:26:39 GMT  
Call-ID: 7461e29a-9b991e08-9bf4a0c5@172.18.197.56  
CSeq: 3 REGISTER  
Expires: 120  
Contact: <sip:3051@172.18.197.56:5072>;methods="INVITE, ACK, BYE, CANCEL, OPTIONS, INFO, MESSAGE, SUBSCRIBE, NOTIFY, PRACK, UPDATE, REFER"  
Content-Length: 0

## 2. Basic\_Call

### 2.1 Basic Call - SIP Basic calls SIP Basic

Title: Basic Call - SIP Basic calls SIP Basic

Description:

A SIP Basic phone calls another SIP Basic phone.

Note a "SIP Basic" phone is a 7960 configured with a pre-SDGA image (POS3-07-5-00) to simulate a 3rd party phone.

Configuration:

Node = CCM, IP = 172.18.203.55

Phone = G, Line = 2010, IP = 172.18.203.46, Model = SIP Basic

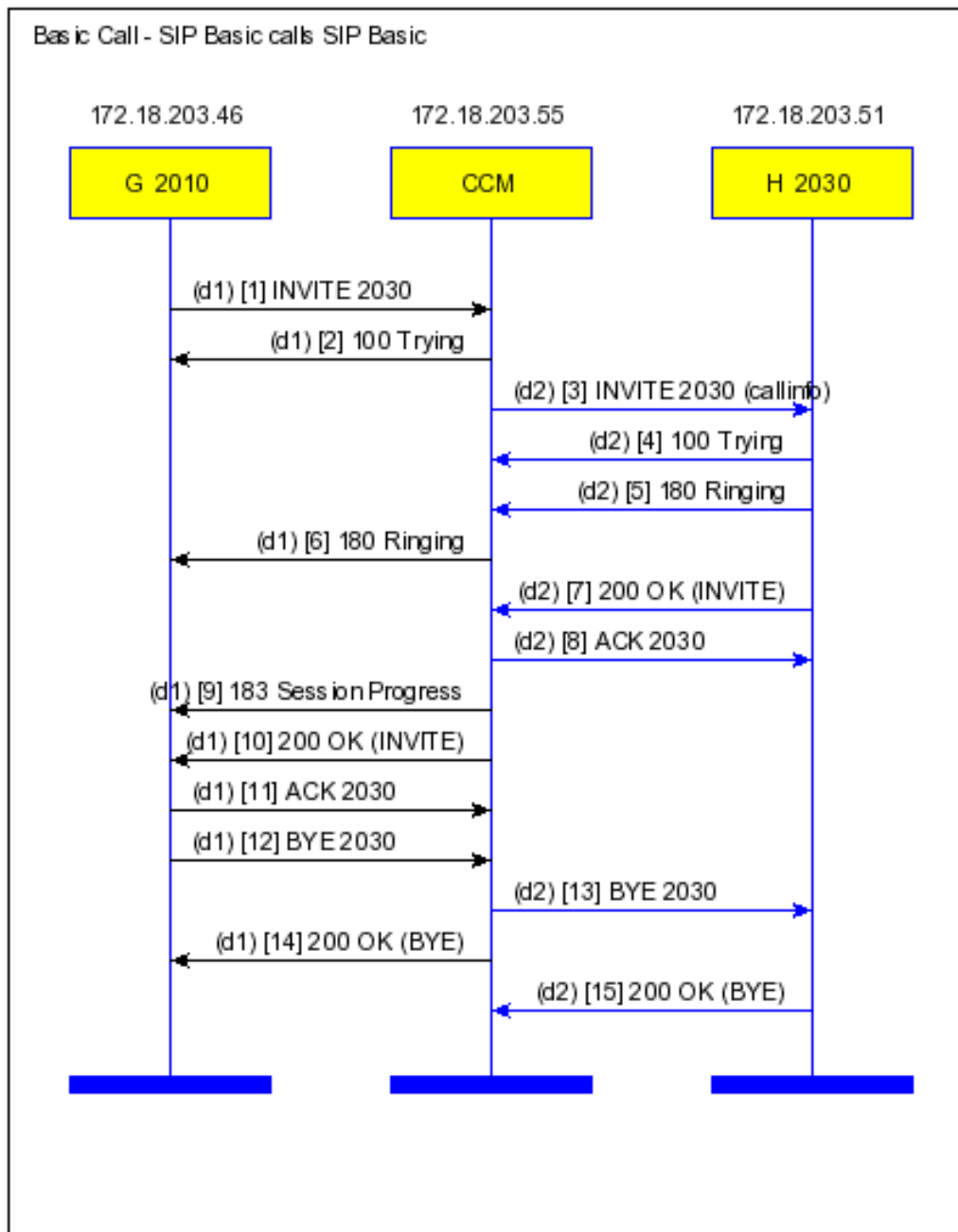
Phone = H, Line = 2030, IP = 172.18.203.51, Model = SIP Basic

Scenario:

2010 calls 2030

2030 answers

2010 goes onhook



[\[diagram\]](#)    Call-ID: [\[prev\]](#) [\[next\]](#)

[1] INVITE sip:2030@172.18.203.55 SIP/2.0

Via: SIP/2.0/UDP 172.18.203.46:5060;branch=z9hG4bK1e8fae8d  
 From: "2010" <sip:2010@172.18.203.55>;tag=00120193edac00041d81e5db-572c3790  
 To: <sip:2030@172.18.203.55>  
 Call-ID: 00120193-edac0004-4413ef13-40b657f5@172.18.203.46  
 Max-Forwards: 70  
 CSeq: 101 INVITE  
 User-Agent: Cisco-CP7960G/7.5  
 Contact: <sip:2010@172.18.203.46:5060>  
 Expires: 180  
 Accept: application/sdp  
 Allow: ACK,BYE,CANCEL,INVITE,NOTIFY,OPTIONS,REFER,REGISTER,UPDATE  
 Remote-Party-ID: "2010" <sip:2010@172.18.203.46>;party=calling;id-type=subscriber;privacy=off;screen=yes  
 Supported: replaces  
 Content-Length: 257  
 Content-Type: application/sdp  
 Content-Disposition: session;handling=optional

v=0  
 o=Cisco-SIPUA 10528 0 IN IP4 172.18.203.46  
 s=SIP Call  
 t=0 0  
 m=audio 20046 RTP/AVP 0 8 18 101  
 c=IN IP4 172.18.203.46  
 a=rtpmap:0 PCMU/8000  
 a=rtpmap:8 PCMA/8000  
 a=rtpmap:18 G729/8000  
 a=rtpmap:101 telephone-event/8000  
 a=fmtp:101 0-15  
 a=sendrecv

[\[diagram\]](#)    Call-ID: [\[prev\]](#) [\[next\]](#)

[2] SIP/2.0 100 Trying

Via: SIP/2.0/UDP 172.18.203.46:5060;branch=z9hG4bK1e8fae8d  
 From: "2010" <sip:2010@172.18.203.55>;tag=00120193edac00041d81e5db-572c3790  
 To: <sip:2030@172.18.203.55>  
 Date: Wed, 12 Jul 2006 20:21:33 GMT  
 Call-ID: 00120193-edac0004-4413ef13-40b657f5@172.18.203.46  
 CSeq: 101 INVITE  
 Allow-Events: presence  
 Content-Length: 0

[\[diagram\]](#)    Call-ID: [\[prev\]](#) [\[next\]](#)

[3] INVITE sip:2030@172.18.203.51:5060 SIP/2.0

Via: SIP/2.0/UDP 172.18.203.55:5060;branch=z9hG4bK6578b806  
 Remote-Party-ID: "SIP Line 2010" <sip:2010@172.18.203.55>;party=calling;screen=yes;privacy=off  
 From: "SIP Line 2010" <sip:2010@172.18.203.55>;tag=b9c8b19b-c709-4d85-86d4-d2f557c6c2a6-30679881  
 To: <sip:2030@172.18.203.51>  
 Date: Wed, 12 Jul 2006 20:21:33 GMT  
 Call-ID: 14c4a00-4b5159cd-43b-37cb12ac@172.18.203.55  
 Supported: timer,replaces  
 Min-SE: 1800  
 User-Agent: Cisco-CCM5.0  
 Allow: INVITE, OPTIONS, INFO, BYE, CANCEL, ACK, PRACK, UPDATE, REFER, SUBSCRIBE, NOTIFY  
 CSeq: 101 INVITE  
 Expires: 180  
 Allow-Events: presence  
 Alert-Info: <urn:x-cisco-remotecc:callinfo>; security= NotAuthenticated; orientation= from; call-instance= 1  
 Alert-Info: <file://Bellcore-dr1/>  
 Contact: <sip:2030@172.18.203.55:5060>  
 Max-Forwards: 69  
 Content-Length: 0

[\[diagram\]](#)    Call-ID: [\[prev\]](#) [\[next\]](#)

[4] SIP/2.0 100 Trying

Via: SIP/2.0/UDP 172.18.203.55:5060;branch=z9hG4bK6578b806  
 From: "SIP Line 2010" <sip:2010@172.18.203.55>;tag=b9c8b19b-c709-4d85-86d4-d2f557c6c2a6-30679881  
 To: <sip:2030@172.18.203.51>  
 Call-ID: 14c4a00-4b5159cd-43b-37cb12ac@172.18.203.55  
 CSeq: 101 INVITE  
 Server: Cisco-CP7960G/7.5  
 Contact: <sip:2030@172.18.203.51:5060>  
 Allow: ACK,BYE,CANCEL,INVITE,NOTIFY,OPTIONS,REFER,REGISTER,UPDATE  
 Remote-Party-ID: "2030" <sip:2030@172.18.203.51>;party=called;id-type=subscriber;privacy=off;screen=yes  
 Content-Length: 0

[\[diagram\]](#)    Call-ID: [\[prev\]](#) [\[next\]](#)

[5] SIP/2.0 180 Ringing

Via: SIP/2.0/UDP 172.18.203.55:5060;branch=z9hG4bK6578b806

From: "SIP Line 2010" <sip:2010@172.18.203.55>;tag=b9c8b19b-c709-4d85-86d4-d2f557c6c2a6-30679881  
 To: <sip:2030@172.18.203.51>;tag=000d280821a500080ed3dc87-23b1cd4f  
 Call-ID: 14c4a00-4b5159cd-43b-37cb12ac@172.18.203.55  
 CSeq: 101 INVITE  
 Server: Cisco-CP7960G/7.5  
 Contact: <sip:2030@172.18.203.51:5060>  
 Allow: ACK,BYE,CANCEL,INVITE,NOTIFY,OPTIONS,REFER,REGISTER,UPDATE  
 Remote-Party-ID: "2030" <sip:2030@172.18.203.51>;party=called;id-type=subscriber;privacy=off;screen=yes  
 Content-Length: 0

[\[diagram\]](#) Call-ID: [\[prev\]](#) [\[next\]](#)

#### [6] SIP/2.0 180 Ringing

Via: SIP/2.0/UDP 172.18.203.46:5060;branch=z9hG4bK1e8fae8d  
 From: "2010" <sip:2010@172.18.203.55>;tag=00120193edac00041d81e5db-572c3790  
 To: <sip:2030@172.18.203.55>;tag=b9c8b19b-c709-4d85-86d4-d2f557c6c2a6-30679880  
 Date: Wed, 12 Jul 2006 20:21:33 GMT  
 Call-ID: 00120193-edac0004-4413ef13-40b657f5@172.18.203.46  
 CSeq: 101 INVITE  
 Allow: INVITE, OPTIONS, INFO, BYE, CANCEL, ACK, PRACK, UPDATE, REFER, SUBSCRIBE, NOTIFY  
 Allow-Events: presence  
 Remote-Party-ID: "SIP Alerting 2030" <sip:2030@172.18.203.55>;party=called;screen=yes;privacy=off  
 Contact: <sip:2030@172.18.203.55:5060>  
 Content-Length: 0

[\[diagram\]](#) Call-ID: [\[prev\]](#) [\[next\]](#)

#### [7] SIP/2.0 200 OK

Via: SIP/2.0/UDP 172.18.203.55:5060;branch=z9hG4bK6578b806  
 From: "SIP Line 2010" <sip:2010@172.18.203.55>;tag=b9c8b19b-c709-4d85-86d4-d2f557c6c2a6-30679881  
 To: <sip:2030@172.18.203.51>;tag=000d280821a500080ed3dc87-23b1cd4f  
 Call-ID: 14c4a00-4b5159cd-43b-37cb12ac@172.18.203.55  
 CSeq: 101 INVITE  
 Server: Cisco-CP7960G/7.5  
 Contact: <sip:2030@172.18.203.51:5060>  
 Allow: ACK,BYE,CANCEL,INVITE,NOTIFY,OPTIONS,REFER,REGISTER,UPDATE  
 Remote-Party-ID: "2030" <sip:2030@172.18.203.51>;party=called;id-type=subscriber;privacy=off;screen=yes  
 Supported: replaces  
 Content-Length: 256  
 Content-Type: application/sdp  
 Content-Disposition: session;handling=optional

```
v=0
o=Cisco-SIPUA 8113 0 IN IP4 172.18.203.51
s=SIP Call
t=0 0
m=audio 17912 RTP/AVP 0 8 18 101
c=IN IP4 172.18.203.51
a=rtpmap:0 PCMU/8000
a=rtpmap:8 PCMA/8000
a=rtpmap:18 G729/8000
a=rtpmap:101 telephone-event/8000
a=fmtp:101 0-15
a=sendrecv
```

[\[diagram\]](#) Call-ID: [\[prev\]](#) [\[next\]](#)

#### [8] ACK sip:2030@172.18.203.51:5060 SIP/2.0

Via: SIP/2.0/UDP 172.18.203.55:5060;branch=z9hG4bK4acb2f3  
 From: "SIP Line 2010" <sip:2010@172.18.203.55>;tag=b9c8b19b-c709-4d85-86d4-d2f557c6c2a6-30679881  
 To: <sip:2030@172.18.203.51>;tag=000d280821a500080ed3dc87-23b1cd4f  
 Date: Wed, 12 Jul 2006 20:21:33 GMT  
 Call-ID: 14c4a00-4b5159cd-43b-37cb12ac@172.18.203.55  
 Max-Forwards: 70  
 CSeq: 101 ACK  
 Allow-Events: presence  
 Content-Type: application/sdp  
 Content-Length: 214

```
v=0
o=CiscoSystemsCCM-SIP 2000 1 IN IP4 172.18.203.55
s=SIP Call
c=IN IP4 172.18.203.46
t=0 0
m=audio 20046 RTP/AVP 0 101
a=rtpmap:0 PCMU/8000
a=ptime:20
a=rtpmap:101 telephone-event/8000
a=fmtp:101 0-15
```

[\[diagram\]](#) Call-ID: [\[prev\]](#) [\[next\]](#)

#### [9] SIP/2.0 183 Session Progress

Via: SIP/2.0/UDP 172.18.203.46:5060;branch=z9hG4bK1e8fae8d

```

From: "2010" <sip:2010@172.18.203.55>;tag=00120193edac00041d81e5db-572c3790
To: <sip:2030@172.18.203.55>;tag=b9c8b19b-c709-4d85-86d4-d2f557c6c2a6-30679880
Date: Wed, 12 Jul 2006 20:21:33 GMT
Call-ID: 00120193-edac0004-4413ef13-40b657f5@172.18.203.46
CSeq: 101 INVITE
Allow: INVITE, OPTIONS, INFO, BYE, CANCEL, ACK, PRACK, UPDATE, REFER, SUBSCRIBE, NOTIFY
Allow-Events: presence
Remote-Party-ID: "SIP Alerting 2030" <sip:2030@172.18.203.55>;party=called;screen=yes;privacy=off
Contact: <sip:2030@172.18.203.55:5060>
Content-Type: application/sdp
Content-Length: 214

```

```

v=0
o=CiscoSystemsCCM-SIP 2000 1 IN IP4 172.18.203.55
s=SIP Call
c=IN IP4 172.18.203.51
t=0 0
m=audio 17912 RTP/AVP 0 101
a=rtpmap:0 PCMU/8000
a=ptime:20
a=rtpmap:101 telephone-event/8000
a=fmtp:101 0-15

```

[\[diagram\]](#) Call-ID: [\[prev\]](#) [\[next\]](#)

**[10] SIP/2.0 200 OK**

```

Via: SIP/2.0/UDP 172.18.203.46:5060;branch=z9hG4bK1e8fae8d
From: "2010" <sip:2010@172.18.203.55>;tag=00120193edac00041d81e5db-572c3790
To: <sip:2030@172.18.203.55>;tag=b9c8b19b-c709-4d85-86d4-d2f557c6c2a6-30679880
Date: Wed, 12 Jul 2006 20:21:33 GMT
Call-ID: 00120193-edac0004-4413ef13-40b657f5@172.18.203.46
CSeq: 101 INVITE
Allow: INVITE, OPTIONS, INFO, BYE, CANCEL, ACK, PRACK, UPDATE, REFER, SUBSCRIBE, NOTIFY
Allow-Events: presence
Remote-Party-ID: "SIP Line 2030" <sip:2030@172.18.203.55>;party=called;screen=yes;privacy=off
Contact: <sip:2030@172.18.203.55:5060>
Content-Type: application/sdp
Content-Length: 214

```

```

v=0
o=CiscoSystemsCCM-SIP 2000 1 IN IP4 172.18.203.55
s=SIP Call
c=IN IP4 172.18.203.51
t=0 0
m=audio 17912 RTP/AVP 0 101
a=rtpmap:0 PCMU/8000
a=ptime:20
a=rtpmap:101 telephone-event/8000
a=fmtp:101 0-15

```

[\[diagram\]](#) Call-ID: [\[prev\]](#) [\[next\]](#)

**[11] ACK sip:2030@172.18.203.55:5060 SIP/2.0**

```

Via: SIP/2.0/UDP 172.18.203.46:5060;branch=z9hG4bK1c973624
From: "2010" <sip:2010@172.18.203.55>;tag=00120193edac00041d81e5db-572c3790
To: <sip:2030@172.18.203.55>;tag=b9c8b19b-c709-4d85-86d4-d2f557c6c2a6-30679880
Call-ID: 00120193-edac0004-4413ef13-40b657f5@172.18.203.46
Max-Forwards: 70
CSeq: 101 ACK
User-Agent: Cisco-CP7960G/7.5
Remote-Party-ID: "2010" <sip:2010@172.18.203.46>;party=calling;id-type=subscriber;privacy=off;screen=yes
Content-Length: 0

```

[\[diagram\]](#) Call-ID: [\[prev\]](#) [\[next\]](#)

**[12] BYE sip:2030@172.18.203.55:5060 SIP/2.0**

```

Via: SIP/2.0/UDP 172.18.203.46:5060;branch=z9hG4bK12fc4f6b
From: "2010" <sip:2010@172.18.203.55>;tag=00120193edac00041d81e5db-572c3790
To: <sip:2030@172.18.203.55>;tag=b9c8b19b-c709-4d85-86d4-d2f557c6c2a6-30679880
Call-ID: 00120193-edac0004-4413ef13-40b657f5@172.18.203.46
Max-Forwards: 70
CSeq: 102 BYE
User-Agent: Cisco-CP7960G/7.5
Content-Length: 0

```

[\[diagram\]](#) Call-ID: [\[prev\]](#) [\[next\]](#)

**[13] BYE sip:2030@172.18.203.51:5060 SIP/2.0**

```

Via: SIP/2.0/UDP 172.18.203.55:5060;branch=z9hG4bK6f85a07b
From: "SIP Line 2010" <sip:2010@172.18.203.55>;tag=b9c8b19b-c709-4d85-86d4-d2f557c6c2a6-30679881
To: <sip:2030@172.18.203.51>;tag=000d280821a500080ed3dc87-23b1cd4f
Date: Wed, 12 Jul 2006 20:21:33 GMT
Call-ID: 14c4a00-4b5159cd-43b-37cb12ac@172.18.203.55
User-Agent: Cisco-CCM5.0

```

Max-Forwards: 70  
CSeq: 102 BYE  
Content-Length: 0

[\[diagram\]](#) Call-ID: [\[prev\]](#) [\[next\]](#)

**[14] SIP/2.0 200 OK**

Via: SIP/2.0/UDP 172.18.203.46:5060;branch=z9hG4bK12fc4f6b  
From: "2010" <sip:2010@172.18.203.55>;tag=00120193edac00041d81e5db-572c3790  
To: <sip:2030@172.18.203.55>;tag=b9c8b19b-c709-4d85-86d4-d2f557c6c2a6-30679880  
Date: Wed, 12 Jul 2006 20:21:38 GMT  
Call-ID: 00120193-edac0004-4413ef13-40b657f5@172.18.203.46  
CSeq: 102 BYE  
Content-Length: 0

[\[diagram\]](#) Call-ID: [\[prev\]](#) [\[next\]](#)

**[15] SIP/2.0 200 OK**

Via: SIP/2.0/UDP 172.18.203.55:5060;branch=z9hG4bK6f85a07b  
From: "SIP Line 2010" <sip:2010@172.18.203.55>;tag=b9c8b19b-c709-4d85-86d4-d2f557c6c2a6-30679881  
To: <sip:2030@172.18.203.51>;tag=000d280821a500080ed3dc87-23b1cd4f  
Call-ID: 14c4a00-4b5159cd-43b-37cb12ac@172.18.203.55  
CSeq: 102 BYE  
Server: Cisco-CP7960G/7.5  
Content-Length: 0

## 2.2 Basic Call - SIP Basic phone calls an SCCP phone

Title: Basic Call - SIP Basic phone calls an SCCP phone

### Description:

SIP Basic phone calls an SCCP phone.

Note a "SIP Basic" phone is a 7960 configured with a pre-SDGA image (P0S3-07-5-00) to simulate a 3rd party phone.

### Configuration:

Node = CCM, IP = 172.18.203.55

Phone = G, Line = 2010, IP = 172.18.203.46, Model = SIP Basic

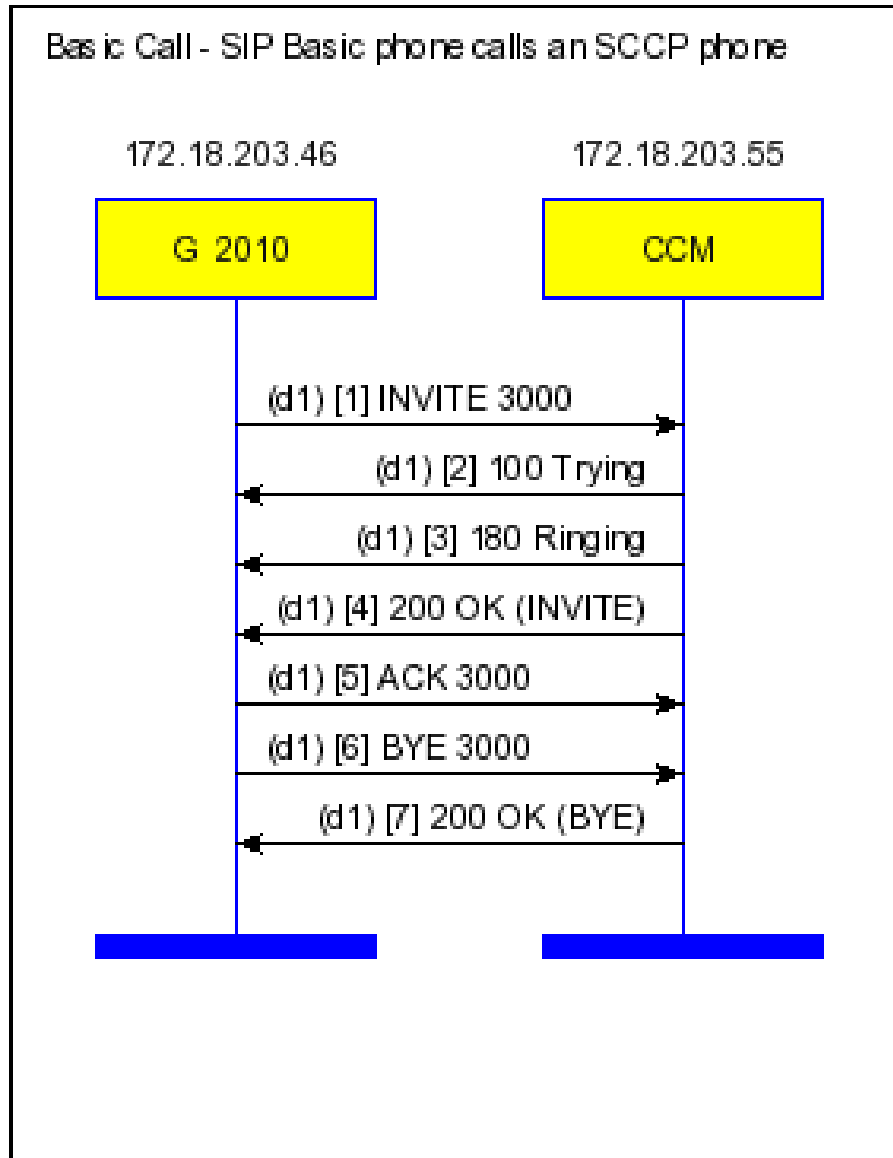
Phone = I, Line = 3000, IP = 172.18.203.47, Model = SCCP

### Scenario:

2010 calls 3000

3000 answers

2010 goes onhook



[\[diagram\]](#) Call-ID: [\[prev\]](#) [\[next\]](#)

**[1] INVITE sip:3000@172.18.203.55 SIP/2.0**

Via: SIP/2.0/UDP 172.18.203.46:5060;branch=z9hG4bK410e7415  
 From: "2010" <sip:2010@172.18.203.55>;tag=00120193edac00057f626a53-6b5711f8  
 To: <sip:3000@172.18.203.55>  
 Call-ID: 00120193-edac0005-48826aca-72f13b9a@172.18.203.46  
 Max-Forwards: 70  
 CSeq: 101 INVITE  
 User-Agent: Cisco-CP7960G/7.5  
 Contact: <sip:2010@172.18.203.46:5060>  
 Expires: 180  
 Accept: application/sdp  
 Allow: ACK,BYE,CANCEL,INVITE,NOTIFY,OPTIONS,REFER,REGISTER,UPDATE  
 Remote-Party-ID: "2010" <sip:2010@172.18.203.46>;party-calling;id-type=subscriber;privacy=off;screen=yes  
 Supported: replaces  
 Content-Length: 257  
 Content-Type: application/sdp  
 Content-Disposition: session;handling=optional

v=0  
 o=Cisco-SIPUA 20651 0 IN IP4 172.18.203.46  
 s=SIP Call  
 t=0 0  
 m=audio 20050 RTP/AVP 0 8 18 101  
 c=IN IP4 172.18.203.46  
 a=rtpmap:0 PCMU/8000  
 a=rtpmap:8 PCMA/8000  
 a=rtpmap:18 G729/8000  
 a=rtpmap:101 telephone-event/8000  
 a=fmtp:101 0-15  
 a=sendrecv

[\[diagram\]](#) Call-ID: [\[prev\]](#) [\[next\]](#)

**[2] SIP/2.0 100 Trying**

Via: SIP/2.0/UDP 172.18.203.46:5060;branch=z9hG4bK410e7415  
 From: "2010" <sip:2010@172.18.203.55>;tag=00120193edac00057f626a53-6b5711f8  
 To: <sip:3000@172.18.203.55>  
 Date: Wed, 12 Jul 2006 20:22:19 GMT  
 Call-ID: 00120193-edac0005-48826aca-72f13b9a@172.18.203.46  
 CSeq: 101 INVITE  
 Allow-Events: presence  
 Content-Length: 0

[\[diagram\]](#) Call-ID: [\[prev\]](#) [\[next\]](#)

**[3] SIP/2.0 180 Ringing**

Via: SIP/2.0/UDP 172.18.203.46:5060;branch=z9hG4bK410e7415  
 From: "2010" <sip:2010@172.18.203.55>;tag=00120193edac00057f626a53-6b5711f8  
 To: <sip:3000@172.18.203.55>;tag=b9c8b19b-c709-4d85-86d4-d2f557c6c2a6-30679882  
 Date: Wed, 12 Jul 2006 20:22:19 GMT  
 Call-ID: 00120193-edac0005-48826aca-72f13b9a@172.18.203.46  
 CSeq: 101 INVITE  
 Allow: INVITE, OPTIONS, INFO, BYE, CANCEL, ACK, PRACK, UPDATE, REFER, SUBSCRIBE, NOTIFY  
 Allow-Events: presence  
 Remote-Party-ID: "SCCP Line 3000" <sip:3000@172.18.203.55>;party-called;screen=yes;privacy=off  
 Contact: <sip:3000@172.18.203.55:5060>  
 Content-Length: 0

[\[diagram\]](#) Call-ID: [\[prev\]](#) [\[next\]](#)

**[4] SIP/2.0 200 OK**

Via: SIP/2.0/UDP 172.18.203.46:5060;branch=z9hG4bK410e7415  
 From: "2010" <sip:2010@172.18.203.55>;tag=00120193edac00057f626a53-6b5711f8  
 To: <sip:3000@172.18.203.55>;tag=b9c8b19b-c709-4d85-86d4-d2f557c6c2a6-30679882  
 Date: Wed, 12 Jul 2006 20:22:19 GMT  
 Call-ID: 00120193-edac0005-48826aca-72f13b9a@172.18.203.46  
 CSeq: 101 INVITE  
 Allow: INVITE, OPTIONS, INFO, BYE, CANCEL, ACK, PRACK, UPDATE, REFER, SUBSCRIBE, NOTIFY  
 Allow-Events: presence  
 Remote-Party-ID: "SCCP Line 3000" <sip:3000@172.18.203.55>;party-called;screen=yes;privacy=off  
 Contact: <sip:3000@172.18.203.55:5060>  
 Content-Type: application/sdp  
 Content-Length: 214

v=0  
 o=CiscoSystemsCCM-SIP 2000 1 IN IP4 172.18.203.55  
 s=SIP Call  
 c=IN IP4 172.18.203.47  
 t=0 0  
 m=audio 27932 RTP/AVP 0 101  
 a=rtpmap:0 PCMU/8000  
 aptime:20

```
a=rtpmap:101 telephone-event/8000
a=fmtp:101 0-15
```

[\[diagram\]](#) Call-ID: [\[prev\]](#) [\[next\]](#)

**[5] ACK sip:3000@172.18.203.55:5060 SIP/2.0**

```
Via: SIP/2.0/UDP 172.18.203.46:5060;branch=z9hG4bK5eb267b6
From: "2010" <sip:2010@172.18.203.55>;tag=00120193edac00057f626a53-6b5711f8
To: <sip:3000@172.18.203.55>;tag=b9c8b19b-c709-4d85-86d4-d2f557c6c2a6-30679882
Call-ID: 00120193-edac0005-48826aca-72f13b9a@172.18.203.46
Max-Forwards: 70
CSeq: 101 ACK
User-Agent: Cisco-CP7960G/7.5
Remote-Party-ID: "2010" <sip:2010@172.18.203.46>;party-calling;id-type=subscriber;privacy=off;screen=yes
Content-Length: 0
```

[\[diagram\]](#) Call-ID: [\[prev\]](#) [\[next\]](#)

**[6] BYE sip:3000@172.18.203.55:5060 SIP/2.0**

```
Via: SIP/2.0/UDP 172.18.203.46:5060;branch=z9hG4bK0d7565c6
From: "2010" <sip:2010@172.18.203.55>;tag=00120193edac00057f626a53-6b5711f8
To: <sip:3000@172.18.203.55>;tag=b9c8b19b-c709-4d85-86d4-d2f557c6c2a6-30679882
Call-ID: 00120193-edac0005-48826aca-72f13b9a@172.18.203.46
Max-Forwards: 70
CSeq: 102 BYE
User-Agent: Cisco-CP7960G/7.5
Content-Length: 0
```

[\[diagram\]](#) Call-ID: [\[prev\]](#) [\[next\]](#)

**[7] SIP/2.0 200 OK**

```
Via: SIP/2.0/UDP 172.18.203.46:5060;branch=z9hG4bK0d7565c6
From: "2010" <sip:2010@172.18.203.55>;tag=00120193edac00057f626a53-6b5711f8
To: <sip:3000@172.18.203.55>;tag=b9c8b19b-c709-4d85-86d4-d2f557c6c2a6-30679882
Date: Wed, 12 Jul 2006 20:22:23 GMT
Call-ID: 00120193-edac0005-48826aca-72f13b9a@172.18.203.46
CSeq: 102 BYE
Content-Length: 0
```

## 2.3 Basic Call - SIP Basic calls SIP Basic - CallerId Restrictions

Title: Basic Call - SIP Basic calls SIP Basic - CallerId Restrictions

### Description:

A SIP Basic phone calls another SIP Basic phone. CallerId blocking restrictions configured in CCM Admin. User dial 71xxxx to activate CallId blocking. CCM strips "71" from dialed pattern.

Note a "SIP Basic" phone is a 7960 configured with a pre-SDGA image (P0S3-07-5-00) to simulate a 3rd party phone.

### Configuration:

Node = CCM, IP = 172.18.203.55

Phone = G, Line = 2010, IP = 172.18.203.46, Model = SIP Basic

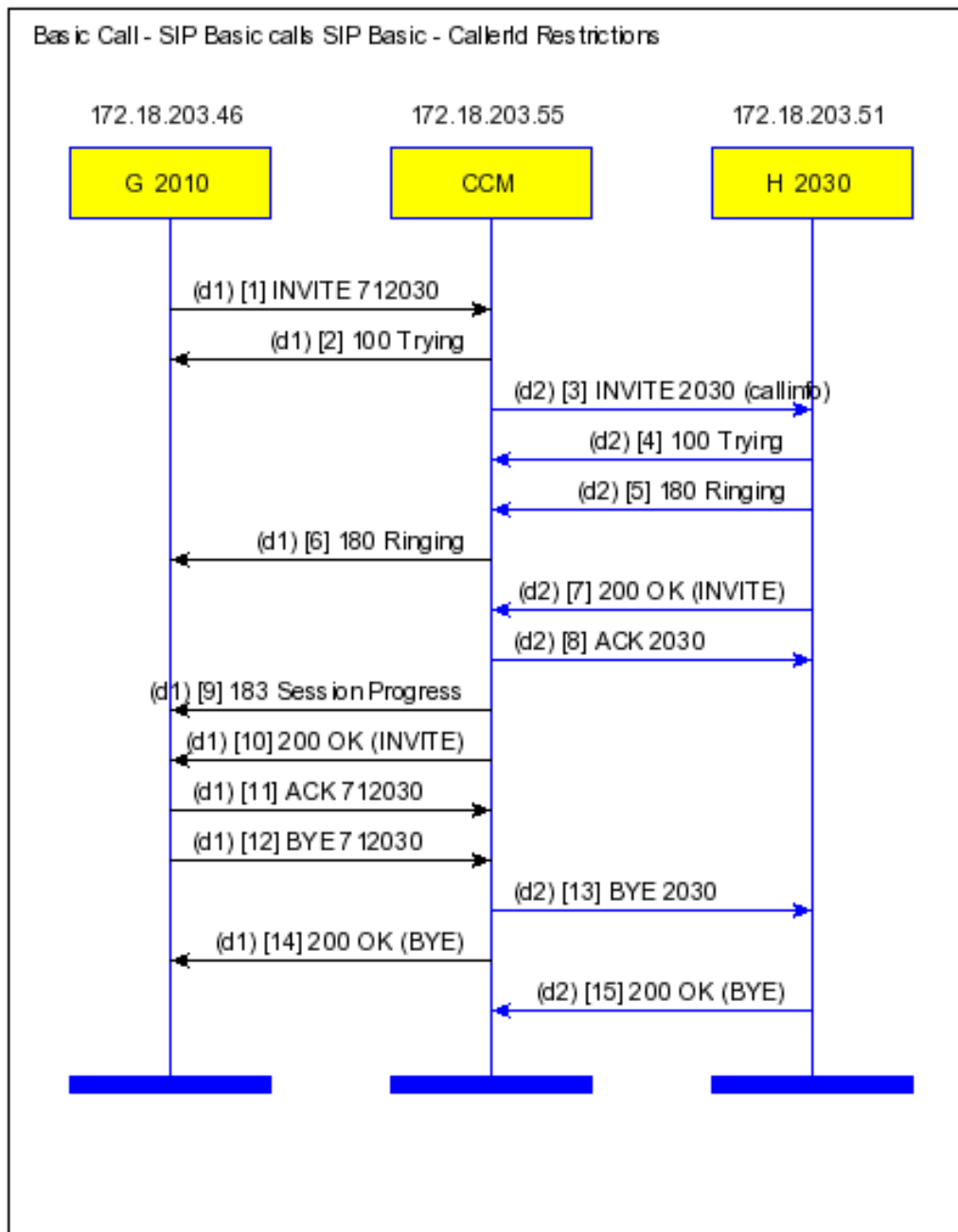
Phone = H, Line = 2030, IP = 172.18.203.51, Model = SIP Basic

### Scenario:

2010 dials 712030

2030 answers

2010 goes onhook



[diagram] Call-ID: [prev] [next]

[1] INVITE sip:712030@172.18.203.55 SIP/2.0

Via: SIP/2.0/UDP 172.18.203.46:5060;branch=z9hG4bK2ee1f2a1  
 From: "2010" <sip:2010@172.18.203.55>;tag=00120193edac000b7d02fa1f-4e13ca22  
 To: <sip:712030@172.18.203.55>  
 Call-ID: 00120193-edac0008-7b260318-5671b191@172.18.203.46  
 Max-Forwards: 70  
 CSeq: 101 INVITE  
 User-Agent: Cisco-CP7960G/7.5  
 Contact: <sip:2010@172.18.203.46:5060>  
 Expires: 180  
 Accept: application/sdp  
 Allow: ACK,BYE,CANCEL,INVITE,NOTIFY,OPTIONS,REFER,REGISTER,UPDATE  
 Remote-Party-ID: "2010" <sip:2010@172.18.203.46>;party=calling;id-type=subscriber;privacy=off;screen=yes  
 Supported: replaces  
 Content-Length: 257  
 Content-Type: application/sdp  
 Content-Disposition: session;handling=optional

v=0  
 o=Cisco-SIPUA 22328 0 IN IP4 172.18.203.46  
 s=SIP Call  
 t=0 0  
 m=audio 20062 RTP/AVP 0 8 18 101  
 c=IN IP4 172.18.203.46  
 a=rtpmap:0 PCMU/8000  
 a=rtpmap:8 PCMA/8000  
 a=rtpmap:18 G729/8000  
 a=rtpmap:101 telephone-event/8000  
 a=fmtp:101 0-15  
 a=sendrecv

[diagram] Call-ID: [prev] [next]

[2] SIP/2.0 100 Trying

Via: SIP/2.0/UDP 172.18.203.46:5060;branch=z9hG4bK2ee1f2a1  
 From: "2010" <sip:2010@172.18.203.55>;tag=00120193edac000b7d02fa1f-4e13ca22  
 To: <sip:712030@172.18.203.55>  
 Date: Wed, 12 Jul 2006 20:28:40 GMT  
 Call-ID: 00120193-edac0008-7b260318-5671b191@172.18.203.46  
 CSeq: 101 INVITE  
 Allow-Events: presence  
 Content-Length: 0

[diagram] Call-ID: [prev] [next]

[3] INVITE sip:2030@172.18.203.51:5060 SIP/2.0

Via: SIP/2.0/UDP 172.18.203.55:5060;branch=z9hG4bK4b7ad1a3  
 Remote-Party-ID: "SIP Line 2010" <sip:2010@172.18.203.55>;party=calling;screen=yes;privacy=full  
 From: "Anonymous" <sip:anonymous@172.18.203.55>;tag=b9c8b19b-c709-4d85-86d4-d2f557c6c2a6-30679890  
 To: <sip:2030@172.18.203.51>  
 Date: Wed, 12 Jul 2006 20:28:40 GMT  
 Call-ID: ffcf5180-4b515b78-44b-37cb12ac@172.18.203.55  
 Supported: timer,replaces  
 Min-SE: 1800  
 User-Agent: Cisco-CCM5.0  
 Allow: INVITE, OPTIONS, INFO, BYE, CANCEL, ACK, PRACK, UPDATE, REFER, SUBSCRIBE, NOTIFY  
 CSeq: 101 INVITE  
 Expires: 180  
 Allow-Events: presence  
 Alert-Info: <urn:x-cisco-remotecc:callinfo>; security= NotAuthenticated; orientation= from; call-instance= 1  
 Contact: <sip:2030@172.18.203.55:5060>  
 Max-Forwards: 69  
 Content-Length: 0

[diagram] Call-ID: [prev] [next]

[4] SIP/2.0 100 Trying

Via: SIP/2.0/UDP 172.18.203.55:5060;branch=z9hG4bK4b7ad1a3  
 From: "Anonymous" <sip:anonymous@172.18.203.55>;tag=b9c8b19b-c709-4d85-86d4-d2f557c6c2a6-30679890  
 To: <sip:2030@172.18.203.51>  
 Call-ID: ffcf5180-4b515b78-44b-37cb12ac@172.18.203.55  
 CSeq: 101 INVITE  
 Server: Cisco-CP7960G/7.5  
 Contact: <sip:2030@172.18.203.51:5060>  
 Allow: ACK,BYE,CANCEL,INVITE,NOTIFY,OPTIONS,REFER,REGISTER,UPDATE  
 Remote-Party-ID: "2030" <sip:2030@172.18.203.51>;party=called;id-type=subscriber;privacy=off;screen=yes  
 Content-Length: 0

[diagram] Call-ID: [prev] [next]

[5] SIP/2.0 180 Ringing

Via: SIP/2.0/UDP 172.18.203.55:5060;branch=z9hG4bK4b7ad1a3

From: "Anonymous" <sip:anonymous@172.18.203.55>;tag=b9c8b19b-c709-4d85-86d4-d2f557c6c2a6-30679890  
 To: <sip:2030@172.18.203.51>;tag=000d280821a5000e673687e3-08772598  
 Call-ID: ffcf5180-4b515b78-44b-37cb12ac@172.18.203.55  
 CSeq: 101 INVITE  
 Server: Cisco-CP7960G/7.5  
 Contact: <sip:2030@172.18.203.51:5060>  
 Allow: ACK,BYE,CANCEL,INVITE,NOTIFY,OPTIONS,REFER,REGISTER,UPDATE  
 Remote-Party-ID: "2030" <sip:2030@172.18.203.51>;party=called;id-type=subscriber;privacy=off;screen=yes  
 Content-Length: 0

[\[diagram\]](#) Call-ID: [\[prev\]](#) [\[next\]](#)

#### [6] SIP/2.0 180 Ringing

Via: SIP/2.0/UDP 172.18.203.46:5060;branch=z9hG4bK2ee1f2a1  
 From: "2010" <sip:2010@172.18.203.55>;tag=00120193edac000b7d02fa1f-4e13ca22  
 To: <sip:712030@172.18.203.55>;tag=b9c8b19b-c709-4d85-86d4-d2f557c6c2a6-30679889  
 Date: Wed, 12 Jul 2006 20:28:40 GMT  
 Call-ID: 00120193-edac0008-7b260318-5671b191@172.18.203.46  
 CSeq: 101 INVITE  
 Allow: INVITE, OPTIONS, INFO, BYE, CANCEL, ACK, PRACK, UPDATE, REFER, SUBSCRIBE, NOTIFY  
 Allow-Events: presence  
 Remote-Party-ID: "SIP Alerting 2030" <sip:2030@172.18.203.55>;party=called;screen=yes;privacy=off  
 Contact: <sip:712030@172.18.203.55:5060>  
 Content-Length: 0

[\[diagram\]](#) Call-ID: [\[prev\]](#) [\[next\]](#)

#### [7] SIP/2.0 200 OK

Via: SIP/2.0/UDP 172.18.203.55:5060;branch=z9hG4bK4b7ad1a3  
 From: "Anonymous" <sip:anonymous@172.18.203.55>;tag=b9c8b19b-c709-4d85-86d4-d2f557c6c2a6-30679890  
 To: <sip:2030@172.18.203.51>;tag=000d280821a5000e673687e3-08772598  
 Call-ID: ffcf5180-4b515b78-44b-37cb12ac@172.18.203.55  
 CSeq: 101 INVITE  
 Server: Cisco-CP7960G/7.5  
 Contact: <sip:2030@172.18.203.51:5060>  
 Allow: ACK,BYE,CANCEL,INVITE,NOTIFY,OPTIONS,REFER,REGISTER,UPDATE  
 Remote-Party-ID: "2030" <sip:2030@172.18.203.51>;party=called;id-type=subscriber;privacy=off;screen=yes  
 Supported: replaces  
 Content-Length: 257  
 Content-Type: application/sdp  
 Content-Disposition: session;handling=optional

```
v=0
o=Cisco-SIPUA 27187 0 IN IP4 172.18.203.51
s=SIP Call
t=0 0
m=audio 17924 RTP/AVP 0 8 18 101
c=IN IP4 172.18.203.51
a=rtpmap:0 PCMU/8000
a=rtpmap:8 PCMA/8000
a=rtpmap:18 G729/8000
a=rtpmap:101 telephone-event/8000
a=fmtp:101 0-15
a=sendrecv
```

[\[diagram\]](#) Call-ID: [\[prev\]](#) [\[next\]](#)

#### [8] ACK sip:2030@172.18.203.51:5060 SIP/2.0

Via: SIP/2.0/UDP 172.18.203.55:5060;branch=z9hG4bK41301038  
 From: "Anonymous" <sip:anonymous@172.18.203.55>;tag=b9c8b19b-c709-4d85-86d4-d2f557c6c2a6-30679890  
 To: <sip:2030@172.18.203.51>;tag=000d280821a5000e673687e3-08772598  
 Date: Wed, 12 Jul 2006 20:28:40 GMT  
 Call-ID: ffcf5180-4b515b78-44b-37cb12ac@172.18.203.55  
 Max-Forwards: 70  
 CSeq: 101 ACK  
 Allow-Events: presence  
 Content-Type: application/sdp  
 Content-Length: 214

```
v=0
o=CiscoSystemsCCM-SIP 2000 1 IN IP4 172.18.203.55
s=SIP Call
c=IN IP4 172.18.203.46
t=0 0
m=audio 20062 RTP/AVP 0 101
a=rtpmap:0 PCMU/8000
a=ptime:20
a=rtpmap:101 telephone-event/8000
a=fmtp:101 0-15
```

[\[diagram\]](#) Call-ID: [\[prev\]](#) [\[next\]](#)

#### [9] SIP/2.0 183 Session Progress

Via: SIP/2.0/UDP 172.18.203.46:5060;branch=z9hG4bK2ee1f2a1

From: "2010" <sip:2010@172.18.203.55>;tag=00120193edac000b7d02fa1f-4e13ca22  
 To: <sip:712030@172.18.203.55>;tag=b9c8b19b-c709-4d85-86d4-d2f557c6c2a6-30679889  
 Date: Wed, 12 Jul 2006 20:28:40 GMT  
 Call-ID: 00120193-edac0008-7b260318-5671b191@172.18.203.46  
 CSeq: 101 INVITE  
 Allow: INVITE, OPTIONS, INFO, BYE, CANCEL, ACK, PRACK, UPDATE, REFER, SUBSCRIBE, NOTIFY  
 Allow-Events: presence  
 Remote-Party-ID: "SIP Alerting 2030" <sip:2030@172.18.203.55>;party=called;screen=yes;privacy=off  
 Contact: <sip:712030@172.18.203.55:5060>  
 Content-Type: application/sdp  
 Content-Length: 214

v=0  
 o=CiscoSystemsCCM-SIP 2000 1 IN IP4 172.18.203.55  
 s=SIP Call  
 c=IN IP4 172.18.203.51  
 t=0 0  
 m=audio 17924 RTP/AVP 0 101  
 a=rtpmap:0 PCMU/8000  
 a=ptime:20  
 a=rtpmap:101 telephone-event/8000  
 a=fmtp:101 0-15

[[diagram](#)] Call-ID: [[prev](#)] [[next](#)]

[10] SIP/2.0 200 OK

Via: SIP/2.0/UDP 172.18.203.46:5060;branch=z9hG4bK2ee1f2a1  
 From: "2010" <sip:2010@172.18.203.55>;tag=00120193edac000b7d02fa1f-4e13ca22  
 To: <sip:712030@172.18.203.55>;tag=b9c8b19b-c709-4d85-86d4-d2f557c6c2a6-30679889  
 Date: Wed, 12 Jul 2006 20:28:40 GMT  
 Call-ID: 00120193-edac0008-7b260318-5671b191@172.18.203.46  
 CSeq: 101 INVITE  
 Allow: INVITE, OPTIONS, INFO, BYE, CANCEL, ACK, PRACK, UPDATE, REFER, SUBSCRIBE, NOTIFY  
 Allow-Events: presence  
 Remote-Party-ID: "SIP Line 2030" <sip:2030@172.18.203.55>;party=called;screen=yes;privacy=off  
 Contact: <sip:712030@172.18.203.55:5060>  
 Content-Type: application/sdp  
 Content-Length: 214

v=0  
 o=CiscoSystemsCCM-SIP 2000 1 IN IP4 172.18.203.55  
 s=SIP Call  
 c=IN IP4 172.18.203.51  
 t=0 0  
 m=audio 17924 RTP/AVP 0 101  
 a=rtpmap:0 PCMU/8000  
 a=ptime:20  
 a=rtpmap:101 telephone-event/8000  
 a=fmtp:101 0-15

[[diagram](#)] Call-ID: [[prev](#)] [[next](#)]

[11] ACK sip:712030@172.18.203.55:5060 SIP/2.0

Via: SIP/2.0/UDP 172.18.203.46:5060;branch=z9hG4bK53e42ac4  
 From: "2010" <sip:2010@172.18.203.55>;tag=00120193edac000b7d02fa1f-4e13ca22  
 To: <sip:712030@172.18.203.55>;tag=b9c8b19b-c709-4d85-86d4-d2f557c6c2a6-30679889  
 Call-ID: 00120193-edac0008-7b260318-5671b191@172.18.203.46  
 Max-Forwards: 70  
 CSeq: 101 ACK  
 User-Agent: Cisco-CP7960G/7.5  
 Remote-Party-ID: "2010" <sip:2010@172.18.203.46>;party=calling;id-type=subscriber;privacy=off;screen=yes  
 Content-Length: 0

[[diagram](#)] Call-ID: [[prev](#)] [[next](#)]

[12] BYE sip:712030@172.18.203.55:5060 SIP/2.0

Via: SIP/2.0/UDP 172.18.203.46:5060;branch=z9hG4bK437f3411  
 From: "2010" <sip:2010@172.18.203.55>;tag=00120193edac000b7d02fa1f-4e13ca22  
 To: <sip:712030@172.18.203.55>;tag=b9c8b19b-c709-4d85-86d4-d2f557c6c2a6-30679889  
 Call-ID: 00120193-edac0008-7b260318-5671b191@172.18.203.46  
 Max-Forwards: 70  
 CSeq: 102 BYE  
 User-Agent: Cisco-CP7960G/7.5  
 Content-Length: 0

[[diagram](#)] Call-ID: [[prev](#)] [[next](#)]

[13] BYE sip:2030@172.18.203.51:5060 SIP/2.0

Via: SIP/2.0/UDP 172.18.203.55:5060;branch=z9hG4bKfc93468  
 From: "Anonymous" <sip:anonymous@172.18.203.55>;tag=b9c8b19b-c709-4d85-86d4-d2f557c6c2a6-30679890  
 To: <sip:2030@172.18.203.51>;tag=000d280821a5000e673687e3-08772598  
 Date: Wed, 12 Jul 2006 20:28:40 GMT  
 Call-ID: ffcf5180-4b515b78-44b-37cb12ac@172.18.203.55  
 User-Agent: Cisco-CCM5.0

Max-Forwards: 70  
CSeq: 102 BYE  
Content-Length: 0

[\[diagram\]](#) Call-ID: [\[prev\]](#) [\[next\]](#)

**[14] SIP/2.0 200 OK**

Via: SIP/2.0/UDP 172.18.203.46:5060;branch=z9hG4bK437f3411  
From: "2010" <sip:2010@172.18.203.55>;tag=00120193edac000b7d02fa1f-4e13ca22  
To: <sip:712030@172.18.203.55>;tag=b9c8b19b-c709-4d85-86d4-d2f557c6c2a6-30679889  
Date: Wed, 12 Jul 2006 20:28:48 GMT  
Call-ID: 00120193-edac0008-7b260318-5671b191@172.18.203.46  
CSeq: 102 BYE  
Content-Length: 0

[\[diagram\]](#) Call-ID: [\[prev\]](#) [\[next\]](#)

**[15] SIP/2.0 200 OK**

Via: SIP/2.0/UDP 172.18.203.55:5060;branch=z9hG4bKfc93468  
From: "Anonymous" <sip:anonymous@172.18.203.55>;tag=b9c8b19b-c709-4d85-86d4-d2f557c6c2a6-30679890  
To: <sip:2030@172.18.203.51>;tag=000d280821a5000e673687e3-08772598  
Call-ID: ffcf5180-4b515b78-44b-37cb12ac@172.18.203.55  
CSeq: 102 BYE  
Server: Cisco-CP7960G/7.5  
Content-Length: 0

## 2.4 Calling and Connected Name ID

Title: Calling and Connected Name ID

### Description:

A SIP Basic phone calls another SIP Basic phone. Alerting name differs from connected name.

Note a "SIP Basic" phone is a 7960 configured with a pre-SDGA image (P0S3-07-5-00) to simulate a 3rd party phone.

### Configuration:

Node = CCM, IP = 172.18.203.55

Phone = G, Line = 2010, IP = 172.18.203.46, Model = SIP Basic

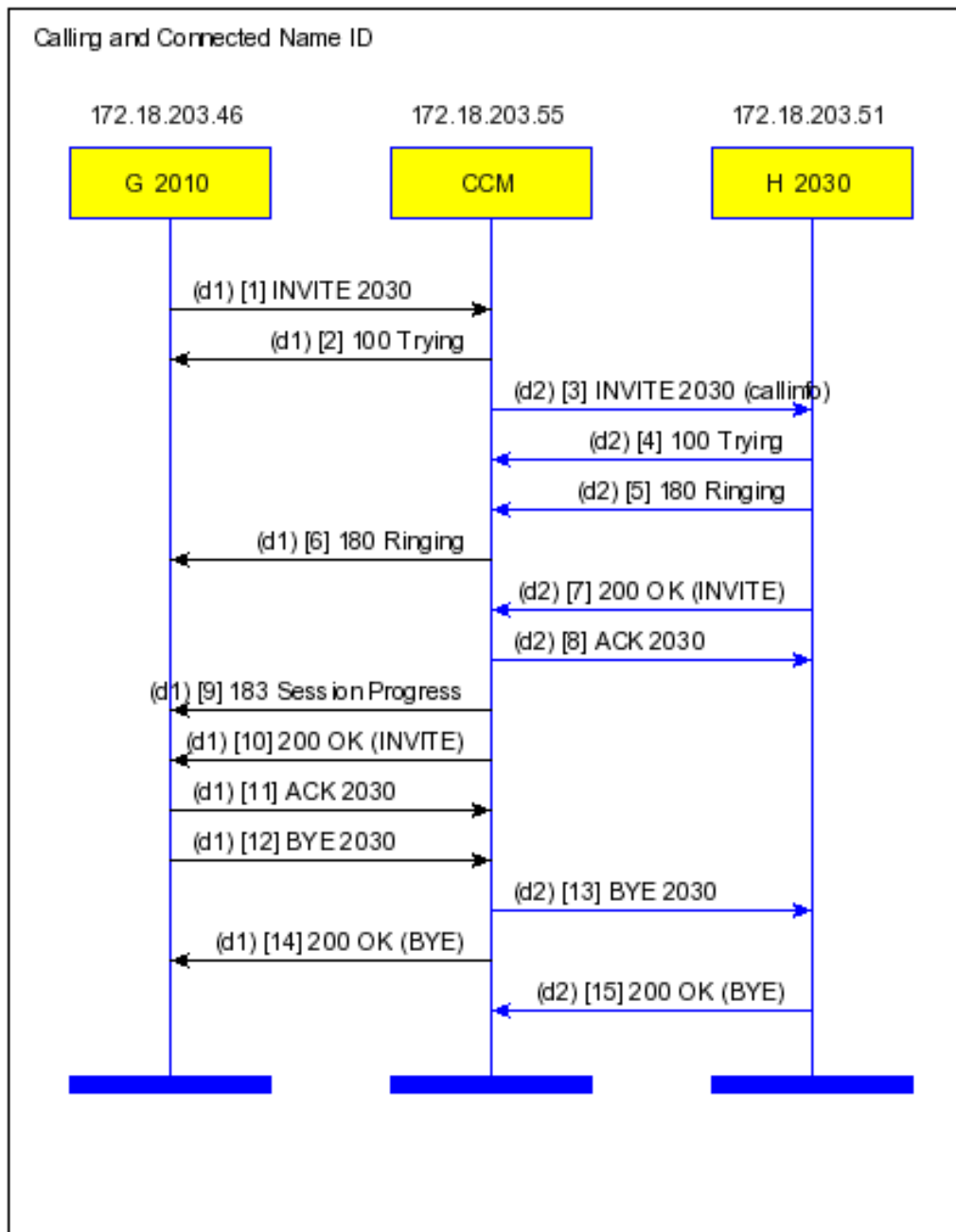
Phone = H, Line = 2030, IP = 172.18.203.51, Model = SIP Basic

### Scenario:

2010 calls 2030

2030 answers

2010 goes onhook



[[diagram](#)] [Call-ID: \[prev\]](#) [[next](#)]

[1] INVITE sip:2030@172.18.203.55 SIP/2.0

Via: SIP/2.0/UDP 172.18.203.46:5060;branch=z9hG4bK18470287  
 From: "2010" <sip:2010@172.18.203.55>;tag=00120193edac0007224ebfd1-142cff97  
 To: <sip:2030@172.18.203.55>  
 Call-ID: 00120193-edac0006-43a22922-7284f810@172.18.203.46  
 Max-Forwards: 70  
 CSeq: 101 INVITE  
 User-Agent: Cisco-CP7960G/7.5  
 Contact: <sip:2010@172.18.203.46:5060>  
 Expires: 180  
 Accept: application/sdp  
 Allow: ACK,BYE,CANCEL,INVITE,NOTIFY,OPTIONS,REFER,REGISTER,UPDATE  
 Remote-Party-ID: "2010" <sip:2010@172.18.203.46>;party=calling;id-type=subscriber;privacy=off;screen=yes  
 Supported: replaces  
 Content-Length: 257  
 Content-Type: application/sdp  
 Content-Disposition: session;handling=optional

v=0  
 o=Cisco-SIPUA 14721 0 IN IP4 172.18.203.46  
 s=SIP Call  
 t=0 0  
 m=audio 20054 RTP/AVP 0 8 18 101  
 c=IN IP4 172.18.203.46  
 a=rtpmap:0 PCMU/8000  
 a=rtpmap:8 PCMA/8000  
 a=rtpmap:18 G729/8000  
 a=rtpmap:101 telephone-event/8000  
 a=fmtp:101 0-15  
 a=sendrecv

[[diagram](#)] [Call-ID: \[prev\]](#) [[next](#)]

[2] SIP/2.0 100 Trying

Via: SIP/2.0/UDP 172.18.203.46:5060;branch=z9hG4bK18470287  
 From: "2010" <sip:2010@172.18.203.55>;tag=00120193edac0007224ebfd1-142cff97  
 To: <sip:2030@172.18.203.55>  
 Date: Wed, 12 Jul 2006 20:24:46 GMT  
 Call-ID: 00120193-edac0006-43a22922-7284f810@172.18.203.46  
 CSeq: 101 INVITE  
 Allow-Events: presence  
 Content-Length: 0

[[diagram](#)] [Call-ID: \[prev\]](#) [[next](#)]

[3] INVITE sip:2030@172.18.203.51:5060 SIP/2.0

Via: SIP/2.0/UDP 172.18.203.55:5060;branch=z9hG4bK10ae99e7  
 Remote-Party-ID: "SIP Line 2010" <sip:2010@172.18.203.55>;party=calling;screen=yes;privacy=off  
 From: "SIP Line 2010" <sip:2010@172.18.203.55>;tag=b9c8b19b-c709-4d85-86d4-d2f557c6c2a6-30679886  
 To: <sip:2030@172.18.203.51>  
 Date: Wed, 12 Jul 2006 20:24:46 GMT  
 Call-ID: 7455c080-4b515a8e-441-37cb12ac@172.18.203.55  
 Supported: timer,replaces  
 Min-SE: 1800  
 User-Agent: Cisco-CCM5.0  
 Allow: INVITE, OPTIONS, INFO, BYE, CANCEL, ACK, PRACK, UPDATE, REFER, SUBSCRIBE, NOTIFY  
 CSeq: 101 INVITE  
 Expires: 180  
 Allow-Events: presence  
 Alert-Info: <urn:x-cisco-remotecc:callinfo>; security= NotAuthenticated; orientation= from; call-instance= 1  
 Alert-Info: <file://Bellcore-dr1/>  
 Contact: <sip:2030@172.18.203.55:5060>  
 Max-Forwards: 69  
 Content-Length: 0

[[diagram](#)] [Call-ID: \[prev\]](#) [[next](#)]

[4] SIP/2.0 100 Trying

Via: SIP/2.0/UDP 172.18.203.55:5060;branch=z9hG4bK10ae99e7  
 From: "SIP Line 2010" <sip:2010@172.18.203.55>;tag=b9c8b19b-c709-4d85-86d4-d2f557c6c2a6-30679886  
 To: <sip:2030@172.18.203.51>  
 Call-ID: 7455c080-4b515a8e-441-37cb12ac@172.18.203.55  
 CSeq: 101 INVITE  
 Server: Cisco-CP7960G/7.5  
 Contact: <sip:2030@172.18.203.51:5060>  
 Allow: ACK,BYE,CANCEL,INVITE,NOTIFY,OPTIONS,REFER,REGISTER,UPDATE  
 Remote-Party-ID: "2030" <sip:2030@172.18.203.51>;party=called;id-type=subscriber;privacy=off;screen=yes  
 Content-Length: 0

[[diagram](#)] [Call-ID: \[prev\]](#) [[next](#)]

[5] SIP/2.0 180 Ringing

Via: SIP/2.0/UDP 172.18.203.55:5060;branch=z9hG4bK10ae99e7

From: "SIP Line 2010" <sip:2010@172.18.203.55>;tag=b9c8b19b-c709-4d85-86d4-d2f557c6c2a6-30679886  
 To: <sip:2030@172.18.203.51>;tag=000d280821a5000a3c4d59d7-502a0edd  
 Call-ID: 7455c080-4b515a8e-441-37cb12ac@172.18.203.55  
 CSeq: 101 INVITE  
 Server: Cisco-CP7960G/7.5  
 Contact: <sip:2030@172.18.203.51:5060>  
 Allow: ACK,BYE,CANCEL,INVITE,NOTIFY,OPTIONS,REFER,REGISTER,UPDATE  
 Remote-Party-ID: "2030" <sip:2030@172.18.203.51>;party=called;id-type=subscriber;privacy=off;screen=yes  
 Content-Length: 0

[\[diagram\]](#) Call-ID: [\[prev\]](#) [\[next\]](#)

#### [6] SIP/2.0 180 Ringing

Via: SIP/2.0/UDP 172.18.203.46:5060;branch=z9hG4bK18470287  
 From: "2010" <sip:2010@172.18.203.55>;tag=00120193edac0007224ebfd1-142cff97  
 To: <sip:2030@172.18.203.55>;tag=b9c8b19b-c709-4d85-86d4-d2f557c6c2a6-30679885  
 Date: Wed, 12 Jul 2006 20:24:46 GMT  
 Call-ID: 00120193-edac0006-43a22922-7284f810@172.18.203.46  
 CSeq: 101 INVITE  
 Allow: INVITE, OPTIONS, INFO, BYE, CANCEL, ACK, PRACK, UPDATE, REFER, SUBSCRIBE, NOTIFY  
 Allow-Events: presence  
 Remote-Party-ID: "SIP Alerting 2030" <sip:2030@172.18.203.55>;party=called;screen=yes;privacy=off  
 Contact: <sip:2030@172.18.203.55:5060>  
 Content-Length: 0

[\[diagram\]](#) Call-ID: [\[prev\]](#) [\[next\]](#)

#### [7] SIP/2.0 200 OK

Via: SIP/2.0/UDP 172.18.203.55:5060;branch=z9hG4bK10ae99e7  
 From: "SIP Line 2010" <sip:2010@172.18.203.55>;tag=b9c8b19b-c709-4d85-86d4-d2f557c6c2a6-30679886  
 To: <sip:2030@172.18.203.51>;tag=000d280821a5000a3c4d59d7-502a0edd  
 Call-ID: 7455c080-4b515a8e-441-37cb12ac@172.18.203.55  
 CSeq: 101 INVITE  
 Server: Cisco-CP7960G/7.5  
 Contact: <sip:2030@172.18.203.51:5060>  
 Allow: ACK,BYE,CANCEL,INVITE,NOTIFY,OPTIONS,REFER,REGISTER,UPDATE  
 Remote-Party-ID: "2030" <sip:2030@172.18.203.51>;party=called;id-type=subscriber;privacy=off;screen=yes  
 Supported: replaces  
 Content-Length: 257  
 Content-Type: application/sdp  
 Content-Disposition: session;handling=optional

```
v=0
o=Cisco-SIPUA 26399 0 IN IP4 172.18.203.51
s=SIP Call
t=0 0
m=audio 17916 RTP/AVP 0 8 18 101
c=IN IP4 172.18.203.51
a=rtpmap:0 PCMU/8000
a=rtpmap:8 PCMA/8000
a=rtpmap:18 G729/8000
a=rtpmap:101 telephone-event/8000
a=fmtp:101 0-15
a=sendrecv
```

[\[diagram\]](#) Call-ID: [\[prev\]](#) [\[next\]](#)

#### [8] ACK sip:2030@172.18.203.51:5060 SIP/2.0

Via: SIP/2.0/UDP 172.18.203.55:5060;branch=z9hG4bK2677146a  
 From: "SIP Line 2010" <sip:2010@172.18.203.55>;tag=b9c8b19b-c709-4d85-86d4-d2f557c6c2a6-30679886  
 To: <sip:2030@172.18.203.51>;tag=000d280821a5000a3c4d59d7-502a0edd  
 Date: Wed, 12 Jul 2006 20:24:46 GMT  
 Call-ID: 7455c080-4b515a8e-441-37cb12ac@172.18.203.55  
 Max-Forwards: 70  
 CSeq: 101 ACK  
 Allow-Events: presence  
 Content-Type: application/sdp  
 Content-Length: 214

```
v=0
o=CiscoSystemsCCM-SIP 2000 1 IN IP4 172.18.203.55
s=SIP Call
c=IN IP4 172.18.203.46
t=0 0
m=audio 20054 RTP/AVP 0 101
a=rtpmap:0 PCMU/8000
a=ptime:20
a=rtpmap:101 telephone-event/8000
a=fmtp:101 0-15
```

[\[diagram\]](#) Call-ID: [\[prev\]](#) [\[next\]](#)

#### [9] SIP/2.0 183 Session Progress

Via: SIP/2.0/UDP 172.18.203.46:5060;branch=z9hG4bK18470287

```

From: "2010" <sip:2010@172.18.203.55>;tag=00120193edac0007224ebfd1-142cff97
To: <sip:2030@172.18.203.55>;tag=b9c8b19b-c709-4d85-86d4-d2f557c6c2a6-30679885
Date: Wed, 12 Jul 2006 20:24:46 GMT
Call-ID: 00120193-edac0006-43a22922-7284f810@172.18.203.46
CSeq: 101 INVITE
Allow: INVITE, OPTIONS, INFO, BYE, CANCEL, ACK, PRACK, UPDATE, REFER, SUBSCRIBE, NOTIFY
Allow-Events: presence
Remote-Party-ID: "SIP Alerting 2030" <sip:2030@172.18.203.55>;party=called;screen=yes;privacy=off
Contact: <sip:2030@172.18.203.55:5060>
Content-Type: application/sdp
Content-Length: 214

```

```

v=0
o=CiscoSystemsCCM-SIP 2000 1 IN IP4 172.18.203.55
s=SIP Call
c=IN IP4 172.18.203.51
t=0 0
m=audio 17916 RTP/AVP 0 101
a=rtpmap:0 PCMU/8000
a=ptime:20
a=rtpmap:101 telephone-event/8000
a=fmtp:101 0-15

```

[\[diagram\]](#) Call-ID: [\[prev\]](#) [\[next\]](#)

```

[10] SIP/2.0 200 OK
Via: SIP/2.0/UDP 172.18.203.46:5060;branch=z9hG4bK18470287
From: "2010" <sip:2010@172.18.203.55>;tag=00120193edac0007224ebfd1-142cff97
To: <sip:2030@172.18.203.55>;tag=b9c8b19b-c709-4d85-86d4-d2f557c6c2a6-30679885
Date: Wed, 12 Jul 2006 20:24:46 GMT
Call-ID: 00120193-edac0006-43a22922-7284f810@172.18.203.46
CSeq: 101 INVITE
Allow: INVITE, OPTIONS, INFO, BYE, CANCEL, ACK, PRACK, UPDATE, REFER, SUBSCRIBE, NOTIFY
Allow-Events: presence
Remote-Party-ID: "SIP Line 2030" <sip:2030@172.18.203.55>;party=called;screen=yes;privacy=off
Contact: <sip:2030@172.18.203.55:5060>
Content-Type: application/sdp
Content-Length: 214

```

```

v=0
o=CiscoSystemsCCM-SIP 2000 1 IN IP4 172.18.203.55
s=SIP Call
c=IN IP4 172.18.203.51
t=0 0
m=audio 17916 RTP/AVP 0 101
a=rtpmap:0 PCMU/8000
a=ptime:20
a=rtpmap:101 telephone-event/8000
a=fmtp:101 0-15

```

[\[diagram\]](#) Call-ID: [\[prev\]](#) [\[next\]](#)

```

[11] ACK sip:2030@172.18.203.55:5060 SIP/2.0
Via: SIP/2.0/UDP 172.18.203.46:5060;branch=z9hG4bK28d54d36
From: "2010" <sip:2010@172.18.203.55>;tag=00120193edac0007224ebfd1-142cff97
To: <sip:2030@172.18.203.55>;tag=b9c8b19b-c709-4d85-86d4-d2f557c6c2a6-30679885
Call-ID: 00120193-edac0006-43a22922-7284f810@172.18.203.46
Max-Forwards: 70
CSeq: 101 ACK
User-Agent: Cisco-CP7960G/7.5
Remote-Party-ID: "2010" <sip:2010@172.18.203.46>;party=calling;id-type=subscriber;privacy=off;screen=yes
Content-Length: 0

```

[\[diagram\]](#) Call-ID: [\[prev\]](#) [\[next\]](#)

```

[12] BYE sip:2030@172.18.203.55:5060 SIP/2.0
Via: SIP/2.0/UDP 172.18.203.46:5060;branch=z9hG4bK0de6323a
From: "2010" <sip:2010@172.18.203.55>;tag=00120193edac0007224ebfd1-142cff97
To: <sip:2030@172.18.203.55>;tag=b9c8b19b-c709-4d85-86d4-d2f557c6c2a6-30679885
Call-ID: 00120193-edac0006-43a22922-7284f810@172.18.203.46
Max-Forwards: 70
CSeq: 102 BYE
User-Agent: Cisco-CP7960G/7.5
Content-Length: 0

```

[\[diagram\]](#) Call-ID: [\[prev\]](#) [\[next\]](#)

```

[13] BYE sip:2030@172.18.203.51:5060 SIP/2.0
Via: SIP/2.0/UDP 172.18.203.55:5060;branch=z9hG4bK61bcc4b8
From: "SIP Line 2010" <sip:2010@172.18.203.55>;tag=b9c8b19b-c709-4d85-86d4-d2f557c6c2a6-30679886
To: <sip:2030@172.18.203.51>;tag=000d280821a5000a3c4d59d7-502a0edd
Date: Wed, 12 Jul 2006 20:24:46 GMT
Call-ID: 7455c080-4b515a8e-441-37cb12ac@172.18.203.55
User-Agent: Cisco-CCM5.0

```

Max-Forwards: 70  
CSeq: 102 BYE  
Content-Length: 0

[\[diagram\]](#) Call-ID: [\[prev\]](#) [\[next\]](#)

**[14] SIP/2.0 200 OK**

Via: SIP/2.0/UDP 172.18.203.46:5060;branch=z9hG4bK0de6323a  
From: "2010" <sip:2010@172.18.203.55>;tag=00120193edac0007224ebfd1-142cff97  
To: <sip:2030@172.18.203.55>;tag=b9c8b19b-c709-4d85-86d4-d2f557c6c2a6-30679885  
Date: Wed, 12 Jul 2006 20:24:50 GMT  
Call-ID: 00120193-edac0006-43a22922-7284f810@172.18.203.46  
CSeq: 102 BYE  
Content-Length: 0

[\[diagram\]](#) Call-ID: [\[prev\]](#) [\[next\]](#)

**[15] SIP/2.0 200 OK**

Via: SIP/2.0/UDP 172.18.203.55:5060;branch=z9hG4bK61bcc4b8  
From: "SIP Line 2010" <sip:2010@172.18.203.55>;tag=b9c8b19b-c709-4d85-86d4-d2f557c6c2a6-30679886  
To: <sip:2030@172.18.203.51>;tag=000d280821a5000a3c4d59d7-502a0edd  
Call-ID: 7455c080-4b515a8e-441-37cb12ac@172.18.203.55  
CSeq: 102 BYE  
Server: Cisco-CP7960G/7.5  
Content-Length: 0

## 2.5 Calling and Connected Name ID

Title: Calling and Connected Name ID

### Description:

A SIP Basic phone calls another SIP Basic phone.

Note a "SIP Basic" phone is a 7960 configured with a pre-SDGA image (P0S3-07-5-00) to simulate a 3rd party phone.

### Configuration:

Node = CCM, IP = 172.18.203.55

Phone = G, Line = 2010, IP = 172.18.203.46, Model = SIP Basic

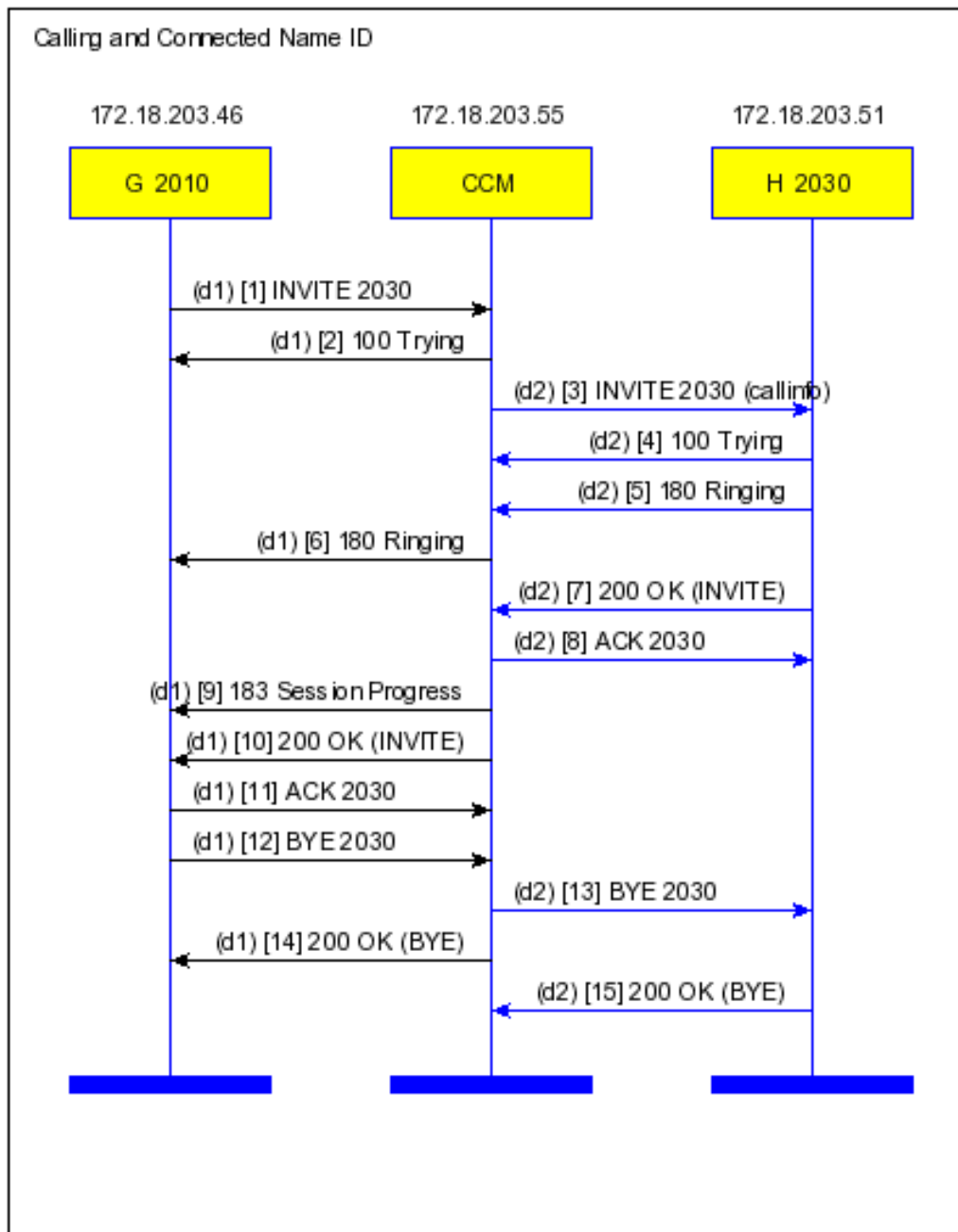
Phone = H, Line = 2030, IP = 172.18.203.51, Model = SIP Basic

### Scenario:

2010 calls 2030

2030 answers

2010 goes onhook



[[diagram](#)] [Call-ID: \[prev\]](#) [[next](#)]

[1] INVITE sip:2030@172.18.203.55 SIP/2.0

Via: SIP/2.0/UDP 172.18.203.46:5060;branch=z9hG4bK7949d3d5  
 From: "2010" <sip:2010@172.18.203.55>;tag=00120193edac00095ae52863-3b8f29a5  
 To: <sip:2030@172.18.203.55>  
 Call-ID: 00120193-edac0007-3b6d5988-38af6d86@172.18.203.46  
 Max-Forwards: 70  
 CSeq: 101 INVITE  
 User-Agent: Cisco-CP7960G/7.5  
 Contact: <sip:2010@172.18.203.46:5060>  
 Expires: 180  
 Accept: application/sdp  
 Allow: ACK,BYE,CANCEL,INVITE,NOTIFY,OPTIONS,REFER,REGISTER,UPDATE  
 Remote-Party-ID: "2010" <sip:2010@172.18.203.46>;party=calling;id-type=subscriber;privacy=off;screen=yes  
 Supported: replaces  
 Content-Length: 257  
 Content-Type: application/sdp  
 Content-Disposition: session;handling=optional

v=0  
 o=Cisco-SIPUA 21096 0 IN IP4 172.18.203.46  
 s=SIP Call  
 t=0 0  
 m=audio 20058 RTP/AVP 0 8 18 101  
 c=IN IP4 172.18.203.46  
 a=rtpmap:0 PCMU/8000  
 a=rtpmap:8 PCMA/8000  
 a=rtpmap:18 G729/8000  
 a=rtpmap:101 telephone-event/8000  
 a=fmtp:101 0-15  
 a=sendrecv

[[diagram](#)] [Call-ID: \[prev\]](#) [[next](#)]

[2] SIP/2.0 100 Trying

Via: SIP/2.0/UDP 172.18.203.46:5060;branch=z9hG4bK7949d3d5  
 From: "2010" <sip:2010@172.18.203.55>;tag=00120193edac00095ae52863-3b8f29a5  
 To: <sip:2030@172.18.203.55>  
 Date: Wed, 12 Jul 2006 20:26:30 GMT  
 Call-ID: 00120193-edac0007-3b6d5988-38af6d86@172.18.203.46  
 CSeq: 101 INVITE  
 Allow-Events: presence  
 Content-Length: 0

[[diagram](#)] [Call-ID: \[prev\]](#) [[next](#)]

[3] INVITE sip:2030@172.18.203.51:5060 SIP/2.0

Via: SIP/2.0/UDP 172.18.203.55:5060;branch=z9hG4bK2a3f7c83  
 Remote-Party-ID: "SIP Line 2010" <sip:2010@172.18.203.55>;party=calling;screen=yes;privacy=off  
 From: "SIP Line 2010" <sip:2010@172.18.203.55>;tag=b9c8b19b-c709-4d85-86d4-d2f557c6c2a6-30679888  
 To: <sip:2030@172.18.203.51>  
 Date: Wed, 12 Jul 2006 20:26:30 GMT  
 Call-ID: b252e480-4b515af6-446-37cb12ac@172.18.203.55  
 Supported: timer,replaces  
 Min-SE: 1800  
 User-Agent: Cisco-CCM5.0  
 Allow: INVITE, OPTIONS, INFO, BYE, CANCEL, ACK, PRACK, UPDATE, REFER, SUBSCRIBE, NOTIFY  
 CSeq: 101 INVITE  
 Expires: 180  
 Allow-Events: presence  
 Alert-Info: <urn:x-cisco-remotecc:callinfo>; security= NotAuthenticated; orientation= from; call-instance= 1  
 Alert-Info: <file://Bellcore-dr1/>  
 Contact: <sip:2030@172.18.203.55:5060>  
 Max-Forwards: 69  
 Content-Length: 0

[[diagram](#)] [Call-ID: \[prev\]](#) [[next](#)]

[4] SIP/2.0 100 Trying

Via: SIP/2.0/UDP 172.18.203.55:5060;branch=z9hG4bK2a3f7c83  
 From: "SIP Line 2010" <sip:2010@172.18.203.55>;tag=b9c8b19b-c709-4d85-86d4-d2f557c6c2a6-30679888  
 To: <sip:2030@172.18.203.51>  
 Call-ID: b252e480-4b515af6-446-37cb12ac@172.18.203.55  
 CSeq: 101 INVITE  
 Server: Cisco-CP7960G/7.5  
 Contact: <sip:2030@172.18.203.51:5060>  
 Allow: ACK,BYE,CANCEL,INVITE,NOTIFY,OPTIONS,REFER,REGISTER,UPDATE  
 Remote-Party-ID: "2030" <sip:2030@172.18.203.51>;party=called;id-type=subscriber;privacy=off;screen=yes  
 Content-Length: 0

[[diagram](#)] [Call-ID: \[prev\]](#) [[next](#)]

[5] SIP/2.0 180 Ringing

Via: SIP/2.0/UDP 172.18.203.55:5060;branch=z9hG4bK2a3f7c83

From: "SIP Line 2010" <sip:2010@172.18.203.55>;tag=b9c8b19b-c709-4d85-86d4-d2f557c6c2a6-30679888  
 To: <sip:2030@172.18.203.51>;tag=000d280821a5000c41189cdc-1ce4e937  
 Call-ID: b252e480-4b515af6-446-37cb12ac@172.18.203.55  
 CSeq: 101 INVITE  
 Server: Cisco-CP7960G/7.5  
 Contact: <sip:2030@172.18.203.51:5060>  
 Allow: ACK,BYE,CANCEL,INVITE,NOTIFY,OPTIONS,REFER,REGISTER,UPDATE  
 Remote-Party-ID: "2030" <sip:2030@172.18.203.51>;party=called;id-type=subscriber;privacy=off;screen=yes  
 Content-Length: 0

[\[diagram\]](#) Call-ID: [\[prev\]](#) [\[next\]](#)

#### [6] SIP/2.0 180 Ringing

Via: SIP/2.0/UDP 172.18.203.46:5060;branch=z9hG4bK7949d3d5  
 From: "2010" <sip:2010@172.18.203.55>;tag=00120193edac00095ae52863-3b8f29a5  
 To: <sip:2030@172.18.203.55>;tag=b9c8b19b-c709-4d85-86d4-d2f557c6c2a6-30679887  
 Date: Wed, 12 Jul 2006 20:26:30 GMT  
 Call-ID: 00120193-edac0007-3b6d5988-38af6d86@172.18.203.46  
 CSeq: 101 INVITE  
 Allow: INVITE, OPTIONS, INFO, BYE, CANCEL, ACK, PRACK, UPDATE, REFER, SUBSCRIBE, NOTIFY  
 Allow-Events: presence  
 Remote-Party-ID: "SIP Alerting 2030" <sip:2030@172.18.203.55>;party=called;screen=yes;privacy=off  
 Contact: <sip:2030@172.18.203.55:5060>  
 Content-Length: 0

[\[diagram\]](#) Call-ID: [\[prev\]](#) [\[next\]](#)

#### [7] SIP/2.0 200 OK

Via: SIP/2.0/UDP 172.18.203.55:5060;branch=z9hG4bK2a3f7c83  
 From: "SIP Line 2010" <sip:2010@172.18.203.55>;tag=b9c8b19b-c709-4d85-86d4-d2f557c6c2a6-30679888  
 To: <sip:2030@172.18.203.51>;tag=000d280821a5000c41189cdc-1ce4e937  
 Call-ID: b252e480-4b515af6-446-37cb12ac@172.18.203.55  
 CSeq: 101 INVITE  
 Server: Cisco-CP7960G/7.5  
 Contact: <sip:2030@172.18.203.51:5060>  
 Allow: ACK,BYE,CANCEL,INVITE,NOTIFY,OPTIONS,REFER,REGISTER,UPDATE  
 Remote-Party-ID: "2030" <sip:2030@172.18.203.51>;party=called;id-type=subscriber;privacy=off;screen=yes  
 Supported: replaces  
 Content-Length: 257  
 Content-Type: application/sdp  
 Content-Disposition: session;handling=optional

```
v=0
o=Cisco-SIPUA 24470 0 IN IP4 172.18.203.51
s=SIP Call
t=0 0
m=audio 17920 RTP/AVP 0 8 18 101
c=IN IP4 172.18.203.51
a=rtpmap:0 PCMU/8000
a=rtpmap:8 PCMA/8000
a=rtpmap:18 G729/8000
a=rtpmap:101 telephone-event/8000
a=fmtp:101 0-15
a=sendrecv
```

[\[diagram\]](#) Call-ID: [\[prev\]](#) [\[next\]](#)

#### [8] ACK sip:2030@172.18.203.51:5060 SIP/2.0

Via: SIP/2.0/UDP 172.18.203.55:5060;branch=z9hG4bK24a178b6  
 From: "SIP Line 2010" <sip:2010@172.18.203.55>;tag=b9c8b19b-c709-4d85-86d4-d2f557c6c2a6-30679888  
 To: <sip:2030@172.18.203.51>;tag=000d280821a5000c41189cdc-1ce4e937  
 Date: Wed, 12 Jul 2006 20:26:30 GMT  
 Call-ID: b252e480-4b515af6-446-37cb12ac@172.18.203.55  
 Max-Forwards: 70  
 CSeq: 101 ACK  
 Allow-Events: presence  
 Content-Type: application/sdp  
 Content-Length: 214

```
v=0
o=CiscoSystemsCCM-SIP 2000 1 IN IP4 172.18.203.55
s=SIP Call
c=IN IP4 172.18.203.46
t=0 0
m=audio 20058 RTP/AVP 0 101
a=rtpmap:0 PCMU/8000
a=ptime:20
a=rtpmap:101 telephone-event/8000
a=fmtp:101 0-15
```

[\[diagram\]](#) Call-ID: [\[prev\]](#) [\[next\]](#)

#### [9] SIP/2.0 183 Session Progress

Via: SIP/2.0/UDP 172.18.203.46:5060;branch=z9hG4bK7949d3d5

```

From: "2010" <sip:2010@172.18.203.55>;tag=00120193edac00095ae52863-3b8f29a5
To: <sip:2030@172.18.203.55>;tag=b9c8b19b-c709-4d85-86d4-d2f557c6c2a6-30679887
Date: Wed, 12 Jul 2006 20:26:30 GMT
Call-ID: 00120193-edac0007-3b6d5988-38af6d86@172.18.203.46
CSeq: 101 INVITE
Allow: INVITE, OPTIONS, INFO, BYE, CANCEL, ACK, PRACK, UPDATE, REFER, SUBSCRIBE, NOTIFY
Allow-Events: presence
Remote-Party-ID: "SIP Alerting 2030" <sip:2030@172.18.203.55>;party=called;screen=yes;privacy=off
Contact: <sip:2030@172.18.203.55:5060>
Content-Type: application/sdp
Content-Length: 214

```

```

v=0
o=CiscoSystemsCCM-SIP 2000 1 IN IP4 172.18.203.55
s=SIP Call
c=IN IP4 172.18.203.51
t=0 0
m=audio 17920 RTP/AVP 0 101
a=rtpmap:0 PCMU/8000
a=ptime:20
a=rtpmap:101 telephone-event/8000
a=fmtp:101 0-15

```

[\[diagram\]](#) Call-ID: [\[prev\]](#) [\[next\]](#)

```

[10] SIP/2.0 200 OK
Via: SIP/2.0/UDP 172.18.203.46:5060;branch=z9hG4bK7949d3d5
From: "2010" <sip:2010@172.18.203.55>;tag=00120193edac00095ae52863-3b8f29a5
To: <sip:2030@172.18.203.55>;tag=b9c8b19b-c709-4d85-86d4-d2f557c6c2a6-30679887
Date: Wed, 12 Jul 2006 20:26:30 GMT
Call-ID: 00120193-edac0007-3b6d5988-38af6d86@172.18.203.46
CSeq: 101 INVITE
Allow: INVITE, OPTIONS, INFO, BYE, CANCEL, ACK, PRACK, UPDATE, REFER, SUBSCRIBE, NOTIFY
Allow-Events: presence
Remote-Party-ID: "SIP Line 2030" <sip:2030@172.18.203.55>;party=called;screen=yes;privacy=off
Contact: <sip:2030@172.18.203.55:5060>
Content-Type: application/sdp
Content-Length: 214

```

```

v=0
o=CiscoSystemsCCM-SIP 2000 1 IN IP4 172.18.203.55
s=SIP Call
c=IN IP4 172.18.203.51
t=0 0
m=audio 17920 RTP/AVP 0 101
a=rtpmap:0 PCMU/8000
a=ptime:20
a=rtpmap:101 telephone-event/8000
a=fmtp:101 0-15

```

[\[diagram\]](#) Call-ID: [\[prev\]](#) [\[next\]](#)

```

[11] ACK sip:2030@172.18.203.55:5060 SIP/2.0
Via: SIP/2.0/UDP 172.18.203.46:5060;branch=z9hG4bK2e8d885a
From: "2010" <sip:2010@172.18.203.55>;tag=00120193edac00095ae52863-3b8f29a5
To: <sip:2030@172.18.203.55>;tag=b9c8b19b-c709-4d85-86d4-d2f557c6c2a6-30679887
Call-ID: 00120193-edac0007-3b6d5988-38af6d86@172.18.203.46
Max-Forwards: 70
CSeq: 101 ACK
User-Agent: Cisco-CP7960G/7.5
Remote-Party-ID: "2010" <sip:2010@172.18.203.46>;party=calling;id-type=subscriber;privacy=off;screen=yes
Content-Length: 0

```

[\[diagram\]](#) Call-ID: [\[prev\]](#) [\[next\]](#)

```

[12] BYE sip:2030@172.18.203.55:5060 SIP/2.0
Via: SIP/2.0/UDP 172.18.203.46:5060;branch=z9hG4bK49848af9
From: "2010" <sip:2010@172.18.203.55>;tag=00120193edac00095ae52863-3b8f29a5
To: <sip:2030@172.18.203.55>;tag=b9c8b19b-c709-4d85-86d4-d2f557c6c2a6-30679887
Call-ID: 00120193-edac0007-3b6d5988-38af6d86@172.18.203.46
Max-Forwards: 70
CSeq: 102 BYE
User-Agent: Cisco-CP7960G/7.5
Content-Length: 0

```

[\[diagram\]](#) Call-ID: [\[prev\]](#) [\[next\]](#)

```

[13] BYE sip:2030@172.18.203.51:5060 SIP/2.0
Via: SIP/2.0/UDP 172.18.203.55:5060;branch=z9hG4bK13faaf5b
From: "SIP Line 2010" <sip:2010@172.18.203.55>;tag=b9c8b19b-c709-4d85-86d4-d2f557c6c2a6-30679888
To: <sip:2030@172.18.203.51>;tag=000d280821a5000c41189cdc-1ce4e937
Date: Wed, 12 Jul 2006 20:26:30 GMT
Call-ID: b252e480-4b515af6-446-37cb12ac@172.18.203.55
User-Agent: Cisco-CCM5.0

```

Max-Forwards: 70  
CSeq: 102 BYE  
Content-Length: 0

[\[diagram\]](#) Call-ID: [\[prev\]](#) [\[next\]](#)

**[14] SIP/2.0 200 OK**

Via: SIP/2.0/UDP 172.18.203.46:5060;branch=z9hG4bK49848af9  
From: "2010" <sip:2010@172.18.203.55>;tag=00120193edac00095ae52863-3b8f29a5  
To: <sip:2030@172.18.203.55>;tag=b9c8b19b-c709-4d85-86d4-d2f557c6c2a6-30679887  
Date: Wed, 12 Jul 2006 20:26:33 GMT  
Call-ID: 00120193-edac0007-3b6d5988-38af6d86@172.18.203.46  
CSeq: 102 BYE  
Content-Length: 0

[\[diagram\]](#) Call-ID: [\[prev\]](#) [\[next\]](#)

**[15] SIP/2.0 200 OK**

Via: SIP/2.0/UDP 172.18.203.55:5060;branch=z9hG4bK13faaf5b  
From: "SIP Line 2010" <sip:2010@172.18.203.55>;tag=b9c8b19b-c709-4d85-86d4-d2f557c6c2a6-30679888  
To: <sip:2030@172.18.203.51>;tag=000d280821a5000c41189cdc-1ce4e937  
Call-ID: b252e480-4b515af6-446-37cb12ac@172.18.203.55  
CSeq: 102 BYE  
Server: Cisco-CP7960G/7.5  
Content-Length: 0

## 2.6 Multiple Lines Per Phone

Title: Multiple Lines Per Phone

### Description:

Line 1 on G calls L. While G is still talking to L on line 1, G initiates a call to H using line 2.

Note a "SIP Basic" phone is a 7960 configured with a pre-SDGA image (P0S3-07-5-00) to simulate a 3rd party phone.

### Configuration:

Node = CCM, IP = 172.18.203.55

Phone = G, Line = 2010-2011, IP = 172.18.203.46, Model = SIP Basic

Phone = H, Line = 2030, IP = 172.18.203.51, Model = SIP Basic

Phone = L, Line = 2040, IP = 172.18.203.52, Model = SIP Basic

### Scenario:

2010 calls 2040

2040 answers

2010 presses hold

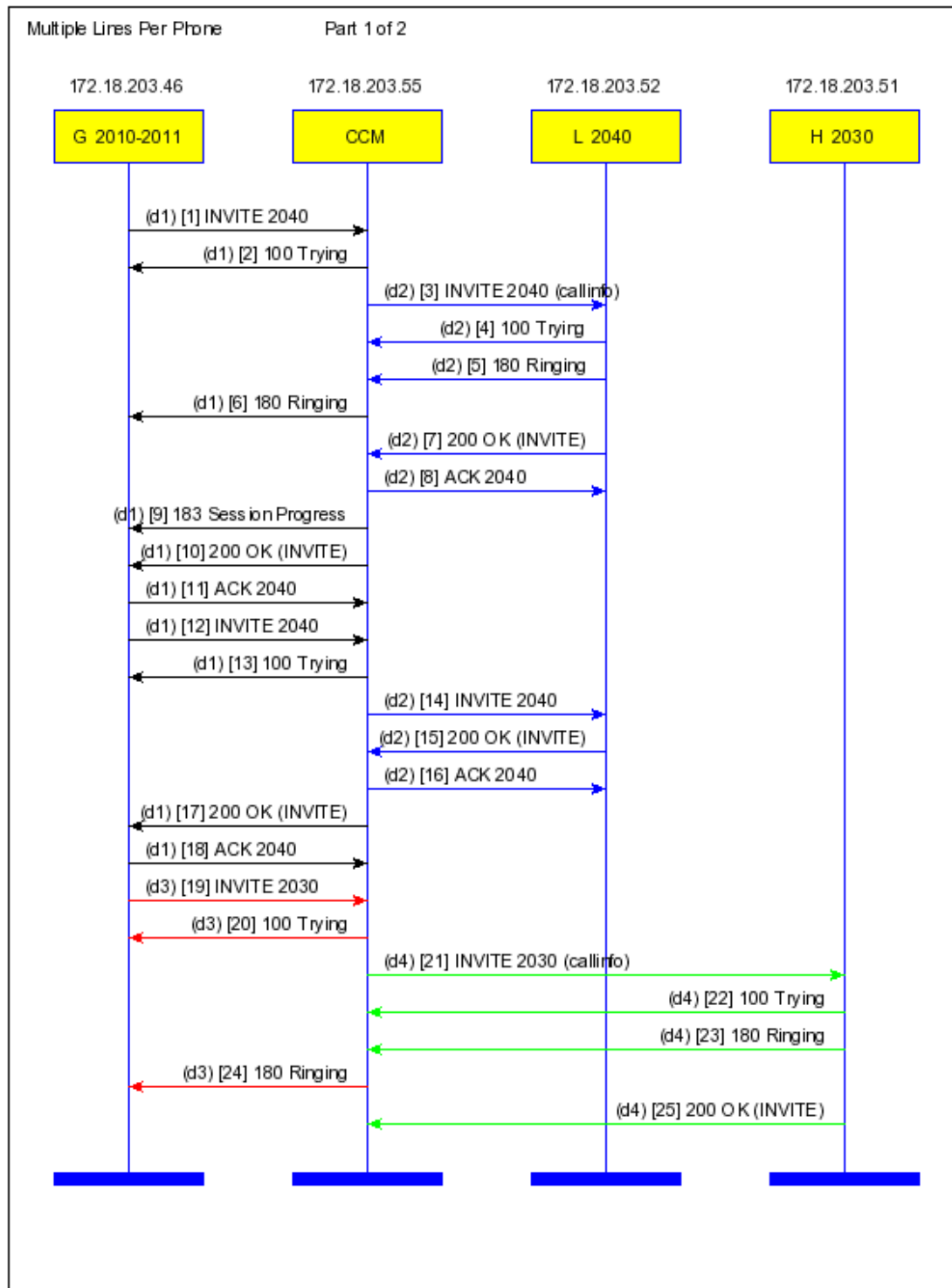
2011 calls 2030

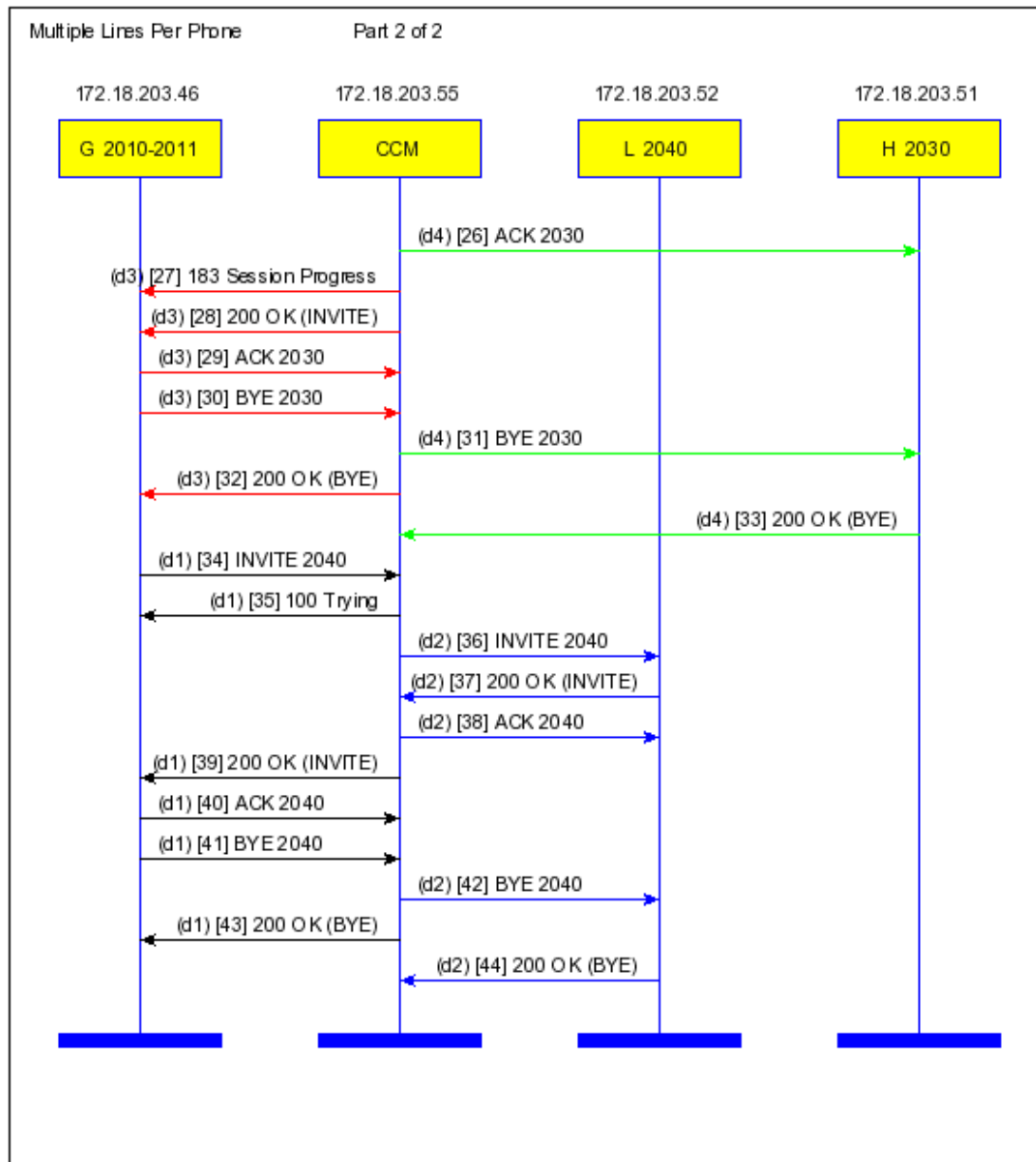
2030 answers

2011 ends calls with 2030

2010 resumes call with 2040

2010 ends call with 2040





[\[diagram\]](#) Call-ID: [\[prev\]](#) [\[next\]](#)

[1] INVITE sip:2040@172.18.203.55 SIP/2.0

Via: SIP/2.0/UDP 172.18.203.46:5060;branch=z9hG4bK03cec5d5  
 From: "2010" <sip:2010@172.18.203.55>;tag=00120193edac00153f24b9cf-4a57dacb  
 To: <sip:2040@172.18.203.55>  
 Call-ID: 00120193-edac000f-4203dea1-68620203@172.18.203.46  
 Max-Forwards: 70  
 CSeq: 101 INVITE  
 User-Agent: Cisco-CP7960G/7.5  
 Contact: <sip:2010@172.18.203.46:5060>  
 Expires: 180  
 Accept: application/sdp  
 Allow: ACK,BYE,CANCEL,INVITE,NOTIFY,OPTIONS,REFER,REGISTER,UPDATE  
 Remote-Party-ID: "2010" <sip:2010@172.18.203.46>;party=calling;id-type=subscriber;privacy=off;screen=yes  
 Supported: replaces  
 Content-Length: 257  
 Content-Type: application/sdp  
 Content-Disposition: session;handling=optional

v=0  
 o=Cisco-SIPUA 10819 0 IN IP4 172.18.203.46  
 s=SIP Call  
 t=0 0  
 m=audio 20090 RTP/AVP 0 8 18 101  
 c=IN IP4 172.18.203.46  
 a=rtpmap:0 PCMU/8000  
 a=rtpmap:8 PCMA/8000  
 a=rtpmap:18 G729/8000  
 a=rtpmap:101 telephone-event/8000  
 a=fmtp:101 0-15  
 a=sendrecv

[\[diagram\]](#) Call-ID: [\[prev\]](#) [\[next\]](#)

[2] SIP/2.0 100 Trying

Via: SIP/2.0/UDP 172.18.203.46:5060;branch=z9hG4bK03cec5d5  
 From: "2010" <sip:2010@172.18.203.55>;tag=00120193edac00153f24b9cf-4a57dacb  
 To: <sip:2040@172.18.203.55>  
 Date: Wed, 12 Jul 2006 20:36:06 GMT  
 Call-ID: 00120193-edac000f-4203dea1-68620203@172.18.203.46  
 CSeq: 101 INVITE  
 Allow-Events: presence  
 Content-Length: 0

[\[diagram\]](#) Call-ID: [\[prev\]](#) [\[next\]](#)

[3] INVITE sip:2040@172.18.203.52:5060 SIP/2.0

Via: SIP/2.0/UDP 172.18.203.55:5060;branch=z9hG4bK1df0b5e0  
 Remote-Party-ID: "SIP Line 2010" <sip:2010@172.18.203.55>;party=calling;screen=yes;privacy=off  
 From: "SIP Line 2010" <sip:2010@172.18.203.55>;tag=b9c8b19b-c709-4d85-86d4-d2f557c6c2a6-30679904  
 To: <sip:2040@172.18.203.52>  
 Date: Wed, 12 Jul 2006 20:36:06 GMT  
 Call-ID: 9a58480-4b515d36-460-37cb12ac@172.18.203.55  
 Supported: timer,replaces  
 Min-SE: 1800  
 User-Agent: Cisco-CCM5.0  
 Allow: INVITE, OPTIONS, INFO, BYE, CANCEL, ACK, PRACK, UPDATE, REFER, SUBSCRIBE, NOTIFY  
 CSeq: 101 INVITE  
 Expires: 180  
 Allow-Events: presence  
 Alert-Info: <urn:x-cisco-remotecc:callinfo>; security= NotAuthenticated; orientation= from; call-instance= 1  
 Alert-Info: <file://Bellcore-dr1/>  
 Contact: <sip:2040@172.18.203.55:5060>  
 Max-Forwards: 69  
 Content-Length: 0

[\[diagram\]](#) Call-ID: [\[prev\]](#) [\[next\]](#)

[4] SIP/2.0 100 Trying

Via: SIP/2.0/UDP 172.18.203.55:5060;branch=z9hG4bK1df0b5e0  
 From: "SIP Line 2010" <sip:2010@172.18.203.55>;tag=b9c8b19b-c709-4d85-86d4-d2f557c6c2a6-30679904  
 To: <sip:2040@172.18.203.52>  
 Call-ID: 9a58480-4b515d36-460-37cb12ac@172.18.203.55  
 CSeq: 101 INVITE  
 Server: Cisco-CP7960G/7.5  
 Contact: <sip:2040@172.18.203.52:5060>  
 Allow: ACK,BYE,CANCEL,INVITE,NOTIFY,OPTIONS,REFER,REGISTER,UPDATE  
 Remote-Party-ID: "2040" <sip:2040@172.18.203.52>;party=called;id-type=subscriber;privacy=off;screen=yes  
 Content-Length: 0

[\[diagram\]](#) Call-ID: [\[prev\]](#) [\[next\]](#)

[5] SIP/2.0 180 Ringing

Via: SIP/2.0/UDP 172.18.203.55:5060;branch=z9hG4bK1df0b5e0

From: "SIP Line 2010" <sip:2010@172.18.203.55>;tag=b9c8b19b-c709-4d85-86d4-d2f557c6c2a6-30679904  
 To: <sip:2040@172.18.203.52>;tag=003094c3cd3a000b23b40a2f-7056e878  
 Call-ID: 9a58480-4b515d36-460-37cb12ac@172.18.203.55  
 CSeq: 101 INVITE  
 Server: Cisco-CP7960G/7.5  
 Contact: <sip:2040@172.18.203.52:5060>  
 Allow: ACK,BYE,CANCEL,INVITE,NOTIFY,OPTIONS,REFER,REGISTER,UPDATE  
 Remote-Party-ID: "2040" <sip:2040@172.18.203.52>;party=called;id-type=subscriber;privacy=off;screen=yes  
 Content-Length: 0

[\[diagram\]](#) Call-ID: [\[prev\]](#) [\[next\]](#)

#### [6] SIP/2.0 180 Ringing

Via: SIP/2.0/UDP 172.18.203.46:5060;branch=z9hG4bK03cec5d5  
 From: "2010" <sip:2010@172.18.203.55>;tag=00120193edac00153f24b9cf-4a57dacb  
 To: <sip:2040@172.18.203.55>;tag=b9c8b19b-c709-4d85-86d4-d2f557c6c2a6-30679903  
 Date: Wed, 12 Jul 2006 20:36:06 GMT  
 Call-ID: 00120193-edac000f-4203deal-68620203@172.18.203.46  
 CSeq: 101 INVITE  
 Allow: INVITE, OPTIONS, INFO, BYE, CANCEL, ACK, PRACK, UPDATE, REFER, SUBSCRIBE, NOTIFY  
 Allow-Events: presence  
 Remote-Party-ID: "SIP Alerting 2040" <sip:2040@172.18.203.55>;party=called;screen=yes;privacy=off  
 Contact: <sip:2040@172.18.203.55:5060>  
 Content-Length: 0

[\[diagram\]](#) Call-ID: [\[prev\]](#) [\[next\]](#)

#### [7] SIP/2.0 200 OK

Via: SIP/2.0/UDP 172.18.203.55:5060;branch=z9hG4bK1df0b5e0  
 From: "SIP Line 2010" <sip:2010@172.18.203.55>;tag=b9c8b19b-c709-4d85-86d4-d2f557c6c2a6-30679904  
 To: <sip:2040@172.18.203.52>;tag=003094c3cd3a000b23b40a2f-7056e878  
 Call-ID: 9a58480-4b515d36-460-37cb12ac@172.18.203.55  
 CSeq: 101 INVITE  
 Server: Cisco-CP7960G/7.5  
 Contact: <sip:2040@172.18.203.52:5060>  
 Allow: ACK,BYE,CANCEL,INVITE,NOTIFY,OPTIONS,REFER,REGISTER,UPDATE  
 Remote-Party-ID: "2040" <sip:2040@172.18.203.52>;party=called;id-type=subscriber;privacy=off;screen=yes  
 Supported: replaces  
 Content-Length: 256  
 Content-Type: application/sdp  
 Content-Disposition: session;handling=optional

```
v=0
o=Cisco-SIPUA 3355 0 IN IP4 172.18.203.52
s=SIP Call
t=0 0
m=audio 30136 RTP/AVP 0 8 18 101
c=IN IP4 172.18.203.52
a=rtpmap:0 PCMU/8000
a=rtpmap:8 PCMA/8000
a=rtpmap:18 G729/8000
a=rtpmap:101 telephone-event/8000
a=fmtp:101 0-15
a=sendrecv
```

[\[diagram\]](#) Call-ID: [\[prev\]](#) [\[next\]](#)

#### [8] ACK sip:2040@172.18.203.52:5060 SIP/2.0

Via: SIP/2.0/UDP 172.18.203.55:5060;branch=z9hG4bK2f76a6c8  
 From: "SIP Line 2010" <sip:2010@172.18.203.55>;tag=b9c8b19b-c709-4d85-86d4-d2f557c6c2a6-30679904  
 To: <sip:2040@172.18.203.52>;tag=003094c3cd3a000b23b40a2f-7056e878  
 Date: Wed, 12 Jul 2006 20:36:06 GMT  
 Call-ID: 9a58480-4b515d36-460-37cb12ac@172.18.203.55  
 Max-Forwards: 70  
 CSeq: 101 ACK  
 Allow-Events: presence  
 Content-Type: application/sdp  
 Content-Length: 214

```
v=0
o=CiscoSystemsCCM-SIP 2000 1 IN IP4 172.18.203.55
s=SIP Call
c=IN IP4 172.18.203.46
t=0 0
m=audio 20090 RTP/AVP 0 101
a=rtpmap:0 PCMU/8000
a=ptime:20
a=rtpmap:101 telephone-event/8000
a=fmtp:101 0-15
```

[\[diagram\]](#) Call-ID: [\[prev\]](#) [\[next\]](#)

#### [9] SIP/2.0 183 Session Progress

Via: SIP/2.0/UDP 172.18.203.46:5060;branch=z9hG4bK03cec5d5

```

From: "2010" <sip:2010@172.18.203.55>;tag=00120193edac00153f24b9cf-4a57dacb
To: <sip:2040@172.18.203.55>;tag=b9c8b19b-c709-4d85-86d4-d2f557c6c2a6-30679903
Date: Wed, 12 Jul 2006 20:36:06 GMT
Call-ID: 00120193-edac000f-4203deal-68620203@172.18.203.46
CSeq: 101 INVITE
Allow: INVITE, OPTIONS, INFO, BYE, CANCEL, ACK, PRACK, UPDATE, REFER, SUBSCRIBE, NOTIFY
Allow-Events: presence
Remote-Party-ID: "SIP Alerting 2040" <sip:2040@172.18.203.55>;party=called;screen=yes;privacy=off
Contact: <sip:2040@172.18.203.55:5060>
Content-Type: application/sdp
Content-Length: 214

```

```

v=0
o=CiscoSystemsCCM-SIP 2000 1 IN IP4 172.18.203.55
s=SIP Call
c=IN IP4 172.18.203.52
t=0 0
m=audio 30136 RTP/AVP 0 101
a=rtpmap:0 PCMU/8000
a=ptime:20
a=rtpmap:101 telephone-event/8000
a=fmtp:101 0-15

```

[\[diagram\]](#) Call-ID: [\[prev\]](#) [\[next\]](#)

**[10] SIP/2.0 200 OK**

```

Via: SIP/2.0/UDP 172.18.203.46:5060;branch=z9hG4bK03cec5d5
From: "2010" <sip:2010@172.18.203.55>;tag=00120193edac00153f24b9cf-4a57dacb
To: <sip:2040@172.18.203.55>;tag=b9c8b19b-c709-4d85-86d4-d2f557c6c2a6-30679903
Date: Wed, 12 Jul 2006 20:36:06 GMT
Call-ID: 00120193-edac000f-4203deal-68620203@172.18.203.46
CSeq: 101 INVITE
Allow: INVITE, OPTIONS, INFO, BYE, CANCEL, ACK, PRACK, UPDATE, REFER, SUBSCRIBE, NOTIFY
Allow-Events: presence
Remote-Party-ID: "SIP Line 2040" <sip:2040@172.18.203.55>;party=called;screen=yes;privacy=off
Contact: <sip:2040@172.18.203.55:5060>
Content-Type: application/sdp
Content-Length: 214

```

```

v=0
o=CiscoSystemsCCM-SIP 2000 1 IN IP4 172.18.203.55
s=SIP Call
c=IN IP4 172.18.203.52
t=0 0
m=audio 30136 RTP/AVP 0 101
a=rtpmap:0 PCMU/8000
a=ptime:20
a=rtpmap:101 telephone-event/8000
a=fmtp:101 0-15

```

[\[diagram\]](#) Call-ID: [\[prev\]](#) [\[next\]](#)

**[11] ACK sip:2040@172.18.203.55:5060 SIP/2.0**

```

Via: SIP/2.0/UDP 172.18.203.46:5060;branch=z9hG4bK170dd089
From: "2010" <sip:2010@172.18.203.55>;tag=00120193edac00153f24b9cf-4a57dacb
To: <sip:2040@172.18.203.55>;tag=b9c8b19b-c709-4d85-86d4-d2f557c6c2a6-30679903
Call-ID: 00120193-edac000f-4203deal-68620203@172.18.203.46
Max-Forwards: 70
CSeq: 101 ACK
User-Agent: Cisco-CP7960G/7.5
Remote-Party-ID: "2010" <sip:2010@172.18.203.46>;party=calling;id-type=subscriber;privacy=off;screen=yes
Content-Length: 0

```

[\[diagram\]](#) Call-ID: [\[prev\]](#) [\[next\]](#)

**[12] INVITE sip:2040@172.18.203.55:5060 SIP/2.0**

```

Via: SIP/2.0/UDP 172.18.203.46:5060;branch=z9hG4bK03b8898f
From: "2010" <sip:2010@172.18.203.55>;tag=00120193edac00153f24b9cf-4a57dacb
To: <sip:2040@172.18.203.55>;tag=b9c8b19b-c709-4d85-86d4-d2f557c6c2a6-30679903
Call-ID: 00120193-edac000f-4203deal-68620203@172.18.203.46
Max-Forwards: 70
CSeq: 102 INVITE
User-Agent: Cisco-CP7960G/7.5
Contact: <sip:2010@172.18.203.46:5060>
Remote-Party-ID: "2010" <sip:2010@172.18.203.46>;party=calling;id-type=subscriber;privacy=off;screen=yes
Content-Length: 257
Content-Type: application/sdp
Content-Disposition: session;handling=optional

```

```

v=0
o=Cisco-SIPUA 10819 1 IN IP4 172.18.203.46
s=SIP Call
t=0 0

```

```

m=audio 20090 RTP/AVP 0 8 18 101
c=IN IP4 172.18.203.46
a=rtpmap:0 PCMU/8000
a=rtpmap:8 PCMA/8000
a=rtpmap:18 G729/8000
a=rtpmap:101 telephone-event/8000
a=fmtp:101 0-15
a=sendonly

```

[[diagram](#)] Call-ID: [[prev](#)] [[next](#)]

#### [13] SIP/2.0 100 Trying

```

Via: SIP/2.0/UDP 172.18.203.46:5060;branch=z9hG4bK03b8898f
From: "2010" <sip:2010@172.18.203.55>;tag=00120193edac00153f24b9cf-4a57dacb
To: <sip:2040@172.18.203.55>;tag=b9c8b19b-c709-4d85-86d4-d2f557c6c2a6-30679903
Date: Wed, 12 Jul 2006 20:36:10 GMT
Call-ID: 00120193-edac000f-4203dea1-68620203@172.18.203.46
CSeq: 102 INVITE
Allow-Events: presence
Content-Length: 0

```

[[diagram](#)] Call-ID: [[prev](#)] [[next](#)]

#### [14] INVITE sip:2040@172.18.203.52:5060 SIP/2.0

```

Via: SIP/2.0/UDP 172.18.203.55:5060;branch=z9hG4bK6d2929c0
Remote-Party-ID: "SIP Line 2010" <sip:2010@172.18.203.55>;party=calling;screen=yes;privacy=off
From: "SIP Line 2010" <sip:2010@172.18.203.55>;tag=b9c8b19b-c709-4d85-86d4-d2f557c6c2a6-30679904
To: <sip:2040@172.18.203.52>;tag=003094c3cd3a000b23b40a2f-7056e878
Date: Wed, 12 Jul 2006 20:36:10 GMT
Call-ID: 9a58480-4b515d36-460-37cb12ac@172.18.203.55
Supported: timer,replaces
Min-SE: 1800
User-Agent: Cisco-CCM5.0
Allow: INVITE, OPTIONS, INFO, BYE, CANCEL, ACK, PRACK, UPDATE, REFER, SUBSCRIBE, NOTIFY
CSeq: 102 INVITE
Max-Forwards: 70
Contact: <sip:2010@172.18.203.55:5060>
Expires: 180
Allow-Events: presence
Content-Type: application/sdp
Content-Length: 300

```

```

v=0
o=CiscoSystemsCCM-SIP 2000 2 IN IP4 172.18.203.55
s=SIP Call
c=IN IP4 172.18.203.46
t=0 0
m=audio 20090 RTP/AVP 0 8 18 101
a=rtpmap:0 PCMU/8000
a=ptime:20
a=rtpmap:8 PCMA/8000
a=ptime:20
a=rtpmap:18 G729/8000
a=ptime:20
a=sendonly
a=rtpmap:101 telephone-event/8000
a=fmtp:101 0-15

```

[[diagram](#)] Call-ID: [[prev](#)] [[next](#)]

#### [15] SIP/2.0 200 OK

```

Via: SIP/2.0/UDP 172.18.203.55:5060;branch=z9hG4bK6d2929c0
From: "SIP Line 2010" <sip:2010@172.18.203.55>;tag=b9c8b19b-c709-4d85-86d4-d2f557c6c2a6-30679904
To: <sip:2040@172.18.203.52>;tag=003094c3cd3a000b23b40a2f-7056e878
Call-ID: 9a58480-4b515d36-460-37cb12ac@172.18.203.55
CSeq: 102 INVITE
Server: Cisco-CP7960G/7.5
Contact: <sip:2040@172.18.203.52:5060>
Allow: ACK,BYE,CANCEL,INVITE,NOTIFY,OPTIONS,REFER,REGISTER,UPDATE
Remote-Party-ID: "2040" <sip:2040@172.18.203.52>;party=called;id-type=subscriber;privacy=off;screen=yes
Supported: replaces
Content-Length: 206
Content-Type: application/sdp
Content-Disposition: session;handling=optional

```

```

v=0
o=Cisco-SIPUA 3355 1 IN IP4 172.18.203.52
s=SIP Call
t=0 0
m=audio 30136 RTP/AVP 0 101
c=IN IP4 172.18.203.52
a=rtpmap:0 PCMU/8000
a=rtpmap:101 telephone-event/8000

```

```
a=fmtp:101 0-15
a=recvonly
```

[[diagram](#)] Call-ID: [[prev](#)] [[next](#)]

[16] ACK sip:2040@172.18.203.52:5060 SIP/2.0

```
Via: SIP/2.0/UDP 172.18.203.55:5060;branch=z9hG4bK5b1c30d3
From: "SIP Line 2010" <sip:2010@172.18.203.55>;tag=b9c8b19b-c709-4d85-86d4-d2f557c6c2a6-30679904
To: <sip:2040@172.18.203.52>;tag=003094c3cd3a000b23b40a2f-7056e878
Date: Wed, 12 Jul 2006 20:36:10 GMT
Call-ID: 9a58480-4b515d36-460-37cb12ac@172.18.203.55
Max-Forwards: 70
CSeq: 102 ACK
Allow-Events: presence
Content-Length: 0
```

[[diagram](#)] Call-ID: [[prev](#)] [[next](#)]

[17] SIP/2.0 200 OK

```
Via: SIP/2.0/UDP 172.18.203.46:5060;branch=z9hG4bK03b8898f
From: "2010" <sip:2010@172.18.203.55>;tag=00120193edac00153f24b9cf-4a57dacb
To: <sip:2040@172.18.203.55>;tag=b9c8b19b-c709-4d85-86d4-d2f557c6c2a6-30679903
Date: Wed, 12 Jul 2006 20:36:10 GMT
Call-ID: 00120193-edac000f-4203dea1-68620203@172.18.203.46
CSeq: 102 INVITE
Allow: INVITE, OPTIONS, INFO, BYE, CANCEL, ACK, PRACK, UPDATE, REFER, SUBSCRIBE, NOTIFY
Allow-Events: presence
Remote-Party-ID: "SIP Line 2040" <sip:2040@172.18.203.55>;party=called;screen=yes;privacy=off
Contact: <sip:2040@172.18.203.55:5060>
Content-Type: application/sdp
Content-Length: 226
```

```
v=0
o=CiscoSystemsCCM-SIP 2000 2 IN IP4 172.18.203.55
s=SIP Call
c=IN IP4 172.18.203.52
t=0 0
m=audio 30136 RTP/AVP 0 101
a=rtpmap:0 PCMU/8000
a=ptime:20
a=recvonly
a=rtpmap:101 telephone-event/8000
a=fmtp:101 0-15
```

[[diagram](#)] Call-ID: [[prev](#)] [[next](#)]

[18] ACK sip:2040@172.18.203.55:5060 SIP/2.0

```
Via: SIP/2.0/UDP 172.18.203.46:5060;branch=z9hG4bK51d7552f
From: "2010" <sip:2010@172.18.203.55>;tag=00120193edac00153f24b9cf-4a57dacb
To: <sip:2040@172.18.203.55>;tag=b9c8b19b-c709-4d85-86d4-d2f557c6c2a6-30679903
Call-ID: 00120193-edac000f-4203dea1-68620203@172.18.203.46
Max-Forwards: 70
CSeq: 102 ACK
User-Agent: Cisco-CP7960G/7.5
Remote-Party-ID: "2010" <sip:2010@172.18.203.46>;party=calling;id-type=subscriber;privacy=off;screen=yes
Content-Length: 0
```

[[diagram](#)] Call-ID: [[prev](#)] [[next](#)]

[19] INVITE sip:2030@172.18.203.55 SIP/2.0

```
Via: SIP/2.0/UDP 172.18.203.46:5060;branch=z9hG4bK5aa304b0
From: "2011" <sip:2011@172.18.203.55>;tag=00120193edac001664c61349-54822cc4
To: <sip:2030@172.18.203.55>
Call-ID: 00120193-edac0010-1595b4b8-4977f88b@172.18.203.46
Max-Forwards: 70
CSeq: 101 INVITE
User-Agent: Cisco-CP7960G/7.5
Contact: <sip:2011@172.18.203.46:5060>
Expires: 180
Accept: application/sdp
Allow: ACK,BYE,CANCEL,INVITE,NOTIFY,OPTIONS,REFER,REGISTER,UPDATE
Remote-Party-ID: "2011" <sip:2011@172.18.203.46>;party=calling;id-type=subscriber;privacy=off;screen=yes
Supported: replaces
Content-Length: 257
Content-Type: application/sdp
Content-Disposition: session;handling=optional
```

```
v=0
o=Cisco-SIPUA 20553 0 IN IP4 172.18.203.46
s=SIP Call
t=0 0
m=audio 20094 RTP/AVP 0 8 18 101
c=IN IP4 172.18.203.46
a=rtpmap:0 PCMU/8000
```

```
a=rtpmap:8 PCMA/8000
a=rtpmap:18 G729/8000
a=rtpmap:101 telephone-event/8000
a=fmtp:101 0-15
a=sendrecv
```

[\[diagram\]](#) Call-ID: [\[prev\]](#) [\[next\]](#)

**[20] SIP/2.0 100 Trying**

```
Via: SIP/2.0/UDP 172.18.203.46:5060;branch=z9hG4bK5aa304b0
From: "2011" <sip:2011@172.18.203.55>;tag=00120193edac001664c61349-54822cc4
To: <sip:2030@172.18.203.55>
Date: Wed, 12 Jul 2006 20:36:13 GMT
Call-ID: 00120193-edac0010-1595b4b8-4977f88b@172.18.203.46
CSeq: 101 INVITE
Allow-Events: presence
Content-Length: 0
```

[\[diagram\]](#) Call-ID: [\[prev\]](#) [\[next\]](#)

**[21] INVITE sip:2030@172.18.203.51:5060 SIP/2.0**

```
Via: SIP/2.0/UDP 172.18.203.55:5060;branch=z9hG4bK454e2b9e
Remote-Party-ID: "SIP Line 2011" <sip:2011@172.18.203.55>;party=calling;screen=yes;privacy=off
From: "SIP Line 2011" <sip:2011@172.18.203.55>;tag=b9c8b19b-c709-4d85-86d4-d2f557c6c2a6-30679906
To: <sip:2030@172.18.203.51>
Date: Wed, 12 Jul 2006 20:36:13 GMT
Call-ID: dd1a200-4b515d3d-462-37cb12ac@172.18.203.55
Supported: timer,replaces
Min-SE: 1800
User-Agent: Cisco-CCM5.0
Allow: INVITE, OPTIONS, INFO, BYE, CANCEL, ACK, PRACK, UPDATE, REFER, SUBSCRIBE, NOTIFY
CSeq: 101 INVITE
Expires: 180
Allow-Events: presence
Call-Info: <urn:x-cisco-remotecc:callinfo>; security= NotAuthenticated; orientation= from; call-instance= 1
Alert-Info: <file://Bellcore-dr1/>
Contact: <sip:2030@172.18.203.55:5060>
Max-Forwards: 69
Content-Length: 0
```

[\[diagram\]](#) Call-ID: [\[prev\]](#) [\[next\]](#)

**[22] SIP/2.0 100 Trying**

```
Via: SIP/2.0/UDP 172.18.203.55:5060;branch=z9hG4bK454e2b9e
From: "SIP Line 2011" <sip:2011@172.18.203.55>;tag=b9c8b19b-c709-4d85-86d4-d2f557c6c2a6-30679906
To: <sip:2030@172.18.203.51>
Call-ID: dd1a200-4b515d3d-462-37cb12ac@172.18.203.55
CSeq: 101 INVITE
Server: Cisco-CP7960G/7.5
Contact: <sip:2030@172.18.203.51:5060>
Allow: ACK, BYE, CANCEL, INVITE, NOTIFY, OPTIONS, REFER, REGISTER, UPDATE
Remote-Party-ID: "2030" <sip:2030@172.18.203.51>;party=called;id-type=subscriber;privacy=off;screen=yes
Content-Length: 0
```

[\[diagram\]](#) Call-ID: [\[prev\]](#) [\[next\]](#)

**[23] SIP/2.0 180 Ringing**

```
Via: SIP/2.0/UDP 172.18.203.55:5060;branch=z9hG4bK454e2b9e
From: "SIP Line 2011" <sip:2011@172.18.203.55>;tag=b9c8b19b-c709-4d85-86d4-d2f557c6c2a6-30679906
To: <sip:2030@172.18.203.51>;tag=000d280821a500155867d538-6e3ca278
Call-ID: dd1a200-4b515d3d-462-37cb12ac@172.18.203.55
CSeq: 101 INVITE
Server: Cisco-CP7960G/7.5
Contact: <sip:2030@172.18.203.51:5060>
Allow: ACK, BYE, CANCEL, INVITE, NOTIFY, OPTIONS, REFER, REGISTER, UPDATE
Remote-Party-ID: "2030" <sip:2030@172.18.203.51>;party=called;id-type=subscriber;privacy=off;screen=yes
Content-Length: 0
```

[\[diagram\]](#) Call-ID: [\[prev\]](#) [\[next\]](#)

**[24] SIP/2.0 180 Ringing**

```
Via: SIP/2.0/UDP 172.18.203.46:5060;branch=z9hG4bK5aa304b0
From: "2011" <sip:2011@172.18.203.55>;tag=00120193edac001664c61349-54822cc4
To: <sip:2030@172.18.203.55>;tag=b9c8b19b-c709-4d85-86d4-d2f557c6c2a6-30679905
Date: Wed, 12 Jul 2006 20:36:13 GMT
Call-ID: 00120193-edac0010-1595b4b8-4977f88b@172.18.203.46
CSeq: 101 INVITE
Allow: INVITE, OPTIONS, INFO, BYE, CANCEL, ACK, PRACK, UPDATE, REFER, SUBSCRIBE, NOTIFY
Allow-Events: presence
Remote-Party-ID: "SIP Alerting 2030" <sip:2030@172.18.203.55>;party=called;screen=yes;privacy=off
Contact: <sip:2030@172.18.203.55:5060>
Content-Length: 0
```

[\[diagram\]](#) Call-ID: [\[prev\]](#) [\[next\]](#)

**[25] SIP/2.0 200 OK**

```
Via: SIP/2.0/UDP 172.18.203.55:5060;branch=z9hG4bK454e2b9e
From: "SIP Line 2011" <sip:2011@172.18.203.55>;tag=b9c8b19b-c709-4d85-86d4-d2f557c6c2a6-30679906
To: <sip:2030@172.18.203.51>;tag=000d280821a500155867d538-6e3ca278
Call-ID: dd1a200-4b515d3d-462-37cb12ac@172.18.203.55
CSeq: 101 INVITE
Server: Cisco-CP7960G/7.5
Contact: <sip:2030@172.18.203.51:5060>
Allow: ACK,BYE,CANCEL,INVITE,NOTIFY,OPTIONS,REFER,REGISTER,UPDATE
Remote-Party-ID: "2030" <sip:2030@172.18.203.51>;party=called;id-type=subscriber;privacy=off;screen=yes
Supported: replaces
Content-Length: 257
Content-Type: application/sdp
Content-Disposition: session;handling=optional
```

```
v=0
o=Cisco-SIPUA 13567 0 IN IP4 172.18.203.51
s=SIP Call
t=0 0
m=audio 17932 RTP/AVP 0 8 18 101
c=IN IP4 172.18.203.51
a=rtpmap:0 PCMU/8000
a=rtpmap:8 PCMA/8000
a=rtpmap:18 G729/8000
a=rtpmap:101 telephone-event/8000
a=fmtp:101 0-15
a=sendrecv
```

[\[diagram\]](#) Call-ID: [\[prev\]](#) [\[next\]](#)

#### [26] ACK sip:2030@172.18.203.51:5060 SIP/2.0

```
Via: SIP/2.0/UDP 172.18.203.55:5060;branch=z9hG4bK70d89bef
From: "SIP Line 2011" <sip:2011@172.18.203.55>;tag=b9c8b19b-c709-4d85-86d4-d2f557c6c2a6-30679906
To: <sip:2030@172.18.203.51>;tag=000d280821a500155867d538-6e3ca278
Date: Wed, 12 Jul 2006 20:36:13 GMT
Call-ID: dd1a200-4b515d3d-462-37cb12ac@172.18.203.55
Max-Forwards: 70
CSeq: 101 ACK
Allow-Events: presence
Content-Type: application/sdp
Content-Length: 214
```

```
v=0
o=CiscoSystemsCCM-SIP 2000 1 IN IP4 172.18.203.55
s=SIP Call
c=IN IP4 172.18.203.46
t=0 0
m=audio 20094 RTP/AVP 0 101
a=rtpmap:0 PCMU/8000
aptime:20
a=rtpmap:101 telephone-event/8000
a=fmtp:101 0-15
```

[\[diagram\]](#) Call-ID: [\[prev\]](#) [\[next\]](#)

#### [27] SIP/2.0 183 Session Progress

```
Via: SIP/2.0/UDP 172.18.203.46:5060;branch=z9hG4bK5aa304b0
From: "2011" <sip:2011@172.18.203.55>;tag=00120193edac001664c61349-54822cc4
To: <sip:2030@172.18.203.55>;tag=b9c8b19b-c709-4d85-86d4-d2f557c6c2a6-30679906
Date: Wed, 12 Jul 2006 20:36:13 GMT
Call-ID: 00120193-edac0010-1595b4b8-4977f88b@172.18.203.46
CSeq: 101 INVITE
Allow: INVITE, OPTIONS, INFO, BYE, CANCEL, ACK, PRACK, UPDATE, REFER, SUBSCRIBE, NOTIFY
Allow-Events: presence
Remote-Party-ID: "SIP Alerting 2030" <sip:2030@172.18.203.55>;party=called;screen=yes;privacy=off
Contact: <sip:2030@172.18.203.55:5060>
Content-Type: application/sdp
Content-Length: 214
```

```
v=0
o=CiscoSystemsCCM-SIP 2000 1 IN IP4 172.18.203.55
s=SIP Call
c=IN IP4 172.18.203.51
t=0 0
m=audio 17932 RTP/AVP 0 101
a=rtpmap:0 PCMU/8000
aptime:20
a=rtpmap:101 telephone-event/8000
a=fmtp:101 0-15
```

[\[diagram\]](#) Call-ID: [\[prev\]](#) [\[next\]](#)

#### [28] SIP/2.0 200 OK

```
Via: SIP/2.0/UDP 172.18.203.46:5060;branch=z9hG4bK5aa304b0
```

From: "2011" <sip:2011@172.18.203.55>;tag=00120193edac001664c61349-54822cc4  
 To: <sip:2030@172.18.203.55>;tag=b9c8b19b-c709-4d85-86d4-d2f557c6c2a6-30679905  
 Date: Wed, 12 Jul 2006 20:36:13 GMT  
 Call-ID: 00120193-edac0010-1595b4b8-4977f88b@172.18.203.46  
 CSeq: 101 INVITE  
 Allow: INVITE, OPTIONS, INFO, BYE, CANCEL, ACK, PRACK, UPDATE, REFER, SUBSCRIBE, NOTIFY  
 Allow-Events: presence  
 Remote-Party-ID: "SIP Line 2030" <sip:2030@172.18.203.55>;party=called;screen=yes;privacy=off  
 Contact: <sip:2030@172.18.203.55:5060>  
 Content-Type: application/sdp  
 Content-Length: 214

v=0  
 o=CiscoSystemsCCM-SIP 2000 1 IN IP4 172.18.203.55  
 s=SIP Call  
 c=IN IP4 172.18.203.51  
 t=0 0  
 m=audio 17932 RTP/AVP 0 101  
 a=rtpmap:0 PCMU/8000  
 a=ptime:20  
 a=rtpmap:101 telephone-event/8000  
 a=fmtp:101 0-15

[[diagram](#)] Call-ID: [[prev](#)] [[next](#)]

[29] ACK sip:2030@172.18.203.55:5060 SIP/2.0

Via: SIP/2.0/UDP 172.18.203.46:5060;branch=z9hG4bK32e0dd0d  
 From: "2011" <sip:2011@172.18.203.55>;tag=00120193edac001664c61349-54822cc4  
 To: <sip:2030@172.18.203.55>;tag=b9c8b19b-c709-4d85-86d4-d2f557c6c2a6-30679905  
 Call-ID: 00120193-edac0010-1595b4b8-4977f88b@172.18.203.46  
 Max-Forwards: 70  
 CSeq: 101 ACK  
 User-Agent: Cisco-CP7960G/7.5  
 Remote-Party-ID: "2011" <sip:2011@172.18.203.46>;party=calling;id-type=subscriber;privacy=off;screen=yes  
 Content-Length: 0

[[diagram](#)] Call-ID: [[prev](#)] [[next](#)]

[30] BYE sip:2030@172.18.203.55:5060 SIP/2.0

Via: SIP/2.0/UDP 172.18.203.46:5060;branch=z9hG4bK5e59a930  
 From: "2011" <sip:2011@172.18.203.55>;tag=00120193edac001664c61349-54822cc4  
 To: <sip:2030@172.18.203.55>;tag=b9c8b19b-c709-4d85-86d4-d2f557c6c2a6-30679905  
 Call-ID: 00120193-edac0010-1595b4b8-4977f88b@172.18.203.46  
 Max-Forwards: 70  
 CSeq: 102 BYE  
 User-Agent: Cisco-CP7960G/7.5  
 Content-Length: 0

[[diagram](#)] Call-ID: [[prev](#)] [[next](#)]

[31] BYE sip:2030@172.18.203.51:5060 SIP/2.0

Via: SIP/2.0/UDP 172.18.203.55:5060;branch=z9hG4bKfaa6ac1  
 From: "SIP Line 2011" <sip:2011@172.18.203.55>;tag=b9c8b19b-c709-4d85-86d4-d2f557c6c2a6-30679906  
 To: <sip:2030@172.18.203.51>;tag=000d280821a500155867d538-6e3ca278  
 Date: Wed, 12 Jul 2006 20:36:13 GMT  
 Call-ID: dd1a200-4b515d3d-462-37cb12ac@172.18.203.55  
 User-Agent: Cisco-CCM5.0  
 Max-Forwards: 70  
 CSeq: 102 BYE  
 Content-Length: 0

[[diagram](#)] Call-ID: [[prev](#)] [[next](#)]

[32] SIP/2.0 200 OK

Via: SIP/2.0/UDP 172.18.203.46:5060;branch=z9hG4bK5e59a930  
 From: "2011" <sip:2011@172.18.203.55>;tag=00120193edac001664c61349-54822cc4  
 To: <sip:2030@172.18.203.55>;tag=b9c8b19b-c709-4d85-86d4-d2f557c6c2a6-30679905  
 Date: Wed, 12 Jul 2006 20:36:18 GMT  
 Call-ID: 00120193-edac0010-1595b4b8-4977f88b@172.18.203.46  
 CSeq: 102 BYE  
 Content-Length: 0

[[diagram](#)] Call-ID: [[prev](#)] [[next](#)]

[33] SIP/2.0 200 OK

Via: SIP/2.0/UDP 172.18.203.55:5060;branch=z9hG4bKfaa6ac1  
 From: "SIP Line 2011" <sip:2011@172.18.203.55>;tag=b9c8b19b-c709-4d85-86d4-d2f557c6c2a6-30679906  
 To: <sip:2030@172.18.203.51>;tag=000d280821a500155867d538-6e3ca278  
 Call-ID: dd1a200-4b515d3d-462-37cb12ac@172.18.203.55  
 CSeq: 102 BYE  
 Server: Cisco-CP7960G/7.5  
 Content-Length: 0

[[diagram](#)] Call-ID: [[prev](#)] [[next](#)]

[34] INVITE sip:2040@172.18.203.55:5060 SIP/2.0

```
Via: SIP/2.0/UDP 172.18.203.46:5060;branch=z9hG4bK7351331c
From: "2010" <sip:2010@172.18.203.55>;tag=00120193edac00153f24b9cf-4a57dacb
To: <sip:2040@172.18.203.55>;tag=b9c8b19b-c709-4d85-86d4-d2f557c6c2a6-30679903
Call-ID: 00120193-edac000f-4203dea1-68620203@172.18.203.46
Max-Forwards: 70
CSeq: 103 INVITE
User-Agent: Cisco-CP7960G/7.5
Contact: <sip:2010@172.18.203.46:5060>
Remote-Party-ID: "2010" <sip:2010@172.18.203.46>;party=calling;id-type=subscriber;privacy=off;screen=yes
Content-Length: 257
Content-Type: application/sdp
Content-Disposition: session;handling=optional
```

```
v=0
o=Cisco-SIPUA 10819 2 IN IP4 172.18.203.46
s=SIP Call
t=0 0
m=audio 20090 RTP/AVP 0 8 18 101
c=IN IP4 172.18.203.46
a=rtpmap:0 PCMU/8000
a=rtpmap:8 PCMA/8000
a=rtpmap:18 G729/8000
a=rtpmap:101 telephone-event/8000
a=fmtp:101 0-15
a=sendrecv
```

[\[diagram\]](#) Call-ID: [\[prev\]](#) [\[next\]](#)

### [35] SIP/2.0 100 Trying

```
Via: SIP/2.0/UDP 172.18.203.46:5060;branch=z9hG4bK7351331c
From: "2010" <sip:2010@172.18.203.55>;tag=00120193edac00153f24b9cf-4a57dacb
To: <sip:2040@172.18.203.55>;tag=b9c8b19b-c709-4d85-86d4-d2f557c6c2a6-30679903
Date: Wed, 12 Jul 2006 20:36:20 GMT
Call-ID: 00120193-edac000f-4203dea1-68620203@172.18.203.46
CSeq: 103 INVITE
Allow-Events: presence
Content-Length: 0
```

[\[diagram\]](#) Call-ID: [\[prev\]](#) [\[next\]](#)

### [36] INVITE sip:2040@172.18.203.52:5060 SIP/2.0

```
Via: SIP/2.0/UDP 172.18.203.55:5060;branch=z9hG4bK69049613
Remote-Party-ID: "SIP Line 2010" <sip:2010@172.18.203.55>;party=calling;screen=yes;privacy=off
From: "SIP Line 2010" <sip:2010@172.18.203.55>;tag=b9c8b19b-c709-4d85-86d4-d2f557c6c2a6-30679904
To: <sip:2040@172.18.203.52>;tag=003094c3cd3a000b23b40a2f-7056e878
Date: Wed, 12 Jul 2006 20:36:20 GMT
Call-ID: 9a58480-4b515d36-460-37cb12ac@172.18.203.55
Supported: timer,replaces
Min-SE: 1800
User-Agent: Cisco-CCM5.0
Allow: INVITE, OPTIONS, INFO, BYE, CANCEL, ACK, PRACK, UPDATE, REFER, SUBSCRIBE, NOTIFY
CSeq: 103 INVITE
Max-Forwards: 70
Contact: <sip:2010@172.18.203.55:5060>
Expires: 180
Allow-Events: presence
Content-Type: application/sdp
Content-Length: 288
```

```
v=0
o=CiscoSystemsCCM-SIP 2000 3 IN IP4 172.18.203.55
s=SIP Call
c=IN IP4 172.18.203.46
t=0 0
m=audio 20090 RTP/AVP 0 8 18 101
a=rtpmap:0 PCMU/8000
a=ptime:20
a=rtpmap:8 PCMA/8000
a=ptime:20
a=rtpmap:18 G729/8000
a=ptime:20
a=rtpmap:101 telephone-event/8000
a=fmtp:101 0-15
```

[\[diagram\]](#) Call-ID: [\[prev\]](#) [\[next\]](#)

### [37] SIP/2.0 200 OK

```
Via: SIP/2.0/UDP 172.18.203.55:5060;branch=z9hG4bK69049613
From: "SIP Line 2010" <sip:2010@172.18.203.55>;tag=b9c8b19b-c709-4d85-86d4-d2f557c6c2a6-30679904
To: <sip:2040@172.18.203.52>;tag=003094c3cd3a000b23b40a2f-7056e878
Call-ID: 9a58480-4b515d36-460-37cb12ac@172.18.203.55
CSeq: 103 INVITE
Server: Cisco-CP7960G/7.5
```

Contact: <sip:2040@172.18.203.52:5060>  
 Allow: ACK,BYE,CANCEL,INVITE,NOTIFY,OPTIONS,REFER,REGISTER,UPDATE  
 Remote-Party-ID: "2040" <sip:2040@172.18.203.52>;party=called;id-type=subscriber;privacy=off;screen=yes  
 Supported: replaces  
 Content-Length: 206  
 Content-Type: application/sdp  
 Content-Disposition: session;handling=optional

v=0  
 o=Cisco-SIPUA 3355 2 IN IP4 172.18.203.52  
 s=SIP Call  
 t=0 0  
 m=audio 30136 RTP/AVP 0 101  
 c=IN IP4 172.18.203.52  
 a=rtpmap:0 PCMU/8000  
 a=rtpmap:101 telephone-event/8000  
 a=fmtp:101 0-15  
 a=sendrecv

[[diagram](#)] Call-ID: [[prev](#)] [[next](#)]

[38] ACK sip:2040@172.18.203.52:5060 SIP/2.0

Via: SIP/2.0/UDP 172.18.203.55:5060;branch=z9hG4bK34b19acd  
 From: "SIP Line 2010" <sip:2010@172.18.203.55>;tag=b9c8b19b-c709-4d85-86d4-d2f557c6c2a6-30679904  
 To: <sip:2040@172.18.203.52>;tag=003094c3cd3a000b23b40a2f-7056e878  
 Date: Wed, 12 Jul 2006 20:36:20 GMT  
 Call-ID: 9a58480-4b515d36-460-37cb12ac@172.18.203.55  
 Max-Forwards: 70  
 CSeq: 103 ACK  
 Allow-Events: presence  
 Content-Length: 0

[[diagram](#)] Call-ID: [[prev](#)] [[next](#)]

[39] SIP/2.0 200 OK

Via: SIP/2.0/UDP 172.18.203.46:5060;branch=z9hG4bK7351331c  
 From: "2010" <sip:2010@172.18.203.55>;tag=00120193edac00153f24b9cf-4a57dacb  
 To: <sip:2040@172.18.203.55>;tag=b9c8b19b-c709-4d85-86d4-d2f557c6c2a6-30679903  
 Date: Wed, 12 Jul 2006 20:36:20 GMT  
 Call-ID: 00120193-edac000f-4203dea1-68620203@172.18.203.46  
 CSeq: 103 INVITE  
 Allow: INVITE, OPTIONS, INFO, BYE, CANCEL, ACK, PRACK, UPDATE, REFER, SUBSCRIBE, NOTIFY  
 Allow-Events: presence  
 Remote-Party-ID: "SIP Line 2040" <sip:2040@172.18.203.55>;party=called;screen=yes;privacy=off  
 Contact: <sip:2040@172.18.203.55:5060>  
 Content-Type: application/sdp  
 Content-Length: 214

v=0  
 o=CiscoSystemsCCM-SIP 2000 3 IN IP4 172.18.203.55  
 s=SIP Call  
 c=IN IP4 172.18.203.52  
 t=0 0  
 m=audio 30136 RTP/AVP 0 101  
 a=rtpmap:0 PCMU/8000  
 a=ptime:20  
 a=rtpmap:101 telephone-event/8000  
 a=fmtp:101 0-15

[[diagram](#)] Call-ID: [[prev](#)] [[next](#)]

[40] ACK sip:2040@172.18.203.55:5060 SIP/2.0

Via: SIP/2.0/UDP 172.18.203.46:5060;branch=z9hG4bK2e6f5a56  
 From: "2010" <sip:2010@172.18.203.55>;tag=00120193edac00153f24b9cf-4a57dacb  
 To: <sip:2040@172.18.203.55>;tag=b9c8b19b-c709-4d85-86d4-d2f557c6c2a6-30679903  
 Call-ID: 00120193-edac000f-4203dea1-68620203@172.18.203.46  
 Max-Forwards: 70  
 CSeq: 103 ACK  
 User-Agent: Cisco-CP7960G/7.5  
 Remote-Party-ID: "2010" <sip:2010@172.18.203.46>;party=calling;id-type=subscriber;privacy=off;screen=yes  
 Content-Length: 0

[[diagram](#)] Call-ID: [[prev](#)] [[next](#)]

[41] BYE sip:2040@172.18.203.55:5060 SIP/2.0

Via: SIP/2.0/UDP 172.18.203.46:5060;branch=z9hG4bK1e8eb8a2  
 From: "2010" <sip:2010@172.18.203.55>;tag=00120193edac00153f24b9cf-4a57dacb  
 To: <sip:2040@172.18.203.55>;tag=b9c8b19b-c709-4d85-86d4-d2f557c6c2a6-30679903  
 Call-ID: 00120193-edac000f-4203dea1-68620203@172.18.203.46  
 Max-Forwards: 70  
 CSeq: 104 BYE  
 User-Agent: Cisco-CP7960G/7.5  
 Content-Length: 0

[diagram] Call-ID: [prev] [next]  
**[42] BYE sip:2040@172.18.203.52:5060 SIP/2.0**  
 Via: SIP/2.0/UDP 172.18.203.55:5060;branch=z9hG4bK456ae785  
 From: "SIP Line 2010" <sip:2010@172.18.203.55>;tag=b9c8b19b-c709-4d85-86d4-d2f557c6c2a6-30679904  
 To: <sip:2040@172.18.203.52>;tag=003094c3cd3a000b23b40a2f-7056e878  
 Date: Wed, 12 Jul 2006 20:36:20 GMT  
 Call-ID: 9a58480-4b515d36-460-37cb12ac@172.18.203.55  
 User-Agent: Cisco-CCM5.0  
 Max-Forwards: 70  
 CSeq: 104 BYE  
 Content-Length: 0

[diagram] Call-ID: [prev] [next]  
**[43] SIP/2.0 200 OK**  
 Via: SIP/2.0/UDP 172.18.203.46:5060;branch=z9hG4bK1e8eb8a2  
 From: "2010" <sip:2010@172.18.203.55>;tag=00120193edac00153f24b9cf-4a57dacb  
 To: <sip:2040@172.18.203.55>;tag=b9c8b19b-c709-4d85-86d4-d2f557c6c2a6-30679903  
 Date: Wed, 12 Jul 2006 20:36:23 GMT  
 Call-ID: 00120193-edac000f-4203deal-68620203@172.18.203.46  
 CSeq: 104 BYE  
 Content-Length: 0

[diagram] Call-ID: [prev] [next]  
**[44] SIP/2.0 200 OK**  
 Via: SIP/2.0/UDP 172.18.203.55:5060;branch=z9hG4bK456ae785  
 From: "SIP Line 2010" <sip:2010@172.18.203.55>;tag=b9c8b19b-c709-4d85-86d4-d2f557c6c2a6-30679904  
 To: <sip:2040@172.18.203.52>;tag=003094c3cd3a000b23b40a2f-7056e878  
 Call-ID: 9a58480-4b515d36-460-37cb12ac@172.18.203.55  
 CSeq: 104 BYE  
 Server: Cisco-CP7960G/7.5  
 Content-Length: 0

## 2.7 Multiple Calls Per Line

Title: Multiple Calls Per Line

### Description:

G calls L. While G is still talking to L, H calls G.

Note a "SIP Basic" phone is a 7960 configured with a pre-SDGA image (P0S3-07-5-00) to simulate a 3rd party phone.

### Configuration:

Node = CCM, IP = 172.18.203.55

Phone = G, Line = 2010, IP = 172.18.203.46, Model = SIP Basic

Phone = H, Line = 2030, IP = 172.18.203.51, Model = SIP Basic

Phone = L, Line = 2040, IP = 172.18.203.52, Model = SIP Basic

### Scenario:

2010 calls 2040

2040 answers

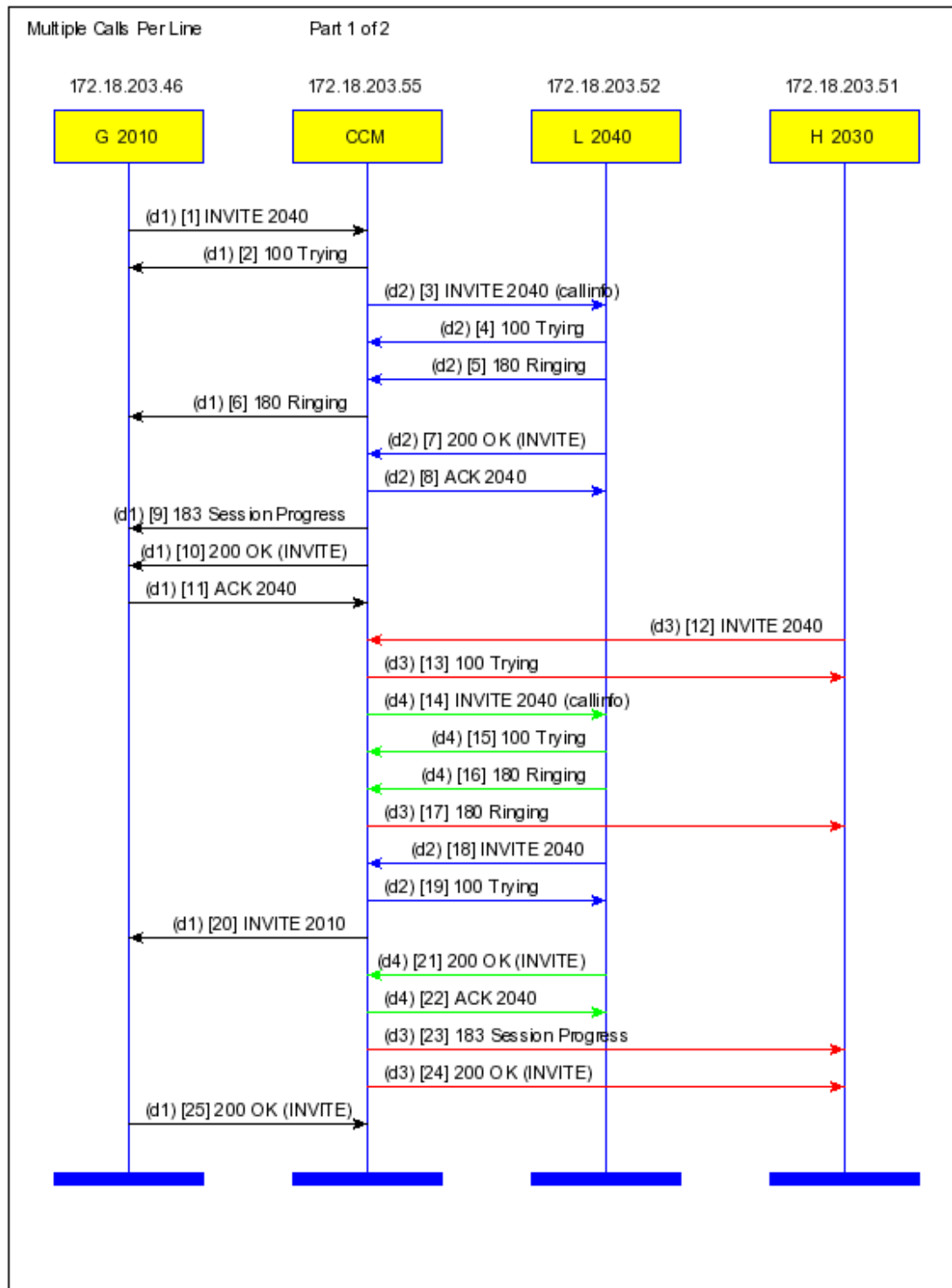
2030 calls 2040

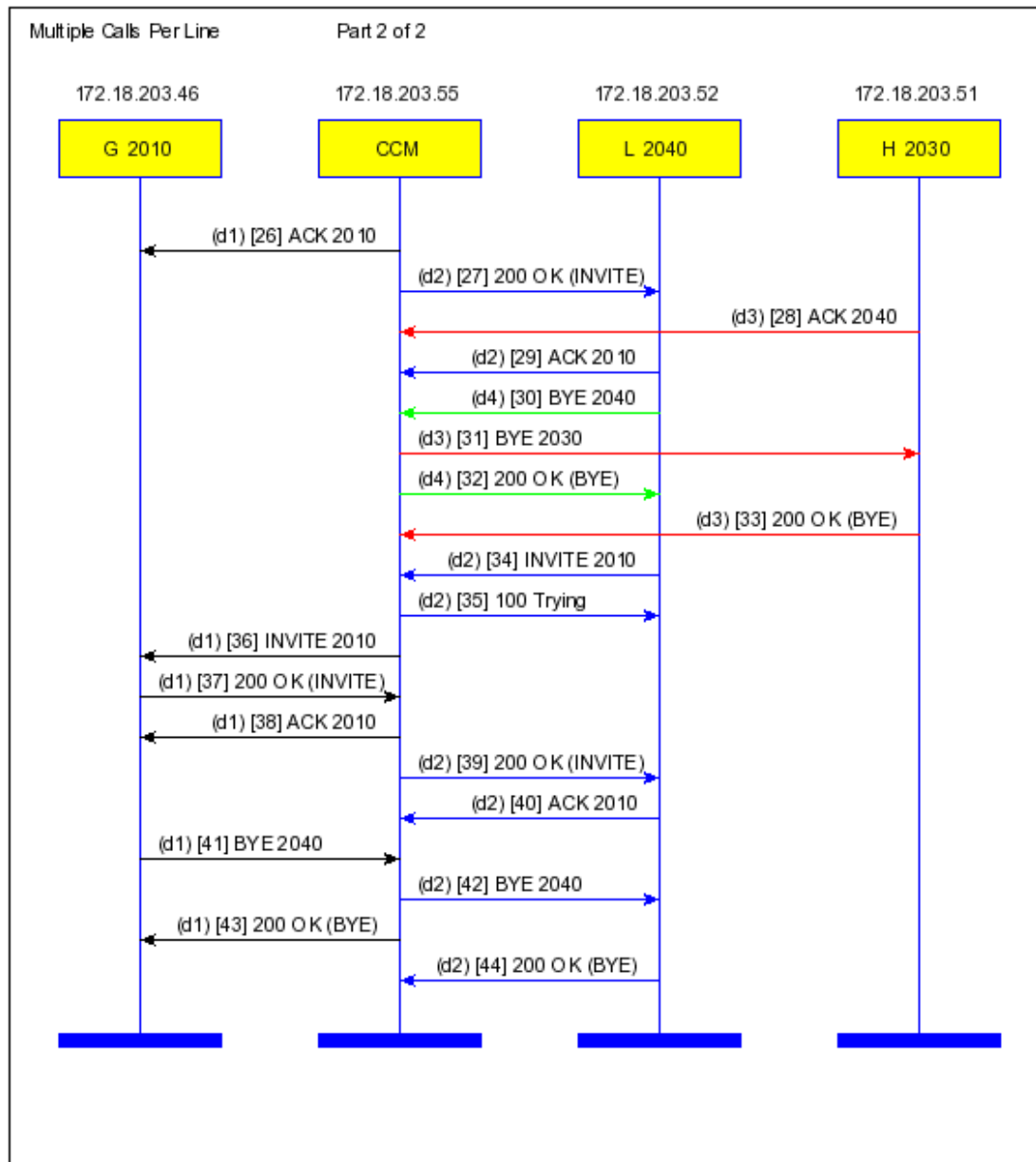
2040 answers

2040 ends call from 2030

2040 resumes call with 2010

2010 ends call with 2040





[\[diagram\]](#) Call-ID: [\[prev\]](#) [\[next\]](#)

**[1] INVITE sip:2040@172.18.203.55 SIP/2.0**

Via: SIP/2.0/UDP 172.18.203.46:5060;branch=z9hG4bK4809c2bc  
 From: "2010" <sip:2010@172.18.203.55>;tag=00120193edac001974ab09df-37123f10  
 To: <sip:2040@172.18.203.55>  
 Call-ID: 00120193-edac0012-2f3eff95-716967c0@172.18.203.46  
 Max-Forwards: 70  
 CSeq: 101 INVITE  
 User-Agent: Cisco-CP7960G/7.5  
 Contact: <sip:2010@172.18.203.46:5060>  
 Expires: 180  
 Accept: application/sdp  
 Allow: ACK,BYE,CANCEL,INVITE,NOTIFY,OPTIONS,REFER,REGISTER,UPDATE  
 Remote-Party-ID: "2010" <sip:2010@172.18.203.46>;party=calling;id-type=subscriber;privacy=off;screen=yes  
 Supported: replaces  
 Content-Length: 256  
 Content-Type: application/sdp  
 Content-Disposition: session;handling=optional

v=0  
 o=Cisco-SIPUA 6320 0 IN IP4 172.18.203.46  
 s=SIP Call  
 t=0 0  
 m=audio 20102 RTP/AVP 0 8 18 101  
 c=IN IP4 172.18.203.46  
 a=rtpmap:0 PCMU/8000  
 a=rtpmap:8 PCMA/8000  
 a=rtpmap:18 G729/8000  
 a=rtpmap:101 telephone-event/8000  
 a=fmtp:101 0-15  
 a=sendrecv

[\[diagram\]](#) Call-ID: [\[prev\]](#) [\[next\]](#)

**[2] SIP/2.0 100 Trying**

Via: SIP/2.0/UDP 172.18.203.46:5060;branch=z9hG4bK4809c2bc  
 From: "2010" <sip:2010@172.18.203.55>;tag=00120193edac001974ab09df-37123f10  
 To: <sip:2040@172.18.203.55>  
 Date: Wed, 12 Jul 2006 20:38:18 GMT  
 Call-ID: 00120193-edac0012-2f3eff95-716967c0@172.18.203.46  
 CSeq: 101 INVITE  
 Allow-Events: presence  
 Content-Length: 0

[\[diagram\]](#) Call-ID: [\[prev\]](#) [\[next\]](#)

**[3] INVITE sip:2040@172.18.203.52:5060 SIP/2.0**

Via: SIP/2.0/UDP 172.18.203.55:5060;branch=z9hG4bK3b9750b2  
 Remote-Party-ID: "SIP Line 2010" <sip:2010@172.18.203.55>;party=calling;screen=yes;privacy=off  
 From: "SIP Line 2010" <sip:2010@172.18.203.55>;tag=b9c8b19b-c709-4d85-86d4-d2f557c6c2a6-30679912  
 To: <sip:2040@172.18.203.52>  
 Date: Wed, 12 Jul 2006 20:38:18 GMT  
 Call-ID: 58531e80-4b515dba-46b-37cb12ac@172.18.203.55  
 Supported: timer,replaces  
 Min-SE: 1800  
 User-Agent: Cisco-CCM5.0  
 Allow: INVITE, OPTIONS, INFO, BYE, CANCEL, ACK, PRACK, UPDATE, REFER, SUBSCRIBE, NOTIFY  
 CSeq: 101 INVITE  
 Expires: 180  
 Allow-Events: presence  
 Alert-Info: <urn:x-cisco-remotecc:callinfo>; security= NotAuthenticated; orientation= from; call-instance= 1  
 Alert-Info: <file://Bellcore-dr1/>  
 Contact: <sip:2040@172.18.203.55:5060>  
 Max-Forwards: 69  
 Content-Length: 0

[\[diagram\]](#) Call-ID: [\[prev\]](#) [\[next\]](#)

**[4] SIP/2.0 100 Trying**

Via: SIP/2.0/UDP 172.18.203.55:5060;branch=z9hG4bK3b9750b2  
 From: "SIP Line 2010" <sip:2010@172.18.203.55>;tag=b9c8b19b-c709-4d85-86d4-d2f557c6c2a6-30679912  
 To: <sip:2040@172.18.203.52>  
 Call-ID: 58531e80-4b515dba-46b-37cb12ac@172.18.203.55  
 CSeq: 101 INVITE  
 Server: Cisco-CP7960G/7.5  
 Contact: <sip:2040@172.18.203.52:5060>  
 Allow: ACK,BYE,CANCEL,INVITE,NOTIFY,OPTIONS,REFER,REGISTER,UPDATE  
 Remote-Party-ID: "2040" <sip:2040@172.18.203.52>;party=called;id-type=subscriber;privacy=off;screen=yes  
 Content-Length: 0

[\[diagram\]](#) Call-ID: [\[prev\]](#) [\[next\]](#)

**[5] SIP/2.0 180 Ringing**

Via: SIP/2.0/UDP 172.18.203.55:5060;branch=z9hG4bK3b9750b2

From: "SIP Line 2010" <sip:2010@172.18.203.55>;tag=b9c8b19b-c709-4d85-86d4-d2f557c6c2a6-30679912  
 To: <sip:2040@172.18.203.52>;tag=003094c3cd3a000f79f83ca2-726630fd  
 Call-ID: 58531e80-4b515dba-46b-37cb12ac@172.18.203.55  
 CSeq: 101 INVITE  
 Server: Cisco-CP7960G/7.5  
 Contact: <sip:2040@172.18.203.52:5060>  
 Allow: ACK,BYE,CANCEL,INVITE,NOTIFY,OPTIONS,REFER,REGISTER,UPDATE  
 Remote-Party-ID: "2040" <sip:2040@172.18.203.52>;party=called;id-type=subscriber;privacy=off;screen=yes  
 Content-Length: 0

[\[diagram\]](#) Call-ID: [\[prev\]](#) [\[next\]](#)

#### [6] SIP/2.0 180 Ringing

Via: SIP/2.0/UDP 172.18.203.46:5060;branch=z9hG4bK4809c2bc  
 From: "2010" <sip:2010@172.18.203.55>;tag=00120193edac001974ab09df-37123f10  
 To: <sip:2040@172.18.203.55>;tag=b9c8b19b-c709-4d85-86d4-d2f557c6c2a6-30679911  
 Date: Wed, 12 Jul 2006 20:38:18 GMT  
 Call-ID: 00120193-edac0012-2f3eff95-716967c0@172.18.203.46  
 CSeq: 101 INVITE  
 Allow: INVITE, OPTIONS, INFO, BYE, CANCEL, ACK, PRACK, UPDATE, REFER, SUBSCRIBE, NOTIFY  
 Allow-Events: presence  
 Remote-Party-ID: "SIP Alerting 2040" <sip:2040@172.18.203.55>;party=called;screen=yes;privacy=off  
 Contact: <sip:2040@172.18.203.55:5060>  
 Content-Length: 0

[\[diagram\]](#) Call-ID: [\[prev\]](#) [\[next\]](#)

#### [7] SIP/2.0 200 OK

Via: SIP/2.0/UDP 172.18.203.55:5060;branch=z9hG4bK3b9750b2  
 From: "SIP Line 2010" <sip:2010@172.18.203.55>;tag=b9c8b19b-c709-4d85-86d4-d2f557c6c2a6-30679912  
 To: <sip:2040@172.18.203.52>;tag=003094c3cd3a000f79f83ca2-726630fd  
 Call-ID: 58531e80-4b515dba-46b-37cb12ac@172.18.203.55  
 CSeq: 101 INVITE  
 Server: Cisco-CP7960G/7.5  
 Contact: <sip:2040@172.18.203.52:5060>  
 Allow: ACK,BYE,CANCEL,INVITE,NOTIFY,OPTIONS,REFER,REGISTER,UPDATE  
 Remote-Party-ID: "2040" <sip:2040@172.18.203.52>;party=called;id-type=subscriber;privacy=off;screen=yes  
 Supported: replaces  
 Content-Length: 256  
 Content-Type: application/sdp  
 Content-Disposition: session;handling=optional

```
v=0
o=Cisco-SIPUA 9979 0 IN IP4 172.18.203.52
s=SIP Call
t=0 0
m=audio 30148 RTP/AVP 0 8 18 101
c=IN IP4 172.18.203.52
a=rtpmap:0 PCMU/8000
a=rtpmap:8 PCMA/8000
a=rtpmap:18 G729/8000
a=rtpmap:101 telephone-event/8000
a=fmtp:101 0-15
a=sendrecv
```

[\[diagram\]](#) Call-ID: [\[prev\]](#) [\[next\]](#)

#### [8] ACK sip:2040@172.18.203.52:5060 SIP/2.0

Via: SIP/2.0/UDP 172.18.203.55:5060;branch=z9hG4bK3f73ed21  
 From: "SIP Line 2010" <sip:2010@172.18.203.55>;tag=b9c8b19b-c709-4d85-86d4-d2f557c6c2a6-30679912  
 To: <sip:2040@172.18.203.52>;tag=003094c3cd3a000f79f83ca2-726630fd  
 Date: Wed, 12 Jul 2006 20:38:18 GMT  
 Call-ID: 58531e80-4b515dba-46b-37cb12ac@172.18.203.55  
 Max-Forwards: 70  
 CSeq: 101 ACK  
 Allow-Events: presence  
 Content-Type: application/sdp  
 Content-Length: 214

```
v=0
o=CiscoSystemsCCM-SIP 2000 1 IN IP4 172.18.203.55
s=SIP Call
c=IN IP4 172.18.203.46
t=0 0
m=audio 20102 RTP/AVP 0 101
a=rtpmap:0 PCMU/8000
a=ptime:20
a=rtpmap:101 telephone-event/8000
a=fmtp:101 0-15
```

[\[diagram\]](#) Call-ID: [\[prev\]](#) [\[next\]](#)

#### [9] SIP/2.0 183 Session Progress

Via: SIP/2.0/UDP 172.18.203.46:5060;branch=z9hG4bK4809c2bc

```

From: "2010" <sip:2010@172.18.203.55>;tag=00120193edac001974ab09df-37123f10
To: <sip:2040@172.18.203.55>;tag=b9c8b19b-c709-4d85-86d4-d2f557c6c2a6-30679911
Date: Wed, 12 Jul 2006 20:38:18 GMT
Call-ID: 00120193-edac0012-2f3eff95-716967c0@172.18.203.46
CSeq: 101 INVITE
Allow: INVITE, OPTIONS, INFO, BYE, CANCEL, ACK, PRACK, UPDATE, REFER, SUBSCRIBE, NOTIFY
Allow-Events: presence
Remote-Party-ID: "SIP Alerting 2040" <sip:2040@172.18.203.55>;party=called;screen=yes;privacy=off
Contact: <sip:2040@172.18.203.55:5060>
Content-Type: application/sdp
Content-Length: 214

```

```

v=0
o=CiscoSystemsCCM-SIP 2000 1 IN IP4 172.18.203.55
s=SIP Call
c=IN IP4 172.18.203.52
t=0 0
m=audio 30148 RTP/AVP 0 101
a=rtpmap:0 PCMU/8000
a=ptime:20
a=rtpmap:101 telephone-event/8000
a=fmtp:101 0-15

```

[\[diagram\]](#) Call-ID: [\[prev\]](#) [\[next\]](#)

```

[10] SIP/2.0 200 OK
Via: SIP/2.0/UDP 172.18.203.46:5060;branch=z9hG4bK4809c2bc
From: "2010" <sip:2010@172.18.203.55>;tag=00120193edac001974ab09df-37123f10
To: <sip:2040@172.18.203.55>;tag=b9c8b19b-c709-4d85-86d4-d2f557c6c2a6-30679911
Date: Wed, 12 Jul 2006 20:38:18 GMT
Call-ID: 00120193-edac0012-2f3eff95-716967c0@172.18.203.46
CSeq: 101 INVITE
Allow: INVITE, OPTIONS, INFO, BYE, CANCEL, ACK, PRACK, UPDATE, REFER, SUBSCRIBE, NOTIFY
Allow-Events: presence
Remote-Party-ID: "SIP Line 2040" <sip:2040@172.18.203.55>;party=called;screen=yes;privacy=off
Contact: <sip:2040@172.18.203.55:5060>
Content-Type: application/sdp
Content-Length: 214

```

```

v=0
o=CiscoSystemsCCM-SIP 2000 1 IN IP4 172.18.203.55
s=SIP Call
c=IN IP4 172.18.203.52
t=0 0
m=audio 30148 RTP/AVP 0 101
a=rtpmap:0 PCMU/8000
a=ptime:20
a=rtpmap:101 telephone-event/8000
a=fmtp:101 0-15

```

[\[diagram\]](#) Call-ID: [\[prev\]](#) [\[next\]](#)

```

[11] ACK sip:2040@172.18.203.55:5060 SIP/2.0
Via: SIP/2.0/UDP 172.18.203.46:5060;branch=z9hG4bK760197b9
From: "2010" <sip:2010@172.18.203.55>;tag=00120193edac001974ab09df-37123f10
To: <sip:2040@172.18.203.55>;tag=b9c8b19b-c709-4d85-86d4-d2f557c6c2a6-30679911
Call-ID: 00120193-edac0012-2f3eff95-716967c0@172.18.203.46
Max-Forwards: 70
CSeq: 101 ACK
User-Agent: Cisco-CP7960G/7.5
Remote-Party-ID: "2010" <sip:2010@172.18.203.46>;party=calling;id-type=subscriber;privacy=off;screen=yes
Content-Length: 0

```

[\[diagram\]](#) Call-ID: [\[prev\]](#) [\[next\]](#)

```

[12] INVITE sip:2040@172.18.203.55 SIP/2.0
Via: SIP/2.0/UDP 172.18.203.51:5060;branch=z9hG4bK69f1b585
From: "2030" <sip:2030@172.18.203.55>;tag=000d280821a500183a22e2b2-5e568cec
To: <sip:2040@172.18.203.55>
Call-ID: 000d2808-21a50007-266703c1-0ef319e4@172.18.203.51
Max-Forwards: 70
CSeq: 101 INVITE
User-Agent: Cisco-CP7960G/7.5
Contact: <sip:2030@172.18.203.51:5060>
Expires: 180
Accept: application/sdp
Allow: ACK, BYE, CANCEL, INVITE, NOTIFY, OPTIONS, REFER, REGISTER, UPDATE
Remote-Party-ID: "2030" <sip:2030@172.18.203.51>;party=calling;id-type=subscriber;privacy=off;screen=yes
Supported: replaces
Content-Length: 256
Content-Type: application/sdp
Content-Disposition: session;handling=optional

```

```
v=0
o=Cisco-SIPUA 6593 0 IN IP4 172.18.203.51
s=SIP Call
t=0 0
m=audio 17940 RTP/AVP 0 8 18 101
c=IN IP4 172.18.203.51
a=rtpmap:0 PCMU/8000
a=rtpmap:8 PCMA/8000
a=rtpmap:18 G729/8000
a=rtpmap:101 telephone-event/8000
a=fmtp:101 0-15
a=sendrecv
```

[\[diagram\]](#) Call-ID: [\[prev\]](#) [\[next\]](#)

#### [13] SIP/2.0 100 Trying

```
Via: SIP/2.0/UDP 172.18.203.51:5060;branch=z9hG4bK69f1b585
From: "2030" <sip:2030@172.18.203.55>;tag=000d280821a500183a22e2b2-5e568cec
To: <sip:2040@172.18.203.55>
Date: Wed, 12 Jul 2006 20:38:25 GMT
Call-ID: 000d2808-21a50007-266703c1-0ef319e4@172.18.203.51
CSeq: 101 INVITE
Allow-Events: presence
Content-Length: 0
```

[\[diagram\]](#) Call-ID: [\[prev\]](#) [\[next\]](#)

#### [14] INVITE sip:2040@172.18.203.52:5060 SIP/2.0

```
Via: SIP/2.0/UDP 172.18.203.55:5060;branch=z9hG4bK7d74cee5
Remote-Party-ID: "SIP Line 2030" <sip:2030@172.18.203.55>;party=calling;screen=yes;privacy=off
From: "SIP Line 2030" <sip:2030@172.18.203.55>;tag=b9c8b19b-c709-4d85-86d4-d2f557c6c2a6-30679914
To: <sip:2040@172.18.203.52>
Date: Wed, 12 Jul 2006 20:38:25 GMT
Call-ID: 5c7f3c00-4b515dc1-46d-37cb12ac@172.18.203.55
Supported: timer,replaces
Min-SE: 1800
User-Agent: Cisco-CCM5.0
Allow: INVITE, OPTIONS, INFO, BYE, CANCEL, ACK, PRACK, UPDATE, REFER, SUBSCRIBE, NOTIFY
CSeq: 101 INVITE
Expires: 180
Allow-Events: presence
Call-Info: <urn:x-cisco-remotecc:callinfo>; security= NotAuthenticated; orientation= from; call-instance= 2
Alert-Info: <file://Bellcore-dr1/>
Contact: <sip:2040@172.18.203.55:5060>
Max-Forwards: 69
Content-Length: 0
```

[\[diagram\]](#) Call-ID: [\[prev\]](#) [\[next\]](#)

#### [15] SIP/2.0 100 Trying

```
Via: SIP/2.0/UDP 172.18.203.55:5060;branch=z9hG4bK7d74cee5
From: "SIP Line 2030" <sip:2030@172.18.203.55>;tag=b9c8b19b-c709-4d85-86d4-d2f557c6c2a6-30679914
To: <sip:2040@172.18.203.52>
Call-ID: 5c7f3c00-4b515dc1-46d-37cb12ac@172.18.203.55
CSeq: 101 INVITE
Server: Cisco-CP7960G/7.5
Contact: <sip:2040@172.18.203.52:5060>
Allow: ACK,BYE,CANCEL,INVITE,NOTIFY,OPTIONS,REFER,REGISTER,UPDATE
Remote-Party-ID: "2040" <sip:2040@172.18.203.52>;party=called;id-type=subscriber;privacy=off;screen=yes
Content-Length: 0
```

[\[diagram\]](#) Call-ID: [\[prev\]](#) [\[next\]](#)

#### [16] SIP/2.0 180 Ringing

```
Via: SIP/2.0/UDP 172.18.203.55:5060;branch=z9hG4bK7d74cee5
From: "SIP Line 2030" <sip:2030@172.18.203.55>;tag=b9c8b19b-c709-4d85-86d4-d2f557c6c2a6-30679914
To: <sip:2040@172.18.203.52>;tag=003094c3cd3a001026839f76-3fc23657
Call-ID: 5c7f3c00-4b515dc1-46d-37cb12ac@172.18.203.55
CSeq: 101 INVITE
Server: Cisco-CP7960G/7.5
Contact: <sip:2040@172.18.203.52:5060>
Allow: ACK,BYE,CANCEL,INVITE,NOTIFY,OPTIONS,REFER,REGISTER,UPDATE
Remote-Party-ID: "2040" <sip:2040@172.18.203.52>;party=called;id-type=subscriber;privacy=off;screen=yes
Content-Length: 0
```

[\[diagram\]](#) Call-ID: [\[prev\]](#) [\[next\]](#)

#### [17] SIP/2.0 180 Ringing

```
Via: SIP/2.0/UDP 172.18.203.51:5060;branch=z9hG4bK69f1b585
From: "2030" <sip:2030@172.18.203.55>;tag=000d280821a500183a22e2b2-5e568cec
To: <sip:2040@172.18.203.55>;tag=b9c8b19b-c709-4d85-86d4-d2f557c6c2a6-30679913
Date: Wed, 12 Jul 2006 20:38:25 GMT
Call-ID: 000d2808-21a50007-266703c1-0ef319e4@172.18.203.51
CSeq: 101 INVITE
Allow: INVITE, OPTIONS, INFO, BYE, CANCEL, ACK, PRACK, UPDATE, REFER, SUBSCRIBE, NOTIFY
```

```

Allow-Events: presence
Remote-Party-ID: "SIP Alerting 2040" <sip:2040@172.18.203.55>;party=called;screen=yes;privacy=off
Contact: <sip:2040@172.18.203.55:5060>
Content-Length: 0

```

[\[diagram\]](#) Call-ID: [\[prev\]](#) [\[next\]](#)

**[18] INVITE sip:2040@172.18.203.55:5060 SIP/2.0**

```

Via: SIP/2.0/UDP 172.18.203.52:5060;branch=z9hG4bK2e061d0e
From: <sip:2040@172.18.203.52>;tag=003094c3cd3a000f79f83ca2-726630fd
To: "SIP Line 2010" <sip:2010@172.18.203.55>;tag=b9c8b19b-c709-4d85-86d4-d2f557c6c2a6-30679912
Call-ID: 58531e80-4b515dba-46b-37cb12ac@172.18.203.55
Max-Forwards: 70
CSeq: 101 INVITE
User-Agent: Cisco-CP7960G/7.5
Contact: <sip:2040@172.18.203.52:5060>
Remote-Party-ID: "2040" <sip:2040@172.18.203.52>;party=called;id-type=subscriber;privacy=off;screen=yes
Content-Length: 256
Content-Type: application/sdp
Content-Disposition: session;handling=optional

```

```

v=0
o=Cisco-SIPUA 9979 1 IN IP4 172.18.203.52
s=SIP Call
t=0 0
m=audio 30148 RTP/AVP 0 8 18 101
c=IN IP4 172.18.203.52
a=rtpmap:0 PCMU/8000
a=rtpmap:8 PCMA/8000
a=rtpmap:18 G729/8000
a=rtpmap:101 telephone-event/8000
a=fmtp:101 0-15
a=sendonly

```

[\[diagram\]](#) Call-ID: [\[prev\]](#) [\[next\]](#)

**[19] SIP/2.0 100 Trying**

```

Via: SIP/2.0/UDP 172.18.203.52:5060;branch=z9hG4bK2e061d0e
From: <sip:2040@172.18.203.52>;tag=003094c3cd3a000f79f83ca2-726630fd
To: "SIP Line 2010" <sip:2010@172.18.203.55>;tag=b9c8b19b-c709-4d85-86d4-d2f557c6c2a6-30679912
Date: Wed, 12 Jul 2006 20:38:27 GMT
Call-ID: 58531e80-4b515dba-46b-37cb12ac@172.18.203.55
CSeq: 101 INVITE
Allow-Events: presence
Content-Length: 0

```

[\[diagram\]](#) Call-ID: [\[prev\]](#) [\[next\]](#)

**[20] INVITE sip:2010@172.18.203.46:5060 SIP/2.0**

```

Via: SIP/2.0/UDP 172.18.203.55:5060;branch=z9hG4bKb6c2873
Remote-Party-ID: "SIP Line 2040" <sip:2040@172.18.203.55>;party=calling;screen=yes;privacy=off
From: <sip:2040@172.18.203.55>;tag=b9c8b19b-c709-4d85-86d4-d2f557c6c2a6-30679911
To: "2010" <sip:2010@172.18.203.55>;tag=00120193edac001974ab09df-37123f10
Date: Wed, 12 Jul 2006 20:38:27 GMT
Call-ID: 00120193-edac0012-2f3eff95-716967c0@172.18.203.46
Supported: timer,replaces
Min-SE: 1800
Cisco-Guid: 1481842304-1263623610-1130-936055468
User-Agent: Cisco-CCM5.0
Allow: INVITE, OPTIONS, INFO, BYE, CANCEL, ACK, PRACK, UPDATE, REFER, SUBSCRIBE, NOTIFY
CSeq: 101 INVITE
Max-Forwards: 70
Contact: <sip:2040@172.18.203.55:5060>
Expires: 180
Allow-Events: presence
Content-Type: application/sdp
Content-Length: 300

```

```

v=0
o=CiscoSystemsCCM-SIP 2000 2 IN IP4 172.18.203.55
s=SIP Call
c=IN IP4 172.18.203.52
t=0 0
m=audio 30148 RTP/AVP 0 8 18 101
a=rtpmap:0 PCMU/8000
a=ptime:20
a=rtpmap:8 PCMA/8000
a=ptime:20
a=rtpmap:18 G729/8000
a=ptime:20
a=sendonly
a=rtpmap:101 telephone-event/8000
a=fmtp:101 0-15

```

[[diagram](#)] Call-ID: [[prev](#)] [[next](#)]

**[21] SIP/2.0 200 OK**

Via: SIP/2.0/UDP 172.18.203.55:5060;branch=z9hG4bK7d74cee5  
 From: "SIP Line 2030" <sip:2030@172.18.203.55>;tag=b9c8b19b-c709-4d85-86d4-d2f557c6c2a6-30679914  
 To: <sip:2040@172.18.203.52>;tag=003094c3cd3a001026839f76-3fc23657  
 Call-ID: 5c7f3c00-4b515dc1-46d-37cb12ac@172.18.203.55  
 CSeq: 101 INVITE  
 Server: Cisco-CP7960G/7.5  
 Contact: <sip:2040@172.18.203.52:5060>  
 Allow: ACK,BYE,CANCEL,INVITE,NOTIFY,OPTIONS,REFER,REGISTER,UPDATE  
 Remote-Party-ID: "2040" <sip:2040@172.18.203.52>;party-called;id-type=subscriber;privacy=off;screen=yes  
 Supported: replaces  
 Content-Length: 256  
 Content-Type: application/sdp  
 Content-Disposition: session;handling=optional

v=0  
 o=Cisco-SIPUA 1291 0 IN IP4 172.18.203.52  
 s=SIP Call  
 t=0 0  
 m=audio 30152 RTP/AVP 0 8 18 101  
 c=IN IP4 172.18.203.52  
 a=rtpmap:0 PCMU/8000  
 a=rtpmap:8 PCMA/8000  
 a=rtpmap:18 G729/8000  
 a=rtpmap:101 telephone-event/8000  
 a=fmtp:101 0-15  
 a=sendrecv

[[diagram](#)] Call-ID: [[prev](#)] [[next](#)]

**[22] ACK sip:2040@172.18.203.52:5060 SIP/2.0**

Via: SIP/2.0/UDP 172.18.203.55:5060;branch=z9hG4bKd10fb57  
 From: "SIP Line 2030" <sip:2030@172.18.203.55>;tag=b9c8b19b-c709-4d85-86d4-d2f557c6c2a6-30679914  
 To: <sip:2040@172.18.203.52>;tag=003094c3cd3a001026839f76-3fc23657  
 Date: Wed, 12 Jul 2006 20:38:25 GMT  
 Call-ID: 5c7f3c00-4b515dc1-46d-37cb12ac@172.18.203.55  
 Max-Forwards: 70  
 CSeq: 101 ACK  
 Allow-Events: presence  
 Content-Type: application/sdp  
 Content-Length: 214

v=0  
 o=CiscoSystemsCCM-SIP 2000 1 IN IP4 172.18.203.55  
 s=SIP Call  
 c=IN IP4 172.18.203.51  
 t=0 0  
 m=audio 17940 RTP/AVP 0 101  
 a=rtpmap:0 PCMU/8000  
 a=ptime:20  
 a=rtpmap:101 telephone-event/8000  
 a=fmtp:101 0-15

[[diagram](#)] Call-ID: [[prev](#)] [[next](#)]

**[23] SIP/2.0 183 Session Progress**

Via: SIP/2.0/UDP 172.18.203.51:5060;branch=z9hG4bK69f1b585  
 From: "2030" <sip:2030@172.18.203.55>;tag=000d280821a500183a22e2b2-5e568cec  
 To: <sip:2040@172.18.203.55>;tag=b9c8b19b-c709-4d85-86d4-d2f557c6c2a6-30679913  
 Date: Wed, 12 Jul 2006 20:38:25 GMT  
 Call-ID: 000d2808-21a50007-266703c1-0ef319e4@172.18.203.51  
 CSeq: 101 INVITE  
 Allow: INVITE, OPTIONS, INFO, BYE, CANCEL, ACK, PRACK, UPDATE, REFER, SUBSCRIBE, NOTIFY  
 Allow-Events: presence  
 Remote-Party-ID: "SIP Alerting 2040" <sip:2040@172.18.203.55>;party-called;screen=yes;privacy=off  
 Contact: <sip:2040@172.18.203.55:5060>  
 Content-Type: application/sdp  
 Content-Length: 214

v=0  
 o=CiscoSystemsCCM-SIP 2000 1 IN IP4 172.18.203.55  
 s=SIP Call  
 c=IN IP4 172.18.203.52  
 t=0 0  
 m=audio 30152 RTP/AVP 0 101  
 a=rtpmap:0 PCMU/8000  
 a=ptime:20  
 a=rtpmap:101 telephone-event/8000  
 a=fmtp:101 0-15

[\[diagram\]](#) Call-ID: [\[prev\]](#) [\[next\]](#)

**[24] SIP/2.0 200 OK**

Via: SIP/2.0/UDP 172.18.203.51:5060;branch=z9hG4bK69f1b585  
 From: "2030" <sip:2030@172.18.203.55>;tag=000d280821a500183a22e2b2-5e568cec  
 To: <sip:2040@172.18.203.55>;tag=b9c8b19b-c709-4d85-86d4-d2f557c6c2a6-30679913  
 Date: Wed, 12 Jul 2006 20:38:25 GMT  
 Call-ID: 000d2808-21a50007-266703c1-0ef319e4@172.18.203.51  
 CSeq: 101 INVITE  
 Allow: INVITE, OPTIONS, INFO, BYE, CANCEL, ACK, PRACK, UPDATE, REFER, SUBSCRIBE, NOTIFY  
 Allow-Events: presence  
 Remote-Party-ID: "SIP Line 2040" <sip:2040@172.18.203.55>;party=called;screen=yes;privacy=off  
 Contact: <sip:2040@172.18.203.55:5060>  
 Content-Type: application/sdp  
 Content-Length: 214

v=0  
 o=CiscoSystemsCCM-SIP 2000 1 IN IP4 172.18.203.55  
 s=SIP Call  
 c=IN IP4 172.18.203.52  
 t=0 0  
 m=audio 30152 RTP/AVP 0 101  
 a=rtpmap:0 PCMU/8000  
 a=ptime:20  
 a=rtpmap:101 telephone-event/8000  
 a=fmtp:101 0-15

[\[diagram\]](#) Call-ID: [\[prev\]](#) [\[next\]](#)

**[25] SIP/2.0 200 OK**

Via: SIP/2.0/UDP 172.18.203.55:5060;branch=z9hG4bKb6c2873  
 From: <sip:2040@172.18.203.55>;tag=b9c8b19b-c709-4d85-86d4-d2f557c6c2a6-30679911  
 To: "2010" <sip:2010@172.18.203.55>;tag=00120193edac001974ab09df-37123f10  
 Call-ID: 00120193-edac0012-2f3eff95-716967c0@172.18.203.46  
 CSeq: 101 INVITE  
 Server: Cisco-CP7960G/7.5  
 Contact: <sip:2010@172.18.203.46:5060>  
 Allow: ACK, BYE, CANCEL, INVITE, NOTIFY, OPTIONS, REFER, REGISTER, UPDATE  
 Remote-Party-ID: "2010" <sip:2010@172.18.203.46>;party=calling;id-type=subscriber;privacy=off;screen=yes  
 Supported: replaces  
 Content-Length: 206  
 Content-Type: application/sdp  
 Content-Disposition: session;handling=optional

v=0  
 o=Cisco-SIPUA 6320 1 IN IP4 172.18.203.46  
 s=SIP Call  
 t=0 0  
 m=audio 20102 RTP/AVP 0 101  
 c=IN IP4 172.18.203.46  
 a=rtpmap:0 PCMU/8000  
 a=rtpmap:101 telephone-event/8000  
 a=fmtp:101 0-15  
 a=recvonly

[\[diagram\]](#) Call-ID: [\[prev\]](#) [\[next\]](#)

**[26] ACK sip:2010@172.18.203.46:5060 SIP/2.0**

Via: SIP/2.0/UDP 172.18.203.55:5060;branch=z9hG4bK570d20e9  
 From: <sip:2040@172.18.203.55>;tag=b9c8b19b-c709-4d85-86d4-d2f557c6c2a6-30679911  
 To: "2010" <sip:2010@172.18.203.55>;tag=00120193edac001974ab09df-37123f10  
 Date: Wed, 12 Jul 2006 20:38:27 GMT  
 Call-ID: 00120193-edac0012-2f3eff95-716967c0@172.18.203.46  
 Max-Forwards: 70  
 CSeq: 101 ACK  
 Allow-Events: presence  
 Content-Length: 0

[\[diagram\]](#) Call-ID: [\[prev\]](#) [\[next\]](#)

**[27] SIP/2.0 200 OK**

Via: SIP/2.0/UDP 172.18.203.52:5060;branch=z9hG4bK2e061d0e  
 From: <sip:2040@172.18.203.52>;tag=003094c3cd3a000f79f83ca2-726630fd  
 To: "SIP Line 2010" <sip:2010@172.18.203.55>;tag=b9c8b19b-c709-4d85-86d4-d2f557c6c2a6-30679912  
 Date: Wed, 12 Jul 2006 20:38:27 GMT  
 Call-ID: 58531e80-4b515dba-46b-37cb12ac@172.18.203.55  
 CSeq: 101 INVITE  
 Allow: INVITE, OPTIONS, INFO, BYE, CANCEL, ACK, PRACK, UPDATE, REFER, SUBSCRIBE, NOTIFY  
 Allow-Events: presence  
 Remote-Party-ID: "SIP Line 2010" <sip:2010@172.18.203.55>;party=called;screen=yes;privacy=off  
 Contact: <sip:2010@172.18.203.55:5060>  
 Content-Type: application/sdp  
 Content-Length: 226

```
v=0
o=CiscoSystemsCCM-SIP 2000 2 IN IP4 172.18.203.55
s=SIP Call
c=IN IP4 172.18.203.46
t=0 0
m=audio 20102 RTP/AVP 0 101
a=rtpmap:0 PCMU/8000
a=ptime:20
a=recvnonly
a=rtpmap:101 telephone-event/8000
a=fmtp:101 0-15
```

[\[diagram\]](#) Call-ID: [\[prev\]](#) [\[next\]](#)

**[28] ACK sip:2040@172.18.203.55:5060 SIP/2.0**

```
Via: SIP/2.0/UDP 172.18.203.51:5060;branch=z9hG4bK1d18f0da
From: "2030" <sip:2030@172.18.203.55>;tag=000d280821a500183a22e2b2-5e568cec
To: <sip:2040@172.18.203.55>;tag=b9c8b19b-c709-4d85-86d4-d2f557c6c2a6-30679913
Call-ID: 000d2808-21a50007-266703c1-0ef319e4@172.18.203.51
Max-Forwards: 70
CSeq: 101 ACK
User-Agent: Cisco-CP7960G/7.5
Remote-Party-ID: "2030" <sip:2030@172.18.203.51>;party=calling;id-type=subscriber;privacy=off;screen=yes
Content-Length: 0
```

[\[diagram\]](#) Call-ID: [\[prev\]](#) [\[next\]](#)

**[29] ACK sip:2010@172.18.203.55:5060 SIP/2.0**

```
Via: SIP/2.0/UDP 172.18.203.52:5060;branch=z9hG4bK13f218b7
From: <sip:2040@172.18.203.52>;tag=003094c3cd3a001026839f76-3fc2365f
To: "SIP Line 2010" <sip:2010@172.18.203.55>;tag=b9c8b19b-c709-4d85-86d4-d2f557c6c2a6-30679912
Call-ID: 58531e80-4b515dba-46b-37cb12ac@172.18.203.55
Max-Forwards: 70
CSeq: 101 ACK
User-Agent: Cisco-CP7960G/7.5
Remote-Party-ID: "2040" <sip:2040@172.18.203.52>;party=called;id-type=subscriber;privacy=off;screen=yes
Content-Length: 0
```

[\[diagram\]](#) Call-ID: [\[prev\]](#) [\[next\]](#)

**[30] BYE sip:2040@172.18.203.55:5060 SIP/2.0**

```
Via: SIP/2.0/UDP 172.18.203.52:5060;branch=z9hG4bK1d7b4a93
From: <sip:2040@172.18.203.52>;tag=003094c3cd3a001026839f76-3fc2365f
To: "SIP Line 2030" <sip:2030@172.18.203.55>;tag=b9c8b19b-c709-4d85-86d4-d2f557c6c2a6-30679914
Call-ID: 5c7f3c00-4b515dc1-46d-37cb12ac@172.18.203.55
Max-Forwards: 70
CSeq: 101 BYE
User-Agent: Cisco-CP7960G/7.5
Content-Length: 0
```

[\[diagram\]](#) Call-ID: [\[prev\]](#) [\[next\]](#)

**[31] BYE sip:2030@172.18.203.51:5060 SIP/2.0**

```
Via: SIP/2.0/UDP 172.18.203.55:5060;branch=z9hG4bK15f059ff
From: <sip:2040@172.18.203.55>;tag=b9c8b19b-c709-4d85-86d4-d2f557c6c2a6-30679913
To: "2030" <sip:2030@172.18.203.55>;tag=000d280821a500183a22e2b2-5e568cec
Date: Wed, 12 Jul 2006 20:38:27 GMT
Call-ID: 000d2808-21a50007-266703c1-0ef319e4@172.18.203.51
User-Agent: Cisco-CCM5.0
Max-Forwards: 70
CSeq: 101 BYE
Content-Length: 0
```

[\[diagram\]](#) Call-ID: [\[prev\]](#) [\[next\]](#)

**[32] SIP/2.0 200 OK**

```
Via: SIP/2.0/UDP 172.18.203.52:5060;branch=z9hG4bK1d7b4a93
From: <sip:2040@172.18.203.52>;tag=003094c3cd3a001026839f76-3fc2365f
To: "SIP Line 2030" <sip:2030@172.18.203.55>;tag=b9c8b19b-c709-4d85-86d4-d2f557c6c2a6-30679914
Date: Wed, 12 Jul 2006 20:38:35 GMT
Call-ID: 5c7f3c00-4b515dc1-46d-37cb12ac@172.18.203.55
CSeq: 101 BYE
Content-Length: 0
```

[\[diagram\]](#) Call-ID: [\[prev\]](#) [\[next\]](#)

**[33] SIP/2.0 200 OK**

```
Via: SIP/2.0/UDP 172.18.203.55:5060;branch=z9hG4bK15f059ff
From: <sip:2040@172.18.203.55>;tag=b9c8b19b-c709-4d85-86d4-d2f557c6c2a6-30679913
To: "2030" <sip:2030@172.18.203.55>;tag=000d280821a500183a22e2b2-5e568cec
Call-ID: 000d2808-21a50007-266703c1-0ef319e4@172.18.203.51
CSeq: 101 BYE
Server: Cisco-CP7960G/7.5
Content-Length: 0
```

[[diagram](#)] [Call-ID: \[prev\] \[next\]](#)

[34] INVITE sip:2010@172.18.203.55:5060 SIP/2.0

Via: SIP/2.0/UDP 172.18.203.52:5060;branch=z9hG4bK0160794f  
 From: <sip:2040@172.18.203.52>;tag=003094c3cd3a000f79f83ca2-726630fd  
 To: "SIP Line 2010" <sip:2010@172.18.203.55>;tag=b9c8b19b-c709-4d85-86d4-d2f557c6c2a6-30679912  
 Call-ID: 58531e80-4b515dba-46b-37cb12ac@172.18.203.55  
 Max-Forwards: 70  
 CSeq: 102 INVITE  
 User-Agent: Cisco-CP7960G/7.5  
 Contact: <sip:2040@172.18.203.52:5060>  
 Remote-Party-ID: "2040" <sip:2040@172.18.203.52>;party=called;id-type=subscriber;privacy=off;screen=yes  
 Content-Length: 256  
 Content-Type: application/sdp  
 Content-Disposition: session;handling=optional

v=0  
 o=Cisco-SIPUA 9979 2 IN IP4 172.18.203.52  
 s=SIP Call  
 t=0 0  
 m=audio 30148 RTP/AVP 0 8 18 101  
 c=IN IP4 172.18.203.52  
 a=rtpmap:0 PCMU/8000  
 a=rtpmap:8 PCMA/8000  
 a=rtpmap:18 G729/8000  
 a=rtpmap:101 telephone-event/8000  
 a=fmtp:101 0-15  
 a=sendrecv

[[diagram](#)] [Call-ID: \[prev\] \[next\]](#)

[35] SIP/2.0 100 Trying

Via: SIP/2.0/UDP 172.18.203.52:5060;branch=z9hG4bK0160794f  
 From: <sip:2040@172.18.203.52>;tag=003094c3cd3a000f79f83ca2-726630fd  
 To: "SIP Line 2010" <sip:2010@172.18.203.55>;tag=b9c8b19b-c709-4d85-86d4-d2f557c6c2a6-30679912  
 Date: Wed, 12 Jul 2006 20:38:38 GMT  
 Call-ID: 58531e80-4b515dba-46b-37cb12ac@172.18.203.55  
 CSeq: 102 INVITE  
 Allow-Events: presence  
 Content-Length: 0

[[diagram](#)] [Call-ID: \[prev\] \[next\]](#)

[36] INVITE sip:2010@172.18.203.46:5060 SIP/2.0

Via: SIP/2.0/UDP 172.18.203.55:5060;branch=z9hG4bK2d54c689  
 Remote-Party-ID: "SIP Line 2040" <sip:2040@172.18.203.55>;party=calling;screen=yes;privacy=off  
 From: <sip:2040@172.18.203.55>;tag=b9c8b19b-c709-4d85-86d4-d2f557c6c2a6-30679911  
 To: "2010" <sip:2010@172.18.203.55>;tag=00120193edac001974ab09df-37123f10  
 Date: Wed, 12 Jul 2006 20:38:38 GMT  
 Call-ID: 00120193-edac0012-2f3eff95-716967c0@172.18.203.46  
 Supported: timer,replaces  
 Min-SE: 1800  
 Cisco-Guid: 1481842304-1263623610-1130-936055468  
 User-Agent: Cisco-CCM5.0  
 Allow: INVITE, OPTIONS, INFO, BYE, CANCEL, ACK, PRACK, UPDATE, REFER, SUBSCRIBE, NOTIFY  
 CSeq: 102 INVITE  
 Max-Forwards: 70  
 Contact: <sip:2040@172.18.203.55:5060>  
 Expires: 180  
 Allow-Events: presence  
 Content-Type: application/sdp  
 Content-Length: 288

v=0  
 o=CiscoSystemsCCM-SIP 2000 3 IN IP4 172.18.203.55  
 s=SIP Call  
 c=IN IP4 172.18.203.52  
 t=0 0  
 m=audio 30148 RTP/AVP 0 8 18 101  
 a=rtpmap:0 PCMU/8000  
 aptime:20  
 a=rtpmap:8 PCMA/8000  
 aptime:20  
 a=rtpmap:18 G729/8000  
 aptime:20  
 a=rtpmap:101 telephone-event/8000  
 a=fmtp:101 0-15

[[diagram](#)] [Call-ID: \[prev\] \[next\]](#)

[37] SIP/2.0 200 OK

Via: SIP/2.0/UDP 172.18.203.55:5060;branch=z9hG4bK2d54c689  
 From: <sip:2040@172.18.203.55>;tag=b9c8b19b-c709-4d85-86d4-d2f557c6c2a6-30679911  
 To: "2010" <sip:2010@172.18.203.55>;tag=00120193edac001974ab09df-37123f10

Call-ID: 00120193-edac0012-2f3eff95-716967c0@172.18.203.46  
 CSeq: 102 INVITE  
 Server: Cisco-CP7960G/7.5  
 Contact: <sip:2010@172.18.203.46:5060>  
 Allow: ACK,BYE,CANCEL,INVITE,NOTIFY,OPTIONS,REFER,REGISTER,UPDATE  
 Remote-Party-ID: "2010" <sip:2010@172.18.203.46>;party=calling;id-type=subscriber;privacy=off;screen=yes  
 Supported: replaces  
 Content-Length: 206  
 Content-Type: application/sdp  
 Content-Disposition: session;handling=optional

v=0  
 o=Cisco-SIPUA 6320 2 IN IP4 172.18.203.46  
 s=SIP Call  
 t=0 0  
 m=audio 20102 RTP/AVP 0 101  
 c=IN IP4 172.18.203.46  
 a=rtpmap:0 PCMU/8000  
 a=rtpmap:101 telephone-event/8000  
 a=fmtp:101 0-15  
 a=sendrecv

[\[diagram\]](#) Call-ID: [\[prev\]](#) [\[next\]](#)

**[38] ACK sip:2010@172.18.203.46:5060 SIP/2.0**  
 Via: SIP/2.0/UDP 172.18.203.55:5060;branch=z9hG4bK233ee764  
 From: <sip:2040@172.18.203.55>;tag=b9c8b19b-c709-4d85-86d4-d2f557c6c2a6-30679911  
 To: "2010" <sip:2010@172.18.203.55>;tag=00120193edac001974ab09df-37123f10  
 Date: Wed, 12 Jul 2006 20:38:38 GMT  
 Call-ID: 00120193-edac0012-2f3eff95-716967c0@172.18.203.46  
 Max-Forwards: 70  
 CSeq: 102 ACK  
 Allow-Events: presence  
 Content-Length: 0

[\[diagram\]](#) Call-ID: [\[prev\]](#) [\[next\]](#)

**[39] SIP/2.0 200 OK**  
 Via: SIP/2.0/UDP 172.18.203.52:5060;branch=z9hG4bK0160794f  
 From: <sip:2040@172.18.203.52>;tag=003094c3cd3a000f79f83ca2-726630fd  
 To: "SIP Line 2010" <sip:2010@172.18.203.55>;tag=b9c8b19b-c709-4d85-86d4-d2f557c6c2a6-30679912  
 Date: Wed, 12 Jul 2006 20:38:38 GMT  
 Call-ID: 58531e80-4b515dba-46b-37cb12ac@172.18.203.55  
 CSeq: 102 INVITE  
 Allow: INVITE, OPTIONS, INFO, BYE, CANCEL, ACK, PRACK, UPDATE, REFER, SUBSCRIBE, NOTIFY  
 Allow-Events: presence  
 Remote-Party-ID: "SIP Line 2010" <sip:2010@172.18.203.55>;party=called;screen=yes;privacy=off  
 Contact: <sip:2010@172.18.203.55:5060>  
 Content-Type: application/sdp  
 Content-Length: 214

v=0  
 o=CiscoSystemsCCM-SIP 2000 3 IN IP4 172.18.203.55  
 s=SIP Call  
 c=IN IP4 172.18.203.46  
 t=0 0  
 m=audio 20102 RTP/AVP 0 101  
 a=rtpmap:0 PCMU/8000  
 a=ptime:20  
 a=rtpmap:101 telephone-event/8000  
 a=fmtp:101 0-15

[\[diagram\]](#) Call-ID: [\[prev\]](#) [\[next\]](#)

**[40] ACK sip:2010@172.18.203.55:5060 SIP/2.0**  
 Via: SIP/2.0/UDP 172.18.203.52:5060;branch=z9hG4bK252dead3  
 From: <sip:2040@172.18.203.52>;tag=003094c3cd3a000f79f83ca2-726630fd  
 To: "SIP Line 2010" <sip:2010@172.18.203.55>;tag=b9c8b19b-c709-4d85-86d4-d2f557c6c2a6-30679912  
 Call-ID: 58531e80-4b515dba-46b-37cb12ac@172.18.203.55  
 Max-Forwards: 70  
 CSeq: 102 ACK  
 User-Agent: Cisco-CP7960G/7.5  
 Remote-Party-ID: "2040" <sip:2040@172.18.203.52>;party=called;id-type=subscriber;privacy=off;screen=yes  
 Content-Length: 0

[\[diagram\]](#) Call-ID: [\[prev\]](#) [\[next\]](#)

**[41] BYE sip:2040@172.18.203.55:5060 SIP/2.0**  
 Via: SIP/2.0/UDP 172.18.203.46:5060;branch=z9hG4bK1fad7434  
 From: "2010" <sip:2010@172.18.203.55>;tag=00120193edac001974ab09df-37123f10  
 To: <sip:2040@172.18.203.55>;tag=b9c8b19b-c709-4d85-86d4-d2f557c6c2a6-30679911  
 Call-ID: 00120193-edac0012-2f3eff95-716967c0@172.18.203.46  
 Max-Forwards: 70  
 CSeq: 102 BYE

User-Agent: Cisco-CP7960G/7.5  
Content-Length: 0

[\[diagram\]](#) Call-ID: [\[prev\]](#)[\[next\]](#)

**[42] BYE sip:20400172.18.203.52:5060 SIP/2.0**

Via: SIP/2.0/UDP 172.18.203.55:5060;branch=z9hG4bK216c83b2  
From: "SIP Line 2010" <sip:2010@172.18.203.55>;tag=b9c8b19b-c709-4d85-86d4-d2f557c6c2a6-30679912  
To: <sip:2040@172.18.203.52>;tag=003094c3cd3a000f79f83ca2-726630fd  
Date: Wed, 12 Jul 2006 20:38:38 GMT  
Call-ID: 58531e80-4b515dba-46b-37cb12ac@172.18.203.55  
User-Agent: Cisco-CCM5.0  
Max-Forwards: 70  
CSeq: 102 BYE  
Content-Length: 0

[\[diagram\]](#) Call-ID: [\[prev\]](#)[\[next\]](#)

**[43] SIP/2.0 200 OK**

Via: SIP/2.0/UDP 172.18.203.46:5060;branch=z9hG4bK1fad7434  
From: "2010" <sip:2010@172.18.203.55>;tag=00120193edac001974ab09df-37123f10  
To: <sip:2040@172.18.203.55>;tag=b9c8b19b-c709-4d85-86d4-d2f557c6c2a6-30679911  
Date: Wed, 12 Jul 2006 20:38:42 GMT  
Call-ID: 00120193-edac0012-2f3eff95-716967c0@172.18.203.46  
CSeq: 102 BYE  
Content-Length: 0

[\[diagram\]](#) Call-ID: [\[prev\]](#)[\[next\]](#)

**[44] SIP/2.0 200 OK**

Via: SIP/2.0/UDP 172.18.203.55:5060;branch=z9hG4bK216c83b2  
From: "SIP Line 2010" <sip:2010@172.18.203.55>;tag=b9c8b19b-c709-4d85-86d4-d2f557c6c2a6-30679912  
To: <sip:2040@172.18.203.52>;tag=003094c3cd3a000f79f83ca2-726630fd  
Call-ID: 58531e80-4b515dba-46b-37cb12ac@172.18.203.55  
CSeq: 102 BYE  
Server: Cisco-CP7960G/7.5  
Content-Length: 0

## 2.8 Call Screening (Normal blocked)

Title: Call Screening (Normal blocked)

### Description:

A SIP Basic phone attempts to call a blocked dialing pattern.

In this scenario, the blocked pattern (667) is configured with a "no error" blocking reason.

Note a "SIP Basic" phone is a 7960 configured with a pre-SDGA image (POS3-07-5-00) to simulate a 3rd party phone.

Note, SIP TNP and SCCP phones would clear the call on the phone without playing re-order. However a 3rd party or 7960 with a POS3-07-5-00 might play re-order.

### Configuration:

Node = CCM, IP = 172.18.203.55

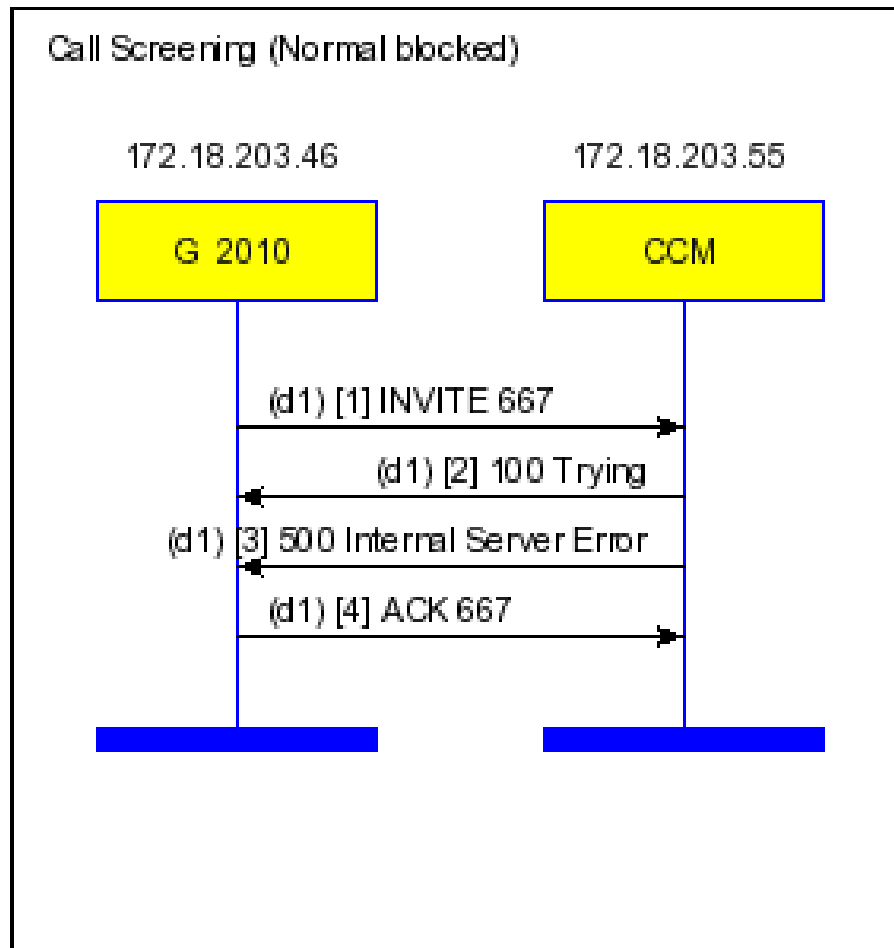
Phone = G, Line = 2010, IP = 172.18.203.46, Model = SIP Basic

### Scenario:

2010 dials 667

CCM generates a 500 back to the phone

2010 goes onhook



[[diagram](#)] [Call-ID: \[prev\]](#) [[next](#)]

[1] INVITE sip:667@172.18.203.55 SIP/2.0

Via: SIP/2.0/UDP 172.18.203.46:5060;branch=z9hG4bK726b0cfe  
 From: "2010" <sip:2010@172.18.203.55>;tag=00120193edac000c5560f65e-4790c9af  
 To: <sip:667@172.18.203.55>  
 Call-ID: 00120193-edac0009-215d57c0-7dc3cf5b@172.18.203.46  
 Max-Forwards: 70  
 CSeq: 101 INVITE  
 User-Agent: Cisco-CP7960G/7.5  
 Contact: <sip:2010@172.18.203.46:5060>  
 Expires: 180  
 Accept: application/sdp  
 Allow: ACK,BYE,CANCEL,INVITE,NOTIFY,OPTIONS,REFER,REGISTER,UPDATE  
 Remote-Party-ID: "2010" <sip:2010@172.18.203.46>;party=calling;id-type=subscriber;privacy=off;screen=yes  
 Supported: replaces  
 Content-Length: 256  
 Content-Type: application/sdp  
 Content-Disposition: session;handling=optional

v=0  
 o=Cisco-SIPUA 9431 0 IN IP4 172.18.203.46  
 s=SIP Call  
 t=0 0  
 m=audio 20066 RTP/AVP 0 8 18 101  
 c=IN IP4 172.18.203.46  
 a=rtpmap:0 PCMU/8000  
 a=rtpmap:8 PCMA/8000  
 a=rtpmap:18 G729/8000  
 a=rtpmap:101 telephone-event/8000  
 a=fmtp:101 0-15  
 a=sendrecv

[[diagram](#)] [Call-ID: \[prev\]](#) [[next](#)]

[2] SIP/2.0 100 Trying

Via: SIP/2.0/UDP 172.18.203.46:5060;branch=z9hG4bK726b0cfe  
 From: "2010" <sip:2010@172.18.203.55>;tag=00120193edac000c5560f65e-4790c9af  
 To: <sip:667@172.18.203.55>  
 Date: Wed, 12 Jul 2006 20:29:24 GMT  
 Call-ID: 00120193-edac0009-215d57c0-7dc3cf5b@172.18.203.46  
 CSeq: 101 INVITE  
 Allow-Events: presence  
 Content-Length: 0

[[diagram](#)] [Call-ID: \[prev\]](#) [[next](#)]

[3] SIP/2.0 500 Internal Server Error

Via: SIP/2.0/UDP 172.18.203.46:5060;branch=z9hG4bK726b0cfe  
 From: "2010" <sip:2010@172.18.203.55>;tag=00120193edac000c5560f65e-4790c9af  
 To: <sip:667@172.18.203.55>;tag=b9c8b19b-c709-4d85-86d4-d2f557c6c2a6-30679891  
 Date: Wed, 12 Jul 2006 20:29:24 GMT  
 Call-ID: 00120193-edac0009-215d57c0-7dc3cf5b@172.18.203.46  
 CSeq: 101 INVITE  
 Allow-Events: presence  
 Reason: Q.850;cause=41  
 Content-Length: 0

[[diagram](#)] [Call-ID: \[prev\]](#) [[next](#)]

[4] ACK sip:667@172.18.203.55 SIP/2.0

Via: SIP/2.0/UDP 172.18.203.46:5060;branch=z9hG4bK726b0cfe  
 From: "2010" <sip:2010@172.18.203.55>;tag=00120193edac000c5560f65e-4790c9af  
 To: <sip:667@172.18.203.55>;tag=b9c8b19b-c709-4d85-86d4-d2f557c6c2a6-30679891  
 Call-ID: 00120193-edac0009-215d57c0-7dc3cf5b@172.18.203.46  
 CSeq: 101 ACK  
 Content-Length: 0

## 2.9 Call Screening (Rejected blocked)

Title: Call Screening (Rejected blocked)

### Description:

A SIP Basic phone attempts to call a blocked dialing pattern.  
In this scenario, the blocked pattern (666) is configured with a "call rejected" blocking reason.

Note a "SIP Basic" phone is a 7960 configured with a pre-SDGA image (P0S3-07-5-00) to simulate a 3rd party phone.

### Configuration:

Node = CCM, IP = 172.18.203.55

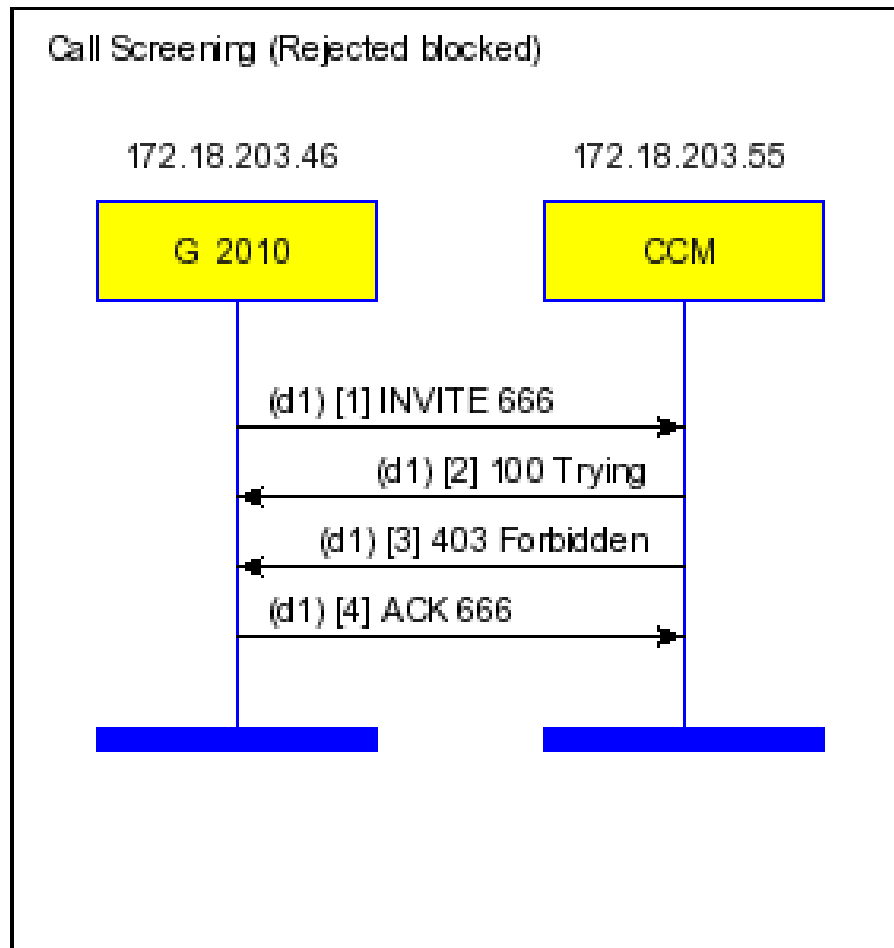
Phone = G, Line = 2010, IP = 172.18.203.46, Model = SIP Basic

### Scenario:

2010 dials 666

CCM generates a 403 to the phone and the phone plays reorder

2010 goes onhook



[\[diagram\]](#) Call-ID: [\[prev\]](#) [\[next\]](#)

**[1] INVITE sip:666@172.18.203.55 SIP/2.0**

Via: SIP/2.0/UDP 172.18.203.46:5060;branch=z9hG4bK4501ad82  
 From: "2010" <sip:2010@172.18.203.55>;tag=00120193edac000d0f8e0588-6f6cbc93  
 To: <sip:666@172.18.203.55>  
 Call-ID: 00120193-edac000a-1d7982ee-3e9e3bcd@172.18.203.46  
 Max-Forwards: 70  
 CSeq: 101 INVITE  
 User-Agent: Cisco-CP7960G/7.5  
 Contact: <sip:2010@172.18.203.46:5060>  
 Expires: 180  
 Accept: application/sdp  
 Allow: ACK,BYE,CANCEL,INVITE,NOTIFY,OPTIONS,REFER,REGISTER,UPDATE  
 Remote-Party-ID: "2010" <sip:2010@172.18.203.46>;party-calling;id-type=subscriber;privacy=off;screen=yes  
 Supported: replaces  
 Content-Length: 257  
 Content-Type: application/sdp  
 Content-Disposition: session;handling=optional

v=0  
 o=Cisco-SIPUA 23541 0 IN IP4 172.18.203.46  
 s=SIP Call  
 t=0 0  
 m=audio 20070 RTP/AVP 0 8 18 101  
 c=IN IP4 172.18.203.46  
 a=rtpmap:0 PCMU/8000  
 a=rtpmap:8 PCMA/8000  
 a=rtpmap:18 G729/8000  
 a=rtpmap:101 telephone-event/8000  
 a=fmtp:101 0-15  
 a=sendrecv

[\[diagram\]](#) Call-ID: [\[prev\]](#) [\[next\]](#)

**[2] SIP/2.0 100 Trying**

Via: SIP/2.0/UDP 172.18.203.46:5060;branch=z9hG4bK4501ad82  
 From: "2010" <sip:2010@172.18.203.55>;tag=00120193edac000d0f8e0588-6f6cbc93  
 To: <sip:666@172.18.203.55>  
 Date: Wed, 12 Jul 2006 20:30:21 GMT  
 Call-ID: 00120193-edac000a-1d7982ee-3e9e3bcd@172.18.203.46  
 CSeq: 101 INVITE  
 Allow-Events: presence  
 Content-Length: 0

[\[diagram\]](#) Call-ID: [\[prev\]](#) [\[next\]](#)

**[3] SIP/2.0 403 Forbidden**

Via: SIP/2.0/UDP 172.18.203.46:5060;branch=z9hG4bK4501ad82  
 From: "2010" <sip:2010@172.18.203.55>;tag=00120193edac000d0f8e0588-6f6cbc93  
 To: <sip:666@172.18.203.55>;tag=b9c8b19b-c709-4d85-86d4-d2f557c6c2a6-30679893  
 Date: Wed, 12 Jul 2006 20:30:21 GMT  
 Call-ID: 00120193-edac000a-1d7982ee-3e9e3bcd@172.18.203.46  
 CSeq: 101 INVITE  
 Allow-Events: presence  
 Reason: Q.850;cause=21  
 Content-Length: 0

[\[diagram\]](#) Call-ID: [\[prev\]](#) [\[next\]](#)

**[4] ACK sip:666@172.18.203.55 SIP/2.0**

Via: SIP/2.0/UDP 172.18.203.46:5060;branch=z9hG4bK4501ad82  
 From: "2010" <sip:2010@172.18.203.55>;tag=00120193edac000d0f8e0588-6f6cbc93  
 To: <sip:666@172.18.203.55>;tag=b9c8b19b-c709-4d85-86d4-d2f557c6c2a6-30679893  
 Call-ID: 00120193-edac000a-1d7982ee-3e9e3bcd@172.18.203.46  
 CSeq: 101 ACK  
 Content-Length: 0

## 2.10 Basic Call - SIP Basic calls unknown number

Title: Basic Call - SIP Basic calls unknown number

### Description:

A SIP Basic phone calls an unknown number. "2099" is not configured.

Note a "SIP Basic" phone is a 7960 configured with a pre-SDGA image (P0S3-07-5-00) to simulate a 3rd party phone.

### Configuration:

Node = CCM, IP = 172.18.203.55

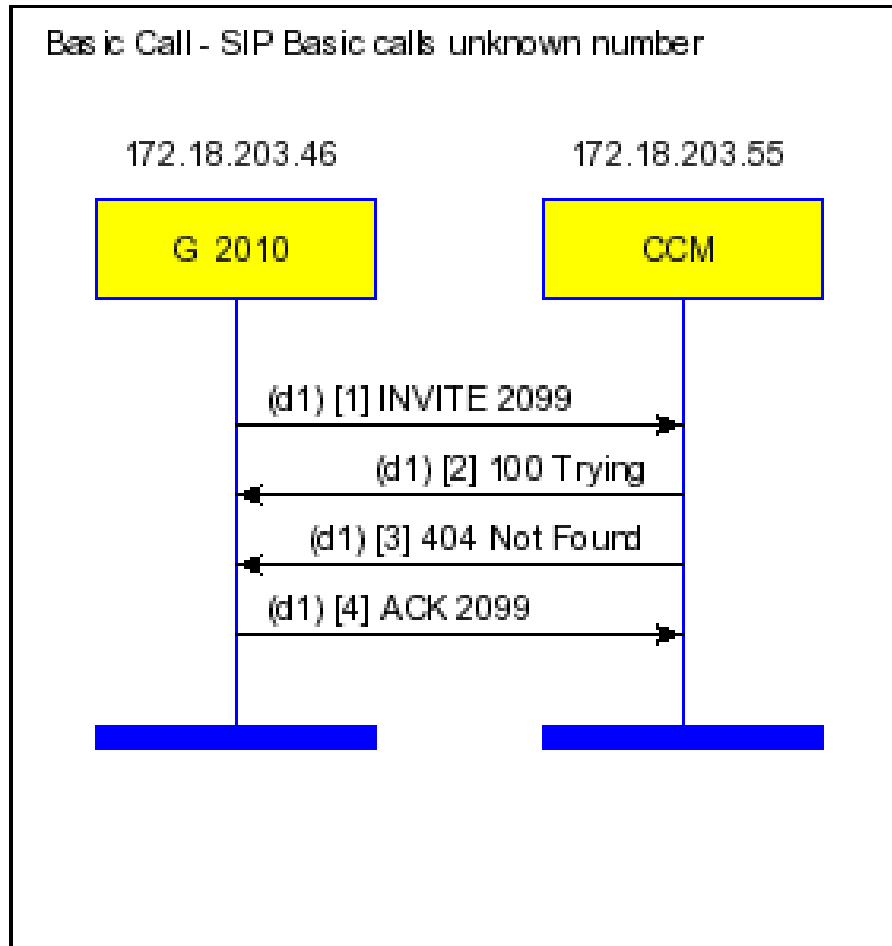
Phone = G, Line = 2010, IP = 172.18.203.46, Model = SIP Basic

### Scenario:

2010 calls 2099

"404 not found" is sent back to 2010

2010 goes onhook



[\[diagram\]](#) Call-ID: [\[prev\]](#) [\[next\]](#)

**[1] INVITE sip:2099@172.18.203.55 SIP/2.0**

Via: SIP/2.0/UDP 172.18.203.46:5060;branch=z9hG4bK60e61f93  
 From: "2010" <sip:2010@172.18.203.55>;tag=00120193edac001041ba5146-541ca434  
 To: <sip:2099@172.18.203.55>  
 Call-ID: 00120193-edac000c-41c91df6-5a56f914@172.18.203.46  
 Max-Forwards: 70  
 CSeq: 101 INVITE  
 User-Agent: Cisco-CP7960G/7.5  
 Contact: <sip:2010@172.18.203.46:5060>  
 Expires: 180  
 Accept: application/sdp  
 Allow: ACK,BYE,CANCEL,INVITE,NOTIFY,OPTIONS,REFER,REGISTER,UPDATE  
 Remote-Party-ID: "2010" <sip:2010@172.18.203.46>;party=calling;id-type=subscriber;privacy=off;screen=yes  
 Supported: replaces  
 Content-Length: 257  
 Content-Type: application/sdp  
 Content-Disposition: session;handling=optional

v=0  
 o=Cisco-SIPUA 10013 0 IN IP4 172.18.203.46  
 s=SIP Call  
 t=0 0  
 m=audio 20078 RTP/AVP 0 8 18 101  
 c=IN IP4 172.18.203.46  
 a=rtpmap:0 PCMU/8000  
 a=rtpmap:8 PCMA/8000  
 a=rtpmap:18 G729/8000  
 a=rtpmap:101 telephone-event/8000  
 a=fmtp:101 0-15  
 a=sendrecv

[\[diagram\]](#) Call-ID: [\[prev\]](#) [\[next\]](#)

**[2] SIP/2.0 100 Trying**

Via: SIP/2.0/UDP 172.18.203.46:5060;branch=z9hG4bK60e61f93  
 From: "2010" <sip:2010@172.18.203.55>;tag=00120193edac001041ba5146-541ca434  
 To: <sip:2099@172.18.203.55>  
 Date: Wed, 12 Jul 2006 20:33:18 GMT  
 Call-ID: 00120193-edac000c-41c91df6-5a56f914@172.18.203.46  
 CSeq: 101 INVITE  
 Allow-Events: presence  
 Content-Length: 0

[\[diagram\]](#) Call-ID: [\[prev\]](#) [\[next\]](#)

**[3] SIP/2.0 404 Not Found**

Via: SIP/2.0/UDP 172.18.203.46:5060;branch=z9hG4bK60e61f93  
 From: "2010" <sip:2010@172.18.203.55>;tag=00120193edac001041ba5146-541ca434  
 To: <sip:2099@172.18.203.55>;tag=b9c8b19b-c709-4d85-86d4-d2f557c6c2a6-30679897  
 Date: Wed, 12 Jul 2006 20:33:18 GMT  
 Call-ID: 00120193-edac000c-41c91df6-5a56f914@172.18.203.46  
 CSeq: 101 INVITE  
 Allow-Events: presence  
 Reason: Q.850;cause=1  
 Content-Length: 0

[\[diagram\]](#) Call-ID: [\[prev\]](#) [\[next\]](#)

**[4] ACK sip:2099@172.18.203.55 SIP/2.0**

Via: SIP/2.0/UDP 172.18.203.46:5060;branch=z9hG4bK60e61f93  
 From: "2010" <sip:2010@172.18.203.55>;tag=00120193edac001041ba5146-541ca434  
 To: <sip:2099@172.18.203.55>;tag=b9c8b19b-c709-4d85-86d4-d2f557c6c2a6-30679897  
 Call-ID: 00120193-edac000c-41c91df6-5a56f914@172.18.203.46  
 CSeq: 101 ACK  
 Content-Length: 0

## 2.11 486 Busy Here

Title: 486 Busy Here

### Description:

Most SIP phones driven by the CCM will have their "busy trigger" managed by the CCM such that if enough active calls to make the phone "busy" are already detected on that device then the CCM won't send additional INVITEs.

It is possible to either configure the CCM such that it's "busy" definition is for more active calls than the phone can handle or to make the phone busy with calls the CCM is not aware of.

If the phone detects that its busy it can respond with 486 Busy Here.

Note: CCM's configured call forward busy to DN's or call forward busy to voicemail will not be triggered by 486.

### Configuration:

Node = CCM, IP = 172.18.203.55

Phone = G, Line = 2010, IP = 172.18.203.46, Model = SIP Basic

Phone = H, Line = 2030, IP = 172.18.203.51, Model = SIP Basic

Phone = L, Line = 2040, IP = 172.18.203.52, Model = SIP Basic

### Scenario:

(Setup: Make 2030 Busy)

2040 calls 2030

2030 rings

2030 answers

2040 and 2030 are connected

2030 puts 2040 on hold

2030 starts a new call (does not finish dialing)

(This makes the line "busy"...no more calls accepted)

(Actual Call)

2010 calls 2030

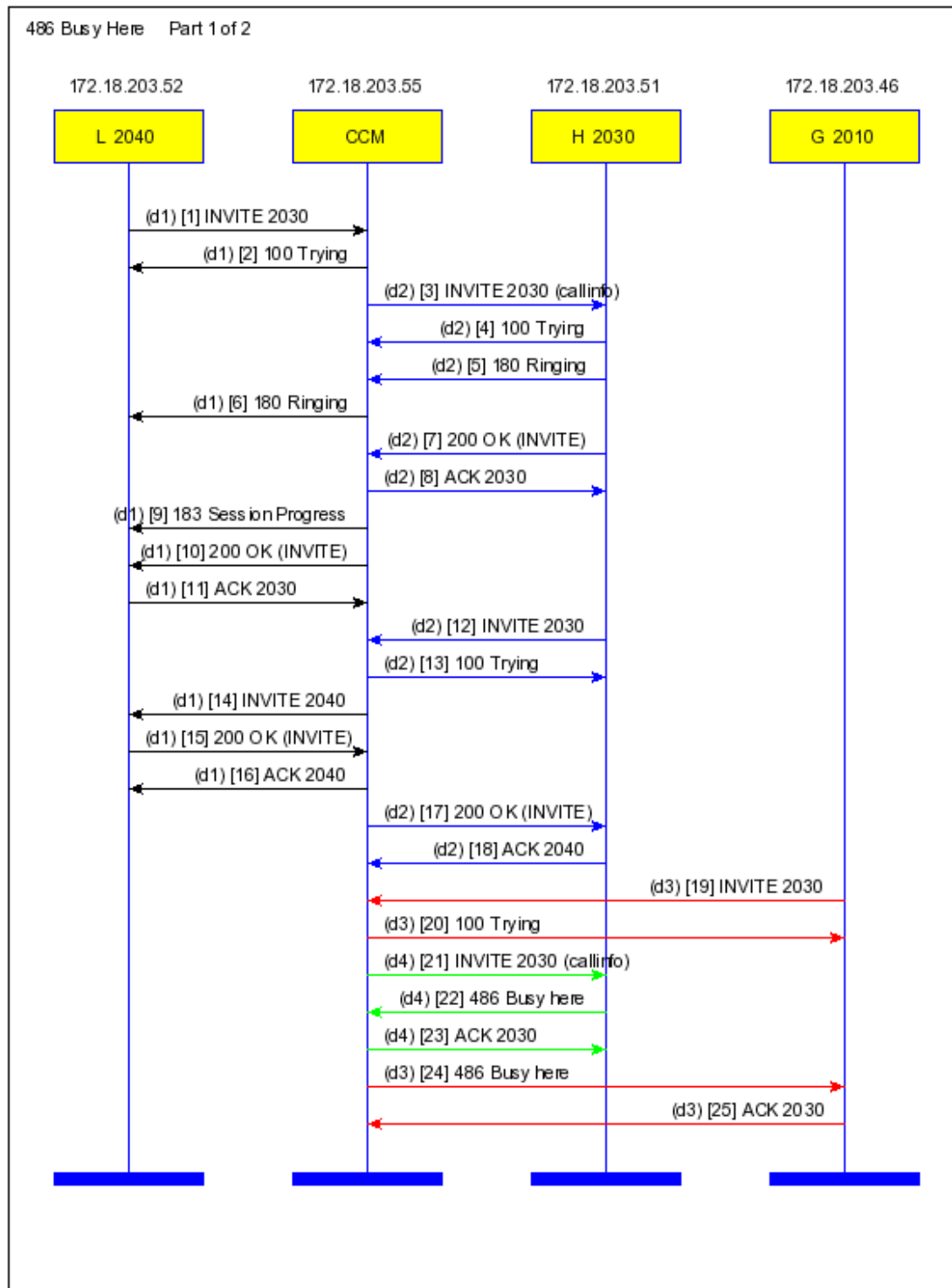
2030 responds with "486 Busy Here"

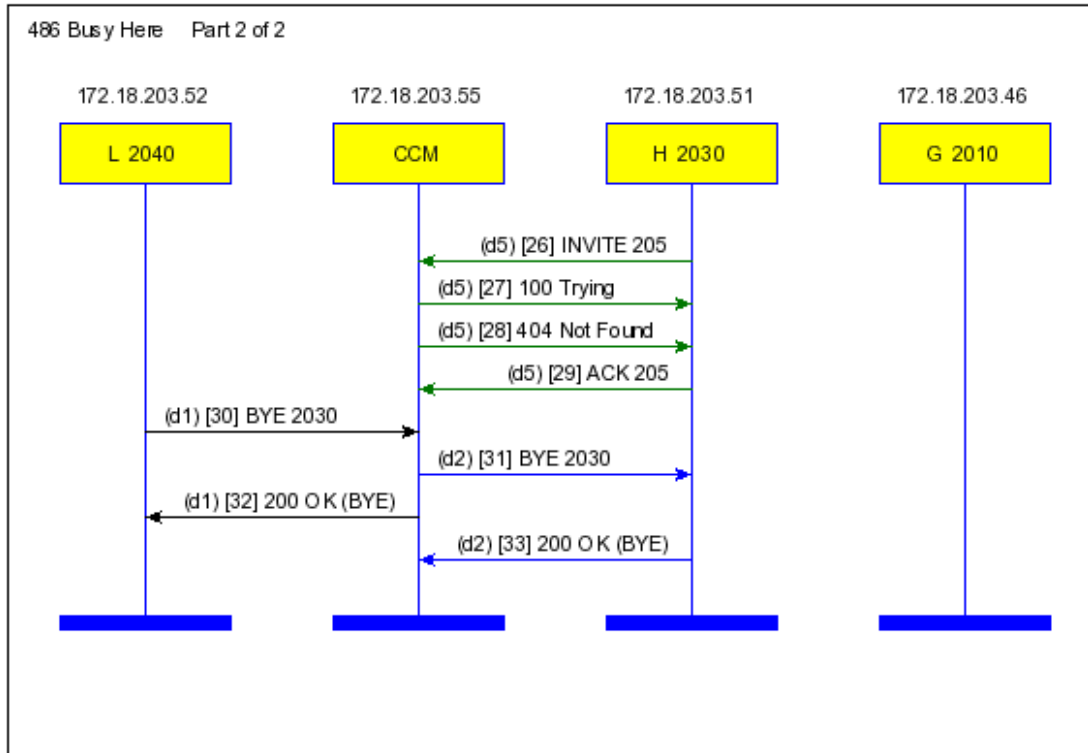
2010 gets busy tone

2010 goes onhook

2040 goes onhook

2030 goes onhook





[[diagram](#)] [Call-ID: \[prev\]](#) [[next](#)]

[1] INVITE sip:2030@172.18.203.55 SIP/2.0

Via: SIP/2.0/UDP 172.18.203.52:5060;branch=z9hG4bK4b46fdd1  
 From: "2040" <sip:2040@172.18.203.55>;tag=003094c3cd3a000b0ee939cf-14adab18  
 To: <sip:2030@172.18.203.55>  
 Call-ID: 003094c3-cd3a0004-0a2dfea2-22217b6f@172.18.203.52  
 Max-Forwards: 70  
 CSeq: 101 INVITE  
 User-Agent: Cisco-CP7960G/7.5  
 Contact: <sip:2040@172.18.203.52:5060>  
 Expires: 180  
 Accept: application/sdp  
 Allow: ACK,BYE,CANCEL,INVITE,NOTIFY,OPTIONS,REFER,REGISTER,UPDATE  
 Remote-Party-ID: "2040" <sip:2040@172.18.203.52>;party=calling;id-type=subscriber;privacy=off;screen=yes  
 Supported: replaces  
 Content-Length: 256  
 Content-Type: application/sdp  
 Content-Disposition: session;handling=optional

v=0  
 o=Cisco-SIPUA 9305 0 IN IP4 172.18.203.52  
 s=SIP Call  
 t=0 0  
 m=audio 16422 RTP/AVP 0 8 18 101  
 c=IN IP4 172.18.203.52  
 a=rtpmap:0 PCMU/8000  
 a=rtpmap:8 PCMA/8000  
 a=rtpmap:18 G729/8000  
 a=rtpmap:101 telephone-event/8000  
 a=fmtp:101 0-15  
 a=sendrecv

[[diagram](#)] [Call-ID: \[prev\]](#) [[next](#)]

[2] SIP/2.0 100 Trying

Via: SIP/2.0/UDP 172.18.203.52:5060;branch=z9hG4bK4b46fdd1  
 From: "2040" <sip:2040@172.18.203.55>;tag=003094c3cd3a000b0ee939cf-14adab18  
 To: <sip:2030@172.18.203.55>  
 Date: Wed, 12 Jul 2006 19:03:16 GMT  
 Call-ID: 003094c3-cd3a0004-0a2dfea2-22217b6f@172.18.203.52  
 CSeq: 101 INVITE  
 Allow-Events: presence  
 Content-Length: 0

[[diagram](#)] [Call-ID: \[prev\]](#) [[next](#)]

[3] INVITE sip:2030@172.18.203.51:5060 SIP/2.0

Via: SIP/2.0/UDP 172.18.203.55:5060;branch=z9hG4bK69bca303  
 Remote-Party-ID: "SIP Line 2040" <sip:2040@172.18.203.55>;party=calling;screen=yes;privacy=off  
 From: "SIP Line 2040" <sip:2040@172.18.203.55>;tag=b9c8b19b-c709-4d85-86d4-d2f557c6c2a6-30679751  
 To: <sip:2030@172.18.203.51>  
 Date: Wed, 12 Jul 2006 19:03:16 GMT  
 Call-ID: 11aaf780-4b514774-2eb-37cb12ac@172.18.203.55  
 Supported: timer,replaces  
 Min-SE: 1800  
 User-Agent: Cisco-CCM5.0  
 Allow: INVITE, OPTIONS, INFO, BYE, CANCEL, ACK, PRACK, UPDATE, REFER, SUBSCRIBE, NOTIFY  
 CSeq: 101 INVITE  
 Expires: 180  
 Allow-Events: presence  
 Call-Info: <urn:x-cisco-remotecc:callinfo>; security= NotAuthenticated; orientation= from; call-instance= 1  
 Alert-Info: <file://Bellcore-dr1/>  
 Contact: <sip:2030@172.18.203.55:5060>  
 Max-Forwards: 69  
 Content-Length: 0

[[diagram](#)] [Call-ID: \[prev\]](#) [[next](#)]

[4] SIP/2.0 100 Trying

Via: SIP/2.0/UDP 172.18.203.55:5060;branch=z9hG4bK69bca303  
 From: "SIP Line 2040" <sip:2040@172.18.203.55>;tag=b9c8b19b-c709-4d85-86d4-d2f557c6c2a6-30679751  
 To: <sip:2030@172.18.203.51>  
 Call-ID: 11aaf780-4b514774-2eb-37cb12ac@172.18.203.55  
 Date: Wed, 12 Jul 2006 19:03:15 GMT  
 CSeq: 101 INVITE  
 Server: Cisco-CP7960G/7.5  
 Contact: <sip:2030@172.18.203.51:5060>  
 Allow: ACK,BYE,CANCEL,INVITE,NOTIFY,OPTIONS,REFER,REGISTER,UPDATE  
 Remote-Party-ID: "2030" <sip:2030@172.18.203.51>;party=called;id-type=subscriber;privacy=off;screen=yes  
 Content-Length: 0

[[diagram](#)] [Call-ID: \[prev\]](#) [[next](#)]

[5] SIP/2.0 180 Ringing

Via: SIP/2.0/UDP 172.18.203.55:5060;branch=z9hG4bK69bca303  
 From: "SIP Line 2040" <sip:2040@172.18.203.55>;tag=b9c8b19b-c709-4d85-86d4-d2f557c6c2a6-30679751  
 To: <sip:2030@172.18.203.51>;tag=000d280821a5008431597251-466cbc39  
 Call-ID: 11aaf780-4b514774-2eb-37cb12ac@172.18.203.55  
 Date: Wed, 12 Jul 2006 19:03:15 GMT  
 CSeq: 101 INVITE  
 Server: Cisco-CP7960G/7.5  
 Contact: <sip:2030@172.18.203.51:5060>  
 Allow: ACK,BYE,CANCEL,INVITE,NOTIFY,OPTIONS,REFER,REGISTER,UPDATE  
 Remote-Party-ID: "2030" <sip:2030@172.18.203.51>;party=called;id-type=subscriber;privacy=off;screen=yes  
 Content-Length: 0

[\[diagram\]](#) Call-ID: [\[prev\]](#) [\[next\]](#)

#### [6] SIP/2.0 180 Ringing

Via: SIP/2.0/UDP 172.18.203.52:5060;branch=z9hG4bK4b46fdd1  
 From: "2040" <sip:2040@172.18.203.55>;tag=003094c3cd3a000b0ee939cf-14adab18  
 To: <sip:2030@172.18.203.55>;tag=b9c8b19b-c709-4d85-86d4-d2f557c6c2a6-30679750  
 Date: Wed, 12 Jul 2006 19:03:16 GMT  
 Call-ID: 003094c3-cd3a0004-0a2dfea2-22217b6f@172.18.203.52  
 CSeq: 101 INVITE  
 Allow: INVITE, OPTIONS, INFO, BYE, CANCEL, ACK, PRACK, UPDATE, REFER, SUBSCRIBE, NOTIFY  
 Allow-Events: presence  
 Remote-Party-ID: "SIP Alerting 2030" <sip:2030@172.18.203.55>;party=called;screen=yes;privacy=off  
 Contact: <sip:2030@172.18.203.55:5060>  
 Content-Length: 0

[\[diagram\]](#) Call-ID: [\[prev\]](#) [\[next\]](#)

#### [7] SIP/2.0 200 OK

Via: SIP/2.0/UDP 172.18.203.55:5060;branch=z9hG4bK69bca303  
 From: "SIP Line 2040" <sip:2040@172.18.203.55>;tag=b9c8b19b-c709-4d85-86d4-d2f557c6c2a6-30679751  
 To: <sip:2030@172.18.203.51>;tag=000d280821a5008431597251-466cbc39  
 Call-ID: 11aaf780-4b514774-2eb-37cb12ac@172.18.203.55  
 Date: Wed, 12 Jul 2006 19:03:17 GMT  
 CSeq: 101 INVITE  
 Server: Cisco-CP7960G/7.5  
 Contact: <sip:2030@172.18.203.51:5060>  
 Allow: ACK,BYE,CANCEL,INVITE,NOTIFY,OPTIONS,REFER,REGISTER,UPDATE  
 Remote-Party-ID: "2030" <sip:2030@172.18.203.51>;party=called;id-type=subscriber;privacy=off;screen=yes  
 Supported: replaces  
 Content-Length: 257  
 Content-Type: application/sdp  
 Content-Disposition: session;handling=optional

```
v=0
o=Cisco-SIPUA 14257 0 IN IP4 172.18.203.51
s=SIP Call
t=0 0
m=audio 21806 RTP/AVP 0 8 18 101
c=IN IP4 172.18.203.51
a=rtpmap:0 PCMU/8000
a=rtpmap:8 PCMA/8000
a=rtpmap:18 G729/8000
a=rtpmap:101 telephone-event/8000
a=fmtp:101 0-15
a=sendrecv
```

[\[diagram\]](#) Call-ID: [\[prev\]](#) [\[next\]](#)

#### [8] ACK sip:2030@172.18.203.51:5060 SIP/2.0

Via: SIP/2.0/UDP 172.18.203.55:5060;branch=z9hG4bK22b30816  
 From: "SIP Line 2040" <sip:2040@172.18.203.55>;tag=b9c8b19b-c709-4d85-86d4-d2f557c6c2a6-30679751  
 To: <sip:2030@172.18.203.51>;tag=000d280821a5008431597251-466cbc39  
 Date: Wed, 12 Jul 2006 19:03:16 GMT  
 Call-ID: 11aaf780-4b514774-2eb-37cb12ac@172.18.203.55  
 Max-Forwards: 70  
 CSeq: 101 ACK  
 Allow-Events: presence  
 Content-Type: application/sdp  
 Content-Length: 214

```
v=0
o=CiscoSystemsCCM-SIP 2000 1 IN IP4 172.18.203.55
s=SIP Call
c=IN IP4 172.18.203.52
t=0 0
m=audio 16422 RTP/AVP 0 101
a=rtpmap:0 PCMU/8000
a=ptime:20
a=rtpmap:101 telephone-event/8000
a=fmtp:101 0-15
```

[[diagram](#)] [Call-ID: \[prev\] \[next\]](#)  
**[9] SIP/2.0 183 Session Progress**  
 Via: SIP/2.0/UDP 172.18.203.52:5060;branch=z9hG4bK4b46fdd1  
 From: "2040" <sip:2040@172.18.203.55>;tag=003094c3cd3a000b0ee939cf-14adab18  
 To: <sip:2030@172.18.203.55>;tag=b9c8b19b-c709-4d85-86d4-d2f557c6c2a6-30679750  
 Date: Wed, 12 Jul 2006 19:03:16 GMT  
 Call-ID: 003094c3-cd3a0004-0a2dfea2-22217b6f@172.18.203.52  
 CSeq: 101 INVITE  
 Allow: INVITE, OPTIONS, INFO, BYE, CANCEL, ACK, PRACK, UPDATE, REFER, SUBSCRIBE, NOTIFY  
 Allow-Events: presence  
 Remote-Party-ID: "SIP Alerting 2030" <sip:2030@172.18.203.55>;party=called;screen=yes;privacy=off  
 Contact: <sip:2030@172.18.203.55:5060>  
 Content-Type: application/sdp  
 Content-Length: 214

v=0  
 o=CiscoSystemsCCM-SIP 2000 1 IN IP4 172.18.203.55  
 s=SIP Call  
 c=IN IP4 172.18.203.51  
 t=0 0  
 m=audio 21806 RTP/AVP 0 101  
 a=rtpmap:0 PCMU/8000  
 a=ptime:20  
 a=rtpmap:101 telephone-event/8000  
 a=fmtp:101 0-15

[[diagram](#)] [Call-ID: \[prev\] \[next\]](#)  
**[10] SIP/2.0 200 OK**  
 Via: SIP/2.0/UDP 172.18.203.52:5060;branch=z9hG4bK4b46fdd1  
 From: "2040" <sip:2040@172.18.203.55>;tag=003094c3cd3a000b0ee939cf-14adab18  
 To: <sip:2030@172.18.203.55>;tag=b9c8b19b-c709-4d85-86d4-d2f557c6c2a6-30679750  
 Date: Wed, 12 Jul 2006 19:03:16 GMT  
 Call-ID: 003094c3-cd3a0004-0a2dfea2-22217b6f@172.18.203.52  
 CSeq: 101 INVITE  
 Allow: INVITE, OPTIONS, INFO, BYE, CANCEL, ACK, PRACK, UPDATE, REFER, SUBSCRIBE, NOTIFY  
 Allow-Events: presence  
 Remote-Party-ID: "SIP Line 2030" <sip:2030@172.18.203.55>;party=called;screen=yes;privacy=off  
 Contact: <sip:2030@172.18.203.55:5060>  
 Content-Type: application/sdp  
 Content-Length: 214

v=0  
 o=CiscoSystemsCCM-SIP 2000 1 IN IP4 172.18.203.55  
 s=SIP Call  
 c=IN IP4 172.18.203.51  
 t=0 0  
 m=audio 21806 RTP/AVP 0 101  
 a=rtpmap:0 PCMU/8000  
 a=ptime:20  
 a=rtpmap:101 telephone-event/8000  
 a=fmtp:101 0-15

[[diagram](#)] [Call-ID: \[prev\] \[next\]](#)  
**[11] ACK sip:2030@172.18.203.55:5060 SIP/2.0**  
 Via: SIP/2.0/UDP 172.18.203.52:5060;branch=z9hG4bK776d323a  
 From: "2040" <sip:2040@172.18.203.55>;tag=003094c3cd3a000b0ee939cf-14adab18  
 To: <sip:2030@172.18.203.55>;tag=b9c8b19b-c709-4d85-86d4-d2f557c6c2a6-30679750  
 Call-ID: 003094c3-cd3a0004-0a2dfea2-22217b6f@172.18.203.52  
 Max-Forwards: 70  
 CSeq: 101 ACK  
 User-Agent: Cisco-CP7960G/7.5  
 Remote-Party-ID: "2040" <sip:2040@172.18.203.52>;party=calling;id-type=subscriber;privacy=off;screen=yes  
 Content-Length: 0

[[diagram](#)] [Call-ID: \[prev\] \[next\]](#)  
**[12] INVITE sip:2030@172.18.203.55:5060 SIP/2.0**  
 Via: SIP/2.0/UDP 172.18.203.51:5060;branch=z9hG4bK7bee08ac  
 From: <sip:2030@172.18.203.51>;tag=000d280821a5008431597251-466cbc39  
 To: "SIP Line 2040" <sip:2040@172.18.203.55>;tag=b9c8b19b-c709-4d85-86d4-d2f557c6c2a6-30679751  
 Call-ID: 11aaf780-4b514774-2eb-37cb12ac@172.18.203.55  
 Max-Forwards: 70  
 Date: Wed, 12 Jul 2006 19:03:21 GMT  
 CSeq: 101 INVITE  
 User-Agent: Cisco-CP7960G/7.5  
 Contact: <sip:2030@172.18.203.51:5060>  
 Remote-Party-ID: "2030" <sip:2030@172.18.203.51>;party=called;id-type=subscriber;privacy=off;screen=yes  
 Content-Length: 257  
 Content-Type: application/sdp  
 Content-Disposition: session;handling=optional

```
v=0
o=Cisco-SIPUA 14257 1 IN IP4 172.18.203.51
s=SIP Call
t=0 0
m=audio 21806 RTP/AVP 0 8 18 101
c=IN IP4 172.18.203.51
a=rtpmap:0 PCMU/8000
a=rtpmap:8 PCMA/8000
a=rtpmap:18 G729/8000
a=rtpmap:101 telephone-event/8000
a=fmtp:101 0-15
a=sendonly
```

[\[diagram\]](#) Call-ID: [\[prev\]](#) [\[next\]](#)

#### [13] SIP/2.0 100 Trying

```
Via: SIP/2.0/UDP 172.18.203.51:5060;branch=z9hG4bK7bee08ac
From: <sip:2030@172.18.203.51>;tag=000d280821a5008431597251-466cbc39
To: "SIP Line 2040" <sip:2040@172.18.203.55>;tag=b9c8b19b-c709-4d85-86d4-d2f557c6c2a6-30679751
Date: Wed, 12 Jul 2006 19:03:22 GMT
Call-ID: 11aaf780-4b514774-2eb-37cb12ac@172.18.203.55
CSeq: 101 INVITE
Allow-Events: presence
Content-Length: 0
```

[\[diagram\]](#) Call-ID: [\[prev\]](#) [\[next\]](#)

#### [14] INVITE sip:2040@172.18.203.52:5060 SIP/2.0

```
Via: SIP/2.0/UDP 172.18.203.55:5060;branch=z9hG4bK4580b085
Remote-Party-ID: "SIP Line 2030" <sip:2030@172.18.203.55>;party=calling;screen=yes;privacy=off
From: <sip:2030@172.18.203.55>;tag=b9c8b19b-c709-4d85-86d4-d2f557c6c2a6-30679750
To: "2040" <sip:2040@172.18.203.55>;tag=003094c3cd3a000b0ee939cf-14adab18
Date: Wed, 12 Jul 2006 19:03:22 GMT
Call-ID: 003094c3-cd3a0004-0a2dfea2-22217b6f@172.18.203.52
Supported: timer,replaces
Min-SE: 1800
Cisco-Guid: 296417152-1263617908-746-936055468
User-Agent: Cisco-CCM5.0
Allow: INVITE, OPTIONS, INFO, BYE, CANCEL, ACK, PRACK, UPDATE, REFER, SUBSCRIBE, NOTIFY
CSeq: 101 INVITE
Max-Forwards: 70
Contact: <sip:2030@172.18.203.55:5060>
Expires: 180
Allow-Events: presence
Content-Type: application/sdp
Content-Length: 300
```

```
v=0
o=CiscoSystemsCCM-SIP 2000 2 IN IP4 172.18.203.55
s=SIP Call
c=IN IP4 172.18.203.51
t=0 0
m=audio 21806 RTP/AVP 0 8 18 101
a=rtpmap:0 PCMU/8000
a=ptime:20
a=rtpmap:8 PCMA/8000
a=ptime:20
a=rtpmap:18 G729/8000
a=ptime:20
a=sendonly
a=rtpmap:101 telephone-event/8000
a=fmtp:101 0-15
```

[\[diagram\]](#) Call-ID: [\[prev\]](#) [\[next\]](#)

#### [15] SIP/2.0 200 OK

```
Via: SIP/2.0/UDP 172.18.203.55:5060;branch=z9hG4bK4580b085
From: <sip:2030@172.18.203.55>;tag=b9c8b19b-c709-4d85-86d4-d2f557c6c2a6-30679750
To: "2040" <sip:2040@172.18.203.55>;tag=003094c3cd3a000b0ee939cf-14adab18
Call-ID: 003094c3-cd3a0004-0a2dfea2-22217b6f@172.18.203.52
CSeq: 101 INVITE
Server: Cisco-CP7960G/7.5
Contact: <sip:2040@172.18.203.52:5060>
Allow: ACK,BYE,CANCEL,INVITE,NOTIFY,OPTIONS,REFER,REGISTER,UPDATE
Remote-Party-ID: "2040" <sip:2040@172.18.203.52>;party=calling;id-type=subscriber;privacy=off;screen=yes
Supported: replaces
Content-Length: 206
Content-Type: application/sdp
Content-Disposition: session;handling=optional
```

```
v=0
o=Cisco-SIPUA 9305 1 IN IP4 172.18.203.52
s=SIP Call
```

```
t=0 0
m=audio 16422 RTP/AVP 0 101
c=IN IP4 172.18.203.52
a=rtpmap:0 PCMU/8000
a=rtpmap:101 telephone-event/8000
a=fmtp:101 0-15
a=recvonly
```

[\[diagram\]](#) Call-ID: [\[prev\]](#) [\[next\]](#)

**[16] ACK sip:2040@172.18.203.52:5060 SIP/2.0**

```
Via: SIP/2.0/UDP 172.18.203.55:5060;branch=z9hG4bK119fea1c
From: <sip:2030@172.18.203.55>;tag=b9c8b19b-c709-4d85-86d4-d2f557c6c2a6-30679750
To: "2040" <sip:2040@172.18.203.55>;tag=003094c3cd3a000b0ee939cf-14adab18
Date: Wed, 12 Jul 2006 19:03:22 GMT
Call-ID: 003094c3-cd3a0004-0a2dfea2-22217b6f@172.18.203.52
Max-Forwards: 70
CSeq: 101 ACK
Allow-Events: presence
Content-Length: 0
```

[\[diagram\]](#) Call-ID: [\[prev\]](#) [\[next\]](#)

**[17] SIP/2.0 200 OK**

```
Via: SIP/2.0/UDP 172.18.203.51:5060;branch=z9hG4bK7bee08ac
From: <sip:2030@172.18.203.51>;tag=000d280821a5008431597251-466cbc39
To: "SIP Line 2040" <sip:2040@172.18.203.55>;tag=b9c8b19b-c709-4d85-86d4-d2f557c6c2a6-30679751
Date: Wed, 12 Jul 2006 19:03:22 GMT
Call-ID: 11aaf780-4b514774-2eb-37cb12ac@172.18.203.55
CSeq: 101 INVITE
Allow: INVITE, OPTIONS, INFO, BYE, CANCEL, ACK, PRACK, UPDATE, REFER, SUBSCRIBE, NOTIFY
Allow-Events: presence
Remote-Party-ID: "SIP Line 2040" <sip:2040@172.18.203.55>;party=called;screen=yes;privacy=off
Contact: <sip:2040@172.18.203.55:5060>
Content-Type: application/sdp
Content-Length: 226
```

```
v=0
o=CiscoSystemsCCM-SIP 2000 2 IN IP4 172.18.203.55
s=SIP Call
c=IN IP4 172.18.203.52
t=0 0
m=audio 16422 RTP/AVP 0 101
a=rtpmap:0 PCMU/8000
a=ptime:20
a=recvonly
a=rtpmap:101 telephone-event/8000
a=fmtp:101 0-15
```

[\[diagram\]](#) Call-ID: [\[prev\]](#) [\[next\]](#)

**[18] ACK sip:2040@172.18.203.55:5060 SIP/2.0**

```
Via: SIP/2.0/UDP 172.18.203.51:5060;branch=z9hG4bK7d9b6736
From: <sip:2030@172.18.203.51>;tag=000d280821a5008431597251-466cbc39
To: "SIP Line 2040" <sip:2040@172.18.203.55>;tag=b9c8b19b-c709-4d85-86d4-d2f557c6c2a6-30679751
Call-ID: 11aaf780-4b514774-2eb-37cb12ac@172.18.203.55
Max-Forwards: 70
Date: Wed, 12 Jul 2006 19:03:21 GMT
CSeq: 101 ACK
User-Agent: Cisco-CP7960G/7.5
Remote-Party-ID: "2030" <sip:2030@172.18.203.51>;party=called;id-type=subscriber;privacy=off;screen=yes
Content-Length: 0
```

[\[diagram\]](#) Call-ID: [\[prev\]](#) [\[next\]](#)

**[19] INVITE sip:2030@172.18.203.55 SIP/2.0**

```
Via: SIP/2.0/UDP 172.18.203.46:5060;branch=z9hG4bK3061f9ae
From: "2010" <sip:2010@172.18.203.55>;tag=00120193edac000c2285253c-4c76c09c
To: <sip:2030@172.18.203.55>
Call-ID: 00120193-edac0008-0baba68d-7c6535ea@172.18.203.46
Max-Forwards: 70
CSeq: 101 INVITE
User-Agent: Cisco-CP7960G/7.5
Contact: <sip:2010@172.18.203.46:5060>
Expires: 180
Accept: application/sdp
Allow: ACK,BYE,CANCEL,INVITE,NOTIFY,OPTIONS,REFER,REGISTER,UPDATE
Remote-Party-ID: "2010" <sip:2010@172.18.203.46>;party=calling;id-type=subscriber;privacy=off;screen=yes
Supported: replaces
Content-Length: 257
Content-Type: application/sdp
Content-Disposition: session;handling=optional
```

```
v=0
```

```
o=Cisco-SIPUA 17553 0 IN IP4 172.18.203.46
s=SIP Call
t=0 0
m=audio 27140 RTP/AVP 0 8 18 101
c=IN IP4 172.18.203.46
a=rtpmap:0 PCMU/8000
a=rtpmap:8 PCMA/8000
a=rtpmap:18 G729/8000
a=rtpmap:101 telephone-event/8000
a=fmtp:101 0-15
a=sendrecv
```

[\[diagram\]](#) Call-ID: [\[prev\]](#) [\[next\]](#)

#### [20] SIP/2.0 100 Trying

```
Via: SIP/2.0/UDP 172.18.203.46:5060;branch=z9hG4bK3061f9ae
From: "2010" <sip:2010@172.18.203.55>;tag=00120193edac000c2285253c-4c76c09c
To: <sip:2030@172.18.203.55>
Date: Wed, 12 Jul 2006 19:03:45 GMT
Call-ID: 00120193-edac0008-0baba68d-7c6535ea@172.18.203.46
CSeq: 101 INVITE
Allow-Events: presence
Content-Length: 0
```

[\[diagram\]](#) Call-ID: [\[prev\]](#) [\[next\]](#)

#### [21] INVITE sip:2030@172.18.203.51:5060 SIP/2.0

```
Via: SIP/2.0/UDP 172.18.203.55:5060;branch=z9hG4bK7ee8f6a6
Remote-Party-ID: "SIP Line 2010" <sip:2010@172.18.203.55>;party=calling;screen=yes;privacy=off
From: "SIP Line 2010" <sip:2010@172.18.203.55>;tag=b9c8b19b-c709-4d85-86d4-d2f557c6c2a6-30679753
To: <sip:2030@172.18.203.51>
Date: Wed, 12 Jul 2006 19:03:45 GMT
Call-ID: 22f40400-4b514791-2ed-37cb12ac@172.18.203.55
Supported: timer,replaces
Min-SE: 1800
User-Agent: Cisco-CCM5.0
Allow: INVITE, OPTIONS, INFO, BYE, CANCEL, ACK, PRACK, UPDATE, REFER, SUBSCRIBE, NOTIFY
CSeq: 101 INVITE
Expires: 180
Allow-Events: presence
Call-Info: <urn:x-cisco-remotecc:callinfo>; security= NotAuthenticated; orientation= from; call-instance= 2
Alert-Info: <file://Bellcore-dr1/>
Contact: <sip:2030@172.18.203.55:5060>
Max-Forwards: 69
Content-Length: 0
```

[\[diagram\]](#) Call-ID: [\[prev\]](#) [\[next\]](#)

#### [22] SIP/2.0 486 Busy here

```
Via: SIP/2.0/UDP 172.18.203.55:5060;branch=z9hG4bK7ee8f6a6
From: "SIP Line 2010" <sip:2010@172.18.203.55>;tag=b9c8b19b-c709-4d85-86d4-d2f557c6c2a6-30679753
To: <sip:2030@172.18.203.51>;tag=000d280821a50085610dec21-368b56ad
Call-ID: 22f40400-4b514791-2ed-37cb12ac@172.18.203.55
Date: Wed, 12 Jul 2006 19:03:44 GMT
CSeq: 101 INVITE
Server: Cisco-CP7960G/7.5
Contact: <sip:2030@172.18.203.51:5060>
Allow: ACK,BYE,CANCEL,INVITE,NOTIFY,OPTIONS,REFER,REGISTER,UPDATE
Remote-Party-ID: "2030" <sip:2030@172.18.203.51>;party=called;id-type=subscriber;privacy=off;screen=yes
Content-Length: 0
```

[\[diagram\]](#) Call-ID: [\[prev\]](#) [\[next\]](#)

#### [23] ACK sip:2030@172.18.203.51:5060 SIP/2.0

```
Via: SIP/2.0/UDP 172.18.203.55:5060;branch=z9hG4bK7ee8f6a6
From: "SIP Line 2010" <sip:2010@172.18.203.55>;tag=b9c8b19b-c709-4d85-86d4-d2f557c6c2a6-30679753
To: <sip:2030@172.18.203.51>;tag=000d280821a50085610dec21-368b56ad
Date: Wed, 12 Jul 2006 19:03:45 GMT
Call-ID: 22f40400-4b514791-2ed-37cb12ac@172.18.203.55
Max-Forwards: 70
CSeq: 101 ACK
Allow-Events: presence
Content-Length: 0
```

[\[diagram\]](#) Call-ID: [\[prev\]](#) [\[next\]](#)

#### [24] SIP/2.0 486 Busy here

```
Via: SIP/2.0/UDP 172.18.203.46:5060;branch=z9hG4bK3061f9ae
From: "2010" <sip:2010@172.18.203.55>;tag=00120193edac000c2285253c-4c76c09c
To: <sip:2030@172.18.203.55>;tag=b9c8b19b-c709-4d85-86d4-d2f557c6c2a6-30679752
Date: Wed, 12 Jul 2006 19:03:45 GMT
Call-ID: 00120193-edac0008-0baba68d-7c6535ea@172.18.203.46
CSeq: 101 INVITE
Allow-Events: presence
Reason: Q.850;cause=17
```

Content-Length: 0

[[diagram](#)] Call-ID: [[prev](#)] [[next](#)]

[25] ACK sip:2030@172.18.203.55 SIP/2.0

Via: SIP/2.0/UDP 172.18.203.46:5060;branch=z9hG4bK3061f9ae  
 From: "2010" <sip:2010@172.18.203.55>;tag=00120193edac000c2285253c-4c76c09c  
 To: <sip:2030@172.18.203.55>;tag=b9c8b19b-c709-4d85-86d4-d2f557c6c2a6-30679752  
 Call-ID: 00120193-edac0008-0baba68d-7c6535ea@172.18.203.46  
 CSeq: 101 ACK  
 Content-Length: 0

[[diagram](#)] Call-ID: [[prev](#)] [[next](#)]

[26] INVITE sip:205@172.18.203.55 SIP/2.0

Via: SIP/2.0/UDP 172.18.203.51:5060;branch=z9hG4bK142166c3  
 From: "2030" <sip:2030@172.18.203.55>;tag=000d280821a5008672397faa-35bb3eeb  
 To: <sip:205@172.18.203.55>  
 Call-ID: 000d2808-21a50006-70155727-60271714@172.18.203.51  
 Max-Forwards: 70  
 Date: Wed, 12 Jul 2006 19:03:46 GMT  
 CSeq: 101 INVITE  
 User-Agent: Cisco-CP7960G/7.5  
 Contact: <sip:2030@172.18.203.51:5060>  
 Expires: 180  
 Accept: application/sdp  
 Allow: ACK,BYE,CANCEL,INVITE,NOTIFY,OPTIONS,REFER,REGISTER,UPDATE  
 Remote-Party-ID: "2030" <sip:2030@172.18.203.51>;party=calling;id-type=subscriber;privacy=off;screen=yes  
 Supported: replaces  
 Content-Length: 255  
 Content-Type: application/sdp  
 Content-Disposition: session;handling=optional

v=0  
 o=Cisco-SIPUA 927 0 IN IP4 172.18.203.51  
 s=SIP Call  
 t=0 0  
 m=audio 21810 RTP/AVP 0 8 18 101  
 c=IN IP4 172.18.203.51  
 a=rtpmap:0 PCMU/8000  
 a=rtpmap:8 PCMA/8000  
 a=rtpmap:18 G729/8000  
 a=rtpmap:101 telephone-event/8000  
 a=fmtp:101 0-15  
 a=sendrecv

[[diagram](#)] Call-ID: [[prev](#)] [[next](#)]

[27] SIP/2.0 100 Trying

Via: SIP/2.0/UDP 172.18.203.51:5060;branch=z9hG4bK142166c3  
 From: "2030" <sip:2030@172.18.203.55>;tag=000d280821a5008672397faa-35bb3eeb  
 To: <sip:205@172.18.203.55>  
 Date: Wed, 12 Jul 2006 19:03:48 GMT  
 Call-ID: 000d2808-21a50006-70155727-60271714@172.18.203.51  
 CSeq: 101 INVITE  
 Allow-Events: presence  
 Content-Length: 0

[[diagram](#)] Call-ID: [[prev](#)] [[next](#)]

[28] SIP/2.0 404 Not Found

Via: SIP/2.0/UDP 172.18.203.51:5060;branch=z9hG4bK142166c3  
 From: "2030" <sip:2030@172.18.203.55>;tag=000d280821a5008672397faa-35bb3eeb  
 To: <sip:205@172.18.203.55>;tag=b9c8b19b-c709-4d85-86d4-d2f557c6c2a6-30679754  
 Date: Wed, 12 Jul 2006 19:03:48 GMT  
 Call-ID: 000d2808-21a50006-70155727-60271714@172.18.203.51  
 CSeq: 101 INVITE  
 Allow-Events: presence  
 Reason: Q.850;cause=1  
 Content-Length: 0

[[diagram](#)] Call-ID: [[prev](#)] [[next](#)]

[29] ACK sip:205@172.18.203.55 SIP/2.0

Via: SIP/2.0/UDP 172.18.203.51:5060;branch=z9hG4bK142166c3  
 From: "2030" <sip:2030@172.18.203.55>;tag=000d280821a5008672397faa-35bb3eeb  
 To: <sip:205@172.18.203.55>;tag=b9c8b19b-c709-4d85-86d4-d2f557c6c2a6-30679754  
 Call-ID: 000d2808-21a50006-70155727-60271714@172.18.203.51  
 Date: Wed, 12 Jul 2006 19:03:46 GMT  
 CSeq: 101 ACK  
 Content-Length: 0

[[diagram](#)] Call-ID: [[prev](#)] [[next](#)]

[30] BYE sip:2030@172.18.203.55:5060 SIP/2.0

Via: SIP/2.0/UDP 172.18.203.52:5060;branch=z9hG4bK514fa188

From: "2040" <sip:2040@172.18.203.55>;tag=003094c3cd3a000b0ee939cf-14adab18  
 To: <sip:2030@172.18.203.55>;tag=b9c8b19b-c709-4d85-86d4-d2f557c6c2a6-30679750  
 Call-ID: 003094c3-cd3a0004-0a2dfea2-22217b6f@172.18.203.52  
 Max-Forwards: 70  
 CSeq: 102 BYE  
 User-Agent: Cisco-CP7960G/7.5  
 Content-Length: 0

[\[diagram\]](#) Call-ID: [\[prev\]](#) [\[next\]](#)

**[31] BYE sip:2030@172.18.203.51:5060 SIP/2.0**

Via: SIP/2.0/UDP 172.18.203.55:5060;branch=z9hG4bK2c7af423  
 From: "SIP Line 2040" <sip:2040@172.18.203.55>;tag=b9c8b19b-c709-4d85-86d4-d2f557c6c2a6-30679751  
 To: <sip:2030@172.18.203.51>;tag=000d280821a5008431597251-466cbc39  
 Date: Wed, 12 Jul 2006 19:03:23 GMT  
 Call-ID: 11aaf780-4b514774-2eb-37cb12ac@172.18.203.55  
 User-Agent: Cisco-CCM5.0  
 Max-Forwards: 70  
 CSeq: 102 BYE  
 Content-Length: 0

[\[diagram\]](#) Call-ID: [\[prev\]](#) [\[next\]](#)

**[32] SIP/2.0 200 OK**

Via: SIP/2.0/UDP 172.18.203.52:5060;branch=z9hG4bK514fa188  
 From: "2040" <sip:2040@172.18.203.55>;tag=003094c3cd3a000b0ee939cf-14adab18  
 To: <sip:2030@172.18.203.55>;tag=b9c8b19b-c709-4d85-86d4-d2f557c6c2a6-30679750  
 Date: Wed, 12 Jul 2006 19:03:52 GMT  
 Call-ID: 003094c3-cd3a0004-0a2dfea2-22217b6f@172.18.203.52  
 CSeq: 102 BYE  
 Content-Length: 0

[\[diagram\]](#) Call-ID: [\[prev\]](#) [\[next\]](#)

**[33] SIP/2.0 200 OK**

Via: SIP/2.0/UDP 172.18.203.55:5060;branch=z9hG4bK2c7af423  
 From: "SIP Line 2040" <sip:2040@172.18.203.55>;tag=b9c8b19b-c709-4d85-86d4-d2f557c6c2a6-30679751  
 To: <sip:2030@172.18.203.51>;tag=000d280821a5008431597251-466cbc39  
 Call-ID: 11aaf780-4b514774-2eb-37cb12ac@172.18.203.55  
 Date: Wed, 12 Jul 2006 19:03:51 GMT  
 CSeq: 102 BYE  
 Server: Cisco-CP7960G/7.5  
 Content-Length: 0

### 3. Hold\_Resume

#### 3.1 Basic Call - Call Hold and Resume (SIP to SIP)

Title: Basic Call - Call Hold and Resume (SIP to SIP)

Description:

A SIP Basic phone calls another SIP Basic phone and presses hold.  
No MOH is heard. The holder presses resume and two-way speech is restored.

Note a "SIP Basic" phone is a 7960 configured with a pre-SDGA image (P0S3-07-5-00) to simulate a 3rd party phone.

Configuration:

Node = CCM, IP = 172.18.203.55

Phone = G, Line = 2010, IP = 172.18.203.46, Model = SIP Basic

Phone = H, Line = 2030, IP = 172.18.203.51, Model = SIP Basic

Scenario:

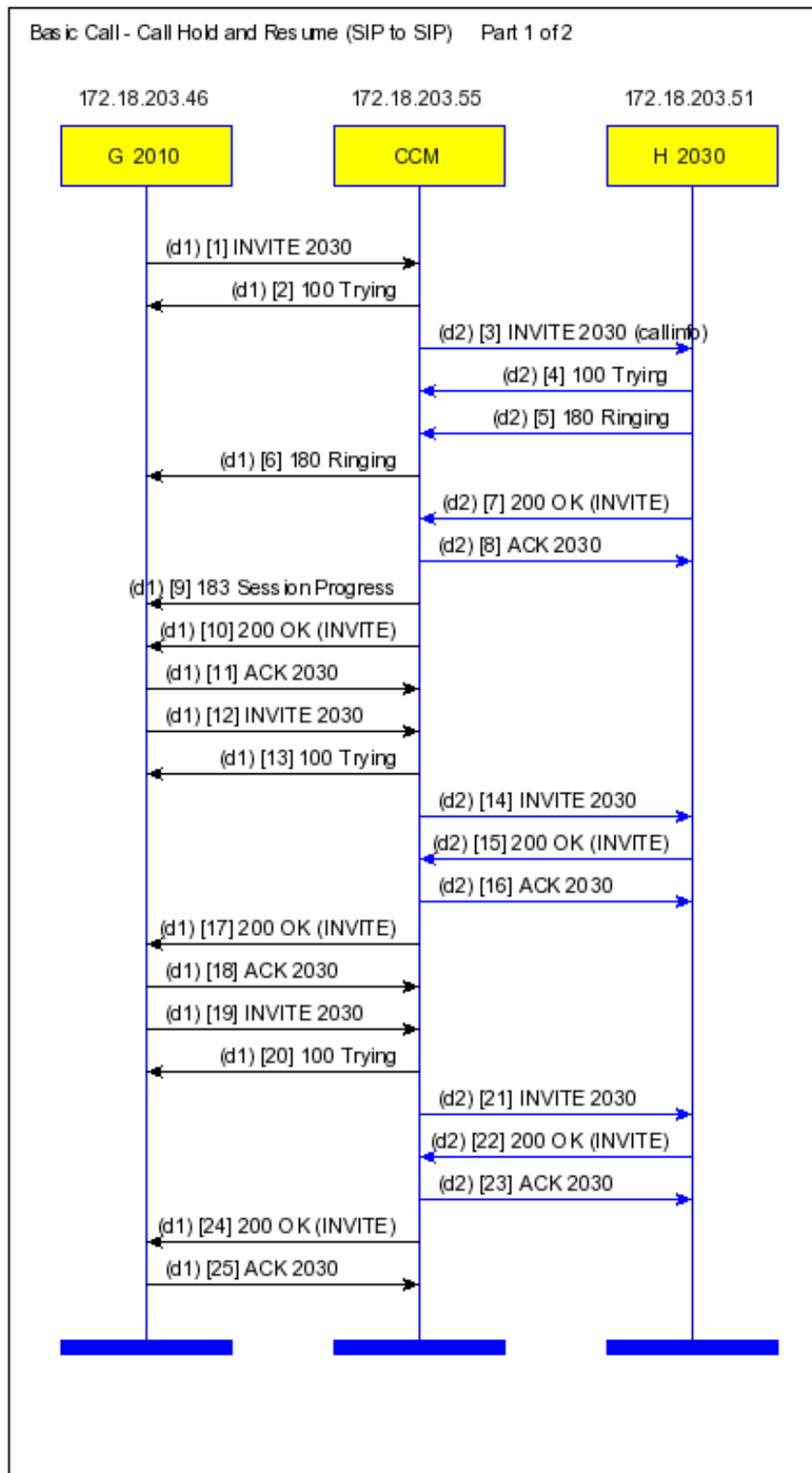
2010 calls 2030

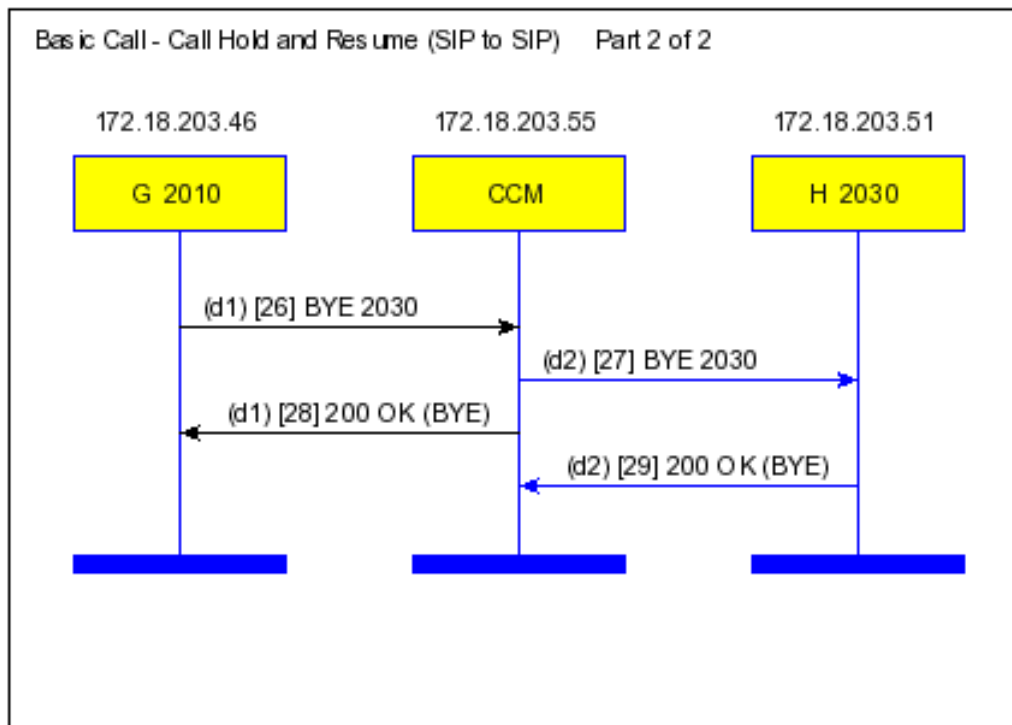
2030 answers

2010 presses hold

2010 presses resume

2010 goes onhook





[\[diagram\]](#)    Call-ID: [\[prev\]](#) [\[next\]](#)

**[1] INVITE sip:2030@172.18.203.55 SIP/2.0**

Via: SIP/2.0/UDP 172.18.203.46:5060;branch=z9hG4bK2d53d006  
 From: "2010" <sip:2010@172.18.203.55>;tag=00120193edac00103abbf39d-445ff887  
 To: <sip:2030@172.18.203.55>  
 Call-ID: 00120193-edac0009-05898d07-502146fb@172.18.203.46  
 Max-Forwards: 70  
 CSeq: 101 INVITE  
 User-Agent: Cisco-CP7960G/7.5  
 Contact: <sip:2010@172.18.203.46:5060>  
 Expires: 180  
 Accept: application/sdp  
 Allow: ACK,BYE,CANCEL,INVITE,NOTIFY,OPTIONS,REFER,REGISTER,UPDATE  
 Remote-Party-ID: "2010" <sip:2010@172.18.203.46>;party=calling;id-type=subscriber;privacy=off;screen=yes  
 Supported: replaces  
 Content-Length: 257  
 Content-Type: application/sdp  
 Content-Disposition: session;handling=optional

v=0  
 o=Cisco-SIPUA 21096 0 IN IP4 172.18.203.46  
 s=SIP Call  
 t=0 0  
 m=audio 27144 RTP/AVP 0 8 18 101  
 c=IN IP4 172.18.203.46  
 a=rtpmap:0 PCMU/8000  
 a=rtpmap:8 PCMA/8000  
 a=rtpmap:18 G729/8000  
 a=rtpmap:101 telephone-event/8000  
 a=fmtp:101 0-15  
 a=sendrecv

[\[diagram\]](#)    Call-ID: [\[prev\]](#) [\[next\]](#)

**[2] SIP/2.0 100 Trying**

Via: SIP/2.0/UDP 172.18.203.46:5060;branch=z9hG4bK2d53d006  
 From: "2010" <sip:2010@172.18.203.55>;tag=00120193edac00103abbf39d-445ff887  
 To: <sip:2030@172.18.203.55>  
 Date: Wed, 12 Jul 2006 19:08:15 GMT  
 Call-ID: 00120193-edac0009-05898d07-502146fb@172.18.203.46  
 CSeq: 101 INVITE  
 Allow-Events: presence  
 Content-Length: 0

[\[diagram\]](#)    Call-ID: [\[prev\]](#) [\[next\]](#)

**[3] INVITE sip:2030@172.18.203.51:5060 SIP/2.0**

Via: SIP/2.0/UDP 172.18.203.55:5060;branch=z9hG4bK30451dec  
 Remote-Party-ID: "SIP Line 2010" <sip:2010@172.18.203.55>;party=calling;screen=yes;privacy=off  
 From: "SIP Line 2010" <sip:2010@172.18.203.55>;tag=b9c8b19b-c709-4d85-86d4-d2f557c6c2a6-30679757  
 To: <sip:2030@172.18.203.51>  
 Date: Wed, 12 Jul 2006 19:08:15 GMT  
 Call-ID: c3e2bf00-4b51489f-2f8-37cb12ac@172.18.203.55  
 Supported: timer,replaces  
 Min-SE: 1800  
 User-Agent: Cisco-CCM5.0  
 Allow: INVITE, OPTIONS, INFO, BYE, CANCEL, ACK, PRACK, UPDATE, REFER, SUBSCRIBE, NOTIFY  
 CSeq: 101 INVITE  
 Expires: 180  
 Allow-Events: presence  
 Call-Info: <urn:x-cisco-remotecc:callinfo>; security= NotAuthenticated; orientation= from; call-instance= 1  
 Alert-Info: <file://Bellcore-dr1/>  
 Contact: <sip:2030@172.18.203.55:5060>  
 Max-Forwards: 69  
 Content-Length: 0

[\[diagram\]](#)    Call-ID: [\[prev\]](#) [\[next\]](#)

**[4] SIP/2.0 100 Trying**

Via: SIP/2.0/UDP 172.18.203.55:5060;branch=z9hG4bK30451dec  
 From: "SIP Line 2010" <sip:2010@172.18.203.55>;tag=b9c8b19b-c709-4d85-86d4-d2f557c6c2a6-30679757  
 To: <sip:2030@172.18.203.51>  
 Call-ID: c3e2bf00-4b51489f-2f8-37cb12ac@172.18.203.55  
 Date: Wed, 12 Jul 2006 19:08:15 GMT  
 CSeq: 101 INVITE  
 Server: Cisco-CP7960G/7.5  
 Contact: <sip:2030@172.18.203.51:5060>  
 Allow: ACK,BYE,CANCEL,INVITE,NOTIFY,OPTIONS,REFER,REGISTER,UPDATE  
 Remote-Party-ID: "2030" <sip:2030@172.18.203.51>;party=called;id-type=subscriber;privacy=off;screen=yes  
 Content-Length: 0

[\[diagram\]](#)    Call-ID: [\[prev\]](#) [\[next\]](#)

**[5] SIP/2.0 180 Ringing**

Via: SIP/2.0/UDP 172.18.203.55:5060;branch=z9hG4bK30451dec  
 From: "SIP Line 2010" <sip:2010@172.18.203.55>;tag=b9c8b19b-c709-4d85-86d4-d2f557c6c2a6-30679757  
 To: <sip:2030@172.18.203.51>;tag=000d280821a500891b834098-568a84d3  
 Call-ID: c3e2bf00-4b51489f-2f8-37cb12ac@172.18.203.55  
 Date: Wed, 12 Jul 2006 19:08:15 GMT  
 CSeq: 101 INVITE  
 Server: Cisco-CP7960G/7.5  
 Contact: <sip:2030@172.18.203.51:5060>  
 Allow: ACK,BYE,CANCEL,INVITE,NOTIFY,OPTIONS,REFER,REGISTER,UPDATE  
 Remote-Party-ID: "2030" <sip:2030@172.18.203.51>;party=called;id-type=subscriber;privacy=off;screen=yes  
 Content-Length: 0

[\[diagram\]](#) Call-ID: [\[prev\]](#) [\[next\]](#)

#### [6] SIP/2.0 180 Ringing

Via: SIP/2.0/UDP 172.18.203.46:5060;branch=z9hG4bK2d53d006  
 From: "2010" <sip:2010@172.18.203.55>;tag=00120193edac00103abbf39d-445ff887  
 To: <sip:2030@172.18.203.55>;tag=b9c8b19b-c709-4d85-86d4-d2f557c6c2a6-30679756  
 Date: Wed, 12 Jul 2006 19:08:15 GMT  
 Call-ID: 00120193-edac0009-05898d07-502146fb@172.18.203.46  
 CSeq: 101 INVITE  
 Allow: INVITE, OPTIONS, INFO, BYE, CANCEL, ACK, PRACK, UPDATE, REFER, SUBSCRIBE, NOTIFY  
 Allow-Events: presence  
 Remote-Party-ID: "SIP Alerting 2030" <sip:2030@172.18.203.55>;party=called;screen=yes;privacy=off  
 Contact: <sip:2030@172.18.203.55:5060>  
 Content-Length: 0

[\[diagram\]](#) Call-ID: [\[prev\]](#) [\[next\]](#)

#### [7] SIP/2.0 200 OK

Via: SIP/2.0/UDP 172.18.203.55:5060;branch=z9hG4bK30451dec  
 From: "SIP Line 2010" <sip:2010@172.18.203.55>;tag=b9c8b19b-c709-4d85-86d4-d2f557c6c2a6-30679757  
 To: <sip:2030@172.18.203.51>;tag=000d280821a500891b834098-568a84d3  
 Call-ID: c3e2bf00-4b51489f-2f8-37cb12ac@172.18.203.55  
 Date: Wed, 12 Jul 2006 19:08:16 GMT  
 CSeq: 101 INVITE  
 Server: Cisco-CP7960G/7.5  
 Contact: <sip:2030@172.18.203.51:5060>  
 Allow: ACK,BYE,CANCEL,INVITE,NOTIFY,OPTIONS,REFER,REGISTER,UPDATE  
 Remote-Party-ID: "2030" <sip:2030@172.18.203.51>;party=called;id-type=subscriber;privacy=off;screen=yes  
 Supported: replaces  
 Content-Length: 256  
 Content-Type: application/sdp  
 Content-Disposition: session;handling=optional

```
v=0
o=Cisco-SIPUA 6161 0 IN IP4 172.18.203.51
s=SIP Call
t=0 0
m=audio 21814 RTP/AVP 0 8 18 101
c=IN IP4 172.18.203.51
a=rtpmap:0 PCMU/8000
a=rtpmap:8 PCMA/8000
a=rtpmap:18 G729/8000
a=rtpmap:101 telephone-event/8000
a=fmtp:101 0-15
a=sendrecv
```

[\[diagram\]](#) Call-ID: [\[prev\]](#) [\[next\]](#)

#### [8] ACK sip:2030@172.18.203.51:5060 SIP/2.0

Via: SIP/2.0/UDP 172.18.203.55:5060;branch=z9hG4bK388cfa70  
 From: "SIP Line 2010" <sip:2010@172.18.203.55>;tag=b9c8b19b-c709-4d85-86d4-d2f557c6c2a6-30679757  
 To: <sip:2030@172.18.203.51>;tag=000d280821a500891b834098-568a84d3  
 Date: Wed, 12 Jul 2006 19:08:15 GMT  
 Call-ID: c3e2bf00-4b51489f-2f8-37cb12ac@172.18.203.55  
 Max-Forwards: 70  
 CSeq: 101 ACK  
 Allow-Events: presence  
 Content-Type: application/sdp  
 Content-Length: 214

```
v=0
o=CiscoSystemsCCM-SIP 2000 1 IN IP4 172.18.203.55
s=SIP Call
c=IN IP4 172.18.203.46
t=0 0
m=audio 27144 RTP/AVP 0 101
a=rtpmap:0 PCMU/8000
a=ptime:20
a=rtpmap:101 telephone-event/8000
a=fmtp:101 0-15
```

[\[diagram\]](#) Call-ID: [\[prev\]](#) [\[next\]](#)

**[9] SIP/2.0 183 Session Progress**

Via: SIP/2.0/UDP 172.18.203.46:5060;branch=z9hG4bK2d53d006  
 From: "2010" <sip:2010@172.18.203.55>;tag=00120193edac00103abbf39d-445ff887  
 To: <sip:2030@172.18.203.55>;tag=b9c8b19b-c709-4d85-86d4-d2f557c6c2a6-30679756  
 Date: Wed, 12 Jul 2006 19:08:15 GMT  
 Call-ID: 00120193-edac0009-05898d07-502146fb@172.18.203.46  
 CSeq: 101 INVITE  
 Allow: INVITE, OPTIONS, INFO, BYE, CANCEL, ACK, PRACK, UPDATE, REFER, SUBSCRIBE, NOTIFY  
 Allow-Events: presence  
 Remote-Party-ID: "SIP Alerting 2030" <sip:2030@172.18.203.55>;party=called;screen=yes;privacy=off  
 Contact: <sip:2030@172.18.203.55:5060>  
 Content-Type: application/sdp  
 Content-Length: 214

v=0  
 o=CiscoSystemsCCM-SIP 2000 1 IN IP4 172.18.203.55  
 s=SIP Call  
 c=IN IP4 172.18.203.51  
 t=0 0  
 m=audio 21814 RTP/AVP 0 101  
 a=rtpmap:0 PCMU/8000  
 a=ptime:20  
 a=rtpmap:101 telephone-event/8000  
 a=fmtp:101 0-15

[\[diagram\]](#) Call-ID: [\[prev\]](#) [\[next\]](#)

**[10] SIP/2.0 200 OK**

Via: SIP/2.0/UDP 172.18.203.46:5060;branch=z9hG4bK2d53d006  
 From: "2010" <sip:2010@172.18.203.55>;tag=00120193edac00103abbf39d-445ff887  
 To: <sip:2030@172.18.203.55>;tag=b9c8b19b-c709-4d85-86d4-d2f557c6c2a6-30679756  
 Date: Wed, 12 Jul 2006 19:08:15 GMT  
 Call-ID: 00120193-edac0009-05898d07-502146fb@172.18.203.46  
 CSeq: 101 INVITE  
 Allow: INVITE, OPTIONS, INFO, BYE, CANCEL, ACK, PRACK, UPDATE, REFER, SUBSCRIBE, NOTIFY  
 Allow-Events: presence  
 Remote-Party-ID: "SIP Line 2030" <sip:2030@172.18.203.55>;party=called;screen=yes;privacy=off  
 Contact: <sip:2030@172.18.203.55:5060>  
 Content-Type: application/sdp  
 Content-Length: 214

v=0  
 o=CiscoSystemsCCM-SIP 2000 1 IN IP4 172.18.203.55  
 s=SIP Call  
 c=IN IP4 172.18.203.51  
 t=0 0  
 m=audio 21814 RTP/AVP 0 101  
 a=rtpmap:0 PCMU/8000  
 a=ptime:20  
 a=rtpmap:101 telephone-event/8000  
 a=fmtp:101 0-15

[\[diagram\]](#) Call-ID: [\[prev\]](#) [\[next\]](#)

**[11] ACK sip:2030@172.18.203.55:5060 SIP/2.0**

Via: SIP/2.0/UDP 172.18.203.46:5060;branch=z9hG4bK58477568  
 From: "2010" <sip:2010@172.18.203.55>;tag=00120193edac00103abbf39d-445ff887  
 To: <sip:2030@172.18.203.55>;tag=b9c8b19b-c709-4d85-86d4-d2f557c6c2a6-30679756  
 Call-ID: 00120193-edac0009-05898d07-502146fb@172.18.203.46  
 Max-Forwards: 70  
 CSeq: 101 ACK  
 User-Agent: Cisco-CP7960G/7.5  
 Remote-Party-ID: "2010" <sip:2010@172.18.203.46>;party=calling;id-type=subscriber;privacy=off;screen=yes  
 Content-Length: 0

[\[diagram\]](#) Call-ID: [\[prev\]](#) [\[next\]](#)

**[12] INVITE sip:2030@172.18.203.55:5060 SIP/2.0**

Via: SIP/2.0/UDP 172.18.203.46:5060;branch=z9hG4bK3ee02ce7  
 From: "2010" <sip:2010@172.18.203.55>;tag=00120193edac00103abbf39d-445ff887  
 To: <sip:2030@172.18.203.55>;tag=b9c8b19b-c709-4d85-86d4-d2f557c6c2a6-30679756  
 Call-ID: 00120193-edac0009-05898d07-502146fb@172.18.203.46  
 Max-Forwards: 70  
 CSeq: 102 INVITE  
 User-Agent: Cisco-CP7960G/7.5  
 Contact: <sip:2010@172.18.203.46:5060>  
 Remote-Party-ID: "2010" <sip:2010@172.18.203.46>;party=calling;id-type=subscriber;privacy=off;screen=yes  
 Content-Length: 257  
 Content-Type: application/sdp  
 Content-Disposition: session;handling=optional

v=0

```

o=Cisco-SIPUA 21096 1 IN IP4 172.18.203.46
s=SIP Call
t=0 0
m=audio 27144 RTP/AVP 0 8 18 101
c=IN IP4 172.18.203.46
a=rtpmap:0 PCMU/8000
a=rtpmap:8 PCMA/8000
a=rtpmap:18 G729/8000
a=rtpmap:101 telephone-event/8000
a=fmtp:101 0-15
a=sendonly

```

[\[diagram\]](#) Call-ID: [\[prev\]](#) [\[next\]](#)

#### [13] SIP/2.0 100 Trying

```

Via: SIP/2.0/UDP 172.18.203.46:5060;branch=z9hG4bK3ee02ce7
From: "2010" <sip:2010@172.18.203.55>;tag=00120193edac00103abbf39d-445ff887
To: <sip:2030@172.18.203.55>;tag=b9c8b19b-c709-4d85-86d4-d2f557c6c2a6-30679756
Date: Wed, 12 Jul 2006 19:08:19 GMT
Call-ID: 00120193-edac0009-05898d07-502146fb@172.18.203.46
CSeq: 102 INVITE
Allow-Events: presence
Content-Length: 0

```

[\[diagram\]](#) Call-ID: [\[prev\]](#) [\[next\]](#)

#### [14] INVITE sip:2030@172.18.203.51:5060 SIP/2.0

```

Via: SIP/2.0/UDP 172.18.203.55:5060;branch=z9hG4bK515d63d2
Remote-Party-ID: "SIP Line 2010" <sip:2010@172.18.203.55>;party=calling;screen=yes;privacy=off
From: "SIP Line 2010" <sip:2010@172.18.203.55>;tag=b9c8b19b-c709-4d85-86d4-d2f557c6c2a6-30679757
To: <sip:2030@172.18.203.51>;tag=000d280821a500891b834098-568a84d3
Date: Wed, 12 Jul 2006 19:08:19 GMT
Call-ID: c3e2bf00-4b51489f-2f8-37cb12ac@172.18.203.55
Supported: timer,replaces
Min-SE: 1800
User-Agent: Cisco-CCM5.0
Allow: INVITE, OPTIONS, INFO, BYE, CANCEL, ACK, PRACK, UPDATE, REFER, SUBSCRIBE, NOTIFY
CSeq: 102 INVITE
Max-Forwards: 70
Contact: <sip:2010@172.18.203.55:5060>
Expires: 180
Allow-Events: presence
Content-Type: application/sdp
Content-Length: 300

```

```

v=0
o=CiscoSystemsCCM-SIP 2000 2 IN IP4 172.18.203.55
s=SIP Call
c=IN IP4 172.18.203.46
t=0 0
m=audio 27144 RTP/AVP 0 8 18 101
a=rtpmap:0 PCMU/8000
a=ptime:20
a=rtpmap:8 PCMA/8000
a=ptime:20
a=rtpmap:18 G729/8000
a=ptime:20
a=sendonly
a=rtpmap:101 telephone-event/8000
a=fmtp:101 0-15

```

[\[diagram\]](#) Call-ID: [\[prev\]](#) [\[next\]](#)

#### [15] SIP/2.0 200 OK

```

Via: SIP/2.0/UDP 172.18.203.55:5060;branch=z9hG4bK515d63d2
From: "SIP Line 2010" <sip:2010@172.18.203.55>;tag=b9c8b19b-c709-4d85-86d4-d2f557c6c2a6-30679757
To: <sip:2030@172.18.203.51>;tag=000d280821a500891b834098-568a84d3
Call-ID: c3e2bf00-4b51489f-2f8-37cb12ac@172.18.203.55
Date: Wed, 12 Jul 2006 19:08:19 GMT
CSeq: 102 INVITE
Server: Cisco-CP7960G/7.5
Contact: <sip:2030@172.18.203.51:5060>
Allow: ACK,BYE,CANCEL,INVITE,NOTIFY,OPTIONS,REFER,REGISTER,UPDATE
Remote-Party-ID: "2030" <sip:2030@172.18.203.51>;party=called;id-type=subscriber;privacy=off;screen=yes
Supported: replaces
Content-Length: 206
Content-Type: application/sdp
Content-Disposition: session;handling=optional

```

```

v=0
o=Cisco-SIPUA 6161 1 IN IP4 172.18.203.51
s=SIP Call
t=0 0

```

```
m=audio 21814 RTP/AVP 0 101
c=IN IP4 172.18.203.51
a=rtpmap:0 PCMU/8000
a=rtpmap:101 telephone-event/8000
a=fmtp:101 0-15
a=recvonly
```

[[diagram](#)] Call-ID: [[prev](#)] [[next](#)]

[16] ACK sip:2030@172.18.203.51:5060 SIP/2.0

```
Via: SIP/2.0/UDP 172.18.203.55:5060;branch=z9hG4bK4c58e703
From: "SIP Line 2010" <sip:2010@172.18.203.55>;tag=b9c8b19b-c709-4d85-86d4-d2f557c6c2a6-30679757
To: <sip:2030@172.18.203.51>;tag=000d280821a500891b834098-568a84d3
Date: Wed, 12 Jul 2006 19:08:19 GMT
Call-ID: c3e2bf00-4b51489f-2f8-37cb12ac@172.18.203.55
Max-Forwards: 70
CSeq: 102 ACK
Allow-Events: presence
Content-Length: 0
```

[[diagram](#)] Call-ID: [[prev](#)] [[next](#)]

[17] SIP/2.0 200 OK

```
Via: SIP/2.0/UDP 172.18.203.46:5060;branch=z9hG4bK3ee02ce7
From: "2010" <sip:2010@172.18.203.55>;tag=00120193edac00103abbf39d-445ff887
To: <sip:2030@172.18.203.55>;tag=b9c8b19b-c709-4d85-86d4-d2f557c6c2a6-30679756
Date: Wed, 12 Jul 2006 19:08:19 GMT
Call-ID: 00120193-edac0009-05898d07-502146fb@172.18.203.46
CSeq: 102 INVITE
Allow: INVITE, OPTIONS, INFO, BYE, CANCEL, ACK, PRACK, UPDATE, REFER, SUBSCRIBE, NOTIFY
Allow-Events: presence
Remote-Party-ID: "SIP Line 2030" <sip:2030@172.18.203.55>;party=called;screen=yes;privacy=off
Contact: <sip:2030@172.18.203.55:5060>
Content-Type: application/sdp
Content-Length: 226
```

```
v=0
o=CiscoSystemsCCM-SIP 2000 2 IN IP4 172.18.203.55
s=SIP Call
c=IN IP4 172.18.203.51
t=0 0
m=audio 21814 RTP/AVP 0 101
a=rtpmap:0 PCMU/8000
a=ptime:20
a=recvonly
a=rtpmap:101 telephone-event/8000
a=fmtp:101 0-15
```

[[diagram](#)] Call-ID: [[prev](#)] [[next](#)]

[18] ACK sip:2030@172.18.203.55:5060 SIP/2.0

```
Via: SIP/2.0/UDP 172.18.203.46:5060;branch=z9hG4bK7355ea4d
From: "2010" <sip:2010@172.18.203.55>;tag=00120193edac00103abbf39d-445ff887
To: <sip:2030@172.18.203.55>;tag=b9c8b19b-c709-4d85-86d4-d2f557c6c2a6-30679756
Call-ID: 00120193-edac0009-05898d07-502146fb@172.18.203.46
Max-Forwards: 70
CSeq: 102 ACK
User-Agent: Cisco-CP7960G/7.5
Remote-Party-ID: "2010" <sip:2010@172.18.203.46>;party=calling;id-type=subscriber;privacy=off;screen=yes
Content-Length: 0
```

[[diagram](#)] Call-ID: [[prev](#)] [[next](#)]

[19] INVITE sip:2030@172.18.203.55:5060 SIP/2.0

```
Via: SIP/2.0/UDP 172.18.203.46:5060;branch=z9hG4bK79b9ecf0
From: "2010" <sip:2010@172.18.203.55>;tag=00120193edac00103abbf39d-445ff887
To: <sip:2030@172.18.203.55>;tag=b9c8b19b-c709-4d85-86d4-d2f557c6c2a6-30679756
Call-ID: 00120193-edac0009-05898d07-502146fb@172.18.203.46
Max-Forwards: 70
CSeq: 103 INVITE
User-Agent: Cisco-CP7960G/7.5
Contact: <sip:2010@172.18.203.46:5060>
Remote-Party-ID: "2010" <sip:2010@172.18.203.46>;party=calling;id-type=subscriber;privacy=off;screen=yes
Content-Length: 257
Content-Type: application/sdp
Content-Disposition: session;handling=optional
```

```
v=0
o=Cisco-SIPUA 21096 2 IN IP4 172.18.203.46
s=SIP Call
t=0 0
m=audio 27144 RTP/AVP 0 8 18 101
c=IN IP4 172.18.203.46
a=rtpmap:0 PCMU/8000
```

```

a=rtpmap:8 PCMA/8000
a=rtpmap:18 G729/8000
a=rtpmap:101 telephone-event/8000
a=fmtp:101 0-15
a=sendrecv

```

[\[diagram\]](#) Call-ID: [\[prev\]](#) [\[next\]](#)

#### [20] SIP/2.0 100 Trying

```

Via: SIP/2.0/UDP 172.18.203.46:5060;branch=z9hG4bK79b9ecf0
From: "2010" <sip:2010@172.18.203.55>;tag=00120193edac00103abbf39d-445ff887
To: <sip:2030@172.18.203.55>;tag=b9c8b19b-c709-4d85-86d4-d2f557c6c2a6-30679756
Date: Wed, 12 Jul 2006 19:08:23 GMT
Call-ID: 00120193-edac0009-05898d07-502146fb@172.18.203.46
CSeq: 103 INVITE
Allow-Events: presence
Content-Length: 0

```

[\[diagram\]](#) Call-ID: [\[prev\]](#) [\[next\]](#)

#### [21] INVITE sip:2030@172.18.203.51:5060 SIP/2.0

```

Via: SIP/2.0/UDP 172.18.203.55:5060;branch=z9hG4bK214352e3
Remote-Party-ID: "SIP Line 2010" <sip:2010@172.18.203.55>;party=calling;screen=yes;privacy=off
From: "SIP Line 2010" <sip:2010@172.18.203.55>;tag=b9c8b19b-c709-4d85-86d4-d2f557c6c2a6-30679757
To: <sip:2030@172.18.203.51>;tag=000d280821a500891b834098-568a84d3
Date: Wed, 12 Jul 2006 19:08:23 GMT
Call-ID: c3e2bf00-4b51489f-2f8-37cb12ac@172.18.203.55
Supported: timer,replaces
Min-SE: 1800
User-Agent: Cisco-CCM5.0
Allow: INVITE, OPTIONS, INFO, BYE, CANCEL, ACK, PRACK, UPDATE, REFER, SUBSCRIBE, NOTIFY
CSeq: 103 INVITE
Max-Forwards: 70
Contact: <sip:2010@172.18.203.55:5060>
Expires: 180
Allow-Events: presence
Content-Type: application/sdp
Content-Length: 288

```

```

v=0
o=CiscoSystemsCCM-SIP 2000 3 IN IP4 172.18.203.55
s=SIP Call
c=IN IP4 172.18.203.46
t=0 0
m=audio 27144 RTP/AVP 0 8 18 101
a=rtpmap:0 PCMU/8000
a=ptime:20
a=rtpmap:8 PCMA/8000
a=ptime:20
a=rtpmap:18 G729/8000
a=ptime:20
a=rtpmap:101 telephone-event/8000
a=fmtp:101 0-15

```

[\[diagram\]](#) Call-ID: [\[prev\]](#) [\[next\]](#)

#### [22] SIP/2.0 200 OK

```

Via: SIP/2.0/UDP 172.18.203.55:5060;branch=z9hG4bK214352e3
From: "SIP Line 2010" <sip:2010@172.18.203.55>;tag=b9c8b19b-c709-4d85-86d4-d2f557c6c2a6-30679757
To: <sip:2030@172.18.203.51>;tag=000d280821a500891b834098-568a84d3
Call-ID: c3e2bf00-4b51489f-2f8-37cb12ac@172.18.203.55
Date: Wed, 12 Jul 2006 19:08:22 GMT
CSeq: 103 INVITE
Server: Cisco-CP7960G/7.5
Contact: <sip:2030@172.18.203.51:5060>
Allow: ACK,BYE,CANCEL,INVITE,NOTIFY,OPTIONS,REFER,REGISTER,UPDATE
Remote-Party-ID: "2030" <sip:2030@172.18.203.51>;party=called;id-type=subscriber;privacy=off;screen=yes
Supported: replaces
Content-Length: 206
Content-Type: application/sdp
Content-Disposition: session;handling=optional

```

```

v=0
o=Cisco-SIPUA 6161 2 IN IP4 172.18.203.51
s=SIP Call
t=0 0
m=audio 21814 RTP/AVP 0 101
c=IN IP4 172.18.203.51
a=rtpmap:0 PCMU/8000
a=rtpmap:101 telephone-event/8000
a=fmtp:101 0-15
a=sendrecv

```

[[diagram](#)] Call-ID: [[prev](#)] [[next](#)]

[23] ACK sip:2030@172.18.203.51:5060 SIP/2.0

Via: SIP/2.0/UDP 172.18.203.55:5060;branch=z9hG4bK1eb81ba7  
 From: "SIP Line 2010" <sip:2010@172.18.203.55>;tag=b9c8b19b-c709-4d85-86d4-d2f557c6c2a6-30679757  
 To: <sip:2030@172.18.203.51>;tag=000d280821a500891b834098-568a84d3  
 Date: Wed, 12 Jul 2006 19:08:23 GMT  
 Call-ID: c3e2bf00-4b51489f-2f8-37cb12ac@172.18.203.55  
 Max-Forwards: 70  
 CSeq: 103 ACK  
 Allow-Events: presence  
 Content-Length: 0

[[diagram](#)] Call-ID: [[prev](#)] [[next](#)]

[24] SIP/2.0 200 OK

Via: SIP/2.0/UDP 172.18.203.46:5060;branch=z9hG4bK79b9ecf0  
 From: "2010" <sip:2010@172.18.203.55>;tag=00120193edac00103abbf39d-445ff887  
 To: <sip:2030@172.18.203.55>;tag=b9c8b19b-c709-4d85-86d4-d2f557c6c2a6-30679756  
 Date: Wed, 12 Jul 2006 19:08:23 GMT  
 Call-ID: 00120193-edac0009-05898d07-502146fb@172.18.203.46  
 CSeq: 103 INVITE  
 Allow: INVITE, OPTIONS, INFO, BYE, CANCEL, ACK, PRACK, UPDATE, REFER, SUBSCRIBE, NOTIFY  
 Allow-Events: presence  
 Remote-Party-ID: "SIP Line 2030" <sip:2030@172.18.203.55>;party=called;screen=yes;privacy=off  
 Contact: <sip:2030@172.18.203.55:5060>  
 Content-Type: application/sdp  
 Content-Length: 214

v=0  
 o=CiscoSystemsCCM-SIP 2000 3 IN IP4 172.18.203.55  
 s=SIP Call  
 c=IN IP4 172.18.203.51  
 t=0 0  
 m=audio 21814 RTP/AVP 0 101  
 a=rtpmap:0 PCMU/8000  
 a=ptime:20  
 a=rtpmap:101 telephone-event/8000  
 a=fmtp:101 0-15

[[diagram](#)] Call-ID: [[prev](#)] [[next](#)]

[25] ACK sip:2030@172.18.203.55:5060 SIP/2.0

Via: SIP/2.0/UDP 172.18.203.46:5060;branch=z9hG4bK17674220  
 From: "2010" <sip:2010@172.18.203.55>;tag=00120193edac00103abbf39d-445ff887  
 To: <sip:2030@172.18.203.55>;tag=b9c8b19b-c709-4d85-86d4-d2f557c6c2a6-30679756  
 Call-ID: 00120193-edac0009-05898d07-502146fb@172.18.203.46  
 Max-Forwards: 70  
 CSeq: 103 ACK  
 User-Agent: Cisco-CP7960G/7.5  
 Remote-Party-ID: "2010" <sip:2010@172.18.203.46>;party=calling;id-type=subscriber;privacy=off;screen=yes  
 Content-Length: 0

[[diagram](#)] Call-ID: [[prev](#)] [[next](#)]

[26] BYE sip:2030@172.18.203.55:5060 SIP/2.0

Via: SIP/2.0/UDP 172.18.203.46:5060;branch=z9hG4bK69099be6  
 From: "2010" <sip:2010@172.18.203.55>;tag=00120193edac00103abbf39d-445ff887  
 To: <sip:2030@172.18.203.55>;tag=b9c8b19b-c709-4d85-86d4-d2f557c6c2a6-30679756  
 Call-ID: 00120193-edac0009-05898d07-502146fb@172.18.203.46  
 Max-Forwards: 70  
 CSeq: 104 BYE  
 User-Agent: Cisco-CP7960G/7.5  
 Content-Length: 0

[[diagram](#)] Call-ID: [[prev](#)] [[next](#)]

[27] BYE sip:2030@172.18.203.51:5060 SIP/2.0

Via: SIP/2.0/UDP 172.18.203.55:5060;branch=z9hG4bK76353375  
 From: "SIP Line 2010" <sip:2010@172.18.203.55>;tag=b9c8b19b-c709-4d85-86d4-d2f557c6c2a6-30679757  
 To: <sip:2030@172.18.203.51>;tag=000d280821a500891b834098-568a84d3  
 Date: Wed, 12 Jul 2006 19:08:23 GMT  
 Call-ID: c3e2bf00-4b51489f-2f8-37cb12ac@172.18.203.55  
 User-Agent: Cisco-CCM5.0  
 Max-Forwards: 70  
 CSeq: 104 BYE  
 Content-Length: 0

[[diagram](#)] Call-ID: [[prev](#)] [[next](#)]

[28] SIP/2.0 200 OK

Via: SIP/2.0/UDP 172.18.203.46:5060;branch=z9hG4bK69099be6  
 From: "2010" <sip:2010@172.18.203.55>;tag=00120193edac00103abbf39d-445ff887  
 To: <sip:2030@172.18.203.55>;tag=b9c8b19b-c709-4d85-86d4-d2f557c6c2a6-30679756  
 Date: Wed, 12 Jul 2006 19:08:28 GMT  
 Call-ID: 00120193-edac0009-05898d07-502146fb@172.18.203.46

CSeq: 104 BYE  
Content-Length: 0

[\[diagram\]](#) Call-ID: [\[prev\]](#)[\[next\]](#)  
**[29] SIP/2.0 200 OK**  
Via: SIP/2.0/UDP 172.18.203.55:5060;branch=z9hG4bK76353375  
From: "SIP Line 2010" <sip:2010@172.18.203.55>;tag=b9c8b19b-c709-4d85-86d4-d2f557c6c2a6-30679757  
To: <sip:2030@172.18.203.51>;tag=000d280821a500891b834098-568a84d3  
Call-ID: c3e2bf00-4b51489f-2f8-37cb12ac@172.18.203.55  
Date: Wed, 12 Jul 2006 19:08:27 GMT  
CSeq: 104 BYE  
Server: Cisco-CP7960G/7.5  
Content-Length: 0

### 3.2 Basic Call - Call Hold and Resume (SIP to SCCP)

Title: Basic Call - Call Hold and Resume (SIP to SCCP)

#### Description:

SIP Basic phone calls an SCCP phone and presses hold. No MOH is heard. SIP Basic phone presses resume and two-way speech is restored.

Note a "SIP Basic" phone is a 7960 configured with a pre-SDGA image (P0S3-07-5-00) to simulate a 3rd party phone.

#### Configuration:

Node = CCM, IP = 172.18.203.55

Phone = G, Line = 2010, IP = 172.18.203.46, Model = SIP Basic

Phone = I, Line = 3000, IP = 172.18.203.47, Model = SCCP

#### Scenario:

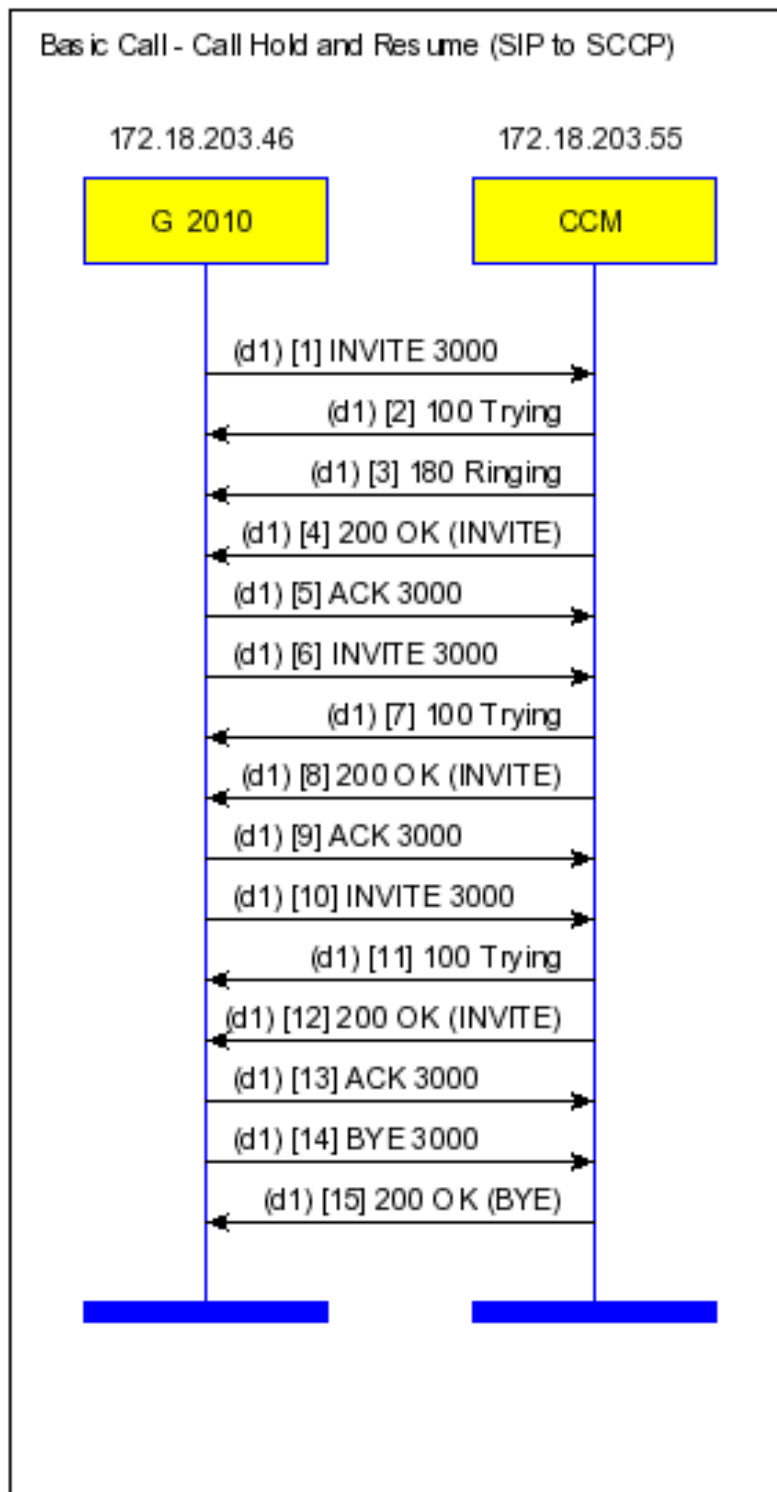
2010 calls 3000

3000 answers

2010 presses hold

2010 presses resume

2010 goes onhook



[\[diagram\]](#)    Call-ID: [\[prev\]](#) [\[next\]](#)

**[1] INVITE sip:3000@172.18.203.55 SIP/2.0**

Via: SIP/2.0/UDP 172.18.203.46:5060;branch=z9hG4bK6acb7546  
 From: "2010" <sip:2010@172.18.203.55>;tag=00120193edac0017635435e1-28c18eb2  
 To: <sip:3000@172.18.203.55>  
 Call-ID: 00120193-edac000b-7ab646e0-1419709f@172.18.203.46  
 Max-Forwards: 70  
 CSeq: 101 INVITE  
 User-Agent: Cisco-CP7960G/7.5  
 Contact: <sip:2010@172.18.203.46:5060>  
 Expires: 180  
 Accept: application/sdp  
 Allow: ACK,BYE,CANCEL,INVITE,NOTIFY,OPTIONS,REFER,REGISTER,UPDATE  
 Remote-Party-ID: "2010" <sip:2010@172.18.203.46>;party-calling;id-type=subscriber;privacy=off;screen=yes  
 Supported: replaces  
 Content-Length: 256  
 Content-Type: application/sdp  
 Content-Disposition: session;handling=optional

v=0  
 o=Cisco-SIPUA 2663 0 IN IP4 172.18.203.46  
 s=SIP Call  
 t=0 0  
 m=audio 27152 RTP/AVP 0 8 18 101  
 c=IN IP4 172.18.203.46  
 a=rtpmap:0 PCMU/8000  
 a=rtpmap:8 PCMA/8000  
 a=rtpmap:18 G729/8000  
 a=rtpmap:101 telephone-event/8000  
 a=fmtp:101 0-15  
 a=sendrecv

[\[diagram\]](#)    Call-ID: [\[prev\]](#) [\[next\]](#)

**[2] SIP/2.0 100 Trying**

Via: SIP/2.0/UDP 172.18.203.46:5060;branch=z9hG4bK6acb7546  
 From: "2010" <sip:2010@172.18.203.55>;tag=00120193edac0017635435e1-28c18eb2  
 To: <sip:3000@172.18.203.55>  
 Date: Wed, 12 Jul 2006 19:22:17 GMT  
 Call-ID: 00120193-edac000b-7ab646e0-1419709f@172.18.203.46  
 CSeq: 101 INVITE  
 Allow-Events: presence  
 Content-Length: 0

[\[diagram\]](#)    Call-ID: [\[prev\]](#) [\[next\]](#)

**[3] SIP/2.0 180 Ringing**

Via: SIP/2.0/UDP 172.18.203.46:5060;branch=z9hG4bK6acb7546  
 From: "2010" <sip:2010@172.18.203.55>;tag=00120193edac0017635435e1-28c18eb2  
 To: <sip:3000@172.18.203.55>;tag=b9c8b19b-c709-4d85-86d4-d2f557c6c2a6-30679762  
 Date: Wed, 12 Jul 2006 19:22:17 GMT  
 Call-ID: 00120193-edac000b-7ab646e0-1419709f@172.18.203.46  
 CSeq: 101 INVITE  
 Allow: INVITE, OPTIONS, INFO, BYE, CANCEL, ACK, PRACK, UPDATE, REFER, SUBSCRIBE, NOTIFY  
 Allow-Events: presence  
 Remote-Party-ID: "SCCP Line 3000" <sip:3000@172.18.203.55>;party-called;screen=yes;privacy=off  
 Contact: <sip:3000@172.18.203.55:5060>  
 Content-Length: 0

[\[diagram\]](#)    Call-ID: [\[prev\]](#) [\[next\]](#)

**[4] SIP/2.0 200 OK**

Via: SIP/2.0/UDP 172.18.203.46:5060;branch=z9hG4bK6acb7546  
 From: "2010" <sip:2010@172.18.203.55>;tag=00120193edac0017635435e1-28c18eb2  
 To: <sip:3000@172.18.203.55>;tag=b9c8b19b-c709-4d85-86d4-d2f557c6c2a6-30679762  
 Date: Wed, 12 Jul 2006 19:22:17 GMT  
 Call-ID: 00120193-edac000b-7ab646e0-1419709f@172.18.203.46  
 CSeq: 101 INVITE  
 Allow: INVITE, OPTIONS, INFO, BYE, CANCEL, ACK, PRACK, UPDATE, REFER, SUBSCRIBE, NOTIFY  
 Allow-Events: presence  
 Remote-Party-ID: "SCCP Line 3000" <sip:3000@172.18.203.55>;party-called;screen=yes;privacy=off  
 Contact: <sip:3000@172.18.203.55:5060>  
 Content-Type: application/sdp  
 Content-Length: 214

v=0  
 o=CiscoSystemsCCM-SIP 2000 1 IN IP4 172.18.203.55  
 s=SIP Call  
 c=IN IP4 172.18.203.47  
 t=0 0  
 m=audio 28098 RTP/AVP 0 101  
 a=rtpmap:0 PCMU/8000  
 aptime:20

```
a=rtpmap:101 telephone-event/8000
a=fmtp:101 0-15
```

[[diagram](#)] Call-ID: [[prev](#)] [[next](#)]

[5] ACK sip:3000@172.18.203.55:5060 SIP/2.0

```
Via: SIP/2.0/UDP 172.18.203.46:5060;branch=z9hG4bK704ad866
From: "2010" <sip:2010@172.18.203.55>;tag=00120193edac0017635435e1-28c18eb2
To: <sip:3000@172.18.203.55>;tag=b9c8b19b-c709-4d85-86d4-d2f557c6c2a6-30679762
Call-ID: 00120193-edac000b-7ab646e0-1419709f@172.18.203.46
Max-Forwards: 70
CSeq: 101 ACK
User-Agent: Cisco-CP7960G/7.5
Remote-Party-ID: "2010" <sip:2010@172.18.203.46>;party=calling;id-type=subscriber;privacy=off;screen=yes
Content-Length: 0
```

[[diagram](#)] Call-ID: [[prev](#)] [[next](#)]

[6] INVITE sip:3000@172.18.203.55:5060 SIP/2.0

```
Via: SIP/2.0/UDP 172.18.203.46:5060;branch=z9hG4bK6506831c
From: "2010" <sip:2010@172.18.203.55>;tag=00120193edac0017635435e1-28c18eb2
To: <sip:3000@172.18.203.55>;tag=b9c8b19b-c709-4d85-86d4-d2f557c6c2a6-30679762
Call-ID: 00120193-edac000b-7ab646e0-1419709f@172.18.203.46
Max-Forwards: 70
CSeq: 102 INVITE
User-Agent: Cisco-CP7960G/7.5
Contact: <sip:2010@172.18.203.46:5060>
Remote-Party-ID: "2010" <sip:2010@172.18.203.46>;party=calling;id-type=subscriber;privacy=off;screen=yes
Content-Length: 256
Content-Type: application/sdp
Content-Disposition: session;handling=optional
```

```
v=0
o=Cisco-SIPUA 2663 1 IN IP4 172.18.203.46
s=SIP Call
t=0 0
m=audio 27152 RTP/AVP 0 8 18 101
c=IN IP4 172.18.203.46
a=rtpmap:0 PCMU/8000
a=rtpmap:8 PCMA/8000
a=rtpmap:18 G729/8000
a=rtpmap:101 telephone-event/8000
a=fmtp:101 0-15
a=sendonly
```

[[diagram](#)] Call-ID: [[prev](#)] [[next](#)]

[7] SIP/2.0 100 Trying

```
Via: SIP/2.0/UDP 172.18.203.46:5060;branch=z9hG4bK6506831c
From: "2010" <sip:2010@172.18.203.55>;tag=00120193edac0017635435e1-28c18eb2
To: <sip:3000@172.18.203.55>;tag=b9c8b19b-c709-4d85-86d4-d2f557c6c2a6-30679762
Date: Wed, 12 Jul 2006 19:22:19 GMT
Call-ID: 00120193-edac000b-7ab646e0-1419709f@172.18.203.46
CSeq: 102 INVITE
Allow-Events: presence
Content-Length: 0
```

[[diagram](#)] Call-ID: [[prev](#)] [[next](#)]

[8] SIP/2.0 200 OK

```
Via: SIP/2.0/UDP 172.18.203.46:5060;branch=z9hG4bK6506831c
From: "2010" <sip:2010@172.18.203.55>;tag=00120193edac0017635435e1-28c18eb2
To: <sip:3000@172.18.203.55>;tag=b9c8b19b-c709-4d85-86d4-d2f557c6c2a6-30679762
Date: Wed, 12 Jul 2006 19:22:19 GMT
Call-ID: 00120193-edac000b-7ab646e0-1419709f@172.18.203.46
CSeq: 102 INVITE
Allow: INVITE, OPTIONS, INFO, BYE, CANCEL, ACK, PRACK, UPDATE, REFER, SUBSCRIBE, NOTIFY
Allow-Events: presence
Remote-Party-ID: "SCCP Line 3000" <sip:3000@172.18.203.55>;party=called;screen=yes;privacy=off
Contact: <sip:3000@172.18.203.55:5060>
Content-Type: application/sdp
Content-Length: 226
```

```
v=0
o=CiscoSystemsCCM-SIP 2000 2 IN IP4 172.18.203.55
s=SIP Call
c=IN IP4 172.18.203.47
t=0 0
m=audio 28098 RTP/AVP 0 101
a=rtpmap:0 PCMU/8000
a=ptime:20
a=recvnonly
a=rtpmap:101 telephone-event/8000
a=fmtp:101 0-15
```

[[diagram](#)] Call-ID: [[prev](#)] [[next](#)]

[9] ACK sip:3000@172.18.203.55:5060 SIP/2.0

Via: SIP/2.0/UDP 172.18.203.46:5060;branch=z9hG4bK7e17a770  
 From: "2010" <sip:2010@172.18.203.55>;tag=00120193edac0017635435e1-28c18eb2  
 To: <sip:3000@172.18.203.55>;tag=b9c8b19b-c709-4d85-86d4-d2f557c6c2a6-30679762  
 Call-ID: 00120193-edac000b-7ab646e0-1419709f@172.18.203.46  
 Max-Forwards: 70  
 CSeq: 102 ACK  
 User-Agent: Cisco-CP7960G/7.5  
 Remote-Party-ID: "2010" <sip:2010@172.18.203.46>;party=calling;id-type=subscriber;privacy=off;screen=yes  
 Content-Length: 0

[[diagram](#)] Call-ID: [[prev](#)] [[next](#)]

[10] INVITE sip:3000@172.18.203.55:5060 SIP/2.0

Via: SIP/2.0/UDP 172.18.203.46:5060;branch=z9hG4bK52decda8  
 From: "2010" <sip:2010@172.18.203.55>;tag=00120193edac0017635435e1-28c18eb2  
 To: <sip:3000@172.18.203.55>;tag=b9c8b19b-c709-4d85-86d4-d2f557c6c2a6-30679762  
 Call-ID: 00120193-edac000b-7ab646e0-1419709f@172.18.203.46  
 Max-Forwards: 70  
 CSeq: 103 INVITE  
 User-Agent: Cisco-CP7960G/7.5  
 Contact: <sip:2010@172.18.203.46:5060>  
 Remote-Party-ID: "2010" <sip:2010@172.18.203.46>;party=calling;id-type=subscriber;privacy=off;screen=yes  
 Content-Length: 256  
 Content-Type: application/sdp  
 Content-Disposition: session;handling=optional

v=0  
 o=Cisco-SIPUA 2663 2 IN IP4 172.18.203.46  
 s=SIP Call  
 t=0 0  
 m=audio 27152 RTP/AVP 0 8 18 101  
 c=IN IP4 172.18.203.46  
 a=rtpmap:0 PCMU/8000  
 a=rtpmap:8 PCMA/8000  
 a=rtpmap:18 G729/8000  
 a=rtpmap:101 telephone-event/8000  
 a=fmtp:101 0-15  
 a=sendrecv

[[diagram](#)] Call-ID: [[prev](#)] [[next](#)]

[11] SIP/2.0 100 Trying

Via: SIP/2.0/UDP 172.18.203.46:5060;branch=z9hG4bK52decda8  
 From: "2010" <sip:2010@172.18.203.55>;tag=00120193edac0017635435e1-28c18eb2  
 To: <sip:3000@172.18.203.55>;tag=b9c8b19b-c709-4d85-86d4-d2f557c6c2a6-30679762  
 Date: Wed, 12 Jul 2006 19:22:23 GMT  
 Call-ID: 00120193-edac000b-7ab646e0-1419709f@172.18.203.46  
 CSeq: 103 INVITE  
 Allow-Events: presence  
 Content-Length: 0

[[diagram](#)] Call-ID: [[prev](#)] [[next](#)]

[12] SIP/2.0 200 OK

Via: SIP/2.0/UDP 172.18.203.46:5060;branch=z9hG4bK52decda8  
 From: "2010" <sip:2010@172.18.203.55>;tag=00120193edac0017635435e1-28c18eb2  
 To: <sip:3000@172.18.203.55>;tag=b9c8b19b-c709-4d85-86d4-d2f557c6c2a6-30679762  
 Date: Wed, 12 Jul 2006 19:22:23 GMT  
 Call-ID: 00120193-edac000b-7ab646e0-1419709f@172.18.203.46  
 CSeq: 103 INVITE  
 Allow: INVITE, OPTIONS, INFO, BYE, CANCEL, ACK, PRACK, UPDATE, REFER, SUBSCRIBE, NOTIFY  
 Allow-Events: presence  
 Remote-Party-ID: "SCCP Line 3000" <sip:3000@172.18.203.55>;party=called;screen=yes;privacy=off  
 Contact: <sip:3000@172.18.203.55:5060>  
 Content-Type: application/sdp  
 Content-Length: 214

v=0  
 o=CiscoSystemsCCM-SIP 2000 3 IN IP4 172.18.203.55  
 s=SIP Call  
 c=IN IP4 172.18.203.47  
 t=0 0  
 m=audio 28098 RTP/AVP 0 101  
 a=rtpmap:0 PCMU/8000  
 a=ptime:20  
 a=rtpmap:101 telephone-event/8000  
 a=fmtp:101 0-15

[[diagram](#)] Call-ID: [[prev](#)] [[next](#)]

[13] ACK sip:3000@172.18.203.55:5060 SIP/2.0

Via: SIP/2.0/UDP 172.18.203.46:5060;branch=z9hG4bK507bf45e  
 From: "2010" <sip:2010@172.18.203.55>;tag=00120193edac0017635435e1-28c18eb2  
 To: <sip:3000@172.18.203.55>;tag=b9c8b19b-c709-4d85-86d4-d2f557c6c2a6-30679762  
 Call-ID: 00120193-edac000b-7ab646e0-1419709f@172.18.203.46  
 Max-Forwards: 70  
 CSeq: 103 ACK  
 User-Agent: Cisco-CP7960G/7.5  
 Remote-Party-ID: "2010" <sip:2010@172.18.203.46>;party=calling;id-type=subscriber;privacy=off;screen=yes  
 Content-Length: 0

[\[diagram\]](#) Call-ID: [\[prev\]](#) [\[next\]](#)

**[14] BYE sip:3000@172.18.203.55:5060 SIP/2.0**

Via: SIP/2.0/UDP 172.18.203.46:5060;branch=z9hG4bK2fde483e  
 From: "2010" <sip:2010@172.18.203.55>;tag=00120193edac0017635435e1-28c18eb2  
 To: <sip:3000@172.18.203.55>;tag=b9c8b19b-c709-4d85-86d4-d2f557c6c2a6-30679762  
 Call-ID: 00120193-edac000b-7ab646e0-1419709f@172.18.203.46  
 Max-Forwards: 70  
 CSeq: 104 BYE  
 User-Agent: Cisco-CP7960G/7.5  
 Content-Length: 0

[\[diagram\]](#) Call-ID: [\[prev\]](#) [\[next\]](#)

**[15] SIP/2.0 200 OK**

Via: SIP/2.0/UDP 172.18.203.46:5060;branch=z9hG4bK2fde483e  
 From: "2010" <sip:2010@172.18.203.55>;tag=00120193edac0017635435e1-28c18eb2  
 To: <sip:3000@172.18.203.55>;tag=b9c8b19b-c709-4d85-86d4-d2f557c6c2a6-30679762  
 Date: Wed, 12 Jul 2006 19:22:26 GMT  
 Call-ID: 00120193-edac000b-7ab646e0-1419709f@172.18.203.46  
 CSeq: 104 BYE  
 Content-Length: 0

## 4. Conference

### 4.1 Three Way Conference Calling (SIP Basic Phones)

Title: Three Way Conference Calling (SIP Basic Phones)

Description:

G calls H and then G conferences in L.

Configuration:

Node = CCM, IP = 172.18.203.55

Phone = G, Line = 2010, IP = 172.18.203.46, Model = SIP Basic

Phone = H, Line = 2030, IP = 172.18.203.51, Model = SIP Basic

Phone = L, Line = 2040, IP = 172.18.203.52, Model = SIP Basic

Scenario:

2010 calls 2030

2030 is ringing

2030 answers

2010 presses Confrn softkey

2010 dials 2040

2040 is ringing

2040 answers

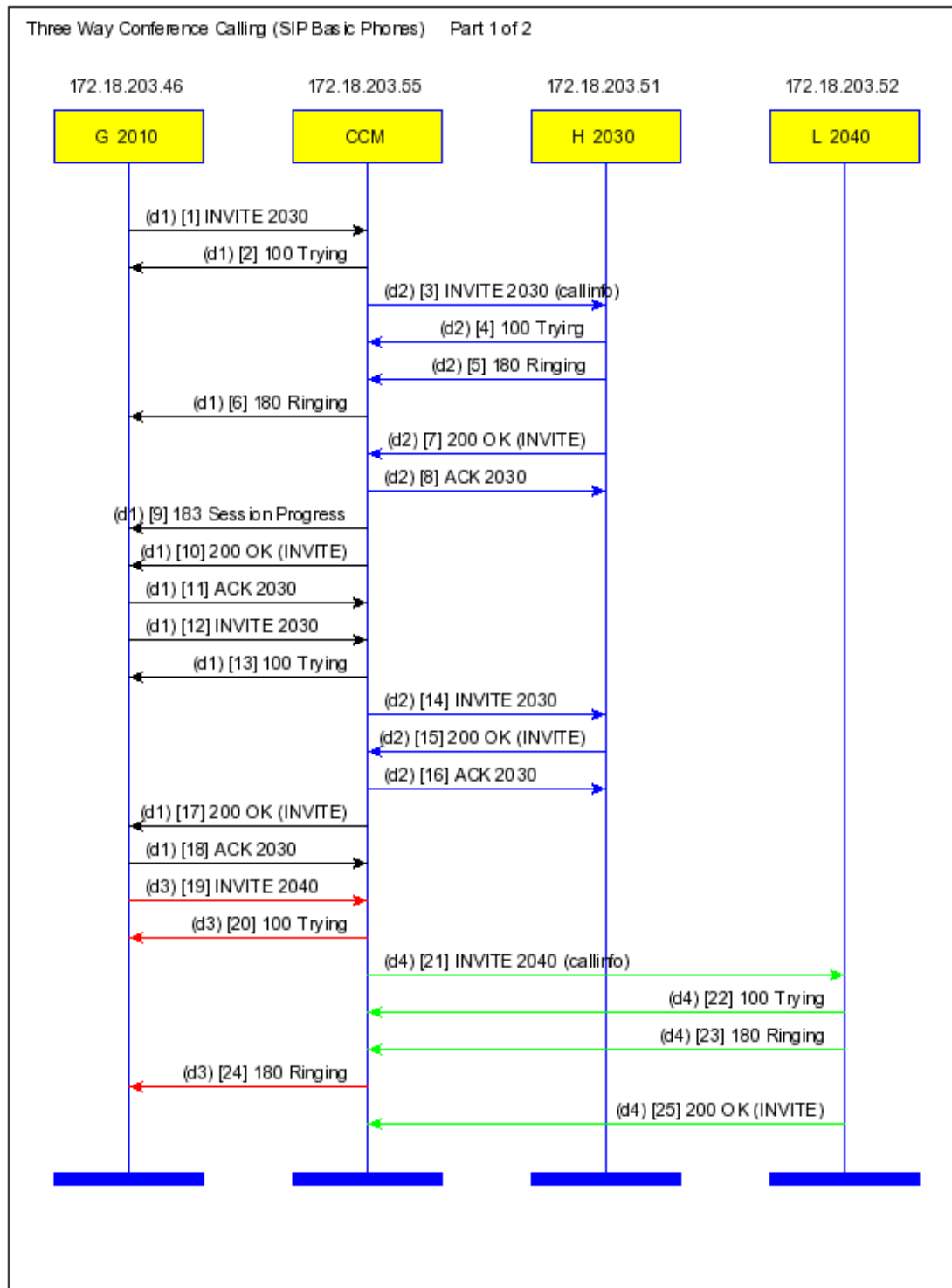
2010 presses Join softkey to complete the conference

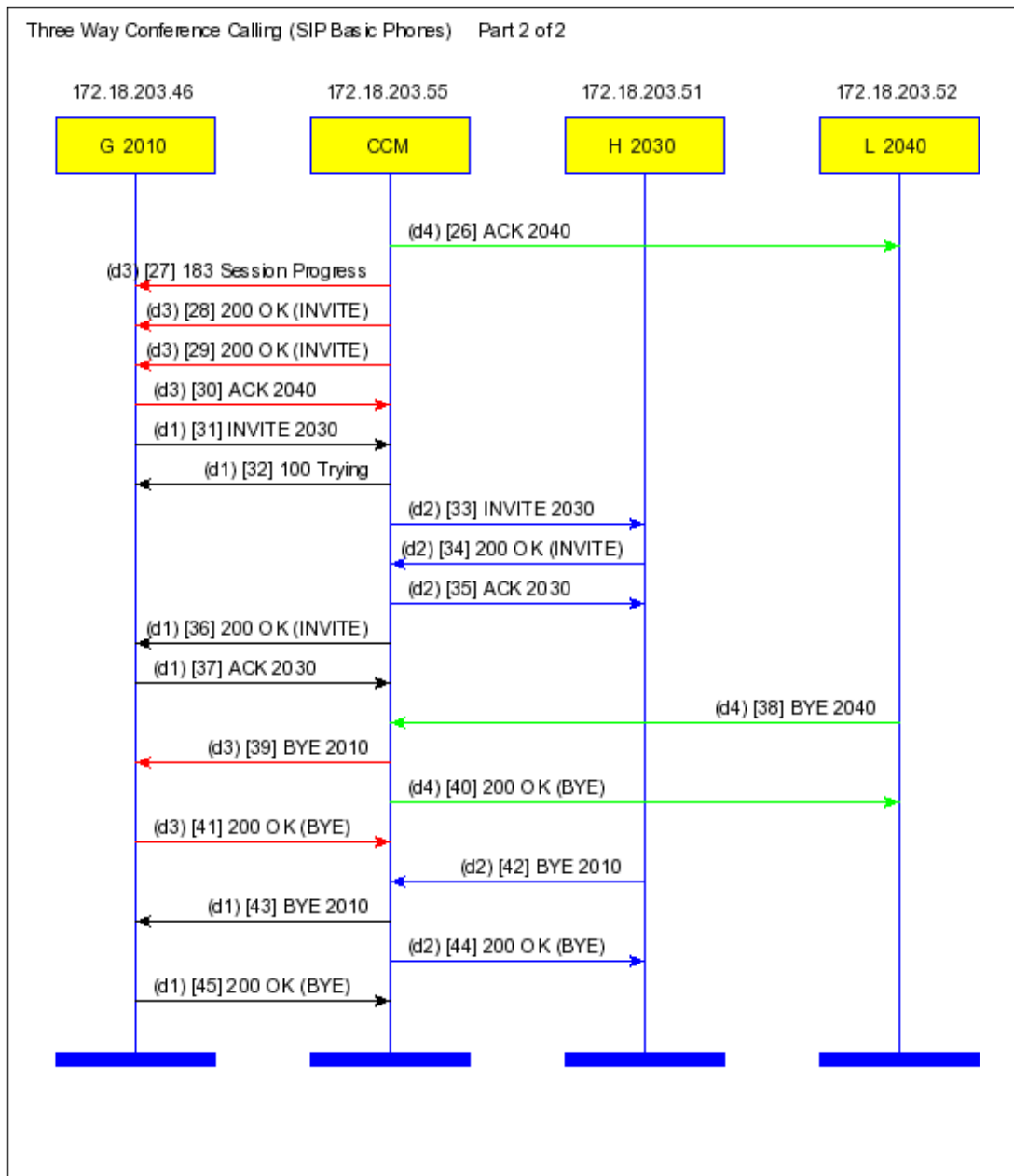
2010, 2030, and 2040 are in three way conference

2040 goes onhook

2030 goes onhook

2010 goes onhook





[[diagram](#)] [Call-ID: \[prev\]](#) [[next](#)]

[1] INVITE sip:2030@172.18.203.55 SIP/2.0

Via: SIP/2.0/UDP 172.18.203.46:5060;branch=z9hG4bK0fe2d3af  
 From: "2010" <sip:2010@172.18.203.55>;tag=00120193edac000676a04aaa-57c95afb  
 To: <sip:2030@172.18.203.55>  
 Call-ID: 00120193-edac0004-5a755507-5106c97b@172.18.203.46  
 Max-Forwards: 70  
 CSeq: 101 INVITE  
 User-Agent: Cisco-CP7960G/7.5  
 Contact: <sip:2010@172.18.203.46:5060>  
 Expires: 180  
 Accept: application/sdp  
 Allow: ACK,BYE,CANCEL,INVITE,NOTIFY,OPTIONS,REFER,REGISTER,UPDATE  
 Remote-Party-ID: "2010" <sip:2010@172.18.203.46>;party=calling;id-type=subscriber;privacy=off;screen=yes  
 Supported: replaces  
 Content-Length: 257  
 Content-Type: application/sdp  
 Content-Disposition: session;handling=optional

v=0  
 o=Cisco-SIPUA 25156 0 IN IP4 172.18.203.46  
 s=SIP Call  
 t=0 0  
 m=audio 27124 RTP/AVP 0 8 18 101  
 c=IN IP4 172.18.203.46  
 a=rtpmap:0 PCMU/8000  
 a=rtpmap:8 PCMA/8000  
 a=rtpmap:18 G729/8000  
 a=rtpmap:101 telephone-event/8000  
 a=fmtp:101 0-15  
 a=sendrecv

[[diagram](#)] [Call-ID: \[prev\]](#) [[next](#)]

[2] SIP/2.0 100 Trying

Via: SIP/2.0/UDP 172.18.203.46:5060;branch=z9hG4bK0fe2d3af  
 From: "2010" <sip:2010@172.18.203.55>;tag=00120193edac000676a04aaa-57c95afb  
 To: <sip:2030@172.18.203.55>  
 Date: Wed, 12 Jul 2006 18:56:27 GMT  
 Call-ID: 00120193-edac0004-5a755507-5106c97b@172.18.203.46  
 CSeq: 101 INVITE  
 Allow-Events: presence  
 Content-Length: 0

[[diagram](#)] [Call-ID: \[prev\]](#) [[next](#)]

[3] INVITE sip:2030@172.18.203.51:5060 SIP/2.0

Via: SIP/2.0/UDP 172.18.203.55:5060;branch=z9hG4bK34ed1760  
 Remote-Party-ID: "SIP Line 2010" <sip:2010@172.18.203.55>;party=calling;screen=yes;privacy=off  
 From: "SIP Line 2010" <sip:2010@172.18.203.55>;tag=b9c8b19b-c709-4d85-86d4-d2f557c6c2a6-30679739  
 To: <sip:2030@172.18.203.51>  
 Date: Wed, 12 Jul 2006 18:56:27 GMT  
 Call-ID: 1de28500-4b5145db-2d8-37cb12ac@172.18.203.55  
 Supported: timer,replaces  
 Min-SE: 1800  
 User-Agent: Cisco-CCM5.0  
 Allow: INVITE, OPTIONS, INFO, BYE, CANCEL, ACK, PRACK, UPDATE, REFER, SUBSCRIBE, NOTIFY  
 CSeq: 101 INVITE  
 Expires: 180  
 Allow-Events: presence  
 Call-Info: <urn:x-cisco-remotecc:callinfo>; security= NotAuthenticated; orientation= from; call-instance= 1  
 Alert-Info: <file://Bellcore-dr1/>  
 Contact: <sip:2030@172.18.203.55:5060>  
 Max-Forwards: 69  
 Content-Length: 0

[[diagram](#)] [Call-ID: \[prev\]](#) [[next](#)]

[4] SIP/2.0 100 Trying

Via: SIP/2.0/UDP 172.18.203.55:5060;branch=z9hG4bK34ed1760  
 From: "SIP Line 2010" <sip:2010@172.18.203.55>;tag=b9c8b19b-c709-4d85-86d4-d2f557c6c2a6-30679739  
 To: <sip:2030@172.18.203.51>  
 Call-ID: 1de28500-4b5145db-2d8-37cb12ac@172.18.203.55  
 Date: Wed, 12 Jul 2006 18:56:27 GMT  
 CSeq: 101 INVITE  
 Server: Cisco-CP7960G/7.5  
 Contact: <sip:2030@172.18.203.51:5060>  
 Allow: ACK,BYE,CANCEL,INVITE,NOTIFY,OPTIONS,REFER,REGISTER,UPDATE  
 Remote-Party-ID: "2030" <sip:2030@172.18.203.51>;party=called;id-type=subscriber;privacy=off;screen=yes  
 Content-Length: 0

[[diagram](#)] [Call-ID: \[prev\]](#) [[next](#)]

[5] SIP/2.0 180 Ringing

Via: SIP/2.0/UDP 172.18.203.55:5060;branch=z9hG4bK34ed1760  
 From: "SIP Line 2010" <sip:2010@172.18.203.55>;tag=b9c8b19b-c709-4d85-86d4-d2f557c6c2a6-30679739  
 To: <sip:2030@172.18.203.51>;tag=000d280821a5007c191506c9-4540ffa4  
 Call-ID: 1de28500-4b5145db-2d8-37cb12ac@172.18.203.55  
 Date: Wed, 12 Jul 2006 18:56:27 GMT  
 CSeq: 101 INVITE  
 Server: Cisco-CP7960G/7.5  
 Contact: <sip:2030@172.18.203.51:5060>  
 Allow: ACK,BYE,CANCEL,INVITE,NOTIFY,OPTIONS,REFER,REGISTER,UPDATE  
 Remote-Party-ID: "2030" <sip:2030@172.18.203.51>;party=called;id-type=subscriber;privacy=off;screen=yes  
 Content-Length: 0

[[diagram](#)] Call-ID: [[prev](#)] [[next](#)]

#### [6] SIP/2.0 180 Ringing

Via: SIP/2.0/UDP 172.18.203.46:5060;branch=z9hG4bK0fe2d3af  
 From: "2010" <sip:2010@172.18.203.55>;tag=00120193edac000676a04aaa-57c95afb  
 To: <sip:2030@172.18.203.55>;tag=b9c8b19b-c709-4d85-86d4-d2f557c6c2a6-30679738  
 Date: Wed, 12 Jul 2006 18:56:27 GMT  
 Call-ID: 00120193-edac0004-5a755507-5106c97b@172.18.203.46  
 CSeq: 101 INVITE  
 Allow: INVITE, OPTIONS, INFO, BYE, CANCEL, ACK, PRACK, UPDATE, REFER, SUBSCRIBE, NOTIFY  
 Allow-Events: presence  
 Remote-Party-ID: "SIP Alerting 2030" <sip:2030@172.18.203.55>;party=called;screen=yes;privacy=off  
 Contact: <sip:2030@172.18.203.55:5060>  
 Content-Length: 0

[[diagram](#)] Call-ID: [[prev](#)] [[next](#)]

#### [7] SIP/2.0 200 OK

Via: SIP/2.0/UDP 172.18.203.55:5060;branch=z9hG4bK34ed1760  
 From: "SIP Line 2010" <sip:2010@172.18.203.55>;tag=b9c8b19b-c709-4d85-86d4-d2f557c6c2a6-30679739  
 To: <sip:2030@172.18.203.51>;tag=000d280821a5007c191506c9-4540ffa4  
 Call-ID: 1de28500-4b5145db-2d8-37cb12ac@172.18.203.55  
 Date: Wed, 12 Jul 2006 18:56:28 GMT  
 CSeq: 101 INVITE  
 Server: Cisco-CP7960G/7.5  
 Contact: <sip:2030@172.18.203.51:5060>  
 Allow: ACK,BYE,CANCEL,INVITE,NOTIFY,OPTIONS,REFER,REGISTER,UPDATE  
 Remote-Party-ID: "2030" <sip:2030@172.18.203.51>;party=called;id-type=subscriber;privacy=off;screen=yes  
 Supported: replaces  
 Content-Length: 257  
 Content-Type: application/sdp  
 Content-Disposition: session;handling=optional

```
v=0
o=Cisco-SIPUA 11984 0 IN IP4 172.18.203.51
s=SIP Call
t=0 0
m=audio 21802 RTP/AVP 0 8 18 101
c=IN IP4 172.18.203.51
a=rtpmap:0 PCMU/8000
a=rtpmap:8 PCMA/8000
a=rtpmap:18 G729/8000
a=rtpmap:101 telephone-event/8000
a=fmtp:101 0-15
a=sendrecv
```

[[diagram](#)] Call-ID: [[prev](#)] [[next](#)]

#### [8] ACK sip:2030@172.18.203.51:5060 SIP/2.0

Via: SIP/2.0/UDP 172.18.203.55:5060;branch=z9hG4bK15f4e061  
 From: "SIP Line 2010" <sip:2010@172.18.203.55>;tag=b9c8b19b-c709-4d85-86d4-d2f557c6c2a6-30679739  
 To: <sip:2030@172.18.203.51>;tag=000d280821a5007c191506c9-4540ffa4  
 Date: Wed, 12 Jul 2006 18:56:27 GMT  
 Call-ID: 1de28500-4b5145db-2d8-37cb12ac@172.18.203.55  
 Max-Forwards: 70  
 CSeq: 101 ACK  
 Allow-Events: presence  
 Content-Type: application/sdp  
 Content-Length: 214

```
v=0
o=CiscoSystemsCCM-SIP 2000 1 IN IP4 172.18.203.55
s=SIP Call
c=IN IP4 172.18.203.46
t=0 0
m=audio 27124 RTP/AVP 0 101
a=rtpmap:0 PCMU/8000
a=ptime:20
a=rtpmap:101 telephone-event/8000
a=fmtp:101 0-15
```

[\[diagram\]](#) Call-ID: [\[prev\]](#) [\[next\]](#)

**[9] SIP/2.0 183 Session Progress**

Via: SIP/2.0/UDP 172.18.203.46:5060;branch=z9hG4bK0fe2d3af  
 From: "2010" <sip:2010@172.18.203.55>;tag=00120193edac000676a04aaa-57c95afb  
 To: <sip:2030@172.18.203.55>;tag=b9c8b19b-c709-4d85-86d4-d2f557c6c2a6-30679738  
 Date: Wed, 12 Jul 2006 18:56:27 GMT  
 Call-ID: 00120193-edac0004-5a755507-5106c97b@172.18.203.46  
 CSeq: 101 INVITE  
 Allow: INVITE, OPTIONS, INFO, BYE, CANCEL, ACK, PRACK, UPDATE, REFER, SUBSCRIBE, NOTIFY  
 Allow-Events: presence  
 Remote-Party-ID: "SIP Alerting 2030" <sip:2030@172.18.203.55>;party=called;screen=yes;privacy=off  
 Contact: <sip:2030@172.18.203.55:5060>  
 Content-Type: application/sdp  
 Content-Length: 214

v=0  
 o=CiscoSystemsCCM-SIP 2000 1 IN IP4 172.18.203.55  
 s=SIP Call  
 c=IN IP4 172.18.203.51  
 t=0 0  
 m=audio 21802 RTP/AVP 0 101  
 a=rtpmap:0 PCMU/8000  
 a=ptime:20  
 a=rtpmap:101 telephone-event/8000  
 a=fmtp:101 0-15

[\[diagram\]](#) Call-ID: [\[prev\]](#) [\[next\]](#)

**[10] SIP/2.0 200 OK**

Via: SIP/2.0/UDP 172.18.203.46:5060;branch=z9hG4bK0fe2d3af  
 From: "2010" <sip:2010@172.18.203.55>;tag=00120193edac000676a04aaa-57c95afb  
 To: <sip:2030@172.18.203.55>;tag=b9c8b19b-c709-4d85-86d4-d2f557c6c2a6-30679738  
 Date: Wed, 12 Jul 2006 18:56:27 GMT  
 Call-ID: 00120193-edac0004-5a755507-5106c97b@172.18.203.46  
 CSeq: 101 INVITE  
 Allow: INVITE, OPTIONS, INFO, BYE, CANCEL, ACK, PRACK, UPDATE, REFER, SUBSCRIBE, NOTIFY  
 Allow-Events: presence  
 Remote-Party-ID: "SIP Line 2030" <sip:2030@172.18.203.55>;party=called;screen=yes;privacy=off  
 Contact: <sip:2030@172.18.203.55:5060>  
 Content-Type: application/sdp  
 Content-Length: 214

v=0  
 o=CiscoSystemsCCM-SIP 2000 1 IN IP4 172.18.203.55  
 s=SIP Call  
 c=IN IP4 172.18.203.51  
 t=0 0  
 m=audio 21802 RTP/AVP 0 101  
 a=rtpmap:0 PCMU/8000  
 a=ptime:20  
 a=rtpmap:101 telephone-event/8000  
 a=fmtp:101 0-15

[\[diagram\]](#) Call-ID: [\[prev\]](#) [\[next\]](#)

**[11] ACK sip:2030@172.18.203.55:5060 SIP/2.0**

Via: SIP/2.0/UDP 172.18.203.46:5060;branch=z9hG4bK69860b36  
 From: "2010" <sip:2010@172.18.203.55>;tag=00120193edac000676a04aaa-57c95afb  
 To: <sip:2030@172.18.203.55>;tag=b9c8b19b-c709-4d85-86d4-d2f557c6c2a6-30679738  
 Call-ID: 00120193-edac0004-5a755507-5106c97b@172.18.203.46  
 Max-Forwards: 70  
 CSeq: 101 ACK  
 User-Agent: Cisco-CP7960G/7.5  
 Remote-Party-ID: "2010" <sip:2010@172.18.203.46>;party=calling;id-type=subscriber;privacy=off;screen=yes  
 Content-Length: 0

[\[diagram\]](#) Call-ID: [\[prev\]](#) [\[next\]](#)

**[12] INVITE sip:2030@172.18.203.55:5060 SIP/2.0**

Via: SIP/2.0/UDP 172.18.203.46:5060;branch=z9hG4bK0e531f60  
 From: "2010" <sip:2010@172.18.203.55>;tag=00120193edac000676a04aaa-57c95afb  
 To: <sip:2030@172.18.203.55>;tag=b9c8b19b-c709-4d85-86d4-d2f557c6c2a6-30679738  
 Call-ID: 00120193-edac0004-5a755507-5106c97b@172.18.203.46  
 Max-Forwards: 70  
 CSeq: 102 INVITE  
 User-Agent: Cisco-CP7960G/7.5  
 Contact: <sip:2010@172.18.203.46:5060>  
 Remote-Party-ID: "2010" <sip:2010@172.18.203.46>;party=calling;id-type=subscriber;privacy=off;screen=yes  
 Content-Length: 231  
 Content-Type: application/sdp  
 Content-Disposition: session;handling=optional

v=0

```

o=Cisco-SIPUA 25156 1 IN IP4 172.18.203.46
s=SIP Call
t=0 0
m=audio 27124 RTP/AVP 0 8 101
c=IN IP4 172.18.203.46
a=rtpmap:0 PCMU/8000
a=rtpmap:8 PCMA/8000
a=rtpmap:101 telephone-event/8000
a=fmtp:101 0-15
a=sendonly

```

[\[diagram\]](#) Call-ID: [\[prev\]](#) [\[next\]](#)

#### [13] SIP/2.0 100 Trying

```

Via: SIP/2.0/UDP 172.18.203.46:5060;branch=z9hG4bK0e531f60
From: "2010" <sip:2010@172.18.203.55>;tag=00120193edac000676a04aaa-57c95afb
To: <sip:2030@172.18.203.55>;tag=b9c8b19b-c709-4d85-86d4-d2f557c6c2a6-30679738
Date: Wed, 12 Jul 2006 18:56:33 GMT
Call-ID: 00120193-edac0004-5a755507-5106c97b@172.18.203.46
CSeq: 102 INVITE
Allow-Events: presence
Content-Length: 0

```

[\[diagram\]](#) Call-ID: [\[prev\]](#) [\[next\]](#)

#### [14] INVITE sip:2030@172.18.203.51:5060 SIP/2.0

```

Via: SIP/2.0/UDP 172.18.203.55:5060;branch=z9hG4bK538f5c8f
Remote-Party-ID: "SIP Line 2010" <sip:2010@172.18.203.55>;party=calling;screen=yes;privacy=off
From: "SIP Line 2010" <sip:2010@172.18.203.55>;tag=b9c8b19b-c709-4d85-86d4-d2f557c6c2a6-30679739
To: <sip:2030@172.18.203.51>;tag=000d280821a5007c191506c9-4540ffa4
Date: Wed, 12 Jul 2006 18:56:33 GMT
Call-ID: 1de28500-4b5145db-2d8-37cb12ac@172.18.203.55
Supported: timer,replaces
Min-SE: 1800
User-Agent: Cisco-CCM5.0
Allow: INVITE, OPTIONS, INFO, BYE, CANCEL, ACK, PRACK, UPDATE, REFER, SUBSCRIBE, NOTIFY
CSeq: 102 INVITE
Max-Forwards: 70
Contact: <sip:2010@172.18.203.55:5060>
Expires: 180
Allow-Events: presence
Content-Type: application/sdp
Content-Length: 262

```

```

v=0
o=CiscoSystemsCCM-SIP 2000 2 IN IP4 172.18.203.55
s=SIP Call
c=IN IP4 172.18.203.46
t=0 0
m=audio 27124 RTP/AVP 0 8 101
a=rtpmap:0 PCMU/8000
a=ptime:20
a=rtpmap:8 PCMA/8000
a=ptime:20
a=sendonly
a=rtpmap:101 telephone-event/8000
a=fmtp:101 0-15

```

[\[diagram\]](#) Call-ID: [\[prev\]](#) [\[next\]](#)

#### [15] SIP/2.0 200 OK

```

Via: SIP/2.0/UDP 172.18.203.55:5060;branch=z9hG4bK538f5c8f
From: "SIP Line 2010" <sip:2010@172.18.203.55>;tag=b9c8b19b-c709-4d85-86d4-d2f557c6c2a6-30679739
To: <sip:2030@172.18.203.51>;tag=000d280821a5007c191506c9-4540ffa4
Call-ID: 1de28500-4b5145db-2d8-37cb12ac@172.18.203.55
Date: Wed, 12 Jul 2006 18:56:33 GMT
CSeq: 102 INVITE
Server: Cisco-CP7960G/7.5
Contact: <sip:2030@172.18.203.51:5060>
Allow: ACK,BYE,CANCEL,INVITE,NOTIFY,OPTIONS,REFER,REGISTER,UPDATE
Remote-Party-ID: "2030" <sip:2030@172.18.203.51>;party=called;id-type=subscriber;privacy=off;screen=yes
Supported: replaces
Content-Length: 207
Content-Type: application/sdp
Content-Disposition: session;handling=optional

```

```

v=0
o=Cisco-SIPUA 11984 1 IN IP4 172.18.203.51
s=SIP Call
t=0 0
m=audio 21802 RTP/AVP 0 101
c=IN IP4 172.18.203.51
a=rtpmap:0 PCMU/8000

```

```
a=rtpmap:101 telephone-event/8000
a=fmtp:101 0-15
a=recvnonly
```

[[diagram](#)] Call-ID: [[prev](#)] [[next](#)]

[16] ACK sip:2030@172.18.203.51:5060 SIP/2.0

```
Via: SIP/2.0/UDP 172.18.203.55:5060;branch=z9hG4bK3a3a8452
From: "SIP Line 2010" <sip:2010@172.18.203.55>;tag=b9c8b19b-c709-4d85-86d4-d2f557c6c2a6-30679738
To: <sip:2030@172.18.203.51>;tag=000d280821a5007c191506c9-4540ffa4
Date: Wed, 12 Jul 2006 18:56:33 GMT
Call-ID: 1de28500-4b5145db-2d8-37cb12ac@172.18.203.55
Max-Forwards: 70
CSeq: 102 ACK
Allow-Events: presence
Content-Length: 0
```

[[diagram](#)] Call-ID: [[prev](#)] [[next](#)]

[17] SIP/2.0 200 OK

```
Via: SIP/2.0/UDP 172.18.203.46:5060;branch=z9hG4bK0e531f60
From: "2010" <sip:2010@172.18.203.55>;tag=00120193edac000676a04aaa-57c95afb
To: <sip:2030@172.18.203.55>;tag=b9c8b19b-c709-4d85-86d4-d2f557c6c2a6-30679738
Date: Wed, 12 Jul 2006 18:56:33 GMT
Call-ID: 00120193-edac0004-5a755507-5106c97b@172.18.203.46
CSeq: 102 INVITE
Allow: INVITE, OPTIONS, INFO, BYE, CANCEL, ACK, PRACK, UPDATE, REFER, SUBSCRIBE, NOTIFY
Allow-Events: presence
Remote-Party-ID: "SIP Line 2030" <sip:2030@172.18.203.55>;party=called;screen=yes;privacy=off
Contact: <sip:2030@172.18.203.55:5060>
Content-Type: application/sdp
Content-Length: 226
```

```
v=0
o=CiscoSystemsCCM-SIP 2000 2 IN IP4 172.18.203.55
s=SIP Call
c=IN IP4 172.18.203.51
t=0 0
m=audio 21802 RTP/AVP 0 101
a=rtpmap:0 PCMU/8000
a=ptime:20
a=recvnonly
a=rtpmap:101 telephone-event/8000
a=fmtp:101 0-15
```

[[diagram](#)] Call-ID: [[prev](#)] [[next](#)]

[18] ACK sip:2030@172.18.203.55:5060 SIP/2.0

```
Via: SIP/2.0/UDP 172.18.203.46:5060;branch=z9hG4bK55e708f9
From: "2010" <sip:2010@172.18.203.55>;tag=00120193edac000676a04aaa-57c95afb
To: <sip:2030@172.18.203.55>;tag=b9c8b19b-c709-4d85-86d4-d2f557c6c2a6-30679738
Call-ID: 00120193-edac0004-5a755507-5106c97b@172.18.203.46
Max-Forwards: 70
CSeq: 102 ACK
User-Agent: Cisco-CP7960G/7.5
Remote-Party-ID: "2010" <sip:2010@172.18.203.46>;party=calling;id-type=subscriber;privacy=off;screen=yes
Content-Length: 0
```

[[diagram](#)] Call-ID: [[prev](#)] [[next](#)]

[19] INVITE sip:2040@172.18.203.55 SIP/2.0

```
Via: SIP/2.0/UDP 172.18.203.46:5060;branch=z9hG4bK2feceede
From: "2010" <sip:2010@172.18.203.55>;tag=00120193edac000734e564e2-210010f1
To: <sip:2040@172.18.203.55>
Call-ID: 00120193-edac0005-48d4579b-52ca2938@172.18.203.46
Max-Forwards: 70
CSeq: 101 INVITE
User-Agent: Cisco-CP7960G/7.5
Contact: <sip:2010@172.18.203.46:5060>
Expires: 180
Accept: application/sdp
Allow: ACK, BYE, CANCEL, INVITE, NOTIFY, OPTIONS, REFER, REGISTER, UPDATE
Remote-Party-ID: "2010" <sip:2010@172.18.203.46>;party=calling;id-type=subscriber;privacy=off;screen=yes
Supported: replaces
Content-Length: 231
Content-Type: application/sdp
Content-Disposition: session;handling=optional
```

```
v=0
o=Cisco-SIPUA 14825 0 IN IP4 172.18.203.46
s=SIP Call
t=0 0
m=audio 27128 RTP/AVP 0 8 101
c=IN IP4 172.18.203.46
```

```

a=rtpmap:0 PCMU/8000
a=rtpmap:8 PCMA/8000
a=rtpmap:101 telephone-event/8000
a=fmtp:101 0-15
a=sendrecv

```

[\[diagram\]](#) Call-ID: [\[prev\]](#) [\[next\]](#)

**[20] SIP/2.0 100 Trying**

```

Via: SIP/2.0/UDP 172.18.203.46:5060;branch=z9hG4bK2feceede
From: "2010" <sip:2010@172.18.203.55>;tag=00120193edac000734e564e2-210010f1
To: <sip:2040@172.18.203.55>
Date: Wed, 12 Jul 2006 18:56:36 GMT
Call-ID: 00120193-edac0005-48d4579b-52ca2938@172.18.203.46
CSeq: 101 INVITE
Allow-Events: presence
Content-Length: 0

```

[\[diagram\]](#) Call-ID: [\[prev\]](#) [\[next\]](#)

**[21] INVITE sip:2040@172.18.203.52:5060 SIP/2.0**

```

Via: SIP/2.0/UDP 172.18.203.55:5060;branch=z9hG4bK12a5096e
Remote-Party-ID: "SIP Line 2010" <sip:2010@172.18.203.55>;party=calling;screen=yes;privacy=off
From: "SIP Line 2010" <sip:2010@172.18.203.55>;tag=b9c8b19b-c709-4d85-86d4-d2f557c6c2a6-30679741
To: <sip:2040@172.18.203.52>
Date: Wed, 12 Jul 2006 18:56:36 GMT
Call-ID: 233fcf80-4b5145e4-2da-37cb12ac@172.18.203.55
Supported: timer,replaces
Min-SE: 1800
User-Agent: Cisco-CCM5.0
Allow: INVITE, OPTIONS, INFO, BYE, CANCEL, ACK, PRACK, UPDATE, REFER, SUBSCRIBE, NOTIFY
CSeq: 101 INVITE
Expires: 180
Allow-Events: presence
Call-Info: <urn:x-cisco-remotecc:callinfo>; security= NotAuthenticated; orientation= from; call-instance= 1
Alert-Info: <file://Bellcore-dr1/>
Contact: <sip:2040@172.18.203.55:5060>
Max-Forwards: 69
Content-Length: 0

```

[\[diagram\]](#) Call-ID: [\[prev\]](#) [\[next\]](#)

**[22] SIP/2.0 100 Trying**

```

Via: SIP/2.0/UDP 172.18.203.55:5060;branch=z9hG4bK12a5096e
From: "SIP Line 2010" <sip:2010@172.18.203.55>;tag=b9c8b19b-c709-4d85-86d4-d2f557c6c2a6-30679741
To: <sip:2040@172.18.203.52>
Call-ID: 233fcf80-4b5145e4-2da-37cb12ac@172.18.203.55
CSeq: 101 INVITE
Server: Cisco-CP7960G/7.5
Contact: <sip:2040@172.18.203.52:5060>
Allow: ACK, BYE, CANCEL, INVITE, NOTIFY, OPTIONS, REFER, REGISTER, UPDATE
Remote-Party-ID: "2040" <sip:2040@172.18.203.52>;party=called;id-type=subscriber;privacy=off;screen=yes
Content-Length: 0

```

[\[diagram\]](#) Call-ID: [\[prev\]](#) [\[next\]](#)

**[23] SIP/2.0 180 Ringing**

```

Via: SIP/2.0/UDP 172.18.203.55:5060;branch=z9hG4bK12a5096e
From: "SIP Line 2010" <sip:2010@172.18.203.55>;tag=b9c8b19b-c709-4d85-86d4-d2f557c6c2a6-30679741
To: <sip:2040@172.18.203.52>;tag=003094c3cd3a000632ae882b-0d7cbda8
Call-ID: 233fcf80-4b5145e4-2da-37cb12ac@172.18.203.55
CSeq: 101 INVITE
Server: Cisco-CP7960G/7.5
Contact: <sip:2040@172.18.203.52:5060>
Allow: ACK, BYE, CANCEL, INVITE, NOTIFY, OPTIONS, REFER, REGISTER, UPDATE
Remote-Party-ID: "2040" <sip:2040@172.18.203.52>;party=called;id-type=subscriber;privacy=off;screen=yes
Content-Length: 0

```

[\[diagram\]](#) Call-ID: [\[prev\]](#) [\[next\]](#)

**[24] SIP/2.0 180 Ringing**

```

Via: SIP/2.0/UDP 172.18.203.46:5060;branch=z9hG4bK2feceede
From: "2010" <sip:2010@172.18.203.55>;tag=00120193edac000734e564e2-210010f1
To: <sip:2040@172.18.203.55>;tag=b9c8b19b-c709-4d85-86d4-d2f557c6c2a6-30679740
Date: Wed, 12 Jul 2006 18:56:36 GMT
Call-ID: 00120193-edac0005-48d4579b-52ca2938@172.18.203.46
CSeq: 101 INVITE
Allow: INVITE, OPTIONS, INFO, BYE, CANCEL, ACK, PRACK, UPDATE, REFER, SUBSCRIBE, NOTIFY
Allow-Events: presence
Remote-Party-ID: "SIP Alerting 2040" <sip:2040@172.18.203.55>;party=called;screen=yes;privacy=off
Contact: <sip:2040@172.18.203.55:5060>
Content-Length: 0

```

[\[diagram\]](#) Call-ID: [\[prev\]](#) [\[next\]](#)

**[25] SIP/2.0 200 OK**

```
Via: SIP/2.0/UDP 172.18.203.55:5060;branch=z9hG4bK12a5096e
From: "SIP Line 2010" <sip:2010@172.18.203.55>;tag=b9c8b19b-c709-4d85-86d4-d2f557c6c2a6-30679741
To: <sip:2040@172.18.203.52>;tag=003094c3cd3a000632ae882b-0d7cbda8
Call-ID: 233fcf80-4b5145e4-2da-37cb12ac@172.18.203.55
CSeq: 101 INVITE
Server: Cisco-CP7960G/7.5
Contact: <sip:2040@172.18.203.52:5060>
Allow: ACK,BYE,CANCEL,INVITE,NOTIFY,OPTIONS,REFER,REGISTER,UPDATE
Remote-Party-ID: "2040" <sip:2040@172.18.203.52>;party=called;id-type=subscriber;privacy=off;screen=yes
Supported: replaces
Content-Length: 257
Content-Type: application/sdp
Content-Disposition: session;handling=optional
```

```
v=0
o=Cisco-SIPUA 18998 0 IN IP4 172.18.203.52
s=SIP Call
t=0 0
m=audio 16410 RTP/AVP 0 8 18 101
c=IN IP4 172.18.203.52
a=rtpmap:0 PCMU/8000
a=rtpmap:8 PCMA/8000
a=rtpmap:18 G729/8000
a=rtpmap:101 telephone-event/8000
a=fmtp:101 0-15
a=sendrecv
```

[\[diagram\]](#) Call-ID: [\[prev\]](#) [\[next\]](#)

#### [26] ACK sip:2040@172.18.203.52:5060 SIP/2.0

```
Via: SIP/2.0/UDP 172.18.203.55:5060;branch=z9hG4bK47339d17
From: "SIP Line 2010" <sip:2010@172.18.203.55>;tag=b9c8b19b-c709-4d85-86d4-d2f557c6c2a6-30679741
To: <sip:2040@172.18.203.52>;tag=003094c3cd3a000632ae882b-0d7cbda8
Date: Wed, 12 Jul 2006 18:56:36 GMT
Call-ID: 233fcf80-4b5145e4-2da-37cb12ac@172.18.203.55
Max-Forwards: 70
CSeq: 101 ACK
Allow-Events: presence
Content-Type: application/sdp
Content-Length: 214
```

```
v=0
o=CiscoSystemsCCM-SIP 2000 1 IN IP4 172.18.203.55
s=SIP Call
c=IN IP4 172.18.203.46
t=0 0
m=audio 27128 RTP/AVP 0 101
a=rtpmap:0 PCMU/8000
aptime:20
a=rtpmap:101 telephone-event/8000
a=fmtp:101 0-15
```

[\[diagram\]](#) Call-ID: [\[prev\]](#) [\[next\]](#)

#### [27] SIP/2.0 183 Session Progress

```
Via: SIP/2.0/UDP 172.18.203.46:5060;branch=z9hG4bK2feceede
From: "2010" <sip:2010@172.18.203.55>;tag=00120193edac000734e564e2-210010f1
To: <sip:2040@172.18.203.55>;tag=b9c8b19b-c709-4d85-86d4-d2f557c6c2a6-30679740
Date: Wed, 12 Jul 2006 18:56:36 GMT
Call-ID: 00120193-edac0005-48d4579b-52ca2938@172.18.203.46
CSeq: 101 INVITE
Allow: INVITE, OPTIONS, INFO, BYE, CANCEL, ACK, PRACK, UPDATE, REFER, SUBSCRIBE, NOTIFY
Allow-Events: presence
Remote-Party-ID: "SIP Alerting 2040" <sip:2040@172.18.203.55>;party=called;screen=yes;privacy=off
Contact: <sip:2040@172.18.203.55:5060>
Content-Type: application/sdp
Content-Length: 214
```

```
v=0
o=CiscoSystemsCCM-SIP 2000 1 IN IP4 172.18.203.55
s=SIP Call
c=IN IP4 172.18.203.52
t=0 0
m=audio 16410 RTP/AVP 0 101
a=rtpmap:0 PCMU/8000
aptime:20
a=rtpmap:101 telephone-event/8000
a=fmtp:101 0-15
```

[\[diagram\]](#) Call-ID: [\[prev\]](#) [\[next\]](#)

#### [28] SIP/2.0 200 OK

```
Via: SIP/2.0/UDP 172.18.203.46:5060;branch=z9hG4bK2feceede
```

```

From: "2010" <sip:2010@172.18.203.55>;tag=00120193edac000734e564e2-210010f1
To: <sip:2040@172.18.203.55>;tag=b9c8b19b-c709-4d85-86d4-d2f557c6c2a6-30679740
Date: Wed, 12 Jul 2006 18:56:36 GMT
Call-ID: 00120193-edac0005-48d4579b-52ca2938@172.18.203.46
CSeq: 101 INVITE
Allow: INVITE, OPTIONS, INFO, BYE, CANCEL, ACK, PRACK, UPDATE, REFER, SUBSCRIBE, NOTIFY
Allow-Events: presence
Remote-Party-ID: "SIP Line 2040" <sip:2040@172.18.203.55>;party=called;screen=yes;privacy=off
Contact: <sip:2040@172.18.203.55:5060>
Content-Type: application/sdp
Content-Length: 214

```

```

v=0
o=CiscoSystemsCCM-SIP 2000 1 IN IP4 172.18.203.55
s=SIP Call
c=IN IP4 172.18.203.52
t=0 0
m=audio 16410 RTP/AVP 0 101
a=rtpmap:0 PCMU/8000
a=ptime:20
a=rtpmap:101 telephone-event/8000
a=fmtp:101 0-15

```

[\[diagram\]](#) Call-ID: [\[prev\]](#) [\[next\]](#)

**[29] SIP/2.0 200 OK**

```

Via: SIP/2.0/UDP 172.18.203.46:5060;branch=z9hG4bK2feceede
From: "2010" <sip:2010@172.18.203.55>;tag=00120193edac000734e564e2-210010f1
To: <sip:2040@172.18.203.55>;tag=b9c8b19b-c709-4d85-86d4-d2f557c6c2a6-30679740
Date: Wed, 12 Jul 2006 18:56:36 GMT
Call-ID: 00120193-edac0005-48d4579b-52ca2938@172.18.203.46
CSeq: 101 INVITE
Allow: INVITE, OPTIONS, INFO, BYE, CANCEL, ACK, PRACK, UPDATE, REFER, SUBSCRIBE, NOTIFY
Allow-Events: presence
Remote-Party-ID: "SIP Line 2040" <sip:2040@172.18.203.55>;party=called;screen=yes;privacy=off
Contact: <sip:2040@172.18.203.55:5060>
Content-Type: application/sdp
Content-Length: 214

```

```

v=0
o=CiscoSystemsCCM-SIP 2000 1 IN IP4 172.18.203.55
s=SIP Call
c=IN IP4 172.18.203.52
t=0 0
m=audio 16410 RTP/AVP 0 101
a=rtpmap:0 PCMU/8000
a=ptime:20
a=rtpmap:101 telephone-event/8000
a=fmtp:101 0-15

```

[\[diagram\]](#) Call-ID: [\[prev\]](#) [\[next\]](#)

**[30] ACK sip:2040@172.18.203.55:5060 SIP/2.0**

```

Via: SIP/2.0/UDP 172.18.203.46:5060;branch=z9hG4bK275f2289
From: "2010" <sip:2010@172.18.203.55>;tag=00120193edac000734e564e2-210010f1
To: <sip:2040@172.18.203.55>;tag=b9c8b19b-c709-4d85-86d4-d2f557c6c2a6-30679740
Call-ID: 00120193-edac0005-48d4579b-52ca2938@172.18.203.46
Max-Forwards: 70
CSeq: 101 ACK
User-Agent: Cisco-CP7960G/7.5
Remote-Party-ID: "2010" <sip:2010@172.18.203.46>;party=calling;id-type=subscriber;privacy=off;screen=yes
Content-Length: 0

```

[\[diagram\]](#) Call-ID: [\[prev\]](#) [\[next\]](#)

**[31] INVITE sip:2030@172.18.203.55:5060 SIP/2.0**

```

Via: SIP/2.0/UDP 172.18.203.46:5060;branch=z9hG4bK08dc06bb
From: "2010" <sip:2010@172.18.203.55>;tag=00120193edac000676a04aaa-57c95afb
To: <sip:2030@172.18.203.55>;tag=b9c8b19b-c709-4d85-86d4-d2f557c6c2a6-30679738
Call-ID: 00120193-edac0004-5a755507-5106c97b@172.18.203.46
Max-Forwards: 70
CSeq: 103 INVITE
User-Agent: Cisco-CP7960G/7.5
Contact: <sip:2010@172.18.203.46:5060>
Remote-Party-ID: "2010" <sip:2010@172.18.203.46>;party=calling;id-type=subscriber;privacy=off;screen=yes
Content-Length: 231
Content-Type: application/sdp
Content-Disposition: session;handling=optional

```

```

v=0
o=Cisco-SIPUA 25156 2 IN IP4 172.18.203.46
s=SIP Call
t=0 0

```

```
m=audio 27124 RTP/AVP 0 8 101
c=IN IP4 172.18.203.46
a=rtpmap:0 PCMU/8000
a=rtpmap:8 PCMA/8000
a=rtpmap:101 telephone-event/8000
a=fmtp:101 0-15
a=sendrecv
```

[[diagram](#)] Call-ID: [[prev](#)] [[next](#)]

### [32] SIP/2.0 100 Trying

```
Via: SIP/2.0/UDP 172.18.203.46:5060;branch=z9hG4bK08dc06bb
From: "2010" <sip:2010@172.18.203.55>;tag=00120193edac000676a04aaa-57c95afb
To: <sip:2030@172.18.203.55>;tag=b9c8b19b-c709-4d85-86d4-d2f557c6c2a6-30679738
Date: Wed, 12 Jul 2006 18:56:41 GMT
Call-ID: 00120193-edac0004-5a755507-5106c97b@172.18.203.46
CSeq: 103 INVITE
Allow-Events: presence
Content-Length: 0
```

[[diagram](#)] Call-ID: [[prev](#)] [[next](#)]

### [33] INVITE sip:2030@172.18.203.51:5060 SIP/2.0

```
Via: SIP/2.0/UDP 172.18.203.55:5060;branch=z9hG4bK214b0545
Remote-Party-ID: "SIP Line 2010" <sip:2010@172.18.203.55>;party=calling;screen=yes;privacy=off
From: "SIP Line 2010" <sip:2010@172.18.203.55>;tag=b9c8b19b-c709-4d85-86d4-d2f557c6c2a6-30679739
To: <sip:2030@172.18.203.51>;tag=000d280821a5007c191506c9-4540ffa4
Date: Wed, 12 Jul 2006 18:56:41 GMT
Call-ID: 1de28500-4b5145db-2d8-37cb12ac@172.18.203.55
Supported: timer,replaces
Min-SE: 1800
User-Agent: Cisco-CCM5.0
Allow: INVITE, OPTIONS, INFO, BYE, CANCEL, ACK, PRACK, UPDATE, REFER, SUBSCRIBE, NOTIFY
CSeq: 103 INVITE
Max-Forwards: 70
Contact: <sip:2010@172.18.203.55:5060>
Expires: 180
Allow-Events: presence
Content-Type: application/sdp
Content-Length: 250
```

```
v=0
o=CiscoSystemsCCM-SIP 2000 3 IN IP4 172.18.203.55
s=SIP Call
c=IN IP4 172.18.203.46
t=0 0
m=audio 27124 RTP/AVP 0 8 101
a=rtpmap:0 PCMU/8000
a=ptime:20
a=rtpmap:8 PCMA/8000
a=ptime:20
a=rtpmap:101 telephone-event/8000
a=fmtp:101 0-15
```

[[diagram](#)] Call-ID: [[prev](#)] [[next](#)]

### [34] SIP/2.0 200 OK

```
Via: SIP/2.0/UDP 172.18.203.55:5060;branch=z9hG4bK214b0545
From: "SIP Line 2010" <sip:2010@172.18.203.55>;tag=b9c8b19b-c709-4d85-86d4-d2f557c6c2a6-30679739
To: <sip:2030@172.18.203.51>;tag=000d280821a5007c191506c9-4540ffa4
Call-ID: 1de28500-4b5145db-2d8-37cb12ac@172.18.203.55
Date: Wed, 12 Jul 2006 18:56:40 GMT
CSeq: 103 INVITE
Server: Cisco-CP7960G/7.5
Contact: <sip:2030@172.18.203.51:5060>
Allow: ACK,BYE,CANCEL,INVITE,NOTIFY,OPTIONS,REFER,REGISTER,UPDATE
Remote-Party-ID: "2030" <sip:2030@172.18.203.51>;party=called;id-type=subscriber;privacy=off;screen=yes
Supported: replaces
Content-Length: 207
Content-Type: application/sdp
Content-Disposition: session;handling=optional
```

```
v=0
o=Cisco-SIPUA 11984 2 IN IP4 172.18.203.51
s=SIP Call
t=0 0
m=audio 21802 RTP/AVP 0 101
c=IN IP4 172.18.203.51
a=rtpmap:0 PCMU/8000
a=rtpmap:101 telephone-event/8000
a=fmtp:101 0-15
a=sendrecv
```

[[diagram](#)] Call-ID: [[prev](#)] [[next](#)]

[35] ACK sip:2030@172.18.203.51:5060 SIP/2.0

Via: SIP/2.0/UDP 172.18.203.55:5060;branch=z9hG4bKabb03b0  
 From: "SIP Line 2010" <sip:2010@172.18.203.55>;tag=b9c8b19b-c709-4d85-86d4-d2f557c6c2a6-30679739  
 To: <sip:2030@172.18.203.51>;tag=000d280821a5007c191506c9-4540ffa4  
 Date: Wed, 12 Jul 2006 18:56:41 GMT  
 Call-ID: 1de28500-4b5145db-2d8-37cb12ac@172.18.203.55  
 Max-Forwards: 70  
 CSeq: 103 ACK  
 Allow-Events: presence  
 Content-Length: 0

[[diagram](#)] Call-ID: [[prev](#)] [[next](#)]

[36] SIP/2.0 200 OK

Via: SIP/2.0/UDP 172.18.203.46:5060;branch=z9hG4bK08dc06bb  
 From: "2010" <sip:2010@172.18.203.55>;tag=00120193edac000676a04aaa-57c95afb  
 To: <sip:2030@172.18.203.55>;tag=b9c8b19b-c709-4d85-86d4-d2f557c6c2a6-30679738  
 Date: Wed, 12 Jul 2006 18:56:41 GMT  
 Call-ID: 00120193-edac0004-5a755507-5106c97b@172.18.203.46  
 CSeq: 103 INVITE  
 Allow: INVITE, OPTIONS, INFO, BYE, CANCEL, ACK, PRACK, UPDATE, REFER, SUBSCRIBE, NOTIFY  
 Allow-Events: presence  
 Remote-Party-ID: "SIP Line 2030" <sip:2030@172.18.203.55>;party=called;screen=yes;privacy=off  
 Contact: <sip:2030@172.18.203.55:5060>  
 Content-Type: application/sdp  
 Content-Length: 214

v=0  
 o=CiscoSystemsCCM-SIP 2000 3 IN IP4 172.18.203.55  
 s=SIP Call  
 c=IN IP4 172.18.203.51  
 t=0 0  
 m=audio 21802 RTP/AVP 0 101  
 a=rtpmap:0 PCMU/8000  
 a=ptime:20  
 a=rtpmap:101 telephone-event/8000  
 a=fmtp:101 0-15

[[diagram](#)] Call-ID: [[prev](#)] [[next](#)]

[37] ACK sip:2030@172.18.203.55:5060 SIP/2.0

Via: SIP/2.0/UDP 172.18.203.46:5060;branch=z9hG4bK5822fe50  
 From: "2010" <sip:2010@172.18.203.55>;tag=00120193edac000676a04aaa-57c95afb  
 To: <sip:2030@172.18.203.55>;tag=b9c8b19b-c709-4d85-86d4-d2f557c6c2a6-30679738  
 Call-ID: 00120193-edac0004-5a755507-5106c97b@172.18.203.46  
 Max-Forwards: 70  
 CSeq: 103 ACK  
 User-Agent: Cisco-CP7960G/7.5  
 Remote-Party-ID: "2010" <sip:2010@172.18.203.46>;party=calling;id-type=subscriber;privacy=off;screen=yes  
 Content-Length: 0

[[diagram](#)] Call-ID: [[prev](#)] [[next](#)]

[38] BYE sip:2040@172.18.203.55:5060 SIP/2.0

Via: SIP/2.0/UDP 172.18.203.52:5060;branch=z9hG4bK3556dbce  
 From: <sip:2040@172.18.203.52>;tag=003094c3cd3a000632ae882b-0d7cbda8  
 To: "SIP Line 2010" <sip:2010@172.18.203.55>;tag=b9c8b19b-c709-4d85-86d4-d2f557c6c2a6-30679741  
 Call-ID: 233fcf80-4b5145e4-2da-37cb12ac@172.18.203.55  
 Max-Forwards: 70  
 CSeq: 101 BYE  
 User-Agent: Cisco-CP7960G/7.5  
 Content-Length: 0

[[diagram](#)] Call-ID: [[prev](#)] [[next](#)]

[39] BYE sip:2010@172.18.203.46:5060 SIP/2.0

Via: SIP/2.0/UDP 172.18.203.55:5060;branch=z9hG4bK29fb5c69  
 From: <sip:2040@172.18.203.55>;tag=b9c8b19b-c709-4d85-86d4-d2f557c6c2a6-30679740  
 To: "2010" <sip:2010@172.18.203.55>;tag=00120193edac000734e564e2-210010f1  
 Date: Wed, 12 Jul 2006 18:56:40 GMT  
 Call-ID: 00120193-edac0005-48d4579b-52ca2938@172.18.203.46  
 User-Agent: Cisco-CCM5.0  
 Max-Forwards: 70  
 CSeq: 101 BYE  
 Content-Length: 0

[[diagram](#)] Call-ID: [[prev](#)] [[next](#)]

[40] SIP/2.0 200 OK

Via: SIP/2.0/UDP 172.18.203.52:5060;branch=z9hG4bK3556dbce  
 From: <sip:2040@172.18.203.52>;tag=003094c3cd3a000632ae882b-0d7cbda8  
 To: "SIP Line 2010" <sip:2010@172.18.203.55>;tag=b9c8b19b-c709-4d85-86d4-d2f557c6c2a6-30679741  
 Date: Wed, 12 Jul 2006 18:56:48 GMT  
 Call-ID: 233fcf80-4b5145e4-2da-37cb12ac@172.18.203.55

CSeq: 101 BYE  
Content-Length: 0

[\[diagram\]](#) Call-ID: [\[prev\]](#) [\[next\]](#)

**[41] SIP/2.0 200 OK**

Via: SIP/2.0/UDP 172.18.203.55:5060;branch=z9hG4bK29fb5c69  
From: <sip:2040@172.18.203.55>;tag=b9c8b19b-c709-4d85-86d4-d2f557c6c2a6-30679740  
To: "2010" <sip:2010@172.18.203.55>;tag=00120193edac000734e564e2-210010f1  
Call-ID: 00120193-edac0005-48d4579b-52ca2938@172.18.203.46  
CSeq: 101 BYE  
Server: Cisco-CP7960G/7.5  
Content-Length: 0

[\[diagram\]](#) Call-ID: [\[prev\]](#) [\[next\]](#)

**[42] BYE sip:2010@172.18.203.55:5060 SIP/2.0**

Via: SIP/2.0/UDP 172.18.203.51:5060;branch=z9hG4bK14ce57b6  
From: <sip:2030@172.18.203.51>;tag=000d280821a5007c191506c9-4540ffa4  
To: "SIP Line 2010" <sip:2010@172.18.203.55>;tag=b9c8b19b-c709-4d85-86d4-d2f557c6c2a6-30679739  
Call-ID: 1de28500-4b5145db-2d8-37cb12ac@172.18.203.55  
Max-Forwards: 70  
Date: Wed, 12 Jul 2006 18:56:55 GMT  
CSeq: 101 BYE  
User-Agent: Cisco-CP7960G/7.5  
Content-Length: 0

[\[diagram\]](#) Call-ID: [\[prev\]](#) [\[next\]](#)

**[43] BYE sip:2010@172.18.203.46:5060 SIP/2.0**

Via: SIP/2.0/UDP 172.18.203.55:5060;branch=z9hG4bK52341ce9  
From: <sip:2030@172.18.203.55>;tag=b9c8b19b-c709-4d85-86d4-d2f557c6c2a6-30679738  
To: "2010" <sip:2010@172.18.203.55>;tag=00120193edac000676a04aaa-57c95afb  
Date: Wed, 12 Jul 2006 18:56:41 GMT  
Call-ID: 00120193-edac0004-5a755507-5106c97b@172.18.203.46  
User-Agent: Cisco-CCM5.0  
Max-Forwards: 70  
CSeq: 101 BYE  
Content-Length: 0

[\[diagram\]](#) Call-ID: [\[prev\]](#) [\[next\]](#)

**[44] SIP/2.0 200 OK**

Via: SIP/2.0/UDP 172.18.203.51:5060;branch=z9hG4bK14ce57b6  
From: <sip:2030@172.18.203.51>;tag=000d280821a5007c191506c9-4540ffa4  
To: "SIP Line 2010" <sip:2010@172.18.203.55>;tag=b9c8b19b-c709-4d85-86d4-d2f557c6c2a6-30679739  
Date: Wed, 12 Jul 2006 18:56:56 GMT  
Call-ID: 1de28500-4b5145db-2d8-37cb12ac@172.18.203.55  
CSeq: 101 BYE  
Content-Length: 0

[\[diagram\]](#) Call-ID: [\[prev\]](#) [\[next\]](#)

**[45] SIP/2.0 200 OK**

Via: SIP/2.0/UDP 172.18.203.55:5060;branch=z9hG4bK52341ce9  
From: <sip:2030@172.18.203.55>;tag=b9c8b19b-c709-4d85-86d4-d2f557c6c2a6-30679738  
To: "2010" <sip:2010@172.18.203.55>;tag=00120193edac000676a04aaa-57c95afb  
Call-ID: 00120193-edac0004-5a755507-5106c97b@172.18.203.46  
CSeq: 101 BYE  
Server: Cisco-CP7960G/7.5  
Content-Length: 0

## 5. Transfer

### 5.1 Transfer Attended (All SIP Basic phones)

Title: Transfer Attended (All SIP Basic phones)

Description:

G calls H and then performs a consultative transfer to L.

Note a "SIP Basic" phone is a 7960 configured with a pre-SDGA image (POS3-07-5-00) to simulate a 3rd party phone. Finally, "Transfer Attended" is sometimes referred to as "Consultative Transfer".

Configuration:

Node = CCM, IP = 172.18.203.55

Phone = G, Line = 2010, IP = 172.18.203.46, Model = SIP Basic

Phone = H, Line = 2030, IP = 172.18.203.51, Model = SIP Basic

Phone = L, Line = 2040, IP = 172.18.203.52, Model = SIP Basic

Scenario:

2010 calls 2030

2030 is ringing

2030 answers

2010 presses Transfer softkey

2010 dials 2040

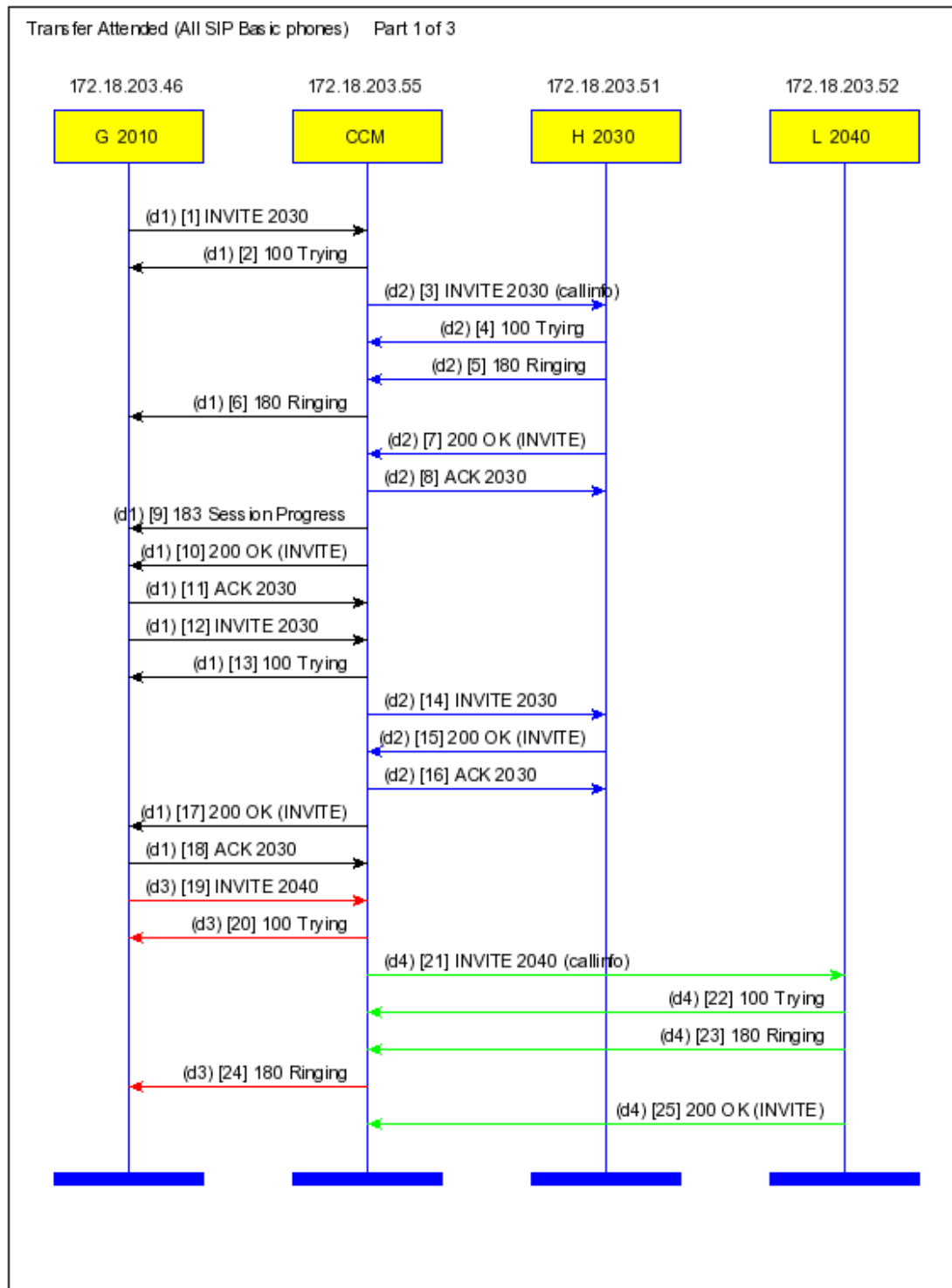
2040 is ringing

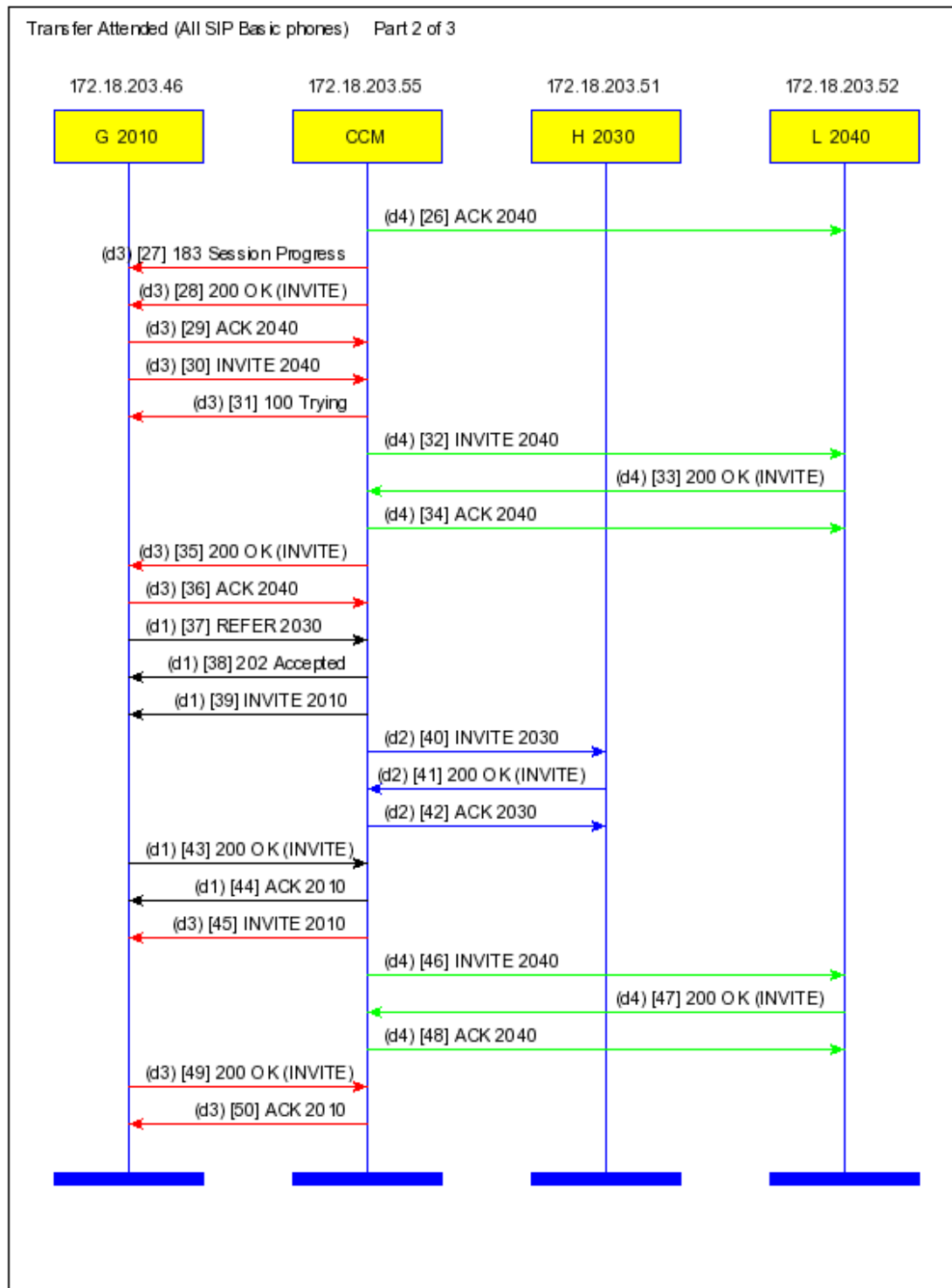
2040 answers

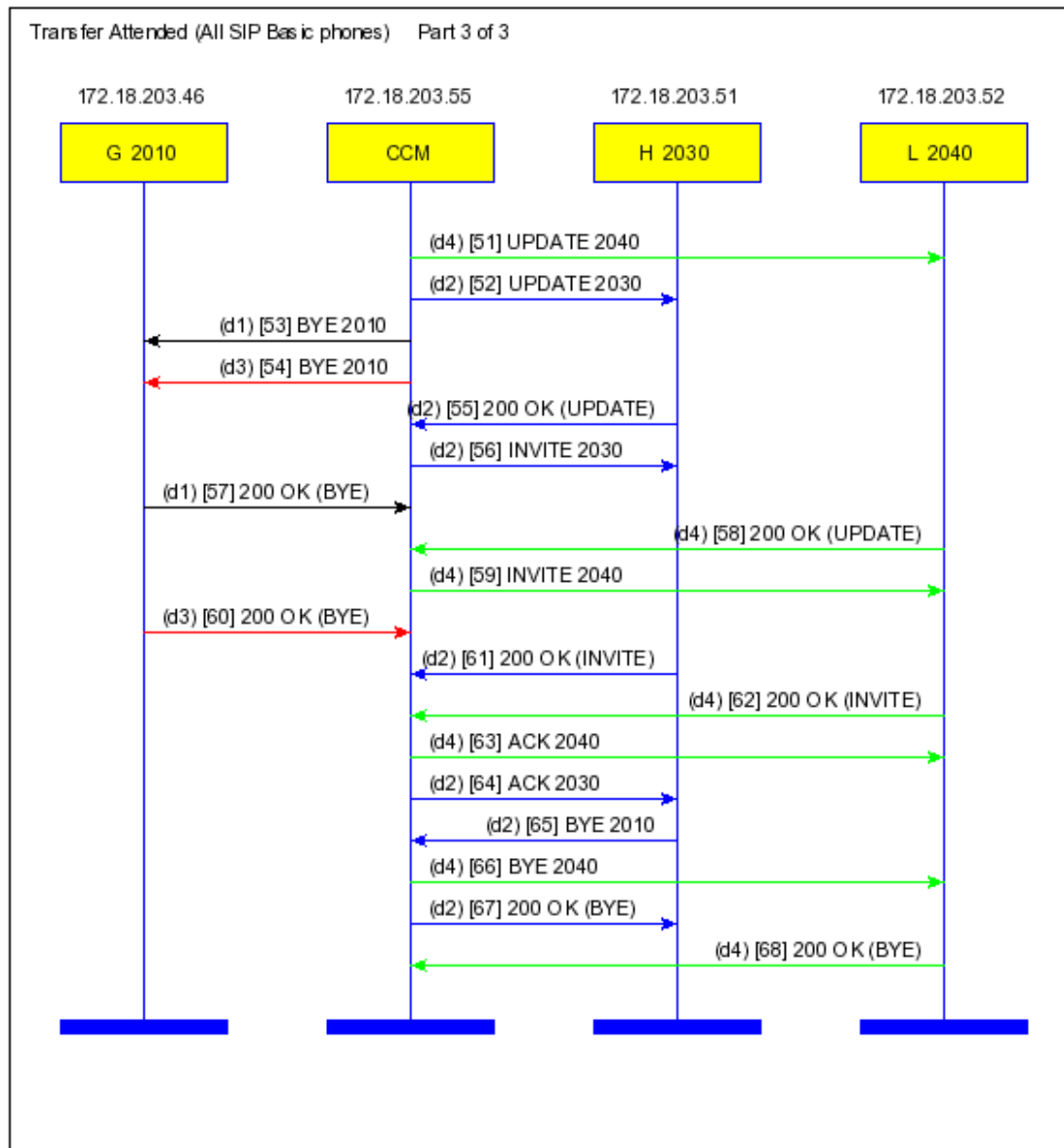
2010 presses Transfer softkey to complete the transfer

2030 and 2040 are connected

2030 goes onhook







[[diagram](#)]    Call-ID: [[prev](#)] [[next](#)]

[1] INVITE sip:2030@172.18.203.55 SIP/2.0

Via: SIP/2.0/UDP 172.18.203.46:5060;branch=z9hG4bK28c43b6a  
 From: "2010" <sip:2010@172.18.203.55>;tag=00120193edac001c0cb66c26-37f5504b  
 To: <sip:2030@172.18.203.55>  
 Call-ID: 00120193-edac000e-0a5fdd8b-057ad388@172.18.203.46  
 Max-Forwards: 70  
 CSeq: 101 INVITE  
 User-Agent: Cisco-CP7960G/7.5  
 Contact: <sip:2010@172.18.203.46:5060>  
 Expires: 180  
 Accept: application/sdp  
 Allow: ACK,BYE,CANCEL,INVITE,NOTIFY,OPTIONS,REFER,REGISTER,UPDATE  
 Remote-Party-ID: "2010" <sip:2010@172.18.203.46>;party=calling;id-type=subscriber;privacy=off;screen=yes  
 Supported: replaces  
 Content-Length: 256  
 Content-Type: application/sdp  
 Content-Disposition: session;handling=optional

v=0  
 o=Cisco-SIPUA 7082 0 IN IP4 172.18.203.46  
 s=SIP Call  
 t=0 0  
 m=audio 27164 RTP/AVP 0 8 18 101  
 c=IN IP4 172.18.203.46  
 a=rtpmap:0 PCMU/8000  
 a=rtpmap:8 PCMA/8000  
 a=rtpmap:18 G729/8000  
 a=rtpmap:101 telephone-event/8000  
 a=fmtp:101 0-15  
 a=sendrecv

[[diagram](#)]    Call-ID: [[prev](#)] [[next](#)]

[2] SIP/2.0 100 Trying

Via: SIP/2.0/UDP 172.18.203.46:5060;branch=z9hG4bK28c43b6a  
 From: "2010" <sip:2010@172.18.203.55>;tag=00120193edac001c0cb66c26-37f5504b  
 To: <sip:2030@172.18.203.55>  
 Date: Wed, 12 Jul 2006 19:26:52 GMT  
 Call-ID: 00120193-edac000e-0a5fdd8b-057ad388@172.18.203.46  
 CSeq: 101 INVITE  
 Allow-Events: presence  
 Content-Length: 0

[[diagram](#)]    Call-ID: [[prev](#)] [[next](#)]

[3] INVITE sip:2030@172.18.203.51:5060 SIP/2.0

Via: SIP/2.0/UDP 172.18.203.55:5060;branch=z9hG4bK2218253d  
 Remote-Party-ID: "SIP Line 2010" <sip:2010@172.18.203.55>;party=calling;screen=yes;privacy=off  
 From: "SIP Line 2010" <sip:2010@172.18.203.55>;tag=b9c8b19b-c709-4d85-86d4-d2f557c6c2a6-30679770  
 To: <sip:2030@172.18.203.51>  
 Date: Wed, 12 Jul 2006 19:26:52 GMT  
 Call-ID: 5dab6b80-4b514cfc-319-37cb12ac@172.18.203.55  
 Supported: timer,replaces  
 Min-SE: 1800  
 User-Agent: Cisco-CCM5.0  
 Allow: INVITE, OPTIONS, INFO, BYE, CANCEL, ACK, PRACK, UPDATE, REFER, SUBSCRIBE, NOTIFY  
 CSeq: 101 INVITE  
 Expires: 180  
 Allow-Events: presence  
 Call-Info: <urn:x-cisco-remotecc:callinfo>; security= NotAuthenticated; orientation= from; call-instance= 1  
 Alert-Info: <file://Bellcore-dr1/>  
 Contact: <sip:2030@172.18.203.55:5060>  
 Max-Forwards: 69  
 Content-Length: 0

[[diagram](#)]    Call-ID: [[prev](#)] [[next](#)]

[4] SIP/2.0 100 Trying

Via: SIP/2.0/UDP 172.18.203.55:5060;branch=z9hG4bK2218253d  
 From: "SIP Line 2010" <sip:2010@172.18.203.55>;tag=b9c8b19b-c709-4d85-86d4-d2f557c6c2a6-30679770  
 To: <sip:2030@172.18.203.51>  
 Call-ID: 5dab6b80-4b514cfc-319-37cb12ac@172.18.203.55  
 Date: Wed, 12 Jul 2006 19:26:52 GMT  
 CSeq: 101 INVITE  
 Server: Cisco-CP7960G/7.5  
 Contact: <sip:2030@172.18.203.51:5060>  
 Allow: ACK,BYE,CANCEL,INVITE,NOTIFY,OPTIONS,REFER,REGISTER,UPDATE  
 Remote-Party-ID: "2030" <sip:2030@172.18.203.51>;party=called;id-type=subscriber;privacy=off;screen=yes  
 Content-Length: 0

[[diagram](#)]    Call-ID: [[prev](#)] [[next](#)]

[5] SIP/2.0 180 Ringing

Via: SIP/2.0/UDP 172.18.203.55:5060;branch=z9hG4bK2218253d  
 From: "SIP Line 2010" <sip:2010@172.18.203.55>;tag=b9c8b19b-c709-4d85-86d4-d2f557c6c2a6-30679770  
 To: <sip:2030@172.18.203.51>;tag=000d280821a500954d7ada82-5da6b2c4  
 Call-ID: 5dab6b80-4b514cfc-319-37cb12ac@172.18.203.55  
 Date: Wed, 12 Jul 2006 19:26:52 GMT  
 CSeq: 101 INVITE  
 Server: Cisco-CP7960G/7.5  
 Contact: <sip:2030@172.18.203.51:5060>  
 Allow: ACK,BYE,CANCEL,INVITE,NOTIFY,OPTIONS,REFER,REGISTER,UPDATE  
 Remote-Party-ID: "2030" <sip:2030@172.18.203.51>;party=called;id-type=subscriber;privacy=off;screen=yes  
 Content-Length: 0

[\[diagram\]](#) Call-ID: [\[prev\]](#) [\[next\]](#)

#### [6] SIP/2.0 180 Ringing

Via: SIP/2.0/UDP 172.18.203.46:5060;branch=z9hG4bK28c43b6a  
 From: "2010" <sip:2010@172.18.203.55>;tag=00120193edac001c0cb66c26-37f5504b  
 To: <sip:2030@172.18.203.55>;tag=b9c8b19b-c709-4d85-86d4-d2f557c6c2a6-30679769  
 Date: Wed, 12 Jul 2006 19:26:52 GMT  
 Call-ID: 00120193-edac000e-0a5fdd8b-057ad388@172.18.203.46  
 CSeq: 101 INVITE  
 Allow: INVITE, OPTIONS, INFO, BYE, CANCEL, ACK, PRACK, UPDATE, REFER, SUBSCRIBE, NOTIFY  
 Allow-Events: presence  
 Remote-Party-ID: "SIP Alerting 2030" <sip:2030@172.18.203.55>;party=called;screen=yes;privacy=off  
 Contact: <sip:2030@172.18.203.55:5060>  
 Content-Length: 0

[\[diagram\]](#) Call-ID: [\[prev\]](#) [\[next\]](#)

#### [7] SIP/2.0 200 OK

Via: SIP/2.0/UDP 172.18.203.55:5060;branch=z9hG4bK2218253d  
 From: "SIP Line 2010" <sip:2010@172.18.203.55>;tag=b9c8b19b-c709-4d85-86d4-d2f557c6c2a6-30679770  
 To: <sip:2030@172.18.203.51>;tag=000d280821a500954d7ada82-5da6b2c4  
 Call-ID: 5dab6b80-4b514cfc-319-37cb12ac@172.18.203.55  
 Date: Wed, 12 Jul 2006 19:26:54 GMT  
 CSeq: 101 INVITE  
 Server: Cisco-CP7960G/7.5  
 Contact: <sip:2030@172.18.203.51:5060>  
 Allow: ACK,BYE,CANCEL,INVITE,NOTIFY,OPTIONS,REFER,REGISTER,UPDATE  
 Remote-Party-ID: "2030" <sip:2030@172.18.203.51>;party=called;id-type=subscriber;privacy=off;screen=yes  
 Supported: replaces  
 Content-Length: 257  
 Content-Type: application/sdp  
 Content-Disposition: session;handling=optional

```
v=0
o=Cisco-SIPUA 27869 0 IN IP4 172.18.203.51
s=SIP Call
t=0 0
m=audio 21826 RTP/AVP 0 8 18 101
c=IN IP4 172.18.203.51
a=rtpmap:0 PCMU/8000
a=rtpmap:8 PCMA/8000
a=rtpmap:18 G729/8000
a=rtpmap:101 telephone-event/8000
a=fmtp:101 0-15
a=sendrecv
```

[\[diagram\]](#) Call-ID: [\[prev\]](#) [\[next\]](#)

#### [8] ACK sip:2030@172.18.203.51:5060 SIP/2.0

Via: SIP/2.0/UDP 172.18.203.55:5060;branch=z9hG4bK769bbba3  
 From: "SIP Line 2010" <sip:2010@172.18.203.55>;tag=b9c8b19b-c709-4d85-86d4-d2f557c6c2a6-30679770  
 To: <sip:2030@172.18.203.51>;tag=000d280821a500954d7ada82-5da6b2c4  
 Date: Wed, 12 Jul 2006 19:26:52 GMT  
 Call-ID: 5dab6b80-4b514cfc-319-37cb12ac@172.18.203.55  
 Max-Forwards: 70  
 CSeq: 101 ACK  
 Allow-Events: presence  
 Content-Type: application/sdp  
 Content-Length: 214

```
v=0
o=CiscoSystemsCCM-SIP 2000 1 IN IP4 172.18.203.55
s=SIP Call
c=IN IP4 172.18.203.46
t=0 0
m=audio 27164 RTP/AVP 0 101
a=rtpmap:0 PCMU/8000
a=ptime:20
a=rtpmap:101 telephone-event/8000
a=fmtp:101 0-15
```

[\[diagram\]](#) Call-ID: [\[prev\]](#) [\[next\]](#)

**[9] SIP/2.0 183 Session Progress**

Via: SIP/2.0/UDP 172.18.203.46:5060;branch=z9hG4bK28c43b6a  
 From: "2010" <sip:2010@172.18.203.55>;tag=00120193edac001c0cb66c26-37f5504b  
 To: <sip:2030@172.18.203.55>;tag=b9c8b19b-c709-4d85-86d4-d2f557c6c2a6-30679769  
 Date: Wed, 12 Jul 2006 19:26:52 GMT  
 Call-ID: 00120193-edac000e-0a5fdd8b-057ad388@172.18.203.46  
 CSeq: 101 INVITE  
 Allow: INVITE, OPTIONS, INFO, BYE, CANCEL, ACK, PRACK, UPDATE, REFER, SUBSCRIBE, NOTIFY  
 Allow-Events: presence  
 Remote-Party-ID: "SIP Alerting 2030" <sip:2030@172.18.203.55>;party=called;screen=yes;privacy=off  
 Contact: <sip:2030@172.18.203.55:5060>  
 Content-Type: application/sdp  
 Content-Length: 214

v=0  
 o=CiscoSystemsCCM-SIP 2000 1 IN IP4 172.18.203.55  
 s=SIP Call  
 c=IN IP4 172.18.203.51  
 t=0 0  
 m=audio 21826 RTP/AVP 0 101  
 a=rtpmap:0 PCMU/8000  
 a=ptime:20  
 a=rtpmap:101 telephone-event/8000  
 a=fmtp:101 0-15

[\[diagram\]](#) Call-ID: [\[prev\]](#) [\[next\]](#)

**[10] SIP/2.0 200 OK**

Via: SIP/2.0/UDP 172.18.203.46:5060;branch=z9hG4bK28c43b6a  
 From: "2010" <sip:2010@172.18.203.55>;tag=00120193edac001c0cb66c26-37f5504b  
 To: <sip:2030@172.18.203.55>;tag=b9c8b19b-c709-4d85-86d4-d2f557c6c2a6-30679769  
 Date: Wed, 12 Jul 2006 19:26:52 GMT  
 Call-ID: 00120193-edac000e-0a5fdd8b-057ad388@172.18.203.46  
 CSeq: 101 INVITE  
 Allow: INVITE, OPTIONS, INFO, BYE, CANCEL, ACK, PRACK, UPDATE, REFER, SUBSCRIBE, NOTIFY  
 Allow-Events: presence  
 Remote-Party-ID: "SIP Line 2030" <sip:2030@172.18.203.55>;party=called;screen=yes;privacy=off  
 Contact: <sip:2030@172.18.203.55:5060>  
 Content-Type: application/sdp  
 Content-Length: 214

v=0  
 o=CiscoSystemsCCM-SIP 2000 1 IN IP4 172.18.203.55  
 s=SIP Call  
 c=IN IP4 172.18.203.51  
 t=0 0  
 m=audio 21826 RTP/AVP 0 101  
 a=rtpmap:0 PCMU/8000  
 a=ptime:20  
 a=rtpmap:101 telephone-event/8000  
 a=fmtp:101 0-15

[\[diagram\]](#) Call-ID: [\[prev\]](#) [\[next\]](#)

**[11] ACK sip:2030@172.18.203.55:5060 SIP/2.0**

Via: SIP/2.0/UDP 172.18.203.46:5060;branch=z9hG4bK09a3a569  
 From: "2010" <sip:2010@172.18.203.55>;tag=00120193edac001c0cb66c26-37f5504b  
 To: <sip:2030@172.18.203.55>;tag=b9c8b19b-c709-4d85-86d4-d2f557c6c2a6-30679769  
 Call-ID: 00120193-edac000e-0a5fdd8b-057ad388@172.18.203.46  
 Max-Forwards: 70  
 CSeq: 101 ACK  
 User-Agent: Cisco-CP7960G/7.5  
 Remote-Party-ID: "2010" <sip:2010@172.18.203.46>;party=calling;id-type=subscriber;privacy=off;screen=yes  
 Content-Length: 0

[\[diagram\]](#) Call-ID: [\[prev\]](#) [\[next\]](#)

**[12] INVITE sip:2030@172.18.203.55:5060 SIP/2.0**

Via: SIP/2.0/UDP 172.18.203.46:5060;branch=z9hG4bK455450f5  
 From: "2010" <sip:2010@172.18.203.55>;tag=00120193edac001c0cb66c26-37f5504b  
 To: <sip:2030@172.18.203.55>;tag=b9c8b19b-c709-4d85-86d4-d2f557c6c2a6-30679769  
 Call-ID: 00120193-edac000e-0a5fdd8b-057ad388@172.18.203.46  
 Max-Forwards: 70  
 CSeq: 102 INVITE  
 User-Agent: Cisco-CP7960G/7.5  
 Contact: <sip:2010@172.18.203.46:5060>  
 Remote-Party-ID: "2010" <sip:2010@172.18.203.46>;party=calling;id-type=subscriber;privacy=off;screen=yes  
 Content-Length: 256  
 Content-Type: application/sdp  
 Content-Disposition: session;handling=optional

v=0

```

o=Cisco-SIPUA 7082 1 IN IP4 172.18.203.46
s=SIP Call
t=0 0
m=audio 27164 RTP/AVP 0 8 18 101
c=IN IP4 172.18.203.46
a=rtpmap:0 PCMU/8000
a=rtpmap:8 PCMA/8000
a=rtpmap:18 G729/8000
a=rtpmap:101 telephone-event/8000
a=fmtp:101 0-15
a=sendonly

```

[\[diagram\]](#) Call-ID: [\[prev\]](#) [\[next\]](#)

### [13] SIP/2.0 100 Trying

```

Via: SIP/2.0/UDP 172.18.203.46:5060;branch=z9hG4bK455450f5
From: "2010" <sip:2010@172.18.203.55>;tag=00120193edac001c0cb66c26-37f5504b
To: <sip:2030@172.18.203.55>;tag=b9c8b19b-c709-4d85-86d4-d2f557c6c2a6-30679769
Date: Wed, 12 Jul 2006 19:26:57 GMT
Call-ID: 00120193-edac000e-0a5fdd8b-057ad388@172.18.203.46
CSeq: 102 INVITE
Allow-Events: presence
Content-Length: 0

```

[\[diagram\]](#) Call-ID: [\[prev\]](#) [\[next\]](#)

### [14] INVITE sip:2030@172.18.203.51:5060 SIP/2.0

```

Via: SIP/2.0/UDP 172.18.203.55:5060;branch=z9hG4bK494dbdf
Remote-Party-ID: "SIP Line 2010" <sip:2010@172.18.203.55>;party=calling;screen=yes;privacy=off
From: "SIP Line 2010" <sip:2010@172.18.203.55>;tag=b9c8b19b-c709-4d85-86d4-d2f557c6c2a6-30679770
To: <sip:2030@172.18.203.51>;tag=000d280821a500954d7ada82-5da6b2c4
Date: Wed, 12 Jul 2006 19:26:57 GMT
Call-ID: 5dab6b80-4b514cfc-319-37cb12ac@172.18.203.55
Supported: timer,replaces
Min-SE: 1800
User-Agent: Cisco-CCM5.0
Allow: INVITE, OPTIONS, INFO, BYE, CANCEL, ACK, PRACK, UPDATE, REFER, SUBSCRIBE, NOTIFY
CSeq: 102 INVITE
Max-Forwards: 70
Contact: <sip:2010@172.18.203.55:5060>
Expires: 180
Allow-Events: presence
Content-Type: application/sdp
Content-Length: 300

```

```

v=0
o=CiscoSystemsCCM-SIP 2000 2 IN IP4 172.18.203.55
s=SIP Call
c=IN IP4 172.18.203.46
t=0 0
m=audio 27164 RTP/AVP 0 8 18 101
a=rtpmap:0 PCMU/8000
a=ptime:20
a=rtpmap:8 PCMA/8000
a=ptime:20
a=rtpmap:18 G729/8000
a=ptime:20
a=sendonly
a=rtpmap:101 telephone-event/8000
a=fmtp:101 0-15

```

[\[diagram\]](#) Call-ID: [\[prev\]](#) [\[next\]](#)

### [15] SIP/2.0 200 OK

```

Via: SIP/2.0/UDP 172.18.203.55:5060;branch=z9hG4bK494dbdf
From: "SIP Line 2010" <sip:2010@172.18.203.55>;tag=b9c8b19b-c709-4d85-86d4-d2f557c6c2a6-30679770
To: <sip:2030@172.18.203.51>;tag=000d280821a500954d7ada82-5da6b2c4
Call-ID: 5dab6b80-4b514cfc-319-37cb12ac@172.18.203.55
Date: Wed, 12 Jul 2006 19:26:57 GMT
CSeq: 102 INVITE
Server: Cisco-CP7960G/7.5
Contact: <sip:2030@172.18.203.51:5060>
Allow: ACK,BYE,CANCEL,INVITE,NOTIFY,OPTIONS,REFER,REGISTER,UPDATE
Remote-Party-ID: "2030" <sip:2030@172.18.203.51>;party=called;id-type=subscriber;privacy=off;screen=yes
Supported: replaces
Content-Length: 207
Content-Type: application/sdp
Content-Disposition: session;handling=optional

```

```

v=0
o=Cisco-SIPUA 27869 1 IN IP4 172.18.203.51
s=SIP Call
t=0 0

```

```
m=audio 21826 RTP/AVP 0 101
c=IN IP4 172.18.203.51
a=rtpmap:0 PCMU/8000
a=rtpmap:101 telephone-event/8000
a=fmtp:101 0-15
a=recvonly
```

[[diagram](#)] Call-ID: [[prev](#)] [[next](#)]

[16] ACK sip:2030@172.18.203.51:5060 SIP/2.0

```
Via: SIP/2.0/UDP 172.18.203.55:5060;branch=z9hG4bK1d727c92
From: "SIP Line 2010" <sip:2010@172.18.203.55>;tag=b9c8b19b-c709-4d85-86d4-d2f557c6c2a6-30679770
To: <sip:2030@172.18.203.51>;tag=000d280821a500954d7ada82-5da6b2c4
Date: Wed, 12 Jul 2006 19:26:57 GMT
Call-ID: 5dab6b80-4b514cfc-319-37cb12ac@172.18.203.55
Max-Forwards: 70
CSeq: 102 ACK
Allow-Events: presence
Content-Length: 0
```

[[diagram](#)] Call-ID: [[prev](#)] [[next](#)]

[17] SIP/2.0 200 OK

```
Via: SIP/2.0/UDP 172.18.203.46:5060;branch=z9hG4bK455450f5
From: "2010" <sip:2010@172.18.203.55>;tag=00120193edac001c0cb66c26-37f5504b
To: <sip:2030@172.18.203.55>;tag=b9c8b19b-c709-4d85-86d4-d2f557c6c2a6-30679769
Date: Wed, 12 Jul 2006 19:26:57 GMT
Call-ID: 00120193-edac000e-0a5fdd8b-057ad388@172.18.203.46
CSeq: 102 INVITE
Allow: INVITE, OPTIONS, INFO, BYE, CANCEL, ACK, PRACK, UPDATE, REFER, SUBSCRIBE, NOTIFY
Allow-Events: presence
Remote-Party-ID: "SIP Line 2030" <sip:2030@172.18.203.55>;party=called;screen=yes;privacy=off
Contact: <sip:2030@172.18.203.55:5060>
Content-Type: application/sdp
Content-Length: 226
```

```
v=0
o=CiscoSystemsCCM-SIP 2000 2 IN IP4 172.18.203.55
s=SIP Call
c=IN IP4 172.18.203.51
t=0 0
m=audio 21826 RTP/AVP 0 101
a=rtpmap:0 PCMU/8000
a=ptime:20
a=recvonly
a=rtpmap:101 telephone-event/8000
a=fmtp:101 0-15
```

[[diagram](#)] Call-ID: [[prev](#)] [[next](#)]

[18] ACK sip:2030@172.18.203.55:5060 SIP/2.0

```
Via: SIP/2.0/UDP 172.18.203.46:5060;branch=z9hG4bK12a6f5d0
From: "2010" <sip:2010@172.18.203.55>;tag=00120193edac001c0cb66c26-37f5504b
To: <sip:2030@172.18.203.55>;tag=b9c8b19b-c709-4d85-86d4-d2f557c6c2a6-30679769
Call-ID: 00120193-edac000e-0a5fdd8b-057ad388@172.18.203.46
Max-Forwards: 70
CSeq: 102 ACK
User-Agent: Cisco-CP7960G/7.5
Remote-Party-ID: "2010" <sip:2010@172.18.203.46>;party=calling;id-type=subscriber;privacy=off;screen=yes
Content-Length: 0
```

[[diagram](#)] Call-ID: [[prev](#)] [[next](#)]

[19] INVITE sip:2040@172.18.203.55 SIP/2.0

```
Via: SIP/2.0/UDP 172.18.203.46:5060;branch=z9hG4bK75e53849
From: "2010" <sip:2010@172.18.203.55>;tag=00120193edac001d3b323aee-1e019536
To: <sip:2040@172.18.203.55>
Call-ID: 00120193-edac000f-60d53fd8-023564eb@172.18.203.46
Max-Forwards: 70
CSeq: 101 INVITE
User-Agent: Cisco-CP7960G/7.5
Contact: <sip:2010@172.18.203.46:5060>
Expires: 180
Accept: application/sdp
Allow: ACK,BYE,CANCEL,INVITE,NOTIFY,OPTIONS,REFER,REGISTER,UPDATE
Remote-Party-ID: "2010" <sip:2010@172.18.203.46>;party=calling;id-type=subscriber;privacy=off;screen=yes
Supported: replaces
Content-Length: 257
Content-Type: application/sdp
Content-Disposition: session;handling=optional
```

```
v=0
o=Cisco-SIPUA 10843 0 IN IP4 172.18.203.46
s=SIP Call
```

```
t=0 0
m=audio 27168 RTP/AVP 0 8 18 101
c=IN IP4 172.18.203.46
a=rtpmap:0 PCMU/8000
a=rtpmap:8 PCMA/8000
a=rtpmap:18 G729/8000
a=rtpmap:101 telephone-event/8000
a=fmtp:101 0-15
a=sendrecv
```

[\[diagram\]](#) Call-ID: [\[prev\]](#) [\[next\]](#)

#### [20] SIP/2.0 100 Trying

```
Via: SIP/2.0/UDP 172.18.203.46:5060;branch=z9hG4bK75e53849
From: "2010" <sip:2010@172.18.203.55>;tag=00120193edac001d3b323aee-1e019536
To: <sip:2040@172.18.203.55>
Date: Wed, 12 Jul 2006 19:26:59 GMT
Call-ID: 00120193-edac000f-60d53fd8-023564eb@172.18.203.46
CSeq: 101 INVITE
Allow-Events: presence
Content-Length: 0
```

[\[diagram\]](#) Call-ID: [\[prev\]](#) [\[next\]](#)

#### [21] INVITE sip:2040@172.18.203.52:5060 SIP/2.0

```
Via: SIP/2.0/UDP 172.18.203.55:5060;branch=z9hG4bK76f53690
Remote-Party-ID: "SIP Line 2010" <sip:2010@172.18.203.55>;party=calling;screen=yes;privacy=off
From: "SIP Line 2010" <sip:2010@172.18.203.55>;tag=b9c8b19b-c709-4d85-86d4-d2f557c6c2a6-30679772
To: <sip:2040@172.18.203.52>
Date: Wed, 12 Jul 2006 19:26:59 GMT
Call-ID: 61d78900-4b514d03-31b-37cb12ac@172.18.203.55
Supported: timer,replaces
Min-SE: 1800
User-Agent: Cisco-CCM5.0
Allow: INVITE, OPTIONS, INFO, BYE, CANCEL, ACK, PRACK, UPDATE, REFER, SUBSCRIBE, NOTIFY
CSeq: 101 INVITE
Expires: 180
Allow-Events: presence
Call-Info: <urn:x-cisco-remotecc:callinfo>; security= NotAuthenticated; orientation= from; call-instance= 1
Alert-Info: <file://Bellcore-dr1/>
Contact: <sip:2040@172.18.203.55:5060>
Max-Forwards: 69
Content-Length: 0
```

[\[diagram\]](#) Call-ID: [\[prev\]](#) [\[next\]](#)

#### [22] SIP/2.0 100 Trying

```
Via: SIP/2.0/UDP 172.18.203.55:5060;branch=z9hG4bK76f53690
From: "SIP Line 2010" <sip:2010@172.18.203.55>;tag=b9c8b19b-c709-4d85-86d4-d2f557c6c2a6-30679772
To: <sip:2040@172.18.203.52>
Call-ID: 61d78900-4b514d03-31b-37cb12ac@172.18.203.55
CSeq: 101 INVITE
Server: Cisco-CP7960G/7.5
Contact: <sip:2040@172.18.203.52:5060>
Allow: ACK, BYE, CANCEL, INVITE, NOTIFY, OPTIONS, REFER, REGISTER, UPDATE
Remote-Party-ID: "2040" <sip:2040@172.18.203.52>;party=called;id-type=subscriber;privacy=off;screen=yes
Content-Length: 0
```

[\[diagram\]](#) Call-ID: [\[prev\]](#) [\[next\]](#)

#### [23] SIP/2.0 180 Ringing

```
Via: SIP/2.0/UDP 172.18.203.55:5060;branch=z9hG4bK76f53690
From: "SIP Line 2010" <sip:2010@172.18.203.55>;tag=b9c8b19b-c709-4d85-86d4-d2f557c6c2a6-30679772
To: <sip:2040@172.18.203.52>;tag=003094c3cd3a00185faafe18-79b7ddc8
Call-ID: 61d78900-4b514d03-31b-37cb12ac@172.18.203.55
CSeq: 101 INVITE
Server: Cisco-CP7960G/7.5
Contact: <sip:2040@172.18.203.52:5060>
Allow: ACK, BYE, CANCEL, INVITE, NOTIFY, OPTIONS, REFER, REGISTER, UPDATE
Remote-Party-ID: "2040" <sip:2040@172.18.203.52>;party=called;id-type=subscriber;privacy=off;screen=yes
Content-Length: 0
```

[\[diagram\]](#) Call-ID: [\[prev\]](#) [\[next\]](#)

#### [24] SIP/2.0 180 Ringing

```
Via: SIP/2.0/UDP 172.18.203.46:5060;branch=z9hG4bK75e53849
From: "2010" <sip:2010@172.18.203.55>;tag=00120193edac001d3b323aee-1e019536
To: <sip:2040@172.18.203.55>;tag=b9c8b19b-c709-4d85-86d4-d2f557c6c2a6-30679771
Date: Wed, 12 Jul 2006 19:26:59 GMT
Call-ID: 00120193-edac000f-60d53fd8-023564eb@172.18.203.46
CSeq: 101 INVITE
Allow: INVITE, OPTIONS, INFO, BYE, CANCEL, ACK, PRACK, UPDATE, REFER, SUBSCRIBE, NOTIFY
Allow-Events: presence
Remote-Party-ID: "SIP Alerting 2040" <sip:2040@172.18.203.55>;party=called;screen=yes;privacy=off
Contact: <sip:2040@172.18.203.55:5060>
```

Content-Length: 0

[\[diagram\]](#) Call-ID: [\[prev\]](#) [\[next\]](#)

**[25] SIP/2.0 200 OK**

Via: SIP/2.0/UDP 172.18.203.55:5060;branch=z9hG4bK76f53690  
 From: "SIP Line 2010" <sip:2010@172.18.203.55>;tag=b9c8b19b-c709-4d85-86d4-d2f557c6c2a6-30679772  
 To: <sip:2040@172.18.203.52>;tag=003094c3cd3a00185faafe18-79b7ddc8  
 Call-ID: 61d78900-4b514d03-31b-37cb12ac@172.18.203.55  
 CSeq: 101 INVITE  
 Server: Cisco-CP7960G/7.5  
 Contact: <sip:2040@172.18.203.52:5060>  
 Allow: ACK,BYE,CANCEL,INVITE,NOTIFY,OPTIONS,REFER,REGISTER,UPDATE  
 Remote-Party-ID: "2040" <sip:2040@172.18.203.52>;party=called;id-type=subscriber;privacy=off;screen=yes  
 Supported: replaces  
 Content-Length: 255  
 Content-Type: application/sdp  
 Content-Disposition: session;handling=optional

v=0  
 o=Cisco-SIPUA 356 0 IN IP4 172.18.203.52  
 s=SIP Call  
 t=0 0  
 m=audio 16434 RTP/AVP 0 8 18 101  
 c=IN IP4 172.18.203.52  
 a=rtpmap:0 PCMU/8000  
 a=rtpmap:8 PCMA/8000  
 a=rtpmap:18 G729/8000  
 a=rtpmap:101 telephone-event/8000  
 a=fmtp:101 0-15  
 a=sendrecv

[\[diagram\]](#) Call-ID: [\[prev\]](#) [\[next\]](#)

**[26] ACK sip:2040@172.18.203.52:5060 SIP/2.0**

Via: SIP/2.0/UDP 172.18.203.55:5060;branch=z9hG4bK5839864d  
 From: "SIP Line 2010" <sip:2010@172.18.203.55>;tag=b9c8b19b-c709-4d85-86d4-d2f557c6c2a6-30679772  
 To: <sip:2040@172.18.203.52>;tag=003094c3cd3a00185faafe18-79b7ddc8  
 Date: Wed, 12 Jul 2006 19:26:59 GMT  
 Call-ID: 61d78900-4b514d03-31b-37cb12ac@172.18.203.55  
 Max-Forwards: 70  
 CSeq: 101 ACK  
 Allow-Events: presence  
 Content-Type: application/sdp  
 Content-Length: 214

v=0  
 o=CiscoSystemsCCM-SIP 2000 1 IN IP4 172.18.203.55  
 s=SIP Call  
 c=IN IP4 172.18.203.46  
 t=0 0  
 m=audio 27168 RTP/AVP 0 101  
 a=rtpmap:0 PCMU/8000  
 a=ptime:20  
 a=rtpmap:101 telephone-event/8000  
 a=fmtp:101 0-15

[\[diagram\]](#) Call-ID: [\[prev\]](#) [\[next\]](#)

**[27] SIP/2.0 183 Session Progress**

Via: SIP/2.0/UDP 172.18.203.46:5060;branch=z9hG4bK75e53849  
 From: "2010" <sip:2010@172.18.203.55>;tag=00120193edac001d3b323aee-1e019536  
 To: <sip:2040@172.18.203.55>;tag=b9c8b19b-c709-4d85-86d4-d2f557c6c2a6-30679771  
 Date: Wed, 12 Jul 2006 19:26:59 GMT  
 Call-ID: 00120193-edac000f-60d53fd8-023564eb@172.18.203.46  
 CSeq: 101 INVITE  
 Allow: INVITE, OPTIONS, INFO, BYE, CANCEL, ACK, PRACK, UPDATE, REFER, SUBSCRIBE, NOTIFY  
 Allow-Events: presence  
 Remote-Party-ID: "SIP Alerting 2040" <sip:2040@172.18.203.55>;party=called;screen=yes;privacy=off  
 Contact: <sip:2040@172.18.203.55:5060>  
 Content-Type: application/sdp  
 Content-Length: 214

v=0  
 o=CiscoSystemsCCM-SIP 2000 1 IN IP4 172.18.203.55  
 s=SIP Call  
 c=IN IP4 172.18.203.52  
 t=0 0  
 m=audio 16434 RTP/AVP 0 101  
 a=rtpmap:0 PCMU/8000  
 a=ptime:20  
 a=rtpmap:101 telephone-event/8000  
 a=fmtp:101 0-15

[[diagram](#)] Call-ID: [[prev](#)] [[next](#)]

[28] SIP/2.0 200 OK

Via: SIP/2.0/UDP 172.18.203.46:5060;branch=z9hG4bK75e53849  
 From: "2010" <sip:2010@172.18.203.55>;tag=00120193edac001d3b323aee-1e019536  
 To: <sip:2040@172.18.203.55>;tag=b9c8b19b-c709-4d85-86d4-d2f557c6c2a6-30679771  
 Date: Wed, 12 Jul 2006 19:26:59 GMT  
 Call-ID: 00120193-edac000f-60d53fd8-023564eb@172.18.203.46  
 CSeq: 101 INVITE  
 Allow: INVITE, OPTIONS, INFO, BYE, CANCEL, ACK, PRACK, UPDATE, REFER, SUBSCRIBE, NOTIFY  
 Allow-Events: presence  
 Remote-Party-ID: "SIP Line 2040" <sip:2040@172.18.203.55>;party=called;screen=yes;privacy=off  
 Contact: <sip:2040@172.18.203.55:5060>  
 Content-Type: application/sdp  
 Content-Length: 214

v=0  
 o=CiscoSystemsCCM-SIP 2000 1 IN IP4 172.18.203.55  
 s=SIP Call  
 c=IN IP4 172.18.203.52  
 t=0 0  
 m=audio 16434 RTP/AVP 0 101  
 a=rtpmap:0 PCMU/8000  
 a=ptime:20  
 a=rtpmap:101 telephone-event/8000  
 a=fmtp:101 0-15

[[diagram](#)] Call-ID: [[prev](#)] [[next](#)]

[29] ACK sip:2040@172.18.203.55:5060 SIP/2.0

Via: SIP/2.0/UDP 172.18.203.46:5060;branch=z9hG4bK558a47f6  
 From: "2010" <sip:2010@172.18.203.55>;tag=00120193edac001d3b323aee-1e019536  
 To: <sip:2040@172.18.203.55>;tag=b9c8b19b-c709-4d85-86d4-d2f557c6c2a6-30679771  
 Call-ID: 00120193-edac000f-60d53fd8-023564eb@172.18.203.46  
 Max-Forwards: 70  
 CSeq: 101 ACK  
 User-Agent: Cisco-CP7960G/7.5  
 Remote-Party-ID: "2010" <sip:2010@172.18.203.46>;party=calling;id-type=subscriber;privacy=off;screen=yes  
 Content-Length: 0

[[diagram](#)] Call-ID: [[prev](#)] [[next](#)]

[30] INVITE sip:2040@172.18.203.55:5060 SIP/2.0

Via: SIP/2.0/UDP 172.18.203.46:5060;branch=z9hG4bK18a41ff9  
 From: "2010" <sip:2010@172.18.203.55>;tag=00120193edac001d3b323aee-1e019536  
 To: <sip:2040@172.18.203.55>;tag=b9c8b19b-c709-4d85-86d4-d2f557c6c2a6-30679771  
 Call-ID: 00120193-edac000f-60d53fd8-023564eb@172.18.203.46  
 Max-Forwards: 70  
 CSeq: 102 INVITE  
 User-Agent: Cisco-CP7960G/7.5  
 Contact: <sip:2010@172.18.203.46:5060>  
 Remote-Party-ID: "2010" <sip:2010@172.18.203.46>;party=calling;id-type=subscriber;privacy=off;screen=yes  
 Content-Length: 257  
 Content-Type: application/sdp  
 Content-Disposition: session;handling=optional

v=0  
 o=Cisco-SIPUA 10843 1 IN IP4 172.18.203.46  
 s=SIP Call  
 t=0 0  
 m=audio 27168 RTP/AVP 0 8 18 101  
 c=IN IP4 172.18.203.46  
 a=rtpmap:0 PCMU/8000  
 a=rtpmap:8 PCMA/8000  
 a=rtpmap:18 G729/8000  
 a=rtpmap:101 telephone-event/8000  
 a=fmtp:101 0-15  
 a=sendonly

[[diagram](#)] Call-ID: [[prev](#)] [[next](#)]

[31] SIP/2.0 100 Trying

Via: SIP/2.0/UDP 172.18.203.46:5060;branch=z9hG4bK18a41ff9  
 From: "2010" <sip:2010@172.18.203.55>;tag=00120193edac001d3b323aee-1e019536  
 To: <sip:2040@172.18.203.55>;tag=b9c8b19b-c709-4d85-86d4-d2f557c6c2a6-30679771  
 Date: Wed, 12 Jul 2006 19:27:04 GMT  
 Call-ID: 00120193-edac000f-60d53fd8-023564eb@172.18.203.46  
 CSeq: 102 INVITE  
 Allow-Events: presence  
 Content-Length: 0

[[diagram](#)] Call-ID: [[prev](#)] [[next](#)]

[32] INVITE sip:2040@172.18.203.52:5060 SIP/2.0

```
Via: SIP/2.0/UDP 172.18.203.55:5060;branch=z9hG4bK3200f264
Remote-Party-ID: "SIP Line 2010" <sip:2010@172.18.203.55>;party=calling;screen=yes;privacy=off
From: "SIP Line 2010" <sip:2010@172.18.203.55>;tag=b9c8b19b-c709-4d85-86d4-d2f557c6c2a6-30679772
To: <sip:2040@172.18.203.52>;tag=003094c3cd3a00185faafe18-79b7ddc8
Date: Wed, 12 Jul 2006 19:27:04 GMT
Call-ID: 61d78900-4b514d03-31b-37cb12ac@172.18.203.55
Supported: timer,replaces
Min-SE: 1800
User-Agent: Cisco-CCM5.0
Allow: INVITE, OPTIONS, INFO, BYE, CANCEL, ACK, PRACK, UPDATE, REFER, SUBSCRIBE, NOTIFY
CSeq: 102 INVITE
Max-Forwards: 70
Contact: <sip:2010@172.18.203.55:5060>
Expires: 180
Allow-Events: presence
Content-Type: application/sdp
Content-Length: 300
```

```
v=0
o=CiscoSystemsCCM-SIP 2000 2 IN IP4 172.18.203.55
s=SIP Call
c=IN IP4 172.18.203.46
t=0 0
m=audio 27168 RTP/AVP 0 8 18 101
a=rtpmap:0 PCMU/8000
a=ptime:20
a=rtpmap:8 PCMA/8000
a=ptime:20
a=rtpmap:18 G729/8000
a=ptime:20
a=sendonly
a=rtpmap:101 telephone-event/8000
a=fmtp:101 0-15
```

[\[diagram\]](#) Call-ID: [\[prev\]](#) [\[next\]](#)

### [33] SIP/2.0 200 OK

```
Via: SIP/2.0/UDP 172.18.203.55:5060;branch=z9hG4bK3200f264
From: "SIP Line 2010" <sip:2010@172.18.203.55>;tag=b9c8b19b-c709-4d85-86d4-d2f557c6c2a6-30679772
To: <sip:2040@172.18.203.52>;tag=003094c3cd3a00185faafe18-79b7ddc8
Call-ID: 61d78900-4b514d03-31b-37cb12ac@172.18.203.55
CSeq: 102 INVITE
Server: Cisco-CP7960G/7.5
Contact: <sip:2040@172.18.203.52:5060>
Allow: ACK,BYE,CANCEL,INVITE,NOTIFY,OPTIONS,REFER,REGISTER,UPDATE
Remote-Party-ID: "2040" <sip:2040@172.18.203.52>;party=called;id-type=subscriber;privacy=off;screen=yes
Supported: replaces
Content-Length: 205
Content-Type: application/sdp
Content-Disposition: session;handling=optional
```

```
v=0
o=Cisco-SIPUA 356 1 IN IP4 172.18.203.52
s=SIP Call
t=0 0
m=audio 16434 RTP/AVP 0 101
c=IN IP4 172.18.203.52
a=rtpmap:0 PCMU/8000
a=rtpmap:101 telephone-event/8000
a=fmtp:101 0-15
a=recvonly
```

[\[diagram\]](#) Call-ID: [\[prev\]](#) [\[next\]](#)

### [34] ACK sip:2040@172.18.203.52:5060 SIP/2.0

```
Via: SIP/2.0/UDP 172.18.203.55:5060;branch=z9hG4bK61607e76
From: "SIP Line 2010" <sip:2010@172.18.203.55>;tag=b9c8b19b-c709-4d85-86d4-d2f557c6c2a6-30679772
To: <sip:2040@172.18.203.52>;tag=003094c3cd3a00185faafe18-79b7ddc8
Date: Wed, 12 Jul 2006 19:27:04 GMT
Call-ID: 61d78900-4b514d03-31b-37cb12ac@172.18.203.55
Max-Forwards: 70
CSeq: 102 ACK
Allow-Events: presence
Content-Length: 0
```

[\[diagram\]](#) Call-ID: [\[prev\]](#) [\[next\]](#)

### [35] SIP/2.0 200 OK

```
Via: SIP/2.0/UDP 172.18.203.46:5060;branch=z9hG4bK18a41ff9
From: "2010" <sip:2010@172.18.203.55>;tag=00120193edac001d3b323aee-1e019536
To: <sip:2040@172.18.203.55>;tag=b9c8b19b-c709-4d85-86d4-d2f557c6c2a6-30679771
Date: Wed, 12 Jul 2006 19:27:04 GMT
Call-ID: 00120193-edac000f-60d53fd8-023564eb@172.18.203.46
```

```
CSeq: 102 INVITE
Allow: INVITE, OPTIONS, INFO, BYE, CANCEL, ACK, PRACK, UPDATE, REFER, SUBSCRIBE, NOTIFY
Allow-Events: presence
Remote-Party-ID: "SIP Line 2040" <sip:2040@172.18.203.55>;party=called;screen=yes;privacy=off
Contact: <sip:2040@172.18.203.55:5060>
Content-Type: application/sdp
Content-Length: 226
```

```
v=0
o=CiscoSystemsCCM-SIP 2000 2 IN IP4 172.18.203.55
s=SIP Call
c=IN IP4 172.18.203.52
t=0 0
m=audio 16434 RTP/AVP 0 101
a=rtpmap:0 PCMU/8000
a=ptime:20
a=recvnonly
a=rtpmap:101 telephone-event/8000
a=fmtp:101 0-15
```

[\[diagram\]](#) Call-ID: [\[prev\]](#) [\[next\]](#)

**[36] ACK sip:2040@172.18.203.55:5060 SIP/2.0**

```
Via: SIP/2.0/UDP 172.18.203.46:5060;branch=z9hG4bK0d03c310
From: "2010" <sip:2010@172.18.203.55>;tag=00120193edac001d3b323aee-1e019536
To: <sip:2040@172.18.203.55>;tag=b9c8b19b-c709-4d85-86d4-d2f557c6c2a6-30679771
Call-ID: 00120193-edac000f-60d53fd8-023564eb@172.18.203.46
Max-Forwards: 70
CSeq: 102 ACK
User-Agent: Cisco-CP7960G/7.5
Remote-Party-ID: "2010" <sip:2010@172.18.203.46>;party=calling;id-type=subscriber;privacy=off;screen=yes
Content-Length: 0
```

[\[diagram\]](#) Call-ID: [\[prev\]](#) [\[next\]](#)

**[37] REFER sip:2030@172.18.203.55:5060 SIP/2.0**

```
Via: SIP/2.0/UDP 172.18.203.46:5060;branch=z9hG4bK4d761462
From: "2010" <sip:2010@172.18.203.55>;tag=00120193edac001c0cb66c26-37f5504b
To: <sip:2030@172.18.203.55>;tag=b9c8b19b-c709-4d85-86d4-d2f557c6c2a6-30679769
Call-ID: 00120193-edac000e-0a5fdd8b-057ad388@172.18.203.46
Max-Forwards: 70
CSeq: 103 REFER
User-Agent: Cisco-CP7960G/7.5
Contact: <sip:2010@172.18.203.46:5060>
Remote-Party-ID: "2010" <sip:2010@172.18.203.46>;party=calling;id-type=subscriber;privacy=off;screen=yes
Content-Length: 0
Refer-To: <sip:2040@172.18.203.55?Replaces=00120193-edac000f-60d53fd8-023564eb%40172.18.203.46%3Bto-
tag%3Db9c8b19b-c709-4d85-86d4-d2f557c6c2a6-30679771%3Bfrom-tag%3D00120193edac001d3b323aee-1e019536>
Referred-By: "2010" <sip:2010@172.18.203.55>
```

[\[diagram\]](#) Call-ID: [\[prev\]](#) [\[next\]](#)

**[38] SIP/2.0 202 Accepted**

```
Via: SIP/2.0/UDP 172.18.203.46:5060;branch=z9hG4bK4d761462
From: "2010" <sip:2010@172.18.203.55>;tag=00120193edac001c0cb66c26-37f5504b
To: <sip:2030@172.18.203.55>;tag=b9c8b19b-c709-4d85-86d4-d2f557c6c2a6-30679769
Date: Wed, 12 Jul 2006 19:27:04 GMT
Call-ID: 00120193-edac000e-0a5fdd8b-057ad388@172.18.203.46
CSeq: 103 REFER
Content-Length: 0
Contact: <sip:2030@172.18.203.55:5060>
```

[\[diagram\]](#) Call-ID: [\[prev\]](#) [\[next\]](#)

**[39] INVITE sip:2010@172.18.203.46:5060 SIP/2.0**

```
Via: SIP/2.0/UDP 172.18.203.55:5060;branch=z9hG4bK6bc7b34c
Remote-Party-ID: "SIP Line 2030" <sip:2030@172.18.203.55>;party=calling;screen=yes;privacy=off
From: <sip:2030@172.18.203.55>;tag=b9c8b19b-c709-4d85-86d4-d2f557c6c2a6-30679769
To: "2010" <sip:2010@172.18.203.55>;tag=00120193edac001c0cb66c26-37f5504b
Date: Wed, 12 Jul 2006 19:27:04 GMT
Call-ID: 00120193-edac000e-0a5fdd8b-057ad388@172.18.203.46
Supported: timer,replaces
Min-SE: 1800
Cisco-Guid: 1571515264-1263619324-792-936055468
User-Agent: Cisco-CCM5.0
Allow: INVITE, OPTIONS, INFO, BYE, CANCEL, ACK, PRACK, UPDATE, REFER, SUBSCRIBE, NOTIFY
CSeq: 101 INVITE
Max-Forwards: 70
Contact: <sip:2030@172.18.203.55:5060>
Expires: 180
Allow-Events: presence
Content-Type: application/sdp
Content-Length: 220
```

```
v=0
o=CiscoSystemsCCM-SIP 2000 3 IN IP4 172.18.203.55
s=SIP Call
c=IN IP4 0.0.0.0
t=0 0
m=audio 21826 RTP/AVP 0 101
a=rtpmap:0 PCMU/8000
a=ptime:20
a=inactive
a=rtpmap:101 telephone-event/8000
a=fmtp:101 0-15
```

[\[diagram\]](#) Call-ID: [\[prev\]](#) [\[next\]](#)

**[40] INVITE sip:2030@172.18.203.51:5060 SIP/2.0**

```
Via: SIP/2.0/UDP 172.18.203.55:5060;branch=z9hG4bK32edf4c1
Remote-Party-ID: "SIP Line 2010" <sip:2010@172.18.203.55>;party=calling;screen=yes;privacy=off
From: "SIP Line 2010" <sip:2010@172.18.203.55>;tag=b9c8b19b-c709-4d85-86d4-d2f557c6c2a6-30679770
To: <sip:2030@172.18.203.51>;tag=000d280821a500954d7ada82-5da6b2c4
Date: Wed, 12 Jul 2006 19:27:04 GMT
Call-ID: 5dab6b80-4b514cfc-319-37cb12ac@172.18.203.55
Supported: timer,replaces
Min-SE: 1800
User-Agent: Cisco-CCM5.0
Allow: INVITE, OPTIONS, INFO, BYE, CANCEL, ACK, PRACK, UPDATE, REFER, SUBSCRIBE, NOTIFY
CSeq: 103 INVITE
Max-Forwards: 70
Contact: <sip:2010@172.18.203.55:5060>
Expires: 180
Allow-Events: presence
Content-Type: application/sdp
Content-Length: 294
```

```
v=0
o=CiscoSystemsCCM-SIP 2000 3 IN IP4 172.18.203.55
s=SIP Call
c=IN IP4 0.0.0.0
t=0 0
m=audio 27164 RTP/AVP 0 8 18 101
a=rtpmap:0 PCMU/8000
a=ptime:20
a=rtpmap:8 PCMA/8000
a=ptime:20
a=rtpmap:18 G729/8000
a=ptime:20
a=inactive
a=rtpmap:101 telephone-event/8000
a=fmtp:101 0-15
```

[\[diagram\]](#) Call-ID: [\[prev\]](#) [\[next\]](#)

**[41] SIP/2.0 200 OK**

```
Via: SIP/2.0/UDP 172.18.203.55:5060;branch=z9hG4bK32edf4c1
From: "SIP Line 2010" <sip:2010@172.18.203.55>;tag=b9c8b19b-c709-4d85-86d4-d2f557c6c2a6-30679770
To: <sip:2030@172.18.203.51>;tag=000d280821a500954d7ada82-5da6b2c4
Call-ID: 5dab6b80-4b514cfc-319-37cb12ac@172.18.203.55
Date: Wed, 12 Jul 2006 19:27:04 GMT
CSeq: 103 INVITE
Server: Cisco-CP7960G/7.5
Contact: <sip:2030@172.18.203.51:5060>
Allow: ACK,BYE,CANCEL,INVITE,NOTIFY,OPTIONS,REFER,REGISTER,UPDATE
Remote-Party-ID: "2030" <sip:2030@172.18.203.51>;party=called;id-type=subscriber;privacy=off;screen=yes
Supported: replaces
Content-Length: 207
Content-Type: application/sdp
Content-Disposition: session;handling=optional
```

```
v=0
o=Cisco-SIPUA 27869 2 IN IP4 172.18.203.51
s=SIP Call
t=0 0
m=audio 21826 RTP/AVP 0 101
c=IN IP4 172.18.203.51
a=rtpmap:0 PCMU/8000
a=rtpmap:101 telephone-event/8000
a=fmtp:101 0-15
a=inactive
```

[\[diagram\]](#) Call-ID: [\[prev\]](#) [\[next\]](#)

**[42] ACK sip:2030@172.18.203.51:5060 SIP/2.0**

```
Via: SIP/2.0/UDP 172.18.203.55:5060;branch=z9hG4bK1dfc8d92
From: "SIP Line 2010" <sip:2010@172.18.203.55>;tag=b9c8b19b-c709-4d85-86d4-d2f557c6c2a6-30679770
```

To: <sip:2030@172.18.203.51>;tag=000d280821a500954d7ada82-5da6b2c4  
 Date: Wed, 12 Jul 2006 19:27:04 GMT  
 Call-ID: 5dab6b80-4b514cfc-319-37cb12ac@172.18.203.55  
 Max-Forwards: 70  
 CSeq: 103 ACK  
 Allow-Events: presence  
 Content-Length: 0

[[diagram](#)] Call-ID: [[prev](#)] [[next](#)]

[43] SIP/2.0 200 OK

Via: SIP/2.0/UDP 172.18.203.55:5060;branch=z9hG4bK6bc7b34c  
 From: <sip:2030@172.18.203.55>;tag=b9c8b19b-c709-4d85-86d4-d2f557c6c2a6-30679769  
 To: "2010" <sip:2010@172.18.203.55>;tag=00120193edac001c0cb66c26-37f5504b  
 Call-ID: 00120193-edac000e-0a5fdd8b-057ad388@172.18.203.46  
 CSeq: 101 INVITE  
 Server: Cisco-CP7960G/7.5  
 Contact: <sip:2010@172.18.203.46:5060>  
 Allow: ACK, BYE, CANCEL, INVITE, NOTIFY, OPTIONS, REFER, REGISTER, UPDATE  
 Remote-Party-ID: "2010" <sip:2010@172.18.203.46>;party=calling;id-type=subscriber;privacy=off;screen=yes  
 Supported: replaces  
 Content-Length: 206  
 Content-Type: application/sdp  
 Content-Disposition: session;handling=optional

v=0  
 o=Cisco-SIPUA 7082 2 IN IP4 172.18.203.46  
 s=SIP Call  
 t=0 0  
 m=audio 27164 RTP/AVP 0 101  
 c=IN IP4 172.18.203.46  
 a=rtpmap:0 PCMU/8000  
 a=rtpmap:101 telephone-event/8000  
 a=fmtp:101 0-15  
 a=inactive

[[diagram](#)] Call-ID: [[prev](#)] [[next](#)]

[44] ACK sip:2010@172.18.203.46:5060 SIP/2.0

Via: SIP/2.0/UDP 172.18.203.55:5060;branch=z9hG4bK4525e554  
 From: <sip:2030@172.18.203.55>;tag=b9c8b19b-c709-4d85-86d4-d2f557c6c2a6-30679769  
 To: "2010" <sip:2010@172.18.203.55>;tag=00120193edac001c0cb66c26-37f5504b  
 Date: Wed, 12 Jul 2006 19:27:04 GMT  
 Call-ID: 00120193-edac000e-0a5fdd8b-057ad388@172.18.203.46  
 Max-Forwards: 70  
 CSeq: 101 ACK  
 Allow-Events: presence  
 Content-Length: 0

[[diagram](#)] Call-ID: [[prev](#)] [[next](#)]

[45] INVITE sip:2010@172.18.203.46:5060 SIP/2.0

Via: SIP/2.0/UDP 172.18.203.55:5060;branch=z9hG4bK38a007cc  
 Remote-Party-ID: "SIP Line 2040" <sip:2040@172.18.203.55>;party=calling;screen=yes;privacy=off  
 From: <sip:2040@172.18.203.55>;tag=b9c8b19b-c709-4d85-86d4-d2f557c6c2a6-30679771  
 To: "2010" <sip:2010@172.18.203.55>;tag=00120193edac001d3b323aee-1e019536  
 Date: Wed, 12 Jul 2006 19:27:05 GMT  
 Call-ID: 00120193-edac000f-60d53fd8-023564eb@172.18.203.46  
 Supported: timer,replaces  
 Min-SE: 1800  
 Cisco-Guid: 1641515264-1263619331-794-936055468  
 User-Agent: Cisco-CCM5.0  
 Allow: INVITE, OPTIONS, INFO, BYE, CANCEL, ACK, PRACK, UPDATE, REFER, SUBSCRIBE, NOTIFY  
 CSeq: 101 INVITE  
 Max-Forwards: 70  
 Contact: <sip:2040@172.18.203.55:5060>  
 Expires: 180  
 Allow-Events: presence  
 Content-Type: application/sdp  
 Content-Length: 220

v=0  
 o=CiscoSystemsCCM-SIP 2000 3 IN IP4 172.18.203.55  
 s=SIP Call  
 c=IN IP4 0.0.0.0  
 t=0 0  
 m=audio 16434 RTP/AVP 0 101  
 a=rtpmap:0 PCMU/8000  
 aptime:20  
 a=inactive  
 a=rtpmap:101 telephone-event/8000  
 a=fmtp:101 0-15

[[diagram](#)] [Call-ID: \[prev\] \[next\]](#)

[46] INVITE sip:2040@172.18.203.52:5060 SIP/2.0

Via: SIP/2.0/UDP 172.18.203.55:5060;branch=z9hG4bK33ec9971  
 Remote-Party-ID: "SIP Line 2010" <sip:2010@172.18.203.55>;party=calling;screen=yes;privacy=off  
 From: "SIP Line 2010" <sip:2010@172.18.203.55>;tag=b9c8b19b-c709-4d85-86d4-d2f557c6c2a6-30679772  
 To: <sip:2040@172.18.203.52>;tag=003094c3cd3a00185faafe18-79b7ddc8  
 Date: Wed, 12 Jul 2006 19:27:05 GMT  
 Call-ID: 61d78900-4b514d03-31b-37cb12ac@172.18.203.55  
 Supported: timer,replaces  
 Min-SE: 1800  
 User-Agent: Cisco-CCM5.0  
 Allow: INVITE, OPTIONS, INFO, BYE, CANCEL, ACK, PRACK, UPDATE, REFER, SUBSCRIBE, NOTIFY  
 CSeq: 103 INVITE  
 Max-Forwards: 70  
 Contact: <sip:2010@172.18.203.55:5060>  
 Expires: 180  
 Allow-Events: presence  
 Content-Type: application/sdp  
 Content-Length: 294

v=0  
 o=CiscoSystemsCCM-SIP 2000 3 IN IP4 172.18.203.55  
 s=SIP Call  
 c=IN IP4 0.0.0.0  
 t=0 0  
 m=audio 27168 RTP/AVP 0 8 18 101  
 a=rtpmap:0 PCMU/8000  
 a=ptime:20  
 a=rtpmap:8 PCMA/8000  
 a=ptime:20  
 a=rtpmap:18 G729/8000  
 a=ptime:20  
 a=inactive  
 a=rtpmap:101 telephone-event/8000  
 a=fmtp:101 0-15

[[diagram](#)] [Call-ID: \[prev\] \[next\]](#)

[47] SIP/2.0 200 OK

Via: SIP/2.0/UDP 172.18.203.55:5060;branch=z9hG4bK33ec9971  
 From: "SIP Line 2010" <sip:2010@172.18.203.55>;tag=b9c8b19b-c709-4d85-86d4-d2f557c6c2a6-30679772  
 To: <sip:2040@172.18.203.52>;tag=003094c3cd3a00185faafe18-79b7ddc8  
 Call-ID: 61d78900-4b514d03-31b-37cb12ac@172.18.203.55  
 CSeq: 103 INVITE  
 Server: Cisco-CP7960G/7.5  
 Contact: <sip:2040@172.18.203.52:5060>  
 Allow: ACK,BYE,CANCEL,INVITE,NOTIFY,OPTIONS,REFER,REGISTER,UPDATE  
 Remote-Party-ID: "2040" <sip:2040@172.18.203.52>;party=called;id-type=subscriber;privacy=off;screen=yes  
 Supported: replaces  
 Content-Length: 205  
 Content-Type: application/sdp  
 Content-Disposition: session;handling=optional

v=0  
 o=Cisco-SIPUA 356 2 IN IP4 172.18.203.52  
 s=SIP Call  
 t=0 0  
 m=audio 16434 RTP/AVP 0 101  
 c=IN IP4 172.18.203.52  
 a=rtpmap:0 PCMU/8000  
 a=rtpmap:101 telephone-event/8000  
 a=fmtp:101 0-15  
 a=inactive

[[diagram](#)] [Call-ID: \[prev\] \[next\]](#)

[48] ACK sip:2040@172.18.203.52:5060 SIP/2.0

Via: SIP/2.0/UDP 172.18.203.55:5060;branch=z9hG4bK50a34ba3  
 From: "SIP Line 2010" <sip:2010@172.18.203.55>;tag=b9c8b19b-c709-4d85-86d4-d2f557c6c2a6-30679772  
 To: <sip:2040@172.18.203.52>;tag=003094c3cd3a00185faafe18-79b7ddc8  
 Date: Wed, 12 Jul 2006 19:27:05 GMT  
 Call-ID: 61d78900-4b514d03-31b-37cb12ac@172.18.203.55  
 Max-Forwards: 70  
 CSeq: 103 ACK  
 Allow-Events: presence  
 Content-Length: 0

[[diagram](#)] [Call-ID: \[prev\] \[next\]](#)

[49] SIP/2.0 200 OK

Via: SIP/2.0/UDP 172.18.203.55:5060;branch=z9hG4bK38a007cc  
 From: <sip:2040@172.18.203.55>;tag=b9c8b19b-c709-4d85-86d4-d2f557c6c2a6-30679771  
 To: "2010" <sip:2010@172.18.203.55>;tag=00120193edac001d3b323aee-1e019536

Call-ID: 00120193-edac000f-60d53fd8-023564eb@172.18.203.46  
 CSeq: 101 INVITE  
 Server: Cisco-CP7960G/7.5  
 Contact: <sip:2010@172.18.203.46:5060>  
 Allow: ACK,BYE,CANCEL,INVITE,NOTIFY,OPTIONS,REFER,REGISTER,UPDATE  
 Remote-Party-ID: "2010" <sip:2010@172.18.203.46>;party=calling;id-type=subscriber;privacy=off;screen=yes  
 Supported: replaces  
 Content-Length: 207  
 Content-Type: application/sdp  
 Content-Disposition: session;handling=optional

v=0  
 o=Cisco-SIPUA 10843 2 IN IP4 172.18.203.46  
 s=SIP Call  
 t=0 0  
 m=audio 27168 RTP/AVP 0 101  
 c=IN IP4 172.18.203.46  
 a=rtpmap:0 PCMU/8000  
 a=rtpmap:101 telephone-event/8000  
 a=fmtp:101 0-15  
 a=inactive

[\[diagram\]](#) Call-ID: [\[prev\]](#) [\[next\]](#)

**[50] ACK sip:2010@172.18.203.46:5060 SIP/2.0**

Via: SIP/2.0/UDP 172.18.203.55:5060;branch=z9hG4bK6e343838  
 From: <sip:2040@172.18.203.55>;tag=b9c8b19b-c709-4d85-86d4-d2f557c6c2a6-30679771  
 To: "2010" <sip:2010@172.18.203.55>;tag=00120193edac001d3b323aee-1e019536  
 Date: Wed, 12 Jul 2006 19:27:05 GMT  
 Call-ID: 00120193-edac000f-60d53fd8-023564eb@172.18.203.46  
 Max-Forwards: 70  
 CSeq: 101 ACK  
 Allow-Events: presence  
 Content-Length: 0

[\[diagram\]](#) Call-ID: [\[prev\]](#) [\[next\]](#)

**[51] UPDATE sip:2040@172.18.203.52:5060 SIP/2.0**

Via: SIP/2.0/UDP 172.18.203.55:5060;branch=z9hG4bK4c7d534d  
 From: "SIP Line 2010" <sip:2010@172.18.203.55>;tag=b9c8b19b-c709-4d85-86d4-d2f557c6c2a6-30679772  
 To: <sip:2040@172.18.203.52>;tag=003094c3cd3a00185faafe18-79b7ddc8  
 Date: Wed, 12 Jul 2006 19:27:05 GMT  
 Call-ID: 61d78900-4b514d03-31b-37cb12ac@172.18.203.55  
 Max-Forwards: 70  
 CSeq: 104 UPDATE  
 Contact: <sip:2010@172.18.203.55:5060>  
 Remote-Party-ID: "SIP Line 2030" <sip:2030@172.18.203.55>;party=calling;screen=yes;privacy=off  
 Content-Length: 0

[\[diagram\]](#) Call-ID: [\[prev\]](#) [\[next\]](#)

**[52] UPDATE sip:2030@172.18.203.51:5060 SIP/2.0**

Via: SIP/2.0/UDP 172.18.203.55:5060;branch=z9hG4bK146ab852  
 From: "SIP Line 2010" <sip:2010@172.18.203.55>;tag=b9c8b19b-c709-4d85-86d4-d2f557c6c2a6-30679770  
 To: <sip:2030@172.18.203.51>;tag=000d280821a500954d7ada82-5da6b2c4  
 Date: Wed, 12 Jul 2006 19:27:04 GMT  
 Call-ID: 5dab6b80-4b514cfc-319-37cb12ac@172.18.203.55  
 Max-Forwards: 70  
 CSeq: 104 UPDATE  
 Contact: <sip:2010@172.18.203.55:5060>  
 Remote-Party-ID: "SIP Line 2040" <sip:2040@172.18.203.55>;party=calling;screen=yes;privacy=off  
 Content-Length: 0

[\[diagram\]](#) Call-ID: [\[prev\]](#) [\[next\]](#)

**[53] BYE sip:2010@172.18.203.46:5060 SIP/2.0**

Via: SIP/2.0/UDP 172.18.203.55:5060;branch=z9hG4bK17b2fe52  
 From: <sip:2030@172.18.203.55>;tag=b9c8b19b-c709-4d85-86d4-d2f557c6c2a6-30679769  
 To: "2010" <sip:2010@172.18.203.55>;tag=00120193edac001c0cb66c26-37f5504b  
 Date: Wed, 12 Jul 2006 19:27:04 GMT  
 Call-ID: 00120193-edac000e-0a5fdd8b-057ad388@172.18.203.46  
 User-Agent: Cisco-CCM5.0  
 Max-Forwards: 70  
 CSeq: 102 BYE  
 Content-Length: 0

[\[diagram\]](#) Call-ID: [\[prev\]](#) [\[next\]](#)

**[54] BYE sip:2010@172.18.203.46:5060 SIP/2.0**

Via: SIP/2.0/UDP 172.18.203.55:5060;branch=z9hG4bK1a23f74b  
 From: <sip:2040@172.18.203.55>;tag=b9c8b19b-c709-4d85-86d4-d2f557c6c2a6-30679771  
 To: "2010" <sip:2010@172.18.203.55>;tag=00120193edac001d3b323aee-1e019536  
 Date: Wed, 12 Jul 2006 19:27:05 GMT  
 Call-ID: 00120193-edac000f-60d53fd8-023564eb@172.18.203.46  
 User-Agent: Cisco-CCM5.0

Max-Forwards: 70  
 CSeq: 102 BYE  
 Content-Length: 0

[\[diagram\]](#) Call-ID: [\[prev\]](#) [\[next\]](#)

**[55] SIP/2.0 200 OK**

Via: SIP/2.0/UDP 172.18.203.55:5060;branch=z9hG4bK146ab852  
 From: "SIP Line 2010" <sip:2010@172.18.203.55>;tag=b9c8b19b-c709-4d85-86d4-d2f557c6c2a6-30679770  
 To: <sip:2030@172.18.203.51>;tag=000d280821a500954d7ada82-5da6b2c4  
 Call-ID: 5dab6b80-4b514cfc-319-37cb12ac@172.18.203.55  
 Date: Wed, 12 Jul 2006 19:27:05 GMT  
 CSeq: 104 UPDATE  
 Server: Cisco-CP7960G/7.5  
 Contact: <sip:2030@172.18.203.51:5060>  
 Allow: ACK,BYE,CANCEL,INVITE,NOTIFY,OPTIONS,REFER,REGISTER,UPDATE  
 Content-Length: 257  
 Content-Type: application/sdp  
 Content-Disposition: session;handling=optional

v=0  
 o=Cisco-SIPUA 27869 2 IN IP4 172.18.203.51  
 s=SIP Call  
 t=0 0  
 m=audio 21826 RTP/AVP 0 8 18 101  
 c=IN IP4 172.18.203.51  
 a=rtpmap:0 PCMU/8000  
 a=rtpmap:8 PCMA/8000  
 a=rtpmap:18 G729/8000  
 a=rtpmap:101 telephone-event/8000  
 a=fmtp:101 0-15  
 a=sendrecv

[\[diagram\]](#) Call-ID: [\[prev\]](#) [\[next\]](#)

**[56] INVITE sip:2030@172.18.203.51:5060 SIP/2.0**

Via: SIP/2.0/UDP 172.18.203.55:5060;branch=z9hG4bK2dba4f11  
 Remote-Party-ID: "SIP Line 2040" <sip:2040@172.18.203.55>;party=calling;screen=yes;privacy=off  
 From: "SIP Line 2010" <sip:2010@172.18.203.55>;tag=b9c8b19b-c709-4d85-86d4-d2f557c6c2a6-30679770  
 To: <sip:2030@172.18.203.51>;tag=000d280821a500954d7ada82-5da6b2c4  
 Date: Wed, 12 Jul 2006 19:27:05 GMT  
 Call-ID: 5dab6b80-4b514cfc-319-37cb12ac@172.18.203.55  
 Supported: timer,replaces  
 Min-SE: 1800  
 User-Agent: Cisco-CCM5.0  
 Allow: INVITE, OPTIONS, INFO, BYE, CANCEL, ACK, PRACK, UPDATE, REFER, SUBSCRIBE, NOTIFY  
 CSeq: 105 INVITE  
 Max-Forwards: 70  
 Contact: <sip:2010@172.18.203.55:5060>  
 Expires: 180  
 Allow-Events: presence  
 Content-Length: 0

[\[diagram\]](#) Call-ID: [\[prev\]](#) [\[next\]](#)

**[57] SIP/2.0 200 OK**

Via: SIP/2.0/UDP 172.18.203.55:5060;branch=z9hG4bK17b2fe52  
 From: <sip:2030@172.18.203.55>;tag=b9c8b19b-c709-4d85-86d4-d2f557c6c2a6-30679769  
 To: "2010" <sip:2010@172.18.203.55>;tag=00120193edac001c0cb66c26-37f5504b  
 Call-ID: 00120193-edac000e-0a5fdd8b-057ad388@172.18.203.46  
 CSeq: 102 BYE  
 Server: Cisco-CP7960G/7.5  
 Content-Length: 0

[\[diagram\]](#) Call-ID: [\[prev\]](#) [\[next\]](#)

**[58] SIP/2.0 200 OK**

Via: SIP/2.0/UDP 172.18.203.55:5060;branch=z9hG4bK4c7d534d  
 From: "SIP Line 2010" <sip:2010@172.18.203.55>;tag=b9c8b19b-c709-4d85-86d4-d2f557c6c2a6-30679772  
 To: <sip:2040@172.18.203.52>;tag=003094c3cd3a00185faafe18-79b7ddc8  
 Call-ID: 61d78900-4b514d03-31b-37cb12ac@172.18.203.55  
 CSeq: 104 UPDATE  
 Server: Cisco-CP7960G/7.5  
 Contact: <sip:2040@172.18.203.52:5060>  
 Allow: ACK,BYE,CANCEL,INVITE,NOTIFY,OPTIONS,REFER,REGISTER,UPDATE  
 Content-Length: 255  
 Content-Type: application/sdp  
 Content-Disposition: session;handling=optional

v=0  
 o=Cisco-SIPUA 356 2 IN IP4 172.18.203.52  
 s=SIP Call  
 t=0 0  
 m=audio 16434 RTP/AVP 0 8 18 101

```
c=IN IP4 172.18.203.52
a=rtpmap:0 PCMU/8000
a=rtpmap:8 PCMA/8000
a=rtpmap:18 G729/8000
a=rtpmap:101 telephone-event/8000
a=fmtp:101 0-15
a=sendrecv
```

[[diagram](#)] Call-ID: [[prev](#)] [[next](#)]

[59] INVITE sip:2040@172.18.203.52:5060 SIP/2.0

```
Via: SIP/2.0/UDP 172.18.203.55:5060;branch=z9hG4bK3aeb120
Remote-Party-ID: "SIP Line 2030" <sip:2030@172.18.203.55>;party=calling;screen=yes;privacy=off
From: "SIP Line 2010" <sip:2010@172.18.203.55>;tag=b9c8b19b-c709-4d85-86d4-d2f557c6c2a6-30679772
To: <sip:2040@172.18.203.52>;tag=003094c3cd3a00185faafe18-79b7ddc8
Date: Wed, 12 Jul 2006 19:27:05 GMT
Call-ID: 61d78900-4b514d03-31b-37cb12ac@172.18.203.55
Supported: timer,replaces
Min-SE: 1800
User-Agent: Cisco-CCM5.0
Allow: INVITE, OPTIONS, INFO, BYE, CANCEL, ACK, PRACK, UPDATE, REFER, SUBSCRIBE, NOTIFY
CSeq: 105 INVITE
Max-Forwards: 70
Contact: <sip:2010@172.18.203.55:5060>
Expires: 180
Allow-Events: presence
Content-Length: 0
```

[[diagram](#)] Call-ID: [[prev](#)] [[next](#)]

[60] SIP/2.0 200 OK

```
Via: SIP/2.0/UDP 172.18.203.55:5060;branch=z9hG4bK1a23f74b
From: <sip:2040@172.18.203.55>;tag=b9c8b19b-c709-4d85-86d4-d2f557c6c2a6-30679771
To: "2010" <sip:2010@172.18.203.55>;tag=00120193edac001d3b323aee-1e019536
Call-ID: 00120193-edac000f-60d53fd8-023564eb@172.18.203.46
CSeq: 102 BYE
Server: Cisco-CP7960G/7.5
Content-Length: 0
```

[[diagram](#)] Call-ID: [[prev](#)] [[next](#)]

[61] SIP/2.0 200 OK

```
Via: SIP/2.0/UDP 172.18.203.55:5060;branch=z9hG4bK2dba4f11
From: "SIP Line 2010" <sip:2010@172.18.203.55>;tag=b9c8b19b-c709-4d85-86d4-d2f557c6c2a6-30679770
To: <sip:2030@172.18.203.51>;tag=000d280821a500954d7ada82-5da6b2c4
Call-ID: 5dab6b80-4b514cfc-319-37cb12ac@172.18.203.55
Date: Wed, 12 Jul 2006 19:27:05 GMT
CSeq: 105 INVITE
Server: Cisco-CP7960G/7.5
Contact: <sip:2030@172.18.203.51:5060>
Allow: ACK, BYE, CANCEL, INVITE, NOTIFY, OPTIONS, REFER, REGISTER, UPDATE
Remote-Party-ID: "2030" <sip:2030@172.18.203.51>;party=called;id-type=subscriber;privacy=off;screen=yes
Supported: replaces
Content-Length: 257
Content-Type: application/sdp
Content-Disposition: session;handling=optional
```

```
v=0
o=Cisco-SIPUA 27869 2 IN IP4 172.18.203.51
s=SIP Call
t=0 0
m=audio 21826 RTP/AVP 0 8 18 101
c=IN IP4 172.18.203.51
a=rtpmap:0 PCMU/8000
a=rtpmap:8 PCMA/8000
a=rtpmap:18 G729/8000
a=rtpmap:101 telephone-event/8000
a=fmtp:101 0-15
a=sendrecv
```

[[diagram](#)] Call-ID: [[prev](#)] [[next](#)]

[62] SIP/2.0 200 OK

```
Via: SIP/2.0/UDP 172.18.203.55:5060;branch=z9hG4bK3aeb120
From: "SIP Line 2010" <sip:2010@172.18.203.55>;tag=b9c8b19b-c709-4d85-86d4-d2f557c6c2a6-30679772
To: <sip:2040@172.18.203.52>;tag=003094c3cd3a00185faafe18-79b7ddc8
Call-ID: 61d78900-4b514d03-31b-37cb12ac@172.18.203.55
CSeq: 105 INVITE
Server: Cisco-CP7960G/7.5
Contact: <sip:2040@172.18.203.52:5060>
Allow: ACK, BYE, CANCEL, INVITE, NOTIFY, OPTIONS, REFER, REGISTER, UPDATE
Remote-Party-ID: "2040" <sip:2040@172.18.203.52>;party=called;id-type=subscriber;privacy=off;screen=yes
Supported: replaces
Content-Length: 255
```

Content-Type: application/sdp  
Content-Disposition: session;handling=optional

v=0  
o=Cisco-SIPUA 356 2 IN IP4 172.18.203.52  
s=SIP Call  
t=0 0  
m=audio 16434 RTP/AVP 0 8 18 101  
c=IN IP4 172.18.203.52  
a=rtpmap:0 PCMU/8000  
a=rtpmap:8 PCMA/8000  
a=rtpmap:18 G729/8000  
a=rtpmap:101 telephone-event/8000  
a=fmtp:101 0-15  
a=sendrecv

[\[diagram\]](#) Call-ID: [\[prev\]](#) [\[next\]](#)

**[63] ACK sip:2040@172.18.203.52:5060 SIP/2.0**

Via: SIP/2.0/UDP 172.18.203.55:5060;branch=z9hG4bK3bffe72a  
From: "SIP Line 2010" <sip:2010@172.18.203.55>;tag=b9c8b19b-c709-4d85-86d4-d2f557c6c2a6-30679772  
To: <sip:2040@172.18.203.52>;tag=003094c3cd3a00185faafe18-79b7ddc8  
Date: Wed, 12 Jul 2006 19:27:05 GMT  
Call-ID: 61d78900-4b514d03-31b-37cb12ac@172.18.203.55  
Max-Forwards: 70  
CSeq: 105 ACK  
Allow-Events: presence  
Content-Type: application/sdp  
Content-Length: 158

v=0  
o=CiscoSystemsCCM-SIP 2000 4 IN IP4 172.18.203.55  
s=SIP Call  
c=IN IP4 172.18.203.51  
t=0 0  
m=audio 21826 RTP/AVP 0  
a=rtpmap:0 PCMU/8000  
a=ptime:20

[\[diagram\]](#) Call-ID: [\[prev\]](#) [\[next\]](#)

**[64] ACK sip:2030@172.18.203.51:5060 SIP/2.0**

Via: SIP/2.0/UDP 172.18.203.55:5060;branch=z9hG4bK6c9dfe50  
From: "SIP Line 2010" <sip:2010@172.18.203.55>;tag=b9c8b19b-c709-4d85-86d4-d2f557c6c2a6-30679770  
To: <sip:2030@172.18.203.51>;tag=000d280821a500954d7ada82-5da6b2c4  
Date: Wed, 12 Jul 2006 19:27:05 GMT  
Call-ID: 5dab6b80-4b514cfc-319-37cb12ac@172.18.203.55  
Max-Forwards: 70  
CSeq: 105 ACK  
Allow-Events: presence  
Content-Type: application/sdp  
Content-Length: 158

v=0  
o=CiscoSystemsCCM-SIP 2000 4 IN IP4 172.18.203.55  
s=SIP Call  
c=IN IP4 172.18.203.52  
t=0 0  
m=audio 16434 RTP/AVP 0  
a=rtpmap:0 PCMU/8000  
a=ptime:20

[\[diagram\]](#) Call-ID: [\[prev\]](#) [\[next\]](#)

**[65] BYE sip:2010@172.18.203.55:5060 SIP/2.0**

Via: SIP/2.0/UDP 172.18.203.51:5060;branch=z9hG4bK19cd1ad7  
From: <sip:2030@172.18.203.51>;tag=000d280821a500954d7ada82-5da6b2c4  
To: "SIP Line 2010" <sip:2010@172.18.203.55>;tag=b9c8b19b-c709-4d85-86d4-d2f557c6c2a6-30679770  
Call-ID: 5dab6b80-4b514cfc-319-37cb12ac@172.18.203.55  
Max-Forwards: 70  
Date: Wed, 12 Jul 2006 19:27:13 GMT  
CSeq: 101 BYE  
User-Agent: Cisco-CP7960G/7.5  
Content-Length: 0

[\[diagram\]](#) Call-ID: [\[prev\]](#) [\[next\]](#)

**[66] BYE sip:2040@172.18.203.52:5060 SIP/2.0**

Via: SIP/2.0/UDP 172.18.203.55:5060;branch=z9hG4bK24acbba7  
From: "SIP Line 2010" <sip:2010@172.18.203.55>;tag=b9c8b19b-c709-4d85-86d4-d2f557c6c2a6-30679772  
To: <sip:2040@172.18.203.52>;tag=003094c3cd3a00185faafe18-79b7ddc8  
Date: Wed, 12 Jul 2006 19:27:05 GMT  
Call-ID: 61d78900-4b514d03-31b-37cb12ac@172.18.203.55  
User-Agent: Cisco-CCM5.0

Max-Forwards: 70  
CSeq: 106 BYE  
Content-Length: 0

[\[diagram\]](#) Call-ID: [\[prev\]](#) [\[next\]](#)

**[67] SIP/2.0 200 OK**

Via: SIP/2.0/UDP 172.18.203.51:5060;branch=z9hG4bK19cd1ad7  
From: <sip:2030@172.18.203.51>;tag=000d280821a500954d7ada82-5da6b2c4  
To: "SIP Line 2010" <sip:2010@172.18.203.55>;tag=b9c8b19b-c709-4d85-86d4-d2f557c6c2a6-30679770  
Date: Wed, 12 Jul 2006 19:27:13 GMT  
Call-ID: 5dab6b80-4b514cfc-319-37cb12ac@172.18.203.55  
CSeq: 101 BYE  
Content-Length: 0

[\[diagram\]](#) Call-ID: [\[prev\]](#) [\[next\]](#)

**[68] SIP/2.0 200 OK**

Via: SIP/2.0/UDP 172.18.203.55:5060;branch=z9hG4bK24acbba7  
From: "SIP Line 2010" <sip:2010@172.18.203.55>;tag=b9c8b19b-c709-4d85-86d4-d2f557c6c2a6-30679772  
To: <sip:2040@172.18.203.52>;tag=003094c3cd3a00185faafe18-79b7ddc8  
Call-ID: 61d78900-4b514d03-31b-37cb12ac@172.18.203.55  
CSeq: 106 BYE  
Server: Cisco-CP7960G/7.5  
Content-Length: 0

## 5.2 Transfer Semi-Attended (All SIP Basic phones)

Title: Transfer Semi-Attended (All SIP Basic phones)

### Description:

G calls H and then performs an early attended transfer to L.

Note a "SIP Basic" phone is a 7960 configured with a pre-SDGA image (P0S3-07-5-00) to simulate a 3rd party phone. Note "Transfer Semi-Attended" is sometimes referred to as "Early Attended Transfer".

### Configuration:

Node = CCM, IP = 172.18.203.55

Phone = G, Line = 2010, IP = 172.18.203.46, Model = SIP Basic

Phone = H, Line = 2030, IP = 172.18.203.51, Model = SIP Basic

Phone = L, Line = 2040, IP = 172.18.203.52, Model = SIP Basic

### Scenario:

2010 calls 2030

2030 is ringing

2030 answers

2010 presses Transfer softkey

2010 dials 2040

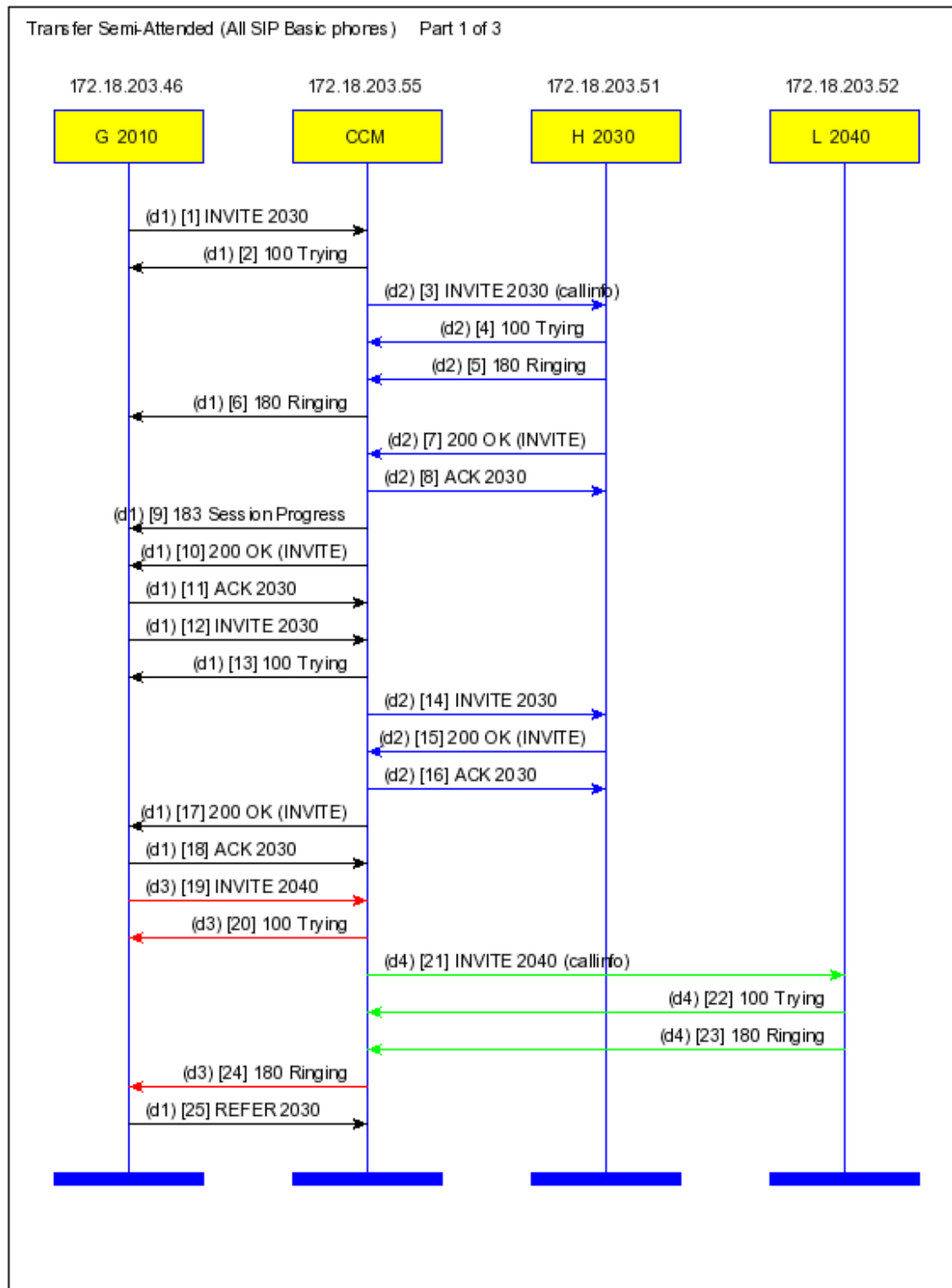
2040 is ringing

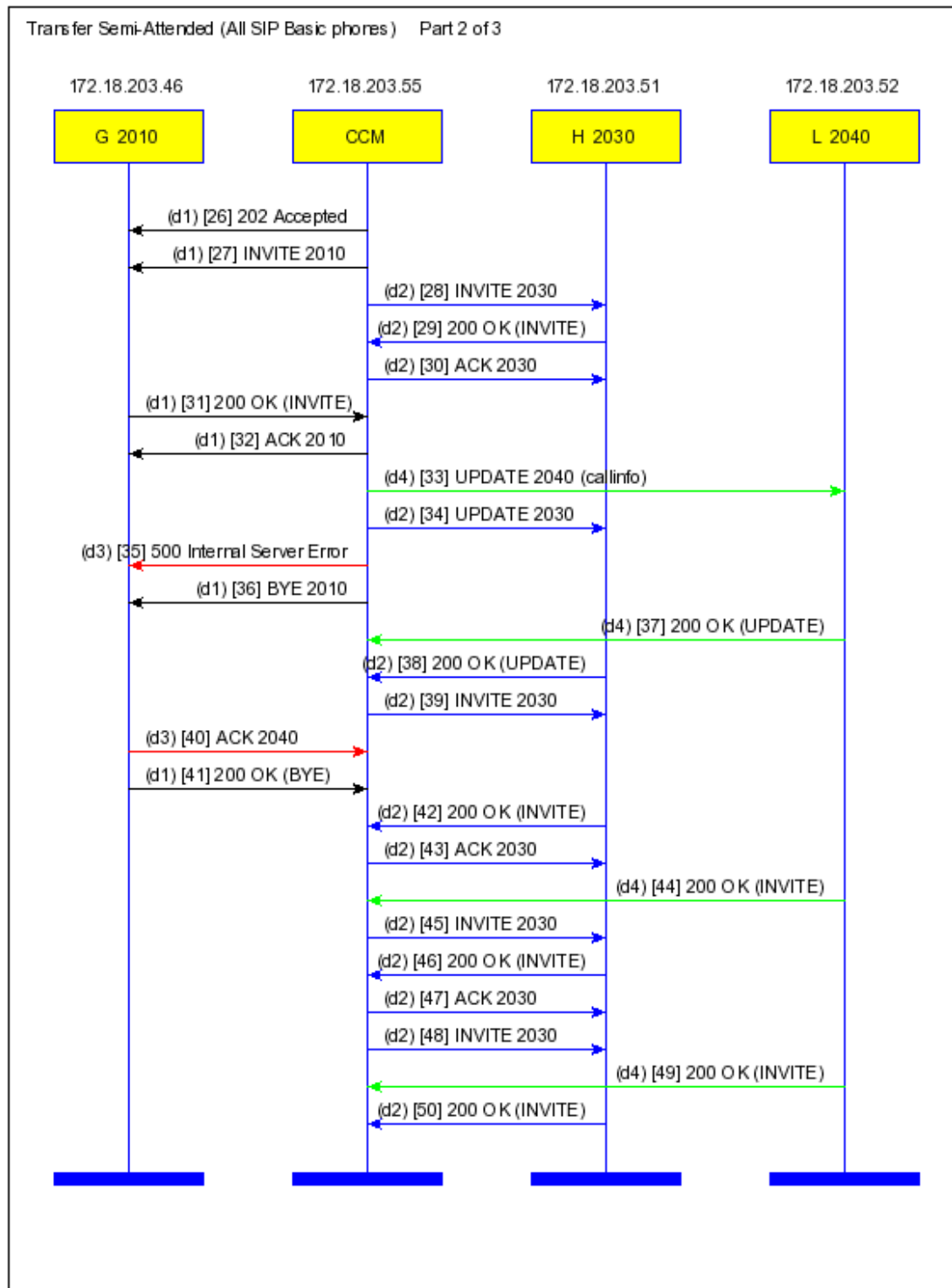
2010 presses Transfer softkey to complete the transfer

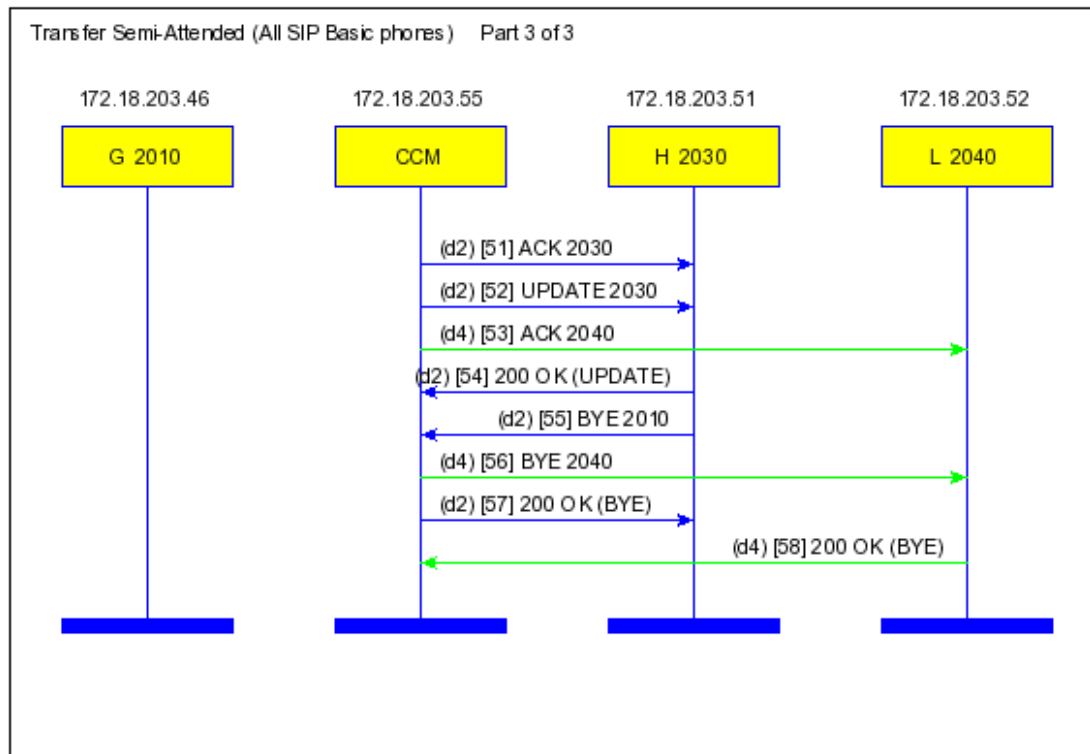
2040 answers

2030 and 2040 are connected

2030 goes onhook







[\[diagram\]](#)    Call-ID: [\[prev\]](#) [\[next\]](#)

**[1] INVITE sip:2030@172.18.203.55 SIP/2.0**

Via: SIP/2.0/UDP 172.18.203.46:5060;branch=z9hG4bK03f837cd  
 From: "2010" <sip:2010@172.18.203.55>;tag=00120193edac002120ec8a1f-79764057  
 To: <sip:2030@172.18.203.55>  
 Call-ID: 00120193-edac0012-1e9b4420-4ef881cf@172.18.203.46  
 Max-Forwards: 70  
 CSeq: 101 INVITE  
 User-Agent: Cisco-CP7960G/7.5  
 Contact: <sip:2010@172.18.203.46:5060>  
 Expires: 180  
 Accept: application/sdp  
 Allow: ACK,BYE,CANCEL,INVITE,NOTIFY,OPTIONS,REFER,REGISTER,UPDATE  
 Remote-Party-ID: "2010" <sip:2010@172.18.203.46>;party=calling;id-type=subscriber;privacy=off;screen=yes  
 Supported: replaces  
 Content-Length: 257  
 Content-Type: application/sdp  
 Content-Disposition: session;handling=optional

v=0  
 o=Cisco-SIPUA 26605 0 IN IP4 172.18.203.46  
 s=SIP Call  
 t=0 0  
 m=audio 27180 RTP/AVP 0 8 18 101  
 c=IN IP4 172.18.203.46  
 a=rtpmap:0 PCMU/8000  
 a=rtpmap:8 PCMA/8000  
 a=rtpmap:18 G729/8000  
 a=rtpmap:101 telephone-event/8000  
 a=fmtp:101 0-15  
 a=sendrecv

[\[diagram\]](#)    Call-ID: [\[prev\]](#) [\[next\]](#)

**[2] SIP/2.0 100 Trying**

Via: SIP/2.0/UDP 172.18.203.46:5060;branch=z9hG4bK03f837cd  
 From: "2010" <sip:2010@172.18.203.55>;tag=00120193edac002120ec8a1f-79764057  
 To: <sip:2030@172.18.203.55>  
 Date: Wed, 12 Jul 2006 19:28:57 GMT  
 Call-ID: 00120193-edac0012-1e9b4420-4ef881cf@172.18.203.46  
 CSeq: 101 INVITE  
 Allow-Events: presence  
 Content-Length: 0

[\[diagram\]](#)    Call-ID: [\[prev\]](#) [\[next\]](#)

**[3] INVITE sip:2030@172.18.203.51:5060 SIP/2.0**

Via: SIP/2.0/UDP 172.18.203.55:5060;branch=z9hG4bK182308b5  
 Remote-Party-ID: "SIP Line 2010" <sip:2010@172.18.203.55>;party=calling;screen=yes;privacy=off  
 From: "SIP Line 2010" <sip:2010@172.18.203.55>;tag=b9c8b19b-c709-4d85-86d4-d2f557c6c2a6-30679779  
 To: <sip:2030@172.18.203.51>  
 Date: Wed, 12 Jul 2006 19:28:57 GMT  
 Call-ID: a82ce800-4b514d79-324-37cb12ac@172.18.203.55  
 Supported: timer,replaces  
 Min-SE: 1800  
 User-Agent: Cisco-CCM5.0  
 Allow: INVITE, OPTIONS, INFO, BYE, CANCEL, ACK, PRACK, UPDATE, REFER, SUBSCRIBE, NOTIFY  
 CSeq: 101 INVITE  
 Expires: 180  
 Allow-Events: presence  
 Call-Info: <urn:x-cisco-remotecc:callinfo>; security= NotAuthenticated; orientation= from; call-instance= 1  
 Alert-Info: <file://Bellcore-dr1/>  
 Contact: <sip:2030@172.18.203.55:5060>  
 Max-Forwards: 69  
 Content-Length: 0

[\[diagram\]](#)    Call-ID: [\[prev\]](#) [\[next\]](#)

**[4] SIP/2.0 100 Trying**

Via: SIP/2.0/UDP 172.18.203.55:5060;branch=z9hG4bK182308b5  
 From: "SIP Line 2010" <sip:2010@172.18.203.55>;tag=b9c8b19b-c709-4d85-86d4-d2f557c6c2a6-30679779  
 To: <sip:2030@172.18.203.51>  
 Call-ID: a82ce800-4b514d79-324-37cb12ac@172.18.203.55  
 Date: Wed, 12 Jul 2006 19:28:57 GMT  
 CSeq: 101 INVITE  
 Server: Cisco-CP7960G/7.5  
 Contact: <sip:2030@172.18.203.51:5060>  
 Allow: ACK,BYE,CANCEL,INVITE,NOTIFY,OPTIONS,REFER,REGISTER,UPDATE  
 Remote-Party-ID: "2030" <sip:2030@172.18.203.51>;party=called;id-type=subscriber;privacy=off;screen=yes  
 Content-Length: 0

[\[diagram\]](#)    Call-ID: [\[prev\]](#) [\[next\]](#)

**[5] SIP/2.0 180 Ringing**

Via: SIP/2.0/UDP 172.18.203.55:5060;branch=z9hG4bK182308b5  
 From: "SIP Line 2010" <sip:2010@172.18.203.55>;tag=b9c8b19b-c709-4d85-86d4-d2f557c6c2a6-30679779  
 To: <sip:2030@172.18.203.51>;tag=000d280821a5009816da06be-78a84159  
 Call-ID: a82ce800-4b514d79-324-37cb12ac@172.18.203.55  
 Date: Wed, 12 Jul 2006 19:28:57 GMT  
 CSeq: 101 INVITE  
 Server: Cisco-CP7960G/7.5  
 Contact: <sip:2030@172.18.203.51:5060>  
 Allow: ACK,BYE,CANCEL,INVITE,NOTIFY,OPTIONS,REFER,REGISTER,UPDATE  
 Remote-Party-ID: "2030" <sip:2030@172.18.203.51>;party=called;id-type=subscriber;privacy=off;screen=yes  
 Content-Length: 0

[\[diagram\]](#) Call-ID: [\[prev\]](#) [\[next\]](#)

#### [6] SIP/2.0 180 Ringing

Via: SIP/2.0/UDP 172.18.203.46:5060;branch=z9hG4bK03f837cd  
 From: "2010" <sip:2010@172.18.203.55>;tag=00120193edac002120ec8a1f-79764057  
 To: <sip:2030@172.18.203.55>;tag=b9c8b19b-c709-4d85-86d4-d2f557c6c2a6-30679778  
 Date: Wed, 12 Jul 2006 19:28:57 GMT  
 Call-ID: 00120193-edac0012-1e9b4420-4ef881cf@172.18.203.46  
 CSeq: 101 INVITE  
 Allow: INVITE, OPTIONS, INFO, BYE, CANCEL, ACK, PRACK, UPDATE, REFER, SUBSCRIBE, NOTIFY  
 Allow-Events: presence  
 Remote-Party-ID: "SIP Alerting 2030" <sip:2030@172.18.203.55>;party=called;screen=yes;privacy=off  
 Contact: <sip:2030@172.18.203.55:5060>  
 Content-Length: 0

[\[diagram\]](#) Call-ID: [\[prev\]](#) [\[next\]](#)

#### [7] SIP/2.0 200 OK

Via: SIP/2.0/UDP 172.18.203.55:5060;branch=z9hG4bK182308b5  
 From: "SIP Line 2010" <sip:2010@172.18.203.55>;tag=b9c8b19b-c709-4d85-86d4-d2f557c6c2a6-30679779  
 To: <sip:2030@172.18.203.51>;tag=000d280821a5009816da06be-78a84159  
 Call-ID: a82ce800-4b514d79-324-37cb12ac@172.18.203.55  
 Date: Wed, 12 Jul 2006 19:28:58 GMT  
 CSeq: 101 INVITE  
 Server: Cisco-CP7960G/7.5  
 Contact: <sip:2030@172.18.203.51:5060>  
 Allow: ACK,BYE,CANCEL,INVITE,NOTIFY,OPTIONS,REFER,REGISTER,UPDATE  
 Remote-Party-ID: "2030" <sip:2030@172.18.203.51>;party=called;id-type=subscriber;privacy=off;screen=yes  
 Supported: replaces  
 Content-Length: 256  
 Content-Type: application/sdp  
 Content-Disposition: session;handling=optional

```
v=0
o=Cisco-SIPUA 9868 0 IN IP4 172.18.203.51
s=SIP Call
t=0 0
m=audio 21834 RTP/AVP 0 8 18 101
c=IN IP4 172.18.203.51
a=rtpmap:0 PCMU/8000
a=rtpmap:8 PCMA/8000
a=rtpmap:18 G729/8000
a=rtpmap:101 telephone-event/8000
a=fmtp:101 0-15
a=sendrecv
```

[\[diagram\]](#) Call-ID: [\[prev\]](#) [\[next\]](#)

#### [8] ACK sip:2030@172.18.203.51:5060 SIP/2.0

Via: SIP/2.0/UDP 172.18.203.55:5060;branch=z9hG4bK3634a33c  
 From: "SIP Line 2010" <sip:2010@172.18.203.55>;tag=b9c8b19b-c709-4d85-86d4-d2f557c6c2a6-30679779  
 To: <sip:2030@172.18.203.51>;tag=000d280821a5009816da06be-78a84159  
 Date: Wed, 12 Jul 2006 19:28:57 GMT  
 Call-ID: a82ce800-4b514d79-324-37cb12ac@172.18.203.55  
 Max-Forwards: 70  
 CSeq: 101 ACK  
 Allow-Events: presence  
 Content-Type: application/sdp  
 Content-Length: 214

```
v=0
o=CiscoSystemsCCM-SIP 2000 1 IN IP4 172.18.203.55
s=SIP Call
c=IN IP4 172.18.203.46
t=0 0
m=audio 27180 RTP/AVP 0 101
a=rtpmap:0 PCMU/8000
a=ptime:20
a=rtpmap:101 telephone-event/8000
a=fmtp:101 0-15
```

[\[diagram\]](#) Call-ID: [\[prev\]](#) [\[next\]](#)

**[9] SIP/2.0 183 Session Progress**

Via: SIP/2.0/UDP 172.18.203.46:5060;branch=z9hG4bK03f837cd  
 From: "2010" <sip:2010@172.18.203.55>;tag=00120193edac002120ec8a1f-79764057  
 To: <sip:2030@172.18.203.55>;tag=b9c8b19b-c709-4d85-86d4-d2f557c6c2a6-30679778  
 Date: Wed, 12 Jul 2006 19:28:57 GMT  
 Call-ID: 00120193-edac0012-1e9b4420-4ef881cf@172.18.203.46  
 CSeq: 101 INVITE  
 Allow: INVITE, OPTIONS, INFO, BYE, CANCEL, ACK, PRACK, UPDATE, REFER, SUBSCRIBE, NOTIFY  
 Allow-Events: presence  
 Remote-Party-ID: "SIP Alerting 2030" <sip:2030@172.18.203.55>;party=called;screen=yes;privacy=off  
 Contact: <sip:2030@172.18.203.55:5060>  
 Content-Type: application/sdp  
 Content-Length: 214

v=0  
 o=CiscoSystemsCCM-SIP 2000 1 IN IP4 172.18.203.55  
 s=SIP Call  
 c=IN IP4 172.18.203.51  
 t=0 0  
 m=audio 21834 RTP/AVP 0 101  
 a=rtpmap:0 PCMU/8000  
 a=ptime:20  
 a=rtpmap:101 telephone-event/8000  
 a=fmtp:101 0-15

[\[diagram\]](#) Call-ID: [\[prev\]](#) [\[next\]](#)

**[10] SIP/2.0 200 OK**

Via: SIP/2.0/UDP 172.18.203.46:5060;branch=z9hG4bK03f837cd  
 From: "2010" <sip:2010@172.18.203.55>;tag=00120193edac002120ec8a1f-79764057  
 To: <sip:2030@172.18.203.55>;tag=b9c8b19b-c709-4d85-86d4-d2f557c6c2a6-30679778  
 Date: Wed, 12 Jul 2006 19:28:57 GMT  
 Call-ID: 00120193-edac0012-1e9b4420-4ef881cf@172.18.203.46  
 CSeq: 101 INVITE  
 Allow: INVITE, OPTIONS, INFO, BYE, CANCEL, ACK, PRACK, UPDATE, REFER, SUBSCRIBE, NOTIFY  
 Allow-Events: presence  
 Remote-Party-ID: "SIP Line 2030" <sip:2030@172.18.203.55>;party=called;screen=yes;privacy=off  
 Contact: <sip:2030@172.18.203.55:5060>  
 Content-Type: application/sdp  
 Content-Length: 214

v=0  
 o=CiscoSystemsCCM-SIP 2000 1 IN IP4 172.18.203.55  
 s=SIP Call  
 c=IN IP4 172.18.203.51  
 t=0 0  
 m=audio 21834 RTP/AVP 0 101  
 a=rtpmap:0 PCMU/8000  
 a=ptime:20  
 a=rtpmap:101 telephone-event/8000  
 a=fmtp:101 0-15

[\[diagram\]](#) Call-ID: [\[prev\]](#) [\[next\]](#)

**[11] ACK sip:2030@172.18.203.55:5060 SIP/2.0**

Via: SIP/2.0/UDP 172.18.203.46:5060;branch=z9hG4bK1322aafc  
 From: "2010" <sip:2010@172.18.203.55>;tag=00120193edac002120ec8a1f-79764057  
 To: <sip:2030@172.18.203.55>;tag=b9c8b19b-c709-4d85-86d4-d2f557c6c2a6-30679778  
 Call-ID: 00120193-edac0012-1e9b4420-4ef881cf@172.18.203.46  
 Max-Forwards: 70  
 CSeq: 101 ACK  
 User-Agent: Cisco-CP7960G/7.5  
 Remote-Party-ID: "2010" <sip:2010@172.18.203.46>;party=calling;id-type=subscriber;privacy=off;screen=yes  
 Content-Length: 0

[\[diagram\]](#) Call-ID: [\[prev\]](#) [\[next\]](#)

**[12] INVITE sip:2030@172.18.203.55:5060 SIP/2.0**

Via: SIP/2.0/UDP 172.18.203.46:5060;branch=z9hG4bK6dec6e75  
 From: "2010" <sip:2010@172.18.203.55>;tag=00120193edac002120ec8a1f-79764057  
 To: <sip:2030@172.18.203.55>;tag=b9c8b19b-c709-4d85-86d4-d2f557c6c2a6-30679778  
 Call-ID: 00120193-edac0012-1e9b4420-4ef881cf@172.18.203.46  
 Max-Forwards: 70  
 CSeq: 102 INVITE  
 User-Agent: Cisco-CP7960G/7.5  
 Contact: <sip:2010@172.18.203.46:5060>  
 Remote-Party-ID: "2010" <sip:2010@172.18.203.46>;party=calling;id-type=subscriber;privacy=off;screen=yes  
 Content-Length: 257  
 Content-Type: application/sdp  
 Content-Disposition: session;handling=optional

v=0

```

o=Cisco-SIPUA 26605 1 IN IP4 172.18.203.46
s=SIP Call
t=0 0
m=audio 27180 RTP/AVP 0 8 18 101
c=IN IP4 172.18.203.46
a=rtpmap:0 PCMU/8000
a=rtpmap:8 PCMA/8000
a=rtpmap:18 G729/8000
a=rtpmap:101 telephone-event/8000
a=fmtp:101 0-15
a=sendonly

```

[\[diagram\]](#) Call-ID: [\[prev\]](#) [\[next\]](#)

### [13] SIP/2.0 100 Trying

```

Via: SIP/2.0/UDP 172.18.203.46:5060;branch=z9hG4bK6dec6e75
From: "2010" <sip:2010@172.18.203.55>;tag=00120193edac002120ec8a1f-79764057
To: <sip:2030@172.18.203.55>;tag=b9c8b19b-c709-4d85-86d4-d2f557c6c2a6-30679778
Date: Wed, 12 Jul 2006 19:29:01 GMT
Call-ID: 00120193-edac0012-1e9b4420-4ef881cf@172.18.203.46
CSeq: 102 INVITE
Allow-Events: presence
Content-Length: 0

```

[\[diagram\]](#) Call-ID: [\[prev\]](#) [\[next\]](#)

### [14] INVITE sip:2030@172.18.203.51:5060 SIP/2.0

```

Via: SIP/2.0/UDP 172.18.203.55:5060;branch=z9hG4bK3899079f
Remote-Party-ID: "SIP Line 2010" <sip:2010@172.18.203.55>;party=calling;screen=yes;privacy=off
From: "SIP Line 2010" <sip:2010@172.18.203.55>;tag=b9c8b19b-c709-4d85-86d4-d2f557c6c2a6-30679779
To: <sip:2030@172.18.203.51>;tag=000d280821a5009816da06be-78a84159
Date: Wed, 12 Jul 2006 19:29:01 GMT
Call-ID: a82ce800-4b514d79-324-37cb12ac@172.18.203.55
Supported: timer,replaces
Min-SE: 1800
User-Agent: Cisco-CCM5.0
Allow: INVITE, OPTIONS, INFO, BYE, CANCEL, ACK, PRACK, UPDATE, REFER, SUBSCRIBE, NOTIFY
CSeq: 102 INVITE
Max-Forwards: 70
Contact: <sip:2010@172.18.203.55:5060>
Expires: 180
Allow-Events: presence
Content-Type: application/sdp
Content-Length: 300

```

```

v=0
o=CiscoSystemsCCM-SIP 2000 2 IN IP4 172.18.203.55
s=SIP Call
c=IN IP4 172.18.203.46
t=0 0
m=audio 27180 RTP/AVP 0 8 18 101
a=rtpmap:0 PCMU/8000
a=ptime:20
a=rtpmap:8 PCMA/8000
a=ptime:20
a=rtpmap:18 G729/8000
a=ptime:20
a=sendonly
a=rtpmap:101 telephone-event/8000
a=fmtp:101 0-15

```

[\[diagram\]](#) Call-ID: [\[prev\]](#) [\[next\]](#)

### [15] SIP/2.0 200 OK

```

Via: SIP/2.0/UDP 172.18.203.55:5060;branch=z9hG4bK3899079f
From: "SIP Line 2010" <sip:2010@172.18.203.55>;tag=b9c8b19b-c709-4d85-86d4-d2f557c6c2a6-30679779
To: <sip:2030@172.18.203.51>;tag=000d280821a5009816da06be-78a84159
Call-ID: a82ce800-4b514d79-324-37cb12ac@172.18.203.55
Date: Wed, 12 Jul 2006 19:29:01 GMT
CSeq: 102 INVITE
Server: Cisco-CP7960G/7.5
Contact: <sip:2030@172.18.203.51:5060>
Allow: ACK,BYE,CANCEL,INVITE,NOTIFY,OPTIONS,REFER,REGISTER,UPDATE
Remote-Party-ID: "2030" <sip:2030@172.18.203.51>;party=called;id-type=subscriber;privacy=off;screen=yes
Supported: replaces
Content-Length: 206
Content-Type: application/sdp
Content-Disposition: session;handling=optional

```

```

v=0
o=Cisco-SIPUA 9868 1 IN IP4 172.18.203.51
s=SIP Call
t=0 0

```

```
m=audio 21834 RTP/AVP 0 101
c=IN IP4 172.18.203.51
a=rtpmap:0 PCMU/8000
a=rtpmap:101 telephone-event/8000
a=fmtp:101 0-15
a=recvonly
```

[\[diagram\]](#) Call-ID: [\[prev\]](#) [\[next\]](#)

**[16] ACK sip:2030@172.18.203.51:5060 SIP/2.0**

```
Via: SIP/2.0/UDP 172.18.203.55:5060;branch=z9hG4bK323660de
From: "SIP Line 2010" <sip:2010@172.18.203.55>;tag=b9c8b19b-c709-4d85-86d4-d2f557c6c2a6-30679779
To: <sip:2030@172.18.203.51>;tag=000d280821a5009816da06be-78a84159
Date: Wed, 12 Jul 2006 19:29:01 GMT
Call-ID: a82ce800-4b514d79-324-37cb12ac@172.18.203.55
Max-Forwards: 70
CSeq: 102 ACK
Allow-Events: presence
Content-Length: 0
```

[\[diagram\]](#) Call-ID: [\[prev\]](#) [\[next\]](#)

**[17] SIP/2.0 200 OK**

```
Via: SIP/2.0/UDP 172.18.203.46:5060;branch=z9hG4bK6dec6e75
From: "2010" <sip:2010@172.18.203.55>;tag=00120193edac002120ec8a1f-79764057
To: <sip:2030@172.18.203.55>;tag=b9c8b19b-c709-4d85-86d4-d2f557c6c2a6-30679778
Date: Wed, 12 Jul 2006 19:29:01 GMT
Call-ID: 00120193-edac0012-1e9b4420-4ef881cf@172.18.203.46
CSeq: 102 INVITE
Allow: INVITE, OPTIONS, INFO, BYE, CANCEL, ACK, PRACK, UPDATE, REFER, SUBSCRIBE, NOTIFY
Allow-Events: presence
Remote-Party-ID: "SIP Line 2030" <sip:2030@172.18.203.55>;party=called;screen=yes;privacy=off
Contact: <sip:2030@172.18.203.55:5060>
Content-Type: application/sdp
Content-Length: 226
```

```
v=0
o=CiscoSystemsCCM-SIP 2000 2 IN IP4 172.18.203.55
s=SIP Call
c=IN IP4 172.18.203.51
t=0 0
m=audio 21834 RTP/AVP 0 101
a=rtpmap:0 PCMU/8000
a=ptime:20
a=recvonly
a=rtpmap:101 telephone-event/8000
a=fmtp:101 0-15
```

[\[diagram\]](#) Call-ID: [\[prev\]](#) [\[next\]](#)

**[18] ACK sip:2030@172.18.203.55:5060 SIP/2.0**

```
Via: SIP/2.0/UDP 172.18.203.46:5060;branch=z9hG4bK2c4235cc
From: "2010" <sip:2010@172.18.203.55>;tag=00120193edac002120ec8a1f-79764057
To: <sip:2030@172.18.203.55>;tag=b9c8b19b-c709-4d85-86d4-d2f557c6c2a6-30679778
Call-ID: 00120193-edac0012-1e9b4420-4ef881cf@172.18.203.46
Max-Forwards: 70
CSeq: 102 ACK
User-Agent: Cisco-CP7960G/7.5
Remote-Party-ID: "2010" <sip:2010@172.18.203.46>;party=calling;id-type=subscriber;privacy=off;screen=yes
Content-Length: 0
```

[\[diagram\]](#) Call-ID: [\[prev\]](#) [\[next\]](#)

**[19] INVITE sip:2040@172.18.203.55 SIP/2.0**

```
Via: SIP/2.0/UDP 172.18.203.46:5060;branch=z9hG4bK235962a0
From: "2010" <sip:2010@172.18.203.55>;tag=00120193edac00226f07b1b3-2bb7d41e
To: <sip:2040@172.18.203.55>
Call-ID: 00120193-edac0013-32973506-0458ff24@172.18.203.46
Max-Forwards: 70
CSeq: 101 INVITE
User-Agent: Cisco-CP7960G/7.5
Contact: <sip:2010@172.18.203.46:5060>
Expires: 180
Accept: application/sdp
Allow: ACK,BYE,CANCEL,INVITE,NOTIFY,OPTIONS,REFER,REGISTER,UPDATE
Remote-Party-ID: "2010" <sip:2010@172.18.203.46>;party=calling;id-type=subscriber;privacy=off;screen=yes
Supported: replaces
Content-Length: 257
Content-Type: application/sdp
Content-Disposition: session;handling=optional
```

```
v=0
o=Cisco-SIPUA 23779 0 IN IP4 172.18.203.46
s=SIP Call
```

```
t=0 0
m=audio 27184 RTP/AVP 0 8 18 101
c=IN IP4 172.18.203.46
a=rtpmap:0 PCMU/8000
a=rtpmap:8 PCMA/8000
a=rtpmap:18 G729/8000
a=rtpmap:101 telephone-event/8000
a=fmtp:101 0-15
a=sendrecv
```

[[diagram](#)] Call-ID: [[prev](#)] [[next](#)]

**[20] SIP/2.0 100 Trying**

```
Via: SIP/2.0/UDP 172.18.203.46:5060;branch=z9hG4bK235962a0
From: "2010" <sip:2010@172.18.203.55>;tag=00120193edac00226f07b1b3-2bb7d41e
To: <sip:2040@172.18.203.55>
Date: Wed, 12 Jul 2006 19:29:02 GMT
Call-ID: 00120193-edac0013-32973506-0458ff24@172.18.203.46
CSeq: 101 INVITE
Allow-Events: presence
Content-Length: 0
```

[[diagram](#)] Call-ID: [[prev](#)] [[next](#)]

**[21] INVITE sip:2040@172.18.203.52:5060 SIP/2.0**

```
Via: SIP/2.0/UDP 172.18.203.55:5060;branch=z9hG4bK720a9d78
Remote-Party-ID: "SIP Line 2010" <sip:2010@172.18.203.55>;party=calling;screen=yes;privacy=off
From: "SIP Line 2010" <sip:2010@172.18.203.55>;tag=b9c8b19b-c709-4d85-86d4-d2f557c6c2a6-30679781
To: <sip:2040@172.18.203.52>
Date: Wed, 12 Jul 2006 19:29:03 GMT
Call-ID: abc06f00-4b514d7f-326-37cb12ac@172.18.203.55
Supported: timer,replaces
Min-SE: 1800
User-Agent: Cisco-CCM5.0
Allow: INVITE, OPTIONS, INFO, BYE, CANCEL, ACK, PRACK, UPDATE, REFER, SUBSCRIBE, NOTIFY
CSeq: 101 INVITE
Expires: 180
Allow-Events: presence
Call-Info: <urn:x-cisco-remotecc:callinfo>; security= NotAuthenticated; orientation= from; call-instance= 1
Alert-Info: <file://Bellcore-dr1/>
Contact: <sip:2040@172.18.203.55:5060>
Max-Forwards: 69
Content-Length: 0
```

[[diagram](#)] Call-ID: [[prev](#)] [[next](#)]

**[22] SIP/2.0 100 Trying**

```
Via: SIP/2.0/UDP 172.18.203.55:5060;branch=z9hG4bK720a9d78
From: "SIP Line 2010" <sip:2010@172.18.203.55>;tag=b9c8b19b-c709-4d85-86d4-d2f557c6c2a6-30679781
To: <sip:2040@172.18.203.52>
Call-ID: abc06f00-4b514d7f-326-37cb12ac@172.18.203.55
CSeq: 101 INVITE
Server: Cisco-CP7960G/7.5
Contact: <sip:2040@172.18.203.52:5060>
Allow: ACK,BYE,CANCEL,INVITE,NOTIFY,OPTIONS,REFER,REGISTER,UPDATE
Remote-Party-ID: "2040" <sip:2040@172.18.203.52>;party=called;id-type=subscriber;privacy=off;screen=yes
Content-Length: 0
```

[[diagram](#)] Call-ID: [[prev](#)] [[next](#)]

**[23] SIP/2.0 180 Ringing**

```
Via: SIP/2.0/UDP 172.18.203.55:5060;branch=z9hG4bK720a9d78
From: "SIP Line 2010" <sip:2010@172.18.203.55>;tag=b9c8b19b-c709-4d85-86d4-d2f557c6c2a6-30679781
To: <sip:2040@172.18.203.52>;tag=003094c3cd3a001b4f72a14a-3ecb221d
Call-ID: abc06f00-4b514d7f-326-37cb12ac@172.18.203.55
CSeq: 101 INVITE
Server: Cisco-CP7960G/7.5
Contact: <sip:2040@172.18.203.52:5060>
Allow: ACK,BYE,CANCEL,INVITE,NOTIFY,OPTIONS,REFER,REGISTER,UPDATE
Remote-Party-ID: "2040" <sip:2040@172.18.203.52>;party=called;id-type=subscriber;privacy=off;screen=yes
Content-Length: 0
```

[[diagram](#)] Call-ID: [[prev](#)] [[next](#)]

**[24] SIP/2.0 180 Ringing**

```
Via: SIP/2.0/UDP 172.18.203.46:5060;branch=z9hG4bK235962a0
From: "2010" <sip:2010@172.18.203.55>;tag=00120193edac00226f07b1b3-2bb7d41e
To: <sip:2040@172.18.203.55>;tag=b9c8b19b-c709-4d85-86d4-d2f557c6c2a6-30679780
Date: Wed, 12 Jul 2006 19:29:02 GMT
Call-ID: 00120193-edac0013-32973506-0458ff24@172.18.203.46
CSeq: 101 INVITE
Allow: INVITE, OPTIONS, INFO, BYE, CANCEL, ACK, PRACK, UPDATE, REFER, SUBSCRIBE, NOTIFY
Allow-Events: presence
Remote-Party-ID: "SIP Alerting 2040" <sip:2040@172.18.203.55>;party=called;screen=yes;privacy=off
Contact: <sip:2040@172.18.203.55:5060>
```

Content-Length: 0

[\[diagram\]](#) Call-ID: [\[prev\]](#) [\[next\]](#)

**[25] REFER sip:2030@172.18.203.55:5060 SIP/2.0**

Via: SIP/2.0/UDP 172.18.203.46:5060;branch=z9hG4bK08fba9b7  
 From: "2010" <sip:2010@172.18.203.55>;tag=00120193edac002120ec8a1f-79764057  
 To: <sip:2030@172.18.203.55>;tag=b9c8b19b-c709-4d85-86d4-d2f557c6c2a6-30679778  
 Call-ID: 00120193-edac0012-1e9b4420-4ef881cf@172.18.203.46  
 Max-Forwards: 70  
 CSeq: 103 REFER  
 User-Agent: Cisco-CP7960G/7.5  
 Contact: <sip:2010@172.18.203.46:5060>  
 Remote-Party-ID: "2010" <sip:2010@172.18.203.46>;party=calling;id-type=subscriber;privacy=off;screen=yes  
 Content-Length: 0  
 Refer-To: <sip:2040@172.18.203.55?Replaces=00120193-edac0013-32973506-0458ff24%40172.18.203.46%3Bto-tag%3Db9c8b19b-c709-4d85-86d4-d2f557c6c2a6-30679780%3Bfrom-tag%3D00120193edac00226f07b1b3-2bb7d41e>  
 Referred-By: "2010" <sip:2010@172.18.203.55>

[\[diagram\]](#) Call-ID: [\[prev\]](#) [\[next\]](#)

**[26] SIP/2.0 202 Accepted**

Via: SIP/2.0/UDP 172.18.203.46:5060;branch=z9hG4bK08fba9b7  
 From: "2010" <sip:2010@172.18.203.55>;tag=00120193edac002120ec8a1f-79764057  
 To: <sip:2030@172.18.203.55>;tag=b9c8b19b-c709-4d85-86d4-d2f557c6c2a6-30679778  
 Date: Wed, 12 Jul 2006 19:29:05 GMT  
 Call-ID: 00120193-edac0012-1e9b4420-4ef881cf@172.18.203.46  
 CSeq: 103 REFER  
 Content-Length: 0  
 Contact: <sip:2030@172.18.203.55:5060>

[\[diagram\]](#) Call-ID: [\[prev\]](#) [\[next\]](#)

**[27] INVITE sip:2010@172.18.203.46:5060 SIP/2.0**

Via: SIP/2.0/UDP 172.18.203.55:5060;branch=z9hG4bK670646bc  
 Remote-Party-ID: "SIP Line 2030" <sip:2030@172.18.203.55>;party=calling;screen=yes;privacy=off  
 From: <sip:2030@172.18.203.55>;tag=b9c8b19b-c709-4d85-86d4-d2f557c6c2a6-30679778  
 To: "2010" <sip:2010@172.18.203.55>;tag=00120193edac002120ec8a1f-79764057  
 Date: Wed, 12 Jul 2006 19:29:05 GMT  
 Call-ID: 00120193-edac0012-1e9b4420-4ef881cf@172.18.203.46  
 Supported: timer,replaces  
 Min-SE: 1800  
 Cisco-Guid: 2821515264-1263619449-803-936055468  
 User-Agent: Cisco-CCM5.0  
 Allow: INVITE, OPTIONS, INFO, BYE, CANCEL, ACK, PRACK, UPDATE, REFER, SUBSCRIBE, NOTIFY  
 CSeq: 101 INVITE  
 Max-Forwards: 70  
 Contact: <sip:2030@172.18.203.55:5060>  
 Expires: 180  
 Allow-Events: presence  
 Content-Type: application/sdp  
 Content-Length: 220

v=0  
 o=CiscoSystemsCCM-SIP 2000 3 IN IP4 172.18.203.55  
 s=SIP Call  
 c=IN IP4 0.0.0.0  
 t=0 0  
 m=audio 21834 RTP/AVP 0 101  
 a=rtpmap:0 PCMU/8000  
 a=ptime:20  
 a=inactive  
 a=rtpmap:101 telephone-event/8000  
 a=fmtp:101 0-15

[\[diagram\]](#) Call-ID: [\[prev\]](#) [\[next\]](#)

**[28] INVITE sip:2030@172.18.203.51:5060 SIP/2.0**

Via: SIP/2.0/UDP 172.18.203.55:5060;branch=z9hG4bK5f6dd782  
 Remote-Party-ID: "SIP Line 2010" <sip:2010@172.18.203.55>;party=calling;screen=yes;privacy=off  
 From: "SIP Line 2010" <sip:2010@172.18.203.55>;tag=b9c8b19b-c709-4d85-86d4-d2f557c6c2a6-30679779  
 To: <sip:2030@172.18.203.51>;tag=000d280821a5009816da06be-78a84159  
 Date: Wed, 12 Jul 2006 19:29:05 GMT  
 Call-ID: a82ce800-4b514d79-324-37cb12ac@172.18.203.55  
 Supported: timer,replaces  
 Min-SE: 1800  
 User-Agent: Cisco-CCM5.0  
 Allow: INVITE, OPTIONS, INFO, BYE, CANCEL, ACK, PRACK, UPDATE, REFER, SUBSCRIBE, NOTIFY  
 CSeq: 103 INVITE  
 Max-Forwards: 70  
 Contact: <sip:2010@172.18.203.55:5060>  
 Expires: 180  
 Allow-Events: presence  
 Content-Type: application/sdp

Content-Length: 294

```
v=0
o=CiscoSystemsCCM-SIP 2000 3 IN IP4 172.18.203.55
s=SIP Call
c=IN IP4 0.0.0.0
t=0 0
m=audio 27180 RTP/AVP 0 8 18 101
a=rtpmap:0 PCMU/8000
a=ptime:20
a=rtpmap:8 PCMA/8000
a=ptime:20
a=rtpmap:18 G729/8000
a=ptime:20
a=inactive
a=rtpmap:101 telephone-event/8000
a=fmtp:101 0-15
```

[\[diagram\]](#) Call-ID: [\[prev\]](#) [\[next\]](#)

**[29] SIP/2.0 200 OK**

```
Via: SIP/2.0/UDP 172.18.203.55:5060;branch=z9hG4bK5f6dd782
From: "SIP Line 2010" <sip:2010@172.18.203.55>;tag=b9c8b19b-c709-4d85-86d4-d2f557c6c2a6-30679779
To: <sip:2030@172.18.203.51>;tag=000d280821a5009816da06be-78a84159
Call-ID: a82ce800-4b514d79-324-37cb12ac@172.18.203.55
Date: Wed, 12 Jul 2006 19:29:05 GMT
CSeq: 103 INVITE
Server: Cisco-CP7960G/7.5
Contact: <sip:2030@172.18.203.51:5060>
Allow: ACK,BYE,CANCEL,INVITE,NOTIFY,OPTIONS,REFER,REGISTER,UPDATE
Remote-Party-ID: "2030" <sip:2030@172.18.203.51>;party=called;id-type=subscriber;privacy=off;screen=yes
Supported: replaces
Content-Length: 206
Content-Type: application/sdp
Content-Disposition: session;handling=optional
```

```
v=0
o=Cisco-SIPUA 9868 2 IN IP4 172.18.203.51
s=SIP Call
t=0 0
m=audio 21834 RTP/AVP 0 101
c=IN IP4 172.18.203.51
a=rtpmap:0 PCMU/8000
a=rtpmap:101 telephone-event/8000
a=fmtp:101 0-15
a=inactive
```

[\[diagram\]](#) Call-ID: [\[prev\]](#) [\[next\]](#)

**[30] ACK sip:2030@172.18.203.51:5060 SIP/2.0**

```
Via: SIP/2.0/UDP 172.18.203.55:5060;branch=z9hG4bK3ddeddc
From: "SIP Line 2010" <sip:2010@172.18.203.55>;tag=b9c8b19b-c709-4d85-86d4-d2f557c6c2a6-30679779
To: <sip:2030@172.18.203.51>;tag=000d280821a5009816da06be-78a84159
Date: Wed, 12 Jul 2006 19:29:05 GMT
Call-ID: a82ce800-4b514d79-324-37cb12ac@172.18.203.55
Max-Forwards: 70
CSeq: 103 ACK
Allow-Events: presence
Content-Length: 0
```

[\[diagram\]](#) Call-ID: [\[prev\]](#) [\[next\]](#)

**[31] SIP/2.0 200 OK**

```
Via: SIP/2.0/UDP 172.18.203.55:5060;branch=z9hG4bK670646bc
From: <sip:2030@172.18.203.55>;tag=b9c8b19b-c709-4d85-86d4-d2f557c6c2a6-30679778
To: "2010" <sip:2010@172.18.203.55>;tag=00120193edac002120ec8a1f-79764057
Call-ID: 00120193-edac0012-1e9b4420-4ef881cf@172.18.203.46
CSeq: 101 INVITE
Server: Cisco-CP7960G/7.5
Contact: <sip:2010@172.18.203.46:5060>
Allow: ACK,BYE,CANCEL,INVITE,NOTIFY,OPTIONS,REFER,REGISTER,UPDATE
Remote-Party-ID: "2010" <sip:2010@172.18.203.46>;party=calling;id-type=subscriber;privacy=off;screen=yes
Supported: replaces
Content-Length: 207
Content-Type: application/sdp
Content-Disposition: session;handling=optional
```

```
v=0
o=Cisco-SIPUA 26605 2 IN IP4 172.18.203.46
s=SIP Call
t=0 0
m=audio 27180 RTP/AVP 0 101
c=IN IP4 172.18.203.46
```

```
a=rtpmap:0 PCMU/8000
a=rtpmap:101 telephone-event/8000
a=fmtp:101 0-15
a=inactive
```

[[diagram](#)] Call-ID: [[prev](#)] [[next](#)]

[32] ACK sip:2010@172.18.203.46:5060 SIP/2.0

```
Via: SIP/2.0/UDP 172.18.203.55:5060;branch=z9hG4bK52068c35
From: <sip:2030@172.18.203.55>;tag=b9c8b19b-c709-4d85-86d4-d2f557c6c2a6-30679778
To: "2010" <sip:2010@172.18.203.55>;tag=00120193edac002120ec8a1f-79764057
Date: Wed, 12 Jul 2006 19:29:05 GMT
Call-ID: 00120193-edac0012-1e9b4420-4ef881cf@172.18.203.46
Max-Forwards: 70
CSeq: 101 ACK
Allow-Events: presence
Content-Length: 0
```

[[diagram](#)] Call-ID: [[prev](#)] [[next](#)]

[33] UPDATE sip:2040@172.18.203.52:5060 SIP/2.0

```
Via: SIP/2.0/UDP 172.18.203.55:5060;branch=z9hG4bK7eaffbbd
From: "SIP Line 2010" <sip:2010@172.18.203.55>;tag=b9c8b19b-c709-4d85-86d4-d2f557c6c2a6-30679781
To: <sip:2040@172.18.203.52>;tag=003094c3cd3a001b4f72a14a-3ecb221d
Date: Wed, 12 Jul 2006 19:29:03 GMT
Call-ID: abc06f00-4b514d7f-326-37cb12ac@172.18.203.55
Max-Forwards: 70
CSeq: 102 UPDATE
Contact: <sip:2010@172.18.203.55:5060>
Remote-Party-ID: "SIP Line 2030" <sip:2030@172.18.203.55>;party=calling;screen=yes;privacy=off
Call-Info: <urn:x-cisco-remotecc:callinfo>; security= NotAuthenticated; orientation= from; call-instance= 1
Content-Length: 0
```

[[diagram](#)] Call-ID: [[prev](#)] [[next](#)]

[34] UPDATE sip:2030@172.18.203.51:5060 SIP/2.0

```
Via: SIP/2.0/UDP 172.18.203.55:5060;branch=z9hG4bK461110e4
From: "SIP Line 2010" <sip:2010@172.18.203.55>;tag=b9c8b19b-c709-4d85-86d4-d2f557c6c2a6-30679779
To: <sip:2030@172.18.203.51>;tag=000d280821a5009816da06be-78a84159
Date: Wed, 12 Jul 2006 19:29:05 GMT
Call-ID: a82ce800-4b514d79-324-37cb12ac@172.18.203.55
Max-Forwards: 70
CSeq: 104 UPDATE
Contact: <sip:2010@172.18.203.55:5060>
Remote-Party-ID: "SIP Alerting 2040" <sip:2040@172.18.203.55>;party=calling;screen=yes;privacy=off
Content-Length: 0
```

[[diagram](#)] Call-ID: [[prev](#)] [[next](#)]

[35] SIP/2.0 500 Internal Server Error

```
Via: SIP/2.0/UDP 172.18.203.46:5060;branch=z9hG4bK235962a0
From: "2010" <sip:2010@172.18.203.55>;tag=00120193edac00226f07b1b3-2bb7d41e
To: <sip:2040@172.18.203.55>;tag=b9c8b19b-c709-4d85-86d4-d2f557c6c2a6-30679780
Date: Wed, 12 Jul 2006 19:29:02 GMT
Call-ID: 00120193-edac0013-32973506-0458ff24@172.18.203.46
CSeq: 101 INVITE
Allow-Events: presence
Reason: Q.850;cause=41
Content-Length: 0
```

[[diagram](#)] Call-ID: [[prev](#)] [[next](#)]

[36] BYE sip:2010@172.18.203.46:5060 SIP/2.0

```
Via: SIP/2.0/UDP 172.18.203.55:5060;branch=z9hG4bK1d3536a5
From: <sip:2030@172.18.203.55>;tag=b9c8b19b-c709-4d85-86d4-d2f557c6c2a6-30679778
To: "2010" <sip:2010@172.18.203.55>;tag=00120193edac002120ec8a1f-79764057
Date: Wed, 12 Jul 2006 19:29:05 GMT
Call-ID: 00120193-edac0012-1e9b4420-4ef881cf@172.18.203.46
User-Agent: Cisco-CCM5.0
Max-Forwards: 70
CSeq: 102 BYE
Content-Length: 0
```

[[diagram](#)] Call-ID: [[prev](#)] [[next](#)]

[37] SIP/2.0 200 OK

```
Via: SIP/2.0/UDP 172.18.203.55:5060;branch=z9hG4bK7eaffbbd
From: "SIP Line 2010" <sip:2010@172.18.203.55>;tag=b9c8b19b-c709-4d85-86d4-d2f557c6c2a6-30679781
To: <sip:2040@172.18.203.52>;tag=003094c3cd3a001b4f72a14a-3ecb221d
Call-ID: abc06f00-4b514d7f-326-37cb12ac@172.18.203.55
CSeq: 102 UPDATE
Server: Cisco-CP7960G/7.5
Contact: <sip:2040@172.18.203.52:5060>
Allow: ACK, BYE, CANCEL, INVITE, NOTIFY, OPTIONS, REFER, REGISTER, UPDATE
Content-Length: 0
```

[\[diagram\]](#) Call-ID: [\[prev\]](#) [\[next\]](#)

**[38] SIP/2.0 200 OK**

Via: SIP/2.0/UDP 172.18.203.55:5060;branch=z9hG4bK461110e4  
 From: "SIP Line 2010" <sip:2010@172.18.203.55>;tag=b9c8b19b-c709-4d85-86d4-d2f557c6c2a6-30679779  
 To: <sip:2030@172.18.203.51>;tag=000d280821a5009816da06be-78a84159  
 Call-ID: a82ce800-4b514d79-324-37cb12ac@172.18.203.55  
 Date: Wed, 12 Jul 2006 19:29:05 GMT  
 CSeq: 104 UPDATE  
 Server: Cisco-CP7960G/7.5  
 Contact: <sip:2030@172.18.203.51:5060>  
 Allow: ACK,BYE,CANCEL,INVITE,NOTIFY,OPTIONS,REFER,REGISTER,UPDATE  
 Content-Length: 256  
 Content-Type: application/sdp  
 Content-Disposition: session;handling=optional

v=0  
 o=Cisco-SIPUA 9868 2 IN IP4 172.18.203.51  
 s=SIP Call  
 t=0 0  
 m=audio 21834 RTP/AVP 0 8 18 101  
 c=IN IP4 172.18.203.51  
 a=rtpmap:0 PCMU/8000  
 a=rtpmap:8 PCMA/8000  
 a=rtpmap:18 G729/8000  
 a=rtpmap:101 telephone-event/8000  
 a=fmtp:101 0-15  
 a=sendrecv

[\[diagram\]](#) Call-ID: [\[prev\]](#) [\[next\]](#)

**[39] INVITE sip:2030@172.18.203.51:5060 SIP/2.0**

Via: SIP/2.0/UDP 172.18.203.55:5060;branch=z9hG4bK65d47b9e  
 Remote-Party-ID: "SIP Alerting 2040" <sip:2040@172.18.203.55>;party=calling;screen=yes;privacy=off  
 From: "SIP Line 2010" <sip:2010@172.18.203.55>;tag=b9c8b19b-c709-4d85-86d4-d2f557c6c2a6-30679779  
 To: <sip:2030@172.18.203.51>;tag=000d280821a5009816da06be-78a84159  
 Date: Wed, 12 Jul 2006 19:29:06 GMT  
 Call-ID: a82ce800-4b514d79-324-37cb12ac@172.18.203.55  
 Supported: timer,replaces  
 Min-SE: 1800  
 User-Agent: Cisco-CCM5.0  
 Allow: INVITE, OPTIONS, INFO, BYE, CANCEL, ACK, PRACK, UPDATE, REFER, SUBSCRIBE, NOTIFY  
 CSeq: 105 INVITE  
 Max-Forwards: 70  
 Contact: <sip:2010@172.18.203.55:5060>  
 Expires: 180  
 Allow-Events: presence  
 Content-Length: 0

[\[diagram\]](#) Call-ID: [\[prev\]](#) [\[next\]](#)

**[40] ACK sip:2040@172.18.203.55 SIP/2.0**

Via: SIP/2.0/UDP 172.18.203.46:5060;branch=z9hG4bK235962a0  
 From: "2010" <sip:2010@172.18.203.55>;tag=00120193edac00226f07b1b3-2bb7d41e  
 To: <sip:2040@172.18.203.55>;tag=b9c8b19b-c709-4d85-86d4-d2f557c6c2a6-30679780  
 Call-ID: 00120193-edac0013-32973506-0458ff24@172.18.203.46  
 CSeq: 101 ACK  
 Content-Length: 0

[\[diagram\]](#) Call-ID: [\[prev\]](#) [\[next\]](#)

**[41] SIP/2.0 200 OK**

Via: SIP/2.0/UDP 172.18.203.55:5060;branch=z9hG4bK1d3536a5  
 From: <sip:2030@172.18.203.55>;tag=b9c8b19b-c709-4d85-86d4-d2f557c6c2a6-30679778  
 To: "2010" <sip:2010@172.18.203.55>;tag=00120193edac002120ec8a1f-79764057  
 Call-ID: 00120193-edac0012-1e9b4420-4ef881cf@172.18.203.46  
 CSeq: 102 BYE  
 Server: Cisco-CP7960G/7.5  
 Content-Length: 0

[\[diagram\]](#) Call-ID: [\[prev\]](#) [\[next\]](#)

**[42] SIP/2.0 200 OK**

Via: SIP/2.0/UDP 172.18.203.55:5060;branch=z9hG4bK65d47b9e  
 From: "SIP Line 2010" <sip:2010@172.18.203.55>;tag=b9c8b19b-c709-4d85-86d4-d2f557c6c2a6-30679779  
 To: <sip:2030@172.18.203.51>;tag=000d280821a5009816da06be-78a84159  
 Call-ID: a82ce800-4b514d79-324-37cb12ac@172.18.203.55  
 Date: Wed, 12 Jul 2006 19:29:06 GMT  
 CSeq: 105 INVITE  
 Server: Cisco-CP7960G/7.5  
 Contact: <sip:2030@172.18.203.51:5060>  
 Allow: ACK,BYE,CANCEL,INVITE,NOTIFY,OPTIONS,REFER,REGISTER,UPDATE  
 Remote-Party-ID: "2030" <sip:2030@172.18.203.51>;party=called;id-type=subscriber;privacy=off;screen=yes  
 Supported: replaces  
 Content-Length: 256

Content-Type: application/sdp  
Content-Disposition: session;handling=optional

v=0  
o=Cisco-SIPUA 9868 2 IN IP4 172.18.203.51  
s=SIP Call  
t=0 0  
m=audio 21834 RTP/AVP 0 8 18 101  
c=IN IP4 172.18.203.51  
a=rtpmap:0 PCMU/8000  
a=rtpmap:8 PCMA/8000  
a=rtpmap:18 G729/8000  
a=rtpmap:101 telephone-event/8000  
a=fmtp:101 0-15  
a=sendrecv

[\[diagram\]](#) Call-ID: [\[prev\]](#) [\[next\]](#)

**[43] ACK sip:2030@172.18.203.51:5060 SIP/2.0**

Via: SIP/2.0/UDP 172.18.203.55:5060;branch=z9hG4bK11dfff4  
From: "SIP Line 2010" <sip:2010@172.18.203.55>;tag=b9c8b19b-c709-4d85-86d4-d2f557c6c2a6-30679779  
To: <sip:2030@172.18.203.51>;tag=000d280821a5009816da06be-78a84159  
Date: Wed, 12 Jul 2006 19:29:06 GMT  
Call-ID: a82ce800-4b514d79-324-37cb12ac@172.18.203.55  
Max-Forwards: 70  
CSeq: 105 ACK  
Allow-Events: presence  
Content-Type: application/sdp  
Content-Length: 225

v=0  
o=CiscoSystemsCCM-SIP 2000 4 IN IP4 172.18.203.55  
s=SIP Call  
c=IN IP4 172.18.203.55  
t=0 0  
m=audio 4000 RTP/AVP 0 101  
a=rtpmap:0 PCMU/8000  
a=ptime:20  
a=sendonly  
a=rtpmap:101 telephone-event/8000  
a=fmtp:101 0-15

[\[diagram\]](#) Call-ID: [\[prev\]](#) [\[next\]](#)

**[44] SIP/2.0 200 OK**

Via: SIP/2.0/UDP 172.18.203.55:5060;branch=z9hG4bK720a9d78  
From: "SIP Line 2010" <sip:2010@172.18.203.55>;tag=b9c8b19b-c709-4d85-86d4-d2f557c6c2a6-30679781  
To: <sip:2040@172.18.203.52>;tag=003094c3cd3a001b4f72a14a-3ecb221d  
Call-ID: abc06f00-4b514d7f-326-37cb12ac@172.18.203.55  
CSeq: 101 INVITE  
Server: Cisco-CP7960G/7.5  
Contact: <sip:2040@172.18.203.52:5060>  
Allow: ACK,BYE,CANCEL,INVITE,NOTIFY,OPTIONS,REFER,REGISTER,UPDATE  
Remote-Party-ID: "2040" <sip:2040@172.18.203.52>;party=called;id-type=subscriber;privacy=off;screen=yes  
Supported: replaces  
Content-Length: 257  
Content-Type: application/sdp  
Content-Disposition: session;handling=optional

v=0  
o=Cisco-SIPUA 28168 0 IN IP4 172.18.203.52  
s=SIP Call  
t=0 0  
m=audio 16442 RTP/AVP 0 8 18 101  
c=IN IP4 172.18.203.52  
a=rtpmap:0 PCMU/8000  
a=rtpmap:8 PCMA/8000  
a=rtpmap:18 G729/8000  
a=rtpmap:101 telephone-event/8000  
a=fmtp:101 0-15  
a=sendrecv

[\[diagram\]](#) Call-ID: [\[prev\]](#) [\[next\]](#)

**[45] INVITE sip:2030@172.18.203.51:5060 SIP/2.0**

Via: SIP/2.0/UDP 172.18.203.55:5060;branch=z9hG4bK1af2fe78  
Remote-Party-ID: "SIP Alerting 2040" <sip:2040@172.18.203.55>;party=calling;screen=yes;privacy=off  
From: "SIP Line 2010" <sip:2010@172.18.203.55>;tag=b9c8b19b-c709-4d85-86d4-d2f557c6c2a6-30679779  
To: <sip:2030@172.18.203.51>;tag=000d280821a5009816da06be-78a84159  
Date: Wed, 12 Jul 2006 19:29:10 GMT  
Call-ID: a82ce800-4b514d79-324-37cb12ac@172.18.203.55  
Supported: timer,replaces  
Min-SE: 1800

```
User-Agent: Cisco-CCM5.0
Allow: INVITE, OPTIONS, INFO, BYE, CANCEL, ACK, PRACK, UPDATE, REFER, SUBSCRIBE, NOTIFY
CSeq: 106 INVITE
Max-Forwards: 70
Contact: <sip:2010@172.18.203.55:5060>
Expires: 180
Allow-Events: presence
Content-Type: application/sdp
Content-Length: 219
```

```
v=0
o=CiscoSystemsCCM-SIP 2000 5 IN IP4 172.18.203.55
s=SIP Call
c=IN IP4 0.0.0.0
t=0 0
m=audio 4000 RTP/AVP 0 101
a=rtpmap:0 PCMU/8000
a=ptime:20
a=inactive
a=rtpmap:101 telephone-event/8000
a=fmtp:101 0-15
```

[\[diagram\]](#) Call-ID: [\[prev\]](#) [\[next\]](#)

**[46] SIP/2.0 200 OK**

```
Via: SIP/2.0/UDP 172.18.203.55:5060;branch=z9hG4bK1af2fe78
From: "SIP Line 2010" <sip:2010@172.18.203.55>;tag=b9c8b19b-c709-4d85-86d4-d2f557c6c2a6-30679779
To: <sip:2030@172.18.203.51>;tag=000d280821a5009816da06be-78a84159
Call-ID: a82ce800-4b514d79-324-37cb12ac@172.18.203.55
Date: Wed, 12 Jul 2006 19:29:10 GMT
CSeq: 106 INVITE
Server: Cisco-CP7960G/7.5
Contact: <sip:2030@172.18.203.51:5060>
Allow: ACK,BYE,CANCEL,INVITE,NOTIFY,OPTIONS,REFER,REGISTER,UPDATE
Remote-Party-ID: "2030" <sip:2030@172.18.203.51>;party=called;id-type=subscriber;privacy=off;screen=yes
Supported: replaces
Content-Length: 206
Content-Type: application/sdp
Content-Disposition: session;handling=optional
```

```
v=0
o=Cisco-SIPUA 9868 4 IN IP4 172.18.203.51
s=SIP Call
t=0 0
m=audio 21834 RTP/AVP 0 101
c=IN IP4 172.18.203.51
a=rtpmap:0 PCMU/8000
a=rtpmap:101 telephone-event/8000
a=fmtp:101 0-15
a=inactive
```

[\[diagram\]](#) Call-ID: [\[prev\]](#) [\[next\]](#)

**[47] ACK sip:2030@172.18.203.51:5060 SIP/2.0**

```
Via: SIP/2.0/UDP 172.18.203.55:5060;branch=z9hG4bK1f421a1f
From: "SIP Line 2010" <sip:2010@172.18.203.55>;tag=b9c8b19b-c709-4d85-86d4-d2f557c6c2a6-30679779
To: <sip:2030@172.18.203.51>;tag=000d280821a5009816da06be-78a84159
Date: Wed, 12 Jul 2006 19:29:10 GMT
Call-ID: a82ce800-4b514d79-324-37cb12ac@172.18.203.55
Max-Forwards: 70
CSeq: 106 ACK
Allow-Events: presence
Content-Length: 0
```

[\[diagram\]](#) Call-ID: [\[prev\]](#) [\[next\]](#)

**[48] INVITE sip:2030@172.18.203.51:5060 SIP/2.0**

```
Via: SIP/2.0/UDP 172.18.203.55:5060;branch=z9hG4bK5d31b77
Remote-Party-ID: "SIP Alerting 2040" <sip:2040@172.18.203.55>;party=calling;screen=yes;privacy=off
From: "SIP Line 2010" <sip:2010@172.18.203.55>;tag=b9c8b19b-c709-4d85-86d4-d2f557c6c2a6-30679779
To: <sip:2030@172.18.203.51>;tag=000d280821a5009816da06be-78a84159
Date: Wed, 12 Jul 2006 19:29:10 GMT
Call-ID: a82ce800-4b514d79-324-37cb12ac@172.18.203.55
Supported: timer,replaces
Min-SE: 1800
User-Agent: Cisco-CCM5.0
Allow: INVITE, OPTIONS, INFO, BYE, CANCEL, ACK, PRACK, UPDATE, REFER, SUBSCRIBE, NOTIFY
CSeq: 107 INVITE
Max-Forwards: 70
Contact: <sip:2010@172.18.203.55:5060>
Expires: 180
Allow-Events: presence
Content-Length: 0
```

[[diagram](#)] [Call-ID: \[prev\] \[next\]](#)

[49] SIP/2.0 200 OK

Via: SIP/2.0/UDP 172.18.203.55:5060;branch=z9hG4bK720a9d78  
 From: "SIP Line 2010" <sip:2010@172.18.203.55>;tag=b9c8b19b-c709-4d85-86d4-d2f557c6c2a6-30679781  
 To: <sip:2040@172.18.203.52>;tag=003094c3cd3a001b4f72a14a-3ecb221d  
 Call-ID: abc06f00-4b514d7f-326-37cb12ac@172.18.203.55  
 CSeq: 101 INVITE  
 Server: Cisco-CP7960G/7.5  
 Contact: <sip:2040@172.18.203.52:5060>  
 Allow: ACK,BYE,CANCEL,INVITE,NOTIFY,OPTIONS,REFER,REGISTER,UPDATE  
 Remote-Party-ID: "2040" <sip:2040@172.18.203.52>;party-called;id-type=subscriber;privacy=off;screen=yes  
 Supported: replaces  
 Content-Length: 257  
 Content-Type: application/sdp  
 Content-Disposition: session;handling=optional

v=0  
 o=Cisco-SIPUA 28168 0 IN IP4 172.18.203.52  
 s=SIP Call  
 t=0 0  
 m=audio 16442 RTP/AVP 0 8 18 101  
 c=IN IP4 172.18.203.52  
 a=rtpmap:0 PCMU/8000  
 a=rtpmap:8 PCMA/8000  
 a=rtpmap:18 G729/8000  
 a=rtpmap:101 telephone-event/8000  
 a=fmtp:101 0-15  
 a=sendrecv

[[diagram](#)] [Call-ID: \[prev\] \[next\]](#)

[50] SIP/2.0 200 OK

Via: SIP/2.0/UDP 172.18.203.55:5060;branch=z9hG4bK5d31b77  
 From: "SIP Line 2010" <sip:2010@172.18.203.55>;tag=b9c8b19b-c709-4d85-86d4-d2f557c6c2a6-30679779  
 To: <sip:2030@172.18.203.51>;tag=000d280821a5009816da06be-78a84159  
 Call-ID: a82ce800-4b514d79-324-37cb12ac@172.18.203.55  
 Date: Wed, 12 Jul 2006 19:29:10 GMT  
 CSeq: 107 INVITE  
 Server: Cisco-CP7960G/7.5  
 Contact: <sip:2030@172.18.203.51:5060>  
 Allow: ACK,BYE,CANCEL,INVITE,NOTIFY,OPTIONS,REFER,REGISTER,UPDATE  
 Remote-Party-ID: "2030" <sip:2030@172.18.203.51>;party-called;id-type=subscriber;privacy=off;screen=yes  
 Supported: replaces  
 Content-Length: 256  
 Content-Type: application/sdp  
 Content-Disposition: session;handling=optional

v=0  
 o=Cisco-SIPUA 9868 4 IN IP4 172.18.203.51  
 s=SIP Call  
 t=0 0  
 m=audio 21834 RTP/AVP 0 8 18 101  
 c=IN IP4 172.18.203.51  
 a=rtpmap:0 PCMU/8000  
 a=rtpmap:8 PCMA/8000  
 a=rtpmap:18 G729/8000  
 a=rtpmap:101 telephone-event/8000  
 a=fmtp:101 0-15  
 a=sendrecv

[[diagram](#)] [Call-ID: \[prev\] \[next\]](#)

[51] ACK sip:2030@172.18.203.51:5060 SIP/2.0

Via: SIP/2.0/UDP 172.18.203.55:5060;branch=z9hG4bK18decad0  
 From: "SIP Line 2010" <sip:2010@172.18.203.55>;tag=b9c8b19b-c709-4d85-86d4-d2f557c6c2a6-30679779  
 To: <sip:2030@172.18.203.51>;tag=000d280821a5009816da06be-78a84159  
 Date: Wed, 12 Jul 2006 19:29:10 GMT  
 Call-ID: a82ce800-4b514d79-324-37cb12ac@172.18.203.55  
 Max-Forwards: 70  
 CSeq: 107 ACK  
 Allow-Events: presence  
 Content-Type: application/sdp  
 Content-Length: 158

v=0  
 o=CiscoSystemsCCM-SIP 2000 6 IN IP4 172.18.203.55  
 s=SIP Call  
 c=IN IP4 172.18.203.52  
 t=0 0  
 m=audio 16442 RTP/AVP 0  
 a=rtpmap:0 PCMU/8000

a=ptime:20

[[diagram](#)] Call-ID: [[prev](#)] [[next](#)]

[52] UPDATE sip:2030@172.18.203.51:5060 SIP/2.0

Via: SIP/2.0/UDP 172.18.203.55:5060;branch=z9hG4bK29ac3839

From: "SIP Line 2010" <sip:2010@172.18.203.55>;tag=b9c8b19b-c709-4d85-86d4-d2f557c6c2a6-30679779

To: <sip:2030@172.18.203.51>;tag=000d280821a5009816da06be-78a84159

Date: Wed, 12 Jul 2006 19:29:10 GMT

Call-ID: a82ce800-4b514d79-324-37cb12ac@172.18.203.55

Max-Forwards: 70

CSeq: 108 UPDATE

Contact: <sip:2010@172.18.203.55:5060>

Remote-Party-ID: "SIP Line 2040" <sip:2040@172.18.203.55>;party=calling;screen=yes;privacy=off

Content-Length: 0

[[diagram](#)] Call-ID: [[prev](#)] [[next](#)]

[53] ACK sip:2040@172.18.203.52:5060 SIP/2.0

Via: SIP/2.0/UDP 172.18.203.55:5060;branch=z9hG4bK287fba1e

From: "SIP Line 2010" <sip:2010@172.18.203.55>;tag=b9c8b19b-c709-4d85-86d4-d2f557c6c2a6-30679781

To: <sip:2040@172.18.203.52>;tag=003094c3cd3a001b4f72a14a-3ecb221d

Date: Wed, 12 Jul 2006 19:29:03 GMT

Call-ID: abc06f00-4b514d7f-326-37cb12ac@172.18.203.55

Max-Forwards: 70

CSeq: 101 ACK

Allow-Events: presence

Content-Type: application/sdp

Content-Length: 214

v=0

o=CiscoSystemsCCM-SIP 2000 1 IN IP4 172.18.203.55

s=SIP Call

c=IN IP4 172.18.203.51

t=0 0

m=audio 21834 RTP/AVP 0 101

a=rtpmap:0 PCMU/8000

a=ptime:20

a=rtpmap:101 telephone-event/8000

a=fmtp:101 0-15

[[diagram](#)] Call-ID: [[prev](#)] [[next](#)]

[54] SIP/2.0 200 OK

Via: SIP/2.0/UDP 172.18.203.55:5060;branch=z9hG4bK29ac3839

From: "SIP Line 2010" <sip:2010@172.18.203.55>;tag=b9c8b19b-c709-4d85-86d4-d2f557c6c2a6-30679779

To: <sip:2030@172.18.203.51>;tag=000d280821a5009816da06be-78a84159

Call-ID: a82ce800-4b514d79-324-37cb12ac@172.18.203.55

Date: Wed, 12 Jul 2006 19:29:10 GMT

CSeq: 108 UPDATE

Server: Cisco-CP7960G/7.5

Contact: <sip:2030@172.18.203.51:5060>

Allow: ACK, BYE, CANCEL, INVITE, NOTIFY, OPTIONS, REFER, REGISTER, UPDATE

Content-Length: 256

Content-Type: application/sdp

Content-Disposition: session;handling=optional

v=0

o=Cisco-SIPUA 9868 5 IN IP4 172.18.203.51

s=SIP Call

t=0 0

m=audio 21834 RTP/AVP 0 8 18 101

c=IN IP4 172.18.203.51

a=rtpmap:0 PCMU/8000

a=rtpmap:8 PCMA/8000

a=rtpmap:18 G729/8000

a=rtpmap:101 telephone-event/8000

a=fmtp:101 0-15

a=sendrecv

[[diagram](#)] Call-ID: [[prev](#)] [[next](#)]

[55] BYE sip:2010@172.18.203.55:5060 SIP/2.0

Via: SIP/2.0/UDP 172.18.203.51:5060;branch=z9hG4bK106a44ae

From: <sip:2030@172.18.203.51>;tag=000d280821a5009816da06be-78a84159

To: "SIP Line 2010" <sip:2010@172.18.203.55>;tag=b9c8b19b-c709-4d85-86d4-d2f557c6c2a6-30679779

Call-ID: a82ce800-4b514d79-324-37cb12ac@172.18.203.55

Max-Forwards: 70

Date: Wed, 12 Jul 2006 19:29:12 GMT

CSeq: 101 BYE

User-Agent: Cisco-CP7960G/7.5

Content-Length: 0

[diagram] Call-ID: [prev] [next]  
**[56] BYE sip:2040@172.18.203.52:5060 SIP/2.0**  
 Via: SIP/2.0/UDP 172.18.203.55:5060;branch=z9hG4bK27b9734a  
 From: "SIP Line 2010" <sip:2010@172.18.203.55>;tag=b9c8b19b-c709-4d85-86d4-d2f557c6c2a6-30679781  
 To: <sip:2040@172.18.203.52>;tag=003094c3cd3a001b4f72a14a-3ecb221d  
 Date: Wed, 12 Jul 2006 19:29:03 GMT  
 Call-ID: abc06f00-4b514d7f-326-37cb12ac@172.18.203.55  
 User-Agent: Cisco-CCM5.0  
 Max-Forwards: 70  
 CSeq: 103 BYE  
 Content-Length: 0

[diagram] Call-ID: [prev] [next]  
**[57] SIP/2.0 200 OK**  
 Via: SIP/2.0/UDP 172.18.203.51:5060;branch=z9hG4bK106a44ae  
 From: <sip:2030@172.18.203.51>;tag=000d280821a5009816da06be-78a84159  
 To: "SIP Line 2010" <sip:2010@172.18.203.55>;tag=b9c8b19b-c709-4d85-86d4-d2f557c6c2a6-30679779  
 Date: Wed, 12 Jul 2006 19:29:12 GMT  
 Call-ID: a82ce800-4b514d79-324-37cb12ac@172.18.203.55  
 CSeq: 101 BYE  
 Content-Length: 0

[diagram] Call-ID: [prev] [next]  
**[58] SIP/2.0 200 OK**  
 Via: SIP/2.0/UDP 172.18.203.55:5060;branch=z9hG4bK27b9734a  
 From: "SIP Line 2010" <sip:2010@172.18.203.55>;tag=b9c8b19b-c709-4d85-86d4-d2f557c6c2a6-30679781  
 To: <sip:2040@172.18.203.52>;tag=003094c3cd3a001b4f72a14a-3ecb221d  
 Call-ID: abc06f00-4b514d7f-326-37cb12ac@172.18.203.55  
 CSeq: 103 BYE  
 Server: Cisco-CP7960G/7.5  
 Content-Length: 0

### 5.3 Transfer Unattended (SIP Basic phones)

Title: Transfer Unattended (SIP Basic phones)

#### Description:

G calls H and then performs a consultative transfer to L.

Note a "SIP Basic" phone is a 7960 configured with a pre-SDGA image (P0S3-07-5-00) to simulate a 3rd party phone. Finally, "transfer unattended" is sometimes referred to as "Blind Transfer"

#### Configuration:

Node = CCM, IP = 172.18.203.55

Phone = G, Line = 2010, IP = 172.18.203.46, Model = SIP Basic

Phone = H, Line = 2030, IP = 172.18.203.51, Model = SIP Basic

Phone = L, Line = 2040, IP = 172.18.203.52, Model = SIP Basic

#### Scenario:

2010 calls 2030

2030 is ringing

2030 answers

2010 presses BlindXfer softkey

2010 dials 2040

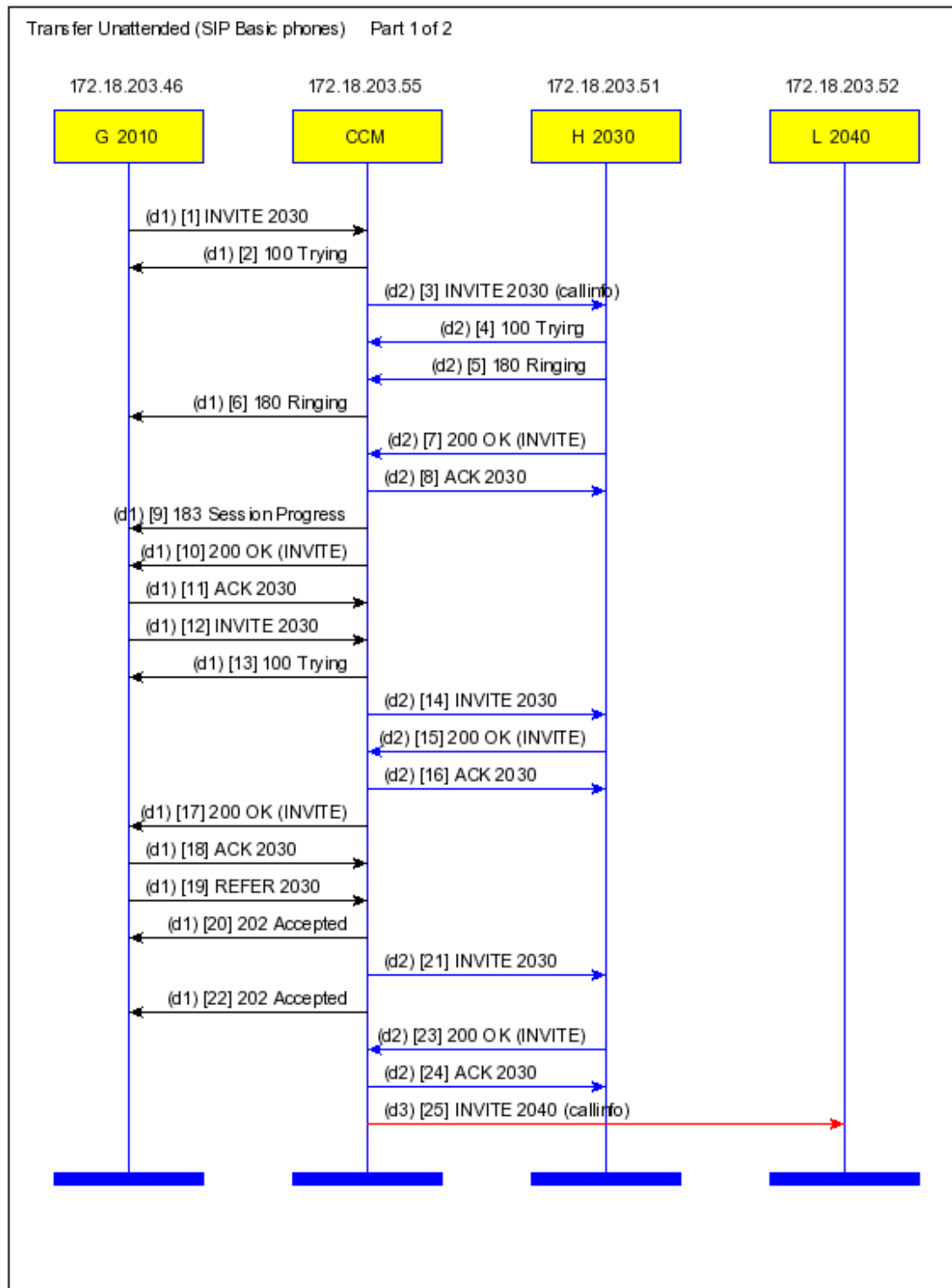
Call is cleared from 2010

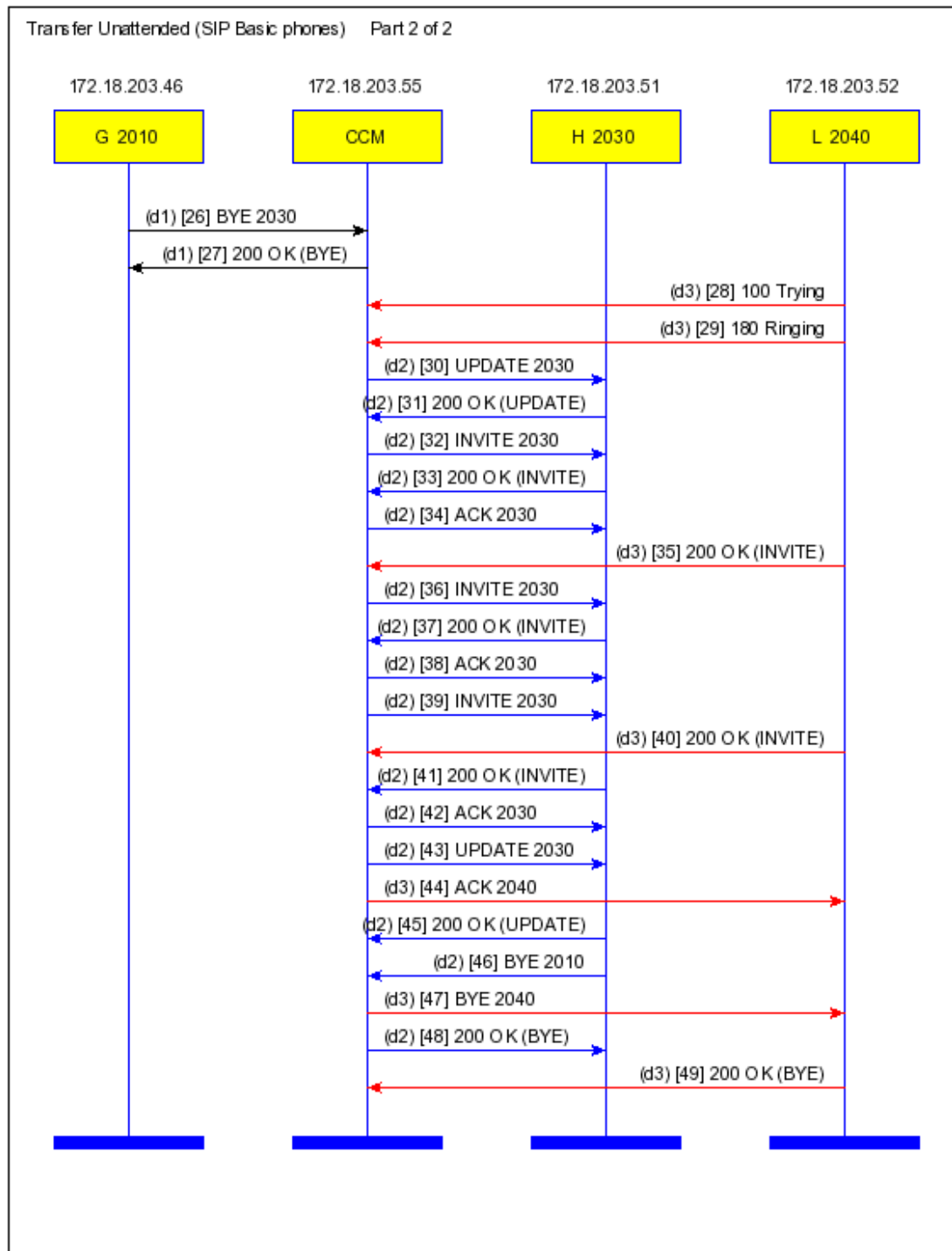
2040 is ringing

2040 answers

2030 and 2040 are connected

2030 goes onhook





[[diagram](#)]    Call-ID: [[prev](#)] [[next](#)]

[1] INVITE sip:2030@172.18.203.55 SIP/2.0

Via: SIP/2.0/UDP 172.18.203.46:5060;branch=z9hG4bK48a28fe6  
 From: "2010" <sip:2010@172.18.203.55>;tag=00120193edac0023013fa490-7d4be503  
 To: <sip:2030@172.18.203.55>  
 Call-ID: 00120193-edac0014-6a21a9f9-5a388c1f@172.18.203.46  
 Max-Forwards: 70  
 CSeq: 101 INVITE  
 User-Agent: Cisco-CP7960G/7.5  
 Contact: <sip:2010@172.18.203.46:5060>  
 Expires: 180  
 Accept: application/sdp  
 Allow: ACK,BYE,CANCEL,INVITE,NOTIFY,OPTIONS,REFER,REGISTER,UPDATE  
 Remote-Party-ID: "2010" <sip:2010@172.18.203.46>;party=calling;id-type=subscriber;privacy=off;screen=yes  
 Supported: replaces  
 Content-Length: 256  
 Content-Type: application/sdp  
 Content-Disposition: session;handling=optional

v=0  
 o=Cisco-SIPUA 3761 0 IN IP4 172.18.203.46  
 s=SIP Call  
 t=0 0  
 m=audio 27188 RTP/AVP 0 8 18 101  
 c=IN IP4 172.18.203.46  
 a=rtpmap:0 PCMU/8000  
 a=rtpmap:8 PCMA/8000  
 a=rtpmap:18 G729/8000  
 a=rtpmap:101 telephone-event/8000  
 a=fmtp:101 0-15  
 a=sendrecv

[[diagram](#)]    Call-ID: [[prev](#)] [[next](#)]

[2] SIP/2.0 100 Trying

Via: SIP/2.0/UDP 172.18.203.46:5060;branch=z9hG4bK48a28fe6  
 From: "2010" <sip:2010@172.18.203.55>;tag=00120193edac0023013fa490-7d4be503  
 To: <sip:2030@172.18.203.55>  
 Date: Wed, 12 Jul 2006 19:29:48 GMT  
 Call-ID: 00120193-edac0014-6a21a9f9-5a388c1f@172.18.203.46  
 CSeq: 101 INVITE  
 Allow-Events: presence  
 Content-Length: 0

[[diagram](#)]    Call-ID: [[prev](#)] [[next](#)]

[3] INVITE sip:2030@172.18.203.51:5060 SIP/2.0

Via: SIP/2.0/UDP 172.18.203.55:5060;branch=z9hG4bKeldbea8  
 Remote-Party-ID: "SIP Line 2010" <sip:2010@172.18.203.55>;party=calling;screen=yes;privacy=off  
 From: "SIP Line 2010" <sip:2010@172.18.203.55>;tag=b9c8b19b-c709-4d85-86d4-d2f557c6c2a6-30679784  
 To: <sip:2030@172.18.203.51>  
 Date: Wed, 12 Jul 2006 19:29:48 GMT  
 Call-ID: c692e380-4b514dac-328-37cb12ac@172.18.203.55  
 Supported: timer,replaces  
 Min-SE: 1800  
 User-Agent: Cisco-CCM5.0  
 Allow: INVITE, OPTIONS, INFO, BYE, CANCEL, ACK, PRACK, UPDATE, REFER, SUBSCRIBE, NOTIFY  
 CSeq: 101 INVITE  
 Expires: 180  
 Allow-Events: presence  
 Alert-Info: <urn:x-cisco-remotecc:callinfo>; security= NotAuthenticated; orientation= from; call-instance= 1  
 Alert-Info: <file://Bellcore-dr1/>  
 Contact: <sip:2030@172.18.203.55:5060>  
 Max-Forwards: 69  
 Content-Length: 0

[[diagram](#)]    Call-ID: [[prev](#)] [[next](#)]

[4] SIP/2.0 100 Trying

Via: SIP/2.0/UDP 172.18.203.55:5060;branch=z9hG4bKeldbea8  
 From: "SIP Line 2010" <sip:2010@172.18.203.55>;tag=b9c8b19b-c709-4d85-86d4-d2f557c6c2a6-30679784  
 To: <sip:2030@172.18.203.51>  
 Call-ID: c692e380-4b514dac-328-37cb12ac@172.18.203.55  
 Date: Wed, 12 Jul 2006 19:29:48 GMT  
 CSeq: 101 INVITE  
 Server: Cisco-CP7960G/7.5  
 Contact: <sip:2030@172.18.203.51:5060>  
 Allow: ACK,BYE,CANCEL,INVITE,NOTIFY,OPTIONS,REFER,REGISTER,UPDATE  
 Remote-Party-ID: "2030" <sip:2030@172.18.203.51>;party=called;id-type=subscriber;privacy=off;screen=yes  
 Content-Length: 0

[[diagram](#)]    Call-ID: [[prev](#)] [[next](#)]

[5] SIP/2.0 180 Ringing

Via: SIP/2.0/UDP 172.18.203.55:5060;branch=z9hG4bKeldbea8  
 From: "SIP Line 2010" <sip:2010@172.18.203.55>;tag=b9c8b19b-c709-4d85-86d4-d2f557c6c2a6-30679784  
 To: <sip:2030@172.18.203.51>;tag=000d280821a5009945a77e96-24ed81d2  
 Call-ID: c692e380-4b514dac-328-37cb12ac@172.18.203.55  
 Date: Wed, 12 Jul 2006 19:29:48 GMT  
 CSeq: 101 INVITE  
 Server: Cisco-CP7960G/7.5  
 Contact: <sip:2030@172.18.203.51:5060>  
 Allow: ACK,BYE,CANCEL,INVITE,NOTIFY,OPTIONS,REFER,REGISTER,UPDATE  
 Remote-Party-ID: "2030" <sip:2030@172.18.203.51>;party=called;id-type=subscriber;privacy=off;screen=yes  
 Content-Length: 0

[\[diagram\]](#) Call-ID: [\[prev\]](#) [\[next\]](#)

#### [6] SIP/2.0 180 Ringing

Via: SIP/2.0/UDP 172.18.203.46:5060;branch=z9hG4bK48a28fe6  
 From: "2010" <sip:2010@172.18.203.55>;tag=00120193edac0023013fa490-7d4be503  
 To: <sip:2030@172.18.203.55>;tag=b9c8b19b-c709-4d85-86d4-d2f557c6c2a6-30679783  
 Date: Wed, 12 Jul 2006 19:29:48 GMT  
 Call-ID: 00120193-edac0014-6a21a9f9-5a388c1f@172.18.203.46  
 CSeq: 101 INVITE  
 Allow: INVITE, OPTIONS, INFO, BYE, CANCEL, ACK, PRACK, UPDATE, REFER, SUBSCRIBE, NOTIFY  
 Allow-Events: presence  
 Remote-Party-ID: "SIP Alerting 2030" <sip:2030@172.18.203.55>;party=called;screen=yes;privacy=off  
 Contact: <sip:2030@172.18.203.55:5060>  
 Content-Length: 0

[\[diagram\]](#) Call-ID: [\[prev\]](#) [\[next\]](#)

#### [7] SIP/2.0 200 OK

Via: SIP/2.0/UDP 172.18.203.55:5060;branch=z9hG4bKeldbea8  
 From: "SIP Line 2010" <sip:2010@172.18.203.55>;tag=b9c8b19b-c709-4d85-86d4-d2f557c6c2a6-30679784  
 To: <sip:2030@172.18.203.51>;tag=000d280821a5009945a77e96-24ed81d2  
 Call-ID: c692e380-4b514dac-328-37cb12ac@172.18.203.55  
 Date: Wed, 12 Jul 2006 19:29:48 GMT  
 CSeq: 101 INVITE  
 Server: Cisco-CP7960G/7.5  
 Contact: <sip:2030@172.18.203.51:5060>  
 Allow: ACK,BYE,CANCEL,INVITE,NOTIFY,OPTIONS,REFER,REGISTER,UPDATE  
 Remote-Party-ID: "2030" <sip:2030@172.18.203.51>;party=called;id-type=subscriber;privacy=off;screen=yes  
 Supported: replaces  
 Content-Length: 257  
 Content-Type: application/sdp  
 Content-Disposition: session;handling=optional

```
v=0
o=Cisco-SIPUA 23769 0 IN IP4 172.18.203.51
s=SIP Call
t=0 0
m=audio 21838 RTP/AVP 0 8 18 101
c=IN IP4 172.18.203.51
a=rtpmap:0 PCMU/8000
a=rtpmap:8 PCMA/8000
a=rtpmap:18 G729/8000
a=rtpmap:101 telephone-event/8000
a=fmtp:101 0-15
a=sendrecv
```

[\[diagram\]](#) Call-ID: [\[prev\]](#) [\[next\]](#)

#### [8] ACK sip:2030@172.18.203.51:5060 SIP/2.0

Via: SIP/2.0/UDP 172.18.203.55:5060;branch=z9hG4bK1ca736e4  
 From: "SIP Line 2010" <sip:2010@172.18.203.55>;tag=b9c8b19b-c709-4d85-86d4-d2f557c6c2a6-30679784  
 To: <sip:2030@172.18.203.51>;tag=000d280821a5009945a77e96-24ed81d2  
 Date: Wed, 12 Jul 2006 19:29:48 GMT  
 Call-ID: c692e380-4b514dac-328-37cb12ac@172.18.203.55  
 Max-Forwards: 70  
 CSeq: 101 ACK  
 Allow-Events: presence  
 Content-Type: application/sdp  
 Content-Length: 214

```
v=0
o=CiscoSystemsCCM-SIP 2000 1 IN IP4 172.18.203.55
s=SIP Call
c=IN IP4 172.18.203.46
t=0 0
m=audio 27188 RTP/AVP 0 101
a=rtpmap:0 PCMU/8000
a=ptime:20
a=rtpmap:101 telephone-event/8000
a=fmtp:101 0-15
```

[\[diagram\]](#) Call-ID: [\[prev\]](#) [\[next\]](#)

**[9] SIP/2.0 183 Session Progress**

Via: SIP/2.0/UDP 172.18.203.46:5060;branch=z9hG4bK48a28fe6  
 From: "2010" <sip:2010@172.18.203.55>;tag=00120193edac0023013fa490-7d4be503  
 To: <sip:2030@172.18.203.55>;tag=b9c8b19b-c709-4d85-86d4-d2f557c6c2a6-30679783  
 Date: Wed, 12 Jul 2006 19:29:48 GMT  
 Call-ID: 00120193-edac0014-6a21a9f9-5a388c1f@172.18.203.46  
 CSeq: 101 INVITE  
 Allow: INVITE, OPTIONS, INFO, BYE, CANCEL, ACK, PRACK, UPDATE, REFER, SUBSCRIBE, NOTIFY  
 Allow-Events: presence  
 Remote-Party-ID: "SIP Alerting 2030" <sip:2030@172.18.203.55>;party=called;screen=yes;privacy=off  
 Contact: <sip:2030@172.18.203.55:5060>  
 Content-Type: application/sdp  
 Content-Length: 214

v=0  
 o=CiscoSystemsCCM-SIP 2000 1 IN IP4 172.18.203.55  
 s=SIP Call  
 c=IN IP4 172.18.203.51  
 t=0 0  
 m=audio 21838 RTP/AVP 0 101  
 a=rtpmap:0 PCMU/8000  
 a=ptime:20  
 a=rtpmap:101 telephone-event/8000  
 a=fmtp:101 0-15

[\[diagram\]](#) Call-ID: [\[prev\]](#) [\[next\]](#)

**[10] SIP/2.0 200 OK**

Via: SIP/2.0/UDP 172.18.203.46:5060;branch=z9hG4bK48a28fe6  
 From: "2010" <sip:2010@172.18.203.55>;tag=00120193edac0023013fa490-7d4be503  
 To: <sip:2030@172.18.203.55>;tag=b9c8b19b-c709-4d85-86d4-d2f557c6c2a6-30679783  
 Date: Wed, 12 Jul 2006 19:29:48 GMT  
 Call-ID: 00120193-edac0014-6a21a9f9-5a388c1f@172.18.203.46  
 CSeq: 101 INVITE  
 Allow: INVITE, OPTIONS, INFO, BYE, CANCEL, ACK, PRACK, UPDATE, REFER, SUBSCRIBE, NOTIFY  
 Allow-Events: presence  
 Remote-Party-ID: "SIP Line 2030" <sip:2030@172.18.203.55>;party=called;screen=yes;privacy=off  
 Contact: <sip:2030@172.18.203.55:5060>  
 Content-Type: application/sdp  
 Content-Length: 214

v=0  
 o=CiscoSystemsCCM-SIP 2000 1 IN IP4 172.18.203.55  
 s=SIP Call  
 c=IN IP4 172.18.203.51  
 t=0 0  
 m=audio 21838 RTP/AVP 0 101  
 a=rtpmap:0 PCMU/8000  
 a=ptime:20  
 a=rtpmap:101 telephone-event/8000  
 a=fmtp:101 0-15

[\[diagram\]](#) Call-ID: [\[prev\]](#) [\[next\]](#)

**[11] ACK sip:2030@172.18.203.55:5060 SIP/2.0**

Via: SIP/2.0/UDP 172.18.203.46:5060;branch=z9hG4bK12aeab09  
 From: "2010" <sip:2010@172.18.203.55>;tag=00120193edac0023013fa490-7d4be503  
 To: <sip:2030@172.18.203.55>;tag=b9c8b19b-c709-4d85-86d4-d2f557c6c2a6-30679783  
 Call-ID: 00120193-edac0014-6a21a9f9-5a388c1f@172.18.203.46  
 Max-Forwards: 70  
 CSeq: 101 ACK  
 User-Agent: Cisco-CP7960G/7.5  
 Remote-Party-ID: "2010" <sip:2010@172.18.203.46>;party=calling;id-type=subscriber;privacy=off;screen=yes  
 Content-Length: 0

[\[diagram\]](#) Call-ID: [\[prev\]](#) [\[next\]](#)

**[12] INVITE sip:2030@172.18.203.55:5060 SIP/2.0**

Via: SIP/2.0/UDP 172.18.203.46:5060;branch=z9hG4bK1088ef9d  
 From: "2010" <sip:2010@172.18.203.55>;tag=00120193edac0023013fa490-7d4be503  
 To: <sip:2030@172.18.203.55>;tag=b9c8b19b-c709-4d85-86d4-d2f557c6c2a6-30679783  
 Call-ID: 00120193-edac0014-6a21a9f9-5a388c1f@172.18.203.46  
 Max-Forwards: 70  
 CSeq: 102 INVITE  
 User-Agent: Cisco-CP7960G/7.5  
 Contact: <sip:2010@172.18.203.46:5060>  
 Remote-Party-ID: "2010" <sip:2010@172.18.203.46>;party=calling;id-type=subscriber;privacy=off;screen=yes  
 Content-Length: 256  
 Content-Type: application/sdp  
 Content-Disposition: session;handling=optional

v=0

```

o=Cisco-SIPUA 3761 1 IN IP4 172.18.203.46
s=SIP Call
t=0 0
m=audio 27188 RTP/AVP 0 8 18 101
c=IN IP4 172.18.203.46
a=rtpmap:0 PCMU/8000
a=rtpmap:8 PCMA/8000
a=rtpmap:18 G729/8000
a=rtpmap:101 telephone-event/8000
a=fmtp:101 0-15
a=sendonly

```

[\[diagram\]](#) Call-ID: [\[prev\]](#) [\[next\]](#)

#### [13] SIP/2.0 100 Trying

```

Via: SIP/2.0/UDP 172.18.203.46:5060;branch=z9hG4bK1088ef9d
From: "2010" <sip:2010@172.18.203.55>;tag=00120193edac0023013fa490-7d4be503
To: <sip:2030@172.18.203.55>;tag=b9c8b19b-c709-4d85-86d4-d2f557c6c2a6-30679783
Date: Wed, 12 Jul 2006 19:29:53 GMT
Call-ID: 00120193-edac0014-6a21a9f9-5a388c1f@172.18.203.46
CSeq: 102 INVITE
Allow-Events: presence
Content-Length: 0

```

[\[diagram\]](#) Call-ID: [\[prev\]](#) [\[next\]](#)

#### [14] INVITE sip:2030@172.18.203.51:5060 SIP/2.0

```

Via: SIP/2.0/UDP 172.18.203.55:5060;branch=z9hG4bK7f2c7c3
Remote-Party-ID: "SIP Line 2010" <sip:2010@172.18.203.55>;party=calling;screen=yes;privacy=off
From: "SIP Line 2010" <sip:2010@172.18.203.55>;tag=b9c8b19b-c709-4d85-86d4-d2f557c6c2a6-30679784
To: <sip:2030@172.18.203.51>;tag=000d280821a5009945a77e96-24ed81d2
Date: Wed, 12 Jul 2006 19:29:53 GMT
Call-ID: c692e380-4b514dac-328-37cb12ac@172.18.203.55
Supported: timer,replaces
Min-SE: 1800
User-Agent: Cisco-CCM5.0
Allow: INVITE, OPTIONS, INFO, BYE, CANCEL, ACK, PRACK, UPDATE, REFER, SUBSCRIBE, NOTIFY
CSeq: 102 INVITE
Max-Forwards: 70
Contact: <sip:2010@172.18.203.55:5060>
Expires: 180
Allow-Events: presence
Content-Type: application/sdp
Content-Length: 300

```

```

v=0
o=CiscoSystemsCCM-SIP 2000 2 IN IP4 172.18.203.55
s=SIP Call
c=IN IP4 172.18.203.46
t=0 0
m=audio 27188 RTP/AVP 0 8 18 101
a=rtpmap:0 PCMU/8000
a=ptime:20
a=rtpmap:8 PCMA/8000
a=ptime:20
a=rtpmap:18 G729/8000
a=ptime:20
a=sendonly
a=rtpmap:101 telephone-event/8000
a=fmtp:101 0-15

```

[\[diagram\]](#) Call-ID: [\[prev\]](#) [\[next\]](#)

#### [15] SIP/2.0 200 OK

```

Via: SIP/2.0/UDP 172.18.203.55:5060;branch=z9hG4bK7f2c7c3
From: "SIP Line 2010" <sip:2010@172.18.203.55>;tag=b9c8b19b-c709-4d85-86d4-d2f557c6c2a6-30679784
To: <sip:2030@172.18.203.51>;tag=000d280821a5009945a77e96-24ed81d2
Call-ID: c692e380-4b514dac-328-37cb12ac@172.18.203.55
Date: Wed, 12 Jul 2006 19:29:53 GMT
CSeq: 102 INVITE
Server: Cisco-CP7960G/7.5
Contact: <sip:2030@172.18.203.51:5060>
Allow: ACK,BYE,CANCEL,INVITE,NOTIFY,OPTIONS,REFER,REGISTER,UPDATE
Remote-Party-ID: "2030" <sip:2030@172.18.203.51>;party=called;id-type=subscriber;privacy=off;screen=yes
Supported: replaces
Content-Length: 207
Content-Type: application/sdp
Content-Disposition: session;handling=optional

```

```

v=0
o=Cisco-SIPUA 23769 1 IN IP4 172.18.203.51
s=SIP Call
t=0 0

```

```

m=audio 21838 RTP/AVP 0 101
c=IN IP4 172.18.203.51
a=rtpmap:0 PCMU/8000
a=rtpmap:101 telephone-event/8000
a=fmtp:101 0-15
a=recvonly

```

[\[diagram\]](#) Call-ID: [\[prev\]](#) [\[next\]](#)

**[16] ACK sip:2030@172.18.203.51:5060 SIP/2.0**

```

Via: SIP/2.0/UDP 172.18.203.55:5060;branch=z9hG4bKd091aee
From: "SIP Line 2010" <sip:2010@172.18.203.55>;tag=b9c8b19b-c709-4d85-86d4-d2f557c6c2a6-30679784
To: <sip:2030@172.18.203.51>;tag=000d280821a5009945a77e96-24ed81d2
Date: Wed, 12 Jul 2006 19:29:53 GMT
Call-ID: c692e380-4b514dac-328-37cb12ac@172.18.203.55
Max-Forwards: 70
CSeq: 102 ACK
Allow-Events: presence
Content-Length: 0

```

[\[diagram\]](#) Call-ID: [\[prev\]](#) [\[next\]](#)

**[17] SIP/2.0 200 OK**

```

Via: SIP/2.0/UDP 172.18.203.46:5060;branch=z9hG4bK1088ef9d
From: "2010" <sip:2010@172.18.203.55>;tag=00120193edac0023013fa490-7d4be503
To: <sip:2030@172.18.203.55>;tag=b9c8b19b-c709-4d85-86d4-d2f557c6c2a6-30679783
Date: Wed, 12 Jul 2006 19:29:53 GMT
Call-ID: 00120193-edac0014-6a21a9f9-5a388c1f@172.18.203.46
CSeq: 102 INVITE
Allow: INVITE, OPTIONS, INFO, BYE, CANCEL, ACK, PRACK, UPDATE, REFER, SUBSCRIBE, NOTIFY
Allow-Events: presence
Remote-Party-ID: "SIP Line 2030" <sip:2030@172.18.203.55>;party=called;screen=yes;privacy=off
Contact: <sip:2030@172.18.203.55:5060>
Content-Type: application/sdp
Content-Length: 226

```

```

v=0
o=CiscoSystemsCCM-SIP 2000 2 IN IP4 172.18.203.55
s=SIP Call
c=IN IP4 172.18.203.51
t=0 0
m=audio 21838 RTP/AVP 0 101
a=rtpmap:0 PCMU/8000
a=ptime:20
a=recvonly
a=rtpmap:101 telephone-event/8000
a=fmtp:101 0-15

```

[\[diagram\]](#) Call-ID: [\[prev\]](#) [\[next\]](#)

**[18] ACK sip:2030@172.18.203.55:5060 SIP/2.0**

```

Via: SIP/2.0/UDP 172.18.203.46:5060;branch=z9hG4bK23dab4e5
From: "2010" <sip:2010@172.18.203.55>;tag=00120193edac0023013fa490-7d4be503
To: <sip:2030@172.18.203.55>;tag=b9c8b19b-c709-4d85-86d4-d2f557c6c2a6-30679783
Call-ID: 00120193-edac0014-6a21a9f9-5a388c1f@172.18.203.46
Max-Forwards: 70
CSeq: 102 ACK
User-Agent: Cisco-CP7960G/7.5
Remote-Party-ID: "2010" <sip:2010@172.18.203.46>;party=calling;id-type=subscriber;privacy=off;screen=yes
Content-Length: 0

```

[\[diagram\]](#) Call-ID: [\[prev\]](#) [\[next\]](#)

**[19] REFER sip:2030@172.18.203.55:5060 SIP/2.0**

```

Via: SIP/2.0/UDP 172.18.203.46:5060;branch=z9hG4bK45cfdb2f
From: "2010" <sip:2010@172.18.203.55>;tag=00120193edac0023013fa490-7d4be503
To: <sip:2030@172.18.203.55>;tag=b9c8b19b-c709-4d85-86d4-d2f557c6c2a6-30679783
Call-ID: 00120193-edac0014-6a21a9f9-5a388c1f@172.18.203.46
Max-Forwards: 70
CSeq: 103 REFER
User-Agent: Cisco-CP7960G/7.5
Contact: <sip:2010@172.18.203.46:5060>
Remote-Party-ID: "2010" <sip:2010@172.18.203.46>;party=calling;id-type=subscriber;privacy=off;screen=yes
Content-Length: 0
Refer-To: sip:2040@172.18.203.55
Referred-By: "2010" <sip:2010@172.18.203.55>

```

[\[diagram\]](#) Call-ID: [\[prev\]](#) [\[next\]](#)

**[20] SIP/2.0 202 Accepted**

```

Via: SIP/2.0/UDP 172.18.203.46:5060;branch=z9hG4bK45cfdb2f
From: "2010" <sip:2010@172.18.203.55>;tag=00120193edac0023013fa490-7d4be503
To: <sip:2030@172.18.203.55>;tag=b9c8b19b-c709-4d85-86d4-d2f557c6c2a6-30679783
Date: Wed, 12 Jul 2006 19:29:55 GMT
Call-ID: 00120193-edac0014-6a21a9f9-5a388c1f@172.18.203.46

```

```
CSeq: 103 REFER
Content-Length: 0
Contact: <sip:2030@172.18.203.55:5060>
```

[\[diagram\]](#) Call-ID: [\[prev\]](#) [\[next\]](#)

**[21] INVITE sip:2030@172.18.203.51:5060 SIP/2.0**

```
Via: SIP/2.0/UDP 172.18.203.55:5060;branch=z9hG4bK7f85409b
Remote-Party-ID: "SIP Line 2010" <sip:2010@172.18.203.55>;party=calling;screen=yes;privacy=off
From: "SIP Line 2010" <sip:2010@172.18.203.55>;tag=b9c8b19b-c709-4d85-86d4-d2f557c6c2a6-30679784
To: <sip:2030@172.18.203.51>;tag=000d280821a5009945a77e96-24ed81d2
Date: Wed, 12 Jul 2006 19:29:55 GMT
Call-ID: c692e380-4b514dac-328-37cb12ac@172.18.203.55
Supported: timer,replaces
Min-SE: 1800
User-Agent: Cisco-CCM5.0
Allow: INVITE, OPTIONS, INFO, BYE, CANCEL, ACK, PRACK, UPDATE, REFER, SUBSCRIBE, NOTIFY
CSeq: 103 INVITE
Max-Forwards: 70
Contact: <sip:2010@172.18.203.55:5060>
Expires: 180
Allow-Events: presence
Content-Type: application/sdp
Content-Length: 294
```

```
v=0
o=CiscoSystemsCCM-SIP 2000 3 IN IP4 172.18.203.55
s=SIP Call
c=IN IP4 0.0.0.0
t=0 0
m=audio 27188 RTP/AVP 0 8 18 101
a=rtpmap:0 PCMU/8000
a=ptime:20
a=rtpmap:8 PCMA/8000
a=ptime:20
a=rtpmap:18 G729/8000
a=ptime:20
a=inactive
a=rtpmap:101 telephone-event/8000
a=fmtp:101 0-15
```

[\[diagram\]](#) Call-ID: [\[prev\]](#) [\[next\]](#)

**[22] SIP/2.0 202 Accepted**

```
Via: SIP/2.0/UDP 172.18.203.46:5060;branch=z9hG4bK45cfdb2f
From: "2010" <sip:2010@172.18.203.55>;tag=00120193edac0023013fa490-7d4be503
To: <sip:2030@172.18.203.55>;tag=b9c8b19b-c709-4d85-86d4-d2f557c6c2a6-30679783
Date: Wed, 12 Jul 2006 19:29:55 GMT
Call-ID: 00120193-edac0014-6a21a9f9-5a388c1f@172.18.203.46
CSeq: 103 REFER
Content-Length: 0
Contact: <sip:2030@172.18.203.55:5060>
```

[\[diagram\]](#) Call-ID: [\[prev\]](#) [\[next\]](#)

**[23] SIP/2.0 200 OK**

```
Via: SIP/2.0/UDP 172.18.203.55:5060;branch=z9hG4bK7f85409b
From: "SIP Line 2010" <sip:2010@172.18.203.55>;tag=b9c8b19b-c709-4d85-86d4-d2f557c6c2a6-30679784
To: <sip:2030@172.18.203.51>;tag=000d280821a5009945a77e96-24ed81d2
Call-ID: c692e380-4b514dac-328-37cb12ac@172.18.203.55
Date: Wed, 12 Jul 2006 19:29:55 GMT
CSeq: 103 INVITE
Server: Cisco-CP7960G/7.5
Contact: <sip:2030@172.18.203.51:5060>
Allow: ACK,BYE,CANCEL,INVITE,NOTIFY,OPTIONS,REFER,REGISTER,UPDATE
Remote-Party-ID: "2030" <sip:2030@172.18.203.51>;party=called;id-type=subscriber;privacy=off;screen=yes
Supported: replaces
Content-Length: 207
Content-Type: application/sdp
Content-Disposition: session;handling=optional
```

```
v=0
o=Cisco-SIPUA 23769 2 IN IP4 172.18.203.51
s=SIP Call
t=0 0
m=audio 21838 RTP/AVP 0 101
c=IN IP4 172.18.203.51
a=rtpmap:0 PCMU/8000
a=rtpmap:101 telephone-event/8000
a=fmtp:101 0-15
a=inactive
```

[diagram] Call-ID: [prev] [next]

[24] ACK sip:2030@172.18.203.51:5060 SIP/2.0

Via: SIP/2.0/UDP 172.18.203.55:5060;branch=z9hG4bK7ba40ba0  
 From: "SIP Line 2010" <sip:2010@172.18.203.55>;tag=b9c8b19b-c709-4d85-86d4-d2f557c6c2a6-30679784  
 To: <sip:2030@172.18.203.51>;tag=000d280821a5009945a77e96-24ed81d2  
 Date: Wed, 12 Jul 2006 19:29:55 GMT  
 Call-ID: c692e380-4b514dac-328-37cb12ac@172.18.203.55  
 Max-Forwards: 70  
 CSeq: 103 ACK  
 Allow-Events: presence  
 Content-Length: 0

[diagram] Call-ID: [prev] [next]

[25] INVITE sip:2040@172.18.203.52:5060 SIP/2.0

Via: SIP/2.0/UDP 172.18.203.55:5060;branch=z9hG4bK14405e86  
 Remote-Party-ID: "SIP Line 2030" <sip:2030@172.18.203.55>;party=calling;screen=yes;privacy=off  
 From: "SIP Line 2030" <sip:2030@172.18.203.55>;tag=b9c8b19b-c709-4d85-86d4-d2f557c6c2a6-30679786  
 To: <sip:2040@172.18.203.52>  
 Date: Wed, 12 Jul 2006 19:29:55 GMT  
 Call-ID: cabf0100-4b514db3-329-37cb12ac@172.18.203.55  
 Supported: timer,replaces  
 Min-SE: 1800  
 User-Agent: Cisco-CCM5.0  
 Allow: INVITE, OPTIONS, INFO, BYE, CANCEL, ACK, PRACK, UPDATE, REFER, SUBSCRIBE, NOTIFY  
 CSeq: 101 INVITE  
 Expires: 180  
 Allow-Events: presence  
 Call-Info: <urn:x-cisco-remotecc:callinfo>; security= NotAuthenticated; orientation= from; call-instance= 1  
 Alert-Info: <file://Bellcore-dr1/>  
 Contact: <sip:2040@172.18.203.55:5060>  
 Max-Forwards: 69  
 Content-Length: 0

[diagram] Call-ID: [prev] [next]

[26] BYE sip:2030@172.18.203.55:5060 SIP/2.0

Via: SIP/2.0/UDP 172.18.203.46:5060;branch=z9hG4bK5f908597  
 From: "2010" <sip:2010@172.18.203.55>;tag=00120193edac0023013fa490-7d4be503  
 To: <sip:2030@172.18.203.55>;tag=b9c8b19b-c709-4d85-86d4-d2f557c6c2a6-30679783  
 Call-ID: 00120193-edac0014-6a21a9f9-5a388c1f@172.18.203.46  
 Max-Forwards: 70  
 CSeq: 104 BYE  
 User-Agent: Cisco-CP7960G/7.5  
 Content-Length: 0

[diagram] Call-ID: [prev] [next]

[27] SIP/2.0 200 OK

Via: SIP/2.0/UDP 172.18.203.46:5060;branch=z9hG4bK5f908597  
 From: "2010" <sip:2010@172.18.203.55>;tag=00120193edac0023013fa490-7d4be503  
 To: <sip:2030@172.18.203.55>;tag=b9c8b19b-c709-4d85-86d4-d2f557c6c2a6-30679783  
 Date: Wed, 12 Jul 2006 19:29:55 GMT  
 Call-ID: 00120193-edac0014-6a21a9f9-5a388c1f@172.18.203.46  
 CSeq: 104 BYE  
 Content-Length: 0

[diagram] Call-ID: [prev] [next]

[28] SIP/2.0 100 Trying

Via: SIP/2.0/UDP 172.18.203.55:5060;branch=z9hG4bK14405e86  
 From: "SIP Line 2030" <sip:2030@172.18.203.55>;tag=b9c8b19b-c709-4d85-86d4-d2f557c6c2a6-30679786  
 To: <sip:2040@172.18.203.52>  
 Call-ID: cabf0100-4b514db3-329-37cb12ac@172.18.203.55  
 CSeq: 101 INVITE  
 Server: Cisco-CP7960G/7.5  
 Contact: <sip:2040@172.18.203.52:5060>  
 Allow: ACK, BYE, CANCEL, INVITE, NOTIFY, OPTIONS, REFER, REGISTER, UPDATE  
 Remote-Party-ID: "2040" <sip:2040@172.18.203.52>;party=called;id-type=subscriber;privacy=off;screen=yes  
 Content-Length: 0

[diagram] Call-ID: [prev] [next]

[29] SIP/2.0 180 Ringing

Via: SIP/2.0/UDP 172.18.203.55:5060;branch=z9hG4bK14405e86  
 From: "SIP Line 2030" <sip:2030@172.18.203.55>;tag=b9c8b19b-c709-4d85-86d4-d2f557c6c2a6-30679786  
 To: <sip:2040@172.18.203.52>;tag=003094c3cd3a001c46506427-2f6f3531  
 Call-ID: cabf0100-4b514db3-329-37cb12ac@172.18.203.55  
 CSeq: 101 INVITE  
 Server: Cisco-CP7960G/7.5  
 Contact: <sip:2040@172.18.203.52:5060>  
 Allow: ACK, BYE, CANCEL, INVITE, NOTIFY, OPTIONS, REFER, REGISTER, UPDATE  
 Remote-Party-ID: "2040" <sip:2040@172.18.203.52>;party=called;id-type=subscriber;privacy=off;screen=yes  
 Content-Length: 0

[[diagram](#)] Call-ID: [[prev](#)] [[next](#)]  
**[30] UPDATE sip:2030@172.18.203.51:5060 SIP/2.0**  
 Via: SIP/2.0/UDP 172.18.203.55:5060;branch=z9hG4bK2b8ff21f  
 From: "SIP Line 2010" <sip:2010@172.18.203.55>;tag=b9c8b19b-c709-4d85-86d4-d2f557c6c2a6-30679784  
 To: <sip:2030@172.18.203.51>;tag=000d280821a5009945a77e96-24ed81d2  
 Date: Wed, 12 Jul 2006 19:29:55 GMT  
 Call-ID: c692e380-4b514dac-328-37cb12ac@172.18.203.55  
 Max-Forwards: 70  
 CSeq: 104 UPDATE  
 Contact: <sip:2010@172.18.203.55:5060>  
 Remote-Party-ID: "SIP Alerting 2040" <sip:2040@172.18.203.55>;party=calling;screen=yes;privacy=off  
 Content-Length: 0

[[diagram](#)] Call-ID: [[prev](#)] [[next](#)]  
**[31] SIP/2.0 200 OK**  
 Via: SIP/2.0/UDP 172.18.203.55:5060;branch=z9hG4bK2b8ff21f  
 From: "SIP Line 2010" <sip:2010@172.18.203.55>;tag=b9c8b19b-c709-4d85-86d4-d2f557c6c2a6-30679784  
 To: <sip:2030@172.18.203.51>;tag=000d280821a5009945a77e96-24ed81d2  
 Call-ID: c692e380-4b514dac-328-37cb12ac@172.18.203.55  
 Date: Wed, 12 Jul 2006 19:29:56 GMT  
 CSeq: 104 UPDATE  
 Server: Cisco-CP7960G/7.5  
 Contact: <sip:2030@172.18.203.51:5060>  
 Allow: ACK,BYE,CANCEL,INVITE,NOTIFY,OPTIONS,REFER,REGISTER,UPDATE  
 Content-Length: 257  
 Content-Type: application/sdp  
 Content-Disposition: session;handling=optional

v=0  
 o=Cisco-SIPUA 23769 2 IN IP4 172.18.203.51  
 s=SIP Call  
 t=0 0  
 m=audio 21838 RTP/AVP 0 8 18 101  
 c=IN IP4 172.18.203.51  
 a=rtpmap:0 PCMU/8000  
 a=rtpmap:8 PCMA/8000  
 a=rtpmap:18 G729/8000  
 a=rtpmap:101 telephone-event/8000  
 a=fmtp:101 0-15  
 a=sendrecv

[[diagram](#)] Call-ID: [[prev](#)] [[next](#)]  
**[32] INVITE sip:2030@172.18.203.51:5060 SIP/2.0**  
 Via: SIP/2.0/UDP 172.18.203.55:5060;branch=z9hG4bK77bdda65  
 Remote-Party-ID: "SIP Alerting 2040" <sip:2040@172.18.203.55>;party=calling;screen=yes;privacy=off  
 From: "SIP Line 2010" <sip:2010@172.18.203.55>;tag=b9c8b19b-c709-4d85-86d4-d2f557c6c2a6-30679784  
 To: <sip:2030@172.18.203.51>;tag=000d280821a5009945a77e96-24ed81d2  
 Date: Wed, 12 Jul 2006 19:29:56 GMT  
 Call-ID: c692e380-4b514dac-328-37cb12ac@172.18.203.55  
 Supported: timer,replaces  
 Min-SE: 1800  
 User-Agent: Cisco-CCM5.0  
 Allow: INVITE, OPTIONS, INFO, BYE, CANCEL, ACK, PRACK, UPDATE, REFER, SUBSCRIBE, NOTIFY  
 CSeq: 105 INVITE  
 Max-Forwards: 70  
 Contact: <sip:2010@172.18.203.55:5060>  
 Expires: 180  
 Allow-Events: presence  
 Content-Length: 0

[[diagram](#)] Call-ID: [[prev](#)] [[next](#)]  
**[33] SIP/2.0 200 OK**  
 Via: SIP/2.0/UDP 172.18.203.55:5060;branch=z9hG4bK77bdda65  
 From: "SIP Line 2010" <sip:2010@172.18.203.55>;tag=b9c8b19b-c709-4d85-86d4-d2f557c6c2a6-30679784  
 To: <sip:2030@172.18.203.51>;tag=000d280821a5009945a77e96-24ed81d2  
 Call-ID: c692e380-4b514dac-328-37cb12ac@172.18.203.55  
 Date: Wed, 12 Jul 2006 19:29:56 GMT  
 CSeq: 105 INVITE  
 Server: Cisco-CP7960G/7.5  
 Contact: <sip:2030@172.18.203.51:5060>  
 Allow: ACK,BYE,CANCEL,INVITE,NOTIFY,OPTIONS,REFER,REGISTER,UPDATE  
 Remote-Party-ID: "2030" <sip:2030@172.18.203.51>;party=called;id-type=subscriber;privacy=off;screen=yes  
 Supported: replaces  
 Content-Length: 257  
 Content-Type: application/sdp  
 Content-Disposition: session;handling=optional

v=0  
 o=Cisco-SIPUA 23769 2 IN IP4 172.18.203.51  
 s=SIP Call

```
t=0 0
m=audio 21838 RTP/AVP 0 8 18 101
c=IN IP4 172.18.203.51
a=rtpmap:0 PCMU/8000
a=rtpmap:8 PCMA/8000
a=rtpmap:18 G729/8000
a=rtpmap:101 telephone-event/8000
a=fmtp:101 0-15
a=sendrecv
```

[\[diagram\]](#) Call-ID: [\[prev\]](#) [\[next\]](#)

**[34] ACK sip:2030@172.18.203.51:5060 SIP/2.0**

```
Via: SIP/2.0/UDP 172.18.203.55:5060;branch=z9hG4bK52f506a0
From: "SIP Line 2010" <sip:2010@172.18.203.55>;tag=b9c8b19b-c709-4d85-86d4-d2f557c6c2a6-30679784
To: <sip:2030@172.18.203.51>;tag=000d280821a5009945a77e96-24ed81d2
Date: Wed, 12 Jul 2006 19:29:56 GMT
Call-ID: c692e380-4b514dac-328-37cb12ac@172.18.203.55
Max-Forwards: 70
CSeq: 105 ACK
Allow-Events: presence
Content-Type: application/sdp
Content-Length: 225
```

```
v=0
o=CiscoSystemsCCM-SIP 2000 4 IN IP4 172.18.203.55
s=SIP Call
c=IN IP4 172.18.203.55
t=0 0
m=audio 4000 RTP/AVP 0 101
a=rtpmap:0 PCMU/8000
a=ptime:20
a=sendonly
a=rtpmap:101 telephone-event/8000
a=fmtp:101 0-15
```

[\[diagram\]](#) Call-ID: [\[prev\]](#) [\[next\]](#)

**[35] SIP/2.0 200 OK**

```
Via: SIP/2.0/UDP 172.18.203.55:5060;branch=z9hG4bK14405e86
From: "SIP Line 2030" <sip:2030@172.18.203.55>;tag=b9c8b19b-c709-4d85-86d4-d2f557c6c2a6-30679786
To: <sip:2040@172.18.203.52>;tag=003094c3cd3a001c46506427-2f6f3531
Call-ID: cabf0100-4b514db3-329-37cb12ac@172.18.203.55
CSeq: 101 INVITE
Server: Cisco-CP7960G/7.5
Contact: <sip:2040@172.18.203.52:5060>
Allow: ACK,BYE,CANCEL,INVITE,NOTIFY,OPTIONS,REFER,REGISTER,UPDATE
Remote-Party-ID: "2040" <sip:2040@172.18.203.52>;party=called;id-type=subscriber;privacy=off;screen=yes
Supported: replaces
Content-Length: 257
Content-Type: application/sdp
Content-Disposition: session;handling=optional
```

```
v=0
o=Cisco-SIPUA 27383 0 IN IP4 172.18.203.52
s=SIP Call
t=0 0
m=audio 16446 RTP/AVP 0 8 18 101
c=IN IP4 172.18.203.52
a=rtpmap:0 PCMU/8000
a=rtpmap:8 PCMA/8000
a=rtpmap:18 G729/8000
a=rtpmap:101 telephone-event/8000
a=fmtp:101 0-15
a=sendrecv
```

[\[diagram\]](#) Call-ID: [\[prev\]](#) [\[next\]](#)

**[36] INVITE sip:2030@172.18.203.51:5060 SIP/2.0**

```
Via: SIP/2.0/UDP 172.18.203.55:5060;branch=z9hG4bK76f6d09b
Remote-Party-ID: "SIP Alerting 2040" <sip:2040@172.18.203.55>;party=calling;screen=yes;privacy=off
From: "SIP Line 2010" <sip:2010@172.18.203.55>;tag=b9c8b19b-c709-4d85-86d4-d2f557c6c2a6-30679784
To: <sip:2030@172.18.203.51>;tag=000d280821a5009945a77e96-24ed81d2
Date: Wed, 12 Jul 2006 19:29:58 GMT
Call-ID: c692e380-4b514dac-328-37cb12ac@172.18.203.55
Supported: timer,replaces
Min-SE: 1800
User-Agent: Cisco-CCM5.0
Allow: INVITE, OPTIONS, INFO, BYE, CANCEL, ACK, PRACK, UPDATE, REFER, SUBSCRIBE, NOTIFY
CSeq: 106 INVITE
Max-Forwards: 70
Contact: <sip:2010@172.18.203.55:5060>
Expires: 180
```

Allow-Events: presence  
Content-Type: application/sdp  
Content-Length: 219

v=0  
o=CiscoSystemsCCM-SIP 2000 5 IN IP4 172.18.203.55  
s=SIP Call  
c=IN IP4 0.0.0.0  
t=0 0  
m=audio 4000 RTP/AVP 0 101  
a=rtpmap:0 PCMU/8000  
a=ptime:20  
a=inactive  
a=rtpmap:101 telephone-event/8000  
a=fmtp:101 0-15

[\[diagram\]](#) Call-ID: [\[prev\]](#) [\[next\]](#)

**[37] SIP/2.0 200 OK**

Via: SIP/2.0/UDP 172.18.203.55:5060;branch=z9hG4bK76f6d09b  
From: "SIP Line 2010" <sip:2010@172.18.203.55>;tag=b9c8b19b-c709-4d85-86d4-d2f557c6c2a6-30679784  
To: <sip:2030@172.18.203.51>;tag=000d280821a5009945a77e96-24ed81d2  
Call-ID: c692e380-4b514dac-328-37cb12ac@172.18.203.55  
Date: Wed, 12 Jul 2006 19:29:58 GMT  
CSeq: 106 INVITE  
Server: Cisco-CP7960G/7.5  
Contact: <sip:2030@172.18.203.51:5060>  
Allow: ACK,BYE,CANCEL,INVITE,NOTIFY,OPTIONS,REFER,REGISTER,UPDATE  
Remote-Party-ID: "2030" <sip:2030@172.18.203.51>;party=called;id-type=subscriber;privacy=off;screen=yes  
Supported: replaces  
Content-Length: 207  
Content-Type: application/sdp  
Content-Disposition: session;handling=optional

v=0  
o=Cisco-SIPUA 23769 4 IN IP4 172.18.203.51  
s=SIP Call  
t=0 0  
m=audio 21838 RTP/AVP 0 101  
c=IN IP4 172.18.203.51  
a=rtpmap:0 PCMU/8000  
a=rtpmap:101 telephone-event/8000  
a=fmtp:101 0-15  
a=inactive

[\[diagram\]](#) Call-ID: [\[prev\]](#) [\[next\]](#)

**[38] ACK sip:2030@172.18.203.51:5060 SIP/2.0**

Via: SIP/2.0/UDP 172.18.203.55:5060;branch=z9hG4bK618208de  
From: "SIP Line 2010" <sip:2010@172.18.203.55>;tag=b9c8b19b-c709-4d85-86d4-d2f557c6c2a6-30679784  
To: <sip:2030@172.18.203.51>;tag=000d280821a5009945a77e96-24ed81d2  
Date: Wed, 12 Jul 2006 19:29:58 GMT  
Call-ID: c692e380-4b514dac-328-37cb12ac@172.18.203.55  
Max-Forwards: 70  
CSeq: 106 ACK  
Allow-Events: presence  
Content-Length: 0

[\[diagram\]](#) Call-ID: [\[prev\]](#) [\[next\]](#)

**[39] INVITE sip:2030@172.18.203.51:5060 SIP/2.0**

Via: SIP/2.0/UDP 172.18.203.55:5060;branch=z9hG4bK62462e6f  
Remote-Party-ID: "SIP Alerting 2040" <sip:2040@172.18.203.55>;party=calling;screen=yes;privacy=off  
From: "SIP Line 2010" <sip:2010@172.18.203.55>;tag=b9c8b19b-c709-4d85-86d4-d2f557c6c2a6-30679784  
To: <sip:2030@172.18.203.51>;tag=000d280821a5009945a77e96-24ed81d2  
Date: Wed, 12 Jul 2006 19:29:58 GMT  
Call-ID: c692e380-4b514dac-328-37cb12ac@172.18.203.55  
Supported: timer,replaces  
Min-SE: 1800  
User-Agent: Cisco-CCM5.0  
Allow: INVITE, OPTIONS, INFO, BYE, CANCEL, ACK, PRACK, UPDATE, REFER, SUBSCRIBE, NOTIFY  
CSeq: 107 INVITE  
Max-Forwards: 70  
Contact: <sip:2010@172.18.203.55:5060>  
Expires: 180  
Allow-Events: presence  
Content-Length: 0

[\[diagram\]](#) Call-ID: [\[prev\]](#) [\[next\]](#)

**[40] SIP/2.0 200 OK**

Via: SIP/2.0/UDP 172.18.203.55:5060;branch=z9hG4bK14405e86  
From: "SIP Line 2030" <sip:2030@172.18.203.55>;tag=b9c8b19b-c709-4d85-86d4-d2f557c6c2a6-30679786  
To: <sip:2040@172.18.203.52>;tag=003094c3cd3a001c46506427-2f6f3531

```

Call-ID: cabf0100-4b514db3-329-37cb12ac@172.18.203.55
CSeq: 101 INVITE
Server: Cisco-CP7960G/7.5
Contact: <sip:2040@172.18.203.52:5060>
Allow: ACK,BYE,CANCEL,INVITE,NOTIFY,OPTIONS,REFER,REGISTER,UPDATE
Remote-Party-ID: "2040" <sip:2040@172.18.203.52>;party=called;id-type=subscriber;privacy=off;screen=yes
Supported: replaces
Content-Length: 257
Content-Type: application/sdp
Content-Disposition: session;handling=optional

```

```

v=0
o=Cisco-SIPUA 27383 0 IN IP4 172.18.203.52
s=SIP Call
t=0 0
m=audio 16446 RTP/AVP 0 8 18 101
c=IN IP4 172.18.203.52
a=rtpmap:0 PCMU/8000
a=rtpmap:8 PCMA/8000
a=rtpmap:18 G729/8000
a=rtpmap:101 telephone-event/8000
a=fmtp:101 0-15
a=sendrecv

```

[\[diagram\]](#) Call-ID: [\[prev\]](#) [\[next\]](#)

**[41] SIP/2.0 200 OK**

```

Via: SIP/2.0/UDP 172.18.203.55:5060;branch=z9hG4bK62462e6f
From: "SIP Line 2010" <sip:2010@172.18.203.55>;tag=b9c8b19b-c709-4d85-86d4-d2f557c6c2a6-30679784
To: <sip:2030@172.18.203.51>;tag=000d280821a5009945a77e96-24ed81d2
Call-ID: c692e380-4b514dac-328-37cb12ac@172.18.203.55
Date: Wed, 12 Jul 2006 19:29:58 GMT
CSeq: 107 INVITE
Server: Cisco-CP7960G/7.5
Contact: <sip:2030@172.18.203.51:5060>
Allow: ACK,BYE,CANCEL,INVITE,NOTIFY,OPTIONS,REFER,REGISTER,UPDATE
Remote-Party-ID: "2030" <sip:2030@172.18.203.51>;party=called;id-type=subscriber;privacy=off;screen=yes
Supported: replaces
Content-Length: 257
Content-Type: application/sdp
Content-Disposition: session;handling=optional

```

```

v=0
o=Cisco-SIPUA 23769 4 IN IP4 172.18.203.51
s=SIP Call
t=0 0
m=audio 21838 RTP/AVP 0 8 18 101
c=IN IP4 172.18.203.51
a=rtpmap:0 PCMU/8000
a=rtpmap:8 PCMA/8000
a=rtpmap:18 G729/8000
a=rtpmap:101 telephone-event/8000
a=fmtp:101 0-15
a=sendrecv

```

[\[diagram\]](#) Call-ID: [\[prev\]](#) [\[next\]](#)

**[42] ACK sip:2030@172.18.203.51:5060 SIP/2.0**

```

Via: SIP/2.0/UDP 172.18.203.55:5060;branch=z9hG4bK11bc694b
From: "SIP Line 2010" <sip:2010@172.18.203.55>;tag=b9c8b19b-c709-4d85-86d4-d2f557c6c2a6-30679784
To: <sip:2030@172.18.203.51>;tag=000d280821a5009945a77e96-24ed81d2
Date: Wed, 12 Jul 2006 19:29:58 GMT
Call-ID: c692e380-4b514dac-328-37cb12ac@172.18.203.55
Max-Forwards: 70
CSeq: 107 ACK
Allow-Events: presence
Content-Type: application/sdp
Content-Length: 158

```

```

v=0
o=CiscoSystemsCCM-SIP 2000 6 IN IP4 172.18.203.55
s=SIP Call
c=IN IP4 172.18.203.52
t=0 0
m=audio 16446 RTP/AVP 0
a=rtpmap:0 PCMU/8000
a=ptime:20

```

[\[diagram\]](#) Call-ID: [\[prev\]](#) [\[next\]](#)

**[43] UPDATE sip:2030@172.18.203.51:5060 SIP/2.0**

```

Via: SIP/2.0/UDP 172.18.203.55:5060;branch=z9hG4bK51995ef0
From: "SIP Line 2010" <sip:2010@172.18.203.55>;tag=b9c8b19b-c709-4d85-86d4-d2f557c6c2a6-30679784

```

To: <sip:2030@172.18.203.51>;tag=000d280821a5009945a77e96-24ed81d2  
 Date: Wed, 12 Jul 2006 19:29:58 GMT  
 Call-ID: c692e380-4b514dac-328-37cb12ac@172.18.203.55  
 Max-Forwards: 70  
 CSeq: 108 UPDATE  
 Contact: <sip:2010@172.18.203.55:5060>  
 Remote-Party-ID: "SIP Line 2040" <sip:2040@172.18.203.55>;party=calling;screen=yes;privacy=off  
 Content-Length: 0

[[diagram](#)] Call-ID: [[prev](#)] [[next](#)]

[44] ACK sip:2040@172.18.203.52:5060 SIP/2.0

Via: SIP/2.0/UDP 172.18.203.55:5060;branch=z9hG4bK6eb781f4  
 From: "SIP Line 2030" <sip:2030@172.18.203.55>;tag=b9c8b19b-c709-4d85-86d4-d2f557c6c2a6-30679786  
 To: <sip:2040@172.18.203.52>;tag=003094c3cd3a001c46506427-2f6f3531  
 Date: Wed, 12 Jul 2006 19:29:55 GMT  
 Call-ID: cabf0100-4b514db3-329-37cb12ac@172.18.203.55  
 Max-Forwards: 70  
 CSeq: 101 ACK  
 Allow-Events: presence  
 Content-Type: application/sdp  
 Content-Length: 214

v=0  
 o=CiscoSystemsCCM-SIP 2000 1 IN IP4 172.18.203.55  
 s=SIP Call  
 c=IN IP4 172.18.203.51  
 t=0 0  
 m=audio 21838 RTP/AVP 0 101  
 a=rtpmap:0 PCMU/8000  
 a=ptime:20  
 a=rtpmap:101 telephone-event/8000  
 a=fmtp:101 0-15

[[diagram](#)] Call-ID: [[prev](#)] [[next](#)]

[45] SIP/2.0 200 OK

Via: SIP/2.0/UDP 172.18.203.55:5060;branch=z9hG4bK51995ef0  
 From: "SIP Line 2010" <sip:2010@172.18.203.55>;tag=b9c8b19b-c709-4d85-86d4-d2f557c6c2a6-30679784  
 To: <sip:2030@172.18.203.51>;tag=000d280821a5009945a77e96-24ed81d2  
 Call-ID: c692e380-4b514dac-328-37cb12ac@172.18.203.55  
 Date: Wed, 12 Jul 2006 19:29:58 GMT  
 CSeq: 108 UPDATE  
 Server: Cisco-CP7960G/7.5  
 Contact: <sip:2030@172.18.203.51:5060>  
 Allow: ACK, BYE, CANCEL, INVITE, NOTIFY, OPTIONS, REFER, REGISTER, UPDATE  
 Content-Length: 257  
 Content-Type: application/sdp  
 Content-Disposition: session;handling=optional

v=0  
 o=Cisco-SIPUA 23769 5 IN IP4 172.18.203.51  
 s=SIP Call  
 t=0 0  
 m=audio 21838 RTP/AVP 0 8 18 101  
 c=IN IP4 172.18.203.51  
 a=rtpmap:0 PCMU/8000  
 a=rtpmap:8 PCMA/8000  
 a=rtpmap:18 G729/8000  
 a=rtpmap:101 telephone-event/8000  
 a=fmtp:101 0-15  
 a=sendrecv

[[diagram](#)] Call-ID: [[prev](#)] [[next](#)]

[46] BYE sip:2010@172.18.203.55:5060 SIP/2.0

Via: SIP/2.0/UDP 172.18.203.51:5060;branch=z9hG4bK729b5995  
 From: <sip:2030@172.18.203.51>;tag=000d280821a5009945a77e96-24ed81d2  
 To: "SIP Line 2010" <sip:2010@172.18.203.55>;tag=b9c8b19b-c709-4d85-86d4-d2f557c6c2a6-30679784  
 Call-ID: c692e380-4b514dac-328-37cb12ac@172.18.203.55  
 Max-Forwards: 70  
 Date: Wed, 12 Jul 2006 19:30:04 GMT  
 CSeq: 101 BYE  
 User-Agent: Cisco-CP7960G/7.5  
 Content-Length: 0

[[diagram](#)] Call-ID: [[prev](#)] [[next](#)]

[47] BYE sip:2040@172.18.203.52:5060 SIP/2.0

Via: SIP/2.0/UDP 172.18.203.55:5060;branch=z9hG4bK192e70d1  
 From: "SIP Line 2030" <sip:2030@172.18.203.55>;tag=b9c8b19b-c709-4d85-86d4-d2f557c6c2a6-30679786  
 To: <sip:2040@172.18.203.52>;tag=003094c3cd3a001c46506427-2f6f3531  
 Date: Wed, 12 Jul 2006 19:29:55 GMT  
 Call-ID: cabf0100-4b514db3-329-37cb12ac@172.18.203.55

User-Agent: Cisco-CCM5.0  
Max-Forwards: 70  
CSeq: 102 BYE  
Content-Length: 0

[\[diagram\]](#) Call-ID: [\[prev\]](#)[\[next\]](#)

**[48] SIP/2.0 200 OK**

Via: SIP/2.0/UDP 172.18.203.51:5060;branch=z9hG4bK729b5995  
From: <sip:2030@172.18.203.51>;tag=000d280821a5009945a77e96-24ed81d2  
To: "SIP Line 2010" <sip:2010@172.18.203.55>;tag=b9c8b19b-c709-4d85-86d4-d2f557c6c2a6-30679784  
Date: Wed, 12 Jul 2006 19:30:05 GMT  
Call-ID: c692e380-4b514dac-328-37cb12ac@172.18.203.55  
CSeq: 101 BYE  
Content-Length: 0

[\[diagram\]](#) Call-ID: [\[prev\]](#)[\[next\]](#)

**[49] SIP/2.0 200 OK**

Via: SIP/2.0/UDP 172.18.203.55:5060;branch=z9hG4bK192e70d1  
From: "SIP Line 2030" <sip:2030@172.18.203.55>;tag=b9c8b19b-c709-4d85-86d4-d2f557c6c2a6-30679786  
To: <sip:2040@172.18.203.52>;tag=003094c3cd3a001c46506427-2f6f3531  
Call-ID: cabf0100-4b514db3-329-37cb12ac@172.18.203.55  
CSeq: 102 BYE  
Server: Cisco-CP7960G/7.5  
Content-Length: 0

## 6. Call\_Forwarding

### 6.1 Call Forward All

Title: Call Forward All

Description:

(F ---> G --CFA--> H)

F calls line 2010 on B while CCM has line 2010 on G configured to forward all calls to H.

Notice the "Diversion:" header in the INVITE to H. It uses "unconditional" to indicate Call Forward All.

Configuration:

Node = CCM, IP = 172.18.203.55

Phone = F, Line = 2005, IP = 172.18.203.45, Model = SIP 7960

Phone = G, Line = 2010, IP = 172.18.203.46, Model = SIP Basic

Phone = H, Line = 2030, IP = 172.18.203.51, Model = SIP Basic

Scenario:

2005 calls 2010

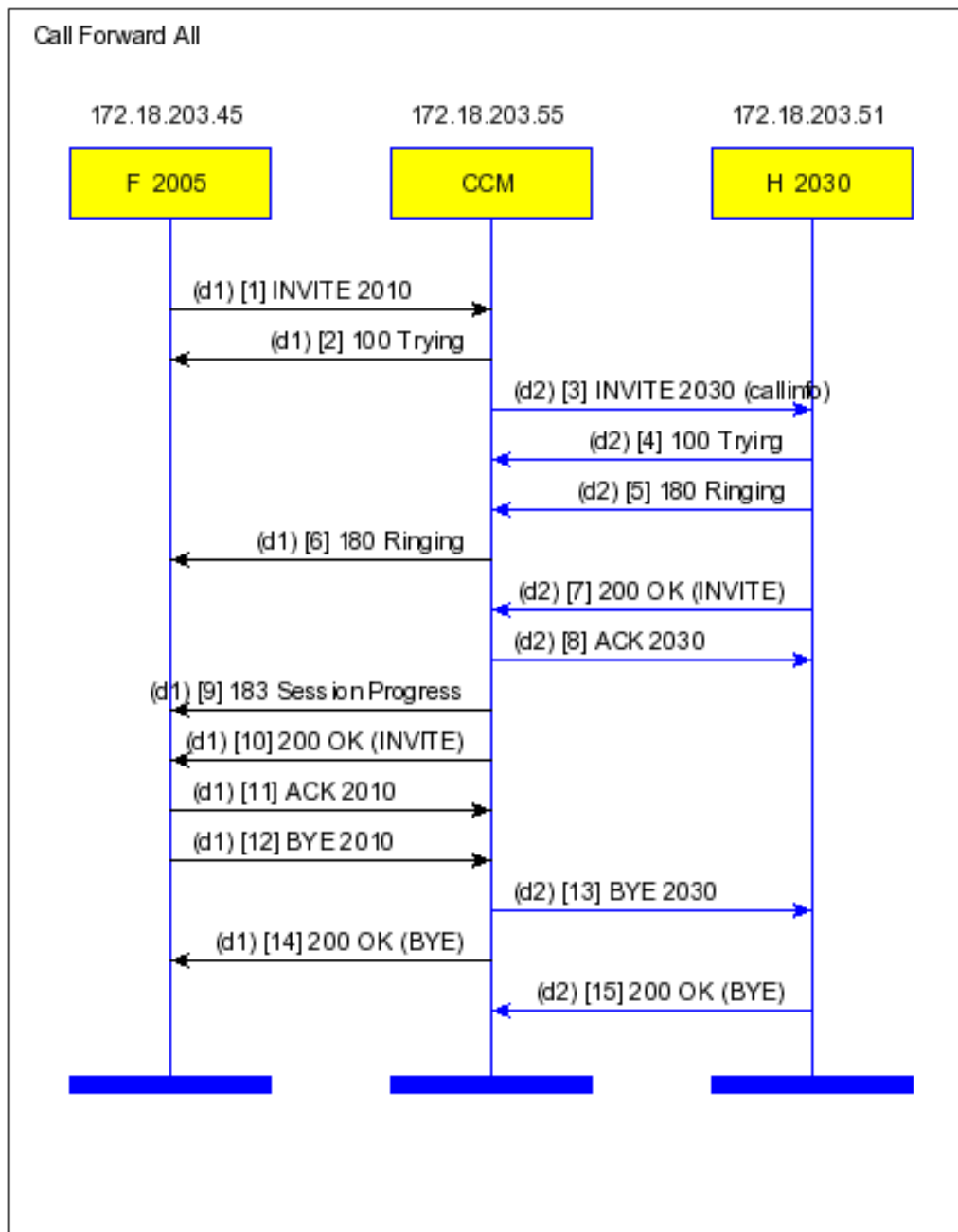
2010 never gets ringing (CCM forwards)

2030 rings

2030 answers

2005 and 2030 are connected

2005 goes onhook



[[diagram](#)] [Call-ID: \[prev\]](#) [[next](#)]  
**[1] INVITE sip:2010@sipsig-ccm55 SIP/2.0**  
 Via: SIP/2.0/UDP 172.18.203.45:5060;branch=z9hG4bK3dc42633  
 From: "SIP Line 2005" <sip:2005@sipsig-ccm55>;tag=00120193edaa07033d4bef2b-12987118  
 To: <sip:2010@sipsig-ccm55>  
 Call-ID: 00120193-edaa00a3-6ea4d0c7-2515f4d4@172.18.203.45  
 Max-Forwards: 70  
 CSeq: 101 INVITE  
 User-Agent: Cisco-CP7960G/8.0  
 Contact: <sip:2005@172.18.203.45:5060;transport=udp>  
 Expires: 180  
 Accept: application/sdp  
 Allow: ACK,BYE,CANCEL,INVITE,NOTIFY,OPTIONS,REFER,REGISTER,UPDATE  
 Remote-Party-ID: "SIP Line 2005" <sip:2005@sipsig-ccm55>;party=calling;id-type=subscriber;privacy=off;screen=yes  
 Content-Length: 274  
 Content-Type: application/sdp  
 Content-Disposition: session;handling=optional

v=0  
 o=Cisco-SIPUA 4564 0 IN IP4 172.18.203.45  
 s=SIP Call  
 t=0 0  
 m=audio 28146 RTP/AVP 0 8 18 101  
 c=IN IP4 172.18.203.45  
 a=rtpmap:0 PCMU/8000  
 a=rtpmap:8 PCMA/8000  
 a=rtpmap:18 G729/0  
 a=fmtp:18 annexb=no  
 a=rtpmap:101 telephone-event/8000  
 a=fmtp:101 0-15  
 a=sendrecv

[[diagram](#)] [Call-ID: \[prev\]](#) [[next](#)]  
**[2] SIP/2.0 100 Trying**  
 Via: SIP/2.0/UDP 172.18.203.45:5060;branch=z9hG4bK3dc42633  
 From: "SIP Line 2005" <sip:2005@sipsig-ccm55>;tag=00120193edaa07033d4bef2b-12987118  
 To: <sip:2010@sipsig-ccm55>  
 Date: Thu, 17 Aug 2006 20:05:46 GMT  
 Call-ID: 00120193-edaa00a3-6ea4d0c7-2515f4d4@172.18.203.45  
 CSeq: 101 INVITE  
 Allow-Events: presence  
 Content-Length: 0

[[diagram](#)] [Call-ID: \[prev\]](#) [[next](#)]  
**[3] INVITE sip:2030@172.18.203.51:5060 SIP/2.0**  
 Via: SIP/2.0/UDP 172.18.203.55:5060;branch=z9hG4bK4cce653c  
 Remote-Party-ID: "SIP Line 2005" <sip:2005@172.18.203.55>;party=calling;screen=yes;privacy=off  
 From: "SIP Line 2005" <sip:2005@172.18.203.55>;tag=b9c8b19b-c709-4d85-86d4-d2f557c6c2a6-26395844  
 To: <sip:2030@172.18.203.51>  
 Date: Thu, 17 Aug 2006 20:05:46 GMT  
 Call-ID: c3b68e80-4e41cc1a-ad-37cb12ac@172.18.203.55  
 Supported: timer,replaces  
 Min-SE: 1800  
 User-Agent: Cisco-CCM5.0  
 Allow: INVITE, OPTIONS, INFO, BYE, CANCEL, ACK, PRACK, UPDATE, REFER, SUBSCRIBE, NOTIFY  
 CSeq: 101 INVITE  
 Expires: 180  
 Allow-Events: presence  
 Call-Info: <urn:x-cisco-remotecc:callinfo>; security= NotAuthenticated; orientation= from; call-instance= 1  
 Alert-Info: <file://Bellcore-dr1/>  
 Contact: <sip:2030@172.18.203.55:5060>  
 Diversion: "SIP Alerting 2010" <sip:2010@172.18.203.55>;reason=unconditional;privacy=off;screen=yes  
 Max-Forwards: 69  
 Content-Length: 0

[[diagram](#)] [Call-ID: \[prev\]](#) [[next](#)]  
**[4] SIP/2.0 100 Trying**  
 Via: SIP/2.0/UDP 172.18.203.55:5060;branch=z9hG4bK4cce653c  
 From: "SIP Line 2005" <sip:2005@172.18.203.55>;tag=b9c8b19b-c709-4d85-86d4-d2f557c6c2a6-26395844  
 To: <sip:2030@172.18.203.51>  
 Call-ID: c3b68e80-4e41cc1a-ad-37cb12ac@172.18.203.55  
 CSeq: 101 INVITE  
 Server: Cisco-CP7960G/7.5  
 Contact: <sip:2030@172.18.203.51:5060>  
 Allow: ACK,BYE,CANCEL,INVITE,NOTIFY,OPTIONS,REFER,REGISTER,UPDATE  
 Remote-Party-ID: "2030" <sip:2030@172.18.203.51>;party=called;id-type=subscriber;privacy=off;screen=yes  
 Content-Length: 0

[\[diagram\]](#) Call-ID: [\[prev\]](#) [\[next\]](#)

#### [5] SIP/2.0 180 Ringing

Via: SIP/2.0/UDP 172.18.203.55:5060;branch=z9hG4bK4cce653c  
 From: "SIP Line 2005" <sip:2005@172.18.203.55>;tag=b9c8b19b-c709-4d85-86d4-d2f557c6c2a6-26395844  
 To: <sip:2030@172.18.203.51>;tag=000d280821a5001f6b48ff79-07bc5738  
 Call-ID: c3b68e80-4e41cc1a-ad-37cb12ac@172.18.203.55  
 CSeq: 101 INVITE  
 Server: Cisco-CP7960G/7.5  
 Contact: <sip:2030@172.18.203.51:5060>  
 Allow: ACK,BYE,CANCEL,INVITE,NOTIFY,OPTIONS,REFER,REGISTER,UPDATE  
 Remote-Party-ID: "2030" <sip:2030@172.18.203.51>;party=called;id-type=subscriber;privacy=off;screen=yes  
 Content-Length: 0

[\[diagram\]](#) Call-ID: [\[prev\]](#) [\[next\]](#)

#### [6] SIP/2.0 180 Ringing

Via: SIP/2.0/UDP 172.18.203.45:5060;branch=z9hG4bK3dc42633  
 From: "SIP Line 2005" <sip:2005@sipsig-ccm55>;tag=00120193edaa07033d4bef2b-12987118  
 To: <sip:2010@sipsig-ccm55>;tag=b9c8b19b-c709-4d85-86d4-d2f557c6c2a6-26395841  
 Date: Thu, 17 Aug 2006 20:05:46 GMT  
 Call-ID: 00120193-edaa00a3-6ea4d0c7-2515f4d4@172.18.203.45  
 CSeq: 101 INVITE  
 Allow: INVITE, OPTIONS, INFO, BYE, CANCEL, ACK, PRACK, UPDATE, REFER, SUBSCRIBE, NOTIFY  
 Allow-Events: presence  
 Remote-Party-ID: "SIP Alerting 2030" <sip:2030@172.18.203.55>;party=called;screen=yes;privacy=off  
 Contact: <sip:2010@172.18.203.55:5060>  
 Call-Info: <urn:x-cisco-remotecc:callinfo>; security= NotAuthenticated; orientation= to; ui-state= ringout;  
 call-instance= 1  
 Content-Length: 0

[\[diagram\]](#) Call-ID: [\[prev\]](#) [\[next\]](#)

#### [7] SIP/2.0 200 OK

Via: SIP/2.0/UDP 172.18.203.55:5060;branch=z9hG4bK4cce653c  
 From: "SIP Line 2005" <sip:2005@172.18.203.55>;tag=b9c8b19b-c709-4d85-86d4-d2f557c6c2a6-26395844  
 To: <sip:2030@172.18.203.51>;tag=000d280821a5001f6b48ff79-07bc5738  
 Call-ID: c3b68e80-4e41cc1a-ad-37cb12ac@172.18.203.55  
 CSeq: 101 INVITE  
 Server: Cisco-CP7960G/7.5  
 Contact: <sip:2030@172.18.203.51:5060>  
 Allow: ACK,BYE,CANCEL,INVITE,NOTIFY,OPTIONS,REFER,REGISTER,UPDATE  
 Remote-Party-ID: "2030" <sip:2030@172.18.203.51>;party=called;id-type=subscriber;privacy=off;screen=yes  
 Supported: replaces  
 Content-Length: 257  
 Content-Type: application/sdp  
 Content-Disposition: session;handling=optional

v=0  
 o=Cisco-SIPUA 23507 0 IN IP4 172.18.203.51  
 s=SIP Call  
 t=0 0  
 m=audio 31008 RTP/AVP 0 8 18 101  
 c=IN IP4 172.18.203.51  
 a=rtpmap:0 PCMU/8000  
 a=rtpmap:8 PCMA/8000  
 a=rtpmap:18 G729/8000  
 a=rtpmap:101 telephone-event/8000  
 a=fmtp:101 0-15  
 a=sendrecv

[\[diagram\]](#) Call-ID: [\[prev\]](#) [\[next\]](#)

#### [8] ACK sip:2030@172.18.203.51:5060 SIP/2.0

Via: SIP/2.0/UDP 172.18.203.55:5060;branch=z9hG4bK4a6bdd75  
 From: "SIP Line 2005" <sip:2005@172.18.203.55>;tag=b9c8b19b-c709-4d85-86d4-d2f557c6c2a6-26395844  
 To: <sip:2030@172.18.203.51>;tag=000d280821a5001f6b48ff79-07bc5738  
 Date: Thu, 17 Aug 2006 20:05:46 GMT  
 Call-ID: c3b68e80-4e41cc1a-ad-37cb12ac@172.18.203.55  
 Max-Forwards: 70  
 CSeq: 101 ACK  
 Allow-Events: presence  
 Content-Type: application/sdp  
 Content-Length: 214

v=0  
 o=CiscoSystemsCCM-SIP 2000 1 IN IP4 172.18.203.55  
 s=SIP Call  
 c=IN IP4 172.18.203.45  
 t=0 0  
 m=audio 28146 RTP/AVP 0 101  
 a=rtpmap:0 PCMU/8000  
 aptime:20  
 a=rtpmap:101 telephone-event/8000

a=fmtp:101 0-15

[\[diagram\]](#) Call-ID: [\[prev\]](#) [\[next\]](#)

**[9] SIP/2.0 183 Session Progress**

Via: SIP/2.0/UDP 172.18.203.45:5060;branch=z9hG4bK3dc42633  
 From: "SIP Line 2005" <sip:2005@sipsig-ccm55>;tag=00120193edaa07033d4bef2b-12987118  
 To: <sip:2010@sipsig-ccm55>;tag=b9c8b19b-c709-4d85-86d4-d2f557c6c2a6-26395841  
 Date: Thu, 17 Aug 2006 20:05:46 GMT  
 Call-ID: 00120193-edaa00a3-6ea4d0c7-2515f4d4@172.18.203.45  
 CSeq: 101 INVITE  
 Allow: INVITE, OPTIONS, INFO, BYE, CANCEL, ACK, PRACK, UPDATE, REFER, SUBSCRIBE, NOTIFY  
 Allow-Events: presence  
 Remote-Party-ID: "SIP Alerting 2030" <sip:2030@172.18.203.55>;party=called;screen=yes;privacy=off  
 Contact: <sip:2010@172.18.203.55:5060>  
 Call-Info: <urn:x-cisco-remotecc:callinfo>; security= NotAuthenticated; orientation= to; ui-state= ringout;  
 call-instance= 1  
 Content-Type: application/sdp  
 Content-Length: 214

v=0  
 o=CiscoSystemsCCM-SIP 2000 1 IN IP4 172.18.203.55  
 s=SIP Call  
 c=IN IP4 172.18.203.51  
 t=0 0  
 m=audio 31008 RTP/AVP 0 101  
 a=rtpmap:0 PCMU/8000  
 a=ptime:20  
 a=rtpmap:101 telephone-event/8000  
 a=fmtp:101 0-15

[\[diagram\]](#) Call-ID: [\[prev\]](#) [\[next\]](#)

**[10] SIP/2.0 200 OK**

Via: SIP/2.0/UDP 172.18.203.45:5060;branch=z9hG4bK3dc42633  
 From: "SIP Line 2005" <sip:2005@sipsig-ccm55>;tag=00120193edaa07033d4bef2b-12987118  
 To: <sip:2010@sipsig-ccm55>;tag=b9c8b19b-c709-4d85-86d4-d2f557c6c2a6-26395841  
 Date: Thu, 17 Aug 2006 20:05:46 GMT  
 Call-ID: 00120193-edaa00a3-6ea4d0c7-2515f4d4@172.18.203.45  
 CSeq: 101 INVITE  
 Allow: INVITE, OPTIONS, INFO, BYE, CANCEL, ACK, PRACK, UPDATE, REFER, SUBSCRIBE, NOTIFY  
 Allow-Events: presence  
 Remote-Party-ID: "SIP Line 2030" <sip:2030@172.18.203.55>;party=called;screen=yes;privacy=off  
 Contact: <sip:2010@172.18.203.55:5060>  
 Call-Info: <urn:x-cisco-remotecc:callinfo>; security= NotAuthenticated; orientation= to; call-instance= 1  
 Content-Type: application/sdp  
 Content-Length: 214

v=0  
 o=CiscoSystemsCCM-SIP 2000 1 IN IP4 172.18.203.55  
 s=SIP Call  
 c=IN IP4 172.18.203.51  
 t=0 0  
 m=audio 31008 RTP/AVP 0 101  
 a=rtpmap:0 PCMU/8000  
 a=ptime:20  
 a=rtpmap:101 telephone-event/8000  
 a=fmtp:101 0-15

[\[diagram\]](#) Call-ID: [\[prev\]](#) [\[next\]](#)

**[11] ACK sip:2010@172.18.203.55:5060 SIP/2.0**

Via: SIP/2.0/UDP 172.18.203.45:5060;branch=z9hG4bK6bf7c505  
 From: "SIP Line 2005" <sip:2005@sipsig-ccm55>;tag=00120193edaa07033d4bef2b-12987118  
 To: <sip:2010@sipsig-ccm55>;tag=b9c8b19b-c709-4d85-86d4-d2f557c6c2a6-26395841  
 Call-ID: 00120193-edaa00a3-6ea4d0c7-2515f4d4@172.18.203.45  
 Max-Forwards: 70  
 CSeq: 101 ACK  
 User-Agent: Cisco-CP7960G/8.0  
 Remote-Party-ID: "SIP Line 2005" <sip:2005@sipsig-ccm55>;party=calling;id-  
 type=subscriber;privacy=off;screen=yes  
 Content-Length: 0

[\[diagram\]](#) Call-ID: [\[prev\]](#) [\[next\]](#)

**[12] BYE sip:2010@172.18.203.55:5060 SIP/2.0**

Via: SIP/2.0/UDP 172.18.203.45:5060;branch=z9hG4bK5ff010aa  
 From: "SIP Line 2005" <sip:2005@sipsig-ccm55>;tag=00120193edaa07033d4bef2b-12987118  
 To: <sip:2010@sipsig-ccm55>;tag=b9c8b19b-c709-4d85-86d4-d2f557c6c2a6-26395841  
 Call-ID: 00120193-edaa00a3-6ea4d0c7-2515f4d4@172.18.203.45  
 Max-Forwards: 70  
 CSeq: 102 BYE  
 User-Agent: Cisco-CP7960G/8.0  
 Content-Length: 0

[diagram] Call-ID: [prev] [next]  
 [13] BYE sip:2030@172.18.203.51:5060 SIP/2.0  
 Via: SIP/2.0/UDP 172.18.203.55:5060;branch=z9hG4bK4cd6f502  
 From: "SIP Line 2005" <sip:2005@172.18.203.55>;tag=b9c8b19b-c709-4d85-86d4-d2f557c6c2a6-26395844  
 To: <sip:2030@172.18.203.51>;tag=000d280821a5001f6b48ff79-07bc5738  
 Date: Thu, 17 Aug 2006 20:05:46 GMT  
 Call-ID: c3b68e80-4e41cc1a-ad-37cb12ac@172.18.203.55  
 User-Agent: Cisco-CCM5.0  
 Max-Forwards: 70  
 CSeq: 102 BYE  
 Content-Length: 0

[diagram] Call-ID: [prev] [next]  
 [14] SIP/2.0 200 OK  
 Via: SIP/2.0/UDP 172.18.203.45:5060;branch=z9hG4bK5fff010aa  
 From: "SIP Line 2005" <sip:2005@sipsig-ccm55>;tag=00120193edaa07033d4bef2b-12987118  
 To: <sip:2010@sipsig-ccm55>;tag=b9c8b19b-c709-4d85-86d4-d2f557c6c2a6-26395841  
 Date: Thu, 17 Aug 2006 20:05:52 GMT  
 Call-ID: 00120193-edaa00a3-6ea4d0c7-2515f4d4@172.18.203.45  
 CSeq: 102 BYE  
 Content-Length: 0

[diagram] Call-ID: [prev] [next]  
 [15] SIP/2.0 200 OK  
 Via: SIP/2.0/UDP 172.18.203.55:5060;branch=z9hG4bK4cd6f502  
 From: "SIP Line 2005" <sip:2005@172.18.203.55>;tag=b9c8b19b-c709-4d85-86d4-d2f557c6c2a6-26395844  
 To: <sip:2030@172.18.203.51>;tag=000d280821a5001f6b48ff79-07bc5738  
 Call-ID: c3b68e80-4e41cc1a-ad-37cb12ac@172.18.203.55  
 CSeq: 102 BYE  
 Server: Cisco-CP7960G/7.5  
 Content-Length: 0

## 6.2 Call Forward No Answer

Title: Call Forward No Answer

Description:

(F ---> G ---CFNA---> H)

F calls line 2010 on G while CCM has line 2010 on G configured with Call Forward No Answer to C after 5 seconds. G does not answer within 5 seconds and the call is forwarded to H.

Notice the "Diversion:" header in the INVITE to H. It uses "no-answer" to indicate Call Forward No Answer.

Configuration:

Node = CCM, IP = 172.18.203.55

Phone = F, Line = 2005, IP = 172.18.203.45, Model = SIP 7960

Phone = G, Line = 2010, IP = 172.18.203.46, Model = SIP Basic

Phone = H, Line = 2030, IP = 172.18.203.51, Model = SIP Basic

Scenario:

2005 calls 2010

2010 rings for about 5 seconds but is not answered

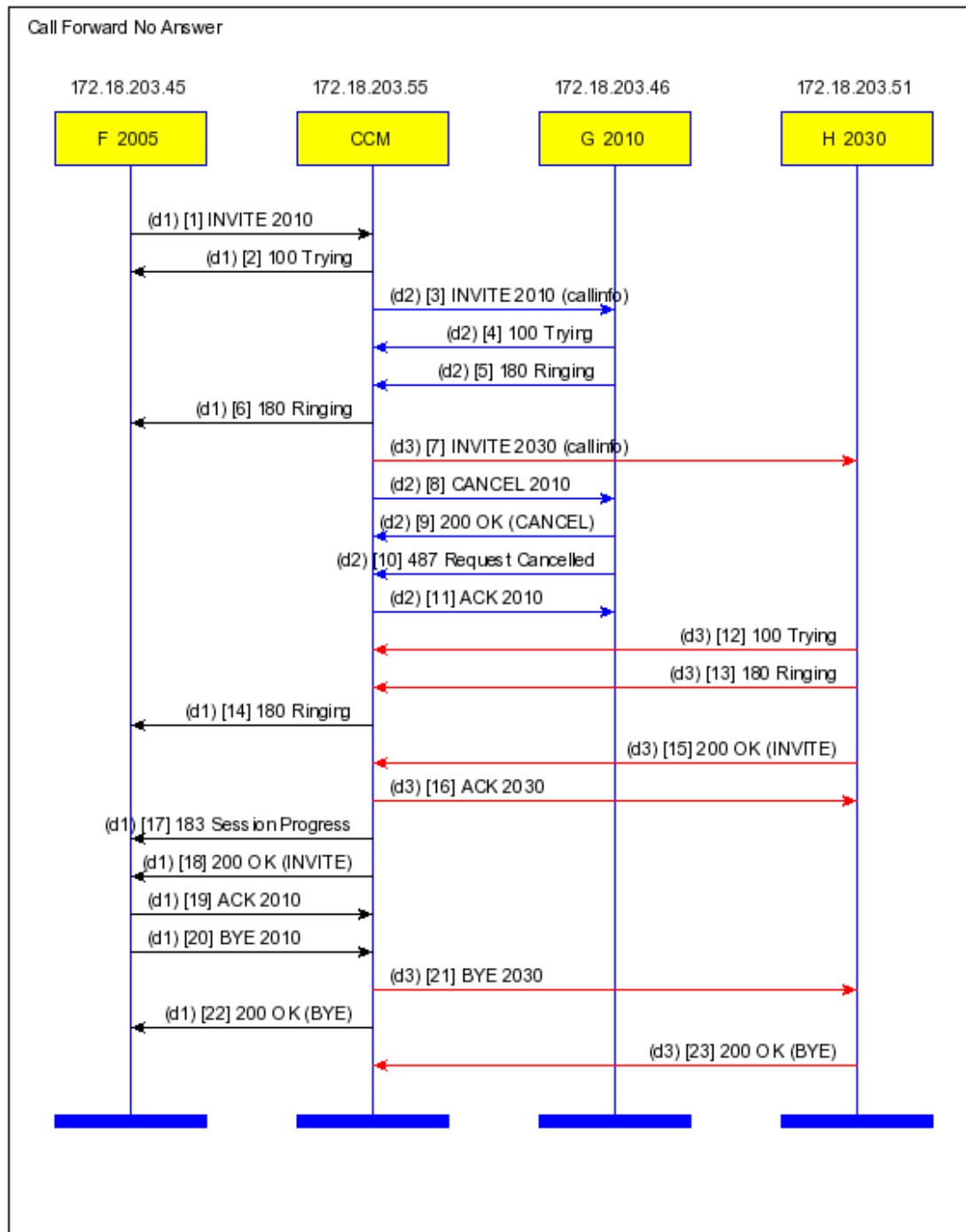
2030 rings

The call to 2010 is cancelled

2030 answers

2005 and 2030 are connected

2005 goes onhook



[[diagram](#)] [Call-ID: \[prev\]](#) [[next](#)]

**[1] INVITE sip:2010@sipsig-ccm55 SIP/2.0**

Via: SIP/2.0/UDP 172.18.203.45:5060;branch=z9hG4bK5e4b38c6  
 From: "SIP Line 2005" <sip:2005@sipsig-ccm55>;tag=00120193edaa07264f9d59fb-3ca4ed09  
 To: <sip:2010@sipsig-ccm55>  
 Call-ID: 00120193-edaa00a7-108de1dd-1c628e35@172.18.203.45  
 Max-Forwards: 70  
 CSeq: 101 INVITE  
 User-Agent: Cisco-CP7960G/8.0  
 Contact: <sip:2005@172.18.203.45:5060;transport=udp>  
 Expires: 180  
 Accept: application/sdp  
 Allow: ACK,BYE,CANCEL,INVITE,NOTIFY,OPTIONS,REFER,REGISTER,UPDATE  
 Remote-Party-ID: "SIP Line 2005" <sip:2005@sipsig-ccm55>;party=calling;id-type=subscriber;privacy=off;screen=yes  
 Content-Length: 275  
 Content-Type: application/sdp  
 Content-Disposition: session;handling=optional

v=0  
 o=Cisco-SIPUA 27265 0 IN IP4 172.18.203.45  
 s=SIP Call  
 t=0 0  
 m=audio 25642 RTP/AVP 0 8 18 101  
 c=IN IP4 172.18.203.45  
 a=rtpmap:0 PCMU/8000  
 a=rtpmap:8 PCMA/8000  
 a=rtpmap:18 G729/0  
 a=fmtp:18 annexb=no  
 a=rtpmap:101 telephone-event/8000  
 a=fmtp:101 0-15  
 a=sendrecv

[[diagram](#)] [Call-ID: \[prev\]](#) [[next](#)]

**[2] SIP/2.0 100 Trying**

Via: SIP/2.0/UDP 172.18.203.45:5060;branch=z9hG4bK5e4b38c6  
 From: "SIP Line 2005" <sip:2005@sipsig-ccm55>;tag=00120193edaa07264f9d59fb-3ca4ed09  
 To: <sip:2010@sipsig-ccm55>  
 Date: Thu, 17 Aug 2006 21:22:28 GMT  
 Call-ID: 00120193-edaa00a7-108de1dd-1c628e35@172.18.203.45  
 CSeq: 101 INVITE  
 Allow-Events: presence  
 Content-Length: 0

[[diagram](#)] [Call-ID: \[prev\]](#) [[next](#)]

**[3] INVITE sip:2010@172.18.203.46:5060 SIP/2.0**

Via: SIP/2.0/UDP 172.18.203.55:5060;branch=z9hG4bK11fa7347  
 Remote-Party-ID: "SIP Line 2005" <sip:2005@172.18.203.55>;party=calling;screen=yes;privacy=off  
 From: "SIP Line 2005" <sip:2005@172.18.203.55>;tag=b9c8b19b-c709-4d85-86d4-d2f557c6c2a6-26395861  
 To: <sip:2010@172.18.203.46>  
 Date: Thu, 17 Aug 2006 21:22:28 GMT  
 Call-ID: 7ab80780-4e41de14-145-37cb12ac@172.18.203.55  
 Supported: timer,replaces  
 Min-SE: 1800  
 User-Agent: Cisco-CCM5.0  
 Allow: INVITE, OPTIONS, INFO, BYE, CANCEL, ACK, PRACK, UPDATE, REFER, SUBSCRIBE, NOTIFY  
 CSeq: 101 INVITE  
 Expires: 180  
 Allow-Events: presence  
 Call-Info: <urn:x-cisco-remotecc:callinfo>; security= NotAuthenticated; orientation= from; call-instance= 1  
 Alert-Info: <file://Bellcore-dr1/>  
 Contact: <sip:2010@172.18.203.55:5060>  
 Max-Forwards: 69  
 Content-Length: 0

[[diagram](#)] [Call-ID: \[prev\]](#) [[next](#)]

**[4] SIP/2.0 100 Trying**

Via: SIP/2.0/UDP 172.18.203.55:5060;branch=z9hG4bK11fa7347  
 From: "SIP Line 2005" <sip:2005@172.18.203.55>;tag=b9c8b19b-c709-4d85-86d4-d2f557c6c2a6-26395861  
 To: <sip:2010@172.18.203.46>  
 Call-ID: 7ab80780-4e41de14-145-37cb12ac@172.18.203.55  
 CSeq: 101 INVITE  
 Server: Cisco-CP7960G/7.5  
 Contact: <sip:2010@172.18.203.46:5060>  
 Allow: ACK,BYE,CANCEL,INVITE,NOTIFY,OPTIONS,REFER,REGISTER,UPDATE  
 Remote-Party-ID: "2010" <sip:2010@172.18.203.46>;party=called;id-type=subscriber;privacy=off;screen=yes  
 Content-Length: 0

[[diagram](#)] [Call-ID: \[prev\]](#) [[next](#)]

**[5] SIP/2.0 180 Ringing**

Via: SIP/2.0/UDP 172.18.203.55:5060;branch=z9hG4bK11fa7347  
 From: "SIP Line 2005" <sip:2005@172.18.203.55>;tag=b9c8b19b-c709-4d85-86d4-d2f557c6c2a6-26395861  
 To: <sip:2010@172.18.203.46>;tag=00120193edac000823acb27b-01c3743b  
 Call-ID: 7ab80780-4e41de14-145-37cb12ac@172.18.203.55  
 CSeq: 101 INVITE  
 Server: Cisco-CP7960G/7.5  
 Contact: <sip:2010@172.18.203.46:5060>  
 Allow: ACK,BYE,CANCEL,INVITE,NOTIFY,OPTIONS,REFER,REGISTER,UPDATE  
 Remote-Party-ID: "2010" <sip:2010@172.18.203.46>;party=called;id-type=subscriber;privacy=off;screen=yes  
 Content-Length: 0

[\[diagram\]](#) Call-ID: [\[prev\]](#) [\[next\]](#)

#### [6] SIP/2.0 180 Ringing

Via: SIP/2.0/UDP 172.18.203.45:5060;branch=z9hG4bK5e4b38c6  
 From: "SIP Line 2005" <sip:2005@sipsig-ccm55>;tag=00120193edaa07264f9d59fb-3ca4ed09  
 To: <sip:2010@sipsig-ccm55>;tag=b9c8b19b-c709-4d85-86d4-d2f557c6c2a6-26395860  
 Date: Thu, 17 Aug 2006 21:22:28 GMT  
 Call-ID: 00120193-edaa00a7-108de1dd-1c628e35@172.18.203.45  
 CSeq: 101 INVITE  
 Allow: INVITE, OPTIONS, INFO, BYE, CANCEL, ACK, PRACK, UPDATE, REFER, SUBSCRIBE, NOTIFY  
 Allow-Events: presence  
 Remote-Party-ID: "SIP Alerting 2010" <sip:2010@172.18.203.55>;party=called;screen=yes;privacy=off  
 Contact: <sip:2010@172.18.203.55:5060>  
 Call-Info: <urn:x-cisco-remotecc:callinfo>; security= NotAuthenticated; orientation= to; ui-state= ringout;  
 call-instance= 1  
 Content-Length: 0

[\[diagram\]](#) Call-ID: [\[prev\]](#) [\[next\]](#)

#### [7] INVITE sip:2030@172.18.203.51:5060 SIP/2.0

Via: SIP/2.0/UDP 172.18.203.55:5060;branch=z9hG4bK1d12aba5  
 Remote-Party-ID: "SIP Line 2005" <sip:2005@172.18.203.55>;party=calling;screen=yes;privacy=off  
 From: "SIP Line 2005" <sip:2005@172.18.203.55>;tag=b9c8b19b-c709-4d85-86d4-d2f557c6c2a6-26395864  
 To: <sip:2030@172.18.203.51>  
 Date: Thu, 17 Aug 2006 21:22:34 GMT  
 Call-ID: 7e4b8e80-4e41de1a-146-37cb12ac@172.18.203.55  
 Supported: timer,replaces  
 Min-SE: 1800  
 User-Agent: Cisco-CCM5.0  
 Allow: INVITE, OPTIONS, INFO, BYE, CANCEL, ACK, PRACK, UPDATE, REFER, SUBSCRIBE, NOTIFY  
 CSeq: 101 INVITE  
 Expires: 180  
 Allow-Events: presence  
 Call-Info: <urn:x-cisco-remotecc:callinfo>; security= NotAuthenticated; orientation= from; call-instance= 1  
 Alert-Info: <file://Bellcore-dr1/>  
 Contact: <sip:2030@172.18.203.55:5060>  
 Diversion: "SIP Alerting 2010" <sip:2010@172.18.203.55>;reason=no-answer;privacy=off;screen=yes  
 Max-Forwards: 69  
 Content-Length: 0

[\[diagram\]](#) Call-ID: [\[prev\]](#) [\[next\]](#)

#### [8] CANCEL sip:2010@172.18.203.46:5060 SIP/2.0

Via: SIP/2.0/UDP 172.18.203.55:5060;branch=z9hG4bK11fa7347  
 From: "SIP Line 2005" <sip:2005@172.18.203.55>;tag=b9c8b19b-c709-4d85-86d4-d2f557c6c2a6-26395861  
 To: <sip:2010@172.18.203.46>  
 Date: Thu, 17 Aug 2006 21:22:28 GMT  
 Call-ID: 7ab80780-4e41de14-145-37cb12ac@172.18.203.55  
 CSeq: 101 CANCEL  
 Max-Forwards: 70  
 Content-Length: 0

[\[diagram\]](#) Call-ID: [\[prev\]](#) [\[next\]](#)

#### [9] SIP/2.0 200 OK

Via: SIP/2.0/UDP 172.18.203.55:5060;branch=z9hG4bK11fa7347  
 From: "SIP Line 2005" <sip:2005@172.18.203.55>;tag=b9c8b19b-c709-4d85-86d4-d2f557c6c2a6-26395861  
 To: <sip:2010@172.18.203.46>;tag=00120193edac000823acb27b-01c3743b  
 Call-ID: 7ab80780-4e41de14-145-37cb12ac@172.18.203.55  
 CSeq: 101 CANCEL  
 Server: Cisco-CP7960G/7.5  
 Content-Length: 0

[\[diagram\]](#) Call-ID: [\[prev\]](#) [\[next\]](#)

#### [10] SIP/2.0 487 Request Cancelled

Via: SIP/2.0/UDP 172.18.203.55:5060;branch=z9hG4bK11fa7347  
 From: "SIP Line 2005" <sip:2005@172.18.203.55>;tag=b9c8b19b-c709-4d85-86d4-d2f557c6c2a6-26395861  
 To: <sip:2010@172.18.203.46>;tag=00120193edac000823acb27b-01c3743b  
 Call-ID: 7ab80780-4e41de14-145-37cb12ac@172.18.203.55  
 CSeq: 101 INVITE  
 Server: Cisco-CP7960G/7.5  
 Contact: <sip:2010@172.18.203.46:5060>  
 Allow: ACK,BYE,CANCEL,INVITE,NOTIFY,OPTIONS,REFER,REGISTER,UPDATE

Remote-Party-ID: "2010" <sip:2010@172.18.203.46>;party=called;id-type=subscriber;privacy=off;screen=yes  
Content-Length: 0

[\[diagram\]](#) Call-ID: [\[prev\]](#) [\[next\]](#)

**[11] ACK sip:2010@172.18.203.46:5060 SIP/2.0**

Via: SIP/2.0/UDP 172.18.203.55:5060;branch=z9hG4bK11fa7347  
From: "SIP Line 2005" <sip:2005@172.18.203.55>;tag=b9c8b19b-c709-4d85-86d4-d2f557c6c2a6-26395861  
To: <sip:2010@172.18.203.46>;tag=00120193edac000823acb27b-01c3743b  
Date: Thu, 17 Aug 2006 21:22:28 GMT  
Call-ID: 7ab80780-4e41de14-145-37cb12ac@172.18.203.55  
Max-Forwards: 70  
CSeq: 101 ACK  
Allow-Events: presence  
Content-Length: 0

[\[diagram\]](#) Call-ID: [\[prev\]](#) [\[next\]](#)

**[12] SIP/2.0 100 Trying**

Via: SIP/2.0/UDP 172.18.203.55:5060;branch=z9hG4bK1d12aba5  
From: "SIP Line 2005" <sip:2005@172.18.203.55>;tag=b9c8b19b-c709-4d85-86d4-d2f557c6c2a6-26395864  
To: <sip:2030@172.18.203.51>  
Call-ID: 7e4b8e80-4e41de1a-146-37cb12ac@172.18.203.55  
CSeq: 101 INVITE  
Server: Cisco-CP7960G/7.5  
Contact: <sip:2030@172.18.203.51:5060>  
Allow: ACK,BYE,CANCEL,INVITE,NOTIFY,OPTIONS,REFER,REGISTER,UPDATE  
Remote-Party-ID: "2030" <sip:2030@172.18.203.51>;party=called;id-type=subscriber;privacy=off;screen=yes  
Content-Length: 0

[\[diagram\]](#) Call-ID: [\[prev\]](#) [\[next\]](#)

**[13] SIP/2.0 180 Ringing**

Via: SIP/2.0/UDP 172.18.203.55:5060;branch=z9hG4bK1d12aba5  
From: "SIP Line 2005" <sip:2005@172.18.203.55>;tag=b9c8b19b-c709-4d85-86d4-d2f557c6c2a6-26395864  
To: <sip:2030@172.18.203.51>;tag=000d280821a5004c09bc0863-3ec0c8d3  
Call-ID: 7e4b8e80-4e41de1a-146-37cb12ac@172.18.203.55  
CSeq: 101 INVITE  
Server: Cisco-CP7960G/7.5  
Contact: <sip:2030@172.18.203.51:5060>  
Allow: ACK,BYE,CANCEL,INVITE,NOTIFY,OPTIONS,REFER,REGISTER,UPDATE  
Remote-Party-ID: "2030" <sip:2030@172.18.203.51>;party=called;id-type=subscriber;privacy=off;screen=yes  
Content-Length: 0

[\[diagram\]](#) Call-ID: [\[prev\]](#) [\[next\]](#)

**[14] SIP/2.0 180 Ringing**

Via: SIP/2.0/UDP 172.18.203.45:5060;branch=z9hG4bK5e4b38c6  
From: "SIP Line 2005" <sip:2005@sipsig-ccm55>;tag=00120193edaa07264f9d59fb-3ca4ed09  
To: <sip:2010@sipsig-ccm55>;tag=b9c8b19b-c709-4d85-86d4-d2f557c6c2a6-26395860  
Date: Thu, 17 Aug 2006 21:22:28 GMT  
Call-ID: 00120193-edaa00a7-108de1dd-1c628e35@172.18.203.45  
CSeq: 101 INVITE  
Allow: INVITE, OPTIONS, INFO, BYE, CANCEL, ACK, PRACK, UPDATE, REFER, SUBSCRIBE, NOTIFY  
Allow-Events: presence  
Remote-Party-ID: "SIP Alerting 2030" <sip:2030@172.18.203.55>;party=called;screen=yes;privacy=off  
Contact: <sip:2010@172.18.203.55:5060>  
Call-Info: <urn:x-cisco-remotecallinfo>; security= NotAuthenticated; orientation= to; ui-state= ringout;  
call-instance= 1  
Content-Length: 0

[\[diagram\]](#) Call-ID: [\[prev\]](#) [\[next\]](#)

**[15] SIP/2.0 200 OK**

Via: SIP/2.0/UDP 172.18.203.55:5060;branch=z9hG4bK1d12aba5  
From: "SIP Line 2005" <sip:2005@172.18.203.55>;tag=b9c8b19b-c709-4d85-86d4-d2f557c6c2a6-26395864  
To: <sip:2030@172.18.203.51>;tag=000d280821a5004c09bc0863-3ec0c8d3  
Call-ID: 7e4b8e80-4e41de1a-146-37cb12ac@172.18.203.55  
CSeq: 101 INVITE  
Server: Cisco-CP7960G/7.5  
Contact: <sip:2030@172.18.203.51:5060>  
Allow: ACK,BYE,CANCEL,INVITE,NOTIFY,OPTIONS,REFER,REGISTER,UPDATE  
Remote-Party-ID: "2030" <sip:2030@172.18.203.51>;party=called;id-type=subscriber;privacy=off;screen=yes  
Supported: replaces  
Content-Length: 257  
Content-Type: application/sdp  
Content-Disposition: session;handling=optional

v=0  
o=Cisco-SIPUA 16050 0 IN IP4 172.18.203.51  
s=SIP Call  
t=0 0  
m=audio 31024 RTP/AVP 0 8 18 101  
c=IN IP4 172.18.203.51  
a=rtpmap:0 PCMU/8000

```
a=rtpmap:8 PCMA/8000
a=rtpmap:18 G729/8000
a=rtpmap:101 telephone-event/8000
a=fmtp:101 0-15
a=sendrecv
```

[\[diagram\]](#) Call-ID: [\[prev\]](#) [\[next\]](#)

**[16] ACK sip:2030@172.18.203.51:5060 SIP/2.0**

```
Via: SIP/2.0/UDP 172.18.203.55:5060;branch=z9hG4bK78f9b50b
From: "SIP Line 2005" <sip:2005@172.18.203.55>;tag=b9c8b19b-c709-4d85-86d4-d2f557c6c2a6-26395864
To: <sip:2030@172.18.203.51>;tag=000d280821a5004c09bc0863-3ec0c8d3
Date: Thu, 17 Aug 2006 21:22:34 GMT
Call-ID: 7e4b8e80-4e41de1a-146-37cb12ac@172.18.203.55
Max-Forwards: 70
CSeq: 101 ACK
Allow-Events: presence
Content-Type: application/sdp
Content-Length: 214
```

```
v=0
o=CiscoSystemsCCM-SIP 2000 1 IN IP4 172.18.203.55
s=SIP Call
c=IN IP4 172.18.203.45
t=0 0
m=audio 25642 RTP/AVP 0 101
a=rtpmap:0 PCMU/8000
a=ptime:20
a=rtpmap:101 telephone-event/8000
a=fmtp:101 0-15
```

[\[diagram\]](#) Call-ID: [\[prev\]](#) [\[next\]](#)

**[17] SIP/2.0 183 Session Progress**

```
Via: SIP/2.0/UDP 172.18.203.45:5060;branch=z9hG4bK5e4b38c6
From: "SIP Line 2005" <sip:2005@sipsig-ccm55>;tag=00120193edaa07264f9d59fb-3ca4ed09
To: <sip:2010@sipsig-ccm55>;tag=b9c8b19b-c709-4d85-86d4-d2f557c6c2a6-26395860
Date: Thu, 17 Aug 2006 21:22:28 GMT
Call-ID: 00120193-edaa00a7-108de1dd-1c628e35@172.18.203.45
CSeq: 101 INVITE
Allow: INVITE, OPTIONS, INFO, BYE, CANCEL, ACK, PRACK, UPDATE, REFER, SUBSCRIBE, NOTIFY
Allow-Events: presence
Remote-Party-ID: "SIP Alerting 2030" <sip:2030@172.18.203.55>;party=called;screen=yes;privacy=off
Contact: <sip:2010@172.18.203.55:5060>
Call-Info: <urn:x-cisco-remotecc:callinfo>; security= NotAuthenticated; orientation= to; ui-state= ringout;
call-instance= 1
Content-Type: application/sdp
Content-Length: 214
```

```
v=0
o=CiscoSystemsCCM-SIP 2000 1 IN IP4 172.18.203.55
s=SIP Call
c=IN IP4 172.18.203.51
t=0 0
m=audio 31024 RTP/AVP 0 101
a=rtpmap:0 PCMU/8000
a=ptime:20
a=rtpmap:101 telephone-event/8000
a=fmtp:101 0-15
```

[\[diagram\]](#) Call-ID: [\[prev\]](#) [\[next\]](#)

**[18] SIP/2.0 200 OK**

```
Via: SIP/2.0/UDP 172.18.203.45:5060;branch=z9hG4bK5e4b38c6
From: "SIP Line 2005" <sip:2005@sipsig-ccm55>;tag=00120193edaa07264f9d59fb-3ca4ed09
To: <sip:2010@sipsig-ccm55>;tag=b9c8b19b-c709-4d85-86d4-d2f557c6c2a6-26395860
Date: Thu, 17 Aug 2006 21:22:28 GMT
Call-ID: 00120193-edaa00a7-108de1dd-1c628e35@172.18.203.45
CSeq: 101 INVITE
Allow: INVITE, OPTIONS, INFO, BYE, CANCEL, ACK, PRACK, UPDATE, REFER, SUBSCRIBE, NOTIFY
Allow-Events: presence
Remote-Party-ID: "SIP Line 2030" <sip:2030@172.18.203.55>;party=called;screen=yes;privacy=off
Contact: <sip:2010@172.18.203.55:5060>
Call-Info: <urn:x-cisco-remotecc:callinfo>; security= NotAuthenticated; orientation= to; call-instance= 1
Content-Type: application/sdp
Content-Length: 214
```

```
v=0
o=CiscoSystemsCCM-SIP 2000 1 IN IP4 172.18.203.55
s=SIP Call
c=IN IP4 172.18.203.51
t=0 0
m=audio 31024 RTP/AVP 0 101
```

```
a=rtpmap:0 PCMU/8000
a=ptime:20
a=rtpmap:101 telephone-event/8000
a=fmtp:101 0-15
```

[[diagram](#)] Call-ID: [[prev](#)] [[next](#)]  
**[19] ACK sip:2010@172.18.203.55:5060 SIP/2.0**  
 Via: SIP/2.0/UDP 172.18.203.45:5060;branch=z9hG4bK244560ea  
 From: "SIP Line 2005" <sip:2005@sipsig-ccm55>;tag=00120193edaa07264f9d59fb-3ca4ed09  
 To: <sip:2010@sipsig-ccm55>;tag=b9c8b19b-c709-4d85-86d4-d2f557c6c2a6-26395860  
 Call-ID: 00120193-edaa00a7-108de1dd-1c628e35@172.18.203.45  
 Max-Forwards: 70  
 CSeq: 101 ACK  
 User-Agent: Cisco-CP7960G/8.0  
 Remote-Party-ID: "SIP Line 2005" <sip:2005@sipsig-ccm55>;party=calling;id-type=subscriber;privacy=off;screen=yes  
 Content-Length: 0

[[diagram](#)] Call-ID: [[prev](#)] [[next](#)]  
**[20] BYE sip:2010@172.18.203.55:5060 SIP/2.0**  
 Via: SIP/2.0/UDP 172.18.203.45:5060;branch=z9hG4bK739082fa  
 From: "SIP Line 2005" <sip:2005@sipsig-ccm55>;tag=00120193edaa07264f9d59fb-3ca4ed09  
 To: <sip:2010@sipsig-ccm55>;tag=b9c8b19b-c709-4d85-86d4-d2f557c6c2a6-26395860  
 Call-ID: 00120193-edaa00a7-108de1dd-1c628e35@172.18.203.45  
 Max-Forwards: 70  
 CSeq: 102 BYE  
 User-Agent: Cisco-CP7960G/8.0  
 Content-Length: 0

[[diagram](#)] Call-ID: [[prev](#)] [[next](#)]  
**[21] BYE sip:2030@172.18.203.51:5060 SIP/2.0**  
 Via: SIP/2.0/UDP 172.18.203.55:5060;branch=z9hG4bK5b181c01  
 From: "SIP Line 2005" <sip:2005@172.18.203.55>;tag=b9c8b19b-c709-4d85-86d4-d2f557c6c2a6-26395864  
 To: <sip:2030@172.18.203.51>;tag=000d280821a5004c09bc0863-3ec0c8d3  
 Date: Thu, 17 Aug 2006 21:22:34 GMT  
 Call-ID: 7e4b8e80-4e41de1a-146-37cb12ac@172.18.203.55  
 User-Agent: Cisco-CCM5.0  
 Max-Forwards: 70  
 CSeq: 102 BYE  
 Content-Length: 0

[[diagram](#)] Call-ID: [[prev](#)] [[next](#)]  
**[22] SIP/2.0 200 OK**  
 Via: SIP/2.0/UDP 172.18.203.45:5060;branch=z9hG4bK739082fa  
 From: "SIP Line 2005" <sip:2005@sipsig-ccm55>;tag=00120193edaa07264f9d59fb-3ca4ed09  
 To: <sip:2010@sipsig-ccm55>;tag=b9c8b19b-c709-4d85-86d4-d2f557c6c2a6-26395860  
 Date: Thu, 17 Aug 2006 21:22:45 GMT  
 Call-ID: 00120193-edaa00a7-108de1dd-1c628e35@172.18.203.45  
 CSeq: 102 BYE  
 Content-Length: 0

[[diagram](#)] Call-ID: [[prev](#)] [[next](#)]  
**[23] SIP/2.0 200 OK**  
 Via: SIP/2.0/UDP 172.18.203.55:5060;branch=z9hG4bK5b181c01  
 From: "SIP Line 2005" <sip:2005@172.18.203.55>;tag=b9c8b19b-c709-4d85-86d4-d2f557c6c2a6-26395864  
 To: <sip:2030@172.18.203.51>;tag=000d280821a5004c09bc0863-3ec0c8d3  
 Call-ID: 7e4b8e80-4e41de1a-146-37cb12ac@172.18.203.55  
 CSeq: 102 BYE  
 Server: Cisco-CP7960G/7.5  
 Content-Length: 0

### 6.3 Call Forward Busy

Title: Call Forward Busy

Description:

(F ---> H,  
G ---> H --CFB--> L)

Line 2005 on phone F is used to call line 2030 on Phone H and establish a connection (making 2030 "busy").

Phone G calls line 2030 on H while CCM has line 2030 on H configured to forward to L when one call is already active on that line (i.e. busy trigger = 1).

Notice the "Diversion:" header in the INVITE to L. It uses "user-busy" to indicate Call Forward Busy.

Configuration:

Node = CCM, IP = 172.18.203.55

Phone = F, Line = 2005, IP = 172.18.203.45, Model = SIP 7960

Phone = G, Line = 2010, IP = 172.18.203.46, Model = SIP Basic

Phone = H, Line = 2030, IP = 172.18.203.51, Model = SIP Basic

Phone = L, Line = 2040, IP = 172.18.203.52, Model = SIP Basic

Scenario:

2005 calls 2030

2030 answers

2030 and 2005 are connected (2030 is now "busy")

2010 calls 2030

2030 never gets ringing for this call (CCM forwards due to busy)

2040 rings

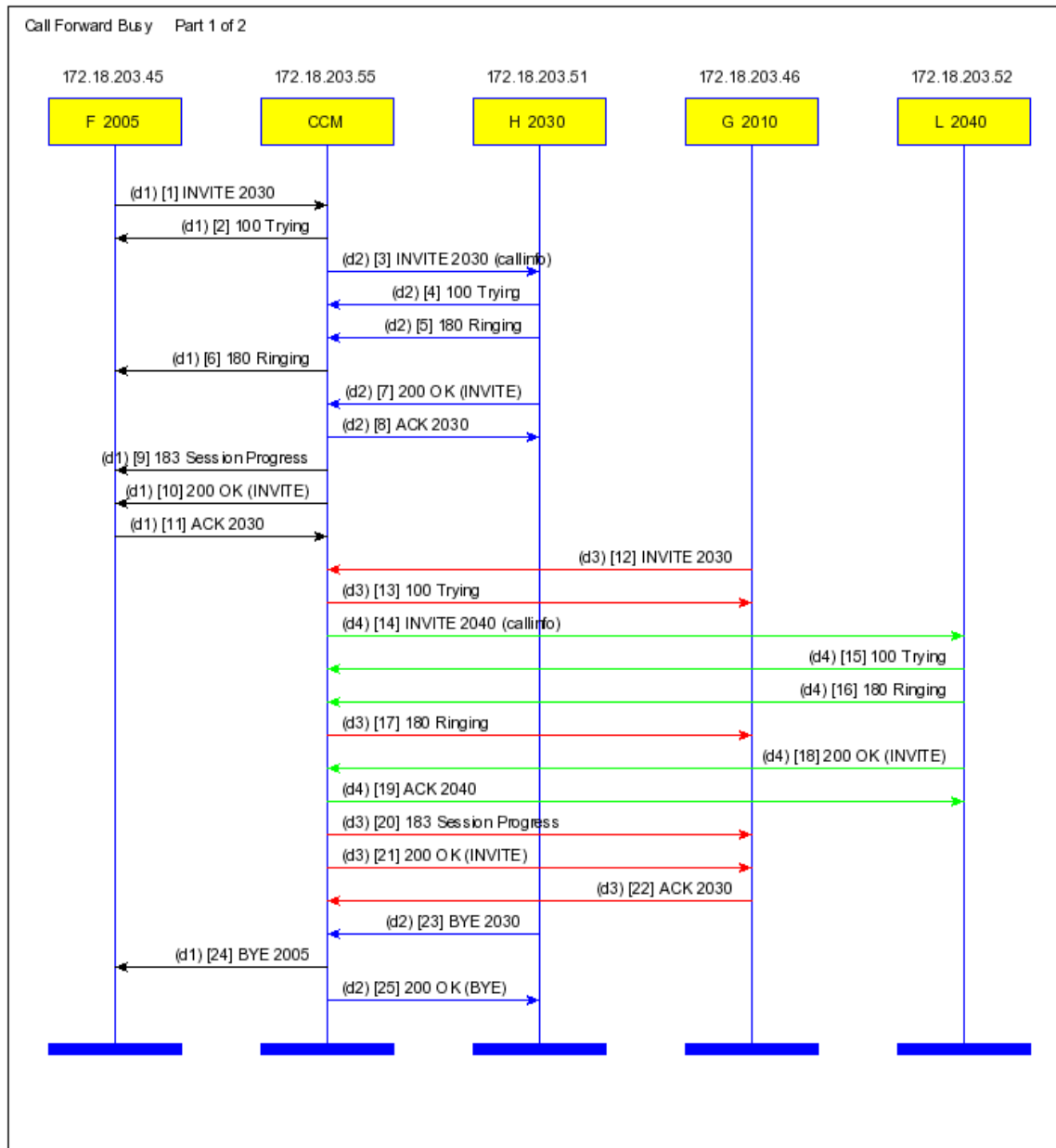
2040 answers

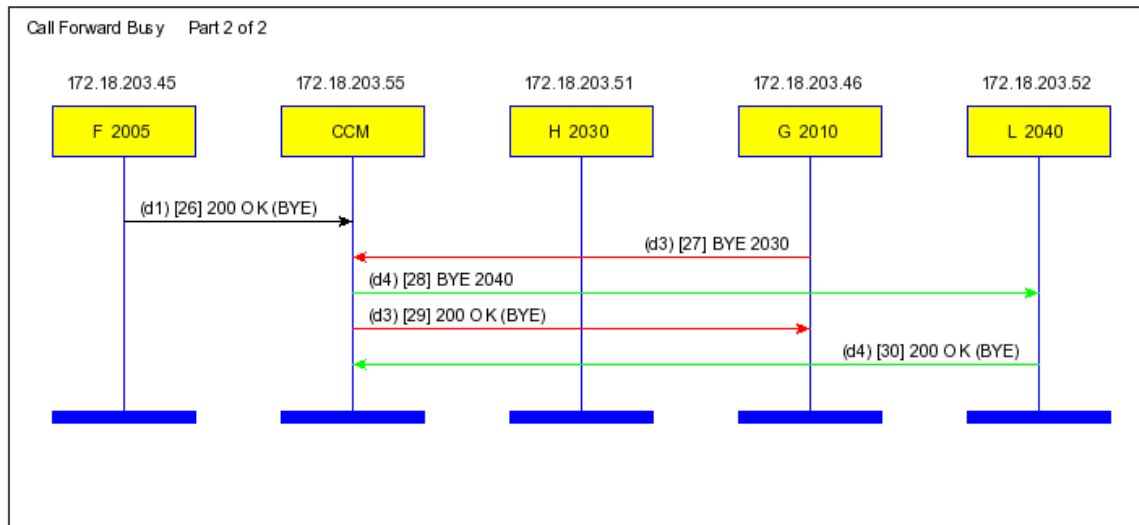
2010 and 2040 are connected

2030 goes onhook to drop 2005

2010 goes onhook to drop 2040







[[diagram](#)]    Call-ID: [[prev](#)] [[next](#)]  
**[1] INVITE sip:2030@sipsig-ccm55 SIP/2.0**  
 Via: SIP/2.0/UDP 172.18.203.45:5060;branch=z9hG4bK6b6cb114  
 From: "SIP Line 2005" <sip:2005@sipsig-ccm55>;tag=00120193edaa072f544607cc-3c2a66ba  
 To: <sip:2030@sipsig-ccm55>  
 Call-ID: 00120193-edaa00aa-7868f903-3e667286@172.18.203.45  
 Max-Forwards: 70  
 CSeq: 101 INVITE  
 User-Agent: Cisco-CP7960G/8.0  
 Contact: <sip:2005@172.18.203.45:5060;transport=udp>  
 Expires: 180  
 Accept: application/sdp  
 Allow: ACK,BYE,CANCEL,INVITE,NOTIFY,OPTIONS,REFER,REGISTER,UPDATE  
 Remote-Party-ID: "SIP Line 2005" <sip:2005@sipsig-ccm55>;party=calling;id-type=subscriber;privacy=off;screen=yes  
 Content-Length: 275  
 Content-Type: application/sdp  
 Content-Disposition: session;handling=optional

v=0  
 o=Cisco-SIPUA 14955 0 IN IP4 172.18.203.45  
 s=SIP Call  
 t=0 0  
 m=audio 30130 RTP/AVP 0 8 18 101  
 c=IN IP4 172.18.203.45  
 a=rtpmap:0 PCMU/8000  
 a=rtpmap:8 PCMA/8000  
 a=rtpmap:18 G729/0  
 a=fmtp:18 annexb=no  
 a=rtpmap:101 telephone-event/8000  
 a=fmtp:101 0-15  
 a=sendrecv

[[diagram](#)]    Call-ID: [[prev](#)] [[next](#)]  
**[2] SIP/2.0 100 Trying**  
 Via: SIP/2.0/UDP 172.18.203.45:5060;branch=z9hG4bK6b6cb114  
 From: "SIP Line 2005" <sip:2005@sipsig-ccm55>;tag=00120193edaa072f544607cc-3c2a66ba  
 To: <sip:2030@sipsig-ccm55>  
 Date: Thu, 17 Aug 2006 21:36:29 GMT  
 Call-ID: 00120193-edaa00aa-7868f903-3e667286@172.18.203.45  
 CSeq: 101 INVITE  
 Allow-Events: presence  
 Content-Length: 0

[[diagram](#)]    Call-ID: [[prev](#)] [[next](#)]  
**[3] INVITE sip:2030@172.18.203.51:5060 SIP/2.0**  
 Via: SIP/2.0/UDP 172.18.203.55:5060;branch=z9hG4bK2418d443  
 Remote-Party-ID: "SIP Line 2005" <sip:2005@172.18.203.55>;party=calling;screen=yes;privacy=off  
 From: "SIP Line 2005" <sip:2005@172.18.203.55>;tag=b9c8b19b-c709-4d85-86d4-d2f557c6c2a6-26395880  
 To: <sip:2030@172.18.203.51>  
 Date: Thu, 17 Aug 2006 21:36:29 GMT  
 Call-ID: 6ffe7200-4e41e15d-17c-37cb12ac@172.18.203.55  
 Supported: timer,replaces  
 Min-SE: 1800  
 User-Agent: Cisco-CCM5.0  
 Allow: INVITE, OPTIONS, INFO, BYE, CANCEL, ACK, PRACK, UPDATE, REFER, SUBSCRIBE, NOTIFY  
 CSeq: 101 INVITE  
 Expires: 180  
 Allow-Events: presence  
 Call-Info: <urn:x-cisco-remotecc:callinfo>; security= NotAuthenticated; orientation= from; call-instance= 1  
 Alert-Info: <file://Bellcore-dr1/>  
 Contact: <sip:2030@172.18.203.55:5060>  
 Max-Forwards: 69  
 Content-Length: 0

[[diagram](#)]    Call-ID: [[prev](#)] [[next](#)]  
**[4] SIP/2.0 100 Trying**  
 Via: SIP/2.0/UDP 172.18.203.55:5060;branch=z9hG4bK2418d443  
 From: "SIP Line 2005" <sip:2005@172.18.203.55>;tag=b9c8b19b-c709-4d85-86d4-d2f557c6c2a6-26395880  
 To: <sip:2030@172.18.203.51>  
 Call-ID: 6ffe7200-4e41e15d-17c-37cb12ac@172.18.203.55  
 CSeq: 101 INVITE  
 Server: Cisco-CP7960G/7.5  
 Contact: <sip:2030@172.18.203.51:5060>  
 Allow: ACK,BYE,CANCEL,INVITE,NOTIFY,OPTIONS,REFER,REGISTER,UPDATE  
 Remote-Party-ID: "2030" <sip:2030@172.18.203.51>;party=called;id-type=subscriber;privacy=off;screen=yes  
 Content-Length: 0

[[diagram](#)]    Call-ID: [[prev](#)] [[next](#)]  
**[5] SIP/2.0 180 Ringing**

Via: SIP/2.0/UDP 172.18.203.55:5060;branch=z9hG4bK2418d443  
 From: "SIP Line 2005" <sip:2005@172.18.203.55>;tag=b9c8b19b-c709-4d85-86d4-d2f557c6c2a6-26395880  
 To: <sip:2030@172.18.203.51>;tag=000d280821a50007251244d2-4f3df7ea  
 Call-ID: 6ffe7200-4e41e15d-17c-37cb12ac@172.18.203.55  
 CSeq: 101 INVITE  
 Server: Cisco-CP7960G/7.5  
 Contact: <sip:2030@172.18.203.51:5060>  
 Allow: ACK,BYE,CANCEL,INVITE,NOTIFY,OPTIONS,REFER,REGISTER,UPDATE  
 Remote-Party-ID: "2030" <sip:2030@172.18.203.51>;party=called;id-type=subscriber;privacy=off;screen=yes  
 Content-Length: 0

[\[diagram\]](#) Call-ID: [\[prev\]](#) [\[next\]](#)

#### [6] SIP/2.0 180 Ringing

Via: SIP/2.0/UDP 172.18.203.45:5060;branch=z9hG4bK6b6cb114  
 From: "SIP Line 2005" <sip:2005@sipsig-ccm55>;tag=00120193edaa072f544607cc-3c2a66ba  
 To: <sip:2030@sipsig-ccm55>;tag=b9c8b19b-c709-4d85-86d4-d2f557c6c2a6-26395879  
 Date: Thu, 17 Aug 2006 21:36:29 GMT  
 Call-ID: 00120193-edaa00aa-7868f903-3e667286@172.18.203.45  
 CSeq: 101 INVITE  
 Allow: INVITE, OPTIONS, INFO, BYE, CANCEL, ACK, PRACK, UPDATE, REFER, SUBSCRIBE, NOTIFY  
 Allow-Events: presence  
 Remote-Party-ID: "SIP Alerting 2030" <sip:2030@172.18.203.55>;party=called;screen=yes;privacy=off  
 Contact: <sip:2030@172.18.203.55:5060>  
 Call-Info: <urn:x-cisco-remotecc:callinfo>; security= NotAuthenticated; orientation= to; ui-state= ringout;  
 call-instance= 1  
 Content-Length: 0

[\[diagram\]](#) Call-ID: [\[prev\]](#) [\[next\]](#)

#### [7] SIP/2.0 200 OK

Via: SIP/2.0/UDP 172.18.203.55:5060;branch=z9hG4bK2418d443  
 From: "SIP Line 2005" <sip:2005@172.18.203.55>;tag=b9c8b19b-c709-4d85-86d4-d2f557c6c2a6-26395880  
 To: <sip:2030@172.18.203.51>;tag=000d280821a50007251244d2-4f3df7ea  
 Call-ID: 6ffe7200-4e41e15d-17c-37cb12ac@172.18.203.55  
 CSeq: 101 INVITE  
 Server: Cisco-CP7960G/7.5  
 Contact: <sip:2030@172.18.203.51:5060>  
 Allow: ACK,BYE,CANCEL,INVITE,NOTIFY,OPTIONS,REFER,REGISTER,UPDATE  
 Remote-Party-ID: "2030" <sip:2030@172.18.203.51>;party=called;id-type=subscriber;privacy=off;screen=yes  
 Supported: replaces  
 Content-Length: 257  
 Content-Type: application/sdp  
 Content-Disposition: session;handling=optional

```
v=0
o=Cisco-SIPUA 20108 0 IN IP4 172.18.203.51
s=SIP Call
t=0 0
m=audio 22178 RTP/AVP 0 8 18 101
c=IN IP4 172.18.203.51
a=rtpmap:0 PCMU/8000
a=rtpmap:8 PCMA/8000
a=rtpmap:18 G729/8000
a=rtpmap:101 telephone-event/8000
a=fmtp:101 0-15
a=sendrecv
```

[\[diagram\]](#) Call-ID: [\[prev\]](#) [\[next\]](#)

#### [8] ACK sip:2030@172.18.203.51:5060 SIP/2.0

Via: SIP/2.0/UDP 172.18.203.55:5060;branch=z9hG4bK3b725906  
 From: "SIP Line 2005" <sip:2005@172.18.203.55>;tag=b9c8b19b-c709-4d85-86d4-d2f557c6c2a6-26395880  
 To: <sip:2030@172.18.203.51>;tag=000d280821a50007251244d2-4f3df7ea  
 Date: Thu, 17 Aug 2006 21:36:29 GMT  
 Call-ID: 6ffe7200-4e41e15d-17c-37cb12ac@172.18.203.55  
 Max-Forwards: 70  
 CSeq: 101 ACK  
 Allow-Events: presence  
 Content-Type: application/sdp  
 Content-Length: 214

```
v=0
o=CiscoSystemsCCM-SIP 2000 1 IN IP4 172.18.203.55
s=SIP Call
c=IN IP4 172.18.203.45
t=0 0
m=audio 30130 RTP/AVP 0 101
a=rtpmap:0 PCMU/8000
a=ptime:20
a=rtpmap:101 telephone-event/8000
a=fmtp:101 0-15
```

[\[diagram\]](#) Call-ID: [\[prev\]](#) [\[next\]](#)

**[9] SIP/2.0 183 Session Progress**

Via: SIP/2.0/UDP 172.18.203.45:5060;branch=z9hG4bK6b6cb114  
 From: "SIP Line 2005" <sip:2005@sipsig-ccm55>;tag=00120193edaa072f544607cc-3c2a66ba  
 To: <sip:2030@sipsig-ccm55>;tag=b9c8b19b-c709-4d85-86d4-d2f557c6c2a6-26395879  
 Date: Thu, 17 Aug 2006 21:36:29 GMT  
 Call-ID: 00120193-edaa00aa-7868f903-3e667286@172.18.203.45  
 CSeq: 101 INVITE  
 Allow: INVITE, OPTIONS, INFO, BYE, CANCEL, ACK, PRACK, UPDATE, REFER, SUBSCRIBE, NOTIFY  
 Allow-Events: presence  
 Remote-Party-ID: "SIP Alerting 2030" <sip:2030@172.18.203.55>;party=called;screen=yes;privacy=off  
 Contact: <sip:2030@172.18.203.55:5060>  
 Call-Info: <urn:x-cisco-remotecc:callinfo>; security= NotAuthenticated; orientation= to; ui-state= ringout;  
 call-instance= 1  
 Content-Type: application/sdp  
 Content-Length: 214

v=0  
 o=CiscoSystemsCCM-SIP 2000 1 IN IP4 172.18.203.55  
 s=SIP Call  
 c=IN IP4 172.18.203.51  
 t=0 0  
 m=audio 22178 RTP/AVP 0 101  
 a=rtpmap:0 PCMU/8000  
 a=ptime:20  
 a=rtpmap:101 telephone-event/8000  
 a=fmtp:101 0-15

[\[diagram\]](#) Call-ID: [\[prev\]](#) [\[next\]](#)

**[10] SIP/2.0 200 OK**

Via: SIP/2.0/UDP 172.18.203.45:5060;branch=z9hG4bK6b6cb114  
 From: "SIP Line 2005" <sip:2005@sipsig-ccm55>;tag=00120193edaa072f544607cc-3c2a66ba  
 To: <sip:2030@sipsig-ccm55>;tag=b9c8b19b-c709-4d85-86d4-d2f557c6c2a6-26395879  
 Date: Thu, 17 Aug 2006 21:36:29 GMT  
 Call-ID: 00120193-edaa00aa-7868f903-3e667286@172.18.203.45  
 CSeq: 101 INVITE  
 Allow: INVITE, OPTIONS, INFO, BYE, CANCEL, ACK, PRACK, UPDATE, REFER, SUBSCRIBE, NOTIFY  
 Allow-Events: presence  
 Remote-Party-ID: "SIP Line 2030" <sip:2030@172.18.203.55>;party=called;screen=yes;privacy=off  
 Contact: <sip:2030@172.18.203.55:5060>  
 Call-Info: <urn:x-cisco-remotecc:callinfo>; security= NotAuthenticated; orientation= to; call-instance= 1  
 Content-Type: application/sdp  
 Content-Length: 214

v=0  
 o=CiscoSystemsCCM-SIP 2000 1 IN IP4 172.18.203.55  
 s=SIP Call  
 c=IN IP4 172.18.203.51  
 t=0 0  
 m=audio 22178 RTP/AVP 0 101  
 a=rtpmap:0 PCMU/8000  
 a=ptime:20  
 a=rtpmap:101 telephone-event/8000  
 a=fmtp:101 0-15

[\[diagram\]](#) Call-ID: [\[prev\]](#) [\[next\]](#)

**[11] ACK sip:2030@172.18.203.55:5060 SIP/2.0**

Via: SIP/2.0/UDP 172.18.203.45:5060;branch=z9hG4bK3479bf5e  
 From: "SIP Line 2005" <sip:2005@sipsig-ccm55>;tag=00120193edaa072f544607cc-3c2a66ba  
 To: <sip:2030@sipsig-ccm55>;tag=b9c8b19b-c709-4d85-86d4-d2f557c6c2a6-26395879  
 Call-ID: 00120193-edaa00aa-7868f903-3e667286@172.18.203.45  
 Max-Forwards: 70  
 CSeq: 101 ACK  
 User-Agent: Cisco-CP7960G/8.0  
 Remote-Party-ID: "SIP Line 2005" <sip:2005@sipsig-ccm55>;party=calling;id-type=subscriber;privacy=off;screen=yes  
 Content-Length: 0

[\[diagram\]](#) Call-ID: [\[prev\]](#) [\[next\]](#)

**[12] INVITE sip:2030@172.18.203.55 SIP/2.0**

Via: SIP/2.0/UDP 172.18.203.46:5060;branch=z9hG4bK699c1b4d  
 From: "2010" <sip:2010@172.18.203.55>;tag=00120193edac00084156070a-3c1e557c  
 To: <sip:2030@172.18.203.55>  
 Call-ID: 00120193-edac0006-09f5aa2a-24c6f94d@172.18.203.46  
 Max-Forwards: 70  
 Date: Thu, 17 Aug 2006 21:36:38 GMT  
 CSeq: 101 INVITE  
 User-Agent: Cisco-CP7960G/7.5  
 Contact: <sip:2010@172.18.203.46:5060>  
 Expires: 180

```
Accept: application/sdp
Allow: ACK,BYE,CANCEL,INVITE,NOTIFY,OPTIONS,REFER,REGISTER,UPDATE
Remote-Party-ID: "2010" <sip:2010@172.18.203.46>;party=calling;id-type=subscriber;privacy=off;screen=yes
Supported: replaces
Content-Length: 257
Content-Type: application/sdp
Content-Disposition: session;handling=optional
```

```
v=0
o=Cisco-SIPUA 20770 0 IN IP4 172.18.203.46
s=SIP Call
t=0 0
m=audio 31050 RTP/AVP 0 8 18 101
c=IN IP4 172.18.203.46
a=rtpmap:0 PCMU/8000
a=rtpmap:8 PCMA/8000
a=rtpmap:18 G729/8000
a=rtpmap:101 telephone-event/8000
a=fmtp:101 0-15
a=sendrecv
```

[\[diagram\]](#) Call-ID: [\[prev\]](#) [\[next\]](#)

#### [13] SIP/2.0 100 Trying

```
Via: SIP/2.0/UDP 172.18.203.46:5060;branch=z9hG4bK699c1b4d
From: "2010" <sip:2010@172.18.203.55>;tag=00120193edac00084156070a-3c1e557c
To: <sip:2030@172.18.203.55>
Date: Thu, 17 Aug 2006 21:36:38 GMT
Call-ID: 00120193-edac0006-09f5aa2a-24c6f94d@172.18.203.46
CSeq: 101 INVITE
Allow-Events: presence
Content-Length: 0
```

[\[diagram\]](#) Call-ID: [\[prev\]](#) [\[next\]](#)

#### [14] INVITE sip:2040@172.18.203.52:5060 SIP/2.0

```
Via: SIP/2.0/UDP 172.18.203.55:5060;branch=z9hG4bK6aa2962e
Remote-Party-ID: "SIP Line 2010" <sip:2010@172.18.203.55>;party=calling;screen=yes;privacy=off
From: "SIP Line 2010" <sip:2010@172.18.203.55>;tag=b9c8b19b-c709-4d85-86d4-d2f557c6c2a6-26395886
To: <sip:2040@172.18.203.52>
Date: Thu, 17 Aug 2006 21:36:38 GMT
Call-ID: 755bbc80-4e41e166-17e-37cb12ac@172.18.203.55
Supported: timer,replaces
Min-SE: 1800
User-Agent: Cisco-CCM5.0
Allow: INVITE, OPTIONS, INFO, BYE, CANCEL, ACK, PRACK, UPDATE, REFER, SUBSCRIBE, NOTIFY
CSeq: 101 INVITE
Expires: 180
Allow-Events: presence
Call-Info: <urn:x-cisco-remotecc:callinfo>; security= NotAuthenticated; orientation= from; call-instance= 1
Alert-Info: <file://Bellcore-dr1/>
Contact: <sip:2040@172.18.203.55:5060>
Diversion: "SIP Alerting 2030" <sip:2030@172.18.203.55>;reason=user-busy;privacy=off;screen=yes
Max-Forwards: 69
Content-Length: 0
```

[\[diagram\]](#) Call-ID: [\[prev\]](#) [\[next\]](#)

#### [15] SIP/2.0 100 Trying

```
Via: SIP/2.0/UDP 172.18.203.55:5060;branch=z9hG4bK6aa2962e
From: "SIP Line 2010" <sip:2010@172.18.203.55>;tag=b9c8b19b-c709-4d85-86d4-d2f557c6c2a6-26395886
To: <sip:2040@172.18.203.52>
Call-ID: 755bbc80-4e41e166-17e-37cb12ac@172.18.203.55
CSeq: 101 INVITE
Server: Cisco-CP7960G/7.5
Contact: <sip:2040@172.18.203.52:5060>
Allow: ACK,BYE,CANCEL,INVITE,NOTIFY,OPTIONS,REFER,REGISTER,UPDATE
Remote-Party-ID: "2040" <sip:2040@172.18.203.52>;party=called;id-type=subscriber;privacy=off;screen=yes
Content-Length: 0
```

[\[diagram\]](#) Call-ID: [\[prev\]](#) [\[next\]](#)

#### [16] SIP/2.0 180 Ringing

```
Via: SIP/2.0/UDP 172.18.203.55:5060;branch=z9hG4bK6aa2962e
From: "SIP Line 2010" <sip:2010@172.18.203.55>;tag=b9c8b19b-c709-4d85-86d4-d2f557c6c2a6-26395886
To: <sip:2040@172.18.203.52>;tag=003094c3cd3a0037231015ba-49d72fb6
Call-ID: 755bbc80-4e41e166-17e-37cb12ac@172.18.203.55
CSeq: 101 INVITE
Server: Cisco-CP7960G/7.5
Contact: <sip:2040@172.18.203.52:5060>
Allow: ACK,BYE,CANCEL,INVITE,NOTIFY,OPTIONS,REFER,REGISTER,UPDATE
Remote-Party-ID: "2040" <sip:2040@172.18.203.52>;party=called;id-type=subscriber;privacy=off;screen=yes
Content-Length: 0
```

[diagram] Call-ID: [prev] [next]

**[17] SIP/2.0 180 Ringing**

Via: SIP/2.0/UDP 172.18.203.46:5060;branch=z9hG4bK699c1b4d  
 From: "2010" <sip:2010@172.18.203.55>;tag=00120193edac00084156070a-3c1e557c  
 To: <sip:2030@172.18.203.55>;tag=b9c8b19b-c709-4d85-86d4-d2f557c6c2a6-26395882  
 Date: Thu, 17 Aug 2006 21:36:38 GMT  
 Call-ID: 00120193-edac0006-09f5aa2a-24c6f94d@172.18.203.46  
 CSeq: 101 INVITE  
 Allow: INVITE, OPTIONS, INFO, BYE, CANCEL, ACK, PRACK, UPDATE, REFER, SUBSCRIBE, NOTIFY  
 Allow-Events: presence  
 Remote-Party-ID: "SIP Alerting 2040" <sip:2040@172.18.203.55>;party=called;screen=yes;privacy=off  
 Contact: <sip:2030@172.18.203.55:5060>  
 Content-Length: 0

[diagram] Call-ID: [prev] [next]

**[18] SIP/2.0 200 OK**

Via: SIP/2.0/UDP 172.18.203.55:5060;branch=z9hG4bK6aa2962e  
 From: "SIP Line 2010" <sip:2010@172.18.203.55>;tag=b9c8b19b-c709-4d85-86d4-d2f557c6c2a6-26395886  
 To: <sip:2040@172.18.203.52>;tag=003094c3cd3a0037231015ba-49d72fb6  
 Call-ID: 755bbc80-4e41e166-17e-37cb12ac@172.18.203.55  
 CSeq: 101 INVITE  
 Server: Cisco-CP7960G/7.5  
 Contact: <sip:2040@172.18.203.52:5060>  
 Allow: ACK, BYE, CANCEL, INVITE, NOTIFY, OPTIONS, REFER, REGISTER, UPDATE  
 Remote-Party-ID: "2040" <sip:2040@172.18.203.52>;party=called;id-type=subscriber;privacy=off;screen=yes  
 Supported: replaces  
 Content-Length: 257  
 Content-Type: application/sdp  
 Content-Disposition: session;handling=optional

v=0  
 o=Cisco-SIPUA 19484 0 IN IP4 172.18.203.52  
 s=SIP Call  
 t=0 0  
 m=audio 30840 RTP/AVP 0 8 18 101  
 c=IN IP4 172.18.203.52  
 a=rtpmap:0 PCMU/8000  
 a=rtpmap:8 PCMA/8000  
 a=rtpmap:18 G729/8000  
 a=rtpmap:101 telephone-event/8000  
 a=fmtp:101 0-15  
 a=sendrecv

[diagram] Call-ID: [prev] [next]

**[19] ACK sip:2040@172.18.203.52:5060 SIP/2.0**

Via: SIP/2.0/UDP 172.18.203.55:5060;branch=z9hG4bK526d9d57  
 From: "SIP Line 2010" <sip:2010@172.18.203.55>;tag=b9c8b19b-c709-4d85-86d4-d2f557c6c2a6-26395886  
 To: <sip:2040@172.18.203.52>;tag=003094c3cd3a0037231015ba-49d72fb6  
 Date: Thu, 17 Aug 2006 21:36:38 GMT  
 Call-ID: 755bbc80-4e41e166-17e-37cb12ac@172.18.203.55  
 Max-Forwards: 70  
 CSeq: 101 ACK  
 Allow-Events: presence  
 Content-Type: application/sdp  
 Content-Length: 214

v=0  
 o=CiscoSystemsCCM-SIP 2000 1 IN IP4 172.18.203.55  
 s=SIP Call  
 c=IN IP4 172.18.203.46  
 t=0 0  
 m=audio 31050 RTP/AVP 0 101  
 a=rtpmap:0 PCMU/8000  
 aptime:20  
 a=rtpmap:101 telephone-event/8000  
 a=fmtp:101 0-15

[diagram] Call-ID: [prev] [next]

**[20] SIP/2.0 183 Session Progress**

Via: SIP/2.0/UDP 172.18.203.46:5060;branch=z9hG4bK699c1b4d  
 From: "2010" <sip:2010@172.18.203.55>;tag=00120193edac00084156070a-3c1e557c  
 To: <sip:2030@172.18.203.55>;tag=b9c8b19b-c709-4d85-86d4-d2f557c6c2a6-26395882  
 Date: Thu, 17 Aug 2006 21:36:38 GMT  
 Call-ID: 00120193-edac0006-09f5aa2a-24c6f94d@172.18.203.46  
 CSeq: 101 INVITE  
 Allow: INVITE, OPTIONS, INFO, BYE, CANCEL, ACK, PRACK, UPDATE, REFER, SUBSCRIBE, NOTIFY  
 Allow-Events: presence  
 Remote-Party-ID: "SIP Alerting 2040" <sip:2040@172.18.203.55>;party=called;screen=yes;privacy=off  
 Contact: <sip:2030@172.18.203.55:5060>  
 Content-Type: application/sdp

Content-Length: 214

```
v=0
o=CiscoSystemsCCM-SIP 2000 1 IN IP4 172.18.203.55
s=SIP Call
c=IN IP4 172.18.203.52
t=0 0
m=audio 30840 RTP/AVP 0 101
a=rtpmap:0 PCMU/8000
a=ptime:20
a=rtpmap:101 telephone-event/8000
a=fmtp:101 0-15
```

[\[diagram\]](#) Call-ID: [\[prev\]](#) [\[next\]](#)

**[21] SIP/2.0 200 OK**

```
Via: SIP/2.0/UDP 172.18.203.46:5060;branch=z9hG4bK699c1b4d
From: "2010" <sip:2010@172.18.203.55>;tag=00120193edac00084156070a-3c1e557c
To: <sip:2030@172.18.203.55>;tag=b9c8b19b-c709-4d85-86d4-d2f557c6c2a6-26395882
Date: Thu, 17 Aug 2006 21:36:38 GMT
Call-ID: 00120193-edac0006-09f5aa2a-24c6f94d@172.18.203.46
CSeq: 101 INVITE
Allow: INVITE, OPTIONS, INFO, BYE, CANCEL, ACK, PRACK, UPDATE, REFER, SUBSCRIBE, NOTIFY
Allow-Events: presence
Remote-Party-ID: "SIP Line 2040" <sip:2040@172.18.203.55>;party=called;screen=yes;privacy=off
Contact: <sip:2030@172.18.203.55:5060>
Content-Type: application/sdp
Content-Length: 214
```

```
v=0
o=CiscoSystemsCCM-SIP 2000 1 IN IP4 172.18.203.55
s=SIP Call
c=IN IP4 172.18.203.52
t=0 0
m=audio 30840 RTP/AVP 0 101
a=rtpmap:0 PCMU/8000
a=ptime:20
a=rtpmap:101 telephone-event/8000
a=fmtp:101 0-15
```

[\[diagram\]](#) Call-ID: [\[prev\]](#) [\[next\]](#)

**[22] ACK sip:2030@172.18.203.55:5060 SIP/2.0**

```
Via: SIP/2.0/UDP 172.18.203.46:5060;branch=z9hG4bK2f6207ec
From: "2010" <sip:2010@172.18.203.55>;tag=00120193edac00084156070a-3c1e557c
To: <sip:2030@172.18.203.55>;tag=b9c8b19b-c709-4d85-86d4-d2f557c6c2a6-26395882
Call-ID: 00120193-edac0006-09f5aa2a-24c6f94d@172.18.203.46
Max-Forwards: 70
Date: Thu, 17 Aug 2006 21:36:42 GMT
CSeq: 101 ACK
User-Agent: Cisco-CP7960G/7.5
Remote-Party-ID: "2010" <sip:2010@172.18.203.46>;party=calling;id-type=subscriber;privacy=off;screen=yes
Content-Length: 0
```

[\[diagram\]](#) Call-ID: [\[prev\]](#) [\[next\]](#)

**[23] BYE sip:2030@172.18.203.55:5060 SIP/2.0**

```
Via: SIP/2.0/UDP 172.18.203.51:5060;branch=z9hG4bK3194c7bd
From: <sip:2030@172.18.203.51>;tag=000d280821a50007251244d2-4f3df7ea
To: "SIP Line 2005" <sip:2005@172.18.203.55>;tag=b9c8b19b-c709-4d85-86d4-d2f557c6c2a6-26395880
Call-ID: 6ffe7200-4e41e15d-17c-37cb12ac@172.18.203.55
Max-Forwards: 70
CSeq: 101 BYE
User-Agent: Cisco-CP7960G/7.5
Content-Length: 0
```

[\[diagram\]](#) Call-ID: [\[prev\]](#) [\[next\]](#)

**[24] BYE sip:2005@172.18.203.45:5060;transport=udp SIP/2.0**

```
Via: SIP/2.0/UDP 172.18.203.55:5060;branch=z9hG4bK72730cb
From: <sip:2030@sipsig-ccm55>;tag=b9c8b19b-c709-4d85-86d4-d2f557c6c2a6-26395879
To: "SIP Line 2005" <sip:2005@sipsig-ccm55>;tag=00120193edaa072f544607cc-3c2a66ba
Date: Thu, 17 Aug 2006 21:36:32 GMT
Call-ID: 00120193-edaa00aa-7868f903-3e667286@172.18.203.45
User-Agent: Cisco-CCM5.0
Max-Forwards: 70
CSeq: 101 BYE
Content-Length: 0
```

[\[diagram\]](#) Call-ID: [\[prev\]](#) [\[next\]](#)

**[25] SIP/2.0 200 OK**

```
Via: SIP/2.0/UDP 172.18.203.51:5060;branch=z9hG4bK3194c7bd
From: <sip:2030@172.18.203.51>;tag=000d280821a50007251244d2-4f3df7ea
To: "SIP Line 2005" <sip:2005@172.18.203.55>;tag=b9c8b19b-c709-4d85-86d4-d2f557c6c2a6-26395880
```

Date: Thu, 17 Aug 2006 21:36:53 GMT  
 Call-ID: 6ffe7200-4e41e15d-17c-37cb12ac@172.18.203.55  
 CSeq: 101 BYE  
 Content-Length: 0

[[diagram](#)] Call-ID: [[prev](#)] [[next](#)]

[26] SIP/2.0 200 OK

Via: SIP/2.0/UDP 172.18.203.55:5060;branch=z9hG4bK72730cb  
 From: <sip:2030@sipsig-ccm55>;tag=b9c8b19b-c709-4d85-86d4-d2f557c6c2a6-26395879  
 To: "SIP Line 2005" <sip:2005@sipsig-ccm55>;tag=00120193edaa072f544607cc-3c2a66ba  
 Call-ID: 00120193-edaa00aa-7868f903-3e667286@172.18.203.45  
 CSeq: 101 BYE  
 Server: Cisco-CP7960G/8.0  
 Content-Length: 0

[[diagram](#)] Call-ID: [[prev](#)] [[next](#)]

[27] BYE sip:2030@172.18.203.55:5060 SIP/2.0

Via: SIP/2.0/UDP 172.18.203.46:5060;branch=z9hG4bK081541e9  
 From: "2010" <sip:2010@172.18.203.55>;tag=00120193edac00084156070a-3c1e557c  
 To: <sip:2030@172.18.203.55>;tag=b9c8b19b-c709-4d85-86d4-d2f557c6c2a6-26395882  
 Call-ID: 00120193-edac0006-09f5aa2a-24c6f94d@172.18.203.46  
 Max-Forwards: 70  
 Date: Thu, 17 Aug 2006 21:36:56 GMT  
 CSeq: 102 BYE  
 User-Agent: Cisco-CP7960G/7.5  
 Content-Length: 0

[[diagram](#)] Call-ID: [[prev](#)] [[next](#)]

[28] BYE sip:2040@172.18.203.52:5060 SIP/2.0

Via: SIP/2.0/UDP 172.18.203.55:5060;branch=z9hG4bK1083c41a  
 From: "SIP Line 2010" <sip:2010@172.18.203.55>;tag=b9c8b19b-c709-4d85-86d4-d2f557c6c2a6-26395886  
 To: <sip:2040@172.18.203.52>;tag=003094c3cd3a0037231015ba-49d72fb6  
 Date: Thu, 17 Aug 2006 21:36:38 GMT  
 Call-ID: 755bbc80-4e41e166-17e-37cb12ac@172.18.203.55  
 User-Agent: Cisco-CCM5.0  
 Max-Forwards: 70  
 CSeq: 102 BYE  
 Content-Length: 0

[[diagram](#)] Call-ID: [[prev](#)] [[next](#)]

[29] SIP/2.0 200 OK

Via: SIP/2.0/UDP 172.18.203.46:5060;branch=z9hG4bK081541e9  
 From: "2010" <sip:2010@172.18.203.55>;tag=00120193edac00084156070a-3c1e557c  
 To: <sip:2030@172.18.203.55>;tag=b9c8b19b-c709-4d85-86d4-d2f557c6c2a6-26395882  
 Date: Thu, 17 Aug 2006 21:36:56 GMT  
 Call-ID: 00120193-edac0006-09f5aa2a-24c6f94d@172.18.203.46  
 CSeq: 102 BYE  
 Content-Length: 0

[[diagram](#)] Call-ID: [[prev](#)] [[next](#)]

[30] SIP/2.0 200 OK

Via: SIP/2.0/UDP 172.18.203.55:5060;branch=z9hG4bK1083c41a  
 From: "SIP Line 2010" <sip:2010@172.18.203.55>;tag=b9c8b19b-c709-4d85-86d4-d2f557c6c2a6-26395886  
 To: <sip:2040@172.18.203.52>;tag=003094c3cd3a0037231015ba-49d72fb6  
 Call-ID: 755bbc80-4e41e166-17e-37cb12ac@172.18.203.55  
 CSeq: 102 BYE  
 Server: Cisco-CP7960G/7.5  
 Content-Length: 0

## 6.4 Call Forward Two Hops

Title: Call Forward Two Hops

Description:

F ----> G ---CFA---> H ---CFNA---> L

To demonstrate multiple diversion headers, set up a call forwarding call with two intermediate phones.

1. F calls line 2010 on G which CCM has configured for Call Forward All to 2030 on phone H.
2. Line 2030 on phone H will ring but has Call Forward No Answer configured to forward to line 2040 on phone L after 5 seconds.
3. Phone H does not answer within 5 seconds and the call is forwarded to L.

Notice the "Diversion:" header in the INVITE to H. This should be identical to the Call Forward All scenario.

Notice the two "Diversion:" headers in the INVITE to L. The first indicates the "no-answer" forwarding from H and the second indicates the "unconditional" forwarding from G.

Configuration:

Node = CCM, IP = 172.18.203.55

Phone = F, Line = 2005, IP = 172.18.203.45, Model = SIP 7960

Phone = G, Line = 2010, IP = 172.18.203.46, Model = SIP Basic

Phone = H, Line = 2030, IP = 172.18.203.51, Model = SIP Basic

Phone = L, Line = 2040, IP = 172.18.203.52, Model = SIP Basic

Scenario:

2005 calls 2010

2010 does not ring for Call Forward All

2030 rings for about 5 seconds but is not answered

2040 rings

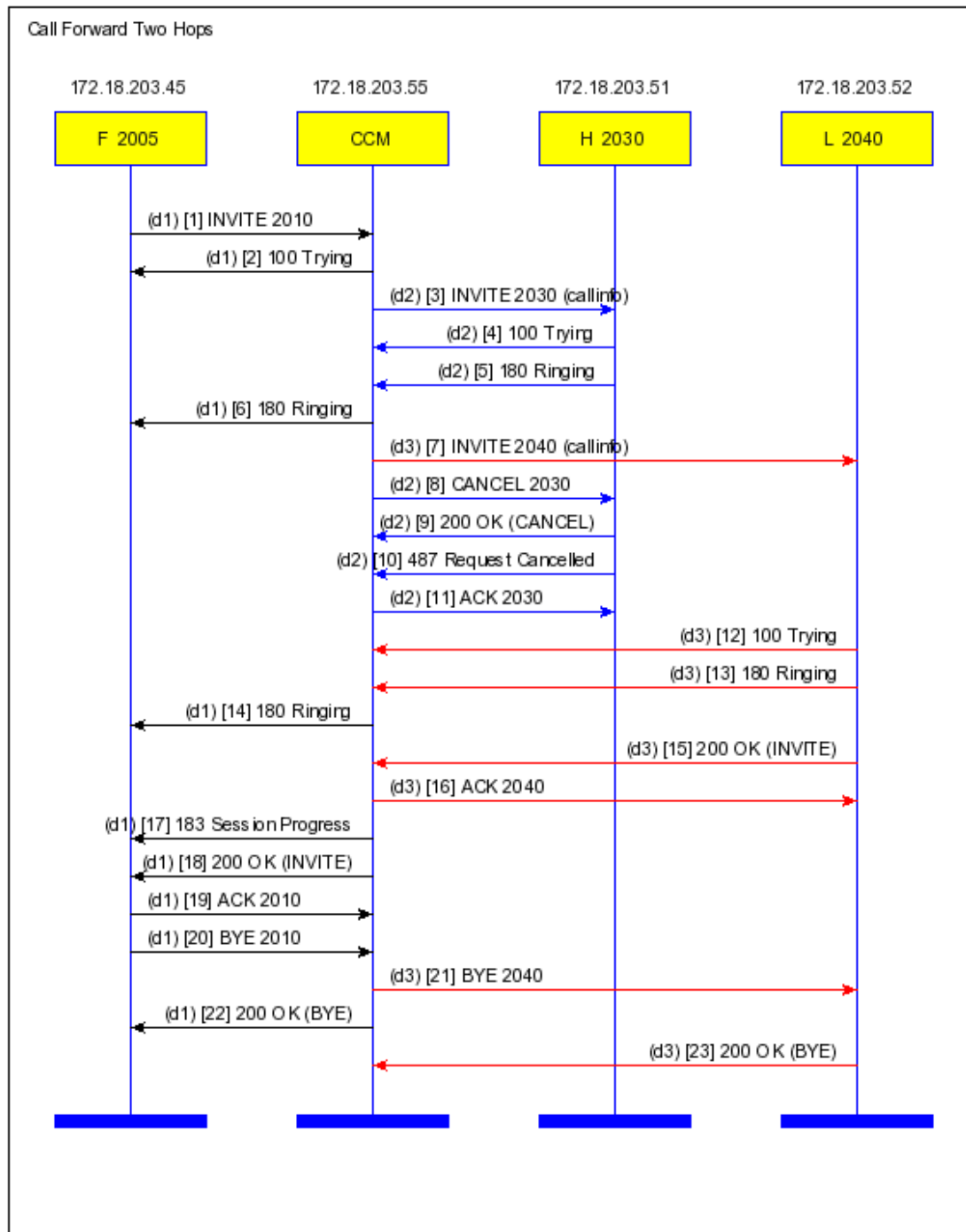
The call to 2030 is cancelled

2040 answers

2005 and 2040 are connected

2005 goes onhook





[\[diagram\]](#) Call-ID: [\[prev\]](#) [\[next\]](#)

**[1] INVITE sip:2010@sipsig-ccm55 SIP/2.0**

Via: SIP/2.0/UDP 172.18.203.45:5060;branch=z9hG4bK6235c899  
 From: "SIP Line 2005" <sip:2005@sipsig-ccm55>;tag=00120193edaa073701a2cfaa-5e553a3b  
 To: <sip:2010@sipsig-ccm55>  
 Call-ID: 00120193-edaa00ac-39a13b83-2912092b@172.18.203.45  
 Max-Forwards: 70  
 CSeq: 101 INVITE  
 User-Agent: Cisco-CP7960G/8.0  
 Contact: <sip:2005@172.18.203.45:5060;transport=udp>  
 Expires: 180  
 Accept: application/sdp  
 Allow: ACK,BYE,CANCEL,INVITE,NOTIFY,OPTIONS,REFER,REGISTER,UPDATE  
 Remote-Party-ID: "SIP Line 2005" <sip:2005@sipsig-ccm55>;party=calling;id-type=subscriber;privacy=off;screen=yes  
 Content-Length: 274  
 Content-Type: application/sdp  
 Content-Disposition: session;handling=optional

v=0  
 o=Cisco-SIPUA 1283 0 IN IP4 172.18.203.45  
 s=SIP Call  
 t=0 0  
 m=audio 22760 RTP/AVP 0 8 18 101  
 c=IN IP4 172.18.203.45  
 a=rtpmap:0 PCMU/8000  
 a=rtpmap:8 PCMA/8000  
 a=rtpmap:18 G729/0  
 a=fmtp:18 annexb=no  
 a=rtpmap:101 telephone-event/8000  
 a=fmtp:101 0-15  
 a=sendrecv

[\[diagram\]](#) Call-ID: [\[prev\]](#) [\[next\]](#)

**[2] SIP/2.0 100 Trying**

Via: SIP/2.0/UDP 172.18.203.45:5060;branch=z9hG4bK6235c899  
 From: "SIP Line 2005" <sip:2005@sipsig-ccm55>;tag=00120193edaa073701a2cfaa-5e553a3b  
 To: <sip:2010@sipsig-ccm55>  
 Date: Thu, 17 Aug 2006 21:51:27 GMT  
 Call-ID: 00120193-edaa00ac-39a13b83-2912092b@172.18.203.45  
 CSeq: 101 INVITE  
 Allow-Events: presence  
 Content-Length: 0

[\[diagram\]](#) Call-ID: [\[prev\]](#) [\[next\]](#)

**[3] INVITE sip:2030@172.18.203.51:5060 SIP/2.0**

Via: SIP/2.0/UDP 172.18.203.55:5060;branch=z9hG4bK45fd1430  
 Remote-Party-ID: "SIP Line 2005" <sip:2005@172.18.203.55>;party=calling;screen=yes;privacy=off  
 From: "SIP Line 2005" <sip:2005@172.18.203.55>;tag=b9c8b19b-c709-4d85-86d4-d2f557c6c2a6-26395897  
 To: <sip:2030@172.18.203.51>  
 Date: Thu, 17 Aug 2006 21:51:27 GMT  
 Call-ID: 873e5f00-4e41e4df-1ae-37cb12ac@172.18.203.55  
 Supported: timer,replaces  
 Min-SE: 1800  
 User-Agent: Cisco-CCM5.0  
 Allow: INVITE, OPTIONS, INFO, BYE, CANCEL, ACK, PRACK, UPDATE, REFER, SUBSCRIBE, NOTIFY  
 CSeq: 101 INVITE  
 Expires: 180  
 Allow-Events: presence  
 Call-Info: <urn:x-cisco-remotecc:callinfo>; security= NotAuthenticated; orientation= from; call-instance= 1  
 Alert-Info: <file://Bellcore-dr1/>  
 Contact: <sip:2030@172.18.203.55:5060>  
 Diversion: "SIP Alerting 2010" <sip:2010@172.18.203.55>;reason=unconditional;privacy=off;screen=yes  
 Max-Forwards: 69  
 Content-Length: 0

[\[diagram\]](#) Call-ID: [\[prev\]](#) [\[next\]](#)

**[4] SIP/2.0 100 Trying**

Via: SIP/2.0/UDP 172.18.203.55:5060;branch=z9hG4bK45fd1430  
 From: "SIP Line 2005" <sip:2005@172.18.203.55>;tag=b9c8b19b-c709-4d85-86d4-d2f557c6c2a6-26395897  
 To: <sip:2030@172.18.203.51>  
 Call-ID: 873e5f00-4e41e4df-1ae-37cb12ac@172.18.203.55  
 CSeq: 101 INVITE  
 Server: Cisco-CP7960G/7.5  
 Contact: <sip:2030@172.18.203.51:5060>  
 Allow: ACK,BYE,CANCEL,INVITE,NOTIFY,OPTIONS,REFER,REGISTER,UPDATE  
 Remote-Party-ID: "2030" <sip:2030@172.18.203.51>;party=called;id-type=subscriber;privacy=off;screen=yes  
 Content-Length: 0

[\[diagram\]](#) Call-ID: [\[prev\]](#) [\[next\]](#)

**[5] SIP/2.0 180 Ringing**

Via: SIP/2.0/UDP 172.18.203.55:5060;branch=z9hG4bK45fd1430  
 From: "SIP Line 2005" <sip:2005@172.18.203.55>;tag=b9c8b19b-c709-4d85-86d4-d2f557c6c2a6-26395897  
 To: <sip:2030@172.18.203.51>;tag=000d280821a50007241fd5d7-3cee73ed  
 Call-ID: 873e5f00-4e41e4df-1ae-37cb12ac@172.18.203.55  
 CSeq: 101 INVITE  
 Server: Cisco-CP7960G/7.5  
 Contact: <sip:2030@172.18.203.51:5060>  
 Allow: ACK,BYE,CANCEL,INVITE,NOTIFY,OPTIONS,REFER,REGISTER,UPDATE  
 Remote-Party-ID: "2030" <sip:2030@172.18.203.51>;party=called;id-type=subscriber;privacy=off;screen=yes  
 Content-Length: 0

[\[diagram\]](#) Call-ID: [\[prev\]](#) [\[next\]](#)

**[6] SIP/2.0 180 Ringing**

Via: SIP/2.0/UDP 172.18.203.45:5060;branch=z9hG4bK6235c899  
 From: "SIP Line 2005" <sip:2005@sipsig-ccm55>;tag=00120193edaa073701a2cfaa-5e553a3b  
 To: <sip:2010@sipsig-ccm55>;tag=b9c8b19b-c709-4d85-86d4-d2f557c6c2a6-26395894  
 Date: Thu, 17 Aug 2006 21:51:27 GMT  
 Call-ID: 00120193-edaa00ac-39a13b83-2912092b@172.18.203.45  
 CSeq: 101 INVITE  
 Allow: INVITE, OPTIONS, INFO, BYE, CANCEL, ACK, PRACK, UPDATE, REFER, SUBSCRIBE, NOTIFY  
 Allow-Events: presence  
 Remote-Party-ID: "SIP Alerting 2030" <sip:2030@172.18.203.55>;party=called;screen=yes;privacy=off  
 Contact: <sip:2010@172.18.203.55:5060>  
 Call-Info: <urn:x-cisco-remotecc:callinfo>; security= NotAuthenticated; orientation= to; ui-state= ringout;  
 call-instance= 1  
 Content-Length: 0

[\[diagram\]](#) Call-ID: [\[prev\]](#) [\[next\]](#)

**[7] INVITE sip:2040@172.18.203.52:5060 SIP/2.0**

Via: SIP/2.0/UDP 172.18.203.55:5060;branch=z9hG4bK23eaf5f9  
 Remote-Party-ID: "SIP Line 2005" <sip:2005@172.18.203.55>;party=calling;screen=yes;privacy=off  
 From: "SIP Line 2005" <sip:2005@172.18.203.55>;tag=b9c8b19b-c709-4d85-86d4-d2f557c6c2a6-26395900  
 To: <sip:2040@172.18.203.52>  
 Date: Thu, 17 Aug 2006 21:51:33 GMT  
 Call-ID: 8ad1e600-4e41e4e5-1af-37cb12ac@172.18.203.55  
 Supported: timer,replaces  
 Min-SE: 1800  
 User-Agent: Cisco-CCM5.0  
 Allow: INVITE, OPTIONS, INFO, BYE, CANCEL, ACK, PRACK, UPDATE, REFER, SUBSCRIBE, NOTIFY  
 CSeq: 101 INVITE  
 Expires: 180  
 Allow-Events: presence  
 Call-Info: <urn:x-cisco-remotecc:callinfo>; security= NotAuthenticated; orientation= from; call-instance= 1  
 Alert-Info: <file://Bellcore-dr1/>  
 Contact: <sip:2040@172.18.203.55:5060>  
 Diversion: "SIP Alerting 2030" <sip:2030@172.18.203.55>;reason=no-answer;privacy=off;screen=yes  
 Diversion: "SIP Alerting 2010" <sip:2010@172.18.203.55>;reason=unconditional;privacy=off;screen=yes  
 Max-Forwards: 69  
 Content-Length: 0

[\[diagram\]](#) Call-ID: [\[prev\]](#) [\[next\]](#)

**[8] CANCEL sip:2030@172.18.203.51:5060 SIP/2.0**

Via: SIP/2.0/UDP 172.18.203.55:5060;branch=z9hG4bK45fd1430  
 From: "SIP Line 2005" <sip:2005@172.18.203.55>;tag=b9c8b19b-c709-4d85-86d4-d2f557c6c2a6-26395897  
 To: <sip:2030@172.18.203.51>  
 Date: Thu, 17 Aug 2006 21:51:27 GMT  
 Call-ID: 873e5f00-4e41e4df-1ae-37cb12ac@172.18.203.55  
 CSeq: 101 CANCEL  
 Max-Forwards: 70  
 Content-Length: 0

[\[diagram\]](#) Call-ID: [\[prev\]](#) [\[next\]](#)

**[9] SIP/2.0 200 OK**

Via: SIP/2.0/UDP 172.18.203.55:5060;branch=z9hG4bK45fd1430  
 From: "SIP Line 2005" <sip:2005@172.18.203.55>;tag=b9c8b19b-c709-4d85-86d4-d2f557c6c2a6-26395897  
 To: <sip:2030@172.18.203.51>;tag=000d280821a50007241fd5d7-3cee73ed  
 Call-ID: 873e5f00-4e41e4df-1ae-37cb12ac@172.18.203.55  
 CSeq: 101 CANCEL  
 Server: Cisco-CP7960G/7.5  
 Content-Length: 0

[\[diagram\]](#) Call-ID: [\[prev\]](#) [\[next\]](#)

**[10] SIP/2.0 487 Request Cancelled**

Via: SIP/2.0/UDP 172.18.203.55:5060;branch=z9hG4bK45fd1430  
 From: "SIP Line 2005" <sip:2005@172.18.203.55>;tag=b9c8b19b-c709-4d85-86d4-d2f557c6c2a6-26395897  
 To: <sip:2030@172.18.203.51>;tag=000d280821a50007241fd5d7-3cee73ed  
 Call-ID: 873e5f00-4e41e4df-1ae-37cb12ac@172.18.203.55  
 CSeq: 101 INVITE

```

Server: Cisco-CP7960G/7.5
Contact: <sip:2030@172.18.203.51:5060>
Allow: ACK,BYE,CANCEL,INVITE,NOTIFY,OPTIONS,REFER,REGISTER,UPDATE
Remote-Party-ID: "2030" <sip:2030@172.18.203.51>;party=called;id-type=subscriber;privacy=off;screen=yes
Content-Length: 0

```

[\[diagram\]](#) Call-ID: [\[prev\]](#) [\[next\]](#)

#### [11] ACK sip:2030@172.18.203.51:5060 SIP/2.0

```

Via: SIP/2.0/UDP 172.18.203.55:5060;branch=z9hG4bK45fd1430
From: "SIP Line 2005" <sip:2005@172.18.203.55>;tag=b9c8b19b-c709-4d85-86d4-d2f557c6c2a6-26395897
To: <sip:2030@172.18.203.51>;tag=000d280821a50007241fd5d7-3cee73ed
Date: Thu, 17 Aug 2006 21:51:27 GMT
Call-ID: 873e5f00-4e41e4df-1ae-37cb12ac@172.18.203.55
Max-Forwards: 70
CSeq: 101 ACK
Allow-Events: presence
Content-Length: 0

```

[\[diagram\]](#) Call-ID: [\[prev\]](#) [\[next\]](#)

#### [12] SIP/2.0 100 Trying

```

Via: SIP/2.0/UDP 172.18.203.55:5060;branch=z9hG4bK23eaf5f9
From: "SIP Line 2005" <sip:2005@172.18.203.55>;tag=b9c8b19b-c709-4d85-86d4-d2f557c6c2a6-26395900
To: <sip:2040@172.18.203.52>
Call-ID: 8ad1e600-4e41e4e5-1af-37cb12ac@172.18.203.55
CSeq: 101 INVITE
Server: Cisco-CP7960G/7.5
Contact: <sip:2040@172.18.203.52:5060>
Allow: ACK,BYE,CANCEL,INVITE,NOTIFY,OPTIONS,REFER,REGISTER,UPDATE
Remote-Party-ID: "2040" <sip:2040@172.18.203.52>;party=called;id-type=subscriber;privacy=off;screen=yes
Content-Length: 0

```

[\[diagram\]](#) Call-ID: [\[prev\]](#) [\[next\]](#)

#### [13] SIP/2.0 180 Ringing

```

Via: SIP/2.0/UDP 172.18.203.55:5060;branch=z9hG4bK23eaf5f9
From: "SIP Line 2005" <sip:2005@172.18.203.55>;tag=b9c8b19b-c709-4d85-86d4-d2f557c6c2a6-26395900
To: <sip:2040@172.18.203.52>;tag=003094c3cd3a003f7eb00ccf-027cce04
Call-ID: 8ad1e600-4e41e4e5-1af-37cb12ac@172.18.203.55
CSeq: 101 INVITE
Server: Cisco-CP7960G/7.5
Contact: <sip:2040@172.18.203.52:5060>
Allow: ACK,BYE,CANCEL,INVITE,NOTIFY,OPTIONS,REFER,REGISTER,UPDATE
Remote-Party-ID: "2040" <sip:2040@172.18.203.52>;party=called;id-type=subscriber;privacy=off;screen=yes
Content-Length: 0

```

[\[diagram\]](#) Call-ID: [\[prev\]](#) [\[next\]](#)

#### [14] SIP/2.0 180 Ringing

```

Via: SIP/2.0/UDP 172.18.203.45:5060;branch=z9hG4bK6235c899
From: "SIP Line 2005" <sip:2005@sipsig-ccm55>;tag=00120193edaa073701a2cfaa-5e553a3b
To: <sip:2010@sipsig-ccm55>;tag=b9c8b19b-c709-4d85-86d4-d2f557c6c2a6-26395894
Date: Thu, 17 Aug 2006 21:51:27 GMT
Call-ID: 00120193-edaa00ac-39a13b83-2912092b@172.18.203.45
CSeq: 101 INVITE
Allow: INVITE, OPTIONS, INFO, BYE, CANCEL, ACK, PRACK, UPDATE, REFER, SUBSCRIBE, NOTIFY
Allow-Events: presence
Remote-Party-ID: "SIP Alerting 2040" <sip:2040@172.18.203.55>;party=called;screen=yes;privacy=off
Contact: <sip:2010@172.18.203.55:5060>
Call-Info: <urn:x-cisco-remotecc:callinfo>; security= NotAuthenticated; orientation= to; ui-state= ringout;
call-instance= 1
Content-Length: 0

```

[\[diagram\]](#) Call-ID: [\[prev\]](#) [\[next\]](#)

#### [15] SIP/2.0 200 OK

```

Via: SIP/2.0/UDP 172.18.203.55:5060;branch=z9hG4bK23eaf5f9
From: "SIP Line 2005" <sip:2005@172.18.203.55>;tag=b9c8b19b-c709-4d85-86d4-d2f557c6c2a6-26395900
To: <sip:2040@172.18.203.52>;tag=003094c3cd3a003f7eb00ccf-027cce04
Call-ID: 8ad1e600-4e41e4e5-1af-37cb12ac@172.18.203.55
CSeq: 101 INVITE
Server: Cisco-CP7960G/7.5
Contact: <sip:2040@172.18.203.52:5060>
Allow: ACK,BYE,CANCEL,INVITE,NOTIFY,OPTIONS,REFER,REGISTER,UPDATE
Remote-Party-ID: "2040" <sip:2040@172.18.203.52>;party=called;id-type=subscriber;privacy=off;screen=yes
Supported: replaces
Content-Length: 256
Content-Type: application/sdp
Content-Disposition: session;handling=optional

```

```

v=0
o=Cisco-SIPUA 9882 0 IN IP4 172.18.203.52
s=SIP Call
t=0 0

```

```
m=audio 30848 RTP/AVP 0 8 18 101
c=IN IP4 172.18.203.52
a=rtpmap:0 PCMU/8000
a=rtpmap:8 PCMA/8000
a=rtpmap:18 G729/8000
a=rtpmap:101 telephone-event/8000
a=fmtp:101 0-15
a=sendrecv
```

[\[diagram\]](#) Call-ID: [\[prev\]](#) [\[next\]](#)

**[16] ACK sip:20400@172.18.203.52:5060 SIP/2.0**

```
Via: SIP/2.0/UDP 172.18.203.55:5060;branch=z9hG4bK771fa4f
From: "SIP Line 2005" <sip:2005@172.18.203.55>;tag=b9c8b19b-c709-4d85-86d4-d2f557c6c2a6-26395900
To: <sip:20400@172.18.203.52>;tag=003094c3cd3a003f7eb00ccf-027cce04
Date: Thu, 17 Aug 2006 21:51:33 GMT
Call-ID: 8ad1e600-4e41e4e5-1af-37cb12ac@172.18.203.55
Max-Forwards: 70
CSeq: 101 ACK
Allow-Events: presence
Content-Type: application/sdp
Content-Length: 214
```

```
v=0
o=CiscoSystemsCCM-SIP 2000 1 IN IP4 172.18.203.55
s=SIP Call
c=IN IP4 172.18.203.45
t=0 0
m=audio 22760 RTP/AVP 0 101
a=rtpmap:0 PCMU/8000
a=ptime:20
a=rtpmap:101 telephone-event/8000
a=fmtp:101 0-15
```

[\[diagram\]](#) Call-ID: [\[prev\]](#) [\[next\]](#)

**[17] SIP/2.0 183 Session Progress**

```
Via: SIP/2.0/UDP 172.18.203.45:5060;branch=z9hG4bK6235c899
From: "SIP Line 2005" <sip:2005@sipsig-ccm55>;tag=00120193edaa073701a2cfaa-5e553a3b
To: <sip:2010@sipsig-ccm55>;tag=b9c8b19b-c709-4d85-86d4-d2f557c6c2a6-26395894
Date: Thu, 17 Aug 2006 21:51:27 GMT
Call-ID: 00120193-edaa00ac-39a13b83-2912092b@172.18.203.45
CSeq: 101 INVITE
Allow: INVITE, OPTIONS, INFO, BYE, CANCEL, ACK, PRACK, UPDATE, REFER, SUBSCRIBE, NOTIFY
Allow-Events: presence
Remote-Party-ID: "SIP Alerting 2040" <sip:2040@172.18.203.55>;party=called;screen=yes;privacy=off
Contact: <sip:2010@172.18.203.55:5060>
Call-Info: <urn:x-cisco-remotecc:callinfo>; security= NotAuthenticated; orientation= to; ui-state= ringout;
call-instance= 1
Content-Type: application/sdp
Content-Length: 214
```

```
v=0
o=CiscoSystemsCCM-SIP 2000 1 IN IP4 172.18.203.55
s=SIP Call
c=IN IP4 172.18.203.52
t=0 0
m=audio 30848 RTP/AVP 0 101
a=rtpmap:0 PCMU/8000
a=ptime:20
a=rtpmap:101 telephone-event/8000
a=fmtp:101 0-15
```

[\[diagram\]](#) Call-ID: [\[prev\]](#) [\[next\]](#)

**[18] SIP/2.0 200 OK**

```
Via: SIP/2.0/UDP 172.18.203.45:5060;branch=z9hG4bK6235c899
From: "SIP Line 2005" <sip:2005@sipsig-ccm55>;tag=00120193edaa073701a2cfaa-5e553a3b
To: <sip:2010@sipsig-ccm55>;tag=b9c8b19b-c709-4d85-86d4-d2f557c6c2a6-26395894
Date: Thu, 17 Aug 2006 21:51:27 GMT
Call-ID: 00120193-edaa00ac-39a13b83-2912092b@172.18.203.45
CSeq: 101 INVITE
Allow: INVITE, OPTIONS, INFO, BYE, CANCEL, ACK, PRACK, UPDATE, REFER, SUBSCRIBE, NOTIFY
Allow-Events: presence
Remote-Party-ID: "SIP Line 2040" <sip:2040@172.18.203.55>;party=called;screen=yes;privacy=off
Contact: <sip:2010@172.18.203.55:5060>
Call-Info: <urn:x-cisco-remotecc:callinfo>; security= NotAuthenticated; orientation= to; call-instance= 1
Content-Type: application/sdp
Content-Length: 214
```

```
v=0
o=CiscoSystemsCCM-SIP 2000 1 IN IP4 172.18.203.55
s=SIP Call
```

```
c=IN IP4 172.18.203.52
t=0 0
m=audio 30848 RTP/AVP 0 101
a=rtpmap:0 PCMU/8000
a=ptime:20
a=rtpmap:101 telephone-event/8000
a=fmtp:101 0-15
```

[\[diagram\]](#) Call-ID: [\[prev\]](#) [\[next\]](#)

**[19] ACK sip:2010@172.18.203.55:5060 SIP/2.0**

```
Via: SIP/2.0/UDP 172.18.203.45:5060;branch=z9hG4bK24d2d890
From: "SIP Line 2005" <sip:2005@sipsig-ccm55>;tag=00120193edaa073701a2cfaa-5e553a3b
To: <sip:2010@sipsig-ccm55>;tag=b9c8b19b-c709-4d85-86d4-d2f557c6c2a6-26395894
Call-ID: 00120193-edaa00ac-39a13b83-2912092b@172.18.203.45
Max-Forwards: 70
CSeq: 101 ACK
User-Agent: Cisco-CP7960G/8.0
Remote-Party-ID: "SIP Line 2005" <sip:2005@sipsig-ccm55>;party=calling;id-
type=subscriber;privacy=off;screen=yes
Content-Length: 0
```

[\[diagram\]](#) Call-ID: [\[prev\]](#) [\[next\]](#)

**[20] BYE sip:2010@172.18.203.55:5060 SIP/2.0**

```
Via: SIP/2.0/UDP 172.18.203.45:5060;branch=z9hG4bK59a495e5
From: "SIP Line 2005" <sip:2005@sipsig-ccm55>;tag=00120193edaa073701a2cfaa-5e553a3b
To: <sip:2010@sipsig-ccm55>;tag=b9c8b19b-c709-4d85-86d4-d2f557c6c2a6-26395894
Call-ID: 00120193-edaa00ac-39a13b83-2912092b@172.18.203.45
Max-Forwards: 70
CSeq: 102 BYE
User-Agent: Cisco-CP7960G/8.0
Content-Length: 0
```

[\[diagram\]](#) Call-ID: [\[prev\]](#) [\[next\]](#)

**[21] BYE sip:2040@172.18.203.52:5060 SIP/2.0**

```
Via: SIP/2.0/UDP 172.18.203.55:5060;branch=z9hG4bK1f505c23
From: "SIP Line 2005" <sip:2005@172.18.203.55>;tag=b9c8b19b-c709-4d85-86d4-d2f557c6c2a6-26395900
To: <sip:2040@172.18.203.52>;tag=003094c3cd3a003f7eb00ccf-027cce04
Date: Thu, 17 Aug 2006 21:51:33 GMT
Call-ID: 8ad1e600-4e41e4e5-1af-37cb12ac@172.18.203.55
User-Agent: Cisco-CCM5.0
Max-Forwards: 70
CSeq: 102 BYE
Content-Length: 0
```

[\[diagram\]](#) Call-ID: [\[prev\]](#) [\[next\]](#)

**[22] SIP/2.0 200 OK**

```
Via: SIP/2.0/UDP 172.18.203.45:5060;branch=z9hG4bK59a495e5
From: "SIP Line 2005" <sip:2005@sipsig-ccm55>;tag=00120193edaa073701a2cfaa-5e553a3b
To: <sip:2010@sipsig-ccm55>;tag=b9c8b19b-c709-4d85-86d4-d2f557c6c2a6-26395894
Date: Thu, 17 Aug 2006 21:51:41 GMT
Call-ID: 00120193-edaa00ac-39a13b83-2912092b@172.18.203.45
CSeq: 102 BYE
Content-Length: 0
```

[\[diagram\]](#) Call-ID: [\[prev\]](#) [\[next\]](#)

**[23] SIP/2.0 200 OK**

```
Via: SIP/2.0/UDP 172.18.203.55:5060;branch=z9hG4bK1f505c23
From: "SIP Line 2005" <sip:2005@172.18.203.55>;tag=b9c8b19b-c709-4d85-86d4-d2f557c6c2a6-26395900
To: <sip:2040@172.18.203.52>;tag=003094c3cd3a003f7eb00ccf-027cce04
Call-ID: 8ad1e600-4e41e4e5-1af-37cb12ac@172.18.203.55
CSeq: 102 BYE
Server: Cisco-CP7960G/7.5
Content-Length: 0
```

## 6.5 302 Redirect

Title: 302 Redirect

### Description:

If a SIP 7940/7960 (non-TNP) phone is configured for call forward all via the phone softkeys, there is no synchronization with the CCM. The phone handles the forwarding locally using a 302 redirect.

For this example, assume that line 2030 on phone H has call forward all configured such that a 302 redirect to 2040 will be sent when it receives an INVITE.

Line 2010 on phone A calls line 2030 on B. The call will be forwarded, via 302, to 2040 on C.

### Configuration:

Node = CCM, IP = 172.18.203.55

Phone = G, Line = 2010, IP = 172.18.203.46, Model = SIP Basic

Phone = H, Line = 2030, IP = 172.18.203.51, Model = SIP Basic

Phone = L, Line = 2040, IP = 172.18.203.52, Model = SIP Basic

### Scenario:

2010 calls 2030

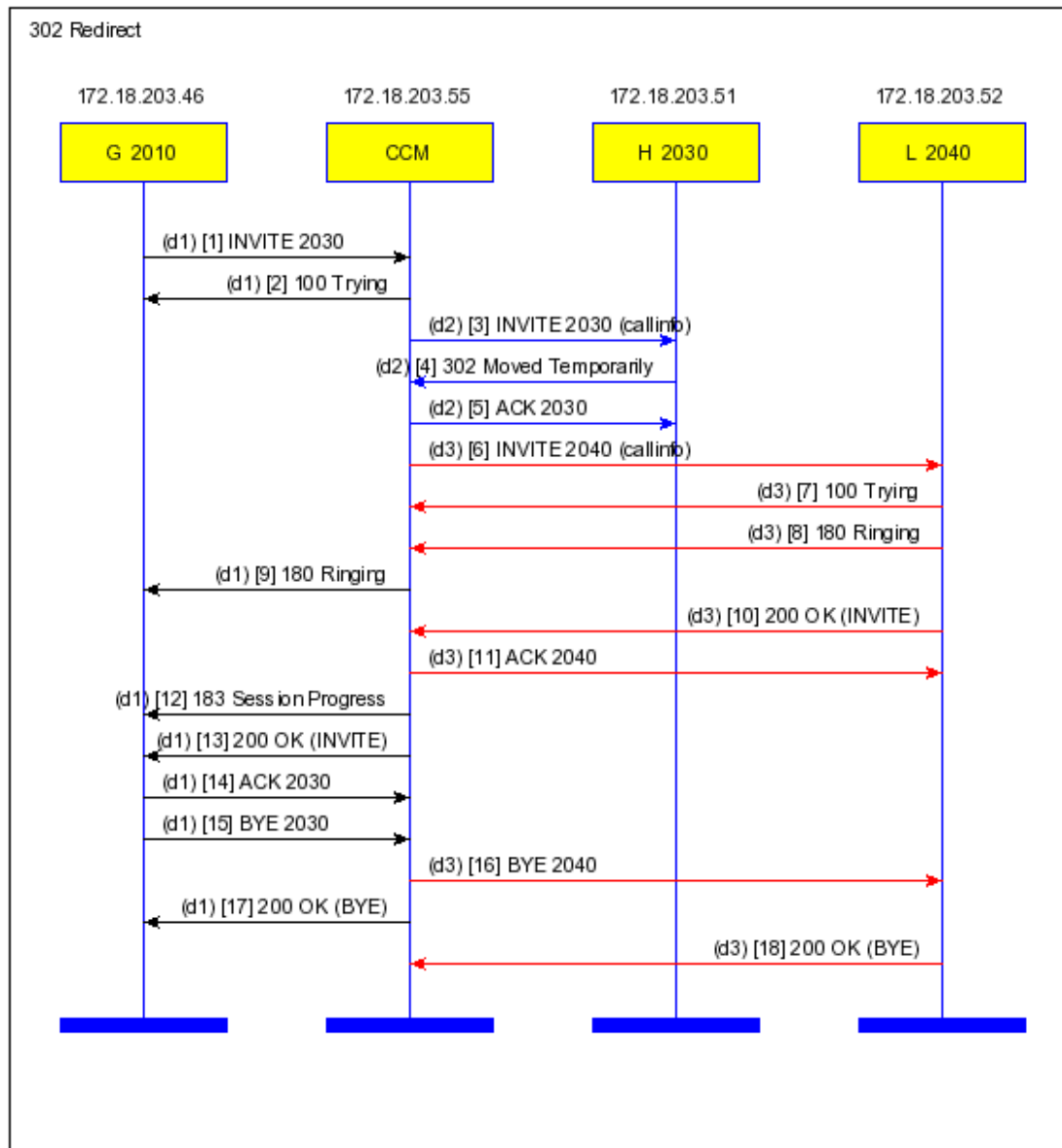
2030 responds with "302 Moved Temporarily"

2040 rings

2040 answers

2010 and 2040 are connected

2010 goes onhook



[diagram] Call-ID: [prev] [next]

[1] INVITE sip:2030@172.18.203.55 SIP/2.0

Via: SIP/2.0/UDP 172.18.203.46:5060;branch=z9hG4bK2926e71e  
 From: "2010" <sip:2010@172.18.203.55>;tag=00120193edac000a7bdf171b-5d12ca1d  
 To: <sip:2030@172.18.203.55>  
 Call-ID: 00120193-edac0007-4149343f-65fd4106@172.18.203.46  
 Max-Forwards: 70  
 CSeq: 101 INVITE  
 User-Agent: Cisco-CP7960G/7.5  
 Contact: <sip:2010@172.18.203.46:5060>  
 Expires: 180  
 Accept: application/sdp  
 Allow: ACK,BYE,CANCEL,INVITE,NOTIFY,OPTIONS,REFER,REGISTER,UPDATE  
 Remote-Party-ID: "2010" <sip:2010@172.18.203.46>;party=calling;id-type=subscriber;privacy=off;screen=yes  
 Supported: replaces  
 Content-Length: 257  
 Content-Type: application/sdp  
 Content-Disposition: session;handling=optional

v=0  
 o=Cisco-SIPUA 27839 0 IN IP4 172.18.203.46  
 s=SIP Call  
 t=0 0  
 m=audio 27136 RTP/AVP 0 8 18 101  
 c=IN IP4 172.18.203.46  
 a=rtpmap:0 PCMU/8000  
 a=rtpmap:8 PCMA/8000  
 a=rtpmap:18 G729/8000  
 a=rtpmap:101 telephone-event/8000  
 a=fmtp:101 0-15  
 a=sendrecv

[diagram] Call-ID: [prev] [next]

[2] SIP/2.0 100 Trying

Via: SIP/2.0/UDP 172.18.203.46:5060;branch=z9hG4bK2926e71e  
 From: "2010" <sip:2010@172.18.203.55>;tag=00120193edac000a7bdf171b-5d12ca1d  
 To: <sip:2030@172.18.203.55>  
 Date: Wed, 12 Jul 2006 19:01:30 GMT  
 Call-ID: 00120193-edac0007-4149343f-65fd4106@172.18.203.46  
 CSeq: 101 INVITE  
 Allow-Events: presence  
 Content-Length: 0

[diagram] Call-ID: [prev] [next]

[3] INVITE sip:2030@172.18.203.51:5060 SIP/2.0

Via: SIP/2.0/UDP 172.18.203.55:5060;branch=z9hG4bK45a6c209  
 Remote-Party-ID: "SIP Line 2010" <sip:2010@172.18.203.55>;party=calling;screen=yes;privacy=off  
 From: "SIP Line 2010" <sip:2010@172.18.203.55>;tag=b9c8b19b-c709-4d85-86d4-d2f557c6c2a6-30679747  
 To: <sip:2030@172.18.203.51>  
 Date: Wed, 12 Jul 2006 19:01:30 GMT  
 Call-ID: d27ca680-4b51470a-2e5-37cb12ac@172.18.203.55  
 Supported: timer,replaces  
 Min-SE: 1800  
 User-Agent: Cisco-CCM5.0  
 Allow: INVITE, OPTIONS, INFO, BYE, CANCEL, ACK, PRACK, UPDATE, REFER, SUBSCRIBE, NOTIFY  
 CSeq: 101 INVITE  
 Expires: 180  
 Allow-Events: presence  
 Call-Info: <urn:x-cisco-remotecc:callinfo>; security= NotAuthenticated; orientation= from; call-instance= 1  
 Alert-Info: <file://Bellcore-dr1/>  
 Contact: <sip:2030@172.18.203.55:5060>  
 Max-Forwards: 69  
 Content-Length: 0

[diagram] Call-ID: [prev] [next]

[4] SIP/2.0 302 Moved Temporarily

Via: SIP/2.0/UDP 172.18.203.55:5060;branch=z9hG4bK45a6c209  
 From: "SIP Line 2010" <sip:2010@172.18.203.55>;tag=b9c8b19b-c709-4d85-86d4-d2f557c6c2a6-30679747  
 To: <sip:2030@172.18.203.51>;tag=000d280821a5008273023349-2f4b20d7  
 Call-ID: d27ca680-4b51470a-2e5-37cb12ac@172.18.203.55  
 Date: Wed, 12 Jul 2006 19:01:29 GMT  
 CSeq: 101 INVITE  
 Server: Cisco-CP7960G/7.5  
 Contact: <sip:2040@172.18.203.55:5060>  
 Diversion: <sip:2040@172.18.203.55:5060>;reason=unconditional  
 Allow: ACK,BYE,CANCEL,INVITE,NOTIFY,OPTIONS,REFER,REGISTER,UPDATE  
 Remote-Party-ID: "2030" <sip:2030@172.18.203.51>;party=called;id-type=subscriber;privacy=off;screen=yes  
 Content-Length: 0

[[diagram](#)] Call-ID: [[prev](#)] [[next](#)]

**[5] ACK sip:2030@172.18.203.51:5060 SIP/2.0**

Via: SIP/2.0/UDP 172.18.203.55:5060;branch=z9hG4bK45a6c209  
 From: "SIP Line 2010" <sip:2010@172.18.203.55>;tag=b9c8b19b-c709-4d85-86d4-d2f557c6c2a6-30679747  
 To: <sip:2030@172.18.203.51>;tag=000d280821a5008273023349-2f4b20d7  
 Date: Wed, 12 Jul 2006 19:01:30 GMT  
 Call-ID: d27ca680-4b51470a-2e5-37cb12ac@172.18.203.55  
 Max-Forwards: 70  
 CSeq: 101 ACK  
 Allow-Events: presence  
 Content-Length: 0

[[diagram](#)] Call-ID: [[prev](#)] [[next](#)]

**[6] INVITE sip:2040@172.18.203.52:5060 SIP/2.0**

Via: SIP/2.0/UDP 172.18.203.55:5060;branch=z9hG4bK5143dd23  
 Remote-Party-ID: "SIP Line 2010" <sip:2010@172.18.203.55>;party=calling;screen=yes;privacy=off  
 From: "SIP Line 2010" <sip:2010@172.18.203.55>;tag=b9c8b19b-c709-4d85-86d4-d2f557c6c2a6-30679749  
 To: <sip:2040@172.18.203.52>  
 Date: Wed, 12 Jul 2006 19:01:30 GMT  
 Call-ID: d27ca680-4b51470a-2e6-37cb12ac@172.18.203.55  
 Supported: timer,replaces  
 Min-SE: 1800  
 User-Agent: Cisco-CCM5.0  
 Allow: INVITE, OPTIONS, INFO, BYE, CANCEL, ACK, PRACK, UPDATE, REFER, SUBSCRIBE, NOTIFY  
 CSeq: 101 INVITE  
 Expires: 180  
 Allow-Events: presence  
 Call-Info: <urn:x-cisco-remotecc:callinfo>; security= NotAuthenticated; orientation= from; call-instance= 1  
 Alert-Info: <file://Bellcore-dr1/>  
 Contact: <sip:2040@172.18.203.55:5060>  
 Diversion: "SIP Alerting 2040" <sip:2040@172.18.203.55>;reason=unconditional;privacy=off;screen=yes  
 Diversion: "SIP Alerting 2030" <sip:2030@172.18.203.55>;reason=unconditional;privacy=off;screen=yes  
 Max-Forwards: 69  
 Content-Length: 0

[[diagram](#)] Call-ID: [[prev](#)] [[next](#)]

**[7] SIP/2.0 100 Trying**

Via: SIP/2.0/UDP 172.18.203.55:5060;branch=z9hG4bK5143dd23  
 From: "SIP Line 2010" <sip:2010@172.18.203.55>;tag=b9c8b19b-c709-4d85-86d4-d2f557c6c2a6-30679749  
 To: <sip:2040@172.18.203.52>  
 Call-ID: d27ca680-4b51470a-2e6-37cb12ac@172.18.203.55  
 CSeq: 101 INVITE  
 Server: Cisco-CP7960G/7.5  
 Contact: <sip:2040@172.18.203.52:5060>  
 Allow: ACK,BYE,CANCEL,INVITE,NOTIFY,OPTIONS,REFER,REGISTER,UPDATE  
 Remote-Party-ID: "2040" <sip:2040@172.18.203.52>;party=called;id-type=subscriber;privacy=off;screen=yes  
 Content-Length: 0

[[diagram](#)] Call-ID: [[prev](#)] [[next](#)]

**[8] SIP/2.0 180 Ringing**

Via: SIP/2.0/UDP 172.18.203.55:5060;branch=z9hG4bK5143dd23  
 From: "SIP Line 2010" <sip:2010@172.18.203.55>;tag=b9c8b19b-c709-4d85-86d4-d2f557c6c2a6-30679749  
 To: <sip:2040@172.18.203.52>;tag=003094c3cd3a00096b9ab432-43f91d57  
 Call-ID: d27ca680-4b51470a-2e6-37cb12ac@172.18.203.55  
 CSeq: 101 INVITE  
 Server: Cisco-CP7960G/7.5  
 Contact: <sip:2040@172.18.203.52:5060>  
 Allow: ACK,BYE,CANCEL,INVITE,NOTIFY,OPTIONS,REFER,REGISTER,UPDATE  
 Remote-Party-ID: "2040" <sip:2040@172.18.203.52>;party=called;id-type=subscriber;privacy=off;screen=yes  
 Content-Length: 0

[[diagram](#)] Call-ID: [[prev](#)] [[next](#)]

**[9] SIP/2.0 180 Ringing**

Via: SIP/2.0/UDP 172.18.203.46:5060;branch=z9hG4bK2926e71e  
 From: "2010" <sip:2010@172.18.203.55>;tag=00120193edac000a7bdf171b-5d12ca1d  
 To: <sip:2030@172.18.203.55>;tag=b9c8b19b-c709-4d85-86d4-d2f557c6c2a6-30679746  
 Date: Wed, 12 Jul 2006 19:01:30 GMT  
 Call-ID: 00120193-edac0007-4149343f-65fd4106@172.18.203.46  
 CSeq: 101 INVITE  
 Allow: INVITE, OPTIONS, INFO, BYE, CANCEL, ACK, PRACK, UPDATE, REFER, SUBSCRIBE, NOTIFY  
 Allow-Events: presence  
 Remote-Party-ID: "SIP Alerting 2040" <sip:2040@172.18.203.55>;party=called;screen=yes;privacy=off  
 Contact: <sip:2030@172.18.203.55:5060>  
 Content-Length: 0

[[diagram](#)] Call-ID: [[prev](#)] [[next](#)]

**[10] SIP/2.0 200 OK**

Via: SIP/2.0/UDP 172.18.203.55:5060;branch=z9hG4bK5143dd23  
 From: "SIP Line 2010" <sip:2010@172.18.203.55>;tag=b9c8b19b-c709-4d85-86d4-d2f557c6c2a6-30679749  
 To: <sip:2040@172.18.203.52>;tag=003094c3cd3a00096b9ab432-43f91d57

```

Call-ID: d27ca680-4b51470a-2e6-37cb12ac@172.18.203.55
CSeq: 101 INVITE
Server: Cisco-CP7960G/7.5
Contact: <sip:2040@172.18.203.52:5060>
Allow: ACK,BYE,CANCEL,INVITE,NOTIFY,OPTIONS,REFER,REGISTER,UPDATE
Remote-Party-ID: "2040" <sip:2040@172.18.203.52>;party=called;id-type=subscriber;privacy=off;screen=yes
Supported: replaces
Content-Length: 256
Content-Type: application/sdp
Content-Disposition: session;handling=optional

```

```

v=0
o=Cisco-SIPUA 9667 0 IN IP4 172.18.203.52
s=SIP Call
t=0 0
m=audio 16418 RTP/AVP 0 8 18 101
c=IN IP4 172.18.203.52
a=rtpmap:0 PCMU/8000
a=rtpmap:8 PCMA/8000
a=rtpmap:18 G729/8000
a=rtpmap:101 telephone-event/8000
a=fmtp:101 0-15
a=sendrecv

```

[\[diagram\]](#) Call-ID: [\[prev\]](#) [\[next\]](#)

#### [11] ACK sip:2040@172.18.203.52:5060 SIP/2.0

```

Via: SIP/2.0/UDP 172.18.203.55:5060;branch=z9hG4bK1b4309c6
From: "SIP Line 2010" <sip:2010@172.18.203.55>;tag=b9c8b19b-c709-4d85-86d4-d2f557c6c2a6-30679749
To: <sip:2040@172.18.203.52>;tag=003094c3cd3a00096b9ab432-43f91d57
Date: Wed, 12 Jul 2006 19:01:30 GMT
Call-ID: d27ca680-4b51470a-2e6-37cb12ac@172.18.203.55
Max-Forwards: 70
CSeq: 101 ACK
Allow-Events: presence
Content-Type: application/sdp
Content-Length: 214

```

```

v=0
o=CiscoSystemsCCM-SIP 2000 1 IN IP4 172.18.203.55
s=SIP Call
c=IN IP4 172.18.203.46
t=0 0
m=audio 27136 RTP/AVP 0 101
a=rtpmap:0 PCMU/8000
a=ptime:20
a=rtpmap:101 telephone-event/8000
a=fmtp:101 0-15

```

[\[diagram\]](#) Call-ID: [\[prev\]](#) [\[next\]](#)

#### [12] SIP/2.0 183 Session Progress

```

Via: SIP/2.0/UDP 172.18.203.46:5060;branch=z9hG4bK2926e71e
From: "2010" <sip:2010@172.18.203.55>;tag=00120193edac000a7bdf171b-5d12ca1d
To: <sip:2030@172.18.203.55>;tag=b9c8b19b-c709-4d85-86d4-d2f557c6c2a6-30679746
Date: Wed, 12 Jul 2006 19:01:30 GMT
Call-ID: 00120193-edac0007-4149343f-65fd4106@172.18.203.46
CSeq: 101 INVITE
Allow: INVITE, OPTIONS, INFO, BYE, CANCEL, ACK, PRACK, UPDATE, REFER, SUBSCRIBE, NOTIFY
Allow-Events: presence
Remote-Party-ID: "SIP Alerting 2040" <sip:2040@172.18.203.55>;party=called;screen=yes;privacy=off
Contact: <sip:2030@172.18.203.55:5060>
Content-Type: application/sdp
Content-Length: 214

```

```

v=0
o=CiscoSystemsCCM-SIP 2000 1 IN IP4 172.18.203.55
s=SIP Call
c=IN IP4 172.18.203.52
t=0 0
m=audio 16418 RTP/AVP 0 101
a=rtpmap:0 PCMU/8000
a=ptime:20
a=rtpmap:101 telephone-event/8000
a=fmtp:101 0-15

```

[\[diagram\]](#) Call-ID: [\[prev\]](#) [\[next\]](#)

#### [13] SIP/2.0 200 OK

```

Via: SIP/2.0/UDP 172.18.203.46:5060;branch=z9hG4bK2926e71e
From: "2010" <sip:2010@172.18.203.55>;tag=00120193edac000a7bdf171b-5d12ca1d
To: <sip:2030@172.18.203.55>;tag=b9c8b19b-c709-4d85-86d4-d2f557c6c2a6-30679746
Date: Wed, 12 Jul 2006 19:01:30 GMT

```

Call-ID: 00120193-edac0007-4149343f-65fd4106@172.18.203.46  
 CSeq: 101 INVITE  
 Allow: INVITE, OPTIONS, INFO, BYE, CANCEL, ACK, PRACK, UPDATE, REFER, SUBSCRIBE, NOTIFY  
 Allow-Events: presence  
 Remote-Party-ID: "SIP Line 2040" <sip:2040@172.18.203.55>;party=called;screen=yes;privacy=off  
 Contact: <sip:2030@172.18.203.55:5060>  
 Content-Type: application/sdp  
 Content-Length: 214

v=0  
 o=CiscoSystemsCCM-SIP 2000 1 IN IP4 172.18.203.55  
 s=SIP Call  
 c=IN IP4 172.18.203.52  
 t=0 0  
 m=audio 16418 RTP/AVP 0 101  
 a=rtpmap:0 PCMU/8000  
 a=ptime:20  
 a=rtpmap:101 telephone-event/8000  
 a=fmtp:101 0-15

[\[diagram\]](#) Call-ID: [\[prev\]](#) [\[next\]](#)

**[14] ACK sip:2030@172.18.203.55:5060 SIP/2.0**

Via: SIP/2.0/UDP 172.18.203.46:5060;branch=z9hG4bK0b3d3483  
 From: "2010" <sip:2010@172.18.203.55>;tag=00120193edac000a7bdf171b-5d12ca1d  
 To: <sip:2030@172.18.203.55>;tag=b9c8b19b-c709-4d85-86d4-d2f557c6c2a6-30679746  
 Call-ID: 00120193-edac0007-4149343f-65fd4106@172.18.203.46  
 Max-Forwards: 70  
 CSeq: 101 ACK  
 User-Agent: Cisco-CP7960G/7.5  
 Remote-Party-ID: "2010" <sip:2010@172.18.203.46>;party=calling;id-type=subscriber;privacy=off;screen=yes  
 Content-Length: 0

[\[diagram\]](#) Call-ID: [\[prev\]](#) [\[next\]](#)

**[15] BYE sip:2030@172.18.203.55:5060 SIP/2.0**

Via: SIP/2.0/UDP 172.18.203.46:5060;branch=z9hG4bK27eda5ec  
 From: "2010" <sip:2010@172.18.203.55>;tag=00120193edac000a7bdf171b-5d12ca1d  
 To: <sip:2030@172.18.203.55>;tag=b9c8b19b-c709-4d85-86d4-d2f557c6c2a6-30679746  
 Call-ID: 00120193-edac0007-4149343f-65fd4106@172.18.203.46  
 Max-Forwards: 70  
 CSeq: 102 BYE  
 User-Agent: Cisco-CP7960G/7.5  
 Content-Length: 0

[\[diagram\]](#) Call-ID: [\[prev\]](#) [\[next\]](#)

**[16] BYE sip:2040@172.18.203.52:5060 SIP/2.0**

Via: SIP/2.0/UDP 172.18.203.55:5060;branch=z9hG4bK561f5877  
 From: "SIP Line 2010" <sip:2010@172.18.203.55>;tag=b9c8b19b-c709-4d85-86d4-d2f557c6c2a6-30679749  
 To: <sip:2040@172.18.203.52>;tag=003094c3cd3a00096b9ab432-43f91d57  
 Date: Wed, 12 Jul 2006 19:01:30 GMT  
 Call-ID: d27ca680-4b51470a-2e6-37cb12ac@172.18.203.55  
 User-Agent: Cisco-CCM5.0  
 Max-Forwards: 70  
 CSeq: 102 BYE  
 Content-Length: 0

[\[diagram\]](#) Call-ID: [\[prev\]](#) [\[next\]](#)

**[17] SIP/2.0 200 OK**

Via: SIP/2.0/UDP 172.18.203.46:5060;branch=z9hG4bK27eda5ec  
 From: "2010" <sip:2010@172.18.203.55>;tag=00120193edac000a7bdf171b-5d12ca1d  
 To: <sip:2030@172.18.203.55>;tag=b9c8b19b-c709-4d85-86d4-d2f557c6c2a6-30679746  
 Date: Wed, 12 Jul 2006 19:01:37 GMT  
 Call-ID: 00120193-edac0007-4149343f-65fd4106@172.18.203.46  
 CSeq: 102 BYE  
 Content-Length: 0

[\[diagram\]](#) Call-ID: [\[prev\]](#) [\[next\]](#)

**[18] SIP/2.0 200 OK**

Via: SIP/2.0/UDP 172.18.203.55:5060;branch=z9hG4bK561f5877  
 From: "SIP Line 2010" <sip:2010@172.18.203.55>;tag=b9c8b19b-c709-4d85-86d4-d2f557c6c2a6-30679749  
 To: <sip:2040@172.18.203.52>;tag=003094c3cd3a00096b9ab432-43f91d57  
 Call-ID: d27ca680-4b51470a-2e6-37cb12ac@172.18.203.55  
 CSeq: 102 BYE  
 Server: Cisco-CP7960G/7.5  
 Content-Length: 0

## 7. Call\_Forking

### 7.1 Call Forking

Title: Call Forking

Description:

A SIP Basic phone make a call to a DN which exists on two other SIP Basic phones.

Configuration:

Node = CCM, IP = 172.18.203.55

Phone = G, Line = 2010, IP = 172.18.203.46, Model = SIP Basic

Phone = H, Line = 2050, IP = 172.18.203.51, Model = SIP Basic

Phone = L, Line = 2050, IP = 172.18.203.52, Model = SIP Basic

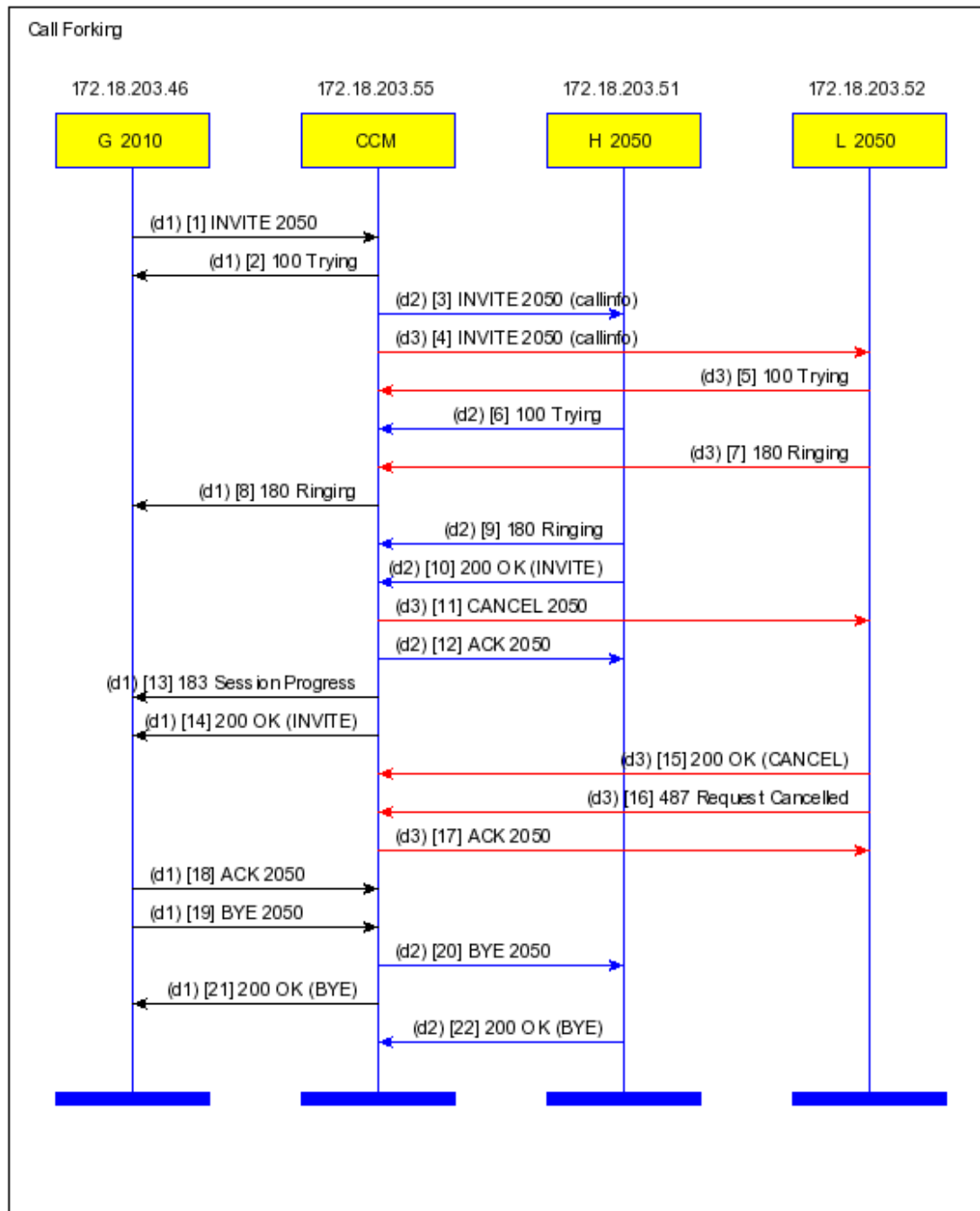
Scenario:

2010 dials 2050

H.2050 and L.2050 rings

H.2050 answers

2010 goes onhook



[\[diagram\]](#)    Call-ID: [\[prev\]](#) [\[next\]](#)

**[1] INVITE sip:2050@172.18.203.55 SIP/2.0**

Via: SIP/2.0/UDP 172.18.203.46:5060;branch=z9hG4bK39fa6f96  
 From: "2010" <sip:2010@172.18.203.55>;tag=00120193edac001a263036ff-481c940a  
 To: <sip:2050@172.18.203.55>  
 Call-ID: 00120193-edac000d-5efda125-51bdf98a@172.18.203.46  
 Max-Forwards: 70  
 CSeq: 101 INVITE  
 User-Agent: Cisco-CP7960G/7.5  
 Contact: <sip:2010@172.18.203.46:5060>  
 Expires: 180  
 Accept: application/sdp  
 Allow: ACK,BYE,CANCEL,INVITE,NOTIFY,OPTIONS,REFER,REGISTER,UPDATE  
 Remote-Party-ID: "2010" <sip:2010@172.18.203.46>;party=calling;id-type=subscriber;privacy=off;screen=yes  
 Supported: replaces  
 Content-Length: 257  
 Content-Type: application/sdp  
 Content-Disposition: session;handling=optional

v=0  
 o=Cisco-SIPUA 27325 0 IN IP4 172.18.203.46  
 s=SIP Call  
 t=0 0  
 m=audio 27160 RTP/AVP 0 8 18 101  
 c=IN IP4 172.18.203.46  
 a=rtpmap:0 PCMU/8000  
 a=rtpmap:8 PCMA/8000  
 a=rtpmap:18 G729/8000  
 a=rtpmap:101 telephone-event/8000  
 a=fmtp:101 0-15  
 a=sendrecv

[\[diagram\]](#)    Call-ID: [\[prev\]](#) [\[next\]](#)

**[2] SIP/2.0 100 Trying**

Via: SIP/2.0/UDP 172.18.203.46:5060;branch=z9hG4bK39fa6f96  
 From: "2010" <sip:2010@172.18.203.55>;tag=00120193edac001a263036ff-481c940a  
 To: <sip:2050@172.18.203.55>  
 Date: Wed, 12 Jul 2006 19:25:19 GMT  
 Call-ID: 00120193-edac000d-5efda125-51bdf98a@172.18.203.46  
 CSeq: 101 INVITE  
 Allow-Events: presence  
 Content-Length: 0

[\[diagram\]](#)    Call-ID: [\[prev\]](#) [\[next\]](#)

**[3] INVITE sip:2050@172.18.203.51:5060 SIP/2.0**

Via: SIP/2.0/UDP 172.18.203.55:5060;branch=z9hG4bK703dea52  
 Remote-Party-ID: "SIP Line 2010" <sip:2010@172.18.203.55>;party=calling;screen=yes;privacy=off  
 From: "SIP Line 2010" <sip:2010@172.18.203.55>;tag=b9c8b19b-c709-4d85-86d4-d2f557c6c2a6-30679768  
 To: <sip:2050@172.18.203.51>  
 Date: Wed, 12 Jul 2006 19:25:19 GMT  
 Call-ID: 263cbf00-4b514c9f-315-37cb12ac@172.18.203.55  
 Supported: timer,replaces  
 Min-SE: 1800  
 User-Agent: Cisco-CCM5.0  
 Allow: INVITE, OPTIONS, INFO, BYE, CANCEL, ACK, PRACK, UPDATE, REFER, SUBSCRIBE, NOTIFY  
 CSeq: 101 INVITE  
 Expires: 180  
 Allow-Events: presence  
 Alert-Info: <urn:x-cisco-remotecc:callinfo>; security= NotAuthenticated; orientation= from; call-instance= 1  
 Contact: <sip:2050@172.18.203.55:5060>  
 Max-Forwards: 69  
 Content-Length: 0

[\[diagram\]](#)    Call-ID: [\[prev\]](#) [\[next\]](#)

**[4] INVITE sip:2050@172.18.203.52:5060 SIP/2.0**

Via: SIP/2.0/UDP 172.18.203.55:5060;branch=z9hG4bK383c9b53  
 Remote-Party-ID: "SIP Line 2010" <sip:2010@172.18.203.55>;party=calling;screen=yes;privacy=off  
 From: "SIP Line 2010" <sip:2010@172.18.203.55>;tag=b9c8b19b-c709-4d85-86d4-d2f557c6c2a6-30679768  
 To: <sip:2050@172.18.203.52>  
 Date: Wed, 12 Jul 2006 19:25:19 GMT  
 Call-ID: 263cbf00-4b514c9f-316-37cb12ac@172.18.203.55  
 Supported: timer,replaces  
 Min-SE: 1800  
 User-Agent: Cisco-CCM5.0  
 Allow: INVITE, OPTIONS, INFO, BYE, CANCEL, ACK, PRACK, UPDATE, REFER, SUBSCRIBE, NOTIFY  
 CSeq: 101 INVITE  
 Expires: 180  
 Allow-Events: presence  
 Call-Info: <urn:x-cisco-remotecc:callinfo>; security= NotAuthenticated; orientation= from; call-instance= 1

Alert-Info: <file://Bellcore-dr1/>  
 Contact: <sip:2050@172.18.203.55:5060>  
 Max-Forwards: 69  
 Content-Length: 0

[[diagram](#)] Call-ID: [[prev](#)] [[next](#)]

**[5] SIP/2.0 100 Trying**

Via: SIP/2.0/UDP 172.18.203.55:5060;branch=z9hG4bK383c9b53  
 From: "SIP Line 2010" <sip:2010@172.18.203.55>;tag=b9c8b19b-c709-4d85-86d4-d2f557c6c2a6-30679768  
 To: <sip:2050@172.18.203.52>  
 Call-ID: 263cbf00-4b514c9f-316-37cb12ac@172.18.203.55  
 CSeq: 101 INVITE  
 Server: Cisco-CP7960G/7.5  
 Contact: <sip:2050@172.18.203.52:5060>  
 Allow: ACK,BYE,CANCEL,INVITE,NOTIFY,OPTIONS,REFER,REGISTER,UPDATE  
 Remote-Party-ID: "2050" <sip:2050@172.18.203.52>;party=called;id-type=subscriber;privacy=off;screen=yes  
 Content-Length: 0

[[diagram](#)] Call-ID: [[prev](#)] [[next](#)]

**[6] SIP/2.0 100 Trying**

Via: SIP/2.0/UDP 172.18.203.55:5060;branch=z9hG4bK703dea52  
 From: "SIP Line 2010" <sip:2010@172.18.203.55>;tag=b9c8b19b-c709-4d85-86d4-d2f557c6c2a6-30679768  
 To: <sip:2050@172.18.203.51>  
 Call-ID: 263cbf00-4b514c9f-315-37cb12ac@172.18.203.55  
 Date: Wed, 12 Jul 2006 19:25:19 GMT  
 CSeq: 101 INVITE  
 Server: Cisco-CP7960G/7.5  
 Contact: <sip:2050@172.18.203.51:5060>  
 Allow: ACK,BYE,CANCEL,INVITE,NOTIFY,OPTIONS,REFER,REGISTER,UPDATE  
 Remote-Party-ID: "2050" <sip:2050@172.18.203.51>;party=called;id-type=subscriber;privacy=off;screen=yes  
 Content-Length: 0

[[diagram](#)] Call-ID: [[prev](#)] [[next](#)]

**[7] SIP/2.0 180 Ringing**

Via: SIP/2.0/UDP 172.18.203.55:5060;branch=z9hG4bK383c9b53  
 From: "SIP Line 2010" <sip:2010@172.18.203.55>;tag=b9c8b19b-c709-4d85-86d4-d2f557c6c2a6-30679768  
 To: <sip:2050@172.18.203.52>;tag=003094c3cd3a00175fa9924a-650cabfe  
 Call-ID: 263cbf00-4b514c9f-316-37cb12ac@172.18.203.55  
 CSeq: 101 INVITE  
 Server: Cisco-CP7960G/7.5  
 Contact: <sip:2050@172.18.203.52:5060>  
 Allow: ACK,BYE,CANCEL,INVITE,NOTIFY,OPTIONS,REFER,REGISTER,UPDATE  
 Remote-Party-ID: "2050" <sip:2050@172.18.203.52>;party=called;id-type=subscriber;privacy=off;screen=yes  
 Content-Length: 0

[[diagram](#)] Call-ID: [[prev](#)] [[next](#)]

**[8] SIP/2.0 180 Ringing**

Via: SIP/2.0/UDP 172.18.203.46:5060;branch=z9hG4bK39fa6f96  
 From: "2010" <sip:2010@172.18.203.55>;tag=00120193edac001a263036ff-481c940a  
 To: <sip:2050@172.18.203.55>;tag=b9c8b19b-c709-4d85-86d4-d2f557c6c2a6-30679767  
 Date: Wed, 12 Jul 2006 19:25:19 GMT  
 Call-ID: 00120193-edac000d-5efda125-51bdf98a@172.18.203.46  
 CSeq: 101 INVITE  
 Allow: INVITE, OPTIONS, INFO, BYE, CANCEL, ACK, PRACK, UPDATE, REFER, SUBSCRIBE, NOTIFY  
 Allow-Events: presence  
 Remote-Party-ID: "SIP Alerting 2050" <sip:2050@172.18.203.55>;party=called;screen=yes;privacy=off  
 Contact: <sip:2050@172.18.203.55:5060>  
 Content-Length: 0

[[diagram](#)] Call-ID: [[prev](#)] [[next](#)]

**[9] SIP/2.0 180 Ringing**

Via: SIP/2.0/UDP 172.18.203.55:5060;branch=z9hG4bK703dea52  
 From: "SIP Line 2010" <sip:2010@172.18.203.55>;tag=b9c8b19b-c709-4d85-86d4-d2f557c6c2a6-30679768  
 To: <sip:2050@172.18.203.51>;tag=000d280821a50094274776d7-06da08dd  
 Call-ID: 263cbf00-4b514c9f-315-37cb12ac@172.18.203.55  
 Date: Wed, 12 Jul 2006 19:25:20 GMT  
 CSeq: 101 INVITE  
 Server: Cisco-CP7960G/7.5  
 Contact: <sip:2050@172.18.203.51:5060>  
 Allow: ACK,BYE,CANCEL,INVITE,NOTIFY,OPTIONS,REFER,REGISTER,UPDATE  
 Remote-Party-ID: "2050" <sip:2050@172.18.203.51>;party=called;id-type=subscriber;privacy=off;screen=yes  
 Content-Length: 0

[[diagram](#)] Call-ID: [[prev](#)] [[next](#)]

**[10] SIP/2.0 200 OK**

Via: SIP/2.0/UDP 172.18.203.55:5060;branch=z9hG4bK703dea52  
 From: "SIP Line 2010" <sip:2010@172.18.203.55>;tag=b9c8b19b-c709-4d85-86d4-d2f557c6c2a6-30679768  
 To: <sip:2050@172.18.203.51>;tag=000d280821a50094274776d7-06da08dd  
 Call-ID: 263cbf00-4b514c9f-315-37cb12ac@172.18.203.55  
 Date: Wed, 12 Jul 2006 19:25:21 GMT

```
CSeq: 101 INVITE
Server: Cisco-CP7960G/7.5
Contact: <sip:2050@172.18.203.51:5060>
Allow: ACK,BYE,CANCEL,INVITE,NOTIFY,OPTIONS,REFER,REGISTER,UPDATE
Remote-Party-ID: "2050" <sip:2050@172.18.203.51>;party=called;id-type=subscriber;privacy=off;screen=yes
Supported: replaces
Content-Length: 257
Content-Type: application/sdp
Content-Disposition: session;handling=optional
```

```
v=0
o=Cisco-SIPUA 26964 0 IN IP4 172.18.203.51
s=SIP Call
t=0 0
m=audio 21822 RTP/AVP 0 8 18 101
c=IN IP4 172.18.203.51
a=rtpmap:0 PCMU/8000
a=rtpmap:8 PCMA/8000
a=rtpmap:18 G729/8000
a=rtpmap:101 telephone-event/8000
a=fmtp:101 0-15
a=sendrecv
```

```
[diagram] Call-ID: [prev] [next]
[11] CANCEL sip:2050@172.18.203.52:5060 SIP/2.0
Via: SIP/2.0/UDP 172.18.203.55:5060;branch=z9hG4bK383c9b53
From: "SIP Line 2010" <sip:2010@172.18.203.55>;tag=b9c8b19b-c709-4d85-86d4-d2f557c6c2a6-30679768
To: <sip:2050@172.18.203.52>
Date: Wed, 12 Jul 2006 19:25:19 GMT
Call-ID: 263cbf00-4b514c9f-316-37cb12ac@172.18.203.55
CSeq: 101 CANCEL
Max-Forwards: 70
Reason: Q.850;cause=31
Content-Length: 0
```

```
[diagram] Call-ID: [prev] [next]
[12] ACK sip:2050@172.18.203.51:5060 SIP/2.0
Via: SIP/2.0/UDP 172.18.203.55:5060;branch=z9hG4bK58762d20
From: "SIP Line 2010" <sip:2010@172.18.203.55>;tag=b9c8b19b-c709-4d85-86d4-d2f557c6c2a6-30679768
To: <sip:2050@172.18.203.51>;tag=000d280821a50094274776d7-06da08dd
Date: Wed, 12 Jul 2006 19:25:19 GMT
Call-ID: 263cbf00-4b514c9f-315-37cb12ac@172.18.203.55
Max-Forwards: 70
CSeq: 101 ACK
Allow-Events: presence
Content-Type: application/sdp
Content-Length: 214
```

```
v=0
o=CiscoSystemsCCM-SIP 2000 1 IN IP4 172.18.203.55
s=SIP Call
c=IN IP4 172.18.203.46
t=0 0
m=audio 27160 RTP/AVP 0 101
a=rtpmap:0 PCMU/8000
aptime:20
a=rtpmap:101 telephone-event/8000
a=fmtp:101 0-15
```

```
[diagram] Call-ID: [prev] [next]
[13] SIP/2.0 183 Session Progress
Via: SIP/2.0/UDP 172.18.203.46:5060;branch=z9hG4bK39fa6f96
From: "2010" <sip:2010@172.18.203.55>;tag=00120193edac001a263036ff-481c940a
To: <sip:2050@172.18.203.55>;tag=b9c8b19b-c709-4d85-86d4-d2f557c6c2a6-30679767
Date: Wed, 12 Jul 2006 19:25:19 GMT
Call-ID: 00120193-edac000d-5efda125-51bdf98a@172.18.203.46
CSeq: 101 INVITE
Allow: INVITE, OPTIONS, INFO, BYE, CANCEL, ACK, PRACK, UPDATE, REFER, SUBSCRIBE, NOTIFY
Allow-Events: presence
Remote-Party-ID: "SIP Alerting 2050" <sip:2050@172.18.203.55>;party=called;screen=yes;privacy=off
Contact: <sip:2050@172.18.203.55:5060>
Content-Type: application/sdp
Content-Length: 214
```

```
v=0
o=CiscoSystemsCCM-SIP 2000 1 IN IP4 172.18.203.55
s=SIP Call
c=IN IP4 172.18.203.51
t=0 0
m=audio 21822 RTP/AVP 0 101
```

```
a=rtpmap:0 PCMU/8000
a=ptime:20
a=rtpmap:101 telephone-event/8000
a=fmtp:101 0-15
```

[[diagram](#)] Call-ID: [[prev](#)] [[next](#)]

```
[14] SIP/2.0 200 OK
Via: SIP/2.0/UDP 172.18.203.46:5060;branch=z9hG4bK39fa6f96
From: "2010" <sip:2010@172.18.203.55>;tag=00120193edac001a263036ff-481c940a
To: <sip:2050@172.18.203.55>;tag=b9c8b19b-c709-4d85-86d4-d2f557c6c2a6-30679767
Date: Wed, 12 Jul 2006 19:25:19 GMT
Call-ID: 00120193-edac000d-5efda125-51bdf98a@172.18.203.46
CSeq: 101 INVITE
Allow: INVITE, OPTIONS, INFO, BYE, CANCEL, ACK, PRACK, UPDATE, REFER, SUBSCRIBE, NOTIFY
Allow-Events: presence
Remote-Party-ID: "SIP Line 2050" <sip:2050@172.18.203.55>;party=called;screen=yes;privacy=off
Contact: <sip:2050@172.18.203.55:5060>
Content-Type: application/sdp
Content-Length: 214
```

```
v=0
o=CiscoSystemsCCM-SIP 2000 1 IN IP4 172.18.203.55
s=SIP Call
c=IN IP4 172.18.203.51
t=0 0
m=audio 21822 RTP/AVP 0 101
a=rtpmap:0 PCMU/8000
a=ptime:20
a=rtpmap:101 telephone-event/8000
a=fmtp:101 0-15
```

[[diagram](#)] Call-ID: [[prev](#)] [[next](#)]

```
[15] SIP/2.0 200 OK
Via: SIP/2.0/UDP 172.18.203.55:5060;branch=z9hG4bK383c9b53
From: "SIP Line 2010" <sip:2010@172.18.203.55>;tag=b9c8b19b-c709-4d85-86d4-d2f557c6c2a6-30679768
To: <sip:2050@172.18.203.52>;tag=003094c3cd3a00175fa9924a-650cabfe
Call-ID: 263cbf00-4b514c9f-316-37cb12ac@172.18.203.55
CSeq: 101 CANCEL
Server: Cisco-CP7960G/7.5
Content-Length: 0
```

[[diagram](#)] Call-ID: [[prev](#)] [[next](#)]

```
[16] SIP/2.0 487 Request Cancelled
Via: SIP/2.0/UDP 172.18.203.55:5060;branch=z9hG4bK383c9b53
From: "SIP Line 2010" <sip:2010@172.18.203.55>;tag=b9c8b19b-c709-4d85-86d4-d2f557c6c2a6-30679768
To: <sip:2050@172.18.203.52>;tag=003094c3cd3a00175fa9924a-650cabfe
Call-ID: 263cbf00-4b514c9f-316-37cb12ac@172.18.203.55
CSeq: 101 INVITE
Server: Cisco-CP7960G/7.5
Contact: <sip:2050@172.18.203.52:5060>
Allow: ACK,BYE,CANCEL,INVITE,NOTIFY,OPTIONS,REFER,REGISTER,UPDATE
Remote-Party-ID: "2050" <sip:2050@172.18.203.52>;party=called;id-type=subscriber;privacy=off;screen=yes
Content-Length: 0
```

[[diagram](#)] Call-ID: [[prev](#)] [[next](#)]

```
[17] ACK sip:2050@172.18.203.52:5060 SIP/2.0
Via: SIP/2.0/UDP 172.18.203.55:5060;branch=z9hG4bK383c9b53
From: "SIP Line 2010" <sip:2010@172.18.203.55>;tag=b9c8b19b-c709-4d85-86d4-d2f557c6c2a6-30679768
To: <sip:2050@172.18.203.52>;tag=003094c3cd3a00175fa9924a-650cabfe
Date: Wed, 12 Jul 2006 19:25:19 GMT
Call-ID: 263cbf00-4b514c9f-316-37cb12ac@172.18.203.55
Max-Forwards: 70
CSeq: 101 ACK
Allow-Events: presence
Content-Length: 0
```

[[diagram](#)] Call-ID: [[prev](#)] [[next](#)]

```
[18] ACK sip:2050@172.18.203.55:5060 SIP/2.0
Via: SIP/2.0/UDP 172.18.203.46:5060;branch=z9hG4bK02163534
From: "2010" <sip:2010@172.18.203.55>;tag=00120193edac001a263036ff-481c940a
To: <sip:2050@172.18.203.55>;tag=b9c8b19b-c709-4d85-86d4-d2f557c6c2a6-30679767
Call-ID: 00120193-edac000d-5efda125-51bdf98a@172.18.203.46
Max-Forwards: 70
CSeq: 101 ACK
User-Agent: Cisco-CP7960G/7.5
Remote-Party-ID: "2010" <sip:2010@172.18.203.46>;party=calling;id-type=subscriber;privacy=off;screen=yes
Content-Length: 0
```

[[diagram](#)] Call-ID: [[prev](#)] [[next](#)]

```
[19] BYE sip:2050@172.18.203.55:5060 SIP/2.0
```

Via: SIP/2.0/UDP 172.18.203.46:5060;branch=z9hG4bK05be3753  
 From: "2010" <sip:2010@172.18.203.55>;tag=00120193edac001a263036ff-481c940a  
 To: <sip:2050@172.18.203.55>;tag=b9c8b19b-c709-4d85-86d4-d2f557c6c2a6-30679767  
 Call-ID: 00120193-edac000d-5efda125-51bdf98a@172.18.203.46  
 Max-Forwards: 70  
 CSeq: 102 BYE  
 User-Agent: Cisco-CP7960G/7.5  
 Content-Length: 0

[\[diagram\]](#) Call-ID: [\[prev\]](#) [\[next\]](#)

[20] BYE sip:2050@172.18.203.51:5060 SIP/2.0

Via: SIP/2.0/UDP 172.18.203.55:5060;branch=z9hG4bK2bc84dbd  
 From: "SIP Line 2010" <sip:2010@172.18.203.55>;tag=b9c8b19b-c709-4d85-86d4-d2f557c6c2a6-30679768  
 To: <sip:2050@172.18.203.51>;tag=000d280821a50094274776d7-06da08dd  
 Date: Wed, 12 Jul 2006 19:25:19 GMT  
 Call-ID: 263cbf00-4b514c9f-315-37cb12ac@172.18.203.55  
 User-Agent: Cisco-CCM5.0  
 Max-Forwards: 70  
 CSeq: 102 BYE  
 Content-Length: 0

[\[diagram\]](#) Call-ID: [\[prev\]](#) [\[next\]](#)

[21] SIP/2.0 200 OK

Via: SIP/2.0/UDP 172.18.203.46:5060;branch=z9hG4bK05be3753  
 From: "2010" <sip:2010@172.18.203.55>;tag=00120193edac001a263036ff-481c940a  
 To: <sip:2050@172.18.203.55>;tag=b9c8b19b-c709-4d85-86d4-d2f557c6c2a6-30679767  
 Date: Wed, 12 Jul 2006 19:25:24 GMT  
 Call-ID: 00120193-edac000d-5efda125-51bdf98a@172.18.203.46  
 CSeq: 102 BYE  
 Content-Length: 0

[\[diagram\]](#) Call-ID: [\[prev\]](#) [\[next\]](#)

[22] SIP/2.0 200 OK

Via: SIP/2.0/UDP 172.18.203.55:5060;branch=z9hG4bK2bc84dbd  
 From: "SIP Line 2010" <sip:2010@172.18.203.55>;tag=b9c8b19b-c709-4d85-86d4-d2f557c6c2a6-30679768  
 To: <sip:2050@172.18.203.51>;tag=000d280821a50094274776d7-06da08dd  
 Call-ID: 263cbf00-4b514c9f-315-37cb12ac@172.18.203.55  
 Date: Wed, 12 Jul 2006 19:25:24 GMT  
 CSeq: 102 BYE  
 Server: Cisco-CP7960G/7.5  
 Content-Length: 0

## 8. Distinctive\_Ringing

### 8.1 Alert Info - Internal

Title: Alert Info - Internal

Description:

SIP 7960 phone calls a SIP 7960 phone.

Configuration:

Node = CCM, IP = 172.18.203.55

Phone = F, Line = 2005, IP = 172.18.203.45, Model = SIP 7960

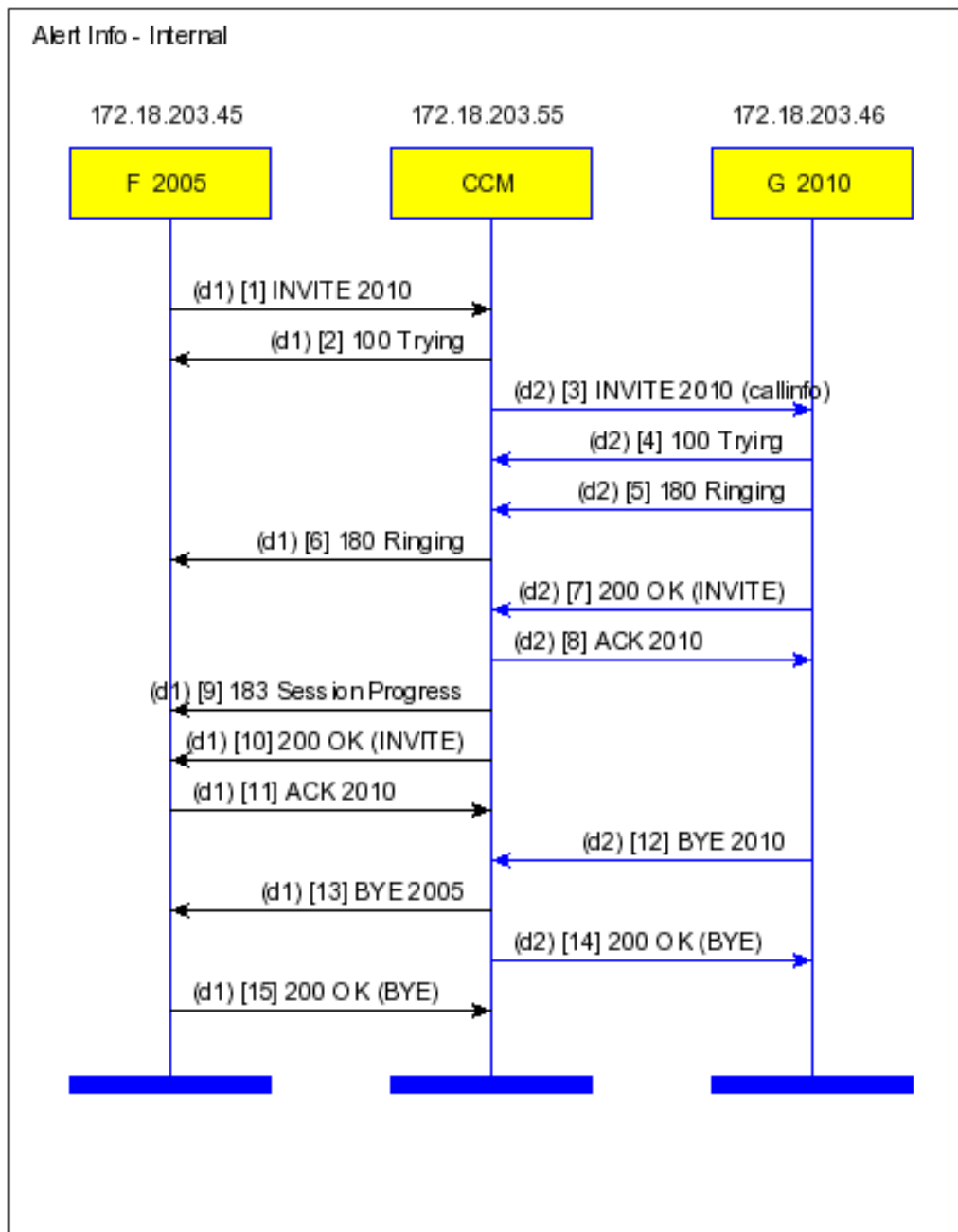
Phone = G, Line = 2010, IP = 172.18.203.46, Model = SIP 7960

Scenario:

2005 calls 2010

2010 answers the call

2010 goes onhook



[[diagram](#)]    Call-ID: [[prev](#)] [[next](#)]  
**[1] INVITE sip:2010@sipsig-ccm55 SIP/2.0**  
 Via: SIP/2.0/UDP 172.18.203.45:5060;branch=z9hG4bK14997ee7  
 From: "SIP Line 2005" <sip:2005@sipsig-ccm55>;tag=00120193edaa06d805b8945b-1b5c3dfd  
 To: <sip:2010@sipsig-ccm55>  
 Call-ID: 00120193-edaa00a0-23bc2b54-56bfa827@172.18.203.45  
 Max-Forwards: 70  
 CSeq: 101 INVITE  
 User-Agent: Cisco-CP7960G/8.0  
 Contact: <sip:2005@172.18.203.45:5060;transport=udp>  
 Expires: 180  
 Accept: application/sdp  
 Allow: ACK,BYE,CANCEL,INVITE,NOTIFY,OPTIONS,REFER,REGISTER,UPDATE  
 Remote-Party-ID: "SIP Line 2005" <sip:2005@sipsig-ccm55>;party=calling;id-type=subscriber;privacy=off;screen=yes  
 Content-Length: 275  
 Content-Type: application/sdp  
 Content-Disposition: session;handling=optional

v=0  
 o=Cisco-SIPUA 28183 0 IN IP4 172.18.203.45  
 s=SIP Call  
 t=0 0  
 m=audio 18702 RTP/AVP 0 8 18 101  
 c=IN IP4 172.18.203.45  
 a=rtpmap:0 PCMU/8000  
 a=rtpmap:8 PCMA/8000  
 a=rtpmap:18 G729/0  
 a=fmtp:18 annexb=no  
 a=rtpmap:101 telephone-event/8000  
 a=fmtp:101 0-15  
 a=sendrecv

[[diagram](#)]    Call-ID: [[prev](#)] [[next](#)]  
**[2] SIP/2.0 100 Trying**  
 Via: SIP/2.0/UDP 172.18.203.45:5060;branch=z9hG4bK14997ee7  
 From: "SIP Line 2005" <sip:2005@sipsig-ccm55>;tag=00120193edaa06d805b8945b-1b5c3dfd  
 To: <sip:2010@sipsig-ccm55>  
 Date: Thu, 17 Aug 2006 18:27:06 GMT  
 Call-ID: 00120193-edaa00a0-23bc2b54-56bfa827@172.18.203.45  
 CSeq: 101 INVITE  
 Allow-Events: presence  
 Content-Length: 0

[[diagram](#)]    Call-ID: [[prev](#)] [[next](#)]  
**[3] INVITE sip:2010@172.18.203.46:5060 SIP/2.0**  
 Via: SIP/2.0/UDP 172.18.203.55:5060;branch=z9hG4bK50df85c8  
 Remote-Party-ID: "SIP Line 2005" <sip:2005@172.18.203.55>;party=calling;screen=yes;privacy=off  
 From: "SIP Line 2005" <sip:2005@172.18.203.55>;tag=b9c8b19b-c709-4d85-86d4-d2f557c6c2a6-26395830  
 To: <sip:2010@172.18.203.46>  
 Date: Thu, 17 Aug 2006 18:27:06 GMT  
 Call-ID: fb1e3e80-4e41b4fa-19-37cb12ac@172.18.203.55  
 Supported: timer,replaces  
 Min-SE: 1800  
 User-Agent: Cisco-CCM5.0  
 Allow: INVITE, OPTIONS, INFO, BYE, CANCEL, ACK, PRACK, UPDATE, REFER, SUBSCRIBE, NOTIFY  
 CSeq: 101 INVITE  
 Expires: 180  
 Allow-Events: presence  
 Call-Info: <urn:x-cisco-remotecc:callinfo>; security= NotAuthenticated; orientation= from; call-instance= 1  
 Alert-Info: <file://Bellcore-dr1/>  
 Contact: <sip:2010@172.18.203.55:5060>  
 Max-Forwards: 69  
 Content-Length: 0

[[diagram](#)]    Call-ID: [[prev](#)] [[next](#)]  
**[4] SIP/2.0 100 Trying**  
 Via: SIP/2.0/UDP 172.18.203.55:5060;branch=z9hG4bK50df85c8  
 From: "SIP Line 2005" <sip:2005@172.18.203.55>;tag=b9c8b19b-c709-4d85-86d4-d2f557c6c2a6-26395830  
 To: <sip:2010@172.18.203.46>  
 Call-ID: fb1e3e80-4e41b4fa-19-37cb12ac@172.18.203.55  
 CSeq: 101 INVITE  
 Server: Cisco-CP7960G/8.0  
 Contact: <sip:2010@172.18.203.46:5060;transport=udp>  
 Allow: ACK,BYE,CANCEL,INVITE,NOTIFY,OPTIONS,REFER,REGISTER,UPDATE  
 Remote-Party-ID: "SIP Line 2010" <sip:2010@sipsig-ccm55>;party=called;id-type=subscriber;privacy=off;screen=yes  
 Content-Length: 0

[\[diagram\]](#) Call-ID: [\[prev\]](#) [\[next\]](#)

**[5] SIP/2.0 180 Ringing**

Via: SIP/2.0/UDP 172.18.203.55:5060;branch=z9hG4bK50df85c8  
 From: "SIP Line 2005" <sip:2005@172.18.203.55>;tag=b9c8b19b-c709-4d85-86d4-d2f557c6c2a6-26395830  
 To: <sip:2010@172.18.203.46>;tag=00120193edac064d72e3eadd-2a3968ed  
 Call-ID: fb1e3e80-4e41b4fa-19-37cb12ac@172.18.203.55  
 CSeq: 101 INVITE  
 Server: Cisco-CP7960G/8.0  
 Contact: <sip:2010@172.18.203.46:5060;transport=udp>  
 Allow: ACK,BYE,CANCEL,INVITE,NOTIFY,OPTIONS,REFER,REGISTER,UPDATE  
 Remote-Party-ID: "SIP Line 2010" <sip:2010@sipsig-ccm55>;party=called;id-type=subscriber;privacy=off;screen=yes  
 Content-Length: 0

[\[diagram\]](#) Call-ID: [\[prev\]](#) [\[next\]](#)

**[6] SIP/2.0 180 Ringing**

Via: SIP/2.0/UDP 172.18.203.45:5060;branch=z9hG4bK14997ee7  
 From: "SIP Line 2005" <sip:2005@sipsig-ccm55>;tag=00120193edaa06d805b8945b-1b5c3dfd  
 To: <sip:2010@sipsig-ccm55>;tag=b9c8b19b-c709-4d85-86d4-d2f557c6c2a6-26395829  
 Date: Thu, 17 Aug 2006 18:27:06 GMT  
 Call-ID: 00120193-edaa00a0-23bc2b54-56bfa827@172.18.203.45  
 CSeq: 101 INVITE  
 Allow: INVITE, OPTIONS, INFO, BYE, CANCEL, ACK, PRACK, UPDATE, REFER, SUBSCRIBE, NOTIFY  
 Allow-Events: presence  
 Remote-Party-ID: "SIP Alerting 2010" <sip:2010@172.18.203.55>;party=called;screen=yes;privacy=off  
 Contact: <sip:2010@172.18.203.55:5060>  
 Call-Info: <urn:x-cisco-remotecallinfo>; security= NotAuthenticated; orientation= to; ui-state= ringout;  
 call-instance= 1  
 Content-Length: 0

[\[diagram\]](#) Call-ID: [\[prev\]](#) [\[next\]](#)

**[7] SIP/2.0 200 OK**

Via: SIP/2.0/UDP 172.18.203.55:5060;branch=z9hG4bK50df85c8  
 From: "SIP Line 2005" <sip:2005@172.18.203.55>;tag=b9c8b19b-c709-4d85-86d4-d2f557c6c2a6-26395830  
 To: <sip:2010@172.18.203.46>;tag=00120193edac064d72e3eadd-2a3968ed  
 Call-ID: fb1e3e80-4e41b4fa-19-37cb12ac@172.18.203.55  
 CSeq: 101 INVITE  
 Server: Cisco-CP7960G/8.0  
 Contact: <sip:2010@172.18.203.46:5060;transport=udp>  
 Allow: ACK,BYE,CANCEL,INVITE,NOTIFY,OPTIONS,REFER,REGISTER,UPDATE  
 Remote-Party-ID: "SIP Line 2010" <sip:2010@sipsig-ccm55>;party=called;id-type=subscriber;privacy=off;screen=yes  
 Content-Length: 275  
 Content-Type: application/sdp  
 Content-Disposition: session;handling=optional

v=0  
 o=Cisco-SIPUA 20571 0 IN IP4 172.18.203.46  
 s=SIP Call  
 t=0 0  
 m=audio 23510 RTP/AVP 0 8 18 101  
 c=IN IP4 172.18.203.46  
 a=rtpmap:0 PCMU/8000  
 a=rtpmap:8 PCMA/8000  
 a=rtpmap:18 G729/0  
 a=fmtp:18 annexb=no  
 a=rtpmap:101 telephone-event/8000  
 a=fmtp:101 0-15  
 a=sendrecv

[\[diagram\]](#) Call-ID: [\[prev\]](#) [\[next\]](#)

**[8] ACK sip:2010@172.18.203.46:5060;transport=udp SIP/2.0**

Via: SIP/2.0/UDP 172.18.203.55:5060;branch=z9hG4bK22e6abd6  
 From: "SIP Line 2005" <sip:2005@172.18.203.55>;tag=b9c8b19b-c709-4d85-86d4-d2f557c6c2a6-26395830  
 To: <sip:2010@172.18.203.46>;tag=00120193edac064d72e3eadd-2a3968ed  
 Date: Thu, 17 Aug 2006 18:27:06 GMT  
 Call-ID: fb1e3e80-4e41b4fa-19-37cb12ac@172.18.203.55  
 Max-Forwards: 70  
 CSeq: 101 ACK  
 Allow-Events: presence  
 Content-Type: application/sdp  
 Content-Length: 214

v=0  
 o=CiscoSystemsCCM-SIP 2000 1 IN IP4 172.18.203.55  
 s=SIP Call  
 c=IN IP4 172.18.203.45  
 t=0 0  
 m=audio 18702 RTP/AVP 0 101  
 a=rtpmap:0 PCMU/8000

```
a=ptime:20
a=rtpmap:101 telephone-event/8000
a=fmtp:101 0-15
```

[[diagram](#)] Call-ID: [[prev](#)] [[next](#)]

#### [9] SIP/2.0 183 Session Progress

```
Via: SIP/2.0/UDP 172.18.203.45:5060;branch=z9hG4bK14997ee7
From: "SIP Line 2005" <sip:2005@sipsig-ccm55>;tag=00120193edaa06d805b8945b-1b5c3dfd
To: <sip:2010@sipsig-ccm55>;tag=b9c8b19b-c709-4d85-86d4-d2f557c6c2a6-26395829
Date: Thu, 17 Aug 2006 18:27:06 GMT
Call-ID: 00120193-edaa00a0-23bc2b54-56bfa827@172.18.203.45
CSeq: 101 INVITE
Allow: INVITE, OPTIONS, INFO, BYE, CANCEL, ACK, PRACK, UPDATE, REFER, SUBSCRIBE, NOTIFY
Allow-Events: presence
Remote-Party-ID: "SIP Alerting 2010" <sip:2010@172.18.203.55>;party=called;screen=yes;privacy=off
Contact: <sip:2010@172.18.203.55:5060>
Call-Info: <urn:x-cisco-remotecc:callinfo>; security= NotAuthenticated; orientation= to; ui-state= ringout;
call-instance= 1
Content-Type: application/sdp
Content-Length: 214
```

```
v=0
o=CiscoSystemsCCM-SIP 2000 1 IN IP4 172.18.203.55
s=SIP Call
c=IN IP4 172.18.203.46
t=0 0
m=audio 23510 RTP/AVP 0 101
a=rtpmap:0 PCMU/8000
a=ptime:20
a=rtpmap:101 telephone-event/8000
a=fmtp:101 0-15
```

[[diagram](#)] Call-ID: [[prev](#)] [[next](#)]

#### [10] SIP/2.0 200 OK

```
Via: SIP/2.0/UDP 172.18.203.45:5060;branch=z9hG4bK14997ee7
From: "SIP Line 2005" <sip:2005@sipsig-ccm55>;tag=00120193edaa06d805b8945b-1b5c3dfd
To: <sip:2010@sipsig-ccm55>;tag=b9c8b19b-c709-4d85-86d4-d2f557c6c2a6-26395829
Date: Thu, 17 Aug 2006 18:27:06 GMT
Call-ID: 00120193-edaa00a0-23bc2b54-56bfa827@172.18.203.45
CSeq: 101 INVITE
Allow: INVITE, OPTIONS, INFO, BYE, CANCEL, ACK, PRACK, UPDATE, REFER, SUBSCRIBE, NOTIFY
Allow-Events: presence
Remote-Party-ID: "SIP Line 2010" <sip:2010@172.18.203.55>;party=called;screen=yes;privacy=off
Contact: <sip:2010@172.18.203.55:5060>
Call-Info: <urn:x-cisco-remotecc:callinfo>; security= NotAuthenticated; orientation= to; call-instance= 1
Content-Type: application/sdp
Content-Length: 214
```

```
v=0
o=CiscoSystemsCCM-SIP 2000 1 IN IP4 172.18.203.55
s=SIP Call
c=IN IP4 172.18.203.46
t=0 0
m=audio 23510 RTP/AVP 0 101
a=rtpmap:0 PCMU/8000
a=ptime:20
a=rtpmap:101 telephone-event/8000
a=fmtp:101 0-15
```

[[diagram](#)] Call-ID: [[prev](#)] [[next](#)]

#### [11] ACK sip:2010@172.18.203.55:5060 SIP/2.0

```
Via: SIP/2.0/UDP 172.18.203.45:5060;branch=z9hG4bK45575618
From: "SIP Line 2005" <sip:2005@sipsig-ccm55>;tag=00120193edaa06d805b8945b-1b5c3dfd
To: <sip:2010@sipsig-ccm55>;tag=b9c8b19b-c709-4d85-86d4-d2f557c6c2a6-26395829
Call-ID: 00120193-edaa00a0-23bc2b54-56bfa827@172.18.203.45
Max-Forwards: 70
CSeq: 101 ACK
User-Agent: Cisco-CP7960G/8.0
Remote-Party-ID: "SIP Line 2005" <sip:2005@sipsig-ccm55>;party=calling;id-
type=subscriber;privacy=off;screen=yes
Content-Length: 0
```

[[diagram](#)] Call-ID: [[prev](#)] [[next](#)]

#### [12] BYE sip:2010@172.18.203.55:5060 SIP/2.0

```
Via: SIP/2.0/UDP 172.18.203.46:5060;branch=z9hG4bK1ec09199
From: <sip:2010@172.18.203.46>;tag=00120193edac064d72e3eadd-2a3968ed
To: "SIP Line 2005" <sip:2005@172.18.203.55>;tag=b9c8b19b-c709-4d85-86d4-d2f557c6c2a6-26395830
Call-ID: fb1e3e80-4e41b4fa-19-37cb12ac@172.18.203.55
Max-Forwards: 70
CSeq: 101 BYE
```

User-Agent: Cisco-CP7960G/8.0  
Content-Length: 0

[\[diagram\]](#) Call-ID: [\[prev\]](#) [\[next\]](#)

[13] BYE sip:2005@172.18.203.45:5060;transport=udp SIP/2.0

Via: SIP/2.0/UDP 172.18.203.55:5060;branch=z9hG4bK2217d5b3

From: <sip:2010@sipsig-ccm55>;tag=b9c8b19b-c709-4d85-86d4-d2f557c6c2a6-26395829

To: "SIP Line 2005" <sip:2005@sipsig-ccm55>;tag=00120193edaa06d805b8945b-1b5c3dfd

Date: Thu, 17 Aug 2006 18:27:08 GMT

Call-ID: 00120193-edaa00a0-23bc2b54-56bfa827@172.18.203.45

User-Agent: Cisco-CCM5.0

Max-Forwards: 70

CSeq: 101 BYE

Content-Length: 0

[\[diagram\]](#) Call-ID: [\[prev\]](#) [\[next\]](#)

[14] SIP/2.0 200 OK

Via: SIP/2.0/UDP 172.18.203.46:5060;branch=z9hG4bK1ec09199

From: <sip:2010@172.18.203.46>;tag=00120193edac064d72e3eadd-2a3968ed

To: "SIP Line 2005" <sip:2005@172.18.203.55>;tag=b9c8b19b-c709-4d85-86d4-d2f557c6c2a6-26395830

Date: Thu, 17 Aug 2006 18:27:13 GMT

Call-ID: fb1e3e80-4e41b4fa-19-37cb12ac@172.18.203.55

CSeq: 101 BYE

Content-Length: 0

[\[diagram\]](#) Call-ID: [\[prev\]](#) [\[next\]](#)

[15] SIP/2.0 200 OK

Via: SIP/2.0/UDP 172.18.203.55:5060;branch=z9hG4bK2217d5b3

From: <sip:2010@sipsig-ccm55>;tag=b9c8b19b-c709-4d85-86d4-d2f557c6c2a6-26395829

To: "SIP Line 2005" <sip:2005@sipsig-ccm55>;tag=00120193edaa06d805b8945b-1b5c3dfd

Call-ID: 00120193-edaa00a0-23bc2b54-56bfa827@172.18.203.45

CSeq: 101 BYE

Server: Cisco-CP7960G/8.0

Content-Length: 0

## 8.2 Alert Info - External

Title: Alert Info - External

### Description:

A phone from another cluster calls a SIP 7960 phone over a SIP-ICT trunk.

### Configuration:

Node = CCM, IP = 172.18.203.55

Node = CCM2, IP = 172.18.203.37

Phone = G, Line = 2010, IP = 172.18.203.46, Model = SIP 7960

Phone = X, Line = 1100, IP = 172.18.203.36, Model = SCCP

SIP-ICT trunk configured

### Scenario:

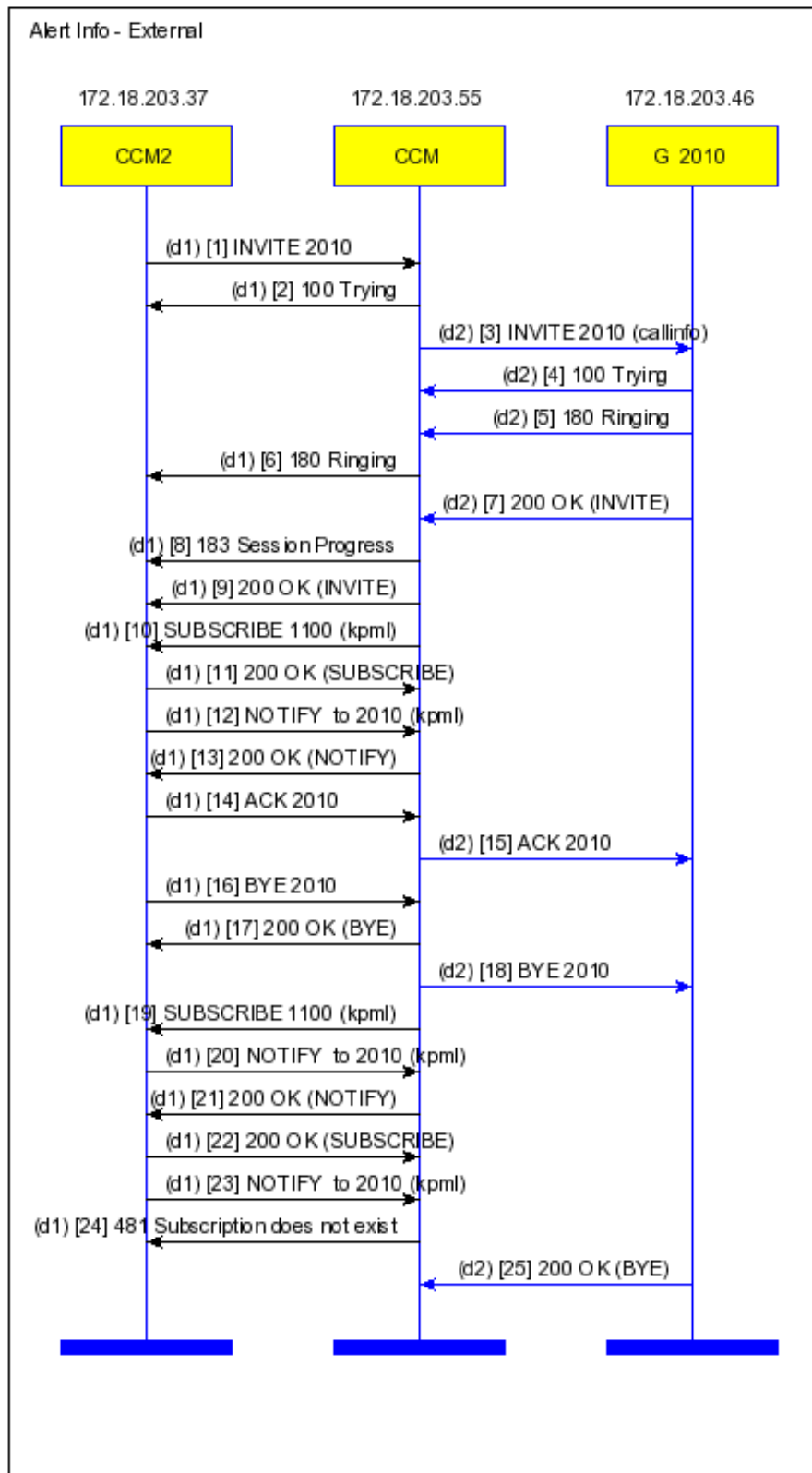
1100 calls 2010

Call arrives over a SIP-ICT trunk

2010 rings

2010 answers

1100 goes onhook



[[diagram](#)] [Call-ID: \[prev\]](#) [[next](#)]  
**[1] INVITE sip:2010@172.18.203.55:5060 SIP/2.0**  
 Via: SIP/2.0/TCP 172.18.203.37;branch=z9hG4bKfc50c4b  
 Remote-Party-ID: "SCCP Line 1100" <sip:1100@172.18.203.37>;party=calling;screen=yes;privacy=off  
 From: "SCCP Line 1100" <sip:1100@172.18.203.37>;tag=e8c235f6-d2b9-4fd9-8f46-3f298e346dfe-26396258  
 To: <sip:2010@172.18.203.55>  
 Date: Thu, 17 Aug 2006 18:29:39 GMT  
 Call-ID: 56503100-4e41b593-d9-25cb12ac@172.18.203.37  
 Supported: timer,replaces  
 Min-SE: 1800  
 User-Agent: Cisco-CCM5.0  
 Allow: INVITE, OPTIONS, INFO, BYE, CANCEL, ACK, PRACK, UPDATE, REFER, SUBSCRIBE, NOTIFY  
 CSeq: 101 INVITE  
 Contact: <sip:1100@172.18.203.37:5060;transport=tcp>  
 Expires: 180  
 Allow-Events: presence, kpml  
 Call-Info: <sip:172.18.203.37:5060>;method="NOTIFY;Event=telephone-event;Duration=500"  
 Session-Expires: 1800  
 Max-Forwards: 70  
 Content-Length: 0

[[diagram](#)] [Call-ID: \[prev\]](#) [[next](#)]  
**[2] SIP/2.0 100 Trying**  
 Via: SIP/2.0/TCP 172.18.203.37;branch=z9hG4bKfc50c4b  
 From: "SCCP Line 1100" <sip:1100@172.18.203.37>;tag=e8c235f6-d2b9-4fd9-8f46-3f298e346dfe-26396258  
 To: <sip:2010@172.18.203.55>  
 Date: Thu, 17 Aug 2006 18:29:39 GMT  
 Call-ID: 56503100-4e41b593-d9-25cb12ac@172.18.203.37  
 CSeq: 101 INVITE  
 Allow-Events: presence  
 Content-Length: 0

[[diagram](#)] [Call-ID: \[prev\]](#) [[next](#)]  
**[3] INVITE sip:2010@172.18.203.46:5060 SIP/2.0**  
 Via: SIP/2.0/UDP 172.18.203.55:5060;branch=z9hG4bK5fe6f6ad  
 Remote-Party-ID: "SCCP Line 1100" <sip:1100@172.18.203.55>;party=calling;screen=yes;privacy=off  
 From: "SCCP Line 1100" <sip:1100@172.18.203.55>;tag=b9c8b19b-c709-4d85-86d4-d2f557c6c2a6-26395832  
 To: <sip:2010@172.18.203.46>  
 Date: Thu, 17 Aug 2006 18:29:39 GMT  
 Call-ID: 56503100-4e41b593-1d-37cb12ac@172.18.203.55  
 Supported: timer,replaces  
 Min-SE: 1800  
 User-Agent: Cisco-CCM5.0  
 Allow: INVITE, OPTIONS, INFO, BYE, CANCEL, ACK, PRACK, UPDATE, REFER, SUBSCRIBE, NOTIFY  
 CSeq: 101 INVITE  
 Expires: 180  
 Allow-Events: presence  
 Call-Info: <urn:x-cisco-remotecc:callinfo>; security= NotAuthenticated; orientation= from; call-instance= 1  
 Alert-Info: <file://Bellcore-dr2/>  
 Contact: <sip:2010@172.18.203.55:5060>  
 Max-Forwards: 69  
 Content-Length: 0

[[diagram](#)] [Call-ID: \[prev\]](#) [[next](#)]  
**[4] SIP/2.0 100 Trying**  
 Via: SIP/2.0/UDP 172.18.203.55:5060;branch=z9hG4bK5fe6f6ad  
 From: "SCCP Line 1100" <sip:1100@172.18.203.55>;tag=b9c8b19b-c709-4d85-86d4-d2f557c6c2a6-26395832  
 To: <sip:2010@172.18.203.46>  
 Call-ID: 56503100-4e41b593-1d-37cb12ac@172.18.203.55  
 CSeq: 101 INVITE  
 Server: Cisco-CP7960G/8.0  
 Contact: <sip:2010@172.18.203.46:5060;transport=udp>  
 Allow: ACK,BYE,CANCEL,INVITE,NOTIFY,OPTIONS,REFER,REGISTER,UPDATE  
 Remote-Party-ID: "SIP Line 2010" <sip:2010@sipsig-ccm55>;party=called;id-type=subscriber;privacy=off;screen=yes  
 Content-Length: 0

[[diagram](#)] [Call-ID: \[prev\]](#) [[next](#)]  
**[5] SIP/2.0 180 Ringing**  
 Via: SIP/2.0/UDP 172.18.203.55:5060;branch=z9hG4bK5fe6f6ad  
 From: "SCCP Line 1100" <sip:1100@172.18.203.55>;tag=b9c8b19b-c709-4d85-86d4-d2f557c6c2a6-26395832  
 To: <sip:2010@172.18.203.46>;tag=00120193edac064f796ea2d0-2a1e8c73  
 Call-ID: 56503100-4e41b593-1d-37cb12ac@172.18.203.55  
 CSeq: 101 INVITE  
 Server: Cisco-CP7960G/8.0  
 Contact: <sip:2010@172.18.203.46:5060;transport=udp>  
 Allow: ACK,BYE,CANCEL,INVITE,NOTIFY,OPTIONS,REFER,REGISTER,UPDATE  
 Remote-Party-ID: "SIP Line 2010" <sip:2010@sipsig-ccm55>;party=called;id-type=subscriber;privacy=off;screen=yes  
 Content-Length: 0

[\[diagram\]](#) Call-ID: [\[prev\]](#) [\[next\]](#)

#### [6] SIP/2.0 180 Ringing

Via: SIP/2.0/TCP 172.18.203.37;branch=z9hG4bKfc50c4b  
 From: "SCCP Line 1100" <sip:1100@172.18.203.37>;tag=e8c235f6-d2b9-4fd9-8f46-3f298e346dfe-26396258  
 To: <sip:2010@172.18.203.55>;tag=b9c8b19b-c709-4d85-86d4-d2f557c6c2a6-26395831  
 Date: Thu, 17 Aug 2006 18:29:39 GMT  
 Call-ID: 56503100-4e41b593-d9-25cb12ac@172.18.203.37  
 CSeq: 101 INVITE  
 Allow: INVITE, OPTIONS, INFO, BYE, CANCEL, ACK, PRACK, UPDATE, REFER, SUBSCRIBE, NOTIFY  
 Allow-Events: presence  
 Remote-Party-ID: "SIP Alerting 2010" <sip:2010@172.18.203.55>;party=called;screen=yes;privacy=off  
 Contact: <sip:2010@172.18.203.55:5060;transport=tcp>  
 Content-Length: 0

[\[diagram\]](#) Call-ID: [\[prev\]](#) [\[next\]](#)

#### [7] SIP/2.0 200 OK

Via: SIP/2.0/UDP 172.18.203.55:5060;branch=z9hG4bK5fe6f6ad  
 From: "SCCP Line 1100" <sip:1100@172.18.203.55>;tag=b9c8b19b-c709-4d85-86d4-d2f557c6c2a6-26395832  
 To: <sip:2010@172.18.203.46>;tag=00120193edac064f796ea2d0-2a1e8c73  
 Call-ID: 56503100-4e41b593-1d-37cb12ac@172.18.203.55  
 CSeq: 101 INVITE  
 Server: Cisco-CP7960G/8.0  
 Contact: <sip:2010@172.18.203.46:5060;transport=udp>  
 Allow: ACK,BYE,CANCEL,INVITE,NOTIFY,OPTIONS,REFER,REGISTER,UPDATE  
 Remote-Party-ID: "SIP Line 2010" <sip:2010@sipsig-ccm55>;party=called;id-type=subscriber;privacy=off;screen=yes  
 Content-Length: 275  
 Content-Type: application/sdp  
 Content-Disposition: session;handling=optional

v=0  
 o=Cisco-SIPUA 16653 0 IN IP4 172.18.203.46  
 s=SIP Call  
 t=0 0  
 m=audio 28574 RTP/AVP 0 8 18 101  
 c=IN IP4 172.18.203.46  
 a=rtpmap:0 PCMU/8000  
 a=rtpmap:8 PCMA/8000  
 a=rtpmap:18 G729/0  
 a=fmtp:18 annexb=no  
 a=rtpmap:101 telephone-event/8000  
 a=fmtp:101 0-15  
 a=sendrecv

[\[diagram\]](#) Call-ID: [\[prev\]](#) [\[next\]](#)

#### [8] SIP/2.0 183 Session Progress

Via: SIP/2.0/TCP 172.18.203.37;branch=z9hG4bKfc50c4b  
 From: "SCCP Line 1100" <sip:1100@172.18.203.37>;tag=e8c235f6-d2b9-4fd9-8f46-3f298e346dfe-26396258  
 To: <sip:2010@172.18.203.55>;tag=b9c8b19b-c709-4d85-86d4-d2f557c6c2a6-26395831  
 Date: Thu, 17 Aug 2006 18:29:39 GMT  
 Call-ID: 56503100-4e41b593-d9-25cb12ac@172.18.203.37  
 CSeq: 101 INVITE  
 Allow: INVITE, OPTIONS, INFO, BYE, CANCEL, ACK, PRACK, UPDATE, REFER, SUBSCRIBE, NOTIFY  
 Allow-Events: presence  
 Remote-Party-ID: "SIP Alerting 2010" <sip:2010@172.18.203.55>;party=called;screen=yes;privacy=off  
 Contact: <sip:2010@172.18.203.55:5060;transport=tcp>  
 Content-Type: application/sdp  
 Content-Length: 309

v=0  
 o=CiscoSystemsCCM-SIP 2000 1 IN IP4 172.18.203.55  
 s=SIP Call  
 c=IN IP4 172.18.203.46  
 t=0 0  
 m=audio 28574 RTP/AVP 0 8 18 101  
 a=rtpmap:0 PCMU/8000  
 aptime:20  
 a=rtpmap:8 PCMA/8000  
 aptime:20  
 a=rtpmap:18 G729/8000  
 aptime:20  
 a=fmtp:18 annexb=no  
 a=rtpmap:101 telephone-event/8000  
 a=fmtp:101 0-15

[\[diagram\]](#) Call-ID: [\[prev\]](#) [\[next\]](#)

#### [9] SIP/2.0 200 OK

Via: SIP/2.0/TCP 172.18.203.37;branch=z9hG4bKfc50c4b  
 From: "SCCP Line 1100" <sip:1100@172.18.203.37>;tag=e8c235f6-d2b9-4fd9-8f46-3f298e346dfe-26396258

To: <sip:2010@172.18.203.55>;tag=b9c8b19b-c709-4d85-86d4-d2f557c6c2a6-26395831  
 Date: Thu, 17 Aug 2006 18:29:39 GMT  
 Call-ID: 56503100-4e41b593-d9-25cb12ac@172.18.203.37  
 CSeq: 101 INVITE  
 Allow: INVITE, OPTIONS, INFO, BYE, CANCEL, ACK, PRACK, UPDATE, REFER, SUBSCRIBE, NOTIFY  
 Allow-Events: presence  
 Remote-Party-ID: "SIP Line 2010" <sip:2010@172.18.203.55>;party=called;screen=yes;privacy=off  
 Contact: <sip:2010@172.18.203.55:5060;transport=tcp>  
 Session-Expires: 1800;refresher=uas  
 Require: timer  
 Content-Type: application/sdp  
 Content-Length: 309

v=0  
 o=CiscoSystemsCCM-SIP 2000 1 IN IP4 172.18.203.55  
 s=SIP Call  
 c=IN IP4 172.18.203.46  
 t=0 0  
 m=audio 28574 RTP/AVP 0 8 18 101  
 a=rtpmap:0 PCMU/8000  
 a=ptime:20  
 a=rtpmap:8 PCMA/8000  
 a=ptime:20  
 a=rtpmap:18 G729/8000  
 a=ptime:20  
 a=fmtp:18 annexb=no  
 a=rtpmap:101 telephone-event/8000  
 a=fmtp:101 0-15

[[diagram](#)] Call-ID: [[prev](#)] [[next](#)]  
**[10] SUBSCRIBE sip:1100@172.18.203.37:5060;transport=tcp SIP/2.0**  
 Via: SIP/2.0/TCP 172.18.203.55;branch=z9hG4bK35cbe0ac  
 From: <sip:2010@172.18.203.55>;tag=b9c8b19b-c709-4d85-86d4-d2f557c6c2a6-26395831  
 To: "SCCP Line 1100" <sip:1100@172.18.203.37>;tag=e8c235f6-d2b9-4fd9-8f46-3f298e346dfe-26396258  
 Call-ID: 56503100-4e41b593-d9-25cb12ac@172.18.203.37  
 CSeq: 101 SUBSCRIBE  
 Max-Forwards: 70  
 Date: Thu, 17 Aug 2006 18:29:41 GMT  
 User-Agent: Cisco-CCM5.0  
 Event: kpml  
 Expires: 7200  
 Contact: <sip:172.18.203.55:5060;transport=tcp>  
 Accept: application/kpml-response+xml  
 Content-Type: application/kpml-request+xml  
 Content-Length: 214

```
<?xml version="1.0" encoding="UTF-8" standalone="no" ?>
<kpml-request version="1.0">
```

```
  <pattern interdigittimer="7260000" persist="persist">
    <regex tag="dtmf">[x*#ABCD]</regex>
  </pattern>
```

```
</kpml-request>
```

[[diagram](#)] Call-ID: [[prev](#)] [[next](#)]  
**[11] SIP/2.0 200 OK**  
 Via: SIP/2.0/TCP 172.18.203.55;branch=z9hG4bK35cbe0ac  
 From: <sip:2010@172.18.203.55>;tag=b9c8b19b-c709-4d85-86d4-d2f557c6c2a6-26395831  
 To: "SCCP Line 1100" <sip:1100@172.18.203.37>;tag=e8c235f6-d2b9-4fd9-8f46-3f298e346dfe-26396258  
 Date: Thu, 17 Aug 2006 18:29:41 GMT  
 Call-ID: 56503100-4e41b593-d9-25cb12ac@172.18.203.37  
 CSeq: 101 SUBSCRIBE  
 Content-Length: 0  
 Contact: <sip:1100@172.18.203.37:5060;transport=tcp>  
 Expires: 3600

[[diagram](#)] Call-ID: [[prev](#)] [[next](#)]  
**[12] NOTIFY sip:172.18.203.55:5060;transport=tcp SIP/2.0**  
 Via: SIP/2.0/TCP 172.18.203.37;branch=z9hG4bK63499c8c  
 From: "SCCP Line 1100" <sip:1100@172.18.203.37>;tag=e8c235f6-d2b9-4fd9-8f46-3f298e346dfe-26396258  
 To: <sip:2010@172.18.203.55>;tag=b9c8b19b-c709-4d85-86d4-d2f557c6c2a6-26395831  
 Call-ID: 56503100-4e41b593-d9-25cb12ac@172.18.203.37  
 CSeq: 102 NOTIFY  
 Max-Forwards: 70  
 Date: Thu, 17 Aug 2006 18:29:41 GMT  
 User-Agent: Cisco-CCM5.0  
 Event: kpml  
 Subscription-State: active;expires=3600  
 Contact: <sip:1100@172.18.203.37:5060;transport=tcp>

Content-Length: 0

[\[diagram\]](#) Call-ID: [\[prev\]](#) [\[next\]](#)

[13] SIP/2.0 200 OK

Via: SIP/2.0/TCP 172.18.203.37;branch=z9hG4bK63499c8c  
 From: "SCCP Line 1100" <sip:1100@172.18.203.37>;tag=e8c235f6-d2b9-4fd9-8f46-3f298e346dfe-26396258  
 To: <sip:2010@172.18.203.55>;tag=b9c8b19b-c709-4d85-86d4-d2f557c6c2a6-26395831  
 Date: Thu, 17 Aug 2006 18:29:41 GMT  
 Call-ID: 56503100-4e41b593-d9-25cb12ac@172.18.203.37  
 CSeq: 102 NOTIFY  
 Content-Length: 0

[\[diagram\]](#) Call-ID: [\[prev\]](#) [\[next\]](#)

[14] ACK sip:2010@172.18.203.55:5060;transport=tcp SIP/2.0

Via: SIP/2.0/TCP 172.18.203.37;branch=z9hG4bKbd535ca  
 From: "SCCP Line 1100" <sip:1100@172.18.203.37>;tag=e8c235f6-d2b9-4fd9-8f46-3f298e346dfe-26396258  
 To: <sip:2010@172.18.203.55>;tag=b9c8b19b-c709-4d85-86d4-d2f557c6c2a6-26395831  
 Date: Thu, 17 Aug 2006 18:29:39 GMT  
 Call-ID: 56503100-4e41b593-d9-25cb12ac@172.18.203.37  
 Max-Forwards: 70  
 CSeq: 101 ACK  
 Allow-Events: presence, kpml  
 Content-Type: application/sdp  
 Content-Length: 214

v=0  
 o=CiscoSystemsCCM-SIP 2000 1 IN IP4 172.18.203.37  
 s=SIP Call  
 c=IN IP4 172.18.203.36  
 t=0 0  
 m=audio 31172 RTP/AVP 0 101  
 a=rtpmap:0 PCMU/8000  
 a=ptime:20  
 a=rtpmap:101 telephone-event/8000  
 a=fmtp:101 0-15

[\[diagram\]](#) Call-ID: [\[prev\]](#) [\[next\]](#)

[15] ACK sip:2010@172.18.203.46:5060;transport=udp SIP/2.0

Via: SIP/2.0/UDP 172.18.203.55:5060;branch=z9hG4bK1e09dcf8  
 From: "SCCP Line 1100" <sip:1100@172.18.203.55>;tag=b9c8b19b-c709-4d85-86d4-d2f557c6c2a6-26395832  
 To: <sip:2010@172.18.203.46>;tag=00120193edac064f796ea2d0-2a1e8c73  
 Date: Thu, 17 Aug 2006 18:29:39 GMT  
 Call-ID: 56503100-4e41b593-1d-37cb12ac@172.18.203.55  
 Max-Forwards: 70  
 CSeq: 101 ACK  
 Allow-Events: presence  
 Content-Type: application/sdp  
 Content-Length: 214

v=0  
 o=CiscoSystemsCCM-SIP 2000 1 IN IP4 172.18.203.55  
 s=SIP Call  
 c=IN IP4 172.18.203.36  
 t=0 0  
 m=audio 31172 RTP/AVP 0 101  
 a=rtpmap:0 PCMU/8000  
 a=ptime:20  
 a=rtpmap:101 telephone-event/8000  
 a=fmtp:101 0-15

[\[diagram\]](#) Call-ID: [\[prev\]](#) [\[next\]](#)

[16] BYE sip:2010@172.18.203.55:5060;transport=tcp SIP/2.0

Via: SIP/2.0/TCP 172.18.203.37;branch=z9hG4bK303de6f  
 From: "SCCP Line 1100" <sip:1100@172.18.203.37>;tag=e8c235f6-d2b9-4fd9-8f46-3f298e346dfe-26396258  
 To: <sip:2010@172.18.203.55>;tag=b9c8b19b-c709-4d85-86d4-d2f557c6c2a6-26395831  
 Date: Thu, 17 Aug 2006 18:29:39 GMT  
 Call-ID: 56503100-4e41b593-d9-25cb12ac@172.18.203.37  
 User-Agent: Cisco-CCM5.0  
 Max-Forwards: 70  
 CSeq: 103 BYE  
 Content-Length: 0

[\[diagram\]](#) Call-ID: [\[prev\]](#) [\[next\]](#)

[17] SIP/2.0 200 OK

Via: SIP/2.0/TCP 172.18.203.37;branch=z9hG4bK303de6f  
 From: "SCCP Line 1100" <sip:1100@172.18.203.37>;tag=e8c235f6-d2b9-4fd9-8f46-3f298e346dfe-26396258  
 To: <sip:2010@172.18.203.55>;tag=b9c8b19b-c709-4d85-86d4-d2f557c6c2a6-26395831  
 Date: Thu, 17 Aug 2006 18:29:44 GMT  
 Call-ID: 56503100-4e41b593-d9-25cb12ac@172.18.203.37  
 CSeq: 103 BYE

Content-Length: 0

[\[diagram\]](#) Call-ID: [\[prev\]](#) [\[next\]](#)

[18] **BYE sip:2010@172.18.203.46:5060;transport=udp SIP/2.0**

Via: SIP/2.0/UDP 172.18.203.55:5060;branch=z9hG4bK5264e6e6

From: "SCCP Line 1100" <sip:1100@172.18.203.55>;tag=b9c8b19b-c709-4d85-86d4-d2f557c6c2a6-26395832

To: <sip:2010@172.18.203.46>;tag=00120193edac064f796ea2d0-2a1e8c73

Date: Thu, 17 Aug 2006 18:29:39 GMT

Call-ID: 56503100-4e41b593-1d-37cb12ac@172.18.203.55

User-Agent: Cisco-CCM5.0

Max-Forwards: 70

CSeq: 102 BYE

Content-Length: 0

[\[diagram\]](#) Call-ID: [\[prev\]](#) [\[next\]](#)

[19] **SUBSCRIBE sip:1100@172.18.203.37:5060;transport=tcp SIP/2.0**

Via: SIP/2.0/TCP 172.18.203.55;branch=z9hG4bK45133f1a

From: <sip:2010@172.18.203.55>;tag=b9c8b19b-c709-4d85-86d4-d2f557c6c2a6-26395831

To: "SCCP Line 1100" <sip:1100@172.18.203.37>;tag=e8c235f6-d2b9-4fd9-8f46-3f298e346dfe-26396258

Call-ID: 56503100-4e41b593-d9-25cb12ac@172.18.203.37

CSeq: 102 SUBSCRIBE

Max-Forwards: 70

Date: Thu, 17 Aug 2006 18:29:44 GMT

User-Agent: Cisco-CCM5.0

Event: kpml

Expires: 0

Contact: <sip:172.18.203.55:5060;transport=tcp>

Content-Length: 0

[\[diagram\]](#) Call-ID: [\[prev\]](#) [\[next\]](#)

[20] **NOTIFY sip:172.18.203.55:5060;transport=tcp SIP/2.0**

Via: SIP/2.0/TCP 172.18.203.37;branch=z9hG4bK3c058a2b

From: "SCCP Line 1100" <sip:1100@172.18.203.37>;tag=e8c235f6-d2b9-4fd9-8f46-3f298e346dfe-26396258

To: <sip:2010@172.18.203.55>;tag=b9c8b19b-c709-4d85-86d4-d2f557c6c2a6-26395831

Call-ID: 56503100-4e41b593-d9-25cb12ac@172.18.203.37

CSeq: 104 NOTIFY

Max-Forwards: 70

Date: Thu, 17 Aug 2006 18:29:44 GMT

User-Agent: Cisco-CCM5.0

Event: kpml

Subscription-State: terminated

Contact: <sip:1100@172.18.203.37:5060;transport=tcp>

Content-Length: 0

[\[diagram\]](#) Call-ID: [\[prev\]](#) [\[next\]](#)

[21] **SIP/2.0 200 OK**

Via: SIP/2.0/TCP 172.18.203.37;branch=z9hG4bK3c058a2b

From: "SCCP Line 1100" <sip:1100@172.18.203.37>;tag=e8c235f6-d2b9-4fd9-8f46-3f298e346dfe-26396258

To: <sip:2010@172.18.203.55>;tag=b9c8b19b-c709-4d85-86d4-d2f557c6c2a6-26395831

Date: Thu, 17 Aug 2006 18:29:44 GMT

Call-ID: 56503100-4e41b593-d9-25cb12ac@172.18.203.37

CSeq: 104 NOTIFY

Content-Length: 0

[\[diagram\]](#) Call-ID: [\[prev\]](#) [\[next\]](#)

[22] **SIP/2.0 200 OK**

Via: SIP/2.0/TCP 172.18.203.55;branch=z9hG4bK45133f1a

From: <sip:2010@172.18.203.55>;tag=b9c8b19b-c709-4d85-86d4-d2f557c6c2a6-26395831

To: "SCCP Line 1100" <sip:1100@172.18.203.37>;tag=e8c235f6-d2b9-4fd9-8f46-3f298e346dfe-26396258

Date: Thu, 17 Aug 2006 18:29:44 GMT

Call-ID: 56503100-4e41b593-d9-25cb12ac@172.18.203.37

CSeq: 102 SUBSCRIBE

Content-Length: 0

Contact: <sip:1100@172.18.203.37:5060;transport=tcp>

Expires: 0

[\[diagram\]](#) Call-ID: [\[prev\]](#) [\[next\]](#)

[23] **NOTIFY sip:172.18.203.55:5060;transport=tcp SIP/2.0**

Via: SIP/2.0/TCP 172.18.203.37;branch=z9hG4bK7f5e93

From: "SCCP Line 1100" <sip:1100@172.18.203.37>;tag=e8c235f6-d2b9-4fd9-8f46-3f298e346dfe-26396258

To: <sip:2010@172.18.203.55>;tag=b9c8b19b-c709-4d85-86d4-d2f557c6c2a6-26395831

Call-ID: 56503100-4e41b593-d9-25cb12ac@172.18.203.37

CSeq: 105 NOTIFY

Max-Forwards: 70

Date: Thu, 17 Aug 2006 18:29:44 GMT

User-Agent: Cisco-CCM5.0

Event: kpml

Subscription-State: terminated;reason=timeout

Contact: <sip:1100@172.18.203.37:5060;transport=tcp>

Content-Type: application/kpml-response+xml

Content-Length: 189

```
<?xml version="1.0" encoding="UTF-8" standalone="no" ?>
<kpml-response code="487" digits="" forced_flush="false" suppressed="false" tag="dtmf" text="Subscription
Expired" version="1.0"/>
```

[\[diagram\]](#) Call-ID: [\[prev\]](#) [\[next\]](#)

**[24] SIP/2.0 481 Subscription does not exist**

Via: SIP/2.0/TCP 172.18.203.37;branch=z9hG4bKe7f5e93

From: "SCCP Line 1100" <sip:1100@172.18.203.37>;tag=e8c235f6-d2b9-4fd9-8f46-3f298e346dfe-26396258

To: <sip:2010@172.18.203.55>;tag=b9c8b19b-c709-4d85-86d4-d2f557c6c2a6-26395831

Date: Thu, 17 Aug 2006 18:29:44 GMT

Call-ID: 56503100-4e41b593-d9-25cb12ac@172.18.203.37

CSeq: 105 NOTIFY

Content-Length: 0

[\[diagram\]](#) Call-ID: [\[prev\]](#) [\[next\]](#)

**[25] SIP/2.0 200 OK**

Via: SIP/2.0/UDP 172.18.203.55:5060;branch=z9hG4bK5264e6e6

From: "SCCP Line 1100" <sip:1100@172.18.203.55>;tag=b9c8b19b-c709-4d85-86d4-d2f557c6c2a6-26395832

To: <sip:2010@172.18.203.46>;tag=00120193edac064f796ea2d0-2a1e8c73

Call-ID: 56503100-4e41b593-1d-37cb12ac@172.18.203.55

CSeq: 102 BYE

Server: Cisco-CP7960G/8.0

Content-Length: 0

## 9. Message\_Waiting\_Indicator

### 9.1 Message Waiting Indication On

Title: Message Waiting Indication On

Description:

Line 2005 on phone F has voicemail configured but no messages currently waiting and is configured via CCM for Call Forward All to voicemail.

Note phone F may have lines other than 2005. However this scenario focuses on Line 2005.

Line 2000 on phone A calls line 2005 on phone F and is forwarded to the voicemail server. The user at phone A leaves a message.

The voicemail server will inform CCM and CCM will inform phone F of the new message waiting on state.

Notice the "NOTIFY" sent to phone F with a "Messages-Waiting: yes" body.

Configuration:

Node = CCM, IP = 172.18.203.55

Phone = E, Line = 2000, IP = 172.18.203.44, Model = SIP 7960

Phone = F, Line = 2005, IP = 172.18.203.45, Model = SIP 7960

Node = Voicemail Server, IP = 172.18.203.82

Scenario:

2000 calls 2005

2005 does not ring

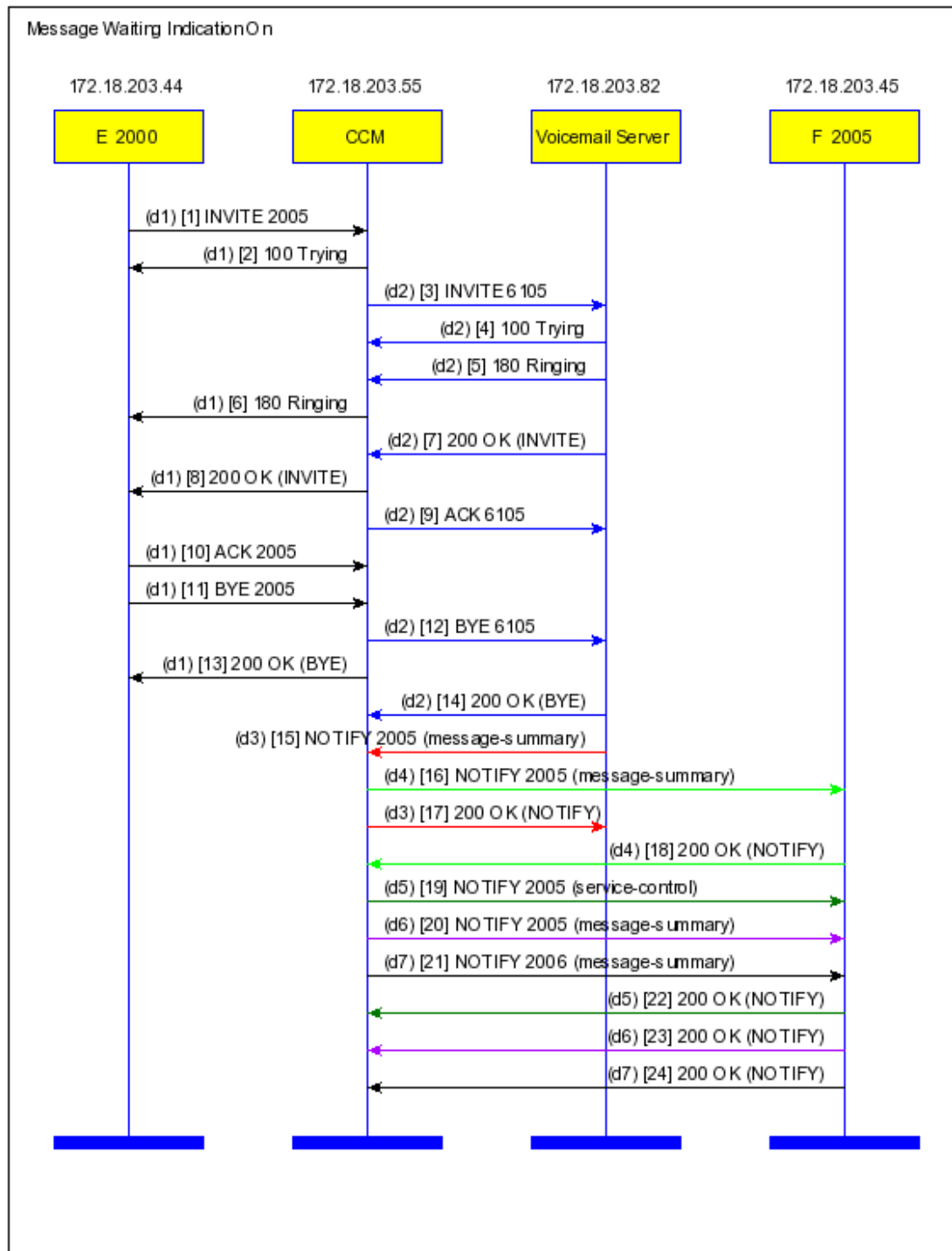
Voicemail server rings and answers

2000 leaves message

2000 goes onhook

Voicemail server notifies CCM of Phone F's MWI state

CCM notifies phone F of its MWI state



[[diagram](#)] [Call-ID: \[prev\]](#) [[next](#)]  
**[1] INVITE sip:2005@sipsig-ccm55 SIP/2.0**  
 Via: SIP/2.0/UDP 172.18.203.44:5060;branch=z9hG4bK2ae84bc2  
 From: "SIP Line 2000" <sip:2000@sipsig-ccm55>;tag=00120155627f230d2155fb26-40eb4e5f  
 To: <sip:2005@sipsig-ccm55>  
 Call-ID: 00120155-627f0257-0ee84d4d-26917440@172.18.203.44  
 Max-Forwards: 70  
 CSeq: 101 INVITE  
 User-Agent: Cisco-CP7960G/8.0  
 Contact: <sip:2000@172.18.203.44:5060;transport=udp>  
 Expires: 180  
 Accept: application/sdp  
 Allow: ACK,BYE,CANCEL,INVITE,NOTIFY,OPTIONS,REFER,REGISTER,UPDATE  
 Remote-Party-ID: "SIP Line 2000" <sip:2000@sipsig-ccm55>;party=calling;id-type=subscriber;privacy=off;screen=yes  
 Content-Length: 275  
 Content-Type: application/sdp  
 Content-Disposition: session;handling=optional

v=0  
 o=Cisco-SIPUA 16136 0 IN IP4 172.18.203.44  
 s=SIP Call  
 t=0 0  
 m=audio 19642 RTP/AVP 0 8 18 101  
 c=IN IP4 172.18.203.44  
 a=rtpmap:0 PCMU/8000  
 a=rtpmap:8 PCMA/8000  
 a=rtpmap:18 G729/0  
 a=fmtp:18 annexb=no  
 a=rtpmap:101 telephone-event/8000  
 a=fmtp:101 0-15  
 a=sendrecv

[[diagram](#)] [Call-ID: \[prev\]](#) [[next](#)]  
**[2] SIP/2.0 100 Trying**  
 Via: SIP/2.0/UDP 172.18.203.44:5060;branch=z9hG4bK2ae84bc2  
 From: "SIP Line 2000" <sip:2000@sipsig-ccm55>;tag=00120155627f230d2155fb26-40eb4e5f  
 To: <sip:2005@sipsig-ccm55>  
 Date: Tue, 15 Aug 2006 16:38:20 GMT  
 Call-ID: 00120155-627f0257-0ee84d4d-26917440@172.18.203.44  
 CSeq: 101 INVITE  
 Allow-Events: presence  
 Content-Length: 0

[[diagram](#)] [Call-ID: \[prev\]](#) [[next](#)]  
**[3] INVITE sip:6105@172.18.203.82:5090 SIP/2.0**  
 Via: SIP/2.0/TCP 172.18.203.55;branch=z9hG4bK4bb40509  
 Remote-Party-ID: "SIP Line 2000" <sip:2000@172.18.203.55>;party=calling;screen=yes;privacy=off  
 From: "SIP Line 2000" <sip:2000@172.18.203.55>;tag=b9c8b19b-c709-4d85-86d4-d2f557c6c2a6-25663736  
 To: <sip:6105@172.18.203.82>  
 Date: Tue, 15 Aug 2006 16:38:20 GMT  
 Call-ID: 747e2b80-4e11f87c-8e-37cb12ac@172.18.203.55  
 Supported: timer,replaces  
 Min-SE: 1800  
 User-Agent: Cisco-CCM5.0  
 Allow: INVITE, OPTIONS, INFO, BYE, CANCEL, ACK, PRACK, UPDATE, REFER, SUBSCRIBE, NOTIFY  
 CSeq: 101 INVITE  
 Contact: <sip:2000@172.18.203.55:5090;transport=tcp>  
 Expires: 180  
 Allow-Events: presence  
 Call-Info: <sip:172.18.203.55:5090>;method="NOTIFY;Event=telephone-event;Duration=500"  
 Session-Expires: 1800  
 Diversion: "SIP Line 2005" <sip:2005@172.18.203.55>;reason=unconditional;privacy=off;screen=yes  
 Max-Forwards: 69  
 Content-Length: 0

[[diagram](#)] [Call-ID: \[prev\]](#) [[next](#)]  
**[4] SIP/2.0 100 Trying**  
 From: "SIP Line 2000" <sip:2000@172.18.203.55>;tag=b9c8b19b-c709-4d85-86d4-d2f557c6c2a6-25663736  
 To: <sip:6105@172.18.203.82>;tag=152A8A720C3344EBAF905E005D414B4D  
 Via: SIP/2.0/TCP 172.18.203.55;branch=z9hG4bK4bb40509  
 Call-ID: 747e2b80-4e11f87c-8e-37cb12ac@172.18.203.55  
 CSeq: 101 INVITE  
 Content-Length: 0

[[diagram](#)] [Call-ID: \[prev\]](#) [[next](#)]  
**[5] SIP/2.0 180 Ringing**  
 From: "SIP Line 2000" <sip:2000@172.18.203.55>;tag=b9c8b19b-c709-4d85-86d4-d2f557c6c2a6-25663736  
 To: <sip:6105@172.18.203.82>;tag=152A8A720C3344EBAF905E005D414B4D  
 Via: SIP/2.0/TCP 172.18.203.55;branch=z9hG4bK4bb40509

Call-ID: 747e2b80-4e11f87c-8e-37cb12ac@172.18.203.55  
 CSeq: 101 INVITE  
 Content-Length: 0

[\[diagram\]](#) Call-ID: [\[prev\]](#) [\[next\]](#)

#### [6] SIP/2.0 180 Ringing

Via: SIP/2.0/UDP 172.18.203.44:5060;branch=z9hG4bK2ae84bc2  
 From: "SIP Line 2000" <sip:2000@sipsig-ccm55>;tag=00120155627f230d2155fb26-40eb4e5f  
 To: <sip:2005@sipsig-ccm55>;tag=b9c8b19b-c709-4d85-86d4-d2f557c6c2a6-25663733  
 Date: Tue, 15 Aug 2006 16:38:20 GMT  
 Call-ID: 00120155-627f0257-0ee84d4d-26917440@172.18.203.44  
 CSeq: 101 INVITE  
 Allow: INVITE, OPTIONS, INFO, BYE, CANCEL, ACK, PRACK, UPDATE, REFER, SUBSCRIBE, NOTIFY  
 Allow-Events: presence  
 Remote-Party-ID: <sip:6105@172.18.203.55>;party=called;screen=yes;privacy=off  
 Contact: <sip:2005@172.18.203.55:5060>  
 Call-Info: <urn:x-cisco-remotecc:callinfo>; security= NotAuthenticated; orientation= to; ui-state= ringout;  
 call-instance= 1  
 Content-Length: 0

[\[diagram\]](#) Call-ID: [\[prev\]](#) [\[next\]](#)

#### [7] SIP/2.0 200 OK

From: "SIP Line 2000" <sip:2000@172.18.203.55>;tag=b9c8b19b-c709-4d85-86d4-d2f557c6c2a6-25663736  
 To: <sip:6105@172.18.203.82>;tag=152A8A720C3344EBAF905E005D414B4D  
 Via: SIP/2.0/TCP 172.18.203.55;branch=z9hG4bK4bb40509  
 Contact: sip:6105@172.18.203.82:5090  
 Call-ID: 747e2b80-4e11f87c-8e-37cb12ac@172.18.203.55  
 CSeq: 101 INVITE  
 Call-Info: <sip:6105@172.18.203.82:5090>;method="NOTIFY;Event=telephone-event;Duration=2000"  
 Content-Length: 238  
 Content-Type: application/sdp

v=0  
 o=172.18.203.82 444045438 444045438 IN IP4 172.18.203.82  
 s=No Subject  
 c=IN IP4 172.18.203.82  
 t=0 0  
 m=audio 22804 RTP/AVP 18 0 101  
 a=rtpmap:18 G729/8000  
 a=rtpmap:0 pcmu/8000  
 a=rtpmap:101 telephone-event/8000  
 a=fmtp:101 0-15

[\[diagram\]](#) Call-ID: [\[prev\]](#) [\[next\]](#)

#### [8] SIP/2.0 200 OK

Via: SIP/2.0/UDP 172.18.203.44:5060;branch=z9hG4bK2ae84bc2  
 From: "SIP Line 2000" <sip:2000@sipsig-ccm55>;tag=00120155627f230d2155fb26-40eb4e5f  
 To: <sip:2005@sipsig-ccm55>;tag=b9c8b19b-c709-4d85-86d4-d2f557c6c2a6-25663733  
 Date: Tue, 15 Aug 2006 16:38:20 GMT  
 Call-ID: 00120155-627f0257-0ee84d4d-26917440@172.18.203.44  
 CSeq: 101 INVITE  
 Allow: INVITE, OPTIONS, INFO, BYE, CANCEL, ACK, PRACK, UPDATE, REFER, SUBSCRIBE, NOTIFY  
 Allow-Events: presence  
 Remote-Party-ID: <sip:6105@172.18.203.55>;party=called;screen=yes;privacy=off  
 Contact: <sip:2005@172.18.203.55:5060>  
 Call-Info: <urn:x-cisco-remotecc:callinfo>; security= NotAuthenticated; orientation= to; call-instance= 1  
 Content-Type: application/sdp  
 Content-Length: 214

v=0  
 o=CiscoSystemsCCM-SIP 2000 1 IN IP4 172.18.203.55  
 s=SIP Call  
 c=IN IP4 172.18.203.55  
 t=0 0  
 m=audio 24604 RTP/AVP 0 101  
 a=rtpmap:0 PCMU/8000  
 a=ptime:20  
 a=rtpmap:101 telephone-event/8000  
 a=fmtp:101 0-15

[\[diagram\]](#) Call-ID: [\[prev\]](#) [\[next\]](#)

#### [9] ACK sip:6105@172.18.203.82:5090 SIP/2.0

Via: SIP/2.0/UDP 172.18.203.55:5090;branch=z9hG4bK45894f37  
 From: "SIP Line 2000" <sip:2000@172.18.203.55>;tag=b9c8b19b-c709-4d85-86d4-d2f557c6c2a6-25663736  
 To: <sip:6105@172.18.203.82>;tag=152A8A720C3344EBAF905E005D414B4D  
 Date: Tue, 15 Aug 2006 16:38:20 GMT  
 Call-ID: 747e2b80-4e11f87c-8e-37cb12ac@172.18.203.55  
 Max-Forwards: 70  
 CSeq: 101 ACK  
 Allow-Events: presence, kpml

Content-Type: application/sdp  
Content-Length: 158

v=0  
o=CiscoSystemsCCM-SIP 2000 1 IN IP4 172.18.203.55  
s=SIP Call  
c=IN IP4 172.18.203.55  
t=0 0  
m=audio 24606 RTP/AVP 0  
a=rtpmap:0 PCMU/8000  
a=ptime:20

[\[diagram\]](#) Call-ID: [\[prev\]](#) [\[next\]](#)

**[10] ACK sip:2005@172.18.203.55:5060 SIP/2.0**

Via: SIP/2.0/UDP 172.18.203.44:5060;branch=z9hG4bK23a3cd44  
From: "SIP Line 2000" <sip:2000@sipsig-ccm55>;tag=00120155627f230d2155fb26-40eb4e5f  
To: <sip:2005@sipsig-ccm55>;tag=b9c8b19b-c709-4d85-86d4-d2f557c6c2a6-25663733  
Call-ID: 00120155-627f0257-0ee84d4d-26917440@172.18.203.44  
Max-Forwards: 70  
CSeq: 101 ACK  
User-Agent: Cisco-CP7960G/8.0  
Remote-Party-ID: "SIP Line 2000" <sip:2000@sipsig-ccm55>;party=calling;id-type=subscriber;privacy=off;screen=yes  
Content-Length: 0

[\[diagram\]](#) Call-ID: [\[prev\]](#) [\[next\]](#)

**[11] BYE sip:2005@172.18.203.55:5060 SIP/2.0**

Via: SIP/2.0/UDP 172.18.203.44:5060;branch=z9hG4bK543b843b  
From: "SIP Line 2000" <sip:2000@sipsig-ccm55>;tag=00120155627f230d2155fb26-40eb4e5f  
To: <sip:2005@sipsig-ccm55>;tag=b9c8b19b-c709-4d85-86d4-d2f557c6c2a6-25663733  
Call-ID: 00120155-627f0257-0ee84d4d-26917440@172.18.203.44  
Max-Forwards: 70  
CSeq: 102 BYE  
User-Agent: Cisco-CP7960G/8.0  
Content-Length: 0

[\[diagram\]](#) Call-ID: [\[prev\]](#) [\[next\]](#)

**[12] BYE sip:6105@172.18.203.82:5090 SIP/2.0**

Via: SIP/2.0/UDP 172.18.203.55:5090;branch=z9hG4bK3b2b8164  
From: "SIP Line 2000" <sip:2000@sipsig-ccm55>;tag=b9c8b19b-c709-4d85-86d4-d2f557c6c2a6-25663733  
To: <sip:6105@172.18.203.82>;tag=152A8A720C3344EBAF905E005D414B4D  
Date: Tue, 15 Aug 2006 16:38:20 GMT  
Call-ID: 747e2b80-4e11f87c-8e-37cb12ac@172.18.203.55  
User-Agent: Cisco-CCM5.0  
Max-Forwards: 70  
CSeq: 102 BYE  
Content-Length: 0

[\[diagram\]](#) Call-ID: [\[prev\]](#) [\[next\]](#)

**[13] SIP/2.0 200 OK**

Via: SIP/2.0/UDP 172.18.203.44:5060;branch=z9hG4bK543b843b  
From: "SIP Line 2000" <sip:2000@sipsig-ccm55>;tag=00120155627f230d2155fb26-40eb4e5f  
To: <sip:2005@sipsig-ccm55>;tag=b9c8b19b-c709-4d85-86d4-d2f557c6c2a6-25663733  
Date: Tue, 15 Aug 2006 16:38:35 GMT  
Call-ID: 00120155-627f0257-0ee84d4d-26917440@172.18.203.44  
CSeq: 102 BYE  
Content-Length: 0

[\[diagram\]](#) Call-ID: [\[prev\]](#) [\[next\]](#)

**[14] SIP/2.0 200 OK**

From: "SIP Line 2000" <sip:2000@172.18.203.55>;tag=b9c8b19b-c709-4d85-86d4-d2f557c6c2a6-25663733  
To: <sip:6105@172.18.203.82>;tag=152A8A720C3344EBAF905E005D414B4D  
Via: SIP/2.0/UDP 172.18.203.55:5090;branch=z9hG4bK3b2b8164  
Call-ID: 747e2b80-4e11f87c-8e-37cb12ac@172.18.203.55  
CSeq: 102 BYE  
Content-Length: 0

[\[diagram\]](#) Call-ID: [\[prev\]](#) [\[next\]](#)

**[15] NOTIFY sip:2005@172.18.203.55 SIP/2.0**

From: sip:6105@172.18.203.55;tag=F4A5DACFD857459498CD7A66372E7877  
To: sip:2005@172.18.203.55  
Via: SIP/2.0/UDP 172.18.203.82:5090;branch=z9hG4bKD08A6471D12E4523AD8CD15F70DC1927  
Max-Forwards: 70  
Contact: sip:6105@172.18.203.82:5090  
Call-ID: 3BDB77FD6E7243A689640BDC2721DC8F@172.18.203.55  
CSeq: 300 NOTIFY  
Event: message-summary  
Content-Length: 23  
Content-Type: text/plain

Messages-Waiting: yes

[[diagram](#)] Call-ID: [[prev](#)] [[next](#)]  
**[16] NOTIFY sip:2005@172.18.203.45:5060 SIP/2.0**  
 Via: SIP/2.0/UDP 172.18.203.55:5060;branch=z9hG4bK6082a277  
 From: <sip:2005@172.18.203.55>;tag=1587354822  
 To: <sip:2005@172.18.203.45>  
 Call-ID: 7d6efd00-4e11f88b-8f-37cb12ac@172.18.203.55  
 CSeq: 101 NOTIFY  
 Max-Forwards: 70  
 Date: Tue, 15 Aug 2006 16:38:35 GMT  
 User-Agent: Cisco-CCM5.0  
 Event: message-summary  
 Subscription-State: active;expires=3461144  
 Contact: <sip:2005@172.18.203.55:5060>  
 Content-Type: application/simple-message-summary  
 Content-Length: 23

Messages-Waiting: yes

[[diagram](#)] Call-ID: [[prev](#)] [[next](#)]  
**[17] SIP/2.0 200 OK**  
 Via: SIP/2.0/UDP 172.18.203.82:5090;branch=z9hG4bKD08A6471D12E4523AD8CD15F70DC1927  
 From: sip:6105@172.18.203.55;tag=F4A5DACFD857459498CD7A66372E7877  
 To: sip:2005@172.18.203.55;tag=1944472354  
 Date: Tue, 15 Aug 2006 16:38:35 GMT  
 Call-ID: 3BDB77FD6E7243A689640BDC2721DC8F@172.18.203.55  
 CSeq: 300 NOTIFY  
 Content-Length: 0

[[diagram](#)] Call-ID: [[prev](#)] [[next](#)]  
**[18] SIP/2.0 200 OK**  
 Via: SIP/2.0/UDP 172.18.203.55:5060;branch=z9hG4bK6082a277  
 From: <sip:2005@172.18.203.55>;tag=1587354822  
 To: <sip:2005@172.18.203.45>  
 Call-ID: 7d6efd00-4e11f88b-8f-37cb12ac@172.18.203.55  
 CSeq: 101 NOTIFY  
 Content-Length: 0

[[diagram](#)] Call-ID: [[prev](#)] [[next](#)]  
**[19] NOTIFY sip:2005@172.18.203.45:5060 SIP/2.0**  
 Via: SIP/2.0/UDP 172.18.203.55:5060;branch=z9hG4bK7c6b5b57  
 From: <sip:172.18.203.55>;tag=1136071408  
 To: <sip:2005@172.18.203.45>  
 Call-ID: 52d27380-4e11fd4c-ad-37cb12ac@172.18.203.55  
 CSeq: 101 NOTIFY  
 Max-Forwards: 70  
 Date: Tue, 15 Aug 2006 16:58:52 GMT  
 User-Agent: Cisco-CCM5.0  
 Event: service-control  
 Subscription-State: active  
 Contact: <sip:172.18.203.55:5060>  
 Content-Type: text/plain  
 Content-Length: 183

action=check-version  
 RegisterCallId={00120193-edaa0003-3bf3c506-31d6f645@172.18.203.45}  
 ConfigVersionStamp={1155660859-688a0758-925d-41c6-a457-715cbe8f0a0b}  
 DialplanVersionStamp={}

[[diagram](#)] Call-ID: [[prev](#)] [[next](#)]  
**[20] NOTIFY sip:2005@172.18.203.45:5060 SIP/2.0**  
 Via: SIP/2.0/UDP 172.18.203.55:5060;branch=z9hG4bK45837c7e  
 From: <sip:2005@172.18.203.55>;tag=153380477  
 To: <sip:2005@172.18.203.45>  
 Call-ID: 52d27380-4e11fd4c-ae-37cb12ac@172.18.203.55  
 CSeq: 101 NOTIFY  
 Max-Forwards: 70  
 Date: Tue, 15 Aug 2006 16:58:52 GMT  
 User-Agent: Cisco-CCM5.0  
 Event: message-summary  
 Subscription-State: active  
 Contact: <sip:2005@172.18.203.55:5060>  
 Content-Type: application/simple-message-summary  
 Content-Length: 23

Messages-Waiting: yes

[[diagram](#)] Call-ID: [[prev](#)] [[next](#)]  
**[21] NOTIFY sip:2006@172.18.203.45:5060 SIP/2.0**

```
Via: SIP/2.0/UDP 172.18.203.55:5060;branch=z9hG4bK42f0a4f0
From: <sip:2006@172.18.203.55>;tag=241884419
To: <sip:2006@172.18.203.45>
Call-ID: 52d27380-4e11fd4c-af-37cb12ac@172.18.203.55
CSeq: 101 NOTIFY
Max-Forwards: 70
Date: Tue, 15 Aug 2006 16:58:52 GMT
User-Agent: Cisco-CCM5.0
Event: message-summary
Subscription-State: active;expires=260295312
Contact: <sip:2006@172.18.203.55:5060>
Content-Type: application/simple-message-summary
Content-Length: 22
```

Messages-Waiting: no

[\[diagram\]](#) Call-ID: [\[prev\]](#) [\[next\]](#)

**[22] SIP/2.0 200 OK**

```
Via: SIP/2.0/UDP 172.18.203.55:5060;branch=z9hG4bK7c6b5b57
From: <sip:172.18.203.55>;tag=1136071408
To: <sip:2005@172.18.203.45>
Call-ID: 52d27380-4e11fd4c-ad-37cb12ac@172.18.203.55
CSeq: 101 NOTIFY
Content-Length: 0
```

[\[diagram\]](#) Call-ID: [\[prev\]](#) [\[next\]](#)

**[23] SIP/2.0 200 OK**

```
Via: SIP/2.0/UDP 172.18.203.55:5060;branch=z9hG4bK45837c7e
From: <sip:2005@172.18.203.55>;tag=153380477
To: <sip:2005@172.18.203.45>
Call-ID: 52d27380-4e11fd4c-ae-37cb12ac@172.18.203.55
CSeq: 101 NOTIFY
Content-Length: 0
```

[\[diagram\]](#) Call-ID: [\[prev\]](#) [\[next\]](#)

**[24] SIP/2.0 200 OK**

```
Via: SIP/2.0/UDP 172.18.203.55:5060;branch=z9hG4bK42f0a4f0
From: <sip:2006@172.18.203.55>;tag=241884419
To: <sip:2006@172.18.203.45>
Call-ID: 52d27380-4e11fd4c-af-37cb12ac@172.18.203.55
CSeq: 101 NOTIFY
Content-Length: 0
```

## 9.2 Message Waiting Indication Off

Title: Message Waiting Indication Off

### Description:

Line 2005 on phone F has voicemail configured with one or more messages currently waiting. Note this phone may have lines other than 2005. However this scenario focuses on Line 2005.

Line 2005 on phone F calls the voicemail server and accesses their voicemail account and listens to all new messages

The voicemail server will inform CCM and CCM will inform phone F of the new message waiting off state

Notice the "NOTIFY" sent to phone F with "Messages-Waiting: no" body for Line 2005.

### Configuration:

Node = CCM, IP = 172.18.203.55

Node = Voicemail Server, IP = 172.18.203.82

Phone = F, Line = 2005, IP = 172.18.203.45, Model = SIP 7960

### Scenario:

2005 calls voicemail server

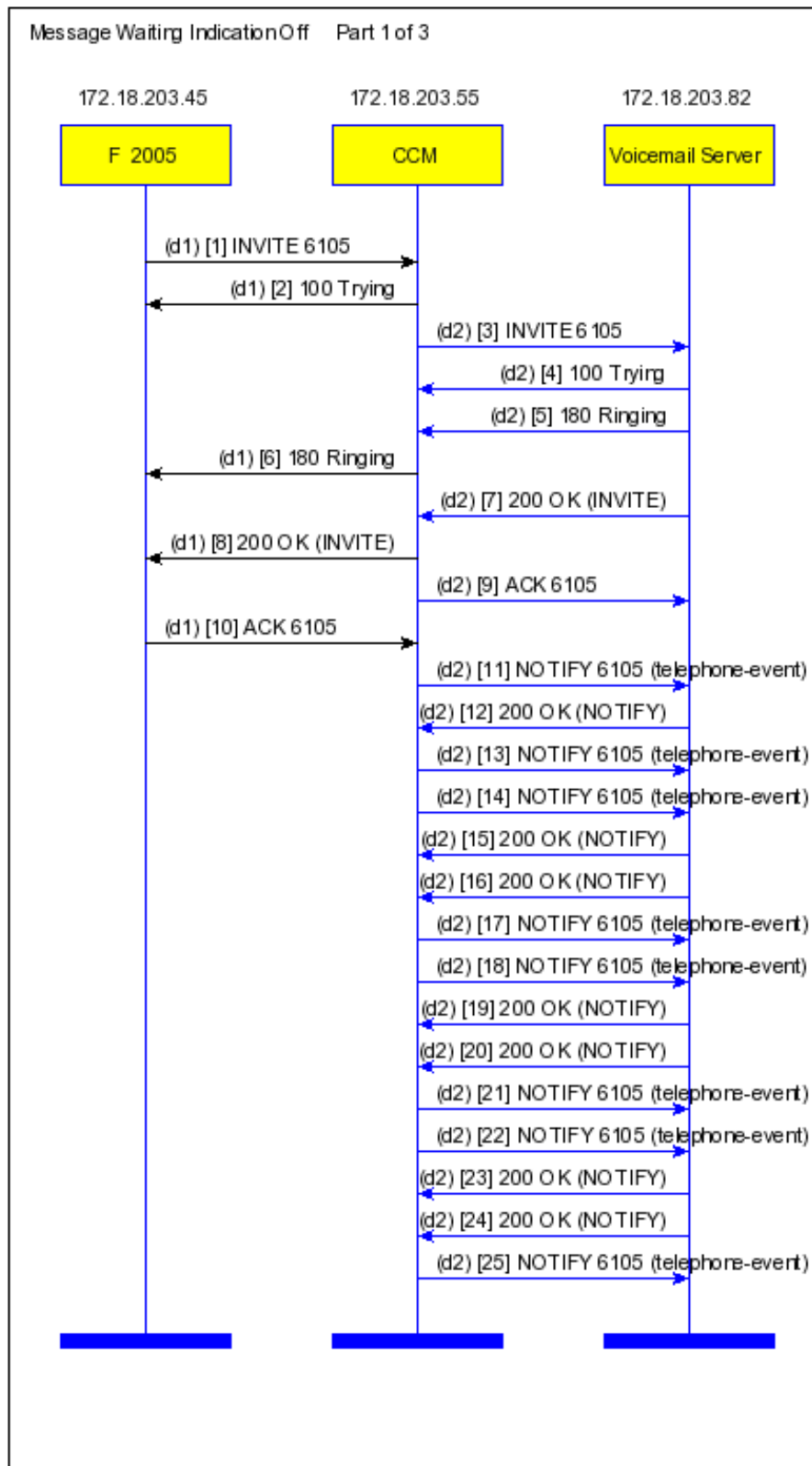
Voicemail server rings and answers

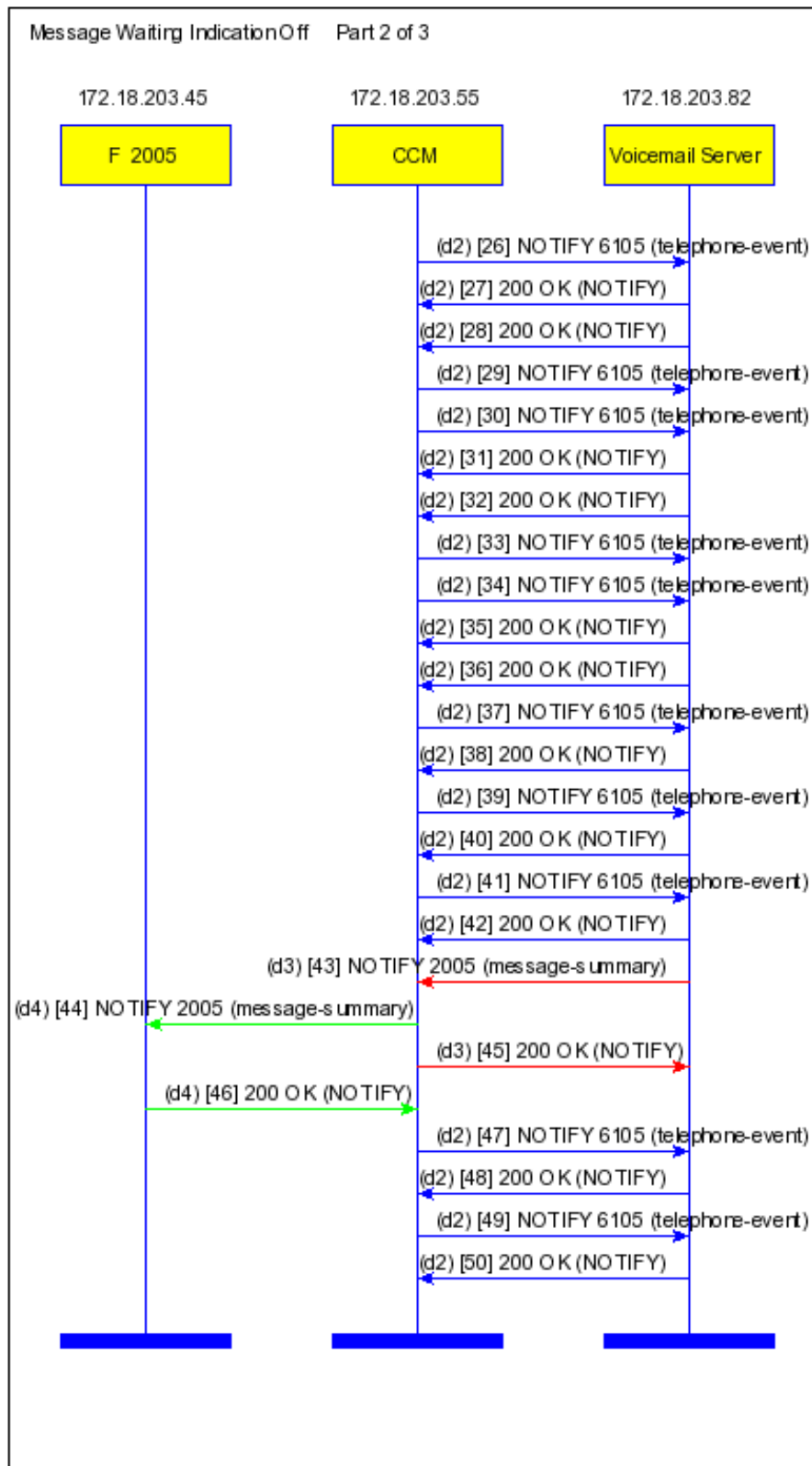
2005 checks messages

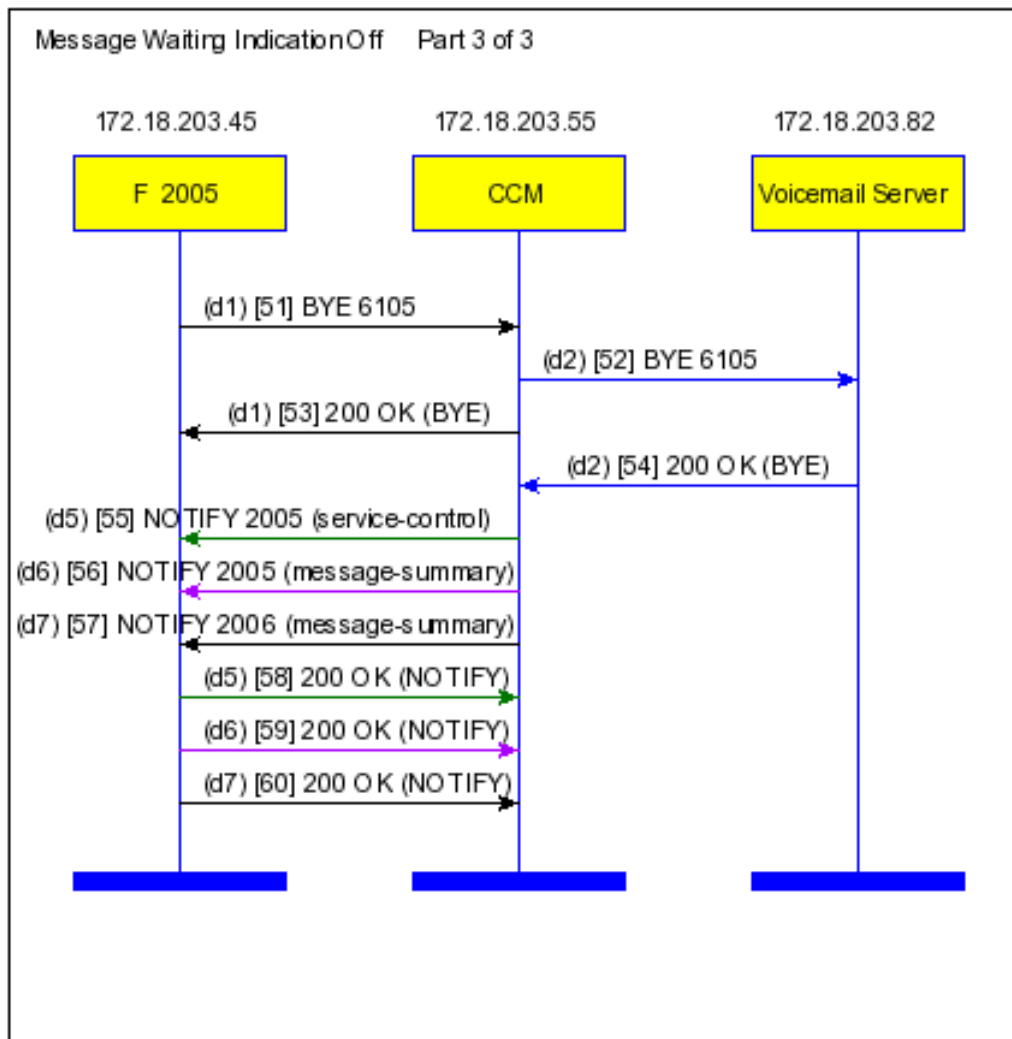
Voicemail server notifies CCM of Phone F's MWI state

CCM notifies phone F of its MWI state

2005 goes onhook







[[diagram](#)] [Call-ID: \[prev\]](#) [[next](#)]  
**[1] INVITE sip:6105@sipsig-ccm55 SIP/2.0**  
 Via: SIP/2.0/UDP 172.18.203.45:5060;branch=z9hG4bK4cae785a  
 From: "SIP Line 2005" <sip:2005@sipsig-ccm55>;tag=00120193edaa2a084751cd18-6167c828  
 To: <sip:6105@sipsig-ccm55>  
 Call-ID: 00120193-edaa0279-0044a58f-2d91a815@172.18.203.45  
 Max-Forwards: 70  
 CSeq: 101 INVITE  
 User-Agent: Cisco-CP7960G/8.0  
 Contact: <sip:2005@172.18.203.45:5060;transport=udp>  
 Expires: 180  
 Accept: application/sdp  
 Allow: ACK,BYE,CANCEL,INVITE,NOTIFY,OPTIONS,REFER,REGISTER,UPDATE  
 Remote-Party-ID: "SIP Line 2005" <sip:2005@sipsig-ccm55>;party=calling;id-type=subscriber;privacy=off;screen=yes  
 Content-Length: 275  
 Content-Type: application/sdp  
 Content-Disposition: session;handling=optional

v=0  
 o=Cisco-SIPUA 10622 0 IN IP4 172.18.203.45  
 s=SIP Call  
 t=0 0  
 m=audio 24802 RTP/AVP 0 8 18 101  
 c=IN IP4 172.18.203.45  
 a=rtpmap:0 PCMU/8000  
 a=rtpmap:8 PCMA/8000  
 a=rtpmap:18 G729/0  
 a=fmtp:18 annexb=no  
 a=rtpmap:101 telephone-event/8000  
 a=fmtp:101 0-15  
 a=sendrecv

[[diagram](#)] [Call-ID: \[prev\]](#) [[next](#)]  
**[2] SIP/2.0 100 Trying**  
 Via: SIP/2.0/UDP 172.18.203.45:5060;branch=z9hG4bK4cae785a  
 From: "SIP Line 2005" <sip:2005@sipsig-ccm55>;tag=00120193edaa2a084751cd18-6167c828  
 To: <sip:6105@sipsig-ccm55>  
 Date: Tue, 15 Aug 2006 16:45:28 GMT  
 Call-ID: 00120193-edaa0279-0044a58f-2d91a815@172.18.203.45  
 CSeq: 101 INVITE  
 Allow-Events: presence  
 Content-Length: 0

[[diagram](#)] [Call-ID: \[prev\]](#) [[next](#)]  
**[3] INVITE sip:6105@172.18.203.82:5090 SIP/2.0**  
 Via: SIP/2.0/TCP 172.18.203.55;branch=z9hG4bK2262daff  
 Remote-Party-ID: "SIP Line 2005" <sip:2005@172.18.203.55>;party=calling;screen=yes;privacy=off  
 From: "SIP Line 2005" <sip:2005@172.18.203.55>;tag=b9c8b19b-c709-4d85-86d4-d2f557c6c2a6-25663760  
 To: <sip:6105@172.18.203.82>  
 Date: Tue, 15 Aug 2006 16:45:28 GMT  
 Call-ID: 7399c980-4e11fa28-a0-37cb12ac@172.18.203.55  
 Supported: timer,replaces  
 Min-SE: 1800  
 User-Agent: Cisco-CCM5.0  
 Allow: INVITE, OPTIONS, INFO, BYE, CANCEL, ACK, PRACK, UPDATE, REFER, SUBSCRIBE, NOTIFY  
 CSeq: 101 INVITE  
 Contact: <sip:2005@172.18.203.55:5090;transport=tcp>  
 Expires: 180  
 Allow-Events: presence  
 Call-Info: <sip:172.18.203.55:5090>;method="NOTIFY;Event=telephone-event;Duration=500"  
 Session-Expires: 1800  
 Max-Forwards: 69  
 Content-Length: 0

[[diagram](#)] [Call-ID: \[prev\]](#) [[next](#)]  
**[4] SIP/2.0 100 Trying**  
 From: "SIP Line 2005" <sip:2005@172.18.203.55>;tag=b9c8b19b-c709-4d85-86d4-d2f557c6c2a6-25663760  
 To: <sip:6105@172.18.203.82>;tag=152A8A720C3344EBAF905E005D414B4D  
 Via: SIP/2.0/TCP 172.18.203.55;branch=z9hG4bK2262daff  
 Call-ID: 7399c980-4e11fa28-a0-37cb12ac@172.18.203.55  
 CSeq: 101 INVITE  
 Content-Length: 0

[[diagram](#)] [Call-ID: \[prev\]](#) [[next](#)]  
**[5] SIP/2.0 180 Ringing**  
 From: "SIP Line 2005" <sip:2005@172.18.203.55>;tag=b9c8b19b-c709-4d85-86d4-d2f557c6c2a6-25663760  
 To: <sip:6105@172.18.203.82>;tag=152A8A720C3344EBAF905E005D414B4D  
 Via: SIP/2.0/TCP 172.18.203.55;branch=z9hG4bK2262daff  
 Call-ID: 7399c980-4e11fa28-a0-37cb12ac@172.18.203.55

CSeq: 101 INVITE  
Content-Length: 0

[\[diagram\]](#) Call-ID: [\[prev\]](#) [\[next\]](#)

#### [6] SIP/2.0 180 Ringing

Via: SIP/2.0/UDP 172.18.203.45:5060;branch=z9hG4bK4cae785a  
From: "SIP Line 2005" <sip:2005@sipsig-ccm55>;tag=00120193edaa2a084751cd18-6167c828  
To: <sip:6105@sipsig-ccm55>;tag=b9c8b19b-c709-4d85-86d4-d2f557c6c2a6-25663759  
Date: Tue, 15 Aug 2006 16:45:28 GMT  
Call-ID: 00120193-edaa0279-0044a58f-2d91a815@172.18.203.45  
CSeq: 101 INVITE  
Allow: INVITE, OPTIONS, INFO, BYE, CANCEL, ACK, PRACK, UPDATE, REFER, SUBSCRIBE, NOTIFY  
Allow-Events: presence  
Remote-Party-ID: <sip:6105@172.18.203.55>;party=called;screen=yes;privacy=off  
Contact: <sip:6105@172.18.203.55:5060>  
Call-Info: <urn:x-cisco-remotecc:callinfo>; security= NotAuthenticated; orientation= to; ui-state= ringout;  
call-instance= 1  
Content-Length: 0

[\[diagram\]](#) Call-ID: [\[prev\]](#) [\[next\]](#)

#### [7] SIP/2.0 200 OK

From: "SIP Line 2005" <sip:2005@172.18.203.55>;tag=b9c8b19b-c709-4d85-86d4-d2f557c6c2a6-25663760  
To: <sip:6105@172.18.203.82>;tag=152A8A720C3344EBAF905E005D414B4D  
Via: SIP/2.0/TCP 172.18.203.55;branch=z9hG4bK2262daff  
Contact: sip:6105@172.18.203.82:5090  
Call-ID: 7399c980-4e11fa28-a0-37cb12ac@172.18.203.55  
CSeq: 101 INVITE  
Call-Info: <sip:6105@172.18.203.82:5090>;method="NOTIFY";Event=telephone-event;Duration=2000"  
Content-Length: 238  
Content-Type: application/sdp

v=0  
o=172.18.203.82 444473391 444473391 IN IP4 172.18.203.82  
s=No Subject  
c=IN IP4 172.18.203.82  
t=0 0  
m=audio 22804 RTP/AVP 18 0 101  
a=rtpmap:18 G729/8000  
a=rtpmap:0 pcmu/8000  
a=rtpmap:101 telephone-event/8000  
a=fmtp:101 0-15

[\[diagram\]](#) Call-ID: [\[prev\]](#) [\[next\]](#)

#### [8] SIP/2.0 200 OK

Via: SIP/2.0/UDP 172.18.203.45:5060;branch=z9hG4bK4cae785a  
From: "SIP Line 2005" <sip:2005@sipsig-ccm55>;tag=00120193edaa2a084751cd18-6167c828  
To: <sip:6105@sipsig-ccm55>;tag=b9c8b19b-c709-4d85-86d4-d2f557c6c2a6-25663759  
Date: Tue, 15 Aug 2006 16:45:28 GMT  
Call-ID: 00120193-edaa0279-0044a58f-2d91a815@172.18.203.45  
CSeq: 101 INVITE  
Allow: INVITE, OPTIONS, INFO, BYE, CANCEL, ACK, PRACK, UPDATE, REFER, SUBSCRIBE, NOTIFY  
Allow-Events: presence  
Remote-Party-ID: <sip:6105@172.18.203.55>;party=called;screen=yes;privacy=off  
Contact: <sip:6105@172.18.203.55:5060>  
Call-Info: <urn:x-cisco-remotecc:callinfo>; security= NotAuthenticated; orientation= to; call-instance= 1  
Content-Type: application/sdp  
Content-Length: 214

v=0  
o=CiscoSystemsCCM-SIP 2000 1 IN IP4 172.18.203.55  
s=SIP Call  
c=IN IP4 172.18.203.55  
t=0 0  
m=audio 24620 RTP/AVP 0 101  
a=rtpmap:0 PCMU/8000  
a=ptime:20  
a=rtpmap:101 telephone-event/8000  
a=fmtp:101 0-15

[\[diagram\]](#) Call-ID: [\[prev\]](#) [\[next\]](#)

#### [9] ACK sip:6105@172.18.203.82:5090 SIP/2.0

Via: SIP/2.0/UDP 172.18.203.55:5090;branch=z9hG4bK6dd7038e  
From: "SIP Line 2005" <sip:2005@172.18.203.55>;tag=b9c8b19b-c709-4d85-86d4-d2f557c6c2a6-25663760  
To: <sip:6105@172.18.203.82>;tag=152A8A720C3344EBAF905E005D414B4D  
Date: Tue, 15 Aug 2006 16:45:28 GMT  
Call-ID: 7399c980-4e11fa28-a0-37cb12ac@172.18.203.55  
Max-Forwards: 70  
CSeq: 101 ACK  
Allow-Events: presence, kpml  
Content-Type: application/sdp

Content-Length: 158

```
v=0
o=CiscoSystemsCCM-SIP 2000 1 IN IP4 172.18.203.55
s=SIP Call
c=IN IP4 172.18.203.55
t=0 0
m=audio 24622 RTP/AVP 0
a=rtpmap:0 PCMU/8000
a=ptime:20
```

[\[diagram\]](#) Call-ID: [\[prev\]](#) [\[next\]](#)

**[10] ACK sip:6105@172.18.203.55:5060 SIP/2.0**

```
Via: SIP/2.0/UDP 172.18.203.45:5060;branch=z9hG4bK0f250948
From: "SIP Line 2005" <sip:2005@sipsig-ccm55>;tag=00120193edaa2a084751cd18-6167c828
To: <sip:6105@sipsig-ccm55>;tag=b9c8b19b-c709-4d85-86d4-d2f557c6c2a6-25663759
Call-ID: 00120193-edaa0279-0044a58f-2d91a815@172.18.203.45
Max-Forwards: 70
CSeq: 101 ACK
User-Agent: Cisco-CP7960G/8.0
Remote-Party-ID: "SIP Line 2005" <sip:2005@sipsig-ccm55>;party=calling;id-
type=subscriber;privacy=off;screen=yes
Content-Length: 0
```

[\[diagram\]](#) Call-ID: [\[prev\]](#) [\[next\]](#)

**[11] NOTIFY sip:6105@172.18.203.82:5090 SIP/2.0**

```
Via: SIP/2.0/UDP 172.18.203.55:5090;branch=z9hG4bK5e9e70ea
From: "SIP Line 2005" <sip:2005@172.18.203.55>;tag=b9c8b19b-c709-4d85-86d4-d2f557c6c2a6-25663760
To: <sip:6105@172.18.203.82>;tag=152A8A720C3344EBAF905E005D414B4D
Call-ID: 7399c980-4e11fa28-a0-37cb12ac@172.18.203.55
CSeq: 102 NOTIFY
Max-Forwards: 70
Date: Tue, 15 Aug 2006 16:45:30 GMT
User-Agent: Cisco-CCM5.0
Event: telephone-event;rate=1000
Subscription-State: active;expires=248224768
Contact: <sip:172.18.203.55:5090>
Content-Type: audio/telephone-event
Content-Length: 4
```

{binary content not shown}

[\[diagram\]](#) Call-ID: [\[prev\]](#) [\[next\]](#)

**[12] SIP/2.0 200 OK**

```
From: "SIP Line 2005" <sip:2005@172.18.203.55>;tag=b9c8b19b-c709-4d85-86d4-d2f557c6c2a6-25663760
To: <sip:6105@172.18.203.82>;tag=152A8A720C3344EBAF905E005D414B4D
Via: SIP/2.0/UDP 172.18.203.55:5090;branch=z9hG4bK5e9e70ea
Call-ID: 7399c980-4e11fa28-a0-37cb12ac@172.18.203.55
CSeq: 102 NOTIFY
Content-Length: 0
```

[\[diagram\]](#) Call-ID: [\[prev\]](#) [\[next\]](#)

**[13] NOTIFY sip:6105@172.18.203.82:5090 SIP/2.0**

```
Via: SIP/2.0/TCP 172.18.203.55;branch=z9hG4bKbdf8c15
From: "SIP Line 2005" <sip:2005@172.18.203.55>;tag=b9c8b19b-c709-4d85-86d4-d2f557c6c2a6-25663760
To: <sip:6105@172.18.203.82>;tag=152A8A720C3344EBAF905E005D414B4D
Call-ID: 7399c980-4e11fa28-a0-37cb12ac@172.18.203.55
CSeq: 103 NOTIFY
Max-Forwards: 70
Date: Tue, 15 Aug 2006 16:45:30 GMT
User-Agent: Cisco-CCM5.0
Event: telephone-event;rate=1000
Subscription-State: active;expires=58490328
Contact: <sip:172.18.203.55:5090;transport=tcp>
Content-Type: audio/telephone-event
Content-Length: 4
```

{binary content not shown}

[\[diagram\]](#) Call-ID: [\[prev\]](#) [\[next\]](#)

**[14] NOTIFY sip:6105@172.18.203.82:5090 SIP/2.0**

```
Via: SIP/2.0/TCP 172.18.203.55;branch=z9hG4bK5afa99b0
From: "SIP Line 2005" <sip:2005@172.18.203.55>;tag=b9c8b19b-c709-4d85-86d4-d2f557c6c2a6-25663760
To: <sip:6105@172.18.203.82>;tag=152A8A720C3344EBAF905E005D414B4D
Call-ID: 7399c980-4e11fa28-a0-37cb12ac@172.18.203.55
CSeq: 104 NOTIFY
Max-Forwards: 70
Date: Tue, 15 Aug 2006 16:45:30 GMT
User-Agent: Cisco-CCM5.0
Event: telephone-event;rate=1000
```

Subscription-State: active;expires=169927672  
 Contact: <sip:172.18.203.55:5090;transport=tcp>  
 Content-Type: audio/telephone-event  
 Content-Length: 4

{binary content not shown}

[\[diagram\]](#) Call-ID: [\[prev\]](#) [\[next\]](#)

**[15] SIP/2.0 200 OK**

From: "SIP Line 2005" <sip:2005@172.18.203.55>;tag=b9c8b19b-c709-4d85-86d4-d2f557c6c2a6-25663760  
 To: <sip:6105@172.18.203.82>;tag=152A8A720C3344EBAF905E005D414B4D  
 Via: SIP/2.0/TCP 172.18.203.55;branch=z9hG4bKbdf8c15  
 Call-ID: 7399c980-4e11fa28-a0-37cb12ac@172.18.203.55  
 CSeq: 103 NOTIFY  
 Content-Length: 0

[\[diagram\]](#) Call-ID: [\[prev\]](#) [\[next\]](#)

**[16] SIP/2.0 200 OK**

From: "SIP Line 2005" <sip:2005@172.18.203.55>;tag=b9c8b19b-c709-4d85-86d4-d2f557c6c2a6-25663760  
 To: <sip:6105@172.18.203.82>;tag=152A8A720C3344EBAF905E005D414B4D  
 Via: SIP/2.0/TCP 172.18.203.55;branch=z9hG4bK5afa99b0  
 Call-ID: 7399c980-4e11fa28-a0-37cb12ac@172.18.203.55  
 CSeq: 104 NOTIFY  
 Content-Length: 0

[\[diagram\]](#) Call-ID: [\[prev\]](#) [\[next\]](#)

**[17] NOTIFY sip:6105@172.18.203.82:5090 SIP/2.0**

Via: SIP/2.0/TCP 172.18.203.55;branch=z9hG4bK2cc25b99  
 From: "SIP Line 2005" <sip:2005@172.18.203.55>;tag=b9c8b19b-c709-4d85-86d4-d2f557c6c2a6-25663760  
 To: <sip:6105@172.18.203.82>;tag=152A8A720C3344EBAF905E005D414B4D  
 Call-ID: 7399c980-4e11fa28-a0-37cb12ac@172.18.203.55  
 CSeq: 105 NOTIFY  
 Max-Forwards: 70  
 Date: Tue, 15 Aug 2006 16:45:31 GMT  
 User-Agent: Cisco-CCM5.0  
 Event: telephone-event;rate=1000  
 Subscription-State: active;expires=58490328  
 Contact: <sip:172.18.203.55:5090;transport=tcp>  
 Content-Type: audio/telephone-event  
 Content-Length: 4

{binary content not shown}

[\[diagram\]](#) Call-ID: [\[prev\]](#) [\[next\]](#)

**[18] NOTIFY sip:6105@172.18.203.82:5090 SIP/2.0**

Via: SIP/2.0/TCP 172.18.203.55;branch=z9hG4bK31ba8b68  
 From: "SIP Line 2005" <sip:2005@172.18.203.55>;tag=b9c8b19b-c709-4d85-86d4-d2f557c6c2a6-25663760  
 To: <sip:6105@172.18.203.82>;tag=152A8A720C3344EBAF905E005D414B4D  
 Call-ID: 7399c980-4e11fa28-a0-37cb12ac@172.18.203.55  
 CSeq: 106 NOTIFY  
 Max-Forwards: 70  
 Date: Tue, 15 Aug 2006 16:45:31 GMT  
 User-Agent: Cisco-CCM5.0  
 Event: telephone-event;rate=1000  
 Subscription-State: active;expires=169927672  
 Contact: <sip:172.18.203.55:5090;transport=tcp>  
 Content-Type: audio/telephone-event  
 Content-Length: 4

{binary content not shown}

[\[diagram\]](#) Call-ID: [\[prev\]](#) [\[next\]](#)

**[19] SIP/2.0 200 OK**

From: "SIP Line 2005" <sip:2005@172.18.203.55>;tag=b9c8b19b-c709-4d85-86d4-d2f557c6c2a6-25663760  
 To: <sip:6105@172.18.203.82>;tag=152A8A720C3344EBAF905E005D414B4D  
 Via: SIP/2.0/TCP 172.18.203.55;branch=z9hG4bK2cc25b99  
 Call-ID: 7399c980-4e11fa28-a0-37cb12ac@172.18.203.55  
 CSeq: 105 NOTIFY  
 Content-Length: 0

[\[diagram\]](#) Call-ID: [\[prev\]](#) [\[next\]](#)

**[20] SIP/2.0 200 OK**

From: "SIP Line 2005" <sip:2005@172.18.203.55>;tag=b9c8b19b-c709-4d85-86d4-d2f557c6c2a6-25663760  
 To: <sip:6105@172.18.203.82>;tag=152A8A720C3344EBAF905E005D414B4D  
 Via: SIP/2.0/TCP 172.18.203.55;branch=z9hG4bK31ba8b68  
 Call-ID: 7399c980-4e11fa28-a0-37cb12ac@172.18.203.55  
 CSeq: 106 NOTIFY  
 Content-Length: 0

[[diagram](#)] Call-ID: [[prev](#)] [[next](#)]  
**[21] NOTIFY sip:6105@172.18.203.82:5090 SIP/2.0**  
 Via: SIP/2.0/TCP 172.18.203.55;branch=z9hG4bK6a827d14  
 From: "SIP Line 2005" <sip:2005@172.18.203.55>;tag=b9c8b19b-c709-4d85-86d4-d2f557c6c2a6-25663760  
 To: <sip:6105@172.18.203.82>;tag=152A8A720C3344EBAF905E005D414B4D  
 Call-ID: 7399c980-4e11fa28-a0-37cb12ac@172.18.203.55  
 CSeq: 107 NOTIFY  
 Max-Forwards: 70  
 Date: Tue, 15 Aug 2006 16:45:31 GMT  
 User-Agent: Cisco-CCM5.0  
 Event: telephone-event;rate=1000  
 Subscription-State: active;expires=58490328  
 Contact: <sip:172.18.203.55:5090;transport=tcp>  
 Content-Type: audio/telephone-event  
 Content-Length: 4  
  
 {binary content not shown}

[[diagram](#)] Call-ID: [[prev](#)] [[next](#)]  
**[22] NOTIFY sip:6105@172.18.203.82:5090 SIP/2.0**  
 Via: SIP/2.0/TCP 172.18.203.55;branch=z9hG4bKbf927d9  
 From: "SIP Line 2005" <sip:2005@172.18.203.55>;tag=b9c8b19b-c709-4d85-86d4-d2f557c6c2a6-25663760  
 To: <sip:6105@172.18.203.82>;tag=152A8A720C3344EBAF905E005D414B4D  
 Call-ID: 7399c980-4e11fa28-a0-37cb12ac@172.18.203.55  
 CSeq: 108 NOTIFY  
 Max-Forwards: 70  
 Date: Tue, 15 Aug 2006 16:45:31 GMT  
 User-Agent: Cisco-CCM5.0  
 Event: telephone-event;rate=1000  
 Subscription-State: active;expires=169927672  
 Contact: <sip:172.18.203.55:5090;transport=tcp>  
 Content-Type: audio/telephone-event  
 Content-Length: 4  
  
 {binary content not shown}

[[diagram](#)] Call-ID: [[prev](#)] [[next](#)]  
**[23] SIP/2.0 200 OK**  
 From: "SIP Line 2005" <sip:2005@172.18.203.55>;tag=b9c8b19b-c709-4d85-86d4-d2f557c6c2a6-25663760  
 To: <sip:6105@172.18.203.82>;tag=152A8A720C3344EBAF905E005D414B4D  
 Via: SIP/2.0/TCP 172.18.203.55;branch=z9hG4bK6a827d14  
 Call-ID: 7399c980-4e11fa28-a0-37cb12ac@172.18.203.55  
 CSeq: 107 NOTIFY  
 Content-Length: 0

[[diagram](#)] Call-ID: [[prev](#)] [[next](#)]  
**[24] SIP/2.0 200 OK**  
 From: "SIP Line 2005" <sip:2005@172.18.203.55>;tag=b9c8b19b-c709-4d85-86d4-d2f557c6c2a6-25663760  
 To: <sip:6105@172.18.203.82>;tag=152A8A720C3344EBAF905E005D414B4D  
 Via: SIP/2.0/TCP 172.18.203.55;branch=z9hG4bKbf927d9  
 Call-ID: 7399c980-4e11fa28-a0-37cb12ac@172.18.203.55  
 CSeq: 108 NOTIFY  
 Content-Length: 0

[[diagram](#)] Call-ID: [[prev](#)] [[next](#)]  
**[25] NOTIFY sip:6105@172.18.203.82:5090 SIP/2.0**  
 Via: SIP/2.0/TCP 172.18.203.55;branch=z9hG4bK43714cb0  
 From: "SIP Line 2005" <sip:2005@172.18.203.55>;tag=b9c8b19b-c709-4d85-86d4-d2f557c6c2a6-25663760  
 To: <sip:6105@172.18.203.82>;tag=152A8A720C3344EBAF905E005D414B4D  
 Call-ID: 7399c980-4e11fa28-a0-37cb12ac@172.18.203.55  
 CSeq: 109 NOTIFY  
 Max-Forwards: 70  
 Date: Tue, 15 Aug 2006 16:45:32 GMT  
 User-Agent: Cisco-CCM5.0  
 Event: telephone-event;rate=1000  
 Subscription-State: active;expires=58490328  
 Contact: <sip:172.18.203.55:5090;transport=tcp>  
 Content-Type: audio/telephone-event  
 Content-Length: 4  
  
 {binary content not shown}

[[diagram](#)] Call-ID: [[prev](#)] [[next](#)]  
**[26] NOTIFY sip:6105@172.18.203.82:5090 SIP/2.0**  
 Via: SIP/2.0/TCP 172.18.203.55;branch=z9hG4bK2aeld004  
 From: "SIP Line 2005" <sip:2005@172.18.203.55>;tag=b9c8b19b-c709-4d85-86d4-d2f557c6c2a6-25663760  
 To: <sip:6105@172.18.203.82>;tag=152A8A720C3344EBAF905E005D414B4D  
 Call-ID: 7399c980-4e11fa28-a0-37cb12ac@172.18.203.55  
 CSeq: 110 NOTIFY  
 Max-Forwards: 70

Date: Tue, 15 Aug 2006 16:45:32 GMT  
 User-Agent: Cisco-CCM5.0  
 Event: telephone-event;rate=1000  
 Subscription-State: active;expires=169927672  
 Contact: <sip:172.18.203.55:5090;transport=tcp>  
 Content-Type: audio/telephone-event  
 Content-Length: 4

{binary content not shown}

[\[diagram\]](#) Call-ID: [\[prev\]](#) [\[next\]](#)

**[27] SIP/2.0 200 OK**

From: "SIP Line 2005" <sip:2005@172.18.203.55>;tag=b9c8b19b-c709-4d85-86d4-d2f557c6c2a6-25663760  
 To: <sip:6105@172.18.203.82>;tag=152A8A720C3344EBAF905E005D414B4D  
 Via: SIP/2.0/TCP 172.18.203.55;branch=z9hG4bK43714cb0  
 Call-ID: 7399c980-4e11fa28-a0-37cb12ac@172.18.203.55  
 CSeq: 109 NOTIFY  
 Content-Length: 0

[\[diagram\]](#) Call-ID: [\[prev\]](#) [\[next\]](#)

**[28] SIP/2.0 200 OK**

From: "SIP Line 2005" <sip:2005@172.18.203.55>;tag=b9c8b19b-c709-4d85-86d4-d2f557c6c2a6-25663760  
 To: <sip:6105@172.18.203.82>;tag=152A8A720C3344EBAF905E005D414B4D  
 Via: SIP/2.0/TCP 172.18.203.55;branch=z9hG4bK2ae1d004  
 Call-ID: 7399c980-4e11fa28-a0-37cb12ac@172.18.203.55  
 CSeq: 110 NOTIFY  
 Content-Length: 0

[\[diagram\]](#) Call-ID: [\[prev\]](#) [\[next\]](#)

**[29] NOTIFY sip:6105@172.18.203.82:5090 SIP/2.0**

Via: SIP/2.0/TCP 172.18.203.55;branch=z9hG4bK5e94f203  
 From: "SIP Line 2005" <sip:2005@172.18.203.55>;tag=b9c8b19b-c709-4d85-86d4-d2f557c6c2a6-25663760  
 To: <sip:6105@172.18.203.82>;tag=152A8A720C3344EBAF905E005D414B4D  
 Call-ID: 7399c980-4e11fa28-a0-37cb12ac@172.18.203.55  
 CSeq: 111 NOTIFY  
 Max-Forwards: 70  
 Date: Tue, 15 Aug 2006 16:45:32 GMT  
 User-Agent: Cisco-CCM5.0  
 Event: telephone-event;rate=1000  
 Subscription-State: active;expires=58490328  
 Contact: <sip:172.18.203.55:5090;transport=tcp>  
 Content-Type: audio/telephone-event  
 Content-Length: 4

{binary content not shown}

[\[diagram\]](#) Call-ID: [\[prev\]](#) [\[next\]](#)

**[30] NOTIFY sip:6105@172.18.203.82:5090 SIP/2.0**

Via: SIP/2.0/TCP 172.18.203.55;branch=z9hG4bK1a7ee681  
 From: "SIP Line 2005" <sip:2005@172.18.203.55>;tag=b9c8b19b-c709-4d85-86d4-d2f557c6c2a6-25663760  
 To: <sip:6105@172.18.203.82>;tag=152A8A720C3344EBAF905E005D414B4D  
 Call-ID: 7399c980-4e11fa28-a0-37cb12ac@172.18.203.55  
 CSeq: 112 NOTIFY  
 Max-Forwards: 70  
 Date: Tue, 15 Aug 2006 16:45:32 GMT  
 User-Agent: Cisco-CCM5.0  
 Event: telephone-event;rate=1000  
 Subscription-State: active;expires=169927672  
 Contact: <sip:172.18.203.55:5090;transport=tcp>  
 Content-Type: audio/telephone-event  
 Content-Length: 4

{binary content not shown}

[\[diagram\]](#) Call-ID: [\[prev\]](#) [\[next\]](#)

**[31] SIP/2.0 200 OK**

From: "SIP Line 2005" <sip:2005@172.18.203.55>;tag=b9c8b19b-c709-4d85-86d4-d2f557c6c2a6-25663760  
 To: <sip:6105@172.18.203.82>;tag=152A8A720C3344EBAF905E005D414B4D  
 Via: SIP/2.0/TCP 172.18.203.55;branch=z9hG4bK5e94f203  
 Call-ID: 7399c980-4e11fa28-a0-37cb12ac@172.18.203.55  
 CSeq: 111 NOTIFY  
 Content-Length: 0

[\[diagram\]](#) Call-ID: [\[prev\]](#) [\[next\]](#)

**[32] SIP/2.0 200 OK**

From: "SIP Line 2005" <sip:2005@172.18.203.55>;tag=b9c8b19b-c709-4d85-86d4-d2f557c6c2a6-25663760  
 To: <sip:6105@172.18.203.82>;tag=152A8A720C3344EBAF905E005D414B4D  
 Via: SIP/2.0/TCP 172.18.203.55;branch=z9hG4bK1a7ee681  
 Call-ID: 7399c980-4e11fa28-a0-37cb12ac@172.18.203.55  
 CSeq: 112 NOTIFY

Content-Length: 0

[\[diagram\]](#) Call-ID: [\[prev\]](#) [\[next\]](#)

**[33] NOTIFY sip:6105@172.18.203.82:5090 SIP/2.0**

Via: SIP/2.0/TCP 172.18.203.55;branch=z9hG4bK62864333  
 From: "SIP Line 2005" <sip:2005@172.18.203.55>;tag=b9c8b19b-c709-4d85-86d4-d2f557c6c2a6-25663760  
 To: <sip:6105@172.18.203.82>;tag=152A8A720C3344EBAF905E005D414B4D  
 Call-ID: 7399c980-4e11fa28-a0-37cb12ac@172.18.203.55  
 CSeq: 113 NOTIFY  
 Max-Forwards: 70  
 Date: Tue, 15 Aug 2006 16:45:33 GMT  
 User-Agent: Cisco-CCM5.0  
 Event: telephone-event;rate=1000  
 Subscription-State: active;expires=58490328  
 Contact: <sip:172.18.203.55:5090;transport=tcp>  
 Content-Type: audio/telephone-event  
 Content-Length: 4

{binary content not shown}

[\[diagram\]](#) Call-ID: [\[prev\]](#) [\[next\]](#)

**[34] NOTIFY sip:6105@172.18.203.82:5090 SIP/2.0**

Via: SIP/2.0/TCP 172.18.203.55;branch=z9hG4bK3ce0c1e4  
 From: "SIP Line 2005" <sip:2005@172.18.203.55>;tag=b9c8b19b-c709-4d85-86d4-d2f557c6c2a6-25663760  
 To: <sip:6105@172.18.203.82>;tag=152A8A720C3344EBAF905E005D414B4D  
 Call-ID: 7399c980-4e11fa28-a0-37cb12ac@172.18.203.55  
 CSeq: 114 NOTIFY  
 Max-Forwards: 70  
 Date: Tue, 15 Aug 2006 16:45:33 GMT  
 User-Agent: Cisco-CCM5.0  
 Event: telephone-event;rate=1000  
 Subscription-State: active;expires=169927672  
 Contact: <sip:172.18.203.55:5090;transport=tcp>  
 Content-Type: audio/telephone-event  
 Content-Length: 4

{binary content not shown}

[\[diagram\]](#) Call-ID: [\[prev\]](#) [\[next\]](#)

**[35] SIP/2.0 200 OK**

From: "SIP Line 2005" <sip:2005@172.18.203.55>;tag=b9c8b19b-c709-4d85-86d4-d2f557c6c2a6-25663760  
 To: <sip:6105@172.18.203.82>;tag=152A8A720C3344EBAF905E005D414B4D  
 Via: SIP/2.0/TCP 172.18.203.55;branch=z9hG4bK62864333  
 Call-ID: 7399c980-4e11fa28-a0-37cb12ac@172.18.203.55  
 CSeq: 113 NOTIFY  
 Content-Length: 0

[\[diagram\]](#) Call-ID: [\[prev\]](#) [\[next\]](#)

**[36] SIP/2.0 200 OK**

From: "SIP Line 2005" <sip:2005@172.18.203.55>;tag=b9c8b19b-c709-4d85-86d4-d2f557c6c2a6-25663760  
 To: <sip:6105@172.18.203.82>;tag=152A8A720C3344EBAF905E005D414B4D  
 Via: SIP/2.0/TCP 172.18.203.55;branch=z9hG4bK3ce0c1e4  
 Call-ID: 7399c980-4e11fa28-a0-37cb12ac@172.18.203.55  
 CSeq: 114 NOTIFY  
 Content-Length: 0

[\[diagram\]](#) Call-ID: [\[prev\]](#) [\[next\]](#)

**[37] NOTIFY sip:6105@172.18.203.82:5090 SIP/2.0**

Via: SIP/2.0/TCP 172.18.203.55;branch=z9hG4bK419baa2b  
 From: "SIP Line 2005" <sip:2005@172.18.203.55>;tag=b9c8b19b-c709-4d85-86d4-d2f557c6c2a6-25663760  
 To: <sip:6105@172.18.203.82>;tag=152A8A720C3344EBAF905E005D414B4D  
 Call-ID: 7399c980-4e11fa28-a0-37cb12ac@172.18.203.55  
 CSeq: 115 NOTIFY  
 Max-Forwards: 70  
 Date: Tue, 15 Aug 2006 16:45:33 GMT  
 User-Agent: Cisco-CCM5.0  
 Event: telephone-event;rate=1000  
 Subscription-State: active;expires=58490328  
 Contact: <sip:172.18.203.55:5090;transport=tcp>  
 Content-Type: audio/telephone-event  
 Content-Length: 4

{binary content not shown}

[\[diagram\]](#) Call-ID: [\[prev\]](#) [\[next\]](#)

**[38] SIP/2.0 200 OK**

From: "SIP Line 2005" <sip:2005@172.18.203.55>;tag=b9c8b19b-c709-4d85-86d4-d2f557c6c2a6-25663760  
 To: <sip:6105@172.18.203.82>;tag=152A8A720C3344EBAF905E005D414B4D  
 Via: SIP/2.0/TCP 172.18.203.55;branch=z9hG4bK419baa2b  
 Call-ID: 7399c980-4e11fa28-a0-37cb12ac@172.18.203.55

CSeq: 115 NOTIFY  
Content-Length: 0

[[diagram](#)] Call-ID: [[prev](#)] [[next](#)]

[39] NOTIFY sip:6105@172.18.203.82:5090 SIP/2.0

Via: SIP/2.0/TCP 172.18.203.55;branch=z9hG4bK69b7e305  
From: "SIP Line 2005" <sip:2005@172.18.203.55>;tag=b9c8b19b-c709-4d85-86d4-d2f557c6c2a6-25663760  
To: <sip:6105@172.18.203.82>;tag=152A8A720C3344EBAF905E005D414B4D  
Call-ID: 7399c980-4e11fa28-a0-37cb12ac@172.18.203.55  
CSeq: 116 NOTIFY  
Max-Forwards: 70  
Date: Tue, 15 Aug 2006 16:45:40 GMT  
User-Agent: Cisco-CCM5.0  
Event: telephone-event;rate=1000  
Subscription-State: active;expires=248224768  
Contact: <sip:172.18.203.55:5090;transport=tcp>  
Content-Type: audio/telephone-event  
Content-Length: 4

{binary content not shown}

[[diagram](#)] Call-ID: [[prev](#)] [[next](#)]

[40] SIP/2.0 200 OK

From: "SIP Line 2005" <sip:2005@172.18.203.55>;tag=b9c8b19b-c709-4d85-86d4-d2f557c6c2a6-25663760  
To: <sip:6105@172.18.203.82>;tag=152A8A720C3344EBAF905E005D414B4D  
Via: SIP/2.0/TCP 172.18.203.55;branch=z9hG4bK69b7e305  
Call-ID: 7399c980-4e11fa28-a0-37cb12ac@172.18.203.55  
CSeq: 116 NOTIFY  
Content-Length: 0

[[diagram](#)] Call-ID: [[prev](#)] [[next](#)]

[41] NOTIFY sip:6105@172.18.203.82:5090 SIP/2.0

Via: SIP/2.0/TCP 172.18.203.55;branch=z9hG4bK56696301  
From: "SIP Line 2005" <sip:2005@172.18.203.55>;tag=b9c8b19b-c709-4d85-86d4-d2f557c6c2a6-25663760  
To: <sip:6105@172.18.203.82>;tag=152A8A720C3344EBAF905E005D414B4D  
Call-ID: 7399c980-4e11fa28-a0-37cb12ac@172.18.203.55  
CSeq: 117 NOTIFY  
Max-Forwards: 70  
Date: Tue, 15 Aug 2006 16:45:41 GMT  
User-Agent: Cisco-CCM5.0  
Event: telephone-event;rate=1000  
Subscription-State: active;expires=58490328  
Contact: <sip:172.18.203.55:5090;transport=tcp>  
Content-Type: audio/telephone-event  
Content-Length: 4

{binary content not shown}

[[diagram](#)] Call-ID: [[prev](#)] [[next](#)]

[42] SIP/2.0 200 OK

From: "SIP Line 2005" <sip:2005@172.18.203.55>;tag=b9c8b19b-c709-4d85-86d4-d2f557c6c2a6-25663760  
To: <sip:6105@172.18.203.82>;tag=152A8A720C3344EBAF905E005D414B4D  
Via: SIP/2.0/TCP 172.18.203.55;branch=z9hG4bK56696301  
Call-ID: 7399c980-4e11fa28-a0-37cb12ac@172.18.203.55  
CSeq: 117 NOTIFY  
Content-Length: 0

[[diagram](#)] Call-ID: [[prev](#)] [[next](#)]

[43] NOTIFY sip:2005@172.18.203.55 SIP/2.0

From: sip:6105@172.18.203.55;tag=548C97520C1F468BBDC11DACB4DAD573  
To: sip:2005@172.18.203.55  
Via: SIP/2.0/UDP 172.18.203.82:5090;branch=z9hG4bKF5842659391F494E816D14F4D2022E08  
Max-Forwards: 70  
Contact: sip:6105@172.18.203.82:5090  
Call-ID: 74B199F4F0214C3F8676C9BBE8DCBEE5@172.18.203.55  
CSeq: 300 NOTIFY  
Event: message-summary  
Content-Length: 22  
Content-Type: text/plain

Messages-Waiting: no

[[diagram](#)] Call-ID: [[prev](#)] [[next](#)]

[44] NOTIFY sip:2005@172.18.203.45:5060 SIP/2.0

Via: SIP/2.0/UDP 172.18.203.55:5060;branch=z9hG4bK49c80295  
From: <sip:2005@172.18.203.55>;tag=1251676744  
To: <sip:2005@172.18.203.45>  
Call-ID: 7bf20480-4e11fa36-a1-37cb12ac@172.18.203.55  
CSeq: 101 NOTIFY  
Max-Forwards: 70

Date: Tue, 15 Aug 2006 16:45:42 GMT  
 User-Agent: Cisco-CCM5.0  
 Event: message-summary  
 Subscription-State: active;expires=3461144  
 Contact: <sip:2005@172.18.203.55:5060>  
 Content-Type: application/simple-message-summary  
 Content-Length: 22

Messages-Waiting: no

[\[diagram\]](#) Call-ID: [\[prev\]](#) [\[next\]](#)

**[45] SIP/2.0 200 OK**

Via: SIP/2.0/UDP 172.18.203.82:5090;branch=z9hG4bKF5842659391F494E816D14F4D2022E08  
 From: sip:6105@172.18.203.55;tag=548C97520C1F468BBDC11DACB4DAD573  
 To: sip:2005@172.18.203.55;tag=104513512  
 Date: Tue, 15 Aug 2006 16:45:42 GMT  
 Call-ID: 74B199F4F0214C3F8676C9BBE8DCBEE5@172.18.203.55  
 CSeq: 300 NOTIFY  
 Content-Length: 0

[\[diagram\]](#) Call-ID: [\[prev\]](#) [\[next\]](#)

**[46] SIP/2.0 200 OK**

Via: SIP/2.0/UDP 172.18.203.55:5060;branch=z9hG4bK49c80295  
 From: <sip:2005@172.18.203.55>;tag=1251676744  
 To: <sip:2005@172.18.203.45>  
 Call-ID: 7bf20480-4e11fa36-a1-37cb12ac@172.18.203.55  
 CSeq: 101 NOTIFY  
 Content-Length: 0

[\[diagram\]](#) Call-ID: [\[prev\]](#) [\[next\]](#)

**[47] NOTIFY sip:6105@172.18.203.82:5090 SIP/2.0**

Via: SIP/2.0/TCP 172.18.203.55;branch=z9hG4bK7a7d1fd2  
 From: "SIP Line 2005" <sip:2005@172.18.203.55>;tag=b9c8b19b-c709-4d85-86d4-d2f557c6c2a6-25663760  
 To: <sip:6105@172.18.203.82>;tag=152A8A720C3344EBAF905E005D414B4D  
 Call-ID: 7399c980-4e11fa28-a0-37cb12ac@172.18.203.55  
 CSeq: 118 NOTIFY  
 Max-Forwards: 70  
 Date: Tue, 15 Aug 2006 16:45:55 GMT  
 User-Agent: Cisco-CCM5.0  
 Event: telephone-event;rate=1000  
 Subscription-State: active;expires=248224768  
 Contact: <sip:172.18.203.55:5090;transport=tcp>  
 Content-Type: audio/telephone-event  
 Content-Length: 4

{binary content not shown}

[\[diagram\]](#) Call-ID: [\[prev\]](#) [\[next\]](#)

**[48] SIP/2.0 200 OK**

From: "SIP Line 2005" <sip:2005@172.18.203.55>;tag=b9c8b19b-c709-4d85-86d4-d2f557c6c2a6-25663760  
 To: <sip:6105@172.18.203.82>;tag=152A8A720C3344EBAF905E005D414B4D  
 Via: SIP/2.0/TCP 172.18.203.55;branch=z9hG4bK7a7d1fd2  
 Call-ID: 7399c980-4e11fa28-a0-37cb12ac@172.18.203.55  
 CSeq: 118 NOTIFY  
 Content-Length: 0

[\[diagram\]](#) Call-ID: [\[prev\]](#) [\[next\]](#)

**[49] NOTIFY sip:6105@172.18.203.82:5090 SIP/2.0**

Via: SIP/2.0/TCP 172.18.203.55;branch=z9hG4bK4d93d015  
 From: "SIP Line 2005" <sip:2005@172.18.203.55>;tag=b9c8b19b-c709-4d85-86d4-d2f557c6c2a6-25663760  
 To: <sip:6105@172.18.203.82>;tag=152A8A720C3344EBAF905E005D414B4D  
 Call-ID: 7399c980-4e11fa28-a0-37cb12ac@172.18.203.55  
 CSeq: 119 NOTIFY  
 Max-Forwards: 70  
 Date: Tue, 15 Aug 2006 16:45:55 GMT  
 User-Agent: Cisco-CCM5.0  
 Event: telephone-event;rate=1000  
 Subscription-State: active;expires=58490328  
 Contact: <sip:172.18.203.55:5090;transport=tcp>  
 Content-Type: audio/telephone-event  
 Content-Length: 4

{binary content not shown}

[\[diagram\]](#) Call-ID: [\[prev\]](#) [\[next\]](#)

**[50] SIP/2.0 200 OK**

From: "SIP Line 2005" <sip:2005@172.18.203.55>;tag=b9c8b19b-c709-4d85-86d4-d2f557c6c2a6-25663760  
 To: <sip:6105@172.18.203.82>;tag=152A8A720C3344EBAF905E005D414B4D  
 Via: SIP/2.0/TCP 172.18.203.55;branch=z9hG4bK4d93d015  
 Call-ID: 7399c980-4e11fa28-a0-37cb12ac@172.18.203.55

CSeq: 119 NOTIFY  
Content-Length: 0

[[diagram](#)] Call-ID: [[prev](#)] [[next](#)]

[51] BYE sip:6105@172.18.203.55:5060 SIP/2.0

Via: SIP/2.0/UDP 172.18.203.45:5060;branch=z9hG4bK0058cf6d  
From: "SIP Line 2005" <sip:2005@sipsig-ccm55>;tag=00120193edaa2a084751cd18-6167c828  
To: <sip:6105@sipsig-ccm55>;tag=b9c8b19b-c709-4d85-86d4-d2f557c6c2a6-25663759  
Call-ID: 00120193-edaa0279-0044a58f-2d91a815@172.18.203.45  
Max-Forwards: 70  
CSeq: 102 BYE  
User-Agent: Cisco-CP7960G/8.0  
Content-Length: 0

[[diagram](#)] Call-ID: [[prev](#)] [[next](#)]

[52] BYE sip:6105@172.18.203.82:5090 SIP/2.0

Via: SIP/2.0/UDP 172.18.203.55:5090;branch=z9hG4bK68075a3f  
From: "SIP Line 2005" <sip:2005@172.18.203.55>;tag=b9c8b19b-c709-4d85-86d4-d2f557c6c2a6-25663760  
To: <sip:6105@172.18.203.82>;tag=152A8A720C3344EBAF905E005D414B4D  
Date: Tue, 15 Aug 2006 16:45:28 GMT  
Call-ID: 7399c980-4e11fa28-a0-37cb12ac@172.18.203.55  
User-Agent: Cisco-CCM5.0  
Max-Forwards: 70  
CSeq: 120 BYE  
Content-Length: 0

[[diagram](#)] Call-ID: [[prev](#)] [[next](#)]

[53] SIP/2.0 200 OK

Via: SIP/2.0/UDP 172.18.203.45:5060;branch=z9hG4bK0058cf6d  
From: "SIP Line 2005" <sip:2005@sipsig-ccm55>;tag=00120193edaa2a084751cd18-6167c828  
To: <sip:6105@sipsig-ccm55>;tag=b9c8b19b-c709-4d85-86d4-d2f557c6c2a6-25663759  
Date: Tue, 15 Aug 2006 16:46:01 GMT  
Call-ID: 00120193-edaa0279-0044a58f-2d91a815@172.18.203.45  
CSeq: 102 BYE  
Content-Length: 0

[[diagram](#)] Call-ID: [[prev](#)] [[next](#)]

[54] SIP/2.0 200 OK

From: "SIP Line 2005" <sip:2005@172.18.203.55>;tag=b9c8b19b-c709-4d85-86d4-d2f557c6c2a6-25663760  
To: <sip:6105@172.18.203.82>;tag=152A8A720C3344EBAF905E005D414B4D  
Via: SIP/2.0/UDP 172.18.203.55:5090;branch=z9hG4bK68075a3f  
Call-ID: 7399c980-4e11fa28-a0-37cb12ac@172.18.203.55  
CSeq: 120 BYE  
Content-Length: 0

[[diagram](#)] Call-ID: [[prev](#)] [[next](#)]

[55] NOTIFY sip:2005@172.18.203.45:5060 SIP/2.0

Via: SIP/2.0/UDP 172.18.203.55:5060;branch=z9hG4bK287b2b8e  
From: <sip:172.18.203.55>;tag=2015540782  
To: <sip:2005@172.18.203.45>  
Call-ID: 7943df00-4e11fbdf-a5-37cb12ac@172.18.203.55  
CSeq: 101 NOTIFY  
Max-Forwards: 70  
Date: Tue, 15 Aug 2006 16:52:47 GMT  
User-Agent: Cisco-CCM5.0  
Event: service-control  
Subscription-State: active  
Contact: <sip:172.18.203.55:5060>  
Content-Type: text/plain  
Content-Length: 183

action=check-version  
RegisterCallId={00120193-edaa0003-5de772cd-18978afd@172.18.203.45}  
ConfigVersionStamp={1155660342-6c8d29df-6172-4969-bb14-59a83579713f}  
DialplanVersionStamp={}

[[diagram](#)] Call-ID: [[prev](#)] [[next](#)]

[56] NOTIFY sip:2005@172.18.203.45:5060 SIP/2.0

Via: SIP/2.0/UDP 172.18.203.55:5060;branch=z9hG4bK7e7392db  
From: <sip:2005@172.18.203.55>;tag=611821552  
To: <sip:2005@172.18.203.45>  
Call-ID: 7943df00-4e11fbdf-a6-37cb12ac@172.18.203.55  
CSeq: 101 NOTIFY  
Max-Forwards: 70  
Date: Tue, 15 Aug 2006 16:52:47 GMT  
User-Agent: Cisco-CCM5.0  
Event: message-summary  
Subscription-State: active  
Contact: <sip:2005@172.18.203.55:5060>  
Content-Type: application/simple-message-summary

Content-Length: 22

Messages-Waiting: no

[[diagram](#)] Call-ID: [[prev](#)] [[next](#)]  
**[57] NOTIFY sip:2006@172.18.203.45:5060 SIP/2.0**  
 Via: SIP/2.0/UDP 172.18.203.55:5060;branch=z9hG4bK27043c49  
 From: <sip:2006@172.18.203.55>;tag=938369224  
 To: <sip:2006@172.18.203.45>  
 Call-ID: 7943df00-4e11fbdf-a7-37cb12ac@172.18.203.55  
 CSeq: 101 NOTIFY  
 Max-Forwards: 70  
 Date: Tue, 15 Aug 2006 16:52:47 GMT  
 User-Agent: Cisco-CCM5.0  
 Event: message-summary  
 Subscription-State: active;expires=260295312  
 Contact: <sip:2006@172.18.203.55:5060>  
 Content-Type: application/simple-message-summary  
 Content-Length: 22

Messages-Waiting: no

[[diagram](#)] Call-ID: [[prev](#)] [[next](#)]  
**[58] SIP/2.0 200 OK**  
 Via: SIP/2.0/UDP 172.18.203.55:5060;branch=z9hG4bK287b2b8e  
 From: <sip:172.18.203.55>;tag=2015540782  
 To: <sip:2005@172.18.203.45>  
 Call-ID: 7943df00-4e11fbdf-a5-37cb12ac@172.18.203.55  
 CSeq: 101 NOTIFY  
 Content-Length: 0

[[diagram](#)] Call-ID: [[prev](#)] [[next](#)]  
**[59] SIP/2.0 200 OK**  
 Via: SIP/2.0/UDP 172.18.203.55:5060;branch=z9hG4bK7e7392db  
 From: <sip:2005@172.18.203.55>;tag=611821552  
 To: <sip:2005@172.18.203.45>  
 Call-ID: 7943df00-4e11fbdf-a6-37cb12ac@172.18.203.55  
 CSeq: 101 NOTIFY  
 Content-Length: 0

[[diagram](#)] Call-ID: [[prev](#)] [[next](#)]  
**[60] SIP/2.0 200 OK**  
 Via: SIP/2.0/UDP 172.18.203.55:5060;branch=z9hG4bK27043c49  
 From: <sip:2006@172.18.203.55>;tag=938369224  
 To: <sip:2006@172.18.203.45>  
 Call-ID: 7943df00-4e11fbdf-a7-37cb12ac@172.18.203.55  
 CSeq: 101 NOTIFY  
 Content-Length: 0

### 9.3 Message Waiting Indication On at Registration

Title: Message Waiting Indication On at Registration

#### Description:

Line 2005 on phone F has voicemail configured with one or more messages currently waiting. Note this phone may have lines other than 2005. However this scenario focuses on Line 2005.

When phone F first registers line 2005 (either when it's created or after a power cycles, for example) CCM will inform the phone of line 2005's MWI state.

In this case, CCM will send a NOTIFY containing a "Messages-Waiting: yes" body for Line 2005.

#### Configuration:

Node = CCM, IP = 172.18.203.55

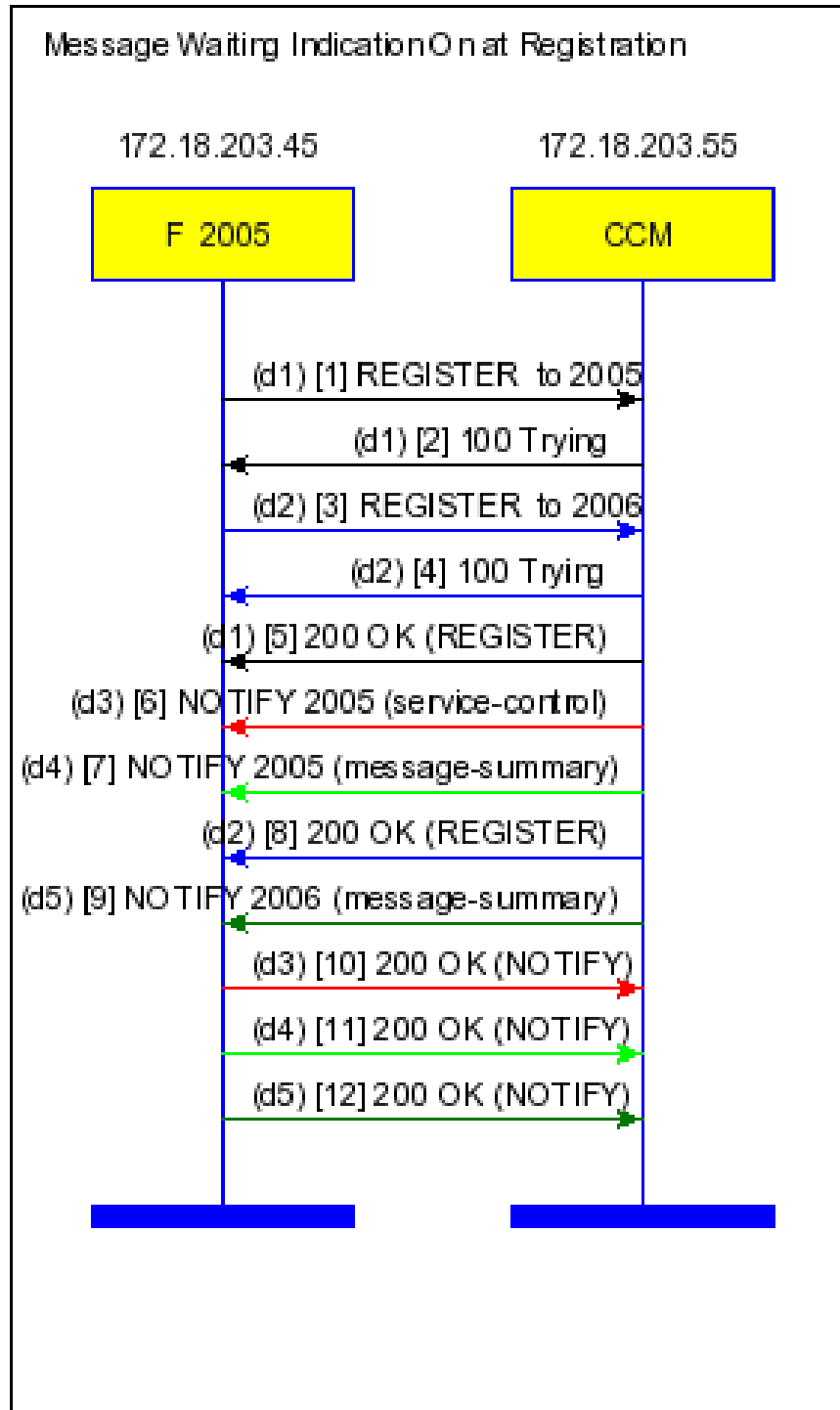
Phone = F, Line = 2005, IP = 172.18.203.45, Model = SIP 7960

#### Scenario:

Phone F is powered on

Phone F gets NOTIFY with "Messages-Waiting: yes" for line 2005.

(See Registration section for complete details)



[diagram] Call-ID: [prev] [next]  
**[1] REGISTER sip:sipsig-ccm55 SIP/2.0**  
 Via: SIP/2.0/UDP 172.18.203.45:5060;branch=z9hG4bK5982d45f  
 From: <sip:2005@sipsig-ccm55>;tag=00120193edaa00027ef2edc3-05ba038d  
 To: <sip:2005@sipsig-ccm55>  
 Call-ID: 00120193-edaa0003-3bf3c506-31d6f645@172.18.203.45  
 Max-Forwards: 70  
 CSeq: 101 REGISTER  
 User-Agent: Cisco-CP7960G/8.0  
 Contact: <sip:2005@172.18.203.45:5060;transport=udp>;+sip.instance="<urn:uuid:00000000-0000-0000-0000-00120193edaa>";+u.sip!model.ccm.cisco.com="7"  
 Supported: replaces,join,norefersub,X-cisco-callinfo,X-cisco-service-control  
 Content-Length: 0  
 Expires: 3600

[diagram] Call-ID: [prev] [next]  
**[2] SIP/2.0 100 Trying**  
 Via: SIP/2.0/UDP 172.18.203.45:5060;branch=z9hG4bK5982d45f  
 From: <sip:2005@sipsig-ccm55>;tag=00120193edaa00027ef2edc3-05ba038d  
 To: <sip:2005@sipsig-ccm55>  
 Date: Tue, 15 Aug 2006 16:58:52 GMT  
 Call-ID: 00120193-edaa0003-3bf3c506-31d6f645@172.18.203.45  
 CSeq: 101 REGISTER  
 Content-Length: 0

[diagram] Call-ID: [prev] [next]  
**[3] REGISTER sip:sipsig-ccm55 SIP/2.0**  
 Via: SIP/2.0/UDP 172.18.203.45:5060;branch=z9hG4bK399159e7  
 From: <sip:2006@sipsig-ccm55>;tag=00120193edaa000323ae851a-4c362983  
 To: <sip:2006@sipsig-ccm55>  
 Call-ID: 00120193-edaa0004-1550c694-1a179f66@172.18.203.45  
 Max-Forwards: 70  
 CSeq: 101 REGISTER  
 User-Agent: Cisco-CP7960G/8.0  
 Contact: <sip:2006@172.18.203.45:5060;transport=udp>;+sip.instance="<urn:uuid:00000000-0000-0000-0000-00120193edaa>";+u.sip!model.ccm.cisco.com="7"  
 Supported: replaces,join,norefersub,X-cisco-callinfo,X-cisco-service-control  
 Content-Length: 0  
 Expires: 3600

[diagram] Call-ID: [prev] [next]  
**[4] SIP/2.0 100 Trying**  
 Via: SIP/2.0/UDP 172.18.203.45:5060;branch=z9hG4bK399159e7  
 From: <sip:2006@sipsig-ccm55>;tag=00120193edaa000323ae851a-4c362983  
 To: <sip:2006@sipsig-ccm55>  
 Date: Tue, 15 Aug 2006 16:58:52 GMT  
 Call-ID: 00120193-edaa0004-1550c694-1a179f66@172.18.203.45  
 CSeq: 101 REGISTER  
 Content-Length: 0

[diagram] Call-ID: [prev] [next]  
**[5] SIP/2.0 200 OK**  
 Via: SIP/2.0/UDP 172.18.203.45:5060;branch=z9hG4bK5982d45f  
 From: <sip:2005@sipsig-ccm55>;tag=00120193edaa00027ef2edc3-05ba038d  
 To: <sip:2005@sipsig-ccm55>;tag=720371765  
 Date: Tue, 15 Aug 2006 16:58:52 GMT  
 Call-ID: 00120193-edaa0003-3bf3c506-31d6f645@172.18.203.45  
 CSeq: 101 REGISTER  
 Expires: 180  
 Contact: <sip:2005@172.18.203.45:5060;transport=udp>;+sip.instance="<urn:uuid:00000000-0000-0000-0000-00120193edaa>";+u.sip!model.ccm.cisco.com="7";x-cisco-newreg  
 Content-Length: 0

[diagram] Call-ID: [prev] [next]  
**[6] NOTIFY sip:2005@172.18.203.45:5060 SIP/2.0**  
 Via: SIP/2.0/UDP 172.18.203.55:5060;branch=z9hG4bK7c6b5b57  
 From: <sip:172.18.203.55>;tag=1136071408  
 To: <sip:2005@172.18.203.45>  
 Call-ID: 52d27380-4e11fd4c-ad-37cb12ac@172.18.203.55  
 CSeq: 101 NOTIFY  
 Max-Forwards: 70  
 Date: Tue, 15 Aug 2006 16:58:52 GMT  
 User-Agent: Cisco-CCM5.0  
 Event: service-control  
 Subscription-State: active  
 Contact: <sip:172.18.203.55:5060>  
 Content-Type: text/plain  
 Content-Length: 183

action=check-version

```
RegisterCallId={00120193-edaa0003-3bf3c506-31d6f645@172.18.203.45}
ConfigVersionStamp={1155660859-688a0758-925d-41c6-a457-715cbe8f0a0b}
DialplanVersionStamp={}
```

```
[diagram] Call-ID: [prev] [next]
[7] NOTIFY sip:2005@172.18.203.45:5060 SIP/2.0
Via: SIP/2.0/UDP 172.18.203.55:5060;branch=z9hG4bK45837c7e
From: <sip:2005@172.18.203.55>;tag=153380477
To: <sip:2005@172.18.203.45>
Call-ID: 52d27380-4e11fd4c-ae-37cb12ac@172.18.203.55
CSeq: 101 NOTIFY
Max-Forwards: 70
Date: Tue, 15 Aug 2006 16:58:52 GMT
User-Agent: Cisco-CCM5.0
Event: message-summary
Subscription-State: active
Contact: <sip:2005@172.18.203.55:5060>
Content-Type: application/simple-message-summary
Content-Length: 23
```

Messages-Waiting: yes

```
[diagram] Call-ID: [prev] [next]
[8] SIP/2.0 200 OK
Via: SIP/2.0/UDP 172.18.203.45:5060;branch=z9hG4bK399159e7
From: <sip:2006@sipsig-ccm55>;tag=00120193edaa000323ae851a-4c362983
To: <sip:2006@sipsig-ccm55>;tag=264307585
Date: Tue, 15 Aug 2006 16:58:52 GMT
Call-ID: 00120193-edaa0004-1550c694-1a179f66@172.18.203.45
CSeq: 101 REGISTER
Expires: 900
Contact: <sip:2006@172.18.203.45:5060;transport=udp>;+sip.instance="urn:uuid:00000000-0000-0000-0000-00120193edaa";+u.sip!model.ccm.cisco.com="7"
Content-Length: 0
```

```
[diagram] Call-ID: [prev] [next]
[9] NOTIFY sip:2006@172.18.203.45:5060 SIP/2.0
Via: SIP/2.0/UDP 172.18.203.55:5060;branch=z9hG4bK42f0a4f0
From: <sip:2006@172.18.203.55>;tag=241884419
To: <sip:2006@172.18.203.45>
Call-ID: 52d27380-4e11fd4c-af-37cb12ac@172.18.203.55
CSeq: 101 NOTIFY
Max-Forwards: 70
Date: Tue, 15 Aug 2006 16:58:52 GMT
User-Agent: Cisco-CCM5.0
Event: message-summary
Subscription-State: active;expires=260295312
Contact: <sip:2006@172.18.203.55:5060>
Content-Type: application/simple-message-summary
Content-Length: 22
```

Messages-Waiting: no

```
[diagram] Call-ID: [prev] [next]
[10] SIP/2.0 200 OK
Via: SIP/2.0/UDP 172.18.203.55:5060;branch=z9hG4bK7c6b5b57
From: <sip:172.18.203.55>;tag=1136071408
To: <sip:2005@172.18.203.45>
Call-ID: 52d27380-4e11fd4c-ad-37cb12ac@172.18.203.55
CSeq: 101 NOTIFY
Content-Length: 0
```

```
[diagram] Call-ID: [prev] [next]
[11] SIP/2.0 200 OK
Via: SIP/2.0/UDP 172.18.203.55:5060;branch=z9hG4bK45837c7e
From: <sip:2005@172.18.203.55>;tag=153380477
To: <sip:2005@172.18.203.45>
Call-ID: 52d27380-4e11fd4c-ae-37cb12ac@172.18.203.55
CSeq: 101 NOTIFY
Content-Length: 0
```

```
[diagram] Call-ID: [prev] [next]
[12] SIP/2.0 200 OK
Via: SIP/2.0/UDP 172.18.203.55:5060;branch=z9hG4bK42f0a4f0
From: <sip:2006@172.18.203.55>;tag=241884419
To: <sip:2006@172.18.203.45>
Call-ID: 52d27380-4e11fd4c-af-37cb12ac@172.18.203.55
CSeq: 101 NOTIFY
Content-Length: 0
```



## 9.4 Message Waiting Indication Off at Registration

Title: Message Waiting Indication Off at Registration

### Description:

Line 2005 on phone F has voicemail configured with no messages currently waiting. Note this phone may have lines other than 2005. However this scenario focuses on Line 2005.

When phone F first registers line 2005 (either when it's created or after a power cycles, for example) CCM will inform the phone of line 2005's MWI state.

In this case, CCM will send a NOTIFY containing a "Messages-Waiting: no" body for Line 2005.

### Configuration:

Node = CCM, IP = 172.18.203.55

Phone = F, Line = 2005, IP = 172.18.203.45, Model = SIP 7960

### Scenario:

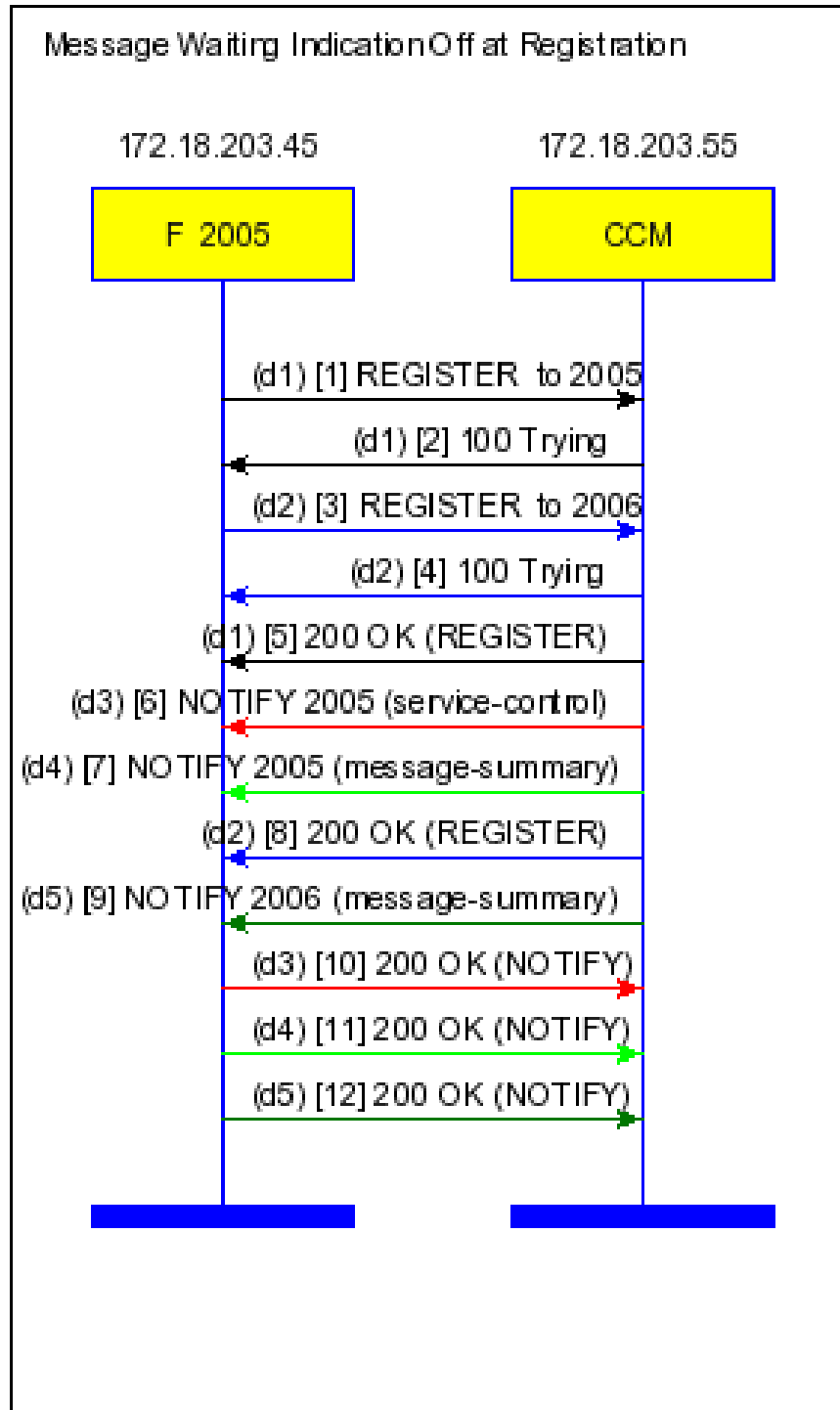
Phone F is powered on

Phone F gets NOTIFY with "Messages-Waiting: no"

(See Registration section for complete details)

### Note:

The audio/telephone-event content type is binary. Currently, this content is not formatted into ASCII and displayed in the detailed messages. Instead, you will see "{binary content not shown}" in place of the actual binary content.



[[diagram](#)] [Call-ID: \[prev\]](#) [[next](#)]  
**[1] REGISTER sip:sipsig-ccm55 SIP/2.0**  
 Via: SIP/2.0/UDP 172.18.203.45:5060;branch=z9hG4bK17483371  
 From: <sip:2005@sipsig-ccm55>;tag=00120193edaa000254dd7ee3-6c273157  
 To: <sip:2005@sipsig-ccm55>  
 Call-ID: 00120193-edaa0003-5de772cd-18978afd@172.18.203.45  
 Max-Forwards: 70  
 CSeq: 101 REGISTER  
 User-Agent: Cisco-CP7960G/8.0  
 Contact: <sip:2005@172.18.203.45:5060;transport=udp>;+sip.instance="<urn:uuid:00000000-0000-0000-0000-00120193edaa>";+u.sip!model.ccm.cisco.com="7"  
 Supported: replaces,join,norefersub,X-cisco-callinfo,X-cisco-service-control  
 Content-Length: 0  
 Expires: 3600

[[diagram](#)] [Call-ID: \[prev\]](#) [[next](#)]  
**[2] SIP/2.0 100 Trying**  
 Via: SIP/2.0/UDP 172.18.203.45:5060;branch=z9hG4bK17483371  
 From: <sip:2005@sipsig-ccm55>;tag=00120193edaa000254dd7ee3-6c273157  
 To: <sip:2005@sipsig-ccm55>  
 Date: Tue, 15 Aug 2006 16:52:47 GMT  
 Call-ID: 00120193-edaa0003-5de772cd-18978afd@172.18.203.45  
 CSeq: 101 REGISTER  
 Content-Length: 0

[[diagram](#)] [Call-ID: \[prev\]](#) [[next](#)]  
**[3] REGISTER sip:sipsig-ccm55 SIP/2.0**  
 Via: SIP/2.0/UDP 172.18.203.45:5060;branch=z9hG4bK7c3d7828  
 From: <sip:2006@sipsig-ccm55>;tag=00120193edaa00035754323a-4e63a392  
 To: <sip:2006@sipsig-ccm55>  
 Call-ID: 00120193-edaa0004-3c80ae86-6b2bc6d4@172.18.203.45  
 Max-Forwards: 70  
 CSeq: 101 REGISTER  
 User-Agent: Cisco-CP7960G/8.0  
 Contact: <sip:2006@172.18.203.45:5060;transport=udp>;+sip.instance="<urn:uuid:00000000-0000-0000-0000-00120193edaa>";+u.sip!model.ccm.cisco.com="7"  
 Supported: replaces,join,norefersub,X-cisco-callinfo,X-cisco-service-control  
 Content-Length: 0  
 Expires: 3600

[[diagram](#)] [Call-ID: \[prev\]](#) [[next](#)]  
**[4] SIP/2.0 100 Trying**  
 Via: SIP/2.0/UDP 172.18.203.45:5060;branch=z9hG4bK7c3d7828  
 From: <sip:2006@sipsig-ccm55>;tag=00120193edaa00035754323a-4e63a392  
 To: <sip:2006@sipsig-ccm55>  
 Date: Tue, 15 Aug 2006 16:52:47 GMT  
 Call-ID: 00120193-edaa0004-3c80ae86-6b2bc6d4@172.18.203.45  
 CSeq: 101 REGISTER  
 Content-Length: 0

[[diagram](#)] [Call-ID: \[prev\]](#) [[next](#)]  
**[5] SIP/2.0 200 OK**  
 Via: SIP/2.0/UDP 172.18.203.45:5060;branch=z9hG4bK17483371  
 From: <sip:2005@sipsig-ccm55>;tag=00120193edaa000254dd7ee3-6c273157  
 To: <sip:2005@sipsig-ccm55>;tag=1418162321  
 Date: Tue, 15 Aug 2006 16:52:47 GMT  
 Call-ID: 00120193-edaa0003-5de772cd-18978afd@172.18.203.45  
 CSeq: 101 REGISTER  
 Expires: 180  
 Contact: <sip:2005@172.18.203.45:5060;transport=udp>;+sip.instance="<urn:uuid:00000000-0000-0000-0000-00120193edaa>";+u.sip!model.ccm.cisco.com="7";x-cisco-newreg  
 Content-Length: 0

[[diagram](#)] [Call-ID: \[prev\]](#) [[next](#)]  
**[6] NOTIFY sip:2005@172.18.203.45:5060 SIP/2.0**  
 Via: SIP/2.0/UDP 172.18.203.55:5060;branch=z9hG4bK287b2b8e  
 From: <sip:172.18.203.55>;tag=2015540782  
 To: <sip:2005@172.18.203.45>  
 Call-ID: 7943df00-4e11fbdf-a5-37cb12ac@172.18.203.55  
 CSeq: 101 NOTIFY  
 Max-Forwards: 70  
 Date: Tue, 15 Aug 2006 16:52:47 GMT  
 User-Agent: Cisco-CCM5.0  
 Event: service-control  
 Subscription-State: active  
 Contact: <sip:172.18.203.55:5060>  
 Content-Type: text/plain  
 Content-Length: 183

action=check-version

```
RegisterCallId={00120193-edaa0003-5de772cd-18978afd@172.18.203.45}
ConfigVersionStamp={1155660342-6c8d29df-6172-4969-bb14-59a83579713f}
DialplanVersionStamp={}
```

```
[diagram] Call-ID: [prev] [next]
[7] NOTIFY sip:2005@172.18.203.45:5060 SIP/2.0
Via: SIP/2.0/UDP 172.18.203.55:5060;branch=z9hG4bK7e7392db
From: <sip:2005@172.18.203.55>;tag=611821552
To: <sip:2005@172.18.203.45>
Call-ID: 7943df00-4e11fbdf-a6-37cb12ac@172.18.203.55
CSeq: 101 NOTIFY
Max-Forwards: 70
Date: Tue, 15 Aug 2006 16:52:47 GMT
User-Agent: Cisco-CCM5.0
Event: message-summary
Subscription-State: active
Contact: <sip:2005@172.18.203.55:5060>
Content-Type: application/simple-message-summary
Content-Length: 22
```

Messages-Waiting: no

```
[diagram] Call-ID: [prev] [next]
[8] SIP/2.0 200 OK
Via: SIP/2.0/UDP 172.18.203.45:5060;branch=z9hG4bK7c3d7828
From: <sip:2006@sipsig-ccm55>;tag=00120193edaa00035754323a-4e63a392
To: <sip:2006@sipsig-ccm55>;tag=1124886201
Date: Tue, 15 Aug 2006 16:52:47 GMT
Call-ID: 00120193-edaa0004-3c80ae86-6b2bc6d4@172.18.203.45
CSeq: 101 REGISTER
Expires: 900
Contact: <sip:2006@172.18.203.45:5060;transport=udp>;+sip.instance="urn:uuid:00000000-0000-0000-0000-00120193edaa";+u.sip!model.ccm.cisco.com="7"
Content-Length: 0
```

```
[diagram] Call-ID: [prev] [next]
[9] NOTIFY sip:2006@172.18.203.45:5060 SIP/2.0
Via: SIP/2.0/UDP 172.18.203.55:5060;branch=z9hG4bK27043c49
From: <sip:2006@172.18.203.55>;tag=938369224
To: <sip:2006@172.18.203.45>
Call-ID: 7943df00-4e11fbdf-a7-37cb12ac@172.18.203.55
CSeq: 101 NOTIFY
Max-Forwards: 70
Date: Tue, 15 Aug 2006 16:52:47 GMT
User-Agent: Cisco-CCM5.0
Event: message-summary
Subscription-State: active;expires=260295312
Contact: <sip:2006@172.18.203.55:5060>
Content-Type: application/simple-message-summary
Content-Length: 22
```

Messages-Waiting: no

```
[diagram] Call-ID: [prev] [next]
[10] SIP/2.0 200 OK
Via: SIP/2.0/UDP 172.18.203.55:5060;branch=z9hG4bK287b2b8e
From: <sip:172.18.203.55>;tag=2015540782
To: <sip:2005@172.18.203.45>
Call-ID: 7943df00-4e11fbdf-a5-37cb12ac@172.18.203.55
CSeq: 101 NOTIFY
Content-Length: 0
```

```
[diagram] Call-ID: [prev] [next]
[11] SIP/2.0 200 OK
Via: SIP/2.0/UDP 172.18.203.55:5060;branch=z9hG4bK7e7392db
From: <sip:2005@172.18.203.55>;tag=611821552
To: <sip:2005@172.18.203.45>
Call-ID: 7943df00-4e11fbdf-a6-37cb12ac@172.18.203.55
CSeq: 101 NOTIFY
Content-Length: 0
```

```
[diagram] Call-ID: [prev] [next]
[12] SIP/2.0 200 OK
Via: SIP/2.0/UDP 172.18.203.55:5060;branch=z9hG4bK27043c49
From: <sip:2006@172.18.203.55>;tag=938369224
To: <sip:2006@172.18.203.45>
Call-ID: 7943df00-4e11fbdf-a7-37cb12ac@172.18.203.55
CSeq: 101 NOTIFY
Content-Length: 0
```

