



Cisco Unified Communications Manager SIP Line Messaging Guide (Standard)

For Cisco Unified Communications Manager Release 8.6(1)

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CONTENTS

Preface v

Audience v

Organization v

Conventions vi

Obtaining Documentation, Obtaining Support, and Security Guidelines vi

CHAPTER 1

SIP Standard Line Interface 1-1

Definitions/Glossary 1-1

New and Changed Information 1-2

Standard Interface Compliance Summary 1-2

Proprietary and Nonstandard SIP Headers and Identification Services 1-6

Remote-Party-ID Header 1-6

Calling Line and Name Identification Presentation 1-8

Calling Line and Name Identification Restriction 1-8

Connected Line and Name Identification Presentation 1-9

Connected Line and Name Identification Restriction 1-9

CPN Number Presentation 1-9

Supported Media Types 1-10

Supported Event Packages 1-11

Supported Content Types 1-12

SIP Message Fields 1-12

Request Messages 1-12

INVITE 1-12

ACK 1-13

Response Messages 1-14

180 Ringing 1-14

183 Session Progress 1-15

2xx 1-15

Message Timers 1-16

Message Retry Counts 1-17

Standard Feature Scenarios 1-17

Registration 1-18

Source Device ID for RFC3261-Compliant Phones 1-18

MultiLine Registration 1-18

REGISTER Refresh (Keepalive)	1-18
Device Binding	1-18
Multiple Bindings for the Same AOR	1-19
Contact: *	1-19
Basic Call	1-19
Simple Hold and Resume	1-19
Transfer	1-20
Attended Transfer	1-20
Early Attended Transfer	1-20
Blind Transfer	1-21
Three-Way Calling	1-21
Call Forwarding	1-22
Message Waiting Indication	1-23
Endpoint Returns 302 Redirect	1-23
Endpoint Returns 486 Busy	1-23
Announcements for Certain Call Setup Failures	1-24
INFO Packages	1-25
INFO Conference Package Negotiation	1-25
G.Clear Calls	1-29
Example SDP for G.Clear Call	1-29
Early Offer Support for G.Clear Calls	1-29
BFCP	1-30

CHAPTER 2

Basic SIP Line Call Flows 2-1

BFCP



Preface

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

The preface covers these topics:

- [Audience](#)
- [Organization](#)
- [Conventions](#)
- [Obtaining Documentation, Obtaining Support, and Security Guidelines](#)

Audience

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

Organization

This document consists of the following two chapters.

Chapter	Description
Chapter 1, “SIP Standard Line Interface”	Provides an overview of SIP line messages and standards compliance.
Chapter 2, “Basic SIP Line Call Flows”	Comprises a listing of all SIP line messages, including sequence charts and examples of call flows.

Conventions

This document uses the following conventions:

Convention	Description
boldface font	Commands and keywords are in boldface .
<i>italic</i> font	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</code> font.
boldface screen font	Information you must enter is in boldface screen font.
<i>italic screen</i> font	Arguments for which you supply values are in <i>italic screen</i> font.
→	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*.

Obtaining Documentation, Obtaining Support, and Security Guidelines

For information on obtaining documentation, obtaining support, providing documentation feedback, security guidelines, and also recommended aliases and general Cisco documents, see the monthly *What's New in Cisco Product Documentation*, which also lists all new and revised Cisco technical documentation, at:

<http://www.cisco.com/en/US/docs/general/whatsnew/whatsnew.html>



CHAPTER 1

SIP Standard Line Interface

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

This document describes the Cisco Unified CM SIP line interface from an external interface point of view. Chapter 2 provides call flow examples for the standard interface.

This chapter includes these sections:

- [Definitions/Glossary, page 1-1](#)
- [New and Changed Information, page 1-2](#)
- [Standard Interface Compliance Summary, page 1-2](#)
- [SIP Message Fields, page 1-12](#)
- [Standard Feature Scenarios, page 1-17](#)

Definitions/Glossary

Acronym/Word	Definition
AOR	Address of Record
BLF	Busy Lamp Field
Cseq	Call Sequence Number
CPN	Calling Party Normalization
CSS	Calling Search Space
CTI	Computer Telephony Integration
DND	Do Not Disturb
DNS	Domain Name Server
DTMF	Dual-Tone Multifrequency
FECC	Far-End Camera Control
FMTF	Format-Specific Parameters
FQDN	Fully Qualified Domain Name
KPML	Key Pad Markup Language

Acronym/Word	Definition
MLPP	Multilevel Precedence and Preemption
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
SIS	SIP line Interface Specification
TLS	Transport Layer Security
UAC	User Agent Client
UAS	User Agent Server
URI	Uniform Resource Identifier
URN	Uniform Resource Name
VM	Voice Mail

New and Changed Information

The release 8.6(1) provides the following new SIP line interface enhancements:

- [BFCP, page 1-30](#)



Note

This section describes the new features and call flows added to Unified CM 8.6(1). It is recommended that you view the complete list of existing SIP basic call flows from SIP Line Messaging Guide (Standard) for Release 8.0(1) from:
http://www.cisco.com/en/US/products/sw/voicesw/ps556/products_programming_reference_guides_list.html

Standard Interface Compliance Summary

This section provides details about Cisco Unified CM 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, “Basic SIP Line Call Flows”](#) 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	Cisco Unified CM Supported	Comments
INVITE	Yes	The system also supports re-INVITE.
ACK	Yes	—
OPTIONS	Yes	Cisco Unified CM will respond to it if received. Cisco Unified CM does not send OPTIONS request.
INFO	Yes	INFO method is used for video support.
BYE	Yes	—
CANCEL	Yes	—
SUBSCRIBE	No	Refer to Supported Event Packages section.
NOTIFY	Yes	Refer to Supported Event Packages section.
REFER	Yes	The system supports inbound REFER as it applies to transfer. Cisco Unified CM line side does not generate outbound REFER for transfer.
REGISTER	Yes	—
PRACK	Yes	You can configure support for PRACK.
UPDATE	Yes	Cisco Unified CM supports receiving and generating UPDATE.
PUBLISH	No	Refer to Advanced Call Flow section.

Table 1-3 Compliance to SIP Responses

SIP Message	Cisco Unified CM Supported	Comments
1xx Response	Yes	—
100 Trying	Yes	—
180 Ringing	Yes	Early media is supported.
181 Call Forward	No	Cisco Unified CM ignores this message.
182 Queued	No	Cisco Unified CM ignores this message.
183 Progress	Yes	Early media is supported.
2xx Response	Yes	—
200 OK	Yes	—
202 OK	Yes	Message applies for REFER.
3xx Response	Yes	—
300–302, 305, 380, 385	Yes	This message does not generate. The system contacts the new address in the Contact header upon receiving.
4xx Response	Yes	Upon receiving, the system initiates a graceful call disconnect.
401	Yes	Cisco Unified CM SIP sends out message 401 (Unauthorized) if authentication and authorization are enabled. Cisco Unified CM SIP also responds to inbound 401 challenges.
403	Yes	Cisco Unified CM SIP sends out message 403 (Forbidden) if a SIP method is not on the Access Control List. 403 can also get returned if the system does not support a method in a particular state.
407	Yes	Cisco Unified CM SIP responds to inbound 407 (Proxy Authentication Required) challenges.
412	Yes	Cisco Unified CM SIP sends out 412 if a PUBLISH refresh or PUBLISH remove request is received with an unknown entity tag.
423	Yes	Cisco Unified CM SIP 423 if an expired header is received with an expires time lower than the acceptable minimum.
5xx Response	Yes	Upon receiving this message, the system sends a new request if an additional address is present. Otherwise, the system initiates a graceful disconnect.
6xx Response	Yes	This message does not get generated. Upon receiving this message, the system initiates a graceful disconnect.

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

SIP Headers	Cisco Unified CM Supported	Comments
Accept	Yes	—
Accept-Encoding	No	—
Accept-Language	No	—
Alert-Info	Yes	Cisco Unified CM 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 CM will ignore this header if it gets received. Cisco Unified CM 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	—
In-Reply-To	No	—
Max-Forwards	Yes	Cisco Unified CM sets to 70 for outgoing INVITE and does not increment/decrement it.
MIME-Version	Yes	This header gets used with REFER.
Min-Expires	Yes	—
Organization	No	—
Priority	No	—
Proxy-Authenticate	Yes	Cisco Unified CM SIP supports receiving this header in 407 responses.
Proxy-Authorization	Yes	Cisco Unified CM SIP supports sending new request with this header after it receives 407 responses.
Proxy-Require	No	—
Record-Route	Yes	—
Reply-To	No	—

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

SIP Headers	Cisco Unified CM Supported	Comments
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 and Nonstandard SIP Headers and Identification Services

Table 1-5 lists the proprietary and nonstandard header fields for the standard SIP line-side interface. Refer to the [“Remote-Party-ID Header”](#) section on page 1-6 for additional information.

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

SIP Headers	Cisco Unified CM Supported	Comments
Diversion	Yes	Used for RDNIS information. If it is present, it always presents 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 get left to the Original Called Party.
Remote-Party-ID	Yes	Used for ID services including Connected Name & ID. This nonstandard, non-proprietary header gets included in the Standard Feature Scenarios anyway.

Remote-Party-ID Header

This section describes the SIP Identification Services in the Cisco Unified CM for the SIP line, including 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 provides ID services header as specified in draft-ietf-sip-privacy-03.txt.

The Cisco Unified CM 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 CM 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.

Cisco Unified CM 8.0(1) enables the Cisco Unified CM to route the localized and globalized forms of a calling number to the receiving endpoint, which is known as *Calling Party Normalization* (CPN). For example, when receiving a local call outside an enterprise in North America, it is desirable to display the familiar seven-digit calling number to the endpoint user (for example, 232-5757). To return a call to a local number outside the enterprise, the endpoint user typically dials an access code (for example, 9) to indicate dialing of an external directory number (92325757). This form of the calling number is referred to as the *global* or *globalized* number. The localized form of the calling number is presented in the SIP Remote-Party-ID header as the user part of the address. The globalized form of the calling number is presented as an optional SIP URI parameter.

**Note**

Although the Remote-Party-ID header is nonstandard, many vendors implement it, and it gets included in most Cisco SIP products. Therefore, the standard section of this document includes it, even though it is effectively proprietary. The use of this header is not negotiated. Recipients should ignore it if it is not understood.

Table 1-6 describes the support levels for identification parameters. Subsequent sections cover the following topics:

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

Table 1-6 Identification Parameters Support

Parameter	Values	Notes
x-cisco-callback-number	various	Ignored if received by Cisco Unified CM. Set to the globalized form of the calling (callback) number. The globalized form of a number is the form that, when dialed by the endpoint, is successfully routed to the desired destination with no editing by the user.

Table 1-6 Identification Parameters Support (continued)

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

Calling Line and Name Identification Presentation

The system includes the Calling Line (Number) and Name in both the From header and optionally 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 system conveys the SIP Line (Number) and Name restrictions by using the privacy parameter. If neither is restricted, privacy gets specified as off. The details that follow provide other values of privacy (name, uri, and full) 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 gets set to “Anonymous.” The display field in the “Remote-Party-ID” header still includes the actual name, but the privacy field gets 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 system sets the calling Line to “Anonymous” out in the “From” header; however, it still gets 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. For example:

```
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 CM 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 CM determined that this number is for “Bob Jones” and sent that back to the originator in a 180 or 183 message.

```
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 still gets 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 still gets 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 get included with privacy=full. For example:

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

CPN Number Presentation

Calling Party Normalization is a supplementary service which provides the calling number in a localized (normalized) and globalized format. Both forms of the calling number may appear in any of the SIP request or response messages where the Remote-Party-ID is present. The localized form of the calling number is presented as the user part of the SIP URI. The globalized form is presented as an optional SIP URI parameter. For example:

```
Remote-Party-ID: "sip line"
<sip:2325757@10.10.10.2;x-cisco-callback-number=99192325757>;party=calling;id-type=subscriber;privacy=off;screen=yes
```

Because this is an optional URI parameter, endpoints that do not support the x-cisco-callback-number parameter should ignore it.

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 μ -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	Supports all combinations of annex A and B.
RFC2833 DTMF	Telephony-event	Dynamically assigned	Acceptable range is 96 through 127.
G.Clear	CLEARMODE	Dynamically assigned	Typically 125 for all Cisco products. Cisco Unified CM supports other encoding names such as X-CCD, CCD, G.nX64 as well.

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). Used for shared line remote state notifications.
presence	Yes	Subscription	Used for BLF speed dials. Used for DND status. Used for missed, placed, and received calls as well as other directory services. Used for BLF alert indicator.
refer	Yes	Subscription	Used to carry sipfrag responses during call transfer. Used to carry remotecc 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 package.
message/sipfrag;version=2.0	See refer package as used for transfer.
application/pidf+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.
application/x-cisco-alarm+xml	See Phone Alarm System.
multipart/mixed	See refer package and remotecc.

SIP Message Fields

Cisco Unified CM SIP line supports request messages and response messages. The request messages include INVITE, ACK, OPTIONS, BYE, CANCEL, PRACK, and UPDATE methods. The response message comprises 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. You can deduce the values that midcall transactions use from these requests. Consult the call flows in [Chapter 2, “Basic SIP Line Call Flows,”](#) for additional information.

The SIP Request messages detailed in this section include:

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

INVITE

Table 1-13 provides the fields of INVITE SIP Request message.

Table 1-13 *INVITE Message Fields*

Message Lines	Variable	Incoming (to Cisco Unified CM)	Outgoing (from Cisco Unified CM)
INVITE sip:userpart@destIP:destPort SIP/2.0	userpart	Called Party Number	Calling Party Number
	destIP	Cisco Unified CM IP address or FQDN	Endpoint IP address
	destPort	Cisco Unified CM SIP port	Endpoint SIP port
Via: SIP/2.0/UDP ip:port;Branch=number	ip	Endpoint IP address	Cisco Unified CM IP address
	port	Endpoint SIP port	Cisco Unified CM SIP port
	number	Endpoint branch number	Cisco Unified CM branch number
From: "display" <sip:userpart@ip>;tag=from-tag	display ¹	Calling Party Name	Calling Party Name
	userpart	Calling Party Number	Calling Party Number
	ip	Cisco Unified CM IP address or FQDN	Cisco Unified CM IP address
	from-tag	Endpoint local tag	Cisco Unified CM local tag
To: <sip:userpart@destIP>	userpart	Called Party Number	Called Party Number
	destIP	Cisco Unified CM IP address or FQDN	Endpoint IP address
Remote-Party-ID: "display" <sip:userpart@ip>;params	display	Calling Party Name	Calling Party Name
	userpart	Calling Party Number	Calling Party Number
	ip	Endpoint IP address	Cisco Unified CM IP address
	params	Varies per Endpoint	Varies per Cisco Unified CM configuration
Call-ID: string	string	Endpoint-generated string	Cisco Unified CM generated string
Contact: <sip:userpart@ip:port >	userpart	Calling Party Number	Calling Party Number
	ip	Endpoint IP address	Cisco Unified CM IP address
	port	Endpoint port	Cisco Unified CM port
Cseq: number method	number	sequence number	Sequence number
	method	SIP method	SIP method
Max-Forwards: number	number	Max forwards	Max forwards
SDP [sdp]	sdp	Endpoint SDP	Cisco Unified CM typically uses delayed media.

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

ACK

The ACK message values will reflect the values that were established by the INVITE/18x/200 message sequence.

**Note**

The ACK may contain SDP and Remote-Party-ID headers.

Response Messages

**Note**

The order of the outgoing and incoming columns is switched in the following table compared to the preceding table for the INVITE messages. This way, the columns align according to dialog across these tables; in other words, an incoming INVITE to Cisco Unified CM results in an outgoing 180 message.

The SIP Response messages that are detailed in this section include

- [180 Ringing, page 1-14](#)
- [183 Session Progress, page 1-15](#)
- [2xx, page 1-15](#)

180 Ringing

[Table 1-14](#) provides the fields of 180 Ringing SIP Response message.

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

Message Lines	Variable	Outgoing (from Cisco Unified CM)	Incoming (to Cisco Unified CM)
SIP/2.0 180 Ringing			
Via: SIP/2.0/UDP ip:port;Branch=number	ip	Endpoint IP address	Cisco Unified CM IP address
	port	Endpoint SIP port	Cisco Unified CM SIP port
	number	Endpoint branch number	Cisco Unified CM branch number
From: "display"<sip:userpart@ip>;tag=from-tag	display	Calling Party Name	Calling Party Name
	userpart	Calling Party Number	Calling Party Number
	ip	Cisco Unified CM IP address or FQDN	Cisco Unified CM IP address
	from-tag	Endpoint local tag	Cisco Unified CM local tag
To: <sip:userpart@destIP>;tag=to-tag	userpart	Called Party Number	Called Party Number
	destIP	Cisco Unified CM IP address or FQDN	Endpoint IP address
	to-tag	Cisco Unified CM local tag	Endpoint local tag
Remote-Party-ID: "display" <sip:userpart@ip>;params	display	Called Party Name	Called Party Name
	userpart	Called Party Number	Called Party Number
	ip	Cisco Unified CM IP address	Endpoint IP address
	params	Varies per Cisco Unified CM processing	Varies per endpoint processing

Table 1-14 180 Ringing Message Fields (continued)

Message Lines	Variable	Outgoing (from Cisco Unified CM)	Incoming (to Cisco Unified CM)
Call-ID: string	string	Endpoint-generated string from the initial INVITE	Cisco Unified CM-generated string from the initial INVITE
Contact: <sip:userpart@ip:port >	userpart	Called Party Number	Called Party Number
	ip	Cisco Unified CM IP address	Endpoint IP address
	port	Cisco Unified CM port	Endpoint port
Cseq: number INVITE	number	Sequence number from initial INVITE	Sequence number from initial INVITE

183 Session Progress

The 183 message establishes early media. Cisco Unified CM will include SDP in a 183 message that is sent to an endpoint. The Remote-Party-ID header may have changed as well. Otherwise, a 183 carries the same values as a 180.

2xx



Note

Most 2XX values match the 180 message; 200 carries SDP. Also, the Remote-Party-ID may have changed after a 18x message was sent.

Table 1-15 provides the fields of 2xx SIP Response message.

Table 1-15 2XX Message Fields

Message Lines	Variable	Outgoing (from Cisco Unified CM)	Incoming (to Cisco Unified CM)
SIP/2.0 200 OK			
Via: SIP/2.0/UDP ip:port;Branch=number	ip	Endpoint IP address	Cisco Unified CM IP address
	port	Endpoint SIP port	Cisco Unified CM SIP port
	number	Endpoint branch number	Cisco Unified CM branch number
From: "display"<sip:userpart@ip>;tag=from-tag	display	Calling Party Name	Calling Party Name
	userpart	Calling Party Number	Calling Party Number
	ip	Cisco Unified CM IP address or FQDN	Cisco Unified CM IP address
	from-tag	Endpoint local tag	Cisco Unified CM local tag
To: <sip:userpart@destIP>;tag=to-tag	userpart	Called Party Number	Called Party Number
	destIP	Cisco Unified CM IP address or FQDN	Endpoint IP address
	to-tag	Cisco Unified CM local tag	Endpoint local tag

Table 1-15 2XX Message Fields (continued)

Message Lines	Variable	Outgoing (from Cisco Unified CM)	Incoming (to Cisco Unified CM)
Remote-Party-ID: "display" <sip:userpart@ip>;params	display	Called Party Name	Called Party Name
	userpart	Called Party Number	Called Party Number
	ip	Cisco Unified CM IP address	Endpoint IP address
	params	Varies per Cisco Unified CM processing	Varies per endpoint processing
Call-ID: string	string	Endpoint-generated string from the initial INVITE	Cisco Unified CM- generated string from the initial INVITE
Contact: <sip:userpart@ip:port >	userpart	Called Party Number	Called Party Number
	ip	Cisco Unified CM IP address	Endpoint IP address
	port	Cisco Unified CM port	Endpoint port
Cseq: number INVITE	number	Sequence number from initial INVITE	Sequence number from initial INVITE
SDP [sdp]	sdp	Cisco Unified CM SDP	Endpoint SDP

Message Timers

The following timers are service parameters that are configurable in Cisco Unified Communications Manager Administration.

Table 1-6 provides the configuration data for the SIP timers that is maintained by Cisco Unified CM.

Table 1-16 Message Timers

Message	Value (Default/Range)	Definition
trying	500 ms / 100–1000 ms	The time to wait for a 100 response to an INVITE request
connect	500 ms / 100–1000 ms	The time to wait for a 200 response to an ACK request
disconnect	500 ms / 100–1000 ms	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 / 100–1000 ms	The time that Cisco Unified CM should wait before retransmitting the reliable 1xx responses
prack	500 ms / 100–1000 ms	The time that Cisco Unified CM should wait before retransmitting the PRACK request
notify	500 ms / 100–1000 ms	The time that Cisco Unified CM should wait before retransmitting the Notify message
Publish	2147483647	Cisco Unified CM does not manage a timer for aging out published event state data it receives from endpoints. Cisco Unified CM requires endpoints to specify an expires time of 2147483647 when publishing event state data to Cisco Unified CM.

Message Retry Counts

All the following retry counts are service parameters that are configurable in Cisco Unified Communications Manager Administration. In case of TCP transportation type, the timers will still pop as usual. In the event of timeout, however, the stack will not retransmit; it will rely instead on TCP itself to do the retry.

[Table 1-17](#) provides the configuration data for the SIP retries, that is maintained by Cisco Unified CM.

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 CM line-side interface. This includes, but is not limited to, the following features:

- [Registration, page 1-18](#)
- [Basic Call, page 1-19](#)
- [Simple Hold and Resume, page 1-19](#)
- [Transfer, page 1-20](#)
- [Three-Way Calling, page 1-21](#)
- [Call Forwarding, page 1-22](#)
- [Message Waiting Indication, page 1-23](#)
- [Endpoint Returns 302 Redirect, page 1-23](#)
- [Endpoint Returns 486 Busy, page 1-23](#)
- [Announcements for Certain Call Setup Failures, page 1-24](#)
- [INFO Packages, page 1-25](#)
- [G.Clear Calls, page 1-29](#)
- [BFCP, page 1-30](#)

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

Registration

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

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

The system supports TCP and UDP transports for Standard registration, but not TLS.

Source Device ID for RFC3261-Compliant Phones

Cisco Unified CM must uniquely identify the device sending the REGISTER message to apply authentication, routing, and filtering. The Contact IP address is not suitable because it can change dynamically if DHCP is used. Instead, Cisco Unified CM uses the HTTP digest user ID. Each device that is configured in Cisco Unified CM requires a unique digest user ID. When the device sends the REGISTER, Cisco Unified CM will immediately respond with a 401 challenge to get the Authentication header. The system uses the user ID from the authentication header 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 CM database, Cisco Unified CM will respond with a 404 Not Found.

MultiLine Registration

Multiple lines can register with Cisco Unified CM if each line has a unique 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 CM uses REGISTER refreshes as keepalive messages to ensure the phone is still alive and connected. When the phone first registers with Cisco Unified CM, 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 CM 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

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

For UDP, the system creates the binding between the device ID and the IP address and port number in the Contact header. After the first REGISTER message is sent, all subsequent requests must use the same IP address and port number in the Contact header. If it changes, a 5xx error response gets returned because Cisco Unified CM cannot route the message.

For TCP, the system uses a combination of Contact binding and TCP connection binding. When a device registers over a TCP connection, Cisco Unified CM cannot determine whether the TCP connection will be transient (a new connection gets used for each transaction) or persistent. Therefore, Cisco Unified CM initially binds the device ID to the Contact IP address and port number. After several transactions get sent over the same TCP connection, the system considers it as proved-in and marks it as persistent. At this point, a binding gets created between the device ID and the TCP connection.

Multiple Bindings for the Same AOR

Cisco Unified CM includes a minor deviation from RFC3261 for the case of multiple registration bindings for a single address of record. Under the Cisco Unified CM 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 CM will only return the contact binding of the registering device during each registration; it will not enumerate other bindings that it knows about for a given AOR during registration. A registering endpoint should not rely on the binding list that is returned in the 200OK response as an exhaustive list for all bindings that are associated with the AOR. In addition, an endpoint cannot modify bindings for another device through Cisco Unified CM; it can only refresh or delete its own binding.

Contact: *

Cisco Unified CM deviates from RFC3261 in that it does not support the Contact: * format. This format is often used to unregister all contacts currently associated with an AOR. However Cisco Unified CM requires that the Contact header in each REGISTER message must contain the SIP URI identifying the device, and the unregister message (REGISTER with Expires: 0) must contain the same Contact header as the original REGISTER message.

This restriction occurs because Cisco Unified CM must be able to identify the source device for each incoming SIP message, and it uses the Contact header for that purpose. Cisco Unified CM cannot use the AOR in the To header because the shared line feature allows multiple different source devices to have the same AOR; thus, it is not unique to a specific device.

Basic Call

Cisco Unified CM follows the procedures that are described in RFC 3261, 3262, and 3264 to establish and clear down basic SIP calls. Often, on the outgoing side, Cisco Unified CM will send out INVITE without SDP. This allows Cisco Unified CM to discover the capabilities of both sides and provide media services in between if necessary (for example, transcoding).

Simple Hold and Resume

Cisco Unified CM 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.

The following three participants exist for call transfer:

- Transferee—The person who is being transferred.
- Transferor—The person who is transferring the call.
- Transfer Target (Target)—The person who is receiving the transfer.

Cisco Unified CM supports three types of transfer:

- Attended (also known as 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 automatically gets taken off hold and connected to the target.

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

Because Cisco Unified CM 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 CM and each phone stay independent. Instead, Cisco Unified CM 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 CM and transferor get BYE'd.

The following more detailed view shows 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:
 - a. reINVITE to connect media.
 - b. 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 receiving a ringback tone, the transferor transfers the call to the target and drops out of both calls. The transferee receives a ringback while the target phone is alerting. When the target answers, the system establishes a connection between transferee and target.

The transferor call flow, which uses a REFER with embedded replaces header, is based on the existing implementation of this feature on the SIP phones and gateways. The problem with this implementation in a peer-to-peer environment is the failure to 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 must to return a 481 message in that situation. Instead, the existing implementation honors the request and replaces the early dialog. That causes it to send a 487 message back to the transferor.

Early attended transfer involves two somewhat independent dialogs at the transferor device up until the time the device sends a REFER with embedded replaces header. When this message is received, Cisco Unified CM registers that the calls are associated. Because Cisco Unified CM 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 CM and each phone stay independent. Instead, Cisco Unified CM 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 CM and transferor get BYE'd.

The following more detailed view shows 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:
 - a. reINVITE to connect media.
 - b. UPDATE display name and number via Remote-Party-ID header.
 - c. Clear transferor dialogs.

The transferee will **not** receive a 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 gets made to the target prior to transfer. The timing for when the transferor drops out of the call depends on the transferor implementation of the feature, but, most likely, the drop occurs when the transferor is notified that the redirect operation was accepted and has begun.

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 Cisco Unified IP Phone 7960/40 supports it. It will continue to work for Cisco Unified CM line-side SIP endpoints. To support local mixing on the phone, Cisco Unified CM must allow the endpoint to have multiple active calls. Cisco Unified CM will allow this for SIP endpoints. From the Cisco Unified CM perspective, a locally mixed three-way call (or an n-way call) just looks like individual active calls. Cisco Unified CM does not perceive local mixing. Cisco Unified CM conference-related features like Conference List and Remove Last Party do not apply.

In a SIP environment, the endpoint that is hosting a three-way call can drop out and arrange to have the remaining two parties connected together. With SIP, the system accomplishes this by using REFER with embedded replaces. Prior to this action, two calls with four dialogs exist:

1. A.1 to B call:
 - a. A.1 to Cisco Unified CM dialog.
 - b. Cisco Unified CM to B dialog.
2. A.2 to C call:
 - a. A.2 to Cisco Unified CM dialog.
 - b. Cisco Unified CM 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 CM 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 does not get answered by the original called party but, instead, gets presented to one or more subsequent forwarded parties. Cisco Unified CM supports three types of forwarding:

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

In only in the call forward no answer case does the call actually get presented to the original called party. Cisco Unified CM detects call forward all and call forward busy prior to sending an INVITE to the called party, so forwarding bypasses that party. Call forward no answer will get detected via a timer in Cisco Unified CM, so Cisco Unified CM will initiate the canceling of the call to the original called party.

Older Cisco phones that use SIP 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 1-23](#)) response codes, respectively, to the INVITE.

Cisco Unified CM informs the calling party that their call has been forwarded via “Remote-Party-ID:” headers in updated 180 messages. The type of forwarding does not get 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 CM indicates forwarding to the called (or current forwarded-to) party by using “Diversion:” headers in subsequent INVITES. Cisco Unified CM 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, the system uses only a single diversion header because the original called party and last forwarding parties are the same. In a three-or-more-hop case, the intermediate parties do not get 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

The system triggers activation of the Message Waiting Indication (MWI) on the phone via an unsolicited NOTIFY from Cisco Unified CM. 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 that contains 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 get sent whenever that Cisco Unified CM detects that the phone MWI status should change. This could occur if a message is left for that subscriber on a connected voice messaging server and that voice messaging server informs Cisco Unified CM or if all messages are cleared. Additionally, this NOTIFY that contains the current MWI state always gets sent during registration of a line, so phones with flash memory have the latest MWI state that is known to Cisco Unified CM.

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 CM, some phones may allow the user to configure a call forward number on the phone locally and then return a 302 message to an INVITE instead.

The 302 message must contain a “Contact:” header that indicates the party to which the call should be forwarded. A phone that sends a 302 should also include a “Diversion:” header that includes its own name and number as well as the reason for forwarding.

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

Endpoint Returns 486 Busy

You can configure all lines on a Cisco Unified CM with a “busy trigger.” After the number of active calls to that line reaches the busy trigger, Cisco Unified CM 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 of which Cisco Unified CM is not aware to exist on the phone (for example, a phone in a dialing state that has not yet sent an INVITE), the phone may need to manage its own busy trigger and autonomously throttle calls. Phones accomplish this by sending a 486 response code to an INVITE.

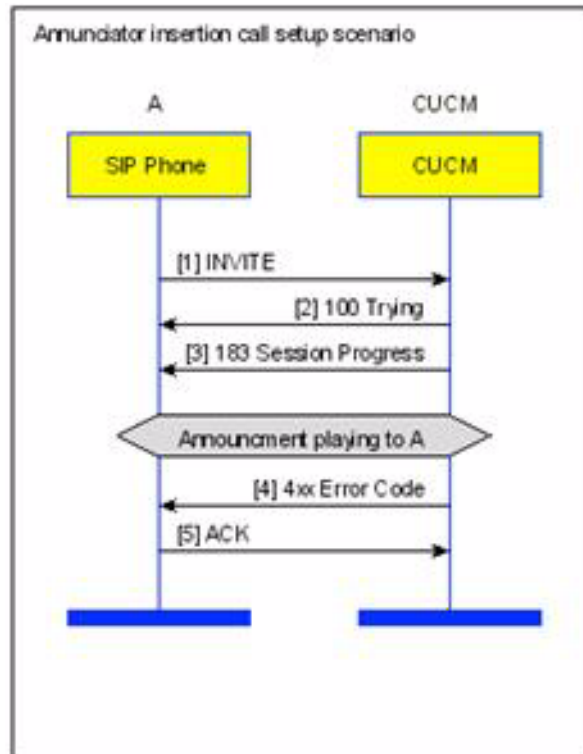
Although Cisco Unified CM may have Call Forward Busy behavior configured for a line (for example, forward to DN or forward to a voice-messaging system), that behavior does not get exercised when a 486 message is received from the phone. Instead, the 486 message will be passed back to the original called party.

Announcements for Certain Call Setup Failures

When Party A calls Party B, there are circumstances in which the call cannot complete and an announcement as to the reason for the call failure is played to party A. A simple example is when party A misdials the B's number and the misdialled number does not exist. This results in a vacant code error.

In this same scenario if Party A were a SCCP phone, then party A would be connected to an annunciator and would receive an announcement similar to *"Your call cannot be completed as dialed. Please consult your directory and call again or ask your operator for assistance. This is a recording."* Once the announcement is completed, the Party A would hear the re-order tone if they were still offhook. Previous to Cisco Unified CM 8.0 if Party A were SIP, they would immediately hear re-order locally on the phone as a result of the 4xx SIP error message and not hear the announcement- Cisco Unified CM 8.0, SIP phones now have parity for error scenarios where an announcement is performed (for example, vacant code).

The call flow for these announcements utilizes standard SIP. A sample of the flow is shown below. In this scenario, announcement is played and the 4xx/5xx error code is sent as before. The SIP 183 contains SDP.

Figure 1-1 Annunciator Insertion Call Setup Scenario

Error scenarios that may result in announcements during call setup include vacant code and certain call setup failures that result from MLPP.

INFO Packages

During the life of an INVITE dialog, INFO packages allow SIP UA's to exchange negotiated content without managing and correlating a subscription. The INFO package negotiation occurs during initial call setup and is remembered throughout the life of the INVITE dialog. This is independent of the number of times the endpoint is subject to some feature interaction such as transfer or conference.

Unified Communication Manager supports the conference package. The negotiation works according to the rules spelled out in the following draft:

draft-ietf-sip-info-events-01.txt.

INFO Conference Package Negotiation

Unified Communication Manager is a B2BUA. As such, each endpoint has their own specific INVITE dialog with Unified Communication Manager, when a call is established. Due to feature invocations, Unified Communication Manager can move the media around, while maintaining the original INVITE dialog. For example, if **A** transfers **B** to **C**, **B** and **C** just get reINVITEs and UPDATES to redirect their media towards each other and to update the connected party information. The original dialogs established between **B** and Unified Communication Manager and **C** and Unified Communication Manager prior to the transfer remain intact.

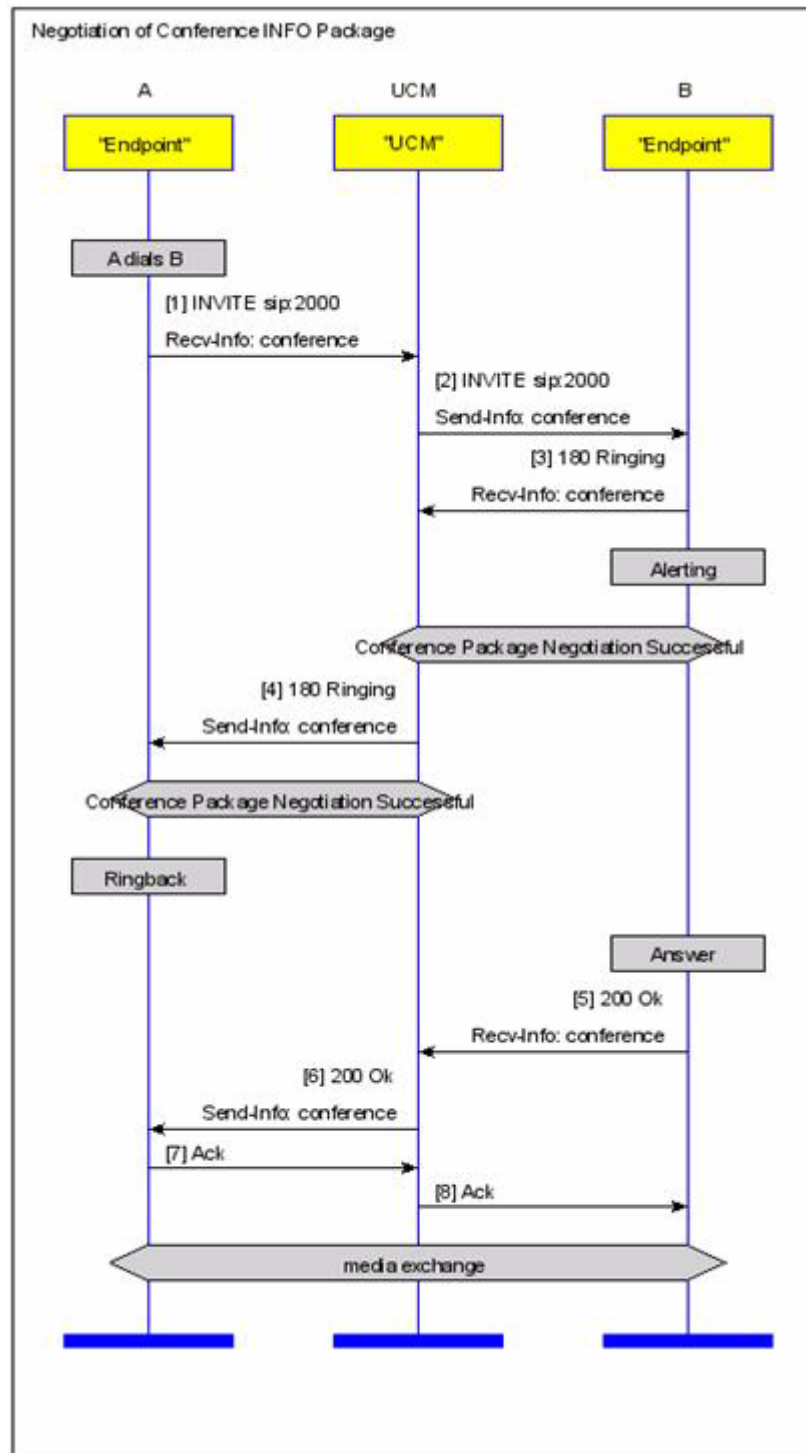
The conference INFO package negotiation occurs during initial call setup and is remembered throughout the life of the INVITE dialog. This is independent of the number of times the endpoint is subject to some feature interaction such as transfer or conference. The actual conference package XML is borrowed from the following RFC:

RFC-4575, A Session Initiation Protocol (SIP) Event Package for Conference State

RFC defines the package in the context of the SUBSCRIBE/NOTIFY framework. The same XML schema can be used in the INFO event package framework.

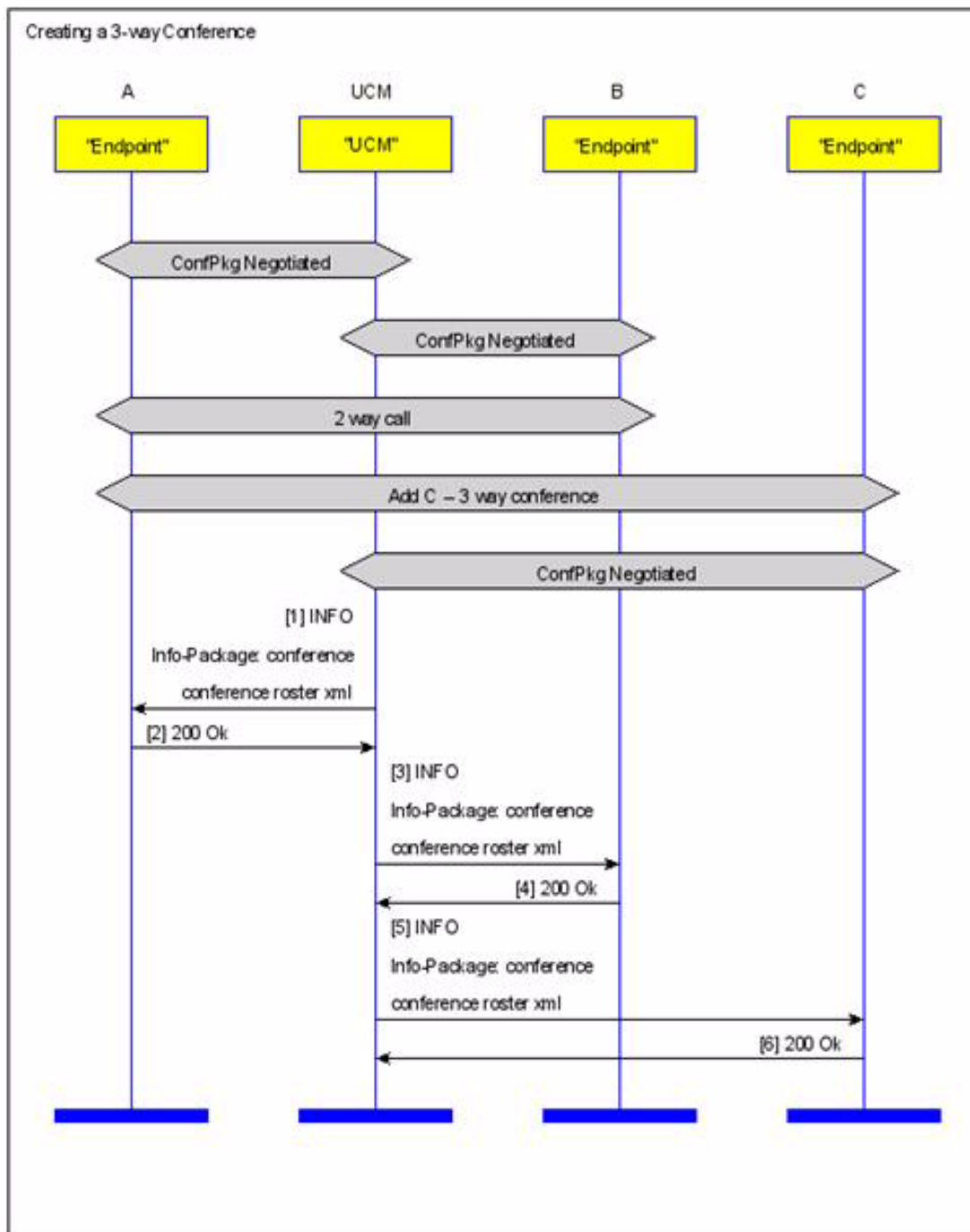
The negotiation within the context of Unified Communication Manager works the following way:

When **A** calls **B**, this is two distinct dialogs since Unified Communication Manager is a B2BUA. In this example, **A** is the initiator of the dialog between **A** and Unified Communication Manager. On the other hand, Unified Communication Manager is the initiator of the dialog between Unified Communication Manager and **B**. The negotiation works based on who initiates the dialog and who is the sender versus receiver of the data. In our example, **A** and **B** are receivers and Unified Communication Manager is the sender of conference roster updates. [Figure 1-2](#) shows how Send-Info and Recv-Info headers are used in this example to negotiate usage of INFO conference package. If an endpoint doesn't include the header, Recv-Info: conference, then Unified Communication Manager will not send INFO messages with the conference package if the call is later connected to a conference.

Figure 1-2 *Negotiation of Conference INFO Package*

Having negotiated use of the INFO conference package, the endpoint must be ready to receive conference INFO at any time during the life of the dialog. It may find itself in and out of conferences throughout the life of the dialog. End of the conference does not guarantee that the endpoint will not receive more conference updates. The call could transit from 3 way to 2 way and back to 3 way. [Figure 1-3](#) depicts creation of a 3 way conference:

Figure 1-3 Creating 3-way Conference



G.Clear Calls

Cisco Unified CM supports voice and video calls. It also establishes a media session between two registered SIP endpoints using the G.Clear codec. A G.Clear media session uses RTP to establish a 64kbps transparent data channel between two devices. This allows data streams generated by ISDN terminals to be transparently being carried via an IP network. Please refer to RFC 4040 for details.

Cisco Unified CM supports the following:

1. G.Clear codec (RFC 4040) handling in SIP signaling and codec negotiation.
2. Including SDP in the outgoing INVITE from Cisco Unified CM for G.Clear calls without requiring an MTP.

Example SDP for G.Clear Call

SIP endpoints capable of initiating a G.Clear calls sends the indication by using the G.Clear codec in the m=audio line of the INVITE SDP.



Note

Only third party SIP devices are capable of initiating a G.Clear call with Cisco Unified Communication Manager.

Example SDP having a G.Clear codec:

```
v=0
o=XYZ 317625 317625 IN IP4 172.18.199.61
s=XYZ
c=IN IP4 172.18.199.61
t=0 0
m=audio 30002 RTP/AVP 125
a=rtpmap:125 CLEARMODE/8000
a=ptime:20
```

Cisco Unified CM also support other rtpmap attributes in addition to the CLEARMODE. It can identify X-CCD, CCD and G.nX64 rtpmap attributes as G.Clear codec in incoming SDPs. Cisco Unified CM supports sending one of these values - CLEARMODE, X-CCD, CCD and G.nX64 in rtpmap attribute of the outgoing SDP. This is based on Cisco Unified CM configuration. For example, Cisco Unified CM need to be configured to send this attribute line for a G.Clear codec in outgoing SDPL:

```
a=rtpmap:125 X-CCD/8000
```

Early Offer Support for G.Clear Calls

Cisco Unified CM shall route the call based on called number in the INVITE request-uri to another SIP endpoint or over SIP trunk. Cisco Unified CM shall include the offer SDP in the outgoing INVITE for G.Clear calls, which is configurable. The SDP included in outgoing INVITE is received from the incoming SIP call leg. Therefore Cisco Unified CM supports, sending offer SDP in outgoing INVITE without requiring an MTP, only for G.Clear calls. Cisco Unified CM Voice calls will still require “MTP Required” checkbox to be enabled in order to include SDP for voice calls.

BFCP

The 8.6(1) release of Cisco Unified CM adds support for negotiation of the Binary Floor Control Protocol (BFCP) between SIP Line and SIP Trunk devices participating in calls that include a presentation sharing session. Presentation is the ability to send a second video stream such as a PowerPoint slide presentation in addition to the main video stream. BFCP enables this functionality.

A sample use case scenario consists of two users in a video call via their Cisco EX90 phones. Each user has the video output of their laptop computer connected to their respective EX90 via HDMI or DVI. During the call, user A on his EX90 decides to share his laptop video with user B. User A presses the "Present" button on the EX90. The EX90s and Cisco Unified CM would utilize SIP and BFCP protocols to enable User B to see User A's main video along with the User A's laptop video.

BFCP is an SDP-only feature and does not entail any signaling related changes. SDP changes are illustrated in Chapter 2.



CHAPTER 2

Basic SIP Line Call Flows

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



Note

This chapter includes the new callflows added to Unified CM 8.6(1). It is recommended that you view the complete list of existing SIP basic call flows from SIP Line Messaging Guide (Standard) for Release 8.0(1) from:

http://www.cisco.com/en/US/products/sw/voicesw/ps556/products_programming_reference_guides_list.html

This chapter contains standard SIP call flow scenarios including registration and call processing for Cisco Unified Communications Manager. Each SIP call flow has the same format:

1. A description for the scenario that describes what is happening from the various phone user perspectives.
2. The message sequence charts, including the phones and Cisco Unified Communications Manager nodes involved in the various SIP transactions. Each message sequence chart uses the following conventions:
 - a. A dialog identifier and message number relative to the scenario precedes each message. 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 stays the same for all messages within a dialog.
 - b. Phone names use letters. For example, Phone A.
 - c. Nodes in the message sequence charts that represent phones have labels with the phone letter and the line number. For example, A 1100 represents line 1100 on phone A.
3. The detailed SIP messages that are 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 message sequence chart that contains that message.

This document uses special terminology for certain types of phones:

- A “SIP Basic” phone is a Cisco Unified IP Phone 7960 that is configured with an image prior to Cisco Unified Communications Manager Release 5.0 to simulate a third-party phone.
- A “SIP TNP” phone includes the Cisco Unified IP Phones 7911, 7941, 7961, 7970, and 7971. These phones all use the same code base and exhibit similar call flow sequences.

**Note**

Cisco used actual traces to generate the message sequence charts and detailed messages for each call scenario in this chapter. Every effort was taken to minimize extraneous messages that do not pertain to a given call flow, but it is not possible to ensure this 100 percent of the time. You may notice some nonrelevant messages and/or nonrelevant nodes in a particular call flow. For example, (re)REGISTER and (re)SUBSCRIBE and related transactions may show up in the middle of a call flow but do not really pertain to the scenario at hand. At times, you may even see a node that does not belong. You can easily recognize an extra node because the relevant nodes and lines are listed in the Configuration section found prior to the first message sequence chart of each scenario.

**Note**

The message sequences depicted are intended to provide the general framework for the type of messages that can be expected in practice. However, the depicted flows represent snapshot examples that may not exactly match (in message number/type/content/sequence) observed.

List of Scenarios:

1. BFCP

- 1.1 Basic call with Presentation between Cisco Telepresence EX90s
- 1.2 Basic call with Presentation between EX90 and E20
- 1.3 Basic audio call between EX90 and 7970 SIP
- 1.4 Basic video call between EX90 and 7985
- 1.5 Basic video call between EX90 and 9971

2. BFCP Enhanced

- 2.1 Basic call with Presentation and hold/resume between Cisco Telepresence EX90s
- 2.2 Basic video call between EX90 and 9971 and Hold/Resume
- 2.3 Call with presentation between EX90 and E20 is transferred by E20 to another EX90

1. BFCP

1.1 Basic call with Presentation between Cisco Telepresence EX90s

Title: Basic call with Presentation between Cisco Telepresence EX90s

Description:

- A calls B
- A starts a presentation with B
- A stops presentation with B
- A ends the call

Configuration:

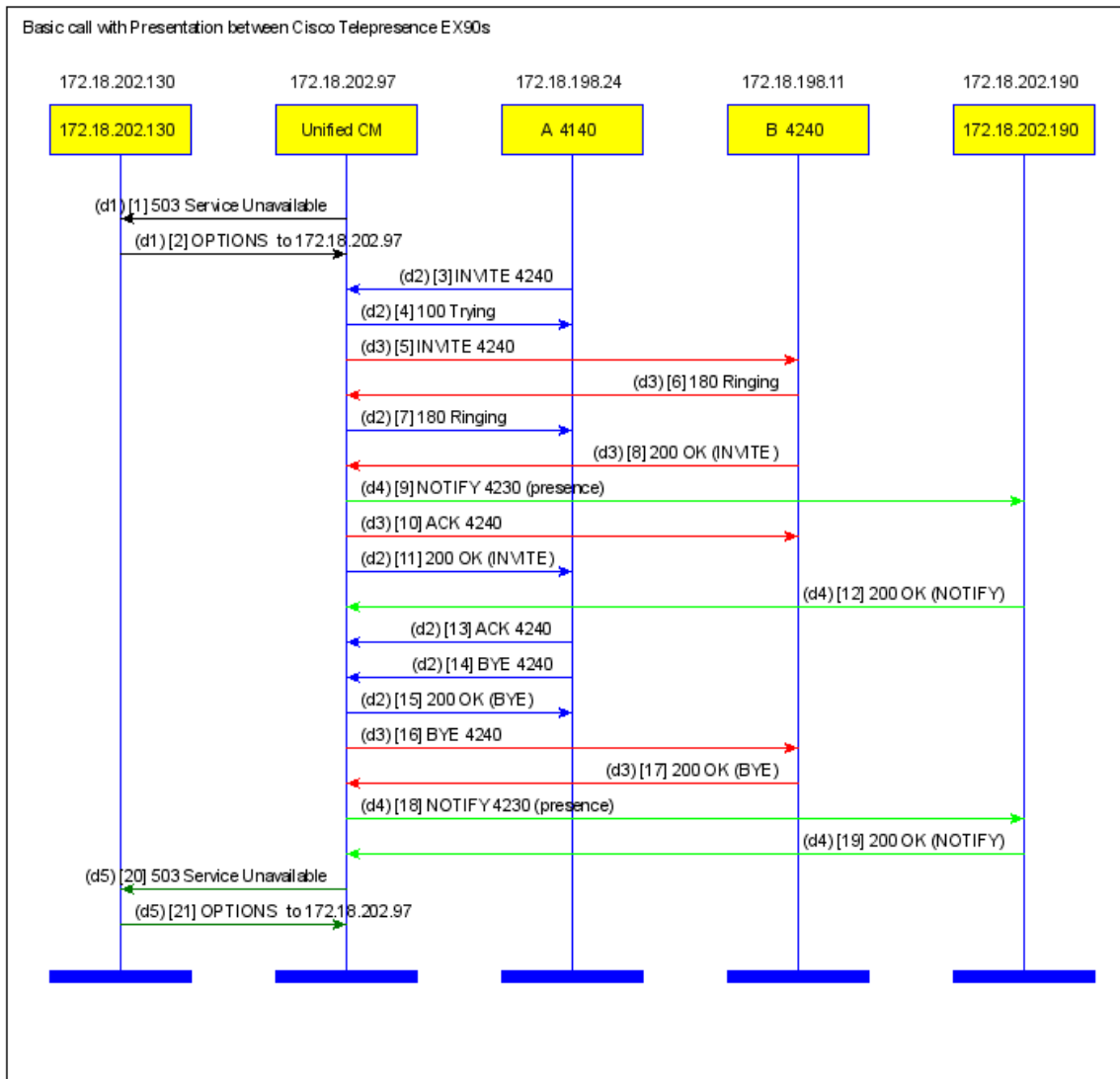
- Node = Unified CM, IP = 172.18.202.97
- Phone = A, Line = 4140, IP = 172.18.198.24, Model = Cisco Telepresence EX90
- Phone = B, Line = 4240, IP = 172.18.198.11, Model = Cisco Telepresence EX90

- A has laptop connected to it via HDMI
- B has laptop connected to it via HDMI

Scenario:

- 4140 calls 4240
- 4240 answers the call
- 4140 presses Present and chooses HDMI as input source for presentation
- Main video and Presentation video are seen on 4240
- 4140 ends Presentation
- 4140 goes onhook

End of Scenario



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

[1] SIP/2.0 503 Service Unavailable

Via: SIP/2.0/TCP 172.18.202.130:5060;branch=z9hG4bKf9a847adb099701d5c24749fc3d3f0992110637;rport
 From: <sip:172.18.202.130>;tag=680b6cc334a8c659
 To: <sip:172.18.202.97:5060>;tag=545705854
 Date: Mon, 19 Dec 2011 23:41:43 GMT
 Call-ID: c1dd2100fd20b12b@172.18.202.130
 CSeq: 21811 OPTIONS
 Warning: 399 sip:172.18.202.130 "Unable to find a device handler for the request received on port 28024 from 172.18.202.130"
 Content-Length: 0

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

[2] OPTIONS sip:172.18.202.97:5060;transport=tcp SIP/2.0

Via: SIP/2.0/TCP 172.18.202.130:5060;branch=z9hG4bKf9a847adb099701d5c24749fc3d3f0992110637;rport
 Call-ID: c1dd2100fd20b12b@172.18.202.130
 CSeq: 21811 OPTIONS
 From: <sip:172.18.202.130>;tag=680b6cc334a8c659
 To: <sip:172.18.202.97:5060>
 Max-Forwards: 0
 User-Agent: TANDBERG/4100 (X6.1)
 Supported: com.tandberg.vcs.resourceusage
 Content-Length: 0

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

[3] INVITE sip:4240@sipsig-ccm97 SIP/2.0

Via: SIP/2.0/TCP 172.18.198.24:5060;branch=z9hG4bK73d52397610051d646dad030cf6cd5d.1;rport
 Call-ID: 855e2ee7d8c0d906@172.18.198.24
 CSeq: 100 INVITE
 Contact: <sip:4140@172.18.198.24:43624;transport=tcp>
 From: <sip:4140@sipsig-ccm97>;tag=74c78181c86a6599
 To: <sip:4240@sipsig-ccm97>
 Max-Forwards: 70
 Route: <sip:172.18.202.97;lr>
 Allow: INVITE,ACK,CANCEL,BYE,UPDATE,INFO,OPTIONS,REFER,NOTIFY
 User-Agent: TANDBERG/516 (TC5.0.0.-PreAlpha (TEST SW))
 Supported: replaces,100rel,timer,gruu,path,outbound,X-cisco-callinfo,X-cisco-serviceuri,X-cisco-service-control,norefersub,extended-refer
 Session-Expires: 1800
 Remote-Party-ID: <sip:4140@sipsig-ccm97>;privacy=off;id-type=subscriber;screen=yes;party=calling
 Content-Type: application/sdp
 Content-Length: 2459

```
v=0
o=tandberg 37 1 IN IP4 172.18.198.24
s=-
c=IN IP4 172.18.198.24
b=AS:6000
t=0 0
m=audio 16664 RTP/AVP 100 102 103 104 105 106 9 8 0 101
b=TIAS:128000
a=rtpmap:100 MP4A-LATM/90000
a=fmtp:100 profile-level-id=25;object=23;bitrate=128000
a=rtpmap:102 MP4A-LATM/90000
a=fmtp:102 profile-level-id=24;object=23;bitrate=64000
a=rtpmap:103 MP4A-LATM/90000
a=fmtp:103 profile-level-id=24;object=23;bitrate=56000
a=rtpmap:104 MP4A-LATM/90000
a=fmtp:104 profile-level-id=24;object=23;bitrate=48000
a=rtpmap:105 G7221/16000
a=fmtp:105 bitrate=32000
a=rtpmap:106 G7221/16000
a=fmtp:106 bitrate=24000
a=rtpmap:9 G722/8000
a=rtpmap:8 PCMA/8000
a=rtpmap:0 PCMU/8000
a=rtpmap:101 telephone-event/8000
a=fmtp:101 0-15
a=sendrecv
m=video 16666 RTP/AVP 97 98 99 34 31
b=TIAS:6000000
a=rtpmap:97 H264/90000
a=fmtp:97 profile-level-id=428016;max-br=5000;max-mbps=108000;max-fs=3600;max-smbps=108000;max-fps=6000
a=rtpmap:98 H264/90000
a=fmtp:98 profile-level-id=428016;max-br=5000;max-mbps=108000;max-fs=3600;max-smbps=108000;packetization-mode=1;max-fps=6000
a=rtpmap:99 H263-1998/90000
a=fmtp:99
custom=1280,768,3;custom=1280,720,3;custom=1024,768,1;custom=1024,576,2;custom=800,600,1;cif4=1;custom=720,480,1;custom=640,480,1;custom=512,288,1;cif=1;custom=352,240,1;qcif=1;maxbr=20000
```

```

a=rtptime:34 H263/90000
a=fmtp:34 cif4=1;cif=1;qcif=1;maxbr=20000
a=rtptime:31 H261/90000
a=fmtp:31 cif=1;qcif=1;maxbr=20000
a=rtcp-fb:* nack pli
a=sendrecv
a=content:main
a=label:11
a=answer:full
m=application 5070 UDP/BFCP *
a=floorctrl:c-s
a=confid:1
a=floorid:2 mstrm:12
a=userid:37
a=setup:actpass
a=connection:new
m=video 16668 RTP/AVP 97 98 99 34 31
b=TIAS:6000000
a=rtptime:97 H264/90000
a=fmtp:97 profile-level-id=428016;max-br=5000;max-mbps=108000;max-fs=3840;max-smbps=108000;max-fps=6000
a=rtptime:98 H264/90000
a=fmtp:98 profile-level-id=428016;max-br=5000;max-mbps=108000;max-fs=3840;max-smbps=108000;packetization-
mode=1;max-fps=6000
a=rtptime:99 H263-1998/90000
a=fmtp:99
custom=1280,768,3;custom=1280,720,3;custom=1024,768,1;custom=1024,576,2;custom=800,600,1;cif4=1;custom=720,4
80,1;custom=640,480,1;custom=512,288,1;cif=1;custom=352,240,1;qcif=1;maxbr=20000
a=rtptime:34 H263/90000
a=fmtp:34 cif4=1;cif=1;qcif=1;maxbr=20000
a=rtptime:31 H261/90000
a=fmtp:31 cif=1;qcif=1;maxbr=20000
a=rtcp-fb:* nack pli
a=sendrecv
a=content:slides
a=label:12
m=application 16670 RTP/AVP 107
a=rtptime:107 H224/4800
a=sendrecv

```

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

[4] SIP/2.0 100 Trying

```

Via: SIP/2.0/TCP 172.18.198.24:5060;branch=z9hG4bK73d52397610051d646dad030cf6cd5d.1;rport
From: <sip:4140@sipsig-ccm97>;tag=74c78181c86a6599
To: <sip:4240@sipsig-ccm97>
Date: Mon, 19 Dec 2011 23:41:56 GMT
Call-ID: 855e2ee7d8c0d906@172.18.198.24
CSeq: 100 INVITE
Allow-Events: presence
Content-Length: 0

```

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

[5] INVITE sip:4240@172.18.198.11:38905;transport=tcp SIP/2.0

```

Via: SIP/2.0/TCP 172.18.202.97:5060;branch=z9hG4bK2a6256aa0c63
From: <sip:4140@172.18.202.97>;tag=459557~b5a88942-7acc-4cc9-9d65-67021cfecfed-30423087
To: <sip:4240@sipsig-ccm97>
Date: Mon, 19 Dec 2011 23:41:56 GMT
Call-ID: 7f3ff80-eef1cbc4-4e-61ca12ac@172.18.202.97
Supported: timer,resource-priority,replaces
Min-SE: 1800
User-Agent: Cisco-CUCM8.6
Allow: INVITE, OPTIONS, INFO, BYE, CANCEL, ACK, PRACK, UPDATE, REFER, SUBSCRIBE, NOTIFY
CSeq: 101 INVITE
Expires: 180
Allow-Events: presence
Send-Info: conference, x-cisco-conference
Alert-Info: <file://Bellcore-dr1/>
Remote-Party-ID: <sip:4140@172.18.202.97;x-cisco-callback-number=4140>;party=calling;screen=yes;privacy=off
Contact: <sip:4140@172.18.202.97:5060;transport=tcp>;video;audio
Max-Forwards: 69
Content-Length: 0

```

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

[6] SIP/2.0 180 Ringing

```

Via: SIP/2.0/TCP 172.18.202.97:5060;branch=z9hG4bK2a6256aa0c63;received=172.18.202.97
Call-ID: 7f3ff80-eef1cbc4-4e-61ca12ac@172.18.202.97
CSeq: 101 INVITE
From: <sip:4140@172.18.202.97>;tag=459557~b5a88942-7acc-4cc9-9d65-67021cfecfed-30423087
To: <sip:4240@sipsig-ccm97>;tag=8efbf40ed6d7ca3a
Server: TANDBERG/516 (TC5.0.0.-PreAlpha (TEST SW))
Remote-Party-ID: <sip:4240@sipsig-ccm97>;privacy=off;id-type=subscriber;screen=yes;party=calling

```

Content-Length: 0

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

[7] SIP/2.0 180 Ringing

Via: SIP/2.0/TCP 172.18.198.24:5060;branch=z9hG4bK73d52397610051d646dadcf6cd5d.1;rport
 From: <sip:4140@sipsig-ccm97>;tag=74c78181c86a6599
 To: <sip:4240@sipsig-ccm97>;tag=459556-b5a88942-7acc-4cc9-9d65-67021cfecfed-30423086
 Date: Mon, 19 Dec 2011 23:41:56 GMT
 Call-ID: 855e2ee7d8c0d906@172.18.198.24
 CSeq: 100 INVITE
 Allow: INVITE, OPTIONS, INFO, BYE, CANCEL, ACK, PRACK, UPDATE, REFER, SUBSCRIBE, NOTIFY
 Allow-Events: presence
 Send-Info: conference, x-cisco-conference
 Remote-Party-ID: <sip:4240@172.18.202.97>;party=called;screen=yes;privacy=off
 Contact: <sip:4240@172.18.202.97:5060;transport=tcp>
 Content-Length: 0

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

[8] SIP/2.0 200 OK

Via: SIP/2.0/TCP 172.18.202.97:5060;branch=z9hG4bK2a6256aa0c63;received=172.18.202.97
 Call-ID: 7f3ff80-eef1cbc4-4e-61ca12ac@172.18.202.97
 CSeq: 101 INVITE
 Contact: <sip:4240@172.18.198.11:38905;transport=tcp>
 From: <sip:4140@172.18.202.97>;tag=459557-b5a88942-7acc-4cc9-9d65-67021cfecfed-30423087
 To: <sip:4240@sipsig-ccm97>;tag=8efbf40ed6d7ca3a
 Allow: INVITE, ACK, CANCEL, BYE, UPDATE, INFO, OPTIONS, REFER, NOTIFY
 Server: TANDBERG/516 (TC5.0.0.-PreAlpha (TEST SW))
 Supported: replaces,100rel,timer,gruu,path,outbound,X-cisco-callinfo,X-cisco-serviceuri,X-cisco-service-control,norefersub,extended-refer
 Require: timer
 Session-Expires: 1800;refresher=uas
 Min-SE: 1800
 Remote-Party-ID: <sip:4240@sipsig-ccm97>;privacy=off;id-type=subscriber;screen=yes;party=calling
 Content-Type: application/sdp
 Content-Length: 2459

```
v=0
o=tandberg 23 1 IN IP4 172.18.198.11
s=-
c=IN IP4 172.18.198.11
b=AS:6000
t=0 0
m=audio 16552 RTP/AVP 100 102 103 104 105 106 9 8 0 101
b=TIAS:128000
a=rtpmap:100 MP4A-LATM/90000
a=fmtp:100 profile-level-id=25;object=23;bitrate=128000
a=rtpmap:102 MP4A-LATM/90000
a=fmtp:102 profile-level-id=24;object=23;bitrate=64000
a=rtpmap:103 MP4A-LATM/90000
a=fmtp:103 profile-level-id=24;object=23;bitrate=56000
a=rtpmap:104 MP4A-LATM/90000
a=fmtp:104 profile-level-id=24;object=23;bitrate=48000
a=rtpmap:105 G7221/16000
a=fmtp:105 bitrate=32000
a=rtpmap:106 G7221/16000
a=fmtp:106 bitrate=24000
a=rtpmap:9 G722/8000
a=rtpmap:8 PCMA/8000
a=rtpmap:0 PCMU/8000
a=rtpmap:101 telephone-event/8000
a=fmtp:101 0-15
a=sendrecv
m=video 16554 RTP/AVP 97 98 99 34 31
b=TIAS:6000000
a=rtpmap:97 H264/90000
a=fmtp:97 profile-level-id=428016;max-br=5000;max-mbps=245000;max-fs=9000;max-smbps=245000;max-fps=6000
a=rtpmap:98 H264/90000
a=fmtp:98 profile-level-id=428016;max-br=5000;max-mbps=245000;max-fs=9000;max-smbps=245000;packetization-mode=1;max-fps=6000
a=rtpmap:99 H263-1998/90000
a=fmtp:99
custom=1280,768,3;custom=1280,720,3;custom=1024,768,1;custom=1024,576,2;custom=800,600,1;cif4=1;custom=720,480,1;custom=640,480,1;custom=512,288,1;cif=1;custom=352,240,1;qcif=1;maxbr=20000
a=rtpmap:34 H263/90000
a=fmtp:34 cif4=1;cif=1;qcif=1;maxbr=20000
a=rtpmap:31 H261/90000
a=fmtp:31 cif=1;qcif=1;maxbr=20000
a=rtcp-fb: * nack pli
a=sendrecv
a=content:main
```

```

a=label:11
a=answer:full
m=application 5070 UDP/BFCP *
a=floorctrl:c-s
a=confid:1
a=floorid:2 mstrm:12
a=userid:23
a=setup:actpass
a=connection:new
m=video 16556 RTP/AVP 97 98 99 34 31
b=TIAS:6000000
a=rtpmap:97 H264/90000
a=fmtp:97 profile-level-id=428016;max-br=5000;max-mbps=245000;max-fs=9000;max-smbps=245000;max-fps=6000
a=rtpmap:98 H264/90000
a=fmtp:98 profile-level-id=428016;max-br=5000;max-mbps=245000;max-fs=9000;max-smbps=245000;packetization-
mode=1;max-fps=6000
a=rtpmap:99 H263-1998/90000
a=fmtp:99
custom=1280,768,3;custom=1280,720,3;custom=1024,768,1;custom=1024,576,2;custom=800,600,1;cif4=1;custom=720,4
80,1;custom=640,480,1;custom=512,288,1;cif=1;custom=352,240,1;qcif=1;maxbr=20000
a=rtpmap:34 H263/90000
a=fmtp:34 cif4=1;cif=1;qcif=1;maxbr=20000
a=rtpmap:31 H261/90000
a=fmtp:31 cif=1;qcif=1;maxbr=20000
a=rtcp-fb:* nack pli
a=sendrecv
a=content:slides
a=label:12
m=application 16558 RTP/AVP 107
a=rtpmap:107 H224/4800
a=sendrecv

```

```

[diagram] Call-ID:[prev][next]
[9] NOTIFY sip:4230@172.18.202.190:46879;transport=tcp SIP/2.0
Via: SIP/2.0/TCP 172.18.202.97:5060;branch=z9hG4bK2a635188c2b9
From: <sip:4240@sipsig-ccm97>;tag=1067531988
To: <sip:4230@sipsig-ccm97>;tag=426dbd41fbc2ccfe
Call-ID: c6623c6f6fd0c164@172.18.202.190
CSeq: 262 NOTIFY
Max-Forwards: 70
Date: Mon, 19 Dec 2011 23:41:57 GMT
User-Agent: Cisco-CUCM8.6
Event: presence
Subscription-State: active;expires=1106
Contact: <sip:4240@172.18.202.97:5060;transport=tcp>
Content-Type: application/pidf+xml
Content-Length: 829

```

```

<?xml version="1.0" encoding="UTF-8" standalone="no" ?>
<presence xmlns="urn:ietf:params:xml:ns:pidf" entity="sip:4240@172.18.202.97"
xmlns:e="urn:ietf:params:xml:ns:pidf:status:rpidd" xmlns:dm="urn:ietf:params:xml:ns:pidf:data-model"
xmlns:ce="urn:cisco:params:xml:ns:pidf:rpidd" xmlns:sc="urn:ietf:params:xml:ns:pidf:servcaps">
  <dm:person>
    <status>
      <basic>open</basic>
    </status>
    <e:activities>
      <e:on-the-phone/>
    </e:activities>
  </dm:person>
  <tuple id="cmp-1-409208">
    <status>
      <basic>open</basic>
    <e:activities>
      <e:on-the-phone/>
    </e:activities>
  </status>
  <sc:servcaps>
    <sc:audio>true</sc:audio>
  </sc:servcaps>
  <contact priority="0.8">sip:4240@172.18.202.97:5060</contact>
  <timestamp>2011-12-19T23:41:57Z</timestamp>
</tuple>
</presence>

```

```

[diagram] Call-ID:[prev][next]
[10] ACK sip:4240@172.18.198.11:38905;transport=tcp SIP/2.0
Via: SIP/2.0/TCP 172.18.202.97:5060;branch=z9hG4bK2a646b7c5642
From: <sip:4140@172.18.202.97>;tag=459557~b5a88942-7acc-4cc9-9d65-67021cfecfed-30423087
To: <sip:4240@sipsig-ccm97>;tag=8efbf40ed6d7ca3a

```

```
Date: Mon, 19 Dec 2011 23:41:56 GMT
Call-ID: 7f3ff80-eef1cbc4-4e-61ca12ac@172.18.202.97
Max-Forwards: 70
CSeq: 101 ACK
Allow-Events: presence
Content-Type: application/sdp
Content-Length: 1053
```

```
v=0
o=CiscoSystemsCCM-SIP 459557 1 IN IP4 172.18.202.97
s=SIP Call
b=AS:6000
t=0 0
m=audio 16664 RTP/AVP 102 101
c=IN IP4 172.18.198.24
b=TIAS:64000
a=rtpmap:102 MP4A-LATM/90000
a=fmtp:102 bitrate=64000;profile-level-id=24;object=23
a=rtpmap:101 telephone-event/8000
a=fmtp:101 0-15
m=video 16666 RTP/AVP 98
c=IN IP4 172.18.198.24
b=TIAS:5936000
a=label:11
a=rtpmap:98 H264/90000
a=fmtp:98 profile-level-id=428016;packetization-mode=1;max-mps=108000;max-fs=3600;max-cpb=200;max-br=5000;max-smps=108000;max-fps=6000
a=content:main
a=rtcp-fb:* nack pli
m=application 5070 UDP/BFCP *
c=IN IP4 172.18.198.24
a=floorctrl:s-only
a=floorid:2 mstrm:12
a=confid:1
a=userid:37
m=video 16668 RTP/AVP 98
c=IN IP4 172.18.198.24
b=TIAS:5936000
a=label:12
a=rtpmap:98 H264/90000
a=fmtp:98 profile-level-id=428016;packetization-mode=1;max-mps=108000;max-fs=3840;max-cpb=200;max-br=5000;max-smps=108000;max-fps=6000
a=content:slides
a=rtcp-fb:* nack pli
m=application 16670 RTP/AVP 107
c=IN IP4 172.18.198.24
a=rtpmap:107 H224/0
```

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

[11] SIP/2.0 200 OK

```
Via: SIP/2.0/TCP 172.18.198.24:5060;branch=z9hG4bK73d52397610051d646dadcc030cf6cd5d.1;rport
From: <sip:4140@sipsig-ccm97>;tag=74c78181c86a6599
To: <sip:4240@sipsig-ccm97>;tag=459556-b5a88942-7acc-4cc9-9d65-67021cfecfed-30423086
Date: Mon, 19 Dec 2011 23:41:56 GMT
Call-ID: 855e2ee7d8c0d906@172.18.198.24
CSeq: 100 INVITE
Allow: INVITE, OPTIONS, INFO, BYE, CANCEL, ACK, PRACK, UPDATE, REFER, SUBSCRIBE, NOTIFY
Allow-Events: presence
Supported: replaces
Send-Info: conference, x-cisco-conference
Session-Expires: 1800;refresher=uas
Require: timer
Remote-Party-ID: <sip:4240@172.18.202.97>;party=called;screen=yes;privacy=off
Contact: <sip:4240@172.18.202.97:5060;transport=tcp>
Content-Type: application/sdp
Content-Length: 1053
```

```
v=0
o=CiscoSystemsCCM-SIP 459556 1 IN IP4 172.18.202.97
s=SIP Call
b=AS:6000
t=0 0
m=audio 16552 RTP/AVP 102 101
c=IN IP4 172.18.198.11
b=TIAS:64000
a=rtpmap:102 MP4A-LATM/90000
a=fmtp:102 bitrate=64000;profile-level-id=24;object=23
a=rtpmap:101 telephone-event/8000
a=fmtp:101 0-15
m=video 16554 RTP/AVP 98
```

```

c=IN IP4 172.18.198.11
b=TIAS:5936000
a=label:11
a=rtpmap:98 H264/90000
a=fmtp:98 profile-level-id=428016;packetization-mode=1;max-mbps=245000;max-fs=9000;max-cpb=200;max-br=5000;max-smbps=245000;max-fps=6000
a=content:main
a=rtcp-fb:* nack pli
m=application 5070 UDP/BFCP *
c=IN IP4 172.18.198.11
a=floorctrl:c-only
a=floorid:2 mstrm:12
a=confid:1
a=userid:23
m=video 16556 RTP/AVP 98
c=IN IP4 172.18.198.11
b=TIAS:5936000
a=label:12
a=rtpmap:98 H264/90000
a=fmtp:98 profile-level-id=428016;packetization-mode=1;max-mbps=245000;max-fs=9000;max-cpb=200;max-br=5000;max-smbps=245000;max-fps=6000
a=content:slides
a=rtcp-fb:* nack pli
m=application 16558 RTP/AVP 107
c=IN IP4 172.18.198.11
a=rtpmap:107 H224/0

```

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

[12] SIP/2.0 200 OK

```

Via: SIP/2.0/TCP 172.18.202.97:5060;branch=z9hG4bK2a635188c2b9;received=172.18.202.97
Call-ID: c6623c6f6fd0c164@172.18.202.190
CSeq: 262 NOTIFY
From: <sip:4240@sipsig-ccm97>;tag=1067531988
To: <sip:4230@sipsig-ccm97>;tag=426dbd41fbc2ccfe
Server: TANDBERG/257 (TE4.1.0.253886Alpha4)
Content-Length: 0

```

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

[13] ACK sip:4240@172.18.202.97:5060;transport=tcp SIP/2.0

```

Via: SIP/2.0/TCP 172.18.198.24:5060;branch=z9hG4bK47ee4b23fbb76f38ede03f88dfe87a15.1;rport
Call-ID: 855e2ee7d8c0d906@172.18.198.24
CSeq: 100 ACK
From: <sip:4140@sipsig-ccm97>;tag=74c78181c86a6599
To: <sip:4240@sipsig-ccm97>;tag=459556-b5a88942-7acc-4cc9-9d65-67021cfeccfed-30423086
Max-Forwards: 70
Allow: INVITE,ACK,CANCEL,BYE,UPDATE,INFO,OPTIONS,REFER,NOTIFY
User-Agent: TANDBERG/516 (TC5.0.0.-PreAlpha (TEST SW))
Supported: replaces,100rel,timer,gruu,path,outbound,X-cisco-callinfo,X-cisco-serviceuri,X-cisco-service-control,norefersub,extended-refer
Content-Length: 0

```

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

[14] BYE sip:4240@172.18.202.97:5060;transport=tcp SIP/2.0

```

Via: SIP/2.0/TCP 172.18.198.24:5060;branch=z9hG4bKa5b667a23452352544f79cbe5fcc0a98.1;rport
Call-ID: 855e2ee7d8c0d906@172.18.198.24
CSeq: 101 BYE
Contact: <sip:4140@172.18.198.24:43624;transport=tcp>;+sip.instance="<urn:uuid:00000000-0000-0000-0000-0050600491d7>";+u.sip:model.ccm.cisco.com="584";audio=TRUE;video=TRUE;mobility="fixed";duplex="full";description="TANDBERG-SIP"
From: <sip:4140@sipsig-ccm97>;tag=74c78181c86a6599
To: <sip:4240@sipsig-ccm97>;tag=459556-b5a88942-7acc-4cc9-9d65-67021cfeccfed-30423086
Max-Forwards: 70
Allow: INVITE,ACK,CANCEL,BYE,UPDATE,INFO,OPTIONS,REFER,NOTIFY
User-Agent: TANDBERG/516 (TC5.0.0.-PreAlpha (TEST SW))
Supported: replaces,100rel,timer,gruu,path,outbound,X-cisco-callinfo,X-cisco-serviceuri,X-cisco-service-control,norefersub,extended-refer
Content-Length: 0

```

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

[15] SIP/2.0 200 OK

```

Via: SIP/2.0/TCP 172.18.198.24:5060;branch=z9hG4bKa5b667a23452352544f79cbe5fcc0a98.1;rport
From: <sip:4140@sipsig-ccm97>;tag=74c78181c86a6599
To: <sip:4240@sipsig-ccm97>;tag=459556-b5a88942-7acc-4cc9-9d65-67021cfeccfed-30423086
Date: Mon, 19 Dec 2011 23:42:08 GMT
Call-ID: 855e2ee7d8c0d906@172.18.198.24
CSeq: 101 BYE
Content-Length: 0

```

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

[16] BYE sip:4240@172.18.198.11:38905;transport=tcp SIP/2.0

Via: SIP/2.0/TCP 172.18.202.97:5060;branch=z9hG4bK2a6553065f24
 From: <sip:4140@172.18.202.97>;tag=459557-b5a88942-7acc-4cc9-9d65-67021cfecfed-30423087
 To: <sip:4240@sipsig-ccm97>;tag=8efbf40ed6d7ca3a
 Date: Mon, 19 Dec 2011 23:41:56 GMT
 Call-ID: 7f3ff80-eef1cbc4-4e-61ca12ac@172.18.202.97
 User-Agent: Cisco-CUCM8.6
 Max-Forwards: 70
 CSeq: 102 BYE
 Reason: Q.850;cause=16
 Content-Length: 0

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

[17] SIP/2.0 200 OK

Via: SIP/2.0/TCP 172.18.202.97:5060;branch=z9hG4bK2a6553065f24;received=172.18.202.97
 Call-ID: 7f3ff80-eef1cbc4-4e-61ca12ac@172.18.202.97
 CSeq: 102 BYE
 From: <sip:4140@172.18.202.97>;tag=459557-b5a88942-7acc-4cc9-9d65-67021cfecfed-30423087
 To: <sip:4240@sipsig-ccm97>;tag=8efbf40ed6d7ca3a
 Allow: INVITE,ACK,CANCEL,BYE,UPDATE,INFO,OPTIONS,REFER,NOTIFY
 Server: TANDBERG/516 (TC5.0.0.-PreAlpha (TEST SW))
 Supported: replaces,100rel,timer,gruu,path,outbound,X-cisco-callinfo,X-cisco-serviceuri,X-cisco-service-control,norefersub,extended-refer
 Content-Length: 0

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

[18] NOTIFY sip:4230@172.18.202.190:46879;transport=tcp SIP/2.0

Via: SIP/2.0/TCP 172.18.202.97:5060;branch=z9hG4bK2a665af79b71
 From: <sip:4240@sipsig-ccm97>;tag=1067531988
 To: <sip:4230@sipsig-ccm97>;tag=426dbd41fbc2ccfe
 Call-ID: c6623c6f6fd0c164@172.18.202.190
 CSeq: 263 NOTIFY
 Max-Forwards: 70
 Date: Mon, 19 Dec 2011 23:42:08 GMT
 User-Agent: Cisco-CUCM8.6
 Event: presence
 Subscription-State: active;expires=1095
 Contact: <sip:4240@172.18.202.97:5060;transport=tcp>
 Content-Type: application/pidf+xml
 Content-Length: 736

```
<?xml version="1.0" encoding="UTF-8" standalone="no" ?>
<presence xmlns="urn:ietf:params:xml:ns:pidf" entity="sip:4240@172.18.202.97"
  xmlns:e="urn:ietf:params:xml:ns:pidf:status:rpidd" xmlns:dm="urn:ietf:params:xml:ns:pidf:data-model"
  xmlns:ce="urn:cisco:params:xml:ns:pidf:rpidd" xmlns:sc="urn:ietf:params:xml:ns:pidf:servcaps">
  <dm:person>
    <status>
      <basic>open</basic>
    </status>
    <e:activities>
      </e:activities>
    </dm:person>
    <tuple id="cmp-1-409208">
      <status>
        <basic>open</basic>
      </status>
      <sc:servcaps>
        <sc:audio>true</sc:audio>
      </sc:servcaps>
      <contact priority="0.8">sip:4240@172.18.202.97:5060</contact>
      <timestamp>2011-12-19T23:42:08Z</timestamp>
    </tuple>
  </presence>
```

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

[19] SIP/2.0 200 OK

Via: SIP/2.0/TCP 172.18.202.97:5060;branch=z9hG4bK2a665af79b71;received=172.18.202.97
 Call-ID: c6623c6f6fd0c164@172.18.202.190
 CSeq: 263 NOTIFY
 From: <sip:4240@sipsig-ccm97>;tag=1067531988
 To: <sip:4230@sipsig-ccm97>;tag=426dbd41fbc2ccfe
 Server: TANDBERG/257 (TE4.1.0.253886Alpha4)
 Content-Length: 0

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

[20] SIP/2.0 503 Service Unavailable

Via: SIP/2.0/TCP 172.18.202.130:5060;branch=z9hG4bKcfa38b70186e4bf41f73f6ce2102313d2110640;rport
 From: <sip:172.18.202.130>;tag=d524afb28262393d
 To: <sip:172.18.202.97:5060>;tag=931473708
 Date: Mon, 19 Dec 2011 23:42:14 GMT
 Call-ID: 3faf0aec0d4d813f@172.18.202.130

CSeq: 7171 OPTIONS
Warning: 399 sip: 172.18.202.130:5060 "Unable to find a device handler for the request received on port 28024 from 172.18.202.130"
Content-Length: 0

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

[21] OPTIONS sip:172.18.202.97:5060;transport=tcp SIP/2.0

Via: SIP/2.0/TCP 172.18.202.130:5060;branch=z9hG4bKcfa38b70186e4bf41f73f6ce2102313d2110640;rport

Call-ID: 3faf0aec0d4d813f@172.18.202.130

CSeq: 7171 OPTIONS

From: <sip:172.18.202.130>;tag=d524afb28262393d

To: <sip:172.18.202.97:5060>

Max-Forwards: 0

User-Agent: TANDBERG/4100 (X6.1)

Supported: com.tandberg.vcs.resourceusage

Content-Length: 0

1.2 Basic call with Presentation between EX90 and E20

Title: Basic call with Presentation between EX90 and E20

Description:

- A calls B
- A starts a presentation with B
- A stops presentation with B
- A ends the call

Configuration:

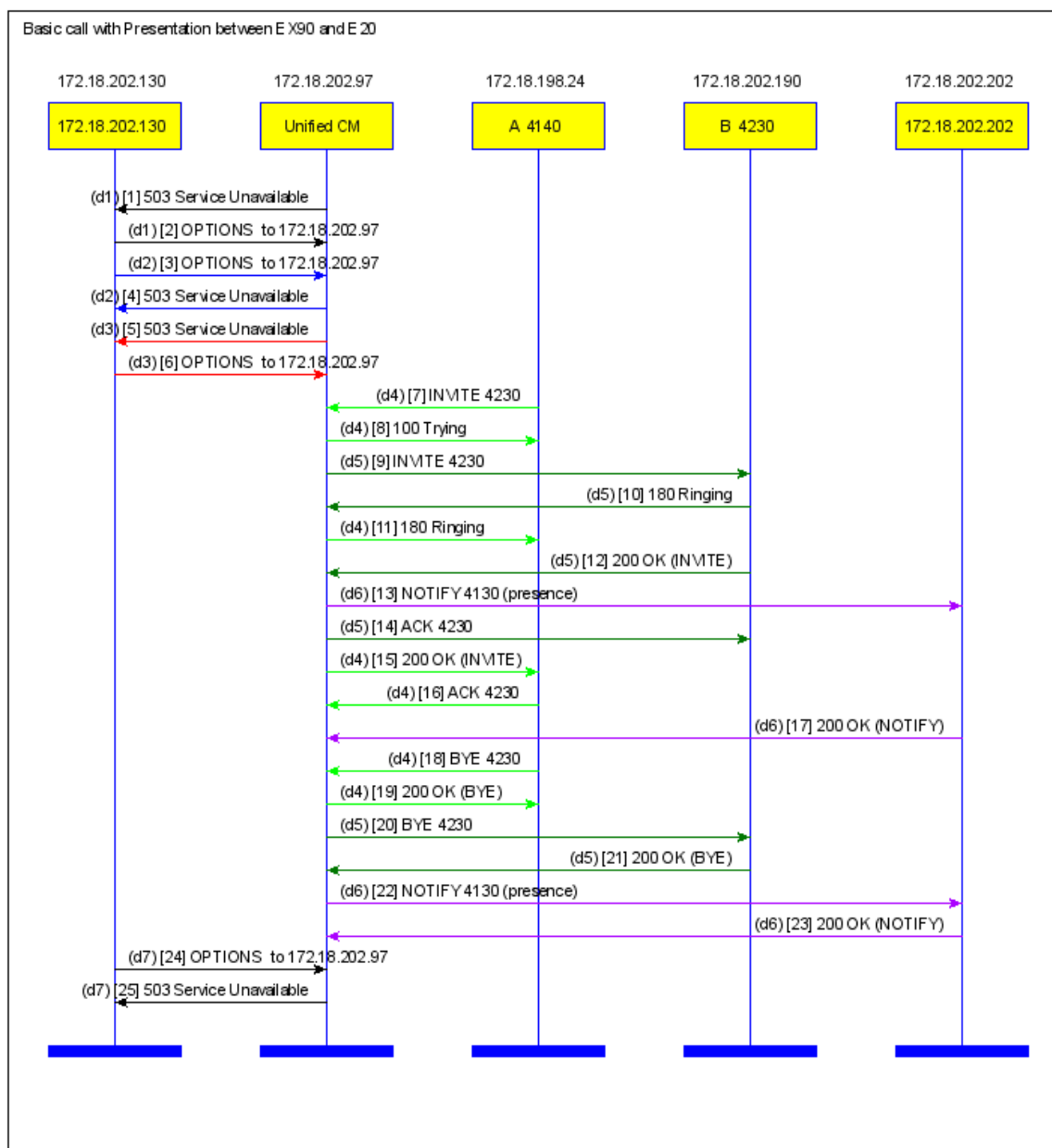
- Node = Unified CM, IP = 172.18.202.97
- Phone = A, Line = 4140, IP = 172.18.198.24, Model = Cisco Telepresence EX90
- Phone = B, Line = 4230, IP = 172.18.202.190, Model = Cisco E20

A has laptop connected to it via HDMI

Scenario:

- 4140 calls 4230
- 4230 answers the call
- 4140 presses Present and chooses HDMI as input source for presentation
- Main video and Presentation video are available on 4230
- 4140 ends Presentation
- 4140 goes onhook

End of Scenario



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

[1] SIP/2.0 503 Service Unavailable

Via: SIP/2.0/TCP 172.18.202.130:5060;branch=z9hG4bK461cfdaa55ab95fcaa48a470414c0e442110670;rport
 From: <sip:172.18.202.130>;tag=4f9b761067c97056
 To: <sip:172.18.202.97:5060>;tag=1276724181
 Date: Mon, 19 Dec 2011 23:47:22 GMT
 Call-ID: 5276abe8d5860696@172.18.202.130
 CSeq: 39861 OPTIONS
 Warning: 399 sip:172.18.202.130:5060 "Unable to find a device handler for the request received on port 28024 from 172.18.202.130"
 Content-Length: 0

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

[2] OPTIONS sip:172.18.202.97:5060;transport=tcp SIP/2.0

Via: SIP/2.0/TCP 172.18.202.130:5060;branch=z9hG4bK461cfdaa55ab95fcaa48a470414c0e442110670;rport
 Call-ID: 5276abe8d5860696@172.18.202.130
 CSeq: 39861 OPTIONS
 From: <sip:172.18.202.130>;tag=4f9b761067c97056
 To: <sip:172.18.202.97:5060>
 Max-Forwards: 0
 User-Agent: TANDBERG/4100 (X6.1)
 Supported: com.tandberg.vcs.resourceusage
 Content-Length: 0

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

[3] OPTIONS sip:172.18.202.97:5060;transport=tcp SIP/2.0

Via: SIP/2.0/TCP 172.18.202.130:5060;branch=z9hG4bK6f614aa8e8a6ad1b99cf885cd8ff21be2110673;rport
 Call-ID: fd8f18cc6f213dc0@172.18.202.130
 CSeq: 41399 OPTIONS
 From: <sip:172.18.202.130>;tag=b8b0ddf427fc67e3
 To: <sip:172.18.202.97:5060>
 Max-Forwards: 0
 User-Agent: TANDBERG/4100 (X6.1)
 Supported: com.tandberg.vcs.resourceusage
 Content-Length: 0

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

[4] SIP/2.0 503 Service Unavailable

Via: SIP/2.0/TCP 172.18.202.130:5060;branch=z9hG4bK6f614aa8e8a6ad1b99cf885cd8ff21be2110673;rport
 From: <sip:172.18.202.130>;tag=b8b0ddf427fc67e3
 To: <sip:172.18.202.97:5060>;tag=1086822906
 Date: Mon, 19 Dec 2011 23:47:53 GMT
 Call-ID: fd8f18cc6f213dc0@172.18.202.130
 CSeq: 41399 OPTIONS
 Warning: 399 sip:172.18.202.130:5060 "Unable to find a device handler for the request received on port 28024 from 172.18.202.130"
 Content-Length: 0

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

[5] SIP/2.0 503 Service Unavailable

Via: SIP/2.0/TCP 172.18.202.130:5060;branch=z9hG4bKa2c68eb6eb538c2ff9f5bbcccec310d0e2110676;rport
 From: <sip:172.18.202.130>;tag=c40c0324429436cf
 To: <sip:172.18.202.97:5060>;tag=2035603326
 Date: Mon, 19 Dec 2011 23:48:24 GMT
 Call-ID: 8ff43c48bc043ba1@172.18.202.130
 CSeq: 63996 OPTIONS
 Warning: 399 sip:172.18.202.130:5060 "Unable to find a device handler for the request received on port 28024 from 172.18.202.130"
 Content-Length: 0

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

[6] OPTIONS sip:172.18.202.97:5060;transport=tcp SIP/2.0

Via: SIP/2.0/TCP 172.18.202.130:5060;branch=z9hG4bKa2c68eb6eb538c2ff9f5bbcccec310d0e2110676;rport
 Call-ID: 8ff43c48bc043ba1@172.18.202.130
 CSeq: 63996 OPTIONS
 From: <sip:172.18.202.130>;tag=c40c0324429436cf
 To: <sip:172.18.202.97:5060>
 Max-Forwards: 0
 User-Agent: TANDBERG/4100 (X6.1)
 Supported: com.tandberg.vcs.resourceusage
 Content-Length: 0

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

[7] INVITE sip:4230@sipsig-ccm97 SIP/2.0

Via: SIP/2.0/TCP 172.18.198.24:5060;branch=z9hG4bKdbf18a810bb0a49c1d22b449aca1b124.1;rport
 Call-ID: a0ad14b6589974e3@172.18.198.24
 CSeq: 100 INVITE
 Contact: <sip:4140@172.18.198.24:43624;transport=tcp>
 From: <sip:4140@sipsig-ccm97>;tag=61e07bb831daa72a
 To: <sip:4230@sipsig-ccm97>

```

Max-Forwards: 70
Route: <sip:172.18.202.97;lr>
Allow: INVITE, ACK, CANCEL, BYE, UPDATE, INFO, OPTIONS, REFER, NOTIFY
User-Agent: TANDBERG/516 (TC5.0.0.-PreAlpha (TEST SW))
Supported: replaces,100rel,timer,gruu,path,outbound,X-cisco-callinfo,X-cisco-serviceuri,X-cisco-service-
control,norefersub,extended-refer
Session-Expires: 1800
Remote-Party-ID: <sip:4140@sipsig-ccm97>;privacy=off;id-type=subscriber;screen=yes;party=calling
Content-Type: application/sdp
Content-Length: 2459

v=0
o=tandberg 39 1 IN IP4 172.18.198.24
s=-
c=IN IP4 172.18.198.24
b=AS:6000
t=0 0
m=audio 16680 RTP/AVP 100 102 103 104 105 106 9 8 0 101
b=TIAS:128000
a=rtpmap:100 MP4A-LATM/90000
a=fmtp:100 profile-level-id=25;object=23;bitrate=128000
a=rtpmap:102 MP4A-LATM/90000
a=fmtp:102 profile-level-id=24;object=23;bitrate=64000
a=rtpmap:103 MP4A-LATM/90000
a=fmtp:103 profile-level-id=24;object=23;bitrate=56000
a=rtpmap:104 MP4A-LATM/90000
a=fmtp:104 profile-level-id=24;object=23;bitrate=48000
a=rtpmap:105 G7221/16000
a=fmtp:105 bitrate=32000
a=rtpmap:106 G7221/16000
a=fmtp:106 bitrate=24000
a=rtpmap:9 G722/8000
a=rtpmap:8 PCMA/8000
a=rtpmap:0 PCMU/8000
a=rtpmap:101 telephone-event/8000
a=fmtp:101 0-15
a=sendrecv
m=video 16682 RTP/AVP 97 98 99 34 31
b=TIAS:6000000
a=rtpmap:97 H264/90000
a=fmtp:97 profile-level-id=428016;max-br=5000;max-mbps=108000;max-fs=3600;max-smbps=108000;max-fps=6000
a=rtpmap:98 H264/90000
a=fmtp:98 profile-level-id=428016;max-br=5000;max-mbps=108000;max-fs=3600;max-smbps=108000;packetization-
mode=1;max-fps=6000
a=rtpmap:99 H263-1998/90000
a=fmtp:99
custom=1280,768,3;custom=1280,720,3;custom=1024,768,1;custom=1024,576,2;custom=800,600,1;cif4=1;custom=720,4
80,1;custom=640,480,1;custom=512,288,1;cif=1;custom=352,240,1;qcif=1;maxbr=20000
a=rtpmap:34 H263/90000
a=fmtp:34 cif4=1;cif=1;qcif=1;maxbr=20000
a=rtpmap:31 H261/90000
a=fmtp:31 cif=1;qcif=1;maxbr=20000
a=rtcp-fb:* nack pli
a=sendrecv
a=content:main
a=label:11
a=answer:full
m=application 5070 UDP/BFCP *
a=floorctrl:c-s
a=confid:1
a=floorid:2 mstrm:12
a=userid:39
a=setup:actpass
a=connection:new
m=video 16684 RTP/AVP 97 98 99 34 31
b=TIAS:6000000
a=rtpmap:97 H264/90000
a=fmtp:97 profile-level-id=428016;max-br=5000;max-mbps=108000;max-fs=3840;max-smbps=108000;max-fps=6000
a=rtpmap:98 H264/90000
a=fmtp:98 profile-level-id=428016;max-br=5000;max-mbps=108000;max-fs=3840;max-smbps=108000;packetization-
mode=1;max-fps=6000
a=rtpmap:99 H263-1998/90000
a=fmtp:99
custom=1280,768,3;custom=1280,720,3;custom=1024,768,1;custom=1024,576,2;custom=800,600,1;cif4=1;custom=720,4
80,1;custom=640,480,1;custom=512,288,1;cif=1;custom=352,240,1;qcif=1;maxbr=20000
a=rtpmap:34 H263/90000
a=fmtp:34 cif4=1;cif=1;qcif=1;maxbr=20000
a=rtpmap:31 H261/90000
a=fmtp:31 cif=1;qcif=1;maxbr=20000
a=rtcp-fb:* nack pli

```

```
a=sendrecv
a=content:slides
a=label:12
m=application 16686 RTP/AVP 107
a=rtpmap:107 H224/4800
a=sendrecv
```

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

[8] SIP/2.0 100 Trying

```
Via: SIP/2.0/TCP 172.18.198.24:5060;branch=z9hG4bKdbf18a810bb0a49c1d22b449aca1b124.1;rport
From: <sip:4140@sipsig-ccm97>;tag=61e07bb831daa72a
To: <sip:4230@sipsig-ccm97>
Date: Mon, 19 Dec 2011 23:48:28 GMT
Call-ID: a0ad14b6589974e3@172.18.198.24
CSeq: 100 INVITE
Allow-Events: presence
Content-Length: 0
```

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

[9] INVITE sip:4230@172.18.202.190:46879;transport=tcp SIP/2.0

```
Via: SIP/2.0/TCP 172.18.202.97:5060;branch=z9hG4bK2a70591d9fb2
From: <sip:4140@172.18.202.97>;tag=459612-b5a88942-7acc-4cc9-9d65-67021cfecfed-30423091
To: <sip:4230@sipsig-ccm97>
Date: Mon, 19 Dec 2011 23:48:28 GMT
Call-ID: f19a7380-eef1cd4c-50-61ca12ac@172.18.202.97
Supported: timer,resource-priority,replaces
Min-SE: 1800
User-Agent: TANDBERG/516 (TC5.0.0.-PreAlpha (TEST SW))
Allow: INVITE, OPTIONS, INFO, BYE, CANCEL, ACK, PRACK, UPDATE, REFER, SUBSCRIBE, NOTIFY
CSeq: 101 INVITE
Expires: 180
Allow-Events: presence
Send-Info: conference, x-cisco-conference
Alert-Info: <file://Bellcore-dr1/>
Remote-Party-ID: <sip:4140@172.18.202.97;x-cisco-callback-number=4140>;party=calling;screen=yes;privacy=off
Contact: <sip:4140@172.18.202.97:5060;transport=tcp>;video;audio
Max-Forwards: 69
Content-Length: 0
```

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

[10] SIP/2.0 180 Ringing

```
Via: SIP/2.0/TCP 172.18.202.97:5060;branch=z9hG4bK2a70591d9fb2;received=172.18.202.97
Call-ID: f19a7380-eef1cd4c-50-61ca12ac@172.18.202.97
CSeq: 101 INVITE
From: <sip:4140@172.18.202.97>;tag=459612-b5a88942-7acc-4cc9-9d65-67021cfecfed-30423091
To: <sip:4230@sipsig-ccm97>;tag=366b448be8c51406
Server: TANDBERG/257 (TE4.1.0.253886Alpha4)
Remote-Party-ID: <sip:4230@sipsig-ccm97>;privacy=off;id-type=subscriber;screen=yes;party=calling
Content-Length: 0
```

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

[11] SIP/2.0 180 Ringing

```
Via: SIP/2.0/TCP 172.18.198.24:5060;branch=z9hG4bKdbf18a810bb0a49c1d22b449aca1b124.1;rport
From: <sip:4140@sipsig-ccm97>;tag=61e07bb831daa72a
To: <sip:4230@sipsig-ccm97>;tag=459611-b5a88942-7acc-4cc9-9d65-67021cfecfed-30423090
Date: Mon, 19 Dec 2011 23:48:28 GMT
Call-ID: a0ad14b6589974e3@172.18.198.24
CSeq: 100 INVITE
Allow: INVITE, OPTIONS, INFO, BYE, CANCEL, ACK, PRACK, UPDATE, REFER, SUBSCRIBE, NOTIFY
Allow-Events: presence
Send-Info: conference, x-cisco-conference
Remote-Party-ID: <sip:4230@172.18.202.97>;party=called;screen=yes;privacy=off
Contact: <sip:4230@172.18.202.97:5060;transport=tcp>
Content-Length: 0
```

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

[12] SIP/2.0 200 OK

```
Via: SIP/2.0/TCP 172.18.202.97:5060;branch=z9hG4bK2a70591d9fb2;received=172.18.202.97
Call-ID: f19a7380-eef1cd4c-50-61ca12ac@172.18.202.97
CSeq: 101 INVITE
Contact: <sip:4230@172.18.202.190:46879;transport=tcp>
From: <sip:4140@172.18.202.97>;tag=459612-b5a88942-7acc-4cc9-9d65-67021cfecfed-30423091
To: <sip:4230@sipsig-ccm97>;tag=366b448be8c51406
Allow: INVITE, ACK, CANCEL, BYE, UPDATE, INFO, OPTIONS, REFER, NOTIFY
Server: TANDBERG/257 (TE4.1.0.253886Alpha4)
Supported: replaces,100rel,timer,gruu,path,outbound,X-cisco-callinfo,X-cisco-serviceuri,X-cisco-service-control,norefersub,extended-refer
Require: timer
Session-Expires: 1800;refresher=uas
Min-SE: 1800
```

Remote-Party-ID: <sip:4230@sipsig-ccm97>;privacy=off;id-type=subscriber;screen=yes;party=calling
 Content-Type: application/sdp
 Content-Length: 2178

```
v=0
o=tandberg 10 1 IN IP4 172.18.202.190
s=-
c=IN IP4 172.18.202.190
b=AS:1152
t=0 0
m=audio 16440 RTP/AVP 100 102 103 9 18 11 8 0 101
b=TIAS:64000
a=rtpmap:100 MP4A-LATM/90000
a=fmtp:100 profile-level-id=24;object=23;bitrate=64000
a=rtpmap:102 G7221/16000
a=fmtp:102 bitrate=32000
a=rtpmap:103 G7221/16000
a=fmtp:103 bitrate=24000
a=rtpmap:9 G722/8000
a=rtpmap:18 G729/8000
a=fmtp:18 annexb=no
a=rtpmap:11 L16/16000
a=rtpmap:8 PCMA/8000
a=rtpmap:0 PCMU/8000
a=rtpmap:101 telephone-event/8000
a=fmtp:101 0-15
a=sendrecv
m=video 16442 RTP/AVP 97 98 99 34 31
b=TIAS:1152000
a=rtpmap:97 H264/90000
a=fmtp:97 profile-level-id=42800d;max-br=906;max-mbps=40500;max-fs=1344;max-smbps=40500;max-fps=3000
a=rtpmap:98 H264/90000
a=fmtp:98 profile-level-id=42800d;max-br=906;max-mbps=40500;max-fs=1344;max-smbps=40500;packetization-
mode=1;max-fps=3000
a=rtpmap:99 H263-1998/90000
a=fmtp:99
custom=1024,768,4;custom=1024,576,4;custom=800,600,4;cif4=2;custom=720,480,2;custom=640,480,2;custom=512,288
,1;cif=1;custom=352,240,1;qcif=1;maxbr=10880
a=rtpmap:34 H263/90000
a=fmtp:34 cif4=2;cif=1;qcif=1;maxbr=10880
a=rtpmap:31 H261/90000
a=fmtp:31 cif=1;qcif=1;maxbr=10880
a=rtcp-fb:* nack pli
a=sendrecv
a=content:main
a=label:11
a=answer:full
m=application 5070 UDP/BFCP *
a=floorctrl:c-s
a=confid:1
a=floorid:2 mstrm:12
a=userid:10
a=setup:actpass
a=connection:new
m=video 16444 RTP/AVP 97 98 99 34 31
b=TIAS:1152000
a=rtpmap:97 H264/90000
a=fmtp:97 profile-level-id=42800d;max-br=906;max-mbps=40500;max-fs=1344;max-smbps=40500;max-fps=3000
a=rtpmap:98 H264/90000
a=fmtp:98 profile-level-id=42800d;max-br=906;max-mbps=40500;max-fs=1344;max-smbps=40500;packetization-
mode=1;max-fps=3000
a=rtpmap:99 H263-1998/90000
a=fmtp:99
custom=1024,768,4;custom=1024,576,4;custom=800,600,4;cif4=2;custom=720,480,2;custom=640,480,2;custom=512,288
,1;cif=1;custom=352,240,1;qcif=1;maxbr=10880
a=rtpmap:34 H263/90000
a=fmtp:34 cif4=2;cif=1;qcif=1;maxbr=10880
a=rtpmap:31 H261/90000
a=fmtp:31 cif=1;qcif=1;maxbr=10880
a=rtcp-fb:* nack pli
a=sendrecv
a=content:slides
a=label:12
m=application 16446 RTP/AVP 104
a=rtpmap:104 H224/4800
a=sendrecv
```

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

[13] NOTIFY sip:4130@172.18.202.202:60912;transport=tcp SIP/2.0

Via: SIP/2.0/TCP 172.18.202.97:5060;branch=z9hG4bK2a712dde68e7

```

From: <sip:4230@172.18.202.97>;tag=2094352210
To: <sip:4130@sipsig-ccm97>;tag=43b201d47a2191fc
Call-ID: b7932df999bc140a@172.18.202.202
CSeq: 1568 NOTIFY
Max-Forwards: 70
Date: Mon, 19 Dec 2011 23:48:28 GMT
User-Agent: Cisco-CUCM8.6
Event: presence
Subscription-State: active;expires=2219
Contact: <sip:4230@172.18.202.97:5060;transport=tcp>
Content-Type: application/pidf+xml
Content-Length: 825

```

```

<?xml version="1.0" encoding="UTF-8" standalone="no" ?>
<presence xmlns="urn:ietf:params:xml:ns:pidf" entity="sip:4230@172.18.202.97"
  xmlns:e="urn:ietf:params:xml:ns:pidf:status:rpidd" xmlns:dm="urn:ietf:params:xml:ns:pidf:data-model"
  xmlns:ce="urn:cisco:params:xml:ns:pidf:rpidd" xmlns:sc="urn:ietf:params:xml:ns:pidf:servcaps">
  <dm:person>
    <status>
      <basic>open</basic>
    </status>
    <e:activities>
      <e:on-the-phone/>
    </e:activities>
  </dm:person>
  <tuple id="cmp-1-79">
    <status>
      <basic>open</basic>
    <e:activities>
      <e:on-the-phone/>
    </e:activities>
  </status>
  <sc:servcaps>
    <sc:audio>true</sc:audio>
  </sc:servcaps>
  <contact priority="0.8">sip:4230@172.18.202.97:5060</contact>
  <timestamp>2011-12-19T23:48:28Z</timestamp>
</tuple>
</presence>

```

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

[14] ACK sip:4230@172.18.202.190:46879;transport=tcp SIP/2.0

```

Via: SIP/2.0/TCP 172.18.202.97:5060;branch=z9hG4bK2a7268a499d1
From: <sip:4140@172.18.202.97>;tag=459612~b5a88942-7acc-4cc9-9d65-67021cfecfed-30423091
To: <sip:4230@sipsig-ccm97>;tag=366b448be8c51406
Date: Mon, 19 Dec 2011 23:48:28 GMT
Call-ID: f19a7380-eef1cd4c-50-61ca12ac@172.18.202.97
Max-Forwards: 70
CSeq: 101 ACK
Allow-Events: presence
Content-Type: application/sdp
Content-Length: 1053

```

```

v=0
o=CiscoSystemsCCM-SIP 459612 1 IN IP4 172.18.202.97
s=SIP Call
b=AS:6000
t=0 0
m=audio 16680 RTP/AVP 102 101
c=IN IP4 172.18.198.24
b=TIAS:64000
a=rtpmap:102 MP4A-LATM/90000
a=fmtp:102 bitrate=64000;profile-level-id=24;object=23
a=rtpmap:101 telephone-event/8000
a=fmtp:101 0-15
m=video 16682 RTP/AVP 98
c=IN IP4 172.18.198.24
b=TIAS:5936000
a=label:11
a=rtpmap:98 H264/90000
a=fmtp:98 profile-level-id=428016;packetization-mode=1;max-mps=108000;max-fs=3600;max-cpb=200;max-br=5000;max-smps=108000;max-fps=6000
a=content:main
a=rtcp-fb:* nack pli
m=application 5070 UDP/BFCP *
c=IN IP4 172.18.198.24
a=floorctrl:s-only
a=floorid:2 mstrm:12
a=confid:1
a=userid:39

```



```

m=video 16684 RTP/AVP 98
c=IN IP4 172.18.198.24
b=TIAS:5936000
a=label:12
a=rtpmap:98 H264/90000
a=fmtp:98 profile-level-id=428016;packetization-mode=1;max-mbps=108000;max-fs=3840;max-cpb=200;max-br=5000;max-smbps=108000;max-fps=6000
a=content:slides
a=rtcp-fb:* nack pli
m=application 16686 RTP/AVP 107
c=IN IP4 172.18.198.24
a=rtpmap:107 H224/0

```

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

[15] SIP/2.0 200 OK

```

Via: SIP/2.0/TCP 172.18.198.24:5060;branch=z9hG4bKdbf18a810bb0a49c1d22b449aca1b124.1;rport
From: <sip:4140@sipsig-ccm97>;tag=61e07bb831daa72a
To: <sip:4230@sipsig-ccm97>;tag=459611-b5a88942-7acc-4cc9-9d65-67021cfecfed-30423090
Date: Mon, 19 Dec 2011 23:48:28 GMT
Call-ID: a0ad14b6589974e3@172.18.198.24
CSeq: 100 INVITE
Allow: INVITE, OPTIONS, INFO, BYE, CANCEL, ACK, PRACK, UPDATE, REFER, SUBSCRIBE, NOTIFY
Allow-Events: presence
Supported: replaces
Send-Info: conference, x-cisco-conference
Session-Expires: 1800;refresher=uas
Require: timer
Remote-Party-ID: <sip:4230@172.18.202.97>;party=called;screen=yes;privacy=off
Contact: <sip:4230@172.18.202.97:5060;transport=tcp>
Content-Type: application/sdp
Content-Length: 1050

```

```

v=0
o=CiscoSystemsCCM-SIP 459611 1 IN IP4 172.18.202.97
s=SIP Call
b=AS:1152
t=0 0
m=audio 16440 RTP/AVP 100 101
c=IN IP4 172.18.202.190
b=TIAS:64000
a=rtpmap:100 MP4A-LATM/90000
a=fmtp:100 bitrate=64000;profile-level-id=24;object=23
a=rtpmap:101 telephone-event/8000
a=fmtp:101 0-15
m=video 16442 RTP/AVP 98
c=IN IP4 172.18.202.190
b=TIAS:1088000
a=label:11
a=rtpmap:98 H264/90000
a=fmtp:98 profile-level-id=42800D;packetization-mode=1;max-mbps=40500;max-fs=1344;max-cpb=37;max-br=925;max-smbps=40500;max-fps=3000
a=content:main
a=rtcp-fb:* nack pli
m=application 5070 UDP/BFCP *
c=IN IP4 172.18.202.190
a=floorctrl:c-only
a=floorid:2 mstrm:12
a=confid:1
a=userid:10
m=video 16444 RTP/AVP 98
c=IN IP4 172.18.202.190
b=TIAS:1088000
a=label:12
a=rtpmap:98 H264/90000
a=fmtp:98 profile-level-id=42800D;packetization-mode=1;max-mbps=40500;max-fs=1344;max-cpb=37;max-br=925;max-smbps=40500;max-fps=3000
a=content:slides
a=rtcp-fb:* nack pli
m=application 16446 RTP/AVP 104
c=IN IP4 172.18.202.190
a=rtpmap:104 H224/0

```

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

[16] ACK sip:4230@172.18.202.97:5060;transport=tcp SIP/2.0

```

Via: SIP/2.0/TCP 172.18.198.24:5060;branch=z9hG4bK4287db242a3068802f99c0714755768f.1;rport
Call-ID: a0ad14b6589974e3@172.18.198.24
CSeq: 100 ACK
From: <sip:4140@sipsig-ccm97>;tag=61e07bb831daa72a
To: <sip:4230@sipsig-ccm97>;tag=459611-b5a88942-7acc-4cc9-9d65-67021cfecfed-30423090
Max-Forwards: 70

```

Allow: INVITE,ACK,CANCEL,BYE,UPDATE,INFO,OPTIONS,REFER,NOTIFY
 User-Agent: TANDBERG/516 (TC5.0.0.-PreAlpha (TEST SW))
 Supported: replaces,100rel,timer,gruu,path,outbound,X-cisco-callinfo,X-cisco-serviceuri,X-cisco-service-control,norefersub,extended-refer
 Content-Length: 0

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

[17] SIP/2.0 200 OK

Via: SIP/2.0/TCP 172.18.202.97:5060;branch=z9hG4bK2a712dde68e7;received=172.18.202.97
 Call-ID: b7932df999bc140a@172.18.202.202
 CSeq: 1568 NOTIFY
 From: <sip:4230@172.18.202.97>;tag=2094352210
 To: <sip:4130@sipsig-ccm97>;tag=43b201d47a2191fc
 Server: TANDBERG/257 (TE4.1.0.253886Alpha4)
 Content-Length: 0

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

[18] BYE sip:4230@172.18.202.97:5060;transport=tcp SIP/2.0

Via: SIP/2.0/TCP 172.18.198.24:5060;branch=z9hG4bK9839b543c70acab8328ce175a514c0fb.1;rport
 Call-ID: a0ad14b6589974e3@172.18.198.24
 CSeq: 101 BYE
 Contact: <sip:4140@172.18.198.24:43624;transport=tcp>;+sip.instance="urn:uuid:00000000-0000-0000-0000-0050600491d7">;+u.sip!model.ccm.cisco.com="584";audio=TRUE;video=TRUE;mobility="fixed";duplex="full";description="TANDBERG-SIP"
 From: <sip:4140@sipsig-ccm97>;tag=61e07bb831daa72a
 To: <sip:4230@sipsig-ccm97>;tag=459611-b5a88942-7acc-4cc9-9d65-67021cfecfed-30423090
 Max-Forwards: 70
 Allow: INVITE,ACK,CANCEL,BYE,UPDATE,INFO,OPTIONS,REFER,NOTIFY
 User-Agent: TANDBERG/516 (TC5.0.0.-PreAlpha (TEST SW))
 Supported: replaces,100rel,timer,gruu,path,outbound,X-cisco-callinfo,X-cisco-serviceuri,X-cisco-service-control,norefersub,extended-refer
 Content-Length: 0

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

[19] SIP/2.0 200 OK

Via: SIP/2.0/TCP 172.18.198.24:5060;branch=z9hG4bK9839b543c70acab8328ce175a514c0fb.1;rport
 From: <sip:4140@sipsig-ccm97>;tag=61e07bb831daa72a
 To: <sip:4230@sipsig-ccm97>;tag=459611-b5a88942-7acc-4cc9-9d65-67021cfecfed-30423090
 Date: Mon, 19 Dec 2011 23:48:40 GMT
 Call-ID: a0ad14b6589974e3@172.18.198.24
 CSeq: 101 BYE
 Content-Length: 0

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

[20] BYE sip:4230@172.18.202.190:46879;transport=tcp SIP/2.0

Via: SIP/2.0/TCP 172.18.202.97:5060;branch=z9hG4bK2a735fd6c350
 From: <sip:4140@172.18.202.97>;tag=459612-b5a88942-7acc-4cc9-9d65-67021cfecfed-30423091
 To: <sip:4230@sipsig-ccm97>;tag=366b448be8c51406
 Date: Mon, 19 Dec 2011 23:48:28 GMT
 Call-ID: f19a7380-eef1cd4c-50-61ca12ac@172.18.202.97
 User-Agent: TANDBERG/516 (TC5.0.0.-PreAlpha (TEST SW))
 Max-Forwards: 70
 CSeq: 102 BYE
 Reason: Q.850;cause=16
 Content-Length: 0

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

[21] SIP/2.0 200 OK

Via: SIP/2.0/TCP 172.18.202.97:5060;branch=z9hG4bK2a735fd6c350;received=172.18.202.97
 Call-ID: f19a7380-eef1cd4c-50-61ca12ac@172.18.202.97
 CSeq: 102 BYE
 From: <sip:4140@172.18.202.97>;tag=459612-b5a88942-7acc-4cc9-9d65-67021cfecfed-30423091
 To: <sip:4230@sipsig-ccm97>;tag=366b448be8c51406
 Allow: INVITE,ACK,CANCEL,BYE,UPDATE,INFO,OPTIONS,REFER,NOTIFY
 Server: TANDBERG/257 (TE4.1.0.253886Alpha4)
 Supported: replaces,100rel,timer,gruu,path,outbound,X-cisco-callinfo,X-cisco-serviceuri,X-cisco-service-control,norefersub,extended-refer
 Content-Length: 0

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

[22] NOTIFY sip:4130@172.18.202.202:60912;transport=tcp SIP/2.0

Via: SIP/2.0/TCP 172.18.202.97:5060;branch=z9hG4bK2a7444d23002
 From: <sip:4230@172.18.202.97>;tag=2094352210
 To: <sip:4130@sipsig-ccm97>;tag=43b201d47a2191fc
 Call-ID: b7932df999bc140a@172.18.202.202
 CSeq: 1569 NOTIFY
 Max-Forwards: 70
 Date: Mon, 19 Dec 2011 23:48:40 GMT
 User-Agent: Cisco-CUCM8.6
 Event: presence

Subscription-State: active;expires=2207
 Contact: <sip:4230@172.18.202.97:5060;transport=tcp>
 Content-Type: application/pidf+xml
 Content-Length: 732

```
<?xml version="1.0" encoding="UTF-8" standalone="no" ?>
<presence xmlns="urn:ietf:params:xml:ns:pidf" entity="sip:4230@172.18.202.97"
  xmlns:e="urn:ietf:params:xml:ns:pidf:status:rpidd" xmlns:dm="urn:ietf:params:xml:ns:pidf:data-model"
  xmlns:ce="urn:cisco:params:xml:ns:pidf:rpidd" xmlns:sc="urn:ietf:params:xml:ns:pidf:servcaps">
  <dm:person>
    <status>
      <basic>open</basic>
    </status>
    <e:activities>
      </e:activities>
    </dm:person>
    <tuple id="cmp-1-79">
      <status>
        <basic>open</basic>
      </status>
      <sc:servcaps>
        <sc:audio>true</sc:audio>
      </sc:servcaps>
      <contact priority="0.8">sip:4230@172.18.202.97:5060</contact>
      <timestamp>2011-12-19T23:48:40Z</timestamp>
    </tuple>
  </presence>
```

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

[23] SIP/2.0 200 OK

Via: SIP/2.0/TCP 172.18.202.97:5060;branch=z9hG4bK2a7444d23002;received=172.18.202.97
 Call-ID: b7932df999bc140a@172.18.202.202
 CSeq: 1569 NOTIFY
 From: <sip:4230@172.18.202.97>;tag=2094352210
 To: <sip:4130@sipsig-ccm97>;tag=43b201d47a2191fc
 Server: TANDBERG/257 (TE4.1.0.253886Alpha4)
 Content-Length: 0

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

[24] OPTIONS sip:172.18.202.97:5060;transport=tcp SIP/2.0

Via: SIP/2.0/TCP 172.18.202.130:5060;branch=z9hG4bK38cb5d6c5a359468cbbb5e1285630bbc2110679;rport
 Call-ID: c30edcc438b00c47@172.18.202.130
 CSeq: 3330 OPTIONS
 From: <sip:172.18.202.130>;tag=cha40cf0ef651cc8
 To: <sip:172.18.202.97:5060>
 Max-Forwards: 0
 User-Agent: TANDBERG/4100 (X6.1)
 Supported: com.tandberg.vcs.resourceusage
 Content-Length: 0

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

[25] SIP/2.0 503 Service Unavailable

Via: SIP/2.0/TCP 172.18.202.130:5060;branch=z9hG4bK38cb5d6c5a359468cbbb5e1285630bbc2110679;rport
 From: <sip:172.18.202.130>;tag=cha40cf0ef651cc8
 To: <sip:172.18.202.97:5060>;tag=1141244321
 Date: Mon, 19 Dec 2011 23:48:55 GMT
 Call-ID: c30edcc438b00c47@172.18.202.130
 CSeq: 3330 OPTIONS
 Warning: 399 sipsig-ccm97 "Unable to find a device handler for the request received on port 28024 from 172.18.202.130"
 Content-Length: 0

1.3 Basic audio call between EX90 and 7970 SIP

Title: Basic audio call between EX90 and 7970 SIP

Description:

- A calls B

- A and B have two-way audio

- A ends the call

Configuration:

- Node = Unified CM, IP = 172.18.202.97

- Phone = A, Line = 4140, IP = 172.18.198.24, Model = Cisco Telepresence EX90

- Phone = B, Line = 4150, IP = 172.18.202.175, Model = SIP 7970

- A has laptop connected to it via HDMI

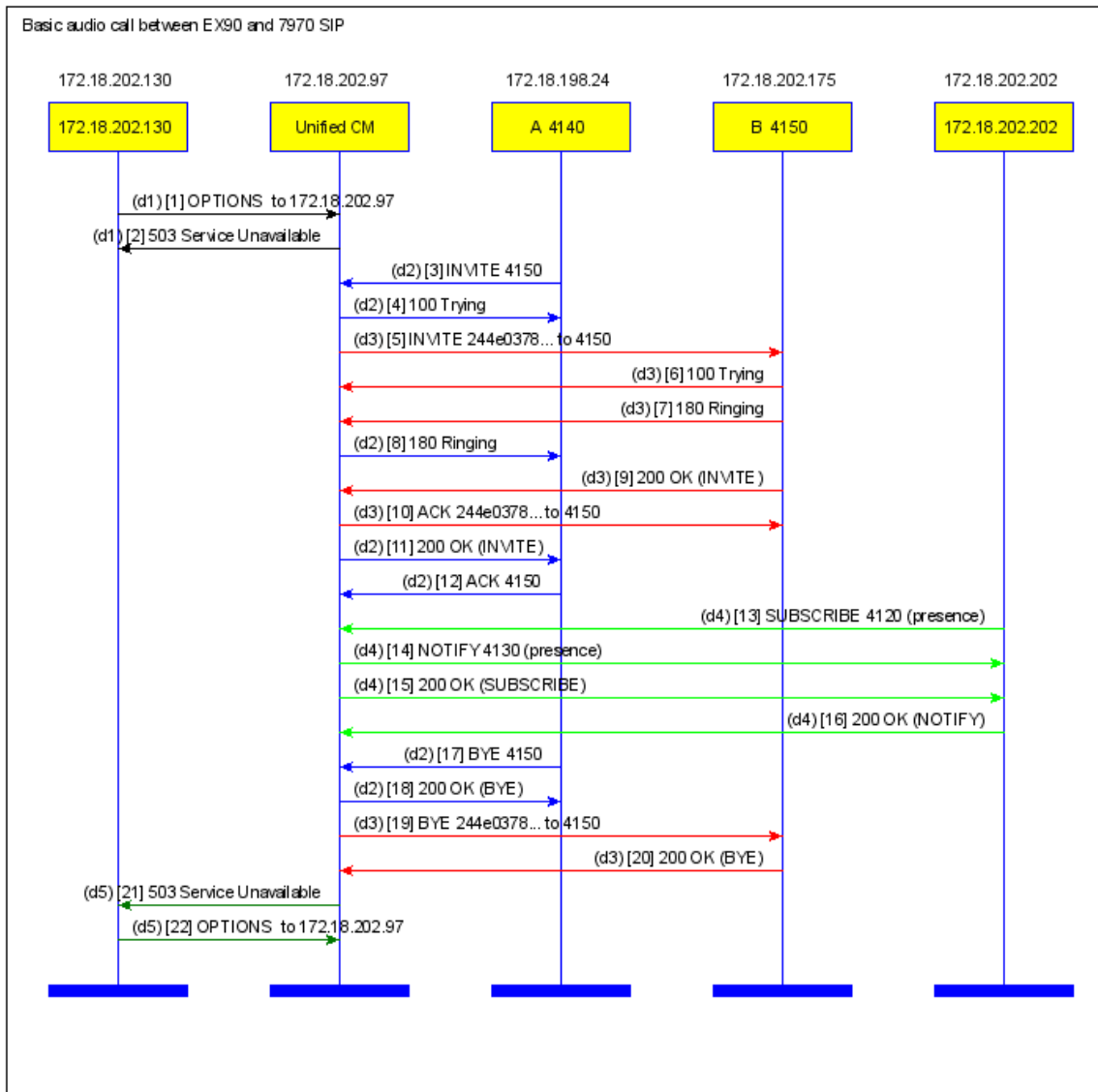
Scenario:

- 4140 calls 4150

- 4150 answers the call

- 4140 goes onhook

End of Scenario



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

[1] OPTIONS sip:172.18.202.97:5060;transport=tcp SIP/2.0

Via: SIP/2.0/TCP 172.18.202.130:5060;branch=z9hG4bK1cc9249496b1612b2ada812f9379c1db2110625;rport
Call-ID: 3d7ef2ebe8ae977e@172.18.202.130
CSeq: 29067 OPTIONS
From: <sip:172.18.202.130>;tag=5497d898dda210e7
To: <sip:172.18.202.97:5060>
Max-Forwards: 0
User-Agent: TANDBERG/4100 (X6.1)
Supported: com.tandberg.vcs.resourceusage
Content-Length: 0

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

[2] SIP/2.0 503 Service Unavailable

Via: SIP/2.0/TCP 172.18.202.130:5060;branch=z9hG4bK1cc9249496b1612b2ada812f9379c1db2110625;rport
From: <sip:172.18.202.130>;tag=5497d898dda210e7
To: <sip:172.18.202.97:5060>;tag=1828791867
Date: Mon, 19 Dec 2011 23:39:39 GMT
Call-ID: 3d7ef2ebe8ae977e@172.18.202.130
CSeq: 29067 OPTIONS
Warning: 399 sip:172.18.202.130 "Unable to find a device handler for the request received on port 28024 from 172.18.202.130"
Content-Length: 0

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

[3] INVITE sip:4150@sipsig-ccm97 SIP/2.0

Via: SIP/2.0/TCP 172.18.198.24:5060;branch=z9hG4bKa6590f55143b7d7075e1d18644b28283.1;rport
Call-ID: ddb1f659d7101722@172.18.198.24
CSeq: 100 INVITE
Contact: <sip:4140@172.18.198.24:43624;transport=tcp>
From: <sip:4140@sipsig-ccm97>;tag=de88394eedcee6bf
To: <sip:4150@sipsig-ccm97>
Max-Forwards: 70
Route: <sip:172.18.202.97;lr>
Allow: INVITE,ACK,CANCEL,BYE,UPDATE,INFO,OPTIONS,REFER,NOTIFY
User-Agent: TANDBERG/516 (TC5.0.0.-PreAlpha (TEST SW))
Supported: replaces,100rel,timer,gruu,path,outbound,X-cisco-callinfo,X-cisco-serviceuri,X-cisco-service-control,norefersub,extended-refer
Session-Expires: 1800
Remote-Party-ID: <sip:4140@sipsig-ccm97>;privacy=off;id-type=subscriber;screen=yes;party=calling
Content-Type: application/sdp
Content-Length: 2459

```
v=0
o=tandberg 36 1 IN IP4 172.18.198.24
s=-
c=IN IP4 172.18.198.24
b=AS:6000
t=0 0
m=audio 16656 RTP/AVP 100 102 103 104 105 106 9 8 0 101
b=TIAS:128000
a=rtpmap:100 MP4A-LATM/90000
a=fmtp:100 profile-level-id=25;object=23;bitrate=128000
a=rtpmap:102 MP4A-LATM/90000
a=fmtp:102 profile-level-id=24;object=23;bitrate=64000
a=rtpmap:103 MP4A-LATM/90000
a=fmtp:103 profile-level-id=24;object=23;bitrate=56000
a=rtpmap:104 MP4A-LATM/90000
a=fmtp:104 profile-level-id=24;object=23;bitrate=48000
a=rtpmap:105 G7221/16000
a=fmtp:105 bitrate=32000
a=rtpmap:106 G7221/16000
a=fmtp:106 bitrate=24000
a=rtpmap:9 G722/8000
a=rtpmap:8 PCMA/8000
a=rtpmap:0 PCMU/8000
a=rtpmap:101 telephone-event/8000
a=fmtp:101 0-15
a=sendrecv
m=video 16658 RTP/AVP 97 98 99 34 31
b=TIAS:6000000
a=rtpmap:97 H264/90000
a=fmtp:97 profile-level-id=428016;max-br=5000;max-mbps=108000;max-fs=3600;max-smbps=108000;max-fps=6000
a=rtpmap:98 H264/90000
a=fmtp:98 profile-level-id=428016;max-br=5000;max-mbps=108000;max-fs=3600;max-smbps=108000;packetization-mode=1;max-fps=6000
a=rtpmap:99 H263-1998/90000
a=fmtp:99
custom=1280,768,3;custom=1280,720,3;custom=1024,768,1;custom=1024,576,2;custom=800,600,1;cif4=1;custom=720,480,1;custom=640,480,1;custom=512,288,1;cif=1;custom=352,240,1;qcif=1;maxbr=20000
```

```

a=rtpmap:34 H263/90000
a=fmtp:34 cif4=1; cif=1; qcif=1; maxbr=20000
a=rtpmap:31 H261/90000
a=fmtp:31 cif=1; qcif=1; maxbr=20000
a=rtcp-fb:* nack pli
a=sendrecv
a=content:main
a=label:11
a=answer:full
m=application 5070 UDP/BFCP *
a=floorctrl:c-s
a=confid:1
a=floorid:2 mstrm:12
a=userid:36
a=setup:actpass
a=connection:new
m=video 16660 RTP/AVP 97 98 99 34 31
b=TIAS:6000000
a=rtpmap:97 H264/90000
a=fmtp:97 profile-level-id=428016; max-br=5000; max-mbps=108000; max-fs=3840; max-smbps=108000; max-fps=6000
a=rtpmap:98 H264/90000
a=fmtp:98 profile-level-id=428016; max-br=5000; max-mbps=108000; max-fs=3840; max-smbps=108000; packetization-
mode=1; max-fps=6000
a=rtpmap:99 H263-1998/90000
a=fmtp:99
custom=1280,768,3; custom=1280,720,3; custom=1024,768,1; custom=1024,576,2; custom=800,600,1; cif4=1; custom=720,4
80,1; custom=640,480,1; custom=512,288,1; cif=1; custom=352,240,1; qcif=1; maxbr=20000
a=rtpmap:34 H263/90000
a=fmtp:34 cif4=1; cif=1; qcif=1; maxbr=20000
a=rtpmap:31 H261/90000
a=fmtp:31 cif=1; qcif=1; maxbr=20000
a=rtcp-fb:* nack pli
a=sendrecv
a=content:slides
a=label:12
m=application 16662 RTP/AVP 107
a=rtpmap:107 H224/4800
a=sendrecv

```

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

[4] SIP/2.0 100 Trying

```

Via: SIP/2.0/TCP 172.18.198.24:5060; branch=z9hG4bKa6590f55143b7d7075e1d18644b28283.1; rport
From: <sip:4140@sipsig-ccm97>; tag=de88394eedcee6bf
To: <sip:4150@sipsig-ccm97>
Date: Mon, 19 Dec 2011 23:39:46 GMT
Call-ID: ddb1f659d7101722@172.18.198.24
CSeq: 100 INVITE
Allow-Events: presence
Content-Length: 0

```

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

[5] INVITE sip:244e0378-db0a-57a6-c77f-0369bcd60ef2@172.18.202.175:51273;transport=tcp SIP/2.0

```

Via: SIP/2.0/TCP 172.18.202.97:5060; branch=z9hG4bK2a5e5e84d483
From: <sip:4140@172.18.202.97>; tag=459538-b5a88942-7acc-4cc9-9d65-67021cfecfed-30423085
To: <sip:4150@172.18.202.97>
Date: Mon, 19 Dec 2011 23:39:46 GMT
Call-ID: ba779280-eef1cb42-4d-61ca12ac@172.18.202.97
Supported: timer, resource-priority, replaces
Min-SE: 1800
User-Agent: Cisco-CUCM8.6
Allow: INVITE, OPTIONS, INFO, BYE, CANCEL, ACK, PRACK, UPDATE, REFER, SUBSCRIBE, NOTIFY
CSeq: 101 INVITE
Expires: 180
Allow-Events: presence
Send-Info: conference, x-cisco-conference
Alert-Info: <file://Bellcore-dr1/>
Remote-Party-ID: <sip:4140@172.18.202.97;x-cisco-callback-number=4140>; party=calling; screen=yes; privacy=off
Contact: <sip:4140@172.18.202.97:5060;transport=tcp>; video; audio
Max-Forwards: 69
Content-Length: 0

```

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

[6] SIP/2.0 100 Trying

```

Via: SIP/2.0/TCP 172.18.202.97:5060; branch=z9hG4bK2a5e5e84d483
From: <sip:4140@172.18.202.97>; tag=459538-b5a88942-7acc-4cc9-9d65-67021cfecfed-30423085
To: <sip:4150@172.18.202.97>
Call-ID: ba779280-eef1cb42-4d-61ca12ac@172.18.202.97
Date: Mon, 19 Dec 2011 23:39:44 GMT
CSeq: 101 INVITE
Server: Cisco-CP7970G/9.2.1

```

Contact: <sip:244e0378-db0a-57a6-c77f-0369bcd60ef2@172.18.202.175:51273;transport=tcp>
 Allow: ACK, BYE, CANCEL, INVITE, NOTIFY, OPTIONS, REFER, REGISTER, UPDATE, SUBSCRIBE, INFO
 Supported: replaces, join, sdp-anat, norefersub, extended-refer, X-cisco-callinfo, X-cisco-serviceuri, X-cisco-escapecodes, X-cisco-service-control, X-cisco-srtp-fallback, X-cisco-monrec, X-cisco-config, X-cisco-sis-5.1.0, X-cisco-xsi-8.5.1
 Allow-Events: kpml, dialog
 Content-Length: 0

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

[7] SIP/2.0 180 Ringing

Via: SIP/2.0/TCP 172.18.202.97:5060;branch=z9hG4bK2a5e5e84d483
 From: <sip:4140@172.18.202.97>;tag=459538-b5a88942-7acc-4cc9-9d65-67021cfecfed-30423085
 To: <sip:4150@172.18.202.97>;tag=0017956dced00009d0ce6472-b379b96d
 Call-ID: ba779280-eef1cb42-4d-61ca12ac@172.18.202.97
 Date: Mon, 19 Dec 2011 23:39:45 GMT
 CSeq: 101 INVITE
 Server: Cisco-CP7970G/9.2.1
 Contact: <sip:244e0378-db0a-57a6-c77f-0369bcd60ef2@172.18.202.175:51273;transport=tcp>
 Allow: ACK, BYE, CANCEL, INVITE, NOTIFY, OPTIONS, REFER, REGISTER, UPDATE, SUBSCRIBE, INFO
 Remote-Party-ID: "4150" <sip:4150@172.18.202.97>;party=called;id-type=subscriber;privacy=off;screen=yes
 Supported: replaces, join, sdp-anat, norefersub, extended-refer, X-cisco-callinfo, X-cisco-serviceuri, X-cisco-escapecodes, X-cisco-service-control, X-cisco-srtp-fallback, X-cisco-monrec, X-cisco-config, X-cisco-sis-5.1.0, X-cisco-xsi-8.5.1
 Allow-Events: kpml, dialog
 Content-Length: 0

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

[8] SIP/2.0 180 Ringing

Via: SIP/2.0/TCP 172.18.198.24:5060;branch=z9hG4bKa6590f55143b7d7075e1d18644b28283.1;rport
 From: <sip:4140@sipsig-ccm97>;tag=de88394eedcee6bf
 To: <sip:4150@sipsig-ccm97>;tag=459537-b5a88942-7acc-4cc9-9d65-67021cfecfed-30423084
 Date: Mon, 19 Dec 2011 23:39:46 GMT
 Call-ID: ddb1f659d7101722@172.18.198.24
 CSeq: 100 INVITE
 Allow: INVITE, OPTIONS, INFO, BYE, CANCEL, ACK, PRACK, UPDATE, REFER, SUBSCRIBE, NOTIFY
 Allow-Events: presence
 Send-Info: conference, x-cisco-conference
 Remote-Party-ID: <sip:4150@172.18.202.97>;party=called;screen=yes;privacy=off
 Contact: <sip:4150@172.18.202.97:5060;transport=tcp>
 Content-Length: 0

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

[9] SIP/2.0 200 OK

Via: SIP/2.0/TCP 172.18.202.97:5060;branch=z9hG4bK2a5e5e84d483
 From: <sip:4140@172.18.202.97>;tag=459538-b5a88942-7acc-4cc9-9d65-67021cfecfed-30423085
 To: <sip:4150@172.18.202.97>;tag=0017956dced00009d0ce6472-b379b96d
 Call-ID: ba779280-eef1cb42-4d-61ca12ac@172.18.202.97
 Date: Mon, 19 Dec 2011 23:39:48 GMT
 CSeq: 101 INVITE
 Server: Cisco-CP7970G/9.2.1
 Contact: <sip:244e0378-db0a-57a6-c77f-0369bcd60ef2@172.18.202.175:51273;transport=tcp>
 Allow: ACK, BYE, CANCEL, INVITE, NOTIFY, OPTIONS, REFER, REGISTER, UPDATE, SUBSCRIBE, INFO
 Remote-Party-ID: "4150" <sip:4150@172.18.202.97>;party=called;id-type=subscriber;privacy=off;screen=yes
 Supported: replaces, join, sdp-anat, norefersub, extended-refer, X-cisco-callinfo, X-cisco-serviceuri, X-cisco-escapecodes, X-cisco-service-control, X-cisco-srtp-fallback, X-cisco-monrec, X-cisco-config, X-cisco-sis-5.1.0, X-cisco-xsi-8.5.1
 Allow-Events: kpml, dialog
 Content-Length: 331
 Content-Type: application/sdp
 Content-Disposition: session;handling=optional

v=0
 o=Cisco-SIPUA 4589 0 IN IP4 172.18.202.175
 s=SIP Call
 t=0 0
 m=audio 16612 RTP/AVP 0 8 18 102 9 101
 c=IN IP4 172.18.202.175
 a=rtpmap:0 PCMU/8000
 a=rtpmap:8 PCMA/8000
 a=rtpmap:18 G729/8000
 a=fmtp:18 annexb=no
 a=rtpmap:102 L16/16000
 a=rtpmap:9 G722/8000
 a=rtpmap:101 telephone-event/8000
 a=fmtp:101 0-15
 a=sendrecv

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

[10] ACK sip:244e0378-db0a-57a6-c77f-0369bcd60ef2@172.18.202.175:51273;transport=tcp SIP/2.0

Via: SIP/2.0/TCP 172.18.202.97:5060;branch=z9hG4bK2a5f36a86b57


```

From: <sip:4140@172.18.202.97>;tag=459538~b5a88942-7acc-4cc9-9d65-67021cfecfed-30423085
To: <sip:4150@172.18.202.97>;tag=0017956dced00009d0ce6472-b379b96d
Date: Mon, 19 Dec 2011 23:39:46 GMT
Call-ID: ba779280-eef1cb42-4d-61ca12ac@172.18.202.97
Max-Forwards: 70
CSeq: 101 ACK
Allow-Events: presence
Content-Type: application/sdp
Content-Length: 230

```

```

v=0
o=CiscoSystemsCCM-SIP 459538 1 IN IP4 172.18.202.97
s=SIP Call
c=IN IP4 172.18.198.24
t=0 0
m=audio 16656 RTP/AVP 9 101
b=TIAS:64000
a=rtpmap:9 G722/8000
a=ptime:20
a=rtpmap:101 telephone-event/8000
a=fmtp:101 0-15

```

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

[11] SIP/2.0 200 OK

```

Via: SIP/2.0/TCP 172.18.198.24:5060;branch=z9hG4bKa6590f55143b7d7075e1d18644b28283.1;rport
From: <sip:4140@sipsig-ccm97>;tag=de88394eedcee6bf
To: <sip:4150@sipsig-ccm97>;tag=459537~b5a88942-7acc-4cc9-9d65-67021cfecfed-30423084
Date: Mon, 19 Dec 2011 23:39:46 GMT
Call-ID: ddb1f659d7101722@172.18.198.24
CSeq: 100 INVITE
Allow: INVITE, OPTIONS, INFO, BYE, CANCEL, ACK, PRACK, UPDATE, REFER, SUBSCRIBE, NOTIFY
Allow-Events: presence
Supported: replaces
Send-Info: conference, x-cisco-conference
Session-Expires: 1800;refresher=uas
Require: timer
Remote-Party-ID: <sip:4150@172.18.202.97>;party=called;screen=yes;privacy=off
Contact: <sip:4150@172.18.202.97:5060;transport=tcp>
Content-Type: application/sdp
Content-Length: 1646

```

```

v=0
o=CiscoSystemsCCM-SIP 459537 1 IN IP4 172.18.202.97
s=SIP Call
b=AS:64
t=0 0
m=audio 16612 RTP/AVP 9 101
c=IN IP4 172.18.202.175
b=TIAS:64000
a=rtpmap:9 G722/8000
a=ptime:20
a=rtpmap:101 telephone-event/8000
a=fmtp:101 0-15
m=video 0 RTP/AVP 97 98 99 34 31
c=IN IP4 172.18.198.24
b=TIAS:6000000
a=label:11
a=rtpmap:97 H264/90000
a=fmtp:97 profile-level-id=428016;max-mbps=108000;max-fs=3600;max-cpb=200;max-br=5000;max-smbps=108000;max-fps=6000
a=rtpmap:98 H264/90000
a=fmtp:98 profile-level-id=428016;packetization-mode=1;max-mbps=108000;max-fs=3600;max-cpb=200;max-br=5000;max-smbps=108000;max-fps=6000
a=rtpmap:99 H263-1998/90000
a=fmtp:99 QCIF=1;CIF=1;CIF4=1;CUSTOM=352,240,1
a=rtpmap:34 H263/90000
a=fmtp:34 QCIF=1;CIF=1;CIF4=1
a=rtpmap:31 H261/90000
a=fmtp:31 CIF=1;QCIF=1
a=content:main
a=rtcp-fb:* nack pli
m=application 0 UDP/BFCP *
c=IN IP4 172.18.198.24
a=floorctrl:c-s
a=floorid:2 mstrm:12
a=confid:1
a=userid:36
m=video 0 RTP/AVP 97 98 99 34 31
c=IN IP4 172.18.198.24
b=TIAS:6000000

```

```

a=label:12
a=rtpmap:97 H264/90000
a=fmtp:97 profile-level-id=428016;max-mbps=108000;max-fs=3840;max-cpb=200;max-br=5000;max-smbps=108000;max-fps=6000
a=rtpmap:98 H264/90000
a=fmtp:98 profile-level-id=428016;packetization-mode=1;max-mbps=108000;max-fs=3840;max-cpb=200;max-br=5000;max-smbps=108000;max-fps=6000
a=rtpmap:99 H263-1998/90000
a=fmtp:99 QCIF=1;CIF=1;CIF4=1;CUSTOM=352,240,1
a=rtpmap:34 H263/90000
a=fmtp:34 QCIF=1;CIF=1;CIF4=1
a=rtpmap:31 H261/90000
a=fmtp:31 CIF=1;QCIF=1
a=content:slides
a=rtcp-fb:* nack pli
m=application 0 RTP/AVP 107
c=IN IP4 172.18.198.24
a=rtpmap:107 H224/0

```

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

[12] ACK sip:4150@172.18.202.97:5060;transport=tcp SIP/2.0

Via: SIP/2.0/TCP 172.18.198.24:5060;branch=z9hG4bKbc389111b8fe8f9c6400b5626027bf3d.1;rport

Call-ID: ddb1f659d7101722@172.18.198.24

CSeq: 100 ACK

From: <sip:4140@sipsig-ccm97>;tag=de88394eedcee6bf

To: <sip:4150@sipsig-ccm97>;tag=459537-b5a88942-7acc-4cc9-9d65-67021cfecfed-30423084

Max-Forwards: 70

Allow: INVITE,ACK,CANCEL,BYE,UPDATE,INFO,OPTIONS,REFER,NOTIFY

User-Agent: TANDBERG/516 (TC5.0.0.-PreAlpha (TEST SW))

Supported: replaces,100rel,timer,gruu,path,outbound,X-cisco-callinfo,X-cisco-serviceuri,X-cisco-service-control,norefersub,extended-refer

Content-Length: 0

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

[13] SUBSCRIBE sip:4120@172.18.202.97 SIP/2.0

Via: SIP/2.0/TCP 172.18.202.202:5060;branch=z9hG4bK47be5c996f6aa61240a200155b4068e5.1;rport

Call-ID: 16ce99f3838b3268@172.18.202.202

CSeq: 1549 SUBSCRIBE

Contact: <sip:4130@172.18.202.202:60912;transport=tcp>;+sip.instance="urn:uuid:00000000-0000-0000-0000-005060045b02>;+u.sip!model.ccm.cisco.com="580";audio=TRUE;video=TRUE;mobility="fixed";duplex="full";description="TANDBERG-SIP"

From: <sip:4130@sipsig-ccm97>;tag=438894512b1f5c53

To: <sip:4120@172.18.202.97>;tag=1845200597

Max-Forwards: 70

Route: <sip:172.18.202.97;lr>

User-Agent: TANDBERG/257 (TE4.1.0.253886Alpha4)

Expires: 3600

Event: presence

Accept: application/pdf+xml

Content-Length: 0

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

[14] NOTIFY sip:4130@172.18.202.202:60912;transport=tcp SIP/2.0

Via: SIP/2.0/TCP 172.18.202.97:5060;branch=z9hG4bK2a605ff047c9

From: <sip:4120@172.18.202.97>;tag=1845200597

To: <sip:4130@sipsig-ccm97>;tag=438894512b1f5c53

Call-ID: 16ce99f3838b3268@172.18.202.202

CSeq: 1554 NOTIFY

Max-Forwards: 70

Date: Mon, 19 Dec 2011 23:39:51 GMT

User-Agent: Cisco-CUCM8.6

Event: presence

Subscription-State: active;expires=3600

Contact: <sip:4120@172.18.202.97:5060;transport=tcp>

Content-Type: application/pdf+xml

Content-Length: 733

```

<?xml version="1.0" encoding="UTF-8" standalone="no" ?>
<presence xmlns="urn:ietf:params:xml:ns:pidf" entity="sip:4120@172.18.202.97"
xmlns:e="urn:ietf:params:xml:ns:pidf:status:rpidd" xmlns:dm="urn:ietf:params:xml:ns:pidf:data-model"
xmlns:ce="urn:cisco:params:xml:ns:pidf:rpidd" xmlns:sc="urn:ietf:params:xml:ns:pidf:servcaps">
  <dm:person>
    <status>
      <basic>open</basic>
    </status>
    <e:activities>
      </e:activities>
    </dm:person>
    <tuple id="cmp-1-575">
      <status>

```

```

    <basic>open</basic>
  </status>
  <sc:svrcaps>
    <sc:audio>true</sc:audio>
  </sc:svrcaps>
  <contact priority="0.8">sip:4120@172.18.202.97:5060</contact>
  <timestamp>2011-12-19T23:08:57Z</timestamp>
</tuple>
</presence>

```

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

[15] SIP/2.0 200 OK

```

Via: SIP/2.0/TCP 172.18.202.202:5060;branch=z9hG4bK47be5c996f6aa61240a200155b4068e5.1;rport
From: <sip:4130@sipsig-ccm97>;tag=438894512b1f5c53
To: <sip:4120@172.18.202.97>;tag=1845200597
Date: Mon, 19 Dec 2011 23:39:51 GMT
Call-ID: 16ce99f3838b3268@172.18.202.202
CSeq: 1549 SUBSCRIBE
Contact: <sip:4120@172.18.202.97:5060;transport=tcp>
Expires: 3600
Content-Length: 0

```

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

[16] SIP/2.0 200 OK

```

Via: SIP/2.0/TCP 172.18.202.97:5060;branch=z9hG4bK2a605ff047c9;received=172.18.202.97
Call-ID: 16ce99f3838b3268@172.18.202.202
CSeq: 1554 NOTIFY
From: <sip:4120@172.18.202.97>;tag=1845200597
To: <sip:4130@sipsig-ccm97>;tag=438894512b1f5c53
Server: TANDBERG/257 (TE4.1.0.253886Alpha4)
Content-Length: 0

```

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

[17] BYE sip:4150@172.18.202.97:5060;transport=tcp SIP/2.0

```

Via: SIP/2.0/TCP 172.18.198.24:5060;branch=z9hG4bK8ab6e294374ed792f16014bd7cf8239b.1;rport
Call-ID: ddb1f659d7101722@172.18.198.24
CSeq: 101 BYE
Contact: <sip:4140@172.18.198.24:43624;transport=tcp>;+sip.instance="urn:uuid:00000000-0000-0000-0000-0050600491d7";+u.sip!model.ccm.cisco.com="584";audio=TRUE;video=TRUE;mobility="fixed";duplex="full";description="TANDBERG-SIP"
From: <sip:4140@sipsig-ccm97>;tag=de88394eedcee6bf
To: <sip:4150@sipsig-ccm97>;tag=459537-b5a88942-7acc-4cc9-9d65-67021cfecfed-30423084
Max-Forwards: 70
Allow: INVITE,ACK,CANCEL,BYE,UPDATE,INFO,OPTIONS,REFER,NOTIFY
User-Agent: TANDBERG/516 (TC5.0.0.-PreAlpha (TEST SW))
Supported: replaces,100rel,timer,gruu,path,outbound,X-cisco-callinfo,X-cisco-serviceuri,X-cisco-service-control,norefersub,extended-refer
Content-Length: 0

```

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

[18] SIP/2.0 200 OK

```

Via: SIP/2.0/TCP 172.18.198.24:5060;branch=z9hG4bK8ab6e294374ed792f16014bd7cf8239b.1;rport
From: <sip:4140@sipsig-ccm97>;tag=de88394eedcee6bf
To: <sip:4150@sipsig-ccm97>;tag=459537-b5a88942-7acc-4cc9-9d65-67021cfecfed-30423084
Date: Mon, 19 Dec 2011 23:39:56 GMT
Call-ID: ddb1f659d7101722@172.18.198.24
CSeq: 101 BYE
Content-Length: 0

```

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

[19] BYE sip:244e0378-db0a-57a6-c77f-0369bcd60ef2@172.18.202.175:51273;transport=tcp SIP/2.0

```

Via: SIP/2.0/TCP 172.18.202.97:5060;branch=z9hG4bK2a6155a907f2
From: <sip:4140@172.18.202.97>;tag=459538-b5a88942-7acc-4cc9-9d65-67021cfecfed-30423085
To: <sip:4150@172.18.202.97>;tag=0017956dced00009d0ce6472-b379b96d
Date: Mon, 19 Dec 2011 23:39:46 GMT
Call-ID: ba779280-eef1cb42-4d-61ca12ac@172.18.202.97
User-Agent: Cisco-CUCM8.6
Max-Forwards: 70
CSeq: 102 BYE
Reason: Q.850;cause=16
Content-Length: 0

```

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

[20] SIP/2.0 200 OK

```

Via: SIP/2.0/TCP 172.18.202.97:5060;branch=z9hG4bK2a6155a907f2
From: <sip:4140@172.18.202.97>;tag=459538-b5a88942-7acc-4cc9-9d65-67021cfecfed-30423085
To: <sip:4150@172.18.202.97>;tag=0017956dced00009d0ce6472-b379b96d
Call-ID: ba779280-eef1cb42-4d-61ca12ac@172.18.202.97
Date: Mon, 19 Dec 2011 23:39:55 GMT
CSeq: 102 BYE

```

Server: Cisco-CP7970G/9.2.1
Content-Length: 0

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

[21] SIP/2.0 503 Service Unavailable

Via: SIP/2.0/TCP 172.18.202.130:5060;branch=z9hG4bK4796059c6bb6d4d5296f9145a65187a42110628;rport

From: <sip:172.18.202.130>;tag=ce886c7970698ed4

To: <sip:172.18.202.97:5060>;tag=614911627

Date: Mon, 19 Dec 2011 23:40:10 GMT

Call-ID: 1da0c883c94989eb@172.18.202.130

CSeq: 65480 OPTIONS

Warning: 399 sip:172.18.202.97:5060 "Unable to find a device handler for the request received on port 28024 from 172.18.202.130"

Content-Length: 0

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

[22] OPTIONS sip:172.18.202.97:5060;transport=tcp SIP/2.0

Via: SIP/2.0/TCP 172.18.202.130:5060;branch=z9hG4bK4796059c6bb6d4d5296f9145a65187a42110628;rport

Call-ID: 1da0c883c94989eb@172.18.202.130

CSeq: 65480 OPTIONS

From: <sip:172.18.202.130>;tag=ce886c7970698ed4

To: <sip:172.18.202.97:5060>

Max-Forwards: 0

User-Agent: TANDBERG/4100 (X6.1)

Supported: com.tandberg.vcs.resourceusage

Content-Length: 0

1.4 Basic video call between EX90 and 7985

Title: Basic video call between EX90 and 7985

Description:

- A calls B

- A and B have two-way audio and video

- A ends the call

Configuration:

- Node = Unified CM, IP = 172.18.202.97

- Phone = A, Line = 4140, IP = 172.18.198.24, Model = Cisco Telepresence EX90

- Phone = B, Line = 4120, IP = 172.18.202.138, Model = SCCP 7985

- A has laptop connected to it via HDMI

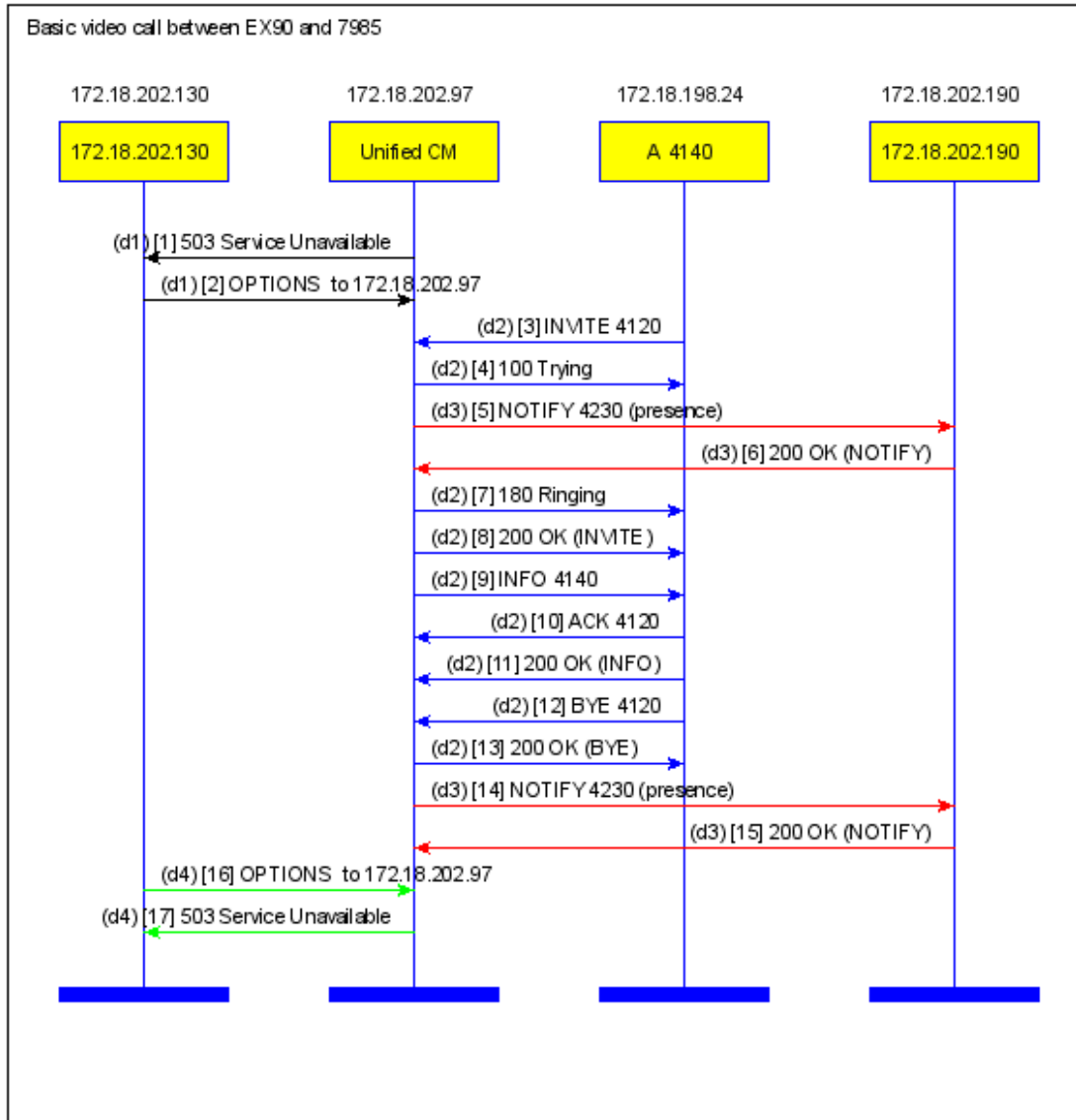
Scenario:

- 4140 calls 4120

- 4120 answers the call

- 4140 goes onhook

End of Scenario



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

[1] SIP/2.0 503 Service Unavailable

Via: SIP/2.0/TCP 172.18.202.130:5060;branch=z9hG4bK3d08ade787fd979414d7d574d4370bb5841329;rport
 From: <sip:172.18.202.130>;tag=acf22a7fed63798c
 To: <sip:172.18.202.97:5060>;tag=643301559
 Date: Fri, 22 Jul 2011 15:05:56 GMT
 Call-ID: 77e8edf36a22e287@172.18.202.130
 CSeq: 8245 OPTIONS
 Warning: 399 sip:172.18.202.130:5060 "Unable to find a device handler for the request received on port 26276 from 172.18.202.130"
 Content-Length: 0

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

[2] OPTIONS sip:172.18.202.97:5060;transport=tcp SIP/2.0

Via: SIP/2.0/TCP 172.18.202.130:5060;branch=z9hG4bK3d08ade787fd979414d7d574d4370bb5841329;rport
 Call-ID: 77e8edf36a22e287@172.18.202.130
 CSeq: 8245 OPTIONS
 From: <sip:172.18.202.130>;tag=acf22a7fed63798c
 To: <sip:172.18.202.97:5060>
 Max-Forwards: 0
 User-Agent: TANDBERG/4100 (X6.1)
 Supported: com.tandberg.vcs.resourceusage
 Content-Length: 0

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

[3] INVITE sip:4120@sipsig-ccm97 SIP/2.0

Via: SIP/2.0/TCP 172.18.198.24:5060;branch=z9hG4bK1e3e708ba806c46d52e1995c498b4a94.1;rport
 Call-ID: 836574886c6f7d93@172.18.198.24
 CSeq: 100 INVITE
 Contact: <sip:4140@172.18.198.24:40577;transport=tcp>
 From: <sip:4140@sipsig-ccm97>;tag=6680d1d6c77f9d9e
 To: <sip:4120@sipsig-ccm97>
 Max-Forwards: 70
 Route: <sip:172.18.202.97;lr>
 Allow: INVITE,ACK,CANCEL,BYE,UPDATE,INFO,OPTIONS,REFER,NOTIFY
 User-Agent: TANDBERG/516 (TC5.0.0.-PreAlpha (TEST SW))
 Supported: replaces,100rel,timer,gruu,path,outbound,X-cisco-callinfo,X-cisco-serviceuri,X-cisco-service-control,norefersub,extended-refer
 Session-Expires: 1800
 Remote-Party-ID: <sip:4140@sipsig-ccm97>;privacy=off;id-type=subscriber;screen=yes;party=calling
 Content-Type: application/sdp
 Content-Length: 2457

```
v=0
o=tandberg 8 1 IN IP4 172.18.198.24
s=-
c=IN IP4 172.18.198.24
b=AS:6000
t=0 0
m=audio 16432 RTP/AVP 100 102 103 104 105 106 9 8 0 101
b=TIAS:128000
a=rtpmap:100 MP4A-LATM/90000
a=fmtp:100 profile-level-id=25;object=23;bitrate=128000
a=rtpmap:102 MP4A-LATM/90000
a=fmtp:102 profile-level-id=24;object=23;bitrate=64000
a=rtpmap:103 MP4A-LATM/90000
a=fmtp:103 profile-level-id=24;object=23;bitrate=56000
a=rtpmap:104 MP4A-LATM/90000
a=fmtp:104 profile-level-id=24;object=23;bitrate=48000
a=rtpmap:105 G7221/16000
a=fmtp:105 bitrate=32000
a=rtpmap:106 G7221/16000
a=fmtp:106 bitrate=24000
a=rtpmap:9 G722/8000
a=rtpmap:8 PCMA/8000
a=rtpmap:0 PCMU/8000
a=rtpmap:101 telephone-event/8000
a=fmtp:101 0-15
a=sendrecv
m=video 16434 RTP/AVP 97 98 99 34 31
b=TIAS:6000000
a=rtpmap:97 H264/90000
a=fmtp:97 profile-level-id=428016;max-br=5000;max-mbps=108000;max-fs=3600;max-smbps=108000;max-fps=6000
a=rtpmap:98 H264/90000
a=fmtp:98 profile-level-id=428016;max-br=5000;max-mbps=108000;max-fs=3600;max-smbps=108000;packetization-mode=1;max-fps=6000
a=rtpmap:99 H263-1998/90000
a=fmtp:99
custom=1280,768,3;custom=1280,720,3;custom=1024,768,1;custom=1024,576,2;custom=800,600,1;cif4=1;custom=720,480,1;custom=640,480,1;custom=512,288,1;cif=1;custom=352,240,1;qcif=1;maxbr=20000
```

```

a=rtptime:34 H263/90000
a=fmtp:34 cif4=1; cif=1; qcif=1; maxbr=20000
a=rtptime:31 H261/90000
a=fmtp:31 cif=1; qcif=1; maxbr=20000
a=rtcp-fb:* nack pli
a=sendrecv
a=content:main
a=label:11
a=answer:full
m=application 5070 UDP/BFCP *
a=floorctrl:c-s
a=confid:1
a=floorid:2 mstrm:12
a=userid:8
a=setup:actpass
a=connection:new
m=video 16436 RTP/AVP 97 98 99 34 31
b=TIAS:6000000
a=rtptime:97 H264/90000
a=fmtp:97 profile-level-id=428016; max-br=5000; max-mbps=108000; max-fs=3840; max-smbps=108000; max-fps=6000
a=rtptime:98 H264/90000
a=fmtp:98 profile-level-id=428016; max-br=5000; max-mbps=108000; max-fs=3840; max-smbps=108000; packetization-
mode=1; max-fps=6000
a=rtptime:99 H263-1998/90000
a=fmtp:99
custom=1280,768,3; custom=1280,720,3; custom=1024,768,1; custom=1024,576,2; custom=800,600,1; cif4=1; custom=720,4
80,1; custom=640,480,1; custom=512,288,1; cif=1; custom=352,240,1; qcif=1; maxbr=20000
a=rtptime:34 H263/90000
a=fmtp:34 cif4=1; cif=1; qcif=1; maxbr=20000
a=rtptime:31 H261/90000
a=fmtp:31 cif=1; qcif=1; maxbr=20000
a=rtcp-fb:* nack pli
a=sendrecv
a=content:slides
a=label:12
m=application 16438 RTP/AVP 107
a=rtptime:107 H224/4800
a=sendrecv

```

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

[4] SIP/2.0 100 Trying

```

Via: SIP/2.0/TCP 172.18.198.24:5060; branch=z9hG4bK1e3e708ba806c46d52e1995c498b4a94.1; rport
From: <sip:4140@sipsig-ccm97>; tag=6680d1d6c77f9d9e
To: <sip:4120@sipsig-ccm97>
Date: Fri, 22 Jul 2011 15:06:02 GMT
Call-ID: 836574886c6f7d93@172.18.198.24
CSeq: 100 INVITE
Allow-Events: presence
Content-Length: 0

```

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

[5] NOTIFY sip:4230@172.18.202.190:52067;transport=tcp SIP/2.0

```

Via: SIP/2.0/TCP 172.18.202.97:5060; branch=z9hG4bK2d7c2f04f8
From: <sip:4140@172.18.202.97>; tag=348076154
To: <sip:4230@sipsig-ccm97>; tag=8fbca08dc546bf5c
Call-ID: 8801b3af6d2464b5@172.18.202.190
CSeq: 102 NOTIFY
Max-Forwards: 70
Date: Fri, 22 Jul 2011 15:06:02 GMT
User-Agent: Cisco-CUCM8.6
Event: presence
Subscription-State: active; expires=3552
Contact: <sip:4140@172.18.202.97:5060;transport=tcp>
Content-Type: application/pidf+xml
Content-Length: 826

```

```

<?xml version="1.0" encoding="UTF-8" standalone="no" ?>
<presence xmlns="urn:ietf:params:xml:ns:pidf" entity="sip:4140@172.18.202.97"
xmlns:e="urn:ietf:params:xml:ns:pidf:status:rpidd" xmlns:dm="urn:ietf:params:xml:ns:pidf:data-model"
xmlns:ce="urn:cisco:params:xml:ns:pidf:rpidd" xmlns:sc="urn:ietf:params:xml:ns:pidf:servcaps">
  <dm:person>
    <status>
      <basic>open</basic>
    </status>
    <e:activities>
      <e:on-the-phone/>
    </e:activities>
  </dm:person>
  <tuple id="cmp-1-232">
    <status>

```



```

    <basic>open</basic>
    <e:activities>
      <e:on-the-phone/>
    </e:activities>
  </status>
  <sc:servcaps>
    <sc:audio>true</sc:audio>
  </sc:servcaps>
  <contact priority="0.8">sip:4140@172.18.202.97:5060</contact>
  <timestamp>2011-07-22T15:06:02Z</timestamp>
</tuple>
</presence>

```

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

[6] SIP/2.0 200 OK

```

Via: SIP/2.0/TCP 172.18.202.97:5060;branch=z9hG4bK2d7c2f04f8;received=172.18.202.97
Call-ID: 8801b3af6d2464b5@172.18.202.190
CSeq: 102 NOTIFY
From: <sip:4140@172.18.202.97>;tag=348076154
To: <sip:4230@sipsig-ccm97>;tag=8fbca08dc546bf5c
Server: TANDBERG/257 (TE4.1.0.253886Alpha4)
Content-Length: 0

```

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

[7] SIP/2.0 180 Ringing

```

Via: SIP/2.0/TCP 172.18.198.24:5060;branch=z9hG4bK1e3e708ba806c46d52e1995c498b4a94.1;rport
From: <sip:4140@sipsig-ccm97>;tag=6680d1d6c77f9d9e
To: <sip:4120@sipsig-ccm97>;tag=245-b5a88942-7acc-4cc9-9d65-67021cfecfed-27669288
Date: Fri, 22 Jul 2011 15:06:02 GMT
Call-ID: 836574886c6f7d93@172.18.198.24
CSeq: 100 INVITE
Allow: INVITE, OPTIONS, INFO, BYE, CANCEL, ACK, PRACK, UPDATE, REFER, SUBSCRIBE, NOTIFY
Allow-Events: presence
Send-Info: conference, x-cisco-conference
Remote-Party-ID: <sip:4120@172.18.202.97>;party=called;screen=yes;privacy=off
Contact: <sip:4120@172.18.202.97:5060;transport=tcp>
Content-Length: 0

```

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

[8] SIP/2.0 200 OK

```

Via: SIP/2.0/TCP 172.18.198.24:5060;branch=z9hG4bK1e3e708ba806c46d52e1995c498b4a94.1;rport
From: <sip:4140@sipsig-ccm97>;tag=6680d1d6c77f9d9e
To: <sip:4120@sipsig-ccm97>;tag=245-b5a88942-7acc-4cc9-9d65-67021cfecfed-27669288
Date: Fri, 22 Jul 2011 15:06:02 GMT
Call-ID: 836574886c6f7d93@172.18.198.24
CSeq: 100 INVITE
Allow: INVITE, OPTIONS, INFO, BYE, CANCEL, ACK, PRACK, UPDATE, REFER, SUBSCRIBE, NOTIFY
Allow-Events: presence
Supported: replaces
Send-Info: conference, x-cisco-conference
Session-Expires: 1800;refresher=uas
Require: timer
Remote-Party-ID: <sip:4120@172.18.202.97>;party=called;screen=yes;privacy=off
Contact: <sip:4120@172.18.202.97:5060;transport=tcp>
Content-Type: application/sdp
Content-Length: 1130

```

```

v=0
o=CiscoSystemsCCM-SIP 245 1 IN IP4 172.18.202.97
s=SIP Call
b=AS:768
t=0 0
m=audio 20008 RTP/AVP 9
c=IN IP4 172.18.202.138
b=TIAS:64000
a=rtpmap:9 G722/8000
a=ptime:20
m=video 20010 RTP/AVP 97
c=IN IP4 172.18.202.138
b=TIAS:704000
a=rtpmap:97 H264/90000
a=fmtp:97 profile-level-id=42000D;packetization-mode=0;level-asymmetry-allowed=1
m=application 0 UDP/BFCP *
c=IN IP4 172.18.198.24
a=floorctrl:c-s
a=floorid:2 mstrm:12
a=confid:1
a=userid:8
m=video 0 RTP/AVP 97 98 99 34 31
c=IN IP4 172.18.198.24

```

```

b=TIAS:6000000
a=label:12
a=rtpmap:97 H264/90000
a=fmtp:97 profile-level-id=428016;max-mbps=108000;max-fs=3840;max-cpb=200;max-br=5000;max-smbps=108000;max-fps=6000
a=rtpmap:98 H264/90000
a=fmtp:98 profile-level-id=428016;packetization-mode=1;max-mbps=108000;max-fs=3840;max-cpb=200;max-br=5000;max-smbps=108000;max-fps=6000
a=rtpmap:99 H263-1998/90000
a=fmtp:99 QCIF=1;CIF=1;CIF4=1;CUSTOM=352,240,1
a=rtpmap:34 H263/90000
a=fmtp:34 QCIF=1;CIF=1;CIF4=1
a=rtpmap:31 H261/90000
a=fmtp:31 CIF=1;QCIF=1
a=content:slides
m=application 0 RTP/AVP 107
c=IN IP4 172.18.198.24
a=rtpmap:107 H224/0

```

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

```

[9] INFO sip:4140@172.18.198.24:40577;transport=tcp SIP/2.0
Via: SIP/2.0/TCP 172.18.202.97:5060;branch=z9hG4bK2e73fe5353
From: <sip:4120@sipsig-ccm97>;tag=245-b5a88942-7acc-4cc9-9d65-67021cfecfed-27669288
To: <sip:4140@sipsig-ccm97>;tag=6680d1d6c77f9d9e
Date: Fri, 22 Jul 2011 15:06:02 GMT
Call-ID: 836574886c6f7d93@172.18.198.24
User-Agent: Cisco-CUCM8.6
Max-Forwards: 70
CSeq: 101 INFO
Contact: <sip:4120@172.18.202.97:5060;transport=tcp>
Content-Type: application/media_control+xml
Content-Length: 190

```

```

<?xml version="1.0" encoding="UTF-8" standalone="no" ?>
<media_control>

  <vc_primitive>
    <to_encoder>
      <picture_fast_update/>
    </to_encoder>
  </vc_primitive>

</media_control>

```

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

```

[10] ACK sip:4120@172.18.202.97:5060;transport=tcp SIP/2.0
Via: SIP/2.0/TCP 172.18.198.24:5060;branch=z9hG4bKf71fb27a2e61655595e2dae2cb106106.1;rport
Call-ID: 836574886c6f7d93@172.18.198.24
CSeq: 100 ACK
From: <sip:4140@sipsig-ccm97>;tag=6680d1d6c77f9d9e
To: <sip:4120@sipsig-ccm97>;tag=245-b5a88942-7acc-4cc9-9d65-67021cfecfed-27669288
Max-Forwards: 70
Allow: INVITE,ACK,CANCEL,BYE,UPDATE,INFO,OPTIONS,REFER,NOTIFY
User-Agent: TANDBERG/516 (TC5.0.0.-PreAlpha (TEST SW))
Supported: replaces,100rel,timer,gruu,path,outbound,X-cisco-callinfo,X-cisco-serviceuri,X-cisco-service-control,norefersub,extended-refer
Content-Length: 0

```

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

```

[11] SIP/2.0 200 OK
Via: SIP/2.0/TCP 172.18.202.97:5060;branch=z9hG4bK2e73fe5353;received=172.18.202.97
Call-ID: 836574886c6f7d93@172.18.198.24
CSeq: 101 INFO
From: <sip:4120@sipsig-ccm97>;tag=245-b5a88942-7acc-4cc9-9d65-67021cfecfed-27669288
To: <sip:4140@sipsig-ccm97>;tag=6680d1d6c77f9d9e
Allow: INVITE,ACK,CANCEL,BYE,UPDATE,INFO,OPTIONS,REFER,NOTIFY
Server: TANDBERG/516 (TC5.0.0.-PreAlpha (TEST SW))
Supported: replaces,100rel,timer,gruu,path,outbound,X-cisco-callinfo,X-cisco-serviceuri,X-cisco-service-control,norefersub,extended-refer
Content-Length: 0

```

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

```

[12] BYE sip:4120@172.18.202.97:5060;transport=tcp SIP/2.0
Via: SIP/2.0/TCP 172.18.198.24:5060;branch=z9hG4bKe58f066f6c9b8ffff0783bbc052a1e370.1;rport
Call-ID: 836574886c6f7d93@172.18.198.24
CSeq: 101 BYE
Contact: <sip:4140@172.18.198.24:40577;transport=tcp>;+sip.instance="urn:uuid:00000000-0000-0000-0000-0050600491d7">;+u.sip!model.ccm.cisco.com="584";audio=TRUE;video=TRUE;mobility="fixed";duplex="full";description="TANDBERG-SIP"
From: <sip:4140@sipsig-ccm97>;tag=6680d1d6c77f9d9e

```

To: <sip:4120@sipsig-ccm97>;tag=245-b5a88942-7acc-4cc9-9d65-67021cfecfed-27669288
 Max-Forwards: 70
 Allow: INVITE,ACK,CANCEL,BYE,UPDATE,INFO,OPTIONS,REFER,NOTIFY
 User-Agent: TANDBERG/516 (TC5.0.0.-PreAlpha (TEST SW))
 Supported: replaces,100rel,timer,gruu,path,outbound,X-cisco-callinfo,X-cisco-serviceuri,X-cisco-service-control,norefersub,extended-refer
 Content-Length: 0

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

[13] SIP/2.0 200 OK

Via: SIP/2.0/TCP 172.18.198.24:5060;branch=z9hG4bke58f066f6c9b8ffff0783bbc052a1e370.1;rport
 From: <sip:4140@sipsig-ccm97>;tag=6680d1d6c77f9d9e
 To: <sip:4120@sipsig-ccm97>;tag=245-b5a88942-7acc-4cc9-9d65-67021cfecfed-27669288
 Date: Fri, 22 Jul 2011 15:06:23 GMT
 Call-ID: 836574886c6f7d93@172.18.198.24
 CSeq: 101 BYE
 Content-Length: 0

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

[14] NOTIFY sip:4230@172.18.202.190:52067;transport=tcp SIP/2.0

Via: SIP/2.0/TCP 172.18.202.97:5060;branch=z9hG4bK2f4b4ba021

From: <sip:4140@172.18.202.97>;tag=348076154
 To: <sip:4230@sipsig-ccm97>;tag=8fbca08dc546bf5c
 Call-ID: 8801b3af6d2464b5@172.18.202.190
 CSeq: 103 NOTIFY
 Max-Forwards: 70
 Date: Fri, 22 Jul 2011 15:06:23 GMT
 User-Agent: Cisco-CUCM8.6
 Event: presence
 Subscription-State: active;expires=3531
 Contact: <sip:4140@172.18.202.97:5060;transport=tcp>
 Content-Type: application/pidf+xml
 Content-Length: 733

```
<?xml version="1.0" encoding="UTF-8" standalone="no" ?>
<presence xmlns="urn:ietf:params:xml:ns:pidf" entity="sip:4140@172.18.202.97"
  xmlns:e="urn:ietf:params:xml:ns:pidf:status:rpidd" xmlns:dm="urn:ietf:params:xml:ns:pidf:data-model"
  xmlns:ce="urn:cisco:params:xml:ns:pidf:rpidd" xmlns:sc="urn:ietf:params:xml:ns:pidf:servcaps">
  <dm:person>
    <status>
      <basic>open</basic>
    </status>
    <e:activities>
      </e:activities>
    </dm:person>
    <tuple id="cmp-1-232">
      <status>
        <basic>open</basic>
      </status>
      <sc:servcaps>
        <sc:audio>true</sc:audio>
      </sc:servcaps>
      <contact priority="0.8">sip:4140@172.18.202.97:5060</contact>
      <timestamp>2011-07-22T15:06:23Z</timestamp>
    </tuple>
  </presence>
```

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

[15] SIP/2.0 200 OK

Via: SIP/2.0/TCP 172.18.202.97:5060;branch=z9hG4bK2f4b4ba021;received=172.18.202.97
 Call-ID: 8801b3af6d2464b5@172.18.202.190
 CSeq: 103 NOTIFY
 From: <sip:4140@172.18.202.97>;tag=348076154
 To: <sip:4230@sipsig-ccm97>;tag=8fbca08dc546bf5c
 Server: TANDBERG/257 (TE4.1.0.253886Alpha4)
 Content-Length: 0

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

[16] OPTIONS sip:172.18.202.97:5060;transport=tcp SIP/2.0

Via: SIP/2.0/TCP 172.18.202.130:5060;branch=z9hG4bK806f84a27c757d93be0bc1e2125986b0841332;rport
 Call-ID: 6031be0c76943e2a@172.18.202.130
 CSeq: 39520 OPTIONS
 From: <sip:172.18.202.130>;tag=0c779f9c36df6f88
 To: <sip:172.18.202.97:5060>
 Max-Forwards: 0
 User-Agent: TANDBERG/4100 (X6.1)
 Supported: com.tandberg.vcs.resourceusage
 Content-Length: 0

[\[diagram\]](#) Call-ID: [\[prev\]](#)[\[next\]](#)
[17] SIP/2.0 503 Service Unavailable
Via: SIP/2.0/TCP 172.18.202.130:5060;branch=z9hG4bK806f84a27c757d93be0bc1e2125986b0841332;rport
From: <sip:172.18.202.130>;tag=0c779f9c36df6f88
To: <sip:172.18.202.97:5060>;tag=837176696
Date: Fri, 22 Jul 2011 15:06:27 GMT
Call-ID: 6031be0c76943e2a@172.18.202.130
CSeq: 39520 OPTIONS
Warning: 399 sip:172.18.202.130:5060 "Unable to find a device handler for the request received on port 26276 from 172.18.202.130"
Content-Length: 0

1.5 Basic video call between EX90 and 9971

Title: Basic video call between EX90 and 9971

Description:

- A calls B

- A and B have two-way audio and video

- A ends the call

Configuration:

- Node = Unified CM, IP = 172.18.202.97

- Phone = A, Line = 4140, IP = 172.18.198.24, Model = Cisco Telepresence EX90

- Phone = B, Line = 4210, IP = 172.18.202.137, Model = SIP 9971

- A has laptop connected to it via HDMI

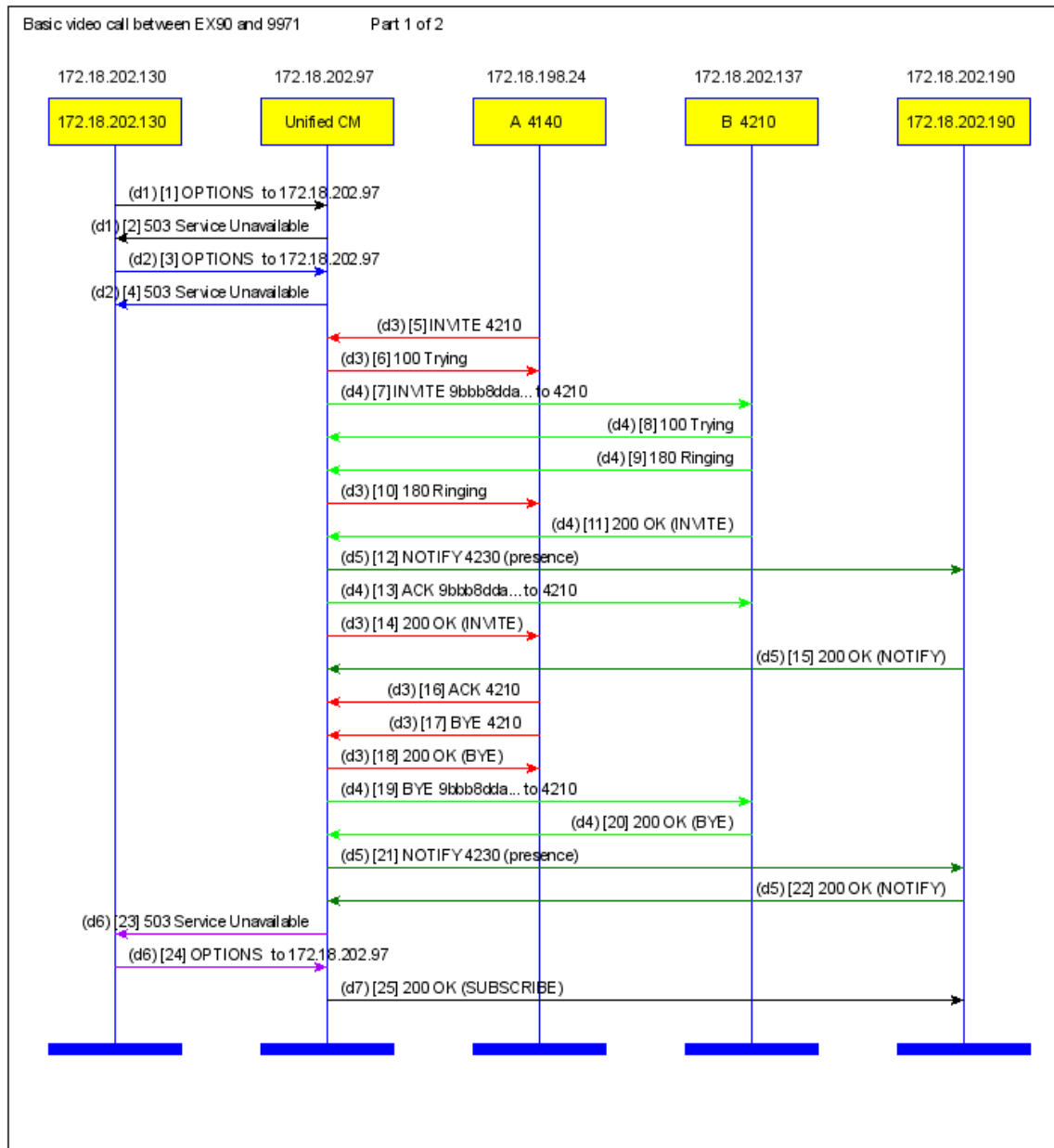
Scenario:

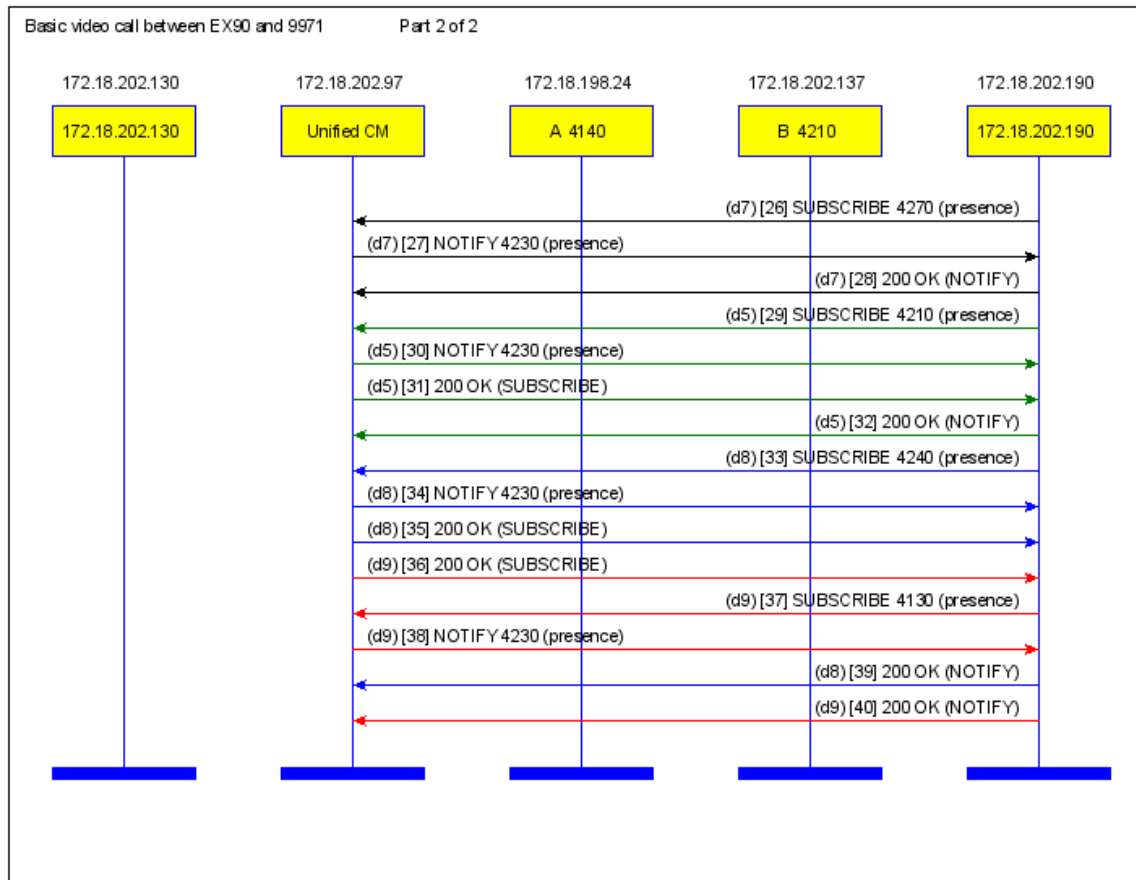
- 4140 calls 4210

- 4210 answers the call

- 4140 goes onhook

End of Scenario





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

[1] OPTIONS sip:172.18.202.97:5060;transport=tcp SIP/2.0

Via: SIP/2.0/TCP 172.18.202.130:5060;branch=z9hG4bK004e8c265e33081e3f0ce6bfc3e614392110652;rport
 Call-ID: 7f5419b880b20526@172.18.202.130
 CSeq: 45970 OPTIONS
 From: <sip:172.18.202.130>;tag=0eaabecbe60a0e3f
 To: <sip:172.18.202.97:5060>
 Max-Forwards: 0
 User-Agent: TANDBERG/4100 (X6.1)
 Supported: com.tandberg.vcs.resourceusage
 Content-Length: 0

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

[2] SIP/2.0 503 Service Unavailable

Via: SIP/2.0/TCP 172.18.202.130:5060;branch=z9hG4bK004e8c265e33081e3f0ce6bfc3e614392110652;rport
 From: <sip:172.18.202.130>;tag=0eaabecbe60a0e3f
 To: <sip:172.18.202.97:5060>;tag=1641245882
 Date: Mon, 19 Dec 2011 23:44:17 GMT
 Call-ID: 7f5419b880b20526@172.18.202.130
 CSeq: 45970 OPTIONS
 Warning: 399 sip:172.18.202.130:5060 "Unable to find a device handler for the request received on port 28024 from 172.18.202.130"
 Content-Length: 0

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

[3] OPTIONS sip:172.18.202.97:5060;transport=tcp SIP/2.0

Via: SIP/2.0/TCP 172.18.202.130:5060;branch=z9hG4bK00ff803391e5d3bac3350fe52c4e9b8af2110655;rport
 Call-ID: b6c744e65ab232a7@172.18.202.130
 CSeq: 38056 OPTIONS
 From: <sip:172.18.202.130>;tag=503c5df15cadb5c4
 To: <sip:172.18.202.97:5060>
 Max-Forwards: 0
 User-Agent: TANDBERG/4100 (X6.1)
 Supported: com.tandberg.vcs.resourceusage
 Content-Length: 0

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

[4] SIP/2.0 503 Service Unavailable

Via: SIP/2.0/TCP 172.18.202.130:5060;branch=z9hG4bK00ff803391e5d3bac3350fe52c4e9b8af2110655;rport
 From: <sip:172.18.202.130>;tag=503c5df15cadb5c4
 To: <sip:172.18.202.97:5060>;tag=409578860
 Date: Mon, 19 Dec 2011 23:44:48 GMT
 Call-ID: b6c744e65ab232a7@172.18.202.130
 CSeq: 38056 OPTIONS
 Warning: 399 sip:172.18.202.130:5060 "Unable to find a device handler for the request received on port 28024 from 172.18.202.130"
 Content-Length: 0

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

[5] INVITE sip:4210@sipsig-ccm97 SIP/2.0

Via: SIP/2.0/TCP 172.18.198.24:5060;branch=z9hG4bKf5c497422a6e06c0085988a4ab2175a8.1;rport
 Call-ID: 9f9610060efeb3b0@172.18.198.24
 CSeq: 100 INVITE
 Contact: <sip:4140@172.18.198.24:43624;transport=tcp>
 From: <sip:4140@sipsig-ccm97>;tag=04f0632eb2ce4cef
 To: <sip:4210@sipsig-ccm97>
 Max-Forwards: 70
 Route: <sip:172.18.202.97;lr>
 Allow: INVITE,ACK,CANCEL,BYE,UPDATE,INFO,OPTIONS,REFER,NOTIFY
 User-Agent: TANDBERG/516 (TC5.0.0.-PreAlpha (TEST SW))
 Supported: replaces,100rel,timer,gruu,path,outbound,X-cisco-callinfo,X-cisco-serviceuri,X-cisco-service-control,norefersub,extended-refer
 Session-Expires: 1800
 Remote-Party-ID: <sip:4140@sipsig-ccm97>;privacy=off;id-type=subscriber;screen=yes;party=calling
 Content-Type: application/sdp
 Content-Length: 2459

v=0
 o=tandberg 38 1 IN IP4 172.18.198.24
 s=-
 c=IN IP4 172.18.198.24
 b=AS:6000
 t=0 0
 m=audio 16672 RTP/AVP 100 102 103 104 105 106 9 8 0 101
 b=TIAS:128000
 a=rtpmap:100 MP4A-LATM/90000
 a=fmtp:100 profile-level-id=25;object=23;bitrate=128000
 a=rtpmap:102 MP4A-LATM/90000
 a=fmtp:102 profile-level-id=24;object=23;bitrate=64000
 a=rtpmap:103 MP4A-LATM/90000


```

a=fmtp:103 profile-level-id=24;object=23;bitrate=56000
a=rtpmap:104 MP4A-LATM/90000
a=fmtp:104 profile-level-id=24;object=23;bitrate=48000
a=rtpmap:105 G7221/16000
a=fmtp:105 bitrate=32000
a=rtpmap:106 G7221/16000
a=fmtp:106 bitrate=24000
a=rtpmap:9 G722/8000
a=rtpmap:8 PCMA/8000
a=rtpmap:0 PCMU/8000
a=rtpmap:101 telephone-event/8000
a=fmtp:101 0-15
a=sendrecv
m=video 16674 RTP/AVP 97 98 99 34 31
b=TIAS:6000000
a=rtpmap:97 H264/90000
a=fmtp:97 profile-level-id=428016;max-br=5000;max-mbps=108000;max-fs=3600;max-smbps=108000;max-fps=6000
a=rtpmap:98 H264/90000
a=fmtp:98 profile-level-id=428016;max-br=5000;max-mbps=108000;max-fs=3600;max-smbps=108000;packetization-
mode=1;max-fps=6000
a=rtpmap:99 H263-1998/90000
a=fmtp:99
custom=1280,768,3;custom=1280,720,3;custom=1024,768,1;custom=1024,576,2;custom=800,600,1;cif4=1;custom=720,4
80,1;custom=640,480,1;custom=512,288,1;cif=1;custom=352,240,1;qcif=1;maxbr=20000
a=rtpmap:34 H263/90000
a=fmtp:34 cif4=1;cif=1;qcif=1;maxbr=20000
a=rtpmap:31 H261/90000
a=fmtp:31 cif=1;qcif=1;maxbr=20000
a=rtcp-fb:* nack pli
a=sendrecv
a=content:main
a=label:11
a=answer:full
m=application 5070 UDP/BFCP *
a=floorctrl:c-s
a=confid:1
a=floorid:2 mstrm:12
a=userid:38
a=setup:actpass
a=connection:new
m=video 16676 RTP/AVP 97 98 99 34 31
b=TIAS:6000000
a=rtpmap:97 H264/90000
a=fmtp:97 profile-level-id=428016;max-br=5000;max-mbps=108000;max-fs=3840;max-smbps=108000;max-fps=6000
a=rtpmap:98 H264/90000
a=fmtp:98 profile-level-id=428016;max-br=5000;max-mbps=108000;max-fs=3840;max-smbps=108000;packetization-
mode=1;max-fps=6000
a=rtpmap:99 H263-1998/90000
a=fmtp:99
custom=1280,768,3;custom=1280,720,3;custom=1024,768,1;custom=1024,576,2;custom=800,600,1;cif4=1;custom=720,4
80,1;custom=640,480,1;custom=512,288,1;cif=1;custom=352,240,1;qcif=1;maxbr=20000
a=rtpmap:34 H263/90000
a=fmtp:34 cif4=1;cif=1;qcif=1;maxbr=20000
a=rtpmap:31 H261/90000
a=fmtp:31 cif=1;qcif=1;maxbr=20000
a=rtcp-fb:* nack pli
a=sendrecv
a=content:slides
a=label:12
m=application 16678 RTP/AVP 107
a=rtpmap:107 H224/4800
a=sendrecv

```

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

[6] SIP/2.0 100 Trying

```

Via: SIP/2.0/TCP 172.18.198.24:5060;branch=z9hG4bKf5c497422a6e06c0085988a4ab2175a8.1;rport
From: <sip:4140@sipsig-ccm97>;tag=04f0632eb2ce4cef
To: <sip:4210@sipsig-ccm97>
Date: Mon, 19 Dec 2011 23:45:08 GMT
Call-ID: 9f9610060efeb3b0@172.18.198.24
CSeq: 100 INVITE
Allow-Events: presence
Content-Length: 0

```

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

[7] INVITE sip:9bbb8dda-00ee-701f-1b73-470a40f63088@172.18.202.137:49175;transport=tcp SIP/2.0

```

Via: SIP/2.0/TCP 172.18.202.97:5060;branch=z9hG4bK2a6732932fc0
From: <sip:4140@172.18.202.97>;tag=459584-b5a88942-7acc-4cc9-9d65-67021cfecfed-30423089
To: <sip:4210@172.18.202.97>
Date: Mon, 19 Dec 2011 23:45:08 GMT

```

Call-ID: 7a64df80-eef1cc84-4f-61ca12ac@172.18.202.97
 Supported: timer,resource-priority,replaces
 Min-SE: 1800
 User-Agent: Cisco-CUCM8.6
 Allow: INVITE, OPTIONS, INFO, BYE, CANCEL, ACK, PRACK, UPDATE, REFER, SUBSCRIBE, NOTIFY
 CSeq: 101 INVITE
 Expires: 180
 Allow-Events: presence
 Send-Info: conference, x-cisco-conference
 Alert-Info: <file://Bellcore-dr1/>
 Remote-Party-ID: <sip:4140@172.18.202.97;x-cisco-callback-number=4140>;party=calling;screen=yes;privacy=off
 Contact: <sip:4140@172.18.202.97:5060;transport=tcp>;video;audio
 Max-Forwards: 69
 Content-Length: 0

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

[8] SIP/2.0 100 Trying

Via: SIP/2.0/TCP 172.18.202.97:5060;branch=z9hG4bK2a6732932fc0
 From: <sip:4140@172.18.202.97>;tag=459584-b5a88942-7acc-4cc9-9d65-67021cfecfed-30423089
 To: <sip:4210@172.18.202.97>
 Call-ID: 7a64df80-eef1cc84-4f-61ca12ac@172.18.202.97
 Date: Mon, 19 Dec 2011 23:45:07 GMT
 CSeq: 101 INVITE
 Server: Cisco-CP9971/9.2.1
 Contact: <sip:9bbb8dda-00ee-701f-1b73-470a40f63088@172.18.202.137:49175;transport=tcp>
 Allow: ACK,BYE,CANCEL,INVITE,NOTIFY,OPTIONS,REFER,REGISTER,UPDATE,SUBSCRIBE,INFO
 Supported: replaces,join,sdp-anat,norefersub,extended-refer,X-cisco-callinfo,X-cisco-serviceuri,X-cisco-escapecodes,X-cisco-service-control,X-cisco-srtp-fallback,X-cisco-monrec,X-cisco-config,X-cisco-sis-5.1.0,X-cisco-xsi-8.0.1
 Allow-Events: kpml,dialog
 Content-Length: 0

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

[9] SIP/2.0 180 Ringing

Via: SIP/2.0/TCP 172.18.202.97:5060;branch=z9hG4bK2a6732932fc0
 From: <sip:4140@172.18.202.97>;tag=459584-b5a88942-7acc-4cc9-9d65-67021cfecfed-30423089
 To: <sip:4210@172.18.202.97>;tag=b4a4e3289b9484fd62707957-2cda7344
 Call-ID: 7a64df80-eef1cc84-4f-61ca12ac@172.18.202.97
 Date: Mon, 19 Dec 2011 23:45:07 GMT
 CSeq: 101 INVITE
 Server: Cisco-CP9971/9.2.1
 Contact: <sip:9bbb8dda-00ee-701f-1b73-470a40f63088@172.18.202.137:49175;transport=tcp>
 Allow: ACK,BYE,CANCEL,INVITE,NOTIFY,OPTIONS,REFER,REGISTER,UPDATE,SUBSCRIBE,INFO
 Remote-Party-ID: "4210" <sip:4210@172.18.202.97>;party=called;id-type=subscriber;privacy=off;screen=yes
 Supported: replaces,join,sdp-anat,norefersub,extended-refer,X-cisco-callinfo,X-cisco-serviceuri,X-cisco-escapecodes,X-cisco-service-control,X-cisco-srtp-fallback,X-cisco-monrec,X-cisco-config,X-cisco-sis-5.1.0,X-cisco-xsi-8.0.1
 Allow-Events: kpml,dialog
 Content-Length: 0

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

[10] SIP/2.0 180 Ringing

Via: SIP/2.0/TCP 172.18.198.24:5060;branch=z9hG4bKf5c497422a6e06c0085988a4ab2175a8.1;rport
 From: <sip:4140@sipsig-ccm97>;tag=04f0632eb2ce4cef
 To: <sip:4210@sipsig-ccm97>;tag=459583-b5a88942-7acc-4cc9-9d65-67021cfecfed-30423088
 Date: Mon, 19 Dec 2011 23:45:08 GMT
 Call-ID: 9f9610060efeb3b0@172.18.198.24
 CSeq: 100 INVITE
 Allow: INVITE, OPTIONS, INFO, BYE, CANCEL, ACK, PRACK, UPDATE, REFER, SUBSCRIBE, NOTIFY
 Allow-Events: presence
 Send-Info: conference, x-cisco-conference
 Remote-Party-ID: <sip:4210@172.18.202.97>;party=called;screen=yes;privacy=off
 Contact: <sip:4210@172.18.202.97:5060;transport=tcp>
 Content-Length: 0

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

[11] SIP/2.0 200 OK

Via: SIP/2.0/TCP 172.18.202.97:5060;branch=z9hG4bK2a6732932fc0
 From: <sip:4140@172.18.202.97>;tag=459584-b5a88942-7acc-4cc9-9d65-67021cfecfed-30423089
 To: <sip:4210@172.18.202.97>;tag=b4a4e3289b9484fd62707957-2cda7344
 Call-ID: 7a64df80-eef1cc84-4f-61ca12ac@172.18.202.97
 Date: Mon, 19 Dec 2011 23:45:08 GMT
 CSeq: 101 INVITE
 Server: Cisco-CP9971/9.2.1
 Contact: <sip:9bbb8dda-00ee-701f-1b73-470a40f63088@172.18.202.137:49175;transport=tcp>
 Allow: ACK,BYE,CANCEL,INVITE,NOTIFY,OPTIONS,REFER,REGISTER,UPDATE,SUBSCRIBE,INFO
 Remote-Party-ID: "4210" <sip:4210@172.18.202.97>;party=called;id-type=subscriber;privacy=off;screen=yes
 Supported: replaces,join,sdp-anat,norefersub,extended-refer,X-cisco-callinfo,X-cisco-serviceuri,X-cisco-escapecodes,X-cisco-service-control,X-cisco-srtp-fallback,X-cisco-monrec,X-cisco-config,X-cisco-sis-5.1.0,X-cisco-xsi-8.0.1

```

Allow-Events: kpml,dialog
Content-Length: 788
Content-Type: application/sdp
Content-Disposition: session;handling=optional

```

```

v=0
o=Cisco-SIPUA 17893 0 IN IP4 172.18.202.137
s=SIP Call
t=0 0
m=audio 18244 RTP/AVP 0 8 18 102 9 116 124 101
c=IN IP4 172.18.202.137
a=rtpmap:0 PCMU/8000
a=rtpmap:8 PCMA/8000
a=rtpmap:18 G729/8000
a=fmtp:18 annexb=no
a=rtpmap:102 L16/16000
a=rtpmap:9 G722/8000
a=rtpmap:116 iLBC/8000
a=fmtp:116 mode=20
a=rtpmap:124 ISAC/16000
a=rtpmap:101 telephone-event/8000
a=fmtp:101 0-15
a=sendrecv
m=video 23686 RTP/AVP 126 97
c=IN IP4 172.18.202.137
b=TIAS:1000000
a=rtpmap:126 H264/90000
a=fmtp:126 profile-level-id=42801E;packetization-mode=1;level-asymmetry-allowed=1
a=imageattr:* recv [x=640,y=480,q=0.50]
a=rtpmap:97 H264/90000
a=fmtp:97 profile-level-id=42801E;packetization-mode=0;level-asymmetry-allowed=1
a=imageattr:* recv [x=640,y=480,q=0.50]
a=sendrecv

```

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

[12] NOTIFY sip:4230@172.18.202.190:46879;transport=tcp SIP/2.0

Via: SIP/2.0/TCP 172.18.202.97:5060;branch=z9hG4bK2a68216e99de

From: <sip:4210@172.18.202.97>;tag=623083919

To: <sip:4230@sipsig-ccm97>;tag=c4e45bcd22f59dd

Call-ID: cea0007ff08eb669@172.18.202.190

CSeq: 260 NOTIFY

Max-Forwards: 70

Date: Mon, 19 Dec 2011 23:45:09 GMT

User-Agent: Cisco-CUCM8.6

Event: presence

Subscription-State: active;expires=914

Contact: <sip:4210@172.18.202.97:5060;transport=tcp>

Content-Type: application/pidf+xml

Content-Length: 829

```

<?xml version="1.0" encoding="UTF-8" standalone="no" ?>
<presence xmlns="urn:ietf:params:xml:ns:pidf" entity="sip:4210@172.18.202.97"
xmlns:e="urn:ietf:params:xml:ns:pidf:status:rpidd" xmlns:dm="urn:ietf:params:xml:ns:pidf:data-model"
xmlns:ce="urn:cisco:params:xml:ns:pidf:rpidd" xmlns:sc="urn:ietf:params:xml:ns:pidf:servcaps">
  <dm:person>
    <status>
      <basic>open</basic>
    </status>
    <e:activities>
      <e:on-the-phone/>
    </e:activities>
  </dm:person>
  <tuple id="cmp-1-409207">
    <status>
      <basic>open</basic>
      <e:activities>
        <e:on-the-phone/>
      </e:activities>
    </status>
    <sc:servcaps>
      <sc:audio>true</sc:audio>
    </sc:servcaps>
    <contact priority="0.8">sip:4210@172.18.202.97:5060</contact>
    <timestamp>2011-12-19T23:45:09Z</timestamp>
  </tuple>
</presence>

```

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

[13] ACK sip:9bbb8dda-00ee-701f-1b73-470a40f63088@172.18.202.137:49175;transport=tcp SIP/2.0

Via: SIP/2.0/TCP 172.18.202.97:5060;branch=z9hG4bK2a692e54ad0e

```

From: <sip:4140@172.18.202.97>;tag=459584~b5a88942-7acc-4cc9-9d65-67021cfecfed-30423089
To: <sip:4210@172.18.202.97>;tag=b4a4e3289b9484fd62707957-2cda7344
Date: Mon, 19 Dec 2011 23:45:08 GMT
Call-ID: 7a64df80-eef1cc84-4f-61ca12ac@172.18.202.97
Max-Forwards: 70
CSeq: 101 ACK
Allow-Events: presence
Content-Type: application/sdp
Content-Length: 484

```

```

v=0
o=CiscoSystemsCCM-SIP 459584 1 IN IP4 172.18.202.97
s=SIP Call
c=IN IP4 172.18.198.24
t=0 0
m=audio 16672 RTP/AVP 9 101
b=TIAS:64000
a=rtpmap:9 G722/8000
a=ptime:20
a=rtpmap:101 telephone-event/8000
a=fmtp:101 0-15
m=video 16674 RTP/AVP 98
b=TIAS:5936000
a=label:11
a=rtpmap:98 H264/90000
a=fmtp:98 profile-level-id=428016;packetization-mode=1;max-mbps=108000;max-fs=3600;max-cpb=200;max-br=5000;max-smbps=108000;max-fps=6000
a=content:main
a=rtcp-fb:* nack pli

```

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

[14] SIP/2.0 200 OK

```

Via: SIP/2.0/TCP 172.18.198.24:5060;branch=z9hG4bKf5c497422a6e06c0085988a4ab2175a8.1;rport
From: <sip:4140@sipsig-ccm97>;tag=04f0632eb2ce4cef
To: <sip:4210@sipsig-ccm97>;tag=459583~b5a88942-7acc-4cc9-9d65-67021cfecfed-30423088
Date: Mon, 19 Dec 2011 23:45:08 GMT
Call-ID: 9f9610060efeb3b0@172.18.198.24
CSeq: 100 INVITE
Allow: INVITE, OPTIONS, INFO, BYE, CANCEL, ACK, PRACK, UPDATE, REFER, SUBSCRIBE, NOTIFY
Allow-Events: presence
Supported: replaces
Send-Info: conference, x-cisco-conference
Session-Expires: 1800;refresher=uas
Require: timer
Remote-Party-ID: <sip:4210@172.18.202.97>;party=called;screen=yes;privacy=off
Contact: <sip:4210@172.18.202.97:5060;transport=tcp>
Content-Type: application/sdp
Content-Length: 1217

```

```

v=0
o=CiscoSystemsCCM-SIP 459583 1 IN IP4 172.18.202.97
s=SIP Call
b=AS:1064
t=0 0
m=audio 18244 RTP/AVP 9 101
c=IN IP4 172.18.202.137
b=TIAS:64000
a=rtpmap:9 G722/8000
a=ptime:20
a=rtpmap:101 telephone-event/8000
a=fmtp:101 0-15
m=video 23686 RTP/AVP 126
c=IN IP4 172.18.202.137
b=TIAS:1000000
a=rtpmap:126 H264/90000
a=fmtp:126 profile-level-id=42801E;packetization-mode=1;level-asymmetry-allowed=1
m=application 0 UDP/BFCP *
c=IN IP4 172.18.198.24
a=floorctrl:c-s
a=floorid:2 mstrm:12
a=confid:1
a=userid:38
m=video 0 RTP/AVP 97 98 99 34 31
c=IN IP4 172.18.198.24
b=TIAS:6000000
a=label:12
a=rtpmap:97 H264/90000
a=fmtp:97 profile-level-id=428016;max-mbps=108000;max-fs=3840;max-cpb=200;max-br=5000;max-smbps=108000;max-fps=6000
a=rtpmap:98 H264/90000

```

```
a=fmtp:98 profile-level-id=428016;packetization-mode=1;max-mbps=108000;max-fs=3840;max-cpb=200;max-br=5000;max-smbps=108000;max-fps=6000
a=rtpmap:99 H263-1998/90000
a=fmtp:99 QCIF=1;CIF=1;CIF4=1;CUSTOM=352,240,1
a=rtpmap:34 H263/90000
a=fmtp:34 QCIF=1;CIF=1;CIF4=1
a=rtpmap:31 H261/90000
a=fmtp:31 CIF=1;QCIF=1
a=content:slides
a=rtcp-fb:* nack pli
m=application 0 RTP/AVP 107
c=IN IP4 172.18.198.24
a=rtpmap:107 H224/0
```

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

[15] SIP/2.0 200 OK

```
Via: SIP/2.0/TCP 172.18.202.97:5060;branch=z9hG4bK2a68216e99de;received=172.18.202.97
Call-ID: cea0007ff08eb669@172.18.202.190
CSeq: 260 NOTIFY
From: <sip:4210@172.18.202.97>;tag=623083919
To: <sip:4230@sipsig-ccm97>;tag=c4e45bcd22f59dd
Server: TANDBERG/257 (TE4.1.0.253886Alpha4)
Content-Length: 0
```

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

[16] ACK sip:4210@172.18.202.97:5060;transport=tcp SIP/2.0

```
Via: SIP/2.0/TCP 172.18.198.24:5060;branch=z9hG4bK67a98a16d5544c7e9a3f24695c35060c.1;rport
Call-ID: 9f9610060efeb3b0@172.18.198.24
CSeq: 100 ACK
From: <sip:4140@sipsig-ccm97>;tag=04f0632eb2ce4cef
To: <sip:4210@sipsig-ccm97>;tag=459583-b5a88942-7acc-4cc9-9d65-67021cfecfed-30423088
Max-Forwards: 70
Allow: INVITE,ACK,CANCEL,BYE,UPDATE,INFO,OPTIONS,REFER,NOTIFY
User-Agent: TANDBERG/516 (TC5.0.0.-PreAlpha (TEST SW))
Supported: replaces,100rel,timer,gruu,path,outbound,X-cisco-callinfo,X-cisco-serviceuri,X-cisco-service-control,norefersub,extended-refer
Content-Length: 0
```

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

[17] BYE sip:4210@172.18.202.97:5060;transport=tcp SIP/2.0

```
Via: SIP/2.0/TCP 172.18.198.24:5060;branch=z9hG4bKc54dd7ce8c3081025d71e60686156411.1;rport
Call-ID: 9f9610060efeb3b0@172.18.198.24
CSeq: 101 BYE
Contact: <sip:4140@172.18.198.24:43624;transport=tcp>;+sip.instance="urn:uuid:00000000-0000-0000-0000-0050600491d7";+u.sip!model.ccm.cisco.com="584";audio=TRUE;video=TRUE;mobility="fixed";duplex="full";description="TANDBERG-SIP"
From: <sip:4140@sipsig-ccm97>;tag=04f0632eb2ce4cef
To: <sip:4210@sipsig-ccm97>;tag=459583-b5a88942-7acc-4cc9-9d65-67021cfecfed-30423088
Max-Forwards: 70
Allow: INVITE,ACK,CANCEL,BYE,UPDATE,INFO,OPTIONS,REFER,NOTIFY
User-Agent: TANDBERG/516 (TC5.0.0.-PreAlpha (TEST SW))
Supported: replaces,100rel,timer,gruu,path,outbound,X-cisco-callinfo,X-cisco-serviceuri,X-cisco-service-control,norefersub,extended-refer
Content-Length: 0
```

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

[18] SIP/2.0 200 OK

```
Via: SIP/2.0/TCP 172.18.198.24:5060;branch=z9hG4bKc54dd7ce8c3081025d71e60686156411.1;rport
From: <sip:4140@sipsig-ccm97>;tag=04f0632eb2ce4cef
To: <sip:4210@sipsig-ccm97>;tag=459583-b5a88942-7acc-4cc9-9d65-67021cfecfed-30423088
Date: Mon, 19 Dec 2011 23:45:17 GMT
Call-ID: 9f9610060efeb3b0@172.18.198.24
CSeq: 101 BYE
Content-Length: 0
```

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

[19] BYE sip:9bbb8dda-00ee-701f-1b73-470a40f63088@172.18.202.137:49175;transport=tcp SIP/2.0

```
Via: SIP/2.0/TCP 172.18.202.97:5060;branch=z9hG4bK2a6a49fb4fe8
From: <sip:4140@172.18.202.97>;tag=459584-b5a88942-7acc-4cc9-9d65-67021cfecfed-30423089
To: <sip:4210@172.18.202.97>;tag=b4a4e3289b9484fd62707957-2cda7344
Date: Mon, 19 Dec 2011 23:45:08 GMT
Call-ID: 7a64df80-eef1cc84-4f-61ca12ac@172.18.202.97
User-Agent: Cisco-CUCM8.6
Max-Forwards: 70
CSeq: 102 BYE
Reason: Q.850;cause=16
Content-Length: 0
```

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

[20] SIP/2.0 200 OK

Via: SIP/2.0/TCP 172.18.202.97:5060;branch=z9hG4bK2a6a49fb4fe8
 From: <sip:4140@172.18.202.97>;tag=459584~b5a88942-7acc-4cc9-9d65-67021cfecfed-30423089
 To: <sip:4210@172.18.202.97>;tag=b4a4e3289b9484fd62707957-2cda7344
 Call-ID: 7a64df80-eef1cc84-4f-61ca12ac@172.18.202.97
 Date: Mon, 19 Dec 2011 23:45:17 GMT
 CSeq: 102 BYE
 Server: Cisco-CP9971/9.2.1
 Content-Length: 0

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

[21] NOTIFY sip:4230@172.18.202.190:46879;transport=tcp SIP/2.0

Via: SIP/2.0/TCP 172.18.202.97:5060;branch=z9hG4bK2a6b56ef5db2
 From: <sip:4210@172.18.202.97>;tag=623083919
 To: <sip:4230@sipsig-ccm97>;tag=c4e45bcdb22f59dd
 Call-ID: cea0007ff08eb669@172.18.202.190
 CSeq: 261 NOTIFY
 Max-Forwards: 70
 Date: Mon, 19 Dec 2011 23:45:17 GMT
 User-Agent: Cisco-CUCM8.6
 Event: presence
 Subscription-State: active;expires=906
 Contact: <sip:4210@172.18.202.97:5060;transport=tcp>
 Content-Type: application/pidf+xml
 Content-Length: 736

```
<?xml version="1.0" encoding="UTF-8" standalone="no" ?>
<presence xmlns="urn:ietf:params:xml:ns:pidf" entity="sip:4210@172.18.202.97"
  xmlns:e="urn:ietf:params:xml:ns:pidf:status:rpidd" xmlns:dm="urn:ietf:params:xml:ns:pidf:data-model"
  xmlns:ce="urn:cisco:params:xml:ns:pidf:rpidd" xmlns:sc="urn:ietf:params:xml:ns:pidf:servcaps">
  <dm:person>
    <status>
      <basic>open</basic>
    </status>
    <e:activities>
      </e:activities>
    </dm:person>
    <tuple id="cmp-1-409207">
      <status>
        <basic>open</basic>
      </status>
      <sc:servcaps>
        <sc:audio>true</sc:audio>
      </sc:servcaps>
      <contact priority="0.8">sip:4210@172.18.202.97:5060</contact>
      <timestamp>2011-12-19T23:45:17Z</timestamp>
    </tuple>
  </presence>
```

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

[22] SIP/2.0 200 OK

Via: SIP/2.0/TCP 172.18.202.97:5060;branch=z9hG4bK2a6b56ef5db2;received=172.18.202.97
 Call-ID: cea0007ff08eb669@172.18.202.190
 CSeq: 261 NOTIFY
 From: <sip:4210@172.18.202.97>;tag=623083919
 To: <sip:4230@sipsig-ccm97>;tag=c4e45bcdb22f59dd
 Server: TANDBERG/257 (TE4.1.0.253886Alpha4)
 Content-Length: 0

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

[23] SIP/2.0 503 Service Unavailable

Via: SIP/2.0/TCP 172.18.202.130:5060;branch=z9hG4bK6d0c21b882d0dee7c8d34e2762d586272110658;rport
 From: <sip:172.18.202.130>;tag=f89774c1a09825fc
 To: <sip:172.18.202.97:5060>;tag=349298521
 Date: Mon, 19 Dec 2011 23:45:19 GMT
 Call-ID: ed1a5dff343f36ef@172.18.202.130
 CSeq: 13467 OPTIONS
 Warning: 399 sipsig-ccm97 "Unable to find a device handler for the request received on port 28024 from 172.18.202.130"
 Content-Length: 0

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

[24] OPTIONS sip:172.18.202.97:5060;transport=tcp SIP/2.0

Via: SIP/2.0/TCP 172.18.202.130:5060;branch=z9hG4bK6d0c21b882d0dee7c8d34e2762d586272110658;rport
 Call-ID: ed1a5dff343f36ef@172.18.202.130
 CSeq: 13467 OPTIONS
 From: <sip:172.18.202.130>;tag=f89774c1a09825fc
 To: <sip:172.18.202.97:5060>
 Max-Forwards: 0
 User-Agent: TANDBERG/4100 (X6.1)
 Supported: com.tandberg.vcs.resourceusage

Content-Length: 0

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

[25] SIP/2.0 200 OK

Via: SIP/2.0/TCP 172.18.202.190:5060;branch=z9hG4bK090bcf6ba88b40431c6be9ca13bc50e1.1;rport
 From: <sip:4230@sipsig-ccm97>;tag=a90e960f653d810c
 To: <sip:4270@172.18.202.97>;tag=1110242243
 Date: Mon, 19 Dec 2011 23:45:23 GMT
 Call-ID: 96cfa99ea5a1b318@172.18.202.190
 CSeq: 260 SUBSCRIBE
 Contact: <sip:4270@172.18.202.97:5060;transport=tcp>
 Expires: 3600
 Content-Length: 0

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

[26] SUBSCRIBE sip:4270@172.18.202.97 SIP/2.0

Via: SIP/2.0/TCP 172.18.202.190:5060;branch=z9hG4bK090bcf6ba88b40431c6be9ca13bc50e1.1;rport
 Call-ID: 96cfa99ea5a1b318@172.18.202.190
 CSeq: 260 SUBSCRIBE
 Contact: <sip:4230@172.18.202.190:46879;transport=tcp>;+sip.instance="urn:uuid:00000000-0000-0000-0000-005060048365";+u.sip!model.ccm.cisco.com="580";audio=TRUE;video=TRUE;mobility="fixed";duplex="full";description="TANDBERG-SIP"
 From: <sip:4230@sipsig-ccm97>;tag=a90e960f653d810c
 To: <sip:4270@172.18.202.97>;tag=1110242243
 Max-Forwards: 70
 Route: <sip:172.18.202.97;lr>
 User-Agent: TANDBERG/257 (TE4.1.0.253886Alpha4)
 Expires: 3600
 Event: presence
 Accept: application/pdf+xml
 Content-Length: 0

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

[27] NOTIFY sip:4230@172.18.202.190:46879;transport=tcp SIP/2.0

Via: SIP/2.0/TCP 172.18.202.97:5060;branch=z9hG4bK2a6c3b6a0250
 From: <sip:4270@172.18.202.97>;tag=1110242243
 To: <sip:4230@sipsig-ccm97>;tag=a90e960f653d810c
 Call-ID: 96cfa99ea5a1b318@172.18.202.190
 CSeq: 260 NOTIFY
 Max-Forwards: 70
 Date: Mon, 19 Dec 2011 23:45:23 GMT
 User-Agent: Cisco-CUCM8.6
 Event: presence
 Subscription-State: active;expires=3600
 Contact: <sip:4270@172.18.202.97:5060;transport=tcp>
 Content-Type: application/pdf+xml
 Content-Length: 736

```
<?xml version="1.0" encoding="UTF-8" standalone="no" ?>
<presence xmlns="urn:ietf:params:xml:ns:pidf" entity="sip:4270@172.18.202.97"
  xmlns:e="urn:ietf:params:xml:ns:pidf:status:rpidd" xmlns:dm="urn:ietf:params:xml:ns:pidf:data-model"
  xmlns:ce="urn:cisco:params:xml:ns:pidf:rpidd" xmlns:sc="urn:ietf:params:xml:ns:pidf:servcaps">
  <dm:person>
    <status>
      <basic>open</basic>
    </status>
    <e:activities>
      </e:activities>
    </dm:person>
    <tuple id="cmp-1-409206">
      <status>
        <basic>open</basic>
      </status>
      <sc:servcaps>
        <sc:audio>true</sc:audio>
      </sc:servcaps>
      <contact priority="0.8">sip:4270@172.18.202.97:5060</contact>
      <timestamp>2011-12-15T00:30:40Z</timestamp>
    </tuple>
  </presence>
```

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

[28] SIP/2.0 200 OK

Via: SIP/2.0/TCP 172.18.202.97:5060;branch=z9hG4bK2a6c3b6a0250;received=172.18.202.97
 Call-ID: 96cfa99ea5a1b318@172.18.202.190
 CSeq: 260 NOTIFY
 From: <sip:4270@172.18.202.97>;tag=1110242243
 To: <sip:4230@sipsig-ccm97>;tag=a90e960f653d810c
 Server: TANDBERG/257 (TE4.1.0.253886Alpha4)
 Content-Length: 0

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

[29] SUBSCRIBE sip:4210@172.18.202.97 SIP/2.0

Via: SIP/2.0/TCP 172.18.202.190:5060;branch=z9hG4bKc283c138d603dc54f08bfbb1466d8183.1;rport
 Call-ID: cea0007ff08eb669@172.18.202.190
 CSeq: 260 SUBSCRIBE
 Contact: <sip:4230@172.18.202.190:46879;transport=tcp>;+sip.instance="urn:uuid:00000000-0000-0000-0000-005060048365";+u.sip!model.ccm.cisco.com="580";audio=TRUE;video=TRUE;mobility="fixed";duplex="full";description="TANDBERG-SIP"
 From: <sip:4230@sipsig-ccm97>;tag=c4e45bcdb22f59dd
 To: <sip:4210@172.18.202.97>;tag=623083919
 Max-Forwards: 70
 Route: <sip:172.18.202.97;lr>
 User-Agent: TANDBERG/257 (TE4.1.0.253886Alpha4)
 Expires: 3600
 Event: presence
 Accept: application/pidf+xml
 Content-Length: 0

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

[30] NOTIFY sip:4230@172.18.202.190:46879;transport=tcp SIP/2.0

Via: SIP/2.0/TCP 172.18.202.97:5060;branch=z9hG4bK2a6d5745bb5f
 From: <sip:4210@172.18.202.97>;tag=623083919
 To: <sip:4230@sipsig-ccm97>;tag=c4e45bcdb22f59dd
 Call-ID: cea0007ff08eb669@172.18.202.190
 CSeq: 262 NOTIFY
 Max-Forwards: 70
 Date: Mon, 19 Dec 2011 23:45:23 GMT
 User-Agent: Cisco-CUCM8.6
 Event: presence
 Subscription-State: active;expires=3600
 Contact: <sip:4210@172.18.202.97:5060;transport=tcp>
 Content-Type: application/pidf+xml
 Content-Length: 736

```
<?xml version="1.0" encoding="UTF-8" standalone="no" ?>
<presence xmlns="urn:ietf:params:xml:ns:pidf" entity="sip:4210@172.18.202.97"
  xmlns:e="urn:ietf:params:xml:ns:pidf:status:rpidd" xmlns:dm="urn:ietf:params:xml:ns:pidf:data-model"
  xmlns:ce="urn:cisco:params:xml:ns:pidf:rpidd" xmlns:sc="urn:ietf:params:xml:ns:pidf:servcaps">
  <dm:person>
    <status>
      <basic>open</basic>
    </status>
    <e:activities>
      </e:activities>
    </dm:person>
    <tuple id="cmp-1-409207">
      <status>
        <basic>open</basic>
      </status>
      <sc:servcaps>
        <sc:audio>true</sc:audio>
      </sc:servcaps>
      <contact priority="0.8">sip:4210@172.18.202.97:5060</contact>
      <timestamp>2011-12-19T23:45:17Z</timestamp>
    </tuple>
  </presence>
```

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

[31] SIP/2.0 200 OK

Via: SIP/2.0/TCP 172.18.202.190:5060;branch=z9hG4bKc283c138d603dc54f08bfbb1466d8183.1;rport
 From: <sip:4230@sipsig-ccm97>;tag=c4e45bcdb22f59dd
 To: <sip:4210@172.18.202.97>;tag=623083919
 Date: Mon, 19 Dec 2011 23:45:23 GMT
 Call-ID: cea0007ff08eb669@172.18.202.190
 CSeq: 260 SUBSCRIBE
 Contact: <sip:4210@172.18.202.97:5060;transport=tcp>
 Expires: 3600
 Content-Length: 0

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

[32] SIP/2.0 200 OK

Via: SIP/2.0/TCP 172.18.202.97:5060;branch=z9hG4bK2a6d5745bb5f;received=172.18.202.97
 Call-ID: cea0007ff08eb669@172.18.202.190
 CSeq: 262 NOTIFY
 From: <sip:4210@172.18.202.97>;tag=623083919
 To: <sip:4230@sipsig-ccm97>;tag=c4e45bcdb22f59dd
 Server: TANDBERG/257 (TE4.1.0.253886Alpha4)
 Content-Length: 0

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

[33] SUBSCRIBE sip:4240@sipsig-ccm97 SIP/2.0

Via: SIP/2.0/TCP 172.18.202.190:5060;branch=z9hG4bK8211da3b855a61642970f0aa060579e6.1;rport
 Call-ID: c6623c6f6fd0c164@172.18.202.190
 CSeq: 260 SUBSCRIBE
 Contact: <sip:4230@172.18.202.190:46879;transport=tcp>;+sip.instance="urn:uuid:00000000-0000-0000-0000-005060048365";+u.sip!model.ccm.cisco.com="580";audio=TRUE;video=TRUE;mobility="fixed";duplex="full";description="TANDBERG-SIP"
 From: <sip:4230@sipsig-ccm97>;tag=426dbd41fbc2ccfe
 To: <sip:4240@sipsig-ccm97>;tag=1067531988
 Max-Forwards: 70
 Route: <sip:172.18.202.97;lr>
 User-Agent: TANDBERG/257 (TE4.1.0.253886Alpha4)
 Expires: 3600
 Event: presence
 Accept: application/pidf+xml
 Content-Length: 0

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

[34] NOTIFY sip:4230@172.18.202.190:46879;transport=tcp SIP/2.0

Via: SIP/2.0/TCP 172.18.202.97:5060;branch=z9hG4bK2a6e19abfa31
 From: <sip:4240@sipsig-ccm97>;tag=1067531988
 To: <sip:4230@sipsig-ccm97>;tag=426dbd41fbc2ccfe
 Call-ID: c6623c6f6fd0c164@172.18.202.190
 CSeq: 264 NOTIFY
 Max-Forwards: 70
 Date: Mon, 19 Dec 2011 23:45:23 GMT
 User-Agent: Cisco-CUCM8.6
 Event: presence
 Subscription-State: active;expires=3600
 Contact: <sip:4240@172.18.202.97:5060;transport=tcp>
 Content-Type: application/pidf+xml
 Content-Length: 736

```
<?xml version="1.0" encoding="UTF-8" standalone="no" ?>
<presence xmlns="urn:ietf:params:xml:ns:pidf" entity="sip:4240@172.18.202.97"
  xmlns:e="urn:ietf:params:xml:ns:pidf:status:rpidd" xmlns:dm="urn:ietf:params:xml:ns:pidf:data-model"
  xmlns:ce="urn:cisco:params:xml:ns:pidf:rpidd" xmlns:sc="urn:ietf:params:xml:ns:pidf:servcaps">
  <dm:person>
    <status>
      <basic>open</basic>
    </status>
    <e:activities>
    </e:activities>
  </dm:person>
  <tuple id="cmp-1-409208">
    <status>
      <basic>open</basic>
    </status>
    <sc:servcaps>
      <sc:audio>true</sc:audio>
    </sc:servcaps>
    <contact priority="0.8">sip:4240@172.18.202.97:5060</contact>
    <timestamp>2011-12-19T23:42:08Z</timestamp>
  </tuple>
</presence>
```

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

[35] SIP/2.0 200 OK

Via: SIP/2.0/TCP 172.18.202.190:5060;branch=z9hG4bK8211da3b855a61642970f0aa060579e6.1;rport
 From: <sip:4230@sipsig-ccm97>;tag=426dbd41fbc2ccfe
 To: <sip:4240@sipsig-ccm97>;tag=1067531988
 Date: Mon, 19 Dec 2011 23:45:23 GMT
 Call-ID: c6623c6f6fd0c164@172.18.202.190
 CSeq: 260 SUBSCRIBE
 Contact: <sip:4240@172.18.202.97:5060;transport=tcp>
 Expires: 3600
 Content-Length: 0

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

[36] SIP/2.0 200 OK

Via: SIP/2.0/TCP 172.18.202.190:5060;branch=z9hG4bK9861b0a37b9118f94076d78cbfb1a15c.1;rport
 From: <sip:4230@sipsig-ccm97>;tag=75b6324a75653cc6
 To: <sip:4130@172.18.202.97>;tag=1737162576
 Date: Mon, 19 Dec 2011 23:45:23 GMT
 Call-ID: f34ba6e68b7783f9@172.18.202.190
 CSeq: 260 SUBSCRIBE
 Contact: <sip:4130@172.18.202.97:5060;transport=tcp>
 Expires: 3600
 Content-Length: 0

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

[37] SUBSCRIBE sip:4130@172.18.202.97 SIP/2.0

Via: SIP/2.0/TCP 172.18.202.190:5060;branch=z9hG4bK9861b0a37b9118f94076d78cbfb1a15c.1;rport
 Call-ID: f34ba6e68b7783f9@172.18.202.190
 CSeq: 260 SUBSCRIBE
 Contact: <sip:4230@172.18.202.190:46879;transport=tcp>;+sip.instance="urn:uuid:00000000-0000-0000-0000-005060048365";+u.sip!model.ccm.cisco.com="580";audio=TRUE;video=TRUE;mobility="fixed";duplex="full";description="TANDBERG-SIP"
 From: <sip:4230@sipsig-ccm97>;tag=75b6324a75653cc6
 To: <sip:4130@172.18.202.97>;tag=1737162576
 Max-Forwards: 70
 Route: <sip:172.18.202.97;lr>
 User-Agent: TANDBERG/257 (TE4.1.0.253886Alpha4)
 Expires: 3600
 Event: presence
 Accept: application/pdf+xml
 Content-Length: 0

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

[38] NOTIFY sip:4230@172.18.202.190:46879;transport=tcp SIP/2.0

Via: SIP/2.0/TCP 172.18.202.97:5060;branch=z9hG4bK2a6f276fc83
 From: <sip:4130@172.18.202.97>;tag=1737162576
 To: <sip:4230@sipsig-ccm97>;tag=75b6324a75653cc6
 Call-ID: f34ba6e68b7783f9@172.18.202.190
 CSeq: 260 NOTIFY
 Max-Forwards: 70
 Date: Mon, 19 Dec 2011 23:45:23 GMT
 User-Agent: Cisco-CUCM8.6
 Event: presence
 Subscription-State: active;expires=3600
 Contact: <sip:4130@172.18.202.97:5060;transport=tcp>
 Content-Type: application/pdf+xml
 Content-Length: 736

```
<?xml version="1.0" encoding="UTF-8" standalone="no" ?>
<presence xmlns="urn:ietf:params:xml:ns:pidf" entity="sip:4130@172.18.202.97"
  xmlns:e="urn:ietf:params:xml:ns:pidf:status:rpidd" xmlns:dm="urn:ietf:params:xml:ns:pidf:data-model"
  xmlns:ce="urn:cisco:params:xml:ns:pidf:rpidd" xmlns:sc="urn:ietf:params:xml:ns:pidf:servcaps">
  <dm:person>
    <status>
      <basic>open</basic>
    </status>
    <e:activities>
      </e:activities>
    </dm:person>
    <tuple id="cmp-1-409209">
      <status>
        <basic>open</basic>
      </status>
      <sc:servcaps>
        <sc:audio>true</sc:audio>
      </sc:servcaps>
      <contact priority="0.8">sip:4130@172.18.202.97:5060</contact>
      <timestamp>2011-12-15T00:30:41Z</timestamp>
    </tuple>
  </presence>
```

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

[39] SIP/2.0 200 OK

Via: SIP/2.0/TCP 172.18.202.97:5060;branch=z9hG4bK2a6e19abfa31;received=172.18.202.97
 Call-ID: c6623c6f6fd0c164@172.18.202.190
 CSeq: 264 NOTIFY
 From: <sip:4240@sipsig-ccm97>;tag=1067531988
 To: <sip:4230@sipsig-ccm97>;tag=426dbd41fbc2ccfe
 Server: TANDBERG/257 (TE4.1.0.253886Alpha4)
 Content-Length: 0

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

[40] SIP/2.0 200 OK

Via: SIP/2.0/TCP 172.18.202.97:5060;branch=z9hG4bK2a6f276fc83;received=172.18.202.97
 Call-ID: f34ba6e68b7783f9@172.18.202.190
 CSeq: 260 NOTIFY
 From: <sip:4130@172.18.202.97>;tag=1737162576
 To: <sip:4230@sipsig-ccm97>;tag=75b6324a75653cc6
 Server: TANDBERG/257 (TE4.1.0.253886Alpha4)
 Content-Length: 0

2. BFCP Enhanced

2.1 Basic call with Presentation and hold/resume between Cisco Telepresence EX90s

Title: Basic call with Presentation and hold/resume between Cisco Telepresence EX90s

Description:

- A calls B
- A starts a presentation with B
- A Holds and Resume the call
- A ends the call

Configuration:

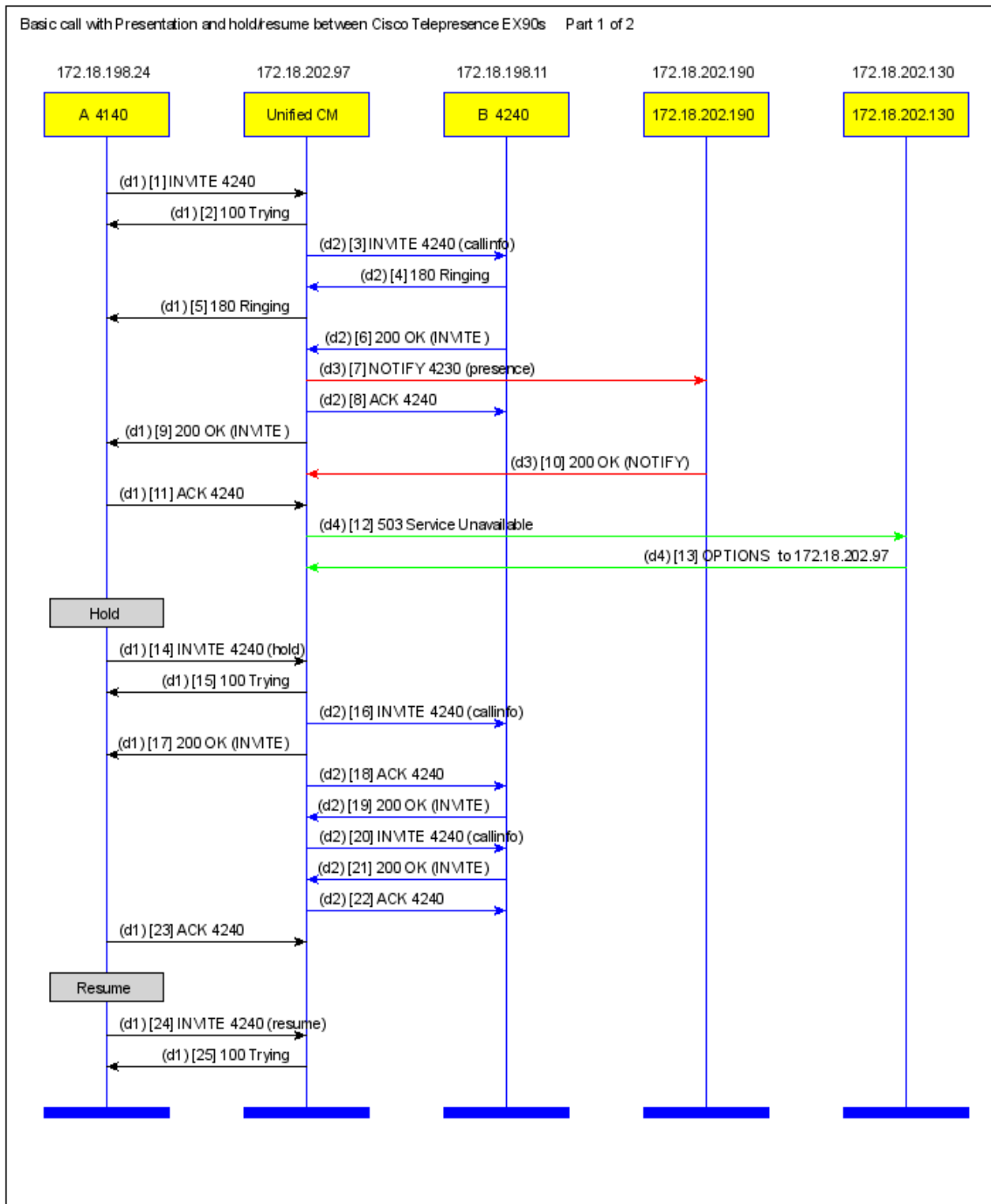
- Node = Unified CM, IP = 172.18.202.97
- Phone = A, Line = 4140, IP = 172.18.198.24, Model = Cisco Telepresence EX90
- Phone = B, Line = 4240, IP = 172.18.198.11, Model = Cisco Telepresence EX90

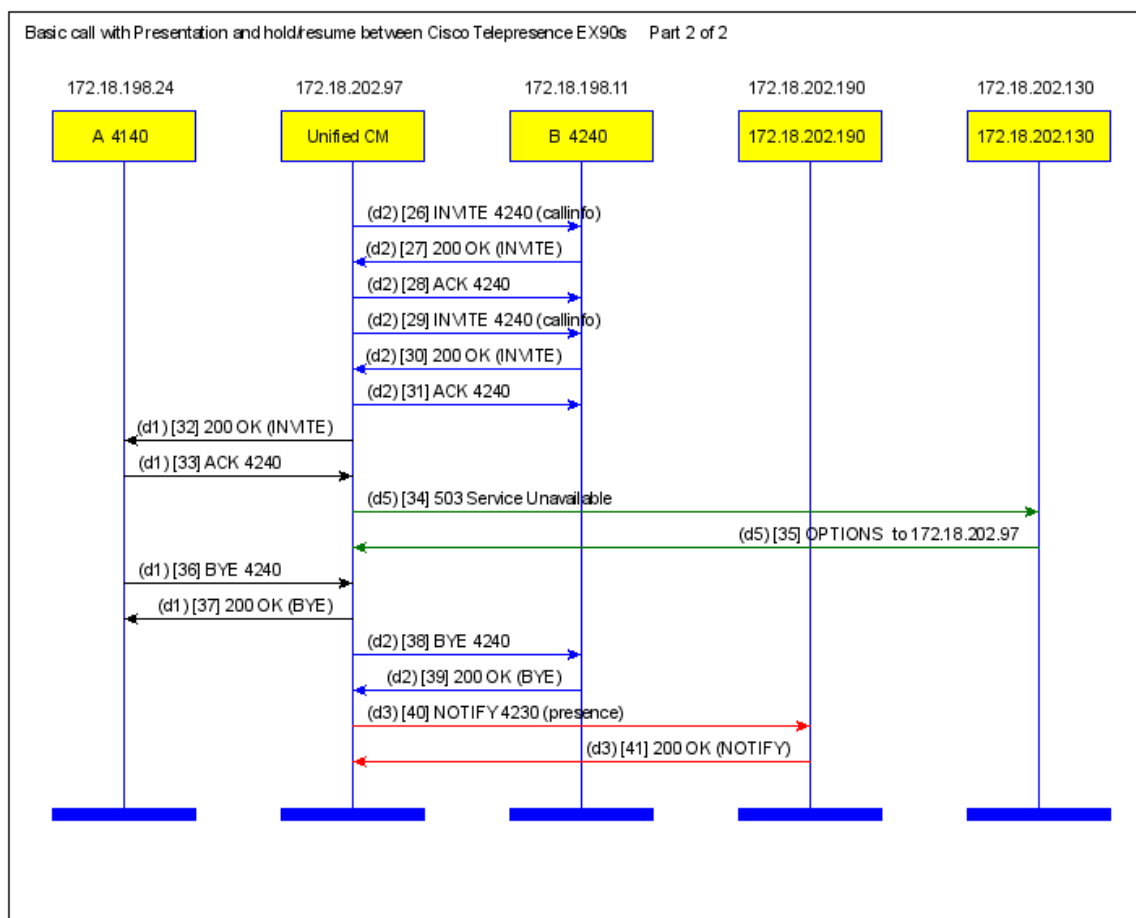
- A has laptop connected to it via HDMI
- B has laptop connected to it via HDMI

Scenario:

- 4140 calls 4240
- 4240 answers the call
- 4140 presses Present and chooses HDMI as input source for presentation
- Main video and Presentation video are seen on 4240
- 4140 presses Hold
- 4140 presses Resume
- 4140 goes onhook

End of Scenario





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

[1] INVITE sip:4240@sipsig-ccm97 SIP/2.0

Via: SIP/2.0/TCP 172.18.198.24:5060;branch=z9hG4bKf451bb5d142fe55d4943b9f2bbdda0b1.1;rport

Call-ID: 7461051bd12fc458@172.18.198.24

CSeq: 100 INVITE

Contact: <sip:4140@172.18.198.24:43624;transport=tcp>

From: <sip:4140@sipsig-ccm97>;tag=cc67b70d999e0199

To: <sip:4240@sipsig-ccm97>

Max-Forwards: 70

Route: <sip:172.18.202.97;lr>

Allow: INVITE,ACK,CANCEL,BYE,UPDATE,INFO,OPTIONS,REFER,NOTIFY

User-Agent: TANDBERG/516 (TC5.0.0.-PreAlpha (TEST SW))

Supported: replaces,100rel,timer,gruu,path,outbound,X-cisco-callinfo,X-cisco-serviceuri,X-cisco-service-control,norefersub,extended-refer

Session-Expires: 1800

Remote-Party-ID: <sip:4140@sipsig-ccm97>;privacy=off;id-type=subscriber;screen=yes;party=calling

Content-Type: application/sdp

Content-Length: 2459

v=0

o=tandberg 44 1 IN IP4 172.18.198.24

s=-

c=IN IP4 172.18.198.24

b=AS:6000

t=0 0

m=audio 16720 RTP/AVP 100 102 103 104 105 106 9 8 0 101

b=TIAS:128000

a=rtpmap:100 MP4A-LATM/90000

a=fmtp:100 profile-level-id=25;object=23;bitrate=128000

a=rtpmap:102 MP4A-LATM/90000

a=fmtp:102 profile-level-id=24;object=23;bitrate=64000

a=rtpmap:103 MP4A-LATM/90000

a=fmtp:103 profile-level-id=24;object=23;bitrate=56000

a=rtpmap:104 MP4A-LATM/90000

a=fmtp:104 profile-level-id=24;object=23;bitrate=48000

a=rtpmap:105 G7221/16000

a=fmtp:105 bitrate=32000

a=rtpmap:106 G7221/16000

a=fmtp:106 bitrate=24000

a=rtpmap:9 G722/8000

a=rtpmap:8 PCMA/8000

a=rtpmap:0 PCMU/8000

a=rtpmap:101 telephone-event/8000

a=fmtp:101 0-15

a=sendrecv

m=video 16722 RTP/AVP 97 98 99 34 31

b=TIAS:6000000

a=rtpmap:97 H264/90000

a=fmtp:97 profile-level-id=428016;max-br=5000;max-mbps=108000;max-fs=3600;max-smbps=108000;max-fps=6000

a=rtpmap:98 H264/90000

a=fmtp:98 profile-level-id=428016;max-br=5000;max-mbps=108000;max-fs=3600;max-smbps=108000;packetization-mode=1;max-fps=6000

a=rtpmap:99 H263-1998/90000

a=fmtp:99

custom=1280,768,3;custom=1280,720,3;custom=1024,768,1;custom=1024,576,2;custom=800,600,1;cif4=1;custom=720,480,1;custom=640,480,1;custom=512,288,1;cif=1;custom=352,240,1;qcif=1;maxbr=20000

a=rtpmap:34 H263/90000

a=fmtp:34 cif4=1;cif=1;qcif=1;maxbr=20000

a=rtpmap:31 H261/90000

a=fmtp:31 cif=1;qcif=1;maxbr=20000

a=rtcp-fb:* nack pli

a=sendrecv

a=content:main

a=label:11

a=answer:full

m=application 5070 UDP/BFCP *

a=floorctrl:c-s

a=confid:1

a=floorid:2 mstrm:12

a=userid:44

a=setup:actpass

a=connection:new

m=video 16724 RTP/AVP 97 98 99 34 31

b=TIAS:6000000

a=rtpmap:97 H264/90000

a=fmtp:97 profile-level-id=428016;max-br=5000;max-mbps=108000;max-fs=3840;max-smbps=108000;max-fps=6000

a=rtpmap:98 H264/90000

a=fmtp:98 profile-level-id=428016;max-br=5000;max-mbps=108000;max-fs=3840;max-smbps=108000;packetization-mode=1;max-fps=6000

a=rtpmap:99 H263-1998/90000

a=fmtp:99

```

custom=1280,768,3;custom=1280,720,3;custom=1024,768,1;custom=1024,576,2;custom=800,600,1;CIF=1;custom=720,4
80,1;custom=640,480,1;custom=512,288,1;CIF=1;custom=352,240,1;QCIF=1;maxbr=20000
a=rtmap:34 H263/90000
a=fmtp:34 CIF=1;CIF=1;QCIF=1;maxbr=20000
a=rtmap:31 H261/90000
a=fmtp:31 CIF=1;QCIF=1;maxbr=20000
a=rtcp-fb:* nack pli
a=sendrecv
a=content:slides
a=label:12
m=application 16726 RTP/AVP 107
a=rtmap:107 H224/4800
a=sendrecv

```

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

[2] SIP/2.0 100 Trying

```

Via: SIP/2.0/TCP 172.18.198.24:5060;branch=z9hG4bKf451bb5d142fe55d4943b9f2bbdda0b1.1;rport
From: <sip:4140@sipsig-ccm97>;tag=cc67b70d999e0199
To: <sip:4240@sipsig-ccm97>
Date: Tue, 20 Dec 2011 18:45:34 GMT
Call-ID: 7461051bd12fc458@172.18.198.24
CSeq: 100 INVITE
Allow-Events: presence
Content-Length: 0

```

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

[3] INVITE sip:4240@172.18.198.11:38905;transport=tcp SIP/2.0

```

Via: SIP/2.0/TCP 172.18.202.97:5060;branch=z9hG4bK2b55617bee27
From: <sip:4140@172.18.202.97>;tag=467552~b5a88942-7acc-4cc9-9d65-67021cfecfed-30423106
To: <sip:4240@sipsig-ccm97>
Date: Tue, 20 Dec 2011 18:45:34 GMT
Call-ID: cb77e080-ef01d7ce-56-61ca12ac@172.18.202.97
Supported: timer,resource-priority,replaces
Min-SE: 1800
User-Agent: Cisco-CUCM8.6
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; gci= 1-167029;
call-instance= 1
Send-Info: conference, x-cisco-conference
Alert-Info: <file://Bellcore-dr1/>
Remote-Party-ID: <sip:4140@172.18.202.97;x-cisco-callback-number=4140>;party=calling;screen=yes;privacy=off
Contact: <sip:4140@172.18.202.97:5060;transport=tcp>;video;audio
Max-Forwards: 69
Content-Length: 0

```

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

[4] SIP/2.0 180 Ringing

```

Via: SIP/2.0/TCP 172.18.202.97:5060;branch=z9hG4bK2b55617bee27;received=172.18.202.97
Call-ID: cb77e080-ef01d7ce-56-61ca12ac@172.18.202.97
CSeq: 101 INVITE
From: <sip:4140@172.18.202.97>;tag=467552~b5a88942-7acc-4cc9-9d65-67021cfecfed-30423106
To: <sip:4240@sipsig-ccm97>;tag=356b302512f26c04
Server: TANDBERG/516 (TC5.0.0.-PreAlpha (TEST SW))
Remote-Party-ID: <sip:4240@sipsig-ccm97>;privacy=off;id-type=subscriber;screen=yes;party=calling
Content-Length: 0

```

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

[5] SIP/2.0 180 Ringing

```

Via: SIP/2.0/TCP 172.18.198.24:5060;branch=z9hG4bKf451bb5d142fe55d4943b9f2bbdda0b1.1;rport
From: <sip:4140@sipsig-ccm97>;tag=cc67b70d999e0199
To: <sip:4240@sipsig-ccm97>;tag=467551~b5a88942-7acc-4cc9-9d65-67021cfecfed-30423105
Date: Tue, 20 Dec 2011 18:45:34 GMT
Call-ID: 7461051bd12fc458@172.18.198.24
CSeq: 100 INVITE
Allow: INVITE, OPTIONS, INFO, BYE, CANCEL, ACK, PRACK, UPDATE, REFER, SUBSCRIBE, NOTIFY
Allow-Events: presence
Call-Info: <urn:x-cisco-remotecc:callinfo>; security= NotAuthenticated; orientation= to; ui-state= ringout;
gci= 1-167029; call-instance= 1
Send-Info: conference, x-cisco-conference
Remote-Party-ID: <sip:4240@172.18.202.97>;party=called;screen=yes;privacy=off
Contact: <sip:4240@172.18.202.97:5060;transport=tcp>
Content-Length: 0

```

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

[6] SIP/2.0 200 OK

```

Via: SIP/2.0/TCP 172.18.202.97:5060;branch=z9hG4bK2b55617bee27;received=172.18.202.97
Call-ID: cb77e080-ef01d7ce-56-61ca12ac@172.18.202.97
CSeq: 101 INVITE

```

```

Contact: <sip:4240@172.18.198.11:38905;transport=tcp>
From: <sip:4140@172.18.202.97>;tag=467552~b5a88942-7acc-4cc9-9d65-67021cfecefed-30423106
To: <sip:4240@sipsig-ccm97>;tag=356b302512f26c04
Allow: INVITE,ACK,CANCEL,BYE,UPDATE,INFO,OPTIONS,REFER,NOTIFY
Server: TANDBERG/516 (TC5.0.0.-PreAlpha (TEST SW))
Supported: replaces,100rel,timer,gruu,path,outbound,X-cisco-callinfo,X-cisco-serviceuri,X-cisco-service-
control,norefersub,extended-refer
Require: timer
Session-Expires: 1800;refresher=uas
Min-SE: 1800
Remote-Party-ID: <sip:4240@sipsig-ccm97>;privacy=off;id-type=subscriber;screen=yes;party=calling
Content-Type: application/sdp
Content-Length: 2459

v=0
o=tandberg 27 1 IN IP4 172.18.198.11
s=-
c=IN IP4 172.18.198.11
b=AS:6000
t=0 0
m=audio 16584 RTP/AVP 100 102 103 104 105 106 9 8 0 101
b=TIAS:128000
a=rtpmap:100 MP4A-LATM/90000
a=fmtp:100 profile-level-id=25;object=23;bitrate=128000
a=rtpmap:102 MP4A-LATM/90000
a=fmtp:102 profile-level-id=24;object=23;bitrate=64000
a=rtpmap:103 MP4A-LATM/90000
a=fmtp:103 profile-level-id=24;object=23;bitrate=56000
a=rtpmap:104 MP4A-LATM/90000
a=fmtp:104 profile-level-id=24;object=23;bitrate=48000
a=rtpmap:105 G7221/16000
a=fmtp:105 bitrate=32000
a=rtpmap:106 G7221/16000
a=fmtp:106 bitrate=24000
a=rtpmap:9 G722/8000
a=rtpmap:8 PCMA/8000
a=rtpmap:0 PCMU/8000
a=rtpmap:101 telephone-event/8000
a=fmtp:101 0-15
a=sendrecv
m=video 16586 RTP/AVP 97 98 99 34 31
b=TIAS:6000000
a=rtpmap:97 H264/90000
a=fmtp:97 profile-level-id=428016;max-br=5000;max-mbps=245000;max-fs=9000;max-smbps=245000;max-fps=6000
a=rtpmap:98 H264/90000
a=fmtp:98 profile-level-id=428016;max-br=5000;max-mbps=245000;max-fs=9000;max-smbps=245000;packetization-
mode=1;max-fps=6000
a=rtpmap:99 H263-1998/90000
a=fmtp:99
custom=1280,768,3;custom=1280,720,3;custom=1024,768,1;custom=1024,576,2;custom=800,600,1;cif4=1;custom=720,4
80,1;custom=640,480,1;custom=512,288,1;cif=1;custom=352,240,1;qcif=1;maxbr=20000
a=rtpmap:34 H263/90000
a=fmtp:34 cif4=1;cif=1;qcif=1;maxbr=20000
a=rtpmap:31 H261/90000
a=fmtp:31 cif=1;qcif=1;maxbr=20000
a=rtcp-fb:* nack pli
a=sendrecv
a=content:main
a=label:11
a=answer:full
m=application 5070 UDP/BFCP *
a=floorctrl:c-s
a=confid:1
a=floorid:2 mstrm:12
a=userid:27
a=setup:actpass
a=connection:new
m=video 16588 RTP/AVP 97 98 99 34 31
b=TIAS:6000000
a=rtpmap:97 H264/90000
a=fmtp:97 profile-level-id=428016;max-br=5000;max-mbps=245000;max-fs=9000;max-smbps=245000;max-fps=6000
a=rtpmap:98 H264/90000
a=fmtp:98 profile-level-id=428016;max-br=5000;max-mbps=245000;max-fs=9000;max-smbps=245000;packetization-
mode=1;max-fps=6000
a=rtpmap:99 H263-1998/90000
a=fmtp:99
custom=1280,768,3;custom=1280,720,3;custom=1024,768,1;custom=1024,576,2;custom=800,600,1;cif4=1;custom=720,4
80,1;custom=640,480,1;custom=512,288,1;cif=1;custom=352,240,1;qcif=1;maxbr=20000
a=rtpmap:34 H263/90000
a=fmtp:34 cif4=1;cif=1;qcif=1;maxbr=20000
a=rtpmap:31 H261/90000

```



```

a=fmtp:31 cif=1;qcif=1;maxbr=20000
a=rtcp-fb:* nack pli
a=sendrecv
a=content:slides
a=label:12
m=application 16590 RTP/AVP 107
a=rtpmap:107 H224/4800
a=sendrecv

```

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

[7] NOTIFY sip:4230@172.18.202.190:46879;transport=tcp SIP/2.0

```

Via: SIP/2.0/TCP 172.18.202.97:5060;branch=z9hG4bK2b5646962c2d
From: <sip:4240@sipsig-ccm97>;tag=1556740667
To: <sip:4230@sipsig-ccm97>;tag=54cbc093e545bb9b
Call-ID: 7c19b9a52cd1daaa@172.18.202.190
CSeq: 123 NOTIFY
Max-Forwards: 70
Date: Tue, 20 Dec 2011 18:45:40 GMT
User-Agent: Cisco-CUCM8.6
Event: presence
Subscription-State: active;expires=3331
Contact: <sip:4240@172.18.202.97:5060;transport=tcp>
Content-Type: application/pidf+xml
Content-Length: 829

```

```

<?xml version="1.0" encoding="UTF-8" standalone="no" ?>
<presence xmlns="urn:ietf:params:xml:ns:pidf" entity="sip:4240@172.18.202.97"
  xmlns:e="urn:ietf:params:xml:ns:pidf:status:rpid" xmlns:dm="urn:ietf:params:xml:ns:pidf:data-model"
  xmlns:ce="urn:cisco:params:xml:ns:pidf:rpipid" xmlns:sc="urn:ietf:params:xml:ns:pidf:servcaps">
  <dm:person>
    <status>
      <basic>open</basic>
    </status>
    <e:activities>
      <e:on-the-phone/>
    </e:activities>
  </dm:person>
  <tuple id="cmp-1-462204">
    <status>
      <basic>open</basic>
    <e:activities>
      <e:on-the-phone/>
    </e:activities>
  </status>
  <sc:servcaps>
    <sc:audio>true</sc:audio>
  </sc:servcaps>
  <contact priority="0.8">sip:4240@172.18.202.97:5060</contact>
  <timestamp>2011-12-20T18:45:40Z</timestamp>
  </tuple>
</presence>

```

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

[8] ACK sip:4240@172.18.198.11:38905;transport=tcp SIP/2.0

```

Via: SIP/2.0/TCP 172.18.202.97:5060;branch=z9hG4bK2b574d8dfc89
From: <sip:4140@172.18.202.97>;tag=467552~b5a88942-7acc-4cc9-9d65-67021cfecfed-30423106
To: <sip:4240@sipsig-ccm97>;tag=356b302512f26c04
Date: Tue, 20 Dec 2011 18:45:34 GMT
Call-ID: cb77e080-ef01d7ce-56-61ca12ac@172.18.202.97
Max-Forwards: 70
CSeq: 101 ACK
Allow-Events: presence
Content-Type: application/sdp
Content-Length: 1053

```

```

v=0
o=CiscoSystemsCCM-SIP 467552 1 IN IP4 172.18.202.97
s=SIP Call
b=AS:6000
t=0 0
m=audio 16720 RTP/AVP 102 101
c=IN IP4 172.18.198.24
b=TIAS:64000
a=rtpmap:102 MP4A-LATM/90000
a=fmtp:102 bitrate=64000;profile-level-id=24;object=23
a=rtpmap:101 telephone-event/8000
a=fmtp:101 0-15
m=video 16722 RTP/AVP 98
c=IN IP4 172.18.198.24
b=TIAS:5936000
a=label:11

```

```

a=rtptime:98 H264/90000
a=fmtp:98 profile-level-id=428016;packetization-mode=1;max-mbps=108000;max-fs=3600;max-cpb=200;max-br=5000;max-smbps=108000;max-fps=6000
a=content:main
a=rtcp-fb:* nack pli
m=application 5070 UDP/BFCP *
c=IN IP4 172.18.198.24
a=floorctrl:s-only
a=floorid:2 mstrm:12
a=confid:1
a=userid:44
m=video 16724 RTP/AVP 98
c=IN IP4 172.18.198.24
b=TIAS:5936000
a=label:12
a=rtptime:98 H264/90000
a=fmtp:98 profile-level-id=428016;packetization-mode=1;max-mbps=108000;max-fs=3840;max-cpb=200;max-br=5000;max-smbps=108000;max-fps=6000
a=content:slides
a=rtcp-fb:* nack pli
m=application 16726 RTP/AVP 107
c=IN IP4 172.18.198.24
a=rtptime:107 H224/0

```

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

[9] SIP/2.0 200 OK

```

Via: SIP/2.0/TCP 172.18.198.24:5060;branch=z9hG4bKf451bb5d142fe55d4943b9f2bbdda0b1.1;rport
From: <sip:4140@sipsig-ccm97>;tag=cc67b70d999e0199
To: <sip:4240@sipsig-ccm97>;tag=467551-b5a88942-7acc-4cc9-9d65-67021cfecfed-30423105
Date: Tue, 20 Dec 2011 18:45:34 GMT
Call-ID: 7461051bd12fc458@172.18.198.24
CSeq: 100 INVITE
Allow: INVITE, OPTIONS, INFO, BYE, CANCEL, ACK, PRACK, UPDATE, REFER, SUBSCRIBE, NOTIFY
Allow-Events: presence
Supported: replaces
Call-Info: <urn:x-cisco-remotecc:callinfo>; security= NotAuthenticated; orientation= to; gci= 1-167029; call-instance= 1
Send-Info: conference, x-cisco-conference
Session-Expires: 1800;refresher=uas
Require: timer
Remote-Party-ID: <sip:4240@172.18.202.97>;party=called;screen=yes;privacy=off
Contact: <sip:4240@172.18.202.97:5060;transport=tcp>
Content-Type: application/sdp
Content-Length: 1053

```

```

v=0
o=CiscoSystemsCCM-SIP 467551 1 IN IP4 172.18.202.97
s=SIP Call
b=AS:6000
t=0 0
m=audio 16584 RTP/AVP 102 101
c=IN IP4 172.18.198.11
b=TIAS:64000
a=rtptime:102 MP4A-LATM/90000
a=fmtp:102 bitrate=64000;profile-level-id=24;object=23
a=rtptime:101 telephone-event/8000
a=fmtp:101 0-15
m=video 16586 RTP/AVP 98
c=IN IP4 172.18.198.11
b=TIAS:5936000
a=label:11
a=rtptime:98 H264/90000
a=fmtp:98 profile-level-id=428016;packetization-mode=1;max-mbps=245000;max-fs=9000;max-cpb=200;max-br=5000;max-smbps=245000;max-fps=6000
a=content:main
a=rtcp-fb:* nack pli
m=application 5070 UDP/BFCP *
c=IN IP4 172.18.198.11
a=floorctrl:c-only
a=floorid:2 mstrm:12
a=confid:1
a=userid:27
m=video 16588 RTP/AVP 98
c=IN IP4 172.18.198.11
b=TIAS:5936000
a=label:12
a=rtptime:98 H264/90000
a=fmtp:98 profile-level-id=428016;packetization-mode=1;max-mbps=245000;max-fs=9000;max-cpb=200;max-br=5000;max-smbps=245000;max-fps=6000
a=content:slides
a=rtcp-fb:* nack pli

```

```
m=application 16590 RTP/AVP 107
c=IN IP4 172.18.198.11
a=rtpmap:107 H224/0
```

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

[10] SIP/2.0 200 OK

```
Via: SIP/2.0/TCP 172.18.202.97:5060;branch=z9hG4bK2b5646962c2d;received=172.18.202.97
Call-ID: 7c19b9a52cd1daaa@172.18.202.190
CSeq: 123 NOTIFY
From: <sip:4240@sipsig-ccm97>;tag=1556740667
To: <sip:4230@sipsig-ccm97>;tag=54cbc093e545bb9b
Server: TANDBERG/257 (TE4.1.0.253886Alpha4)
Content-Length: 0
```

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

[11] ACK sip:4240@172.18.202.97:5060;transport=tcp SIP/2.0

```
Via: SIP/2.0/TCP 172.18.198.24:5060;branch=z9hG4bKa5bc1a1227ff976952fbaa6d1f8aa683.1;rport
Call-ID: 7461051bd12fc458@172.18.198.24
CSeq: 100 ACK
From: <sip:4140@sipsig-ccm97>;tag=cc67b70d999e0199
To: <sip:4240@sipsig-ccm97>;tag=467551-b5a88942-7acc-4cc9-9d65-67021cfecfed-30423105
Max-Forwards: 70
Allow: INVITE,ACK,CANCEL,BYE,UPDATE,INFO,OPTIONS,REFER,NOTIFY
User-Agent: TANDBERG/516 (TC5.0.0.-PreAlpha (TEST SW))
Supported: replaces,100rel,timer,gruu,path,outbound,X-cisco-callinfo,X-cisco-serviceuri,X-cisco-service-control,norefersub,extended-refer
Content-Length: 0
```

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

[12] SIP/2.0 503 Service Unavailable

```
Via: SIP/2.0/TCP 172.18.202.130:5060;branch=z9hG4bK6ce0f9ad2d1e27b0fb7f1a64bdc2effb2117339;rport
From: <sip:172.18.202.130>;tag=1cd6330442560439
To: <sip:172.18.202.97:5060>;tag=953412666
Date: Tue, 20 Dec 2011 18:45:40 GMT
Call-ID: 22ed876c147a341c@172.18.202.130
CSeq: 27265 OPTIONS
Warning: 399 sipsig-ccm97 "Unable to find a device handler for the request received on port 28024 from 172.18.202.130"
Content-Length: 0
```

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

[13] OPTIONS sip:172.18.202.97:5060;transport=tcp SIP/2.0

```
Via: SIP/2.0/TCP 172.18.202.130:5060;branch=z9hG4bK6ce0f9ad2d1e27b0fb7f1a64bdc2effb2117339;rport
Call-ID: 22ed876c147a341c@172.18.202.130
CSeq: 27265 OPTIONS
From: <sip:172.18.202.130>;tag=1cd6330442560439
To: <sip:172.18.202.97:5060>
Max-Forwards: 0
User-Agent: TANDBERG/4100 (X6.1)
Supported: com.tandberg.vcs.resourceusage
Content-Length: 0
```

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

[14] INVITE sip:4240@172.18.202.97:5060;transport=tcp SIP/2.0

```
Via: SIP/2.0/TCP 172.18.198.24:5060;branch=z9hG4bK9bca3c20f50b06989533e4083ca6385.1;rport
Call-ID: 7461051bd12fc458@172.18.198.24
CSeq: 101 INVITE
Contact: <sip:4140@172.18.198.24:43624;transport=tcp>
From: <sip:4140@sipsig-ccm97>;tag=cc67b70d999e0199
To: <sip:4240@sipsig-ccm97>;tag=467551-b5a88942-7acc-4cc9-9d65-67021cfecfed-30423105
Max-Forwards: 70
Allow: INVITE,ACK,CANCEL,BYE,UPDATE,INFO,OPTIONS,REFER,NOTIFY
User-Agent: TANDBERG/516 (TC5.0.0.-PreAlpha (TEST SW))
Supported: replaces,100rel,timer,gruu,path,outbound,X-cisco-callinfo,X-cisco-serviceuri,X-cisco-service-control,norefersub,extended-refer
Call-Info: <urn:x-cisco-remotecc:hold>
Session-Expires: 1800;refresher=uac
Min-SE: 90
Remote-Party-ID: <sip:4140@sipsig-ccm97>;privacy=off;id-type=subscriber;screen=yes;party=calling
Content-Type: application/sdp
Content-Length: 2459
```

```
v=0
o=tandberg 44 2 IN IP4 172.18.198.24
s=-
c=IN IP4 172.18.198.24
b=AS:6000
t=0 0
m=audio 16720 RTP/AVP 100 102 103 104 105 106 9 8 0 101
b=TIAS:128000
a=rtpmap:100 MP4A-LATM/90000
```

```

a=fmtp:100 profile-level-id=25;object=23;bitrate=128000
a=rtpmap:102 MP4A-LATM/90000
a=fmtp:102 profile-level-id=24;object=23;bitrate=64000
a=rtpmap:103 MP4A-LATM/90000
a=fmtp:103 profile-level-id=24;object=23;bitrate=56000
a=rtpmap:104 MP4A-LATM/90000
a=fmtp:104 profile-level-id=24;object=23;bitrate=48000
a=rtpmap:105 G7221/16000
a=fmtp:105 bitrate=32000
a=rtpmap:106 G7221/16000
a=fmtp:106 bitrate=24000
a=rtpmap:9 G722/8000
a=rtpmap:8 PCMA/8000
a=rtpmap:0 PCMU/8000
a=rtpmap:101 telephone-event/8000
a=fmtp:101 0-15
a=inactive
m=video 16722 RTP/AVP 97 98 99 34 31
b=TIAS:6000000
a=rtpmap:97 H264/90000
a=fmtp:97 profile-level-id=428016;max-br=5000;max-mbps=108000;max-fs=3600;max-smbps=108000;max-fps=6000
a=rtpmap:98 H264/90000
a=fmtp:98 profile-level-id=428016;max-br=5000;max-mbps=108000;max-fs=3600;max-smbps=108000;packetization-
mode=1;max-fps=6000
a=rtpmap:99 H263-1998/90000
a=fmtp:99
custom=1280,768,3;custom=1280,720,3;custom=1024,768,1;custom=1024,576,2;custom=800,600,1;cif4=1;custom=720,4
80,1;custom=640,480,1;custom=512,288,1;cif=1;custom=352,240,1;qcif=1;maxbr=20000
a=rtpmap:34 H263/90000
a=fmtp:34 cif4=1;cif=1;qcif=1;maxbr=20000
a=rtpmap:31 H261/90000
a=fmtp:31 cif=1;qcif=1;maxbr=20000
a=rtcp-fb:* nack pli
a=inactive
a=content:main
a=label:11
a=answer:full
m=application 5070 UDP/BFCP *
a=floorctrl:c-s
a=confid:1
a=floorid:2 mstrm:12
a=userid:44
a=setup:actpass
a=connection:new
m=video 16724 RTP/AVP 97 98 99 34 31
b=TIAS:6000000
a=rtpmap:97 H264/90000
a=fmtp:97 profile-level-id=428016;max-br=5000;max-mbps=108000;max-fs=3840;max-smbps=108000;max-fps=6000
a=rtpmap:98 H264/90000
a=fmtp:98 profile-level-id=428016;max-br=5000;max-mbps=108000;max-fs=3840;max-smbps=108000;packetization-
mode=1;max-fps=6000
a=rtpmap:99 H263-1998/90000
a=fmtp:99
custom=1280,768,3;custom=1280,720,3;custom=1024,768,1;custom=1024,576,2;custom=800,600,1;cif4=1;custom=720,4
80,1;custom=640,480,1;custom=512,288,1;cif=1;custom=352,240,1;qcif=1;maxbr=20000
a=rtpmap:34 H263/90000
a=fmtp:34 cif4=1;cif=1;qcif=1;maxbr=20000
a=rtpmap:31 H261/90000
a=fmtp:31 cif=1;qcif=1;maxbr=20000
a=rtcp-fb:* nack pli
a=inactive
a=content:slides
a=label:12
m=application 16726 RTP/AVP 107
a=rtpmap:107 H224/4800
a=inactive

```

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

[15] SIP/2.0 100 Trying

```

Via: SIP/2.0/TCP 172.18.198.24:5060;branch=z9hG4bKc9bca3c20f50b06989533e4083ca6385.1;rport
From: <sip:4140@sipsig-ccm97>;tag=cc67b70d999e0199
To: <sip:4240@sipsig-ccm97>;tag=467551-b5a88942-7acc-4cc9-9d65-67021cfecfed-30423105
Date: Tue, 20 Dec 2011 18:45:59 GMT
Call-ID: 7461051bd12fc458@172.18.198.24
CSeq: 101 INVITE
Allow-Events: presence
Content-Length: 0

```

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

[16] INVITE sip:4240@172.18.198.11:38905;transport=tcp SIP/2.0

```

Via: SIP/2.0/TCP 172.18.202.97:5060;branch=z9hG4bK2b585d16936e

```

```

From: <sip:4140@172.18.202.97>;tag=467552~b5a88942-7acc-4cc9-9d65-67021cfecfed-30423106
To: <sip:4240@sipsig-ccm97>;tag=356b302512f26c04
Date: Tue, 20 Dec 2011 18:45:59 GMT
Call-ID: cb77e080-ef01d7ce-56-61ca12ac@172.18.202.97
Supported: timer,resource-priority,replaces
Min-SE: 1800
User-Agent: Cisco-CUCM8.6
Allow: INVITE, OPTIONS, INFO, BYE, CANCEL, ACK, PRACK, UPDATE, REFER, SUBSCRIBE, NOTIFY
CSeq: 102 INVITE
Max-Forwards: 70
Expires: 180
Allow-Events: presence
Call-Info: <urn:x-cisco-remotecc:callinfo>; security= NotAuthenticated; orientation= from; gci= 1-167029;
call-instance= 1
Session-Expires: 1800;refresher=uas
Remote-Party-ID: <sip:4140@172.18.202.97>;party=calling;screen=yes;privacy=off
Contact: <sip:4140@172.18.202.97:5060;transport=tcp>
Content-Type: application/sdp
Content-Length: 1071

```

```

v=0
o=CiscoSystemsCCM-SIP 467552 2 IN IP4 172.18.202.97
s=SIP Call
b=AS:6000
t=0 0
m=audio 16720 RTP/AVP 102 101
c=IN IP4 0.0.0.0
b=TIAS:64000
a=rtpmap:102 MP4A-LATM/90000
a=fmtp:102 bitrate=64000;profile-level-id=24;object=23
a=inactive
a=rtpmap:101 telephone-event/8000
a=fmtp:101 0-15
m=video 16722 RTP/AVP 98
c=IN IP4 0.0.0.0
b=TIAS:5936000
a=label:11
a=rtpmap:98 H264/90000
a=fmtp:98 profile-level-id=428016;packetization-mode=1;max-mbps=108000;max-fs=3600;max-cpb=200;max-br=5000;max-smbps=108000;max-fps=6000
a=content:main
a=inactive
a=rtcp-fb:* nack pli
m=application 5070 UDP/BFCP *
c=IN IP4 0.0.0.0
a=floorctrl:s-only
a=floorid:2 mstrm:12
a=confid:1
a=userid:44
m=video 16724 RTP/AVP 98
c=IN IP4 0.0.0.0
b=TIAS:5936000
a=label:12
a=rtpmap:98 H264/90000
a=fmtp:98 profile-level-id=428016;packetization-mode=1;max-mbps=108000;max-fs=3840;max-cpb=200;max-br=5000;max-smbps=108000;max-fps=6000
a=content:slides
a=inactive
a=rtcp-fb:* nack pli
m=application 16726 RTP/AVP 107
c=IN IP4 0.0.0.0
a=rtpmap:107 H224/0
a=inactive

```

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

[17] SIP/2.0 200 OK

```

Via: SIP/2.0/TCP 172.18.198.24:5060;branch=z9hG4bKc9bca3c20f50b06989533e4083ca6385.1;rport
From: <sip:4140@sipsig-ccm97>;tag=cc67b70d999e0199
To: <sip:4240@sipsig-ccm97>;tag=467551~b5a88942-7acc-4cc9-9d65-67021cfecfed-30423105
Date: Tue, 20 Dec 2011 18:45:59 GMT
Call-ID: 7461051bd12fc458@172.18.198.24
CSeq: 101 INVITE
Allow: INVITE, OPTIONS, INFO, BYE, CANCEL, ACK, PRACK, UPDATE, REFER, SUBSCRIBE, NOTIFY
Allow-Events: presence
Supported: replaces
Call-Info: <urn:x-cisco-remotecc:callinfo>; security= NotAuthenticated; orientation= to; gci= 1-167029;
call-instance= 1
Session-Expires: 1800;refresher=uac
Require: timer
Remote-Party-ID: <sip:4240@172.18.202.97>;party=called;screen=yes;privacy=off
Contact: <sip:4240@172.18.202.97:5060;transport=tcp>

```

Content-Type: application/sdp
Content-Length: 1071

```
v=0
o=CiscoSystemsCCM-SIP 467551 2 IN IP4 172.18.202.97
s=SIP Call
b=AS:6000
t=0 0
m=audio 16584 RTP/AVP 102 101
c=IN IP4 0.0.0.0
b=TIAS:64000
a=rtpmap:102 MP4A-LATM/90000
a=fmtp:102 bitrate=64000;profile-level-id=24;object=23
a=inactive
a=rtpmap:101 telephone-event/8000
a=fmtp:101 0-15
m=video 16586 RTP/AVP 98
c=IN IP4 0.0.0.0
b=TIAS:5936000
a=label:11
a=rtpmap:98 H264/90000
a=fmtp:98 profile-level-id=428016;packetization-mode=1;max-mbps=245000;max-fs=9000;max-cpb=200;max-br=5000;max-smbps=245000;max-fps=6000
a=content:main
a=inactive
a=rtcp-fb:* nack pli
m=application 5070 UDP/BFCP *
c=IN IP4 0.0.0.0
a=floorctrl:c-only
a=floorid:2 mstrm:12
a=confid:1
a=userid:27
m=video 16588 RTP/AVP 98
c=IN IP4 0.0.0.0
b=TIAS:5936000
a=label:12
a=rtpmap:98 H264/90000
a=fmtp:98 profile-level-id=428016;packetization-mode=1;max-mbps=245000;max-fs=9000;max-cpb=200;max-br=5000;max-smbps=245000;max-fps=6000
a=content:slides
a=inactive
a=rtcp-fb:* nack pli
m=application 16590 RTP/AVP 107
c=IN IP4 0.0.0.0
a=rtpmap:107 H224/0
a=inactive
```

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

[18] ACK sip:4240@172.18.198.11:38905;transport=tcp SIP/2.0
Via: SIP/2.0/TCP 172.18.202.97:5060;branch=z9hG4bK2b59236705ba
From: <sip:4140@172.18.202.97>;tag=467552~b5a88942-7acc-4cc9-9d65-67021cfecfed-30423106
To: <sip:4240@sipsig-ccm97>;tag=356b302512f26c04
Date: Tue, 20 Dec 2011 18:45:59 GMT
Call-ID: cb77e080-ef01d7ce-56-61ca12ac@172.18.202.97
Max-Forwards: 70
CSeq: 102 ACK
Allow-Events: presence
Content-Length: 0

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

[19] SIP/2.0 200 OK
Via: SIP/2.0/TCP 172.18.202.97:5060;branch=z9hG4bK2b585d16936e;received=172.18.202.97
Call-ID: cb77e080-ef01d7ce-56-61ca12ac@172.18.202.97
CSeq: 102 INVITE
Contact: <sip:4240@172.18.198.11:38905;transport=tcp>
From: <sip:4140@172.18.202.97>;tag=467552~b5a88942-7acc-4cc9-9d65-67021cfecfed-30423106
To: <sip:4240@sipsig-ccm97>;tag=356b302512f26c04
Allow: INVITE, ACK, CANCEL, BYE, UPDATE, INFO, OPTIONS, REFER, NOTIFY
Server: TANDBERG/516 (TC5.0.0.-PreAlpha (TEST SW))
Supported: replaces,100rel,timer,gruu,path,outbound,X-cisco-callinfo,X-cisco-serviceuri,X-cisco-service-control,norefersub,extended-refer
Require: timer
Session-Expires: 1800;refresher=uas
Min-SE: 1800
Content-Type: application/sdp
Content-Length: 915

```
v=0
o=tandberg 27 2 IN IP4 172.18.198.11
s=-
c=IN IP4 172.18.198.11
```

```

b=AS:6000
t=0 0
m=audio 16584 RTP/AVP 102 101
b=TIAS:64000
a=rtpmap:102 MP4A-LATM/90000
a=fmtp:102 profile-level-id=24;object=23;bitrate=64000
a=rtpmap:101 telephone-event/8000
a=fmtp:101 0-15
a=inactive
m=video 16586 RTP/AVP 98
b=TIAS:5936000
a=rtpmap:98 H264/90000
a=fmtp:98 profile-level-id=428016;max-br=5000;max-mbps=245000;max-fs=9000;max-smbps=245000;packetization-
mode=1;max-fps=6000
a=rtcp-fb:* nack pli
a=inactive
a=content:main
a=label:11
m=application 5070 UDP/BFCP *
a=floorctrl:c-only
m=video 16588 RTP/AVP 98
b=TIAS:5936000
a=rtpmap:98 H264/90000
a=fmtp:98 profile-level-id=428016;max-br=5000;max-mbps=245000;max-fs=9000;max-smbps=245000;packetization-
mode=1;max-fps=6000
a=rtcp-fb:* nack pli
a=inactive
a=content:slides
a=label:12
m=application 16590 RTP/AVP 107
a=rtpmap:107 H224/4800
a=inactive

```

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

[20] INVITE sip:4240@172.18.198.11:38905;transport=tcp SIP/2.0

```

Via: SIP/2.0/TCP 172.18.202.97:5060;branch=z9hG4bK2b5a7f6763a3
From: <sip:4140@172.18.202.97>;tag=467552-b5a88942-7acc-4cc9-9d65-67021cfecfed-30423106
To: <sip:4240@sipsig-ccm97>;tag=356b302512f26c04
Date: Tue, 20 Dec 2011 18:45:59 GMT
Call-ID: cb77e080-ef01d7ce-56-61ca12ac@172.18.202.97
Supported: timer,resource-priority,replaces
Min-SE: 1800
User-Agent: Cisco-CUCM8.6
Allow: INVITE, OPTIONS, INFO, BYE, CANCEL, ACK, PRACK, UPDATE, REFER, SUBSCRIBE, NOTIFY
CSeq: 103 INVITE
Max-Forwards: 70
Expires: 180
Allow-Events: presence
Call-Info: <urn:x-cisco-remotecc:callinfo>; security= NotAuthenticated; orientation= from; gci= 1-167029;
call-instance= 1
Session-Expires: 1800;refresher=uas
Remote-Party-ID: <sip:4140@172.18.202.97>;party=calling;screen=yes;privacy=off
Contact: <sip:4140@172.18.202.97:5060;transport=tcp>
Content-Length: 0

```

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

[21] SIP/2.0 200 OK

```

Via: SIP/2.0/TCP 172.18.202.97:5060;branch=z9hG4bK2b5a7f6763a3;received=172.18.202.97
Call-ID: cb77e080-ef01d7ce-56-61ca12ac@172.18.202.97
CSeq: 103 INVITE
Contact: <sip:4240@172.18.198.11:38905;transport=tcp>
From: <sip:4140@172.18.202.97>;tag=467552-b5a88942-7acc-4cc9-9d65-67021cfecfed-30423106
To: <sip:4240@sipsig-ccm97>;tag=356b302512f26c04
Allow: INVITE, ACK, CANCEL, BYE, UPDATE, INFO, OPTIONS, REFER, NOTIFY
Server: TANDBERG/516 (TC5.0.0.-PreAlpha (TEST SW))
Supported: replaces,100rel,timer,gruu,path,outbound,X-cisco-callinfo,X-cisco-serviceuri,X-cisco-service-
control,norefersub,extended-refer
Require: timer
Session-Expires: 1800;refresher=uas
Min-SE: 1800
Content-Type: application/sdp
Content-Length: 2459

```

```

v=0
o=tandberg 27 3 IN IP4 172.18.198.11
s=-
c=IN IP4 172.18.198.11
b=AS:6000
t=0 0
m=audio 16584 RTP/AVP 100 102 103 104 105 106 9 8 0 101
b=TIAS:128000

```



```

a=rtpmap:100 MP4A-LATM/90000
a=fmtp:100 profile-level-id=25;object=23;bitrate=128000
a=rtpmap:102 MP4A-LATM/90000
a=fmtp:102 profile-level-id=24;object=23;bitrate=64000
a=rtpmap:103 MP4A-LATM/90000
a=fmtp:103 profile-level-id=24;object=23;bitrate=56000
a=rtpmap:104 MP4A-LATM/90000
a=fmtp:104 profile-level-id=24;object=23;bitrate=48000
a=rtpmap:105 G7221/16000
a=fmtp:105 bitrate=32000
a=rtpmap:106 G7221/16000
a=fmtp:106 bitrate=24000
a=rtpmap:9 G722/8000
a=rtpmap:8 PCMA/8000
a=rtpmap:0 PCMU/8000
a=rtpmap:101 telephone-event/8000
a=fmtp:101 0-15
a=sendrecv
m=video 16586 RTP/AVP 97 98 99 34 31
b=TIAS:6000000
a=rtpmap:97 H264/90000
a=fmtp:97 profile-level-id=428016;max-br=5000;max-mbps=245000;max-fs=9000;max-smbps=245000;max-fps=6000
a=rtpmap:98 H264/90000
a=fmtp:98 profile-level-id=428016;max-br=5000;max-mbps=245000;max-fs=9000;max-smbps=245000;packetization-
mode=1;max-fps=6000
a=rtpmap:99 H263-1998/90000
a=fmtp:99
custom=1280,768,3;custom=1280,720,3;custom=1024,768,1;custom=1024,576,2;custom=800,600,1;cif4=1;custom=720,4
80,1;custom=640,480,1;custom=512,288,1;cif=1;custom=352,240,1;qcif=1;maxbr=20000
a=rtpmap:34 H263/90000
a=fmtp:34 cif4=1;cif=1;qcif=1;maxbr=20000
a=rtpmap:31 H261/90000
a=fmtp:31 cif=1;qcif=1;maxbr=20000
a=rtcp-fb:* nack pli
a=sendrecv
a=content:main
a=label:11
a=answer:full
m=application 5070 UDP/BFCP *
a=floorctrl:c-s
a=confid:1
a=floorid:2 mstrm:12
a=userid:27
a=setup:actpass
a=connection:new
m=video 16588 RTP/AVP 97 98 99 34 31
b=TIAS:6000000
a=rtpmap:97 H264/90000
a=fmtp:97 profile-level-id=428016;max-br=5000;max-mbps=245000;max-fs=9000;max-smbps=245000;max-fps=6000
a=rtpmap:98 H264/90000
a=fmtp:98 profile-level-id=428016;max-br=5000;max-mbps=245000;max-fs=9000;max-smbps=245000;packetization-
mode=1;max-fps=6000
a=rtpmap:99 H263-1998/90000
a=fmtp:99
custom=1280,768,3;custom=1280,720,3;custom=1024,768,1;custom=1024,576,2;custom=800,600,1;cif4=1;custom=720,4
80,1;custom=640,480,1;custom=512,288,1;cif=1;custom=352,240,1;qcif=1;maxbr=20000
a=rtpmap:34 H263/90000
a=fmtp:34 cif4=1;cif=1;qcif=1;maxbr=20000
a=rtpmap:31 H261/90000
a=fmtp:31 cif=1;qcif=1;maxbr=20000
a=rtcp-fb:* nack pli
a=sendrecv
a=content:slides
a=label:12
m=application 16590 RTP/AVP 107
a=rtpmap:107 H224/4800
a=sendrecv

```

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

[22] ACK sip:4240@172.18.198.11:38905;transport=tcp SIP/2.0

Via: SIP/2.0/TCP 172.18.202.97:5060;branch=z9hG4bK2b5b6783328e

From: <sip:4140@172.18.202.97>;tag=467552~b5a88942-7acc-4cc9-9d65-67021cfecfed-30423106

To: <sip:4240@sipsig-ccm97>;tag=356b302512f26c04

Date: Tue, 20 Dec 2011 18:45:59 GMT

Call-ID: cb77e080-ef01d7ce-56-61ca12ac@172.18.202.97

Max-Forwards: 70

CSeq: 103 ACK

Allow-Events: presence

Content-Type: application/sdp

Content-Length: 884


```

v=0
o=CiscoSystemsCCM-SIP 467552 3 IN IP4 172.18.202.97
s=SIP Call
t=0 0
m=audio 4000 RTP/AVP 0
c=IN IP4 172.18.202.97
b=TIAS:64000
a=rtpmap:0 PCMU/8000
a=ptime:20
a=sendonly
m=video 0 RTP/AVP 98
c=IN IP4 172.18.198.24
b=TIAS:5936000
a=label:11
a=rtpmap:98 H264/90000
a=fmtp:98 profile-level-id=428016;packetization-mode=1;max-mbps=108000;max-fs=3600;max-cpb=200;max-br=5000;max-smbps=108000;max-fps=6000
a=content:main
m=application 0 UDP/BFCP *
c=IN IP4 172.18.198.24
a=floorctrl:s-only
a=floorid:2 mstrm:12
a=confid:1
a=userid:44
m=video 0 RTP/AVP 98
c=IN IP4 172.18.198.24
b=TIAS:5936000
a=label:12
a=rtpmap:98 H264/90000
a=fmtp:98 profile-level-id=428016;packetization-mode=1;max-mbps=108000;max-fs=3840;max-cpb=200;max-br=5000;max-smbps=108000;max-fps=6000
a=content:slides
m=application 0 RTP/AVP 107
c=IN IP4 172.18.198.24
a=rtpmap:107 H224/0

```

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

[23] ACK sip:4240@172.18.202.97:5060;transport=tcp SIP/2.0

Via: SIP/2.0/TCP 172.18.198.24:5060;branch=z9hG4bK18db4c6a1f1af4eda7070e214488e56c.1;rport

Call-ID: 7461051bd12fc458@172.18.198.24

CSeq: 101 ACK

From: <sip:4140@sipsig-ccm97>;tag=cc67b70d999e0199

To: <sip:4240@sipsig-ccm97>;tag=467551-b5a88942-7acc-4cc9-9d65-67021cfecfed-30423105

Max-Forwards: 70

Allow: INVITE,ACK,CANCEL,BYE,UPDATE,INFO,OPTIONS,REFER,NOTIFY

User-Agent: TANDBERG/516 (TC5.0.0.-PreAlpha (TEST SW))

Supported: replaces,100rel,timer,gruu,path,outbound,X-cisco-callinfo,X-cisco-serviceuri,X-cisco-service-control,norefersub,extended-refer

Content-Length: 0

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

[24] INVITE sip:4240@172.18.202.97:5060;transport=tcp SIP/2.0

Via: SIP/2.0/TCP 172.18.198.24:5060;branch=z9hG4bK6e35c9b110043072a9646027aa81e81c.1;rport

Call-ID: 7461051bd12fc458@172.18.198.24

CSeq: 102 INVITE

Contact: <sip:4140@172.18.198.24:43624;transport=tcp>

From: <sip:4140@sipsig-ccm97>;tag=cc67b70d999e0199

To: <sip:4240@sipsig-ccm97>;tag=467551-b5a88942-7acc-4cc9-9d65-67021cfecfed-30423105

Max-Forwards: 70

Allow: INVITE,ACK,CANCEL,BYE,UPDATE,INFO,OPTIONS,REFER,NOTIFY

User-Agent: TANDBERG/516 (TC5.0.0.-PreAlpha (TEST SW))

Supported: replaces,100rel,timer,gruu,path,outbound,X-cisco-callinfo,X-cisco-serviceuri,X-cisco-service-control,norefersub,extended-refer

Call-Info: <urn:x-cisco-remotecc:resume>

Session-Expires: 1800;refresher=uac

Min-SE: 90

Remote-Party-ID: <sip:4140@sipsig-ccm97>;privacy=off;id-type=subscriber;screen=yes;party=calling

Content-Type: application/sdp

Content-Length: 2459

```

v=0
o=tandberg 44 3 IN IP4 172.18.198.24
s=-
c=IN IP4 172.18.198.24
b=AS:6000
t=0 0
m=audio 16720 RTP/AVP 100 102 103 104 105 106 9 8 0 101
b=TIAS:128000
a=rtpmap:100 MP4A-LATM/90000
a=fmtp:100 profile-level-id=25;object=23;bitrate=128000
a=rtpmap:102 MP4A-LATM/90000

```

```

a=fmtp:102 profile-level-id=24;object=23;bitrate=64000
a=rtpmap:103 MP4A-LATM/90000
a=fmtp:103 profile-level-id=24;object=23;bitrate=56000
a=rtpmap:104 MP4A-LATM/90000
a=fmtp:104 profile-level-id=24;object=23;bitrate=48000
a=rtpmap:105 G7221/16000
a=fmtp:105 bitrate=32000
a=rtpmap:106 G7221/16000
a=fmtp:106 bitrate=24000
a=rtpmap:9 G722/8000
a=rtpmap:8 PCMA/8000
a=rtpmap:0 PCMU/8000
a=rtpmap:101 telephone-event/8000
a=fmtp:101 0-15
a=sendrecv
m=video 16722 RTP/AVP 97 98 99 34 31
b=TIAS:6000000
a=rtpmap:97 H264/90000
a=fmtp:97 profile-level-id=428016;max-br=5000;max-mbps=108000;max-fs=3600;max-smbps=108000;max-fps=6000
a=rtpmap:98 H264/90000
a=fmtp:98 profile-level-id=428016;max-br=5000;max-mbps=108000;max-fs=3600;max-smbps=108000;packetization-
mode=1;max-fps=6000
a=rtpmap:99 H263-1998/90000
a=fmtp:99
custom=1280,768,3;custom=1280,720,3;custom=1024,768,1;custom=1024,576,2;custom=800,600,1;cif4=1;custom=720,4
80,1;custom=640,480,1;custom=512,288,1;cif=1;custom=352,240,1;qcif=1;maxbr=20000
a=rtpmap:34 H263/90000
a=fmtp:34 cif4=1;cif=1;qcif=1;maxbr=20000
a=rtpmap:31 H261/90000
a=fmtp:31 cif=1;qcif=1;maxbr=20000
a=rtcp-fb:* nack pli
a=sendrecv
a=content:main
a=label:11
a=answer:full
m=application 5070 UDP/BFCP *
a=floorctrl:c-s
a=confid:1
a=floorid:2 mstrm:12
a=userid:44
a=setup:actpass
a=connection:new
m=video 16724 RTP/AVP 97 98 99 34 31
b=TIAS:6000000
a=rtpmap:97 H264/90000
a=fmtp:97 profile-level-id=428016;max-br=5000;max-mbps=108000;max-fs=3840;max-smbps=108000;max-fps=6000
a=rtpmap:98 H264/90000
a=fmtp:98 profile-level-id=428016;max-br=5000;max-mbps=108000;max-fs=3840;max-smbps=108000;packetization-
mode=1;max-fps=6000
a=rtpmap:99 H263-1998/90000
a=fmtp:99
custom=1280,768,3;custom=1280,720,3;custom=1024,768,1;custom=1024,576,2;custom=800,600,1;cif4=1;custom=720,4
80,1;custom=640,480,1;custom=512,288,1;cif=1;custom=352,240,1;qcif=1;maxbr=20000
a=rtpmap:34 H263/90000
a=fmtp:34 cif4=1;cif=1;qcif=1;maxbr=20000
a=rtpmap:31 H261/90000
a=fmtp:31 cif=1;qcif=1;maxbr=20000
a=rtcp-fb:* nack pli
a=sendrecv
a=content:slides
a=label:12
m=application 16726 RTP/AVP 107
a=rtpmap:107 H224/4800
a=sendrecv

```

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

[25] SIP/2.0 100 Trying

```

Via: SIP/2.0/TCP 172.18.198.24:5060;branch=z9hG4bK6e35c9b110043072a9646027aa81e81c.1;rport
From: <sip:4140@sipsig-ccm97>;tag=cc67b70d999e0199
To: <sip:4240@sipsig-ccm97>;tag=467551-b5a88942-7acc-4cc9-9d65-67021cfecfed-30423105
Date: Tue, 20 Dec 2011 18:46:09 GMT
Call-ID: 7461051bd12fc458@172.18.198.24
CSeq: 102 INVITE
Allow-Events: presence
Content-Length: 0

```

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

[26] INVITE sip:4240@172.18.198.11:38905;transport=tcp SIP/2.0

```

Via: SIP/2.0/TCP 172.18.202.97:5060;branch=z9hG4bK2b5c2ace4826
From: <sip:4140@172.18.202.97>;tag=467552-b5a88942-7acc-4cc9-9d65-67021cfecfed-30423106
To: <sip:4240@sipsig-ccm97>;tag=356b302512f26c04

```

```

Date: Tue, 20 Dec 2011 18:46:09 GMT
Call-ID: cb77e080-ef01d7ce-56-61ca12ac@172.18.202.97
Supported: timer,resource-priority,replaces
Min-SE: 1800
User-Agent: Cisco-CUCM8.6
Allow: INVITE, OPTIONS, INFO, BYE, CANCEL, ACK, PRACK, UPDATE, REFER, SUBSCRIBE, NOTIFY
CSeq: 104 INVITE
Max-Forwards: 70
Expires: 180
Allow-Events: presence
Call-Info: <urn:x-cisco-remotecc:callinfo>; security= NotAuthenticated; orientation= from; gci= 1-167029;
call-instance= 1
Session-Expires: 1800;refresher=uas
Remote-Party-ID: <sip:4140@172.18.202.97>;party=calling;screen=yes;privacy=off
Contact: <sip:4140@172.18.202.97:5060;transport=tcp>
Content-Type: application/sdp
Content-Length: 890

```

```

v=0
o=CiscoSystemsCCM-SIP 467552 4 IN IP4 172.18.202.97
s=SIP Call
t=0 0
m=audio 4000 RTP/AVP 0
c=IN IP4 0.0.0.0
b=TIAS:64000
a=rtpmap:0 PCMU/8000
a=ptime:20
a=inactive
m=video 0 RTP/AVP 98
c=IN IP4 0.0.0.0
b=TIAS:5936000
a=label:11
a=rtpmap:98 H264/90000
a=fmtp:98 profile-level-id=428016;packetization-mode=1;max-mbps=108000;max-fs=3600;max-cpb=200;max-br=5000;max-smbps=108000;max-fps=6000
a=content:main
a=inactive
m=application 0 UDP/BFCP *
c=IN IP4 0.0.0.0
a=floorctrl:s-only
a=floorid:2 mstrm:12
a=confid:1
a=userid:44
m=video 0 RTP/AVP 98
c=IN IP4 0.0.0.0
b=TIAS:5936000
a=label:12
a=rtpmap:98 H264/90000
a=fmtp:98 profile-level-id=428016;packetization-mode=1;max-mbps=108000;max-fs=3840;max-cpb=200;max-br=5000;max-smbps=108000;max-fps=6000
a=content:slides
a=inactive
m=application 0 RTP/AVP 107
c=IN IP4 0.0.0.0
a=rtpmap:107 H224/0
a=inactive

```

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

[27] SIP/2.0 200 OK

```

Via: SIP/2.0/TCP 172.18.202.97:5060;branch=z9hG4bK2b5c2ace4826;received=172.18.202.97
Call-ID: cb77e080-ef01d7ce-56-61ca12ac@172.18.202.97
CSeq: 104 INVITE
Contact: <sip:4240@172.18.198.11:38905;transport=tcp>
From: <sip:4140@172.18.202.97>;tag=467552~b5a88942-7acc-4cc9-9d65-67021cfecfed-30423106
To: <sip:4240@sipsig-ccm97>;tag=356b302512f26c04
Allow: INVITE, ACK, CANCEL, BYE, UPDATE, INFO, OPTIONS, REFER, NOTIFY
Server: TANDBERG/516 (TC5.0.0.-PreAlpha (TEST SW))
Supported: replaces,100rel,timer,gruu,path,outbound,X-cisco-callinfo,X-cisco-serviceuri,X-cisco-service-control,norefersub,extended-refer
Require: timer
Session-Expires: 1800;refresher=uas
Min-SE: 1800
Content-Type: application/sdp
Content-Length: 264

```

```

v=0
o=tandberg 27 4 IN IP4 172.18.198.11
s=-
c=IN IP4 172.18.198.11
b=AS:6000
t=0 0

```

```

m=audio 16584 RTP/AVP 0
b=TIAS:64000
a=rtpmap:0 PCMU/8000
a=inactive
m=video 0 RTP/AVP 98
m=application 0 UDP/BFCP *
m=video 0 RTP/AVP 98
m=application 0 RTP/AVP 107

```

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

```

[28] ACK sip:4240@172.18.198.11:38905;transport=tcp SIP/2.0
Via: SIP/2.0/TCP 172.18.202.97:5060;branch=z9hG4bK2b5d1de2de7e
From: <sip:4140@172.18.202.97>;tag=467552~b5a88942-7acc-4cc9-9d65-67021cfecfed-30423106
To: <sip:4240@sipsig-ccm97>;tag=356b302512f26c04
Date: Tue, 20 Dec 2011 18:46:09 GMT
Call-ID: cb77e080-ef01d7ce-56-61ca12ac@172.18.202.97
Max-Forwards: 70
CSeq: 104 ACK
Allow-Events: presence
Content-Length: 0

```

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

```

[29] INVITE sip:4240@172.18.198.11:38905;transport=tcp SIP/2.0
Via: SIP/2.0/TCP 172.18.202.97:5060;branch=z9hG4bK2b5e7f801d0e
From: <sip:4140@172.18.202.97>;tag=467552~b5a88942-7acc-4cc9-9d65-67021cfecfed-30423106
To: <sip:4240@sipsig-ccm97>;tag=356b302512f26c04
Date: Tue, 20 Dec 2011 18:46:09 GMT
Call-ID: cb77e080-ef01d7ce-56-61ca12ac@172.18.202.97
Supported: timer,resource-priority,replaces
Min-SE: 1800
User-Agent: Cisco-CUCM8.6
Allow: INVITE, OPTIONS, INFO, BYE, CANCEL, ACK, PRACK, UPDATE, REFER, SUBSCRIBE, NOTIFY
CSeq: 105 INVITE
Max-Forwards: 70
Expires: 180
Allow-Events: presence
Call-Info: <urn:x-cisco-remotecc:callinfo>; security= NotAuthenticated; orientation= from; gci= 1-167029;
call-instance= 1
Session-Expires: 1800;refresher=uas
Remote-Party-ID: <sip:4140@172.18.202.97>;party=calling;screen=yes;privacy=off
Contact: <sip:4140@172.18.202.97:5060;transport=tcp>;video;audio
Content-Length: 0

```

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

```

[30] SIP/2.0 200 OK
Via: SIP/2.0/TCP 172.18.202.97:5060;branch=z9hG4bK2b5e7f801d0e;received=172.18.202.97
Call-ID: cb77e080-ef01d7ce-56-61ca12ac@172.18.202.97
CSeq: 105 INVITE
Contact: <sip:4240@172.18.198.11:38905;transport=tcp>
From: <sip:4140@172.18.202.97>;tag=467552~b5a88942-7acc-4cc9-9d65-67021cfecfed-30423106
To: <sip:4240@sipsig-ccm97>;tag=356b302512f26c04
Allow: INVITE, ACK, CANCEL, BYE, UPDATE, INFO, OPTIONS, REFER, NOTIFY
Server: TANDBERG/516 (TC5.0.0.-PreAlpha (TEST SW))
Supported: replaces,100rel,timer,gruu,path,outbound,X-cisco-callinfo,X-cisco-serviceuri,X-cisco-service-
control,norefersub,extended-refer
Require: timer
Session-Expires: 1800;refresher=uas
Min-SE: 1800
Content-Type: application/sdp
Content-Length: 2459

```

```

v=0
o=tandberg 27 5 IN IP4 172.18.198.11
s=-
c=IN IP4 172.18.198.11
b=AS:6000
t=0 0
m=audio 16584 RTP/AVP 100 102 103 104 105 106 9 8 0 101
b=TIAS:128000
a=rtpmap:100 MP4A-LATM/90000
a=fmtp:100 profile-level-id=25;object=23;bitrate=128000
a=rtpmap:102 MP4A-LATM/90000
a=fmtp:102 profile-level-id=24;object=23;bitrate=64000
a=rtpmap:103 MP4A-LATM/90000
a=fmtp:103 profile-level-id=24;object=23;bitrate=56000
a=rtpmap:104 MP4A-LATM/90000
a=fmtp:104 profile-level-id=24;object=23;bitrate=48000
a=rtpmap:105 G7221/16000
a=fmtp:105 bitrate=32000
a=rtpmap:106 G7221/16000
a=fmtp:106 bitrate=24000

```

```

a=rtpmap:9 G722/8000
a=rtpmap:8 PCMA/8000
a=rtpmap:0 PCMU/8000
a=rtpmap:101 telephone-event/8000
a=fmtp:101 0-15
a=sendrecv
m=video 16586 RTP/AVP 97 98 99 34 31
b=TIAS:6000000
a=rtpmap:97 H264/90000
a=fmtp:97 profile-level-id=428016;max-br=5000;max-mbps=245000;max-fs=9000;max-smbps=245000;max-fps=6000
a=rtpmap:98 H264/90000
a=fmtp:98 profile-level-id=428016;max-br=5000;max-mbps=245000;max-fs=9000;max-smbps=245000;packetization-
mode=1;max-fps=6000
a=rtpmap:99 H263-1998/90000
a=fmtp:99
custom=1280,768,3;custom=1280,720,3;custom=1024,768,1;custom=1024,576,2;custom=800,600,1;cif4=1;custom=720,4
80,1;custom=640,480,1;custom=512,288,1;cif=1;custom=352,240,1;qcif=1;maxbr=20000
a=rtpmap:34 H263/90000
a=fmtp:34 cif4=1;cif=1;qcif=1;maxbr=20000
a=rtpmap:31 H261/90000
a=fmtp:31 cif=1;qcif=1;maxbr=20000
a=rtcp-fb:* nack pli
a=sendrecv
a=content:main
a=label:11
a=answer:full
m=application 5070 UDP/BFCP *
a=floorctrl:c-s
a=confid:1
a=floorid:2 mstrm:12
a=userid:27
a=setup:actpass
a=connection:new
m=video 16588 RTP/AVP 97 98 99 34 31
b=TIAS:6000000
a=rtpmap:97 H264/90000
a=fmtp:97 profile-level-id=428016;max-br=5000;max-mbps=245000;max-fs=9000;max-smbps=245000;max-fps=6000
a=rtpmap:98 H264/90000
a=fmtp:98 profile-level-id=428016;max-br=5000;max-mbps=245000;max-fs=9000;max-smbps=245000;packetization-
mode=1;max-fps=6000
a=rtpmap:99 H263-1998/90000
a=fmtp:99
custom=1280,768,3;custom=1280,720,3;custom=1024,768,1;custom=1024,576,2;custom=800,600,1;cif4=1;custom=720,4
80,1;custom=640,480,1;custom=512,288,1;cif=1;custom=352,240,1;qcif=1;maxbr=20000
a=rtpmap:34 H263/90000
a=fmtp:34 cif4=1;cif=1;qcif=1;maxbr=20000
a=rtpmap:31 H261/90000
a=fmtp:31 cif=1;qcif=1;maxbr=20000
a=rtcp-fb:* nack pli
a=sendrecv
a=content:slides
a=label:12
m=application 16590 RTP/AVP 107
a=rtpmap:107 H224/4800
a=sendrecv

```

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

[31] ACK sip:4240@172.18.198.11:38905;transport=tcp SIP/2.0

```

Via: SIP/2.0/TCP 172.18.202.97:5060;branch=z9hG4bK2b5f509e395
From: <sip:4140@172.18.202.97>;tag=467552-b5a88942-7acc-4cc9-9d65-67021cfecfed-30423106
To: <sip:4240@sipsig-ccm97>;tag=356b302512f26c04
Date: Tue, 20 Dec 2011 18:46:09 GMT
Call-ID: cb77e080-ef01d7ce-56-61ca12ac@172.18.202.97
Max-Forwards: 70
CSeq: 105 ACK
Allow-Events: presence
Content-Type: application/sdp
Content-Length: 1053

```

```

v=0
o=CiscoSystemsCCM-SIP 467552 5 IN IP4 172.18.202.97
s=SIP Call
b=AS:6000
t=0 0
m=audio 16720 RTP/AVP 102 101
c=IN IP4 172.18.198.24
b=TIAS:64000
a=rtpmap:102 MP4A-LATM/90000
a=fmtp:102 bitrate=64000;profile-level-id=24;object=23
a=rtpmap:101 telephone-event/8000
a=fmtp:101 0-15

```

```

m=video 16722 RTP/AVP 98
c=IN IP4 172.18.198.24
b=TIAS:5936000
a=label:11
a=rtpmap:98 H264/90000
a=fmtp:98 profile-level-id=428016;packetization-mode=1;max-mbps=108000;max-fs=3600;max-cpb=200;max-br=5000;max-smbps=108000;max-fps=6000
a=content:main
a=rtcp-fb:* nack pli
m=application 5070 UDP/BFCP *
c=IN IP4 172.18.198.24
a=floorctrl:s-only
a=floorid:2 mstrm:12
a=confid:1
a=userid:44
m=video 16724 RTP/AVP 98
c=IN IP4 172.18.198.24
b=TIAS:5936000
a=label:12
a=rtpmap:98 H264/90000
a=fmtp:98 profile-level-id=428016;packetization-mode=1;max-mbps=108000;max-fs=3840;max-cpb=200;max-br=5000;max-smbps=108000;max-fps=6000
a=content:slides
a=rtcp-fb:* nack pli
m=application 16726 RTP/AVP 107
c=IN IP4 172.18.198.24
a=rtpmap:107 H224/0

```

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

[32] SIP/2.0 200 OK

```

Via: SIP/2.0/TCP 172.18.198.24:5060;branch=z9hG4bK6e35c9b110043072a9646027aa81e81c.1;rport
From: <sip:4140@sipsig-ccm97>;tag=cc67b70d999e0199
To: <sip:4240@sipsig-ccm97>;tag=467551-b5a88942-7acc-4cc9-9d65-67021cfecfed-30423105
Date: Tue, 20 Dec 2011 18:46:09 GMT
Call-ID: 7461051bd12fc458@172.18.198.24
CSeq: 102 INVITE
Allow: INVITE, OPTIONS, INFO, BYE, CANCEL, ACK, PRACK, UPDATE, REFER, SUBSCRIBE, NOTIFY
Allow-Events: presence
Supported: replaces
Call-Info: <urn:x-cisco-remotecc:callinfo>; security= NotAuthenticated; orientation= to; gci= 1-167029; call-instance= 1
Session-Expires: 1800;refresher=uac
Require: timer
Remote-Party-ID: <sip:4240@172.18.202.97>;party=called;screen=yes;privacy=off
Contact: <sip:4240@172.18.202.97:5060;transport=tcp>
Content-Type: application/sdp
Content-Length: 1053

```

```

v=0
o=CiscoSystemsCCM-SIP 467551 3 IN IP4 172.18.202.97
s=SIP Call
b=AS:6000
t=0 0
m=audio 16584 RTP/AVP 102 101
c=IN IP4 172.18.198.11
b=TIAS:64000
a=rtpmap:102 MP4A-LATM/90000
a=fmtp:102 bitrate=64000;profile-level-id=24;object=23
a=rtpmap:101 telephone-event/8000
a=fmtp:101 0-15
m=video 16586 RTP/AVP 98
c=IN IP4 172.18.198.11
b=TIAS:5936000
a=label:11
a=rtpmap:98 H264/90000
a=fmtp:98 profile-level-id=428016;packetization-mode=1;max-mbps=245000;max-fs=9000;max-cpb=200;max-br=5000;max-smbps=245000;max-fps=6000
a=content:main
a=rtcp-fb:* nack pli
m=application 5070 UDP/BFCP *
c=IN IP4 172.18.198.11
a=floorctrl:c-only
a=floorid:2 mstrm:12
a=confid:1
a=userid:27
m=video 16588 RTP/AVP 98
c=IN IP4 172.18.198.11
b=TIAS:5936000
a=label:12
a=rtpmap:98 H264/90000
a=fmtp:98 profile-level-id=428016;packetization-mode=1;max-mbps=245000;max-fs=9000;max-cpb=200;max-

```



```

br=5000;max-smbps=245000;max-fps=6000
a=content:slides
a=rtcp-fb:* nack pli
m=application 16590 RTP/AVP 107
c=IN IP4 172.18.198.11
a=rtpmap:107 H224/0

```

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

[33] ACK sip:4240@172.18.202.97:5060;transport=tcp SIP/2.0

```

Via: SIP/2.0/TCP 172.18.198.24:5060;branch=z9hG4bKb098885d38faa4c8f6189e3930c35845.1;rport
Call-ID: 7461051bd12fc458@172.18.198.24
CSeq: 102 ACK
From: <sip:4140@sipsig-ccm97>;tag=cc67b70d999e0199
To: <sip:4240@sipsig-ccm97>;tag=467551-b5a88942-7acc-4cc9-9d65-67021cfecfed-30423105
Max-Forwards: 70
Allow: INVITE,ACK,CANCEL,BYE,UPDATE,INFO,OPTIONS,REFER,NOTIFY
User-Agent: TANDBERG/516 (TC5.0.0.-PreAlpha (TEST SW))
Supported: replaces,100rel,timer,gruu,path,outbound,X-cisco-callinfo,X-cisco-serviceuri,X-cisco-service-control,norefersub,extended-refer
Content-Length: 0

```

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

[34] SIP/2.0 503 Service Unavailable

```

Via: SIP/2.0/TCP 172.18.202.130:5060;branch=z9hG4bKKeaa119a4161c334e621ce855e38547d72117342;rport
From: <sip:172.18.202.130>;tag=e8d228620d434499
To: <sip:172.18.202.97:5060>;tag=1553549568
Date: Tue, 20 Dec 2011 18:46:11 GMT
Call-ID: 8e189dbecde4a2da@172.18.202.130
CSeq: 62011 OPTIONS
Warning: 399 sipsig-ccm97 "Unable to find a device handler for the request received on port 28024 from 172.18.202.130"
Content-Length: 0

```

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

[35] OPTIONS sip:172.18.202.97:5060;transport=tcp SIP/2.0

```

Via: SIP/2.0/TCP 172.18.202.130:5060;branch=z9hG4bKKeaa119a4161c334e621ce855e38547d72117342;rport
Call-ID: 8e189dbecde4a2da@172.18.202.130
CSeq: 62011 OPTIONS
From: <sip:172.18.202.130>;tag=e8d228620d434499
To: <sip:172.18.202.97:5060>
Max-Forwards: 0
User-Agent: TANDBERG/4100 (X6.1)
Supported: com.tandberg.vcs.resourceusage
Content-Length: 0

```

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

[36] BYE sip:4240@172.18.202.97:5060;transport=tcp SIP/2.0

```

Via: SIP/2.0/TCP 172.18.198.24:5060;branch=z9hG4bK078b05bc0acfa07b224b3da9cac58e32.1;rport
Call-ID: 7461051bd12fc458@172.18.198.24
CSeq: 103 BYE
Contact: <sip:4140@172.18.198.24:43624;transport=tcp>;+sip.instance="<urn:uuid:00000000-0000-0000-0000-0050600491d7>";+u.sip!model.ccm.cisco.com="584";audio=TRUE;video=TRUE;mobility="fixed";duplex="full";description="TANDBERG-SIP"
From: <sip:4140@sipsig-ccm97>;tag=cc67b70d999e0199
To: <sip:4240@sipsig-ccm97>;tag=467551-b5a88942-7acc-4cc9-9d65-67021cfecfed-30423105
Max-Forwards: 70
Allow: INVITE,ACK,CANCEL,BYE,UPDATE,INFO,OPTIONS,REFER,NOTIFY
User-Agent: TANDBERG/516 (TC5.0.0.-PreAlpha (TEST SW))
Supported: replaces,100rel,timer,gruu,path,outbound,X-cisco-callinfo,X-cisco-serviceuri,X-cisco-service-control,norefersub,extended-refer
Content-Length: 0

```

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

[37] SIP/2.0 200 OK

```

Via: SIP/2.0/TCP 172.18.198.24:5060;branch=z9hG4bK078b05bc0acfa07b224b3da9cac58e32.1;rport
From: <sip:4140@sipsig-ccm97>;tag=cc67b70d999e0199
To: <sip:4240@sipsig-ccm97>;tag=467551-b5a88942-7acc-4cc9-9d65-67021cfecfed-30423105
Date: Tue, 20 Dec 2011 18:46:18 GMT
Call-ID: 7461051bd12fc458@172.18.198.24
CSeq: 103 BYE
Content-Length: 0

```

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

[38] BYE sip:4240@172.18.198.11:38905;transport=tcp SIP/2.0

```

Via: SIP/2.0/TCP 172.18.202.97:5060;branch=z9hG4bK2b6074ca29cf
From: <sip:4140@172.18.202.97>;tag=467552-b5a88942-7acc-4cc9-9d65-67021cfecfed-30423106
To: <sip:4240@sipsig-ccm97>;tag=356b302512f26c04
Date: Tue, 20 Dec 2011 18:46:09 GMT
Call-ID: cb77e080-ef01d7ce-56-61ca12ac@172.18.202.97
User-Agent: Cisco-CUCM8.6
Max-Forwards: 70

```

CSeq: 106 BYE
Reason: Q.850;cause=16
Content-Length: 0

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

[39] SIP/2.0 200 OK

Via: SIP/2.0/TCP 172.18.202.97:5060;branch=z9hG4bK2b6074ca29cf;received=172.18.202.97

Call-ID: cb77e080-ef01d7ce-56-61ca12ac@172.18.202.97

CSeq: 106 BYE

From: <sip:4140@172.18.202.97>;tag=467552~b5a88942-7acc-4cc9-9d65-67021cfecfed-30423106

To: <sip:4240@sipsig-ccm97>;tag=356b302512f26c04

Allow: INVITE, ACK, CANCEL, BYE, UPDATE, INFO, OPTIONS, REFER, NOTIFY

Server: TANDBERG/516 (TC5.0.0.-PreAlpha (TEST SW))

Supported: replaces,100rel,timer,gruu,path,outbound,X-cisco-callinfo,X-cisco-serviceuri,X-cisco-service-control,norefersub,extended-refer

Content-Length: 0

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

[40] NOTIFY sip:4230@172.18.202.190:46879;transport=tcp SIP/2.0

Via: SIP/2.0/TCP 172.18.202.97:5060;branch=z9hG4bK2b617f1c4235

From: <sip:4240@sipsig-ccm97>;tag=1556740667

To: <sip:4230@sipsig-ccm97>;tag=54cbc093e545bb9b

Call-ID: 7c19b9a52cd1daaa@172.18.202.190

CSeq: 124 NOTIFY

Max-Forwards: 70

Date: Tue, 20 Dec 2011 18:46:18 GMT

User-Agent: Cisco-CUCM8.6

Event: presence

Subscription-State: active;expires=3293

Contact: <sip:4240@172.18.202.97:5060;transport=tcp>

Content-Type: application/pidf+xml

Content-Length: 736

```
<?xml version="1.0" encoding="UTF-8" standalone="no" ?>
<presence xmlns="urn:ietf:params:xml:ns:pidf" entity="sip:4240@172.18.202.97"
  xmlns:e="urn:ietf:params:xml:ns:pidf:status:rpidd" xmlns:dm="urn:ietf:params:xml:ns:pidf:data-model"
  xmlns:ce="urn:cisco:params:xml:ns:pidf:rpidd" xmlns:sc="urn:ietf:params:xml:ns:pidf:servcaps">
  <dm:person>
    <status>
      <basic>open</basic>
    </status>
    <e:activities>
      </e:activities>
    </dm:person>
    <tuple id="cmp-1-462204">
      <status>
        <basic>open</basic>
      </status>
      <sc:servcaps>
        <sc:audio>true</sc:audio>
      </sc:servcaps>
      <contact priority="0.8">sip:4240@172.18.202.97:5060</contact>
      <timestamp>2011-12-20T18:46:18Z</timestamp>
    </tuple>
  </presence>
```

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

[41] SIP/2.0 200 OK

Via: SIP/2.0/TCP 172.18.202.97:5060;branch=z9hG4bK2b617f1c4235;received=172.18.202.97

Call-ID: 7c19b9a52cd1daaa@172.18.202.190

CSeq: 124 NOTIFY

From: <sip:4240@sipsig-ccm97>;tag=1556740667

To: <sip:4230@sipsig-ccm97>;tag=54cbc093e545bb9b

Server: TANDBERG/257 (TE4.1.0.253886Alpha4)

Content-Length: 0

2.2 Basic video call between EX90 and 9971 and Hold/Resume

Title: Basic video call between EX90 and 9971 and Hold/Resume

Description:

- A calls B
- A and B have two-way audio and video
- B Hold/Resume
- A and B have two-way audio and video
- A ends the call

Configuration:

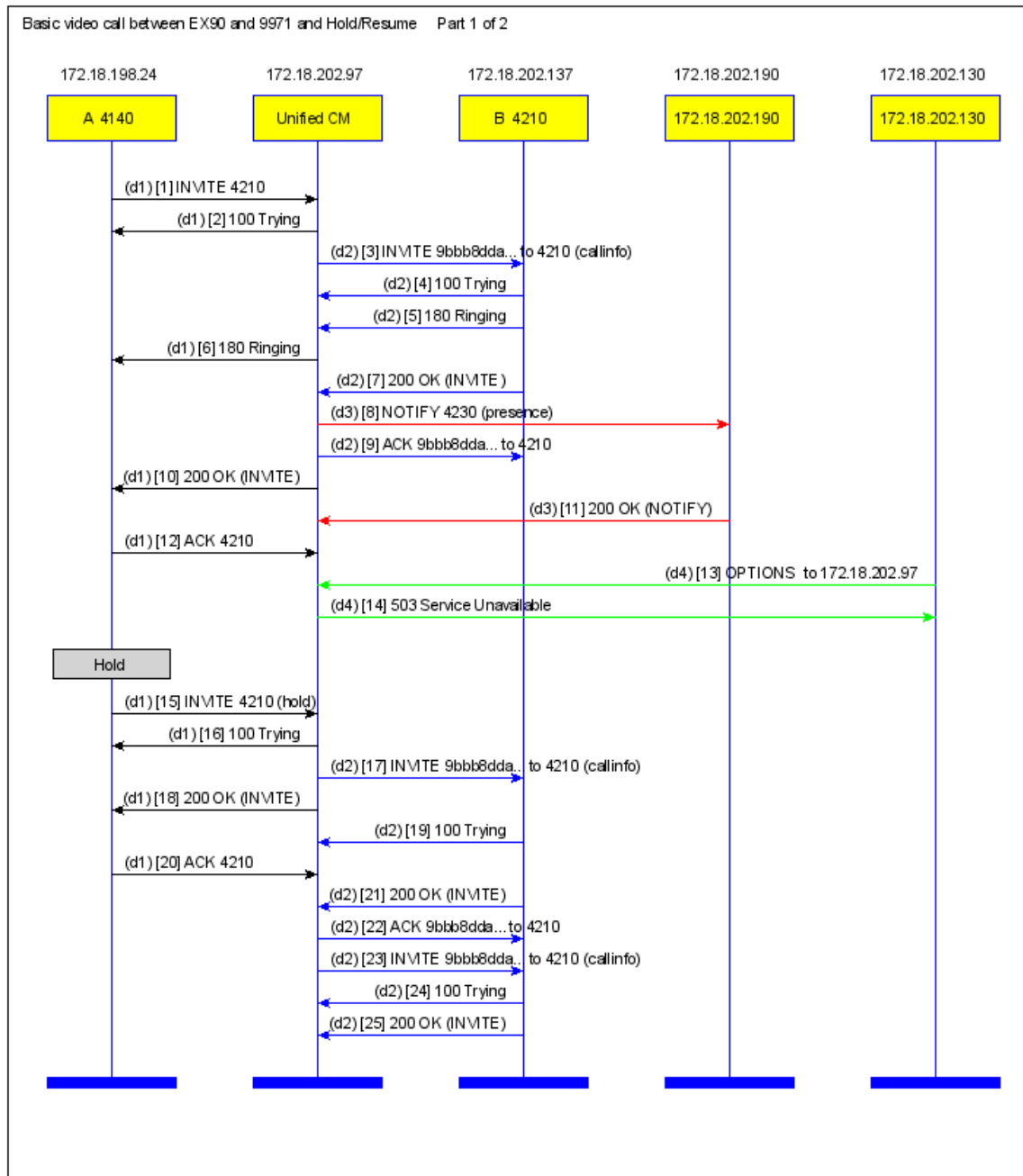
- Node = Unified CM, IP = 172.18.202.97
- Phone = A, Line = 4140, IP = 172.18.198.24, Model = Cisco Telepresence EX90
- Phone = B, Line = 4210, IP = 172.18.202.137, Model = SIP 9971

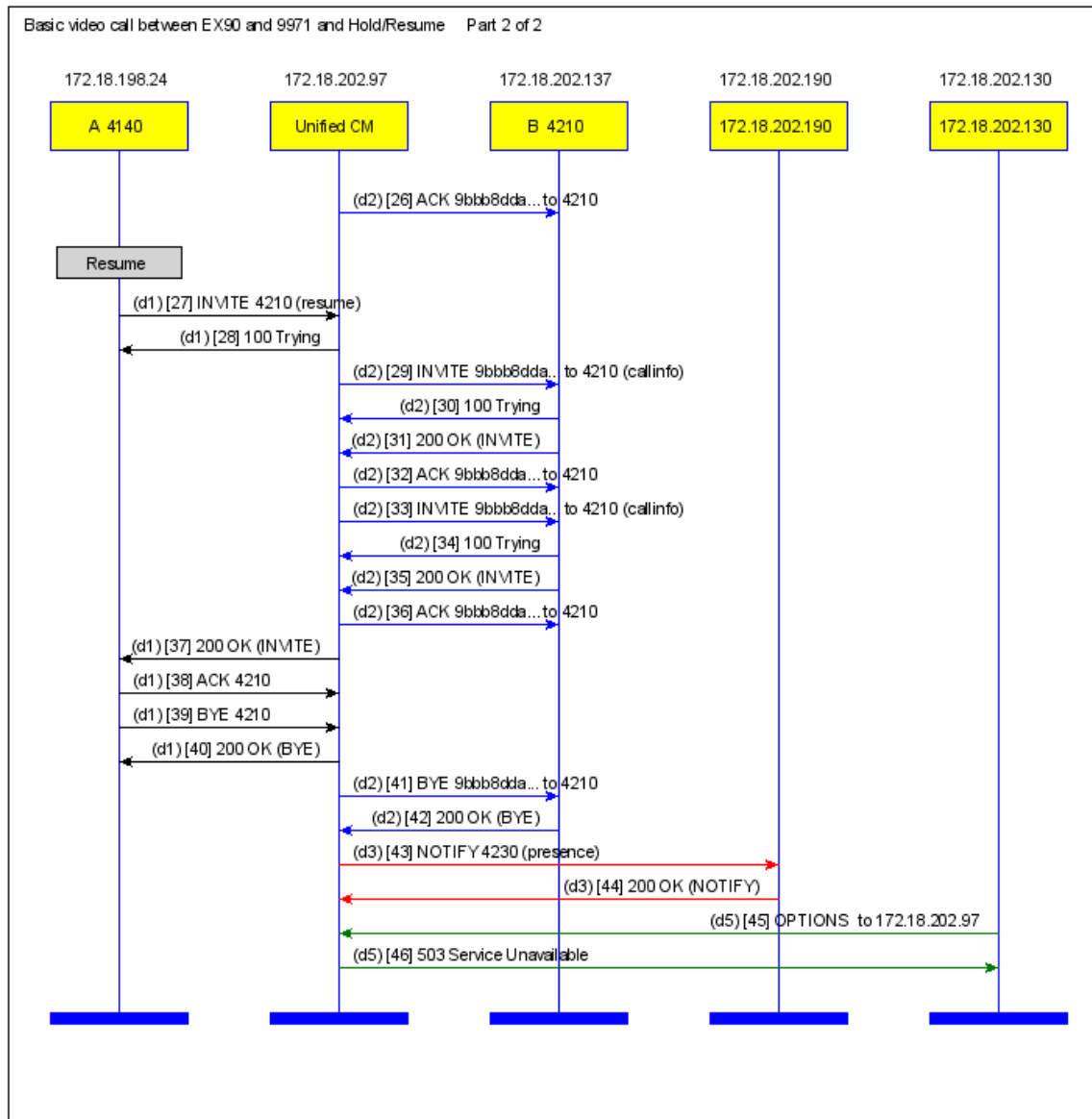
- A has laptop connected to it via HDMI

Scenario:

- 4140 calls 4210
- 4210 answers the call
- 4140 presses Hold
- 4140 presses Resume
- 4140 goes onhook

End of Scenario





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

[1] INVITE sip:4210@sipsig-ccm97 SIP/2.0

Via: SIP/2.0/TCP 172.18.198.24:5060;branch=z9hG4bKa6d9ad1969b19d1ad50810d34e51cbbd.1;rport

Call-ID: c1229954d7a16a8f@172.18.198.24

CSeq: 100 INVITE

Contact: <sip:4140@172.18.198.24:43624;transport=tcp>

From: <sip:4140@sipsig-ccm97>;tag=fefc3b50b0b21cfb

To: <sip:4210@sipsig-ccm97>

Max-Forwards: 70

Route: <sip:172.18.202.97;lr>

Allow: INVITE,ACK,CANCEL,BYE,UPDATE,INFO,OPTIONS,REFER,NOTIFY

User-Agent: TANDBERG/516 (TC5.0.0.-PreAlpha (TEST SW))

Supported: replaces,100rel,timer,gruu,path,outbound,X-cisco-callinfo,X-cisco-serviceuri,X-cisco-service-control,norefersub,extended-refer

Session-Expires: 1800

Remote-Party-ID: <sip:4140@sipsig-ccm97>;privacy=off;id-type=subscriber;screen=yes;party=calling

Content-Type: application/sdp

Content-Length: 2459

v=0

o=tandberg 45 1 IN IP4 172.18.198.24

s=-

c=IN IP4 172.18.198.24

b=AS:6000

t=0 0

m=audio 16728 RTP/AVP 100 102 103 104 105 106 9 8 0 101

b=TIAS:128000

a=rtpmap:100 MP4A-LATM/90000

a=fmtp:100 profile-level-id=25;object=23;bitrate=128000

a=rtpmap:102 MP4A-LATM/90000

a=fmtp:102 profile-level-id=24;object=23;bitrate=64000

a=rtpmap:103 MP4A-LATM/90000

a=fmtp:103 profile-level-id=24;object=23;bitrate=56000

a=rtpmap:104 MP4A-LATM/90000

a=fmtp:104 profile-level-id=24;object=23;bitrate=48000

a=rtpmap:105 G7221/16000

a=fmtp:105 bitrate=32000

a=rtpmap:106 G7221/16000

a=fmtp:106 bitrate=24000

a=rtpmap:9 G722/8000

a=rtpmap:8 PCMA/8000

a=rtpmap:0 PCMU/8000

a=rtpmap:101 telephone-event/8000

a=fmtp:101 0-15

a=sendrecv

m=video 16730 RTP/AVP 97 98 99 34 31

b=TIAS:6000000

a=rtpmap:97 H264/90000

a=fmtp:97 profile-level-id=428016;max-br=5000;max-mbps=108000;max-fs=3600;max-smbps=108000;max-fps=6000

a=rtpmap:98 H264/90000

a=fmtp:98 profile-level-id=428016;max-br=5000;max-mbps=108000;max-fs=3600;max-smbps=108000;packetization-mode=1;max-fps=6000

a=rtpmap:99 H263-1998/90000

a=fmtp:99

custom=1280,768,3;custom=1280,720,3;custom=1024,768,1;custom=1024,576,2;custom=800,600,1;cif4=1;custom=720,480,1;custom=640,480,1;custom=512,288,1;cif=1;custom=352,240,1;qcif=1;maxbr=20000

a=rtpmap:34 H263/90000

a=fmtp:34 cif4=1;cif=1;qcif=1;maxbr=20000

a=rtpmap:31 H261/90000

a=fmtp:31 cif=1;qcif=1;maxbr=20000

a=rtcp-fb:* nack pli

a=sendrecv

a=content:main

a=label:11

a=answer:full

m=application 5070 UDP/BFCP *

a=floorctrl:c-s

a=confid:1

a=floorid:2 mstrm:12

a=userid:45

a=setup:actpass

a=connection:new

m=video 16732 RTP/AVP 97 98 99 34 31

b=TIAS:6000000

a=rtpmap:97 H264/90000

a=fmtp:97 profile-level-id=428016;max-br=5000;max-mbps=108000;max-fs=3840;max-smbps=108000;max-fps=6000

a=rtpmap:98 H264/90000

a=fmtp:98 profile-level-id=428016;max-br=5000;max-mbps=108000;max-fs=3840;max-smbps=108000;packetization-mode=1;max-fps=6000

a=rtpmap:99 H263-1998/90000

a=fmtp:99

```

custom=1280,768,3;custom=1280,720,3;custom=1024,768,1;custom=1024,576,2;custom=800,600,1;cif4=1;custom=720,4
80,1;custom=640,480,1;custom=512,288,1;cif=1;custom=352,240,1;qcif=1;maxbr=20000
a=rtpmap:34 H263/90000
a=fmtp:34 cif4=1;cif=1;qcif=1;maxbr=20000
a=rtpmap:31 H261/90000
a=fmtp:31 cif=1;qcif=1;maxbr=20000
a=rtcp-fb:* nack pli
a=sendrecv
a=content:slides
a=label:12
m=application 16734 RTP/AVP 107
a=rtpmap:107 H224/4800
a=sendrecv

```

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

[2] SIP/2.0 100 Trying

```

Via: SIP/2.0/TCP 172.18.198.24:5060;branch=z9hG4bKa6d9ad1969b19d1ad50810d34e51cbbd.1;rport
From: <sip:4140@sipsig-ccm97>;tag=fefc3b50b0b21cfb
To: <sip:4210@sipsig-ccm97>
Date: Tue, 20 Dec 2011 18:56:13 GMT
Call-ID: c1229954d7a16a8f@172.18.198.24
CSeq: 100 INVITE
Allow-Events: presence
Content-Length: 0

```

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

[3] INVITE sip:9bbb8dda-00ee-701f-1b73-470a40f63088@172.18.202.137:49175;transport=tcp SIP/2.0

```

Via: SIP/2.0/TCP 172.18.202.97:5060;branch=z9hG4bK2b625204eead
From: <sip:4140@172.18.202.97>;tag=467630-b5a88942-7acc-4cc9-9d65-67021cfecfed-30423109
To: <sip:4210@172.18.202.97>
Date: Tue, 20 Dec 2011 18:56:13 GMT
Call-ID: 48578a00-ef01da4d-57-61ca12ac@172.18.202.97
Supported: timer,resource-priority,replaces
Min-SE: 1800
User-Agent: Cisco-CUCM8.6
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; gci= 1-167030;
call-instance= 1
Send-Info: conference, x-cisco-conference
Alert-Info: <file://Bellcore-dr1/>
Remote-Party-ID: <sip:4140@172.18.202.97;x-cisco-callback-number=4140>;party=calling;screen=yes;privacy=off
Contact: <sip:4140@172.18.202.97:5060;transport=tcp>;video;audio
Max-Forwards: 69
Content-Length: 0

```

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

[4] SIP/2.0 100 Trying

```

Via: SIP/2.0/TCP 172.18.202.97:5060;branch=z9hG4bK2b625204eead
From: <sip:4140@172.18.202.97>;tag=467630-b5a88942-7acc-4cc9-9d65-67021cfecfed-30423109
To: <sip:4210@172.18.202.97>
Call-ID: 48578a00-ef01da4d-57-61ca12ac@172.18.202.97
Date: Tue, 20 Dec 2011 18:56:11 GMT
CSeq: 101 INVITE
Server: Cisco-CP9971/9.2.1
Contact: <sip:9bbb8dda-00ee-701f-1b73-470a40f63088@172.18.202.137:49175;transport=tcp>
Allow: ACK, BYE, CANCEL, INVITE, NOTIFY, OPTIONS, REFER, REGISTER, UPDATE, SUBSCRIBE, INFO
Supported: replaces, join, sdp-anat, norefersub, extended-refer, X-cisco-callinfo, X-cisco-serviceuri, X-cisco-
escapecodes, X-cisco-service-control, X-cisco-srtp-fallback, X-cisco-monrec, X-cisco-config, X-cisco-sis-5.1.0, X-
cisco-xsi-8.0.1
Allow-Events: kpml, dialog
Content-Length: 0

```

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

[5] SIP/2.0 180 Ringing

```

Via: SIP/2.0/TCP 172.18.202.97:5060;branch=z9hG4bK2b625204eead
From: <sip:4140@172.18.202.97>;tag=467630-b5a88942-7acc-4cc9-9d65-67021cfecfed-30423109
To: <sip:4210@172.18.202.97>;tag=b4a4e3289b9487571a816b7e-22810f52
Call-ID: 48578a00-ef01da4d-57-61ca12ac@172.18.202.97
Date: Tue, 20 Dec 2011 18:56:11 GMT
CSeq: 101 INVITE
Server: Cisco-CP9971/9.2.1
Contact: <sip:9bbb8dda-00ee-701f-1b73-470a40f63088@172.18.202.137:49175;transport=tcp>
Allow: ACK, BYE, CANCEL, INVITE, NOTIFY, OPTIONS, REFER, REGISTER, UPDATE, SUBSCRIBE, INFO
Remote-Party-ID: "4210" <sip:4210@172.18.202.97>;party=called;id-type=subscriber;privacy=off;screen=yes
Supported: replaces, join, sdp-anat, norefersub, extended-refer, X-cisco-callinfo, X-cisco-serviceuri, X-cisco-
escapecodes, X-cisco-service-control, X-cisco-srtp-fallback, X-cisco-monrec, X-cisco-config, X-cisco-sis-5.1.0, X-
cisco-xsi-8.0.1
Allow-Events: kpml, dialog

```

Content-Length: 0

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

[6] SIP/2.0 180 Ringing

Via: SIP/2.0/TCP 172.18.198.24:5060;branch=z9hG4bKa6d9ad1969b19d1ad50810d34e51cbbd.1;rport
 From: <sip:4140@sipsig-ccm97>;tag=fefc3b50b0b21cfb
 To: <sip:4210@sipsig-ccm97>;tag=467629-b5a88942-7acc-4cc9-9d65-67021cfecfed-30423108
 Date: Tue, 20 Dec 2011 18:56:13 GMT
 Call-ID: c1229954d7a16a8f@172.18.198.24
 CSeq: 100 INVITE
 Allow: INVITE, OPTIONS, INFO, BYE, CANCEL, ACK, PRACK, UPDATE, REFER, SUBSCRIBE, NOTIFY
 Allow-Events: presence
 Call-Info: <urn:x-cisco-remotecc:callinfo>; security= NotAuthenticated; orientation= to; ui-state= ringout;
 gci= 1-167030; call-instance= 1
 Send-Info: conference, x-cisco-conference
 Remote-Party-ID: <sip:4210@172.18.202.97>;party=called;screen=yes;privacy=off
 Contact: <sip:4210@172.18.202.97:5060;transport=tcp>
 Content-Length: 0

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

[7] SIP/2.0 200 OK

Via: SIP/2.0/TCP 172.18.202.97:5060;branch=z9hG4bK2b625204eead
 From: <sip:4140@172.18.202.97>;tag=467630-b5a88942-7acc-4cc9-9d65-67021cfecfed-30423109
 To: <sip:4210@172.18.202.97>;tag=b4a4e3289b9487571a816b7e-22810f52
 Call-ID: 48578a00-ef01da4d-57-61ca12ac@172.18.202.97
 Date: Tue, 20 Dec 2011 18:56:22 GMT
 CSeq: 101 INVITE
 Server: Cisco-CP9971/9.2.1
 Contact: <sip:9bbb8dda-00ee-701f-1b73-470a40f63088@172.18.202.137:49175;transport=tcp>
 Allow: ACK, BYE, CANCEL, INVITE, NOTIFY, OPTIONS, REFER, REGISTER, UPDATE, SUBSCRIBE, INFO
 Remote-Party-ID: "4210" <sip:4210@172.18.202.97>;party=called;id-type=subscriber;privacy=off;screen=yes
 Supported: replaces, join, sdp-anat, norefersub, extended-refer, X-cisco-callinfo, X-cisco-serviceuri, X-cisco-escapecodes, X-cisco-service-control, X-cisco-srtp-fallback, X-cisco-monrec, X-cisco-config, X-cisco-sis-5.1.0, X-cisco-xsi-8.0.1
 Allow-Events: kpml, dialog
 Content-Length: 788
 Content-Type: application/sdp
 Content-Disposition: session;handling=optional

v=0
 o=Cisco-SIPUA 10347 0 IN IP4 172.18.202.137
 s=SIP Call
 t=0 0
 m=audio 21446 RTP/AVP 0 8 18 102 9 116 124 101
 c=IN IP4 172.18.202.137
 a=rtpmap:0 PCMU/8000
 a=rtpmap:8 PCMA/8000
 a=rtpmap:18 G729/8000
 a=fmtp:18 annexb=no
 a=rtpmap:102 L16/16000
 a=rtpmap:9 G722/8000
 a=rtpmap:116 iLBC/8000
 a=fmtp:116 mode=20
 a=rtpmap:124 ISAC/16000
 a=rtpmap:101 telephone-event/8000
 a=fmtp:101 0-15
 a=sendrecv
 m=video 28624 RTP/AVP 126 97
 c=IN IP4 172.18.202.137
 b=TIAS:1000000
 a=rtpmap:126 H264/90000
 a=fmtp:126 profile-level-id=42801E;packetization-mode=1;level-asymmetry-allowed=1
 a=imageattr:* recv [x=640,y=480,q=0.50]
 a=rtpmap:97 H264/90000
 a=fmtp:97 profile-level-id=42801E;packetization-mode=0;level-asymmetry-allowed=1
 a=imageattr:* recv [x=640,y=480,q=0.50]
 a=sendrecv

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

[8] NOTIFY sip:4230@172.18.202.190:46879;transport=tcp SIP/2.0

Via: SIP/2.0/TCP 172.18.202.97:5060;branch=z9hG4bK2b637a61582
 From: <sip:4210@172.18.202.97>;tag=623083919
 To: <sip:4230@sipsig-ccm97>;tag=c4e45bcdb22f59dd
 Call-ID: cea0007ff08eb669@172.18.202.190
 CSeq: 290 NOTIFY
 Max-Forwards: 70
 Date: Tue, 20 Dec 2011 18:56:24 GMT
 User-Agent: Cisco-CUCM8.6
 Event: presence
 Subscription-State: active;expires=2037
 Contact: <sip:4210@172.18.202.97:5060;transport=tcp>

Content-Type: application/pidf+xml
Content-Length: 829

```
<?xml version="1.0" encoding="UTF-8" standalone="no" ?>
<presence xmlns="urn:ietf:params:xml:ns:pidf" entity="sip:4210@172.18.202.97"
xmlns:e="urn:ietf:params:xml:ns:pidf:status:rpidd" xmlns:dm="urn:ietf:params:xml:ns:pidf:data-model"
xmlns:ce="urn:cisco:params:xml:ns:pidf:rpidd" xmlns:sc="urn:ietf:params:xml:ns:pidf:servcaps">
  <dm:person>
    <status>
      <basic>open</basic>
    </status>
    <e:activities>
      <e:on-the-phone/>
    </e:activities>
  </dm:person>
  <tuple id="cmp-1-409207">
    <status>
      <basic>open</basic>
      <e:activities>
        <e:on-the-phone/>
      </e:activities>
    </status>
    <sc:servcaps>
      <sc:audio>true</sc:audio>
    </sc:servcaps>
    <contact priority="0.8">sip:4210@172.18.202.97:5060</contact>
    <timestamp>2011-12-20T18:56:24Z</timestamp>
  </tuple>
</presence>
```

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

[9] ACK sip:9bbb8dda-00ee-701f-1b73-470a40f63088@172.18.202.137:49175;transport=tcp SIP/2.0

Via: SIP/2.0/TCP 172.18.202.97:5060;branch=z9hG4bK2b6417d796a8
From: <sip:4140@172.18.202.97>;tag=467630~b5a88942-7acc-4cc9-9d65-67021cfecfed-30423109
To: <sip:4210@172.18.202.97>;tag=b4a4e3289b9487571a816b7e-22810f52
Date: Tue, 20 Dec 2011 18:56:13 GMT
Call-ID: 48578a00-ef01da4d-57-61ca12ac@172.18.202.97
Max-Forwards: 70
CSeq: 101 ACK
Allow-Events: presence
Content-Type: application/sdp
Content-Length: 484

```
v=0
o=CiscoSystemsCCM-SIP 467630 1 IN IP4 172.18.202.97
s=SIP Call
c=IN IP4 172.18.198.24
t=0 0
m=audio 16728 RTP/AVP 9 101
b=TIAS:64000
a=rtpmap:9 G722/8000
a=ptime:20
a=rtpmap:101 telephone-event/8000
a=fmtp:101 0-15
m=video 16730 RTP/AVP 98
b=TIAS:5936000
a=label:11
a=rtpmap:98 H264/90000
a=fmtp:98 profile-level-id=428016;packetization-mode=1;max-mps=108000;max-fs=3600;max-cpb=200;max-br=5000;max-smps=108000;max-fps=6000
a=content:main
a=rtcp-fb:* nack pli
```

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

[10] SIP/2.0 200 OK

Via: SIP/2.0/TCP 172.18.198.24:5060;branch=z9hG4bKa6d9ad1969b19d1ad50810d34e51cbbd.1;rport
From: <sip:4140@sipsig-ccm97>;tag=fefc3b50b0b21cfb
To: <sip:4210@sipsig-ccm97>;tag=467629~b5a88942-7acc-4cc9-9d65-67021cfecfed-30423108
Date: Tue, 20 Dec 2011 18:56:13 GMT
Call-ID: c1229954d7a16a8f@172.18.198.24
CSeq: 100 INVITE
Allow: INVITE, OPTIONS, INFO, BYE, CANCEL, ACK, PRACK, UPDATE, REFER, SUBSCRIBE, NOTIFY
Allow-Events: presence
Supported: replaces
Call-Info: <urn:x-cisco-remotecc:callinfo>; security= NotAuthenticated; orientation= to; gci= 1-167030;
call-instance= 1
Send-Info: conference, x-cisco-conference
Session-Expires: 1800;refresher=uas
Require: timer
Remote-Party-ID: <sip:4210@172.18.202.97>;party=called;screen=yes;privacy=off
Contact: <sip:4210@172.18.202.97:5060;transport=tcp>

Content-Type: application/sdp
Content-Length: 1217

```
v=0
o=CiscoSystemsCCM-SIP 467629 1 IN IP4 172.18.202.97
s=SIP Call
b=AS:1064
t=0 0
m=audio 21446 RTP/AVP 9 101
c=IN IP4 172.18.202.137
b=TIAS:64000
a=rtpmap:9 G722/8000
a=ptime:20
a=rtpmap:101 telephone-event/8000
a=fmtp:101 0-15
m=video 28624 RTP/AVP 126
c=IN IP4 172.18.202.137
b=TIAS:1000000
a=rtpmap:126 H264/90000
a=fmtp:126 profile-level-id=42801E;packetization-mode=1;level-asymmetry-allowed=1
m=application 0 UDP/BFCP *
c=IN IP4 172.18.198.24
a=floorctrl:c-s
a=floorid:2 mstrm:12
a=confid:1
a=userid:45
m=video 0 RTP/AVP 97 98 99 34 31
c=IN IP4 172.18.198.24
b=TIAS:6000000
a=label:12
a=rtpmap:97 H264/90000
a=fmtp:97 profile-level-id=428016;max-mbps=108000;max-fs=3840;max-cpb=200;max-br=5000;max-smbps=108000;max-fps=6000
a=rtpmap:98 H264/90000
a=fmtp:98 profile-level-id=428016;packetization-mode=1;max-mbps=108000;max-fs=3840;max-cpb=200;max-br=5000;max-smbps=108000;max-fps=6000
a=rtpmap:99 H263-1998/90000
a=fmtp:99 QCIF=1;CIF=1;CIF4=1;CUSTOM=352,240,1
a=rtpmap:34 H263/90000
a=fmtp:34 QCIF=1;CIF=1;CIF4=1
a=rtpmap:31 H261/90000
a=fmtp:31 CIF=1;QCIF=1
a=content:slides
a=rtcp-fb:* nack pli
m=application 0 RTP/AVP 107
c=IN IP4 172.18.198.24
a=rtpmap:107 H224/0
```

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

[11] SIP/2.0 200 OK

Via: SIP/2.0/TCP 172.18.202.97:5060;branch=z9hG4bK2b637a61582;received=172.18.202.97
Call-ID: cea0007ff08eb669@172.18.202.190
CSeq: 290 NOTIFY
From: <sip:4210@172.18.202.97>;tag=623083919
To: <sip:4230@sipsig-ccm97>;tag=c4e45bcd22f59dd
Server: TANDBERG/257 (TE4.1.0.253886Alpha4)
Content-Length: 0

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

[12] ACK sip:4210@172.18.202.97:5060;transport=tcp SIP/2.0

Via: SIP/2.0/TCP 172.18.198.24:5060;branch=z9hG4bK7b0ae65f0a3a48f3dd4c3812001076f7.1;rport
Call-ID: c1229954d7a16a8f@172.18.198.24
CSeq: 100 ACK
From: <sip:4140@sipsig-ccm97>;tag=fefc3b50b0b21cfb
To: <sip:4210@sipsig-ccm97>;tag=467629-b5a88942-7acc-4cc9-9d65-67021cfecfed-30423108
Max-Forwards: 70
Allow: INVITE,ACK,CANCEL,BYE,UPDATE,INFO,OPTIONS,REFER,NOTIFY
User-Agent: TANDBERG/516 (TC5.0.0.-PreAlpha (TEST SW))
Supported: replaces,100rel,timer,gruu,path,outbound,X-cisco-callinfo,X-cisco-serviceuri,X-cisco-service-control,norefersub,extended-refer
Content-Length: 0

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

[13] OPTIONS sip:172.18.202.97:5060;transport=tcp SIP/2.0

Via: SIP/2.0/TCP 172.18.202.130:5060;branch=z9hG4bK8a91d0235e68184ccb094508f2b8ec352117402;rport
Call-ID: 0295625b1c6b98a9@172.18.202.130
CSeq: 10635 OPTIONS
From: <sip:172.18.202.130>;tag=888091040942035e
To: <sip:172.18.202.97:5060>
Max-Forwards: 0
User-Agent: TANDBERG/4100 (X6.1)

Supported: com.tandberg.vcs.resourceusage
Content-Length: 0

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

[14] SIP/2.0 503 Service Unavailable

Via: SIP/2.0/TCP 172.18.202.130:5060;branch=z9hG4bK8a91d0235e68184ccb094508f2b8ec352117402;rport
From: <sip:172.18.202.130>;tag=888091040942035e
To: <sip:172.18.202.97:5060>;tag=578913099
Date: Tue, 20 Dec 2011 18:56:27 GMT
Call-ID: 0295625b1c6b98a9@172.18.202.130
CSeq: 10635 OPTIONS
Warning: 399 sip:172.18.202.97 "Unable to find a device handler for the request received on port 28024 from 172.18.202.130"
Content-Length: 0

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

[15] INVITE sip:4210@172.18.202.97:5060;transport=tcp SIP/2.0

Via: SIP/2.0/TCP 172.18.198.24:5060;branch=z9hG4bK1bfe6a4d5df4ea12a758cacf360925e4.1;rport
Call-ID: c1229954d7a16a8f@172.18.198.24
CSeq: 101 INVITE
Contact: <sip:4140@172.18.198.24:43624;transport=tcp>
From: <sip:4140@sipsig-ccm97>;tag=fefc3b50b0b21cfc
To: <sip:4210@sipsig-ccm97>;tag=467629-b5a88942-7acc-4cc9-9d65-67021cfecfed-30423108
Max-Forwards: 70
Allow: INVITE,ACK,CANCEL,BYE,UPDATE,INFO,OPTIONS,REFER,NOTIFY
User-Agent: TANDBERG/516 (TC5.0.0.-PreAlpha (TEST SW))
Supported: replaces,100rel,timer,gruu,path,outbound,X-cisco-callinfo,X-cisco-serviceuri,X-cisco-service-control,norefersub,extended-refer
Call-Info: <urn:x-cisco-remotecc:hold>
Session-Expires: 1800;refresher=uac
Min-SE: 90
Remote-Party-ID: <sip:4140@sipsig-ccm97>;privacy=off;id-type=subscriber;screen=yes;party=calling
Content-Type: application/sdp
Content-Length: 2459

```
v=0
o=tandberg 45 2 IN IP4 172.18.198.24
s=-
c=IN IP4 172.18.198.24
b=AS:6000
t=0 0
m=audio 16728 RTP/AVP 100 102 103 104 105 106 9 8 0 101
b=TIAS:128000
a=rtpmap:100 MP4A-LATM/90000
a=fmtp:100 profile-level-id=25;object=23;bitrate=128000
a=rtpmap:102 MP4A-LATM/90000
a=fmtp:102 profile-level-id=24;object=23;bitrate=64000
a=rtpmap:103 MP4A-LATM/90000
a=fmtp:103 profile-level-id=24;object=23;bitrate=56000
a=rtpmap:104 MP4A-LATM/90000
a=fmtp:104 profile-level-id=24;object=23;bitrate=48000
a=rtpmap:105 G7221/16000
a=fmtp:105 bitrate=32000
a=rtpmap:106 G7221/16000
a=fmtp:106 bitrate=24000
a=rtpmap:9 G722/8000
a=rtpmap:8 PCMA/8000
a=rtpmap:0 PCMU/8000
a=rtpmap:101 telephone-event/8000
a=fmtp:101 0-15
a=inactive
m=video 16730 RTP/AVP 97 98 99 34 31
b=TIAS:6000000
a=rtpmap:97 H264/90000
a=fmtp:97 profile-level-id=428016;max-br=5000;max-mbps=108000;max-fs=3600;max-smbps=108000;max-fps=6000
a=rtpmap:98 H264/90000
a=fmtp:98 profile-level-id=428016;max-br=5000;max-mbps=108000;max-fs=3600;max-smbps=108000;packetization-mode=1;max-fps=6000
a=rtpmap:99 H263-1998/90000
a=fmtp:99
  custom=1280,768,3;custom=1280,720,3;custom=1024,768,1;custom=1024,576,2;custom=800,600,1;cif4=1;custom=720,480,1;custom=640,480,1;custom=512,288,1;cif=1;custom=352,240,1;qcif=1;maxbr=20000
a=rtpmap:34 H263/90000
a=fmtp:34 cif4=1;cif=1;qcif=1;maxbr=20000
a=rtpmap:31 H261/90000
a=fmtp:31 cif=1;qcif=1;maxbr=20000
a=rtcp-fb:* nack pli
a=inactive
a=content:main
a=label:11
a=answer:full
```

```

m=application 5070 UDP/BFCP *
a=floorctrl:c-s
a=confid:1
a=floorid:2 mstrm:12
a=userid:45
a=setup:actpass
a=connection:new
m=video 16732 RTP/AVP 97 98 99 34 31
b=TIAS:6000000
a=rtpmap:97 H264/90000
a=fmtp:97 profile-level-id=428016;max-br=5000;max-mbps=108000;max-fs=3840;max-smbps=108000;max-fps=6000
a=rtpmap:98 H264/90000
a=fmtp:98 profile-level-id=428016;max-br=5000;max-mbps=108000;max-fs=3840;max-smbps=108000;packetization-
mode=1;max-fps=6000
a=rtpmap:99 H263-1998/90000
a=fmtp:99
custom=1280,768,3;custom=1280,720,3;custom=1024,768,1;custom=1024,576,2;custom=800,600,1;cif4=1;custom=720,4
80,1;custom=640,480,1;custom=512,288,1;cif=1;custom=352,240,1;qcif=1;maxbr=20000
a=rtpmap:34 H263/90000
a=fmtp:34 cif4=1;cif=1;qcif=1;maxbr=20000
a=rtpmap:31 H261/90000
a=fmtp:31 cif=1;qcif=1;maxbr=20000
a=rtcp-fb:* nack pli
a=inactive
a=content:slides
a=label:12
m=application 16734 RTP/AVP 107
a=rtpmap:107 H224/4800
a=inactive

```

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

[16] SIP/2.0 100 Trying

```

Via: SIP/2.0/TCP 172.18.198.24:5060;branch=z9hG4bK1bfe6a4d5df4ea12a758cacf360925e4.1;rport
From: <sip:4140@sipsig-ccm97>;tag=fefc3b50b0b21cfb
To: <sip:4210@sipsig-ccm97>;tag=467629-b5a88942-7acc-4cc9-9d65-67021cfecfed-30423108
Date: Tue, 20 Dec 2011 18:56:41 GMT
Call-ID: c1229954d7a16a8f@172.18.198.24
CSeq: 101 INVITE
Allow-Events: presence
Content-Length: 0

```

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

[17] INVITE sip:9bbb8dda-00ee-701f-1b73-470a40f63088@172.18.202.137:49175;transport=tcp SIP/2.0

```

Via: SIP/2.0/TCP 172.18.202.97:5060;branch=z9hG4bK2b6526c2dc66
From: <sip:4140@172.18.202.97>;tag=467630-b5a88942-7acc-4cc9-9d65-67021cfecfed-30423109
To: <sip:4210@172.18.202.97>;tag=b4a4e3289b9487571a816b7e-22810f52
Date: Tue, 20 Dec 2011 18:56:41 GMT
Call-ID: 48578a00-ef01da4d-57-61ca12ac@172.18.202.97
Supported: timer,resource-priority,replaces
Min-SE: 1800
User-Agent: Cisco-CUCM8.6
Allow: INVITE, OPTIONS, INFO, BYE, CANCEL, ACK, PRACK, UPDATE, REFER, SUBSCRIBE, NOTIFY
CSeq: 102 INVITE
Max-Forwards: 70
Expires: 180
Allow-Events: presence
Call-Info: <urn:x-cisco-remotecc:callinfo>; security= NotAuthenticated; orientation= from; gci= 1-167030;
call-instance= 1
Remote-Party-ID: <sip:4140@172.18.202.97>;party=calling;screen=yes;privacy=off
Contact: <sip:4140@172.18.202.97:5060;transport=tcp>
Content-Type: application/sdp
Content-Length: 502

```

```

v=0
o=CiscoSystemsCCM-SIP 467630 2 IN IP4 172.18.202.97
s=SIP Call
c=IN IP4 0.0.0.0
t=0 0
m=audio 16728 RTP/AVP 9 101
b=TIAS:64000
a=rtpmap:9 G722/8000
aptime:20
a=inactive
a=rtpmap:101 telephone-event/8000
a=fmtp:101 0-15
m=video 16730 RTP/AVP 98
b=TIAS:5936000
a=label:11
a=rtpmap:98 H264/90000
a=fmtp:98 profile-level-id=428016;packetization-mode=1;max-mbps=108000;max-fs=3600;max-cpb=200;max-
br=5000;max-smbps=108000;max-fps=6000

```

```
a=content:main
a=inactive
a=rtcp-fb:* nack pli
```

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

[18] SIP/2.0 200 OK

```
Via: SIP/2.0/TCP 172.18.198.24:5060;branch=z9hG4bK1bfe6a4d5df4ea12a758cacf360925e4.1;rport
From: <sip:4140@sipsig-ccm97>;tag=fefc3b50b0b21cfc
To: <sip:4210@sipsig-ccm97>;tag=467629-b5a88942-7acc-4cc9-9d65-67021cfecfed-30423108
Date: Tue, 20 Dec 2011 18:56:41 GMT
Call-ID: c1229954d7a16a8f@172.18.198.24
CSeq: 101 INVITE
Allow: INVITE, OPTIONS, INFO, BYE, CANCEL, ACK, PRACK, UPDATE, REFER, SUBSCRIBE, NOTIFY
Allow-Events: presence
Supported: replaces
Call-Info: <urn:x-cisco-remotecc:callinfo>; security= NotAuthenticated; orientation= to; gci= 1-167030;
call-instance= 1
Session-Expires: 1800;refresher=uac
Require: timer
Remote-Party-ID: <sip:4210@172.18.202.97>;party=called;screen=yes;privacy=off
Contact: <sip:4210@172.18.202.97:5060;transport=tcp>
Content-Type: application/sdp
Content-Length: 1233
```

```
v=0
o=CiscoSystemsCCM-SIP 467629 2 IN IP4 172.18.202.97
s=SIP Call
b=AS:1064
t=0 0
m=audio 21446 RTP/AVP 9 101
c=IN IP4 0.0.0.0
b=TIAS:64000
a=rtpmap:9 G722/8000
a=ptime:20
a=inactive
a=rtpmap:101 telephone-event/8000
a=fmtp:101 0-15
m=video 28624 RTP/AVP 126
c=IN IP4 0.0.0.0
b=TIAS:1000000
a=rtpmap:126 H264/90000
a=fmtp:126 profile-level-id=42801E;packetization-mode=1;level-asymmetry-allowed=1
a=inactive
m=application 0 UDP/BFCP *
c=IN IP4 0.0.0.0
a=floorctrl:c-s
a=floorid:2 mstrm:12
a=confid:1
a=userid:45
m=video 0 RTP/AVP 97 98 99 34 31
c=IN IP4 0.0.0.0
b=TIAS:6000000
a=label:12
a=rtpmap:97 H264/90000
a=fmtp:97 profile-level-id=428016;max-mbps=108000;max-fs=3840;max-cpb=200;max-br=5000;max-smbps=108000;max-fps=6000
a=rtpmap:98 H264/90000
a=fmtp:98 profile-level-id=428016;packetization-mode=1;max-mbps=108000;max-fs=3840;max-cpb=200;max-br=5000;max-smbps=108000;max-fps=6000
a=rtpmap:99 H263-1998/90000
a=fmtp:99 QCIF=1;CIF=1;CIF4=1;CUSTOM=352,240,1
a=rtpmap:34 H263/90000
a=fmtp:34 QCIF=1;CIF=1;CIF4=1
a=rtpmap:31 H261/90000
a=fmtp:31 CIF=1;QCIF=1
a=content:slides
a=inactive
a=rtcp-fb:* nack pli
m=application 0 RTP/AVP 107
c=IN IP4 0.0.0.0
a=rtpmap:107 H224/0
a=inactive
```

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

[19] SIP/2.0 100 Trying

```
Via: SIP/2.0/TCP 172.18.202.97:5060;branch=z9hG4bK2b6526c2dc66
From: <sip:4140@172.18.202.97>;tag=467630-b5a88942-7acc-4cc9-9d65-67021cfecfed-30423109
To: <sip:4210@172.18.202.97>;tag=b4a4e3289b9487571a816b7e-22810f52
Call-ID: 48578a00-ef01da4d-57-61ca12ac@172.18.202.97
Date: Tue, 20 Dec 2011 18:56:40 GMT
CSeq: 102 INVITE
```

Server: Cisco-CP9971/9.2.1
 Contact: <sip:9bbb8dda-00ee-701f-1b73-470a40f63088@172.18.202.137:49175;transport=tcp>
 Allow: ACK, BYE, CANCEL, INVITE, NOTIFY, OPTIONS, REFER, REGISTER, UPDATE, SUBSCRIBE, INFO
 Supported: replaces, join, sdp-anat, norefersub, extended-refer, X-cisco-callinfo, X-cisco-serviceuri, X-cisco-escapecodes, X-cisco-service-control, X-cisco-srtp-fallback, X-cisco-monrec, X-cisco-config, X-cisco-sis-5.1.0, X-cisco-xsi-8.0.1
 Allow-Events: kpml, dialog
 Content-Length: 0

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

[20] ACK sip:4210@172.18.202.97:5060;transport=tcp SIP/2.0

Via: SIP/2.0/TCP 172.18.198.24:5060;branch=z9hG4bK9dac8cd6c45fee9dddfc39c537794e4e9.1;rport
 Call-ID: c1229954d7a16a8f@172.18.198.24
 CSeq: 101 ACK
 From: <sip:4140@sipsig-ccm97>;tag=fefc3b50b0b21cfb
 To: <sip:4210@sipsig-ccm97>;tag=467629-b5a88942-7acc-4cc9-9d65-67021cfecfed-30423108
 Max-Forwards: 70
 Allow: INVITE, ACK, CANCEL, BYE, UPDATE, INFO, OPTIONS, REFER, NOTIFY
 User-Agent: TANDBERG/516 (TC5.0.0.-PreAlpha (TEST SW))
 Supported: replaces, 100rel, timer, gruu, path, outbound, X-cisco-callinfo, X-cisco-serviceuri, X-cisco-service-control, norefersub, extended-refer
 Content-Length: 0

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

[21] SIP/2.0 200 OK

Via: SIP/2.0/TCP 172.18.202.97:5060;branch=z9hG4bK2b6526c2dc66
 From: <sip:4140@172.18.202.97>;tag=467630-b5a88942-7acc-4cc9-9d65-67021cfecfed-30423109
 To: <sip:4210@172.18.202.97>;tag=b4a4e3289b9487571a816b7e-22810f52
 Call-ID: 48578a00-ef01da4d-57-61ca12ac@172.18.202.97
 Date: Tue, 20 Dec 2011 18:56:40 GMT
 CSeq: 102 INVITE
 Server: Cisco-CP9971/9.2.1
 Contact: <sip:9bbb8dda-00ee-701f-1b73-470a40f63088@172.18.202.137:49175;transport=tcp>
 Allow: ACK, BYE, CANCEL, INVITE, NOTIFY, OPTIONS, REFER, REGISTER, UPDATE, SUBSCRIBE, INFO
 Remote-Party-ID: "4210" <sip:4210@172.18.202.97>;party=called;id-type=subscriber;privacy=off;screen=yes
 Supported: replaces, join, sdp-anat, norefersub, extended-refer, X-cisco-callinfo, X-cisco-serviceuri, X-cisco-escapecodes, X-cisco-service-control, X-cisco-srtp-fallback, X-cisco-monrec, X-cisco-config, X-cisco-sis-5.1.0, X-cisco-xsi-8.0.1
 Allow-Events: kpml, dialog
 Content-Length: 435
 Content-Type: application/sdp
 Content-Disposition: session;handling=optional

v=0
 o=Cisco-SIPUA 10347 1 IN IP4 172.18.202.137
 s=SIP Call
 t=0 0
 m=audio 21446 RTP/AVP 9 101
 c=IN IP4 172.18.202.137
 a=rtpmap:9 G722/8000
 a=rtpmap:101 telephone-event/8000
 a=fmtp:101 0-15
 a=inactive
 m=video 28624 RTP/AVP 98
 c=IN IP4 172.18.202.137
 b=TIAS:1000000
 a=rtpmap:98 H264/90000
 a=fmtp:98 profile-level-id=42801E;packetization-mode=1;level-asymmetry-allowed=1
 a=imageattr:* recv [x=640,y=480,q=0.50]
 a=inactive

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

[22] ACK sip:9bbb8dda-00ee-701f-1b73-470a40f63088@172.18.202.137:49175;transport=tcp SIP/2.0

Via: SIP/2.0/TCP 172.18.202.97:5060;branch=z9hG4bK2b66cc5965a
 From: <sip:4140@172.18.202.97>;tag=467630-b5a88942-7acc-4cc9-9d65-67021cfecfed-30423109
 To: <sip:4210@172.18.202.97>;tag=b4a4e3289b9487571a816b7e-22810f52
 Date: Tue, 20 Dec 2011 18:56:41 GMT
 Call-ID: 48578a00-ef01da4d-57-61ca12ac@172.18.202.97
 Max-Forwards: 70
 CSeq: 102 ACK
 Allow-Events: presence
 Content-Length: 0

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

[23] INVITE sip:9bbb8dda-00ee-701f-1b73-470a40f63088@172.18.202.137:49175;transport=tcp SIP/2.0

Via: SIP/2.0/TCP 172.18.202.97:5060;branch=z9hG4bK2b672705f0bb
 From: <sip:4140@172.18.202.97>;tag=467630-b5a88942-7acc-4cc9-9d65-67021cfecfed-30423109
 To: <sip:4210@172.18.202.97>;tag=b4a4e3289b9487571a816b7e-22810f52
 Date: Tue, 20 Dec 2011 18:56:42 GMT
 Call-ID: 48578a00-ef01da4d-57-61ca12ac@172.18.202.97
 Supported: timer, resource-priority, replaces

```

Min-SE: 1800
User-Agent: Cisco-CUCM8.6
Allow: INVITE, OPTIONS, INFO, BYE, CANCEL, ACK, PRACK, UPDATE, REFER, SUBSCRIBE, NOTIFY
CSeq: 103 INVITE
Max-Forwards: 70
Expires: 180
Allow-Events: presence
Call-Info: <urn:x-cisco-remotecc:callinfo>; security= NotAuthenticated; orientation= from; gci= 1-167030;
call-instance= 1
Remote-Party-ID: <sip:4140@172.18.202.97>;party=calling;screen=yes;privacy=off
Contact: <sip:4140@172.18.202.97:5060;transport=tcp>
Content-Length: 0

```

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

[24] SIP/2.0 100 Trying

```

Via: SIP/2.0/TCP 172.18.202.97:5060;branch=z9hG4bK2b672705f0bb
From: <sip:4140@172.18.202.97>;tag=467630~b5a88942-7acc-4cc9-9d65-67021cfecfed-30423109
To: <sip:4210@172.18.202.97>;tag=b4a4e3289b9487571a816b7e-22810f52
Call-ID: 48578a00-ef01da4d-57-61ca12ac@172.18.202.97
Date: Tue, 20 Dec 2011 18:56:40 GMT
CSeq: 103 INVITE
Server: Cisco-CP9971/9.2.1
Contact: <sip:9bbb8dda-00ee-701f-1b73-470a40f63088@172.18.202.137:49175;transport=tcp>
Allow: ACK, BYE, CANCEL, INVITE, NOTIFY, OPTIONS, REFER, REGISTER, UPDATE, SUBSCRIBE, INFO
Supported: replaces, join, sdp-anat, norefersub, extended-refer, X-cisco-callinfo, X-cisco-serviceuri, X-cisco-escapecodes, X-cisco-service-control, X-cisco-srtp-fallback, X-cisco-monrec, X-cisco-config, X-cisco-sis-5.1.0, X-cisco-xsi-8.0.1
Allow-Events: kpml, dialog
Content-Length: 0

```

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

[25] SIP/2.0 200 OK

```

Via: SIP/2.0/TCP 172.18.202.97:5060;branch=z9hG4bK2b672705f0bb
From: <sip:4140@172.18.202.97>;tag=467630~b5a88942-7acc-4cc9-9d65-67021cfecfed-30423109
To: <sip:4210@172.18.202.97>;tag=b4a4e3289b9487571a816b7e-22810f52
Call-ID: 48578a00-ef01da4d-57-61ca12ac@172.18.202.97
Date: Tue, 20 Dec 2011 18:56:40 GMT
CSeq: 103 INVITE
Server: Cisco-CP9971/9.2.1
Contact: <sip:9bbb8dda-00ee-701f-1b73-470a40f63088@172.18.202.137:49175;transport=tcp>
Allow: ACK, BYE, CANCEL, INVITE, NOTIFY, OPTIONS, REFER, REGISTER, UPDATE, SUBSCRIBE, INFO
Remote-Party-ID: "4210" <sip:4210@172.18.202.97>;party=called;id-type=subscriber;privacy=off;screen=yes
Supported: replaces, join, sdp-anat, norefersub, extended-refer, X-cisco-callinfo, X-cisco-serviceuri, X-cisco-escapecodes, X-cisco-service-control, X-cisco-srtp-fallback, X-cisco-monrec, X-cisco-config, X-cisco-sis-5.1.0, X-cisco-xsi-8.0.1
Allow-Events: kpml, dialog
Content-Length: 788
Content-Type: application/sdp
Content-Disposition: session;handling=optional

```

```

v=0
o=Cisco-SIPUA 10347 2 IN IP4 172.18.202.137
s=SIP Call
t=0 0
m=audio 21446 RTP/AVP 0 8 18 102 9 116 124 101
c=IN IP4 172.18.202.137
a=rtpmap:0 PCMU/8000
a=rtpmap:8 PCMA/8000
a=rtpmap:18 G729/8000
a=fmtp:18 annexb=no
a=rtpmap:102 L16/16000
a=rtpmap:9 G722/8000
a=rtpmap:116 iLBC/8000
a=fmtp:116 mode=20
a=rtpmap:124 ISAC/16000
a=rtpmap:101 telephone-event/8000
a=fmtp:101 0-15
a=sendrecv
m=video 28624 RTP/AVP 126 97
c=IN IP4 172.18.202.137
b=TIAS:1000000
a=rtpmap:126 H264/90000
a=fmtp:126 profile-level-id=42801E;packetization-mode=1;level-asymmetry-allowed=1
a=imageattr:* recv [x=640,y=480,q=0.50]
a=rtpmap:97 H264/90000
a=fmtp:97 profile-level-id=42801E;packetization-mode=0;level-asymmetry-allowed=1
a=imageattr:* recv [x=640,y=480,q=0.50]
a=sendrecv

```

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

[26] ACK sip:9bbb8dda-00ee-701f-1b73-470a40f63088@172.18.202.137:49175;transport=tcp SIP/2.0

```
Via: SIP/2.0/TCP 172.18.202.97:5060;branch=z9hG4bK2b684b3b0e75
From: <sip:4140@172.18.202.97>;tag=467630~b5a88942-7acc-4cc9-9d65-67021cfecfed-30423109
To: <sip:4210@172.18.202.97>;tag=b4a4e3289b9487571a816b7e-22810f52
Date: Tue, 20 Dec 2011 18:56:42 GMT
Call-ID: 48578a00-ef01da4d-57-61ca12ac@172.18.202.97
Max-Forwards: 70
CSeq: 103 ACK
Allow-Events: presence
Content-Type: application/sdp
Content-Length: 423
```

```
v=0
o=CiscoSystemsCCM-SIP 467630 3 IN IP4 172.18.202.97
s=SIP Call
t=0 0
m=audio 4000 RTP/AVP 0
c=IN IP4 172.18.202.97
a=rtpmap:0 PCMU/8000
a=ptime:20
a=sendonly
m=video 0 RTP/AVP 98
c=IN IP4 172.18.198.24
b=TIAS:5936000
a=label:11
a=rtpmap:98 H264/90000
a=fmtp:98 profile-level-id=428016;packetization-mode=1;max-mbps=108000;max-fs=3600;max-cpb=200;max-br=5000;max-smbps=108000;max-fps=6000
a=content:main
```

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

[27] INVITE sip:4210@172.18.202.97:5060;transport=tcp SIP/2.0

```
Via: SIP/2.0/TCP 172.18.198.24:5060;branch=z9hG4bKb8becc4bfe0ad05fd5d88809153162dc.1;rport
Call-ID: c1229954d7a16a8f@172.18.198.24
CSeq: 102 INVITE
Contact: <sip:4140@172.18.198.24:43624;transport=tcp>
From: <sip:4140@sipsig-ccm97>;tag=fefc3b50b0b21cfb
To: <sip:4210@sipsig-ccm97>;tag=467629~b5a88942-7acc-4cc9-9d65-67021cfecfed-30423108
Max-Forwards: 70
Allow: INVITE,ACK,CANCEL,BYE,UPDATE,INFO,OPTIONS,REFER,NOTIFY
User-Agent: TANDBERG/516 (TC5.0.0.-PreAlpha (TEST SW))
Supported: replaces,100rel,timer,gruu,path,outbound,X-cisco-callinfo,X-cisco-serviceuri,X-cisco-service-control,norefersub,extended-refer
Call-Info: <urn:x-cisco-remotecc:resume>
Session-Expires: 1800;refresher=uac
Min-SE: 90
Remote-Party-ID: <sip:4140@sipsig-ccm97>;privacy=off;id-type=subscriber;screen=yes;party=calling
Content-Type: application/sdp
Content-Length: 2459
```

```
v=0
o=tandberg 45 3 IN IP4 172.18.198.24
s=-
c=IN IP4 172.18.198.24
b=AS:6000
t=0 0
m=audio 16728 RTP/AVP 100 102 103 104 105 106 9 8 0 101
b=TIAS:128000
a=rtpmap:100 MP4A-LATM/90000
a=fmtp:100 profile-level-id=25;object=23;bitrate=128000
a=rtpmap:102 MP4A-LATM/90000
a=fmtp:102 profile-level-id=24;object=23;bitrate=64000
a=rtpmap:103 MP4A-LATM/90000
a=fmtp:103 profile-level-id=24;object=23;bitrate=56000
a=rtpmap:104 MP4A-LATM/90000
a=fmtp:104 profile-level-id=24;object=23;bitrate=48000
a=rtpmap:105 G7221/16000
a=fmtp:105 bitrate=32000
a=rtpmap:106 G7221/16000
a=fmtp:106 bitrate=24000
a=rtpmap:9 G722/8000
a=rtpmap:8 PCMA/8000
a=rtpmap:0 PCMU/8000
a=rtpmap:101 telephone-event/8000
a=fmtp:101 0-15
a=sendrecv
m=video 16730 RTP/AVP 97 98 99 34 31
b=TIAS:6000000
a=rtpmap:97 H264/90000
a=fmtp:97 profile-level-id=428016;max-br=5000;max-mbps=108000;max-fs=3600;max-smbps=108000;max-fps=6000
a=rtpmap:98 H264/90000
a=fmtp:98 profile-level-id=428016;max-br=5000;max-mbps=108000;max-fs=3600;max-smbps=108000;packetization-
```



```

mode=1;max-fps=6000
a=rtpmap:99 H263-1998/90000
a=fmtp:99
custom=1280,768,3;custom=1280,720,3;custom=1024,768,1;custom=1024,576,2;custom=800,600,1;cif4=1;custom=720,4
80,1;custom=640,480,1;custom=512,288,1;cif=1;custom=352,240,1;qcif=1;maxbr=20000
a=rtpmap:34 H263/90000
a=fmtp:34 cif4=1;cif=1;qcif=1;maxbr=20000
a=rtpmap:31 H261/90000
a=fmtp:31 cif=1;qcif=1;maxbr=20000
a=rtcp-fb:* nack pli
a=sendrecv
a=content:main
a=label:11
a=answer:full
m=application 5070 UDP/BFCP *
a=floorctrl:c-s
a=confid:1
a=floorid:2 mstrm:12
a=userid:45
a=setup:actpass
a=connection:new
m=video 16732 RTP/AVP 97 98 99 34 31
b=TIAS:6000000
a=rtpmap:97 H264/90000
a=fmtp:97 profile-level-id=428016;max-br=5000;max-mbps=108000;max-fs=3840;max-smbps=108000;max-fps=6000
a=rtpmap:98 H264/90000
a=fmtp:98 profile-level-id=428016;max-br=5000;max-mbps=108000;max-fs=3840;max-smbps=108000;packetization-
mode=1;max-fps=6000
a=rtpmap:99 H263-1998/90000
a=fmtp:99
custom=1280,768,3;custom=1280,720,3;custom=1024,768,1;custom=1024,576,2;custom=800,600,1;cif4=1;custom=720,4
80,1;custom=640,480,1;custom=512,288,1;cif=1;custom=352,240,1;qcif=1;maxbr=20000
a=rtpmap:34 H263/90000
a=fmtp:34 cif4=1;cif=1;qcif=1;maxbr=20000
a=rtpmap:31 H261/90000
a=fmtp:31 cif=1;qcif=1;maxbr=20000
a=rtcp-fb:* nack pli
a=sendrecv
a=content:slides
a=label:12
m=application 16734 RTP/AVP 107
a=rtpmap:107 H224/4800
a=sendrecv

```

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

[28] SIP/2.0 100 Trying

```

Via: SIP/2.0/TCP 172.18.198.24:5060;branch=z9hG4bKb8becc4bfe0ad05fd5d88809153162dc.1;rport
From: <sip:4140@sipsig-ccm97>;tag=fefc3b50b0b21cfb
To: <sip:4210@sipsig-ccm97>;tag=467629-b5a88942-7acc-4cc9-9d65-67021cfecfed-30423108
Date: Tue, 20 Dec 2011 18:56:47 GMT
Call-ID: c1229954d7a16a8f@172.18.198.24
CSeq: 102 INVITE
Allow-Events: presence
Content-Length: 0

```

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

[29] INVITE sip:9bbb8dda-00ee-701f-1b73-470a40f63088@172.18.202.137:49175;transport=tcp SIP/2.0

```

Via: SIP/2.0/TCP 172.18.202.97:5060;branch=z9hG4bK2b694f31ab7d
From: <sip:4140@172.18.202.97>;tag=467630-b5a88942-7acc-4cc9-9d65-67021cfecfed-30423109
To: <sip:4210@172.18.202.97>;tag=b4a4e3289b9487571a816b7e-22810f52
Date: Tue, 20 Dec 2011 18:56:47 GMT
Call-ID: 48578a00-ef01da4d-57-61ca12ac@172.18.202.97
Supported: timer,resource-priority,replaces
Min-SE: 1800
User-Agent: Cisco-CUCM8.6
Allow: INVITE, OPTIONS, INFO, BYE, CANCEL, ACK, PRACK, UPDATE, REFER, SUBSCRIBE, NOTIFY
CSeq: 104 INVITE
Max-Forwards: 70
Expires: 180
Allow-Events: presence
Call-Info: <urn:x-cisco-remotecc:callinfo>; security= NotAuthenticated; orientation= from; gci= 1-167030;
call-instance= 1
Remote-Party-ID: <sip:4140@172.18.202.97>;party=calling;screen=yes;privacy=off
Contact: <sip:4140@172.18.202.97:5060;transport=tcp>
Content-Type: application/sdp
Content-Length: 405

```

```

v=0
o=CiscoSystemsCCM-SIP 467630 4 IN IP4 172.18.202.97
s=SIP Call
c=IN IP4 0.0.0.0

```

```

t=0 0
m=audio 4000 RTP/AVP 0
a=rtpmap:0 PCMU/8000
a=ptime:20
a=inactive
m=video 0 RTP/AVP 98
b=TIAS:5936000
a=label:11
a=rtpmap:98 H264/90000
a=fmtp:98 profile-level-id=428016;packetization-mode=1;max-mbps=108000;max-fs=3600;max-cpb=200;max-br=5000;max-smbps=108000;max-fps=6000
a=content:main
a=inactive

```

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

[30] SIP/2.0 100 Trying

```

Via: SIP/2.0/TCP 172.18.202.97:5060;branch=z9hG4bK2b694f31ab7d
From: <sip:4140@172.18.202.97>;tag=467630~b5a88942-7acc-4cc9-9d65-67021cfecfed-30423109
To: <sip:4210@172.18.202.97>;tag=b4a4e3289b9487571a816b7e-22810f52
Call-ID: 48578a00-ef01da4d-57-61ca12ac@172.18.202.97
Date: Tue, 20 Dec 2011 18:56:46 GMT
CSeq: 104 INVITE
Server: Cisco-CP9971/9.2.1
Contact: <sip:9bbb8dda-00ee-701f-1b73-470a40f63088@172.18.202.137:49175;transport=tcp>
Allow: ACK,BYE,CANCEL,INVITE,NOTIFY,OPTIONS,REFER,REGISTER,UPDATE,SUBSCRIBE,INFO
Supported: replaces,join,sdp-anat,norefersub,extended-refer,X-cisco-callinfo,X-cisco-serviceuri,X-cisco-escapecodes,X-cisco-service-control,X-cisco-srtp-fallback,X-cisco-monrec,X-cisco-config,X-cisco-sis-5.1.0,X-cisco-xsi-8.0.1
Allow-Events: kpml,dialog
Content-Length: 0

```

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

[31] SIP/2.0 200 OK

```

Via: SIP/2.0/TCP 172.18.202.97:5060;branch=z9hG4bK2b694f31ab7d
From: <sip:4140@172.18.202.97>;tag=467630~b5a88942-7acc-4cc9-9d65-67021cfecfed-30423109
To: <sip:4210@172.18.202.97>;tag=b4a4e3289b9487571a816b7e-22810f52
Call-ID: 48578a00-ef01da4d-57-61ca12ac@172.18.202.97
Date: Tue, 20 Dec 2011 18:56:46 GMT
CSeq: 104 INVITE
Server: Cisco-CP9971/9.2.1
Contact: <sip:9bbb8dda-00ee-701f-1b73-470a40f63088@172.18.202.137:49175;transport=tcp>
Allow: ACK,BYE,CANCEL,INVITE,NOTIFY,OPTIONS,REFER,REGISTER,UPDATE,SUBSCRIBE,INFO
Remote-Party-ID: "4210" <sip:4210@172.18.202.97>;party=called;id-type=subscriber;privacy=off;screen=yes
Supported: replaces,join,sdp-anat,norefersub,extended-refer,X-cisco-callinfo,X-cisco-serviceuri,X-cisco-escapecodes,X-cisco-service-control,X-cisco-srtp-fallback,X-cisco-monrec,X-cisco-config,X-cisco-sis-5.1.0,X-cisco-xsi-8.0.1
Allow-Events: kpml,dialog
Content-Length: 193
Content-Type: application/sdp
Content-Disposition: session;handling=optional

```

```

v=0
o=Cisco-SIPUA 10347 3 IN IP4 172.18.202.137
s=SIP Call
t=0 0
m=audio 21446 RTP/AVP 0
c=IN IP4 172.18.202.137
a=rtpmap:0 PCMU/8000
a=inactive
m=video 0 RTP/AVP 98
c=IN IP4 0.0.0.0

```

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

[32] ACK sip:9bbb8dda-00ee-701f-1b73-470a40f63088@172.18.202.137:49175;transport=tcp SIP/2.0

```

Via: SIP/2.0/TCP 172.18.202.97:5060;branch=z9hG4bK2b6a2016a00e
From: <sip:4140@172.18.202.97>;tag=467630~b5a88942-7acc-4cc9-9d65-67021cfecfed-30423109
To: <sip:4210@172.18.202.97>;tag=b4a4e3289b9487571a816b7e-22810f52
Date: Tue, 20 Dec 2011 18:56:47 GMT
Call-ID: 48578a00-ef01da4d-57-61ca12ac@172.18.202.97
Max-Forwards: 70
CSeq: 104 ACK
Allow-Events: presence
Content-Length: 0

```

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

[33] INVITE sip:9bbb8dda-00ee-701f-1b73-470a40f63088@172.18.202.137:49175;transport=tcp SIP/2.0

```

Via: SIP/2.0/TCP 172.18.202.97:5060;branch=z9hG4bK2b6b43dc499c
From: <sip:4140@172.18.202.97>;tag=467630~b5a88942-7acc-4cc9-9d65-67021cfecfed-30423109
To: <sip:4210@172.18.202.97>;tag=b4a4e3289b9487571a816b7e-22810f52
Date: Tue, 20 Dec 2011 18:56:47 GMT
Call-ID: 48578a00-ef01da4d-57-61ca12ac@172.18.202.97

```


Supported: timer,resource-priority,replaces
 Min-SE: 1800
 User-Agent: Cisco-CUCM8.6
 Allow: INVITE, OPTIONS, INFO, BYE, CANCEL, ACK, PRACK, UPDATE, REFER, SUBSCRIBE, NOTIFY
 CSeq: 105 INVITE
 Max-Forwards: 70
 Expires: 180
 Allow-Events: presence
 Call-Info: <urn:x-cisco-remotecc:callinfo>; security= NotAuthenticated; orientation= from; gci= 1-167030;
 call-instance= 1
 Remote-Party-ID: <sip:4140@172.18.202.97>;party=calling;screen=yes;privacy=off
 Contact: <sip:4140@172.18.202.97:5060;transport=tcp>;video;audio
 Content-Length: 0

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

[34] SIP/2.0 100 Trying

Via: SIP/2.0/TCP 172.18.202.97:5060;branch=z9hG4bK2b6b43dc499c
 From: <sip:4140@172.18.202.97>;tag=467630~b5a88942-7acc-4cc9-9d65-67021cfecfed-30423109
 To: <sip:4210@172.18.202.97>;tag=b4a4e3289b9487571a816b7e-22810f52
 Call-ID: 48578a00-ef01da4d-57-61ca12ac@172.18.202.97
 Date: Tue, 20 Dec 2011 18:56:46 GMT
 CSeq: 105 INVITE
 Server: Cisco-CP9971/9.2.1
 Contact: <sip:9bbb8dda-00ee-701f-1b73-470a40f63088@172.18.202.137:49175;transport=tcp>
 Allow: ACK,BYE,CANCEL,INVITE,NOTIFY,OPTIONS,REFER,REGISTER,UPDATE,SUBSCRIBE,INFO
 Supported: replaces,join,sdp-anat,norefersub,extended-refer,X-cisco-callinfo,X-cisco-serviceuri,X-cisco-escapecodes,X-cisco-service-control,X-cisco-srtp-fallback,X-cisco-monrec,X-cisco-config,X-cisco-sis-5.1.0,X-cisco-xsi-8.0.1
 Allow-Events: kpml,dialog
 Content-Length: 0

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

[35] SIP/2.0 200 OK

Via: SIP/2.0/TCP 172.18.202.97:5060;branch=z9hG4bK2b6b43dc499c
 From: <sip:4140@172.18.202.97>;tag=467630~b5a88942-7acc-4cc9-9d65-67021cfecfed-30423109
 To: <sip:4210@172.18.202.97>;tag=b4a4e3289b9487571a816b7e-22810f52
 Call-ID: 48578a00-ef01da4d-57-61ca12ac@172.18.202.97
 Date: Tue, 20 Dec 2011 18:56:46 GMT
 CSeq: 105 INVITE
 Server: Cisco-CP9971/9.2.1
 Contact: <sip:9bbb8dda-00ee-701f-1b73-470a40f63088@172.18.202.137:49175;transport=tcp>
 Allow: ACK,BYE,CANCEL,INVITE,NOTIFY,OPTIONS,REFER,REGISTER,UPDATE,SUBSCRIBE,INFO
 Remote-Party-ID: "4210" <sip:4210@172.18.202.97>;party=called;id-type=subscriber;privacy=off;screen=yes
 Supported: replaces,join,sdp-anat,norefersub,extended-refer,X-cisco-callinfo,X-cisco-serviceuri,X-cisco-escapecodes,X-cisco-service-control,X-cisco-srtp-fallback,X-cisco-monrec,X-cisco-config,X-cisco-sis-5.1.0,X-cisco-xsi-8.0.1
 Allow-Events: kpml,dialog
 Content-Length: 788
 Content-Type: application/sdp
 Content-Disposition: session;handling=optional

```
v=0
o=Cisco-SIPUA 10347 4 IN IP4 172.18.202.137
s=SIP Call
t=0 0
m=audio 21446 RTP/AVP 0 8 18 102 9 116 124 101
c=IN IP4 172.18.202.137
a=rtpmap:0 PCMU/8000
a=rtpmap:8 PCMA/8000
a=rtpmap:18 G729/8000
a=fmtp:18 annexb=no
a=rtpmap:102 L16/16000
a=rtpmap:9 G722/8000
a=rtpmap:116 iLBC/8000
a=fmtp:116 mode=20
a=rtpmap:124 ISAC/16000
a=rtpmap:101 telephone-event/8000
a=fmtp:101 0-15
a=sendrecv
m=video 20116 RTP/AVP 126 97
c=IN IP4 172.18.202.137
b=TIAS:1000000
a=rtpmap:126 H264/90000
a=fmtp:126 profile-level-id=42801E;packetization-mode=1;level-asymmetry-allowed=1
a=imageattr:* recv [x=640,y=480,q=0.50]
a=rtpmap:97 H264/90000
a=fmtp:97 profile-level-id=42801E;packetization-mode=0;level-asymmetry-allowed=1
a=imageattr:* recv [x=640,y=480,q=0.50]
a=sendrecv
```

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

[36] ACK sip:9bbb8dda-00ee-701f-1b73-470a40f63088@172.18.202.137:49175;transport=tcp SIP/2.0

Via: SIP/2.0/TCP 172.18.202.97:5060;branch=z9hG4bK2b6c1de65dc1

From: <sip:4140@172.18.202.97>;tag=467630-b5a88942-7acc-4cc9-9d65-67021cfecfed-30423109

To: <sip:4210@172.18.202.97>;tag=b4a4e3289b9487571a816b7e-22810f52

Date: Tue, 20 Dec 2011 18:56:47 GMT

Call-ID: 48578a00-ef01da4d-57-61ca12ac@172.18.202.97

Max-Forwards: 70

CSeq: 105 ACK

Allow-Events: presence

Content-Type: application/sdp

Content-Length: 484

```
v=0
o=CiscoSystemsCCM-SIP 467630 5 IN IP4 172.18.202.97
s=SIP Call
c=IN IP4 172.18.198.24
t=0 0
m=audio 16728 RTP/AVP 9 101
b=TIAS:64000
a=rtpmap:9 G722/8000
a=ptime:20
a=rtpmap:101 telephone-event/8000
a=fmtp:101 0-15
m=video 16730 RTP/AVP 98
b=TIAS:5936000
a=label:11
a=rtpmap:98 H264/90000
a=fmtp:98 profile-level-id=428016;packetization-mode=1;max-mps=108000;max-fs=3600;max-cpb=200;max-br=5000;max-smps=108000;max-fps=6000
a=content:main
a=rtcp-fb:* nack pli
```

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

[37] SIP/2.0 200 OK

Via: SIP/2.0/TCP 172.18.198.24:5060;branch=z9hG4bKb8becc4bfe0ad05fd5d88809153162dc.1;rport

From: <sip:4140@sipsig-ccm97>;tag=fefc3b50b0b21cfb

To: <sip:4210@sipsig-ccm97>;tag=467629-b5a88942-7acc-4cc9-9d65-67021cfecfed-30423108

Date: Tue, 20 Dec 2011 18:56:47 GMT

Call-ID: c1229954d7a16a8f@172.18.198.24

CSeq: 102 INVITE

Allow: INVITE, OPTIONS, INFO, BYE, CANCEL, ACK, PRACK, UPDATE, REFER, SUBSCRIBE, NOTIFY

Allow-Events: presence

Supported: replaces

Call-Info: <urn:x-cisco-remotecc:callinfo>; security= NotAuthenticated; orientation= to; gci= 1-167030;

call-instance= 1

Session-Expires: 1800;refresher=uac

Require: timer

Remote-Party-ID: <sip:4210@172.18.202.97>;party=called;screen=yes;privacy=off

Contact: <sip:4210@172.18.202.97:5060;transport=tcp>

Content-Type: application/sdp

Content-Length: 1217

```
v=0
o=CiscoSystemsCCM-SIP 467629 3 IN IP4 172.18.202.97
s=SIP Call
b=AS:1064
t=0 0
m=audio 21446 RTP/AVP 9 101
c=IN IP4 172.18.202.137
b=TIAS:64000
a=rtpmap:9 G722/8000
a=ptime:20
a=rtpmap:101 telephone-event/8000
a=fmtp:101 0-15
m=video 20116 RTP/AVP 126
c=IN IP4 172.18.202.137
b=TIAS:1000000
a=rtpmap:126 H264/90000
a=fmtp:126 profile-level-id=42801E;packetization-mode=1;level-asymmetry-allowed=1
m=application 0 UDP/BFCP *
c=IN IP4 172.18.198.24
a=floorctrl:c-s
a=floorid:2 mstrm:12
a=confid:1
a=userid:45
m=video 0 RTP/AVP 97 98 99 34 31
c=IN IP4 172.18.198.24
b=TIAS:6000000
a=label:12
a=rtpmap:97 H264/90000
```

```

a=fmtp:97 profile-level-id=428016;max-mbps=108000;max-fs=3840;max-cpb=200;max-br=5000;max-smbps=108000;max-fps=6000
a=rtpmap:98 H264/90000
a=fmtp:98 profile-level-id=428016;packetization-mode=1;max-mbps=108000;max-fs=3840;max-cpb=200;max-br=5000;max-smbps=108000;max-fps=6000
a=rtpmap:99 H263-1998/90000
a=fmtp:99 QCIF=1;CIF=1;CIF4=1;CUSTOM=352,240,1
a=rtpmap:34 H263/90000
a=fmtp:34 QCIF=1;CIF=1;CIF4=1
a=rtpmap:31 H261/90000
a=fmtp:31 CIF=1;QCIF=1
a=content:slides
a=rtcp-fb:* nack pli
m=application 0 RTP/AVP 107
c=IN IP4 172.18.198.24
a=rtpmap:107 H224/0

```

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

[38] ACK sip:4210@172.18.202.97:5060;transport=tcp SIP/2.0

Via: SIP/2.0/TCP 172.18.198.24:5060;branch=z9hG4bK5e0ffba203587e835bf5393c63ea8eea.1;rport

Call-ID: c1229954d7a16a8f@172.18.198.24

CSeq: 102 ACK

From: <sip:4140@sipsig-ccm97>;tag=fefc3b50b0b21cfb

To: <sip:4210@sipsig-ccm97>;tag=467629-b5a88942-7acc-4cc9-9d65-67021cfecfed-30423108

Max-Forwards: 70

Allow: INVITE, ACK, CANCEL, BYE, UPDATE, INFO, OPTIONS, REFER, NOTIFY

User-Agent: TANDBERG/516 (TC5.0.0.-PreAlpha (TEST SW))

Supported: replaces,100rel,timer,gruu,path,outbound,X-cisco-callinfo,X-cisco-serviceuri,X-cisco-service-control,norefersub,extended-refer

Content-Length: 0

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

[39] BYE sip:4210@172.18.202.97:5060;transport=tcp SIP/2.0

Via: SIP/2.0/TCP 172.18.198.24:5060;branch=z9hG4bK849695409ed36aaafc6a58f1b7ce0bea1.1;rport

Call-ID: c1229954d7a16a8f@172.18.198.24

CSeq: 103 BYE

Contact: <sip:4140@172.18.198.24:43624;transport=tcp>;+sip.instance="urn:uuid:00000000-0000-0000-0000-0050600491d7>";+u.sip!model.ccm.cisco.com="584";audio=TRUE;video=TRUE;mobility="fixed";duplex="full";description="TANDBERG-SIP"

From: <sip:4140@sipsig-ccm97>;tag=fefc3b50b0b21cfb

To: <sip:4210@sipsig-ccm97>;tag=467629-b5a88942-7acc-4cc9-9d65-67021cfecfed-30423108

Max-Forwards: 70

Allow: INVITE, ACK, CANCEL, BYE, UPDATE, INFO, OPTIONS, REFER, NOTIFY

User-Agent: TANDBERG/516 (TC5.0.0.-PreAlpha (TEST SW))

Supported: replaces,100rel,timer,gruu,path,outbound,X-cisco-callinfo,X-cisco-serviceuri,X-cisco-service-control,norefersub,extended-refer

Content-Length: 0

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

[40] SIP/2.0 200 OK

Via: SIP/2.0/TCP 172.18.198.24:5060;branch=z9hG4bK849695409ed36aaafc6a58f1b7ce0bea1.1;rport

From: <sip:4140@sipsig-ccm97>;tag=fefc3b50b0b21cfb

To: <sip:4210@sipsig-ccm97>;tag=467629-b5a88942-7acc-4cc9-9d65-67021cfecfed-30423108

Date: Tue, 20 Dec 2011 18:56:53 GMT

Call-ID: c1229954d7a16a8f@172.18.198.24

CSeq: 103 BYE

Content-Length: 0

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

[41] BYE sip:9bbb8dda-00ee-701f-1b73-470a40f63088@172.18.202.137:49175;transport=tcp SIP/2.0

Via: SIP/2.0/TCP 172.18.202.97:5060;branch=z9hG4bK2b6dd66e4db

From: <sip:4140@172.18.202.97>;tag=467630-b5a88942-7acc-4cc9-9d65-67021cfecfed-30423109

To: <sip:4210@172.18.202.97>;tag=b4a4e3289b9487571a816b7e-22810f52

Date: Tue, 20 Dec 2011 18:56:47 GMT

Call-ID: 48578a00-ef01da4d-57-61ca12ac@172.18.202.97

User-Agent: Cisco-CUCM8.6

Max-Forwards: 70

CSeq: 106 BYE

Reason: Q.850;cause=16

Content-Length: 0

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

[42] SIP/2.0 200 OK

Via: SIP/2.0/TCP 172.18.202.97:5060;branch=z9hG4bK2b6dd66e4db

From: <sip:4140@172.18.202.97>;tag=467630-b5a88942-7acc-4cc9-9d65-67021cfecfed-30423109

To: <sip:4210@172.18.202.97>;tag=b4a4e3289b9487571a816b7e-22810f52

Call-ID: 48578a00-ef01da4d-57-61ca12ac@172.18.202.97

Date: Tue, 20 Dec 2011 18:56:51 GMT

CSeq: 106 BYE

Server: Cisco-CP9971/9.2.1

Content-Length: 0

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

[43] NOTIFY sip:4230@172.18.202.190:46879;transport=tcp SIP/2.0

Via: SIP/2.0/TCP 172.18.202.97:5060;branch=z9hG4bK2b6e234928cb

From: <sip:4210@172.18.202.97>;tag=623083919

To: <sip:4230@sipsig-ccm97>;tag=c4e45bcdb22f59dd

Call-ID: cea0007ff08eb669@172.18.202.190

CSeq: 291 NOTIFY

Max-Forwards: 70

Date: Tue, 20 Dec 2011 18:56:53 GMT

User-Agent: Cisco-CUCM8.6

Event: presence

Subscription-State: active;expires=2008

Contact: <sip:4210@172.18.202.97:5060;transport=tcp>

Content-Type: application/pidf+xml

Content-Length: 736

```
<?xml version="1.0" encoding="UTF-8" standalone="no" ?>
<presence xmlns="urn:ietf:params:xml:ns:pidf" entity="sip:4210@172.18.202.97"
  xmlns:e="urn:ietf:params:xml:ns:pidf:status:rpidd" xmlns:dm="urn:ietf:params:xml:ns:pidf:data-model"
  xmlns:ce="urn:cisco:params:xml:ns:pidf:rpidd" xmlns:sc="urn:ietf:params:xml:ns:pidf:servcaps">
  <dm:person>
    <status>
      <basic>open</basic>
    </status>
    <e:activities>
      </e:activities>
    </dm:person>
    <tuple id="cmp-1-409207">
      <status>
        <basic>open</basic>
      </status>
      <sc:servcaps>
        <sc:audio>true</sc:audio>
      </sc:servcaps>
      <contact priority="0.8">sip:4210@172.18.202.97:5060</contact>
      <timestamp>2011-12-20T18:56:53Z</timestamp>
    </tuple>
  </presence>
```

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

[44] SIP/2.0 200 OK

Via: SIP/2.0/TCP 172.18.202.97:5060;branch=z9hG4bK2b6e234928cb;received=172.18.202.97

Call-ID: cea0007ff08eb669@172.18.202.190

CSeq: 291 NOTIFY

From: <sip:4210@172.18.202.97>;tag=623083919

To: <sip:4230@sipsig-ccm97>;tag=c4e45bcdb22f59dd

Server: TANDBERG/257 (TE4.1.0.253886Alpha4)

Content-Length: 0

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

[45] OPTIONS sip:172.18.202.97:5060;transport=tcp SIP/2.0

Via: SIP/2.0/TCP 172.18.202.130:5060;branch=z9hG4bKe1a180409600a9aaafd94b088928120b2117405;rport

Call-ID: 67ae86db446aaf99@172.18.202.130

CSeq: 40552 OPTIONS

From: <sip:172.18.202.130>;tag=4839c8caea72e95f

To: <sip:172.18.202.97:5060>

Max-Forwards: 0

User-Agent: TANDBERG/4100 (X6.1)

Supported: com.tandberg.vcs.resourceusage

Content-Length: 0

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

[46] SIP/2.0 503 Service Unavailable

Via: SIP/2.0/TCP 172.18.202.130:5060;branch=z9hG4bKe1a180409600a9aaafd94b088928120b2117405;rport

From: <sip:172.18.202.130>;tag=4839c8caea72e95f

To: <sip:172.18.202.97:5060>;tag=178873198

Date: Tue, 20 Dec 2011 18:56:57 GMT

Call-ID: 67ae86db446aaf99@172.18.202.130

CSeq: 40552 OPTIONS

Warning: 399 sipsig-ccm97 "Unable to find a device handler for the request received on port 28024 from 172.18.202.130"

Content-Length: 0

2.3 Call with presentation between EX90 and E20 is transferred by E20 to another EX90

Title: Call with presentation between EX90 and E20 is transferred by E20 to another EX90

Description:

- A calls B
- A starts a presentation with B
- B transfers call to C
- A is now in a video call with C
- A starts presentation with C
- A ends presentation
- A ends the call

Configuration:

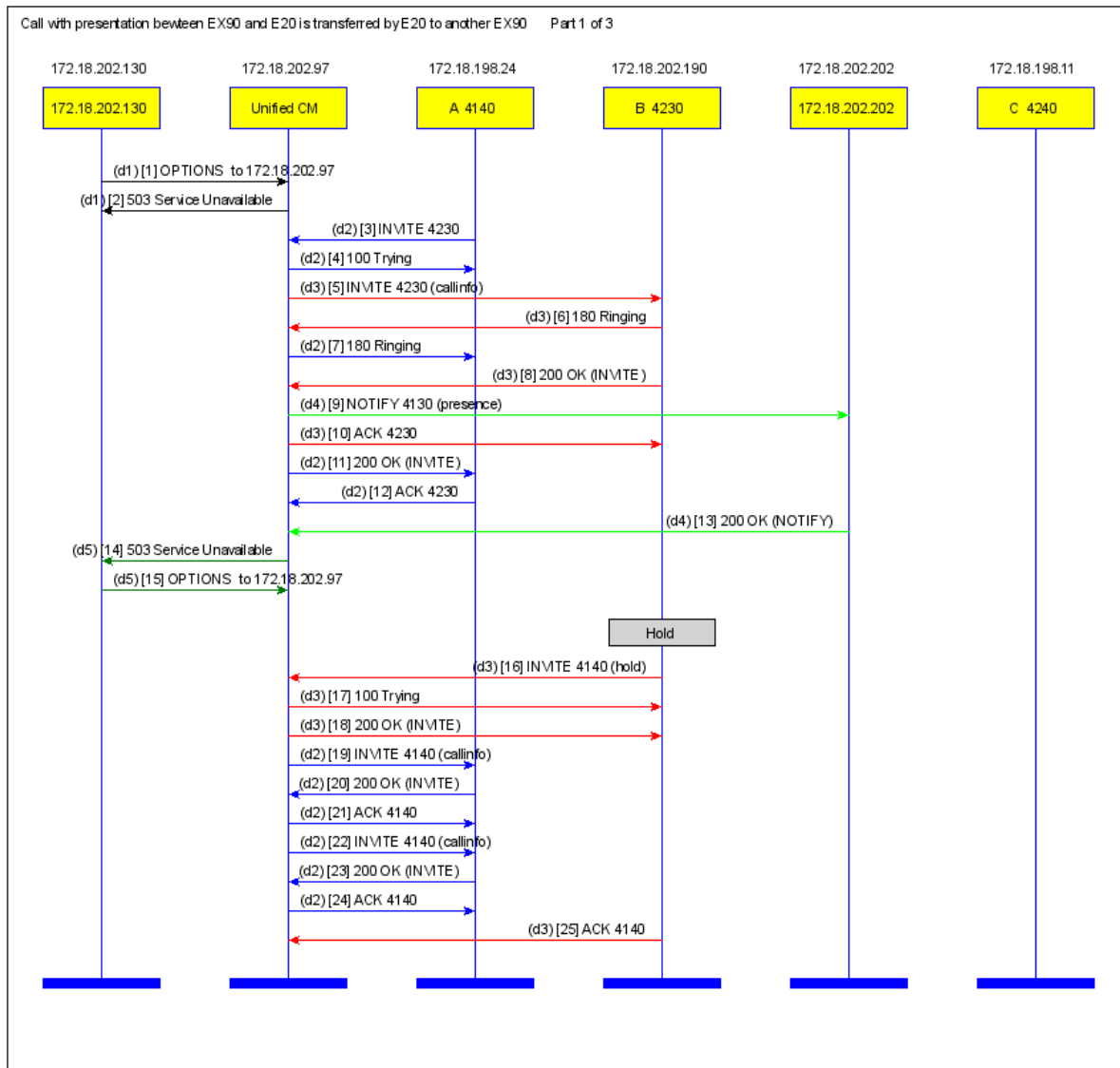
- Node = Unified CM, IP = 172.18.202.97
- Phone = A, Line = 4140, IP = 172.18.198.24, Model = Cisco Telepresence EX90
- Phone = B, Line = 4230, IP = 172.18.202.190, Model = Cisco E20
- Phone = C, Line = 4240, IP = 172.18.198.11, Model = Cisco Telepresence EX90

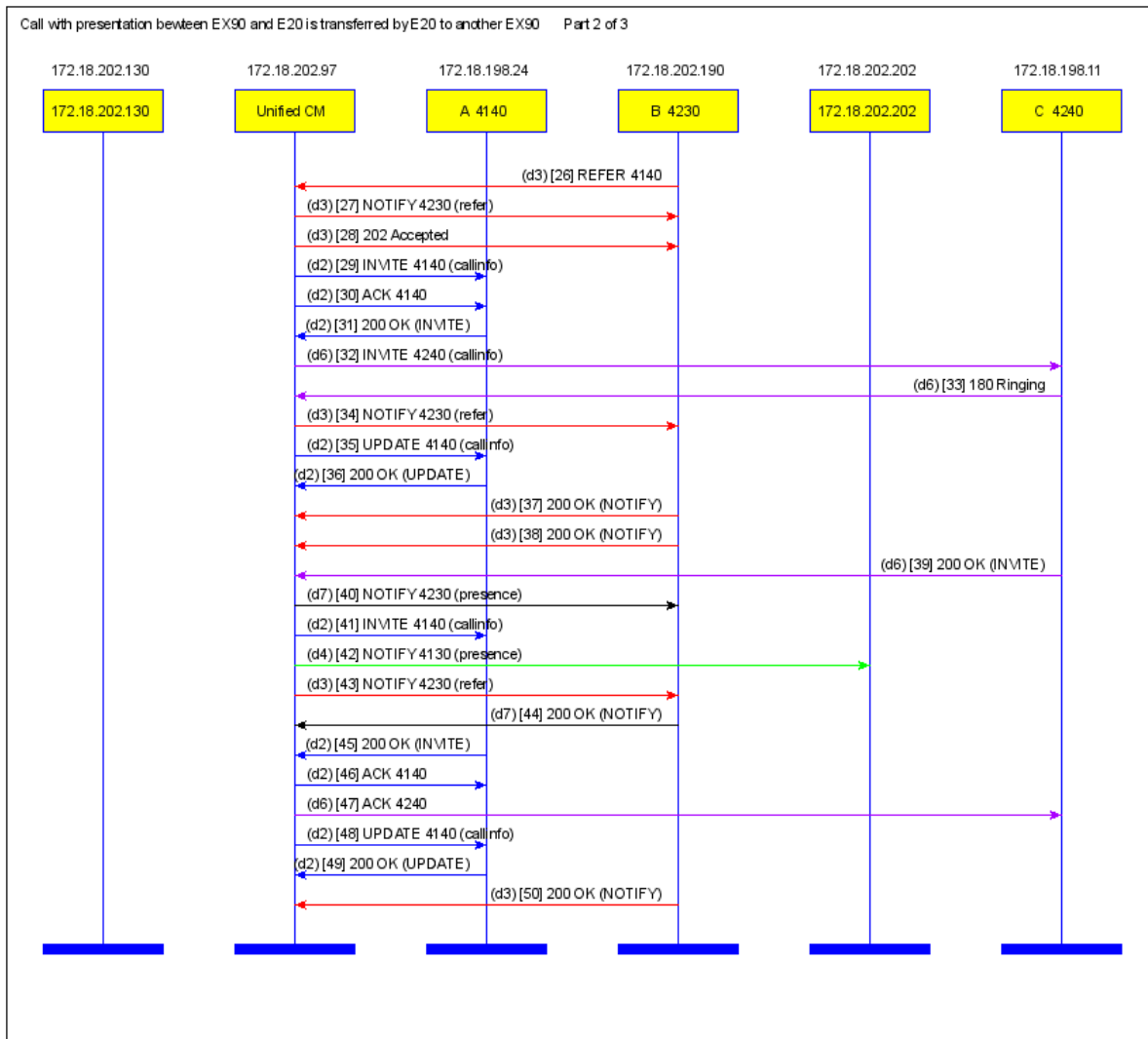
- A has laptop connected to it via HDMI
- C has laptop connected to it via HDMI

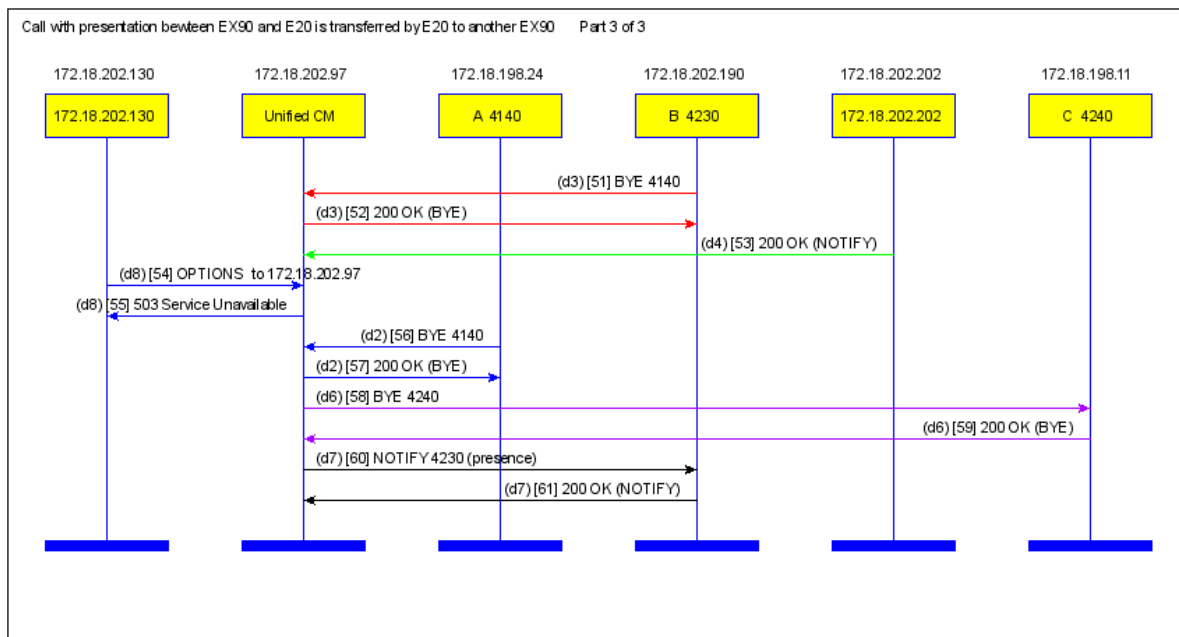
Scenario:

- 4140 calls 4230
- 4230 answers the call
- 4140 presses Present and chooses HDMI as input source for presentation
- Main video and Presentation video are available on 4230
- 4230 presses Transfer and calls 4240
- 4240 answers the call
- 4140 and 4240 are in a video call now
- 4140 presses Present and chooses HDMI as input source for presentation
- Main video and Presentation video are available on 4240
- 4140 ends Presentation
- 4140 goes onhook

End of Scenario







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

[1] OPTIONS sip:172.18.202.97:5060;transport=tcp SIP/2.0

Via: SIP/2.0/TCP 172.18.202.130:5060;branch=z9hG4bKd1bcc36249c2df362ce3459f297c41152117426;rport

Call-ID: 354a8b0ede505ea3@172.18.202.130

CSeq: 22779 OPTIONS

From: <sip:172.18.202.130>;tag=3d9a9d576f51b712

To: <sip:172.18.202.97:5060>

Max-Forwards: 0

User-Agent: TANDBERG/4100 (X6.1)

Supported: com.tandberg.vcs.resourceusage

Content-Length: 0

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

[2] SIP/2.0 503 Service Unavailable

Via: SIP/2.0/TCP 172.18.202.130:5060;branch=z9hG4bKd1bcc36249c2df362ce3459f297c41152117426;rport

From: <sip:172.18.202.130>;tag=3d9a9d576f51b712

To: <sip:172.18.202.97:5060>;tag=807238130

Date: Tue, 20 Dec 2011 19:00:32 GMT

Call-ID: 354a8b0ede505ea3@172.18.202.130

CSeq: 22779 OPTIONS

Warning: 399 sip: 399 sipsig-ccm97 "Unable to find a device handler for the request received on port 28024 from 172.18.202.130"

Content-Length: 0

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

[3] INVITE sip:4230@sipsig-ccm97 SIP/2.0

Via: SIP/2.0/TCP 172.18.198.24:5060;branch=z9hG4bK9e5f713607a397a6ac05ca00a844b487.1;rport

Call-ID: ae2c7f5e238c87af@172.18.198.24

CSeq: 100 INVITE

Contact: <sip:4140@172.18.198.24:43624;transport=tcp>

From: <sip:4140@sipsig-ccm97>;tag=ee1295183789ebbb

To: <sip:4230@sipsig-ccm97>

Max-Forwards: 70

Route: <sip:172.18.202.97;lr>

Allow: INVITE,ACK,CANCEL,BYE,UPDATE,INFO,OPTIONS,REFER,NOTIFY

User-Agent: TANDBERG/516 (TC5.0.0.-PreAlpha (TEST SW))

Supported: replaces,100rel,timer,gruu,path,outbound,X-cisco-callinfo,X-cisco-serviceuri,X-cisco-service-control,norefersub,extended-refer

Session-Expires: 1800

Remote-Party-ID: <sip:4140@sipsig-ccm97>;privacy=off;id-type=subscriber;screen=yes;party=calling

Content-Type: application/sdp

Content-Length: 2459

v=0

o=tandberg 47 1 IN IP4 172.18.198.24

s=-

c=IN IP4 172.18.198.24

b=AS:6000

t=0 0

m=audio 16744 RTP/AVP 100 102 103 104 105 106 9 8 0 101

b=TIAS:128000

a=rtpmap:100 MP4A-LATM/90000

a=fmtp:100 profile-level-id=25;object=23;bitrate=128000

a=rtpmap:102 MP4A-LATM/90000

a=fmtp:102 profile-level-id=24;object=23;bitrate=64000

a=rtpmap:103 MP4A-LATM/90000

a=fmtp:103 profile-level-id=24;object=23;bitrate=56000

a=rtpmap:104 MP4A-LATM/90000

a=fmtp:104 profile-level-id=24;object=23;bitrate=48000

a=rtpmap:105 G7221/16000

a=fmtp:105 bitrate=32000

a=rtpmap:106 G7221/16000

a=fmtp:106 bitrate=24000

a=rtpmap:9 G722/8000

a=rtpmap:8 PCMA/8000

a=rtpmap:0 PCMU/8000

a=rtpmap:101 telephone-event/8000

a=fmtp:101 0-15

a=sendrecv

m=video 16746 RTP/AVP 97 98 99 34 31

b=TIAS:6000000

a=rtpmap:97 H264/90000

a=fmtp:97 profile-level-id=428016;max-br=5000;max-mbps=108000;max-fs=3600;max-smbps=108000;max-fps=6000

a=rtpmap:98 H264/90000

a=fmtp:98 profile-level-id=428016;max-br=5000;max-mbps=108000;max-fs=3600;max-smbps=108000;packetization-mode=1;max-fps=6000

a=rtpmap:99 H263-1998/90000

a=fmtp:99

custom=1280,768,3;custom=1280,720,3;custom=1024,768,1;custom=1024,576,2;custom=800,600,1;cif4=1;custom=720,480,1;custom=640,480,1;custom=512,288,1;cif=1;custom=352,240,1;qcif=1;maxbr=20000

a=rtpmap:34 H263/90000

```

a=fmtp:34 cif4=1; cif=1; qcif=1; maxbr=20000
a=rtpmap:31 H261/90000
a=fmtp:31 cif=1; qcif=1; maxbr=20000
a=rtcp-fb:* nack pli
a=sendrecv
a=content:main
a=label:11
a=answer:full
m=application 5070 UDP/BFCP *
a=floorctrl:c-s
a=confid:1
a=floorid:2 mstrm:12
a=userid:47
a=setup:actpass
a=connection:new
m=video 16748 RTP/AVP 97 98 99 34 31
b=TIAS:6000000
a=rtpmap:97 H264/90000
a=fmtp:97 profile-level-id=428016; max-br=5000; max-mbps=108000; max-fs=3840; max-smbps=108000; max-fps=6000
a=rtpmap:98 H264/90000
a=fmtp:98 profile-level-id=428016; max-br=5000; max-mbps=108000; max-fs=3840; max-smbps=108000; packetization-
mode=1; max-fps=6000
a=rtpmap:99 H263-1998/90000
a=fmtp:99
custom=1280,768,3; custom=1280,720,3; custom=1024,768,1; custom=1024,576,2; custom=800,600,1; cif4=1; custom=720,4
80,1; custom=640,480,1; custom=512,288,1; cif=1; custom=352,240,1; qcif=1; maxbr=20000
a=rtpmap:34 H263/90000
a=fmtp:34 cif4=1; cif=1; qcif=1; maxbr=20000
a=rtpmap:31 H261/90000
a=fmtp:31 cif=1; qcif=1; maxbr=20000
a=rtcp-fb:* nack pli
a=sendrecv
a=content:slides
a=label:12
m=application 16750 RTP/AVP 107
a=rtpmap:107 H224/4800
a=sendrecv

```

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

[4] SIP/2.0 100 Trying

```

Via: SIP/2.0/TCP 172.18.198.24:5060; branch=z9hG4bK9e5f713607a397a6ac05ca00a844b487.1;rport
From: <sip:4140@sipsig-ccm97>; tag=ee1295183789ebbb
To: <sip:4230@sipsig-ccm97>
Date: Tue, 20 Dec 2011 19:00:33 GMT
Call-ID: ae2c7f5e238c87af@172.18.198.24
CSeq: 100 INVITE
Allow-Events: presence
Content-Length: 0

```

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

[5] INVITE sip:4230@172.18.202.190:46879;transport=tcp SIP/2.0

```

Via: SIP/2.0/TCP 172.18.202.97:5060; branch=z9hG4bK2b7f383fbda7
From: <sip:4140@172.18.202.97>; tag=467669~b5a88942-7acc-4cc9-9d65-67021cfecfed-30423119
To: <sip:4230@sipsig-ccm97>
Date: Tue, 20 Dec 2011 19:00:33 GMT
Call-ID: e3506400-ef01db51-59-61ca12ac@172.18.202.97
Supported: timer,resource-priority,replaces
Min-SE: 1800
User-Agent: TANDBERG/516 (TC5.0.0.-PreAlpha (TEST SW))
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; gci= 1-167032;
call-instance= 1
Send-Info: conference, x-cisco-conference
Alert-Info: <file://Bellcore-dr1/>
Remote-Party-ID: <sip:4140@172.18.202.97;x-cisco-callback-number=4140>; party=calling; screen=yes; privacy=off
Contact: <sip:4140@172.18.202.97:5060;transport=tcp>; video; audio
Max-Forwards: 69
Content-Length: 0

```

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

[6] SIP/2.0 180 Ringing

```

Via: SIP/2.0/TCP 172.18.202.97:5060; branch=z9hG4bK2b7f383fbda7; received=172.18.202.97
Call-ID: e3506400-ef01db51-59-61ca12ac@172.18.202.97
CSeq: 101 INVITE
From: <sip:4140@172.18.202.97>; tag=467669~b5a88942-7acc-4cc9-9d65-67021cfecfed-30423119
To: <sip:4230@sipsig-ccm97>; tag=7630b7dc47dac62e
Server: TANDBERG/257 (TE4.1.0.253886Alpha4)
Remote-Party-ID: <sip:4230@sipsig-ccm97>; privacy=off; id-type=subscriber; screen=yes; party=calling

```

Content-Length: 0

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

[7] SIP/2.0 180 Ringing

Via: SIP/2.0/TCP 172.18.198.24:5060;branch=z9hG4bK9e5f713607a397a6ac05ca00a844b487.1;rport
 From: <sip:4140@sipsig-ccm97>;tag=ee1295183789ebbb
 To: <sip:4230@sipsig-ccm97>;tag=467668-b5a88942-7acc-4cc9-9d65-67021cfecfed-30423118
 Date: Tue, 20 Dec 2011 19:00:33 GMT
 Call-ID: ae2c7f5e238c87af@172.18.198.24
 CSeq: 100 INVITE
 Allow: INVITE, OPTIONS, INFO, BYE, CANCEL, ACK, PRACK, UPDATE, REFER, SUBSCRIBE, NOTIFY
 Allow-Events: presence
 Call-Info: <urn:x-cisco-remotecc:callinfo>; security= NotAuthenticated; orientation= to; ui-state= ringout;
 gci= 1-167032; call-instance= 1
 Send-Info: conference, x-cisco-conference
 Remote-Party-ID: <sip:4230@172.18.202.97>;party=called;screen=yes;privacy=off
 Contact: <sip:4230@172.18.202.97:5060;transport=tcp>
 Content-Length: 0

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

[8] SIP/2.0 200 OK

Via: SIP/2.0/TCP 172.18.202.97:5060;branch=z9hG4bK2b7f383fbd7;received=172.18.202.97
 Call-ID: e3506400-ef01db51-59-61ca12ac@172.18.202.97
 CSeq: 101 INVITE
 Contact: <sip:4230@172.18.202.190:46879;transport=tcp>
 From: <sip:4140@172.18.202.97>;tag=467669-b5a88942-7acc-4cc9-9d65-67021cfecfed-30423119
 To: <sip:4230@sipsig-ccm97>;tag=7630b7dc47dac62e
 Allow: INVITE, ACK, CANCEL, BYE, UPDATE, INFO, OPTIONS, REFER, NOTIFY
 Server: TANDBERG/257 (TE4.1.0.253886Alpha4)
 Supported: replaces,100rel,timer,gruu,path,outbound,X-cisco-callinfo,X-cisco-serviceuri,X-cisco-service-
 control,norefersub,extended-refer
 Require: timer
 Session-Expires: 1800;refresher=uas
 Min-SE: 1800
 Remote-Party-ID: <sip:4230@sipsig-ccm97>;privacy=off;id-type=subscriber;screen=yes;party=calling
 Content-Type: application/sdp
 Content-Length: 2178

```
v=0
o=tandberg 13 1 IN IP4 172.18.202.190
s=-
c=IN IP4 172.18.202.190
b=AS:1152
t=0 0
m=audio 16464 RTP/AVP 100 102 103 9 18 11 8 0 101
b=TIAS:64000
a=rtpmap:100 MP4A-LATM/90000
a=fmtp:100 profile-level-id=24;object=23;bitrate=64000
a=rtpmap:102 G7221/16000
a=fmtp:102 bitrate=32000
a=rtpmap:103 G7221/16000
a=fmtp:103 bitrate=24000
a=rtpmap:9 G722/8000
a=rtpmap:18 G729/8000
a=fmtp:18 annexb=no
a=rtpmap:11 L16/16000
a=rtpmap:8 PCMA/8000
a=rtpmap:0 PCMU/8000
a=rtpmap:101 telephone-event/8000
a=fmtp:101 0-15
a=sendrecv
m=video 16466 RTP/AVP 97 98 99 34 31
b=TIAS:1152000
a=rtpmap:97 H264/90000
a=fmtp:97 profile-level-id=42800d;max-br=906;max-mbps=40500;max-fs=1344;max-smbps=40500;max-fps=3000
a=rtpmap:98 H264/90000
a=fmtp:98 profile-level-id=42800d;max-br=906;max-mbps=40500;max-fs=1344;max-smbps=40500;packetization-
mode=1;max-fps=3000
a=rtpmap:99 H263-1998/90000
a=fmtp:99
  custom=1024,768,4;custom=1024,576,4;custom=800,600,4;cif4=2;custom=720,480,2;custom=640,480,2;custom=512,288
  ,1;cif=1;custom=352,240,1;qcif=1;maxbr=10880
a=rtpmap:34 H263/90000
a=fmtp:34 cif4=2;cif=1;qcif=1;maxbr=10880
a=rtpmap:31 H261/90000
a=fmtp:31 cif=1;qcif=1;maxbr=10880
a=rtcp-fb:* nack pli
a=sendrecv
a=content:main
a=label:11
a=answer:full
```

```

m=application 5070 UDP/BFCP *
a=floorctrl:c-s
a=confid:1
a=floorid:2 mstrm:12
a=userid:13
a=setup:actpass
a=connection:new
m=video 16468 RTP/AVP 97 98 99 34 31
b=TIAS:1152000
a=rtpmap:97 H264/90000
a=fmtp:97 profile-level-id=42800d;max-br=906;max-mbps=40500;max-fs=1344;max-smbps=40500;max-fps=3000
a=rtpmap:98 H264/90000
a=fmtp:98 profile-level-id=42800d;max-br=906;max-mbps=40500;max-fs=1344;max-smbps=40500;packetization-
mode=1;max-fps=3000
a=rtpmap:99 H263-1998/90000
a=fmtp:99
custom=1024,768,4;custom=1024,576,4;custom=800,600,4;cif4=2;custom=720,480,2;custom=640,480,2;custom=512,288
,1;cif=1;custom=352,240,1;qcif=1;maxbr=10880
a=rtpmap:34 H263/90000
a=fmtp:34 cif4=2;cif=1;qcif=1;maxbr=10880
a=rtpmap:31 H261/90000
a=fmtp:31 cif=1;qcif=1;maxbr=10880
a=rtcp-fb:* nack pli
a=sendrecv
a=content:slides
a=label:12
m=application 16470 RTP/AVP 104
a=rtpmap:104 H224/4800
a=sendrecv

```

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

[9] NOTIFY sip:4130@172.18.202.202:60912;transport=tcp SIP/2.0

```

Via: SIP/2.0/TCP 172.18.202.97:5060;branch=z9hG4bK2b80a41e4a9
From: <sip:4230@172.18.202.97>;tag=2094352210
To: <sip:4130@sipsig-ccm97>;tag=43b201d47a2191fc
Call-ID: b7932df999bc140a@172.18.202.202
CSeq: 1597 NOTIFY
Max-Forwards: 70
Date: Tue, 20 Dec 2011 19:00:36 GMT
User-Agent: Cisco-CUCM8.6
Event: presence
Subscription-State: active;expires=2544
Contact: <sip:4230@172.18.202.97:5060;transport=tcp>
Content-Type: application/pidf+xml
Content-Length: 825

```

```

<?xml version="1.0" encoding="UTF-8" standalone="no" ?>
<presence xmlns="urn:ietf:params:xml:ns:pidf" entity="sip:4230@172.18.202.97"
xmlns:e="urn:ietf:params:xml:ns:pidf:status:rpidd" xmlns:dm="urn:ietf:params:xml:ns:pidf:data-model"
xmlns:ce="urn:cisco:params:xml:ns:pidf:rpidd" xmlns:sc="urn:ietf:params:xml:ns:pidf:servcaps">
  <dm:person>
    <status>
      <basic>open</basic>
    </status>
    <e:activities>
      <e:on-the-phone/>
    </e:activities>
  </dm:person>
  <tuple id="cmp-1-79">
    <status>
      <basic>open</basic>
      <e:activities>
        <e:on-the-phone/>
      </e:activities>
    </status>
    <sc:servcaps>
      <sc:audio>true</sc:audio>
    </sc:servcaps>
    <contact priority="0.8">sip:4230@172.18.202.97:5060</contact>
    <timestamp>2011-12-20T19:00:36Z</timestamp>
  </tuple>
</presence>

```

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

[10] ACK sip:4230@172.18.202.190:46879;transport=tcp SIP/2.0

```

Via: SIP/2.0/TCP 172.18.202.97:5060;branch=z9hG4bK2b811b73cab1
From: <sip:4140@172.18.202.97>;tag=467669-b5a88942-7acc-4cc9-9d65-67021cfecfed-30423119
To: <sip:4230@sipsig-ccm97>;tag=7630b7dc47dac62e
Date: Tue, 20 Dec 2011 19:00:33 GMT
Call-ID: e3506400-ef01db51-59-61ca12ac@172.18.202.97
Max-Forwards: 70

```

```

CSeq: 101 ACK
Allow-Events: presence
Content-Type: application/sdp
Content-Length: 1053

v=0
o=CiscoSystemsCCM-SIP 467669 1 IN IP4 172.18.202.97
s=SIP Call
b=AS:6000
t=0 0
m=audio 16744 RTP/AVP 102 101
c=IN IP4 172.18.198.24
b=TIAS:64000
a=rtpmap:102 MP4A-LATM/90000
a=fmtp:102 bitrate=64000;profile-level-id=24;object=23
a=rtpmap:101 telephone-event/8000
a=fmtp:101 0-15
m=video 16746 RTP/AVP 98
c=IN IP4 172.18.198.24
b=TIAS:5936000
a=label:11
a=rtpmap:98 H264/90000
a=fmtp:98 profile-level-id=428016;packetization-mode=1;max-mbps=108000;max-fs=3600;max-cpb=200;max-br=5000;max-smbps=108000;max-fps=6000
a=content:main
a=rtcp-fb:* nack pli
m=application 5070 UDP/BFCP *
c=IN IP4 172.18.198.24
a=floorctrl:s-only
a=floorid:2 mstrm:12
a=confid:1
a=userid:47
m=video 16748 RTP/AVP 98
c=IN IP4 172.18.198.24
b=TIAS:5936000
a=label:12
a=rtpmap:98 H264/90000
a=fmtp:98 profile-level-id=428016;packetization-mode=1;max-mbps=108000;max-fs=3840;max-cpb=200;max-br=5000;max-smbps=108000;max-fps=6000
a=content:slides
a=rtcp-fb:* nack pli
m=application 16750 RTP/AVP 107
c=IN IP4 172.18.198.24
a=rtpmap:107 H224/0

```

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

[11] SIP/2.0 200 OK

```

Via: SIP/2.0/TCP 172.18.198.24:5060;branch=z9hG4bK9e5f713607a397a6ac05ca00a844b487.1;rport
From: <sip:4140@sipsig-ccm97>;tag=ee1295183789ebbb
To: <sip:4230@sipsig-ccm97>;tag=467668-b5a88942-7acc-4cc9-9d65-67021cfecfed-30423118
Date: Tue, 20 Dec 2011 19:00:33 GMT
Call-ID: ae2c7f5e238c87af@172.18.198.24
CSeq: 100 INVITE
Allow: INVITE, OPTIONS, INFO, BYE, CANCEL, ACK, PRACK, UPDATE, REFER, SUBSCRIBE, NOTIFY
Allow-Events: presence
Supported: replaces
Call-Info: <urn:x-cisco-remotecc:callinfo>; security= NotAuthenticated; orientation= to; gci= 1-167032; call-instance= 1
Send-Info: conference, x-cisco-conference
Session-Expires: 1800;refresher=uas
Require: timer
Remote-Party-ID: <sip:4230@172.18.202.97>;party=called;screen=yes;privacy=off
Contact: <sip:4230@172.18.202.97:5060;transport=tcp>
Content-Type: application/sdp
Content-Length: 1050

```

```

v=0
o=CiscoSystemsCCM-SIP 467668 1 IN IP4 172.18.202.97
s=SIP Call
b=AS:1152
t=0 0
m=audio 16464 RTP/AVP 100 101
c=IN IP4 172.18.202.190
b=TIAS:64000
a=rtpmap:100 MP4A-LATM/90000
a=fmtp:100 bitrate=64000;profile-level-id=24;object=23
a=rtpmap:101 telephone-event/8000
a=fmtp:101 0-15
m=video 16466 RTP/AVP 98
c=IN IP4 172.18.202.190
b=TIAS:1088000

```

```

a=label:11
a=rtptime:98 H264/90000
a=fmtp:98 profile-level-id=42800D;packetization-mode=1;max-mbps=40500;max-fs=1344;max-cpb=37;max-br=925;max-
smbps=40500;max-fps=3000
a=content:main
a=rtcp-fb:* nack pli
m=application 5070 UDP/BFCP *
c=IN IP4 172.18.202.190
a=floorctrl:c-only
a=floorid:2 mstrm:12
a=confid:1
a=userid:13
m=video 16468 RTP/AVP 98
c=IN IP4 172.18.202.190
b=TIAS:1088000
a=label:12
a=rtptime:98 H264/90000
a=fmtp:98 profile-level-id=42800D;packetization-mode=1;max-mbps=40500;max-fs=1344;max-cpb=37;max-br=925;max-
smbps=40500;max-fps=3000
a=content:slides
a=rtcp-fb:* nack pli
m=application 16470 RTP/AVP 104
c=IN IP4 172.18.202.190
a=rtptime:104 H224/0

```

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

[12] ACK sip:4230@172.18.202.97:5060;transport=tcp SIP/2.0

Via: SIP/2.0/TCP 172.18.198.24:5060;branch=z9hG4bKb6db26ae18e3f86250d8b19e8f9c1760.1;rport

Call-ID: ae2c7f5e238c87af@172.18.198.24

CSeq: 100 ACK

From: <sip:4140@sipsig-ccm97>;tag=ee1295183789ebbb

To: <sip:4230@sipsig-ccm97>;tag=467668-b5a88942-7acc-4cc9-9d65-67021cfecfed-30423118

Max-Forwards: 70

Allow: INVITE, ACK, CANCEL, BYE, UPDATE, INFO, OPTIONS, REFER, NOTIFY

User-Agent: TANDBERG/516 (TC5.0.0.-PreAlpha (TEST SW))

Supported: replaces,100rel,timer,gruu,path,outbound,X-cisco-callinfo,X-cisco-serviceuri,X-cisco-service-
control,norefersub,extended-refer

Content-Length: 0

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

[13] SIP/2.0 200 OK

Via: SIP/2.0/TCP 172.18.202.97:5060;branch=z9hG4bK2b80a41e4a9;received=172.18.202.97

Call-ID: b7932df999bc140a@172.18.202.202

CSeq: 1597 NOTIFY

From: <sip:4230@172.18.202.97>;tag=2094352210

To: <sip:4130@sipsig-ccm97>;tag=43b201d47a2191fc

Server: TANDBERG/257 (TE4.1.0.253886Alpha4)

Content-Length: 0

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

[14] SIP/2.0 503 Service Unavailable

Via: SIP/2.0/TCP 172.18.202.130:5060;branch=z9hG4bKcbe5f6f050f8a5617f0ebbd2463461c92117429;rport

From: <sip:172.18.202.130>;tag=b6d179b030878753

To: <sip:172.18.202.97:5060>;tag=1380108259

Date: Tue, 20 Dec 2011 19:01:03 GMT

Call-ID: f0941defec1a6f5d@172.18.202.130

CSeq: 41118 OPTIONS

Warning: 399 sipsig-ccm97 "Unable to find a device handler for the request received on port 28024 from
172.18.202.130"

Content-Length: 0

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

[15] OPTIONS sip:172.18.202.97:5060;transport=tcp SIP/2.0

Via: SIP/2.0/TCP 172.18.202.130:5060;branch=z9hG4bKcbe5f6f050f8a5617f0ebbd2463461c92117429;rport

Call-ID: f0941defec1a6f5d@172.18.202.130

CSeq: 41118 OPTIONS

From: <sip:172.18.202.130>;tag=b6d179b030878753

To: <sip:172.18.202.97:5060>

Max-Forwards: 0

User-Agent: TANDBERG/4100 (X6.1)

Supported: com.tandberg.vcs.resourceusage

Content-Length: 0

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

[16] INVITE sip:4140@172.18.202.97:5060;transport=tcp SIP/2.0

Via: SIP/2.0/TCP 172.18.202.190:5060;branch=z9hG4bKe3e5e7a703d81f852bd2c7b5cbe09140.1;rport

Call-ID: e3506400-ef01db51-59-61ca12ac@172.18.202.97

CSeq: 501 INVITE

Contact: <sip:4230@172.18.202.190:46879;transport=tcp>

From: <sip:4230@sipsig-ccm97>;tag=7630b7dc47dac62e

To: <sip:4140@172.18.202.97>;tag=467669-b5a88942-7acc-4cc9-9d65-67021cfecfed-30423119

```

Max-Forwards: 70
Allow: INVITE, ACK, CANCEL, BYE, UPDATE, INFO, OPTIONS, REFER, NOTIFY
User-Agent: TANDBERG/257 (TE4.1.0.253886Alpha4)
Supported: replaces,100rel, timer,gruu,path,outbound,X-cisco-callinfo,X-cisco-serviceuri,X-cisco-service-
control,norefersub,extended-refer
Require: timer
Call-Info: <urn:x-cisco-remotecc:hold>;reason=transfer
Session-Expires: 1800;refresher=uac
Min-SE: 1800
Remote-Party-ID: <sip:4230@sipsig-ccm97>;privacy=off;id-type=subscriber;screen=yes;party=calling
Content-Type: application/sdp
Content-Length: 2178

v=0
o=tandberg 13 2 IN IP4 172.18.202.190
s=-
c=IN IP4 172.18.202.190
b=AS:1152
t=0 0
m=audio 16464 RTP/AVP 100 102 103 9 18 11 8 0 101
b=TIAS:64000
a=rtpmap:100 MP4A-LATM/90000
a=fmtp:100 profile-level-id=24;object=23;bitrate=64000
a=rtpmap:102 G7221/16000
a=fmtp:102 bitrate=32000
a=rtpmap:103 G7221/16000
a=fmtp:103 bitrate=24000
a=rtpmap:9 G722/8000
a=rtpmap:18 G729/8000
a=fmtp:18 annexb=no
a=rtpmap:11 L16/16000
a=rtpmap:8 PCMA/8000
a=rtpmap:0 PCMU/8000
a=rtpmap:101 telephone-event/8000
a=fmtp:101 0-15
a=inactive
m=video 16466 RTP/AVP 97 98 99 34 31
b=TIAS:1152000
a=rtpmap:97 H264/90000
a=fmtp:97 profile-level-id=42800d;max-br=906;max-mbps=40500;max-fs=1344;max-smbps=40500;max-fps=3000
a=rtpmap:98 H264/90000
a=fmtp:98 profile-level-id=42800d;max-br=906;max-mbps=40500;max-fs=1344;max-smbps=40500;packetization-
mode=1;max-fps=3000
a=rtpmap:99 H263-1998/90000
a=fmtp:99
custom=1024,768,4;custom=1024,576,4;custom=800,600,4;cif4=2;custom=720,480,2;custom=640,480,2;custom=512,288
,1;cif=1;custom=352,240,1;qcif=1;maxbr=10880
a=rtpmap:34 H263/90000
a=fmtp:34 cif4=2;cif=1;qcif=1;maxbr=10880
a=rtpmap:31 H261/90000
a=fmtp:31 cif=1;qcif=1;maxbr=10880
a=rtcp-fb:* nack pli
a=inactive
a=content:main
a=label:11
a=answer:full
m=application 5070 UDP/BFCP *
a=floorctrl:c-s
a=confid:1
a=floorid:2 mstrm:12
a=userid:13
a=setup:actpass
a=connection:new
m=video 16468 RTP/AVP 97 98 99 34 31
b=TIAS:1152000
a=rtpmap:97 H264/90000
a=fmtp:97 profile-level-id=42800d;max-br=906;max-mbps=40500;max-fs=1344;max-smbps=40500;max-fps=3000
a=rtpmap:98 H264/90000
a=fmtp:98 profile-level-id=42800d;max-br=906;max-mbps=40500;max-fs=1344;max-smbps=40500;packetization-
mode=1;max-fps=3000
a=rtpmap:99 H263-1998/90000
a=fmtp:99
custom=1024,768,4;custom=1024,576,4;custom=800,600,4;cif4=2;custom=720,480,2;custom=640,480,2;custom=512,288
,1;cif=1;custom=352,240,1;qcif=1;maxbr=10880
a=rtpmap:34 H263/90000
a=fmtp:34 cif4=2;cif=1;qcif=1;maxbr=10880
a=rtpmap:31 H261/90000
a=fmtp:31 cif=1;qcif=1;maxbr=10880
a=rtcp-fb:* nack pli
a=inactive
a=content:slides

```



```
a=label:12
m=application 16470 RTP/AVP 104
a=rtpmap:104 H224/4800
a=inactive
```

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

[17] SIP/2.0 100 Trying

```
Via: SIP/2.0/TCP 172.18.202.190:5060;branch=z9hG4bKe3e5e7a703d81f852bd2c7b5cbe09140.1;rport
From: <sip:4230@sipsig-ccm97>;tag=7630b7dc47dac62e
To: <sip:4140@172.18.202.97>;tag=467669-b5a88942-7acc-4cc9-9d65-67021cfecfed-30423119
Date: Tue, 20 Dec 2011 19:01:07 GMT
Call-ID: e3506400-ef01db51-59-61ca12ac@172.18.202.97
CSeq: 501 INVITE
Allow-Events: presence
Server: TANDBERG/516 (TC5.0.0.-PreAlpha (TEST SW))
Content-Length: 0
```

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

[18] SIP/2.0 200 OK

```
Via: SIP/2.0/TCP 172.18.202.190:5060;branch=z9hG4bKe3e5e7a703d81f852bd2c7b5cbe09140.1;rport
From: <sip:4230@sipsig-ccm97>;tag=7630b7dc47dac62e
To: <sip:4140@172.18.202.97>;tag=467669-b5a88942-7acc-4cc9-9d65-67021cfecfed-30423119
Date: Tue, 20 Dec 2011 19:01:07 GMT
Call-ID: e3506400-ef01db51-59-61ca12ac@172.18.202.97
CSeq: 501 INVITE
Allow: INVITE, OPTIONS, INFO, BYE, CANCEL, ACK, PRACK, UPDATE, REFER, SUBSCRIBE, NOTIFY
Allow-Events: presence
Supported: replaces
Server: TANDBERG/516 (TC5.0.0.-PreAlpha (TEST SW))
Call-Info: <urn:x-cisco-remotecc:callinfo>; security= NotAuthenticated; orientation= from; gci= 1-167032;
call-instance= 1
Session-Expires: 1800;refresher=uac
Require: timer
Remote-Party-ID: <sip:4140@172.18.202.97>;party=called;screen=yes;privacy=off
Contact: <sip:4140@172.18.202.97:5060;transport=tcp>
Content-Type: application/sdp
Content-Length: 1071
```

```
v=0
o=CiscoSystemsCCM-SIP 467669 2 IN IP4 172.18.202.97
s=SIP Call
b=AS:6000
t=0 0
m=audio 16744 RTP/AVP 102 101
c=IN IP4 0.0.0.0
b=TIAS:64000
a=rtpmap:102 MP4A-LATM/90000
a=fmtp:102 bitrate=64000;profile-level-id=24;object=23
a=inactive
a=rtpmap:101 telephone-event/8000
a=fmtp:101 0-15
m=video 16746 RTP/AVP 98
c=IN IP4 0.0.0.0
b=TIAS:5936000
a=label:11
a=rtpmap:98 H264/90000
a=fmtp:98 profile-level-id=428016;packetization-mode=1;max-mps=108000;max-fs=3600;max-cpb=200;max-br=5000;max-smps=108000;max-fps=6000
a=content:main
a=inactive
a=rtcp-fb:* nack pli
m=application 5070 UDP/BFCP *
c=IN IP4 0.0.0.0
a=floorctrl:s-only
a=floorid:2 mstrm:12
a=confid:1
a=userid:47
m=video 16748 RTP/AVP 98
c=IN IP4 0.0.0.0
b=TIAS:5936000
a=label:12
a=rtpmap:98 H264/90000
a=fmtp:98 profile-level-id=428016;packetization-mode=1;max-mps=108000;max-fs=3840;max-cpb=200;max-br=5000;max-smps=108000;max-fps=6000
a=content:slides
a=inactive
a=rtcp-fb:* nack pli
m=application 16750 RTP/AVP 107
c=IN IP4 0.0.0.0
a=rtpmap:107 H224/0
a=inactive
```


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

[19] INVITE sip:4140@172.18.198.24:43624;transport=tcp SIP/2.0

Via: SIP/2.0/TCP 172.18.202.97:5060;branch=z9hG4bK2b82327beb05

From: <sip:4230@sipsig-ccm97>;tag=467668-b5a88942-7acc-4cc9-9d65-67021cfecfed-30423118

To: <sip:4140@sipsig-ccm97>;tag=ee1295183789ebbb

Date: Tue, 20 Dec 2011 19:01:07 GMT

Call-ID: ae2c7f5e238c87af@172.18.198.24

Supported: timer,resource-priority,replaces

Min-SE: 1800

User-Agent: Cisco-CUCM8.6

Allow: INVITE, OPTIONS, INFO, BYE, CANCEL, ACK, PRACK, UPDATE, REFER, SUBSCRIBE, NOTIFY

CSeq: 101 INVITE

Max-Forwards: 70

Expires: 180

Allow-Events: presence

Call-Info: <urn:x-cisco-remotecc:callinfo>; security= NotAuthenticated; orientation= to; gci= 1-167032;

call-instance= 1

Session-Expires: 1800;refresher=uac

Remote-Party-ID: <sip:4230@172.18.202.97>;party=calling;screen=yes;privacy=off

Contact: <sip:4140@172.18.202.97:5060;transport=tcp>

Content-Type: application/sdp

Content-Length: 1063

v=0

o=CiscoSystemsCCM-SIP 467668 2 IN IP4 172.18.202.97

s=SIP Call

b=AS:1152

t=0 0

m=audio 16464 RTP/AVP 100 101

c=IN IP4 0.0.0.0

b=TIAS:64000

a=rtpmap:100 MP4A-LATM/90000

a=fmtp:100 bitrate=64000;profile-level-id=24;object=23

a=inactive

a=rtpmap:101 telephone-event/8000

a=fmtp:101 0-15

m=video 16466 RTP/AVP 98

c=IN IP4 0.0.0.0

b=TIAS:1088000

a=label:11

a=rtpmap:98 H264/90000

a=fmtp:98 profile-level-id=42800D;packetization-mode=1;max-mbps=40500;max-fs=1344;max-cpb=37;max-br=925;max-

smbps=40500;max-fps=3000

a=content:main

a=inactive

a=rtcp-fb:* nack pli

m=application 5070 UDP/BFCP *

c=IN IP4 0.0.0.0

a=floorctrl:c-only

a=floorid:2 mstrm:12

a=confid:1

a=userid:13

m=video 16468 RTP/AVP 98

c=IN IP4 0.0.0.0

b=TIAS:1088000

a=label:12

a=rtpmap:98 H264/90000

a=fmtp:98 profile-level-id=42800D;packetization-mode=1;max-mbps=40500;max-fs=1344;max-cpb=37;max-br=925;max-

smbps=40500;max-fps=3000

a=content:slides

a=inactive

a=rtcp-fb:* nack pli

m=application 16470 RTP/AVP 104

c=IN IP4 0.0.0.0

a=rtpmap:104 H224/0

a=inactive

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

[20] SIP/2.0 200 OK

Via: SIP/2.0/TCP 172.18.202.97:5060;branch=z9hG4bK2b82327beb05;received=172.18.202.97

Call-ID: ae2c7f5e238c87af@172.18.198.24

CSeq: 101 INVITE

Contact: <sip:4140@172.18.198.24:43624;transport=tcp>

From: <sip:4230@sipsig-ccm97>;tag=467668-b5a88942-7acc-4cc9-9d65-67021cfecfed-30423118

To: <sip:4140@sipsig-ccm97>;tag=ee1295183789ebbb

Allow: INVITE, ACK, CANCEL, BYE, UPDATE, INFO, OPTIONS, REFER, NOTIFY

Server: TANDBERG/516 (TC5.0.0.-PreAlpha (TEST SW))

Supported: replaces,100rel,timer,gruu,path,outbound,X-cisco-callinfo,X-cisco-serviceuri,X-cisco-service-

control,norefersub,extended-refer

Require: timer

```

Session-Expires: 1800;refresher=uac
Min-SE: 1800
Content-Type: application/sdp
Content-Length: 962

```

```

v=0
o=tandberg 47 2 IN IP4 172.18.198.24
s=-
c=IN IP4 172.18.198.24
b=AS:6000
t=0 0
m=audio 16744 RTP/AVP 102 101
b=TIAS:64000
a=rtpmap:102 MP4A-LATM/90000
a=fmtp:102 profile-level-id=24;object=23;bitrate=64000
a=rtpmap:101 telephone-event/8000
a=fmtp:101 0-15
a=inactive
m=video 16746 RTP/AVP 98
b=TIAS:1088000
a=rtpmap:98 H264/90000
a=fmtp:98 profile-level-id=428016;max-br=5000;max-mbps=108000;max-fs=3600;max-smbps=108000;packetization-
mode=1;max-fps=6000
a=rtcp-fb:* nack pli
a=inactive
a=content:main
a=label:11
m=application 5070 UDP/BFCP *
a=floorctrl:s-only
a=confid:1
a=floorid:2 mstrm:12
a=userid:47
m=video 16748 RTP/AVP 98
b=TIAS:1088000
a=rtpmap:98 H264/90000
a=fmtp:98 profile-level-id=428016;max-br=5000;max-mbps=108000;max-fs=3840;max-smbps=108000;packetization-
mode=1;max-fps=6000
a=rtcp-fb:* nack pli
a=inactive
a=content:slides
a=label:12
m=application 16750 RTP/AVP 107
a=rtpmap:107 H224/4800
a=inactive

```

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

```

[21] ACK sip:4140@172.18.198.24:43624;transport=tcp SIP/2.0
Via: SIP/2.0/TCP 172.18.202.97:5060;branch=z9hG4bK2b832c532857
From: <sip:4230@sipsig-ccm97>;tag=467668-b5a88942-7acc-4cc9-9d65-67021cfecfed-30423118
To: <sip:4140@sipsig-ccm97>;tag=ee1295183789ebbb
Date: Tue, 20 Dec 2011 19:01:07 GMT
Call-ID: ae2c7f5e238c87af@172.18.198.24
Max-Forwards: 70
CSeq: 101 ACK
Allow-Events: presence
Content-Length: 0

```

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

```

[22] INVITE sip:4140@172.18.198.24:43624;transport=tcp SIP/2.0
Via: SIP/2.0/TCP 172.18.202.97:5060;branch=z9hG4bK2b8435d8ba07
From: <sip:4230@sipsig-ccm97>;tag=467668-b5a88942-7acc-4cc9-9d65-67021cfecfed-30423118
To: <sip:4140@sipsig-ccm97>;tag=ee1295183789ebbb
Date: Tue, 20 Dec 2011 19:01:07 GMT
Call-ID: ae2c7f5e238c87af@172.18.198.24
Supported: timer,resource-priority,replaces
Min-SE: 1800
User-Agent: Cisco-CUCM8.6
Allow: INVITE, OPTIONS, INFO, BYE, CANCEL, ACK, PRACK, UPDATE, REFER, SUBSCRIBE, NOTIFY
CSeq: 102 INVITE
Max-Forwards: 70
Expires: 180
Allow-Events: presence
Call-Info: <urn:x-cisco-remotecc:callinfo>; security= NotAuthenticated; orientation= to; gci= 1-167032;
call-instance= 1
Session-Expires: 1800;refresher=uac
Remote-Party-ID: <sip:4230@172.18.202.97>;party=calling;screen=yes;privacy=off
Contact: <sip:4140@172.18.202.97:5060;transport=tcp>
Content-Length: 0

```

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

```

[23] SIP/2.0 200 OK

```

```

Via: SIP/2.0/TCP 172.18.202.97:5060;branch=z9hG4bK2b8435d8ba07;received=172.18.202.97
Call-ID: ae2c7f5e238c87af@172.18.198.24
CSeq: 102 INVITE
Contact: <sip:4140@172.18.198.24:43624;transport=tcp>
From: <sip:4230@sipsig-ccm97>;tag=467668-b5a88942-7acc-4cc9-9d65-67021cfeccfed-30423118
To: <sip:4140@sipsig-ccm97>;tag=ee1295183789ebbb
Allow: INVITE,ACK,CANCEL,BYE,UPDATE,INFO,OPTIONS,REFER,NOTIFY
Server: TANDBERG/516 (TC5.0.0.-PreAlpha (TEST SW))
Supported: replaces,100rel,timer,gruu,path,outbound,X-cisco-callinfo,X-cisco-serviceuri,X-cisco-service-control,norefersub,extended-refer
Require: timer
Session-Expires: 1800;refresher=uac
Min-SE: 1800
Content-Type: application/sdp
Content-Length: 2459

v=0
o=tandberg 47 3 IN IP4 172.18.198.24
s=-
c=IN IP4 172.18.198.24
b=AS:6000
t=0 0
m=audio 16744 RTP/AVP 100 102 103 104 105 106 9 8 0 101
b=TIAS:128000
a=rtpmap:100 MP4A-LATM/90000
a=fmtp:100 profile-level-id=25;object=23;bitrate=128000
a=rtpmap:102 MP4A-LATM/90000
a=fmtp:102 profile-level-id=24;object=23;bitrate=64000
a=rtpmap:103 MP4A-LATM/90000
a=fmtp:103 profile-level-id=24;object=23;bitrate=56000
a=rtpmap:104 MP4A-LATM/90000
a=fmtp:104 profile-level-id=24;object=23;bitrate=48000
a=rtpmap:105 G7221/16000
a=fmtp:105 bitrate=32000
a=rtpmap:106 G7221/16000
a=fmtp:106 bitrate=24000
a=rtpmap:9 G722/8000
a=rtpmap:8 PCMA/8000
a=rtpmap:0 PCMU/8000
a=rtpmap:101 telephone-event/8000
a=fmtp:101 0-15
a=sendrecv
m=video 16746 RTP/AVP 97 98 99 34 31
b=TIAS:6000000
a=rtpmap:97 H264/90000
a=fmtp:97 profile-level-id=428016;max-br=5000;max-mbps=108000;max-fs=3600;max-smbps=108000;max-fps=6000
a=rtpmap:98 H264/90000
a=fmtp:98 profile-level-id=428016;max-br=5000;max-mbps=108000;max-fs=3600;max-smbps=108000;packetization-mode=1;max-fps=6000
a=rtpmap:99 H263-1998/90000
a=fmtp:99
custom=1280,768,3;custom=1280,720,3;custom=1024,768,1;custom=1024,576,2;custom=800,600,1;cif4=1;custom=720,480,1;custom=640,480,1;custom=512,288,1;cif=1;custom=352,240,1;qcif=1;maxbr=20000
a=rtpmap:34 H263/90000
a=fmtp:34 cif4=1;cif=1;qcif=1;maxbr=20000
a=rtpmap:31 H261/90000
a=fmtp:31 cif=1;qcif=1;maxbr=20000
a=rtcp-fb:* nack pli
a=sendrecv
a=content:main
a=label:11
a=answer:full
m=application 5070 UDP/BFCP *
a=floorctrl:c-s
a=confid:1
a=floorid:2 mstrm:12
a=userid:47
a=setup:actpass
a=connection:new
m=video 16748 RTP/AVP 97 98 99 34 31
b=TIAS:6000000
a=rtpmap:97 H264/90000
a=fmtp:97 profile-level-id=428016;max-br=5000;max-mbps=108000;max-fs=3840;max-smbps=108000;max-fps=6000
a=rtpmap:98 H264/90000
a=fmtp:98 profile-level-id=428016;max-br=5000;max-mbps=108000;max-fs=3840;max-smbps=108000;packetization-mode=1;max-fps=6000
a=rtpmap:99 H263-1998/90000
a=fmtp:99
custom=1280,768,3;custom=1280,720,3;custom=1024,768,1;custom=1024,576,2;custom=800,600,1;cif4=1;custom=720,480,1;custom=640,480,1;custom=512,288,1;cif=1;custom=352,240,1;qcif=1;maxbr=20000
a=rtpmap:34 H263/90000

```

```

a=fmtp:34 cif4=1;cif=1;qcif=1;maxbr=20000
a=rtpmap:31 H261/90000
a=fmtp:31 cif=1;qcif=1;maxbr=20000
a=rtcp-fb:* nack pli
a=sendrecv
a=content:slides
a=label:12
m=application 16750 RTP/AVP 107
a=rtpmap:107 H224/4800
a=sendrecv

```

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

[24] ACK sip:4140@172.18.198.24:43624;transport=tcp SIP/2.0

```

Via: SIP/2.0/TCP 172.18.202.97:5060;branch=z9hG4bK2b856c3667f0
From: <sip:4230@sipsig-ccm97>;tag=467668-b5a88942-7acc-4cc9-9d65-67021cfecfed-30423118
To: <sip:4140@sipsig-ccm97>;tag=ee1295183789ebbb
Date: Tue, 20 Dec 2011 19:01:07 GMT
Call-ID: ae2c7f5e238c87af@172.18.198.24
Max-Forwards: 70
CSeq: 102 ACK
Allow-Events: presence
Content-Type: application/sdp
Content-Length: 880

```

```

v=0
o=CiscoSystemsCCM-SIP 467668 3 IN IP4 172.18.202.97
s=SIP Call
t=0 0
m=audio 4000 RTP/AVP 0
c=IN IP4 172.18.202.97
b=TIAS:64000
a=rtpmap:0 PCMU/8000
a=ptime:20
a=sendonly
m=video 0 RTP/AVP 98
c=IN IP4 172.18.202.190
b=TIAS:1088000
a=label:11
a=rtpmap:98 H264/90000
a=fmtp:98 profile-level-id=42800D;packetization-mode=1;max-mbps=40500;max-fs=1344;max-cpb=37;max-br=925;max-smbps=40500;max-fps=3000
a=content:main
m=application 0 UDP/BFCP *
c=IN IP4 172.18.202.190
a=floorctrl:c-only
a=floorid:2 mstrm:12
a=confid:1
a=userid:13
m=video 0 RTP/AVP 98
c=IN IP4 172.18.202.190
b=TIAS:1088000
a=label:12
a=rtpmap:98 H264/90000
a=fmtp:98 profile-level-id=42800D;packetization-mode=1;max-mbps=40500;max-fs=1344;max-cpb=37;max-br=925;max-smbps=40500;max-fps=3000
a=content:slides
m=application 0 RTP/AVP 104
c=IN IP4 172.18.202.190
a=rtpmap:104 H224/0

```

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

[25] ACK sip:4140@172.18.202.97:5060;transport=tcp SIP/2.0

```

Via: SIP/2.0/TCP 172.18.202.190:5060;branch=z9hG4bKf708080414b5a1c58cf29357d411112a.1;rport
Call-ID: e3506400-ef01db51-59-61ca12ac@172.18.202.97
CSeq: 501 ACK
From: <sip:4230@sipsig-ccm97>;tag=7630b7dc47dac62e
To: <sip:4140@172.18.202.97>;tag=467669-b5a88942-7acc-4cc9-9d65-67021cfecfed-30423119
Max-Forwards: 70
Allow: INVITE,ACK,CANCEL,BYE,UPDATE,INFO,OPTIONS,REFER,NOTIFY
User-Agent: TANDBERG/257 (TE4.1.0.253886Alpha4)
Supported: replaces,100rel,timer,gruu,path,outbound,X-cisco-callinfo,X-cisco-serviceuri,X-cisco-service-control,norefersub,extended-refer
Content-Length: 0

```

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

[26] REFER sip:4140@172.18.202.97:5060;transport=tcp SIP/2.0

```

Via: SIP/2.0/TCP 172.18.202.190:5060;branch=z9hG4bK7879e94de40d84c4dee5312333bfb6b0.1;rport
Call-ID: e3506400-ef01db51-59-61ca12ac@172.18.202.97
CSeq: 502 REFER
Contact: <sip:4230@172.18.202.190:46879;transport=tcp>
Refer-To: <sip:4240@sipsig-ccm97>

```

Referred-By: <sip:4230@sipsig-ccm97>
 From: <sip:4230@sipsig-ccm97>;tag=7630b7dc47dac62e
 To: <sip:4140@172.18.202.97>;tag=467669-b5a88942-7acc-4cc9-9d65-67021cfecfed-30423119
 Max-Forwards: 70
 Allow: INVITE,ACK,CANCEL,BYE,UPDATE,INFO,OPTIONS,REFER,NOTIFY
 User-Agent: TANDBERG/257 (TE4.1.0.253886Alpha4)
 Supported: replaces,100rel,timer,gruu,path,outbound,X-cisco-callinfo,X-cisco-serviceuri,X-cisco-service-control,extended-refer
 Remote-Party-ID: <sip:4230@sipsig-ccm97>;privacy=off;id-type=subscriber;screen=yes;party=calling
 Content-Length: 0

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

[27] NOTIFY sip:4230@172.18.202.190:46879;transport=tcp SIP/2.0

Via: SIP/2.0/TCP 172.18.202.97:5060;branch=z9hG4bK2b872b750eb2
 From: <sip:4140@172.18.202.97>;tag=467669-b5a88942-7acc-4cc9-9d65-67021cfecfed-30423119
 To: <sip:4230@sipsig-ccm97>;tag=7630b7dc47dac62e
 Call-ID: e3506400-ef01db51-59-61ca12ac@172.18.202.97
 CSeq: 102 NOTIFY
 Max-Forwards: 70
 Date: Tue, 20 Dec 2011 19:01:07 GMT
 User-Agent: Cisco-CUCM8.6
 Event: refer
 Subscription-State: active;expires=60
 Contact: <sip:4140@172.18.202.97:5060;transport=tcp>
 Content-Type: message/sipfrag;version=2.0
 Content-Length: 20

SIP/2.0 100 Trying

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

[28] SIP/2.0 202 Accepted

Via: SIP/2.0/TCP 172.18.202.190:5060;branch=z9hG4bK7879e94de40d84c4dee5312333bfb6b0.1;rport
 From: <sip:4230@sipsig-ccm97>;tag=7630b7dc47dac62e
 To: <sip:4140@172.18.202.97>;tag=467669-b5a88942-7acc-4cc9-9d65-67021cfecfed-30423119
 Date: Tue, 20 Dec 2011 19:01:07 GMT
 Call-ID: e3506400-ef01db51-59-61ca12ac@172.18.202.97
 CSeq: 502 REFER
 Contact: <sip:4140@172.18.202.97:5060;transport=tcp>
 Content-Length: 0

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

[29] INVITE sip:4140@172.18.198.24:43624;transport=tcp SIP/2.0

Via: SIP/2.0/TCP 172.18.202.97:5060;branch=z9hG4bK2b865b4cce6d
 From: <sip:4230@sipsig-ccm97>;tag=467668-b5a88942-7acc-4cc9-9d65-67021cfecfed-30423118
 To: <sip:4140@sipsig-ccm97>;tag=ee1295183789ebbb
 Date: Tue, 20 Dec 2011 19:01:07 GMT
 Call-ID: ae2c7f5e238c87af@172.18.198.24
 Supported: timer,resource-priority,replaces
 Min-SE: 1800
 User-Agent: Cisco-CUCM8.6
 Allow: INVITE,OPTIONS,INFO,BYE,CANCEL,ACK,PRACK,UPDATE,REFER,SUBSCRIBE,NOTIFY
 CSeq: 103 INVITE
 Max-Forwards: 70
 Expires: 180
 Allow-Events: presence
 Call-Info: <urn:x-cisco-remotecc:callinfo>; security= NotAuthenticated; orientation= to; gci= 1-167032;
 call-instance= 1
 Session-Expires: 1800;refresher=uac
 Remote-Party-ID: <sip:4230@172.18.202.97>;party=calling;screen=yes;privacy=off
 Contact: <sip:4140@172.18.202.97:5060;transport=tcp>
 Content-Type: application/sdp
 Content-Length: 882

v=0
 o=CiscoSystemsCCM-SIP 467668 4 IN IP4 172.18.202.97
 s=SIP Call
 t=0 0
 m=audio 4000 RTP/AVP 0
 c=IN IP4 0.0.0.0
 b=TIAS:64000
 a=rtpmap:0 PCMU/8000
 aptime:20
 a=inactive
 m=video 0 RTP/AVP 98
 c=IN IP4 0.0.0.0
 b=TIAS:1088000
 a=label:11
 a=rtpmap:98 H264/90000
 a=fmtp:98 profile-level-id=42800D;packetization-mode=1;max-mps=40500;max-fs=1344;max-cpb=37;max-br=925;max-smps=40500;max-fps=3000
 a=content:main

```

a=inactive
m=application 0 UDP/BFCP *
c=IN IP4 0.0.0.0
a=floorctrl:c-only
a=floorid:2 mstrm:12
a=confid:1
a=userid:13
m=video 0 RTP/AVP 98
c=IN IP4 0.0.0.0
b=TIAS:1088000
a=label:12
a=rtpmap:98 H264/90000
a=fmtp:98 profile-level-id=42800D;packetization-mode=1;max-mbps=40500;max-fs=1344;max-cpb=37;max-br=925;max-
smbps=40500;max-fps=3000
a=content:slides
a=inactive
m=application 0 RTP/AVP 104
c=IN IP4 0.0.0.0
a=rtpmap:104 H224/0
a=inactive

```

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

```

[30] ACK sip:4140@172.18.198.24:43624;transport=tcp SIP/2.0
Via: SIP/2.0/TCP 172.18.202.97:5060;branch=z9hG4bK2b881261c3f4
From: <sip:4230@sipsig-ccm97>;tag=467668-b5a88942-7acc-4cc9-9d65-67021cfecfed-30423118
To: <sip:4140@sipsig-ccm97>;tag=ee1295183789ebbb
Date: Tue, 20 Dec 2011 19:01:07 GMT
Call-ID: ae2c7f5e238c87af@172.18.198.24
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/TCP 172.18.202.97:5060;branch=z9hG4bK2b865b4cce6d;received=172.18.202.97
Call-ID: ae2c7f5e238c87af@172.18.198.24
CSeq: 103 INVITE
Contact: <sip:4140@172.18.198.24:43624;transport=tcp>
From: <sip:4230@sipsig-ccm97>;tag=467668-b5a88942-7acc-4cc9-9d65-67021cfecfed-30423118
To: <sip:4140@sipsig-ccm97>;tag=ee1295183789ebbb
Allow: INVITE, ACK, CANCEL, BYE, UPDATE, INFO, OPTIONS, REFER, NOTIFY
Server: TANDBERG/516 (TC5.0.0.-PreAlpha (TEST SW))
Supported: replaces,100rel,timer,gruu,path,outbound,X-cisco-callinfo,X-cisco-serviceuri,X-cisco-service-
control,norefersub,extended-refer
Require: timer
Session-Expires: 1800;refresher=uac
Min-SE: 1800
Content-Type: application/sdp
Content-Length: 264

```

```

v=0
o=tandberg 47 4 IN IP4 172.18.198.24
s=-
c=IN IP4 172.18.198.24
b=AS:6000
t=0 0
m=audio 16744 RTP/AVP 0
b=TIAS:64000
a=rtpmap:0 PCMU/8000
a=inactive
m=video 0 RTP/AVP 98
m=application 0 UDP/BFCP *
m=video 0 RTP/AVP 98
m=application 0 RTP/AVP 107

```

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

```

[32] INVITE sip:4240@172.18.198.11:38905;transport=tcp SIP/2.0
Via: SIP/2.0/TCP 172.18.202.97:5060;branch=z9hG4bK2b89bb6dda1
From: <sip:4140@172.18.202.97>;tag=467677-b5a88942-7acc-4cc9-9d65-67021cfecfed-30423122
To: <sip:4240@sipsig-ccm97>
Date: Tue, 20 Dec 2011 19:01:07 GMT
Call-ID: f7946100-ef01db73-5a-61ca12ac@172.18.202.97
Supported: timer,resource-priority,replaces
Min-SE: 1800
User-Agent: Cisco-CUCM8.6
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; gci= 1-167032;

```

call-instance= 1
 Send-Info: conference, x-cisco-conference
 Alert-Info: <file://Bellcore-dr1/>
 Remote-Party-ID: <sip:4140@172.18.202.97;x-cisco-callback-number=4140>;party=calling;screen=yes;privacy=off
 Contact: <sip:4140@172.18.202.97:5060;transport=tcp>;video;audio
 Max-Forwards: 69
 Content-Length: 0

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

[33] SIP/2.0 180 Ringing

Via: SIP/2.0/TCP 172.18.202.97:5060;branch=z9hG4bK2b89bb6dda1;received=172.18.202.97
 Call-ID: f7946100-ef01db73-5a-61ca12ac@172.18.202.97
 CSeq: 101 INVITE
 From: <sip:4140@172.18.202.97>;tag=467677~b5a88942-7acc-4cc9-9d65-67021cfecfed-30423122
 To: <sip:4240@sipsig-ccm97>;tag=6b3fb160e0835440
 Server: TANDBERG/516 (TC5.0.0.-PreAlpha (TEST SW))
 Remote-Party-ID: <sip:4240@sipsig-ccm97>;privacy=off;id-type=subscriber;screen=yes;party=calling
 Content-Length: 0

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

[34] NOTIFY sip:4230@172.18.202.190:46879;transport=tcp SIP/2.0

Via: SIP/2.0/TCP 172.18.202.97:5060;branch=z9hG4bK2b8b43de75b7
 From: <sip:4140@172.18.202.97>;tag=467669~b5a88942-7acc-4cc9-9d65-67021cfecfed-30423119
 To: <sip:4230@sipsig-ccm97>;tag=7630b7dc47dac62e
 Call-ID: e3506400-ef01db51-59-61ca12ac@172.18.202.97
 CSeq: 103 NOTIFY
 Max-Forwards: 70
 Date: Tue, 20 Dec 2011 19:01:07 GMT
 User-Agent: Cisco-CUCM8.6
 Event: refer
 Subscription-State: active;expires=60
 Contact: <sip:4140@172.18.202.97:5060;transport=tcp>
 Content-Type: message/sipfrag;version=2.0
 Content-Length: 21

SIP/2.0 180 Ringing

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

[35] UPDATE sip:4140@172.18.198.24:43624;transport=tcp SIP/2.0

Via: SIP/2.0/TCP 172.18.202.97:5060;branch=z9hG4bK2b8a6ffbbe28
 From: <sip:4230@sipsig-ccm97>;tag=467668~b5a88942-7acc-4cc9-9d65-67021cfecfed-30423118
 To: <sip:4140@sipsig-ccm97>;tag=ee1295183789ebbb
 Date: Tue, 20 Dec 2011 19:01:07 GMT
 Call-ID: ae2c7f5e238c87af@172.18.198.24
 User-Agent: Cisco-CUCM8.6
 Max-Forwards: 70
 Supported: timer,resource-priority,replaces
 Allow: INVITE, OPTIONS, INFO, BYE, CANCEL, ACK, PRACK, UPDATE, REFER, SUBSCRIBE, NOTIFY
 CSeq: 104 UPDATE
 Call-Info: <urn:x-cisco-remotecc:callinfo>; security= NotAuthenticated; orientation= to; ui-state= ringout;
 gci= 1-167032; call-instance= 1
 Remote-Party-ID: <sip:4240@172.18.202.97>;party=calling;screen=yes;privacy=off
 Contact: <sip:4140@172.18.202.97:5060;transport=tcp>
 Content-Length: 0

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

[36] SIP/2.0 200 OK

Via: SIP/2.0/TCP 172.18.202.97:5060;branch=z9hG4bK2b8a6ffbbe28;received=172.18.202.97
 Call-ID: ae2c7f5e238c87af@172.18.198.24
 CSeq: 104 UPDATE
 From: <sip:4230@sipsig-ccm97>;tag=467668~b5a88942-7acc-4cc9-9d65-67021cfecfed-30423118
 To: <sip:4140@sipsig-ccm97>;tag=ee1295183789ebbb
 Allow: INVITE, ACK, CANCEL, BYE, UPDATE, INFO, OPTIONS, REFER, NOTIFY
 Server: TANDBERG/516 (TC5.0.0.-PreAlpha (TEST SW))
 Supported: replaces,100rel,timer,gruu,path,outbound,X-cisco-callinfo,X-cisco-serviceuri,X-cisco-service-control,norefersub,extended-refer
 Require: timer
 Session-Expires: 1800;refresher=uas
 Min-SE: 1800
 Content-Length: 0

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

[37] SIP/2.0 200 OK

Via: SIP/2.0/TCP 172.18.202.97:5060;branch=z9hG4bK2b872b750eb2;received=172.18.202.97
 Call-ID: e3506400-ef01db51-59-61ca12ac@172.18.202.97
 CSeq: 102 NOTIFY
 From: <sip:4140@172.18.202.97>;tag=467669~b5a88942-7acc-4cc9-9d65-67021cfecfed-30423119
 To: <sip:4230@sipsig-ccm97>;tag=7630b7dc47dac62e
 Allow: INVITE, ACK, CANCEL, BYE, UPDATE, INFO, OPTIONS, REFER, NOTIFY
 Server: TANDBERG/257 (TE4.1.0.253886Alpha4)
 Supported: replaces,100rel,timer,gruu,path,outbound,X-cisco-callinfo,X-cisco-serviceuri,X-cisco-service-


```
control,norefersub,extended-refer
Call-Info: <urn:x-cisco-remotecc:hold>
Content-Length: 0
```

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

[38] SIP/2.0 200 OK

```
Via: SIP/2.0/TCP 172.18.202.97:5060;branch=z9hG4bK2b8b43de75b7;received=172.18.202.97
Call-ID: e3506400-ef01db51-59-61ca12ac@172.18.202.97
CSeq: 103 NOTIFY
From: <sip:4140@172.18.202.97>;tag=467669~b5a88942-7acc-4cc9-9d65-67021cfecfed-30423119
To: <sip:4230@sipsig-ccm97>;tag=7630b7dc47dac62e
Allow: INVITE,ACK,CANCEL,BYE,UPDATE,INFO,OPTIONS,REFER,NOTIFY
Server: TANDBERG/257 (TE4.1.0.253886Alpha4)
Supported: replaces,100rel,timer,gruu,path,outbound,X-cisco-callinfo,X-cisco-serviceuri,X-cisco-service-
control,norefersub,extended-refer
Call-Info: <urn:x-cisco-remotecc:hold>
Content-Length: 0
```

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

[39] SIP/2.0 200 OK

```
Via: SIP/2.0/TCP 172.18.202.97:5060;branch=z9hG4bK2b89bb6dda1;received=172.18.202.97
Call-ID: f7946100-ef01db73-5a-61ca12ac@172.18.202.97
CSeq: 101 INVITE
Contact: <sip:4240@172.18.198.11:38905;transport=tcp>
From: <sip:4140@172.18.202.97>;tag=467677~b5a88942-7acc-4cc9-9d65-67021cfecfed-30423122
To: <sip:4240@sipsig-ccm97>;tag=6b3fb160e0835440
Allow: INVITE,ACK,CANCEL,BYE,UPDATE,INFO,OPTIONS,REFER,NOTIFY
Server: TANDBERG/516 (TC5.0.0.-PreAlpha (TEST SW))
Supported: replaces,100rel,timer,gruu,path,outbound,X-cisco-callinfo,X-cisco-serviceuri,X-cisco-service-
control,norefersub,extended-refer
Require: timer
Session-Expires: 1800;refresher=uas
Min-SE: 1800
Remote-Party-ID: <sip:4240@sipsig-ccm97>;privacy=off;id-type=subscriber;screen=yes;party=calling
Content-Type: application/sdp
Content-Length: 2459
```

```
v=0
o=tandberg 28 1 IN IP4 172.18.198.11
s=-
c=IN IP4 172.18.198.11
b=AS:6000
t=0 0
m=audio 16592 RTP/AVP 100 102 103 104 105 106 9 8 0 101
b=TIAS:128000
a=rtpmap:100 MP4A-LATM/90000
a=fmtp:100 profile-level-id=25;object=23;bitrate=128000
a=rtpmap:102 MP4A-LATM/90000
a=fmtp:102 profile-level-id=24;object=23;bitrate=64000
a=rtpmap:103 MP4A-LATM/90000
a=fmtp:103 profile-level-id=24;object=23;bitrate=56000
a=rtpmap:104 MP4A-LATM/90000
a=fmtp:104 profile-level-id=24;object=23;bitrate=48000
a=rtpmap:105 G7221/16000
a=fmtp:105 bitrate=32000
a=rtpmap:106 G7221/16000
a=fmtp:106 bitrate=24000
a=rtpmap:9 G722/8000
a=rtpmap:8 PCMA/8000
a=rtpmap:0 PCMU/8000
a=rtpmap:101 telephone-event/8000
a=fmtp:101 0-15
a=sendrecv
m=video 16594 RTP/AVP 97 98 99 34 31
b=TIAS:6000000
a=rtpmap:97 H264/90000
a=fmtp:97 profile-level-id=428016;max-br=5000;max-mbps=245000;max-fs=9000;max-smbps=245000;max-fps=6000
a=rtpmap:98 H264/90000
a=fmtp:98 profile-level-id=428016;max-br=5000;max-mbps=245000;max-fs=9000;max-smbps=245000;packetization-
mode=1;max-fps=6000
a=rtpmap:99 H263-1998/90000
a=fmtp:99
custom=1280,768,3;custom=1280,720,3;custom=1024,768,1;custom=1024,576,2;custom=800,600,1;cif4=1;custom=720,4
80,1;custom=640,480,1;custom=512,288,1;cif=1;custom=352,240,1;qcif=1;maxbr=20000
a=rtpmap:34 H263/90000
a=fmtp:34 cif4=1;cif=1;qcif=1;maxbr=20000
a=rtpmap:31 H261/90000
a=fmtp:31 cif=1;qcif=1;maxbr=20000
a=rtcp-fb:* nack pli
a=sendrecv
a=content:main
```



```

a=label:11
a=answer:full
m=application 5070 UDP/BFCP *
a=floorctrl:c-s
a=confid:1
a=floorid:2 mstrm:12
a=userid:28
a=setup:actpass
a=connection:new
m=video 16596 RTP/AVP 97 98 99 34 31
b=TIAS:6000000
a=rtpmap:97 H264/90000
a=fmtp:97 profile-level-id=428016;max-br=5000;max-mbps=245000;max-fs=9000;max-smbps=245000;max-fps=6000
a=rtpmap:98 H264/90000
a=fmtp:98 profile-level-id=428016;max-br=5000;max-mbps=245000;max-fs=9000;max-smbps=245000;packetization-
mode=1;max-fps=6000
a=rtpmap:99 H263-1998/90000
a=fmtp:99
custom=1280,768,3;custom=1280,720,3;custom=1024,768,1;custom=1024,576,2;custom=800,600,1;cif4=1;custom=720,4
80,1;custom=640,480,1;custom=512,288,1;cif=1;custom=352,240,1;qcif=1;maxbr=20000
a=rtpmap:34 H263/90000
a=fmtp:34 cif4=1;cif=1;qcif=1;maxbr=20000
a=rtpmap:31 H261/90000
a=fmtp:31 cif=1;qcif=1;maxbr=20000
a=rtcp-fb:* nack pli
a=sendrecv
a=content:slides
a=label:12
m=application 16598 RTP/AVP 107
a=rtpmap:107 H224/4800
a=sendrecv

```

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

[40] NOTIFY sip:4230@172.18.202.190:46879;transport=tcp SIP/2.0

Via: SIP/2.0/TCP 172.18.202.97:5060;branch=z9hG4bK2b8d234bdce1

From: <sip:4240@sipsig-ccm97>;tag=1556740667

To: <sip:4230@sipsig-ccm97>;tag=54cbc093e545bb9b

Call-ID: 7c19b9a52cd1daaa@172.18.202.190

CSeq: 125 NOTIFY

Max-Forwards: 70

Date: Tue, 20 Dec 2011 19:01:10 GMT

User-Agent: Cisco-CUCM8.6

Event: presence

Subscription-State: active;expires=2401

Contact: <sip:4240@172.18.202.97:5060;transport=tcp>

Content-Type: application/pidf+xml

Content-Length: 829

```

<?xml version="1.0" encoding="UTF-8" standalone="no" ?>
<presence xmlns="urn:ietf:params:xml:ns:pidf" entity="sip:4240@172.18.202.97"
  xmlns:e="urn:ietf:params:xml:ns:pidf:status:rpidd" xmlns:dm="urn:ietf:params:xml:ns:pidf:data-model"
  xmlns:ce="urn:cisco:params:xml:ns:pidf:rpidd" xmlns:sc="urn:ietf:params:xml:ns:pidf:servcaps">
  <dm:person>
    <status>
      <basic>open</basic>
    </status>
    <e:activities>
      <e:on-the-phone/>
    </e:activities>
  </dm:person>
  <tuple id="cmp-1-462204">
    <status>
      <basic>open</basic>
      <e:activities>
        <e:on-the-phone/>
      </e:activities>
    </status>
    <sc:servcaps>
      <sc:audio>true</sc:audio>
    </sc:servcaps>
    <contact priority="0.8">sip:4240@172.18.202.97:5060</contact>
    <timestamp>2011-12-20T19:01:10Z</timestamp>
  </tuple>
</presence>

```

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

[41] INVITE sip:4140@172.18.198.24:43624;transport=tcp SIP/2.0

Via: SIP/2.0/TCP 172.18.202.97:5060;branch=z9hG4bK2b8c5bb133b3

From: <sip:4230@sipsig-ccm97>;tag=467668-b5a88942-7acc-4cc9-9d65-67021cfeccfed-30423118

To: <sip:4140@sipsig-ccm97>;tag=ee1295183789ebbb

Date: Tue, 20 Dec 2011 19:01:10 GMT

Call-ID: ae2c7f5e238c87af@172.18.198.24
 Supported: timer,resource-priority,replaces
 Min-SE: 1800
 User-Agent: Cisco-CUCM8.6
 Allow: INVITE, OPTIONS, INFO, BYE, CANCEL, ACK, PRACK, UPDATE, REFER, SUBSCRIBE, NOTIFY
 CSeq: 105 INVITE
 Max-Forwards: 70
 Expires: 180
 Allow-Events: presence
 Call-Info: <urn:x-cisco-remotecc:callinfo>; security= NotAuthenticated; orientation= to; ui-state= ringout;
 gci= 1-167032; call-instance= 1
 Session-Expires: 1800;refresher=uas
 Remote-Party-ID: <sip:4240@172.18.202.97>;party=calling;screen=yes;privacy=off
 Contact: <sip:4140@172.18.202.97:5060;transport=tcp>;video;audio
 Content-Length: 0

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

[42] NOTIFY sip:4130@172.18.202.202:60912;transport=tcp SIP/2.0

Via: SIP/2.0/TCP 172.18.202.97:5060;branch=z9hG4bK2b8f134df700

From: <sip:4230@172.18.202.97>;tag=2094352210

To: <sip:4130@sipsig-ccm97>;tag=43b201d47a2191fc

Call-ID: b7932df999bc140a@172.18.202.202

CSeq: 1598 NOTIFY

Max-Forwards: 70

Date: Tue, 20 Dec 2011 19:01:10 GMT

User-Agent: Cisco-CUCM8.6

Event: presence

Subscription-State: active;expires=2510

Contact: <sip:4230@172.18.202.97:5060;transport=tcp>

Content-Type: application/pidf+xml

Content-Length: 732

```
<?xml version="1.0" encoding="UTF-8" standalone="no" ?>
<presence xmlns="urn:ietf:params:xml:ns:pidf" entity="sip:4230@172.18.202.97"
  xmlns:e="urn:ietf:params:xml:ns:pidf:status:rpidd" xmlns:dm="urn:ietf:params:xml:ns:pidf:data-model"
  xmlns:ce="urn:cisco:params:xml:ns:pidf:rpidd" xmlns:sc="urn:ietf:params:xml:ns:pidf:servcaps">
  <dm:person>
    <status>
      <basic>open</basic>
    </status>
    <e:activities>
      </e:activities>
    </dm:person>
    <tuple id="cmp-1-79">
      <status>
        <basic>open</basic>
      </status>
      <sc:servcaps>
        <sc:audio>true</sc:audio>
      </sc:servcaps>
      <contact priority="0.8">sip:4230@172.18.202.97:5060</contact>
      <timestamp>2011-12-20T19:01:10Z</timestamp>
    </tuple>
  </presence>
```

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

[43] NOTIFY sip:4230@172.18.202.190:46879;transport=tcp SIP/2.0

Via: SIP/2.0/TCP 172.18.202.97:5060;branch=z9hG4bK2b8e4051bb25

From: <sip:4140@172.18.202.97>;tag=467669-b5a88942-7acc-4cc9-9d65-67021cfecfed-30423119

To: <sip:4230@sipsig-ccm97>;tag=7630b7dc47dac62e

Call-ID: e3506400-ef01db51-59-61ca12ac@172.18.202.97

CSeq: 104 NOTIFY

Max-Forwards: 70

Date: Tue, 20 Dec 2011 19:01:10 GMT

User-Agent: Cisco-CUCM8.6

Event: refer

Subscription-State: terminated

Contact: <sip:4140@172.18.202.97:5060;transport=tcp>

Content-Type: message/sipfrag;version=2.0

Content-Length: 16

SIP/2.0 200 OK

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

[44] SIP/2.0 200 OK

Via: SIP/2.0/TCP 172.18.202.97:5060;branch=z9hG4bK2b8d234bdce1;received=172.18.202.97

Call-ID: 7c19b9a52cd1daaa@172.18.202.190

CSeq: 125 NOTIFY

From: <sip:4240@sipsig-ccm97>;tag=1556740667

To: <sip:4230@sipsig-ccm97>;tag=54cbc093e545bb9b

Server: TANDBERG/257 (TE4.1.0.253886Alpha4)

Content-Length: 0

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

[45] SIP/2.0 200 OK

Via: SIP/2.0/TCP 172.18.202.97:5060;branch=z9hG4bK2b8c5bb133b3;received=172.18.202.97

Call-ID: ae2c7f5e238c87af@172.18.198.24

CSeq: 105 INVITE

Contact: <sip:4140@172.18.198.24:43624;transport=tcp>

From: <sip:4230@sipsig-ccm97>;tag=467668-b5a88942-7acc-4cc9-9d65-67021cfecfed-30423118

To: <sip:4140@sipsig-ccm97>;tag=ee1295183789ebbb

Allow: INVITE,ACK,CANCEL,BYE,UPDATE,INFO,OPTIONS,REFER,NOTIFY

Server: TANDBERG/516 (TC5.0.0.-PreAlpha (TEST SW))

Supported: replaces,100rel,timer,gruu,path,outbound,X-cisco-callinfo,X-cisco-serviceuri,X-cisco-service-control,norefersub,extended-refer

Require: timer

Session-Expires: 1800;refresher=uas

Min-SE: 1800

Content-Type: application/sdp

Content-Length: 2459

v=0

o=tandberg 47 6 IN IP4 172.18.198.24

s=-

c=IN IP4 172.18.198.24

b=AS:6000

t=0 0

m=audio 16744 RTP/AVP 100 102 103 104 105 106 9 8 0 101

b=TIAS:128000

a=rtpmap:100 MP4A-LATM/90000

a=fmtp:100 profile-level-id=25;object=23;bitrate=128000

a=rtpmap:102 MP4A-LATM/90000

a=fmtp:102 profile-level-id=24;object=23;bitrate=64000

a=rtpmap:103 MP4A-LATM/90000

a=fmtp:103 profile-level-id=24;object=23;bitrate=56000

a=rtpmap:104 MP4A-LATM/90000

a=fmtp:104 profile-level-id=24;object=23;bitrate=48000

a=rtpmap:105 G7221/16000

a=fmtp:105 bitrate=32000

a=rtpmap:106 G7221/16000

a=fmtp:106 bitrate=24000

a=rtpmap:9 G722/8000

a=rtpmap:8 PCMA/8000

a=rtpmap:0 PCMU/8000

a=rtpmap:101 telephone-event/8000

a=fmtp:101 0-15

a=sendrecv

m=video 16746 RTP/AVP 97 98 99 34 31

b=TIAS:6000000

a=rtpmap:97 H264/90000

a=fmtp:97 profile-level-id=428016;max-br=5000;max-mbps=108000;max-fs=3600;max-smbps=108000;max-fps=6000

a=rtpmap:98 H264/90000

a=fmtp:98 profile-level-id=428016;max-br=5000;max-mbps=108000;max-fs=3600;max-smbps=108000;packetization-mode=1;max-fps=6000

a=rtpmap:99 H263-1998/90000

a=fmtp:99

custom=1280,768,3;custom=1280,720,3;custom=1024,768,1;custom=1024,576,2;custom=800,600,1;cif4=1;custom=720,480,1;custom=640,480,1;custom=512,288,1;cif=1;custom=352,240,1;qcif=1;maxbr=20000

a=rtpmap:34 H263/90000

a=fmtp:34 cif4=1;cif=1;qcif=1;maxbr=20000

a=rtpmap:31 H261/90000

a=fmtp:31 cif=1;qcif=1;maxbr=20000

a=rtcp-fb: * nack pli

a=sendrecv

a=content:main

a=label:11

a=answer:full

m=application 5070 UDP/BFCP *

a=floorctrl:c-s

a=confid:1

a=floorid:2 mstrm:12

a=userid:47

a=setup:actpass

a=connection:new

m=video 16748 RTP/AVP 97 98 99 34 31

b=TIAS:6000000

a=rtpmap:97 H264/90000

a=fmtp:97 profile-level-id=428016;max-br=5000;max-mbps=108000;max-fs=3840;max-smbps=108000;max-fps=6000

a=rtpmap:98 H264/90000

a=fmtp:98 profile-level-id=428016;max-br=5000;max-mbps=108000;max-fs=3840;max-smbps=108000;packetization-mode=1;max-fps=6000

a=rtpmap:99 H263-1998/90000

```

a=fmtp:99
custom=1280,768,3;custom=1280,720,3;custom=1024,768,1;custom=1024,576,2;custom=800,600,1;CIF=1;custom=720,4
80,1;custom=640,480,1;custom=512,288,1;CIF=1;custom=352,240,1;QCIF=1;maxbr=20000
a=rtpmap:34 H263/90000
a=fmtp:34 CIF=1;CIF=1;QCIF=1;maxbr=20000
a=rtpmap:31 H261/90000
a=fmtp:31 CIF=1;QCIF=1;maxbr=20000
a=rtcp-fb:* nack pli
a=sendrecv
a=content:slides
a=label:12
m=application 16750 RTP/AVP 107
a=rtpmap:107 H224/4800
a=sendrecv

```

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

[46] ACK sip:4140@172.18.198.24:43624;transport=tcp SIP/2.0

```

Via: SIP/2.0/TCP 172.18.202.97:5060;branch=z9hG4bK2b902878b7c7
From: <sip:4230@sipsig-ccm97>;tag=467668-b5a88942-7acc-4cc9-9d65-67021cfecfed-30423118
To: <sip:4140@sipsig-ccm97>;tag=ee1295183789ebbb
Date: Tue, 20 Dec 2011 19:01:10 GMT
Call-ID: ae2c7f5e238c87af@172.18.198.24
Max-Forwards: 70
CSeq: 105 ACK
Allow-Events: presence
Content-Type: application/sdp
Content-Length: 1053

```

```

v=0
o=CiscoSystemsCCM-SIP 467668 5 IN IP4 172.18.202.97
s=SIP Call
b=AS:6000
t=0 0
m=audio 16592 RTP/AVP 102 101
c=IN IP4 172.18.198.11
b=TIAS:64000
a=rtpmap:102 MP4A-LATM/90000
a=fmtp:102 bitrate=64000;profile-level-id=24;object=23
a=rtpmap:101 telephone-event/8000
a=fmtp:101 0-15
m=video 16594 RTP/AVP 98
c=IN IP4 172.18.198.11
b=TIAS:5936000
a=label:11
a=rtpmap:98 H264/90000
a=fmtp:98 profile-level-id=428016;packetization-mode=1;max-mps=245000;max-fs=9000;max-cpb=200;max-
br=5000;max-smps=245000;max-fps=6000
a=content:main
a=rtcp-fb:* nack pli
m=application 5070 UDP/BFCP *
c=IN IP4 172.18.198.11
a=floorctrl:c-only
a=floorid:2 mstrm:12
a=confid:1
a=userid:28
m=video 16596 RTP/AVP 98
c=IN IP4 172.18.198.11
b=TIAS:5936000
a=label:12
a=rtpmap:98 H264/90000
a=fmtp:98 profile-level-id=428016;packetization-mode=1;max-mps=245000;max-fs=9000;max-cpb=200;max-
br=5000;max-smps=245000;max-fps=6000
a=content:slides
a=rtcp-fb:* nack pli
m=application 16598 RTP/AVP 107
c=IN IP4 172.18.198.11
a=rtpmap:107 H224/0

```

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

[47] ACK sip:4240@172.18.198.11:38905;transport=tcp SIP/2.0

```

Via: SIP/2.0/TCP 172.18.202.97:5060;branch=z9hG4bK2b927ac6f289
From: <sip:4140@172.18.202.97>;tag=467677-b5a88942-7acc-4cc9-9d65-67021cfecfed-30423122
To: <sip:4240@sipsig-ccm97>;tag=6b3fb160e0835440
Date: Tue, 20 Dec 2011 19:01:07 GMT
Call-ID: f7946100-ef01db73-5a-61ca12ac@172.18.202.97
Max-Forwards: 70
CSeq: 101 ACK
Allow-Events: presence
Content-Type: application/sdp
Content-Length: 1053

```

```

v=0
o=CiscoSystemsCCM-SIP 467677 1 IN IP4 172.18.202.97
s=SIP Call
b=AS:6000
t=0 0
m=audio 16744 RTP/AVP 102 101
c=IN IP4 172.18.198.24
b=TIAS:64000
a=rtpmap:102 MP4A-LATM/90000
a=fmtp:102 bitrate=64000;profile-level-id=24;object=23
a=rtpmap:101 telephone-event/8000
a=fmtp:101 0-15
m=video 16746 RTP/AVP 98
c=IN IP4 172.18.198.24
b=TIAS:5936000
a=label:11
a=rtpmap:98 H264/90000
a=fmtp:98 profile-level-id=428016;packetization-mode=1;max-mbps=108000;max-fs=3600;max-cpb=200;max-br=5000;max-smbps=108000;max-fps=6000
a=content:main
a=rtcp-fb:* nack pli
m=application 5070 UDP/BFCP *
c=IN IP4 172.18.198.24
a=floorctrl:s-only
a=floorid:2 mstrm:12
a=confid:1
a=userid:47
m=video 16748 RTP/AVP 98
c=IN IP4 172.18.198.24
b=TIAS:5936000
a=label:12
a=rtpmap:98 H264/90000
a=fmtp:98 profile-level-id=428016;packetization-mode=1;max-mbps=108000;max-fs=3840;max-cpb=200;max-br=5000;max-smbps=108000;max-fps=6000
a=content:slides
a=rtcp-fb:* nack pli
m=application 16750 RTP/AVP 107
c=IN IP4 172.18.198.24
a=rtpmap:107 H224/0

```

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

[48] UPDATE sip:4140@172.18.198.24:43624;transport=tcp SIP/2.0

```

Via: SIP/2.0/TCP 172.18.202.97:5060;branch=z9hG4bK2b91583164b1
From: <sip:4230@sipsig-ccm97>;tag=467668-b5a88942-7acc-4cc9-9d65-67021cfecefed-30423118
To: <sip:4140@sipsig-ccm97>;tag=ee1295183789ebbb
Date: Tue, 20 Dec 2011 19:01:10 GMT
Call-ID: ae2c7f5e238c87af@172.18.198.24
User-Agent: Cisco-CUCM8.6
Max-Forwards: 70
Supported: timer,resource-priority,replaces
Allow: INVITE, OPTIONS, INFO, BYE, CANCEL, ACK, PRACK, UPDATE, REFER, SUBSCRIBE, NOTIFY
CSeq: 106 UPDATE
Call-Info: <urn:x-cisco-remotecc:callinfo>; security= NotAuthenticated; orientation= to; gci= 1-167032; call-instance= 1
Remote-Party-ID: <sip:4240@172.18.202.97>;party=calling;screen=yes;privacy=off
Contact: <sip:4140@172.18.202.97:5060;transport=tcp>
Content-Length: 0

```

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

[49] SIP/2.0 200 OK

```

Via: SIP/2.0/TCP 172.18.202.97:5060;branch=z9hG4bK2b91583164b1;received=172.18.202.97
Call-ID: ae2c7f5e238c87af@172.18.198.24
CSeq: 106 UPDATE
From: <sip:4230@sipsig-ccm97>;tag=467668-b5a88942-7acc-4cc9-9d65-67021cfecefed-30423118
To: <sip:4140@sipsig-ccm97>;tag=ee1295183789ebbb
Allow: INVITE, ACK, CANCEL, BYE, UPDATE, INFO, OPTIONS, REFER, NOTIFY
Server: TANDBERG/516 (TC5.0.0.-PreAlpha (TEST SW))
Supported: replaces,100rel,timer,gruu,path,outbound,X-cisco-callinfo,X-cisco-serviceuri,X-cisco-service-control,norefersub,extended-refer
Require: timer
Session-Expires: 1800;refresher=uas
Min-SE: 1800
Content-Length: 0

```

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

[50] SIP/2.0 200 OK

```

Via: SIP/2.0/TCP 172.18.202.97:5060;branch=z9hG4bK2b8e4051bb25;received=172.18.202.97
Call-ID: e3506400-ef01db51-59-61ca12ac@172.18.202.97
CSeq: 104 NOTIFY
From: <sip:4140@172.18.202.97>;tag=467669-b5a88942-7acc-4cc9-9d65-67021cfecefed-30423119
To: <sip:4230@sipsig-ccm97>;tag=7630b7dc47dac62e

```

Allow: INVITE,ACK,CANCEL,BYE,UPDATE,INFO,OPTIONS,REFER,NOTIFY
 Server: TANDBERG/257 (TE4.1.0.253886Alpha4)
 Supported: replaces,100rel,timer,gruu,path,outbound,X-cisco-callinfo,X-cisco-serviceuri,X-cisco-service-control,norefersub,extended-refer
 Call-Info: <urn:x-cisco-remotecc:hold>
 Content-Length: 0

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

[51] BYE sip:4140@172.18.202.97:5060;transport=tcp SIP/2.0

Via: SIP/2.0/TCP 172.18.202.190:5060;branch=z9hG4bK9965539a5b40473170784f82b2d4de63.1;rport

Call-ID: e3506400-ef01db51-59-61ca12ac@172.18.202.97

CSeq: 503 BYE

Contact: <sip:4230@172.18.202.190:46879;transport=tcp>;+sip.instance="<urn:uuid:00000000-0000-0000-0000-005060048365>";+u.sip!model.ccm.cisco.com="580";audio=TRUE;video=TRUE;mobility="fixed";duplex="full";description="TANDBERG-SIP"

From: <sip:4230@sipsig-ccm97>;tag=7630b7dc47dac62e

To: <sip:4140@172.18.202.97>;tag=467669-b5a88942-7acc-4cc9-9d65-67021cfecfed-30423119

Max-Forwards: 70

Allow: INVITE,ACK,CANCEL,BYE,UPDATE,INFO,OPTIONS,REFER,NOTIFY

User-Agent: TANDBERG/257 (TE4.1.0.253886Alpha4)

Supported: replaces,100rel,timer,gruu,path,outbound,X-cisco-callinfo,X-cisco-serviceuri,X-cisco-service-control,norefersub,extended-refer

Content-Length: 0

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

[52] SIP/2.0 200 OK

Via: SIP/2.0/TCP 172.18.202.190:5060;branch=z9hG4bK9965539a5b40473170784f82b2d4de63.1;rport

From: <sip:4230@sipsig-ccm97>;tag=7630b7dc47dac62e

To: <sip:4140@172.18.202.97>;tag=467669-b5a88942-7acc-4cc9-9d65-67021cfecfed-30423119

Date: Tue, 20 Dec 2011 19:01:11 GMT

Call-ID: e3506400-ef01db51-59-61ca12ac@172.18.202.97

Server: TANDBERG/516 (TC5.0.0.-PreAlpha (TEST SW))

CSeq: 503 BYE

Content-Length: 0

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

[53] SIP/2.0 200 OK

Via: SIP/2.0/TCP 172.18.202.97:5060;branch=z9hG4bK2b8f134df700;received=172.18.202.97

Call-ID: b7932df999bc140a@172.18.202.202

CSeq: 1598 NOTIFY

From: <sip:4230@172.18.202.97>;tag=2094352210

To: <sip:4130@sipsig-ccm97>;tag=43b201d47a2191fc

Server: TANDBERG/257 (TE4.1.0.253886Alpha4)

Content-Length: 0

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

[54] OPTIONS sip:172.18.202.97:5060;transport=tcp SIP/2.0

Via: SIP/2.0/TCP 172.18.202.130:5060;branch=z9hG4bK8c642e627e614910a371223efaf1d47d2117432;rport

Call-ID: 4336e4f83a0e5285@172.18.202.130

CSeq: 30093 OPTIONS

From: <sip:172.18.202.130>;tag=f4e7064418cea13b

To: <sip:172.18.202.97:5060>

Max-Forwards: 0

User-Agent: TANDBERG/4100 (X6.1)

Supported: com.tandberg.vcs.resourceusage

Content-Length: 0

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

[55] SIP/2.0 503 Service Unavailable

Via: SIP/2.0/TCP 172.18.202.130:5060;branch=z9hG4bK8c642e627e614910a371223efaf1d47d2117432;rport

From: <sip:172.18.202.130>;tag=f4e7064418cea13b

To: <sip:172.18.202.97:5060>;tag=324250986

Date: Tue, 20 Dec 2011 19:01:34 GMT

Call-ID: 4336e4f83a0e5285@172.18.202.130

CSeq: 30093 OPTIONS

Warning: 399 sipsig-ccm97 "Unable to find a device handler for the request received on port 28024 from 172.18.202.130"

Content-Length: 0

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

[56] BYE sip:4140@172.18.202.97:5060;transport=tcp SIP/2.0

Via: SIP/2.0/TCP 172.18.198.24:5060;branch=z9hG4bKa4e4e616c11624167744b8a1c24b21d4.1;rport

Call-ID: ae2c7f5e238c87af@172.18.198.24

CSeq: 101 BYE

Contact: <sip:4140@172.18.198.24:43624;transport=tcp>;+sip.instance="<urn:uuid:00000000-0000-0000-0000-0050600491d7>";+u.sip!model.ccm.cisco.com="584";audio=TRUE;video=TRUE;mobility="fixed";duplex="full";description="TANDBERG-SIP"

From: <sip:4140@sipsig-ccm97>;tag=ee1295183789ebbb

To: <sip:4230@sipsig-ccm97>;tag=467668-b5a88942-7acc-4cc9-9d65-67021cfecfed-30423118

Max-Forwards: 70

Allow: INVITE,ACK,CANCEL,BYE,UPDATE,INFO,OPTIONS,REFER,NOTIFY

User-Agent: TANDBERG/516 (TC5.0.0.-PreAlpha (TEST SW))
 Supported: replaces,100rel,timer,gruu,path,outbound,X-cisco-callinfo,X-cisco-serviceuri,X-cisco-service-control,norefersub,extended-refer
 Content-Length: 0

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

[57] SIP/2.0 200 OK

Via: SIP/2.0/TCP 172.18.198.24:5060;branch=z9hG4bKa4e4e616c11624167744b8a1c24b21d4.1;rport
 From: <sip:4140@sipsig-ccm97>;tag=ee1295183789ebbb
 To: <sip:4230@sipsig-ccm97>;tag=467668-b5a88942-7acc-4cc9-9d65-67021cfecfed-30423118
 Date: Tue, 20 Dec 2011 19:01:43 GMT
 Call-ID: ae2c7f5e238c87af@172.18.198.24
 CSeq: 101 BYE
 Content-Length: 0

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

[58] BYE sip:4240@172.18.198.11:38905;transport=tcp SIP/2.0

Via: SIP/2.0/TCP 172.18.202.97:5060;branch=z9hG4bK2b9354d9cf6
 From: <sip:4140@172.18.202.97>;tag=467677-b5a88942-7acc-4cc9-9d65-67021cfecfed-30423122
 To: <sip:4240@sipsig-ccm97>;tag=6b3fb160e0835440
 Date: Tue, 20 Dec 2011 19:01:07 GMT
 Call-ID: f7946100-ef01db73-5a-61ca12ac@172.18.202.97
 User-Agent: Cisco-CUCM8.6
 Max-Forwards: 70
 CSeq: 102 BYE
 Reason: Q.850;cause=16
 Content-Length: 0

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

[59] SIP/2.0 200 OK

Via: SIP/2.0/TCP 172.18.202.97:5060;branch=z9hG4bK2b9354d9cf6;received=172.18.202.97
 Call-ID: f7946100-ef01db73-5a-61ca12ac@172.18.202.97
 CSeq: 102 BYE
 From: <sip:4140@172.18.202.97>;tag=467677-b5a88942-7acc-4cc9-9d65-67021cfecfed-30423122
 To: <sip:4240@sipsig-ccm97>;tag=6b3fb160e0835440
 Allow: INVITE, ACK, CANCEL, BYE, UPDATE, INFO, OPTIONS, REFER, NOTIFY
 Server: TANDBERG/516 (TC5.0.0.-PreAlpha (TEST SW))
 Supported: replaces,100rel,timer,gruu,path,outbound,X-cisco-callinfo,X-cisco-serviceuri,X-cisco-service-control,norefersub,extended-refer
 Content-Length: 0

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

[60] NOTIFY sip:4230@172.18.202.190:46879;transport=tcp SIP/2.0

Via: SIP/2.0/TCP 172.18.202.97:5060;branch=z9hG4bK2b943479eff
 From: <sip:4240@sipsig-ccm97>;tag=1556740667
 To: <sip:4230@sipsig-ccm97>;tag=54cbc093e545bb9b
 Call-ID: 7c19b9a52cd1daaa@172.18.202.190
 CSeq: 126 NOTIFY
 Max-Forwards: 70
 Date: Tue, 20 Dec 2011 19:01:43 GMT
 User-Agent: Cisco-CUCM8.6
 Event: presence
 Subscription-State: active;expires=2368
 Contact: <sip:4240@172.18.202.97:5060;transport=tcp>
 Content-Type: application/pidf+xml
 Content-Length: 736

```
<?xml version="1.0" encoding="UTF-8" standalone="no" ?>
<presence xmlns="urn:ietf:params:xml:ns:pidf" entity="sip:4240@172.18.202.97"
  xmlns:e="urn:ietf:params:xml:ns:pidf:status:rpidd" xmlns:dm="urn:ietf:params:xml:ns:pidf:data-model"
  xmlns:ce="urn:cisco:params:xml:ns:pidf:rpidd" xmlns:sc="urn:ietf:params:xml:ns:pidf:servcaps">
  <dm:person>
    <status>
      <basic>open</basic>
    </status>
    <e:activities>
      </e:activities>
    </dm:person>
    <tuple id="cmp-1-462204">
      <status>
        <basic>open</basic>
      </status>
      <sc:servcaps>
        <sc:audio>true</sc:audio>
      </sc:servcaps>
      <contact priority="0.8">sip:4240@172.18.202.97:5060</contact>
      <timestamp>2011-12-20T19:01:43Z</timestamp>
    </tuple>
  </presence>
```

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

[61] SIP/2.0 200 OK

Via: SIP/2.0/TCP 172.18.202.97:5060;branch=z9hG4bK2b943479eff;received=172.18.202.97

Call-ID: 7c19b9a52cd1daaa@172.18.202.190

CSeq: 126 NOTIFY

From: <sip:4240@sipsig-ccm97>;tag=1556740667

To: <sip:4230@sipsig-ccm97>;tag=54cbc093e545bb9b

Server: TANDBERG/257 (TE4.1.0.253886Alpha4)

Content-Length: 0