



Cisco Unified Communications Manager Express Call Monitoring Interface Guide

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This document describes call and line monitoring on the Session Initiation Protocol (SIP) interface between the Cisco Unified Communications Manager Express (Unified CME) and a session server, such as Cisco Unified Contact Center Express (Unified CCX). The Cisco Unified CME is a Cisco IOS-based IP PBX with a device capability dependent on your specific Cisco IOS release, the Cisco router you use as your Unified CME, and the combination of devices you include in your configuration. For example, a Cisco Unified CME running on a Cisco 3845 router can handle up to 720 directory numbers and up to 240 skinny client control protocol (SCCP) user agents (UAs) but when using the Cisco Unified CCX as your session server, your configuration is limited to a total of 50 UAs.

As of release 4.2, the Cisco Unified CME provides a monitoring interface, based on SIP, to report both line state and call activities in support of telephony applications such as a call center. SIP presence and dialog event packages are used for line and call monitoring using the SIP REGISTER, SUBSCRIBE, and NOTIFY mechanisms.

This document focuses primarily on a detailed description of how SIP provides interworking and interoperability between a session server (such as Cisco Unified CCX) and the Cisco Unified CME (formerly known as Cisco Unified CallManager Express) and the utilization of specific computer supported telecommunications applications (CSTA) and Cisco proprietary events defined by the standard extensible markup language (XML) protocol.

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Prerequisites for Cisco Unified CME Call Monitoring

- Cisco Unified Communications Manager Express (Unified CME) software release 4.2 or higher.
- Cisco Unified Contact Center Express (Unified CCX) software release 5.0 or higher—required only for customers using Cisco Unified CME to collaborate with Cisco Unified CCX for advanced call center features.

Restrictions for Cisco Unified CME Call Monitoring

- Third-party remote call control is not supported by this feature.
- Only SCCP devices can be configured as user agents. (SIP phone agents are not supported.)
- Support is limited to eight registered session servers.
- Support is limited to 50 user agents when Unified CME is interacting with Cisco Unified CCX.

Information About Cisco Unified CME Call Monitoring

The Cisco Unified CME interacts with a session server, such as Cisco Unified CCX. With this call monitoring feature, Unified CME customers access advanced session server applications, such as call queuing and call routing, without the complexity of the Cisco Unified Communications Manager (formerly known as Cisco Unified CallManager).

To understand the call and line monitoring features of the Cisco Unified CME, you should be familiar with the following concepts:

- [Call Monitoring Basics, page 3](#)
- [Administrative XML Layer, page 6](#)
- [Registration Process for Call and Line Monitoring, page 7](#)
- [Subscription Overview for Call and Line Monitoring, page 10](#)
- [Line Subscription, page 10](#)
- [Call Subscription, page 17](#)
- [ECMA-323 Standard Reference, page 41](#)
- [Cisco Extension to ECMA-323, page 42](#)

**Note**

For information specific to Cisco Unified CME, Cisco Unified CCX, and other Cisco Unified Communications products, see the [“Related Documents” section on page 45](#).

Call Monitoring Basics

Cisco Unified CCX provides a single-box session server with automatic call distribution (ACD), interactive voice response (IVR), and computer telephony integration (CTI). Unified CCX interacts with a PBX, such as Cisco Unified Communications Manager, to provide intelligent call queuing and call routing for session server agent devices.

Some portions of this guide reference Cisco Unified CCX specifically, especially where examples are provided. However, the Cisco Unified CME is designed to interface with a session server application to provide call and line monitoring capability. To provide this capability, the Cisco Unified CME is configured to communicate with session server applications to perform three basic configuration and functional processes (see also [Figure 1](#)):

- The session server application needs specific information about the phones, users, and lines available for monitoring (an inventory). You can configure the application manually or you can utilize the HTTP/XML Administrative XML Layer (AXL) interface used by the session server application to query and configure the Cisco Unified CME. (See the [“Administrative XML Layer” section on page 6.](#))



Note To see examples of related AXL configurations and messages, refer to the [XML Provisioning Guide for Cisco CME/SRST](#).

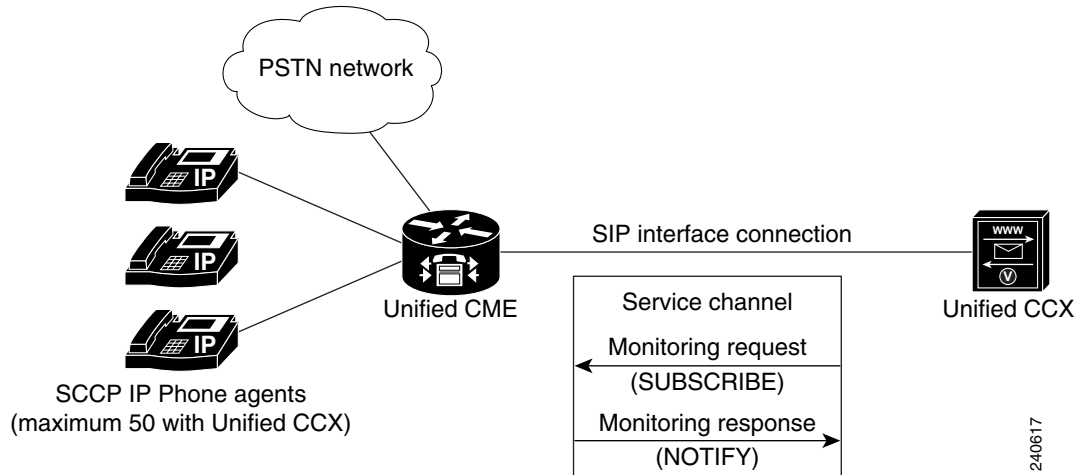
- The session server application uses the SIP REGISTER, SUBSCRIBE, and NOTIFY mechanisms to maintain an updated inventory of agents it is interested in monitoring and to perform monitoring functions. This interface guide is specifically designed to provide detailed information about these functions.
- The session server application configures route points on the Cisco Unified CME so that the session server can route appropriate incoming public switched telephone network (PSTN) calls to the Unified CME to the session server. Using the AXL interface, you can configure settings at the session server console and then send, or “push”, the configuration to the Unified CME, creating SIP dial peers that point to the session server. (See the [“Administrative XML Layer” section on page 6.](#))



Note Before a session server can push configuration settings to the Cisco Unified CME, you must first preconfigure the Unified CME with required parameters. For an example of minimal preconfiguration settings, see the [“Minimum preconfiguration required before using the AXL interface” section on page 119.](#)

Calls are typically selected based on the called number, provided by the PSTN when the call is presented to the Unified CME. The called number is matched using the destination-pattern command line interface (CLI) under the dial peer. Session servers, such as Cisco Unified CCX, utilize this capability.

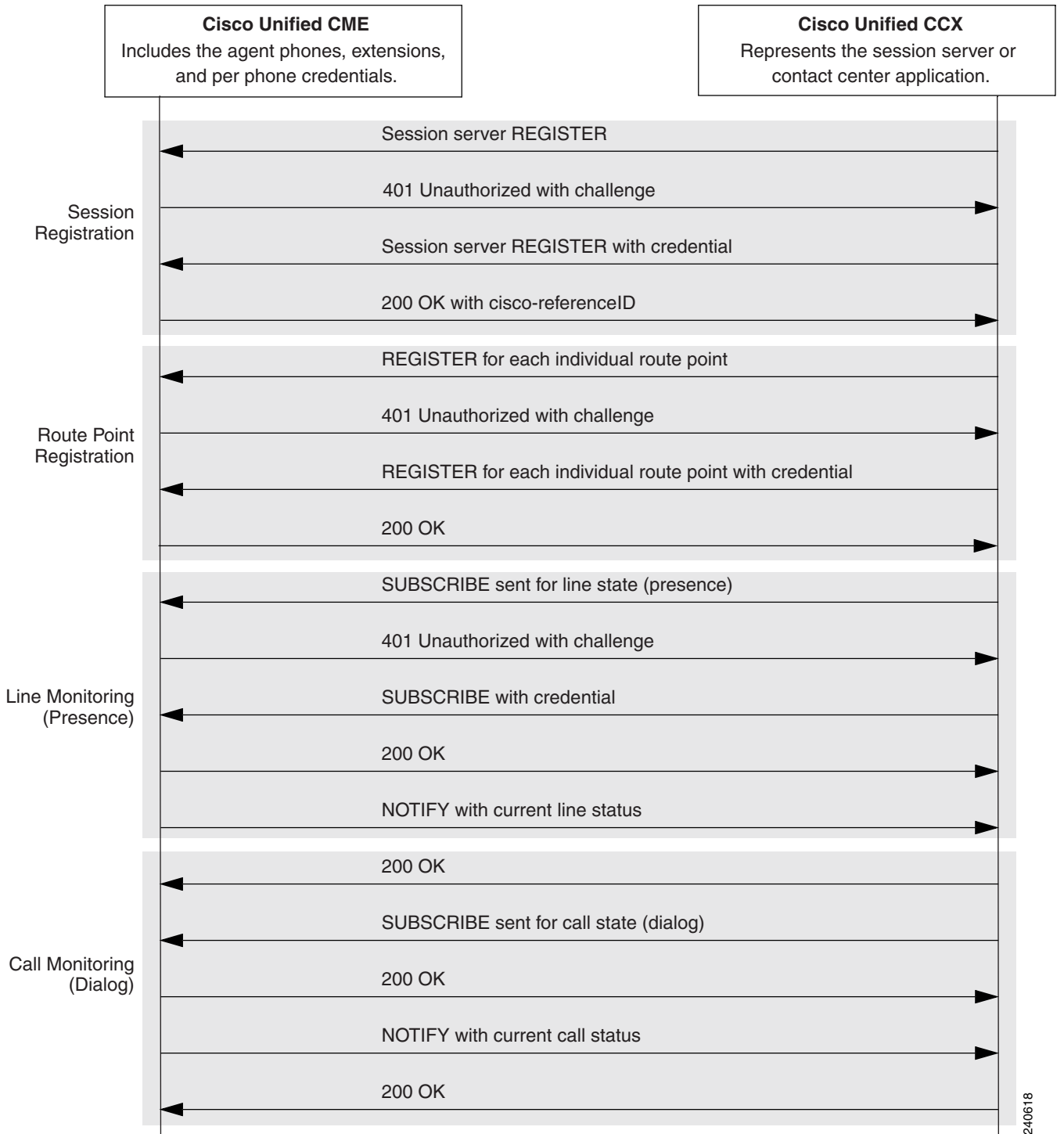
Figure 1 Overview of Unified CME and Session Server (Unified CCX) Interaction



When a call comes in to the Cisco Unified CME from the Internet (through the SIP trunk), it is checked against configured voice register pools. Those with a matched route point are routed to the session server (Unified CCX in [Figure 1](#)). The session server then initiates monitoring of service requests by sending a SUBSCRIBE request to the Cisco Unified CME through the SIP interface connection.

When presented with a subscription request, the Unified CME responds with a NOTIFY message to the session server, routes the call to the appropriate agent, and continues interacting with the session server during the call for monitoring purposes. See [Figure 2](#) for an example of a call monitoring system flow between Unified CME and Unified CCX.

Figure 2 High Level Summary of Line and Call Monitoring System Flow



Administrative XML Layer

Cisco Unified CME provides the session server with an XML-based interface—the Administrative XML Layer (AXL) interface—to perform configuration-related tasks. Both the session server and the Cisco Unified CME must be configured with appropriate information about lines and route points available to the call and line monitoring functions.

Cisco Unified CCX uses the `xml-admin-user` account to complete the configuration changes on the Cisco Unified CME and uses the same user account to retrieve the required Unified CME configuration information. The credential for this account is manually supplied to the session server. The session server provision and configuration capabilities are broadly categorized into two areas, which are described in the following sections:

- [Remote Control Credential Authentication, page 6](#)
- [Route Point Configuration, page 6](#)

Remote Control Credential Authentication

The AXL interface provides the ability to authenticate the remote control credential belonging to the session server before accepting changes to the Unified CME configuration. This mechanism also prevents unauthenticated SIP REGISTER messages or SIP SUBSCRIBE messages for presence events.

Tip The session server must be configured with the remote control credential before it can add, change, or delete route point configuration settings on the Unified CME.

Route Point Configuration

The AXL interface provides the session server with the ability to create, delete, and modify configuration properties for the list of route points stored on the Cisco Unified CME. Using the AXL interface, you can configure route points once, at the session server terminal, and send, or “push,” the route point configurations to the Unified CME. Without a properly configured list of route points, the Unified CME cannot provide those incoming calls access to their destinations.

A PSTN call received by the Unified CME has a specific destination, or endpoint—a call routing service on the session server, such as auto attendant (AA) or integrated contact distribution (ICD) on Cisco Unified CCX. Once the call reaches its endpoint on the session server it is forwarded to the appropriate user agent. However, for a call to pass through the Unified CME and reach its specified endpoint, the session server must first send endpoint information to the Unified CME.

Each call routing service on the session server is uniquely identified as a route point on the Unified CME. The session server sends information about each call routing service to the Unified CME over the AXL interface and the Unified CME then converts the unique identity of each call routing service into a unique route point ID. The route points are stored on the Unified CME as SIP endpoints (also called voice register pools (VRPs)).

Once VRPs are created on the Unified CME, incoming calls can access their appropriate endpoint (call routing service) on the session server and be routed to the appropriate user agent. Additionally, the route points can be registered on the Unified CME so that associated calls and agent lines can be monitored. (See the [“Route Point Registration” section on page 8.](#))

Registration Process for Call and Line Monitoring

The session server establishes and terminates a call monitoring channel with the Cisco Unified CME using the events and header fields described in the following sections:

- [Session Server Registration, page 7](#)
- [X-cisco-referenceID, page 8](#)
- [Route Point Registration, page 8](#)
- [Registration Examples, page 8](#)



Note

SIP messages provided in these sections and throughout this document are not intended to be exact. They are included as examples of the information passed in the various SIP messages. These message examples represent the attributes and information exchanged between the Cisco Unified CME and a session server, such as Cisco Unified CCX.

Session Server Registration

To establish an open session between the Cisco Unified CME and a session server, such as Cisco Unified CCX, the session server sends a SIP REGISTER message to the Unified CME. The primary purpose of this initial registration process is to open a monitoring session between the session server and the Unified CME. Once the session is established, the Unified CME and the session server are able to configure and reserve resources so that the session server can register and monitor route points and request status updates for agent lines and calls during the session.

The session server must exchange keepalive messages with the Cisco Unified CME to keep the session open. Cisco Unified CCX uses the `xml-user-admin` credential to send keepalive messages. Additionally, as a REGISTER message, the keepalive message requires authentication. The Unified CME challenges the initial keepalive REGISTER request and authenticates this request with an admin credential.

Once the admin credential is verified, a proprietary `cisco-referenceID` is generated by the Unified CME and sent in response to the keepalive REGISTER request with the `cisco-referenceID` included in the header. The Unified CME recognizes the session server by this `cisco-referenceID`. All future interactions in the same session include the `cisco-referenceID` header so that subsequent re-REGISTER and un-REGISTER messages can be processed without the need for additional authentication.



Note

See the `xml user` command in the *Cisco Unified Communications Manager Express Command Reference* for more information about configuring the `xml-user-admin` credential.

When the session server restarts, it sends a REGISTER message. The REGISTER message has an expiration time that is configurable on both the session server and the Cisco Unified CME. If the Unified CME does not receive a re-REGISTER request after the existing registration expires, the Unified CME interprets the session server as down and initiates a cleanup of all associated internal resources.

To shut down a session between the Cisco Unified CME and the session server gracefully, either the Unified CME or the session server initiates a graceful shutdown request. This request is in the form of a SIP un-REGISTER message where the Expires header field is set to zero. The device that receives the un-REGISTER request releases or removes the resources associated with that session.

X-cisco-referenceID

The X-cisco-referenceID is a unique identification assigned to a session server when a session is established. The Cisco Unified CME supports a maximum of eight (8) X-cisco-referenceIDs at a time, one for each open session. The X-cisco-referenceID is used for all SUBSCRIBE requests for monitoring events. The session server decides which SUBSCRIBE requests are to be bundled and in which keepalive sessions to bundle them according to the X-cisco-referenceID specified in the SUBSCRIBE request. All subscriptions within a keepalive session inherit the same keepalive timer.

Incoming SUBSCRIBE or REGISTER requests with no X-cisco-referenceID or with an X-cisco-referenceID that is not in the Unified CME X-cisco-referenceID database are rejected with a 400 Bad Request response.

Route Point Registration

Before calls or agent lines can be monitored by a session server, all route points associated with those calls or user agent lines must first exist on the Cisco Unified CME and then be registered. (See the [“Administrative XML Layer”](#) section on page 6 for information about creating route points on the Unified CME.)

Once a session is established between the Unified CME and the session server, the session server sends SIP REGISTER message requests for each route point it will monitor. The Unified CME replies to those SIP REGISTER requests with SIP 200 OK messages. Once registration is completed, the session server maintains each registered route point (as a VRP) on the Unified CME.

Registration Examples

The following are message examples (with cisco-referenceID) for a SIP REGISTER request to open a session, a SIP REGISTER request for route point registration, and a SIP un-REGISTER request to end a session.

Example: SIP REGISTER request received by the Unified CME to open a session

```
REGISTER sip:192.0.2.105:5060;transport=tcp SIP/2.0
Via: SIP/2.0/TCP 192.0.2.200:5060;branch=z9hG4bK4sucdtfC.Aj0pZt8vaxhRw~1
Max-Forwards: 70
To: <sip:CRS_controller@192.0.2.105>
From: <sip:CRS_controller@192.0.2.105>;tag=ds3dbf7342
Call-ID: 11739854999401@192.0.2.200
CSeq: 2 REGISTER
Content-Length: 0
Contact: <sip:CRS_controller@192.0.2.200:5060;transport=tcp>;expires=300
Allow: INVITE, BYE, CANCEL, ACK, NOTIFY
User-Agent: Cisco-CRS/5.0
X-cisco-session-server: CISCO-L2IZ31WFE_1170978599000
Authorization: Digest
    username='axluser', realm='', nonce='C6F5410C0001A22A', qop=auth, nc=00000001,
    cnonce='08LAFIdaSVbCs+RsyYCLGQ==', response='eb08a551a403b4362af2832e5456ada2',
    uri='sip:192.0.2.105:5060;transport=tcp', algorithm=MD5
```

Response:

```
SIP/2.0 200 OK
Via: SIP/2.0/TCP 192.0.2.200:5060;branch=z9hG4bK4sucdtfC.Aj0pZt8vaxhRw~1
From: <sip:CRS_controller@192.0.2.105>;tag=ds3dbf7342
To: <sip:CRS_controller@192.0.2.105>;tag=1055E4-5B1
Date: Thu, 15 Mar 2007 18:41:49 GMT
Call-ID: 11739854999401@192.0.2.200
Server: Cisco-SIPGateway/IOS-12.x
```



```

CSeq: 2 REGISTER
X-cisco-referenceID: EBC891CD
Contact: <sip:CRS_controller@192.0.2.200:5060;transport=tcp>;expires=300;x-cisco-newreg
Expires: 300
Content-Length: 0

```

Example: SIP REGISTRATION request received by the Unified CME for route point registration

```

REGISTER sip:192.0.2.105:5060;transport=tcp SIP/2.0
Via: SIP/2.0/TCP 192.0.2.200:5060;branch=z9hG4bK4sucdtfC.Aj0pZt8vaxhRw~11
Max-Forwards: 70
To: <sip:6888@192.0.2.105>
From: <sip:6888@192.0.2.105>;tag=ds73ab77e5
Call-ID: 11739855011434@192.0.2.200
CSeq: 2 REGISTER
Content-Length: 0
Contact: <sip:6888@192.0.2.200:5060;transport=tcp>;expires=360000
Allow: INVITE, BYE, CANCEL, ACK, NOTIFY
User-Agent: Cisco-CRS/5.0
X-cisco-referenceID: EBC891CD
Authorization: Digest
    username="axluser", realm="", nonce="4B7A07260001A29A", qop=auth, nc=00000001,
    cnonce="puq8yH43mSC/iFnkeQtpJQ==", response="6f791cce5d3dd6b374cc5fabcd4eaf06",
    uri="sip:192.0.2.105:5060;transport=tcp", algorithm=MD5

```

Response:

```

SIP/2.0 200 OK
Via: SIP/2.0/TCP 192.0.2.200:5060;branch=z9hG4bK4sucdtfC.Aj0pZt8vaxhRw~11
From: <sip:6888@192.0.2.105>;tag=ds73ab77e5
To: <sip:6888@192.0.2.105>;tag=105AB8-158D
Date: Thu, 15 Mar 2007 18:41:50 GMT
Call-ID: 11739855011434@192.0.2.200
Server: Cisco-SIPGateway/IOS-12.x
CSeq: 2 REGISTER
X-cisco-referenceID: EBC891CD
Contact: <sip:6888@192.0.2.200:5060;transport=tcp>;expires=600;x-cisco-newreg
Expires: 600
Content-Length: 0

```

Example: Session-ending SIP un-REGISTER request

```

REGISTER sip:192.0.2.105:5060;transport=tcp SIP/2.0
Via: SIP/2.0/TCP 192.0.2.200:5060;branch=z9hG4bK1UDpwwHo.CSGK2K2kSH0eQ~2708
Max-Forwards: 70
To: <sip:6888@192.0.2.105>
From: <sip:6888@192.0.2.105>;tag=ds5c4924ef
Call-ID: 117398462795030@192.0.2.200
CSeq: 7 REGISTER
Content-Length: 0
Allow: INVITE, BYE, CANCEL, ACK, NOTIFY
User-Agent: Cisco-CRS/5.0
X-cisco-referenceID: BB24BC58
Authorization: Digest
    username='axluser', realm='', nonce='0991D070000137EA', qop=auth, nc=00000001,
    cnonce='g8Wd1GvtvU240mYL104PQg==', response='8ff6a328150878055b661f4d6efd9723',
    uri='sip:192.0.2.105:5060;transport=tcp', algorithm=MD5
Contact: *
Expires: 0

```

Subscription Overview for Call and Line Monitoring

The SIP interface provides complete call and line monitoring functions based on SIP presence and dialog event packages. Monitoring of calls, lines, and route points allows decisions to be made during call routing. The Cisco Unified CME and session server use the SIP SUBSCRIBE and NOTIFY mechanisms for dialog and presence events. Additionally, SUBSCRIBE requests and NOTIFY messages for call monitoring (dialog events) use the Computer Supported Telephony Applications (CSTA) payload type.

Dialog events apply to call monitoring, presence events apply to line monitoring, and both apply to registered route points. The session server must send two SIP SUBSCRIBE messages for each route point and user agent line for which it subscribes—one for presence events and one for dialog events—before call monitoring can take place.

The Cisco Unified CME follows up each successful SIP SUBSCRIBE process with an initial SIP NOTIFY message that includes the current status of the specified or associated user agent line. For dialog event subscriptions, the body portion of the NOTIFY message will be empty if no call activities occurred prior to the SUBSCRIBE request. Otherwise, the message body will include the last event for all calls on the specified user agent line.

The Cisco Unified CME uses general message support for all monitoring operations. This section defines the XML schema used to monitor service between the Unified CME and a session server, such as Unified CCX. If there is no existing XML standard, proprietary Cisco parameters are used.

Line Subscription

To route a call to the correct agent, the session server initiates a SUBSCRIBE request for line monitoring using the SIP presence event package. This SIP SUBSCRIBE message utilizes two Multipurpose Internet Mail Extensions (MIME) payload types to monitor line status: presence information data format (PIDF) and remote party ID (RPID). These concepts are described in more detail in the following sections:

- [Line Subscription Process, page 10](#)
- [Line Status Notification, page 12](#)
- [Line Subscription Examples, page 14](#)
- [Line Status Notification Examples, page 15](#)

Line Subscription Process

Before a session server can monitor calls, it must subscribe to all user agent lines (and associated route points) it intends to monitor. To subscribe, the session server sends a subscription request (SIP SUBSCRIBE message) with a presence event for the specified agent line to the Cisco Unified CME. The SIP SUBSCRIBE message notifies the Cisco Unified CME that the session server intends to monitor agent line specified in the subscription request and that it needs to be informed of any status changes during the time the subscription remains active.

Line subscription requires that the session server be notified of any line-related events or status changes. The Unified CME provides status change notification to the session server by sending SIP NOTIFY messages whenever the status changes for a subscribed line or associated route point. After the session server successfully subscribes to the SIP presence package for a specified user agent, it is notified of all presence events related to that line (see [Table 1](#)).

**Note**

The SIP presence package, which is implemented by the Cisco Unified CME for line status monitoring, is defined in [RFC 3856, A Presence Event Package for the Session Initiation Protocol \(SIP\)](#). The suggested payload type for these messages is MIME type “application/pidf/rpid+xml,” which is defined in [RFC 3863, Presence Information Data Format \(PIDF\)](#).

Not all events or event attributes described in these RFCs are included or supported by the Cisco Unified CME. Where differences exist, this interface guide takes precedence.

Line monitoring events are essentially SIP presence information and are primarily available through the SIP presence package. The session server subscribes to and maps the presence information to internal events.

To gracefully shut down or end subscription to a line, the session server sends a SIP un-SUBSCRIBE message request to the Cisco Unified CME. The SIP un-SUBSCRIBE request is nearly the same as the original corresponding SIP SUBSCRIBE message request but the Expires header field is set to 0. When the Unified CME receives a message to unsubscribe from a line, it stops sending notification messages regarding presence events for that line.

The following examples show a SIP SUBSCRIBE request with the Cisco Unified CME SIP NOTIFY response for establishing subscription of a line and a SIP un-SUBSCRIBE request to end subscription to a line:

Example: SIP SUBSCRIBE request received by the Unified CME for line subscription

```
SUBSCRIBE sip:6401@192.0.2.105:5060;transport=tcp SIP/2.0
Via: SIP/2.0/TCP 192.0.2.200:5060;branch=z9hG4bK4sucdtfC.Aj0pZt8vaxhRw~44
Max-Forwards: 70
To: <sip:6401@192.0.2.105>
From: <sip:CRS_controller@192.0.2.200>;tag=ds9517f1e3
Call-ID: 117398618772314@192.0.2.200
CSeq: 2 SUBSCRIBE
Content-Length: 0
Contact: <sip:CRS_controller@192.0.2.200:5060;transport=tcp>
User-Agent: Cisco-CRS/5.0
X-cisco-referenceID: EBC891CD
Event: presence
Accept: application/pidf+xml+axl;ciscogw1
Expires: 280000
Allow-Events: refer
Allow-Events: telephone-event
Authorization: Digest
    username='axluser', realm='', nonce='93F9B1DF0002AEC6', qop=auth, nc=00000001,
    cnonce='TUL4tAKxDalk5dlJbpleNQ==', response='f50a04977e6ffc454636ec4220407bdf',
    uri='sip:6401@192.0.2.105:5060;transport=tcp', algorithm=MD5
```

Response:

```
NOTIFY sip:CRS_controller@192.0.2.200:5060;transport=tcp SIP/2.0
Via: SIP/2.0/TCP 192.0.2.105;branch=z9hG4bK1EDC6
From: <sip:6401@192.0.2.105>;tag=1AD410-207E
To: <sip:CRS_controller@192.0.2.200>;tag=ds9517f1e3
Call-ID: 117398618772314@192.0.2.200
CSeq: 101 NOTIFY
Max-Forwards: 70
Date: Thu, 15 Mar 2007 18:53:17 GMT
User-Agent: Cisco-SIPGateway/IOS-12.x
Event: presence
Subscription-State: active;expires=3600
Contact: <sip:6401@192.0.2.105:5060;transport=tcp>
```

Content-Type: application/pidf+xml
Content-Length: 444

```
<?xml version='1.0' encoding='UTF-8'?><presence xmlns='urn:ietf:params:xml:ns:pidf'
entity='sip:6401@192.0.2.105' xmlns:e='urn:ietf:params:xml:ns:pidf:status:rpid'
xmlns:rpid='urn:ietf:params:xml:ns:pidf:status:rpid' xmlns:dm='urn:ietf:params:xml:ns:
pidf:data-model'><dm:person><status><basic>Open</basic></status></dm:person><tuple>id='
cisco-cme'><status><basic>Open</basic><rpid:activeIdle>idle</rpid:activeIdle></status>
</tuple></presence>
```

Example: SIP un-SUBSCRIBE message request received by the Unified CME to unsubscribe a line

```
SUBSCRIBE sip:6401@192.0.2.105:5060;transport=tcp SIP/2.0
Via: SIP/2.0/TCP 192.0.2.200:5060;branch=z9hG4bKlUdpgwHo.CSGK2K2kSH0eQ~~2672
Max-Forwards: 70
To: <sip:6401@192.0.2.105>;tag=30774-262
From: <sip:CRS_controller@192.0.2.200>;tag=dsc7524ff
Call-ID: 117398462796634@192.0.2.200
CSeq: 3 SUBSCRIBE
Content-Length: 0
Contact: <sip:CRS_controller@192.0.2.200:5060;transport=tcp>
User-Agent: Cisco-CRS/5.0
X-cisco-referenceID: BB24BC58
Event: presence
Accept: application/pidf+xml+axl;ciscogw1
Expires: 0
Allow-Events: refer
Allow-Events: telephone-event
Authorization: Digest
username='axluser', realm='', nonce='83AA79D800004D89', qop=auth, nc=00000002,
cnonce='ybxqxaokjytpqK+tzEIB2g==', response='33f378d8c481b8d57dd0bde9cb7df2d7',
uri='sip:6401@192.0.2.105:5060;transport=tcp', algorithm=MD5
```

Line Status Notification

The Cisco Unified CME sends unsolicited NOTIFY messages to inform the session server of any changes to the status of a subscribed line. The session server must receive and store this information so that it can monitor the line and any calls it wants to monitor on that line. Line monitoring events are reported for both agent lines and route points. [Table 1](#) provides a summary of line subscription status notification values and links to sections that provide detailed information for those values.

Table 1 Line Subscription Status Notification Values

Line Status	PIDF Tag: basic	RPID Tag: activeIdle	HTML Format
Line In Service	OPEN	—	<status><basic>Open</basic><rpid:activeIdle></rpid:activeIdle></status>
Line Out of Service	CLOSED	—	<status><basic>Closed</basic><rpid:activeIdle></rpid:activeIdle></status>
Line Available	OPEN	active	<status><basic>Open</basic><rpid:activeIdle>active</rpid:activeIdle></status>
Line Busy	CLOSED	active	<status><basic>Closed</basic><rpid:activeIdle>active</rpid:activeIdle></status>
Line Idle	OPEN	idle	<status><basic>Open</basic><rpid:activeIdle>idle</rpid:activeIdle></status>

Line In Service

The Cisco Unified CME sends a SIP NOTIFY message to the session server when a monitored line that was out of service makes the transition to an in-service state. The line-in-service NOTIFY message includes the OPEN value in the PIDF tag.

The Cisco attributes included in a line-in-service NOTIFY message are:

- LINE ADDRESS
- DEVICE IDENTIFIER (the user agent where this line went in service)

Line Out of Service

The Cisco Unified CME sends a SIP NOTIFY message to the session server when a monitored line that was in service makes the transition to an out-of-service state. The line-out-of-service NOTIFY message includes the CLOSED value in the PIDF tag.

The Cisco attributes included in a line-out-of-service NOTIFY message are:

- LINE ADDRESS
- DEVICE IDENTIFIER (the user agent where this line went out of service)
- CAUSE

Line Available

The Cisco Unified CME sends a SIP NOTIFY message to the session server when a monitored line accepts a call, signifying that it has become available. A line is available after accepting a new call if it still has open channels. The line available NOTIFY message includes the OPEN value in the PIDF tag and a value of active in the RPID tag.

The Cisco attributes included in a line available NOTIFY message are:

- LINE ADDRESS
- DEVICE IDENTIFIER (the user agent where this line became available)



Note

When interacting with Cisco Unified CCX, the line available notification is treated the same as the line busy NOTIFY message—no calls are routed to this line until it returns to idle state.

Line Busy

The Cisco Unified CME sends a SIP NOTIFY message to the session server when an idle line changes to busy state. A line is busy when: it answers a call; originates a new call; has a call on hold; or has multiple calls on the same line. When a line is busy it has no more open channels and cannot accept any new calls.

The Cisco attributes included in a line busy NOTIFY message are:

- LINE ADDRESS
- DEVICE IDENTIFIER (the user agent where this line went into the busy state)

Line Idle

The Cisco Unified CME sends a SIP NOTIFY message to the session server when a line that was busy changes to idle state. A line is idle when all calls for that line address are disconnected and there are no remaining calls, regardless of the call state (such as answered, ringing, or hold).

The Cisco attributes included in a line idle NOTIFY message are:

- LINE ADDRESS
- DEVICE IDENTIFIER (the device ID where this line went into the idle state)



Note

Line monitoring depends on XML schema defined for PIDF and RPID. For each tuple, only basic status defined in PIDF and activeIdle defined in RPID are used.

For more information, refer to [RFC 3863](#), [RFC 4479](#), and [RFC 4480](#).

Line Subscription Examples

The following are message examples for a SIP SUBSCRIBE request for line subscription:

Example: SIP SUBSCRIBE request received by the Unified CME to monitor a line

```
SUBSCRIBE sip:6888@192.0.2.105:5060;transport=tcp SIP/2.0
Via: SIP/2.0/TCP 192.0.2.200:5060;branch=z9hG4bK4sucdtfC.Aj0pZt8vaxhRw~14
Max-Forwards: 70
To: <sip:6888@192.0.2.105>
From: <sip:CRS_controller@192.0.2.200>;tag=ds7dff792d
Call-ID: 117398550147110@192.0.2.200
CSeq: 1 SUBSCRIBE
Content-Length: 0
Contact: <sip:CRS_controller@192.0.2.200:5060;transport=tcp>
User-Agent: Cisco-CRS/5.0
X-cisco-referenceID: EBC891CD
Event: presence
Accept: application/pidf+xml+axl; ciscogw1
Expires: 280000
Authorization: Digest
    username="axluser", realm="", nonce="4B7A07260001A29A", qop=auth, nc=00000002,
    cnonce="puq8yH43mSC/iFnkeQtpJQ==", response="76fdf874e63934da88c33ed9b354b8d5",
    uri="sip:6888@192.0.2.105:5060;transport=tcp", algorithm=MD5Allow-Events:
    referAllow-Events: telephone-event
```

Response for a registered line:

```
SIP/2.0 202 Accepted
Via: SIP/2.0/TCP 192.0.2.200:5060;branch=z9hG4bK4sucdtfC.Aj0pZt8vaxhRw~14
From: <sip:CRS_controller@192.0.2.200>;tag=ds7dff792d
To: <sip:6888@192.0.2.105>;tag=105B44-6E3
Date: Thu, 15 Mar 2007 18:41:51 GMT
Call-ID: 117398550147110@192.0.2.200
CSeq: 1 SUBSCRIBE
Content-Length: 0
Contact: <sip:6888@192.0.2.105:5060;transport=tcp>
Expires: 3600
```

Line Status Notification Examples

The following are SIP NOTIFY message examples sent by Unified CME to notify the session server of changes in status to a monitored line:

Example: SIP NOTIFY message sent to notify the session server that the line is now available

```
NOTIFY sip:CRS_controller@192.0.2.200:5060;transport=tcp SIP/2.0
Via: SIP/2.0/TCP 192.0.2.105;branch=z9hG4bK16BBB8
From: <sip:6401@192.0.2.105>;tag=1AD410-207E
To: <sip:CRS_controller@192.0.2.200>;tag=ds9517f1e3
Call-ID: 117398618772314@192.0.2.200
CSeq: 128 NOTIFY
Max-Forwards: 70
Date: Thu, 15 Mar 2007 19:36:43 GMT
User-Agent: Cisco-SIPGateway/IOS-12.x
Event: presence
Subscription-State: active;expires=993
Contact: <sip:6401@192.0.2.105:5060;transport=tcp>
Content-Type: application/pidf+xml
Content-Length: 492
```

```
<?xml version="1.0" encoding="UTF-8"?><presence xmlns="urn:ietf:params:xml:ns:pidf"
  entity="sip:6401@192.0.2.105" xmlns:e="urn:ietf:params:xml:ns:pidf:status:rpid"
  xmlns:rpid="urn:ietf:params:xml:ns:pidf:status:rpid" xmlns:dm="urn:ietf:params:
  xml:ns:pidf:data-model"><dm:person><status><basic>Open</basic></status><e:activities>
  <e:on-the-phone/></e:activities></dm:person><tuple id="ciscocme"><status><basic>Open
  </basic><rpid:activeIdle>active</rpid:activeIdle></status></tuple></presence>
```

Example: SIP NOTIFY message sent to notify the session server that the line is now busy

```
NOTIFY sip:CRS_controller@192.0.2.200:5060;transport=tcp SIP/2.0
Via: SIP/2.0/TCP 192.0.2.105;branch=z9hG4bK171683
From: <sip:6401@192.0.2.105>;tag=1AD410-207E
To: <sip:CRS_controller@192.0.2.200>;tag=ds9517f1e3
Call-ID: 117398618772314@192.0.2.200
CSeq: 129 NOTIFY
Max-Forwards: 70
Date: Thu, 15 Mar 2007 19:37:09 GMT
User-Agent: Cisco-SIPGateway/IOS-12.x
Event: presence
Subscription-State: active;expires=967
Contact: <sip:6401@192.0.2.105:5060;transport=tcp>
Content-Type: application/pidf+xml
Content-Length: 496
```

```
<?xml version="1.0" encoding="UTF-8"?><presence xmlns="urn:ietf:params:xml:ns:pidf"
  entity="sip:6401@192.0.2.105" xmlns:e="urn:ietf:params:xml:ns:pidf:status:rpid"
  xmlns:rpid="urn:ietf:params:xml:ns:pidf:status:rpid" xmlns:dm="urn:ietf:params:xml:
  ns:pidf:data-model"><dm:person><status><basic>Closed</basic></status><e:activities>
  <e:on-the-phone/></e:activities></dm:person><tuple id="ciscocme"><status><basic>Closed
  </basic><rpid:activeIdle>active</rpid:activeIdle></status></tuple></presence>
```

Example: SIP NOTIFY message sent to notify the session server that the line is now idle

```
NOTIFY sip:CRS_controller@192.0.2.200:5060;transport=tcp SIP/2.0
Via: SIP/2.0/TCP 192.0.2.105;branch=z9hG4bK1EDC6
From: <sip:6401@192.0.2.105>;tag=1AD410-207E
To: <sip:CRS_controller@192.0.2.200>;tag=ds9517f1e3
Call-ID: 117398618772314@192.0.2.200
CSeq: 101 NOTIFY
Max-Forwards: 70
```

```
Date: Thu, 15 Mar 2007 18:53:17 GMT
User-Agent: Cisco-SIPGateway/IOS-12.x
Event: presence
Subscription-State: active;expires=3600
Contact: <sip:6401@192.0.2.105:5060;transport=tcp>
Content-Type: application/pidf+xml
Content-Length: 444
```

```
<?xml version="1.0" encoding="UTF-8"?><presence xmlns="urn:ietf:params:xml:ns:pidf"
  entity="sip:6401@192.0.2.105" xmlns:e="urn:ietf:params:xml:ns:pidf:status:rpid"
  xmlns:rpid="urn:ietf:params:xml:ns:pidf:status:rpid" xmlns:dm="urn:ietf:params:
  xml:ns:pidf:data-model"><dm:person><status><basic>Open</basic></status></dm:person>
  <tupleid="ciscocme"><status><basic>Open</basic><rpid:activeIdle>idle</rpid:activeIdle>
  </status></tuple></presence>
```

Example: SIP NOTIFY message sent to notify the session server that a line is unregistered

```
NOTIFY sip:CRS_controller@192.0.2.200:5060;transport=tcp SIP/2.0
Via: SIP/2.0/TCP 192.0.2.105:5060;branch=z9hG4bK542470
From: <sip:6401@192.0.2.105>;tag=EB944-1FD8
To: <sip:CRS_controller@192.0.2.200>;tag=dsf50857ce
Call-ID: 117458697315814@192.0.2.200
CSeq: 108 NOTIFY
Max-Forwards: 70
Date: Fri, 23 Mar 2007 00:16:08 GMT
User-Agent: Cisco-SIPGateway/IOS-12.x
Event: presence
Subscription-State: active;expires=708
Contact: <sip:6401@192.0.2.105:5060;transport=tcp>
Content-Type: application/pidf+xml
Content-Length: 425
```

```
<?xml version='1.0' encoding='UTF-8'?><presence xmlns='urn:ietf:params:xml:ns:pidf'
  entity='sip:6401@192.0.2.105' xmlns:e='urn:ietf:params:xml:ns:pidf:status:rpid'
  xmlns:rpid='urn:ietf:params:xml:ns:pidf:status:rpid' xmlns:dm='urn:ietf:params:
  xml:ns:pidf:data-model'><dm:person><status></status></dm:person><tuple id=
  'cisco-cme'><status><basic>Closed</basic><note errCode='2'>UnRegistered</note>
  </status></tuple></presence>
```


Call Subscription

Call monitoring is based on the SIP SUBSCRIBE and NOTIFY mechanism using TCP for transport. Suggested payload types for these messages are found in ECMA standards and use MIME type “application/csta+xml.”



Note

Cisco call monitoring uses XML schema that is defined using standards defined in [ECMA-323](#) and [ECMA-269](#). However, not all services, events, or attributes in these ECMA standards are supported or utilized in the Cisco Unified CME call monitoring feature.

To route a call to the correct agent, the session server initiates a SIP SUBSCRIBE request for call monitoring. The session server uses the SIP dialog package, implemented by the Cisco Unified CME, for call monitoring. Using the SIP dialog event package enables dialog state information to be distributed among different applications over a generic event notification framework.

Call monitoring uses a SIP dialog event package with the CSTA payload type. Call events are received one per call, regardless of the number of connections associated with a given call. Each call maintains a watcher list of session servers for call monitoring events and, when a connection (user agent) joins a call, the watch list is updated with all session servers that have subscribed to that user agent line. When the Unified CME sends a notification of a call event, it checks the list and notifies all subscribed list members.

Additionally, the Cisco Unified CME tracks a list of route point subscriptions for a session server. The Unified CME uses the subscription context of the first list element to report call events for all route points and agents under that session server instead of using their individual contexts.

Call connection events are received one per call connection. If an event is related to a connection, then a single call can receive multiple call connection events, such as active and disconnected events. Call connection events are delivered even when the address corresponding to the connection is not an observed party but the call is monitored. So if the address corresponding to a specific connection is monitored, then the session server will receive the connection events for all connections associated with that call.

This section provides detailed information about the following call monitoring topics:

- [Global Call ID, page 17](#)
- [Call Monitoring SIP Header Example, page 19](#)
- [Call Monitoring CSTA Conventions, page 19](#)
- [Call Monitoring Events, page 21](#)

Global Call ID

The Cisco Unified CME adds a Cisco proprietary SIP header field, Global Call ID (GCID), in all outbound SIP messages. The GCID is an H.225-based globally unique call identifier composed of 16 octets. The GCID octets are derived from a combination of the time stamp and a MAC address. This unique ID is a key entity used by both the Unified CME and the session server to identify and authenticate a call. This GCID is the callID value in the event payload.

The GCID is used when a call is redirected or transferred. The SIP call ID changes with a transfer but the GCID field stays the same, regardless of the number of transfers and redirects. The Unified CME manages the GCID and the session server relies on the Unified CME to change or remove the GCID field as necessary.

When the session server generates an outbound call, it generates the GCID, and includes the GCID in the SIP INVITE message. The Unified CME then uses that GCID for the call.

The following is an example of a SIP INVITE message with the Global Call ID field:

```
INVITE sip:6888@192.0.2.200:5060 SIP/2.0
Via: SIP/2.0/TCP 192.0.2.105;branch=z9hG4bKFB10EA
Remote-Party-ID: <sip:6501@192.0.2.105>;party=calling;screen=no;privacy=off
From: <sip:6501@192.0.2.105>;tag=285FE8-1574
To: <sip:6888@192.0.2.200>
Date: Thu, 15 Mar 2007 19:08:04 GMT
Call-ID: 5658E3AC-D25F11DB-80CBCC54-BAF89C4F@192.0.2.105
Supported: 100rel,timer,resource-priority,replaces
Min-SE: 1800
Cisco-Guid: 1435306675-3529445851-2160512084-3136855119
User-Agent: Cisco-SIPGateway/IOS-12.x
Allow: INVITE, OPTIONS, BYE, CANCEL, ACK, PRACK, UPDATE, REFER, SUBSCRIBE, NOTIFY, INFO, REGISTER
CSeq: 101 INVITE
Max-Forwards: 70
Timestamp: 1173985684
Contact: <sip:6501@192.0.2.105:5060;transport=tcp>
Call-Info: <sip:192.0.2.105:5060>;method='NOTIFY;Event=telephone-event;Duration=2000''
Expires: 180
Allow-Events: telephone-event
Cisco-Gcid: 558D0AB3-D25F-11DB-80C6-CC54BAF89C4F
Content-Type: application/sdp
Content-Disposition: session;handling=required
Content-Length: 211

v=0
o=CiscoSystemsSIP-GW-UserAgent 300 5155 IN IP4 192.0.2.105 s=SIP Call c=IN IP4 192.0.2.105
t=0 0 m=audio 19306 RTP/AVP 0 19 c=IN IP4 192.0.2.105 a=rtpmap:0 PCMU/8000
a=rtpmap:19 CN/8000
a=ptime:20
```

Configure GCID using the **gcid** command in voice service voip configuration mode of the CLI. When configured, the Cisco Unified CME generates a GCID for outbound calls and adds the Cisco-Gcid header field to INVITE requests, REFER requests, and 180, 183, and 200 responses. The GCID header field is passed from the Unified CME to the session server for every call.



Note

For more information about the **gcid** command, refer to the [Cisco Unified CME Command Reference](#).

The GCID header field propagates through the call leg to uniquely identify the monitored call. Only one GCID is needed for call monitoring except for the following scenarios, which require two GCIDs:

- Call changes to active state—Event from transferee for consultation transfer at time of connect or when put on hold.
- Call changes to ringing state—Event from transferee for consultation transfer at time of alert.

For these two GCIDs (those in calls changing to active or ringing state), the surviving GCID (the GCID used between transferee and transfer target) is listed first. With Cisco Unified CME, the surviving GCID is always the GCID between transferrer and transferee.

For a conference call event, only one GCID is included.

Call Monitoring SIP Header Example

The following are example headers for the SIP SUBSCRIBE and SIP NOTIFY messages:

Example: Header fields in a SIP SUBSCRIBE message

```
SUBSCRIBE sip:2777@mbenenso-cme1.example.com:5060;transport=tcp SIP/2.0
Via: SIP/2.0/TCP 192.0.2.107:5060;branch=z9hG4bKSQi8eZldK7iXqtgLL1Ediw~~4
Max-Forwards: 70
To: <sip:2777@mbenenso-cme1.example.com>
From: <sip:CRS_controller@192.0.2.107>;tag=ds4d17470
Call-ID: 11739153122734@192.0.2.107
CSeq: 1 SUBSCRIBE
Content-Length: 0
Contact: <sip:CRS_controller@192.0.2.107:5060;transport=tcp>
User-Agent: Cisco-CRS/4.6
X-cisco-referenceID: D737A35F
Event: dialog
Accept: application/csta+xml
Expires: 2800
Authorization: Digest
    username="mbenenso", realm="", nonce="F40D17330000B11A", qop=auth, nc=00000003,
    cnonce="G9052Wml/imp5R+sScjOCw=", response="955fd4c7e44b2b1df8f6658b060c5d78",
    uri="sip:2777@mbenenso-cme1.example.com:5060;transport=tcp", algorithm=MD5
Allow-Events: refer
Allow-Events: telephone-event
```

Example: Header fields in a SIP NOTIFY message

```
NOTIFY sip:CRS_controller@192.0.2.107:5060;transport=tcp SIP/2.0
Via: SIP/2.0/TCP 172.19.238.158;branch=z9hG4bK1B5D
From: <sip:2777@mbenenso-cme1.example.com>;tag=6EBA4-16FD
To: <sip:CRS_controller@192.0.2.107>;tag=ds4d17470
Call-ID: 11739153122734@192.0.2.107
CSeq: 101 NOTIFY
Max-Forwards: 70
Date: Wed, 14 Mar 2007 23:35:13 GMT
User-Agent: Cisco-SIPGateway/IOS-12.x
Event: dialog
Subscription-State: active;expires=2800
Contact: <sip:2777@172.19.238.158:5060;transport=tcp>
Content-Length: 0
```

Call Monitoring CSTA Conventions

This section provides detailed information CSTA conventions in the following topics:

- [Device, page 19](#)
- [Call, page 20](#)
- [Connection, page 20](#)

Device

A device can be either a physical or logical entity. CSTA allows users to observe and modify the device entity to access different telephony services. A device is identified by a deviceID, which functions similarly to a SIP Uniform Resource Identifier (URI) in a SIP network.

Call

A call is the communication relationships between one or more CSTA devices and is identified by a callID. During some call phases, such as establishment and release, the call is not completely formed and there may be only one CSTA device involved. In other call operations, such as a conference or transfer, one device in a call can be replaced by another device or two calls can be merged into one.

A call state refers to a collection of all associated connection states.

Connection

A connection refers to a relationship between a call and a device. Each connection in a call is associated with a connection state. A connection is identified by a connectionID, which consists of both a callID and a deviceID.

Table 2 lists CSTA defined names and descriptions of connection states.

Table 2 CSTA Connection States

Connection State	Description
Alerting	Indicates an incoming call at an endpoint. Typically the connection may be ringing or it may be in a prealerting condition, such as offered.
Connected	Indicates that a connection is actively participating in a call. This connection state can be the result of an incoming or outgoing call.
Failed	Indicates that call progression has stalled. Typically, this indicates that an outgoing call attempt encountered a busy endpoint.
Held	Indicates that an endpoint is no longer actively participating in a call. A connection could be held while the line is used to place another call, such as during a consultation transfer.
Initiated	Indicates a transient state, usually prompted by an endpoint initiating a service, such as a dial tone.
Null	Indicates there is no relationship between the call and the endpoint.
Queued	Indicates that the call is temporarily suspended at a device, such as when a call is parked or camped on.

Call Monitoring Cause Strings

There are specific strings used to provide a cause value when status of a call changes:

- UNKNOWN
- normal
- busy
- transfer
- callForwardNoAnswer
- callForward
- callForwardBusy
- Conference
- CONF_DROP
- numberUnallocated
- normalClearing
- unknownOverflow
- alertTimeExpired
- resourcesNotAvailable
- networkNotObtainable
- networkOutOfOrder
- recall

Call Monitoring Events

All call monitoring events contain the following information:

- Global Call ID (GCID) in the GCID header field.
- Call direction information, such as calling party and called party.



Note Wherever the calling party or called party address is unavailable, call direction information fields contain UNKNOWN; however, these attributes should be as complete as possible.

Table 3 displays supported CSTA call control events and when they are reported by the Unified CME. The events are listed in semi-chronological order so that each event description and example in this document can build on related events. Each CSTA event name in the list also serves as a cross-reference link to more detailed information, including XML schema examples, for the events listed in this table.

Table 3 Call Monitoring Events

Call Monitoring Event	When Event Is Reported (SIP NOTIFY Message Is Sent to Session Server)
ActiveEvent, page 21	When the connection of a call becomes active.
OriginatedEvent, page 22	When a call is attempted from a device.
OfferedEvent, page 24	When a call is offered.
DeliveredEvent, page 25	When a call is presented to a called party that is in ringing state.
EstablishedEvent, page 26	When a call is answered and connected.
ConnectionClearedEvent, page 27	When the connection of a call is disconnected.
CallClearedEvent, page 29	When all connections of a call are disconnected and the call is cleared.
FailedEvent, page 30	When an outbound call attempt fails.
HeldEvent, page 31	When a call is put on hold.
RetrievedEvent, page 32	When a call is retrieved from hold.
TransferredEvent, page 33	When a consult transfer takes place.
ConferencedEvent, page 37	When a call conference takes place.

ActiveEvent

The Cisco Unified CME reports an ActiveEvent to the session server when the connection for a given call moves to the active (answered) state. This is a Cisco proprietary event that provides additional information on a newly active connection.

The ActiveEvent is reported under the following circumstances:

- The agent device originates a new outbound call.
- The agent device answers a new inbound call.
- A consult transfer completes—the transferred-to party joins the primary call.
- A conference is established—the participants have joined the primary call.

This call connection event is a vendor-specific event designed for the interworking of Unified CME and a session server. The schema for this event is defined as a Cisco extension to CSTA with the encoded XML event for ActiveEvent included as a subelement to privateData.

Table 4 displays the parameters used for the ActiveEvent SIP NOTIFY message.

Table 4 ActiveEvent Parameters

Parameter Name	Description
Standard Parameters	
none	—
Cisco Private Parameters	
callingDirectoryNumber	Specifies the calling directory number (outbound call only).
calledDirectoryNumber	Specifies the called directory number (inbound call only).
connectionAddress	Specifies the deviceID of the connection.
callType	Indicates either direct or consult call (outbound call only).
parentGCID	Specifies the primary global callID (outbound consult call only).



Note

Because the ActiveEvent is a subelement to privateData, the ActiveEvent example is included as part of the OriginatedEvent example. See the [“privateData Extension schema for OriginatedEvent with associated ActiveEvent for a call attempt from directory number 1001”](#) section on page 22.

OriginatedEvent

The Cisco Unified CME reports an OriginatedEvent to the session server when a monitored line (a local SCCP IP phone) attempts a new call, such as when the handset is lifted or a soft button is pressed on the agent but dialing has not yet taken place.

Table 5 displays the parameters used for the OriginatedEvent SIP NOTIFY message.

Table 5 OriginatedEvent Parameters

Parameter Name	Description
Standard Parameters	
originatedConnection	Specifies the connection ID of the originating device.
callingDevice	Specifies the deviceID of the calling device.
Cisco Private Parameters	
callType	Indicates either direct or consult call.
parentGCID	Specifies the primary global callID (for consultation only).

Example: privateData Extension schema for OriginatedEvent with associated ActiveEvent for a call attempt from directory number 1001

```
<?xml version="1.0" encoding="UTF-8"?>
<OriginatedEvent
  xmlns="http://www.ecma-international.org/standards/ecma-323/csta/ed3"
  xmlns:xsi="http://www.example.org/2001/XMLSchema-instance"
  xsi:schemaLocation="http://www.ecma-international.org/standards/ecma-323/csta/ed3
http://www.ecma-international.org/standards/ecma-323/csta/ed3/originated-event.xsd"
  xmlns:cisco-csta-ext="cisco-csta-ext.xsd">
  <monitorCrossRefID>E41B4F99</monitorCrossRefID>
  <originatedConnection>
  <callID>438AA8BD-D893-11DB-87F4-996E115FF692</callID>
  <deviceID>1001</deviceID>
```

```

</originatedConnection>
<callingDevice>
<deviceIdentifier>1001</deviceIdentifier>
</callingDevice>
<calledDevice>
<deviceIdentifier></deviceIdentifier>
</calledDevice>
<cause>normal</cause>
<extensions>
<privateData>
<private>
<cisco-csta-ext:originatedPrivate>
<cisco-csta-ext:callDirection>FALSE</cisco-csta-ext:callDirection>
<cisco-csta-ext:callType>direct</cisco-csta-ext:callType>
<cisco-csta-ext:parentGCID></cisco-csta-ext:parentGCID>
</cisco-csta-ext:originatedPrivate>
</private>
</privateData>
</extensions>
</OriginatedEvent>

<?xml version="1.0" encoding="UTF-8"?>
<cisco-csta-ext:ActiveEvent
  xmlns="http://www.ecma-international.org/standards/ecma-323/csta/ed3"
  xmlns:xsi="http://www.example.org/2001/XMLSchema-instance"
  xsi:schemaLocation="http://www.ecma-international.org/standards/ecma-323/csta/ed3
http://www.ecma-international.org/standards/ecma-323/csta/ed3/private-event.xsd"
  xmlns:cisco-csta-ext="cisco-csta-ext.xsd">
<monitorCrossRefID>E41B4F99</monitorCrossRefID>
<extensions>
<privateData>
<private>
<cisco-csta-ext:gcid>438AA8BD-D893-11DB-87F4-996E115FF692</cisco-csta-ext:gcid>
<cisco-csta-ext:callDirection>FALSE</cisco-csta-ext:callDirection>
<cisco-csta-ext:callingDirectoryNumber>6401</cisco-csta-ext:callingDirectoryNumber>
<cisco-csta-ext:calledDirectoryNumber></cisco-csta-ext:calledDirectoryNumber>
<connectionAddress>
<deviceIdentifier>1001</deviceIdentifier>
</connectionAddress>
<lastRedirectionDevice>
<numberDialed></numberDialed>
</lastRedirectionDevice>
<originalCalledAddress></originalCalledAddress>
<cisco-csta-ext:callType>direct</cisco-csta-ext:callType>
<cisco-csta-ext:parentGCID></cisco-csta-ext:parentGCID>
</private>
</privateData>
</extensions>
</cisco-csta-ext:ActiveEvent>

```

OfferedEvent

The Cisco Unified CME reports an OfferedEvent to the session server when an incoming call is delivered to an agent device on a monitored line.

Table 6 displays the parameters used for the OfferedEvent SIP NOTIFY message.

Table 6 OfferedEvent Parameters

Parameter Name	Description
Standard Parameters	
offeredConnection	Specifies the connectionID of the called device.
callingDevice	Specifies the deviceID of the calling device.
calledDevice	Specifies the deviceID of the called device.
lastRedirectionDevice	Specifies the last redirecting device (call forward and blind transfer only).
Cisco Private Parameters	
callType	Indicates either direct or consult call.
parentGCID	Specifies the primary global callID (for consultation only).

Example: privateData Extension schema for OfferedEvent for a call being offered to DN 1002

```
<?xml version="1.0" encoding="UTF-8"?>
<OfferedEvent
xmlns="http://www.ecma-international.org/standards/ecma-323/csta/ed3"
  xmlns:xsi="http://www.example.org/2001/XMLSchema-instance"
  xsi:schemaLocation="http://www.ecma-international.org/standards/ecma-323/csta/ed3
http://www.ec
ma-international.org/standards/ecma-323/csta/ed3/offered-event.xsd"
xmlns:cisco-csta-ext="cisco-
csta-ext.xsd">
<monitorCrossRefID>EBC891CD</monitorCrossRefID>
<offeredConnection>
<callID>7CAD4A3-D25F-11DB-80D0-CC54BAF89C4F</callID>
<deviceID>1002</deviceID>
</offeredConnection>
<offeredDevice>
<deviceIdentifier>NULL</deviceIdentifier>
</offeredDevice>
<callingDevice>
<deviceIdentifier>1001</deviceIdentifier>
</callingDevice>
<calledDevice>
<deviceIdentifier>1002</deviceIdentifier>
</calledDevice>
<lastRedirectionDevice>
<numberDialed></numberDialed>
</lastRedirectionDevice>
<cause>normal</cause>
<extensions>
<privateData>
<private>
<cisco-csta-ext:OfferedPrivate>
<cisco-csta-ext:callDirection>FALSE</cisco-csta-ext:callDirection>
<cisco-csta-ext:callType>direct</cisco-csta-ext:callType>
<cisco-csta-ext:parentGCID></cisco-csta-ext:parentGCID>
<originalCalledAddress></originalCalledAddress>
</cisco-csta-ext:OfferedPrivate>
```



```

</private>
</privateData>
</extensions>
</OfferedEvent>

```

DeliveredEvent

The Cisco Unified CME reports a DeliveredEvent to the session server when one of the connections on a monitored call is in the accept (ringing) state—either the agent device has started ringing for an incoming call or the agent device has begun sending alerts for an outgoing call.

The session server receives only one of these events per connection and only for the call connection that is in the accept (ringing) state regardless of which lines are monitored. For example, if Agent 1 calls Agent 2, then Unified CME reports this event only for Agent 2's connection when ringing regardless if Agent 1 is observed, Agent 2 is observed, or both are observed.

Table 7 displays the parameters used for the DeliveredEvent SIP NOTIFY message.

Table 7 *DelieveredEvent Parameters*

Parameter Name	Description
Standard Parameters	
connection	Specifies the connectionID of the device that is ringing.
callingDevice	Specifies the deviceID of the calling device.
calledDevice	Specifies the deviceID of the called device.
lastRedirectionDevice	Specifies the last redirecting device (call forward and blind transfer only).
Cisco Private Parameters	
callType	Indicates either direct or consult call.
parentGCID	Specifies the primary global callID (for consultation only).

Example: privateData Extension schema for DeliveredEvent for agent device 1002 in ringing state

```

<?xml version="1.0" encoding="UTF-8"?>
<DeliveredEvent
  xmlns="http://www.ecma-international.org/standards/ecma-323/csta/ed3"
  xmlns:xsi="http://www.example.org/2001/XMLSchema-instance"
  xsi:schemaLocation="http://www.ecma-international.org/standards/ecma-323/csta/ed3
http://www.ec
ma-international.org/standards/ecma-323/csta/ed3/delivered-event.xsd"
  xmlns:cisco-csta-ext="cisc
o-csta-ext.xsd">
  <monitorCrossRefID>EBC891CD</monitorCrossRefID>
  <connection>
    <callID>7CAD4A3-D25F-11DB-80D0-CC54BAF89C4F</callID>
    <deviceID>1002</deviceID>
  </connection>
  <alertingDevice>
    <deviceIdentifier>NULL</deviceIdentifier>
  </alertingDevice>
  <callingDevice>
    <deviceIdentifier>1001</deviceIdentifier>
  </callingDevice>
  <calledDevice>
    <deviceIdentifier>1002</deviceIdentifier>
  </calledDevice>
  <lastRedirectionDevice>

```

```

<numberDialed></numberDialed>
</lastRedirectionDevice>
<cause>normal</cause>
<extensions>
<privateData>
<private>
<cisco-csta-ext:deliveredPrivate>
<cisco-csta-ext:callDirection>FALSE</cisco-csta-ext:callDirection>
<cisco-csta-ext:callType>direct</cisco-csta-ext:callType>
<cisco-csta-ext:parentGCID></cisco-csta-ext:parentGCID>
</cisco-csta-ext:deliveredPrivate>
</private>
</privateData>
</extensions>
</DeliveredEvent>

```

EstablishedEvent

The Cisco Unified CME reports an EstablishedEvent to the session server when an incoming call to the agent device is answered or when a call originated from the agent device is answered by the far end. The event is generated when a call is answered by the party that has been ringing and is generated per call so that only one such event is generated when the call moves to the answer state and all call connections are in the active state.

Table 8 displays the parameters used for the EstablishedEvent SIP NOTIFY message.

Table 8 EstablishedEvent Parameters

Parameter Name	Description
Standard Parameters	
establishedConnection	Specifies the connectionID of the called (answering) device.
callingDevice	Specifies the deviceID of the calling device.
calledDevice	Specifies the deviceID of the called device.
lastRedirectionDevice	Specifies the last redirecting device (call forward and blind transfer only).
Cisco Private Parameters	
none	—

Example: privateData Extension schema for EstablishedEvent with associated ActiveEvent sent when agent device 1002 answers a call

```

<?xml version="1.0" encoding="UTF-8"?>
<cisco-csta-ext:ActiveEvent
  xmlns="http://www.ecma-international.org/standards/ecma-323/csta/ed3"
  xmlns:xsi="http://www.example.org/2001/XMLSchema-instance"
  xsi:schemaLocation="http://www.ecma-international.org/standards/ecma-323/csta/ed3
http://www.ec
ma-international.org/standards/ecma-323/csta/ed3/private-event.xsd"
  xmlns:cisco-csta-ext="cisco-
csta-ext.xsd">
<monitorCrossRefID>EBC891CD</monitorCrossRefID>
<extensions>
<privateData>
<private>
<cisco-csta-ext:gcid>7CAD4A3-D25F-11DB-80D0-CC54BAF89C4F</cisco-csta-ext:gcid>
<cisco-csta-ext:callDirection>FALSE</cisco-csta-ext:callDirection>
<cisco-csta-ext:callingDirectoryNumber>1001</cisco-csta-ext:callingDirectoryNumber>

```

```

<cisco-csta-ext:calledDirectoryNumber>1002</cisco-csta-ext:calledDirectoryNumber>
<connectionAddress>
<deviceIdentifier>1002</deviceIdentifier>
</connectionAddress>
<lastRedirectionDevice>
<numberDialed></numberDialed>
</lastRedirectionDevice>
<originalCalledAddress></originalCalledAddress>
<cisco-csta-ext:callType>direct</cisco-csta-ext:callType>
<cisco-csta-ext:parentGCID></cisco-csta-ext:parentGCID>
</private>
</privateData>
</extensions>
</cisco-csta-ext:ActiveEvent>

<?xml version="1.0" encoding="UTF-8"?>
<EstablishedEvent
  xmlns="http://www.ecma-international.org/standards/ecma-323/csta/ed3"
  xmlns:xsi="http://www.example.org/2001/XMLSchema-instance"
  xsi:schemaLocation="http://www.ecma-international.org/standards/ecma-323/csta/ed3
http://www.ec
ma-international.org/standards/ecma-323/csta/ed3/established-event.xsd"
  xmlns:cisco-csta-ext="cisco-csta-ext.xsd">
<monitorCrossRefID>EBC891CD</monitorCrossRefID>
<establishedConnection>
<callID>7CADC4A3-D25F-11DB-80D0-CC54BAF89C4F</callID>
<deviceID>NULL</deviceID>
</establishedConnection>
<answeringDevice>
<deviceIdentifier>NULL</deviceIdentifier>
</answeringDevice>
<callingDevice>
<deviceIdentifier>1001</deviceIdentifier>
</callingDevice>
<calledDevice>
<deviceIdentifier>1002</deviceIdentifier>
</calledDevice>
<lastRedirectionDevice>
<numberDialed>NULL</numberDialed>
</lastRedirectionDevice>
<cause>normal</cause>
</EstablishedEvent>

```

ConnectionClearedEvent

The Cisco Unified CME reports a ConnectionClearedEvent to the session server when a connection that is part of a monitored call drops out of the call, such as when one party drops out of a conference call. However, disconnect is not limited to a conference scenario.

The ConnectionClearedEvent is reported under the following circumstances:

- An agent device drops out of a basic call or conference.
- A call is forwarded because the original party does not answer.
- A blind transfer takes place (transferrer connection drops).
- A consult transfer takes place (transferrer and transferee connections drop out of a consult call).
- A conference takes place (connections for all secondary calls are dropped).

Table 9 displays the parameters used for the ConnectionClearedEvent SIP NOTIFY message.

Table 9 ConnectionClearedEvent Parameters

Parameter Name	Description
Standard Parameters	
droppedConnection	Specifies the connectionID of the device dropped from the call.
cause	Specifies the reason for disconnection.
Cisco Private Parameters	
callingDirectoryNumber	Specifies the calling directory number.
calledDirectoryNumber	Specifies the called directory number.

Example: privateData Extension schema for ConnectionClearedEvent when route point 6888 drops out after successfully transferring the call to an agent

```
<?xml version="1.0" encoding="UTF-8"?>
<ConnectionClearedEvent
  xmlns="http://www.ecma-international.org/standards/ecma-323/csta/ed3"
  xmlns:xsi="http://www.example.org/2001/XMLSchema-instance"
  xsi:schemaLocation="http://www.ecma-international.org/standards/ecma-323/csta/ed3
http://www.ec
ma-international.org/standards/ecma-323/csta/ed3/connection-cleared-event.xsd"
  xmlns:cisco-csta-
ext="cisco-csta-ext.xsd">
  <monitorCrossRefID>EBC891CD</monitorCrossRefID>
  <droppedConnection>
  <callID>7CAD4A3-D25F-11DB-80D0-CC54BAF89C4F</callID>
  <deviceID>6888</deviceID>
  </droppedConnection>
  <releasingDevice>
  <deviceIdentifier>NULL</deviceIdentifier>
  </releasingDevice>
  <cause>transfer</cause>
  <extensions>
  <privateData>
  <private>
  <cisco-csta-ext:CallConnectionClearedPrivate>
  <cisco-csta-ext:callDirection>FALSE</cisco-csta-ext:callDirection>
  <cisco-csta-ext:callingDirectoryNumber>1001</cisco-csta-ext:callingDirectoryNumber>
  <cisco-csta-ext:calledDirectoryNumber>6888</cisco-csta-ext:calledDirectoryNumber>
  </cisco-csta-ext:CallConnectionClearedPrivate>
  </private>
  </privateData>
  </extensions>
  </ConnectionClearedEvent>
```

CallClearedEvent

The Cisco Unified CME reports a CallClearedEvent to the session server when all connections for a call are disconnected and the call is cleared. This event implies that the call specified by the GCID can now be safely removed from the system.

Table 10 displays the parameters used for the CallClearedEvent SIP NOTIFY message.

Table 10 CallClearedEvent Parameters

Parameter Name	Description
Standard Parameters	
clearedCall	Specifies the callID of the call that was cleared (both deviceID and connectionID are set to NULL).
cause	Specifies the reason for call clearing.
Cisco Private Parameters	
callingDirectoryNumber	Specifies the calling directory number.
calledDirectoryNumber	Specifies the called directory number.

Example: privateData Extension schema for CallClearedEvent when a call between DNs 1001 and 1002 is cleared due to a normal disconnection event

```
<?xml version="1.0" encoding="UTF-8"?>
<CallClearedEvent
  xmlns="http://www.ecma-international.org/standards/ecma-323/csta/ed3"
  xmlns:xsi="http://www.example.org/2001/XMLSchema-instance"
  xsi:schemaLocation="http://www.ecma-international.org/standards/ecma-323/csta/ed3
http://www.ec
ma-international.org/standards/ecma-323/csta/ed3/call-cleared-event.xsd"
  xmlns:cisco-csta-ext="cisco-csta-ext.xsd">
  <monitorCrossRefID>EBC891CD</monitorCrossRefID>
  <clearedCall>
  <callID>7CAD4A3-D25F-11DB-80D0-CC54BAF89C4F</callID>
  <deviceID>NULL</deviceID>
  </clearedCall>
  <cause>normalClearing</cause>
  <extensions>
  <privateData>
  <private>
  <droppedPrivate>
  <cisco-csta-ext:callingDirectoryNumber>1001</cisco-csta-ext:callingDirectoryNumber>
  <cisco-csta-ext:calledDirectoryNumber>1002</cisco-csta-ext:calledDirectoryNumber>
  </droppedPrivate>
  </private>
  </privateData>
  </extensions>
</CallClearedEvent>
```

FailedEvent

The Cisco Unified CME reports a FailedEvent to the session server when an outbound call cannot be completed, such as when a party is busy.

Table 11 displays the parameters used for the FailedEvent SIP NOTIFY message.

Table 11 FailedEvent Parameters

Parameter Name	Description
Standard Parameters	
failedConnection	Specifies the connectionID (deviceID represents the called device).
callingDevice	Specifies the deviceID of the calling device.
calledDevice	Specifies the deviceID of the called device.
cause	Specifies the reason for failure.
Cisco Private Parameters	
none	—

Example: privateData Extension schema for FailedEvent when a call from device 1001 to device 9999 cannot be completed due to an unallocated destination number (Unified CME cannot resolve to any outbound dial peer)

```
<?xml version="1.0" encoding="UTF-8"?>
<FailedEvent
  xmlns="http://www.ecma-international.org/standards/ecma-323/csta/ed3"
  xmlns:xsi="http://www.example.org/2001/XMLSchema-instance"
  xsi:schemaLocation="http://www.ecma-international.org/standards/ecma-323/csta/ed3
http://www.ec
ma-international.org/standards/ecma-323/csta/ed3/failed-event.xsd"
  xmlns:cisco-csta-ext="cisco-c
sta-ext.xsd">
  <monitorCrossRefID>306D4BB2</monitorCrossRefID>
  <failedConnection>
    <callID>3A780EF7-EDEB-11DB-8E93-C3B7F63094E9</callID>
    <deviceID>9999</deviceID>
  </failedConnection>
  <failingDevice>
    <deviceIdentifier>NULL</deviceIdentifier>
  </failingDevice>
  <callingDevice>
    <deviceIdentifier>1001</deviceIdentifier>
  </callingDevice>
  <calledDevice>
    <deviceIdentifier>9999</deviceIdentifier>
  </calledDevice>
  <lastRedirectionDevice>
    <numberDialed>NULL</numberDialed>
  </lastRedirectionDevice>
  <cause>numberUnallocated</cause>
  <extensions>
    <privateData>
      <private>
        <cisco-csta-ext:FailedPrivate>
          <cisco-csta-ext:callDirection>TRUE</cisco-csta-ext:callDirection>
        </cisco-csta-ext:FailedPrivate>
      </private>
    </privateData>
  </extensions>
</FailedEvent>
```

HeldEvent

The Cisco Unified CME reports HeldEvent to the session server when a call is put on hold, locally or remotely, by one of the parties connected to the call. This event is generated per connection to associate the connection with the held event.

Table 12 displays the parameters used for the HeldEvent SIP NOTIFY message.

Table 12 *HeldEvent Parameters*

Parameter Name	Description
Standard Parameters	
heldConnection	Specifies the connectionID of the device that put the call on hold.
cause	Specifies the reason for the call being put on hold.
Cisco Private Parameters	
callingDirectoryNumber	Specifies the calling directory number.
calledDirectoryNumber	Specifies the called directory number.

Example: privateData Extension schema for HeldEvent when a call from device 2001 to route point 6888 is put on hold by the destination route point

```
<?xml version="1.0" encoding="UTF-8"?>
<HeldEvent
  xmlns="http://www.ecma-international.org/standards/ecma-323/csta/ed3"
  xmlns:xsi="http://www.example.org/2001/XMLSchema-instance"
  xsi:schemaLocation="http://www.ecma-international.org/standards/ecma-323/csta/ed3
http://www.ec
ma-international.org/standards/ecma-323/csta/ed3/held-event.xsd"
  xmlns:cisco-csta-ext="cisco-csta
a-ext.xsd">
  <monitorCrossRefID>306D4BB2</monitorCrossRefID>
  <heldConnection>
  <callID>3A780EF7-EDEB-11DB-8E93-C3B7F63094E9</callID>
  <deviceID>6888</deviceID>
  </heldConnection>
  <holdingDevice>
  <deviceIdentifier>NULL</deviceIdentifier>
  </holdingDevice>
  <cause>normal</cause>
  <extensions>
  <privateData>
  <private>
  <cisco-csta-ext:HeldPrivate>
  <cisco-csta-ext:callDirection>FALSE</cisco-csta-ext:callDirection>
  <cisco-csta-ext:callingDirectoryNumber>1001</cisco-csta-ext:callingDirectoryNumber>
  <cisco-csta-ext:calledDirectoryNumber>6888</cisco-csta-ext:calledDirectoryNumber>
  </cisco-csta-ext:HeldPrivate>
  </private>
  </privateData>
  </extensions>
  </HeldEvent>
```

RetrievedEvent

The Cisco Unified CME reports RetrievedEvent to the session server when a call that was put on hold is resumed, locally or remotely. This event is generated per connection to associate the connection with the held event.

Table 13 displays the parameters used for the RetrievedEvent SIP NOTIFY message.

Table 13 RetrievedEvent Parameters

Parameter Name	Description
Standard Parameters	
retrievedConnection	Specifies the connectionID of the device taking the call off hold.
cause	Specifies the reason for resuming the call.
Cisco Private Parameters	
callingDirectoryNumber	Specifies the calling directory number.
calledDirectoryNumber	Specifies the called directory number.

Example: privateData Extension schema for RetrievedEvent when a call from device 1001, put on hold by route point 6888, is resumed (taken off hold) by that same route point

```
<?xml version="1.0" encoding="UTF-8"?>
<RetrievedEvent
  xmlns="http://www.ecma-international.org/standards/ecma-323/csta/ed3"
  xmlns:xsi="http://www.example.org/2001/XMLSchema-instance"
  xsi:schemaLocation="http://www.ecma-international.org/standards/ecma-323/csta/ed3
http://www.ec
ma-international.org/standards/ecma-323/csta/ed3/retrieved-event.xsd"
  xmlns:cisco-csta-ext="cisc
o-csta-ext.xsd">
  <monitorCrossRefID>306D4BB2</monitorCrossRefID>
  <retrievedConnection>
  <callID>3A780EF7-EDEB-11DB-8E93-C3B7F63094E9</callID>
  <deviceID>6888</deviceID>
  </retrievedConnection>
  <retrievingDevice>
  <deviceIdentifier>NULL</deviceIdentifier>
  </retrievingDevice>
  <cause>normal</cause>
  <extensions>
  <privateData>
  <private>
  <cisco-csta-ext:RetrievedPrivate>
  <cisco-csta-ext:callDirection>FALSE</cisco-csta-ext:callDirection>
  <cisco-csta-ext:callingDirectoryNumber>1001</cisco-csta-ext:callingDirectoryNumber>
  <cisco-csta-ext:calledDirectoryNumber>6888</cisco-csta-ext:calledDirectoryNumber>
  </cisco-csta-ext:RetrievedPrivate>
  </private>
  </privateData>
  </extensions>
  </RetrievedEvent>
```


TransferredEvent

The Cisco Unified CME reports a TransferredEvent to the session server when a consult transfer is successfully completed—a resulting call is established between the transferee and transfer-target, reusing the callID of the original primary call. Once the transfer is complete, the transferrer connections and the consult call are cleared.

A route point as a consult transferrer is not supported.



Note

This event is not posted for blind transfer completion.

The following sequence of events is typical following a TransferredEvent. (In this sequence, primary calls take GCID1 and secondary calls take GCID2.)

- ConnectionClearedEvent (transferrer, GCID2)
- ConnectionClearedEvent (transfer-target, GCID2)
- CallClearedEvent (GCID2)
- ConnectionClearedEvent (transferrer, GCID1)
- ActiveEvent (for transfer at connect) or DeliveredEvent (for transfer at alerting) (transfer-target, GCID1)

Table 14 displays the parameters used for the TransferredEvent SIP NOTIFY message.

Table 14 *TransferredEvent Parameters*

Parameter Name	Description
Standard Parameters	
primaryOldCall	Specifies the connectionID of the primary call.
transferringDevice	Specifies the deviceID of the transferrer.
transferredToDevice	Specifies the deviceID of the transfer target.
connectionListItems of transferredConnections:	
– newConnection	Specifies the connectionID of the secondary call connection.
– oldConnection	Specifies the connectionID of the primary call connection.
Cisco Private Parameters	
none	—

Example: privateData Extension schema for TransferredEvent when device 1002 transfers caller 1001 to consulted party 1003



Note

The resulting call takes on the primary callID AE48ECBC-D893-11DB-87FC-996E115FF692; The consult call (C2C3A6A9-D893-11DB-8801-996E115FF692) is cleared.

This example, in addition to the TransferredEvent message, displays the associated ConnectionClearedEvent, CallClearedEvent, and ActiveEvent messages.

```
<?xml version="1.0" encoding="UTF-8"?>
<TransferredEvent
```

```

  xmlns="http://www.ecma-international.org/standards/ecma-323/csta/ed3"
  xmlns:xsi="http://www.example.org/2001/XMLSchema-instance"
  xsi:schemaLocation="http://www.ecma-international.org/standards/ecma-323/csta/ed3
http://www.ec
ma-international.org/standards/ecma-323/csta/ed3/transferred-event.xsd"
xmlns:cisco-csta-ext="cisco-csta-ext.xsd">
<monitorCrossRefID>E41B4F99</monitorCrossRefID>
<primaryOldCall>
<callID>AE48ECBC-D893-11DB-87FC-996E115FF692</callID>
<deviceID>NULL</deviceID>
</primaryOldCall>
<secondaryOldCall>
<callID></callID>
<deviceID>NULL</deviceID>
</secondaryOldCall>
<transferringDevice>
<deviceIdentifier>1002</deviceIdentifier>
</transferringDevice>
<transferredToDevice>
<deviceIdentifier>1003</deviceIdentifier>
</transferredToDevice>
<transferredConnections>
<connectionListItem>
<newConnection>
<callID>C2C3A6A9-D893-11DB-8801-996E115FF692</callID>
</newConnection>
<oldConnection>
<callID>AE48ECBC-D893-11DB-87FC-996E115FF692</callID>
</oldConnection><endpoint>
<deviceID>1001</deviceID>
</endpoint>
</connectionListItem>
</transferredConnections>
<cause>normal</cause>
</TransferredEvent>

<?xml version="1.0" encoding="UTF-8"?>
<ConnectionClearedEvent
  xmlns="http://www.ecma-international.org/standards/ecma-323/csta/ed3"
  xmlns:xsi="http://www.example.org/2001/XMLSchema-instance"
  xsi:schemaLocation="http://www.ecma-international.org/standards/ecma-323/csta/ed3
http://www.ec
ma-international.org/standards/ecma-323/csta/ed3/connection-cleared-event.xsd"
xmlns:cisco-csta-
ext="cisco-csta-ext.xsd">
<monitorCrossRefID>E41B4F99</monitorCrossRefID>
<droppedConnection>
<callID>C2C3A6A9-D893-11DB-8801-996E115FF692</callID>
<deviceID>1002</deviceID>
</droppedConnection>
<releasingDevice>
<deviceIdentifier>NULL</deviceIdentifier>
</releasingDevice>
<cause>transfer</cause>
<extensions>
<privateData>
<private>
<cisco-csta-ext:CallConnectionClearedPrivate>
<cisco-csta-ext:callDirection>FALSE</cisco-csta-ext:callDirection>
<cisco-csta-ext:callingDirectoryNumber>1002</cisco-csta-ext:callingDirectoryNumber>
<cisco-csta-ext:calledDirectoryNumber>1003</cisco-csta-ext:calledDirectoryNumber>
</cisco-csta-ext:CallConnectionClearedPrivate>
</private>

```

```

</privateData>
</extensions>
</ConnectionClearedEvent>

```

```

<?xml version="1.0" encoding="UTF-8"?>
<ConnectionClearedEvent
  xmlns="http://www.ecma-international.org/standards/ecma-323/csta/ed3"
  xmlns:xsi="http://www.example.org/2001/XMLSchema-instance"
  xsi:schemaLocation="http://www.ecma-international.org/standards/ecma-323/csta/ed3
http://www.ec
ma-international.org/standards/ecma-323/csta/ed3/connection-cleared-event.xsd"
  xmlns:cisco-csta-
ext="cisco-csta-ext.xsd">
<monitorCrossRefID>E41B4F99</monitorCrossRefID>
<droppedConnection>
<callID>C2C3A6A9-D893-11DB-8801-996E115FF692</callID>
<deviceID>1003</deviceID>
</droppedConnection>
<releasingDevice>
<deviceIdentifier>NULL</deviceIdentifier>
</releasingDevice>
<cause>transfer</cause>
<extensions>
<privateData>
<private>
<cisco-csta-ext:CallConnectionClearedPrivate>
<cisco-csta-ext:callDirection>FALSE</cisco-csta-ext:callDirection>
<cisco-csta-ext:callingDirectoryNumber>1002</cisco-csta-ext:callingDirectoryNumber>
<cisco-csta-ext:calledDirectoryNumber>1003</cisco-csta-ext:calledDirectoryNumber>
</cisco-csta-ext:CallConnectionClearedPrivate>
</private>
</privateData>
</extensions>
</ConnectionClearedEvent>

```

```

<?xml version="1.0" encoding="UTF-8"?>
<CallClearedEvent
  xmlns="http://www.ecma-international.org/standards/ecma-323/csta/ed3"
  xmlns:xsi="http://www.example.org/2001/XMLSchema-instance"
  xsi:schemaLocation="http://www.ecma-international.org/standards/ecma-323/csta/ed3
http://www.ec
ma-international.org/standards/ecma-323/csta/ed3/call-cleared-event.xsd"
  xmlns:cisco-csta-ext="cisco-csta-ext.xsd">
<monitorCrossRefID>E41B4F99</monitorCrossRefID>
<clearedCall>
<callID>C2C3A6A9-D893-11DB-8801-996E115FF692</callID>
<deviceID>NULL</deviceID>
</clearedCall>
<cause>transfer</cause>
<extensions>
<privateData>
<private>
<droppedPrivate>
<cisco-csta-ext:callingDirectoryNumber>1002</cisco-csta-ext:callingDirectoryNumber>
<cisco-csta-ext:calledDirectoryNumber>1003</cisco-csta-ext:calledDirectoryNumber>
</droppedPrivate>
</private>
</privateData>
</extensions>
</CallClearedEvent>

```

```

<?xml version="1.0" encoding="UTF-8"?>
<ConnectionClearedEvent
  xmlns="http://www.ecma-international.org/standards/ecma-323/csta/ed3"
  xmlns:xsi="http://www.example.org/2001/XMLSchema-instance"
  xsi:schemaLocation="http://www.ecma-international.org/standards/ecma-323/csta/ed3
http://www.ec
ma-international.org/standards/ecma-323/csta/ed3/connection-cleared-event.xsd"
  xmlns:cisco-csta-
ext="cisco-csta-ext.xsd">
  <monitorCrossRefID>E41B4F99</monitorCrossRefID>
  <droppedConnection>
  <callID>AE48ECBC-D893-11DB-87FC-996E115FF692</callID>
  <deviceID>1002</deviceID>
  </droppedConnection>
  <releasingDevice>
  <deviceIdentifier>NULL</deviceIdentifier>
  </releasingDevice>
  <cause>transfer</cause>
  <extensions>
  <privateData>
  <private>
  <cisco-csta-ext:CallConnectionClearedPrivate>
  <cisco-csta-ext:callDirection>FALSE</cisco-csta-ext:callDirection>
  <cisco-csta-ext:callingDirectoryNumber>1001</cisco-csta-ext:callingDirectoryNumber>
  <cisco-csta-ext:calledDirectoryNumber>1002</cisco-csta-ext:calledDirectoryNumber>
  </cisco-csta-ext:CallConnectionClearedPrivate>
  </private>
  </privateData>
  </extensions>
</ConnectionClearedEvent>

```

```

<?xml version="1.0" encoding="UTF-8"?>
<cisco-csta-ext:ActiveEvent
  xmlns="http://www.ecma-international.org/standards/ecma-323/csta/ed3"
  xmlns:xsi="http://www.example.org/2001/XMLSchema-instance"
  xsi:schemaLocation="http://www.ecma-international.org/standards/ecma-323/csta/ed3
http://www.ec
ma-international.org/standards/ecma-323/csta/ed3/private-event.xsd"
  xmlns:cisco-csta-ext="cisco-
csta-ext.xsd">
  <monitorCrossRefID>E41B4F99</monitorCrossRefID>
  <extensions>
  <privateData>
  <private>
  <cisco-csta-ext:gcid>AE48ECBC-D893-11DB-87FC-996E115FF692</cisco-csta-ext:gcid>
  <cisco-csta-ext:callDirection>FALSE</cisco-csta-ext:callDirection>
  <cisco-csta-ext:callingDirectoryNumber>1001</cisco-csta-ext:callingDirectoryNumber>
  <cisco-csta-ext:calledDirectoryNumber>1003</cisco-csta-ext:calledDirectoryNumber>
  <connectionAddress>
  <deviceIdentifier>1003</deviceIdentifier>
  </connectionAddress>
  <lastRedirectionDevice>
  <numberDialed></numberDialed>
  </lastRedirectionDevice>
  <originalCalledAddress></originalCalledAddress>
  <cisco-csta-ext:callType>direct</cisco-csta-ext:callType>
  <cisco-csta-ext:parentGCID></cisco-csta-ext:parentGCID>
  </private>
  </privateData>
  </extensions>
</cisco-csta-ext:ActiveEvent>

```

ConferencedEvent

The Cisco Unified CME reports a ConferencedEvent to the session server when a call conference is successfully established. This is a call event that indicates two or more calls are merging by connecting their connections into a single call after a conference operation, reusing the callID of the original primary call.

All secondary calls and associated connections are cleared and take on a new connectionID.

The following sequence of events is typical following a ConferencedEvent. (In this sequence, primary calls take GCID1 and secondary calls take GCID2.)

- RetrievedEvent (controller, GCID1)
- ConnectionClearedEvent (controller, GCID2)
- ConnectionClearedEvent (participant 2, GCID2)
- CallClearedEvent (GCID2)
- ActiveEvent (participant 2, GCID1)

Table 15 displays the parameters used for the ConferencedEvent SIP NOTIFY message.

Table 15 ConferencedEvent Parameters

Parameter Name	Description
Standard Parameters	
primaryOldCall	Specifies the connectionID of the primary call.
conferencingDevice	Specifies the deviceID of the conference-controlling device.
connectionListItems of conferencedConnections:	
– newConnection	Specifies the connectionID of the secondary call connection.
– oldConnection	Specifies the connectionID of the primary call connection.
Cisco Private Parameters	
none	—

Example: privateData Extension schema for ConferencedEvent when controller 2803 has conferenced primary party 2807 and secondary party 2808



Note

The resulting call takes on the primary callID BE95D856-13B7-11DC-836A-9790DDA32D45; The consult call (C929F81E-13B7-11DC-8372-9790DDA32D45) is cleared.

This example, in addition to the ConferencedEvent message, displays the associated RetrievedEvent, ConnectionClearedEvent, CallClearedEvent, and ActiveEvent messages.

```
<?xml version="1.0" encoding="UTF-8"?>
<ConferencedEvent
  xmlns="http://www.ecma-international.org/standards/ecma-323/csta/ed3"
  xmlns:xsi="http://www.example.org/2001/XMLSchema-instance"
  xsi:schemaLocation="http://www.ecma-international.org/standards/ecma-323/csta/ed3
http://www.ecma-international.org/standards/ecma-323/csta/ed3/conferenced-event.xsd"
  xmlns:cisco-csta-ext="cisco-csta-ext.xsd">
  <monitorCrossRefID>48F1DB51</monitorCrossRefID>
  <primaryOldCall>
```

```

<callID>BE95D856-13B7-11DC-836A-9790DDA32D45</callID>
<deviceID>NULL</deviceID>
</primaryOldCall>
<secondaryOldCall>
<callID></callID>
<deviceID>NULL</deviceID>
</secondaryOldCall>
<conferencingDevice>
<deviceIdentifier>2803</deviceIdentifier>
</conferencingDevice>
<addedParty>
<deviceIdentifier>NULL</deviceIdentifier>
</addedParty>
<conferenceConnections>
<connectionListItem>
<newConnection>
<callID> C929F81E-13B7-11DC-8372-9790DDA32D45</callID>
<deviceID>2808</deviceID>
</newConnection>
<oldConnection>
<callID>BE95D856-13B7-11DC-836A-9790DDA32D45</callID>
<deviceID>2807</deviceID>
</oldConnection><endpoint>
<deviceID>2808</deviceID>
</endpoint>
</connectionListItem>
</conferenceConnections>
<cause>normal</cause>
</ConferencedEvent>

```

```

<?xml version="1.0" encoding="UTF-8"?>
<RetrievedEvent
  xmlns="http://www.ecma-international.org/standards/ecma-323/csta/ed3"
  xmlns:xsi="http://www.example.org/2001/XMLSchema-instance"
  xsi:schemaLocation="http://www.ecma-international.org/standards/ecma-323/csta/ed3
http://www.ecma-international.org/standards/ecma-323/csta/ed3/retrieved-event.xsd"
  xmlns:cisco-csta-ext="cisco-csta-ext.xsd">
<monitorCrossRefID>48F1DB51</monitorCrossRefID>
<retrievedConnection>
<callID>BE95D856-13B7-11DC-836A-9790DDA32D45</callID>
<deviceID>2803</deviceID>
</retrievedConnection>
<retrievingDevice>
<deviceIdentifier>NULL</deviceIdentifier>
</retrievingDevice>
<cause>normal</cause>
<extensions>
<privateData>
<private>
<cisco-csta-ext:RetrievedPrivate>
<cisco-csta-ext:callDirection>TRUE</cisco-csta-ext:callDirection>
<cisco-csta-ext:callingDirectoryNumber>2807</cisco-csta-ext:callingDirectoryNumber>
<cisco-csta-ext:calledDirectoryNumber>2803</cisco-csta-ext:calledDirectoryNumber>
</cisco-csta-ext:RetrievedPrivate>
</private>
</privateData>
</extensions>
</RetrievedEvent>

```

```

<?xml version="1.0" encoding="UTF-8"?>
<ConnectionClearedEvent
  xmlns="http://www.ecma-international.org/standards/ecma-323/csta/ed3"

```

```

    xmlns:xsi="http://www.example.org/2001/XMLSchema-instance"
    xsi:schemaLocation="http://www.ecma-international.org/standards/ecma-323/csta/ed3
http://www.ecma-international.org/standards/ecma-323/csta/ed3/connection-cleared-event.xsd
" xmlns:cisco-csta-ext="cisco-csta-ext.xsd">
<monitorCrossRefID>48F1DB51</monitorCrossRefID>
<droppedConnection>
<callID>C929F81E-13B7-11DC-8372-9790DDA32D45</callID>
<deviceID>2803</deviceID>
</droppedConnection>
<releasingDevice>
<deviceIdentifier>NULL</deviceIdentifier>
</releasingDevice>
<cause>Conference</cause>
<extensions>
<privateData>
<private>
<cisco-csta-ext:CallConnectionClearedPrivate>
<cisco-csta-ext:callDirection>FALSE</cisco-csta-ext:callDirection>
<cisco-csta-ext:callingDirectoryNumber>2803</cisco-csta-ext:callingDirectoryNumber>
<cisco-csta-ext:calledDirectoryNumber>2808</cisco-csta-ext:calledDirectoryNumber>
</cisco-csta-ext:CallConnectionClearedPrivate>
</private>
</privateData>
</extensions>
</ConnectionClearedEvent>

```

```

<?xml version="1.0" encoding="UTF-8"?>
<ConnectionClearedEvent
    xmlns="http://www.ecma-international.org/standards/ecma-323/csta/ed3"
    xmlns:xsi="http://www.example.org/2001/XMLSchema-instance"
    xsi:schemaLocation="http://www.ecma-international.org/standards/ecma-323/csta/ed3
http://www.ecma-international.org/standards/ecma-323/csta/ed3/connection-cleared-event.xsd
" xmlns:cisco-csta-ext="cisco-csta-ext.xsd">
<monitorCrossRefID>48F1DB51</monitorCrossRefID>
<droppedConnection>
<callID>C929F81E-13B7-11DC-8372-9790DDA32D45</callID>
<deviceID>2808</deviceID>
</droppedConnection>
<releasingDevice>
<deviceIdentifier>NULL</deviceIdentifier>
</releasingDevice>
<cause>Conference</cause>
<extensions>
<privateData>
<private>
<cisco-csta-ext:CallConnectionClearedPrivate>
<cisco-csta-ext:callDirection>FALSE</cisco-csta-ext:callDirection>
<cisco-csta-ext:callingDirectoryNumber>2803</cisco-csta-ext:callingDirectoryNumber>
<cisco-csta-ext:calledDirectoryNumber>2808</cisco-csta-ext:calledDirectoryNumber>
</cisco-csta-ext:CallConnectionClearedPrivate>
</private>
</privateData>
</extensions>
</ConnectionClearedEvent>

```

```

<?xml version="1.0" encoding="UTF-8"?>
<CallClearedEvent
    xmlns="http://www.ecma-international.org/standards/ecma-323/csta/ed3"
    xmlns:xsi="http://www.example.org/2001/XMLSchema-instance"
    xsi:schemaLocation="http://www.ecma-international.org/standards/ecma-323/csta/ed3
http://www.ecma-international.org/standards/ecma-323/csta/ed3/call-cleared-event.xsd"
    xmlns:cisco-csta-ext="cisco-csta-ext.xsd">

```

```

<monitorCrossRefID>48F1DB51</monitorCrossRefID>
<clearedCall>
<callID>C929F81E-13B7-11DC-8372-9790DDA32D45</callID>
<deviceID>NULL</deviceID>
</clearedCall>
<cause>Conference</cause>
<extensions>
<privateData>
<private>
<droppedPrivate>
<cisco-csta-ext:callingDirectoryNumber>2803</cisco-csta-ext:callingDirectoryNumber>
<cisco-csta-ext:calledDirectoryNumber>2808</cisco-csta-ext:calledDirectoryNumber>
</droppedPrivate>
</private>
</privateData>
</extensions>
</CallClearedEvent>

```

```

<?xml version="1.0" encoding="UTF-8"?>
<cisco-csta-ext:ActiveEvent
  xmlns="http://www.ecma-international.org/standards/ecma-323/csta/ed3"
  xmlns:xsi="http://www.example.org/2001/XMLSchema-instance"
  xsi:schemaLocation="http://www.ecma-international.org/standards/ecma-323/csta/ed3
http://www.ecma-international.org/standards/ecma-323/csta/ed3/private-event.xsd"
  xmlns:cisco-csta-ext="cisco-csta-ext.xsd">
<monitorCrossRefID>48F1DB51</monitorCrossRefID>
<extensions>
<privateData>
<private>
<cisco-csta-ext:gcid>BE95D856-13B7-11DC-836A-9790DDA32D45</cisco-csta-ext:gcid>
<cisco-csta-ext:callDirection>FALSE</cisco-csta-ext:callDirection>
<cisco-csta-ext:callingDirectoryNumber>2803</cisco-csta-ext:callingDirectoryNumber>
<cisco-csta-ext:calledDirectoryNumber>2808</cisco-csta-ext:calledDirectoryNumber>
<connectionAddress>
<deviceIdentifier>2808</deviceIdentifier>
</connectionAddress>
<lastRedirectionDevice>
<numberDialed></numberDialed>
</lastRedirectionDevice>
<originalCalledAddress></originalCalledAddress>
<cisco-csta-ext:callType>consult</cisco-csta-ext:callType>
<cisco-csta-ext:parentGCID></cisco-csta-ext:parentGCID>
</private>
</privateData>
</extensions>
</cisco-csta-ext:ActiveEvent>

```


ECMA-323 Standard Reference

Table 16 includes the various top-level element names and the specific section of the ECMA-323 standard that defines each element's XML schema. Use this table to find more detailed information about the XML schema used to send event messages between the Cisco Unified CME and a session server for call and line monitoring functions.

Table 16 Sectional References to ECMA-323 for CSTA Events

Element Name (Top Level)	ECMA-323 Reference Section
ConnectionClearedEvent	15.2.4
CallClearedEvent	15.2.2
FailedEvent	15.2.9
HeldEvent	15.2.10
OriginatedEvent	15.2.14
OfferedEvent	15.2.13
DeliveredEvent	15.2.5
RetrievedEvent	15.2.6
EstablishedEvent	15.2.8
ConferencedEvent	15.2.3
TransferredEvent	15.2.18
PrivateEvent	26.3.1
MonitorStart	13.1.2
MonitorStartResponse	13.1.2
MonitorStop	13.1.3
MonitorStopResponse	13.1.3

Cisco Extension to ECMA-323

The following is an example of the Cisco proprietary extension to the ECMA-323 standard to provide private and vendor-specific information in call and line monitoring functions:

Example: Cisco-csta-ext.xsd

```
<?xml version="1.0" encoding="UTD-8"?>
<xsd:schema targetNamespace="Cisco-CSTA-Extension/V1"
xmlns:xsd=http://www.example.org/2001/XMLSchema
xmlns:csta=http://www.ecma-international.org/standards/ecma-323/csta/ed3
xmlns:cisco-csta-ext=cisco-csta-ext
elementFormDefault="qualified" attributeFormDefault="unqualified">

  <xsd:annotation>
  <xsd:documentation>cisco-csta-ext-call-active-event</xsd:documentation>
  </xsd:annotation>

  <xsd:include schemaLocation="device-identifiers.xsd"/>
  <xsd:include schemaLocation="call-connection-identifiers.xsd"/>

  <xsd:element name="ActiveEvent">
  <xsd:complexType>
  <xsd:sequence>
  <xsd:element name="gcid" type="csta:CallID">
  <xsd:element name="callDirection" type="xsd:boolean"/>
  <xsd:element name="callingDirectoryNumber" type="csta:deviceID" />
  <xsd:element name="calledDirectoryNumber" type="csta:deviceID" />

  <xsd:element name="connectionAddress" type="csta:deviceID"/>
  <xsd:element name="lastRedirectedAddress" type="csta:deviceID" minOccurs="0" />
  <xsd:element name="originalCalledAddress" type="csta:deviceID" minOccurs="0" />

  <xsd:element name="callType" type="cisco-csta-ext:callType"/>
  <xsd:element name="parentGCID" type="csta:CallID" minOccurs="0" />
  </xsd:sequence>
  </xsd:complexType>
  </xsd:element>

  <xsd:annotation>
  <xsd:documentation>cisco-csta-ext-CallConnectionClearedEvent-private-
  data</xsd:documentation>
  </xsd:annotation>

  <xsd:element name="CallConnectionClearedPrivate">
  <xsd:complexType>
  <xsd:sequence>
  <xsd:element name="callDirection" type="xsd:boolean"/>
  <xsd:element name="callingDirectoryNumber" type="csta:deviceID" />
  <xsd:element name="calledDirectoryNumber" type="csta:deviceID" />
  </xsd:sequence>
  </xsd:complexType>
  </xsd:element>

  <xsd:annotation>
  <xsd:documentation>cisco-csta-ext-FailedEvent-private-data</xsd:documentation>
  </xsd:annotation>

  <xsd:element name="FailedPrivate">
  <xsd:complexType>
  <xsd:sequence>
  <xsd:element name="callDirection" type="xsd:boolean"/>
```

```

</xsd:sequence>
</xsd:complexType>
</xsd:element>

<xsd:annotation>
<xsd:documentation>cisco-csta-ext-HeldEvent-private-data</xsd:documentation>
</xsd:annotation>

<xsd:element name="HeldPrivate">
<xsd:complexType>
<xsd:sequence>
<xsd:element name="callDirection" type="xsd:boolean"/>
<xsd:element name="callingDirectoryNumber" type="csta:deviceID" />
<xsd:element name="calledDirectoryNumber" type="csta:deviceID" />
</xsd:sequence>
</xsd:complexType>
</xsd:element>

<xsd:annotation>
<xsd:documentation>cisco-csta-ext-OriginatedEvent-private-data</xsd:documentation>
</xsd:annotation>

<xsd:element name="OriginatedPrivate">
<xsd:complexType>
<xsd:sequence>
<xsd:element name="callDirection" type="xsd:boolean"/>
<xsd:element name="callType" type="cisco-csta-ext:callType"/>
<xsd:element name="parentGCID" type="csta:CallID" minOccurs="0" />
</xsd:sequence>
</xsd:complexType>
</xsd:element>

<xsd:annotation>
<xsd:documentation>cisco-csta-ext-OfferedEvent-private-data</xsd:documentation>
</xsd:annotation>

<xsd:element name="OfferedPrivate">
<xsd:complexType>
<xsd:sequence>
<xsd:element name="callDirection" type="xsd:boolean"/>
<xsd:element name="callType" type="cisco-csta-ext:callType"/>
<xsd:element name="parentGCID" type="csta:CallID" minOccurs="0" />
<xsd:element name="originalCalledParty" type="csta:deviceID" />
</xsd:sequence>
</xsd:complexType>
</xsd:element>

<xsd:annotation>
<xsd:documentation>cisco-csta-ext-DeliveredEvent-private-data</xsd:documentation>
</xsd:annotation>

<xsd:element name="DeliveredPrivate">
<xsd:complexType>
<xsd:sequence>
<xsd:element name="callDirection" type="xsd:boolean"/>
<xsd:element name="parentGCID" type="csta:CallID" minOccurs="0" />
<xsd:element name="callType" type="cisco-csta-ext:callType"/>
</xsd:sequence>
</xsd:complexType>
</xsd:element>

<xsd:annotation>
<xsd:documentation>cisco-csta-ext-RetrievedEvent-private-data</xsd:documentation>
</xsd:annotation>

```

```
<xsd:element name="RetrievedPrivate">
  <xsd:complexType>
    <xsd:sequence>
      <xsd:element name="callDirection" type="xsd:boolean"/>
      <xsd:element name="callingDirectoryNumber" type="csta:deviceID" />
      <xsd:element name="calledDirectoryNumber" type="csta:deviceID" />
    </xsd:sequence>
  </xsd:complexType>
</xsd:element>

<xsd:annotation>
<xsd:documentation>cisco-csta-ext-call-CallClearedEvent-private-data</xsd:documentation>
</xsd:annotation>

<xsd:element name="CallClearedPrivate">
  <xsd:complexType>
    <xsd:sequence>
      <xsd:element name="callingDirectoryNumber" type="csta:deviceID" />
      <xsd:element name="calledDirectoryNumber" type="csta:deviceID" />
    </xsd:sequence>
  </xsd:complexType>
</xsd:element>

<xsd:element name="callType">
  <xsd:simpleType>
    <xsd:restriction base="string">
      <xsd:enumeration value="direct"/>
      <xsd:enumeration value="consult"/>
      <xsd:enumeration value="unknown"/>
    </xsd:restriction>
  </xsd:simpleType>
</xsd:element>

</xsd:schema>
```

Additional References

The following sections provide references related to the call monitoring interface feature:

- [Related Documents, page 45](#)
- [Standards, page 46](#)
- [MIBs, page 46](#)
- [RFCs, page 46](#)
- [Technical Assistance, page 46](#)

Related Documents

Related Topic	Document Title
Using and managing: <ul style="list-style-type: none"> • Cisco Unified Communications Manager Express (Unified CME) • Cisco Unified Communications Express GUI • Cisco IOS Telephony Services • Cisco Unified IP Phones 	<i>Cisco Unified CME</i> documentation, by version
Using Cisco Unified CME commands: complete command syntax, command mode, command history, defaults, usage guidelines, and examples	<i>Cisco Unified Communications Manager Express Command Reference</i>
Using and managing: <ul style="list-style-type: none"> • Cisco Unified Contact Center Express (Unified CCX) • Cisco Unified IP Interactive Voice Response (IVR) • Cisco Unified Queue Manager 	<i>Cisco Customer Response Solutions Administration Guide</i> , Release 4.1(1)
Using and managing: <ul style="list-style-type: none"> • Automatic Call Distribution (ACD) • Cisco Unity Express 	<i>Cisco Unified CME Basic Automatic Call Distribution and Cisco Unity Express Auto Attendant Interoperation Configuration Example</i>
Using and managing: <ul style="list-style-type: none"> • Cisco Unified Communications Manager (formerly Cisco Unified CallManager) • Computer Telephony Integration (CTI) 	<i>Cisco Unified CallManager System Guide</i> , Release 4.0(1)
Implementing Cisco SIP to enable supported Cisco platforms to signal the configuration of voice and multimedia calls over IP networks	<i>Cisco IOS SIP Configuration Guide</i> , Release 12.4
Using and managing Cisco Unified Survivable Remote Site Telephony (SRST)	<i>Cisco Unified SRST</i> documentation, all versions
Configuring various Cisco IOS Voice products	<i>Cisco IOS Voice Configuration Library</i>
Accessing Voice and Unified Communications support resources	<i>Voice and Unified Communications Support Resources</i>

Standards

Standard	Title
ECMA-323	XML Protocol for Computer Supported Telecommunications Applications (CSTA) Phase III
ECMA-269	Services for Computer Supported Telecommunications Applications (CSTA) Phase III

MIBs

MIB	MIBs Link
To locate and download MIBs for selected platforms, Cisco IOS releases, and feature sets, use Cisco MIB Locator.	The Cisco MIB Locator is located at the following URL: http://www.cisco.com/go/mibs

RFCs

RFC	Title
<ul style="list-style-type: none"> • RFC 3261 - (replaced RFC 2543 in June 2002 and updated by RFCs 3853 (July 2004) and 4320 (Jan. 2006)) 	SIP: Session Initiation Protocol
<ul style="list-style-type: none"> • RFC 3265 - (replaced RFC 2543 in June 2002) 	Session Initiation Protocol (SIP)-Specific Event Notification
<ul style="list-style-type: none"> • RFC 3856 	A Presence Event Package for the Session Initiation Protocol (SIP)
<ul style="list-style-type: none"> • RFC 3863 	Presence Information Data Format (PIDF)
<ul style="list-style-type: none"> • RFC 4235 	An INVITE-Initiated Dialog Event Package for the Session Initiation Protocol (SIP)
<ul style="list-style-type: none"> • RFC 4479 	A Data Model for Presence
<ul style="list-style-type: none"> • RFC 4480 	RPID: Rich Presence Extensions to the Presence Information Data Format (PIDF)

Technical Assistance

Description	Link
<p>The Cisco Support website provides extensive online resources, including documentation and tools for troubleshooting and resolving technical issues with Cisco products and technologies.</p> <p>To receive security and technical information about your products, you can subscribe to various services, such as the Product Alert Tool (accessed from Field Notices), the Cisco Technical Services Newsletter, and Really Simple Syndication (RSS) Feeds.</p> <p>Access to most tools on the Cisco Support website requires a Cisco.com user ID and password.</p>	http://www.cisco.com/techsupport

Command Reference

For Cisco IOS CLI commands associated with this feature, refer to the [Cisco Unified CME Command Reference](#).

Call Monitoring Scenario Examples

This section provides the overall SIP message flow for some of the more common call scenarios. The following example scenarios include the complete set of session control messages along with all presence (line monitoring) and dialog (call monitoring) event notifications.

- [Scenario 1: Basic Call Scenario, page 47](#)
- [Scenario 2: Routing Point Transfer Call to Agent, page 58](#)
- [Scenario 3: Call Forward, page 81](#)
- [Scenario 4: Consult Transfer, page 91](#)
- [Scenario 5: Call Conference, page 105](#)



Note

The following notation is used in these five scenario examples:

- Route Point: RP (2229)
- Agent: Ag (2803)
- Local SCCP Endpoints: A (2807), B (2808)

Scenario 1: Basic Call Scenario

This example scenario shows the user agent calling SCCP A, connecting, and then hanging up:

```
Jun  6 22:33:01.330: //-1/xxxxxxxxxxxx/SIP/Msg/ccsipDisplayMsg:
Sent:
NOTIFY sip:CRS_controller@192.0.2.9:5060;transport=tcp SIP/2.0
Via: SIP/2.0/TCP 192.0.2.7:5060;branch=z9hG4bK596BF
From: <sip:2229@192.0.2.7>;tag=4D1FEEB0-1E6
To: <sip:CRS_controller@192.0.2.9>;tag=dscdc4ede7
Call-ID: 11811688227034@192.0.2.9
CSeq: 128 NOTIFY
Max-Forwards: 70
Date: Wed, 06 Jun 2007 22:33:01 GMT
User-Agent: Cisco-SIPGateway/IOS-12.x
Event: dialog
Subscription-State: active;expires=2800
Contact: <sip:2229@192.0.2.7:5060;transport=tcp>
Content-Type: application/csta+xml
Content-Length: 1084

<?xml version="1.0" encoding="UTF-8"?>
<OriginatedEvent
  xmlns="http://www.ecma-international.org/standards/ecma-323/csta/ed3"
```

```

  xmlns:xsi="http://www.example.org/2001/XMLSchema-instance"
  xsi:schemaLocation="http://www.ecma-international.org/standards/ecma-323/csta/ed3
http://www.ecma-international.org/standards/ecma-323/csta/ed3/originated-event.xsd"
xmlns:cisco-csta-ext="cisco-csta-ext.xsd">
<monitorCrossRefID>48F1DB51</monitorCrossRefID>
<originatedConnection>
<callID>B7AFD639-13B4-11DC-8330-9790DDA32D45</callID>
<deviceID>2803</deviceID>
</originatedConnection>
<callingDevice>
<deviceIdentifier>2803</deviceIdentifier>
</callingDevice>
<calledDevice>
<deviceIdentifier></deviceIdentifier>
</calledDevice>
<cause>normal</cause>
<extensions>
<privateData>
<private>
<cisco-csta-ext:originatedPrivate>
<cisco-csta-ext:callDirection>FALSE</cisco-csta-ext:callDirection>
<cisco-csta-ext:callType>direct</cisco-csta-ext:callType>
<cisco-csta-ext:parentGCID></cisco-csta-ext:parentGCID>
</cisco-csta-ext:originatedPrivate>
</private>
</privateData>
</extensions>
</OriginatedEvent>

```

Jun 6 22:33:01.334: //-1/xxxxxxxxxxxx/SIP/Msg/ccsipDisplayMsg:

Received:

```

SIP/2.0 200 Ok
Via: SIP/2.0/TCP 192.0.2.7:5060;branch=z9hG4bK596BF
To: <sip:CRS_controller@192.0.2.9>;tag=dscdc4ede7
From: <sip:2229@192.0.2.7>;tag=4D1FEEB0-1E6
Call-ID: 11811688227034@192.0.2.9
CSeq: 128 NOTIFY
Content-Length: 0
Allow-Events: refer
Allow-Events: telephone-event

```

Jun 6 22:33:01.334: //-1/xxxxxxxxxxxx/SIP/Msg/ccsipDisplayMsg:

Sent:

```

NOTIFY sip:CRS_controller@192.0.2.9:5060;transport=tcp SIP/2.0
Via: SIP/2.0/TCP 192.0.2.7:5060;branch=z9hG4bK5A15E5
From: <sip:2229@192.0.2.7>;tag=4D1FEEB0-1E6
To: <sip:CRS_controller@192.0.2.9>;tag=dscdc4ede7
Call-ID: 11811688227034@192.0.2.9
CSeq: 129 NOTIFY
Max-Forwards: 70
Date: Wed, 06 Jun 2007 22:33:01 GMT
User-Agent: Cisco-SIPGateway/IOS-12.x
Event: dialog
Subscription-State: active;expires=2800
Contact: <sip:2229@192.0.2.7:5060;transport=tcp>
Content-Type: application/csta+xml
Content-Length: 1190

```

```

<?xml version="1.0" encoding="UTF-8"?>
<cisco-csta-ext:ActiveEvent
  xmlns="http://www.ecma-international.org/standards/ecma-323/csta/ed3"

```



```

  xmlns:xsi="http://www.example.org/2001/XMLSchema-instance"
  xsi:schemaLocation="http://www.ecma-international.org/standards/ecma-323/csta/ed3
http://www.ecma-international.org/standards/ecma-323/csta/ed3/private-event.xsd"
  xmlns:cisco-csta-ext="cisco-csta-ext.xsd">
<monitorCrossRefID>48F1DB51</monitorCrossRefID>
<extensions>
<privateData>
<private>
<cisco-csta-ext:gcid>B7AFD639-13B4-11DC-8330-9790DDA32D45</cisco-csta-ext:gcid>
<cisco-csta-ext:callDirection>FALSE</cisco-csta-ext:callDirection>
<cisco-csta-ext:callingDirectoryNumber>2803</cisco-csta-ext:callingDirectoryNumber>
<cisco-csta-ext:calledDirectoryNumber></cisco-csta-ext:calledDirectoryNumber>
<connectionAddress>
<deviceIdentifier>2803</deviceIdentifier>
</connectionAddress>
<lastRedirectionDevice>
<numberDialed></numberDialed>
</lastRedirectionDevice>
<originalCalledAddress></originalCalledAddress>
<cisco-csta-ext:callType>direct</cisco-csta-ext:callType>
<cisco-csta-ext:parentGCID></cisco-csta-ext:parentGCID>
</private>
</privateData>
</extensions>
</cisco-csta-ext:ActiveEvent>

```

Jun 6 22:33:01.350: //-1/xxxxxxxxxxxx/SIP/Msg/ccsipDisplayMsg:

Received:

```

SIP/2.0 200 Ok
Via: SIP/2.0/TCP 192.0.2.7:5060;branch=z9hG4bK5A15E5
To: <sip:CRS_controller@192.0.2.9>;tag=dscdc4ede7
From: <sip:2229@192.0.2.7>;tag=4D1FEEB0-1E6
Call-ID: 11811688227034@192.0.2.9
CSeq: 129 NOTIFY
Content-Length: 0
Allow-Events: refer
Allow-Events: telephone-event

```

Jun 6 22:33:03.078: DestCheckTeleUnassBusy cvif OperStatus 5, Type 1A, status 40020

Jun 6 22:33:03.086: //-1/xxxxxxxxxxxx/SIP/Msg/ccsipDisplayMsg:

Sent:

```

NOTIFY sip:CRS_controller@192.0.2.9:5060;transport=tcp SIP/2.0
Via: SIP/2.0/TCP 192.0.2.7:5060;branch=z9hG4bK5BA36
From: <sip:2229@192.0.2.7>;tag=4D1FEEB0-1E6
To: <sip:CRS_controller@192.0.2.9>;tag=dscdc4ede7
Call-ID: 11811688227034@192.0.2.9
CSeq: 130 NOTIFY
Max-Forwards: 70
Date: Wed, 06 Jun 2007 22:33:03 GMT
User-Agent: Cisco-SIPGateway/IOS-12.x
Event: dialog
Subscription-State: active;expires=2800
Contact: <sip:2229@192.0.2.7:5060;transport=tcp>
Content-Type: application/csta+xml
Content-Length: 1268

```

```

<?xml version="1.0" encoding="UTF-8"?>
<OfferedEvent
  xmlns="http://www.ecma-international.org/standards/ecma-323/csta/ed3"

```

```

  xmlns:xsi="http://www.example.org/2001/XMLSchema-instance"
  xsi:schemaLocation="http://www.ecma-international.org/standards/ecma-323/csta/ed3
http://www.ecma-international.org/standards/ecma-323/csta/ed3/offered-event.xsd"
  xmlns:cisco-csta-ext="cisco-csta-ext.xsd">
<monitorCrossRefID>48F1DB51</monitorCrossRefID>
<offeredConnection>
<callID>B7AFD639-13B4-11DC-8330-9790DDA32D45</callID>
<deviceID>2807</deviceID>
</offeredConnection>
<offeredDevice>
<deviceIdentifier>NULL</deviceIdentifier>
</offeredDevice>
<callingDevice>
<deviceIdentifier>2803</deviceIdentifier>
</callingDevice>
<calledDevice>
<deviceIdentifier>2807</deviceIdentifier>
</calledDevice>
<lastRedirectionDevice>
<numberDialed></numberDialed>
</lastRedirectionDevice>
<cause>normal</cause>
<extensions>
<privateData>
<private>
<cisco-csta-ext:OfferedPrivate>
<cisco-csta-ext:callDirection>FALSE</cisco-csta-ext:callDirection>
<cisco-csta-ext:callType>direct</cisco-csta-ext:callType>
<cisco-csta-ext:parentGCID></cisco-csta-ext:parentGCID>
<originalCalledAddress></originalCalledAddress>
</cisco-csta-ext:OfferedPrivate>
</private>
</privateData>
</extensions>
</OfferedEvent>

```

Jun 6 22:33:03.094: //-1/xxxxxxxxxxxx/SIP/Msg/ccsipDisplayMsg:

Received:

```

SIP/2.0 200 Ok
Via: SIP/2.0/TCP 192.0.2.7:5060;branch=z9hG4bK5BA36
To: <sip:CRS_controller@192.0.2.9>;tag=dscdc4ede7
From: <sip:2229@192.0.2.7>;tag=4D1FEEB0-1E6
Call-ID: 11811688227034@192.0.2.9
CSeq: 130 NOTIFY
Content-Length: 0
Allow-Events: refer
Allow-Events: telephone-event

```

Jun 6 22:33:03.094: //-1/xxxxxxxxxxxx/SIP/Msg/ccsipDisplayMsg:

Sent:

```

NOTIFY sip:CRS_controller@192.0.2.9:5060;transport=tcp SIP/2.0
Via: SIP/2.0/TCP 192.0.2.7:5060;branch=z9hG4bK5C11C6
From: <sip:2229@192.0.2.7>;tag=4D1FEEB0-1E6
To: <sip:CRS_controller@192.0.2.9>;tag=dscdc4ede7
Call-ID: 11811688227034@192.0.2.9
CSeq: 131 NOTIFY
Max-Forwards: 70
Date: Wed, 06 Jun 2007 22:33:03 GMT
User-Agent: Cisco-SIPGateway/IOS-12.x
Event: dialog
Subscription-State: active;expires=2800

```

Contact: <sip:2229@192.0.2.7:5060;transport=tcp>
 Content-Type: application/csta+xml
 Content-Length: 1218

```
<?xml version="1.0" encoding="UTF-8"?>
<DeliveredEvent
  xmlns="http://www.ecma-international.org/standards/ecma-323/csta/ed3"
  xmlns:xsi="http://www.example.org/2001/XMLSchema-instance"
  xsi:schemaLocation="http://www.ecma-international.org/standards/ecma-323/csta/ed3
http://www.ecma-international.org/standards/ecma-323/csta/ed3/delivered-event.xsd"
  xmlns:cisco-csta-ext="cisco-csta-ext.xsd">
  <monitorCrossRefID>48F1DB51</monitorCrossRefID>
  <connection>
  <callID>B7AFD639-13B4-11DC-8330-9790DDA32D45</callID>
  <deviceID>2807</deviceID>
  </connection>
  <alertingDevice>
  <deviceIdentifier>NULL</deviceIdentifier>
  </alertingDevice>
  <callingDevice>
  <deviceIdentifier>2803</deviceIdentifier>
  </callingDevice>
  <calledDevice>
  <deviceIdentifier>2807</deviceIdentifier>
  </calledDevice>
  <lastRedirectionDevice>
  <numberDialed></numberDialed>
  </lastRedirectionDevice>
  <cause>normal</cause>
  <extensions>
  <privateData>
  <private>
  <cisco-csta-ext:deliveredPrivate>
  <cisco-csta-ext:callDirection>FALSE</cisco-csta-ext:callDirection>
  <cisco-csta-ext:callType>direct</cisco-csta-ext:callType>
  <cisco-csta-ext:parentGCID></cisco-csta-ext:parentGCID>
  </cisco-csta-ext:deliveredPrivate>
  </private>
  </privateData>
  </extensions>
  </DeliveredEvent>
```

Jun 6 22:33:03.106: //-1/xxxxxxxxxxxx/SIP/Msg/ccsipDisplayMsg:

Received:

```
SIP/2.0 200 Ok
Via: SIP/2.0/TCP 192.0.2.7:5060;branch=z9hG4bK5C11C6
To: <sip:CRS_controller@192.0.2.9>;tag=dscdc4ede7
From: <sip:2229@192.0.2.7>;tag=4D1FEEB0-1E6
Call-ID: 11811688227034@192.0.2.9
CSeq: 131 NOTIFY
Content-Length: 0
Allow-Events: refer
Allow-Events: telephone-event
```

Jun 6 22:33:05.066: //-1/xxxxxxxxxxxx/SIP/Msg/ccsipDisplayMsg:

Sent:

```
NOTIFY sip:CRS_controller@192.0.2.9:5060;transport=tcp SIP/2.0
Via: SIP/2.0/TCP 192.0.2.7:5060;branch=z9hG4bK5DF49
From: <sip:2229@192.0.2.7>;tag=4D1FEEB0-1E6
To: <sip:CRS_controller@192.0.2.9>;tag=dscdc4ede7
Call-ID: 11811688227034@192.0.2.9
```

```

CSeq: 132 NOTIFY
Max-Forwards: 70
Date: Wed, 06 Jun 2007 22:33:05 GMT
User-Agent: Cisco-SIPGateway/IOS-12.x
Event: dialog
Subscription-State: active;expires=2800
Contact: <sip:2229@192.0.2.7:5060;transport=tcp>
Content-Type: application/csta+xml
Content-Length: 1194

```

```

<?xml version="1.0" encoding="UTF-8"?>
<cisco-csta-ext:ActiveEvent
  xmlns="http://www.ecma-international.org/standards/ecma-323/csta/ed3"
  xmlns:xsi="http://www.example.org/2001/XMLSchema-instance"
  xsi:schemaLocation="http://www.ecma-international.org/standards/ecma-323/csta/ed3
http://www.ecma-international.org/standards/ecma-323/csta/ed3/private-event.xsd"
  xmlns:cisco-csta-ext="cisco-csta-ext.xsd">
  <monitorCrossRefID>48F1DB51</monitorCrossRefID>
  <extensions>
  <privateData>
  <private>
  <cisco-csta-ext:gcid>B7AFD639-13B4-11DC-8330-9790DDA32D45</cisco-csta-ext:gcid>
  <cisco-csta-ext:callDirection>FALSE</cisco-csta-ext:callDirection>
  <cisco-csta-ext:callingDirectoryNumber>2803</cisco-csta-ext:callingDirectoryNumber>
  <cisco-csta-ext:calledDirectoryNumber>2807</cisco-csta-ext:calledDirectoryNumber>
  <connectionAddress>
  <deviceIdentifier>2807</deviceIdentifier>
  </connectionAddress>
  <lastRedirectionDevice>
  <numberDialed></numberDialed>
  </lastRedirectionDevice>
  <originalCalledAddress></originalCalledAddress>
  <cisco-csta-ext:callType>direct</cisco-csta-ext:callType>
  <cisco-csta-ext:parentGCID></cisco-csta-ext:parentGCID>
  </private>
  </privateData>
  </extensions>
  </cisco-csta-ext:ActiveEvent>

```

```
Jun 6 22:33:05.086: //-1/xxxxxxxxxxxx/SIP/Msg/ccsipDisplayMsg:
```

Received:

```

SIP/2.0 200 Ok
Via: SIP/2.0/TCP 192.0.2.7:5060;branch=z9hG4bK5DF49
To: <sip:CRS_controller@192.0.2.9>;tag=dscdc4ede7
From: <sip:2229@192.0.2.7>;tag=4D1FEEB0-1E6
Call-ID: 11811688227034@192.0.2.9
CSeq: 132 NOTIFY
Content-Length: 0
Allow-Events: refer
Allow-Events: telephone-event

```

```
Jun 6 22:33:05.086: //-1/xxxxxxxxxxxx/SIP/Msg/ccsipDisplayMsg:
```

Sent:

```

NOTIFY sip:CRS_controller@192.0.2.9:5060;transport=tcp SIP/2.0
Via: SIP/2.0/TCP 192.0.2.7:5060;branch=z9hG4bK5E2371
From: <sip:2229@192.0.2.7>;tag=4D1FEEB0-1E6
To: <sip:CRS_controller@192.0.2.9>;tag=dscdc4ede7
Call-ID: 11811688227034@192.0.2.9
CSeq: 133 NOTIFY
Max-Forwards: 70
Date: Wed, 06 Jun 2007 22:33:05 GMT

```

```
User-Agent: Cisco-SIPGateway/IOS-12.x
Event: dialog
Subscription-State: active;expires=2800
Contact: <sip:2229@192.0.2.7:5060;transport=tcp>
Content-Type: application/csta+xml
Content-Length: 925
```

```
<?xml version="1.0" encoding="UTF-8"?>
<EstablishedEvent
  xmlns="http://www.ecma-international.org/standards/ecma-323/csta/ed3"
  xmlns:xsi="http://www.example.org/2001/XMLSchema-instance"
  xsi:schemaLocation="http://www.ecma-international.org/standards/ecma-323/csta/ed3
http://www.ecma-international.org/standards/ecma-323/csta/ed3/established-event.xsd"
  xmlns:cisco-csta-ext="cisco-csta-ext.xsd">
  <monitorCrossRefID>48F1DB51</monitorCrossRefID>
  <establishedConnection>
  <callID>B7AFD639-13B4-11DC-8330-9790DDA32D45</callID>
  <deviceID>NULL</deviceID>
  </establishedConnection>
  <answeringDevice>
  <deviceIdentifier>NULL</deviceIdentifier>
  </answeringDevice>
  <callingDevice>
  <deviceIdentifier>2803</deviceIdentifier>
  </callingDevice>
  <calledDevice>
  <deviceIdentifier>2807</deviceIdentifier>
  </calledDevice>
  <lastRedirectionDevice>
  <numberDialed>NULL</numberDialed>
  </lastRedirectionDevice>
  <cause>normal</cause>
  </EstablishedEvent>
```

Jun 6 22:33:05.094: //-1/xxxxxxxxxxxx/SIP/Msg/ccsipDisplayMsg:

Received:

```
SIP/2.0 200 Ok
Via: SIP/2.0/TCP 192.0.2.7:5060;branch=z9hG4bK5E2371
To: <sip:CRS_controller@192.0.2.9>;tag=dscdc4ede7
From: <sip:2229@192.0.2.7>;tag=4D1FEEB0-1E6
Call-ID: 11811688227034@192.0.2.9
CSeq: 133 NOTIFY
Content-Length: 0
Allow-Events: refer
Allow-Events: telephone-event
```

Jun 6 22:33:05.706: //-1/xxxxxxxxxxxx/SIP/Msg/ccsipDisplayMsg:

Received:

```
REGISTER sip:192.0.2.7:5060;transport=tcp SIP/2.0
Via: SIP/2.0/TCP 192.0.2.9:5060;branch=z9hG4bKl83.ZS9nz+P+iXsflQiSMw~22
Max-Forwards: 70
To: <sip:CRS_controller@192.0.2.7>
From: <sip:CRS_controller@192.0.2.7>;tag=dsa8afec60
Call-ID: 11811688223121@192.0.2.9
CSeq: 13 REGISTER
Content-Length: 0
Contact: <sip:CRS_controller@192.0.2.9:5060;transport=tcp>;expires=160
Allow: INVITE, BYE, CANCEL, ACK, NOTIFY
User-Agent: Cisco-CRS/4.6
X-cisco-session-server: CRS1
```

Jun 6 22:33:05.710: //-1/xxxxxxxxxxxx/SIP/Msg/ccsipDisplayMsg:

Sent:

SIP/2.0 100 Trying
 Via: SIP/2.0/TCP 192.0.2.9:5060;branch=z9hG4bK183.ZS9nz+P+iXsflQiSMw~22
 From: <sip:CRS_controller@192.0.2.7>;tag=dsa8afec60
 To: <sip:CRS_controller@192.0.2.7>
 Date: Wed, 06 Jun 2007 22:33:05 GMT
 Call-ID: 11811688223121@192.0.2.9
 Server: Cisco-SIPGateway/IOS-12.x
 CSeq: 13 REGISTER
 Content-Length: 0

Jun 6 22:33:05.710: //-1/xxxxxxxxxxxx/SIP/Msg/ccsipDisplayMsg:

Sent:

SIP/2.0 200 OK
 Via: SIP/2.0/TCP 192.0.2.9:5060;branch=z9hG4bK183.ZS9nz+P+iXsflQiSMw~22
 From: <sip:CRS_controller@192.0.2.7>;tag=dsa8afec60
 To: <sip:CRS_controller@192.0.2.7>;tag=4D2E943C-1FB3
 Date: Wed, 06 Jun 2007 22:33:05 GMT
 Call-ID: 11811688223121@192.0.2.9
 Server: Cisco-SIPGateway/IOS-12.x
 CSeq: 13 REGISTER
 X-cisco-referenceID: 48F1DB51
 Contact: <sip:CRS_controller@192.0.2.9:5060;transport=tcp>;expires=160
 Expires: 160
 Content-Length: 0

Jun 6 22:33:08.066: //-1/xxxxxxxxxxxx/SIP/Msg/ccsipDisplayMsg:

Sent:

NOTIFY sip:CRS_controller@192.0.2.9:5060;transport=tcp SIP/2.0
 Via: SIP/2.0/TCP 192.0.2.7:5060;branch=z9hG4bK5F25A3
 From: <sip:2229@192.0.2.7>;tag=4D1FEEB0-1E6
 To: <sip:CRS_controller@192.0.2.9>;tag=dsdc4ede7
 Call-ID: 11811688227034@192.0.2.9
 CSeq: 134 NOTIFY
 Max-Forwards: 70
 Date: Wed, 06 Jun 2007 22:33:08 GMT
 User-Agent: Cisco-SIPGateway/IOS-12.x
 Event: dialog
 Subscription-State: active;expires=2800
 Contact: <sip:2229@192.0.2.7:5060;transport=tcp>
 Content-Type: application/csta+xml
 Content-Length: 1116

```
<?xml version="1.0" encoding="UTF-8"?>
<ConnectionClearedEvent
  xmlns="http://www.ecma-international.org/standards/ecma-323/csta/ed3"
  xmlns:xsi="http://www.example.org/2001/XMLSchema-instance"
  xsi:schemaLocation="http://www.ecma-international.org/standards/ecma-323/csta/ed3
http://www.ecma-international.org/standards/ecma-323/csta/ed3/connection-cleared-event.xsd"
  xmlns:cisco-csta-ext="cisco-csta-ext.xsd">
  <monitorCrossRefID>48F1DB51</monitorCrossRefID>
  <droppedConnection>
  <callID>B7AFD639-13B4-11DC-8330-9790DDA32D45</callID>
  <deviceID>2803</deviceID>
  </droppedConnection>
  <releasingDevice>
  <deviceIdentifier>NULL</deviceIdentifier>
  </releasingDevice>
  <cause>normalClearing</cause>
```

```

<extensions>
<privateData>
<private>
<cisco-csta-ext:CallConnectionClearedPrivate>
<cisco-csta-ext:callDirection>FALSE</cisco-csta-ext:callDirection>
<cisco-csta-ext:callingDirectoryNumber>2803</cisco-csta-ext:callingDirectoryNumber>
<cisco-csta-ext:calledDirectoryNumber>2807</cisco-csta-ext:calledDirectoryNumber>
</cisco-csta-ext:CallConnectionClearedPrivate>
</private>
</privateData>
</extensions>
</ConnectionClearedEvent>

```

Jun 6 22:33:08.070: //-1/xxxxxxxxxxxx/SIP/Msg/ccsipDisplayMsg:

Received:

```

SIP/2.0 200 Ok
Via: SIP/2.0/TCP 192.0.2.7:5060;branch=z9hG4bK5F25A3
To: <sip:CRS_controller@192.0.2.9>;tag=dscdc4ede7
From: <sip:2229@192.0.2.7>;tag=4D1FEEB0-1E6
Call-ID: 11811688227034@192.0.2.9
CSeq: 134 NOTIFY
Content-Length: 0
Allow-Events: refer
Allow-Events: telephone-event

```

Jun 6 22:33:08.074: //-1/xxxxxxxxxxxx/SIP/Msg/ccsipDisplayMsg:

Sent:

```

NOTIFY sip:CRS_controller@192.0.2.9:5060;transport=tcp SIP/2.0
Via: SIP/2.0/TCP 192.0.2.7:5060;branch=z9hG4bK6011BF
From: <sip:2229@192.0.2.7>;tag=4D1FEEB0-1E6
To: <sip:CRS_controller@192.0.2.9>;tag=dscdc4ede7
Call-ID: 11811688227034@192.0.2.9
CSeq: 135 NOTIFY
Max-Forwards: 70
Date: Wed, 06 Jun 2007 22:33:08 GMT
User-Agent: Cisco-SIPGateway/IOS-12.x
Event: dialog
Subscription-State: active;expires=2800
Contact: <sip:2229@192.0.2.7:5060;transport=tcp>
Content-Type: application/csta+xml
Content-Length: 1116

```

```

<?xml version="1.0" encoding="UTF-8"?>
<ConnectionClearedEvent
  xmlns="http://www.ecma-international.org/standards/ecma-323/csta/ed3"
  xmlns:xsi="http://www.example.org/2001/XMLSchema-instance"
  xsi:schemaLocation="http://www.ecma-international.org/standards/ecma-323/csta/ed3
http://www.ecma-international.org/standards/ecma-323/csta/ed3/connection-cleared-event.xsd"
  xmlns:cisco-csta-ext="cisco-csta-ext.xsd">
<monitorCrossRefID>48F1DB51</monitorCrossRefID>
<droppedConnection>
<callID>B7AFD639-13B4-11DC-8330-9790DDA32D45</callID>
<deviceID>2807</deviceID>
</droppedConnection>
<releasingDevice>
<deviceIdentifier>NULL</deviceIdentifier>
</releasingDevice>
<cause>normalClearing</cause>
<extensions>
<privateData>
<private>

```

```

<cisco-csta-ext:CallConnectionClearedPrivate>
<cisco-csta-ext:callDirection>FALSE</cisco-csta-ext:callDirection>
<cisco-csta-ext:callingDirectoryNumber>2803</cisco-csta-ext:callingDirectoryNumber>
<cisco-csta-ext:calledDirectoryNumber>2807</cisco-csta-ext:calledDirectoryNumber>
</cisco-csta-ext:CallConnectionClearedPrivate>
</private>
</privateData>
</extensions>
</ConnectionClearedEvent>

```

Jun 6 22:33:08.082: //-1/xxxxxxxxxxxx/SIP/Msg/ccsipDisplayMsg:

Received:

```

SIP/2.0 200 Ok
Via: SIP/2.0/TCP 192.0.2.7:5060;branch=z9hG4bK6011BF
To: <sip:CRS_controller@192.0.2.9>;tag=dscdc4ede7
From: <sip:2229@192.0.2.7>;tag=4D1FEEB0-1E6
Call-ID: 11811688227034@192.0.2.9
CSeq: 135 NOTIFY
Content-Length: 0
Allow-Events: refer
Allow-Events: telephone-event

```

Jun 6 22:33:08.086: //-1/xxxxxxxxxxxx/SIP/Msg/ccsipDisplayMsg:

Sent:

```

NOTIFY sip:CRS_controller@192.0.2.9:5060;transport=tcp SIP/2.0
Via: SIP/2.0/TCP 192.0.2.7:5060;branch=z9hG4bK615F
From: <sip:2229@192.0.2.7>;tag=4D1FEEB0-1E6
To: <sip:CRS_controller@192.0.2.9>;tag=dscdc4ede7
Call-ID: 11811688227034@192.0.2.9
CSeq: 136 NOTIFY
Max-Forwards: 70
Date: Wed, 06 Jun 2007 22:33:08 GMT
User-Agent: Cisco-SIPGateway/IOS-12.x
Event: dialog
Subscription-State: active;expires=2800
Contact: <sip:2229@192.0.2.7:5060;transport=tcp>
Content-Type: application/csta+xml
Content-Length: 882

```

```

<?xml version="1.0" encoding="UTF-8"?>
<CallClearedEvent
  xmlns="http://www.ecma-international.org/standards/ecma-323/csta/ed3"
  xmlns:xsi="http://www.example.org/2001/XMLSchema-instance"
  xsi:schemaLocation="http://www.ecma-international.org/standards/ecma-323/csta/ed3
http://www.ecma-international.org/standards/ecma-323/csta/ed3/call-cleared-event.xsd"
  xmlns:cisco-csta-ext="cisco-csta-ext.xsd">
  <monitorCrossRefID>48F1DB51</monitorCrossRefID>
  <clearedCall>
  <callID>B7AFD639-13B4-11DC-8330-9790DDA32D45</callID>
  <deviceID>NULL</deviceID>
  </clearedCall>
  <cause>normalClearing</cause>
  <extensions>
  <privateData>
  <private>
  <droppedPrivate>
  <cisco-csta-ext:callingDirectoryNumber>2803</cisco-csta-ext:callingDirectoryNumber>
  <cisco-csta-ext:calledDirectoryNumber>2807</cisco-csta-ext:calledDirectoryNumber>
  </droppedPrivate>
  </private>
  </privateData>

```



```
</extensions>  
</CallClearedEvent>
```

```
Jun  6 22:33:08.098: //-1/xxxxxxxxxxxx/SIP/Msg/ccsipDisplayMsg:
```

Received:

```
SIP/2.0 200 Ok  
Via: SIP/2.0/TCP 192.0.2.7:5060;branch=z9hG4bK615F  
To: <sip:CRS_controller@192.0.2.9>;tag=dscdc4ede7  
From: <sip:2229@192.0.2.7>;tag=4D1FEEB0-1E6  
Call-ID: 11811688227034@192.0.2.9  
CSeq: 136 NOTIFY  
Content-Length: 0  
Allow-Events: refer  
Allow-Events: telephone-event
```

Scenario 2: Routing Point Transfer Call to Agent

This example displays message flow for a call coming into RP from SCCP A, connecting, and then being transferred by RP to AG:

```
Jun  6 22:36:41.282: //-1/xxxxxxxxxxxx/SIP/Msg/ccsipDisplayMsg:
```

Sent:

```
INVITE sip:2229@192.0.2.9:5060 SIP/2.0
Via: SIP/2.0/TCP 192.0.2.7:5060;branch=z9hG4bK6215AD
Remote-Party-ID: "Remote IP9" <sip:2807@192.0.2.7>;party=calling;screen=no;privacy=off
From: "Remote IP9" <sip:2807@192.0.2.7>;tag=4D31DE54-1489
To: <sip:2229@192.0.2.9>
Date: Wed, 06 Jun 2007 22:36:41 GMT
Call-ID: 3AEC0612-13B511DC-833F9790-DDA32D45@192.0.2.7
Supported: 100rel,timer,resource-priority,replaces
Min-SE: 1800
Cisco-Guid: 972226503-330633692-2201655184-3718458693
User-Agent: Cisco-SIPGateway/IOS-12.x
Allow: INVITE, OPTIONS, BYE, CANCEL, ACK, PRACK, UPDATE, REFER, SUBSCRIBE, NOTIFY, INFO,
REGISTER
CSeq: 101 INVITE
Max-Forwards: 70
Timestamp: 1181169401
Contact: <sip:2807@192.0.2.7:5060;transport=tcp>
Call-Info: <sip:192.0.2.7:5060>;method="NOTIFY";Event=telephone-event;Duration=2000"
Expires: 180
Allow-Events: telephone-event
Cisco-Gcid: 39F2FFC7-13B5-11DC-833A-9790DDA32D45
Content-Type: application/sdp
Content-Disposition: session;handling=required
Content-Length: 203
```

```
v=0
```

```
o=CiscoSystemsSIP-GW-UserAgent 4096 8192 IN IP4 192.0.2.7
s=SIP Call
c=IN IP4 192.0.2.7
t=0 0
m=audio 17738 RTP/AVP 0 19
c=IN IP4 192.0.2.7
a=rtpmap:0 PCMU/8000
a=rtpmap:19 CN/8000
a=ptime:20
```

```
Jun  6 22:36:41.286: //-1/xxxxxxxxxxxx/SIP/Msg/ccsipDisplayMsg:
```

Sent:

```
NOTIFY sip:CRS_controller@192.0.2.9:5060;transport=tcp SIP/2.0
Via: SIP/2.0/TCP 192.0.2.7:5060;branch=z9hG4bK63690
From: <sip:2229@192.0.2.7>;tag=4D1FEEB0-1E6
To: <sip:CRS_controller@192.0.2.9>;tag=dscdc4ede7
Call-ID: 11811688227034@192.0.2.9
CSeq: 137 NOTIFY
Max-Forwards: 70
Date: Wed, 06 Jun 2007 22:36:41 GMT
User-Agent: Cisco-SIPGateway/IOS-12.x
Event: dialog
Subscription-State: active;expires=2800
Contact: <sip:2229@192.0.2.7:5060;transport=tcp>
Content-Type: application/csta+xml
Content-Length: 1268
```

```
<?xml version="1.0" encoding="UTF-8"?>
<OfferedEvent
  xmlns="http://www.ecma-international.org/standards/ecma-323/csta/ed3"
  xmlns:xsi="http://www.example.org/2001/XMLSchema-instance"
  xsi:schemaLocation="http://www.ecma-international.org/standards/ecma-323/csta/ed3
http://www.ecma-international.org/standards/ecma-323/csta/ed3/offered-event.xsd"
  xmlns:cisco-csta-ext="cisco-csta-ext.xsd">
  <monitorCrossRefID>48F1DB51</monitorCrossRefID>
  <offeredConnection>
  <callID>39F2FFC7-13B5-11DC-833A-9790DDA32D45</callID>
  <deviceID>2229</deviceID>
  </offeredConnection>
  <offeredDevice>
  <deviceIdentifier>NULL</deviceIdentifier>
  </offeredDevice>
  <callingDevice>
  <deviceIdentifier>2807</deviceIdentifier>
  </callingDevice>
  <calledDevice>
  <deviceIdentifier>2229</deviceIdentifier>
  </calledDevice>
  <lastRedirectionDevice>
  <numberDialed></numberDialed>
  </lastRedirectionDevice>
  <cause>normal</cause>
  <extensions>
  <privateData>
  <private>
  <cisco-csta-ext:OfferedPrivate>
  <cisco-csta-ext:callDirection>FALSE</cisco-csta-ext:callDirection>
  <cisco-csta-ext:callType>direct</cisco-csta-ext:callType>
  <cisco-csta-ext:parentGCID></cisco-csta-ext:parentGCID>
  <originalCalledAddress></originalCalledAddress>
  </cisco-csta-ext:OfferedPrivate>
  </private>
  </privateData>
  </extensions>
  </OfferedEvent>
```

Jun 6 22:36:41.286: //-1/xxxxxxxxxxxx/SIP/Msg/ccsipDisplayMsg:

Sent:

```
NOTIFY sip:CRS_controller@192.0.2.9:5060;transport=tcp SIP/2.0
Via: SIP/2.0/TCP 192.0.2.7:5060;branch=z9hG4bK6415D3
From: <sip:2229@192.0.2.7>;tag=4D1FEE90-31B
To: <sip:CRS_controller@192.0.2.9>;tag=ds1e98edb8
Call-ID: 11811688226563@192.0.2.9
CSeq: 104 NOTIFY
Max-Forwards: 70
Date: Wed, 06 Jun 2007 22:36:41 GMT
User-Agent: Cisco-SIPGateway/IOS-12.x
Event: presence
Subscription-State: active;expires=1624
Contact: <sip:2229@192.0.2.7:5060;transport=tcp>
Content-Type: application/pdf+xml
Content-Length: 489
```

```
<?xml version="1.0" encoding="UTF-8"?><presence xmlns="urn:ietf:params:xml:ns:pidf"
entity="sip:2229@192.0.2.7" xmlns:e="urn:ietf:params:xml:ns:pidf:status:rpid"
xmlns:rpid="urn:ietf:params:xml:ns:pidf:status:rpid" xmlns:dm="urn:ietf:params:
xml:ns:pidf:data-model"><dm:person><status><basic>Open</basic></status>
<e:activities><e:on-the-phone/></e:activities></dm:person><tupleid="cisco-cme"><status>
<basic>Open</basic><rpid:activeIdle>active</rpid:activeIdle></status></tuple></presence>
```

Jun 6 22:36:41.306: //-1/xxxxxxxxxxxx/SIP/Msg/ccsipDisplayMsg:

Received:

SIP/2.0 100 Trying
 Via: SIP/2.0/TCP 192.0.2.7:5060;branch=z9hG4bK6215AD
 To: <sip:2229@192.0.2.9>
 From: "Remote IP9" <sip:2807@192.0.2.7>;tag=4D31DE54-1489
 Call-ID: 3AEC0612-13B511DC-833F9790-DDA32D45@192.0.2.7
 CSeq: 101 INVITE
 Content-Length: 0
 Timestamp: 1181169401

Jun 6 22:36:41.306: //-1/xxxxxxxxxxxx/SIP/Msg/ccsipDisplayMsg:

Received:

SIP/2.0 200 Ok
 Via: SIP/2.0/TCP 192.0.2.7:5060;branch=z9hG4bK63690
 To: <sip:CRS_controller@192.0.2.9>;tag=dscdc4ede7
 From: <sip:2229@192.0.2.7>;tag=4D1FEEB0-1E6
 Call-ID: 11811688227034@192.0.2.9
 CSeq: 137 NOTIFY
 Content-Length: 0
 Allow-Events: refer
 Allow-Events: telephone-event

Jun 6 22:36:41.322: //-1/xxxxxxxxxxxx/SIP/Msg/ccsipDisplayMsg:

Received:

SIP/2.0 200 Ok
 Via: SIP/2.0/TCP 192.0.2.7:5060;branch=z9hG4bK6415D3
 To: <sip:CRS_controller@192.0.2.9>;tag=ds1e98edb8
 From: <sip:2229@192.0.2.7>;tag=4D1FEE90-31B
 Call-ID: 11811688226563@192.0.2.9
 CSeq: 104 NOTIFY
 Content-Length: 0
 Allow-Events: refer
 Allow-Events: telephone-event

Jun 6 22:36:41.346: //-1/xxxxxxxxxxxx/SIP/Msg/ccsipDisplayMsg:

Received:

SIP/2.0 180 Ringing
 Via: SIP/2.0/TCP 192.0.2.7:5060;branch=z9hG4bK6215AD
 To: <sip:2229@192.0.2.9>;tag=dsf8c9ed89
 From: "Remote IP9" <sip:2807@192.0.2.7>;tag=4D31DE54-1489
 Call-ID: 3AEC0612-13B511DC-833F9790-DDA32D45@192.0.2.7
 CSeq: 101 INVITE
 Content-Length: 0
 Contact: <sip:2229@192.0.2.9:5060;transport=tcp>
 Allow: INVITE, BYE, CANCEL, ACK, NOTIFY
 Server: Cisco-CRS/4.6
 Cisco-Gcid: 39F2FFC7-13B5-11DC-833A-9790DDA32D45

Jun 6 22:36:41.350: //-1/xxxxxxxxxxxx/SIP/Msg/ccsipDisplayMsg:

Sent:

NOTIFY sip:CRS_controller@192.0.2.9:5060;transport=tcp SIP/2.0
 Via: SIP/2.0/TCP 192.0.2.7:5060;branch=z9hG4bK651F92
 From: <sip:2229@192.0.2.7>;tag=4D1FEEB0-1E6
 To: <sip:CRS_controller@192.0.2.9>;tag=dscdc4ede7
 Call-ID: 11811688227034@192.0.2.9
 CSeq: 138 NOTIFY
 Max-Forwards: 70

```
Date: Wed, 06 Jun 2007 22:36:41 GMT
User-Agent: Cisco-SIPGateway/IOS-12.x
Event: dialog
Subscription-State: active;expires=2800
Contact: <sip:2229@192.0.2.7:5060;transport=tcp>
Content-Type: application/csta+xml
Content-Length: 1218
```

```
<?xml version="1.0" encoding="UTF-8"?>
<DeliveredEvent
  xmlns="http://www.ecma-international.org/standards/ecma-323/csta/ed3"
  xmlns:xsi="http://www.example.org/2001/XMLSchema-instance"
  xsi:schemaLocation="http://www.ecma-international.org/standards/ecma-323/csta/ed3
http://www.ecma-international.org/standards/ecma-323/csta/ed3/delivered-event.xsd"
  xmlns:cisco-csta-ext="cisco-csta-ext.xsd">
  <monitorCrossRefID>48F1DB51</monitorCrossRefID>
  <connection>
  <callID>39F2FFC7-13B5-11DC-833A-9790DDA32D45</callID>
  <deviceID>2229</deviceID>
  </connection>
  <alertingDevice>
  <deviceIdentifier>NULL</deviceIdentifier>
  </alertingDevice>
  <callingDevice>
  <deviceIdentifier>2807</deviceIdentifier>
  </callingDevice>
  <calledDevice>
  <deviceIdentifier>2229</deviceIdentifier>
  </calledDevice>
  <lastRedirectionDevice>
  <numberDialed></numberDialed>
  </lastRedirectionDevice>
  <cause>normal</cause>
  <extensions>
  <privateData>
  <private>
  <cisco-csta-ext:deliveredPrivate>
  <cisco-csta-ext:callDirection>FALSE</cisco-csta-ext:callDirection>
  <cisco-csta-ext:callType>direct</cisco-csta-ext:callType>
  <cisco-csta-ext:parentGCID></cisco-csta-ext:parentGCID>
  </cisco-csta-ext:deliveredPrivate>
  </private>
  </privateData>
  </extensions>
  </DeliveredEvent>
```

```
Jun 6 22:36:41.358: //-1/xxxxxxxxxxxx/SIP/Msg/ccsipDisplayMsg:
```

Received:

```
SIP/2.0 200 Ok
Via: SIP/2.0/TCP 192.0.2.7:5060;branch=z9hG4bK651F92
To: <sip:CRS_controller@192.0.2.9>;tag=dscdc4ede7
From: <sip:2229@192.0.2.7>;tag=4D1FEEB0-1E6
Call-ID: 11811688227034@192.0.2.9
CSeq: 138 NOTIFY
Content-Length: 0
Allow-Events: refer
Allow-Events: telephone-event
```

```
Jun 6 22:36:44.450: //-1/xxxxxxxxxxxx/SIP/Msg/ccsipDisplayMsg:
```

Received:

```
SIP/2.0 200 Ok
```

```
Via: SIP/2.0/TCP 192.0.2.7:5060;branch=z9hG4bK6215AD
To: <sip:2229@192.0.2.9>;tag=dsf8c9ed89
From: "Remote IP9" <sip:2807@192.0.2.7>;tag=4D31DE54-1489
Call-ID: 3AEC0612-13B511DC-833F9790-DDA32D45@192.0.2.7
CSeq: 101 INVITE
Content-Length: 126
Contact: <sip:2229@192.0.2.9:5060;transport=tcp>
Content-Type: application/sdp
Call-Info: <sip:192.0.2.9:5060>;method="NOTIFY;Event=telephone-event;Duration=2000"
Allow-Events: telephone-event
Allow: INVITE, BYE, CANCEL, ACK, NOTIFY
Server: Cisco-CRS/4.6
Cisco-Gcid: 39F2FFC7-13B5-11DC-833A-9790DDA32D45
```

```
v=0
o=Cisco-CRS 1440 1 IN IP4 192.0.2.9
s=SIP Call
c=IN IP4 192.0.2.9
t=0 0
m=audio 1044 RTP/AVP 0
a=rtpmap:0 PCMU/8000
```

```
Jun 6 22:36:44.454: //-1/xxxxxxxxxxxx/SIP/Msg/ccsipDisplayMsg:
```

Sent:

```
ACK sip:2229@192.0.2.9:5060;transport=tcp SIP/2.0
Via: SIP/2.0/TCP 192.0.2.7:5060;branch=z9hG4bK6615A8
From: "Remote IP9" <sip:2807@192.0.2.7>;tag=4D31DE54-1489
To: <sip:2229@192.0.2.9>;tag=dsf8c9ed89
Date: Wed, 06 Jun 2007 22:36:41 GMT
Call-ID: 3AEC0612-13B511DC-833F9790-DDA32D45@192.0.2.7
Max-Forwards: 70
CSeq: 101 ACK
Allow-Events: telephone-event
Content-Length: 0
```

```
Jun 6 22:36:44.454: //-1/xxxxxxxxxxxx/SIP/Msg/ccsipDisplayMsg:
```

Sent:

```
NOTIFY sip:CRS_controller@192.0.2.9:5060;transport=tcp SIP/2.0
Via: SIP/2.0/TCP 192.0.2.7:5060;branch=z9hG4bK672699
From: <sip:2229@192.0.2.7>;tag=4D1FEEB0-1E6
To: <sip:CRS_controller@192.0.2.9>;tag=dscdc4ede7
Call-ID: 11811688227034@192.0.2.9
CSeq: 139 NOTIFY
Max-Forwards: 70
Date: Wed, 06 Jun 2007 22:36:44 GMT
User-Agent: Cisco-SIPGateway/IOS-12.x
Event: dialog
Subscription-State: active;expires=2800
Contact: <sip:2229@192.0.2.7:5060;transport=tcp>
Content-Type: application/csta+xml
Content-Length: 1194
```

```
<?xml version="1.0" encoding="UTF-8"?>
<cisco-csta-ext:ActiveEvent
  xmlns="http://www.ecma-international.org/standards/ecma-323/csta/ed3"
  xmlns:xsi="http://www.example.org/2001/XMLSchema-instance"
  xsi:schemaLocation="http://www.ecma-international.org/standards/ecma-323/csta/ed3
http://www.ecma-international.org/standards/ecma-323/csta/ed3/private-event.xsd"
  xmlns:cisco-csta-ext="cisco-csta-ext.xsd">
  <monitorCrossRefID>48F1DB51</monitorCrossRefID>
  <extensions>
```

```

<privateData>
<private>
<cisco-csta-ext:gcid>39F2FFC7-13B5-11DC-833A-9790DDA32D45</cisco-csta-ext:gcid>
<cisco-csta-ext:callDirection>FALSE</cisco-csta-ext:callDirection>
<cisco-csta-ext:callingDirectoryNumber>2807</cisco-csta-ext:callingDirectoryNumber>
<cisco-csta-ext:calledDirectoryNumber>2229</cisco-csta-ext:calledDirectoryNumber>
<connectionAddress>
<deviceIdentifier>2229</deviceIdentifier>
</connectionAddress>
<lastRedirectionDevice>
<numberDialed></numberDialed>
</lastRedirectionDevice>
<originalCalledAddress></originalCalledAddress>
<cisco-csta-ext:callType>direct</cisco-csta-ext:callType>
<cisco-csta-ext:parentGCID></cisco-csta-ext:parentGCID>
</private>
</privateData>
</extensions>
</cisco-csta-ext:ActiveEvent>

```

Jun 6 22:36:44.474: //-1/xxxxxxxxxxxx/SIP/Msg/ccsipDisplayMsg:

Received:

```

SIP/2.0 200 Ok
Via: SIP/2.0/TCP 192.0.2.7:5060;branch=z9hG4bK672699
To: <sip:CRS_controller@192.0.2.9>;tag=dscdc4ede7
From: <sip:2229@192.0.2.7>;tag=4D1FEEB0-1E6
Call-ID: 11811688227034@192.0.2.9
CSeq: 139 NOTIFY
Content-Length: 0
Allow-Events: refer
Allow-Events: telephone-event

```

Jun 6 22:36:44.474: //-1/xxxxxxxxxxxx/SIP/Msg/ccsipDisplayMsg:

Sent:

```

NOTIFY sip:CRS_controller@192.0.2.9:5060;transport=tcp SIP/2.0
Via: SIP/2.0/TCP 192.0.2.7:5060;branch=z9hG4bK68321
From: <sip:2229@192.0.2.7>;tag=4D1FEEB0-1E6
To: <sip:CRS_controller@192.0.2.9>;tag=dscdc4ede7
Call-ID: 11811688227034@192.0.2.9
CSeq: 140 NOTIFY
Max-Forwards: 70
Date: Wed, 06 Jun 2007 22:36:44 GMT
User-Agent: Cisco-SIPGateway/IOS-12.x
Event: dialog
Subscription-State: active;expires=2800
Contact: <sip:2229@192.0.2.7:5060;transport=tcp>
Content-Type: application/csta+xml
Content-Length: 925

```

```

<?xml version="1.0" encoding="UTF-8"?>
<EstablishedEvent
  xmlns="http://www.ecma-international.org/standards/ecma-323/csta/ed3"
  xmlns:xsi="http://www.example.org/2001/XMLSchema-instance"
  xsi:schemaLocation="http://www.ecma-international.org/standards/ecma-323/csta/ed3
http://www.ecma-international.org/standards/ecma-323/csta/ed3/established-event.xsd"
  xmlns:cisco-csta-ext="cisco-csta-ext.xsd">
<monitorCrossRefID>48F1DB51</monitorCrossRefID>
<establishedConnection>
<callID>39F2FFC7-13B5-11DC-833A-9790DDA32D45</callID>
<deviceID>NULL</deviceID>
</establishedConnection>

```

```

<answeringDevice>
<deviceIdentifier>NULL</deviceIdentifier>
</answeringDevice>
<callingDevice>
<deviceIdentifier>2807</deviceIdentifier>
</callingDevice>
<calledDevice>
<deviceIdentifier>2229</deviceIdentifier>
</calledDevice>
<lastRedirectionDevice>
<numberDialed>NULL</numberDialed>
</lastRedirectionDevice>
<cause>normal</cause>
</EstablishedEvent>

```

Jun 6 22:36:44.494: //-1/xxxxxxxxxxxx/SIP/Msg/ccsipDisplayMsg:

Received:

```

SIP/2.0 200 Ok
Via: SIP/2.0/TCP 192.0.2.7:5060;branch=z9hG4bK68321
To: <sip:CRS_controller@192.0.2.9>;tag=dscdc4ede7
From: <sip:2229@192.0.2.7>;tag=4D1FEEB0-1E6
Call-ID: 11811688227034@192.0.2.9
CSeq: 140 NOTIFY
Content-Length: 0
Allow-Events: refer
Allow-Events: telephone-event

```

Jun 6 22:36:46.718: //-1/xxxxxxxxxxxx/SIP/Msg/ccsipDisplayMsg:

Sent:

```

NOTIFY sip:2229@192.0.2.9:5060;transport=tcp SIP/2.0
Via: SIP/2.0/TCP 192.0.2.7:5060;branch=z9hG4bK692E4
From: "Remote IP9" <sip:2807@192.0.2.7>;tag=4D31DE54-1489
To: <sip:2229@192.0.2.9>;tag=dsf8c9ed89
Call-ID: 3AEC0612-13B511DC-833F9790-DDA32D45@192.0.2.7
CSeq: 102 NOTIFY
Max-Forwards: 70
Date: Wed, 06 Jun 2007 22:36:46 GMT
User-Agent: Cisco-SIPGateway/IOS-12.x
Event: telephone-event
Subscription-State: active
Contact: <sip:192.0.2.7:5060;transport=tcp>
Content-Type: audio/telephone-event
Content-Length: 4

```

Jun 6 22:36:46.722: //-1/xxxxxxxxxxxx/SIP/Msg/ccsipDisplayMsg:

Received:

```

SIP/2.0 200 Ok
Via: SIP/2.0/TCP 192.0.2.7:5060;branch=z9hG4bK692E4
To: <sip:2229@192.0.2.9>;tag=dsf8c9ed89
From: "Remote IP9" <sip:2807@192.0.2.7>;tag=4D31DE54-1489
Call-ID: 3AEC0612-13B511DC-833F9790-DDA32D45@192.0.2.7
CSeq: 102 NOTIFY
Content-Length: 0
Allow-Events: refer
Allow-Events: telephone-event

```


Jun 6 22:36:46.722: //-1/xxxxxxxxxxxx/SIP/Msg/ccsipDisplayMsg:

Sent:

NOTIFY sip:2229@192.0.2.9:5060;transport=tcp SIP/2.0
Via: SIP/2.0/TCP 192.0.2.7:5060;branch=z9hG4bK6AB0C
From: "Remote IP9" <sip:2807@192.0.2.7>;tag=4D31DE54-1489
To: <sip:2229@192.0.2.9>;tag=dsf8c9ed89
Call-ID: 3AEC0612-13B511DC-833F9790-DDA32D45@192.0.2.7
CSeq: 103 NOTIFY
Max-Forwards: 70
Date: Wed, 06 Jun 2007 22:36:46 GMT
User-Agent: Cisco-SIPGateway/IOS-12.x
Event: telephone-event
Subscription-State: active
Contact: <sip:192.0.2.7:5060;transport=tcp>
Content-Type: audio/telephone-event
Content-Length: 4

Jun 6 22:36:46.730: //-1/xxxxxxxxxxxx/SIP/Msg/ccsipDisplayMsg:

Received:

SIP/2.0 200 Ok
Via: SIP/2.0/TCP 192.0.2.7:5060;branch=z9hG4bK6AB0C
To: <sip:2229@192.0.2.9>;tag=dsf8c9ed89
From: "Remote IP9" <sip:2807@192.0.2.7>;tag=4D31DE54-1489
Call-ID: 3AEC0612-13B511DC-833F9790-DDA32D45@192.0.2.7
CSeq: 103 NOTIFY
Content-Length: 0
Allow-Events: refer
Allow-Events: telephone-event

Jun 6 22:36:47.026: //-1/xxxxxxxxxxxx/SIP/Msg/ccsipDisplayMsg:

Sent:

NOTIFY sip:2229@192.0.2.9:5060;transport=tcp SIP/2.0
Via: SIP/2.0/TCP 192.0.2.7:5060;branch=z9hG4bK6BDA
From: "Remote IP9" <sip:2807@192.0.2.7>;tag=4D31DE54-1489
To: <sip:2229@192.0.2.9>;tag=dsf8c9ed89
Call-ID: 3AEC0612-13B511DC-833F9790-DDA32D45@192.0.2.7
CSeq: 104 NOTIFY
Max-Forwards: 70
Date: Wed, 06 Jun 2007 22:36:47 GMT
User-Agent: Cisco-SIPGateway/IOS-12.x
Event: telephone-event
Subscription-State: active
Contact: <sip:192.0.2.7:5060;transport=tcp>
Content-Type: audio/telephone-event
Content-Length: 4

Jun 6 22:36:47.034: //-1/xxxxxxxxxxxx/SIP/Msg/ccsipDisplayMsg:

Received:

SIP/2.0 200 Ok
Via: SIP/2.0/TCP 192.0.2.7:5060;branch=z9hG4bK6BDA
To: <sip:2229@192.0.2.9>;tag=dsf8c9ed89
From: "Remote IP9" <sip:2807@192.0.2.7>;tag=4D31DE54-1489
Call-ID: 3AEC0612-13B511DC-833F9790-DDA32D45@192.0.2.7
CSeq: 104 NOTIFY
Content-Length: 0
Allow-Events: refer
Allow-Events: telephone-event

Jun 6 22:36:47.034: //-1/xxxxxxxxxxxx/SIP/Msg/ccsipDisplayMsg:

Sent:

NOTIFY sip:2229@192.0.2.9:5060;transport=tcp SIP/2.0
 Via: SIP/2.0/TCP 192.0.2.7:5060;branch=z9hG4bK6C11C4
 From: "Remote IP9" <sip:2807@192.0.2.7>;tag=4D31DE54-1489
 To: <sip:2229@192.0.2.9>;tag=dsf8c9ed89
 Call-ID: 3AEC0612-13B511DC-833F9790-DDA32D45@192.0.2.7
 CSeq: 105 NOTIFY
 Max-Forwards: 70
 Date: Wed, 06 Jun 2007 22:36:47 GMT
 User-Agent: Cisco-SIPGateway/IOS-12.x
 Event: telephone-event
 Subscription-State: active
 Contact: <sip:192.0.2.7:5060;transport=tcp>
 Content-Type: audio/telephone-event
 Content-Length: 4

Jun 6 22:36:47.038: //-1/xxxxxxxxxxxx/SIP/Msg/ccsipDisplayMsg:

Received:

SIP/2.0 200 Ok
 Via: SIP/2.0/TCP 192.0.2.7:5060;branch=z9hG4bK6C11C4
 To: <sip:2229@192.0.2.9>;tag=dsf8c9ed89
 From: "Remote IP9" <sip:2807@192.0.2.7>;tag=4D31DE54-1489
 Call-ID: 3AEC0612-13B511DC-833F9790-DDA32D45@192.0.2.7
 CSeq: 105 NOTIFY
 Content-Length: 0
 Allow-Events: refer
 Allow-Events: telephone-event

Jun 6 22:36:47.246: //-1/xxxxxxxxxxxx/SIP/Msg/ccsipDisplayMsg:

Sent:

NOTIFY sip:2229@192.0.2.9:5060;transport=tcp SIP/2.0
 Via: SIP/2.0/TCP 192.0.2.7:5060;branch=z9hG4bK6D1E26
 From: "Remote IP9" <sip:2807@192.0.2.7>;tag=4D31DE54-1489
 To: <sip:2229@192.0.2.9>;tag=dsf8c9ed89
 Call-ID: 3AEC0612-13B511DC-833F9790-DDA32D45@192.0.2.7
 CSeq: 106 NOTIFY
 Max-Forwards: 70
 Date: Wed, 06 Jun 2007 22:36:47 GMT
 User-Agent: Cisco-SIPGateway/IOS-12.x
 Event: telephone-event
 Subscription-State: active
 Contact: <sip:192.0.2.7:5060;transport=tcp>
 Content-Type: audio/telephone-event
 Content-Length: 4

Jun 6 22:36:47.254: //-1/xxxxxxxxxxxx/SIP/Msg/ccsipDisplayMsg:

Received:

SIP/2.0 200 Ok
 Via: SIP/2.0/TCP 192.0.2.7:5060;branch=z9hG4bK6D1E26
 To: <sip:2229@192.0.2.9>;tag=dsf8c9ed89
 From: "Remote IP9" <sip:2807@192.0.2.7>;tag=4D31DE54-1489
 Call-ID: 3AEC0612-13B511DC-833F9790-DDA32D45@192.0.2.7
 CSeq: 106 NOTIFY
 Content-Length: 0
 Allow-Events: refer
 Allow-Events: telephone-event

Jun 6 22:36:47.254: //-1/xxxxxxxxxxxx/SIP/Msg/ccsipDisplayMsg:

Sent:

NOTIFY sip:2229@192.0.2.9:5060;transport=tcp SIP/2.0
Via: SIP/2.0/TCP 192.0.2.7:5060;branch=z9hG4bK6E1747
From: "Remote IP9" <sip:2807@192.0.2.7>;tag=4D31DE54-1489
To: <sip:2229@192.0.2.9>;tag=dsf8c9ed89
Call-ID: 3AEC0612-13B511DC-833F9790-DDA32D45@192.0.2.7
CSeq: 107 NOTIFY
Max-Forwards: 70
Date: Wed, 06 Jun 2007 22:36:47 GMT
User-Agent: Cisco-SIPGateway/IOS-12.x
Event: telephone-event
Subscription-State: active
Contact: <sip:192.0.2.7:5060;transport=tcp>
Content-Type: audio/telephone-event
Content-Length: 4

Jun 6 22:36:47.262: //-1/xxxxxxxxxxxx/SIP/Msg/ccsipDisplayMsg:

Received:

SIP/2.0 200 Ok
Via: SIP/2.0/TCP 192.0.2.7:5060;branch=z9hG4bK6E1747
To: <sip:2229@192.0.2.9>;tag=dsf8c9ed89
From: "Remote IP9" <sip:2807@192.0.2.7>;tag=4D31DE54-1489
Call-ID: 3AEC0612-13B511DC-833F9790-DDA32D45@192.0.2.7
CSeq: 107 NOTIFY
Content-Length: 0
Allow-Events: refer
Allow-Events: telephone-event

Jun 6 22:36:47.538: //-1/xxxxxxxxxxxx/SIP/Msg/ccsipDisplayMsg:

Sent:

NOTIFY sip:2229@192.0.2.9:5060;transport=tcp SIP/2.0
Via: SIP/2.0/TCP 192.0.2.7:5060;branch=z9hG4bK6FEE4
From: "Remote IP9" <sip:2807@192.0.2.7>;tag=4D31DE54-1489
To: <sip:2229@192.0.2.9>;tag=dsf8c9ed89
Call-ID: 3AEC0612-13B511DC-833F9790-DDA32D45@192.0.2.7
CSeq: 108 NOTIFY
Max-Forwards: 70
Date: Wed, 06 Jun 2007 22:36:47 GMT
User-Agent: Cisco-SIPGateway/IOS-12.x
Event: telephone-event
Subscription-State: active
Contact: <sip:192.0.2.7:5060;transport=tcp>
Content-Type: audio/telephone-event
Content-Length: 4

Jun 6 22:36:47.542: //-1/xxxxxxxxxxxx/SIP/Msg/ccsipDisplayMsg:

Received:

SIP/2.0 200 Ok
Via: SIP/2.0/TCP 192.0.2.7:5060;branch=z9hG4bK6FEE4
To: <sip:2229@192.0.2.9>;tag=dsf8c9ed89
From: "Remote IP9" <sip:2807@192.0.2.7>;tag=4D31DE54-1489
Call-ID: 3AEC0612-13B511DC-833F9790-DDA32D45@192.0.2.7
CSeq: 108 NOTIFY
Content-Length: 0
Allow-Events: refer
Allow-Events: telephone-event

Jun 6 22:36:47.542: //-1/xxxxxxxxxxxx/SIP/Msg/ccsipDisplayMsg:

Sent:

NOTIFY sip:2229@192.0.2.9:5060;transport=tcp SIP/2.0
 Via: SIP/2.0/TCP 192.0.2.7:5060;branch=z9hG4bK7016DF
 From: "Remote IP9" <sip:2807@192.0.2.7>;tag=4D31DE54-1489
 To: <sip:2229@192.0.2.9>;tag=dsf8c9ed89
 Call-ID: 3AEC0612-13B511DC-833F9790-DDA32D45@192.0.2.7
 CSeq: 109 NOTIFY
 Max-Forwards: 70
 Date: Wed, 06 Jun 2007 22:36:47 GMT
 User-Agent: Cisco-SIPGateway/IOS-12.x
 Event: telephone-event
 Subscription-State: active
 Contact: <sip:192.0.2.7:5060;transport=tcp>
 Content-Type: audio/telephone-event
 Content-Length: 4

Jun 6 22:36:47.550: //-1/xxxxxxxxxxxx/SIP/Msg/ccsipDisplayMsg:

Received:

SIP/2.0 200 Ok
 Via: SIP/2.0/TCP 192.0.2.7:5060;branch=z9hG4bK7016DF
 To: <sip:2229@192.0.2.9>;tag=dsf8c9ed89
 From: "Remote IP9" <sip:2807@192.0.2.7>;tag=4D31DE54-1489
 Call-ID: 3AEC0612-13B511DC-833F9790-DDA32D45@192.0.2.7
 CSeq: 109 NOTIFY
 Content-Length: 0
 Allow-Events: refer
 Allow-Events: telephone-event

Jun 6 22:36:47.858: //-1/xxxxxxxxxxxx/SIP/Msg/ccsipDisplayMsg:

Sent:

NOTIFY sip:2229@192.0.2.9:5060;transport=tcp SIP/2.0
 Via: SIP/2.0/TCP 192.0.2.7:5060;branch=z9hG4bK7118C8
 From: "Remote IP9" <sip:2807@192.0.2.7>;tag=4D31DE54-1489
 To: <sip:2229@192.0.2.9>;tag=dsf8c9ed89
 Call-ID: 3AEC0612-13B511DC-833F9790-DDA32D45@192.0.2.7
 CSeq: 110 NOTIFY
 Max-Forwards: 70
 Date: Wed, 06 Jun 2007 22:36:47 GMT
 User-Agent: Cisco-SIPGateway/IOS-12.x
 Event: telephone-event
 Subscription-State: active
 Contact: <sip:192.0.2.7:5060;transport=tcp>
 Content-Type: audio/telephone-event
 Content-Length: 4

Jun 6 22:36:47.866: //-1/xxxxxxxxxxxx/SIP/Msg/ccsipDisplayMsg:

Received:

SIP/2.0 200 Ok
 Via: SIP/2.0/TCP 192.0.2.7:5060;branch=z9hG4bK7118C8
 To: <sip:2229@192.0.2.9>;tag=dsf8c9ed89
 From: "Remote IP9" <sip:2807@192.0.2.7>;tag=4D31DE54-1489
 Call-ID: 3AEC0612-13B511DC-833F9790-DDA32D45@192.0.2.7
 CSeq: 110 NOTIFY
 Content-Length: 0
 Allow-Events: refer
 Allow-Events: telephone-event

Jun 6 22:36:47.866: //-1/xxxxxxxxxxxx/SIP/Msg/ccsipDisplayMsg:

Sent:

NOTIFY sip:2229@192.0.2.9:5060;transport=tcp SIP/2.0
 Via: SIP/2.0/TCP 192.0.2.7:5060;branch=z9hG4bK72FC7
 From: "Remote IP9" <sip:2807@192.0.2.7>;tag=4D31DE54-1489
 To: <sip:2229@192.0.2.9>;tag=dsf8c9ed89
 Call-ID: 3AEC0612-13B511DC-833F9790-DDA32D45@192.0.2.7
 CSeq: 111 NOTIFY
 Max-Forwards: 70
 Date: Wed, 06 Jun 2007 22:36:47 GMT
 User-Agent: Cisco-SIPGateway/IOS-12.x
 Event: telephone-event
 Subscription-State: active
 Contact: <sip:192.0.2.7:5060;transport=tcp>
 Content-Type: audio/telephone-event
 Content-Length: 4

Jun 6 22:36:47.874: //-1/xxxxxxxxxxxx/SIP/Msg/ccsipDisplayMsg:

Received:

SIP/2.0 200 Ok
 Via: SIP/2.0/TCP 192.0.2.7:5060;branch=z9hG4bK72FC7
 To: <sip:2229@192.0.2.9>;tag=dsf8c9ed89
 From: "Remote IP9" <sip:2807@192.0.2.7>;tag=4D31DE54-1489
 Call-ID: 3AEC0612-13B511DC-833F9790-DDA32D45@192.0.2.7
 CSeq: 111 NOTIFY
 Content-Length: 0
 Allow-Events: refer
 Allow-Events: telephone-event

Jun 6 22:36:47.882: //-1/xxxxxxxxxxxx/SIP/Msg/ccsipDisplayMsg:

Received:

INVITE sip:2807@192.0.2.7:5060;transport=tcp SIP/2.0
 Via: SIP/2.0/TCP 192.0.2.9:5060;branch=z9hG4bK183.ZS9nz+P+iXsfLQiSMw~~25
 Max-Forwards: 70
 To: <sip:2807@192.0.2.7>;tag=4D31DE54-1489
 From: <sip:2229@192.0.2.9>;tag=dsf8c9ed89
 Call-ID: 3AEC0612-13B511DC-833F9790-DDA32D45@192.0.2.7
 CSeq: 1 INVITE
 Content-Length: 137
 Contact: <sip:2229@192.0.2.9:5060;transport=tcp>
 Content-Type: application/sdp
 Call-Info: <sip:192.0.2.9:5060>;method="NOTIFY;Event=telephone-event;Duration=2000"
 Allow-Events: telephone-event
 Allow: INVITE, BYE, CANCEL, ACK, NOTIFY
 User-Agent: Cisco-CRS/4.6
 Cisco-Gcid: 39F2FFC7-13B5-11DC-833A-9790DDA32D45

v=0
 o=Cisco-CRS 907 1 IN IP4 192.0.2.9
 s=SIP Call
 c=IN IP4 192.0.2.9
 t=0 0
 m=audio 1044 RTP/AVP 0
 a=rtpmap:0 PCMU/8000
 a=sendonly

Jun 6 22:36:47.886: //-1/xxxxxxxxxxxx/SIP/Msg/ccsipDisplayMsg:

Sent:

SIP/2.0 100 Trying

```
Via: SIP/2.0/TCP 192.0.2.9:5060;branch=z9hG4bKl83.ZS9nz+P+iXsfLQiSMw~~25
From: <sip:2229@192.0.2.9>;tag=dsf8c9ed89
To: "Remote IP9" <sip:2807@192.0.2.7>;tag=4D31DE54-1489
Date: Wed, 06 Jun 2007 22:36:47 GMT
Call-ID: 3AEC0612-13B511DC-833F9790-DDA32D45@192.0.2.7
Server: Cisco-SIPGateway/IOS-12.x
CSeq: 1 INVITE
Allow-Events: telephone-event
Content-Length: 0
```

```
Jun 6 22:36:47.886: //-1/xxxxxxxxxxxx/SIP/Msg/ccsipDisplayMsg:
```

Sent:

```
SIP/2.0 200 OK
Via: SIP/2.0/TCP 192.0.2.9:5060;branch=z9hG4bKl83.ZS9nz+P+iXsfLQiSMw~~25
From: <sip:2229@192.0.2.9>;tag=dsf8c9ed89
To: "Remote IP9" <sip:2807@192.0.2.7>;tag=4D31DE54-1489
Date: Wed, 06 Jun 2007 22:36:47 GMT
Call-ID: 3AEC0612-13B511DC-833F9790-DDA32D45@192.0.2.7
Server: Cisco-SIPGateway/IOS-12.x
CSeq: 1 INVITE
Allow: INVITE, OPTIONS, BYE, CANCEL, ACK, PRACK, UPDATE, REFER, SUBSCRIBE, NOTIFY, INFO,
REGISTER
Allow-Events: telephone-event
Remote-Party-ID: "Remote IP9" <sip:2807@192.0.2.7>;party=called;screen=no;privacy=off
Contact: <sip:2807@192.0.2.7:5060;transport=tcp>
Supported: replaces
Call-Info: <sip:192.0.2.7:5060>;method="NOTIFY;Event=telephone-event;Duration=2000"
Content-Type: application/sdp
Content-Length: 179
```

```
v=0
o=CiscoSystemsSIP-GW-UserAgent 4096 8192 IN IP4 192.0.2.7
s=SIP Call
c=IN IP4 192.0.2.7
t=0 0
m=audio 17738 RTP/AVP 0
c=IN IP4 192.0.2.7
a=recvonly
a=rtpmap:0 PCMU/8000
```

Jun 6 22:36:47.890: //-1/xxxxxxxxxxxx/SIP/Msg/ccsipDisplayMsg:

Sent:

NOTIFY sip:CRS_controller@192.0.2.9:5060;transport=tcp SIP/2.0
 Via: SIP/2.0/TCP 192.0.2.7:5060;branch=z9hG4bK731FB5
 From: <sip:2229@192.0.2.7>;tag=4D1FEEB0-1E6
 To: <sip:CRS_controller@192.0.2.9>;tag=dscdc4ede7
 Call-ID: 11811688227034@192.0.2.9
 CSeq: 141 NOTIFY
 Max-Forwards: 70
 Date: Wed, 06 Jun 2007 22:36:47 GMT
 User-Agent: Cisco-SIPGateway/IOS-12.x
 Event: dialog
 Subscription-State: active;expires=2800
 Contact: <sip:2229@192.0.2.7:5060;transport=tcp>
 Content-Type: application/csta+xml
 Content-Length: 1024

```
<?xml version="1.0" encoding="UTF-8"?>
<HeldEvent
  xmlns="http://www.ecma-international.org/standards/ecma-323/csta/ed3"
  xmlns:xsi="http://www.example.org/2001/XMLSchema-instance"
  xsi:schemaLocation="http://www.ecma-international.org/standards/ecma-323/csta/ed3
http://www.ecma-international.org/standards/ecma-323/csta/ed3/held-event.xsd"
  xmlns:cisco-csta-ext="cisco-csta-ext.xsd">
  <monitorCrossRefID>48F1DB51</monitorCrossRefID>
  <heldConnection>
  <callID>39F2FFC7-13B5-11DC-833A-9790DDA32D45</callID>
  <deviceID>2229</deviceID>
  </heldConnection>
  <holdingDevice>
  <deviceIdentifier>NULL</deviceIdentifier>
  </holdingDevice>
  <cause>normal</cause>
  <extensions>
  <privateData>
  <private>
  <cisco-csta-ext:HeldPrivate>
  <cisco-csta-ext:callDirection>FALSE</cisco-csta-ext:callDirection>
  <cisco-csta-ext:callingDirectoryNumber>2807</cisco-csta-ext:callingDirectoryNumber>
  <cisco-csta-ext:calledDirectoryNumber>2229</cisco-csta-ext:calledDirectoryNumber>
  </cisco-csta-ext:HeldPrivate>
  </private>
  </privateData>
  </extensions>
  </HeldEvent>
```

Jun 6 22:36:47.898: //-1/xxxxxxxxxxxx/SIP/Msg/ccsipDisplayMsg:

Received:

SIP/2.0 200 Ok
 Via: SIP/2.0/TCP 192.0.2.7:5060;branch=z9hG4bK731FB5
 To: <sip:CRS_controller@192.0.2.9>;tag=dscdc4ede7
 From: <sip:2229@192.0.2.7>;tag=4D1FEEB0-1E6
 Call-ID: 11811688227034@192.0.2.9
 CSeq: 141 NOTIFY
 Content-Length: 0
 Allow-Events: refer
 Allow-Events: telephone-event

Jun 6 22:36:47.926: //-1/xxxxxxxxxxxx/SIP/Msg/ccsipDisplayMsg:

Received:

ACK sip:2807@192.0.2.7:5060;transport=tcp SIP/2.0
 Via: SIP/2.0/TCP 192.0.2.9:5060;branch=z9hG4bK183.ZS9nz+P+iXsfLQiSMw~26
 Max-Forwards: 70
 To: "Remote IP9" <sip:2807@192.0.2.7>;tag=4D31DE54-1489
 From: <sip:2229@192.0.2.9>;tag=dsf8c9ed89
 Call-ID: 3AEC0612-13B511DC-833F9790-DDA32D45@192.0.2.7
 CSeq: 1 ACK
 Content-Length: 0
 Contact: <sip:2229@192.0.2.9:5060;transport=tcp>

Jun 6 22:36:47.926: //-1/xxxxxxxxxxxx/SIP/Msg/ccsipDisplayMsg:

Received:

REFER sip:2807@192.0.2.7:5060;transport=tcp SIP/2.0
 Via: SIP/2.0/TCP 192.0.2.9:5060;branch=z9hG4bK183.ZS9nz+P+iXsfLQiSMw~27
 Max-Forwards: 70
 To: <sip:2807@192.0.2.7>;tag=4D31DE54-1489
 From: <sip:2229@192.0.2.9>;tag=dsf8c9ed89
 Call-ID: 3AEC0612-13B511DC-833F9790-DDA32D45@192.0.2.7
 CSeq: 2 REFER
 Content-Length: 0
 Contact: <sip:2229@192.0.2.9:5060;transport=tcp>
 Referred-By: <sip:2229@192.0.2.7>
 Refer-To: <sip:2803@192.0.2.7:5060>
 Call-Info: <urn:x-cisco-remotecc:delayDisconnect>;reason=blind transfer
 Allow: INVITE, BYE, CANCEL, ACK, NOTIFY
 User-Agent: Cisco-CRS/4.6
 Cisco-Gcid: 39F2FFC7-13B5-11DC-833A-9790DDA32D45

Jun 6 22:36:47.930: //-1/xxxxxxxxxxxx/SIP/Msg/ccsipDisplayMsg:

Sent:

SIP/2.0 202 Accepted
 Via: SIP/2.0/TCP 192.0.2.9:5060;branch=z9hG4bK183.ZS9nz+P+iXsfLQiSMw~27
 From: <sip:2229@192.0.2.9>;tag=dsf8c9ed89
 To: "Remote IP9" <sip:2807@192.0.2.7>;tag=4D31DE54-1489
 Date: Wed, 06 Jun 2007 22:36:47 GMT
 Call-ID: 3AEC0612-13B511DC-833F9790-DDA32D45@192.0.2.7
 CSeq: 2 REFER
 Content-Length: 0
 Contact: <sip:2807@192.0.2.7:5060;transport=tcp>

Jun 6 22:36:47.930: //-1/xxxxxxxxxxxx/SIP/Msg/ccsipDisplayMsg:

Sent:

NOTIFY sip:2229@192.0.2.9:5060;transport=tcp SIP/2.0
 Via: SIP/2.0/TCP 192.0.2.7:5060;branch=z9hG4bK74A67
 From: "Remote IP9" <sip:2807@192.0.2.7>;tag=4D31DE54-1489
 To: <sip:2229@192.0.2.9>;tag=dsf8c9ed89
 Call-ID: 3AEC0612-13B511DC-833F9790-DDA32D45@192.0.2.7
 CSeq: 112 NOTIFY
 Max-Forwards: 70
 Date: Wed, 06 Jun 2007 22:36:47 GMT
 User-Agent: Cisco-SIPGateway/IOS-12.x
 Event: refer
 Subscription-State: pending;expires=180
 Contact: <sip:192.0.2.7:5060;transport=tcp>
 Content-Type: message/sipfrag
 Content-Length: 22

SIP/2.0 100 Trying

Jun 6 22:36:47.930: DestCheckTeleUnassBusy cvif OperStatus 5, Type 1A, status 40020

Jun 6 22:36:47.934: //-1/xxxxxxxxxxxx/SIP/Msg/ccsipDisplayMsg:

Sent:

NOTIFY sip:CRS_controller@192.0.2.9:5060;transport=tcp SIP/2.0
 Via: SIP/2.0/TCP 192.0.2.7:5060;branch=z9hG4bK75251A
 From: <sip:2229@192.0.2.7>;tag=4D1FEEB0-1E6
 To: <sip:CRS_controller@192.0.2.9>;tag=dscdc4ede7
 Call-ID: 11811688227034@192.0.2.9
 CSeq: 142 NOTIFY
 Max-Forwards: 70
 Date: Wed, 06 Jun 2007 22:36:47 GMT
 User-Agent: Cisco-SIPGateway/IOS-12.x
 Event: dialog
 Subscription-State: active;expires=2800
 Contact: <sip:2229@192.0.2.7:5060;transport=tcp>
 Content-Type: application/csta+xml
 Content-Length: 1272

```
<?xml version="1.0" encoding="UTF-8"?>
<OfferedEvent
  xmlns="http://www.ecma-international.org/standards/ecma-323/csta/ed3"
  xmlns:xsi="http://www.example.org/2001/XMLSchema-instance"
  xsi:schemaLocation="http://www.ecma-international.org/standards/ecma-323/csta/ed3
http://www.ecma-international.org/standards/ecma-323/csta/ed3/offered-event.xsd"
  xmlns:cisco-csta-ext="cisco-csta-ext.xsd">
  <monitorCrossRefID>48F1DB51</monitorCrossRefID>
  <offeredConnection>
    <callID>39F2FFC7-13B5-11DC-833A-9790DDA32D45</callID>
    <deviceID>2803</deviceID>
  </offeredConnection>
  <offeredDevice>
    <deviceIdentifier>NULL</deviceIdentifier>
  </offeredDevice>
  <callingDevice>
    <deviceIdentifier>2807</deviceIdentifier>
  </callingDevice>
  <calledDevice>
    <deviceIdentifier>2803</deviceIdentifier>
  </calledDevice>
  <lastRedirectionDevice>
    <numberDialed>2229</numberDialed>
  </lastRedirectionDevice>
  <cause>normal</cause>
  <extensions>
    <privateData>
      <private>
        <cisco-csta-ext:OfferedPrivate>
          <cisco-csta-ext:callDirection>FALSE</cisco-csta-ext:callDirection>
          <cisco-csta-ext:callType>direct</cisco-csta-ext:callType>
          <cisco-csta-ext:parentGCID></cisco-csta-ext:parentGCID>
          <originalCalledAddress></originalCalledAddress>
        </cisco-csta-ext:OfferedPrivate>
      </private>
    </privateData>
  </extensions>
</OfferedEvent>
```

Jun 6 22:36:47.942: //-1/xxxxxxxxxxxx/SIP/Msg/ccsipDisplayMsg:

Received:

SIP/2.0 200 Ok
 Via: SIP/2.0/TCP 192.0.2.7:5060;branch=z9hG4bK74A67
 To: <sip:2229@192.0.2.9>;tag=dsf8c9ed89
 From: "Remote IP9" <sip:2807@192.0.2.7>;tag=4D31DE54-1489
 Call-ID: 3AEC0612-13B511DC-833F9790-DDA32D45@192.0.2.7
 CSeq: 112 NOTIFY
 Content-Length: 0
 Allow-Events: refer
 Allow-Events: telephone-event

Jun 6 22:36:47.942: //-1/xxxxxxxxxxxx/SIP/Msg/ccsipDisplayMsg:

Sent:

NOTIFY sip:2229@192.0.2.9:5060;transport=tcp SIP/2.0
 Via: SIP/2.0/TCP 192.0.2.7:5060;branch=z9hG4bK761AB9
 From: "Remote IP9" <sip:2807@192.0.2.7>;tag=4D31DE54-1489
 To: <sip:2229@192.0.2.9>;tag=dsf8c9ed89
 Call-ID: 3AEC0612-13B511DC-833F9790-DDA32D45@192.0.2.7
 CSeq: 113 NOTIFY
 Max-Forwards: 70
 Date: Wed, 06 Jun 2007 22:36:47 GMT
 User-Agent: Cisco-SIPGateway/IOS-12.x
 Event: refer
 Subscription-State: active
 Contact: <sip:192.0.2.7:5060;transport=tcp>
 Content-Type: message/sipfrag
 Content-Length: 23

SIP/2.0 180 Ringing

Jun 6 22:36:47.946: //-1/xxxxxxxxxxxx/SIP/Msg/ccsipDisplayMsg:

Received:

SIP/2.0 200 Ok
 Via: SIP/2.0/TCP 192.0.2.7:5060;branch=z9hG4bK75251A
 To: <sip:CRS_controller@192.0.2.9>;tag=dscdc4ede7
 From: <sip:2229@192.0.2.7>;tag=4D1FEEB0-1E6
 Call-ID: 11811688227034@192.0.2.9
 CSeq: 142 NOTIFY
 Content-Length: 0
 Allow-Events: refer
 Allow-Events: telephone-event

Jun 6 22:36:47.946: //-1/xxxxxxxxxxxx/SIP/Msg/ccsipDisplayMsg:

Sent:

NOTIFY sip:CRS_controller@192.0.2.9:5060;transport=tcp SIP/2.0
 Via: SIP/2.0/TCP 192.0.2.7:5060;branch=z9hG4bK771024
 From: <sip:2229@192.0.2.7>;tag=4D1FEEB0-1E6
 To: <sip:CRS_controller@192.0.2.9>;tag=dscdc4ede7
 Call-ID: 11811688227034@192.0.2.9
 CSeq: 143 NOTIFY
 Max-Forwards: 70
 Date: Wed, 06 Jun 2007 22:36:47 GMT
 User-Agent: Cisco-SIPGateway/IOS-12.x
 Event: dialog
 Subscription-State: active;expires=2800
 Contact: <sip:2229@192.0.2.7:5060;transport=tcp>
 Content-Type: application/csta+xml

Content-Length: 1222

```
<?xml version="1.0" encoding="UTF-8"?>
<DeliveredEvent
  xmlns="http://www.ecma-international.org/standards/ecma-323/csta/ed3"
  xmlns:xsi="http://www.example.org/2001/XMLSchema-instance"
  xsi:schemaLocation="http://www.ecma-international.org/standards/ecma-323/csta/ed3
http://www.ecma-international.org/standards/ecma-323/csta/ed3/delivered-event.xsd"
  xmlns:cisco-csta-ext="cisco-csta-ext.xsd">
<monitorCrossRefID>48F1DB51</monitorCrossRefID>
<connection>
<callID>39F2FFC7-13B5-11DC-833A-9790DDA32D45</callID>
<deviceID>2803</deviceID>
</connection>
<alertingDevice>
<deviceIdentifier>NULL</deviceIdentifier>
</alertingDevice>
<callingDevice>
<deviceIdentifier>2807</deviceIdentifier>
</callingDevice>
<calledDevice>
<deviceIdentifier>2803</deviceIdentifier>
</calledDevice>
<lastRedirectionDevice>
<numberDialed>2229</numberDialed>
</lastRedirectionDevice>
<cause>normal</cause>
<extensions>
<privateData>
<private>
<cisco-csta-ext:deliveredPrivate>
<cisco-csta-ext:callDirection>FALSE</cisco-csta-ext:callDirection>
<cisco-csta-ext:callType>direct</cisco-csta-ext:callType>
<cisco-csta-ext:parentGCID></cisco-csta-ext:parentGCID>
</cisco-csta-ext:deliveredPrivate>
</private>
</privateData>
</extensions>
</DeliveredEvent>
```

Jun 6 22:36:47.982: //-1/xxxxxxxxxxxx/SIP/Msg/ccsipDisplayMsg:

Received:

```
SIP/2.0 200 Ok
Via: SIP/2.0/TCP 192.0.2.7:5060;branch=z9hG4bK761AB9
To: <sip:2229@192.0.2.9>;tag=dsf8c9ed89
From: "Remote IP9" <sip:2807@192.0.2.7>;tag=4D31DE54-1489
Call-ID: 3AEC0612-13B511DC-833F9790-DDA32D45@192.0.2.7
CSeq: 113 NOTIFY
Content-Length: 0
Allow-Events: refer
Allow-Events: telephone-event
```

Jun 6 22:36:47.986: //-1/xxxxxxxxxxxx/SIP/Msg/ccsipDisplayMsg:

Received:

```
SIP/2.0 200 Ok
Via: SIP/2.0/TCP 192.0.2.7:5060;branch=z9hG4bK771024
To: <sip:CRS_controller@192.0.2.9>;tag=dscdc4ede7
From: <sip:2229@192.0.2.7>;tag=4D1FEEB0-1E6
Call-ID: 11811688227034@192.0.2.9
CSeq: 143 NOTIFY
Content-Length: 0
```

```
Allow-Events: refer
Allow-Events: telephone-event
```

```
Jun 6 22:36:49.690: //-1/xxxxxxxxxxxx/SIP/Msg/ccsipDisplayMsg:
```

Sent:

```
NOTIFY sip:CRS_controller@192.0.2.9:5060;transport=tcp SIP/2.0
Via: SIP/2.0/TCP 192.0.2.7:5060;branch=z9hG4bK78AD9
From: <sip:2229@192.0.2.7>;tag=4D1FEEB0-1E6
To: <sip:CRS_controller@192.0.2.9>;tag=dsdc4ede7
Call-ID: 11811688227034@192.0.2.9
CSeq: 144 NOTIFY
Max-Forwards: 70
Date: Wed, 06 Jun 2007 22:36:49 GMT
User-Agent: Cisco-SIPGateway/IOS-12.x
Event: dialog
Subscription-State: active;expires=2800
Contact: <sip:2229@192.0.2.7:5060;transport=tcp>
Content-Type: application/csta+xml
Content-Length: 1198
```

```
<?xml version="1.0" encoding="UTF-8"?>
<cisco-csta-ext:ActiveEvent
  xmlns="http://www.ecma-international.org/standards/ecma-323/csta/ed3"
  xmlns:xsi="http://www.example.org/2001/XMLSchema-instance"
  xsi:schemaLocation="http://www.ecma-international.org/standards/ecma-323/csta/ed3
http://www.ecma-international.org/standards/ecma-323/csta/ed3/private-event.xsd"
  xmlns:cisco-csta-ext="cisco-csta-ext.xsd">
  <monitorCrossRefID>48F1DB51</monitorCrossRefID>
  <extensions>
  <privateData>
  <private>
  <cisco-csta-ext:gcid>39F2FFC7-13B5-11DC-833A-9790DDA32D45</cisco-csta-ext:gcid>
  <cisco-csta-ext:callDirection>FALSE</cisco-csta-ext:callDirection>
  <cisco-csta-ext:callingDirectoryNumber>2807</cisco-csta-ext:callingDirectoryNumber>
  <cisco-csta-ext:calledDirectoryNumber>2803</cisco-csta-ext:calledDirectoryNumber>
  <connectionAddress>
  <deviceIdentifier>2803</deviceIdentifier>
  </connectionAddress>
  <lastRedirectionDevice>
  <numberDialed>2229</numberDialed>
  </lastRedirectionDevice>
  <originalCalledAddress></originalCalledAddress>
  <cisco-csta-ext:callType>direct</cisco-csta-ext:callType>
  <cisco-csta-ext:parentGCID></cisco-csta-ext:parentGCID>
  </private>
  </privateData>
  </extensions>
  </cisco-csta-ext:ActiveEvent>
```

```
Jun 6 22:36:49.694: //-1/xxxxxxxxxxxx/SIP/Msg/ccsipDisplayMsg:
```

Sent:

```
NOTIFY sip:2229@192.0.2.9:5060;transport=tcp SIP/2.0
Via: SIP/2.0/TCP 192.0.2.7:5060;branch=z9hG4bK791F11
From: "Remote IP9" <sip:2807@192.0.2.7>;tag=4D31DE54-1489
To: <sip:2229@192.0.2.9>;tag=dsf8c9ed89
Call-ID: 3AEC0612-13B511DC-833F9790-DDA32D45@192.0.2.7
CSeq: 114 NOTIFY
Max-Forwards: 70
Date: Wed, 06 Jun 2007 22:36:49 GMT
User-Agent: Cisco-SIPGateway/IOS-12.x
Event: refer
```

```
Subscription-State: terminated;reason=noresource
Contact: <sip:192.0.2.7:5060;transport=tcp>
Content-Type: message/sipfrag
Content-Length: 18
```

```
SIP/2.0 200 OK
```

```
Jun 6 22:36:49.698: //-1/xxxxxxxxxxxx/SIP/Msg/ccsipDisplayMsg:
```

Received:

```
SIP/2.0 200 Ok
Via: SIP/2.0/TCP 192.0.2.7:5060;branch=z9hG4bK78AD9
To: <sip:CRS_controller@192.0.2.9>;tag=dscdc4ede7
From: <sip:2229@192.0.2.7>;tag=4D1FEEB0-1E6
Call-ID: 11811688227034@192.0.2.9
CSeq: 144 NOTIFY
Content-Length: 0
Allow-Events: refer
Allow-Events: telephone-event
```

```
Jun 6 22:36:49.698: //-1/xxxxxxxxxxxx/SIP/Msg/ccsipDisplayMsg:
```

Sent:

```
NOTIFY sip:CRS_controller@192.0.2.9:5060;transport=tcp SIP/2.0
Via: SIP/2.0/TCP 192.0.2.7:5060;branch=z9hG4bK7AEB5
From: <sip:2229@192.0.2.7>;tag=4D1FEEB0-1E6
To: <sip:CRS_controller@192.0.2.9>;tag=dscdc4ede7
Call-ID: 11811688227034@192.0.2.9
CSeq: 145 NOTIFY
Max-Forwards: 70
Date: Wed, 06 Jun 2007 22:36:49 GMT
User-Agent: Cisco-SIPGateway/IOS-12.x
Event: dialog
Subscription-State: active;expires=2800
Contact: <sip:2229@192.0.2.7:5060;transport=tcp>
Content-Type: application/csta+xml
Content-Length: 925
```

```
<?xml version="1.0" encoding="UTF-8"?>
<EstablishedEvent
  xmlns="http://www.ecma-international.org/standards/ecma-323/csta/ed3"
  xmlns:xsi="http://www.example.org/2001/XMLSchema-instance"
  xsi:schemaLocation="http://www.ecma-international.org/standards/ecma-323/csta/ed3
http://www.ecma-international.org/standards/ecma-323/csta/ed3/established-event.xsd"
  xmlns:cisco-csta-ext="cisco-csta-ext.xsd">
  <monitorCrossRefID>48F1DB51</monitorCrossRefID>
  <establishedConnection>
  <callID>39F2FFC7-13B5-11DC-833A-9790DDA32D45</callID>
  <deviceID>NULL</deviceID>
  </establishedConnection>
  <answeringDevice>
  <deviceIdentifier>NULL</deviceIdentifier>
  </answeringDevice>
  <callingDevice>
  <deviceIdentifier>2807</deviceIdentifier>
  </callingDevice>
  <calledDevice>
  <deviceIdentifier>2803</deviceIdentifier>
  </calledDevice>
  <lastRedirectionDevice>
  <numberDialed>NULL</numberDialed>
  </lastRedirectionDevice>
```

```
<cause>normal</cause>
</EstablishedEvent>
```

```
Jun  6 22:36:49.718: //-1/xxxxxxxxxxxx/SIP/Msg/ccsipDisplayMsg:
```

Received:

```
SIP/2.0 200 Ok
Via: SIP/2.0/TCP 192.0.2.7:5060;branch=z9hG4bK791F11
To: <sip:2229@192.0.2.9>;tag=dsf8c9ed89
From: "Remote IP9" <sip:2807@192.0.2.7>;tag=4D31DE54-1489
Call-ID: 3AEC0612-13B511DC-833F9790-DDA32D45@192.0.2.7
CSeq: 114 NOTIFY
Content-Length: 0
Allow-Events: refer
Allow-Events: telephone-event
```

```
Jun  6 22:36:49.718: //-1/xxxxxxxxxxxx/SIP/Msg/ccsipDisplayMsg:
```

Received:

```
SIP/2.0 200 Ok
Via: SIP/2.0/TCP 192.0.2.7:5060;branch=z9hG4bK7AEB5
To: <sip:CRS_controller@192.0.2.9>;tag=dscdc4ede7
From: <sip:2229@192.0.2.7>;tag=4D1FEEB0-1E6
Call-ID: 11811688227034@192.0.2.9
CSeq: 145 NOTIFY
Content-Length: 0
Allow-Events: refer
Allow-Events: telephone-event
```

```
Jun  6 22:36:49.718: //-1/xxxxxxxxxxxx/SIP/Msg/ccsipDisplayMsg:
```

Sent:

```
BYE sip:2229@192.0.2.9:5060;transport=tcp SIP/2.0
Via: SIP/2.0/TCP 192.0.2.7:5060;branch=z9hG4bK7BA7B
From: "Remote IP9" <sip:2807@192.0.2.7>;tag=4D31DE54-1489
To: <sip:2229@192.0.2.9>;tag=dsf8c9ed89
Date: Wed, 06 Jun 2007 22:36:47 GMT
Call-ID: 3AEC0612-13B511DC-833F9790-DDA32D45@192.0.2.7
User-Agent: Cisco-SIPGateway/IOS-12.x
Max-Forwards: 70
Timestamp: 1181169409
CSeq: 115 BYE
Content-Length: 0
```

```
Jun  6 22:36:49.718: //-1/xxxxxxxxxxxx/SIP/Msg/ccsipDisplayMsg:
```

Sent:

```
NOTIFY sip:CRS_controller@192.0.2.9:5060;transport=tcp SIP/2.0
Via: SIP/2.0/TCP 192.0.2.7:5060;branch=z9hG4bK7C1020
From: <sip:2229@192.0.2.7>;tag=4D1FEEB0-1E6
To: <sip:CRS_controller@192.0.2.9>;tag=dscdc4ede7
Call-ID: 11811688227034@192.0.2.9
CSeq: 146 NOTIFY
Max-Forwards: 70
Date: Wed, 06 Jun 2007 22:36:49 GMT
User-Agent: Cisco-SIPGateway/IOS-12.x
Event: dialog
Subscription-State: active;expires=2800
Contact: <sip:2229@192.0.2.7:5060;transport=tcp>
Content-Type: application/csta+xml
Content-Length: 1110
```

```
<?xml version="1.0" encoding="UTF-8"?>
<ConnectionClearedEvent
  xmlns="http://www.ecma-international.org/standards/ecma-323/csta/ed3"
  xmlns:xsi="http://www.example.org/2001/XMLSchema-instance"
  xsi:schemaLocation="http://www.ecma-international.org/standards/ecma-323/csta/ed3
http://www.ecma-international.org/standards/ecma-323/csta/ed3/connection-cleared-event.xsd
" xmlns:cisco-csta-ext="cisco-csta-ext.xsd">
<monitorCrossRefID>48F1DB51</monitorCrossRefID>
<droppedConnection>
<callID>39F2FFC7-13B5-11DC-833A-9790DDA32D45</callID>
<deviceID>2229</deviceID>
</droppedConnection>
<releasingDevice>
<deviceIdentifier>NULL</deviceIdentifier>
</releasingDevice>
<cause>transfer</cause>
<extensions>
<privateData>
<private>
<cisco-csta-ext:CallConnectionClearedPrivate>
<cisco-csta-ext:callDirection>FALSE</cisco-csta-ext:callDirection>
<cisco-csta-ext:callingDirectoryNumber>2807</cisco-csta-ext:callingDirectoryNumber>
<cisco-csta-ext:calledDirectoryNumber>2229</cisco-csta-ext:calledDirectoryNumber>
</cisco-csta-ext:CallConnectionClearedPrivate>
</private>
</privateData>
</extensions>
</ConnectionClearedEvent>
```

Jun 6 22:36:49.742: //-1/xxxxxxxxxxxx/SIP/Msg/ccsipDisplayMsg:

Received:

```
BYE sip:2807@192.0.2.7:5060;transport=tcp SIP/2.0
Via: SIP/2.0/TCP 192.0.2.9:5060;branch=z9hG4bKl83.ZS9nz+P+iXsfLQiSMw~~28
Max-Forwards: 70
To: <sip:2807@192.0.2.7>;tag=4D31DE54-1489
From: <sip:2229@192.0.2.9>;tag=dsf8c9ed89
Call-ID: 3AEC0612-13B511DC-833F9790-DDA32D45@192.0.2.7
CSeq: 4 BYE
Content-Length: 0
Allow: INVITE, BYE, CANCEL, ACK, NOTIFY
User-Agent: Cisco-CRS/4.6
Cisco-Gcid: 39F2FFC7-13B5-11DC-833A-9790DDA32D45
```

Jun 6 22:36:49.742: //-1/xxxxxxxxxxxx/SIP/Msg/ccsipDisplayMsg:

Received:

```
SIP/2.0 481 Call Leg/Transaction Does Not Exist
Via: SIP/2.0/TCP 192.0.2.7:5060;branch=z9hG4bK7BA7B
To: <sip:2229@192.0.2.9>;tag=dsf8c9ed89
From: "Remote IP9" <sip:2807@192.0.2.7>;tag=4D31DE54-1489
Call-ID: 3AEC0612-13B511DC-833F9790-DDA32D45@192.0.2.7
CSeq: 115 BYE
Content-Length: 0
```

Jun 6 22:36:49.742: //-1/xxxxxxxxxxxx/SIP/Msg/ccsipDisplayMsg:

Sent:

```
SIP/2.0 200 OK
Via: SIP/2.0/TCP 192.0.2.9:5060;branch=z9hG4bKl83.ZS9nz+P+iXsfLQiSMw~~28
From: <sip:2229@192.0.2.9>;tag=dsf8c9ed89
To: "Remote IP9" <sip:2807@192.0.2.7>;tag=4D31DE54-1489
```

Date: Wed, 06 Jun 2007 22:36:49 GMT
 Call-ID: 3AEC0612-13B511DC-833F9790-DDA32D45@192.0.2.7
 Server: Cisco-SIPGateway/IOS-12.x
 CSeq: 4 BYE
 Content-Length: 0

Jun 6 22:36:49.742: //-1/xxxxxxxxxxxx/SIP/Msg/ccsipDisplayMsg:

Received:

SIP/2.0 200 Ok
 Via: SIP/2.0/TCP 192.0.2.7:5060;branch=z9hG4bK7C1020
 To: <sip:CRS_controller@192.0.2.9>;tag=dscdc4ede7
 From: <sip:2229@192.0.2.7>;tag=4D1FEEB0-1E6
 Call-ID: 11811688227034@192.0.2.9
 CSeq: 146 NOTIFY
 Content-Length: 0
 Allow-Events: refer
 Allow-Events: telephone-event

Jun 6 22:36:49.746: //-1/xxxxxxxxxxxx/SIP/Msg/ccsipDisplayMsg:

Sent:

NOTIFY sip:CRS_controller@192.0.2.9:5060;transport=tcp SIP/2.0
 Via: SIP/2.0/TCP 192.0.2.7:5060;branch=z9hG4bK7D2416
 From: <sip:2229@192.0.2.7>;tag=4D1FEE90-31B
 To: <sip:CRS_controller@192.0.2.9>;tag=ds1e98edb8
 Call-ID: 11811688226563@192.0.2.9
 CSeq: 105 NOTIFY
 Max-Forwards: 70
 Date: Wed, 06 Jun 2007 22:36:49 GMT
 User-Agent: Cisco-SIPGateway/IOS-12.x
 Event: presence
 Subscription-State: active;expires=1616
 Contact: <sip:2229@192.0.2.7:5060;transport=tcp>
 Content-Type: application/pidf+xml
 Content-Length: 441

```
<?xml version="1.0" encoding="UTF-8"?><presence xmlns="urn:ietf:params:xml:ns:pidf"
entity="sip:2229@192.0.2.7" xmlns:e="urn:ietf:params:xml:ns:pidf:status:rpid"
xmlns:rpid="urn:ietf:params:xml:ns:pidf:status:rpid" xmlns:dm="urn:ietf:params:
xml:ns:pidf:data-model"><dm:person><status><basic>Open</basic></status></dm:person>
<tupleid="cisco-cme"><status><basic>Open</basic><rpid:activeIdle>idle</rpid:activeIdle>
</status></tuple></presence>
```

Jun 6 22:36:49.766: //-1/xxxxxxxxxxxx/SIP/Msg/ccsipDisplayMsg:

Received:

SIP/2.0 200 Ok
 Via: SIP/2.0/TCP 192.0.2.7:5060;branch=z9hG4bK7D2416
 To: <sip:CRS_controller@192.0.2.9>;tag=ds1e98edb8
 From: <sip:2229@192.0.2.7>;tag=4D1FEE90-31B
 Call-ID: 11811688226563@192.0.2.9
 CSeq: 105 NOTIFY
 Content-Length: 0
 Allow-Events: refer
 Allow-Events: telephone-event

Scenario 3: Call Forward

This scenario example displays message flow for the agent calling SCCP A but then the call is forwarded to SCCP B after ringing for ten seconds with no answer:

```
Jun  6 22:42:00.494: //-1/xxxxxxxxxxxx/SIP/Msg/ccsipDisplayMsg:
```

Sent:

```
NOTIFY sip:CRS_controller@192.0.2.9:5060;transport=tcp SIP/2.0
Via: SIP/2.0/TCP 192.0.2.7:5060;branch=z9hG4bK811925
From: <sip:2229@192.0.2.7>;tag=4D1FEEB0-1E6
To: <sip:CRS_controller@192.0.2.9>;tag=dscdc4ede7
Call-ID: 11811688227034@192.0.2.9
CSeq: 150 NOTIFY
Max-Forwards: 70
Date: Wed, 06 Jun 2007 22:42:00 GMT
User-Agent: Cisco-SIPGateway/IOS-12.x
Event: dialog
Subscription-State: active;expires=2800
Contact: <sip:2229@192.0.2.7:5060;transport=tcp>
Content-Type: application/csta+xml
Content-Length: 1084
```

```
<?xml version="1.0" encoding="UTF-8"?>
<OriginatedEvent
  xmlns="http://www.ecma-international.org/standards/ecma-323/csta/ed3"
  xmlns:xsi="http://www.example.org/2001/XMLSchema-instance"
  xsi:schemaLocation="http://www.ecma-international.org/standards/ecma-323/csta/ed3
http://www.ecma-international.org/standards/ecma-323/csta/ed3/originated-event.xsd"
  xmlns:cisco-csta-ext="cisco-csta-ext.xsd">
  <monitorCrossRefID>48F1DB51</monitorCrossRefID>
  <originatedConnection>
  <callID>F92F4B44-13B5-11DC-8346-9790DDA32D45</callID>
  <deviceID>2803</deviceID>
  </originatedConnection>
  <callingDevice>
  <deviceIdentifier>2803</deviceIdentifier>
  </callingDevice>
  <calledDevice>
  <deviceIdentifier></deviceIdentifier>
  </calledDevice>
  <cause>normal</cause>
  <extensions>
  <privateData>
  <private>
  <cisco-csta-ext:originatedPrivate>
  <cisco-csta-ext:callDirection>FALSE</cisco-csta-ext:callDirection>
  <cisco-csta-ext:callType>direct</cisco-csta-ext:callType>
  <cisco-csta-ext:parentGCID></cisco-csta-ext:parentGCID>
  </cisco-csta-ext:originatedPrivate>
  </private>
  </privateData>
  </extensions>
  </OriginatedEvent>
```

```
Jun  6 22:42:00.502: //-1/xxxxxxxxxxxx/SIP/Msg/ccsipDisplayMsg:
```

Received:

```
SIP/2.0 200 Ok
Via: SIP/2.0/TCP 192.0.2.7:5060;branch=z9hG4bK811925
To: <sip:CRS_controller@192.0.2.9>;tag=dscdc4ede7
From: <sip:2229@192.0.2.7>;tag=4D1FEEB0-1E6
```

```

Call-ID: 11811688227034@192.0.2.9
CSeq: 150 NOTIFY
Content-Length: 0
Allow-Events: refer
Allow-Events: telephone-event

```

```
Jun 6 22:42:00.502: //-1/xxxxxxxxxxxx/SIP/Msg/ccsipDisplayMsg:
```

Sent:

```

NOTIFY sip:CRS_controller@192.0.2.9:5060;transport=tcp SIP/2.0
Via: SIP/2.0/TCP 192.0.2.7:5060;branch=z9hG4bK82A55
From: <sip:2229@192.0.2.7>;tag=4D1FEEB0-1E6
To: <sip:CRS_controller@192.0.2.9>;tag=dscdc4ede7
Call-ID: 11811688227034@192.0.2.9
CSeq: 151 NOTIFY
Max-Forwards: 70
Date: Wed, 06 Jun 2007 22:42:00 GMT
User-Agent: Cisco-SIPGateway/IOS-12.x
Event: dialog
Subscription-State: active;expires=2800
Contact: <sip:2229@192.0.2.7:5060;transport=tcp>
Content-Type: application/csta+xml
Content-Length: 1190

```

```

<?xml version="1.0" encoding="UTF-8"?>
<cisco-csta-ext:ActiveEvent
  xmlns="http://www.ecma-international.org/standards/ecma-323/csta/ed3"
  xmlns:xsi="http://www.example.org/2001/XMLSchema-instance"
  xsi:schemaLocation="http://www.ecma-international.org/standards/ecma-323/csta/ed3
http://www.ecma-international.org/standards/ecma-323/csta/ed3/private-event.xsd"
  xmlns:cisco-csta-ext="cisco-csta-ext.xsd">
  <monitorCrossRefID>48F1DB51</monitorCrossRefID>
  <extensions>
  <privateData>
  <private>
  <cisco-csta-ext:gcid>F92F4B44-13B5-11DC-8346-9790DDA32D45</cisco-csta-ext:gcid>
  <cisco-csta-ext:callDirection>FALSE</cisco-csta-ext:callDirection>
  <cisco-csta-ext:callingDirectoryNumber>2803</cisco-csta-ext:callingDirectoryNumber>
  <cisco-csta-ext:calledDirectoryNumber></cisco-csta-ext:calledDirectoryNumber>
  <connectionAddress>
  <deviceIdentifier>2803</deviceIdentifier>
  </connectionAddress>
  <lastRedirectionDevice>
  <numberDialed></numberDialed>
  </lastRedirectionDevice>
  <originalCalledAddress></originalCalledAddress>
  <cisco-csta-ext:callType>direct</cisco-csta-ext:callType>
  <cisco-csta-ext:parentGCID></cisco-csta-ext:parentGCID>
  </private>
  </privateData>
  </extensions>
  </cisco-csta-ext:ActiveEvent>

```

```
Jun 6 22:42:00.514: //-1/xxxxxxxxxxxx/SIP/Msg/ccsipDisplayMsg:
```

Received:

```

SIP/2.0 200 Ok
Via: SIP/2.0/TCP 192.0.2.7:5060;branch=z9hG4bK82A55
To: <sip:CRS_controller@192.0.2.9>;tag=dscdc4ede7
From: <sip:2229@192.0.2.7>;tag=4D1FEEB0-1E6
Call-ID: 11811688227034@192.0.2.9
CSeq: 151 NOTIFY
Content-Length: 0

```

```
Allow-Events: refer
Allow-Events: telephone-event
```

```
Jun  6 22:42:02.150: DestCheckTeleUnassBusy cvif OperStatus 5, Type 1A, status 40020
```

```
Jun  6 22:42:02.154: //-1/xxxxxxxxxxxx/SIP/Msg/ccsipDisplayMsg:
```

Sent:

```
NOTIFY sip:CRS_controller@192.0.2.9:5060;transport=tcp SIP/2.0
Via: SIP/2.0/TCP 192.0.2.7:5060;branch=z9hG4bK8317D7
From: <sip:2229@192.0.2.7>;tag=4D1FEEB0-1E6
To: <sip:CRS_controller@192.0.2.9>;tag=dscdc4ede7
Call-ID: 11811688227034@192.0.2.9
CSeq: 152 NOTIFY
Max-Forwards: 70
Date: Wed, 06 Jun 2007 22:42:02 GMT
User-Agent: Cisco-SIPGateway/IOS-12.x
Event: dialog
Subscription-State: active;expires=2800
Contact: <sip:2229@192.0.2.7:5060;transport=tcp>
Content-Type: application/csta+xml
Content-Length: 1268
```

```
<?xml version="1.0" encoding="UTF-8"?>
<OfferedEvent
  xmlns="http://www.ecma-international.org/standards/ecma-323/csta/ed3"
  xmlns:xsi="http://www.example.org/2001/XMLSchema-instance"
  xsi:schemaLocation="http://www.ecma-international.org/standards/ecma-323/csta/ed3
http://www.ecma-international.org/standards/ecma-323/csta/ed3/offered-event.xsd"
  xmlns:cisco-csta-ext="cisco-csta-ext.xsd">
  <monitorCrossRefID>48F1DB51</monitorCrossRefID>
  <offeredConnection>
    <callID>F92F4B44-13B5-11DC-8346-9790DDA32D45</callID>
    <deviceID>2807</deviceID>
  </offeredConnection>
  <offeredDevice>
    <deviceIdentifier>NULL</deviceIdentifier>
  </offeredDevice>
  <callingDevice>
    <deviceIdentifier>2803</deviceIdentifier>
  </callingDevice>
  <calledDevice>
    <deviceIdentifier>2807</deviceIdentifier>
  </calledDevice>
  <lastRedirectionDevice>
    <numberDialed></numberDialed>
  </lastRedirectionDevice>
  <cause>normal</cause>
  <extensions>
    <privateData>
      <private>
        <cisco-csta-ext:OfferedPrivate>
          <cisco-csta-ext:callDirection>FALSE</cisco-csta-ext:callDirection>
          <cisco-csta-ext:callType>direct</cisco-csta-ext:callType>
          <cisco-csta-ext:parentGCID></cisco-csta-ext:parentGCID>
          <originalCalledAddress></originalCalledAddress>
        </cisco-csta-ext:OfferedPrivate>
      </private>
    </privateData>
  </extensions>
</OfferedEvent>
```

Jun 6 22:42:02.162: //-1/xxxxxxxxxxxx/SIP/Msg/ccsipDisplayMsg:

Received:

SIP/2.0 200 Ok
 Via: SIP/2.0/TCP 192.0.2.7:5060;branch=z9hG4bK8317D7
 To: <sip:CRS_controller@192.0.2.9>;tag=dscdc4ede7
 From: <sip:2229@192.0.2.7>;tag=4D1FEEB0-1E6
 Call-ID: 11811688227034@192.0.2.9
 CSeq: 152 NOTIFY
 Content-Length: 0
 Allow-Events: refer
 Allow-Events: telephone-event

Jun 6 22:42:02.162: //-1/xxxxxxxxxxxx/SIP/Msg/ccsipDisplayMsg:

Sent:

NOTIFY sip:CRS_controller@192.0.2.9:5060;transport=tcp SIP/2.0
 Via: SIP/2.0/TCP 192.0.2.7:5060;branch=z9hG4bK8413CF
 From: <sip:2229@192.0.2.7>;tag=4D1FEEB0-1E6
 To: <sip:CRS_controller@192.0.2.9>;tag=dscdc4ede7
 Call-ID: 11811688227034@192.0.2.9
 CSeq: 153 NOTIFY
 Max-Forwards: 70
 Date: Wed, 06 Jun 2007 22:42:02 GMT
 User-Agent: Cisco-SIPGateway/IOS-12.x
 Event: dialog
 Subscription-State: active;expires=2800
 Contact: <sip:2229@192.0.2.7:5060;transport=tcp>
 Content-Type: application/csta+xml
 Content-Length: 1218

```
<?xml version="1.0" encoding="UTF-8"?>
<DeliveredEvent
  xmlns="http://www.ecma-international.org/standards/ecma-323/csta/ed3"
  xmlns:xsi="http://www.example.org/2001/XMLSchema-instance"
  xsi:schemaLocation="http://www.ecma-international.org/standards/ecma-323/csta/ed3
http://www.ecma-international.org/standards/ecma-323/csta/ed3/delivered-event.xsd"
  xmlns:cisco-csta-ext="cisco-csta-ext.xsd">
  <monitorCrossRefID>48F1DB51</monitorCrossRefID>
  <connection>
  <callID>F92F4B44-13B5-11DC-8346-9790DDA32D45</callID>
  <deviceID>2807</deviceID>
  </connection>
  <alertingDevice>
  <deviceIdentifier>NULL</deviceIdentifier>
  </alertingDevice>
  <callingDevice>
  <deviceIdentifier>2803</deviceIdentifier>
  </callingDevice>
  <calledDevice>
  <deviceIdentifier>2807</deviceIdentifier>
  </calledDevice>
  <lastRedirectionDevice>
  <numberDialed></numberDialed>
  </lastRedirectionDevice>
  <cause>normal</cause>
  <extensions>
  <privateData>
  <private>
  <cisco-csta-ext:deliveredPrivate>
  <cisco-csta-ext:callDirection>FALSE</cisco-csta-ext:callDirection>
  <cisco-csta-ext:callType>direct</cisco-csta-ext:callType>
  <cisco-csta-ext:parentGCID></cisco-csta-ext:parentGCID>
  </cisco-csta-ext:deliveredPrivate>
```

```

</private>
</privateData>
</extensions>
</DeliveredEvent>

```

Jun 6 22:42:02.174: //-1/xxxxxxxxxxxx/SIP/Msg/ccsipDisplayMsg:

Received:

```

SIP/2.0 200 Ok
Via: SIP/2.0/TCP 192.0.2.7:5060;branch=z9hG4bK8413CF
To: <sip:CRS_controller@192.0.2.9>;tag=dscdc4ede7
From: <sip:2229@192.0.2.7>;tag=4D1FEEB0-1E6
Call-ID: 11811688227034@192.0.2.9
CSeq: 153 NOTIFY
Content-Length: 0
Allow-Events: refer
Allow-Events: telephone-event

```

Jun 6 22:42:12.154: DestCheckTeleUnassBusy cvif OperStatus 5, Type 1A, status 40020

Jun 6 22:42:12.158: //-1/xxxxxxxxxxxx/SIP/Msg/ccsipDisplayMsg:

Sent:

```

NOTIFY sip:CRS_controller@192.0.2.9:5060;transport=tcp SIP/2.0
Via: SIP/2.0/TCP 192.0.2.7:5060;branch=z9hG4bK858CD
From: <sip:2229@192.0.2.7>;tag=4D1FEEB0-1E6
To: <sip:CRS_controller@192.0.2.9>;tag=dscdc4ede7
Call-ID: 11811688227034@192.0.2.9
CSeq: 154 NOTIFY
Max-Forwards: 70
Date: Wed, 06 Jun 2007 22:42:12 GMT
User-Agent: Cisco-SIPGateway/IOS-12.x
Event: dialog
Subscription-State: active;expires=2800
Contact: <sip:2229@192.0.2.7:5060;transport=tcp>
Content-Type: application/csta+xml
Content-Length: 1276

```

```

<?xml version="1.0" encoding="UTF-8"?>
<OfferedEvent
  xmlns="http://www.ecma-international.org/standards/ecma-323/csta/ed3"
  xmlns:xsi="http://www.example.org/2001/XMLSchema-instance"
  xsi:schemaLocation="http://www.ecma-international.org/standards/ecma-323/csta/ed3
http://www.ecma-international.org/standards/ecma-323/csta/ed3/offered-event.xsd"
  xmlns:cisco-csta-ext="cisco-csta-ext.xsd">
  <monitorCrossRefID>48F1DB51</monitorCrossRefID>
  <offeredConnection>
  <callID>F92F4B44-13B5-11DC-8346-9790DDA32D45</callID>
  <deviceID>2808</deviceID>
  </offeredConnection>
  <offeredDevice>
  <deviceIdentifier>NULL</deviceIdentifier>
  </offeredDevice>
  <callingDevice>
  <deviceIdentifier>2803</deviceIdentifier>
  </callingDevice>
  <calledDevice>
  <deviceIdentifier>2808</deviceIdentifier>
  </calledDevice>
  <lastRedirectionDevice>
  <numberDialed>2807</numberDialed>
  </lastRedirectionDevice>

```

```

<cause>normal</cause>
<extensions>
<privateData>
<private>
<cisco-csta-ext:OfferedPrivate>
<cisco-csta-ext:callDirection>FALSE</cisco-csta-ext:callDirection>
<cisco-csta-ext:callType>direct</cisco-csta-ext:callType>
<cisco-csta-ext:parentGCID></cisco-csta-ext:parentGCID>
<originalCalledAddress>2807</originalCalledAddress>
</cisco-csta-ext:OfferedPrivate>
</private>
</privateData>
</extensions>
</OfferedEvent>

```

Jun 6 22:42:12.166: //-1/xxxxxxxxxxxx/SIP/Msg/ccsipDisplayMsg:

Received:

```

SIP/2.0 200 Ok
Via: SIP/2.0/TCP 192.0.2.7:5060;branch=z9hG4bK858CD
To: <sip:CRS_controller@192.0.2.9>;tag=dscdc4ede7
From: <sip:2229@192.0.2.7>;tag=4D1FEEB0-1E6
Call-ID: 11811688227034@192.0.2.9
CSeq: 154 NOTIFY
Content-Length: 0
Allow-Events: refer
Allow-Events: telephone-event

```

Jun 6 22:42:12.170: //-1/xxxxxxxxxxxx/SIP/Msg/ccsipDisplayMsg:

Sent:

```

NOTIFY sip:CRS_controller@192.0.2.9:5060;transport=tcp SIP/2.0
Via: SIP/2.0/TCP 192.0.2.7:5060;branch=z9hG4bK863E2
From: <sip:2229@192.0.2.7>;tag=4D1FEEB0-1E6
To: <sip:CRS_controller@192.0.2.9>;tag=dscdc4ede7
Call-ID: 11811688227034@192.0.2.9
CSeq: 155 NOTIFY
Max-Forwards: 70
Date: Wed, 06 Jun 2007 22:42:12 GMT
User-Agent: Cisco-SIPGateway/IOS-12.x
Event: dialog
Subscription-State: active;expires=2800
Contact: <sip:2229@192.0.2.7:5060;transport=tcp>
Content-Type: application/csta+xml
Content-Length: 1222

```

```

<?xml version="1.0" encoding="UTF-8"?>
<DeliveredEvent
  xmlns="http://www.ecma-international.org/standards/ecma-323/csta/ed3"
  xmlns:xsi="http://www.example.org/2001/XMLSchema-instance"
  xsi:schemaLocation="http://www.ecma-international.org/standards/ecma-323/csta/ed3
http://www.ecma-international.org/standards/ecma-323/csta/ed3/delivered-event.xsd"
  xmlns:cisco-csta-ext="cisco-csta-ext.xsd">
  <monitorCrossRefID>48F1DB51</monitorCrossRefID>
  <connection>
  <callID>F92F4B44-13B5-11DC-8346-9790DDA32D45</callID>
  <deviceID>2808</deviceID>
  </connection>
  <alertingDevice>
  <deviceIdentifier>NULL</deviceIdentifier>
  </alertingDevice>
  <callingDevice>
  <deviceIdentifier>2803</deviceIdentifier>

```

```

</callingDevice>
<calledDevice>
<deviceIdentifier>2808</deviceIdentifier>
</calledDevice>
<lastRedirectionDevice>
<numberDialed>2807</numberDialed>
</lastRedirectionDevice>
<cause>normal</cause>
<extensions>
<privateData>
<private>
<cisco-csta-ext:deliveredPrivate>
<cisco-csta-ext:callDirection>FALSE</cisco-csta-ext:callDirection>
<cisco-csta-ext:callType>direct</cisco-csta-ext:callType>
<cisco-csta-ext:parentGCID></cisco-csta-ext:parentGCID>
</cisco-csta-ext:deliveredPrivate>
</private>
</privateData>
</extensions>
</DeliveredEvent>

```

Jun 6 22:42:12.182: //-1/xxxxxxxxxxxx/SIP/Msg/ccsipDisplayMsg:

Received:

```

SIP/2.0 200 Ok
Via: SIP/2.0/TCP 192.0.2.7:5060;branch=z9hG4bK863E2
To: <sip:CRS_controller@192.0.2.9>;tag=dscdc4ede7
From: <sip:2229@192.0.2.7>;tag=4D1FEEB0-1E6
Call-ID: 11811688227034@192.0.2.9
CSeq: 155 NOTIFY
Content-Length: 0
Allow-Events: refer
Allow-Events: telephone-event

```

Jun 6 22:42:12.182: //-1/xxxxxxxxxxxx/SIP/Msg/ccsipDisplayMsg:

Sent:

```

NOTIFY sip:CRS_controller@192.0.2.9:5060;transport=tcp SIP/2.0
Via: SIP/2.0/TCP 192.0.2.7:5060;branch=z9hG4bK87291
From: <sip:2229@192.0.2.7>;tag=4D1FEEB0-1E6
To: <sip:CRS_controller@192.0.2.9>;tag=dscdc4ede7
Call-ID: 11811688227034@192.0.2.9
CSeq: 156 NOTIFY
Max-Forwards: 70
Date: Wed, 06 Jun 2007 22:42:12 GMT
User-Agent: Cisco-SIPGateway/IOS-12.x
Event: dialog
Subscription-State: active;expires=2800
Contact: <sip:2229@192.0.2.7:5060;transport=tcp>
Content-Type: application/csta+xml
Content-Length: 1121

```

```

<?xml version="1.0" encoding="UTF-8"?>
<ConnectionClearedEvent
  xmlns="http://www.ecma-international.org/standards/ecma-323/csta/ed3"
  xmlns:xsi="http://www.example.org/2001/XMLSchema-instance"
  xsi:schemaLocation="http://www.ecma-international.org/standards/ecma-323/csta/ed3
http://www.ecma-international.org/standards/ecma-323/csta/ed3/connection-cleared-event.xsd
" xmlns:cisco-csta-ext="cisco-csta-ext.xsd">
  <monitorCrossRefID>48F1DB51</monitorCrossRefID>
  <droppedConnection>
  <callID>F92F4B44-13B5-11DC-8346-9790DDA32D45</callID>
  <deviceID>2807</deviceID>

```

```

</droppedConnection>
<releasingDevice>
<deviceIdentifier>NULL</deviceIdentifier>
</releasingDevice>
<cause>callForwardNoAnswer</cause>
<extensions>
<privateData>
<private>
<cisco-csta-ext:CallConnectionClearedPrivate>
<cisco-csta-ext:callDirection>FALSE</cisco-csta-ext:callDirection>
<cisco-csta-ext:callingDirectoryNumber>2803</cisco-csta-ext:callingDirectoryNumber>
<cisco-csta-ext:calledDirectoryNumber>2807</cisco-csta-ext:calledDirectoryNumber>
</cisco-csta-ext:CallConnectionClearedPrivate>
</private>
</privateData>
</extensions>
</ConnectionClearedEvent>

```

Jun 6 22:42:12.194: //-1/xxxxxxxxxxxx/SIP/Msg/ccsipDisplayMsg:

Received:

```

SIP/2.0 200 Ok
Via: SIP/2.0/TCP 192.0.2.7:5060;branch=z9hG4bK87291
To: <sip:CRS_controller@192.0.2.9>;tag=dscdc4ede7
From: <sip:2229@192.0.2.7>;tag=4D1FEEB0-1E6
Call-ID: 11811688227034@192.0.2.9
CSeq: 156 NOTIFY
Content-Length: 0
Allow-Events: refer
Allow-Events: telephone-event

```

Jun 6 22:42:16.766: //-1/xxxxxxxxxxxx/SIP/Msg/ccsipDisplayMsg:

Sent:

```

NOTIFY sip:CRS_controller@192.0.2.9:5060;transport=tcp SIP/2.0
Via: SIP/2.0/TCP 192.0.2.7:5060;branch=z9hG4bK8829B
From: <sip:2229@192.0.2.7>;tag=4D1FEEB0-1E6
To: <sip:CRS_controller@192.0.2.9>;tag=dscdc4ede7
Call-ID: 11811688227034@192.0.2.9
CSeq: 157 NOTIFY
Max-Forwards: 70
Date: Wed, 06 Jun 2007 22:42:16 GMT
User-Agent: Cisco-SIPGateway/IOS-12.x
Event: dialog
Subscription-State: active;expires=2800
Contact: <sip:2229@192.0.2.7:5060;transport=tcp>
Content-Type: application/csta+xml
Content-Length: 1202

```

```

<?xml version="1.0" encoding="UTF-8"?>
<cisco-csta-ext:ActiveEvent
  xmlns="http://www.ecma-international.org/standards/ecma-323/csta/ed3"
  xmlns:xsi="http://www.example.org/2001/XMLSchema-instance"
  xsi:schemaLocation="http://www.ecma-international.org/standards/ecma-323/csta/ed3
http://www.ecma-international.org/standards/ecma-323/csta/ed3/private-event.xsd"
  xmlns:cisco-csta-ext="cisco-csta-ext.xsd">
<monitorCrossRefID>48F1DB51</monitorCrossRefID>
<extensions>
<privateData>
<private>
<cisco-csta-ext:gcid>F92F4B44-13B5-11DC-8346-9790DDA32D45</cisco-csta-ext:gcid>
<cisco-csta-ext:callDirection>FALSE</cisco-csta-ext:callDirection>
<cisco-csta-ext:callingDirectoryNumber>2803</cisco-csta-ext:callingDirectoryNumber>

```



```

<cisco-csta-ext:calledDirectoryNumber>2808</cisco-csta-ext:calledDirectoryNumber>
<connectionAddress>
<deviceIdentifier>2808</deviceIdentifier>
</connectionAddress>
<lastRedirectionDevice>
<numberDialed>2807</numberDialed>
</lastRedirectionDevice>
<originalCalledAddress>2807</originalCalledAddress>
<cisco-csta-ext:callType>direct</cisco-csta-ext:callType>
<cisco-csta-ext:parentGCID></cisco-csta-ext:parentGCID>
</private>
</privateData>
</extensions>
</cisco-csta-ext:ActiveEvent>

```

Jun 6 22:42:16.774: //-1/xxxxxxxxxxxx/SIP/Msg/ccsipDisplayMsg:

Received:

```

SIP/2.0 200 Ok
Via: SIP/2.0/TCP 192.0.2.7:5060;branch=z9hG4bK8829B
To: <sip:CRS_controller@192.0.2.9>;tag=dscdc4ede7
From: <sip:2229@192.0.2.7>;tag=4D1FEEB0-1E6
Call-ID: 11811688227034@192.0.2.9
CSeq: 157 NOTIFY
Content-Length: 0
Allow-Events: refer
Allow-Events: telephone-event

```

Jun 6 22:42:16.774: //-1/xxxxxxxxxxxx/SIP/Msg/ccsipDisplayMsg:

Sent:

```

NOTIFY sip:CRS_controller@192.0.2.9:5060;transport=tcp SIP/2.0
Via: SIP/2.0/TCP 192.0.2.7:5060;branch=z9hG4bK8916B
From: <sip:2229@192.0.2.7>;tag=4D1FEEB0-1E6
To: <sip:CRS_controller@192.0.2.9>;tag=dscdc4ede7
Call-ID: 11811688227034@192.0.2.9
CSeq: 158 NOTIFY
Max-Forwards: 70
Date: Wed, 06 Jun 2007 22:42:16 GMT
User-Agent: Cisco-SIPGateway/IOS-12.x
Event: dialog
Subscription-State: active;expires=2800
Contact: <sip:2229@192.0.2.7:5060;transport=tcp>
Content-Type: application/csta+xml
Content-Length: 925

```

```

<?xml version="1.0" encoding="UTF-8"?>
<EstablishedEvent
  xmlns="http://www.ecma-international.org/standards/ecma-323/csta/ed3"
  xmlns:xsi="http://www.example.org/2001/XMLSchema-instance"
  xsi:schemaLocation="http://www.ecma-international.org/standards/ecma-323/csta/ed3
http://www.ecma-international.org/standards/ecma-323/csta/ed3/established-event.xsd"
  xmlns:cisco-csta-ext="cisco-csta-ext.xsd">
  <monitorCrossRefID>48F1DB51</monitorCrossRefID>
  <establishedConnection>
  <callID>F92F4B44-13B5-11DC-8346-9790DDA32D45</callID>
  <deviceID>NULL</deviceID>
  </establishedConnection>
  <answeringDevice>
  <deviceIdentifier>NULL</deviceIdentifier>
  </answeringDevice>
  <callingDevice>
  <deviceIdentifier>2803</deviceIdentifier>

```

```
</callingDevice>  
<calledDevice>  
<deviceIdentifier>2808</deviceIdentifier>  
</calledDevice>  
<lastRedirectionDevice>  
<numberDialed>NULL</numberDialed>  
</lastRedirectionDevice>  
<cause>normal</cause>  
</EstablishedEvent>
```

Jun 6 22:42:16.794: //-1/xxxxxxxxxxxx/SIP/Msg/ccsipDisplayMsg:

Received:

```
SIP/2.0 200 Ok  
Via: SIP/2.0/TCP 192.0.2.7:5060;branch=z9hG4bK8916B  
To: <sip:CRS_controller@192.0.2.9>;tag=dscdc4ede7  
From: <sip:2229@192.0.2.7>;tag=4D1FEEB0-1E6  
Call-ID: 11811688227034@192.0.2.9  
CSeq: 158 NOTIFY  
Content-Length: 0  
Allow-Events: refer  
Allow-Events: telephone-event
```

Scenario 4: Consult Transfer

This example scenario continues where scenario 2 left off. From this point, user agent (Ag) receives call, initiates consult transfer to SCCP endpoint B, and then commits transfer while endpoint B is ringing:



Note The primary callID is derived from the parentGCID of the consult call.

```
Jun  6 22:50:25.514: //-1/xxxxxxxxxxxx/SIP/Msg/ccsipDisplayMsg:
```

Received:

```
REGISTER sip:192.0.2.7:5060;transport=tcp SIP/2.0
Via: SIP/2.0/TCP 192.0.2.9:5060;branch=z9hG4bKl83.ZS9nz+P+iXsfLQiSMw~~44
Max-Forwards: 70
To: <sip:CRS_controller@192.0.2.7>
From: <sip:CRS_controller@192.0.2.7>;tag=dsa8afec60
Call-ID: 11811688223121@192.0.2.9
CSeq: 26 REGISTER
Content-Length: 0
Contact: <sip:CRS_controller@192.0.2.9:5060;transport=tcp>;expires=160
Allow: INVITE, BYE, CANCEL, ACK, NOTIFY
User-Agent: Cisco-CRS/4.6
X-cisco-session-server: CRS1
```

```
Jun  6 22:50:25.514: //-1/xxxxxxxxxxxx/SIP/Msg/ccsipDisplayMsg:
```

Sent:

```
SIP/2.0 100 Trying
Via: SIP/2.0/TCP 192.0.2.9:5060;branch=z9hG4bKl83.ZS9nz+P+iXsfLQiSMw~~44
From: <sip:CRS_controller@192.0.2.7>;tag=dsa8afec60
To: <sip:CRS_controller@192.0.2.7>
Date: Wed, 06 Jun 2007 22:50:25 GMT
Call-ID: 11811688223121@192.0.2.9
Server: Cisco-SIPGateway/IOS-12.x
CSeq: 26 REGISTER
Content-Length: 0
```

```
Jun  6 22:50:25.514: //-1/xxxxxxxxxxxx/SIP/Msg/ccsipDisplayMsg:
```

Sent:

```
SIP/2.0 200 OK
Via: SIP/2.0/TCP 192.0.2.9:5060;branch=z9hG4bKl83.ZS9nz+P+iXsfLQiSMw~~44
From: <sip:CRS_controller@192.0.2.7>;tag=dsa8afec60
To: <sip:CRS_controller@192.0.2.7>;tag=4D3E71FC-21D5
Date: Wed, 06 Jun 2007 22:50:25 GMT
Call-ID: 11811688223121@192.0.2.9
Server: Cisco-SIPGateway/IOS-12.x
CSeq: 26 REGISTER
X-cisco-referenceID: 48F1DB51
Contact: <sip:CRS_controller@192.0.2.9:5060;transport=tcp>;expires=160
Expires: 160
Content-Length: 0
```

```
Jun  6 22:50:29.402: //-1/xxxxxxxxxxxx/SIP/Msg/ccsipDisplayMsg:
```

Sent:

```
NOTIFY sip:CRS_controller@192.0.2.9:5060;transport=tcp SIP/2.0
Via: SIP/2.0/TCP 192.0.2.7:5060;branch=z9hG4bKA9B87
From: <sip:2229@192.0.2.7>;tag=4D1FEEB0-1E6
To: <sip:CRS_controller@192.0.2.9>;tag=dscdc4ede7
```

Call-ID: 11811688227034@192.0.2.9
 CSeq: 172 NOTIFY
 Max-Forwards: 70
 Date: Wed, 06 Jun 2007 22:50:29 GMT
 User-Agent: Cisco-SIPGateway/IOS-12.x
 Event: dialog
 Subscription-State: active;expires=2800
 Contact: <sip:2229@192.0.2.7:5060;transport=tcp>
 Content-Type: application/csta+xml
 Content-Length: 1024

```

<?xml version="1.0" encoding="UTF-8"?>
<HeldEvent
  xmlns="http://www.ecma-international.org/standards/ecma-323/csta/ed3"
  xmlns:xsi="http://www.example.org/2001/XMLSchema-instance"
  xsi:schemaLocation="http://www.ecma-international.org/standards/ecma-323/csta/ed3
http://www.ecma-international.org/standards/ecma-323/csta/ed3/held-event.xsd"
  xmlns:cisco-csta-ext="cisco-csta-ext.xsd">
  <monitorCrossRefID>48F1DB51</monitorCrossRefID>
  <heldConnection>
  <callID>192BA764-13B7-11DC-8358-9790DDA32D45</callID>
  <deviceID>2803</deviceID>
  </heldConnection>
  <holdingDevice>
  <deviceIdentifier>NULL</deviceIdentifier>
  </holdingDevice>
  <cause>normal</cause>
  <extensions>
  <privateData>
  <private>
  <cisco-csta-ext:HeldPrivate>
  <cisco-csta-ext:callDirection>FALSE</cisco-csta-ext:callDirection>
  <cisco-csta-ext:callingDirectoryNumber>2807</cisco-csta-ext:callingDirectoryNumber>
  <cisco-csta-ext:calledDirectoryNumber>2803</cisco-csta-ext:calledDirectoryNumber>
  </cisco-csta-ext:HeldPrivate>
  </private>
  </privateData>
  </extensions>
  </HeldEvent>
  
```

Jun 6 22:50:29.414: //-1/xxxxxxxxxxxx/SIP/Msg/ccsipDisplayMsg:

Received:

SIP/2.0 200 Ok
 Via: SIP/2.0/TCP 192.0.2.7:5060;branch=z9hG4bKA9B87
 To: <sip:CRS_controller@192.0.2.9>;tag=dscdc4ede7
 From: <sip:2229@192.0.2.7>;tag=4D1FEEB0-1E6
 Call-ID: 11811688227034@192.0.2.9
 CSeq: 172 NOTIFY
 Content-Length: 0
 Allow-Events: refer
 Allow-Events: telephone-event

Jun 6 22:50:31.006: //-1/xxxxxxxxxxxx/SIP/Msg/ccsipDisplayMsg:

Sent:

NOTIFY sip:CRS_controller@192.0.2.9:5060;transport=tcp SIP/2.0
 Via: SIP/2.0/TCP 192.0.2.7:5060;branch=z9hG4bKAA19B5
 From: <sip:2229@192.0.2.7>;tag=4D1FEEB0-1E6
 To: <sip:CRS_controller@192.0.2.9>;tag=dscdc4ede7
 Call-ID: 11811688227034@192.0.2.9
 CSeq: 173 NOTIFY
 Max-Forwards: 70

```

Date: Wed, 06 Jun 2007 22:50:31 GMT
User-Agent: Cisco-SIPGateway/IOS-12.x
Event: dialog
Subscription-State: active;expires=2800
Contact: <sip:2229@192.0.2.7:5060;transport=tcp>
Content-Type: application/csta+xml
Content-Length: 1121

<?xml version="1.0" encoding="UTF-8"?>
<OriginatedEvent
  xmlns="http://www.ecma-international.org/standards/ecma-323/csta/ed3"
  xmlns:xsi="http://www.example.org/2001/XMLSchema-instance"
  xsi:schemaLocation="http://www.ecma-international.org/standards/ecma-323/csta/ed3
http://www.ecma-international.org/standards/ecma-323/csta/ed3/originated-event.xsd"
  xmlns:cisco-csta-ext="cisco-csta-ext.xsd">
  <monitorCrossRefID>48F1DB51</monitorCrossRefID>
  <originatedConnection>
  <callID>29793E66-13B7-11DC-8361-9790DDA32D45</callID>
  <deviceID>2803</deviceID>
  </originatedConnection>
  <callingDevice>
  <deviceIdentifier>2803</deviceIdentifier>
  </callingDevice>
  <calledDevice>
  <deviceIdentifier></deviceIdentifier>
  </calledDevice>
  <cause>normal</cause>
  <extensions>
  <privateData>
  <private>
  <cisco-csta-ext:originatedPrivate>
  <cisco-csta-ext:callDirection>FALSE</cisco-csta-ext:callDirection>
  <cisco-csta-ext:callType>consult</cisco-csta-ext:callType>
  <cisco-csta-ext:parentGCID>192BA764-13B7-11DC-8358-9790DDA32D45</cisco-csta-ext:parentGCID>
  </cisco-csta-ext:originatedPrivate>
  </private>
  </privateData>
  </extensions>
  </OriginatedEvent>

```

Jun 6 22:50:31.010: //-1/xxxxxxxxxxxx/SIP/Msg/ccsipDisplayMsg:

Received:

```

SIP/2.0 200 Ok
Via: SIP/2.0/TCP 192.0.2.7:5060;branch=z9hG4bKAA19B5
To: <sip:CRS_controller@192.0.2.9>;tag=dscdc4ede7
From: <sip:2229@192.0.2.7>;tag=4D1FEEB0-1E6
Call-ID: 11811688227034@192.0.2.9
CSeq: 173 NOTIFY
Content-Length: 0
Allow-Events: refer
Allow-Events: telephone-event

```

Jun 6 22:50:31.014: //-1/xxxxxxxxxxxx/SIP/Msg/ccsipDisplayMsg:

Sent:

```

NOTIFY sip:CRS_controller@192.0.2.9:5060;transport=tcp SIP/2.0
Via: SIP/2.0/TCP 192.0.2.7:5060;branch=z9hG4bKAB26A5
From: <sip:2229@192.0.2.7>;tag=4D1FEEB0-1E6
To: <sip:CRS_controller@192.0.2.9>;tag=dscdc4ede7
Call-ID: 11811688227034@192.0.2.9
CSeq: 174 NOTIFY
Max-Forwards: 70

```

```
Date: Wed, 06 Jun 2007 22:50:31 GMT
User-Agent: Cisco-SIPGateway/IOS-12.x
Event: dialog
Subscription-State: active;expires=2800
Contact: <sip:2229@192.0.2.7:5060;transport=tcp>
Content-Type: application/csta+xml
Content-Length: 1227
```

```
<?xml version="1.0" encoding="UTF-8"?>
<cisco-csta-ext:ActiveEvent
  xmlns="http://www.ecma-international.org/standards/ecma-323/csta/ed3"
  xmlns:xsi="http://www.example.org/2001/XMLSchema-instance"
  xsi:schemaLocation="http://www.ecma-international.org/standards/ecma-323/csta/ed3
http://www.ecma-international.org/standards/ecma-323/csta/ed3/private-event.xsd"
  xmlns:cisco-csta-ext="cisco-csta-ext.xsd">
  <monitorCrossRefID>48F1DB51</monitorCrossRefID>
  <extensions>
  <privateData>
  <private>
  <cisco-csta-ext:gcid>29793E66-13B7-11DC-8361-9790DDA32D45</cisco-csta-ext:gcid>
  <cisco-csta-ext:callDirection>FALSE</cisco-csta-ext:callDirection>
  <cisco-csta-ext:callingDirectoryNumber>2803</cisco-csta-ext:callingDirectoryNumber>
  <cisco-csta-ext:calledDirectoryNumber></cisco-csta-ext:calledDirectoryNumber>
  <connectionAddress>
  <deviceIdentifier>2803</deviceIdentifier>
  </connectionAddress>
  <lastRedirectionDevice>
  <numberDialed></numberDialed>
  </lastRedirectionDevice>
  <originalCalledAddress></originalCalledAddress>
  <cisco-csta-ext:callType>consult</cisco-csta-ext:callType>
  <cisco-csta-ext:parentGCID>192BA764-13B7-11DC-8358-9790DDA32D45</cisco-csta-ext:parentGCID
  >
  </private>
  </privateData>
  </extensions>
</cisco-csta-ext:ActiveEvent>
```

```
Jun 6 22:50:31.026: //-1/xxxxxxxxxxxx/SIP/Msg/ccsipDisplayMsg:
```

Received:

```
SIP/2.0 200 Ok
Via: SIP/2.0/TCP 192.0.2.7:5060;branch=z9hG4bKAB26A5
To: <sip:CRS_controller@192.0.2.9>;tag=dscdc4ede7
From: <sip:2229@192.0.2.7>;tag=4D1FEEB0-1E6
Call-ID: 11811688227034@192.0.2.9
CSeq: 174 NOTIFY
Content-Length: 0
Allow-Events: refer
Allow-Events: telephone-event
```

```
Jun 6 22:50:31.606: DestCheckTeleUnassBusy cvif OperStatus 5, Type 1A, status 40020
```

```
Jun 6 22:50:31.614: //-1/xxxxxxxxxxxx/SIP/Msg/ccsipDisplayMsg:
```

Sent:

```
NOTIFY sip:CRS_controller@192.0.2.9:5060;transport=tcp SIP/2.0
Via: SIP/2.0/TCP 192.0.2.7:5060;branch=z9hG4bKAC1DB7
From: <sip:2229@192.0.2.7>;tag=4D1FEEB0-1E6
To: <sip:CRS_controller@192.0.2.9>;tag=dscdc4ede7
Call-ID: 11811688227034@192.0.2.9
CSeq: 175 NOTIFY
```

```

Max-Forwards: 70
Date: Wed, 06 Jun 2007 22:50:31 GMT
User-Agent: Cisco-SIPGateway/IOS-12.x
Event: dialog
Subscription-State: active;expires=2800
Contact: <sip:2229@192.0.2.7:5060;transport=tcp>
Content-Type: application/csta+xml
Content-Length: 1305

<?xml version="1.0" encoding="UTF-8"?>
<OfferedEvent
  xmlns="http://www.ecma-international.org/standards/ecma-323/csta/ed3"
  xmlns:xsi="http://www.example.org/2001/XMLSchema-instance"
  xsi:schemaLocation="http://www.ecma-international.org/standards/ecma-323/csta/ed3
http://www.ecma-international.org/standards/ecma-323/csta/ed3/offered-event.xsd"
  xmlns:cisco-csta-ext="cisco-csta-ext.xsd">
  <monitorCrossRefID>48F1DB51</monitorCrossRefID>
  <offeredConnection>
    <callID>29793E66-13B7-11DC-8361-9790DDA32D45</callID>
    <deviceID>2808</deviceID>
  </offeredConnection>
  <offeredDevice>
    <deviceIdentifier>NULL</deviceIdentifier>
  </offeredDevice>
  <callingDevice>
    <deviceIdentifier>2803</deviceIdentifier>
  </callingDevice>
  <calledDevice>
    <deviceIdentifier>2808</deviceIdentifier>
  </calledDevice>
  <lastRedirectionDevice>
    <numberDialed></numberDialed>
  </lastRedirectionDevice>
  <cause>normal</cause>
  <extensions>
    <privateData>
      <private>
        <cisco-csta-ext:OfferedPrivate>
          <cisco-csta-ext:callDirection>FALSE</cisco-csta-ext:callDirection>
          <cisco-csta-ext:callType>consult</cisco-csta-ext:callType>
          <cisco-csta-ext:parentGCID>192BA764-13B7-11DC-8358-9790DDA32D45</cisco-csta-ext:parentGCID
          >
          <originalCalledAddress></originalCalledAddress>
        </cisco-csta-ext:OfferedPrivate>
      </private>
    </privateData>
  </extensions>
</OfferedEvent>

```

Jun 6 22:50:31.622: //-1/xxxxxxxxxxxx/SIP/Msg/ccsipDisplayMsg:

Received:

```

SIP/2.0 200 OK
Via: SIP/2.0/TCP 192.0.2.7:5060;branch=z9hG4bKAC1DB7
To: <sip:CRS_controller@192.0.2.9>;tag=dscdc4ede7
From: <sip:2229@192.0.2.7>;tag=4D1FEEB0-1E6
Call-ID: 11811688227034@192.0.2.9
CSeq: 175 NOTIFY
Content-Length: 0
Allow-Events: refer
Allow-Events: telephone-event

```

Jun 6 22:50:31.622: //-1/xxxxxxxxxxxx/SIP/Msg/ccsipDisplayMsg:

Sent:

NOTIFY sip:CRS_controller@192.0.2.9:5060;transport=tcp SIP/2.0
 Via: SIP/2.0/TCP 192.0.2.7:5060;branch=z9hG4bKAD778
 From: <sip:2229@192.0.2.7>;tag=4D1FEEB0-1E6
 To: <sip:CRS_controller@192.0.2.9>;tag=dscdc4ede7
 Call-ID: 11811688227034@192.0.2.9
 CSeq: 176 NOTIFY
 Max-Forwards: 70
 Date: Wed, 06 Jun 2007 22:50:31 GMT
 User-Agent: Cisco-SIPGateway/IOS-12.x
 Event: dialog
 Subscription-State: active;expires=2800
 Contact: <sip:2229@192.0.2.7:5060;transport=tcp>
 Content-Type: application/csta+xml
 Content-Length: 1255

```
<?xml version="1.0" encoding="UTF-8"?>
<DeliveredEvent
  xmlns="http://www.ecma-international.org/standards/ecma-323/csta/ed3"
  xmlns:xsi="http://www.example.org/2001/XMLSchema-instance"
  xsi:schemaLocation="http://www.ecma-international.org/standards/ecma-323/csta/ed3
http://www.ecma-international.org/standards/ecma-323/csta/ed3/delivered-event.xsd"
  xmlns:cisco-csta-ext="cisco-csta-ext.xsd">
  <monitorCrossRefID>48F1DB51</monitorCrossRefID>
  <connection>
  <callID>29793E66-13B7-11DC-8361-9790DDA32D45</callID>
  <deviceID>2808</deviceID>
  </connection>
  <alertingDevice>
  <deviceIdentifier>NULL</deviceIdentifier>
  </alertingDevice>
  <callingDevice>
  <deviceIdentifier>2803</deviceIdentifier>
  </callingDevice>
  <calledDevice>
  <deviceIdentifier>2808</deviceIdentifier>
  </calledDevice>
  <lastRedirectionDevice>
  <numberDialed></numberDialed>
  </lastRedirectionDevice>
  <cause>normal</cause>
  <extensions>
  <privateData>
  <private>
  <cisco-csta-ext:deliveredPrivate>
  <cisco-csta-ext:callDirection>FALSE</cisco-csta-ext:callDirection>
  <cisco-csta-ext:callType>consult</cisco-csta-ext:callType>
  <cisco-csta-ext:parentGCID>192BA764-13B7-11DC-8358-9790DDA32D45</cisco-csta-ext:parentGCID
  >
  </cisco-csta-ext:deliveredPrivate>
  </private>
  </privateData>
  </extensions>
  </DeliveredEvent>
```

Jun 6 22:50:31.634: //-1/xxxxxxxxxxxx/SIP/Msg/ccsipDisplayMsg:

Received:

SIP/2.0 200 Ok
 Via: SIP/2.0/TCP 192.0.2.7:5060;branch=z9hG4bKAD778
 To: <sip:CRS_controller@192.0.2.9>;tag=dscdc4ede7
 From: <sip:2229@192.0.2.7>;tag=4D1FEEB0-1E6


```

Call-ID: 11811688227034@192.0.2.9
CSeq: 176 NOTIFY
Content-Length: 0
Allow-Events: refer
Allow-Events: telephone-event

```

```

Jun  6 22:50:33.430: //-1/xxxxxxxxxxxx/SIP/Msg/ccsipDisplayMsg:

```

Sent:

```

NOTIFY sip:CRS_controller@192.0.2.9:5060;transport=tcp SIP/2.0
Via: SIP/2.0/TCP 192.0.2.7:5060;branch=z9hG4bKAECEBD
From: <sip:2229@192.0.2.7>;tag=4D1FEEB0-1E6
To: <sip:CRS_controller@192.0.2.9>;tag=dscdc4ede7
Call-ID: 11811688227034@192.0.2.9
CSeq: 177 NOTIFY
Max-Forwards: 70
Date: Wed, 06 Jun 2007 22:50:33 GMT
User-Agent: Cisco-SIPGateway/IOS-12.x
Event: dialog
Subscription-State: active;expires=2800
Contact: <sip:2229@192.0.2.7:5060;transport=tcp>
Content-Type: application/csta+xml
Content-Length: 1170

```

```

<?xml version="1.0" encoding="UTF-8"?>
<TransferredEvent
  xmlns="http://www.ecma-international.org/standards/ecma-323/csta/ed3"
  xmlns:xsi="http://www.example.org/2001/XMLSchema-instance"
  xsi:schemaLocation="http://www.ecma-international.org/standards/ecma-323/csta/ed3
http://www.ecma-international.org/standards/ecma-323/csta/ed3/transferred-event.xsd"
  xmlns:cisco-csta-ext="cisco-csta-ext.xsd">
  <monitorCrossRefID>48F1DB51</monitorCrossRefID>
  <primaryOldCall>
    <callID>192BA764-13B7-11DC-8358-9790DDA32D45</callID>
    <deviceID>NULL</deviceID>
  </primaryOldCall>
  <secondaryOldCall>
    <callID></callID>
    <deviceID>NULL</deviceID>
  </secondaryOldCall>
  <transferringDevice>
    <deviceIdentifier>2803</deviceIdentifier>
  </transferringDevice>
  <transferredToDevice>
    <deviceIdentifier>2808</deviceIdentifier>
  </transferredToDevice>
  <transferredConnections>
    <connectionListItem>
      <newConnection>
        <callID>29793E66-13B7-11DC-8361-9790DDA32D45</callID>
      </newConnection>
      <oldConnection>
        <callID>192BA764-13B7-11DC-8358-9790DDA32D45</callID>
      </oldConnection><endpoint>
        <deviceID>2807</deviceID>
      </endpoint>
    </connectionListItem>
  </transferredConnections>
  <cause>normal</cause>
</TransferredEvent>

```

Jun 6 22:50:33.466: //-1/xxxxxxxxxxxx/SIP/Msg/ccsipDisplayMsg:

Received:

SIP/2.0 200 Ok
 Via: SIP/2.0/TCP 192.0.2.7:5060;branch=z9hG4bKAECEBD
 To: <sip:CRS_controller@192.0.2.9>;tag=dscdc4ede7
 From: <sip:2229@192.0.2.7>;tag=4D1FEEB0-1E6
 Call-ID: 11811688227034@192.0.2.9
 CSeq: 177 NOTIFY
 Content-Length: 0
 Allow-Events: refer
 Allow-Events: telephone-event

Jun 6 22:50:33.466: //-1/xxxxxxxxxxxx/SIP/Msg/ccsipDisplayMsg:

Sent:

NOTIFY sip:CRS_controller@192.0.2.9:5060;transport=tcp SIP/2.0
 Via: SIP/2.0/TCP 192.0.2.7:5060;branch=z9hG4bKAF394
 From: <sip:2229@192.0.2.7>;tag=4D1FEEB0-1E6
 To: <sip:CRS_controller@192.0.2.9>;tag=dscdc4ede7
 Call-ID: 11811688227034@192.0.2.9
 CSeq: 178 NOTIFY
 Max-Forwards: 70
 Date: Wed, 06 Jun 2007 22:50:33 GMT
 User-Agent: Cisco-SIPGateway/IOS-12.x
 Event: dialog
 Subscription-State: active;expires=2800
 Contact: <sip:2229@192.0.2.7:5060;transport=tcp>
 Content-Type: application/csta+xml
 Content-Length: 1110

```
<?xml version="1.0" encoding="UTF-8"?>
<ConnectionClearedEvent
  xmlns="http://www.ecma-international.org/standards/ecma-323/csta/ed3"
  xmlns:xsi="http://www.example.org/2001/XMLSchema-instance"
  xsi:schemaLocation="http://www.ecma-international.org/standards/ecma-323/csta/ed3
http://www.ecma-international.org/standards/ecma-323/csta/ed3/connection-cleared-event.xsd"
  xmlns:cisco-csta-ext="cisco-csta-ext.xsd">
  <monitorCrossRefID>48F1DB51</monitorCrossRefID>
  <droppedConnection>
  <callID>29793E66-13B7-11DC-8361-9790DDA32D45</callID>
  <deviceID>2803</deviceID>
  </droppedConnection>
  <releasingDevice>
  <deviceIdentifier>NULL</deviceIdentifier>
  </releasingDevice>
  <cause>transfer</cause>
  <extensions>
  <privateData>
  <private>
  <cisco-csta-ext:CallConnectionClearedPrivate>
  <cisco-csta-ext:callDirection>FALSE</cisco-csta-ext:callDirection>
  <cisco-csta-ext:callingDirectoryNumber>2803</cisco-csta-ext:callingDirectoryNumber>
  <cisco-csta-ext:calledDirectoryNumber>2808</cisco-csta-ext:calledDirectoryNumber>
  </cisco-csta-ext:CallConnectionClearedPrivate>
  </private>
  </privateData>
  </extensions>
  </ConnectionClearedEvent>
```

Jun 6 22:50:33.474: //-1/xxxxxxxxxxxx/SIP/Msg/ccsipDisplayMsg:

Received:

SIP/2.0 200 Ok
 Via: SIP/2.0/TCP 192.0.2.7:5060;branch=z9hG4bKAF394
 To: <sip:CRS_controller@192.0.2.9>;tag=dscdc4ede7
 From: <sip:2229@192.0.2.7>;tag=4D1FEEB0-1E6
 Call-ID: 11811688227034@192.0.2.9
 CSeq: 178 NOTIFY
 Content-Length: 0
 Allow-Events: refer
 Allow-Events: telephone-event

Jun 6 22:50:33.474: //-1/xxxxxxxxxxxx/SIP/Msg/ccsipDisplayMsg:

Sent:

NOTIFY sip:CRS_controller@192.0.2.9:5060;transport=tcp SIP/2.0
 Via: SIP/2.0/TCP 192.0.2.7:5060;branch=z9hG4bKB0BF1
 From: <sip:2229@192.0.2.7>;tag=4D1FEEB0-1E6
 To: <sip:CRS_controller@192.0.2.9>;tag=dscdc4ede7
 Call-ID: 11811688227034@192.0.2.9
 CSeq: 179 NOTIFY
 Max-Forwards: 70
 Date: Wed, 06 Jun 2007 22:50:33 GMT
 User-Agent: Cisco-SIPGateway/IOS-12.x
 Event: dialog
 Subscription-State: active;expires=2800
 Contact: <sip:2229@192.0.2.7:5060;transport=tcp>
 Content-Type: application/csta+xml
 Content-Length: 1110

```
<?xml version="1.0" encoding="UTF-8"?>
<ConnectionClearedEvent
  xmlns="http://www.ecma-international.org/standards/ecma-323/csta/ed3"
  xmlns:xsi="http://www.example.org/2001/XMLSchema-instance"
  xsi:schemaLocation="http://www.ecma-international.org/standards/ecma-323/csta/ed3
http://www.ecma-international.org/standards/ecma-323/csta/ed3/connection-cleared-event.xsd"
  xmlns:cisco-csta-ext="cisco-csta-ext.xsd">
  <monitorCrossRefID>48F1DB51</monitorCrossRefID>
  <droppedConnection>
  <callID>29793E66-13B7-11DC-8361-9790DDA32D45</callID>
  <deviceID>2808</deviceID>
  </droppedConnection>
  <releasingDevice>
  <deviceIdentifier>NULL</deviceIdentifier>
  </releasingDevice>
  <cause>transfer</cause>
  <extensions>
  <privateData>
  <private>
  <cisco-csta-ext:CallConnectionClearedPrivate>
  <cisco-csta-ext:callDirection>FALSE</cisco-csta-ext:callDirection>
  <cisco-csta-ext:callingDirectoryNumber>2803</cisco-csta-ext:callingDirectoryNumber>
  <cisco-csta-ext:calledDirectoryNumber>2808</cisco-csta-ext:calledDirectoryNumber>
  </cisco-csta-ext:CallConnectionClearedPrivate>
  </private>
  </privateData>
  </extensions>
  </ConnectionClearedEvent>
```

Jun 6 22:50:33.482: //-1/xxxxxxxxxxxx/SIP/Msg/ccsipDisplayMsg:

Received:

SIP/2.0 200 Ok
 Via: SIP/2.0/TCP 192.0.2.7:5060;branch=z9hG4bKB0BF1
 To: <sip:CRS_controller@192.0.2.9>;tag=dscdc4ede7
 From: <sip:2229@192.0.2.7>;tag=4D1FEEB0-1E6
 Call-ID: 11811688227034@192.0.2.9
 CSeq: 179 NOTIFY
 Content-Length: 0
 Allow-Events: refer
 Allow-Events: telephone-event

Jun 6 22:50:33.486: //-1/xxxxxxxxxxxx/SIP/Msg/ccsipDisplayMsg:

Sent:

NOTIFY sip:CRS_controller@192.0.2.9:5060;transport=tcp SIP/2.0
 Via: SIP/2.0/TCP 192.0.2.7:5060;branch=z9hG4bKB11ABC
 From: <sip:2229@192.0.2.7>;tag=4D1FEEB0-1E6
 To: <sip:CRS_controller@192.0.2.9>;tag=dscdc4ede7
 Call-ID: 11811688227034@192.0.2.9
 CSeq: 180 NOTIFY
 Max-Forwards: 70
 Date: Wed, 06 Jun 2007 22:50:33 GMT
 User-Agent: Cisco-SIPGateway/IOS-12.x
 Event: dialog
 Subscription-State: active;expires=2800
 Contact: <sip:2229@192.0.2.7:5060;transport=tcp>
 Content-Type: application/csta+xml
 Content-Length: 876

```
<?xml version="1.0" encoding="UTF-8"?>
<CallClearedEvent
  xmlns="http://www.ecma-international.org/standards/ecma-323/csta/ed3"
  xmlns:xsi="http://www.example.org/2001/XMLSchema-instance"
  xsi:schemaLocation="http://www.ecma-international.org/standards/ecma-323/csta/ed3
http://www.ecma-international.org/standards/ecma-323/csta/ed3/call-cleared-event.xsd"
  xmlns:cisco-csta-ext="cisco-csta-ext.xsd">
  <monitorCrossRefID>48F1DB51</monitorCrossRefID>
  <clearedCall>
  <callID>29793E66-13B7-11DC-8361-9790DDA32D45</callID>
  <deviceID>NULL</deviceID>
  </clearedCall>
  <cause>transfer</cause>
  <extensions>
  <privateData>
  <private>
  <droppedPrivate>
  <cisco-csta-ext:callingDirectoryNumber>2803</cisco-csta-ext:callingDirectoryNumber>
  <cisco-csta-ext:calledDirectoryNumber>2808</cisco-csta-ext:calledDirectoryNumber>
  </droppedPrivate>
  </private>
  </privateData>
  </extensions>
  </CallClearedEvent>
```

Jun 6 22:50:33.494: //-1/xxxxxxxxxxxx/SIP/Msg/ccsipDisplayMsg:

Received:

SIP/2.0 200 Ok
 Via: SIP/2.0/TCP 192.0.2.7:5060;branch=z9hG4bKB11ABC
 To: <sip:CRS_controller@192.0.2.9>;tag=dscdc4ede7
 From: <sip:2229@192.0.2.7>;tag=4D1FEEB0-1E6

```

Call-ID: 11811688227034@192.0.2.9
CSeq: 180 NOTIFY
Content-Length: 0
Allow-Events: refer
Allow-Events: telephone-event

```

```
Jun 6 22:50:33.494: //-1/xxxxxxxxxxxx/SIP/Msg/ccsipDisplayMsg:
```

Sent:

```

NOTIFY sip:CRS_controller@192.0.2.9:5060;transport=tcp SIP/2.0
Via: SIP/2.0/TCP 192.0.2.7:5060;branch=z9hG4bKB21433
From: <sip:2229@192.0.2.7>;tag=4D1FEEB0-1E6
To: <sip:CRS_controller@192.0.2.9>;tag=dscdc4ede7
Call-ID: 11811688227034@192.0.2.9
CSeq: 181 NOTIFY
Max-Forwards: 70
Date: Wed, 06 Jun 2007 22:50:33 GMT
User-Agent: Cisco-SIPGateway/IOS-12.x
Event: dialog
Subscription-State: active;expires=2800
Contact: <sip:2229@192.0.2.7:5060;transport=tcp>
Content-Type: application/csta+xml
Content-Length: 1110

```

```

<?xml version="1.0" encoding="UTF-8"?>
<ConnectionClearedEvent
  xmlns="http://www.ecma-international.org/standards/ecma-323/csta/ed3"
  xmlns:xsi="http://www.example.org/2001/XMLSchema-instance"
  xsi:schemaLocation="http://www.ecma-international.org/standards/ecma-323/csta/ed3
http://www.ecma-international.org/standards/ecma-323/csta/ed3/connection-cleared-event.xsd"
  xmlns:cisco-csta-ext="cisco-csta-ext.xsd">
  <monitorCrossRefID>48F1DB51</monitorCrossRefID>
  <droppedConnection>
  <callID>192BA764-13B7-11DC-8358-9790DDA32D45</callID>
  <deviceID>2803</deviceID>
  </droppedConnection>
  <releasingDevice>
  <deviceIdentifier>NULL</deviceIdentifier>
  </releasingDevice>
  <cause>transfer</cause>
  <extensions>
  <privateData>
  <private>
  <cisco-csta-ext:CallConnectionClearedPrivate>
  <cisco-csta-ext:callDirection>FALSE</cisco-csta-ext:callDirection>
  <cisco-csta-ext:callingDirectoryNumber>2807</cisco-csta-ext:callingDirectoryNumber>
  <cisco-csta-ext:calledDirectoryNumber>2803</cisco-csta-ext:calledDirectoryNumber>
  </cisco-csta-ext:CallConnectionClearedPrivate>
  </private>
  </privateData>
  </extensions>
  </ConnectionClearedEvent>

```

```
Jun 6 22:50:33.502: //-1/xxxxxxxxxxxx/SIP/Msg/ccsipDisplayMsg:
```

Received:

```

SIP/2.0 200 Ok
Via: SIP/2.0/TCP 192.0.2.7:5060;branch=z9hG4bKB21433
To: <sip:CRS_controller@192.0.2.9>;tag=dscdc4ede7
From: <sip:2229@192.0.2.7>;tag=4D1FEEB0-1E6
Call-ID: 11811688227034@192.0.2.9
CSeq: 181 NOTIFY
Content-Length: 0

```

```
Allow-Events: refer
Allow-Events: telephone-event
```

```
Jun 6 22:50:33.502: //-1/xxxxxxxxxxxx/SIP/Msg/ccsipDisplayMsg:
```

Sent:

```
NOTIFY sip:CRS_controller@192.0.2.9:5060;transport=tcp SIP/2.0
Via: SIP/2.0/TCP 192.0.2.7:5060;branch=z9hG4bKB3D97
From: <sip:2229@192.0.2.7>;tag=4D1FEEB0-1E6
To: <sip:CRS_controller@192.0.2.9>;tag=dscdc4ede7
Call-ID: 11811688227034@192.0.2.9
CSeq: 182 NOTIFY
Max-Forwards: 70
Date: Wed, 06 Jun 2007 22:50:33 GMT
User-Agent: Cisco-SIPGateway/IOS-12.x
Event: dialog
Subscription-State: active;expires=2800
Contact: <sip:2229@192.0.2.7:5060;transport=tcp>
Content-Type: application/csta+xml
Content-Length: 1218
```

```
<?xml version="1.0" encoding="UTF-8"?>
<DeliveredEvent
  xmlns="http://www.ecma-international.org/standards/ecma-323/csta/ed3"
  xmlns:xsi="http://www.example.org/2001/XMLSchema-instance"
  xsi:schemaLocation="http://www.ecma-international.org/standards/ecma-323/csta/ed3
http://www.ecma-international.org/standards/ecma-323/csta/ed3/delivered-event.xsd"
  xmlns:cisco-csta-ext="cisco-csta-ext.xsd">
  <monitorCrossRefID>48F1DB51</monitorCrossRefID>
  <connection>
  <callID>192BA764-13B7-11DC-8358-9790DDA32D45</callID>
  <deviceID>2808</deviceID>
  </connection>
  <alertingDevice>
  <deviceIdentifier>NULL</deviceIdentifier>
  </alertingDevice>
  <callingDevice>
  <deviceIdentifier>2807</deviceIdentifier>
  </callingDevice>
  <calledDevice>
  <deviceIdentifier>2808</deviceIdentifier>
  </calledDevice>
  <lastRedirectionDevice>
  <numberDialed></numberDialed>
  </lastRedirectionDevice>
  <cause>normal</cause>
  <extensions>
  <privateData>
  <private>
  <cisco-csta-ext:deliveredPrivate>
  <cisco-csta-ext:callDirection>FALSE</cisco-csta-ext:callDirection>
  <cisco-csta-ext:callType>direct</cisco-csta-ext:callType>
  <cisco-csta-ext:parentGCID></cisco-csta-ext:parentGCID>
  </cisco-csta-ext:deliveredPrivate>
  </private>
  </privateData>
  </extensions>
  </DeliveredEvent>
```

```
Jun 6 22:50:33.514: //-1/xxxxxxxxxxxx/SIP/Msg/ccsipDisplayMsg:
```

Received:

```
SIP/2.0 200 Ok
```

```
Via: SIP/2.0/TCP 192.0.2.7:5060;branch=z9hG4bKB3D97
To: <sip:CRS_controller@192.0.2.9>;tag=dscdc4ede7
From: <sip:2229@192.0.2.7>;tag=4D1FEEB0-1E6
Call-ID: 11811688227034@192.0.2.9
CSeq: 182 NOTIFY
Content-Length: 0
Allow-Events: refer
Allow-Events: telephone-event
```

```
Jun 6 22:50:36.338: //-1/xxxxxxxxxxxx/SIP/Msg/ccsipDisplayMsg:
```

Sent:

```
NOTIFY sip:CRS_controller@192.0.2.9:5060;transport=tcp SIP/2.0
Via: SIP/2.0/TCP 192.0.2.7:5060;branch=z9hG4bKB425FB
From: <sip:2229@192.0.2.7>;tag=4D1FEEB0-1E6
To: <sip:CRS_controller@192.0.2.9>;tag=dscdc4ede7
Call-ID: 11811688227034@192.0.2.9
CSeq: 183 NOTIFY
Max-Forwards: 70
Date: Wed, 06 Jun 2007 22:50:36 GMT
User-Agent: Cisco-SIPGateway/IOS-12.x
Event: dialog
Subscription-State: active;expires=2800
Contact: <sip:2229@192.0.2.7:5060;transport=tcp>
Content-Type: application/csta+xml
Content-Length: 1194
```

```
<?xml version="1.0" encoding="UTF-8"?>
<cisco-csta-ext:ActiveEvent
  xmlns="http://www.ecma-international.org/standards/ecma-323/csta/ed3"
  xmlns:xsi="http://www.example.org/2001/XMLSchema-instance"
  xsi:schemaLocation="http://www.ecma-international.org/standards/ecma-323/csta/ed3
http://www.ecma-international.org/standards/ecma-323/csta/ed3/private-event.xsd"
  xmlns:cisco-csta-ext="cisco-csta-ext.xsd">
<monitorCrossRefID>48F1DB51</monitorCrossRefID>
<extensions>
<privateData>
<private>
<cisco-csta-ext:gcid>192BA764-13B7-11DC-8358-9790DDA32D45</cisco-csta-ext:gcid>
<cisco-csta-ext:callDirection>FALSE</cisco-csta-ext:callDirection>
<cisco-csta-ext:callingDirectoryNumber>2807</cisco-csta-ext:callingDirectoryNumber>
<cisco-csta-ext:calledDirectoryNumber>2808</cisco-csta-ext:calledDirectoryNumber>
<connectionAddress>
<deviceIdentifier>2808</deviceIdentifier>
</connectionAddress>
<lastRedirectionDevice>
<numberDialed></numberDialed>
</lastRedirectionDevice>
<originalCalledAddress></originalCalledAddress>
<cisco-csta-ext:callType>direct</cisco-csta-ext:callType>
<cisco-csta-ext:parentGCID></cisco-csta-ext:parentGCID>
</private>
</privateData>
</extensions>
</cisco-csta-ext:ActiveEvent>
```

```
Jun 6 22:50:36.346: //-1/xxxxxxxxxxxx/SIP/Msg/ccsipDisplayMsg:
```

Received:

```
SIP/2.0 200 Ok
Via: SIP/2.0/TCP 192.0.2.7:5060;branch=z9hG4bKB425FB
To: <sip:CRS_controller@192.0.2.9>;tag=dscdc4ede7
From: <sip:2229@192.0.2.7>;tag=4D1FEEB0-1E6
```

```

Call-ID: 11811688227034@192.0.2.9
CSeq: 183 NOTIFY
Content-Length: 0
Allow-Events: refer
Allow-Events: telephone-event

```

```
Jun 6 22:50:36.346: //-1/xxxxxxxxxxxx/SIP/Msg/ccsipDisplayMsg:
```

Sent:

```

NOTIFY sip:CRS_controller@192.0.2.9:5060;transport=tcp SIP/2.0
Via: SIP/2.0/TCP 192.0.2.7:5060;branch=z9hG4bKB5237E
From: <sip:2229@192.0.2.7>;tag=4D1FEEB0-1E6
To: <sip:CRS_controller@192.0.2.9>;tag=dscdc4ede7
Call-ID: 11811688227034@192.0.2.9
CSeq: 184 NOTIFY
Max-Forwards: 70
Date: Wed, 06 Jun 2007 22:50:36 GMT
User-Agent: Cisco-SIPGateway/IOS-12.x
Event: dialog
Subscription-State: active;expires=2800
Contact: <sip:2229@192.0.2.7:5060;transport=tcp>
Content-Type: application/csta+xml
Content-Length: 925

```

```

<?xml version="1.0" encoding="UTF-8"?>
<EstablishedEvent
  xmlns="http://www.ecma-international.org/standards/ecma-323/csta/ed3"
  xmlns:xsi="http://www.example.org/2001/XMLSchema-instance"
  xsi:schemaLocation="http://www.ecma-international.org/standards/ecma-323/csta/ed3
http://www.ecma-international.org/standards/ecma-323/csta/ed3/established-event.xsd"
  xmlns:cisco-csta-ext="cisco-csta-ext.xsd">
  <monitorCrossRefID>48F1DB51</monitorCrossRefID>
  <establishedConnection>
  <callID>192BA764-13B7-11DC-8358-9790DDA32D45</callID>
  <deviceID>NULL</deviceID>
  </establishedConnection>
  <answeringDevice>
  <deviceIdentifier>NULL</deviceIdentifier>
  </answeringDevice>
  <callingDevice>
  <deviceIdentifier>2807</deviceIdentifier>
  </callingDevice>
  <calledDevice>
  <deviceIdentifier>2808</deviceIdentifier>
  </calledDevice>
  <lastRedirectionDevice>
  <numberDialed>NULL</numberDialed>
  </lastRedirectionDevice>
  <cause>normal</cause>
  </EstablishedEvent>

```

```
Jun 6 22:50:36.358: //-1/xxxxxxxxxxxx/SIP/Msg/ccsipDisplayMsg:
```

Received:

```

SIP/2.0 200 Ok
Via: SIP/2.0/TCP 192.0.2.7:5060;branch=z9hG4bKB5237E
To: <sip:CRS_controller@192.0.2.9>;tag=dscdc4ede7
From: <sip:2229@192.0.2.7>;tag=4D1FEEB0-1E6
Call-ID: 11811688227034@192.0.2.9
CSeq: 184 NOTIFY
Content-Length: 0
Allow-Events: refer
Allow-Events: telephone-event

```


Scenario 5: Call Conference

This example scenario continues where scenario 2 left off—call routed to user agent (Ag), Ag initiates consult call and connects with SCCP endpoint B, and then Ag commits the conference:

```
Jun  6 22:54:58.918: //-1/xxxxxxxxxxxx/SIP/Msg/ccsipDisplayMsg:
```

Sent:

```
NOTIFY sip:CRS_controller@192.0.2.9:5060;transport=tcp SIP/2.0
Via: SIP/2.0/TCP 192.0.2.7:5060;branch=z9hG4bKD514E9
From: <sip:2229@192.0.2.7>;tag=4D1FEEB0-1E6
To: <sip:CRS_controller@192.0.2.9>;tag=dscdc4ede7
Call-ID: 11811688227034@192.0.2.9
CSeq: 198 NOTIFY
Max-Forwards: 70
Date: Wed, 06 Jun 2007 22:54:58 GMT
User-Agent: Cisco-SIPGateway/IOS-12.x
Event: dialog
Subscription-State: active;expires=2800
Contact: <sip:2229@192.0.2.7:5060;transport=tcp>
Content-Type: application/csta+xml
Content-Length: 1024
```

```
<?xml version="1.0" encoding="UTF-8"?>
<HeldEvent
  xmlns="http://www.ecma-international.org/standards/ecma-323/csta/ed3"
  xmlns:xsi="http://www.example.org/2001/XMLSchema-instance"
  xsi:schemaLocation="http://www.ecma-international.org/standards/ecma-323/csta/ed3
http://www.ecma-international.org/standards/ecma-323/csta/ed3/held-event.xsd"
  xmlns:cisco-csta-ext="cisco-csta-ext.xsd">
  <monitorCrossRefID>48F1DB51</monitorCrossRefID>
  <heldConnection>
  <callID>BE95D856-13B7-11DC-836A-9790DDA32D45</callID>
  <deviceID>2803</deviceID>
  </heldConnection>
  <holdingDevice>
  <deviceIdentifier>NULL</deviceIdentifier>
  </holdingDevice>
  <cause>normal</cause>
  <extensions>
  <privateData>
  <private>
  <cisco-csta-ext:HeldPrivate>
  <cisco-csta-ext:callDirection>FALSE</cisco-csta-ext:callDirection>
  <cisco-csta-ext:callingDirectoryNumber>2807</cisco-csta-ext:callingDirectoryNumber>
  <cisco-csta-ext:calledDirectoryNumber>2803</cisco-csta-ext:calledDirectoryNumber>
  </cisco-csta-ext:HeldPrivate>
  </private>
  </privateData>
  </extensions>
  </HeldEvent>
```

```
Jun  6 22:54:58.926: //-1/xxxxxxxxxxxx/SIP/Msg/ccsipDisplayMsg:
```

Received:

```
SIP/2.0 200 Ok
Via: SIP/2.0/TCP 192.0.2.7:5060;branch=z9hG4bKD514E9
To: <sip:CRS_controller@192.0.2.9>;tag=dscdc4ede7
From: <sip:2229@192.0.2.7>;tag=4D1FEEB0-1E6
Call-ID: 11811688227034@192.0.2.9
CSeq: 198 NOTIFY
Content-Length: 0
```

```
Allow-Events: refer
Allow-Events: telephone-event
```

```
Jun 6 22:54:58.930: //-1/xxxxxxxxxxxx/SIP/Msg/ccsipDisplayMsg:
```

Sent:

```
NOTIFY sip:CRS_controller@192.0.2.9:5060;transport=tcp SIP/2.0
Via: SIP/2.0/TCP 192.0.2.7:5060;branch=z9hG4bKD611D1
From: <sip:2229@192.0.2.7>;tag=4D1FEEB0-1E6
To: <sip:CRS_controller@192.0.2.9>;tag=dscdc4ede7
Call-ID: 11811688227034@192.0.2.9
CSeq: 199 NOTIFY
Max-Forwards: 70
Date: Wed, 06 Jun 2007 22:54:58 GMT
User-Agent: Cisco-SIPGateway/IOS-12.x
Event: dialog
Subscription-State: active;expires=2800
Contact: <sip:2229@192.0.2.7:5060;transport=tcp>
Content-Type: application/csta+xml
Content-Length: 1121
```

```
<?xml version="1.0" encoding="UTF-8"?>
<OriginatedEvent
  xmlns="http://www.ecma-international.org/standards/ecma-323/csta/ed3"
  xmlns:xsi="http://www.example.org/2001/XMLSchema-instance"
  xsi:schemaLocation="http://www.ecma-international.org/standards/ecma-323/csta/ed3
http://www.ecma-international.org/standards/ecma-323/csta/ed3/originated-event.xsd"
  xmlns:cisco-csta-ext="cisco-csta-ext.xsd">
  <monitorCrossRefID>48F1DB51</monitorCrossRefID>
  <originatedConnection>
  <callID>C929F81E-13B7-11DC-8372-9790DDA32D45</callID>
  <deviceID>2803</deviceID>
  </originatedConnection>
  <callingDevice>
  <deviceIdentifier>2803</deviceIdentifier>
  </callingDevice>
  <calledDevice>
  <deviceIdentifier></deviceIdentifier>
  </calledDevice>
  <cause>normal</cause>
  <extensions>
  <privateData>
  <private>
  <cisco-csta-ext:originatedPrivate>
  <cisco-csta-ext:callDirection>FALSE</cisco-csta-ext:callDirection>
  <cisco-csta-ext:callType>consult</cisco-csta-ext:callType>
  <cisco-csta-ext:parentGCID>BE95D856-13B7-11DC-836A-9790DDA32D45</cisco-csta-ext:parentGCID>
  </cisco-csta-ext:originatedPrivate>
  </private>
  </privateData>
  </extensions>
  </OriginatedEvent>
```

```
Jun 6 22:54:58.938: //-1/xxxxxxxxxxxx/SIP/Msg/ccsipDisplayMsg:
```

Received:

```
SIP/2.0 200 Ok
Via: SIP/2.0/TCP 192.0.2.7:5060;branch=z9hG4bKD611D1
To: <sip:CRS_controller@192.0.2.9>;tag=dscdc4ede7
From: <sip:2229@192.0.2.7>;tag=4D1FEEB0-1E6
Call-ID: 11811688227034@192.0.2.9
CSeq: 199 NOTIFY
Content-Length: 0
```

Allow-Events: refer
 Allow-Events: telephone-event

Jun 6 22:54:58.942: //-1/xxxxxxxxxxxx/SIP/Msg/ccsipDisplayMsg:

Sent:

NOTIFY sip:CRS_controller@192.0.2.9:5060;transport=tcp SIP/2.0
 Via: SIP/2.0/TCP 192.0.2.7:5060;branch=z9hG4bKD72045
 From: <sip:2229@192.0.2.7>;tag=4D1FEEB0-1E6
 To: <sip:CRS_controller@192.0.2.9>;tag=dscdc4ede7
 Call-ID: 11811688227034@192.0.2.9
 CSeq: 200 NOTIFY
 Max-Forwards: 70
 Date: Wed, 06 Jun 2007 22:54:58 GMT
 User-Agent: Cisco-SIPGateway/IOS-12.x
 Event: dialog
 Subscription-State: active;expires=2800
 Contact: <sip:2229@192.0.2.7:5060;transport=tcp>
 Content-Type: application/csta+xml
 Content-Length: 1227

```
<?xml version="1.0" encoding="UTF-8"?>
<cisco-csta-ext:ActiveEvent
  xmlns="http://www.ecma-international.org/standards/ecma-323/csta/ed3"
  xmlns:xsi="http://www.example.org/2001/XMLSchema-instance"
  xsi:schemaLocation="http://www.ecma-international.org/standards/ecma-323/csta/ed3
http://www.ecma-international.org/standards/ecma-323/csta/ed3/private-event.xsd"
  xmlns:cisco-csta-ext="cisco-csta-ext.xsd">
<monitorCrossRefID>48F1DB51</monitorCrossRefID>
<extensions>
<privateData>
<private>
<cisco-csta-ext:gcid>C929F81E-13B7-11DC-8372-9790DDA32D45</cisco-csta-ext:gcid>
<cisco-csta-ext:callDirection>FALSE</cisco-csta-ext:callDirection>
<cisco-csta-ext:callingDirectoryNumber>2803</cisco-csta-ext:callingDirectoryNumber>
<cisco-csta-ext:calledDirectoryNumber></cisco-csta-ext:calledDirectoryNumber>
<connectionAddress>
<deviceIdentifier>2803</deviceIdentifier>
</connectionAddress>
<lastRedirectionDevice>
<numberDialed></numberDialed>
</lastRedirectionDevice>
<originalCalledAddress></originalCalledAddress>
<cisco-csta-ext:callType>consult</cisco-csta-ext:callType>
<cisco-csta-ext:parentGCID>BE95D856-13B7-11DC-836A-9790DDA32D45</cisco-csta-ext:parentGCID>
</private>
</privateData>
</extensions>
</cisco-csta-ext:ActiveEvent>
```

Jun 6 22:54:58.946: //-1/xxxxxxxxxxxx/SIP/Msg/ccsipDisplayMsg:

Received:

SIP/2.0 200 Ok
 Via: SIP/2.0/TCP 192.0.2.7:5060;branch=z9hG4bKD72045
 To: <sip:CRS_controller@192.0.2.9>;tag=dscdc4ede7
 From: <sip:2229@192.0.2.7>;tag=4D1FEEB0-1E6
 Call-ID: 11811688227034@192.0.2.9
 CSeq: 200 NOTIFY
 Content-Length: 0
 Allow-Events: refer
 Allow-Events: telephone-event

Jun 6 22:55:00.358: DestCheckTeleUnassBusy cvif OperStatus 5, Type 1A, status 40020

Jun 6 22:55:00.362: //-1/xxxxxxxxxxxx/SIP/Msg/ccsipDisplayMsg:

Sent:

NOTIFY sip:CRS_controller@192.0.2.9:5060;transport=tcp SIP/2.0

Via: SIP/2.0/TCP 192.0.2.7:5060;branch=z9hG4bKD81E04

From: <sip:2229@192.0.2.7>;tag=4D1FEEB0-1E6

To: <sip:CRS_controller@192.0.2.9>;tag=dscdc4ede7

Call-ID: 11811688227034@192.0.2.9

CSeq: 201 NOTIFY

Max-Forwards: 70

Date: Wed, 06 Jun 2007 22:55:00 GMT

User-Agent: Cisco-SIPGateway/IOS-12.x

Event: dialog

Subscription-State: active;expires=2800

Contact: <sip:2229@192.0.2.7:5060;transport=tcp>

Content-Type: application/csta+xml

Content-Length: 1305

```
<?xml version="1.0" encoding="UTF-8"?>
```

```
<OfferedEvent
```

```
  xmlns="http://www.ecma-international.org/standards/ecma-323/csta/ed3"
```

```
  xmlns:xsi="http://www.example.org/2001/XMLSchema-instance"
```

```
  xsi:schemaLocation="http://www.ecma-international.org/standards/ecma-323/csta/ed3
```

```
http://www.ecma-international.org/standards/ecma-323/csta/ed3/offered-event.xsd"
```

```
  xmlns:cisco-csta-ext="cisco-csta-ext.xsd">
```

```
<monitorCrossRefID>48F1DB51</monitorCrossRefID>
```

```
<offeredConnection>
```

```
<callID>C929F81E-13B7-11DC-8372-9790DDA32D45</callID>
```

```
<deviceID>2808</deviceID>
```

```
</offeredConnection>
```

```
<offeredDevice>
```

```
<deviceIdentifier>NULL</deviceIdentifier>
```

```
</offeredDevice>
```

```
<callingDevice>
```

```
<deviceIdentifier>2803</deviceIdentifier>
```

```
</callingDevice>
```

```
<calledDevice>
```

```
<deviceIdentifier>2808</deviceIdentifier>
```

```
</calledDevice>
```

```
<lastRedirectionDevice>
```

```
<numberDialed></numberDialed>
```

```
</lastRedirectionDevice>
```

```
<cause>normal</cause>
```

```
<extensions>
```

```
<privateData>
```

```
<private>
```

```
<cisco-csta-ext:OfferedPrivate>
```

```
<cisco-csta-ext:callDirection>FALSE</cisco-csta-ext:callDirection>
```

```
<cisco-csta-ext:callType>consult</cisco-csta-ext:callType>
```

```
<cisco-csta-ext:parentGCID>BE95D856-13B7-11DC-836A-9790DDA32D45</cisco-csta-ext:parentGCID
```

```
>
```

```
<originalCalledAddress></originalCalledAddress>
```

```
</cisco-csta-ext:OfferedPrivate>
```

```
</private>
```

```
</privateData>
```

```
</extensions>
```

```
</OfferedEvent>
```

Jun 6 22:55:00.370: //-1/xxxxxxxxxxxx/SIP/Msg/ccsipDisplayMsg:

Received:

SIP/2.0 200 Ok
 Via: SIP/2.0/TCP 192.0.2.7:5060;branch=z9hG4bKD81E04
 To: <sip:CRS_controller@192.0.2.9>;tag=dscdc4ede7
 From: <sip:2229@192.0.2.7>;tag=4D1FEEB0-1E6
 Call-ID: 11811688227034@192.0.2.9
 CSeq: 201 NOTIFY
 Content-Length: 0
 Allow-Events: refer
 Allow-Events: telephone-event

Jun 6 22:55:00.370: //-1/xxxxxxxxxxxx/SIP/Msg/ccsipDisplayMsg:

Sent:

NOTIFY sip:CRS_controller@192.0.2.9:5060;transport=tcp SIP/2.0
 Via: SIP/2.0/TCP 192.0.2.7:5060;branch=z9hG4bKD9594
 From: <sip:2229@192.0.2.7>;tag=4D1FEEB0-1E6
 To: <sip:CRS_controller@192.0.2.9>;tag=dscdc4ede7
 Call-ID: 11811688227034@192.0.2.9
 CSeq: 202 NOTIFY
 Max-Forwards: 70
 Date: Wed, 06 Jun 2007 22:55:00 GMT
 User-Agent: Cisco-SIPGateway/IOS-12.x
 Event: dialog
 Subscription-State: active;expires=2800
 Contact: <sip:2229@192.0.2.7:5060;transport=tcp>
 Content-Type: application/csta+xml
 Content-Length: 1255

```
<?xml version="1.0" encoding="UTF-8"?>
<DeliveredEvent
  xmlns="http://www.ecma-international.org/standards/ecma-323/csta/ed3"
  xmlns:xsi="http://www.example.org/2001/XMLSchema-instance"
  xsi:schemaLocation="http://www.ecma-international.org/standards/ecma-323/csta/ed3
http://www.ecma-international.org/standards/ecma-323/csta/ed3/delivered-event.xsd"
  xmlns:cisco-csta-ext="cisco-csta-ext.xsd">
  <monitorCrossRefID>48F1DB51</monitorCrossRefID>
  <connection>
  <callID>C929F81E-13B7-11DC-8372-9790DDA32D45</callID>
  <deviceID>2808</deviceID>
  </connection>
  <alertingDevice>
  <deviceIdentifier>NULL</deviceIdentifier>
  </alertingDevice>
  <callingDevice>
  <deviceIdentifier>2803</deviceIdentifier>
  </callingDevice>
  <calledDevice>
  <deviceIdentifier>2808</deviceIdentifier>
  </calledDevice>
  <lastRedirectionDevice>
  <numberDialed></numberDialed>
  </lastRedirectionDevice>
  <cause>normal</cause>
  <extensions>
  <privateData>
  <private>
  <cisco-csta-ext:deliveredPrivate>
  <cisco-csta-ext:callDirection>FALSE</cisco-csta-ext:callDirection>
  <cisco-csta-ext:callType>consult</cisco-csta-ext:callType>
  <cisco-csta-ext:parentGCID>BE95D856-13B7-11DC-836A-9790DDA32D45</cisco-csta-ext:parentGCID
  >
```

```

</cisco-csta-ext:deliveredPrivate>
</private>
</privateData>
</extensions>
</DeliveredEvent>

```

```
Jun 6 22:55:00.378: //-1/xxxxxxxxxxxx/SIP/Msg/ccsipDisplayMsg:
```

Received:

```

SIP/2.0 200 Ok
Via: SIP/2.0/TCP 192.0.2.7:5060;branch=z9hG4bKD9594
To: <sip:CRS_controller@192.0.2.9>;tag=dscdc4ede7
From: <sip:2229@192.0.2.7>;tag=4D1FEEB0-1E6
Call-ID: 11811688227034@192.0.2.9
CSeq: 202 NOTIFY
Content-Length: 0
Allow-Events: refer
Allow-Events: telephone-event

```

```
Jun 6 22:55:02.394: //-1/xxxxxxxxxxxx/SIP/Msg/ccsipDisplayMsg:
```

Sent:

```

NOTIFY sip:CRS_controller@192.0.2.9:5060;transport=tcp SIP/2.0
Via: SIP/2.0/TCP 192.0.2.7:5060;branch=z9hG4bKDADAB
From: <sip:2229@192.0.2.7>;tag=4D1FEEB0-1E6
To: <sip:CRS_controller@192.0.2.9>;tag=dscdc4ede7
Call-ID: 11811688227034@192.0.2.9
CSeq: 203 NOTIFY
Max-Forwards: 70
Date: Wed, 06 Jun 2007 22:55:02 GMT
User-Agent: Cisco-SIPGateway/IOS-12.x
Event: dialog
Subscription-State: active;expires=2800
Contact: <sip:2229@192.0.2.7:5060;transport=tcp>
Content-Type: application/csta+xml
Content-Length: 1230

```

```

<?xml version="1.0" encoding="UTF-8"?>
<cisco-csta-ext:ActiveEvent
  xmlns="http://www.ecma-international.org/standards/ecma-323/csta/ed3"
  xmlns:xsi="http://www.example.org/2001/XMLSchema-instance"
  xsi:schemaLocation="http://www.ecma-international.org/standards/ecma-323/csta/ed3
http://www.ecma-international.org/standards/ecma-323/csta/ed3/private-event.xsd"
  xmlns:cisco-csta-ext="cisco-csta-ext.xsd">
  <monitorCrossRefID>48F1DB51</monitorCrossRefID>
  <extensions>
  <privateData>
  <private>
  <cisco-csta-ext:gcid>C929F81E-13B7-11DC-8372-9790DDA32D45</cisco-csta-ext:gcid>
  <cisco-csta-ext:callDirection>FALSE</cisco-csta-ext:callDirection>
  <cisco-csta-ext:callingDirectoryNumber>2803</cisco-csta-ext:callingDirectoryNumber>
  <cisco-csta-ext:calledDirectoryNumber>2808</cisco-csta-ext:calledDirectoryNumber>
  <connectionAddress>
  <deviceIdentifier>2808</deviceIdentifier>
  </connectionAddress>
  <lastRedirectionDevice>
  <numberDialed></numberDialed>
  </lastRedirectionDevice>
  <originalCalledAddress></originalCalledAddress>
  <cisco-csta-ext:callType>direct</cisco-csta-ext:callType>
  <cisco-csta-ext:parentGCID>BE95D856-13B7-11DC-836A-9790DDA32D45</cisco-csta-ext:parentGCID>
  >
  </private>

```

```

</privateData>
</extensions>
</cisco-csta-ext:ActiveEvent>

```

```
Jun 6 22:55:02.402: //-1/xxxxxxxxxxxx/SIP/Msg/ccsipDisplayMsg:
```

Received:

```

SIP/2.0 200 Ok
Via: SIP/2.0/TCP 192.0.2.7:5060;branch=z9hG4bKDADAB
To: <sip:CRS_controller@192.0.2.9>;tag=dscdc4ede7
From: <sip:2229@192.0.2.7>;tag=4D1FEEB0-1E6
Call-ID: 11811688227034@192.0.2.9
CSeq: 203 NOTIFY
Content-Length: 0
Allow-Events: refer
Allow-Events: telephone-event

```

```
Jun 6 22:55:02.402: //-1/xxxxxxxxxxxx/SIP/Msg/ccsipDisplayMsg:
```

Sent:

```

NOTIFY sip:CRS_controller@192.0.2.9:5060;transport=tcp SIP/2.0
Via: SIP/2.0/TCP 192.0.2.7:5060;branch=z9hG4bKDB19D7
From: <sip:2229@192.0.2.7>;tag=4D1FEEB0-1E6
To: <sip:CRS_controller@192.0.2.9>;tag=dscdc4ede7
Call-ID: 11811688227034@192.0.2.9
CSeq: 204 NOTIFY
Max-Forwards: 70
Date: Wed, 06 Jun 2007 22:55:02 GMT
User-Agent: Cisco-SIPGateway/IOS-12.x
Event: dialog
Subscription-State: active;expires=2800
Contact: <sip:2229@192.0.2.7:5060;transport=tcp>
Content-Type: application/csta+xml
Content-Length: 925

```

```

<?xml version="1.0" encoding="UTF-8"?>
<EstablishedEvent
  xmlns="http://www.ecma-international.org/standards/ecma-323/csta/ed3"
  xmlns:xsi="http://www.example.org/2001/XMLSchema-instance"
  xsi:schemaLocation="http://www.ecma-international.org/standards/ecma-323/csta/ed3
http://www.ecma-international.org/standards/ecma-323/csta/ed3/established-event.xsd"
  xmlns:cisco-csta-ext="cisco-csta-ext.xsd">
  <monitorCrossRefID>48F1DB51</monitorCrossRefID>
  <establishedConnection>
  <callID>C929F81E-13B7-11DC-8372-9790DDA32D45</callID>
  <deviceID>NULL</deviceID>
  </establishedConnection>
  <answeringDevice>
  <deviceIdentifier>NULL</deviceIdentifier>
  </answeringDevice>
  <callingDevice>
  <deviceIdentifier>2803</deviceIdentifier>
  </callingDevice>
  <calledDevice>
  <deviceIdentifier>2808</deviceIdentifier>
  </calledDevice>
  <lastRedirectionDevice>
  <numberDialed>NULL</numberDialed>
  </lastRedirectionDevice>
  <cause>normal</cause>
  </EstablishedEvent>

```

Jun 6 22:55:02.414: //-1/xxxxxxxxxxxx/SIP/Msg/ccsipDisplayMsg:

Received:

SIP/2.0 200 Ok
 Via: SIP/2.0/TCP 192.0.2.7:5060;branch=z9hG4bKDB19D7
 To: <sip:CRS_controller@192.0.2.9>;tag=dscdc4ede7
 From: <sip:2229@192.0.2.7>;tag=4D1FEEB0-1E6
 Call-ID: 11811688227034@192.0.2.9
 CSeq: 204 NOTIFY
 Content-Length: 0
 Allow-Events: refer
 Allow-Events: telephone-event

Jun 6 22:55:05.762: //-1/xxxxxxxxxxxx/SIP/Msg/ccsipDisplayMsg:

Sent:

NOTIFY sip:CRS_controller@192.0.2.9:5060;transport=tcp SIP/2.0
 Via: SIP/2.0/TCP 192.0.2.7:5060;branch=z9hG4bKDC1EC0
 From: <sip:2229@192.0.2.7>;tag=4D1FEEB0-1E6
 To: <sip:CRS_controller@192.0.2.9>;tag=dscdc4ede7
 Call-ID: 11811688227034@192.0.2.9
 CSeq: 205 NOTIFY
 Max-Forwards: 70
 Date: Wed, 06 Jun 2007 22:55:05 GMT
 User-Agent: Cisco-SIPGateway/IOS-12.x
 Event: dialog
 Subscription-State: active;expires=2800
 Contact: <sip:2229@192.0.2.7:5060;transport=tcp>
 Content-Type: application/csta+xml
 Content-Length: 1204

```
<?xml version="1.0" encoding="UTF-8"?>
<ConferencedEvent
  xmlns="http://www.ecma-international.org/standards/ecma-323/csta/ed3"
  xmlns:xsi="http://www.example.org/2001/XMLSchema-instance"
  xsi:schemaLocation="http://www.ecma-international.org/standards/ecma-323/csta/ed3
http://www.ecma-international.org/standards/ecma-323/csta/ed3/conferenced-event.xsd"
  xmlns:cisco-csta-ext="cisco-csta-ext.xsd">
  <monitorCrossRefID>48F1DB51</monitorCrossRefID>
  <primaryOldCall>
  <callID>BE95D856-13B7-11DC-836A-9790DDA32D45</callID>
  <deviceID>NULL</deviceID>
  </primaryOldCall>
  <secondaryOldCall>
  <callID></callID>
  <deviceID>NULL</deviceID>
  </secondaryOldCall>
  <conferencingDevice>
  <deviceIdentifier>2803</deviceIdentifier>
  </conferencingDevice>
  <addedParty>
  <deviceIdentifier>NULL</deviceIdentifier>
  </addedParty>
  <conferenceConnections>
  <connectionListItem>
  <newConnection>
  <callID>C929F81E-13B7-11DC-8372-9790DDA32D45</callID>
  <deviceID>2808</deviceID>
  </newConnection>
  <oldConnection>
  <callID>BE95D856-13B7-11DC-836A-9790DDA32D45</callID>
  <deviceID>2807</deviceID>
  </oldConnection><endpoint>
  <deviceID>2808</deviceID>
```



```

</endpoint>
</connectionListItem>
</conferenceConnections>
<cause>normal</cause>
</ConferencedEvent>

```

Jun 6 22:55:05.766: //-1/xxxxxxxxxxxx/SIP/Msg/ccsipDisplayMsg:

Received:

```

SIP/2.0 200 Ok
Via: SIP/2.0/TCP 192.0.2.7:5060;branch=z9hG4bKDC1EC0
To: <sip:CRS_controller@192.0.2.9>;tag=dscdc4ede7
From: <sip:2229@192.0.2.7>;tag=4D1FEEB0-1E6
Call-ID: 11811688227034@192.0.2.9
CSeq: 205 NOTIFY
Content-Length: 0
Allow-Events: refer
Allow-Events: telephone-event

```

Jun 6 22:55:05.770: //-1/xxxxxxxxxxxx/SIP/Msg/ccsipDisplayMsg:

Sent:

```

NOTIFY sip:CRS_controller@192.0.2.9:5060;transport=tcp SIP/2.0
Via: SIP/2.0/TCP 192.0.2.7:5060;branch=z9hG4bKDD1998
From: <sip:2229@192.0.2.7>;tag=4D1FEEB0-1E6
To: <sip:CRS_controller@192.0.2.9>;tag=dscdc4ede7
Call-ID: 11811688227034@192.0.2.9
CSeq: 206 NOTIFY
Max-Forwards: 70
Date: Wed, 06 Jun 2007 22:55:05 GMT
User-Agent: Cisco-SIPGateway/IOS-12.x
Event: dialog
Subscription-State: active;expires=2800
Contact: <sip:2229@192.0.2.7:5060;transport=tcp>
Content-Type: application/csta+xml
Content-Length: 1064

```

```

<?xml version="1.0" encoding="UTF-8"?>
<RetrievedEvent
  xmlns="http://www.ecma-international.org/standards/ecma-323/csta/ed3"
  xmlns:xsi="http://www.example.org/2001/XMLSchema-instance"
  xsi:schemaLocation="http://www.ecma-international.org/standards/ecma-323/csta/ed3
http://www.ecma-international.org/standards/ecma-323/csta/ed3/retrieved-event.xsd"
  xmlns:cisco-csta-ext="cisco-csta-ext.xsd">
  <monitorCrossRefID>48F1DB51</monitorCrossRefID>
  <retrievedConnection>
    <callID>BE95D856-13B7-11DC-836A-9790DDA32D45</callID>
    <deviceID>2803</deviceID>
  </retrievedConnection>
  <retrievingDevice>
    <deviceIdentifier>NULL</deviceIdentifier>
  </retrievingDevice>
  <cause>normal</cause>
  <extensions>
    <privateData>
      <private>
        <cisco-csta-ext:RetrievedPrivate>
          <cisco-csta-ext:callDirection>TRUE</cisco-csta-ext:callDirection>
          <cisco-csta-ext:callingDirectoryNumber>2807</cisco-csta-ext:callingDirectoryNumber>
          <cisco-csta-ext:calledDirectoryNumber>2803</cisco-csta-ext:calledDirectoryNumber>
        </cisco-csta-ext:RetrievedPrivate>
      </private>
    </privateData>

```

```
</extensions>
</RetrievedEvent>
```

```
Jun 6 22:55:05.794: //-1/xxxxxxxxxxxx/SIP/Msg/ccsipDisplayMsg:
```

Received:

```
SIP/2.0 200 Ok
Via: SIP/2.0/TCP 192.0.2.7:5060;branch=z9hG4bKDD1998
To: <sip:CRS_controller@192.0.2.9>;tag=dscdc4ede7
From: <sip:2229@192.0.2.7>;tag=4D1FEEB0-1E6
Call-ID: 11811688227034@192.0.2.9
CSeq: 206 NOTIFY
Content-Length: 0
Allow-Events: refer
Allow-Events: telephone-event
```

```
Jun 6 22:55:05.794: //-1/xxxxxxxxxxxx/SIP/Msg/ccsipDisplayMsg:
```

Sent:

```
NOTIFY sip:CRS_controller@192.0.2.9:5060;transport=tcp SIP/2.0
Via: SIP/2.0/TCP 192.0.2.7:5060;branch=z9hG4bKDEF82
From: <sip:2229@192.0.2.7>;tag=4D1FEEB0-1E6
To: <sip:CRS_controller@192.0.2.9>;tag=dscdc4ede7
Call-ID: 11811688227034@192.0.2.9
CSeq: 207 NOTIFY
Max-Forwards: 70
Date: Wed, 06 Jun 2007 22:55:05 GMT
User-Agent: Cisco-SIPGateway/IOS-12.x
Event: dialog
Subscription-State: active;expires=2800
Contact: <sip:2229@192.0.2.7:5060;transport=tcp>
Content-Type: application/csta+xml
Content-Length: 1112
```

```
<?xml version="1.0" encoding="UTF-8"?>
<ConnectionClearedEvent
  xmlns="http://www.ecma-international.org/standards/ecma-323/csta/ed3"
  xmlns:xsi="http://www.example.org/2001/XMLSchema-instance"
  xsi:schemaLocation="http://www.ecma-international.org/standards/ecma-323/csta/ed3
http://www.ecma-international.org/standards/ecma-323/csta/ed3/connection-cleared-event.xsd"
  xmlns:cisco-csta-ext="cisco-csta-ext.xsd">
  <monitorCrossRefID>48F1DB51</monitorCrossRefID>
  <droppedConnection>
  <callID>C929F81E-13B7-11DC-8372-9790DDA32D45</callID>
  <deviceID>2803</deviceID>
  </droppedConnection>
  <releasingDevice>
  <deviceIdentifier>NULL</deviceIdentifier>
  </releasingDevice>
  <cause>Conference</cause>
  <extensions>
  <privateData>
  <private>
  <cisco-csta-ext:CallConnectionClearedPrivate>
  <cisco-csta-ext:callDirection>FALSE</cisco-csta-ext:callDirection>
  <cisco-csta-ext:callingDirectoryNumber>2803</cisco-csta-ext:callingDirectoryNumber>
  <cisco-csta-ext:calledDirectoryNumber>2808</cisco-csta-ext:calledDirectoryNumber>
  </cisco-csta-ext:CallConnectionClearedPrivate>
  </private>
  </privateData>
  </extensions>
  </ConnectionClearedEvent>
```

Jun 6 22:55:05.830: //-1/xxxxxxxxxxxx/SIP/Msg/ccsipDisplayMsg:

Received:

SIP/2.0 200 Ok
 Via: SIP/2.0/TCP 192.0.2.7:5060;branch=z9hG4bKDEF82
 To: <sip:CRS_controller@192.0.2.9>;tag=dscdc4ede7
 From: <sip:2229@192.0.2.7>;tag=4D1FEEB0-1E6
 Call-ID: 11811688227034@192.0.2.9
 CSeq: 207 NOTIFY
 Content-Length: 0
 Allow-Events: refer
 Allow-Events: telephone-event

Jun 6 22:55:05.834: //-1/xxxxxxxxxxxx/SIP/Msg/ccsipDisplayMsg:

Sent:

NOTIFY sip:CRS_controller@192.0.2.9:5060;transport=tcp SIP/2.0
 Via: SIP/2.0/TCP 192.0.2.7:5060;branch=z9hG4bKDF85
 From: <sip:2229@192.0.2.7>;tag=4D1FEEB0-1E6
 To: <sip:CRS_controller@192.0.2.9>;tag=dscdc4ede7
 Call-ID: 11811688227034@192.0.2.9
 CSeq: 208 NOTIFY
 Max-Forwards: 70
 Date: Wed, 06 Jun 2007 22:55:05 GMT
 User-Agent: Cisco-SIPGateway/IOS-12.x
 Event: dialog
 Subscription-State: active;expires=2800
 Contact: <sip:2229@192.0.2.7:5060;transport=tcp>
 Content-Type: application/csta+xml
 Content-Length: 1112

```
<?xml version="1.0" encoding="UTF-8"?>
<ConnectionClearedEvent
  xmlns="http://www.ecma-international.org/standards/ecma-323/csta/ed3"
  xmlns:xsi="http://www.example.org/2001/XMLSchema-instance"
  xsi:schemaLocation="http://www.ecma-international.org/standards/ecma-323/csta/ed3
http://www.ecma-international.org/standards/ecma-323/csta/ed3/connection-cleared-event.xsd
" xmlns:cisco-csta-ext="cisco-csta-ext.xsd">
  <monitorCrossRefID>48F1DB51</monitorCrossRefID>
  <droppedConnection>
    <callID>C929F81E-13B7-11DC-8372-9790DDA32D45</callID>
    <deviceID>2808</deviceID>
  </droppedConnection>
  <releasingDevice>
    <deviceIdentifier>NULL</deviceIdentifier>
  </releasingDevice>
  <cause>Conference</cause>
  <extensions>
    <privateData>
      <private>
        <cisco-csta-ext:CallConnectionClearedPrivate>
          <cisco-csta-ext:callDirection>FALSE</cisco-csta-ext:callDirection>
          <cisco-csta-ext:callingDirectoryNumber>2803</cisco-csta-ext:callingDirectoryNumber>
          <cisco-csta-ext:calledDirectoryNumber>2808</cisco-csta-ext:calledDirectoryNumber>
        </cisco-csta-ext:CallConnectionClearedPrivate>
      </private>
    </privateData>
  </extensions>
</ConnectionClearedEvent>
```

Jun 6 22:55:05.838: //-1/xxxxxxxxxxxx/SIP/Msg/ccsipDisplayMsg:

Received:

SIP/2.0 200 Ok
 Via: SIP/2.0/TCP 192.0.2.7:5060;branch=z9hG4bKDF85
 To: <sip:CRS_controller@192.0.2.9>;tag=dscdc4ede7
 From: <sip:2229@192.0.2.7>;tag=4D1FEEB0-1E6
 Call-ID: 11811688227034@192.0.2.9
 CSeq: 208 NOTIFY
 Content-Length: 0
 Allow-Events: refer
 Allow-Events: telephone-event

Jun 6 22:55:05.838: //-1/xxxxxxxxxxxx/SIP/Msg/ccsipDisplayMsg:

Sent:

NOTIFY sip:CRS_controller@192.0.2.9:5060;transport=tcp SIP/2.0
 Via: SIP/2.0/TCP 192.0.2.7:5060;branch=z9hG4bKE0BE1
 From: <sip:2229@192.0.2.7>;tag=4D1FEEB0-1E6
 To: <sip:CRS_controller@192.0.2.9>;tag=dscdc4ede7
 Call-ID: 11811688227034@192.0.2.9
 CSeq: 209 NOTIFY
 Max-Forwards: 70
 Date: Wed, 06 Jun 2007 22:55:05 GMT
 User-Agent: Cisco-SIPGateway/IOS-12.x
 Event: dialog
 Subscription-State: active;expires=2800
 Contact: <sip:2229@192.0.2.7:5060;transport=tcp>
 Content-Type: application/csta+xml
 Content-Length: 878

```
<?xml version="1.0" encoding="UTF-8"?>
<CallClearedEvent
  xmlns="http://www.ecma-international.org/standards/ecma-323/csta/ed3"
  xmlns:xsi="http://www.example.org/2001/XMLSchema-instance"
  xsi:schemaLocation="http://www.ecma-international.org/standards/ecma-323/csta/ed3
http://www.ecma-international.org/standards/ecma-323/csta/ed3/call-cleared-event.xsd"
  xmlns:cisco-csta-ext="cisco-csta-ext.xsd">
  <monitorCrossRefID>48F1DB51</monitorCrossRefID>
  <clearedCall>
  <callID>C929F81E-13B7-11DC-8372-9790DDA32D45</callID>
  <deviceID>NULL</deviceID>
  </clearedCall>
  <cause>Conference</cause>
  <extensions>
  <privateData>
  <private>
  <droppedPrivate>
  <cisco-csta-ext:callingDirectoryNumber>2803</cisco-csta-ext:callingDirectoryNumber>
  <cisco-csta-ext:calledDirectoryNumber>2808</cisco-csta-ext:calledDirectoryNumber>
  </droppedPrivate>
  </private>
  </privateData>
  </extensions>
  </CallClearedEvent>
```

Jun 6 22:55:05.850: //-1/xxxxxxxxxxxx/SIP/Msg/ccsipDisplayMsg:

Received:

SIP/2.0 200 Ok
 Via: SIP/2.0/TCP 192.0.2.7:5060;branch=z9hG4bKE0BE1
 To: <sip:CRS_controller@192.0.2.9>;tag=dscdc4ede7
 From: <sip:2229@192.0.2.7>;tag=4D1FEEB0-1E6

```

Call-ID: 11811688227034@192.0.2.9
CSeq: 209 NOTIFY
Content-Length: 0
Allow-Events: refer
Allow-Events: telephone-event

```

```
Jun 6 22:55:05.850: //-1/xxxxxxxxxxxx/SIP/Msg/ccsipDisplayMsg:
```

Sent:

```

NOTIFY sip:CRS_controller@192.0.2.9:5060;transport=tcp SIP/2.0
Via: SIP/2.0/TCP 192.0.2.7:5060;branch=z9hG4bKE1BDD
From: <sip:2229@192.0.2.7>;tag=4D1FEEB0-1E6
To: <sip:CRS_controller@192.0.2.9>;tag=dscdc4ede7
Call-ID: 11811688227034@192.0.2.9
CSeq: 210 NOTIFY
Max-Forwards: 70
Date: Wed, 06 Jun 2007 22:55:05 GMT
User-Agent: Cisco-SIPGateway/IOS-12.x
Event: dialog
Subscription-State: active;expires=2800
Contact: <sip:2229@192.0.2.7:5060;transport=tcp>
Content-Type: application/csta+xml
Content-Length: 1195

```

```

<?xml version="1.0" encoding="UTF-8"?>
<cisco-csta-ext:ActiveEvent
  xmlns="http://www.ecma-international.org/standards/ecma-323/csta/ed3"
  xmlns:xsi="http://www.example.org/2001/XMLSchema-instance"
  xsi:schemaLocation="http://www.ecma-international.org/standards/ecma-323/csta/ed3
http://www.ecma-international.org/standards/ecma-323/csta/ed3/private-event.xsd"
  xmlns:cisco-csta-ext="cisco-csta-ext.xsd">
  <monitorCrossRefID>48F1DB51</monitorCrossRefID>
  <extensions>
  <privateData>
  <private>
  <cisco-csta-ext:gcid>BE95D856-13B7-11DC-836A-9790DDA32D45</cisco-csta-ext:gcid>
  <cisco-csta-ext:callDirection>FALSE</cisco-csta-ext:callDirection>
  <cisco-csta-ext:callingDirectoryNumber>2803</cisco-csta-ext:callingDirectoryNumber>
  <cisco-csta-ext:calledDirectoryNumber>2808</cisco-csta-ext:calledDirectoryNumber>
  <connectionAddress>
  <deviceIdentifier>2808</deviceIdentifier>
  </connectionAddress>
  <lastRedirectionDevice>
  <numberDialed></numberDialed>
  </lastRedirectionDevice>
  <originalCalledAddress></originalCalledAddress>
  <cisco-csta-ext:callType>consult</cisco-csta-ext:callType>
  <cisco-csta-ext:parentGCID></cisco-csta-ext:parentGCID>
  </private>
  </privateData>
  </extensions>
</cisco-csta-ext:ActiveEvent>

```

```
Jun 6 22:55:05.862: //-1/xxxxxxxxxxxx/SIP/Msg/ccsipDisplayMsg:
```

Received:

```

SIP/2.0 200 Ok
Via: SIP/2.0/TCP 192.0.2.7:5060;branch=z9hG4bKE1BDD
To: <sip:CRS_controller@192.0.2.9>;tag=dscdc4ede7
From: <sip:2229@192.0.2.7>;tag=4D1FEEB0-1E6
Call-ID: 11811688227034@192.0.2.9
CSeq: 210 NOTIFY
Content-Length: 0

```

```
Allow-Events: refer  
Allow-Events: telephone-event
```

Cisco Unified CME Configuration Examples

The following examples provide sample configurations of the Unified CME for configuring and activating the call monitoring feature:

- [Minimum preconfiguration required before using the AXL interface, page 119](#)
- [Typical configuration of the Unified CME, page 120](#)

Minimum preconfiguration required before using the AXL interface

```
!  
voice service voip  
    allow-connections sip to sip  
    sip  
        registrar server  
!  
voice register global  
    mode cme  
    source-address 192.0.2.254 port 5060  
    max-dn 100  
    max-pool 100  
    authentication presence  
    authentication register  
    create profile  
!  
ixi transport http  
    response size 64  
    no shutdown  
    request outstanding 1  
!  
ixi application cme  
    no shutdown  
!  
presence  
    presence call-list  
    watcher all  
    allow subscribe  
!  
sip-ua  
    presence enable  
!  
telephony-service  
    xml user axluser password cisco 15
```

Typical configuration of the Unified CME

```

!
version 12.4
service timestamps debug datetime msec
service timestamps log datetime msec
no service password-encryption
!
hostname sb-sj1-3845-uut1
!
boot-start-marker
boot system flash:c3845-ipvoice-mz.124-12.12.2.PIA1
boot-end-marker
!
card type t1 0 2
card type t1 0 3
logging buffered 1000000
no logging console
enable password lab
!
no aaa new-model
network-clock-participate wic 2
network-clock-participate wic 3
!
ip cef
!
!
no ip dhcp use vrf connected
ip dhcp excluded-address 192.0.2.130 192.0.2.255
!
ip dhcp pool ephones
    network 192.0.2.0 255.255.255.0
    option 150 ip 192.0.2.254
    default-router 192.0.2.254
!
!
no ip domain lookup
multilink bundle-name authenticated
!
isdn switch-type primary-5ess
!
voice-card 0
    no dspfarm
    dsp services dspfarm
!
!
!
voice service voip
    gcid
    callmonitor
    allow-connections h323 to h323
    allow-connections h323 to sip
    allow-connections sip to h323
    allow-connections sip to sip
    no supplementary-service sip moved-temporarily
    sip
        registrar server expires max 120 min 60
!
!
voice class codec 1
    codec preference 1 g711ulaw
    codec preference 2 g729r8
!

```



```
!  
!  
!  
!  
!  
!  
!  
!  
!  
voice register global  
  mode cme  
  source-address 192.0.2.254 port 5060  
  max-dn 720  
  max-pool 240  
  authenticate presence  
  dialplan-pattern 1 511.... extension-length 4  
  voicemail 9001  
  create profile sync 0000260378327476  
!  
voice register session-server 1  
  keepalive 300  
  register-id SB-SJ1-UCCX1_1173482160000  
!  
voice register dn 1  
  session-server 1  
  number 8901  
  allow watch  
  refer target dial-peer  
!  
voice register dn 2  
  session-server 1  
  number 8001  
  allow watch  
  refer target dial-peer  
!  
voice register dn 3  
  session-server 1  
  number 8002  
  allow watch  
  refer target dial-peer  
!  
voice register dn 4  
  session-server 1  
  number 8101  
  allow watch  
  refer target dial-peer  
!  
voice register dn 5  
  session-server 1  
  number 8102  
  allow watch  
  refer target dial-peer  
!  
voice register dn 11  
  number 2011  
  name ep-sip-1-11  
  mwi  
!  
voice register dn 12  
  number 2012  
  name ep-sip-1-12  
  mwi  
!  
voice register dn 13
```

```
number 2013
name ep-sip-1-13
mwi
!
voice register dn 14
number 2014
name ep-sip-1-14
mwi
!
voice register dn 15
number 2015
name ep-sip-1-15
mwi
!
voice register dn 16
number 5016
name rp-sip-1-16
label SIP 511-5016
mwi
!
voice register dn 17
number 5017
name rp-sip-1-17
label SIP 511-5017
mwi
!
voice register dn 18
number 5018
name rp-sip-1-18
label SIP 511-5018
mwi
!
voice register dn 19
number 5019
name rp-sip-1-19
label SIP 511-5019
mwi
!
voice register dn 20
number 5020
name rp-sip-1-20
label SIP 511-5020
mwi
!
voice register dn 21
number 5021
name rp-sip-1-21
label SIP 511-5021
mwi
!
voice register dn 22
number 5022
name rp-sip-1-22
label SIP 511-5022
mwi
!
voice register pool 1
session-server 1
number 1 dn 1
number 2 dn 2
number 3 dn 3
number 4 dn 4
number 5 dn 5
dtmf-relay sip-notify
```

```
    codec g711ulaw
  !
voice register pool 11
  id mac 1111.0511.2011
  type 7970
  number 1 dn 11
  dtmf-relay rtp-nte
  voice-class codec 1
  username 5112011 password 5112011
  !
voice register pool 12
  id mac 1111.0511.2012
  type 7960
  number 1 dn 12
  dtmf-relay rtp-nte
  voice-class codec 1
  username 5112012 password 5112012
  !
voice register pool 13
  id mac 1111.0511.2013
  type 7970
  number 1 dn 13
  dtmf-relay rtp-nte
  voice-class codec 1
  username 5112013 password 5112013
  !
voice register pool 14
  id mac 1111.0511.2014
  type 7970
  number 1 dn 14
  dtmf-relay rtp-nte
  voice-class codec 1
  username 5112014 password 5112014
  !
voice register pool 15
  id mac 1111.0511.2015
  type 7970
  number 1 dn 15
  dtmf-relay rtp-nte
  voice-class codec 1
  username 5112015 password 5112015
  !
voice register pool 16
  id mac 0013.1A10.7349
  type 7970
  number 1 dn 16
  dtmf-relay rtp-nte
  voice-class codec 1
  username rp-sip-1-16 password cisco
  !
voice register pool 17
  id mac 0016.9D99.2BFE
  type 7941GE
  number 1 dn 17
  dtmf-relay rtp-nte
  voice-class codec 1
  username rp-sip-1-17 password cisco
  !
voice register pool 18
  id mac 0014.1C0F.0176
  type 7970
  number 1 dn 18
  dtmf-relay rtp-nte
  voice-class codec 1
```

```
username rp-sip-1-18 password cisco
!
voice register pool 19
  id mac 0011.9378.D1B5
  type 7960
  number 1 dn 19
  dtmf-relay rtp-nte
  voice-class codec 1
  username rp-sip-1-19 password cisco
!
voice register pool 20
  id mac 0015.F9A2.CE5E
  type 7940
  number 1 dn 20
  dtmf-relay rtp-nte
  voice-class codec 1
  username rp-sip-1-20 password cisco
!
voice register pool 21
  id mac 0014.69E2.662C
  type 7940
  number 1 dn 21
  dtmf-relay rtp-nte
  voice-class codec 1
  username rp-sip-1-21 password cisco
!
voice register pool 22
  id mac 0014.698C.5D9F
  type 7960
  number 1 dn 22
  dtmf-relay rtp-nte
  voice-class codec 1
  username rp-sip-1-22 password cisco
!
voice logout-profile 1
  number 4034 type normal
  speed-dial 1 4317 label SD_511-4317
!
voice logout-profile 2
  number 4035 type normal
  speed-dial 1 4016 label SD_511-4016
!
voice user-profile 1
  user ad1 password ad1ad1
  number 4044,4046,4048 type normal
  speed-dial 1 4017 label SD_511-4017
!
voice user-profile 2
  user ad2 password ad2ad2
  number 4045 type normal
  speed-dial 1 4017 label SD_511-4017
!
voice user-profile 3
  user ad3 password ad3ad3
  number 4046 type normal
  speed-dial 1 4018 label SD_511-4018
!
!
!
!
!
archive
  log config
!
```

```
!  
controller T1 0/2/0  
  framing esf  
  clock source internal  
  linecode b8zs  
  pri-group timeslots 1-4,24  
!  
controller T1 0/2/1  
  framing esf  
  clock source internal  
  linecode b8zs  
  pri-group timeslots 1-4,24  
!  
controller T1 0/3/0  
  framing esf  
  clock source internal  
  linecode b8zs  
  ds0-group 0 timeslots 1-4 type e&m-immediate-start  
!  
controller T1 0/3/1  
  framing esf  
  clock source internal  
  linecode b8zs  
  ds0-group 0 timeslots 1-4 type e&m-immediate-start  
!  
!  
!  
!  
!  
interface GigabitEthernet0/0  
  ip address 192.0.2.1 255.255.0.0  
  duplex auto  
  speed auto  
  media-type rj45  
  no keepalive  
!  
interface GigabitEthernet0/1  
  ip address 192.0.2.254 255.255.255.0  
  duplex auto  
  speed auto  
  media-type rj45  
  no keepalive  
!  
interface Serial0/2/0:23  
  no ip address  
  encapsulation hdlc  
  isdn switch-type primary-5ess  
  isdn protocol-emulate network  
  isdn incoming-voice voice  
  no cdp enable  
!  
interface Serial0/2/1:23  
  no ip address  
  encapsulation hdlc  
  isdn switch-type primary-5ess  
  isdn protocol-emulate network  
  isdn incoming-voice voice  
  no cdp enable  
!  
interface Service-Engine1/0  
  ip unnumbered GigabitEthernet0/0  
  service-module ip address 192.0.2.250 255.255.0.0  
  service-module ip default-gateway 192.0.2.1  
!
```

```

ip route 192.0.0.0 255.0.0.0 192.0.2.1
ip route 192.0.2.250 255.255.255.255 Service-Engine1/0
ip route 172.16.2.0 255.255.255.0 192.0.2.2
ip route 172.16.3.0 255.255.255.0 192.0.2.3
ip route 223.255.254.0 255.255.255.0 192.0.2.1
!
!
ip http server
ip http authentication local
ip http path flash:
!
!
ixi transport http
  response size 64
  no shutdown
  request outstanding 1
!
ixi application cme
  no shutdown
!
!
!
control-plane
!
!
!
voice-port 0/0/0
!
voice-port 0/0/1
!
voice-port 0/2/0:23
!
voice-port 0/3/0:0
!
voice-port 0/1/0
!
voice-port 0/1/1
!
voice-port 0/2/1:23
!
voice-port 0/3/1:0
!
!
!
sccp local GigabitEthernet0/1
sccp ccm 192.0.2.254 identifier 100 version 4.0
sccp
!
sccp ccm group 1
  associate ccm 100 priority 1
  associate profile 1 register confprof1
!
dspfarm profile 1 conference
  codec g711ulaw
  codec g711alaw
  codec g729ar8
  codec g729abr8
  codec g729r8
  codec g729br8
  maximum sessions 3
  associate application SCCP
  shutdown
!
!

```

```
dial-peer voice 9000 voip
  description ==> This is for internal calls to CUE
  destination-pattern 9...
  voice-class codec 1
  session protocol sipv2
  session target ipv4:192.0.2.250
  dtmf-relay rtp-nte sip-notify
!
dial-peer voice 9001 voip
  description ==> This is for external calls to CUE
  destination-pattern 5119...
  voice-class codec 1
  session protocol sipv2
  session target ipv4:192.0.2.250
  dtmf-relay rtp-nte sip-notify
!
dial-peer voice 521 voip
  destination-pattern 521....
  voice-class codec 1
  max-redirects 5
  session protocol sipv2
  session target ipv4:192.0.2.2
  dtmf-relay sip-notify rtp-nte
!
!
presence
  presence call-list
  watcher all
  allow subscribe
!
sip-ua
  mwi-server ipv4:192.0.2.250 expires 3600 port 5060 transport udp
  presence enable
!
!
telephony-service
  sdspfarm conference mute-on B11 mute-off B22
  sdspfarm units 1
  sdspfarm tag 1 confprof1
  conference hardware
  no auto-reg-ephone
  xml user axluser password cisco 15
  max-ephones 240
  max-dn 720
  ip source-address 192.0.2.254 port 2000
  system message sb-sj1-3845-uut1
  url services http://192.0.2.252:6293/ipphone/jsp/sciphonexml/IPAgentInitial.jsp
  url authentication
  http://192.0.2.252:6293/ipphone/jsp/sciphonexml/IPAgentAuthenticate.jsp
  cnf-file perphone
  dialplan-pattern 1 511.... extension-length 4
  voicemail 9001
  max-conferences 8 gain -6
  call-forward pattern .T
  transfer-system full-consult
  transfer-pattern .T
  create cnf-files version-stamp Jan 01 2002 00:00:00
!
!
ephone-dn 1 dual-line
  session-server 1
  number 1001
  name ag-1-1
  allow watch
```

```
mwi sip
!
!
ephone-dn 2 dual-line
  session-server 1
  number 1002
  name ag-1-2
  allow watch
  mwi sip
!
!
ephone-dn 3 dual-line
  session-server 1
  number 1003
  name ag-1-3
  allow watch
  mwi sip
!
!
ephone-dn 4 dual-line
  session-server 1
  number 1004
  name ag-1-4
  allow watch
  mwi sip
!
!
ephone-dn 5 dual-line
  session-server 1
  number 1005
  name ag-1-5
  allow watch
  mwi sip
!
!
ephone-dn 11 dual-line
  number 3011
  name ep-sccp-1-11
  mwi sip
!
!
ephone-dn 12 dual-line
  number 3012
  name ep-sccp-1-12
  mwi sip
!
!
ephone-dn 13 dual-line
  number 3013
  name ep-sccp-1-13
  mwi sip
!
!
ephone-dn 14 dual-line
  number 3014
  name ep-sccp-1-14
  mwi sip
!
!
ephone-dn 15 dual-line
  number 3015
  name ep-sccp-1-15
  mwi sip
!
```



```
!
ephone-dn 16 dual-line
  session-server 1
  number 4016
  label SCCP 511-4016
  name rp-sccp-1-16
  allow watch
  mwi sip
!
!
ephone-dn 17 dual-line
  session-server 1
  number 4017
  label SCCP 511-4017
  name rp-sccp-1-17
  allow watch
  mwi sip
!
!
ephone-dn 18 dual-line
  number 4018
  label SCCP 511-4018
  name rp-sccp-1-18
  mwi sip
!
!
ephone-dn 19 dual-line
  number 4019
  label SCCP 511-4019
  name rp-sccp-1-19
  mwi sip
!
!
ephone-dn 20 dual-line
  session-server 1
  number 4020
  label SCCP 511-4020
  name rp-sccp-1-20
  allow watch
  mwi sip
!
!
ephone-dn 21 dual-line
  number 4021
  label SCCP 511-4021
  name rp-sccp-1-21
  mwi sip
!
!
ephone-dn 22 dual-line
  number 4022
  label SCCP 511-4022
  name rp-sccp-1-22
  mwi sip
!
!
ephone-dn 23 dual-line
  number 4023
  label SCCP 511-4023
  name rp-sccp-1-23
  mwi sip
!
!
ephone-dn 24 dual-line
```

```
number 4024
label SCCP 511-4024
name rp-sccp-1-24
mwi sip
!
!
ephone-dn 25 dual-line
session-server 1
number 4025
label SCCP 511-4025
name rp-sccp-1-25
allow watch
!
!
ephone-dn 26 dual-line
session-server 1
number 4026
label SCCP 511-4026
name rp-sccp-1-5114026
allow watch
!
!
ephone-dn 27 dual-line
session-server 1
number 4027
label SCCP 511-4027
name rp-sccp-1-5114027
allow watch
!
!
ephone-dn 34 dual-line
session-server 1
number 4034
label SCCP 511-4034
name rp-sccp-1-5114034
allow watch
!
!
ephone-dn 35 dual-line
session-server 1
number 4035
label SCCP 511-4035
name rp-sccp-1-5114035
allow watch
!
!
ephone-dn 44 dual-line
session-server 1
number 4044
label SCCP 511-4044
name rp-sccp-1-5114044
allow watch
!
!
ephone-dn 45 dual-line
session-server 1
number 4045
label SCCP 511-4045
name rp-sccp-1-5114045
allow watch
!
!
ephone-dn 46 dual-line
session-server 1
```

```
number 4046
label SCCP 511-4046
name rp-sccp-1-5114046
allow watch
!
!
ephone-dn 121 dual-line
number A000
conference ad-hoc
preference 1
no huntstop
!
!
ephone-dn 122 dual-line
number A000
conference ad-hoc
preference 2
no huntstop
!
!
ephone-dn 123 dual-line
number A000
conference ad-hoc
preference 3
no huntstop
!
!
ephone-dn 124 dual-line
number A000
conference ad-hoc
preference 4
no huntstop
!
!
ephone-dn 125 dual-line
number A001
conference ad-hoc
preference 1
no huntstop
!
!
ephone-dn 126 dual-line
number A001
conference ad-hoc
preference 2
no huntstop
!
!
ephone-dn 127 dual-line
number A001
conference ad-hoc
preference 3
no huntstop
!
!
ephone-dn 128 dual-line
number A001
conference ad-hoc
preference 4
no huntstop
!
!
ephone 1
mac-address 1111.0511.1001
```

```
type 7970
keep-conference endcall
button 1:1
!
!
!
ephone 2
mac-address 1111.0511.1002
type 7970
keep-conference endcall
button 1:2
!
!
!
ephone 3
mac-address 1111.0511.1003
type 7970
keep-conference endcall
button 1:3
!
!
!
ephone 4
mac-address 1111.0511.1004
type 7970
keep-conference endcall
button 1:4
!
!
!
ephone 5
mac-address 1111.0511.1005
type 7970
keep-conference endcall
button 1:5
!
!
!
ephone 11
mac-address 1111.0511.3011
type 7960
keep-conference endcall
button 1:11
!
!
!
ephone 12
mac-address 1111.0511.3012
type 7960
keep-conference endcall
button 1:12
!
!
!
ephone 13
mac-address 1111.0511.3013
type 7960
keep-conference endcall
button 1:13
!
!
!
ephone 14
mac-address 1111.0511.3014
```

```
type 7960
keep-conference endcall
button 1:14
!
!
!
ephone 15
mac-address 1111.0511.3015
type 7960
keep-conference endcall
button 1:15
!
!
!
ephone 16
mac-address 0002.4BCC.D6D4
type 7960
keep-conference endcall
button 1:16
!
!
!
ephone 17
mac-address 0011.9350.8030
type 7960
keep-conference endcall
button 1:17
!
!
!
ephone 18
mac-address 0016.9D99.29CE
type 7941
keep-conference endcall
button 1:18
!
!
!
ephone 19
mac-address 0015.F9A2.CC64
type 7940
keep-conference endcall
button 1:19
!
!
!
ephone 20
mac-address 0011.9378.D1FA
type 7960
keep-conference endcall
button 1:20
!
!
!
ephone 21
mac-address 0011.93B6.C547
type 7905
keep-conference endcall
button 1:21
!
!
!
ephone 22
mac-address 0011.5C0E.550D
```

```
type 7970
keep-conference endcall
button 1:22
!
!
!
ephone 23
mac-address 0011.216E.158B
type 7970
keep-conference endcall
button 1:23
!
!
!
ephone 24
mac-address 0015.6389.AF1E
type 7931
keep-conference endcall
button 1:24
!
!
!
ephone 25
mac-address 0050.BF97.30EB
type CIPC
keep-conference endcall
button 1:25
!
!
!
ephone 26
mac-address 0018.F3F1.CD5F
type CIPC
keep-conference endcall
button 1:26
!
!
!
ephone 27
mac-address 0050.DAB2.67B9
type CIPC
keep-conference endcall
button 1:27
!
!
!
line con 0
exec-timeout 0 0
stopbits 1
line 66
no activation-character
no exec
transport preferred none
transport input all
transport output pad telnet rlogin lapb-ta mop udptn v120
line aux 0
stopbits 1
line vty 0 4
password lab
login
!
scheduler allocate 20000 1000
!
end
```

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