



## CHAPTER 6

# Cisco Unified Communications Manager Services Issues

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This section covers the solutions for the following most common issues that relate to Cisco Unified Communications Manager services:

- [No Available Conference Bridge, page 6-1](#)
- [Hardware Transcoder Not Working As Expected, page 6-2](#)
- [No Supplementary Services Are Available on an Established Call, page 6-4](#)

## No Available Conference Bridge

### Symptom

The following message displays: No Conference Bridge Available.

### Possible Cause

This could indicate either a software or a hardware problem.

### Recommended Action

1. Check to see whether you have any available software or hardware conference bridge resources that are registered with Cisco Unified Communications Manager.
2. Use the Cisco Unified Communications Manager Cisco Unified Real-Time Monitoring Tool to check the number of Unicast AvailableConferences.

The Cisco IP Voice Media Streaming application performs the conference bridge function. One software installation of Cisco IP Voice Media Streaming will support 16 Unicast Available Conferences (three people/conference), as shown in the following trace.



### Note

The number of supported devices may vary with different Cisco Unified Communications Manager releases. Refer to the appropriate version of Cisco Unified Communications Manager documentation at the following location:

[http://www.cisco.com/en/US/products/sw/voicesw/ps556/products\\_documentation\\_roadmaps\\_list.html](http://www.cisco.com/en/US/products/sw/voicesw/ps556/products_documentation_roadmaps_list.html)

```
10:59:29.951 CCM CallManager|UnicastBridgeControl - wait_capabilities_StationCapRes - Device= CFB_kirribilli - Registered - ConfBridges= 16, Streams= 48, tcpHandle=4f12738
```

```
10:59:29.951 CCM CallManager|UnicastBridgeManager - UnicastBridgeRegistrationReq -
Device Registration Complete for Name= Xoø ô%ô - DeviceType= 50, ResourcesAvailable=
16, deviceTblIndex= 0
```

One E1 port (WS-X6608-E1 card contains 8x E1 ports) provides five Unicast Available Conferences (max conference size = 6), as shown in the following trace.

```
11:14:05.390 CCM CallManager|UnicastBridgeControl - wait_capabilities_StationCapRes -
Device= CFB00107B000FB0 - Registered - ConfBridges= 5, Streams= 16, tcpHandle=4f19d64
11:14:05.480 CCM CallManager|UnicastBridgeManager - UnicastBridgeRegistrationReq -
Device Registration Complete for Name= Xoø ô%ô - DeviceType= 51, ResourcesAvailable=
5, deviceTblIndex= 0
```

The following hardware trace on the Cisco Catalyst 6000 8 Port Voice T1/E1 and Services Module indicates that the E1 port 4/1 in the card registered as a Conference Bridge with Cisco Unified Communications Manager.

```
greece-sup (enable) sh port 4/1
Port Name Status Vlan Duplex Speed Type
-----
4/1 enabled 1 full -Conf Bridge

Port DHCP MAC-Address IP-Address Subnet-Mask
-----
4/1 disable 00-10-7b-00-0f-b0 10.200.72.31 255.255.255.0

Port Call-Manager(s) DHCP-Server TFTP-Server Gateway
-----
4/1 10.200.72.25 - 10.200.72.25 -

Port DNS-Server(s) Domain
-----
4/1 - 0.0.0.0

Port CallManagerState DSP-Type
-----
4/1 registered C549

Port NoiseRegen NonLinearProcessing
-----
4/1 disabled disabled
```

3. Check the maximum number of users that are configured in your ad hoc or meet-me conference to determine whether the problem occurred because this number was exceeded.
4. Check the setting of the Audio Bandwidth field on the Location Configuration window. If the call bandwidth exceeds this configured limit, the conferencing fails. To resolve this issue, choose the Unlimited Bandwidth radio button. For more information on the Location Configuration window, refer to the *Cisco Unified Communications Manager Administration Guide*.

## Hardware Transcoder Not Working As Expected

### Symptom

You have installed a hardware transcoder in the Cisco Catalyst 6000 8 Port Voice T1/E1 and Services Module, and it does not work as expected (you cannot make calls between two users with no common codec).

**Possible Cause**

You may not have any available transcoder resources that are registered with Cisco Unified Communications Manager (must be hardware).

**Recommended Action**

Use the Cisco Unified Communications Manager Cisco Unified Real-Time Monitoring Tool to check the number of available resources by viewing the ResourceAvailable counter in the Cisco MTP Device object.

One E1 port (WS-X6608-E1 card contains 8x E1 ports) provides transcoder/MTP resources for 16 calls, as shown in the following trace.



**Note** The number of supported devices may vary with different Cisco Unified Communications Manager releases. Refer to the appropriate version of Cisco Unified Communications Manager documentation at the following location:  
[http://www.cisco.com/en/US/products/sw/voicesw/ps556/products\\_documentation\\_roadmaps\\_list.html](http://www.cisco.com/en/US/products/sw/voicesw/ps556/products_documentation_roadmaps_list.html)

```
11:51:09.939 CCM CallManager|MediaTerminationPointControl - Capabilities Received -
Device= MTP00107B000FB1 - Registered - Supports 16 calls
```

The following hardware trace on the Cisco Catalyst 6000 8 Port Voice T1/E1 and Services Module indicates that the E1 port 4/2 in the card registered as an MTP/transcoder with Cisco Unified Communications Manager.

```
greece-sup (enable) sh port 4/2
Port Name Status Vlan Duplex Speed Type
-----
4/2 enabled 1 full - MTP

Port DHCP MAC-Address IP-Address Subnet-Mask
-----
4/2 disable 00-10-7b-00-0f-b1 10.200.72.32 255.255.255.0

Port Call-Manager(s) DHCP-Server TFTP-Server Gateway
-----
4/2 10.200.72.25 - 10.200.72.25 -

Port DNS-Server(s) Domain
-----
4/2 - 0.0.0.0

Port CallManagerState DSP-Type
-----
4/2 registered C549

Port NoiseRegen NonLinearProcessing
-----
4/2 disabled disabled
```



**Note** You cannot configure the same E1 port for both Conference Bridge and Transcoder/MTP

To make a call between two devices that are using a low bit rate code (such as G.729 and G.723) that do not support the same codec, you need a transcoder resource.

Assume Cisco Unified Communications Manager has been configured such that the codec between Region1 and Region2 is G.729. The following scenarios apply:

- If caller on Phone A initiates a call, Cisco Unified Communications Manager realizes it is a Cisco Unified IP Phone model 7960, which supports G.729. After the digits are collected, the Cisco Unified Communications Manager determines that the call is destined for User D who is in Region2. Because the destination device also supports G.729, the call gets set up, and the audio flows directly between Phone A and Phone D.
- If a caller on Phone B, who has a Cisco Unified IP Phone model 12SP+, initiates a call to Phone D, this time the Cisco Unified Communications Manager would realize that the originating phone only supports G.723 or G.711. Cisco Unified Communications Manager would need to allocate a transcoding resource so audio would flow as G.711 between Phone B and the transcoder but as G.729 between the transcoder and Phone D. If no transcoder were available, Phone D would ring, but as soon as the call was answered, the call would disconnect.
- If a user on Phone B calls Phone F, which is a Cisco Unified IP Phone model 12SP+, the two phones would actually use G.723, even though G.729 is configured as the codec to use between the regions. G.723 gets used because both endpoints support it, and it uses less bandwidth than G.729.

## No Supplementary Services Are Available on an Established Call

### Symptom

A call gets established, but supplementary services are not available.

### Possible Cause

An MTP resource problem could provide the source of the transcoding problem if a call is established, but supplementary services are not available on an H.323 device that does not support H323v2.

### Recommended Action

1. Determine whether you have any available software or hardware MTP resources that are registered with Cisco Unified Communications Manager.
2. Use Performance monitoring in the Cisco Unified Communications Manager Cisco Unified Real-Time Monitoring Tool to check the number of MTP devices available.

Using MTP to support supplementary services with H.323 devices that do not support H.323v2 allows one MTP software application to support 24 calls as shown in the following trace.



### Note

The number of supported devices may vary with different Cisco Unified Communications Manager releases. Refer to the appropriate version of Cisco Unified Communications Manager documentation at the following location:  
[http://www.cisco.com/en/US/products/sw/voicesw/ps556/products\\_documentation\\_roadmap\\_ps\\_list.html](http://www.cisco.com/en/US/products/sw/voicesw/ps556/products_documentation_roadmap_ps_list.html)

```
10:12:19.161 CCM CallManager|MediaTerminationPointControl - Capabilities Received -
Device= MTP_kirribilli. - Registered - Supports 24 calls
```

One E1 port (WS-X6608-E1 card contains 8x E1 ports) provides MTP resources for 16 calls, as shown in the following trace.

```
11:51:09.939 CCM CallManager|MediaTerminationPointControl - Capabilities Received -
Device= MTP00107B000FB1 - Registered - Supports 16 calls
```

The following hardware trace from the Cisco Catalyst 6000 8 Port Voice T1/E1 and Services Module indicates that the E1 port 4/2 in the card has registered as an MTP/transcoder with Cisco Unified Communications Manager.

```
greece-sup (enable) sh port 4/2
Port  Name                Status      Vlan      Duplex Speed Type
-----
 4/2                      enabled    1         full   - MTP

Port  DHCP      MAC-Address      IP-Address      Subnet-Mask
-----
 4/2   disable  00-10-7b-00-0f-b1  10.200.72.32    255.255.255.0

Port  Call-Manager(s)  DHCP-Server      TFTP-Server      Gateway
-----
 4/2   10.200.72.25    -                 10.200.72.25    -

Port  DNS-Server(s)    Domain
-----
 4/2   -                0.0.0.0

Port  CallManagerState DSP-Type
-----
 4/2   registered      C549

Port  NoiseRegen NonLinearProcessing
-----
 4/2   disabled      disabled
```

3. In the Gateway Configuration window of Cisco Unified Communications Manager Administration, check to see whether the **Media Termination Point Required** check box is checked.
4. Verify that Cisco Unified Communications Manager allocated the required number of MTP devices.

■ No Supplementary Services Are Available on an Established Call