



CHAPTER

3

## Common Telephone Issues in Cisco Unified MeetingPlace Express

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After reviewing this chapter, if you still have problems with Cisco Unified MeetingPlace Express, contact Cisco TAC. See the “[Obtaining Technical Assistance” section on page vi](#) for information on contacting Cisco TAC.

### Tips for Failed Calls

The following tips should always be used when troubleshooting failed calls:

- Look for network congestion at the time of the call. Network congestion information can be found via router and switch statistics.
- Ensure that the Cisco Unified MeetingPlace Express system is set to full-duplex with 100 Mbps network speed.
- Ensure that the local switch port for the Cisco Unified MeetingPlace Express system has the same auto-negotiation setting as the Cisco Unified MeetingPlace Express system. You can run the **mii-tool** command from the CLI to see the current link setting.
- If Cisco Unified MeetingPlace Express and the local switch (or router) are configured correctly, make sure that the network on the other side of the switch or router is also set to 100 Mbps, full duplex.
- Ensure that the Cisco Unified MeetingPlace Express system is not connected to a multiple-device Ethernet bus. The system works best if micro-segmented to use a single switch port rather than share a bus with other devices. Sharing a bus can cause excessive collisions which reduce bandwidth and cause unpredictable bandwidth availability.
- If there is still congestion, you may have to take standard congestion reduction measures such as these:

**Undetected Key Presses**

- Reduce traffic in the local LAN by adding more switches and distributing the network devices between them.
- Reduce the number of devices on the local LAN (and thus the traffic) by adding more routers to create more (but smaller) LANs. There might also be unused ports on the local router in which case more routers are not needed.
- Change network device settings to reduce unnecessary traffic such as adding Access Control Lists (ACLs) to the local router to filter out irrelevant traffic.
- Get a trace of network traffic. This trace should be taken as close to the eth0 port as possible.
- Some phones provide network error statistics about how many bad frames have been received. See if the particular phone has these statistics. If so, see if the phone has registered the reception of a large number of bad frames.
- Verify the configuration of the device that routes calls to Cisco Unified MeetingPlace Express.
- Check for any firewalls between the phone and Cisco Unified MeetingPlace Express that may prevent calls.

## Undetected Key Presses

If it appears that the Cisco Unified MeetingPlace Express system is not detecting you when you press the keys on your phone, try these steps:

### Procedure

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**Step 1** Log in to the Cisco Unified MeetingPlace Express operating system as the root user.

**Step 2** At the password prompt, enter the root password.

The Cisco Unified MeetingPlace Express operating system desktop appears.

**Step 3** Right-click on the desktop.

**Step 4** From the menu, select **New Terminal**. This brings up a terminal session.

**Step 5** At the CLI, enter the following:

```
eventlog -b<mmddhhmm> -e<mmddhhmm>
```

For the start time (the -b value), enter a time shortly before the call failed. For the stop time (the -e value), enter a time shortly after the call failed.

**Step 6** Check the DID/DNIS and input events to determine which port is yours.

**Step 7** Look later in the trace to see if DTMFs sent from your phone were being detected. If they are not detected, then check the following:

- Verify that the telephony network is using RFC 2833 digits or out-of-band digits. (The Cisco Unified MeetingPlace Express system does not support in-band digits.)
  - Network congestion might be preventing the RFC 2833 digits or out-of-band digits from reaching the system.
  - Check if G.729 coders are being used somewhere in your network, instead of G.711. G.729 will seriously corrupt in-band digits (DTMF) causing these digits to either be lost or changed. If this is happening and RFC 2833 is *not* a good choice, consider converting to a pure G.711 network.
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# Failed Incoming Calls

If you are not able to receive incoming calls, do the following:

## Procedure

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- Step 1** Log in to the Cisco Unified MeetingPlace Express operating system as the root user.
- Step 2** At the password prompt, enter the root password.  
The Cisco Unified MeetingPlace Express operating system desktop appears.
- Step 3** Right-click on the desktop.
- Step 4** From the menu, select **New Terminal**. This brings up a terminal session.
- Step 5** At the CLI, enter the following:  
**eventlog -b<mmddhhmm> -e<mmddhhmm>**  
For the start time (the -b value), enter a time shortly before the call failed. For the stop time (the -e value), enter a time shortly after the call failed.
- Step 6** Determine if the Cisco Unified MeetingPlace Express system registered the call signaling packets.
- If the system registered the call, look for a reason in the trace log why the call was disconnected.  
Enter one of these commands:  
**eventlog -b<mmddhhmm> -e<mmddhhmm> -v**  
**eventlog -b<mmddhhmm> -e<mmddhhmm> -G -v**
  - If the system did not register the call in the trace log, the problem might be a configuration problem on the device that routes calls to Cisco Unified MeetingPlace Express. Also, check if any firewalls may be preventing the call from reaching the system.
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# Dropped Calls

If calls are connected to the system, but then disconnect during the call, do the following:

## Procedure

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- Step 1** Log in to the Cisco Unified MeetingPlace Express operating system as the root user.
- Step 2** At the password prompt, enter the root password.  
The Cisco Unified MeetingPlace Express operating system desktop appears.
- Step 3** Right-click on the desktop.
- Step 4** From the menu, select **New Terminal**. This brings up a terminal session.
- Step 5** At the CLI, enter the following:  
**eventlog -b<mmddhhmm> -e<mmddhhmm>**  
For the start time (the -b value), enter a time shortly before the call failed. For the stop time (the -e value), enter a time shortly after the call failed.

**Dead Air During Calls**

- Step 6** Check for a “far end disconnect event.” If you see this, the disconnect may have been initiated outside of the Cisco Unified MeetingPlace Express system. Check for errors on the devices between the phone and the Cisco Unified MeetingPlace Express system.
- Step 7** If you do not see a “far end disconnect event,” the Cisco Unified MeetingPlace Express system hung up on you first. Review the trace log to try to determine why the system hung up on you.
- Step 8** If your system uses Cisco Unified CallManager contact the Cisco Unified CallManager network administrator to get a call session trace indicating why Cisco Unified CallManager sent the disconnect event to you.
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## Dead Air During Calls

If you think that your call has been disconnected, but your phone still shows that the call is active, follow these steps:

**Procedure**

- Step 1** If you are in a meeting, enter #21 to hear a roll call of all meeting participants.  
Do you hear anything?
  - If yes, you have at least one-way audio (that is, you can hear but not speak).
  - If you do not hear anything, either there is no audio either way or Cisco Unified MeetingPlace Express cannot detect your DTMF keypresses.
- Step 2** Provide this information to your network administrator and try to get a call session trace from Cisco Unified CallManager.
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## Dropped Packets

If you determine that packets are being dropped (as determined by RTCP statistics) or delivered with errors and then dropped at the endpoints, consider changing the following call configuration parameters:

**Procedure**

- Step 1** Log in to Cisco Unified MeetingPlace Express.
- Step 2** At the top of the page, click **Administration**.
- Step 3** On the left side of the page:
  - a. Click **System Configuration**.
  - b. Click **Call Configuration**.
  - c. Click **Audio Parameters**.
- Step 4** In the Default G.711 packet size (milliseconds) field, enter **10**.  
A smaller packet size reduces the damaging effect of a lost packet. However, network traffic increases slightly.

**Step 5** Set the Voice activity detect field to **yes**.

This reduces outgoing packets to callers. The Cisco Unified MeetingPlace Express system only transmits packets if someone is actively speaking during a meeting. However, there might be a slight delay when someone starts speaking causing part of their initial syllable to not be heard.

**Step 6** Determine how to configure the phones in your organization to use Voice Activity Detect (VAD). This way, the phones only send packets to the Cisco Unified MeetingPlace Express system when the phone detects sound on your handset or headset.**Step 7** Set the Maximum jitter buffer (milliseconds) field to **250**.

This is the maximum value allowed. This higher value introduces more delays into conversations, but also reduces packet loss due to sudden surges in traffic.

**Step 8** To maximize bandwidth, have the network administrator check that the your Cisco Unified MeetingPlace Express system and the local switch that your system connects to are both running in 100 Mbps full duplex mode.

■ Dropped Packets