



# Cisco TelePresence MCU MSE 8420 Getting started

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# General information

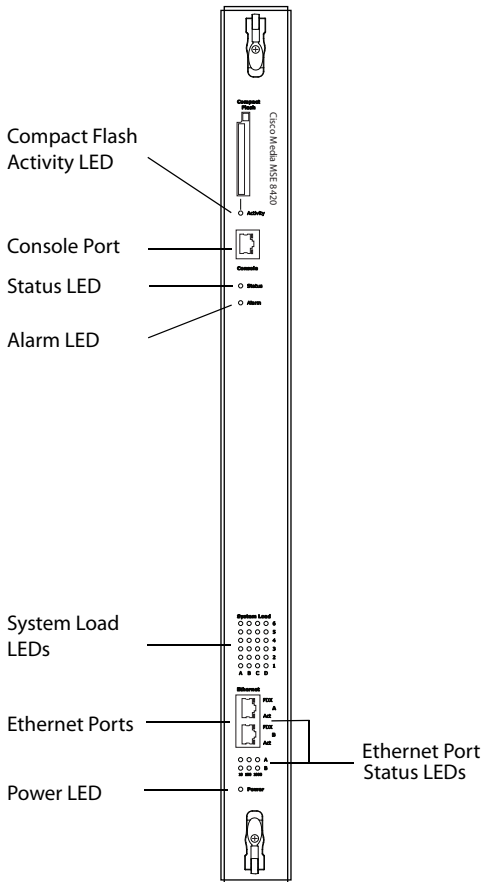
## About the Cisco TelePresence MCU MSE 8420

The Cisco TelePresence MCU MSE 8420 (MCU MSE 8420) is a technologically advanced Multipoint Control Unit (MCU) that fits into a Cisco TelePresence MSE 8000 chassis. It is designed to provide high quality voice and video conferencing.

## Port and LED location

Figure 1 shows the position of ports and LEDs on the MCU MSE 8420.

Figure 1: MCU MSE 8420 front panel



## LED behavior

Table 1 describes the behavior of the LEDs.

Table 1: MCU MSE 8420 LED behavior

LED	Color	Indicates
Compact Flash Activity	Flashing green	One of: <ul style="list-style-type: none"> <li>▶ the MCU MSE 8420 is booting</li> <li>▶ a configuration change has been made</li> <li>▶ the configuration is being transferred by FTP</li> </ul>
Status	Green	The MCU MSE 8420 is operating normally
Alarm	Red	The MCU MSE 8420 is booting or has developed a fault, for example: <ul style="list-style-type: none"> <li>▶ temperature is outside normal limits</li> <li>▶ battery failure of the internal clock</li> </ul> Refer to the web interface for more information about the problem (go to <b>Status &gt; Health</b> )
System Load	Green	The MCU MSE 8420 is processing conference data. The LEDs represent the media processing load of the MCU MSE 8420. The column numbered 1 represents audio load. The other columns represent video DSP load. Media processing load is also displayed in the web interface: go to <b>Status &gt; General</b>

Table 1: MCU MSE 8420 LED behavior (continued)

<b>LED</b>	<b>Color</b>	<b>Indicates</b>
Ethernet Port Status, for each Ethernet port and Admin port:		
FDX	Green	The link has been negotiated as a full-duplex link
Act	Green	Packets are being transmitted on this port
Link	Green	The speed of the link from this port, which is either 10, 100, or 1000 Mbps
Power	Blue	The MCU MSE 8420 is receiving power from the MSE 8000 chassis.

## Installing the MCU MSE 8420



**Important:** Before installing the MCU MSE 8420 into the MSE 8000, read the safety information guide for the MSE 8000 chassis at <http://www.cisco.com/go/telepresence/safety>.



Although blades are hot-swappable parts, you must only remove one blade at any time. Remove the power from the MSE 8000, if you need to remove more than one blade at a time.



Before hot-swapping a blade, shut down the blade using the web interface. Do not shut down a blade during a software upgrade or if the blade is processing (for example if a conference is taking place on a blade).

For information about powering the MSE 8000 refer to the *Getting Started Guide* on <http://www.tandberg.com/support/video-conferencing-documentation.jsp>.

### Step one: Install the MCU MSE 8420 into the MSE 8000 chassis



You must install either a blade or a blanking blade in each of the ten positions in the chassis.



The Supervisor blade must be installed into slot 1 of the MSE 8000 chassis.

- 1 Remove the blade or blanking blade from the slot into which you are going to install the MCU MSE 8420:
  - i Using a No.1 Phillips screwdriver, loosen the screws in the retaining latches with an anti-clockwise quarter turn.
  - ii Open both retaining latches on the front of the blade or blanking blade. When open, a retaining latch is at a 90° angle perpendicular to the front of the blade.
  - iii Slide out the blade or blanking blade.
- 2 Open both retaining latches on the front of the MCU MSE 8420. When open, a retaining latch is at a 90° angle perpendicular to the front of the blade.
- 3 Slide the MCU MSE 8420 into the blade slot (as shown in Figure 2) until it stops.

- 4 Simultaneously close both retaining latches on the blade (thereby engaging the connectors at the rear of the blade) to secure in the chassis as shown in Figure 3.
- 5 Using a No.1 Phillips screwdriver, tighten the screws in the retaining latches with a clockwise quarter turn.

Figure 2: Inserting a blade into the chassis

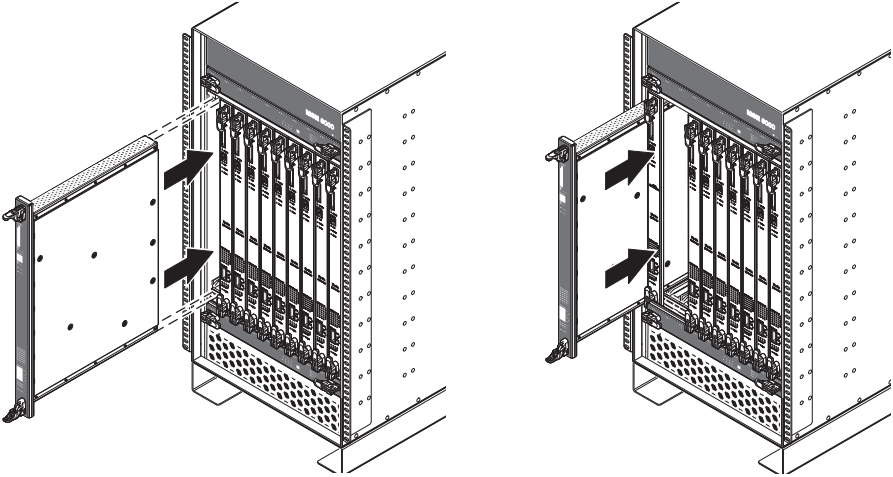
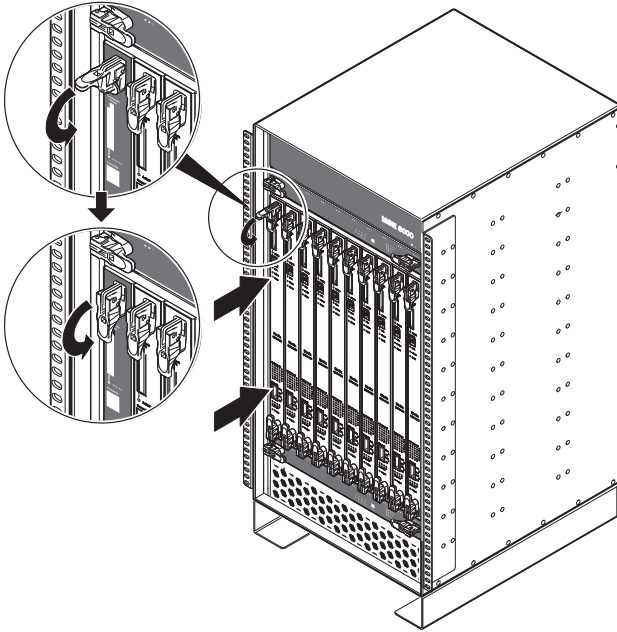


Figure 3: Closing the retaining latches on the front of a blade



## Step two: Connect to Ethernet Port A

Connect an Ethernet cable from Ethernet Port A to an Ethernet switch (rather than a hub, to minimize interference from other devices on the network). The Ethernet port is a 10/100/1000 Mbps auto-sensing connection.



Only connect to Ethernet Port B if you need to connect the MCU MSE 8420 to a second subnet.



Do not connect Ethernet Port A and Ethernet Port B to the same subnet.



## Initial configuration

### Step one: Configure Ethernet Port A settings

The default setting for the MCU MSE 8420 Ethernet ports is auto-sensing mode. If the switch ports to which you connect the MCU MSE 8420 are not also set to auto-sensing mode, then you need to configure the MCU MSE 8420 Ethernet ports to use the same speed and duplex mode.



Only connect to Ethernet Port B if you need to connect the MCU MSE 8420 to a second subnet.



Both ends of the Ethernet connection must be configured in the same way. For example, either configure both ends of the link to be auto-sensing or configure both ends to operate at the same speed and duplex.



To establish a 1000Mbps connection, both ends of the link must be configured as auto-sensing.

To configure Ethernet Port A, log in to the Supervisor's web interface and go to **Hardware > Blades**. For more information about configuring the port, refer to the online help accessible from the Supervisor's web interface.

### Step two: Assign an IP address to the MCU MSE 8420

You can use the Supervisor's web interface to configure the IP addresses of all blades installed in the MSE 8000. Note that all blades are supplied with DHCP enabled. You can either keep this setting or assign static IP addresses to a blade from the Supervisor's web interface. To view or configure the IP address of the MCU MSE 8420, log in to the Supervisor and go to **Hardware > Blades**. To access the web interface of the MCU MSE 8420, go to **Hardware > Blades** and click the IP address of that blade.

## Configuring the MCU MSE 8420

### Step one: Log in to the MCU MSE 8420

All administration of the MCU MSE 8420 is performed via the web interface.

To log in to the web interface of the MCU MSE 8420:

- 1 Log in to the Supervisor's web interface.
- 2 Go to **Hardware > Blades** and click the IP address of the MCU MSE 8420.
- 3 Click **Log in** and enter the user name **admin** with no password. The **Login information page** is displayed.



Cisco recommends that you change the admin account to use a password as soon as possible. To do that, click **Change password** on the **Login information page** or go to **Users**, click the **admin** link, and provide the required user information.

### Step two: Allocate port licences

Port licenses must be allocated to the MSE 8420 from the Supervisor's **Port licenses** page. Refer to the online help for assistance.

### Step three: Using an H.323 gatekeeper or SIP registrar (optional)

If you have H.323 endpoints, using an H.323 gatekeeper can make it easier for participants to call in to a conference. You can configure the MCU MSE 8420 to use an external gatekeeper or its own built-in gatekeeper. For information about using the built-in gatekeeper, refer to the online help.

If you have SIP endpoints, using a SIP registrar can make it easier for participants to call in to a conference.

To configure the MCU MSE 8420 to use an H.323 gatekeeper:

- 1 In the web interface of the MCU MSE 8420, go to **Settings > H.323**.
- 2 Enable **H.323 gatekeeper usage** and configure the settings you require, using the online help for further assistance.
- 3 Click **Apply changes**.

To configure the MCU MSE 8420 to use a SIP registrar:

- 1 In the web interface, go to **Settings > SIP**.
- 2 Configure the settings you require, using the online help for further assistance.
- 3 Click **Apply changes**.



Before you configure the MCU MSE 8420 to use, and register conferences to, a SIP registrar, you must set up the MCU MSE 8420 and its conferences on that SIP registrar.

### Step four: Add endpoints (optional)

One way to add participants to a conference that you create is to have the MCU MSE 8420 automatically call them when the conference starts. To do this, you configure their endpoints on the MCU MSE 8420. When you set up a conference, you can choose the endpoints from the **Pre-configured participants** list. This is easier than entering each endpoint's details every time. Participants that are pre-configured for a conference will automatically be called by the MCU MSE 8420 to join that conference.

To define pre-configured endpoints:

- 1 In the web interface of the MCU MSE 8420, go to **Endpoints**:
  - To add a H.323 endpoint, click **Add H.323**
  - To add a SIP endpoint, click **Add SIP**
  - To add a VNC screen, click **Add VNC**
- 2 Configure the endpoint settings you require, using the online help for further assistance.
- 3 Click **Add endpoint**.

## Using the MCU MSE 8420

### Creating conferences

To create a conference:

- 1 In the web interface of the MCU MSE 8420, go to **Conferences** and click **Add new conference**.
- 2 Type a **Name** for the conference, for example *SalesMeeting*.
- 3 Type an optional numeric identifier, for example **123**. This will be the telephone number that participants can use to join the conference when calling in to the MCU MSE 8420 via a gatekeeper or SIP registrar.



There are two types of conference participant: chairperson and guest. IDs and PINs allow participants to connect to conferences as the correct participant type. Chairperson participants use the Numeric ID and optionally, the PIN; guest participants use the Guest numeric ID and optionally, the Guest PIN. For more information, refer to the online help.

- 4 If you are using a gatekeeper, select **H.323 gatekeeper**; if you are using a SIP registrar, select **SIP registrar**.
- 5 Ensure the **Maximum duration** of the conference is sufficient (the default is one hour).
- 6 All other values can be left at their default settings. Refer to the online help for further information about the available settings.



Note that if you do not configure the conference to start immediately, it will become a scheduled conference and will be inactive until its start time.

- 7 Scroll down and click **Add conference**.

The conference you have created is now active (if you used the default immediate start time) and participants can join in one of two ways: either the MCU MSE 8420 can call out to specified endpoints or endpoints can dial in. Any endpoints that have been added to a conference, as pre-configured participants, will be called in to the conference by the MCU MSE 8420.

## Calling participants in to a conference

To call participants in to a conference:

- 1 In the web interface of the MCU MSE 8420, go to **Conferences** and click on the name of an active conference.
- 2 On the **Participants** tab, click **Add participant** to call out to an H.323 or SIP endpoint.
- 3 In the **Address** field:
  - where there is no H.323 gatekeeper or SIP registrar, type the IP address, host name, or SIP URI of an accessible endpoint on your network
  - if you are using an H.323 gatekeeper, enter the number registered with the gatekeeper for the required endpoint
  - if you are using a SIP registrar, enter the number registered with the SIP registrar for the required endpoint
- 4 Leave the other fields as their default values and click **Call endpoint**. The MCU MSE 8420 automatically connects to the endpoint.
- 5 If the endpoint is not configured to automatically answer calls, accept the call on the endpoint.

## Calling in to a conference

Participants can call in to conferences in either one of two ways:

- ▶ if you have given the conference a numeric identifier and you are using an H.323 gatekeeper or SIP registrar, tell participants to dial the numeric identifier from their endpoint to join that conference
- ▶ participants can dial the IP address of the MCU MSE 8420 to access the auto attendant of the MCU MSE 8420. Participants will see a menu of available conferences on their video screen and will hear instructions

## Streaming conferences

Streaming is a way of viewing a conference in a standard web browser. The MCU MSE 8420 allows streaming of video and, if enabled for a conference, the streaming of data. You can also conduct a text ‘chat’ and add notes and drawings to the data stream.



Note that to use the ‘chat’ facility when streaming a conference, your MCU MSE 8420 needs the web conferencing feature key. For more information, refer to your reseller.

You can configure two streaming options on the MCU MSE 8420 that will be available for users to choose between when streaming conferences. For each streaming option, you must choose a media player (QuickTime, RealPlayer, or Windows Media Player) and a bit rate.

To configure streaming options:

- 1 In the web interface of the MCU MSE 8420, go to **Settings > Streaming**.
- 2 Configure the streaming options you require, referring to the online help for more details about options.
- 3 Click **Apply changes**.

Streaming users will need to have installed one of the media players that you have chosen for the two streaming options. Streaming users might also need to install Java (from [www.java.com](http://www.java.com)).

To stream a conference:

- 1 In a web browser, go to the IP address of the MCU MSE 8420 (or if you are already logged in, go to **Home** and click **Streaming-only interface**).
- 2 If web conferencing is enabled, type in a **Sign-in name**. This is the name by which you will be identified if you ‘chat’.
- 3 Type in the **Conference ID** (the numeric identifier of the conference).
- 4 Click **Stream this conference** and streaming will start.

## Instructing conference participants

You need to tell conference participants how to join conferences. You can also tell them how to use the Far-End Camera Controls (FECC) to navigate menus in the auto attendant and choose conference layouts. There is a document: *Getting Started: Accessing Conferences* available in the **Documentation** area of the web site, which you can print out and give to conference participants.

## Checking for updates

It is a good idea to regularly check for updates to the main MCU MSE 8420 software image on the Cisco web site. This section describes how to upgrade the MCU MSE 8420 using the web. Note that you can also upgrade the MCU MSE 8420 using FTP; this can be more reliable if you are upgrading the device remotely. Upgrading your device via FTP is described in the release notes that are available alongside the software images in the support section of the web site.

To check for, and download, updates:

- 1 Log in to the MCU MSE 8420 web interface and go to **Status > General**.
- 2 Make a note of the software version that is currently installed.
- 3 Go to the support section of the web site and check if a more recent release is available for the MCU MSE 8420.
- 4 If a more recent release is available, download it and save it locally.

To upgrade the MCU MSE 8420:

- 1 Unzip the software release file that you downloaded.
- 2 In the MCU MSE 8420 web interface, go to **Settings > Upgrade**.
- 3 In the **Main software image** section, click **Browse** and locate the unzipped file.
- 4 Click **Upload software image**. The browser begins uploading the file to the MCU MSE 8420, and a new browser window opens to indicate the progress of the upload.

When finished, the browser window refreshes and indicates that the software upgrade is complete.

- 5 Go to **Settings > Shutdown** to shut down and restart the MCU MSE 8420.



Note that shutting down the MCU MSE 8420 will disconnect all participants.

## Troubleshooting and technical support information

### Using the event log to help solve a problem

You can use the event log to produce debugging information to assist technical support in solving any problems. Event logging capture filter topics are set by default to **Errors, warnings and information**. Do not change the capture filter topic level without the guidance of technical support.

### Getting more help

Cisco recommends registering your product at <http://www.tandberg.com/services/video-conferencing-product-registration.jsp> in order to receive notifications about the latest software and security updates. New feature and maintenance releases are published regularly, and we recommend that the MCU MSE 8420's software is always kept up to date.

If you experience any problems when configuring or using the MCU MSE 8420, consult the online help (available within the UI of your MCU MSE 8420) for an explanation of how its individual features and settings work. If you cannot find the answer you need, check on the web site at <http://www.tandberg.com/support> to make sure that the MCU MSE 8420 is running the most up-to-date software and for further relevant documentation.

You or your reseller can get help from our support team by raising a case at <http://www.tandberg.com/support/video-conferencing-online-support.jsp>. Make sure you have the following information ready:

- ▶ The serial number and product model number of the unit
- ▶ The software build number which can be found on the product user interface
- ▶ Your contact email address or telephone number



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