



Cisco TelePresence ISDN GW MSE 8321 Getting Started Guide

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General information

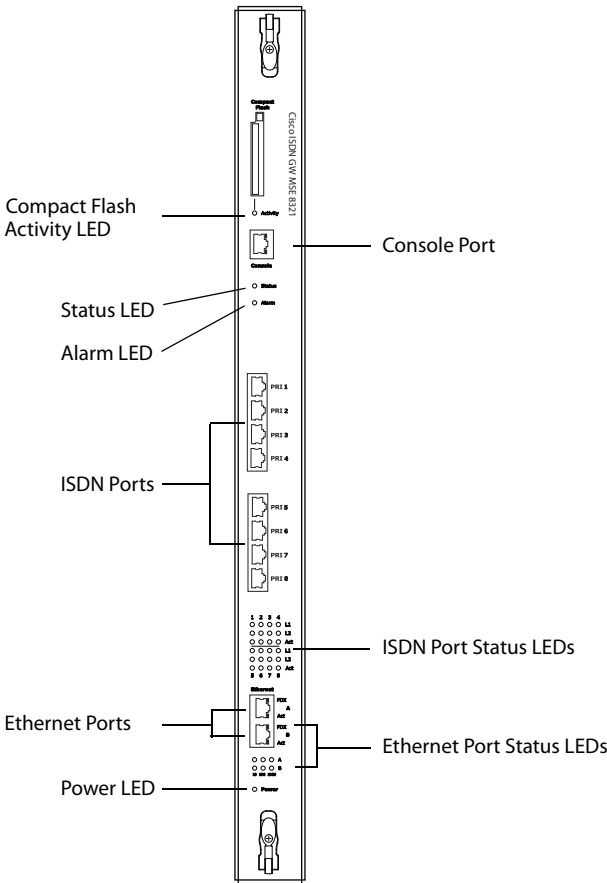
About the Cisco TelePresence ISDN GW MSE 8321

The Cisco TelePresence ISDN GW MSE 8321 (ISDN GW MSE 8321) is a high performance video gateway which enables ISDN network connectivity for the Cisco TelePresence IP-based video infrastructure products as well as IP-based endpoints.

Port and LED location

Figure 1 shows the position of ports on the ISDN GW MSE 8321.

Figure 1: ISDN GW MSE 8321 front panel



LED behavior

Table 1 describes the behavior of the LEDs on the device.

Table 1: ISDN GW MSE 8321 LED behavior

LED	Color	Indicates
Compact Flash Activity	Flashing green	One of: <ul style="list-style-type: none">▶ The device is booting▶ A configuration change has been made▶ The configuration is being transferred by FTP
Status	Green	The device is operating normally
Alarm	Red	The device is booting or has developed a fault. For example: <ul style="list-style-type: none">▶ Temperature outside normal limits▶ Battery failure of the internal clock See the web interface for more information about the problem (go to Status > Health)
ISDN Port Status, for each ISDN port:		
L1	Off	There is no connection on this port, or the device is not receiving framing (also known as Red Alarm)
	Flashing green	The device is receiving framing, but the far end is not receiving framing (also known as Yellow Alarm)
	Green	The port is connected to the far end
L2	Green	Layer 2 connectivity has been achieved with the ISDN network from this port. This means that D-channel signaling has been established with the network
Act	Green	At least one active call is using this port. Data is currently being received on this port

Table 1: ISDN GW MSE 8321 LED behavior (continued)

LED	Color	Indicates
Ethernet Port Status, for each Ethernet 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 device is receiving power from the MSE 8000 chassis

Installing the ISDN GW MSE 8321



IMPORTANT: Before installing the ISDN GW MSE 8321 into the MSE 8000, and connecting the power supply, you must read the safety information 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 information about powering the MSE 8000, see the *Getting Started Guide* on http://www.cisco.com/en/US/products/ps11340/prod_installation_guides_list.html

Step one: Install the ISDN GW MSE 8321 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 Cisco TelePresence Supervisor MSE 8050 (Supervisor) 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 ISDN GW MSE 8321:
 - 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 ISDN GW MSE 8321. When open, a retaining latch is at a 90° angle perpendicular to the front of the blade.

- 3 Slide the ISDN GW MSE 8321 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 it 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

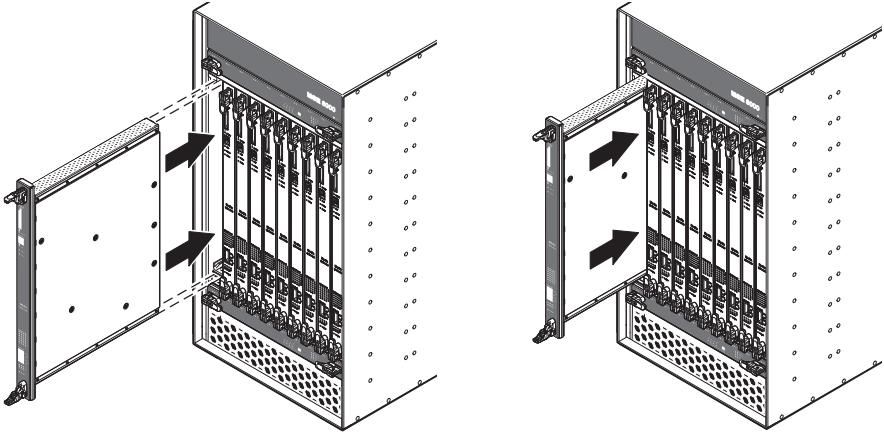
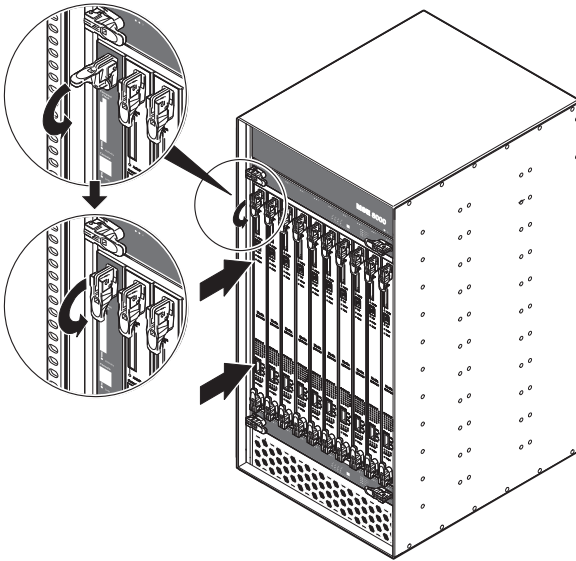


Figure 3: Closing the retaining latches on the front of a blade



Connecting the ISDN GW MSE 8321

Your ISDN connection



To reduce the risk of fire, use only 26 AWG or larger telecommunication line cord.

Outside North America

Check with your network provider to ensure that your incoming ISDN PRI line is terminated in an NTU/CSU (Network Termination Unit/ Channel Service Unit). If it is not, then seek their advice regarding the provisioning of such a device. Do not connect the ISDN GW MSE 8321 directly to an external ISDN line.

Within North America

If your network provider has not terminated all of your incoming ISDN PRI lines with an NTU/CSU, Cisco recommends that you install a suitably approved CSU to protect the ISDN GW MSE 8321 from damage by surges on your ISDN PRI lines.

Step one: 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 A, as all initial configuration must be done on this port. Do not connect anything to Ethernet Port B.

Step two: Connect to the ISDN ports

The ISDN GW MSE 8321 uses a standard RJ48C ISDN interface for each PRI port. Use a single straight-through STP patch cable to connect each PRI port on the ISDN GW MSE 8321 to your ISDN connection.

For information about the behavior of the ISDN port LEDs, see Table 1, ISDN GW MSE 8321 LED behavior, on page 4.



For D-channel signaling to be established, the ISDN GW MSE 8321 must have found and synchronized with the ISDN network clock. In some installations, you may have to explicitly request your ISDN provider to enable the network clock before the link will be established.

Initial configuration

Step one: Configure Ethernet Port A settings

The default setting for the ISDN GW MSE 8321 Ethernet ports is auto-sensing mode. If the switch ports to which you connect the ISDN GW MSE 8321 are not also set to auto-sensing mode, then you need to configure the ISDN GW MSE 8321 Ethernet ports to use the same speed and duplex mode.



Only connect to Ethernet Port A, as all initial configuration must be done on this port. Do not connect anything to Ethernet Port B.



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

To configure Ethernet Port A, log in to the Cisco TelePresence Supervisor MSE 8050 (Supervisor) web interface and go to **Hardware > Blades**. For more information about configuring the port, see the Supervisor online help.

Step two: Assign an IP address to the ISDN GW MSE 8321

You can use the Supervisor 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 web interface. To view or configure the IP address of the ISDN GW MSE 8321, log in to the Supervisor and go to **Hardware > Blades**. To access the web interface of the ISDN GW MSE 8321, go to **Hardware > Blades** and click the IP address of that blade.

Configuring the ISDN GW MSE 8321

Step one: Log in to the web interface

- 1 Log in to the Supervisor web interface first.
- 2 Go to **Hardware > Blades** and click the IP address of the ISDN GW MSE 8321.
- 3 Log in to the ISDN GW MSE 8321 web interface:
 - i Type **admin** in the username field and leave the password field blank.
 - ii Click **OK**.

The **Login information page** for the ISDN GW MSE 8321 is displayed.



We recommend that you change the admin account to use a password as soon as possible. Click **Change password** on the **Login information** page, or go to **Users** and click the **admin** user ID.

Step two: Allocate port licences

Port licenses must be allocated to the ISDN GW MSE 8321 from the Cisco TelePresence Supervisor MSE 8050 (Supervisor). To do this, go to the **Port licenses** page in the Supervisor web interface. For assistance see the Supervisor online help topic “Allocating port licenses to blades”.

Step three: Set up the ISDN interface

To define the ISDN interface type for the ISDN GW MSE 8321, go to **Settings > ISDN** in the ISDN GW MSE 8321 web interface. For assistance click the help button for the page. Leave the advanced settings unchanged unless you have specific configuration requirements.

Step four: Configure the ISDN ports

To configure the ISDN ports on the ISDN GW MSE 8321, go to **Settings > ISDN ports** and specify the appropriate values for each port. For assistance click the help button for the page.

Step five: Configure call control

To define a SIP proxy for call control/address resolution, go to **Settings > SIP**. If you use an H.323 gatekeeper, go to **Settings > H.323** instead. For assistance click the help button for the page.

Step six: Configure the dial plan

By default the ISDN GW MSE 8321 rejects all calls. To enable calling with the ISDN GW MSE 8321 you must configure a dial plan with at least one dial plan rule for each direction in which you want calls to be accepted (IP to ISDN and/or ISDN to IP).

Although the ISDN GW MSE 8321 supports advanced dial plan capabilities, we recommend that you define just a simple dial plan to get started. The online help topic “Getting started with the gateway” explains how to create a suitable basic dial plan.

Information about setting up and managing more complex dial plans, including advanced settings and examples, is available in the “Dial plan” section of the online help.

Troubleshooting and technical support information

Refer to this section if you are experiencing difficulties with the ISDN GW MSE 8321.

Calls fail to complete

If outgoing calls fail to complete, check that you have configured the device and all other equipment correctly, paying particular attention to the number you are trying to call. Remember that endpoints may be busy when you call them.

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

If you experience any problems when configuring or using the ISDN GW MSE 8321, consult the online help available from the user interface.

If you cannot find the answer you need, check the web site at <http://www.cisco.com/cisco/web/support/index.html> where you will be able to:

- ▶ Make sure that you are running the most up-to-date software.
- ▶ Get help from the Cisco Technical Support team.

Make sure you have the following information ready before raising a case:

- ▶ Identifying information for your product, such as model number, firmware version, and software version (where applicable).
- ▶ Your contact email address or telephone number.
- ▶ A full description of the problem.

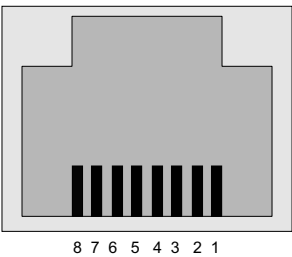
Pin outs

The pin numbering for the PRI ports on the ISDN GW MSE 8321 is shown in Figure 4. The pin assignments for the PRI ports are shown in Table 2:

Table 2: Pin assignments for PRI ports

Pin number	Signal
1	Receive -
2	Receive +
3	Not connected
4	Transmit -
5	Transmit +
6	Not connected
7	Not connected
8	Not connected

Figure 4: Pin numbering for PRI ports



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