Preface

Change History

Table 1  Installation Guide Change History

<table>
<thead>
<tr>
<th>Date</th>
<th>Change</th>
<th>Reason</th>
</tr>
</thead>
<tbody>
<tr>
<td>October 2019</td>
<td>First release.</td>
<td>Published with Expressway version X12.5.5</td>
</tr>
</tbody>
</table>
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Introduction

This guide describes how to install a CE1200 appliance into a video network, including how to prepare and install the hardware, and how to do the basic initial configuration. It also provides some troubleshooting suggestions.

Note: The guide is for Cisco Expressway Series deployments only, as the appliance does not support the Cisco VCS product.

Required Software Version

The CE1200 ships with pre-installed Expressway software. If you need to in future, you can upgrade the pre-installed software to a later supported version. (If you want to check whether the Cisco Expressway has the latest software installed, go to http://software.cisco.com/download/navigator.html and navigate to the Cisco Expressway.)

The minimum required Expressway software version depends on which revision of the appliance you are using. You can identify this from the serial number, as follows:

<table>
<thead>
<tr>
<th>Platform</th>
<th>Serial numbers</th>
<th>Required software</th>
</tr>
</thead>
<tbody>
<tr>
<td>2nd revision CE1200 (Expressway pre-installed on UCS C220 M5L)</td>
<td>52E1#####</td>
<td>X12.5.5 or later</td>
</tr>
<tr>
<td>1st revision CE1200 (Expressway pre-installed on UCS C220 M5L)</td>
<td>52E0#####</td>
<td>X8.11.1 or later</td>
</tr>
</tbody>
</table>

CAUTION: Although the system does not prevent downgrades to an earlier software version, Cisco does not support appliances running earlier versions than those specified in the table. This requirement applies to any UCS C220 M5L-based appliance.

System Sizes Supported

The appliance can support either a Large or a Medium Expressway system.

For appliances which are deployed as Cisco Expressway- Es (but not for Cisco Expressway-Cs) you can optionally change the default system size setting in the Expressway software from a Large system to a Medium system, or the other way round.

What’s Different?

If you deploy existing CE500, CE1000, or CE1100 appliances, this section highlights some of the differences in the CE1200:

- The CE1200 is designed for use with the Cisco Expressway Series product range, and does not support the Cisco VCS product.
- Unlike earlier appliances, the CE1200 is a single, multi-purpose server that can operate as a Cisco Expressway-C or a Cisco Expressway-E. By default it always ships with Expressway-C preinstalled. To deploy the server as an Expressway-E, you configure the Type option as Expressway-E, in the Service Setup Wizard (the wizard runs when you first launch the Expressway web user interface, or you can run it anytime from the Status > Overview page). The Traversal Server option key is no longer used to change to an Cisco Expressway-E.
- The CE1200 can support up to 5000 registrations for Mobile and Remote Access, an increase on the 2500 MRA registrations supported by other physical appliances or VM-based systems.
- From May 2019, the CE1200 no longer ships with power cables and KVM cables supplied as default.
For CE1200 appliances deployed as Cisco Expressway-Es, you can manually change the default system size setting in the Expressway software from a Large system to a Medium system, or the other way round. (You can also do this on CE1100 appliances running X8.11.4 or later.)

To add a CE1200 appliance to an existing cluster that has CE1100 models in it, configure the Type option to match the other peers (Expressway-E or Expressway-C) through the service setup wizard on the Status > Overview page, before you add the CE1200 to the cluster.

More Information and Training

Training: training is available online and at our training locations. Information about the courses we provide and the location of our training offices is at www.cisco.com/go/telepresencetraining

Glossary: a glossary of TelePresence terms is at https://tp-tools-web01.cisco.com/start/glossary/

Related documents

- Detailed information about installing this appliance is provided in the Cisco UCS C220 Server Installation and Service Guide
- Managing and operating Cisco Expressway software is described in the Cisco Expressway Administrator Guide on the Expressway Maintain and Operate Guides page
- Creating and maintaining a cluster of Cisco Expressways is described in the Cisco Expressway Cluster Creation and Maintenance Deployment Guide on the Expressway Configuration Guides page
Hardware Components

The CE1200 is based on a UCS C220 M5L server, with the following components:

<table>
<thead>
<tr>
<th>Item</th>
<th>Part</th>
<th>Quantity</th>
</tr>
</thead>
<tbody>
<tr>
<td>Chassis</td>
<td>UCS-C220-M5L</td>
<td>1</td>
</tr>
<tr>
<td>Processor</td>
<td>UCS-CPU-6134 (3.2 GHz 6134/130W 8C/24.75MB Cache/DDR4 2666MHz)</td>
<td>1</td>
</tr>
<tr>
<td>RAM</td>
<td>UCS-MR-X16G1RS-H (16GB) DDR4-2666-MHz RDIMM/PC4-21300/single rank/x4/1.2v</td>
<td>2</td>
</tr>
<tr>
<td>Hard Disk</td>
<td>UCS-HD2T7KL12N 2 TB 12G SAS 7.2K RPM LFF HDD</td>
<td>2</td>
</tr>
<tr>
<td>RAID Controller</td>
<td>UCSC-MRAID1GB-KIT SAS RAID KIT for C220M5L</td>
<td>1</td>
</tr>
<tr>
<td>NIC</td>
<td>UCSC-PCIE-ID10GF Intel X710-DA2 dual-port 10G SFP+ NIC</td>
<td>1</td>
</tr>
<tr>
<td></td>
<td>EXP-10GSFP-SR-MP (10Gb SR Fiber SFP)</td>
<td>2</td>
</tr>
<tr>
<td></td>
<td>EXP-1GSFP-T (1Gb Copper SFP)</td>
<td>2</td>
</tr>
<tr>
<td>PSU</td>
<td>UCSC-PSU1-770W</td>
<td>2</td>
</tr>
<tr>
<td>TPM</td>
<td>UCSX-TPM2-002 (Trusted Platform Module 2.0)</td>
<td>1</td>
</tr>
<tr>
<td>SD Card</td>
<td>UCS-SD-32G-S (32GB SD Card for UCS servers)</td>
<td>1</td>
</tr>
<tr>
<td>Miscellaneous</td>
<td>UCSC-RAILF-M4 (Rail kit)</td>
<td>1</td>
</tr>
<tr>
<td></td>
<td>UCSC-HS-C220M5 (Heat sink)</td>
<td>1</td>
</tr>
<tr>
<td></td>
<td>UCSC-BBLKD-L2 (blanking panels for HDD slots)</td>
<td>2</td>
</tr>
<tr>
<td></td>
<td>UCS-MSTOR-SD (Mini Storage Carrier for SD)</td>
<td>1</td>
</tr>
<tr>
<td></td>
<td>Accessory Kit</td>
<td>1</td>
</tr>
<tr>
<td></td>
<td>Bezel</td>
<td>1</td>
</tr>
</tbody>
</table>

Power Cables

Power cables are available to order from Cisco.

**WARNING:** If you opt not to order power cables from Cisco, you must use cables of the designated type, - see https://www.cisco.com/c/dam/en/us/products/collateral/servers-unified-computing/ucs-c-series-rack-servers/c220m5-lff-specsheet.pdf

KVM Adaptors

KVM adaptors are available to order from Cisco.
Field-Replaceable Components

These components are field replaceable:

- Hard disks
- Power supply units (PSUs)
- Fan module
- SFP network connection modules (1 Gb and 10 Gb)

**CAUTION:** To avoid compatibility issues use only the supplied SFPs, and follow the other requirements for SFPs in Task 2: Insert the SFP Network Connection Modules, page 12

Returns or Replacements

Front Panel Layout

This section details the front panel layout, LEDs and ports.

Figure 1  Front view of the Cisco Expressway

Table 4  Front panel LEDs and components

<table>
<thead>
<tr>
<th></th>
<th>Front panel LEDs and components</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>HD drives <em>(use Slot 1 and Slot 2 only)</em></td>
</tr>
<tr>
<td>2</td>
<td>Activity/fault LED for HD drives</td>
</tr>
<tr>
<td>3</td>
<td>Power button/power status LED</td>
</tr>
<tr>
<td>4</td>
<td>Identification button LED</td>
</tr>
<tr>
<td>5</td>
<td>System status LED</td>
</tr>
<tr>
<td>6</td>
<td>Fan status LED</td>
</tr>
<tr>
<td>7</td>
<td>Temperature status LED</td>
</tr>
<tr>
<td>8</td>
<td>Power supply status LED</td>
</tr>
<tr>
<td>9</td>
<td>Network link activity LED</td>
</tr>
<tr>
<td>10</td>
<td>KVM connector (for USB/VGA connection)</td>
</tr>
<tr>
<td>11</td>
<td>Pullout tab for UCS serial number, MAC addresses</td>
</tr>
</tbody>
</table>
**Rear Panel Layout**

This section details the rear panel layout, LEDs and ports.

**Figure 2  Rear view of the Cisco Expressway**

<table>
<thead>
<tr>
<th>1</th>
<th>Modular LAN on Motherboard (mLOM) card slot (not populated)</th>
</tr>
</thead>
<tbody>
<tr>
<td>2</td>
<td>USB 3.0 ports (two slots)</td>
</tr>
<tr>
<td>3</td>
<td>LAN3 and LAN4 <em>(do not use)</em></td>
</tr>
<tr>
<td>4</td>
<td>VGA video connector</td>
</tr>
<tr>
<td>5</td>
<td>CIMC/dedicated management port (1 Gb Ethernet)</td>
</tr>
<tr>
<td>6</td>
<td>Serial port (RJ-45 connector)</td>
</tr>
<tr>
<td>7</td>
<td>Rear identification button/LED</td>
</tr>
<tr>
<td>8</td>
<td>Power supplies PSU 01 and PSU 02</td>
</tr>
<tr>
<td></td>
<td>The second power supply can be added for 1+1 redundancy</td>
</tr>
<tr>
<td>9</td>
<td>Slot 2: Low-profile PCIe slot on riser (not populated)</td>
</tr>
<tr>
<td>10</td>
<td>Slot 1: Standard-profile PCIe slot on riser; houses two SFP ports</td>
</tr>
<tr>
<td></td>
<td>Left port is LAN1 (NIC1) in the Expressway user interface</td>
</tr>
<tr>
<td></td>
<td>Right port is LAN2 (NIC2) if used in the interface</td>
</tr>
</tbody>
</table>
Preparing to Install

For Your Safety!


Environmental and Power Specifications


Unpacking and Preparation


Information in that guide includes:

- Installation guidelines
- Rack requirements
- Equipment requirements
- Slide rail adjustment range

Locating Serial Numbers

The Cisco Expressway appliance displays two serial numbers:

- UCS serial number in format WZPxxxxxxx. Displayed on the hardware pullout tab, and in the Cisco Integrated Management Controller (CIMC) web interface.
- Software serial number in format 52ENNNNN. Displayed on the top panel of the appliance, and in the Cisco Expressway web interface or through SSH.
Install the Appliance

Task 1: Install into a Rack


Task 2: Insert the SFP Network Connection Modules

The CE1200 ships with two 10 Gb fiber SFP modules and two 1 Gb copper SFPs.

CAUTION: To avoid compatibility issues, the following restrictions apply to SFP modules.

- Only use the SFPs supplied with the appliance. (Note that SFP modules from M4-based Expressways should not be reused in this appliance.)
- Do not mix SFPs. Either insert two 10 Gb fiber SFPs or two 1 Gb copper SFPs.

The following requirements also apply to the SFPs:

- Insert them only into the designated SFP ports on the PCIe 01 card. The leftmost SFP port corresponds to LAN1 on the Expressway user interface.
- Although SFPs support auto-negotiation for speed and duplex, they only negotiate one speed—to the stated speed of the SFP and full duplex. This means you must connect them to a switch port that supports the stated speed and full duplex:
  - 10 Gb full duplex for fiber SFPs
  - 1 Gb full duplex for copper SFPs
- If you are installing the CE1200 in an environment that only supports 100 Mb, such as an older DMZ implementation, you need a switch to handle the speed negotiation from 1 Gb to 100 Mb.

Medium appliances with 1 Gbps NIC - demultiplexing ports

If you upgrade a Medium appliance with a 1 Gbps NIC to X8.10 or later, Cisco VCS automatically converts the system to a Large system. As a result, Cisco VCS Expressway listens for multiplexed RTP/RTCP traffic on the default demultiplexing ports for Large systems (36000 to 36011); instead of on the demultiplexing ports that are configured for Medium systems. In this case, the Cisco VCS Expressway drops the calls because ports 36000 to 36011 are not open on the firewall. From X8.11.4 you can manually change the system size back to Medium, through the System > Administration settings page (select Medium from the Deployment Configuration list). If you encounter this issue in a release earlier than X8.11.4, the workaround is to open the default demultiplexing ports for Large systems on the firewall.

Task 3: Connect and Power On

2. When you plug in the CE1200 appliance for the first time, leave it in standby mode for 5 minutes before pressing the power button. This time allows the onboard CIMC to boot, ready the self-test, perform a hardware check, and prepare the power characterization test. Failure to wait enough time will postpone the power characterization test until the next boot.
3. Power on the appliance (the power button is on the top-left corner of the front panel). The system performs a self-test and the appliance automatically restarts. This restart is expected behavior.
4. The first boot takes approximately 5 minutes due to the initial power characterization test. Any subsequent boot of the system takes approximately 2 minutes. The power characterization test displays the message *Performing Platform Characterization* ... when running.

5. If the power characterization test runs on subsequent bootups, causing a lag in the boot time, it is important that you disable it. It is especially important to disable the test in a clustered environment to avoid issues. See the Appendix 1: Troubleshooting, page 20 section for more information.

**Task 4: Verify Power Status**

Check the Power Status LED on the front of the appliance:

- **Off.** No AC power is present in the appliance.
- **Amber.** Appliance is in standby power mode. Power is supplied only to the CIMC and some motherboard functions.
- **Green.** Appliance is in main power mode. Power is supplied to all server components.

**Monitoring power consumption**

The CIMC has a power monitoring utility that you can use to track power consumption.
Connect to the Expressway Console

Before you can use the Expressway you need to configure some basic information by connecting to the Expressway console and then completing the secure Install Wizard.

You can use either of these connection methods, as described below:

- Direct cabled connection from a PC to the Cisco Expressway serial port.
- Remote connection with the Cisco Integrated Management Controller (CIMC) tool using serial over LAN.

Before you Begin

1. Connect an Ethernet LAN cable from the LAN1 port on the rear panel to your network.

2. Have the following information ready for when the Install Wizard runs:
   - IPv4 and/or IPv6 address, subnet mask and default gateway address for the Expressway. Consult your network administrator about which addresses to use. The Cisco Expressway must use a static IP address.
   - Suitable passwords for the predefined root and admin user accounts - use strong passwords for both accounts.

3. If you intend to use a CIMC connection these additional points apply:
   a. You need an IP address for it, which can be static or DHCP-assigned.
   b. You need a browser with the following minimum requirements:
      - Java Runtime Environment 1.6 or later
      - HTTP and HTTPS enabled
      - Adobe Flash Player 10 or later

**CAUTION: You cannot use a KVM or vKVM console for initial installation.** This is because the secure Install Wizard is not exposed on the KVM console and does not show on the VGA output port. Hence the wizard will wait indefinitely for you to complete installation on the Expressway serial console. If you need to recover from this situation, connect to the serial console as described below and issue the ctrl+D sequence to the console. The install wizard restarts so that you can continue.

Connecting Using the Serial Port

1. Connect the supplied DB9-to-RJ-45 cable from your PC (DB9 end) to the serial port on the rear of the appliance (RJ-45 end).
   To ensure compatibility, use the blue serial cable supplied in the accessory pack. This is a cross-over cable, with the following pin assignments:

<table>
<thead>
<tr>
<th>Male RJ45 pin</th>
<th>Female DB9 pin</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>8</td>
</tr>
<tr>
<td>2</td>
<td>6</td>
</tr>
<tr>
<td>3 TXD</td>
<td>2</td>
</tr>
<tr>
<td>4 GND</td>
<td>5</td>
</tr>
<tr>
<td>5 GND</td>
<td>5</td>
</tr>
<tr>
<td>6 RXD</td>
<td>3</td>
</tr>
<tr>
<td>7</td>
<td>4</td>
</tr>
</tbody>
</table>
Connect to the Expressway Console

<table>
<thead>
<tr>
<th>Male RJ45 pin</th>
<th>Female DB9 pin</th>
</tr>
</thead>
<tbody>
<tr>
<td>8</td>
<td>7</td>
</tr>
</tbody>
</table>

2. Start a terminal emulator program (for example PuTTY) on the PC and configure it to use the PC serial port as follows:
   - baud rate: 115200 bits per second
   - data bits: 8
   - parity: none
   - stop bits: 1
   - flow control (hardware and software): none

3. Once you are connected to the Expressway console, wait for the Install Wizard to appear and then go on to the next section Run the Install Wizard, page 18.

**Note:** Close the terminal emulator session after use. An open session may cause issues during system restarts.

Connecting Using CIMC Serial Over LAN

CIMC is the management interface for C-Series servers. It runs within the server to support remote administration, configuration, and monitoring using web or SSH command line access. For detailed information, see the Cisco UCS C-Series Integrated Management Controller Configuration Guides on the CIMC Configuration Guides page.

**CIMC password requirements**

The CIMC default password must be changed to a strong password, as described in this section. If you use DHCP addressing, you do this when you first log into the CIMC web interface. If you use static IP addresses, you change the password during the initial boot process.

CIMC passwords must contain characters from three of the following four categories:

- English uppercase letters A through Z
- English lowercase letters a through z
- Digits 0 through 9
- These non-alphabetic characters: ! @ # $ % ^ & * _ - =

**Task 1:** Configure the CIMC IP address and password (once only)

**If you use DHCP addressing**

Follow these steps if your deployment uses DHCP addressing:

1. Connect your network to the CIMC/dedicated management port (port 5 in Rear Panel Layout, page 10).
2. Connect a USB keyboard and VGA monitor using one of the following methods:
   - If you ordered a KVM adapter (3-legged cable), connect it to the console port at the front of the CE1200 and connect the keyboard and monitor to the adapter.
   - If the appliance was ordered without a KVM adapter, connect the keyboard and monitor to the appropriate ports on the rear of the server.
3. Switch on the monitor.
Configure your DHCP server to deliver the correct address for the CIMC. For the MAC address, use the `MGMT` address on the pullout tab.

5. Switch on the CE1200.

6. Watch the boot process on the monitor.

7. During the initial Power On Self Test phase, you should see the CIMC address displayed in the bottom left of the screen.

   **Result:** CIMC is now enabled on this Expressway. You will be prompted to change the default CIMC password when you first log in to the CIMC web interface.

8. Disconnect the peripherals and the adapter.

**If you use static addresses:**

Follow these steps if your deployment uses static IP addressing:

1. Connect your network to the CIMC/dedicated management port (port 5 in Rear Panel Layout, page 10).

2. Connect a USB keyboard and VGA monitor using one of the following methods:

   - If you ordered a KVM adapter (3-legged cable), connect it to the console port at the front of the CE1200 and connect the keyboard and monitor to the adapter (see Front panel showing KVM connector, page 15).

   - If the appliance was ordered without a KVM adapter, connect the keyboard and monitor to the appropriate ports on the rear of the server.

   **Note:** The KVM console is used to configure the CIMC, not to access Expressway.

3. Switch on the monitor.

4. Switch on the CE1200 appliance.

5. Watch the boot process on the monitor.

6. Press F8 to enter the CIMC configuration.

7. You are prompted to change the default CIMC password and configure the management interface IP address:

   a. Set a strong password that matches the conditions in CIMC password requirements, page 15 and press Enter.

   b. At the password modified prompt, press Enter again to complete the password change.

   **Note:** Due to a known issue, the system fails to notify you if the new password does not match the password requirements. In this case, when you first try to access the CIMC web interface (Task 2) you must use the supplied default CIMC password and will then be prompted to set a different, stronger, password before you continue. (At that point the system will correctly prompt you if the password doesn't match the requirements.)

   c. We recommend leaving the default NIC mode as Dedicated and the NIC redundancy settings as None.

8. Press F10 to save your changes and Esc to exit.

   **Result:** CIMC is now enabled on this Expressway.

9. Disconnect the peripherals and the adapter.
Task 2: Run CIMC from a remote host and enable Serial over LAN (once only)

1. In a web browser, go to the CIMC IP address you configured in the previous task.
2. Do one of the following:
   - If you use a static IP address, log in using the password you set in Task 1.
     
     **Note:** If the new password you set in Task 1 was not strong enough, because of the known issue with the system failing to notify you at the time, you are now prompted to enter the default password and then to set a different, strong, password before you can continue. The new password must match the conditions in CIMC password requirements, page 15.
   - If you use DHCP, define a strong password to replace the supplied default. The new password must match the conditions in CIMC password requirements, page 15.
3. Click the menu arrow in the top-left corner.
4. Navigate to Compute > Remote Management > Serial over LAN.
5. In the Serial over LAN Properties, check Enabled and then click Save Changes. This step is necessary as serial over LAN is disabled by default.

Task 3: Connect to the Expressway console (any time you need to)

1. In a terminal emulator, use SSH to connect to the CIMC IP address.
2. Type the default username admin and your CIMC password, and press Enter.
3. Type connect host and press Enter.
4. You are now connected to the Expressway console using serial over LAN.
   
   Wait for the Install Wizard to appear, and then go on to the next section Run the Install Wizard, page 18.
Run the Install Wizard

After the system boots up the terminal emulator program on the PC displays Cisco Expressway startup information. After approximately four minutes the **Install Wizard** is displayed.

If the Cisco Expressway was already on when you connected and you don’t see the Install Wizard, press Ctrl+D to access it. If you encounter issues or enter incorrect information during the wizard you can press Ctrl+D to restart it.

Install Wizard Process

1. Follow the prompts in the Install Wizard to specify the following:
   - IPv4, IPv6, or both.
   - LAN 1 IPv4 subnet mask of the Cisco Expressway (if you select IPv4).
   - IP address of the Expressway default gateway.
   - Password for root user account.
   - Password for admin user account.
   - Whether to enable the Expressway web UI (recommended).
     If you plan to deploy the appliance as an Expressway-E then you **must** enable the web UI. It’s not possible to configure the appliance as an Expressway-E through the CLI.
   - Whether to allow SSH access to the Cisco Expressway CLI.
   - Timezone. The default is UTC. You can search and replace with your desired zone in the wizard. Or you can change it later through the **System > Time** page in the web user interface.

2. Wait for the wizard to finish and the *Installation wizard complete* message to appear.

3. Press Enter to continue.

4. The system applies the specified settings and continues to boot.

5. After the boot completes, the Expressway is ready to use.

**Note:** The system services restart after you complete the wizard. This is expected behavior.

You can now access the Expressway user interface using the IP address assigned to the LAN1 Ethernet port (see next section).
Access the Expressway User Interface

This section describes how to access the Expressway web and CLI user interfaces. The interfaces are enabled through the Install Wizard.

Using the Web UI

To log into the web user interface:

1. Open a browser window and in the address line type one of the following:
   - IP address of the Cisco Expressway (for example, https://10.0.0.1). Enter the address as HTTPS.
   - FQDN of the Cisco Expressway (for example, https://mydomain.example.com).
2. In the Login page, select Administrator login.
3. Log in with username admin and your system password.
4. The Expressway Overview page is displayed.

More information

Detailed information about configuring and managing Expressway, including each page in the interface, is provided in the Expressway online help and in the Cisco Expressway Administrator Guide.

Using the CLI

The command line interface is available over SSH and through the serial port by default:

1. Start an SSH session.
2. Enter the IP address or FQDN of the Cisco Expressway.
3. Log in with username admin and your system password.
4. A welcome message is displayed.

More information

The CLI commands for Expressway are detailed in the Cisco Expressway Administrator Guide.

Next Steps

From the Expressway user interface, follow the steps described in the Cisco Expressway Basic Configuration Deployment Guide to set up the Expressway. The process is briefly summarized here, but please refer to the other guide for details before you continue:

1. The first time you log in, the Service Setup Wizard launches. The wizard is used to select specific licensing requirements for a deployment, and if necessary to change the default Expressway-C configuration to an Expressway-E.
2. After the Service Setup Wizard, you go on to configure Expressway:
   a. System configuration, including the System Name, DNS settings, server certificate, NTP servers, SIP domains).
   b. Routing configuration, including transforms, search rules, and zones.
   c. Endpoint registration.
   d. System verification checks.
   e. Maintenance and optional configuration tasks.
Appendix 1: Troubleshooting

Locating LEDs and Components

The panel layouts for this appliance are described in:
- Front Panel Layout, page 9
- Rear Panel Layout, page 10

Definitions of LED States


Reset from the Internal Recovery Partition (IRP)

The Cisco Expressway CE1200 appliance comes pre-installed with an SD card that you can use to complete a reinstall of your configuration. You must reset the SD card and enable the virtual drive before proceeding with the reinstall using the KVM console in the Cisco Integrated Management Controller (CIMC). Once the reset is complete, make sure that you disable the virtual drive again.

Before you begin

You need to set up and access the CIMC, as described in Run the Install Wizard, page 18

Task 1: Reset the SD Card and Enable the Virtual Drive

1. Log in to the CIMC.
2. Click the menu arrow in the top left corner and navigate to Storage > Cisco FlexFlash.
3. Under the General tab, click on Activate/Reset FlexFlash Controller and click ok in the popup window that appears. The reset ensures your FlexFlash Controller is in the correct state.
4. Click the Virtual Drives tab.
5. Check the Hypervisor checkbox.
6. Click Enable Virtual Drive and confirm that you would like to enable the virtual drive.

Task 2: IRP Reinstall Using the KVM Console

1. Launch the KVM Console using the icon in the CIMC.
2. Power up the CE1200 and, when prompted, press F2 to enter Setup.
3. Select Boot Options and ensure that the CiscoVD Hypervisor is visible as one of the options.
   If the CiscoVD Hypervisor is not visible, you can select the UEFI: Built-in EFI Shell boot option and change it to CiscoVD Hypervisor.
4. When prompted, press F6 to enter the Boot Menu.
5. Select CiscoVD Hypervisor as the boot option.
6. When prompted, type y and press Enter to proceed with the reinstall.
7. Type b to reboot.
   During this reboot we recommend disabling the virtual drive (although you can also do it later as described in Task 3 below). To disable the virtual drive now:
   a. Press F2 to enter boot Setup.
   b. Under Boot Options select CiscoVD Hypervisor and disable it.
   c. Press F10 to save and exit.
   d. While the system reboots, return to the Virtual Drive Info tab—in the CIMC interface under Storage—and check the Hypervisor check box. The click Disable.

8. After the reboot completes, connect using serial to complete the reset. You will see the factory installation wizard.

9. You can optionally apply any option keys for the appliance (such as room or desktop registrations). If you choose not to at this stage, they can be applied later through the Expressway web UI or CLI.

10. When prompted, press Enter to shutdown the system.
    The factory installation wizard phase is complete.

11. Power on the appliance, and follow the steps in Run the Install Wizard, page 18 to complete the customer installation wizard.

Task 3: Disable the Virtual Drive After the Reinstall

If you chose not to disable the virtual drive during the reinstall stage, we recommend that you do it now:

1. Access the CIMC interface.
2. Go to Storage > Virtual Drive Info tab.
3. Check the Hypervisor check box, then press Disable.

Lag During Boot up Due to Power Characterization Check

The power characterization test is run only once when you plug in and power up the CE1200. If the power characterization test continues to run, causing a lag in the boot time, ensure that it is disabled in the CIMC. To do this:

1. Log in to the CIMC (see Connecting Using CIMC Serial Over LAN, page 15).
2. Click the menu arrow in the top-left corner.
4. Click Disable Power Characterization.
5. Click Save Changes.
Notices

Technical Support

If you cannot find the answer you need in the documentation, 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.

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You can find more information about accessibility here:

www.cisco.com/web/about/responsibility/accessibility/index.html
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- Reorient or relocate the receiving antenna.
- Increase the separation between the equipment and receiver.
- Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
- Consult the dealer or an experienced radio/TV technician for help.

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