



Troubleshooting with the Installation Wizard

If the Installation Wizard Status column indicates that one or more of your Content Distribution Managers, Content Engines, or Content Routers is not *online* after you have followed instructions in the *Cisco Content Delivery Networking Products Getting Started Guide*, you can use the Installation Wizard to help bring devices back online or identify connectivity problems.

Confirming Configuration Settings

In addition to setting the IP addresses for your devices, you can use the Installation Wizard to confirm whether or not your devices are using the addresses you assigned to them using the wizard.

See the next procedure and the sections that follow for more information on confirming the configuration settings of your devices.

To confirm an IP configuration:

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- Step 1** Launch the Installation Wizard and click **Next**.
The Select a Device window appears.
 - Step 2** Locate the device for which you wish to confirm IP settings by using its device name (the MAC address, device ID, or user-friendly equivalent).



Note Devices that are properly configured and connected to the network display a green triangle icon and a status of “online” in the Status column. Devices that are offline display one of a number of icons and an error message in the Status column.





See [Table 5-1](#) for details on the various device status indicators used by the Installation Wizard.

- Step 3** Double-click the record for the device to display the Device Details window. The window displays the settings for the device. These values should match the network and E-CDN application configuration settings assigned to the device.
- Step 4** If the Device Details window displays information that is not accurate, you need to use the Installation Wizard to reconfigure your device:
- Click **OK** to close the Device Details window.
 - Choose the device from the list of devices and click **Next** to reconfigure the device using the Installation Wizard.
 - Refer to the *Cisco Content Delivery Networking Products Getting Started Guide* for instructions on configuring the Content Distribution Manager, Content Router, and Content Engine with the Installation Wizard.
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Installation Wizard Device Status Indicators

When viewing the online status of devices using the Installation Wizard, use the status indicators to help you evaluate whether a given device is online or not. [Table 5-1](#) identifies the status indicators and describes their meanings.

Table 5-1 *Installation Wizard Device Status Indicators*

Status Indicator	Device Status	Explanation
	Online	The device is active and communicating without error with other devices on the network.
	Not responding	The device previously communicated with the Installation Wizard but has not done so recently. The device could be powered off, disconnected from the network, or experiencing other hardware- or software-related problems. Determine what state the device is in before using the Installation Wizard to help bring the device online.
	Needs attention	The device is active but is encountering problems communicating with other CDN devices. Use the Installation Wizard to help adjust the device settings and correct any communication problems.
	Incompatible software version	The device is running an older version of CDN software and cannot communicate with the Installation Wizard. Use a previous version of the Installation Wizard to communicate with this device, or update the CDN software to Version 2.1 or later.

Device Boot Sequence

All content networking hardware devices follow the same sequence of steps when implementing new or changed configuration settings provided by the Installation Wizard. Each step in the configuration process is captured in the Installation Wizard Configuring window, the last step in the Installation Wizard.

Boot Sequence Overview

The following is a step-by-step explanation of the boot sequence using the Installation Wizard.

1. Network settings (provided by a DHCP server, if one is being used, or manually using the Installation Wizard) are applied.
2. If the network settings are valid and do not conflict with those of other devices on your network, E-CDN application settings (such as the DNS server, proxy server, and Content Distribution Manager used) are applied to the device.
3. With both the network and the E-CDN application settings configured, the device sends a request to its Content Distribution Manager for approval. If the device is a Content Distribution Manager or a preexisting Content Engine or Content Router, approval is automatic. If the device is a new Content Engine or Content Router, it must await approval by an administrator who checks the Approve check box in the Identification window accessed from the Device Editor menu.
4. Once approval from the Content Distribution Manager has been granted, a device restarts using the confirmed network and E-CDN application configuration settings and connects to other devices on the network. The device status changes to “online.”

Sample Boot Sequence

The following is a typical device boot sequence for Content Distribution Managers, Content Routers, and Content Engines. This sequence may pause at any of the steps listed as the device awaits configuration information from the network or the Content Distribution Manager.

```
Beginning boot sequence.  
Forcing restart and re-configuring.  
Waiting for network configuration.  
Trying new network configuration.  
Machine now set to use DHCP.  
Network configuration installed successfully.  
Waiting for CDN configuration.  
Trying new CDN configuration.  
CDN configuration installed successfully.  
Waiting for approval from CDM.  
Processing approval from CDM.  
Waiting for servers to start.  
Starting servers.  
Servers started successfully.  
Running normally.
```

Device Configuration Error Messages

Error Message Configuration failed.

Explanation The Installation Wizard was unable to successfully reconfigure the selected device using the supplied settings. The device did not restart successfully and connect to the Enterprise CDN using the current configuration settings.

Recommended Action Verify the network and Enterprise CDN configuration settings you supplied. Next, use the Installation Wizard to reconfigure the device using valid configuration settings.

Error Message IP address <IP_address> is already in use by another computer <MAC_address>.

Explanation You have assigned an IP address to the selected content delivery networking hardware device that is already being used by another device on your network. The conflicting address and machine name (MAC address) of the device currently using the address are provided.

Recommended Action Use the Installation Wizard to reassign to the selected device an IP address that is not being used.

Error Message Missing <required_field_names> for CE configuration.

Explanation The Content Engine device configuration message sent by the Installation Wizard was missing required fields.

Recommended Action This typically indicates an internal problem. Contact Cisco Technical Support.

Error Message Missing <required_field_names> for CR configuration.

Explanation The Content Router device configuration message sent by the Installation Wizard was missing required fields.

Recommended Action This typically indicates an internal problem. Contact Cisco Technical Support.

Error Message Missing <required_field_names> for network configuration.

Explanation The network configuration message sent by the Installation Wizard was missing required fields.

Recommended Action This typically indicates an internal problem. Contact Cisco Technical Support.

Error Message `Missing CDM info.`

Explanation The selected Content Engine or Content Router is missing the address of a valid Content Distribution Manager to connect to or is awaiting approval from its Content Distribution Manager. All Content Engines and Content Routers must be associated with a Content Distribution Manager on your network.

Recommended Action Use the Installation Wizard to verify that the Content Engine or Content Router is associated with a valid Content Distribution Manager. If it is, use the Content Distribution Manager to approve the device. The Approve option is located in the Identification window for the selected Content Engine or Content Router.

Error Message `Missing CDN settings.`

Explanation The selected device is missing Enterprise CDN configuration information it needs to connect to the network. Enterprise CDN configuration information includes the name or address of the Content Distribution Manager that the selected device is associated with, DNS server information (if one is being used), and proxy server or secure proxy server addresses if proxy servers are being used.

Recommended Action Use the Installation Wizard to reconfigure the selected device using the correct settings for DNS and proxy servers.

Error Message `Missing network settings.`

Explanation The selected device is missing its network configuration information. If you are using DHCP, the selected device is not being served properly by the DHCP server. If you are assigning network information manually, the information provided is incomplete or inaccurate.

Recommended Action Use the Installation Wizard to reconfigure the device with proper network settings (IP address, subnet mask, and gateway), or reconnect the device to your DHCP server.

Error Message Needs attention.

Explanation The selected device is online but is not communicating properly with the Installation Wizard and other content networking hardware devices. Possible causes could be a conflicting IP address or other environmental problem.

Recommended Action Verify that the device is properly configured and that it is up and running. You may be required to reboot the device or to modify its configuration settings to restore communication with the Installation Wizard and Enterprise CDN again.

Error Message Not responding.

Explanation The selected device was previously configured on the Installation Wizard and was active, but it is now offline.

Recommended Action Verify that the selected device is powered up and that it is still using the same network address and Enterprise CDN configuration it had when it was initially added to the network. If necessary, use the Installation Wizard to change any configuration settings and try to contact the device again.

Error Message Router <router_IP_address> is not responding.

Explanation The gateway you specified for the selected device using the Installation Wizard is not responding. The router may have changed addresses or may not be functioning properly.

Recommended Action Verify the address that you provided for the router and verify that the router is functioning properly. If necessary, use the Installation Wizard to point the device to another functioning router.

Error Message Sent malformed message.

Explanation The message received from the content networking hardware device did not use the expected format.

Recommended Action This typically indicates an internal problem. Contact Cisco Technical Support.

Error Message Servers not started.

Explanation The Installation Wizard was unable to bring up a required content delivery networking hardware device or service.

Recommended Action Refer to the following files for more detailed error text, and contact Cisco Technical Support:

```
/sonoma/state/boot.log  
/sonoma/state/log
```

Error Message Unable to commit records to library.

Explanation The Installation Wizard encountered an internal error.

Recommended Action Refer to the following files for more detailed error text, and contact Cisco Technical Support:

```
/sonoma/state/boot.log  
/sonoma/state/log
```

Error Message Unable to start servers!

Explanation The Installation Wizard encountered an error when attempting to restart a device using the specified configuration settings.

Recommended Action Refer to the following files for more detailed error text, and contact Cisco Technical Support:

```
/sonoma/state/boot.log  
/sonoma/state/log
```

Resolving Device Errors

The Installation Wizard can be used to identify and even resolve configuration problems, though its role in troubleshooting is limited to modifying configuration settings that are incorrect or that are conflicting with other devices on your network. For example, if the Status column for a Content Engine or Content Router reads “Missing Network settings,” you can use the Installation Wizard to assign the correct network configuration to the device, or associate it with a DHCP server on your network.

Certain error conditions may require interventions that cannot be carried out using the Installation Wizard. For such cases, we recommend contacting Cisco Technical Support for help in resolving the problem.

See the “[Device Configuration Error Messages](#)” section on page 5-5 for descriptions of Installation Wizard errors. See the “[Obtaining Technical Assistance](#)” section on page xii for information on contacting the Cisco Technical Assistance Center (TAC).

To reconfigure a device using the Installation Wizard:

Step 1 Launch the Installation Wizard and click **Next**.

The Select a Device window appears.

Step 2 Locate the device that needs attention and click to choose it.

Devices that are offline display a message in the status column and either the “not responding” or “needs attention” icon. See [Table 5-1](#) for details on device status indicators.

Step 3 Double-click the device record or, with the offline device chosen, click **Details**.

The Device Details window appears, displaying the current configuration for the device, as well as any error conditions. Check this information against the proper configuration settings to find discrepancies, or refer to the Status column for information on configuration problems.

See the “[Device Configuration Error Messages](#)” section on page 5-5 for details on the various messages that you may encounter using the Installation Wizard.

Step 4 Choose the device record in the list of devices and click **Next** to reconfigure the device using the Installation Wizard.

Refer to the *Cisco Content Delivery Networking Products Getting Started Guide* for instructions on configuring devices with the Installation Wizard.
