



Replacing an S3260 M5 Server Node

This chapter describes how to install or shut down and replace an M5 server node in the S3260 chassis.

- [Shutting Down an S3260 M5 Server Node, on page 1](#)
- [Replacing an S3260 M5 Server Node, on page 2](#)

Shutting Down an S3260 M5 Server Node

You can invoke a graceful shutdown or a hard shutdown of a server node by using either the Cisco Integrated Management Controller (Cisco IMC) interface, or the power button that is on the face of the server node. Both procedures are included in this section.

Shutting Down a Server Node By Using the Cisco IMC GUI

Step 1 Use a browser and the management IP address of the system to log in to the Cisco IMC GUI.

Step 2 In the **Navigation** pane, click the **Chassis** menu.

Step 3 In the **Chassis** menu, click **Summary**.

Step 4 In the toolbar above the work pane, click the **Host Power** link.

The Server Power Management dialog opens. This dialog lists all server nodes that are present in the system.

Step 5 In the Server Power Management dialog, select one of the following buttons for the server node that you want to shut down:

Caution To avoid data loss or damage to your operating system, you should always invoke a graceful shutdown of the operating system. Do not power off a server if any firmware or BIOS updates are in progress.

- **Shut Down**—Performs a graceful shutdown of the operating system and then powers off the selected server node.
- **Power Off**—Powers off the selected server node, even if tasks are running on that server node.

Step 6 Check that the Chassis Status pane shows the **Power State** as **Off** for the selected server node.

Note It is safe to remove the server node from the chassis when the physical power button on the rear panel turns amber.

Shutting Down a Server Node By Using the Power Button on the Server Node

Step 1 Check the color of the server node power button/status LED:

- Amber—the server node is powered off. It is safe to remove the server node from the chassis.
- Green—The server node is powered on. Continue with the next step.

Step 2 Invoke either a graceful shutdown or an emergency shutdown:

Caution To avoid data loss or damage to your operating system, you should always invoke a graceful shutdown of the operating system. Do not power off a server if any firmware or BIOS updates are in progress.

- Graceful shutdown—Press and release the Power button on the server node. The software performs a graceful shutdown of the operating system and then powers off the server node.
- Emergency shutdown—Press and hold the Power button for four seconds to force the power off the server node.

Note It is safe to remove the server node from the chassis when the physical power button on the rear panel turns amber.

Replacing an S3260 M5 Server Node

Use the procedure in this section to remove or install a server node in a chassis.

To replace components inside a server node or its attached I/O expander, see [Replacing Server Node and I/O Expander Components](#).

S3260 M5 Server Node Population Rules

Observe the following rules:

- Do not mix an S3260 M5 server node with a different generation server node (M3 or M4) in the same Cisco UCS S3260 system. An M5 server node can be identified by the “M5 SVRN” label on the rear panel.
- Single-node systems:
 - Cisco IMC releases earlier than 2.0(13): If your S3260 system has only one server node, it must be installed in bay 1.
 - Cisco IMC releases 2.0(13) and later: If your S3260 system has only one server node, it can be installed in either server bay.



Note Whichever bay a server node is installed to, it must have a corresponding SIOC. That is, a server node in bay 1 must be paired with a SIOC in SIOC slot 1; a server node in bay 2 must be paired with a SIOC in SIOC bay 2.

Replacing a Node in a Chassis

The server node is accessed from the rear of the system, so you do not have to pull the system out from the rack.



Note You do not have to power off the system chassis in this procedure. Replacement with chassis powered on is supported if you shut down the server node before removal.



Caution Before you replace a server node, export and save the Cisco IMC configuration from the node if you want that same configuration on the new node. You can import the saved configuration to the new replacement node after you install it. This chapter contains procedures for exporting and importing a configuration.

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- Step 1** Optional—Export the Cisco IMC configuration from the server node that you are replacing so that you can import it to the replacement server node. If you choose to do this, use the procedure in [Exporting Cisco IMC Configuration From a Server Node, on page 4](#), then return to the next step.
- Step 2** Shut down the server node by using the software interface or by pressing the node power button, as described in [Shutting Down an S3260 M5 Server Node, on page 1](#).
- Step 3** Remove the server node from the system:
- Grasp the two ejector levers and pinch their latches to release the levers.
 - Rotate both levers to the outside at the same time to evenly disengage the server node from its midplane connectors.
 - Pull the server node straight out from the system.
- Step 4** If the server node has an I/O expander attached, use the procedures in [Disassembling the I/O Expander Assembly](#) to remove it from the server node. Then use [Reassembling the I/O Expander Assembly](#) to reinstall it on the new server node before you continue with the next step.
- If there is no I/O expander attached, continue with the next step.
- Step 5** Install a new server node:
- With the two ejector levers open, align the new server node with the empty bay. Note these configuration rules:
 - Cisco IMC releases earlier than 2.0(13): If your S3260 system has only one server node, it must be installed in bay 1.
 - Cisco IMC releases 2.0(13) and later: If your S3260 system has only one server node, it can be installed in either server bay.

Note Whichever bay a server node is installed to, it must have a corresponding SIOC. That is, a server node in bay 1 must be paired with a SIOC in SIOC slot 1; a server node in bay 2 must be paired with a SIOC in SIOC bay 2.

- b) Push the server node into the bay until it engages with the midplane connectors and is flush with the chassis.
- c) Rotate both ejector levers toward the center until they lay flat and their latches lock into the rear of the server node.

Step 6 Power on the server node.

Step 7 Perform initial setup on the new server node to assign an IP address and your other preferred network settings. See Initial System Setup in the [Cisco UCS S3260 Storage Server Installation and Service Guide](#).

Step 8 Optional—Import the Cisco IMC configuration that you saved in step 1. If you choose to do this, use the procedure in [Importing Cisco IMC Configuration to a Server Node, on page 5](#).

Step 9 Update the node firmware using the Host Upgrade Utility. This will ensure that the firmware version on the node is compatible with the latest system firmware.

See the [Cisco Host Upgrade Utility User Guide For S3260 Storage Servers](#) for instructions on updating the firmware.

Exporting Cisco IMC Configuration From a Server Node

This operation can be performed using either the GUI or CLI interface of the Cisco IMC. The example in this procedure uses the CLI commands. For more information, see *Exporting a Cisco IMC Configuration* in the CLI and GUI guides for S3260 Storage Servers here: [Configuration Guides](#).

Step 1 Log in to the IP address and CLI interface of the server node that you are replacing.

Step 2 Enter the following commands as you are prompted:

```
Server# scope cimc
Server /cimc# scope import-export
Server /cimc/import-export# export-config <protocol> <ip-address> <path-and-filename>
```

Step 3 Enter the user name, password, and pass phrase.

This sets the user name, password, and pass phrase for the file that you are exporting. The export operation begins after you enter a pass phrase, which can be anything that you choose.

To determine whether the export operation has completed successfully, use the **show detail** command. To abort the operation, type CTRL+C.

The following is an example of an export operation. In this example, the TFTP protocol is used to export the configuration to IP address 192.0.2.34, in file /ucs/backups/cimc5.xml.

```
Server# scope cimc
Server /cimc # scope import-export
Server /cimc/import-export # export-config tftp 192.0.2.34 /ucs/backups/cimc5.xml
Username:xxxx
Password:****
Passphrase:***
Export config started. Please check the status using "show detail".
Server /cimc/import-export # show detail
Import Export:
Operation: EXPORT
Status: COMPLETED
```

```
Error Code: 100 (No Error)
Diagnostic Message: NONE
```

Importing Cisco IMC Configuration to a Server Node

This operation can be performed using either the GUI or CLI interface of the Cisco IMC. The example in this procedure uses the CLI commands. For more information, see *Importing a Cisco IMC Configuration* in the CLI and GUI guides for S3260 Storage Servers here: [Configuration Guides](#).

Step 1 SSH into the CLI interface of the new server node.

Step 2 Enter the following commands as you are prompted:

```
Server# scope cimc
Server /cimc# scope import-export
Server /cimc/import-export# import-config <protocol> <ip-address> <path-and-filename>
```

Step 3 Enter the user name, password, and pass phrase.

This should be the user name, password, and pass phrase that you used during the export operation. The import operation begins after you enter the pass phrase.

The following is an example of an import operation. In this example, the TFTP protocol is used to import the configuration to the server node from IP address 192.0.2.34, from file /ucs/backups/cimc5.xml.

```
Server# scope cimc
Server /cimc # scope import-export
Server /cimc/import-export # import-config tftp 192.0.2.34 /ucs/backups/cimc5.xml
Username: xxxx
Password: ****
Passphrase: ***
Export config started. Please check the status using "show detail".
Server /cimc/import-export # show detail
Import Export:
Operation: IMPORT
Status: COMPLETED
Error Code: 100 (No Error)
Diagnostic Message: NONE
```
