

Managing Cisco UCS S3260 Dense Storage Rack Server

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About Cisco UCS S3260 Dense Storage Rack Server

The Cisco UCS S3260 is a dense storage rack server that supports dual server nodes. It can also have one optimized for large datasets used in environments such as Big data, cloud, object storage, and content delivery. It belongs to the Cisco UCS C-Series rack-mount servers product family.

The Cisco UCS S3260 Dense Storage Rack Server is designed to operate in a standalone environment and as part of the Cisco Unified Computing System with Cisco IMC Supervisor integration. The Cisco UCS S3260 Dense Storage Rack Server includes the following features:

- Enterprise-class redundancy with full featured Redundant Array of Independent Disks (RAID) plus Just a Bunch of Disks (JBOD)
- Standalone management interface (Cisco Integrated Management Controller)
- No data migration required when replacing or upgrading server nodes
- · No need for extended depth racks

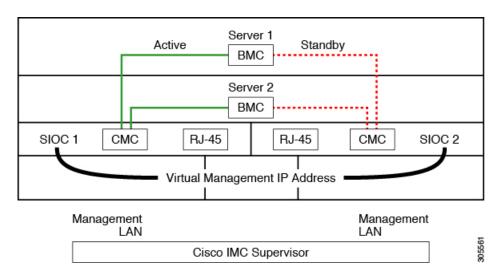
For more information about Cisco UCS S3260 dense storage rack server, see Cisco UCS S3260 Rack Server.

Cisco UCS S3260 Dense Storage Rack Server Architectural Overview

Architectural Overview

The Cisco UCS S3260 uses a modular server architecture that, using Cisco's blade technology expertise, allows you to upgrade the computing or network nodes in the system without the need to migrate data from one system to another. It delivers:

- · Dual server nodes
- Up to 24 computing cores per server node
- Up to 60 drives mixing a large form factor (LFF) with up to 14 solid-state disk (SSD) drives plus 2 SSD SATA boot drives per server node
- Up to 512 GB of memory per server node (1 terabyte [TB] total)
- Support for 12-Gbps serial-attached SCSI (SAS) drives
- A system I/O Controller with Cisco VIC 1300 Series Embedded Chip supporting Dual-port 40Gbps
- High reliability, availability, and serviceability (RAS) features with tool-free server nodes, system I/O
 controller, easy-to-use latching lid, and hot-swappable and hot-pluggable components



The system uses a chassis management controller (CMC) to manage the server nodes. Each system I/O controller (SIOC) module contains an onboard CMC. If you have two SIOCs, the two CMCs act in an active/standby organization. The CMC in the SIOC that you log into with the Cisco IMC interface becomes the active CMC and it allows you to manage the BMCs in both server nodes.

When you connect to the system to manage the server nodes' BMCs via the Cisco IMC interface, you physically connect to the management port (RJ-45) on a SIOC. When you log into the Cisco IMC interface, you use the Virtual Management IP address that has been assigned to the CMC in that SIOC.

All user interfaces run only on the active CMC. Configuration changes are automatically synchronized between the active and standby CMCs.

When you power-cycle the system, the CMC in SIOC 1 is the active CMC by default. The active CMC will fail over to the standby CMC when any of the following conditions occur:

- The active CMC is rebooted or fails.
- The SIOC with active CMC is removed.
- Network connectivity is lost on the active CMC.

For configuring the S3260 rack server, see Cisco UCS S3260Rack Server Specification Sheet.

Cisco IMC Supervisor with Cisco UCS S3260 Dense Storage Rack Server

Cisco IMC Supervisor-Managed Dense Storage Rack Servers support all features that come along with C-Series Rack Servers. It also provides additional reports for the These features and concepts are detailed in the following sections:

- Overview —Provides detailed information about the architecture of Cisco UCS S3260, and its connectivity when managed through Cisco IMC Supervisor.
- Adding a Rack Account—Describes, and provides detailed information about adding a Cisco UCS 3260 chassis rack account.
- Managing Chassis—Describes, and provides detailed information about the management of the Dense Storage Rack Chassis.
- Policies and Profiles— Describes, and provides detailed information about the Cisco UCS 3260 chassis related policies and profiles.
- Upgrading Firmware—Provides detailed information about Chassis Firmware Packages and the endpoints of Cisco UCS S3260 on which firmware can be updated manually.
- Viewing Cisco UCS S3260 rack server details—View details such as PSUs, VIC Adapters, Chassis Summary, and SAS Expander.

Adding a Rack Account

To add a rack account you can now provide a Virtual Management IP in the **Server IP** field. For more information about adding a rack account, see Adding a Rack Account. You can view the servers managed by the Cisco UCS S3260 Rack Server after inventory collection from the **Rack Servers** tab.



Note

If you add a CMC 1 or CMC 2 IP address, an error occurs.

Managing Cisco UCS S3260 Rack Server

Restarting Chassis Management Controller

- **Step 1** Choose **Systems** > **Inventory** and **Fault Status**.
- Step 2 On the Rack Groups page, click Chassis.
- Step 3 Click Reboot CMC.
- Step 4 On the Reboot Chassis Management Controller window, select either CMC1 or CMC2.
- Step 5 Click Submit.

The chassis you have selected, restarts.

Tagging Assets for Cisco UCS S3260 Rack Server

Asset tag is a user-defined tag for the server. You can use the **Asset Tag** option to add the Cisco IMC server property through Cisco IMC Supervisor

You can tag assets for both rack servers and for chassis. To tag assets for a rack-mount server, see Tagging Assets for a Rack Mount Server. Perform this procedure when you want to tag an asset for chassis.

Before you begin

The server is already added as a Rack Account under a Rack Group.

- **Step 1** Choose Systems > Inventory and Fault Status.
- Step 2 On the Rack Groups page, click Chassis.

Note You can also select any sub group under Rack Groups in the Inventory and Fault Status pane.

- **Step 3** From the list of chassis, select the chassis you want to tag.
- **Step 4** From the **More Actions** drop-down list, choose **Asset Tag**.

Note You cannot see the **Asset Tag** option until you select the server from the list.

Step 5 Click Submit.

Note The **Asset Tag** option is available only from Cisco IMC release 3.0.(1c) onwards. For lower version platforms, the **Asset Tag** column in the **Rack Groups** page displays a blank entry.

Setting Front Locator LED for Cisco UCS S3260 Rack Server

A server locator LED helps you to identify a specific server among many servers in a data center. Perform this procedure when you want to turn on or turn off the front locator LED for a selected chassis.

- **Step 1** Choose **Systems** > **Inventory** and **Fault Status**.
- Step 2 On the Rack Groups page, click Chassis.
- Step 3 Click Front Locator LED.
- Step 4 From the Turn the Front Locator LED for selected chassis on/off drop-down list, choose ON or OFF.
- Step 5 Click Submit.

Managing Tags for Cisco UCS S3260 Rack Server

Tagging is used to assign a label to an object, such as a resource group, Cisco UCS S3260 Dense Storage Rack Server, or a rack-mount server. Tags can be used to provide information such as rack locations, responsible support groups, purpose, or Operating System. For information about adding or modifying tags for Cisco UCS S3260 Dense Storage Rack Server or for rack-mount server, see Managing Tags for a Rack-Mount Server.



Note

You can manage tags for aserver only when the server is included as a Rack Account within a Rack Group.

Adding Tags for Cisco UCS S3260 Rack Server

Tagging is used to assign a label to an object, such as a resource group or a rack server. Tags can be used to provide information such as rack locations, responsible support groups, purpose, or operating system. Perform this procedure to add tags to a Cisco UCS S3260 Rack Server.

Before you begin

The server is already added as a rack account under a rack group.



Note

You can also select multiple rack servers.

- **Step 1** Choose Systems > Inventory and Fault Status.
- Step 2 Click Add Tags.

Note You cannot see **Add Tags** button till you select the server from the list.

- **Step 3** Choose the **Tag Name** from the drop-down list.
- **Step 4** Choose the **Tag Value** from the drop-down list.

Step 5 Click on the plus icon to create a new tag. See Managing Tags for Cisco UCS S3260 Rack Server, on page 5 to create tags.

Note You can also edit, delete, and view tag details.

Policies and Profiles

Cisco IMC Supervisor includes a new **Cisco UCS S3260** option to create Cisco UCS S3260 chassis policies and profiles where you can add the chassis information.

These new chassis policies will be known as the User Administration policies and the existing rack mount server policies will be known as the Compute Node policies in this document. You can view the differentiated User Administration policies and Compute Node policies listed in the **Hardware Policies** table. The Server Platform for User Administration policies are displayed as **Cisco UCS S3260** and Compute Node policies are displayed as **All C-Series and E-Series except Cisco UCS S3260**.

The policies and profile reports have a column **Server Platform** indicating if the policy is Cisco UCS S3260 or others. Chassis policies irrespective of User Administration Policies or Compute Node polices are displayed as **Cisco UCS S3260**. For the other C-Series and E-Series platforms or non Cisco UCS S3260 policies it is displayed as **All C-Series and E-Series except Cisco UCS S3260**.

You can either create a Cisco UCS S3260 chassis profile or a rack-mount server profile. Selecting a Compute Node policy allows you to choose the server nodes where you want to apply the policy.

Applying a Policy

To apply a policy you have created, select from a list of Cisco UCS 3260 Rack Servers and Rack Mount servers. You can either select a Cisco UCS S3260 chassis or a rack-mount server based on the selected server platform. For more information about creating and applying policies, see Hardware Policies.

The following policies are User Administration Policies and Compute Node policies:

User Administration Policies	Compute Node Policies
User	BIOS
SNMP	Precision Boot Order
LDAP	RAID
NTP	KVM
Network Security	vMedia
SSH	VIC
NTP	Serial Over LAN



Note

- IPMI Over LAN and Network Policy have a mix of both BMC and CMC configuration details for Cisco UCS 3260 Rack Server.
- Zoning Policy is only applicable to Cisco UCS 3260 Rack Server. Hence, the Cisco UCS S3260 check box in the UI is checked.
- Legacy Boot Order and Flex Flash policies are not applicable for Cisco UCS 3260 Rack Server.

Applying a Profile

To apply a Cisco UCS S3260 profile you have created, select from a list of Cisco UCS 3260 Rack Servers. You can only select a Cisco UCS S3260 chassis. Only Cisco UCS S3260 policies can be added to the profile. For Compute Node Policies, you can choose the **Apply Policy To** field to indicate the server node to which the policy should be applicable while applying a profile. For more information about creating and applying profiles, see Hardware Profiles.

Upgrading Firmware

Cisco IMC Supervisor firmware upgrade can be performed at a server level. However, during server upgrade, the chassis components as well as the Hard Disk Drive components associated with the server are upgraded too. When you upgrade a server, the chassis and disk drive firmware are automatically updated. For more information about upgrading firmware, see Upgrading Firmware.



Note

You can upgrade only one server node at a time.

Viewing Cisco UCS S3260 Dense Storage Rack Server Details

Perform this procedure when you want to view the details for a Cisco UCS S3260 Dense Storage Rack Server, such as PSUs, VIC Adapters, Chassis Summary, and SAS Expander.

Before you begin

Ensure that the server is already added as a Rack Account under a Rack Group.

SUMMARY STEPS

- 1. Choose Systems > Inventory and Fault Status.
- Expand Rack Groups and select the rack group that contains the Cisco UCS S3260 Dense Storage Rack Server.
- **3.** On the **Rack Groups** page, click **Chassis**.
- **4.** Double-click the Cisco UCS S3260 Dense Storage Rack Server in the list to view the details, or click the Cisco UCS S3260 Dense Storage Rack Server in the list and then choose **View Details**.
- **5.** Click the **Back** button on the far right to return to the previous window.

DETAILED STEPS

- **Step 1** Choose **Systems** > **Inventory** and **Fault Status**.
- **Step 2** Expand Rack Groups and select the rack group that contains the Cisco UCS S3260 Dense Storage Rack Server.
- Step 3 On the Rack Groups page, click Chassis.
- Step 4 Double-click the Cisco UCS S3260 Dense Storage Rack Server in the list to view the details, or click the Cisco UCS S3260 Dense Storage Rack Server in the list and then choose View Details.

Note You cannot see the **View Details** option until you select a Cisco UCS S3260 Dense Storage Rack Server from the list.

The following details are available for a Cisco UCS S3260 Dense Storage Rack Server:

Tab	Description	
PSUs	The details of the power supply unit used in the server.	
	Note Not applicable for Cisco UCS S3260 dense storage rack server.	
VIC Adapters	The details of the VIC adapters used in the server.	
	Select any of the VIC Adapters listed and click View Details to view information such as External Ethernet Interfaces and VM FEXs .	
Communication	The information on the protocol, such as HTTP, HTTPS, SSH, IPMI Over LAN, NTP, and SNMP.	
Remote Presence	The details of vKVM, Serial Over LAN, and vMedia.	
Faults	The details of the faults logged in the server.	
Users	The details about users under Default Group . You can also view the strong password policy and password expiration details that you have set while creating a user policy and password expiration policy respectively. See, User Policy and Password Expiration Policy.	
	Note • Not applicable for Cisco UCS S3260 dense storage rack server.	
	• You can view Users at the chassis level and not at the server level.	
Cisco IMC Log	The details of the Cisco IMC logs for the server.	
	Note Not applicable for Cisco UCS S3260 dense storage rack server.	
System Event Log	The details of the server logs.	
	Note Not applicable for Cisco UCS S3260 dense storage rack server.	
Fault History	Historical information on the faults that occurred on the server.	

Tab	Description
Tech Support	Details about the tech-support log files, such as the file name, destination type, and status of the upload are displayed in the Tech Support table.
	An option to export the tech-support log files to a remote server or on the local Cisco IMC Supervisor appliance is available. For more information about exporting, see Exporting Technical Support Data to a Remote Server.
	Note Not applicable for Cisco UCS S3260 dense storage rack server.
Associated Hardware Profiles	Details of policies that are associated to a hardware profile.
Chassis Summary	Summary of properties such as CMC 1 network, common, and NIC.
Rack Servers	Rack server details such as hostname, IP address, and connection status.
System IO Controller	Details such as IP address, MAC address, and firmware version.
SAS Expander	Details such as ID, SAS name, and firmware version.
Zoning	Details such as health, presence, ownership, and size.

Step 5 Click the **Back** button on the far right to return to the previous window.

Viewing Cisco UCS S3260 Dense Storage Rack Server Details