



Cisco UCS Director Release Notes, Release 6.9

First Published: 2024-05-07

Cisco UCS Director Release Notes

Cisco UCS Director

Cisco UCS Director delivers unified, highly secure management for supported compute, network, storage, and virtualization platforms and for the industry's leading converged infrastructure solutions, which are based on the Cisco Unified Computing System (Cisco UCS) and Cisco Nexus platforms. Cisco UCS Director extends the unification of computing and network layers through Cisco UCS to provide data center administrators with comprehensive visibility and management capabilities for compute, network, storage, and virtualization. For more information, see [Cisco UCS Director on Cisco.com](#).

Revision History

Release	Date	Description
6.9	May 7, 2024	Created for Release 6.9(0.0). <ul style="list-style-type: none">• Supported Migration Paths to Cisco UCS Director, Release 6.9(0.0), on page 5• Supported Migration Paths for Bare Metal Agent Release 6.9(0.0), on page 6• New and Changed Features in Release 6.9, on page 7• Open Bugs in Release 6.9(0.0), on page 9• Resolved Bugs in Release 6.9(0.0), on page 9

System Requirements

The system requirements for this release are available in the [Cisco UCS Director installation and upgrade guides](#) for the following:

- VMware vSphere
- Microsoft Hyper-V

Supported Browser Versions

Cisco UCS Director supports the following browsers:

- Microsoft Edge version 120.x.x.x or higher
- Firefox version 120.x or higher
- Safari 17.x or higher
- Google Chrome version 120.x.x.x or higher

Minimum System Requirements for a Single-Node Setup

The following tables detail the minimum resource requirements for a single-node setup of . Cisco recommends a single-node setup for installations of up to 5000 VMs.

For optimal performance, the entire memory and CPU allocations specified in the table below should be reserved. Failure to follow these specifications could affect performance. For example, 4 vCPU cores with 3000 MHz and 16G of memory must be reserved for the VM.

The minimum memory required for the **inframgr** service is automatically set during deployment. To enable the **inframgr** service to use more than the minimum required memory, edit the `inframgr.env` file available in the following location:

```
/opt/infra/bin/
```

In this file, update the `MEMORY_MAX` parameter to the value you want. To activate the changes, restart the **inframgr** service.

The default memory settings are `MEMORY_MIN=8192m` and `MEMORY_MAX=8192m`.

For information about minimum system requirements for a multi-node setup, see the [Cisco UCS Director Multi-Node Installation and Configuration Guide](#).

Table 1: Minimum system requirements for a single-node installation (up to 5,000 VMs)

Element	Minimum Supported Requirement
vCPU	4
Allocated Memory	16 GB
Reserved Memory	16 GB
Disk Space	100 GB
Disk Write I/O Bandwidth	4 MBps
Disk Read I/O Bandwidth	4 MBps
Memory Allocated for inframgr	8 GB

Restart the database and all services after making these changes to the `/etc/my.cnf`.

Minimum System Requirements for a Multi-Node Setup

System Requirements for the Primary Node

Number of VMs	vCPU Allocation	Memory Allocation (GB)	Memory Reservation (GB)	Disk Size (GB)	Inframgr Memory Allocation (GB)
1 - 5000	4	16	16	100	8
5001 - 10000	4	22	22	100	12
10001 - 15000	4	28	28	100	12
15001 - 20000	4	34	34	100	16
20001 - 25000	8	40	40	100	16
25001 - 30000	8	46	46	100	24
30001 - 35000	8	52	52	100	24
35001 - 40000	8	58	58	100	28
40001 - 45000	8	64	64	100	28
45001 - 50000	8	64	64	100	32

You can configure the Inframgr memory allocation in the `/opt/infra/bin/inframgr.env` file.

System Requirements for the Database Node

Number of VMs	vCPU Allocation	Memory Allocation (GB)	Memory Reservation (GB)	Disk Read I/O Bandwidth (MBps)	Disk Write I/O Bandwidth (MBps)	Disk Size (GB)	Database InnoDB Buffer Pool (GB)
1 - 5000	4	12	12	4	4	100	8
5001 - 10000	4	16	16	6	6	100	12
10001 - 15000	4	28	28	8	8	100	24
15001 - 20000	4	40	40	10	10	200	36
20001 - 25000	8	52	52	12	12	200	48
25001 - 30000	8	64	64	14	14	200	60

Number of VMs	vCPU Allocation	Memory Allocation (GB)	Memory Reservation (GB)	Disk Read I/O Bandwidth (MBps)	Disk Write I/O Bandwidth (MBps)	Disk Size (GB)	Database InnoDB Buffer Pool (GB)
30001 - 35000	8	76	76	16	16	300	72
35001 - 40000	16	90	90	18	18	600	84
40001 - 45000	16	90	90	20	20	600	84
45001 - 50000	16	90	90	22	22	600	84

You can configure the Database InnoDB Buffer Pool parameter in the `/etc/my.cnf` file.



Note To determine the currently configured disk read I/O bandwidth and disk write I/O bandwidth, use the **Collect Diagnostics** option from the Cisco UCS Director Shell Admin menu.

Database Parameters

VMs	Thread Cache Size	Maximum Connections	innodb lock wait timeout	Query Cache Size (MB)	Maximum Connection Errors	Connection Timeout	innodb read I/O Threads	innodb write I/O Threads
1 - 5000	1000	1000	100	128	10000	20	64	64
5001 - 10000	1000	1000	100	128	10000	20	64	64
10001 - 15000	1000	1000	100	128	10000	20	64	64
15001 - 20000	1000	1000	100	128	10000	20	64	64
20001 - 25000	2000	2000	100	128	10000	20	64	64
25001 - 30000	2000	2000	100	128	10000	20	64	64
30001 - 35000	4000	2000	100	128	10000	20	64	64
35001 - 40000	4000	4000	100	128	10000	20	64	64

VMs	Thread Cache Size	Maximum Connections	innodb lock wait timeout	Query Cache Size (MB)	Maximum Connection Errors	Connection Timeout	innodb read I/O Threads	innodb write I/O Threads
40001 - 45000	4000	4000	100	128	10000	20	64	64
45001 - 50000	4000	4000	100	128	10000	20	64	64

Configure these parameters in the `/etc/my.cnf` file.

Installation and Upgrade Notes

Cisco UCS Director uses a standard virtual machine that is delivered in OVA format for VMware, and in VHD format for Microsoft Hyper-V. It can be hosted on VMware vSphere or vCenter, or on Microsoft Hyper-V Manager. For installation instructions, see the appropriate [Cisco UCS Director installation guide](#).

Installation and Upgrade Notes for Cisco UCS Director, Release 6.9

Cisco UCS Director Release 6.9 uses a new version of Almalinux operating system and Maria DB version. The previous releases of Cisco UCS Director uses CentOS version 7.x, which is about to reach End of Life. To continue to receive support for security issues and patches, upgrade to Cisco UCS Director 6.9 and Cisco UCS Director Bare Metal Agent 6.9



Note Cisco UCS Director OVA and VHD zip files are created using zip 3.x in Cisco UCS Director, Release 6.9. For Linux systems, you can extract the zip files with unzip 6.x or higher or with the latest version of the 7-Zip archiving tool. For Windows systems, you can extract the zip files with the native Extract All in Windows Explorer for Windows or with the latest versions of archiving tools such as 7-Zip or WinRAR.

Installing Cisco UCS Director Powershell Agent

Installing a newer version of the PowerShell Agent requires that you uninstall the older version first. To remove the older version of PowerShell Agent, stop the Cisco PSA Service first and then uninstall the agent. For instructions on installing, see [Cisco UCS Director PowerShell Agent Installation and Configuration Guide, Release 6.9](#).

Supported Migration Paths to Cisco UCS Director, Release 6.9(0.0)

See the [Cisco UCS Director Upgrade Guide](#) for detailed steps on how to migrate to Release 6.9 from your current release.



Important You must upgrade to Cisco UCS Director, Release 6.7(4.3) or should be in Release 6.8(x.x) before migrating to Cisco UCS Director, Release 6.9. For more information, see the *Supported Upgrade Paths to Cisco UCS Director, Release 6.7* and Supported Migration Paths to Cisco UCS Director, Release 6.8 documented in the [Cisco UCS Director Release Notes, Release 6.7](#) and [Cisco UCS Director Release Notes, Release 6.8](#) respectively.

The following are the supported migration paths for the Cisco UCS Director Release 6.9:

- From Release 6.7(4.3) to Release 6.9
- From Release 6.8(0.0) to Release 6.9
- From Release 6.8(1.0) to Release 6.9
- From Release 6.8(2.0) to Release 6.9
- From Release 6.8(3.0) to Release 6.9
- From Release 6.8(4.0) to Release 6.9
- From Release 6.8(5.0) to Release 6.9
- From Release 6.8(6.0) to Release 6.9
- From Release 6.8(7.0) to Release 6.9
- From Release 6.8(8.0) to Release 6.9



Note Before migrating from Release 6.7(4.3)/6.8(x.x) to Release 6.9, in progress service requests (SRs) must be in completed state (no in progress service requests) because you cannot complete the service requests after migrating to Release 6.9.

Supported Migration Paths for Bare Metal Agent Release 6.9(0.0)

The following are the supported migration paths for the Bare Metal Agent Release 6.9:



Important You must upgrade to Bare Metal Agent Patch, Release 6.7(4.2) or should be in Release 6.8 (x.x) before migrating to Bare Metal Agent, Release 6.9. For more information, see the *Supported Upgrade Paths for Bare Metal Agent Patch, Release 6.7(4.x)* and 6.8 in the [Cisco UCS Director Release Notes, Release 6.7](#) and the [Cisco UCS Director Release Notes, Release 6.8](#).

- From Release 6.7(4.2) to Release 6.9(0.0)
- From Release 6.8(0.0) to Release 6.9(0.0)
- From Release 6.8(1.0) to Release 6.9(0.0)
- From Release 6.8(2.0) to Release 6.9(0.0)
- From Release 6.8(3.0) to Release 6.9(0.0)
- From Release 6.8(4.0) to Release 6.9(0.0)
- From Release 6.8(5.0) to Release 6.9(0.0)
- From Release 6.8(6.0) to Release 6.9(0.0)
- From Release 6.8(7.0) to Release 6.9(0.0)
- From Release 6.8(8.0) to Release 6.9(0.0)

New and Changed Features in Release 6.9

This section provides an overview of the significant new and changed features in this release. This section does not provide an exhaustive list of all enhancements included in this release.

Data Migration

In this release, you must migrate the data from Cisco UCS Director Release 6.7.4.3/6.8.x.x to Cisco UCS Director Release 6.9. If you have a version prior to Release 6.7.4.3 installed, you cannot upgrade directly to Release 6.9(0.0). You must first upgrade to Release 6.7(4.3) from Release 6.7(4.x), and then migrate to Release 6.9(0.0).



Note The `dhcpd.conf` file of Bare Metal Agent (version 6.7.4.2 / 6.8.x.x) appliance is copied into the migrated Bare Metal Agent (version 6.9.0.0) appliance in the `/etc/dhcp` path.

Before you add a Bare Metal Agent account, do the following:

- If the **Samba Service for Windows PXE** check box is enabled, make sure to use the same Samba password of the legacy BMA (version 6.7.4.2 / 6.8.x.x) in the **Samba Password** and **Confirm Samba Password** fields in the migrated BMA (version 6.9.0.0).
- If the legacy BMA (version 6.7.4.2 / 6.8.x.x) and migrated BMA (version 6.9.0.0) are deployed with different PXE IP addresses, log into Bare Metal Agent VM using SSH client and update WinPE.wim with ens224 IP address details of the migrated BMA (version 6.9.0.0).
- If the legacy BMA (version 6.7.4.2 / 6.8.x.x) and migrated BMA (version 6.9.0.0) are deployed with different PXEVLAN ID or a failed service request is available in the migrated Cisco UCS Director appliance (version 6.9.0.0), log into Cisco UCS Manager and update the service profile with PXE VLAN details of the migrated BMA (version 6.9.0.0), reset the server, and then resubmit the service request in Cisco UCS Director appliance.

Documented in the [Cisco UCS Director Multi-Node Installation and Configuration Guide, Release 6.9](#) and [Cisco UCS Director Bare Metal Agent Installation and Configuration Guide, Release 6.9](#).

Support for Downloading Rack server Firmware Images to Local Cisco UCS Director System

Starting with Cisco UCS Director Release 6.9(0.0), offline configuration of Cisco credentials under **Cisco.com User** configuration page for software downloads from Cisco is discontinued.

For enhanced security, you should activate your device first using Activate Device action under Images- Local page in order to download Standalone Rack server firmware from Cisco.com.



Note For enhanced security, device activation done once stays active for an hour, allowing secure downloads. After one hour, you have to re-activate your device with the **Activate Device** action to download software from Cisco.com .

Enhancement to Physical Compute Chassis Inventory Report and Global Equipment Policies

In this release of Cisco UCS Director, Physical Compute Chassis Inventory is enhanced with new XFM module report and Fan Module report under I/O modules to show the real-time status of the Fan modules and Fans under it.

New Global Equipment Policies such as **Power Policy, Cisco UCS X9508 Chassis Power Extended Policy, Cisco UCS X9508 Chassis Fan Control Policy** were added to support and manage the X9508 Chassis.

For more information please refer to the [Cisco UCS Director Management Guide for Cisco UCS Manager, Release 6.9](#)

Enhanced Custom Workflow Tasks

In this release of Cisco UCS Director, the Custom Workflow Tasks Report in the user interface was enhanced with a new column to filter and sort based on category.

Rollback Service Request Enhancements

From this release and later, you can do the following:

- See the rollback details of service requests, which includes the rollback service request ID's of selected service request.
- Schedule the rollback of a service request at a particular time

For more information, see the Cisco UCS Director Orchestration Guide, Release 6.9

CSV Format Type in Cloud Sense

This release introduces the capability to generate and export cloud sense reports in CSV format. For more information, see Managing CloudSense Analytics in the UCS Director Administration Guide, Release 6.9.

New Parameters for the APIC Device

This release introduces the following new parameters for the APIC device in the **Add Domain to APIC EPG** workflow task.

- Untagged VLAN Access
- Primary VLAN
- Active Uplinks Order
- Standby Uplinks
- Custom EPG Name

Edit Server IP Address in LDAP Integration

This release introduces the capability to edit the Server IP Address field in the LDAP Integration report - LDAP Configuration form.

Migration of F5 device communication to REST API from SOAP

In UCS Director, the loadbalancing communication process of an F5 device was migrated to REST API from SOAP. In addition, iControl Axis jar files were removed.

New End User VM Disk Report

In this release of Cisco UCS Director, a new VM Disk report has been brought in for End user in order to provide insight to the disk information in more detail.

The Resize VM feature Supports Custom Input

In this release of Cisco UCS Director, custom user input is enabled for Resize VM Memory GUI action and workflow task instead of pre-defined drop down values in order to provide more flexibility to users in allocating the resources.

Support for New OS versions in Guest OS ISO Image Mapping Policy

In this release of Cisco UCS Director, the Guest OS ISO Image Mapping policy which is used to provision VM(s) using ISO images is enhanced to support SUSE Linux Enterprise 12 (64-bit), SUSE Linux Enterprise 15 (64-bit), CentOS 8 (64-bit), Red Hat Enterprise Linux 7 (64-bit), Red Hat Enterprise Linux 8 (64-bit) and Red Hat Enterprise Linux 9 (64-bit).

Open and Resolved Bugs

The open and resolved bugs for this release are accessible through the [Cisco Bug Search Tool](#). This web-based tool provides you with access to the Cisco bug tracking system, which maintains information about bugs and vulnerabilities in this product and other Cisco hardware and software products.



Note You must have a Cisco.com account to log in and access the Cisco Bug Search Tool. If you do not have one, you can [register for an account](#).

For more information about the Cisco Bug Search Tool, see the [Bug Search Tool Help & FAQ](#).

Open Bugs in Release 6.9(0.0)

You can find detailed information about all open bugs in Release 6.9 through the [open bug search for Release 6.9](#). This search uses the following parameters:

Field	Parameter
Product drop-down list	Choose Series/Model and enter Cisco UCS Director.
Releases drop-down list	Choose Affecting or Fixed in these Releases and enter 6.9(0.0).
Filter	Choose Open from the Status drop-down list.

Resolved Bugs in Release 6.9(0.0)

You can find detailed information about all resolved bugs in Release 6.9 through the [resolved bug search query for Release 6.9](#). This search uses the following parameters:

Field	Parameter
Product drop-down list	Choose Series/Model and enter Cisco UCS Director.
Releases drop-down list	Choose Affecting or Fixed in these Releases and enter 6.9(0.0).
Filter	Choose Fixed from the Status drop-down list.

Communications, Services, and Additional Information

- To receive timely, relevant information from Cisco, sign up at [Cisco Profile Manager](#).
- To get the business impact you're looking for with the technologies that matter, visit [Cisco Services](#).
- To submit a service request, visit [Cisco Support](#).
- To discover and browse secure, validated enterprise-class apps, products, solutions and services, visit [Cisco Marketplace](#).
- To obtain general networking, training, and certification titles, visit [Cisco Press](#).
- To find warranty information for a specific product or product family, access [Cisco Warranty Finder](#).

Cisco Bug Search Tool

[Cisco Bug Search Tool](#) (BST) is a web-based tool that acts as a gateway to the Cisco bug tracking system that maintains a comprehensive list of defects and vulnerabilities in Cisco products and software. BST provides you with detailed defect information about your products and software.

