



Cisco UCS Director Release Notes, Release 6.0

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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
6.0	September 19, 2016	Published release notes for Cisco UCS Director, Release 6.0
6.0	September 29, 2016	Added support for Cisco HX Data Platform, Release 1.8(1a). See Updated Support in Release 6.0, on page 16 .
6.0(0.1)	October 21, 2016	Added upgrade path for 6.0(0.1). See Supported Upgrade Paths to Cisco UCS Director, Release 6.0, on page 9 . Added fix for open licensing issue. See CSCyb71196 - Subscription Server Licenses Are Not Allowed on Top of a Perpetual Base License, on page 20 .
6.0(1.0)	December 21, 2016	Updated with information on Release 6.0(1.0)
6.0(1.1)	January 27, 2017	Updated with information on Patch Release 6.0(1.1)

Release	Date	Description
6.0(1.2)	April 20, 2017	Updated with information on Patch Release 6.0(1.2)
6.0(1.3)	August 9, 2017	Updated with information on Patch Release 6.0(1.3)

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 and requires the Adobe Flash Player 11 plug-in for those browsers:

- Internet Explorer 8 or higher
- Google Chrome 4.1 or higher
- Firefox 3.5 or higher
- Safari 4.0 or higher (for Apple Mac)

All browsers must have Adobe Flash Player plug-in version 11 or higher.

Prerequisites

For Microsoft Hyper-V Manager:

- Installation of Microsoft System Center Virtual Machine Manager
- Configure a user account with SCVMM administrator privileges
- Cisco UCS Director deployed on a Hyper-V host

For VMware vSphere:

- Installation of VMware vSphere or vCenter
- Configure a user account with system administrator privileges on VMware vCenter
- Cisco UCS Director deployed on a VMware vSphere host

Minimum System Requirements for a Single-Node Setup

The minimum system requirements depend on the number of VMs you plan to manage. We recommend deploying a Cisco UCS Director VM on a local datastore with a minimum of 25 MBps I/O speed, or on an external datastore with a minimum of 50 MBps I/O speed.



Note

- For optimal performance, reserve additional CPU and memory resources. We recommend that you reserve the following resources in addition to the minimum system requirements listed in the tables below: CPU resources of more than or equal to 3000MHz, and memory reservation of more than or equal to 4GB. You should add more vCPUs if the Cisco UCS Director VM's CPU usage is consistently high.
- The minimum memory required for the inframgr service is automatically set during deployment. However, if you want to modify the memory for the inframgr service, 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. After changing this parameter, restart the service for the changes to take effect. The default memory settings are MEMORY_MIN=128m and MEMORY_MAX=6144m.

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

Up to 2,000 VMs

If you plan to manage up to 2,000 VMs, the Cisco UCS Director environment must meet at least the minimum system requirements in the following table.

Table 1: Minimum System Requirements for up to 2,000 VMs

Element	Minimum Supported Requirement
vCPU	4
Memory	12 GB
Hard Disk	100 GB

Up to 5,000 VMs

If you plan to manage no more than 5,000 VMs, the Cisco UCS Director environment must meet at least the minimum system requirements and recommended configurations in the following tables.

Table 2: Minimum System Requirements for up to 5,000 VMs

Element	Minimum Supported Requirement
vCPU	8
Memory	20 GB
Hard Disk	100 GB

Table 3: Minimum Database Configuration

Element	Minimum Supported Configuration
thread_cache_size	100
max_connections	1000
innodb_lock_wait_timeout	100
query_cache_size	128 MB
innodb_buffer_pool_size	4096 MB
max_connect_errors	10000
connect_timeout	20
innodb_read_io_threads	64
innodb_write_io_threads	64

Minimum System Requirements for a Multi-Node Setup

The minimum system requirements for a multi-node setup depends upon the number of VMs that need to be supported by Cisco UCS Director. We recommend deploying a Cisco UCS Director VM on a local datastore with a minimum of 25 Mbps I/O speed, or on an external datastore with a minimum of 50 Mbps I/O speed. The following table describes the number of VMs supported by each deployment size.

Deployment Size	Number of VMs Supported
Small	5,000 to 10,000 VMs
Medium	10,000 to 20,000 VMs
Large	20,000 to 50,000 VMs

Minimum System Requirements for a Small Multi-Node Setup

The small multi-node setup supports from 5,000 to 10,000 VMs. We recommend that this deployment include the following nodes:

- One primary node
- Two service nodes
- One inventory database
- One monitoring database


Note

For optimal performance, reserve additional CPU and memory resources.

Minimum Requirements for each Primary Node and Service Node

Element	Minimum Supported Requirement
vCPU	4
Memory	16 GB
Hard disk	100 GB

Minimum Requirements for the Inventory Database

Element	Minimum Supported Requirement
vCPU	4
Memory	30 GB
Hard disk	100 GB (SSD Type Storage)

Minimum Requirements for the Monitoring Database

Element	Minimum Supported Requirement
vCPU	4
Memory	30 GB
Hard disk	100 GB (SSD Type Storage)

Minimum Memory Configuration for Cisco UCS Director Services on Primary and Service Nodes

Service	Recommended Configuration	File Location	Parameter
inframgr	8 GB	/opt/infra/bin/inframgr.env	MEMORY_MAX


Note

To modify the memory settings for the inframgr service, in the inframgr.env file, update the "MEMORY_MAX" parameter to the value you want. After changing this parameter, restart the service for the changes to take effect.

Minimum System Requirements for a Medium Multi-Node Setup

The medium multi-node setup supports between 10,000 and 20,000 VMs. We recommend that this deployment include the following nodes:

- One primary node
- Three service nodes
- One inventory database
- One monitoring database


Note

For optimal performance, reserve additional CPU and memory resources.

Minimum Requirements for each Primary Node and Service Node

Element	Minimum Supported Requirement
vCPU	8
Memory	30 GB
Hard disk	100 GB

Minimum Requirements for the Inventory Database

Element	Minimum Supported Requirement
vCPU	8
Memory	60 GB

Element	Minimum Supported Requirement
Hard disk	100 GB (SSD type storage)

Minimum Requirements for the Monitoring Database

Element	Minimum Supported Requirement
vCPU	8
Memory	60 GB
Hard disk	100 GB (SSD type storage)

Minimum Memory Configuration for Cisco UCS Director Services on Primary and Service Nodes

Service	Recommended Configuration	File Location	Parameter
inframgr	12 GB	/opt/infra/bin/inframgr.env	MEMORY_MAX


Note

To modify the memory settings for the inframgr service, in the inframgr.env file, update the "MEMORY_MAX" parameter to the value you want. After changing this parameter, restart the service for the changes to take effect.

Minimum System Requirements for a Large Multi-Node Setup

The large multi-node setup supports between 20,000 and 50,000 VMs. We recommend that this deployment include the following nodes:

- One primary node
- Six service nodes
- One inventory database
- One monitoring database


Note

For optimal performance, reserve additional CPU and memory resources.

Minimum Requirements for each Primary Node and Service Node

Element	Minimum Supported Requirement
vCPU	8
Memory	60 GB
Hard disk	100 GB

Minimum Requirements for the Inventory Database

Element	Minimum Supported Requirement
vCPU	8
Memory	120 GB
Hard disk	200 GB (SSD type storage)

Minimum Requirements for the Monitoring Database

Element	Minimum Supported Requirement
vCPU	8
Memory	120 GB
Hard disk	600 GB (SSD type storage)

Minimum Memory Configuration for Cisco UCS Director Services on Primary and Service Nodes

Service	Recommended Configuration	File Location	Parameter
inframgr	24 GB	/opt/infra/bin/inframgr.env	MEMORY_MAX

**Note**

To modify the memory settings for the inframgr service, in the inframgr.env file, update the "MEMORY_MAX" parameter to the value you want. After changing this parameter, restart the service for the changes to take effect.

Installation and Upgrade Notes

Cisco UCS Director uses a standard virtual machine that is delivered in OVF 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](#).

**Note**

Cisco UCS Director OVF and VHD zip files are created using zip 3.x in CentOS 6.x. 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 10 and Windows Server 2012 or with the latest versions of archiving tools such as 7-Zip or WinRAR.

**Note**

After you apply the upgrade patch and complete that installation, choose the Start Services option of ShellAdmin to start/restart the Cisco UCS Director services and complete the patch process. The patch process is not complete or successful until the services have started, Cisco UCS Director is available, the login screen is displayed, and the admin user can log in.

All Cisco UCS Director services must be stopped before you perform other ShellAdmin procedures, such as apply additional patches, take a database backup, or restore a database from a backup.

Supported Upgrade Paths to Cisco UCS Director, Release 6.0

The following are the supported upgrade paths for Cisco UCS Director, Release 6.0 .

See the [Cisco UCS Director Upgrade Guide](#) for detailed steps on how to upgrade to Release 6.0 from your current release.

Upgrade Paths from Release 6.0(0.0) Platform

- From Release 6.0(0.0) to Release 6.0(0.1)
- From Release 6.0(0.0) to Release 6.0(1.0)
- From Release 6.0(0.1) to Release 6.0(1.0)

**Important**

Cisco UCS Director release 6.0(1.0) includes a kernel version change. This kernel version change is applicable to the Bare Metal Agent as well. As part of the upgrade process, the Cisco UCS Director VM is automatically restarted. We recommend that you take a snapshot of the VM before you begin the upgrade. While upgrading on Microsoft Hyper-V, the system is restarted thrice.

Upgrade Paths from Release 5.5(x.x) Platform

- From Release 5.5 to Release 6.0
- From Release 5.5(0.1) to Release 6.0

- From Release 5.5 to Release 6.0(1.0)
- From Release 5.5(0.1) to Release 6.0(1.0)

Upgrade Paths from Prior Releases

**Note**

Direct upgrade to Release 6.0 from versions prior to Release 5.5 is not supported.

- Customers running Release 5.4.x version must first upgrade to Release 5.5 or Release 5.5(0.1), and then upgrade to Release 6.0 version.
- Customers running versions prior than 5.4 version must first migrate to Release 5.4, then upgrade to Release 5.5 or Release 5.5(0.1), and then upgrade to Release 6.0 version.

Supported Upgrade Paths to Cisco UCS Director, Patch Release 6.0(1.1)

The following is the supported upgrade path to Cisco UCS Director, Patch Release 6.0(1.1):

- From Release 6.0(1.0) to Patch Release 6.0(1.1)

**Note**

You can only upgrade to Patch Release 6.0(1.1) from Release 6.0(1.0). If you want to upgrade to Patch Release 6.0(1.1) from any other release, you must first upgrade to Release 6.0(1.0).

Supported Upgrade Paths to Cisco UCS Director, Patch Release 6.0(1.2)

The following are the supported upgrade paths to Cisco UCS Director, Patch Release 6.0(1.2):

- From Release 6.0 to Patch Release 6.0(1.2)
- From Patch Release 6.0(0.1) to Patch Release 6.0(1.2)
- From Patch Release 6.0(1.0) to Patch Release 6.0(1.2)
- From Patch Release 6.0(1.1) to Patch Release 6.0(1.2)

Supported Upgrade Paths to Cisco UCS Director, Patch Release 6.0(1.3)

The following are the supported upgrade paths to Cisco UCS Director, Patch Release 6.0(1.3):

- From Release 6.0 to Patch Release 6.0(1.3)
- From Patch Release 6.0(0.1) to Patch Release 6.0(1.3)
- From Patch Release 6.0(1.0) to Patch Release 6.0(1.3)
- From Patch Release 6.0(1.1) to Patch Release 6.0(1.3)
- From Patch Release 6.0(1.2) to Patch Release 6.0(1.3)

New and Changed Features

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.

**Note**

For information about the physical and virtual devices and software supported by Cisco UCS Director in this release, see the [Compatibility Matrix for this release](#).

New and Changed Features in Release 6.0

New End User Portal

This release introduces a new and improved HTML-5 based End User Portal User Interface for service end-users that replaces the Self-Service Portal. The landing page for the End User Portal can be customized to meet the needs of your end users. These customizations include summary dashlets and custom dashboards. Some customizations must be configured by administrators to be available to your end users.

Using this portal, end users can perform the same tasks that they could with the Self-Service Portal, including the following:

- Provision virtual machines (VMs), application containers, and bare metal servers with predefined policies and workflow service requests.
- Review and manage service requests.
- Upload and deploy OVF images
- Monitor and create reports for provisioned virtual and physical resources.
- Approve service requests to provision VMs, application containers and bare metal servers.

**Note**

The Self-Service Portal is still available, but can only be accessed as the Classic View from within the new End User Portal.

Documented in the [Cisco UCS Director End User Portal Guide, Release 6.0](#). Documentation for the Self-Service Portal is only available as online help in this release.

Support for Bare Metal Policy, Cost Model, Catalogs and Workflows for Managed UCS Servers

This release introduces policy-based provisioning for Bare Metal deployment, specifically for UCS managed servers using a UCS Manager policy. Further there is a new cost model, catalog and workflow (wrapper) for customers to define appropriate Bare Metal deployment and associated show back and charge back budgetary cost.

Bare Metal provisioning for UCS managed servers can also be published to the End User Portal using the Bare Metal Catalog (a new type of Catalog introduced in this release), and with the Bare Metal Wrapper workflow that pass appropriate parameters from the Catalog User input to the workflow.

Further, an administrator can configure Bare Metal lifecycle actions for End Users to self-serve once the Bare Metal servers are provisioned.

Documented in the [Cisco UCS Director Administration Guide, Release 6.0](#) and the [Cisco UCS Director End User Portal Guide, Release 6.0](#).

Support for Lifecycle Management of Bare Metal Servers from the End User Portal

This release introduces support for lifecycle management of baremetal servers from the End User Portal. Both actions and tasks are available to assign Cisco UCS blade and rack servers to user groups. Users in those groups who have the required additional permissions can then view the servers in the End User Portal and perform the following lifecycle management actions:

- Powering servers on and off
- Associating and disassociating servers with a service profile
- Launching the KVM console from the server

This feature is also available in the classic view, Self-Service Portal.

Documented in the [Cisco UCS Director End User Portal Guide, Release 6.0](#).

Support for Cisco HyperFlex Systems

Cisco UCS Director support Cisco HyperFlex and HX Data Platform clusters. A simple wizard is available to set up an HyperFlex Pod in Cisco UCS Director, that allows all the necessary credentials for Cisco HyperFlex infrastructure. Once an HyperFlex Pod is setup, you can use Cisco UCS Director to perform the following:

- Automatically, and periodically collect inventory from Cisco HyperFlex clusters
- Discover clusters, nodes, disks, datastores and controller VM's within Cisco HyperFlex system.
- Datastore provisioning and management
- Automation and orchestration of VM provisioning

The End User Portal can be used for self-service VM provisioning along with VM Actions from the End User Status report.

Documented in the [Cisco UCS Director HyperFlex Systems Management Guide, Release 6.0](#).

Enhancements to VMware Support

This release introduces the following support for the deployment of VMs across datacenters in the same cloud:

- Provisioning of a VM on a datacenter by using a template image available in any other datacenter under the same cloud
- Cloning of a VM from one datacenter to another datacenter under the same cloud

Documented in the [Cisco UCS Director VMware vSphere Management Guide, Release 6.0](#).

Enhancement to Open Automation

This release introduces a list of form field types that you can use to define the type of a form field when you create a form for an open automation module.

Documented in the [Cisco UCS Director Open Automation Cookbook, Release 6.0](#).

Enhancements to REST APIs

The following APIs have been added in this release:

- userAPIModifyLoginProfilePassword
- userAPIModifyUserPassword
- userAPIAddTierToContainer
- userAPIProvisionRequest
- userAPIGetEligibleDataStoreClustersForCreateNewDisk
- userAPIGetEligibleDataStoresForCreateNewDisk

The following APIs have been updated in this release:

- userAPICreateGroup
- userAPIUpdateGroup

The following APIs have been deprecated in this release:

- userAPIResetMyPassword
- userAPIResetUserPassword
- userAPIAddTierToContainerVM

In addition, you can pass variables with special characters in the REST URL.

Documented in the [Cisco UCS Director REST API Getting Started Guide, Release 6.0](#) and the [Cisco UCS Director REST API Cookbook, Release 6.0](#).

Additions to Workflows in the Task Library

The following new workflow tasks have been added to the Task library in Cisco UCS Director:

- Adding Physical Network Account
- Push NTP Configuration
- Delete NTP Configuration
- Configure Host Name
- Delete Host Name
- Reset Password
- Create VRF
- Delete VRF

Support for Cisco UCS Director Express for Big Data in Cisco UCS Director

The enhancements to Cisco UCS Director Express for Big Data in Cisco UCS Director include the following:

- Support for Cloudera 5.8.0, MapR 5.2, and Hortonworks 2.4 cluster versions.
- Support for NTP service for all new bare metal nodes.

- Support for NFS, Drillbit, and Spark service in MapR cluster.
- Support for Cisco UCS Manager version 3.1(1g)

Documented in the [Cisco UCS Director Express for Big Data Management Guide, Release 3.0](#).

Enhancement to Bare Metal Agent Installation

With this release, you now have the option to create a Samba user when adding Bare Metal Agent to Cisco UCS Director.

Documented in the [Cisco UCS Director Bare Metal Agent Installation and Configuration Guide, Release 6.0](#).

Enhancements to Support for C-Series Standalone Servers through Cisco IMC Supervisor, Release 2.1

For C-Series standalone servers, native support is now available for the following Cisco IMC Supervisor 2.1 features:

- Support for Cisco UCS C3260 servers
- Enhancements in configuring a RAID policy for unused disks with Unconfigured Good and JBOD configurations
- Introduction of a network configuration policy to configure the DNS server and other network settings
- Introduction of a zoning policy to assign physical drives to a Cisco UCS C3260 server
- Enhancements to the user policy to enable strong password protection rule for user accounts that are configured with this policy
- Changes to configuring an email alert rule to enable you to create a rule for specific servers
- Changes to diagnostics-related tasks to enable you to create multiple SCU image profiles and run diagnostics on server groups

Some Cisco IMC Supervisor, Release 2.1 features are not supported in Cisco UCS Director, such as Smart Call Home and certain REST APIs.

Documented in the [Cisco UCS Director Management Guide for Rack Servers, Release 6.0](#).

Additional Enhancements to Cisco UCS Director

Other enhancements to Cisco UCS Director include the following:

- Support for editing ciphers used by the system
- Support for enabling database audit logging
- Modifications to the password policy
- New icons for catalogs—visible after you upgrade to this release.

Documented in the [Cisco UCS Director Administration Guide, Release 6.0](#).

New and Changed Features in Release 6.0(1.0)

Support for UCS S3260 Servers

This release introduces support for Cisco UCS S3260 servers. In addition to managing this server using the user interface, you can also use the following tasks that have been added to the task library:

- Associating and disassociating storage profiles from the service profile
- Delete All LUNs

Enhancements to Support for Cisco UCS Central

Support for Cisco UCS Central includes the following enhancements:

- Addition of the following tasks:
 - Select Global Service Profile
 - Bind Global Service Profile Template vNIC to Template
 - UnBind Global Service Profile Template vNIC from Template
 - Add UCS Central Organization
 - Delete UCS Central Organization
 - Clone Global Service Profile Template
 - Delete UCS Central server pool and server pool qualification
 - Add and delete VSAN from global service profile template
 - Modify global service profile template for UCS Central
 - Delete global service profile template in UCS Central
 - Create UCS Central server pool
 - Add and delete UCS servers to UCS Central server pool
 - Create and modify server pool qualification
- Modifications to the following existing tasks:
 - Create vnic template
 - delete ucs central server pool
 - delete ucs central server pool qualification
 - Single service profile inventory
- User interface changes to support the following actions:
 - Creating UCS Central server pools
 - Adding and deleting UCS servers from the UCS Central server pools
 - Creating and modifying server pool qualification

- Deleting UCS Central server pools and server pool qualifications
- Enhanced inventory management capabilities to manage large number of servers with Cisco UCS Central.

For more information, see the *Cisco UCS Director Management Guide for Cisco UCS Central, Release 6.0*.

Changes to the End User Portal

This release introduces changes to the search and filtering capability in the End User Portal. The pagination capability that was previously available in the user interface is no longer available. When you access a page, it lists all the records in one single page. You can use the filter icon to narrow down to the records that you want to view. After you enter the filter criteria, all records that match the criteria are highlighted and displayed.

Documented in the *Cisco UCS Director End User Portal Guide, Release 6.0*.

New and Changed Features in Release 6.0(1.1)

Customizable Approval and Rollback Email Templates for Workflows

You are no longer restricted to a single or fixed email template for workflow approval. If desired, every workflow you use can have its own approval email template. In addition, you can use a different email template for workflow rollback approval.

Cisco UCS Director no longer limits the number of email templates. You can choose to create or customize your own templates for approval and/or rollback approval workflows, or you can use the out-of-the-box templates.

Since not all email templates work with all types of workflows, you must test your email templates with your workflows before you finalize your deployment.

This feature is documented in the [Cisco UCS Director Orchestration Guide, Release 6.0](#).

Updated Support in Release 6.0

This section provides a summary of the updated support in Release 6.0. For more information, see the [Cisco UCS Director Compatibility Matrix, Release 6.0](#).

Cisco Server Support

The following changes were added to Cisco server support in this release:

- Cisco UCS Manager: 2.2(8*)
- Cisco UCS Central: 1.5(1*)
- Cisco UCS C-Series Rack Servers (Standalone through Rack accounts): Cisco IMC Supervisor, Release 2.1
- Cisco UCS E-Series Servers (Standalone through Rack accounts): Cisco IMC Supervisor, Release 2.1

Cisco Application Centric Infrastructure Support

The following changes were added to Cisco Application Centric Infrastructure support in this release:

- Cisco Application Centric Infrastructure: Release 2.0(1*)

- Cisco Application Virtual Switch: 5.2(1)SV3(1.20)

EMC Storage Support

The following changes were added to EMC storage support in this release:

- EMC XtremIO: V4.0.2-80
- EMC RecoverPoint Cluster: V 4.4 SP1

NetApp Storage Support

The following changes were added to NetApp storage support in this release:

- NetApp FAS (Clustered Data-ONTAP): 8.3.2

IBM Storwize Storage Support

The following changes were added to IBM Storwize storage support in this release:

- IBM Storwize V5000: 7.6.1.3
- IBM Storwize V9000 (Flash System): 7.6.1.4

Hyper-Converged Infrastructure Support

The following support was added for Cisco HyperFlex System in this release:

- Cisco HX-Series Server: HX220C-M4, HX240C-M4
- Cisco HX Data Platform: Release 1.7.1

Updated Support in Release 6.0(1.0)

This section provides a summary of the updated support in Release 6.0(1.0). For more information, see the [Cisco UCS Director Compatibility Matrix, Release 6.0](#).

Cisco Server Support

The following changes were added to Cisco server support in this release:

- Cisco UCS Manager 3.1(2)
- Cisco UCS S3260 Storage Server

Cisco Network and Fabric Support

The following changes were added to the support for Cisco network and fabric devices in this release:

- Cisco Nexus 1000V for VMware vSphere:5.2(1)SV3(2.1)
- Cisco Nexus 3132: 7.0(3)I4
- Nexus 3172: 7.0(3)I4
- Cisco Nexus 5696Q: 7.3.1

- Cisco Nexus 56128P: 7.3.0.
- Nexus 7004: 7.3.0
- Nexus 7010:7.3.1
- Nexus 9372TX: 7.0(3)I3
- Nexus 9372PX standalone: 7.0(3)I4
- Cisco MDS 9148: 7.3.1.D1(1)
- Cisco MDS 9148S: 7.3.1.D1(1)
- Cisco MDS 9396S:7.3.1.D1(1)
- Cisco MDS 9250i:7.3.1.D1(1)
- Cisco MDS 9706: 7.3.1.D1(1)
- Cisco Data Center Network Manager: 7.0(x), 7.1(x), 7.2, 7.2(x), 10.0(x), 10.1 and 10.1(x)

You must change the **Global Mobility Domain Detectable VLAN Range** setting from **Default** to **Valid VLAN Range** in Cisco Data Center Network Manager for Cisco UCS Director to create networks.

F5 Network and Load Balancer Support

The following changes were added to the F5 Network and Load Balancer support in this release:

- Big-IP LTM 2200: 11.6.1 and 12.1.1.

Cisco Security and Firewall Support

The following changes were added to the Cisco security and firewall support in this release:

- Cisco Prime Network Services Controller: 3.4.1

Deprecation Announcement

Deprecation Announcement for Cisco UCS Invicta

The following Cisco UCS Invicta Series Storage accounts have been deprecated:

- Cisco UCS Invicta Appliance
- Cisco UCS Invicta Scaling System

Existing Cisco UCS Invicta accounts will be supported. However, you can no longer create a new Cisco UCS Invicta account. The *Cisco UCS Director Invicta Series Management Guide* will also no longer be updated.



Note

For End-of-Life milestones and dates, see the [End-of-Sale and End-of-Life Announcement for the Cisco UCS Invicta Series](#).

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 and Resolved Bugs in Release 6.0

Open Bugs in Release 6.0

You can find detailed information about all open bugs in Release 6.0 through the [open bug search for Release 6.0](#). This search uses the following parameters:

Field	Parameter
Product drop-down list	Choose Series/Model and enter Cisco UCS Director 6.0.
Releases drop-down list	Choose Affecting or Fixed in these Releases and enter 6.0(0.0).
Filter	Choose Open from the Status drop-down list.

Resolved Bugs in Release 6.0

You can find detailed information about all resolved bugs in Release 6.0 through the [resolved bug search query for Release 6.0](#). This search uses the following parameters:

Field	Parameter
Product drop-down list	Choose Series/Model and enter Cisco UCS Director 6.0.
Releases drop-down list	Choose Affecting or Fixed in these Releases and enter 6.0(0.0).
Filter	Choose Fixed from the Status drop-down list.

Open and Resolved Bugs in Release 6.0(0.1)

Open Bugs in Release 6.0(0.1)

You can find detailed information about all open bugs in Release 6.0(0.1) through the [open bug search for Release 6.0](#). This search uses the following parameters:

Field	Parameter
Product drop-down list	Choose Series/Model and enter Cisco UCS Director 6.0.
Releases drop-down list	Choose Affecting or Fixed in these Releases and enter 6.0(0.1).
Filter	Choose Open from the Status drop-down list.

Resolved Bugs in Release 6.0(0.1)

You can find detailed information about all resolved bugs in Release 6.0(0.1) through the [resolved bug search query for Release 6.0](#). This search uses the following parameters:

Field	Parameter
Product drop-down list	Choose Series/Model and enter Cisco UCS Director 6.0.
Releases drop-down list	Choose Affecting or Fixed in these Releases and enter 6.0(0.1).
Filter	Choose Fixed from the Status drop-down list.

CSCvb71196 - Subscription Server Licenses Are Not Allowed on Top of a Perpetual Base License

CSCvb71196 is a fixed bug in Cisco UCS Director, Release 6.0(0.1) that affects subscription server licenses, as follows:

Impact

Previously, if you had a Perpetual Server license installed on any version of Cisco UCS Director prior to Cisco UCS Director, version 6.0(0.1), after upgrading the Cisco UCS Director appliance to version 6.0(0.1), you could not add a Subscription Server license on top of the existing Perpetual Server license.

With this fix, Cisco UCS Director allows the addition of a Subscription Server license on top of a Perpetual Base license, but does not allow coexistence of a Perpetual Server license and a Subscription Server license.

If you want to add a new Subscription Server license, you must clean up all the licenses present in the system using the `dbLicClean.sh` script located in the `/opt/infra` directory. Then you can choose the path to either the Perpetual Server license or the Subscription Server license that you want to use.

Open and Resolved Bugs in Release 6.0(1.0)

Open Bugs in Release 6.0(1.0)

You can find detailed information about all open bugs in Release 6.0(1.0) through the [open bug search for Release 6.0\(1.0\)](#). This search uses the following parameters:

Field	Parameter
Product drop-down list	Choose Series/Model and enter Cisco UCS Director 6.0.
Releases drop-down list	Choose Affecting or Fixed in these Releases and enter 6.0(1.0)
Filter	Choose Open from the Status drop-down list.

Resolved Caveats in Release 6.0(1.0)

You can find detailed information about all resolved bugs in Release 6.0(1.0) through the [resolved bug search for Release 6.0\(1.0\)](#). This search uses the following parameters:

Field	Parameter
Product drop-down list	Choose Series/Model and enter Cisco UCS Director 6.0.
Releases drop-down list	Choose Affecting or Fixed in these Releases and enter 6.0(1.0)
Filter	Choose Fixed from the Status drop-down list.

Open and Resolved Bugs in Release 6.0(1.1)

Open Bugs in Release 6.0(1.1)

There are no open bugs associated with Release 6.0(1.1). Open bugs in Release 6.0 and 6.0(1.0) that were not resolved in this patch release may apply to this release.

Resolved Bugs in Release 6.0(1.1)

You can find detailed information about all resolved bugs in Release 6.0(1.1) through the [resolved bug search for Release 6.0\(1.1\)](#). This search uses the following parameters:

Field	Parameter
Product drop-down list	Choose Series/Model and enter Cisco UCS Director 6.0.
Releases drop-down list	Choose Affecting or Fixed in these Releases and enter 6.0(1.1)
Filter	Choose Fixed from the Status drop-down list.

Open and Resolved Bugs in Release 6.0(1.2)

Open Bugs in Release 6.0(1.2)

You can find detailed information about all open bugs in Release 6.0(1.2) through the [open bug search for Release 6.0\(1.2\)](#). This search uses the following parameters:

Field	Parameter
Product drop-down list	Choose Series/Model and enter Cisco UCS Director 6.0.
Releases drop-down list	Choose Affecting or Fixed in these Releases and enter 6.0(1.2)
Filter	Choose Open from the Status drop-down list.

Resolved Bugs in Release 6.0(1.2)

You can find detailed information about all resolved bugs in Release 6.0(1.2) through the [resolved bug search for Release 6.0\(1.2\)](#). This search uses the following parameters:

Field	Parameter
Product drop-down list	Choose Series/Model and enter Cisco UCS Director 6.0.
Releases drop-down list	Choose Affecting or Fixed in these Releases and enter 6.0(1.2)
Filter	Choose Fixed from the Status drop-down list.

Open and Resolved Bugs in Release 6.0(1.3)

Open Bugs in Release 6.0(1.3)

You can find detailed information about all open bugs in Release 6.0(1.3) through the [open bug search query for Release 6.0\(1.3\)](#). This search uses the following parameters:

Field	Parameter
Product drop-down list	Choose Series/Model and enter Cisco UCS Director 6.0.
Releases drop-down list	Choose Affecting or Fixed in these Releases and enter 6.0(1.3)
Filter	Choose Open from the Status drop-down list.

Resolved Bugs in Release 6.0(1.3)

You can find detailed information about all resolved bugs in Release 6.0(1.3) through the [resolved bug search for Release 6.0\(1.3\)](#). This search uses the following parameters:

Field	Parameter
Product drop-down list	Choose Series/Model and enter Cisco UCS Director 6.0.
Releases drop-down list	Choose Affecting or Fixed in these Releases and enter 6.0(1.3).
Filter	Choose Fixed from the Status drop-down list.

Obtaining Documentation and Submitting a Service Request

For information on obtaining documentation, using the Cisco Bug Search Tool (BST), submitting a service request, and gathering additional information, see [What's New in Cisco Product Documentation](#).

To receive new and revised Cisco technical content directly to your desktop, you can subscribe to the [What's New in Cisco Product Documentation RSS feed](#). RSS feeds are a free service.

