

# **Introducing Cisco UCS Central 1.4**

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# **Overview of Cisco UCS Central 1.4 Features**

Cisco UCS Central, release 1.4 allows you to take charge of the data center environment by delivering easy to use, integrated solution for managing Cisco UCS Domains from a single management point, both in data centers and remote management locations, with high availability. With Cisco UCS Central 1.4, you can efficiently manage server, storage and network policies and generate network traffic reports for your entire data center.

This release includes full support for the HTML5-based user interface, which is now the default user interface. The previous flash-based user interface is available at http://UCSCentral IP/flex.html.

The following table lists the new features in the HTML 5 user interface:

Feature	Functions
Advanced Local Storage Configuration	Configuration of Storage Profiles and multiple virtual drives—To allow flexibility in defining the number of storage disks, roles and usage of these disks, and other storage parameters, you can create and use storage profiles. A storage profile encapsulates the storage requirements for one or more service profiles. You can also configure multiple virtual drives.
	Configuration of a local LUN or a JBOD as the primary boot device
	<ul> <li>Support for local storage configuration on multiple storage controllers</li> </ul>
	Support for out-of-band configuration for local storage
Port Configuration and Disjoint Layer-2 Network	Enables configuration support for ports and port channels, including scalability ports. Also allows upstream disjoint L2 configuration.
Equipment Policies	Global support for chassis discovery policy, rack discovery policy, rack management connection policy, and other equipment-related policies.
Global Service Profile enhancements	Manual creation of vNICs and vHBAs inside service profiles.
	<ul> <li>Naming conventions when creating service profiles from templates.</li> </ul>
	Service profile qualification policy
Adapter Policy enhancements	RoCE, NVGRE, ARFS, and VxLAN added to adaptor policies.
New connection policies	VMQ connection policy
	usNIC connection policy
PVLAN	Configuration support for private VLANs.
Advanced Host Firmware Pack	Component exclusion support in host firmware package policy.
Maintenance Policy enhancements	Can now schedule maintenance policies to automatically apply changes at the next reboot.

Feature	Functions
Smart Call Home	Enables support for Smart Call Home on Cisco UCS Central.
Support for traditional licence management and Smart Licensing	Enables support for the new Smart licensing, as well as continuing support for traditional license management.
Remote Authentication enhancements	Added support for TACACs and RADIUS.
BIOS token support	Includes support for all BIOS tokens included in Cisco UCS Manager, including Consistent Device Naming (CDN).
SNMP Support	Support for sending Cisco UCS Central alerts via SNMP to other management tools.
Cisco UCS Manager 3.1	Pre-enabled support for Cisco UCS Manager release 3.1 and associated hardware platforms.
Boot Policy enhancements	Enables support for booting from multiple LUNs, embedded LUNs and embedded JBOD.
API Communications Report	Enables reporting on active API communications between the GUI and back-end.
Tomcat Logging	Enables logging for Tomcat processes.
Improved VLAN permission management	Allows different organizations to have permissions to different VLANs.
Multi-delete usage analysis	Allows you to see the effect of deleting multiple policies, such as what service profiles use them.
General UI enhancements	Export, saved searches
	Domain group and organization view UI enhancements
	Enhanced widgets and additional widgets added
	Hardware components table view that displays all hardware components within the system, such as FANs, PSUs, and Memory.
Configuration Status	Can view configuration status for Ports, Service Profiles, and Firmware Upgrade scheduling.

Feature	Functions
Security enhancements	<ul> <li>Added multiple security enhancements as well as updates to the underlying operating system.</li> <li>Unified KVM launch with KVM-only permissions</li> </ul>
Direct-attached Storage (DAS)	Enables connecting a storage array directly to the FI.

## **Overview of Cisco UCS Central HTML 5 UI**

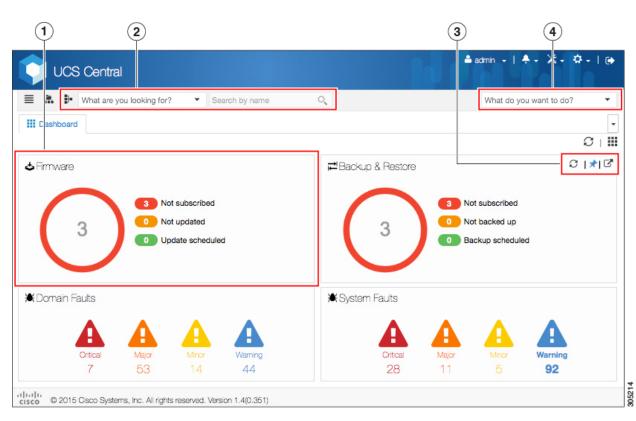
Cisco UCS Central HTML5 based user interface provides flexibility and task based usability for your management purposes.

The dashboard provides a quick overview of components in the system. You can pin the components you use frequently and customize the dashboard to suit your operational requirements. You can click on any object on the dashboard to go to the related page in the system. To watch a brief introduction to the HTML 5 UI, see Video: Introducing Cisco UCS Central 1.4.

# **Using the HTML5 UI**

#### **Dashboard**

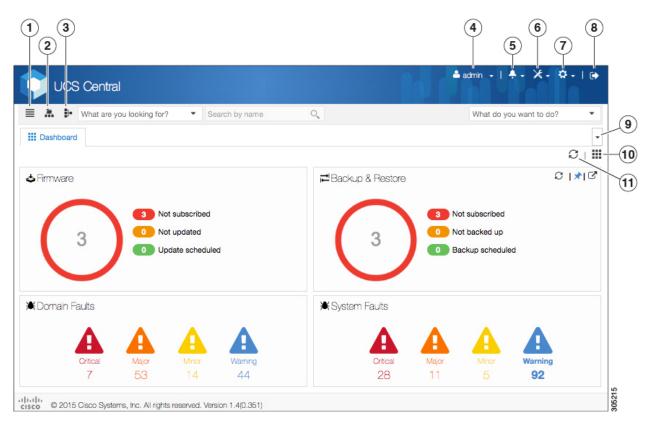
You can pin dashboard widgets and customize the dashboard based on your operational requirements. The following is the basic dashboard structure:



Item	Description
1	Dashboard widget. You can pin any widget on this dashboard. When you mouse over on the widget, other options are enabled on widget's menu bar.
2	Search bar. What are you looking for? You can do the following:
	• Select the entity type to search for any entity in the system by name. Empty search string returns all entities.
	• Filter search results by location and status when applicable.
	• Click on an entity in the search results to open the details in a new page.
3	From within any widget on the dashboard, when you display additional options, you can do the following:
	Refresh the displayed information for this specific widget.
	• Unpin this widget from the dashboard.
	• Launch the details page for this operation.
4	Actions bar. <b>What do you want to do?</b> You can Create, Schedule, Install, Export and Import from here:
	• Click drop down to display available actions and select a task or type the task in the field and launch the dialog box and perform the task.

### **Navigation Icons**

The following navigation icons help you navigate around the product to perform management tasks:



Item	Description
1	Search icon. Click to display physical and logical inventory related entities in the system such as, <b>Domains</b> , <b>Fabric Interconnects</b> , <b>Servers</b> , <b>Chassis</b> , <b>FEX</b> , <b>vLANs</b> , <b>vSANs</b> , <b>Service Profiles</b> , <b>Templates</b> , <b>Pools</b> , <b>Policies</b> and <b>ID Universe</b> . Click on any of these entities to launch related page and view details.
2	Organization icon. Click to display org <b>root</b> and other sub organizations in the system. You can click on the root or any sub org to launch the details page for a selected org.
3	Domain group icon. Click to display domain group <b>root</b> and other domain groups in the system. You can click on a domain group to launch the details page.
4	User Preferences icon. Click to launch User Settings. From here you can Change Password, Restore Dashboard Defaults, and Show First Launch Experience.

Item	Description
5	Alerts icon. Click to display and navigate to <b>Pending Activities</b> , <b>System Faults</b> , <b>Domain Faults</b> , <b>Events</b> , <b>Audit Logs</b> , <b>Core Dumps</b> , <b>Sessions</b> and <b>Internal Services</b> .
6	Operations icon. Click to display and navigate to Firmware, Backup & Restore, Export & Import, Licenses and Tech Support.
7	System Settings icon. Click to display and navigate to System Profiles, System Policies, Users, Authentication and SNMP.
8	Log out icon. Click to log out from the active UCS Central session.
9	Tab navigator. Allows you to navigate through the open tabs, or close all tabs at once.
10	Dashboard widgets library icon. Click to view available widgets and click on the widget to pin it to the dashboard.
11	Refresh icon. Click to refresh information in all pinned widgets or table pages.
	Each widget has individual refresh icons to refresh data for individual widgets.

## **Dashboard Widgets**

Dashboard widgets allow you to customize the dashboard based on your operational requirements. Cisco UCS Central contains the following types of widgets:

#### **Default Widgets**

Default widgets are listed in the widgets library on the dashboard. Click the widgets library to pin the widget to the dashboard. The widgets library includes the following widgets:

- Welcome to UCS Central!—Displays introductory links and videos to get you started with Cisco UCS Central.
- UCS Central Basics— Displays basic concepts and flows for Cisco UCS Central.
- Licenses—Displays the total number of licenses and their status.
- Backup & Restore—Displays the current backup and restore status.
- Config Export & Import—Displays the current config export and import status.
- Firmware—Displays the total number of UCS domains.
- All Inventory Status—Displays the number of domains, FIs, servers, chassis, and FEX, as well as the overall status.
- ID Universe—Displays the number of IDs that are available or in conflict.

• System Faults—Displays the number of system faults with the top four severities.

Click the Expand icon to view the Faults Log page for all system faults. Click on a fault icon to view the system faults with the selected severity pre-selected.

• **Domain Faults**—Displays the number of domain faults with the top four severities.

Click the Expand icon to view the Faults Log page for all domain faults. Click on a fault icon to view the domain faults with the selected severity pre-selected.

#### **Table Summary Widgets**

Table summary widgets displays the total number of items and the status for the following:

- Domains
- Fabric Interconnects
- Servers
- Chassis
- FEX
- Service Profiles

Up to two status bars can be displayed, with the top four errors displayed in each status bar.

Click the Expand icon to view the full table.

#### **Detailed Instance Summary Widgets**

Detailed instance summary widgets display the overall status and fault summary. Click the pin icon to create a widget for the following instances:

- Domain
- Domain Group
- Organization
- · Fabric Interconnect
- Server
- · Chassis
- FEX
- · Service Profile

Click the Expand icon to view the full instance page. Click on a fault icon to view a faults window with the selected severity pre-selected.

#### **Instance Shortcut Widgets**

Shortcut widgets create a read-only link to a particular instance of a policy or template. Click the pin icon on an instance to create the widget.

### **Adding Table Summary Widgets to the Dashboard**

#### **Procedure**

- **Step 1** Click the **Search** icon and select one of the following:
  - Domains
  - Fabric Interconnects
  - Servers
  - Chassis
  - FEX
  - Service Profiles
- **Step 2** On the table page that displays, click the **Pin** icon.
- **Step 3** Click the **Dashboard** link to view the new widget.

### **Adding Instance Summary Widgets to the Dashboard**

### **Procedure**

- **Step 1** Click the **Search** icon and select one of the following:
  - Domains
  - Fabric Interconnects
  - Servers
  - Chassis
  - FEX
  - Service Profiles
- **Step 2** Double-click an instance.
- **Step 3** On the page that displays, click the **Pin** icon.
- **Step 4** Click the **Dashboard** link to view the new widget.

## **Tab Navigator**

The tab navigator appears on all screens, and allows you to navigate quickly through the tabs that you have opened. You can also close all tabs at once.

#### **Using the Tab Navigator**

#### **Procedure**

**Step 1** On the tab bar, click the drop-down on the far right.

A list of all currently opened tabs is displayed.

**Step 2** Select the tab that you want to navigate to, or select Close All Tabs to close all of the tabs.

**Note** The dashboard tab cannot be closed.

# **Behavior and Design Changes in HTML5 UI**

#### **Feature Support**

The following features that are available in the older flash-based user interface are not supported in the new HTML5 user interface at this time:

- Policy Import
- · Threshold Policy
- Statistics



Note

Any functionality introduced in Cisco UCS Central release 1.4(1a) and newer releases will be available in the HTML 5 user interface only.

### **Behavior Changes Based on Design**

- You must create the global service profile template before you can create a service profile.
- The following inline options are not available in a service profile:
  - · Boot Policy
  - ° Static ID

If you have an existing global service profile with any of these options, you cannot edit the global service profile in the HTML5 UI.

- The iSCSI target configuration under the boot policy is not available in the Flex UI.
- vNIC and vHBA Placement is now referred to as Interface Placement.
- Registration Policy is now referred to as Domain Group Qualification Policy.
- ID Range Qualification Policy is now referred to as ID Range Access Control Policy.

- There are no qualified IP addresses for ID Range Access Control Policy.
- The only backup option is config-all backup. Other backup types such as config logical and config system are not supported.
- Local service profile picks up Host Firmware Policy from the Org instead of the Domain Group.
- When Import fails in HTML 5 UI, the message displays the reason for import failure. Make sure to correct errors and resubmit the configuration for import.
- Local service profile inventory is not displayed.
- The maintenance policy and schedules that are currently used by local service profiles and currently under domain groups will not be available in HTML5 UI.

# **Multi-version Management Support**

Cisco UCS Central, release 1.1(2a) and newer provides you the ability to manage multiple Cisco UCS domains with different versions of Cisco UCS Manager at the same time. Cisco UCS Central identifies feature capabilities of each Cisco UCS domain at the time of domain registration. This ability enables you to seamlessly integrate multiple versions Cisco UCS Manager with Cisco UCS Central for management and global service profile deployment.

When you upgrade your Cisco UCS Central to a newer release, based on the features you are using, you might not have to upgrade all of your Cisco UCS Manager release versions to make sure the registered UCS domains are compatible with Cisco UCS Central.

When you register a Cisco UCS domain in Cisco UCS Central, along with the inventory information Cisco UCS Central receives the following information from the domain:

- Cisco UCS Manager release version
- List of available supported features in the domain

The available features are sent as a management capability matrix to Cisco UCS Central. Based on this information Cisco UCS Central builds a list of supported features for each registered domain. Based on the feature capabilities in a Cisco UCS domain, Cisco UCS Central decides if certain global management options are possible in the domain. When you perform management tasks, such as deploying a global service profile on a group of domains that include earlier versions of Cisco UCS Manager instances, based on the feature capability matrix, Cisco UCS Central does the following:

- Delivers the task only to the supported domains.
- Displays a version incompatibility message for the domains where the feature is not supported.

#### **Supported Features in Cisco UCS Manager**

You can view supported features in a Cisco UCS domain using the Cisco UCS Central CLI. Based on the Cisco UCS Manager versions in the registered Cisco UCS domains, Cisco UCS Central CLI builds list of supported features in the following four categories:

- Server Feature Mask: Includes global service profiles, policy mapping and Inband management, advanced boot order
- Network Feature Mask: None

- Storage Feature Mask: FC Zoning and ISCSI IPv6
- Environment Feature Mask: Power group, remote operations, UCS registration, estimate impact on reconnect

#### **Management Exclusion**

Multi-version support also provides you the ability to exclude some features from global management. You can log into a registered UCS domain and turn off a specific feature from Cisco UCS Manager CLI. You can disable the following global management capabilities:

- Global service profile deployment: If you deploy global service profile on a server pool, and you have disabled global service profile deployment in one of the servers in the pool, Cisco UCS Central excludes the server from the global service profile deployment.
- In band management: A service profile with inband management capability will not be deployed on the servers where you have excluded inband management feature.
- Policy mapping: This will disable importing policies or policy components from this Cisco UCS domain into Cisco UCS Central.
- Remote management: This will restrain controlling physical devices in a Cisco UCS domain from Cisco UCS Central.

You can enable these features any time using the Cisco UCS Manager CLI to restore global management capabilities in the registered Cisco UCS domains at anytime.

# **Feature Support Matrix**

The following table provides a list of features in Cisco UCS Central, and Cisco UCS Manager release versions in which these features are supported:



Note

Some features are built in Cisco UCS Central to be compatible with upcoming Cisco UCS Manager releases

#### Feature Support for Release 1.4

Cisco UCS Central Features	Supported Cisco UCS Central Versions	Supported Cisco UCS Manager Versions					
		2.1	2.2	2.5	3.0	3.1	
Port Configuration	1.4(1a)	No	2.2(7) and later	No	No	3.1(1) and later	
Advanced Local Storage Configuration	1.4(1a)	No	2.2(7) and later	2.5(1) and later	No	3.1(1) and later	

Cisco UCS Central Features	Supported Cisco UCS Central Versions	Supported Cisco UCS Manager Versions					
		2.1	2.2	2.5	3.0	3.1	
Multiple LUNs in Boot Policy	1.4(1a)	No	2.2(7) and later	2.5(1) and later	No	3.1(1) and later	
Consistent Device Naming	1.4(1a)	No	2.2(4) and later	2.5(1) and later	3.0(1) and later	3.1(1) and later	
Direct-Attached Storage/FC Zoning	1.4(1a)	No	2.2(7) and later	No	No	3.1(1) and later	
Advanced Host Firmware Pack	1.4(1a)	No	2.2(6) and later	No	No	3.1(1) and later	
usNIC Connection Policy	1.4(1a)	No	2.2(6) and later	No	No	3.1(1) and later	
VMQ Connection Policy	1.4(1a)	No	2.2(6) and later	No	No	3.1(1) and later	
Equipment Policies	1.4(1a)	No	2.2(7) and later	No	No	3.1(1) and later	
Maintenance Policy on Next Reboot	1.4(1a)	No	2.2(8) and later	No	No	3.1(1) and later	

### Feature Support for Release 1.3 and earlier

Cisco UCS	Supported Cisco UCS Central Versions	Supported Cisco UCS Manager Versions					
Central Features		2.1	2.2	2.5	3.0	3.1	
Multi-version management support and viewing supported Cisco UCS Manager features	1.1(2a)	No	2.2(1b) and later	2.5(1a) and later	3.0(1c) and later	3.1(1a) and later	
Importing policy/policy component and resources		No	2.2(1b) and later	2.5(1a) and later	3.0(1c) and later	3.1(1a) and later	
Specifying remote location for backup image files		No	2.2(2b) and later	2.5(1a) and later	3.0(1c) and later	3.1(1a) and later	
3rd party certificate		No	2.2(2c) and later	2.5(1a) and later	3.0(1c) and later	3.1(1a) and later	
IPv6 inband management support		No	2.2(2c) and later	2.5(1a) and later	3.0(1c) and later	3.1(1a) and later	
Estimate Impact on Reconnect	1.2(1a)	No	2.2(3a) and later	2.5(1a) and later	3.0(1c) and later	3.1(1a) and later	
Precision Boot Order Control		No	2.2(1b) and later	2.5(1a) and later	3.0(1c) and later	3.1(1a) and later	
Scriptable vMedia	1.2(1e) and later	No	2.2(2c) and later	2.5(1a) and later	3.0(2c) and later	3.1(1a) and later	



- Searching for policy/policy components or resources is supported in Cisco UCS Manager, releases 2.1(2x) and 2.1(3x). To import policies, you must have Cisco UCS Manager, releases 2.2(1b) or higher.
- For precision boot order control, the blade server must have CIMC version 2.2(1b) or above.