



Cisco Business Dashboard Lite Administration Guide Version 2.8.0

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Americas Headquarters

Cisco Systems, Inc.
170 West Tasman Drive
San Jose, CA 95134-1706
USA
<http://www.cisco.com>
Tel: 408 526-4000
800 553-NETS (6387)
Fax: 408 527-0883



CHAPTER 1

CBD Lite Overview

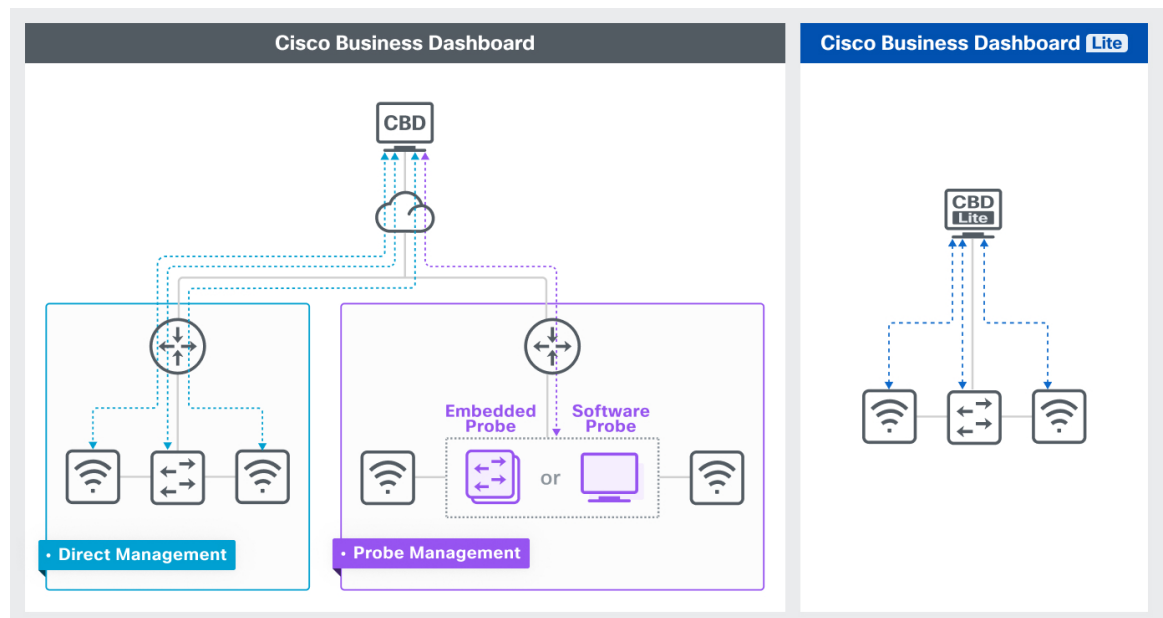
This chapter contains the following sections:

- [About Cisco Business Dashboard Lite, on page 1](#)
- [Audience, on page 3](#)
- [Related Documents, on page 3](#)

About Cisco Business Dashboard Lite

Cisco Business Dashboard Lite provides tools that help you monitor and manage the devices in your Cisco Business network. It automatically discovers your network and allows you to configure and monitor all supported devices such as switches and wireless access points. It also notifies you about the availability of firmware updates, and about any devices that are no longer under warranty or covered by a support contract.

Cisco Business Dashboard Lite is a simplified version of Cisco Business Dashboard. It retains the core features of the original product while reducing complexity and resource usage. This makes it suitable for users who need basic functionality without the additional overhead of the full product.



Feature Comparison Table

Feature	Cisco Business Dashboard Lite	Cisco Business Dashboard
Deployment options	Native Microsoft Windows installation	Virtualized environments (e.g., VMWare, VirtualBox, Hyper-V, AWS, Microsoft Azure) or to be installed directly on Ubuntu Linux.
Deployment location requirements	Same network as managed devices	Any convenient location, even when it's hosted in the cloud and the managed devices are behind Network Address Translation (NAT)
Device onboarding requirements	No configuration changes necessary for management	Requires changes to device configurations, enabling the Cisco Business Dashboard (CBD) agent, and establishing an active connection to CBD for management.
OS requirements	Microsoft Windows	Ubuntu Linux
Minimum system requirements	Any CPU/RAM specifications required by Windows, 3 GB Disk	2 vCPU, 4 GB RAM, 60 GB Disk
Supported devices	Refer to the Cisco Business Dashboard Lite – Device Support List for details	Refer to the Cisco Business Dashboard – Device Support List for details.
Maximum supported devices	25	3000
Network discovery and inventory report	Yes	Yes
Device configuration and operation	Yes	Yes
Customizable monitoring dashboard	Yes	Yes
Device lifecycle report	Yes	Yes
Automatic firmware update notifications & One-click apply	Yes	Yes
Be alerted automatically to important events such as network devices going offline	Popup	Popup, email, open helpdesk ticket, send to collaboration space
Manage networks across multiple sites	No	Yes
Remote access to sites and devices without VPNs	No	Yes
Cisco Network Plug and Play (PnP)	No	Yes

Feature	Cisco Business Dashboard Lite	Cisco Business Dashboard
Role based access	Yes	Yes
Muti-tenant support/organizations	No	Yes
Device groups	No	Yes
API support for third-party integration	No	Yes
Integrates with popular Professional Service Automation (PSA) tools	No	Yes

Audience

This guide is primarily intended for network administrators who are responsible for Cisco Business Dashboard Lite software installation and management.

Related Documents

The documentation for Cisco Business Dashboard Lite is comprised of a number of separate guides. These include:

- **Quick Start Guide** —This guide provides details on performing the initial setup for Cisco Business Dashboard Lite using the most commonly selected options. Check out the [Cisco Business Dashboard Lite Quick Start Guide](#).

- **Installation Guides**

The following table lists all the installation guides for the Dashboard Lite software that can be deployed on different platforms. Refer the path provided in the location column for details:

Supported Platforms	Location
Microsoft Windows	Cisco Business Dashboard Lite Installation Guide for Microsoft Windows.

- **Administration Guide** —This is a reference guide that provides details about all the features and options provided by the software and how they may be configured and used. Check out the [Cisco Business Dashboard Lite Administration Guide](#).
- **Device Support List**—This list provides details of the devices supported by Cisco Business Dashboard Lite. Check out the [Cisco Business Dashboard Lite - Device Support List](#).



CHAPTER 2

Using CBD Lite

- [Using the Cisco Business Dashboard Lite GUI, on page 5](#)
- [Upgrading Cisco Business Dashboard Lite, on page 7](#)

Using the Cisco Business Dashboard Lite GUI

This chapter provides an overview of the Cisco Business Dashboard Lite GUI including descriptions of the navigation pane links.

1. The **Header** pane

The header toolbar contains the following options:

- A menu button to display the navigation pane
- Header text
- A series of icons for functions such as language selection, notifications, task activity, feedback, context sensitive help, and version information.


2. The **Work** pane is this is the area where the feature interface is displayed.








When you click an option in the **Navigation** pane, its corresponding window opens in this area.

3. The **Navigation** pane provides access to the Cisco Business Dashboard features. The navigation pane is displayed when the **Menu** icon is clicked, and slides away once a selection is made.

Navigation Pane Options





The **Navigation** pane provides options to access the major Cisco Business Dashboard features.



Icon	Description
	The Favorites allows you to bookmark your favorite sections in the Cisco Business Dashboard for easy access.

Icon	Description
	The Dashboard allows you to monitor the performance of your network over time. The dashboard allows you to monitor traffic levels, connected device counts, and other details about the network.
	The Inventory tool provides a list of all devices in the network, allows you to view detailed information about the devices, and to perform actions such as update firmware, backup configurations, and reboot.
	The Provision option provides access to Port Management , Network Configuration and Network Plug and Play , and allows you to manage the ports and make configuration changes.
	The Assurance page provides access to Monitoring which allows you to monitor and manage your network. And Device Integrity which analyzes the integrity of your devices.
	The Reports option will display a number of reports that provide life-cycle information about your network devices, including end of life bulletins, warranty information and service contract details.
	The Administration pages allow you to maintain the Cisco Business Dashboard.
	The System pages are used to administer the Cisco Business Dashboard application.

Header Toolbar Options


The **Header** toolbar provides access to other system functions and displays system notifications.

Icon	Description
	The currently logged in user is displayed at the top of the navigation bar along with a Language and Logout option. Click on the username to display the user's profile page.
	The Menu button is located on the top left of the header—Click this button to display the navigation pane.
	The Notification Center icon displays the number and severity of outstanding notifications in Cisco Business Dashboard. Click this icon to display the Notification Center panel which provides you the option to filter the notification events that are displayed.
	The Job Center icon shows the status of currently executing jobs and the history of past jobs. Jobs include any actions performed by Cisco Business Dashboard including both user-initiated jobs and system jobs. Click this icon to display jobs that are pending, in progress, and completed.

Icon	Description
 	Click the Support Center icon to access the help information, virtual assistant, feedback and About Cisco Business Dashboard . Click the About Cisco Business Dashboard icon to see information about this version, including the current version. If a new version is available, a green icon with an arrow will be displayed on the Support Center icon and the About icon, and a link to apply the update will be available in the pop-up of About .

Upgrading Cisco Business Dashboard Lite

From time to time, Cisco releases new versions and updates for Cisco Business Dashboard Lite and posts them to the Software Center on cisco.com. Cisco Business Dashboard Lite periodically checks the Software

Center for updates and if one is found, displays a badge on the  icon in the header panel of the UI. You can click to have the Dashboard download and apply the update.

To set up Dashboard to download and apply the update:

1. Click **About Cisco Business Dashboard Lite** to open the pop-up. If any updates are available for the Dashboard will be listed here.
2. If an update is available for the Dashboard, click the download icon. Alternatively you can download the Cisco Business Dashboard Lite installer file by navigating to <https://cisco.com/go/cbd-sw> and selecting the Download Software option from the product selection panel at the bottom right.
3. Copy the installer file to the Dashboard file system.
4. Execute the installer.



CHAPTER 3

Dashboard

This chapter contains the following sections:

- [About the Monitoring Dashboard, on page 9](#)
- [Adding a Widget, on page 10](#)
- [Modifying a Widget, on page 10](#)
- [Deleting a Widget, on page 10](#)
- [Modifying the Dashboard Layout, on page 10](#)

About the Monitoring Dashboard

The **Dashboard** page in the Cisco Business Dashboard Lite lets you view the performance of the network in real time. It shows all the devices and provides the data in a graphical format.

This dashboard is a customizable arrangement of widgets that you can select. Following are the widgets included by default in the dashboard:

Widget	Description
Inventory Summary	Displays a breakdown of the devices discovered in the network.
Device Health	Displays the overall health of the devices in the network.
Traffic	Displays a graph of the traffic flowing through the selected interface.
Switch Port Utilization	Displays the percentage of switch ports in-use vs. total number of switch ports.
Switch PoE Utilization	Displays a graphic representation of the PoE utilization status.

Controls on each of the widgets allows the data shown to be customized.

In the graphical widgets, click on the labels in the legend on the graph to toggle the display of each set of data. This allows you to further refine the data being shown and can help with troubleshooting a specific device on your network, or even the network itself.

Adding a Widget

This feature allows you to add one or more widgets to the existing default ones displayed in the dashboard to monitor tasks specific to a device or network you wish to view.

-
- Step 1** Click the Dashboard Edit icon to open the edit window. + icon beside each widget name.
 - Step 2** To add a widget, click the + icon beside each widget name.
 - Step 3** Drag the new widget to the desired location in the dashboard and resize if necessary.
-

Modifying a Widget

You can modify any widget on your dashboard with the following steps:

-
- Step 1** Click the **Config Widget** icon on the top right of the widget to modify parameters such as sample interval or thresholds.
 - Step 2** Use the drop-down lists within the new widget to select the specific data you wish to display.
 - Step 3** To change the title of the Widget click the Edit Mode icon.
- Important** You must be in **Edit Mode** in the Dashboard to change the title of a widget.
-

Deleting a Widget

-
- Step 1** Click the Dashboard Edit icon and select **Edit Mode**.
 - Step 2** Click the **remove widget** icon at the top right of the widget to be removed. Rearrange the remaining widgets as desired.
-

Modifying the Dashboard Layout

The **Dashboard** layout can be customized using the following steps:

-
- Step 1** Click the Dashboard Edit icon and select **Edit Mode**.
 - Step 2** Click in the header of a widget and drag to move the widget in the **Dashboard**. Other widgets will adjust dynamically to make room. Click and drag on the edge or corner of a widget to re-size. As you rearrange the layout, the dashboard will automatically re-size to fit in the available width.
 - Step 3** Click the Dashboard Edit icon again and select **View Mode** to preserve the changes.
-



CHAPTER 4

Inventory

This chapter contains the following sections:

- [Viewing Device Inventory, on page 11](#)
- [Performing Device Actions, on page 12](#)

Viewing Device Inventory

Access the Inventory page to view, monitor and support all of the device inventory in your network. The **Inventory** page displays a complete list of the devices and their details in a tabular view. Additionally, it also provides action buttons to perform configuration tasks and apply the latest firmware updates for supported devices. The following table provides details of the information displayed:

Table 1: Inventory Details

Item	Description
Hostname	Displays the name of the device.
Type	The type of device such as a switch, router or wireless access point (WAP).
Tags	Lists any tags associated with the device.
IP	The Internet Protocol (IP) addresses of the device.
MAC	The Media Access Control (MAC) address is a standardized data link layer address that is required for certain network interface types. These addresses are specific and unique to each device and are not used by other devices in the network.
Serial Number	The serial number for the device.
Version	The current firmware version of the device.
Vendor	The vendor that manufactured the device.
Model	Model name of the device.
Notification	A count of the outstanding notifications for the device

The following additional controls are available on the **Inventory** page:

- **Select columns** button—Use this button located at the top left of the table to choose which columns to display.
- **Filter Box**—You may use the **Filter box** to limit the display by typing device names, device types, serial numbers and so on. By default, the inventory is filtered to display only network devices.
- **Refresh** button—Click this button to update the table to show the latest available information.
- **Action** button —Allow you to perform actions on one or more selected devices. Action buttons are only displayed when one or more devices supporting actions are selected. For more details on these actions, see next topic.

Performing Device Actions

You can perform actions such as firmware update, configuration backup & restore and reboot easily on devices in the network. To perform these actions, do the following:

Step 1 On the **Inventory** page, click on a network device such as a switch or a router.

Step 2 In the **Basic Info** panel, select the **Actions** tab. Depending on the device capabilities one or more of the following actions are displayed:

Update firmware to latest	Allows you to apply the latest firmware update to the device. Cisco Business Dashboard Lite will download the update from Cisco and then upload it to the device. The device will reboot at the completion of the update.
Upgrade From Local	Allows you to upload a firmware upgrade file from your local drive. Cisco Business Dashboard Lite will upload the file to the device, and the device will reboot at the completion of the update.
Backup Configuration	<p>Allows you to save a copy of the current device configuration on the Dashboard.</p> <ol style="list-style-type: none"> Click Backup Configuration. In the Backup Configuration window, optionally, you may add a note in the text box for the backup you wish to perform. <ul style="list-style-type: none"> Note This note is displayed whenever the backup is listed in the GUI. Click Save Backup to complete this action or Cancel if you no longer wish to proceed. <p>A backup configuration job is created and may be viewed in the Task Center.</p>

Restore Configuration	<p>Allows you to restore a previously backed up configuration to the device.</p> <p>Click Restore Configuration.</p> <p>The following backup configuration options are provided:</p> <ul style="list-style-type: none"> • Backups for <i>device name</i>—Lists all available backups to configure for a specific device • Backup for other device—Lists all available backups to configure other devices of the same type or same Product ID • Backup for other compatible device—Lists all available backups to configure other devices in the series that are compatible with the selected device <p>To perform the backup configuration, do the following:</p> <p>a. In the Restore Configuration window, select the backup you wish to restore to the device.</p> <p>Use the scroll bar to view all the available backups and click the corresponding radio button. This enables the Restore Configuration button.</p> <p>Alternatively, you may choose to upload a configuration file. To do so, drag and drop the configuration file onto the target area, or click on the target area to select a file from the file system.</p> <p>b. Click Restore Configuration to complete this action.</p> <p>A restore configuration job is created and may be viewed in the Task Center.</p>
Reboot	<p>Restarts the device.</p> <p>When you click this button, you will be prompted to click again to confirm.</p>
Save Running Configuration	<p>For devices that support separate running and startup configurations, this action copies the current running configuration to the startup configuration. This ensures any configuration changes that are retained when the device next reboots.</p>
Delete	<p>Remove an offline device from the Topology and Inventory.</p>



CHAPTER 5

Provision

This chapter contains the following sections:

- [Port Management, on page 15](#)
- [Network Configuration, on page 16](#)

Port Management

Port Management provides a front panel view of each device that includes switch ports that can be configured by Cisco Business Dashboard. This page allows you to view the status of the ports including traffic counters, and make changes to the port configuration. This page also lets you view and configure the Smartports role for ports on devices that support Smartports. You can use the search box to limit the devices displayed. Type in all or part of a device name, product ID, or serial number to find the desired device.

A list view of the same information is also provided to show all the switch ports in a tabular format. The front panel view in **Port Management** presents two different views of the device:

The **Physical** view allows you to see the status and change the configuration of the port at the physical layer. You can view or change settings for speed, duplex, Energy Efficient Ethernet (EEE), Power over Ethernet (PoE), and VLANs. Each port is shown with a green LED indicating link and a yellow LED indicating that power is being supplied to the attached device.

The **Smartports** view allows you to see the current Smartports role for each port, and to change the role.



Note A **Smartport** is an interface to which a built-in (or user-defined) template can be applied. These templates are designed to provide a means of quickly configuring the device to support the communication requirements and utilize the features of various types of network devices.

To view the status of a port, click on the port in either the front panel view or list view. The Basic Info panel for the port appears, showing a series of panels as follows:

General	This panel shows the physical layer status of the port and allows you to enable the port or shut it down
Ethernet	Use this panel to control speed and duplex settings

Port Authentication	This panel allows you to enable 802.1x port authentication on this port. Authentication will be performed against the authentication server(s) specified in the Authentication profile assigned to the device. If no authentication servers are defined, Cisco Business Dashboard will be used as the default authentication server.
VLAN	This panel shows the VLANs currently configured on the port. Click the Select VLAN or Create VLAN buttons to modify this configuration
POE	This panel is only displayed for POE-enabled ports, and allows you to configure the POE settings for the port. You can also power-cycle an attached POE device by clicking the Toggle Power button
Green Ethernet	This panel allows you to manage the Energy Efficient Ethernet (EEE) configuration for the port
Smartports	This panel shows the Smartports roles available for this port. Click on a role to apply that configuration to the port. The currently configured role is highlighted.

To make changes to the port settings, click the **edit** icon in the top right of the pane containing that setting. Once the changes have been made, click the **Save** icon.

Network Configuration

The **Network Configuration** pages allow you to define various configuration parameters that typically apply to all devices in the network. These parameters include configuration such as time settings, domain name services, administrator authentication, and Virtual LANs.

Time Management

The **Time Management** page allows you to configure timezones, daylight saving, and NTP servers for the network. The following sections provide instructions on modifying the Time Settings configuration profile.

Modifying a Time Management Configuration Profile

1. Navigate to **Provision > Network Configuration > Time Management**.
2. Click the toggle button to enable the profile.
3. In the **Time Setting** section, select an appropriate timezone from the drop-down list.
4. Optionally enable **Daylight Saving** by checking the check box, and then specify the parameters for daylight saving in the fields provided. You may choose to specify fixed dates or a recurring pattern. You may also specify the offset to be used.
5. Optionally enable the Network Time Protocol (NTP) in the **Use NTP** section for clock synchronization by checking the check box. In the boxes provided specify at least one NTP server address.
6. Click **Update**.

DNS Resolvers

The **DNS Resolvers** page allows you to configure the domain name and domain name servers for the network. The following sections provide instructions on creating, modifying and deleting the DNS resolvers configuration profile.

Modifying a DNS Resolver Configuration Profile

1. Navigate to **Provision > Network Configuration > DNS Resolvers**.
2. Click the toggle button to enable the profile.
3. Specify the domain name for the network.
4. Specify at least one DNS server address.
5. Click **Save**.

Virtual LANs

The **Virtual LANs** page allows you to divide your switch network into multiple virtual networks or VLANs. You can find the existing VLANs in the network that were not configured by Cisco Business Dashboard Lite also displayed on this page in a separate table. The following sections provide instructions on modifying Virtual LAN configuration profile.

Create a Virtual LAN

1. Navigate to **Provision > Network Configuration > Virtual LANs**.
2. Click the toggle button to enable the profile.
3. Click the **+**(plus) icon to add a new VLAN.
4. Specify a descriptive name for the VLAN, and the VLAN ID to be used. The VLAN ID should be a number in the range 1-4094.
5. You may create multiple VLANs. If you want to create additional VLANs, click **+ (plus) icon** and go back to step 4.
6. Click **Update**. The new VLAN will be created on all VLAN-capable devices.

If the VLAN ID of the newly created VLAN matches an existing VLAN already present on devices, that VLAN will be adopted by Cisco Business Dashboard Lite and removed from the discovered Virtual LANs table.

Modify a VLAN

1. Click the edit button.
2. Make the required changes to the VLAN settings and click **Update**.

Remove a VLAN

1. Click the edit button.

2. Click the X icon next to the VLAN to be removed.

Remove a VLAN not created by Cisco Business Dashboard Lite

In the table of discovered VLANs, click the **delete** icon next to the VLAN or VLANs to be removed.



Note VLAN 1 may not be deleted.



CHAPTER 6

Assurance

This chapter contains the following sections:

- [Monitoring](#), on page 19

Monitoring

Cisco Business Dashboard Lite allows for real-time monitoring of the network, networking events and collects historical data for reporting purposes. This helps network administrators maintain a robust understanding of the network's health and performance, and allows them to act quickly should issues arise.

Notification Center

Cisco Business Dashboard Lite generates notifications when different events occur in the network. A notification may generate a pop-up alert that appears in the lower right corner of the browser, and all notifications are logged for later review.

Notifications can also be acknowledged when they are no longer of interest. Those notifications will be hidden from the **Notification Center** by default.

Supported Notifications

The following table lists the notifications supported by CBD Lite.

Table 2: Supported Notifications

Event	Level	Description	Clears Automatically?
Device Notifications for Access Points, Routers, IP Phones and Switches			
Reachability/Device Discovered	Information	A new device is detected on the network.	Yes, 5 minutes after the device is discovered.
Reachability/Device Unreachable	Warning	A device is known through a discovery protocol, but is not reachable using IP.	Yes, when the device is reachable through IP again.
Reachability/Device Offline	Alert	A device is no longer detectable on the network	Yes, when the device is rediscovered.

Event	Level	Description	Clears Automatically?
Credential Required/User ID	Warning	The Dashboard is unable to access the device due to an authentication error.	Yes, when the Dashboard authenticates.
Credential Required/Password Expired	Warning	The password has expired for the admin user on the device.	Yes, when the password on the device has been reset.
Configuration Mismatch	Alert	The current device configuration does not match the configuration specified in Cisco Business Dashboard configuration profiles and device settings.	Yes, when the configuration mismatch is resolved.
Cisco Support Notifications			
Firmware	Information	A later version of firmware is available on cisco.com	Yes, when the device is updated to the latest version.
End of Life	Warning/Alert	An End of Life bulletin is found for the device or an End of Life milestone has been reached.	No
Maintenance Expiry	Warning/Alert	The device is out of warranty and/or does not have a currently active maintenance contract.	Yes, if a new maintenance contract is taken out.
Device Health Notifications			
CPU	Warning/Alert	Device CPU usage exceeds maximum thresholds.	Yes, when the CPU usage returns to a normal level.
Uptime	Warning/Alert	Device uptime is below minimum thresholds.	Yes, when the device uptime exceeds minimum levels.

Viewing and Filtering Current Device Notifications

To view currently active notifications for a single device or all devices, do the following:

Step 1 In the **Home** window, click **Notification Center** icon on the top right corner of the global tool bar. The number badge on the icon specifies the total number of unacknowledged notifications outstanding, and the color of the badge indicates the highest severity level currently outstanding.

Any notifications currently outstanding are listed below the icons in the **Notification Center**. The number on the severity icon provides a total of the number of notifications in each of the following categories:

- Information (green circle icon)
- Warning (orange triangle icon)
- Alert (red inverted triangle icon)

Step 2 In the **Notification Center**, you can perform the following actions:

- Acknowledge a notification—Check the check box against the notification to acknowledge it. You may acknowledge all notifications in the display by checking the **ACK All** checkbox
- Filter the displayed notifications—Instructions for this action is provided in the following step

Step 3 The Filter box limits the notifications displayed in the table. By default, notifications of all types and all severity levels will be displayed. To change an existing filter, double click on that filter to change the setting. To add a new filter, click on the Add Filter label and select a filter from the dropdown list. The following filters are available:

Table 3: Available Filters

Filter	Description
Notification Type	The type of notification to be displayed. For example, to display notifications for devices that are offline, choose Device Offline from the drop-down list.
Severity	The severity level of the notifications to be displayed. It can be one of the following: <ul style="list-style-type: none"> • Info • Warning • Alert You may include higher severity levels by selecting the Higher checkbox.
Include Ack	Include notifications that have been acknowledged.
Device	Displays notifications for the specified device(s). Start typing in the filter and matching devices will be listed in a dropdown. Click to select the desired device. You may include multiple devices in the filter.

Note Notifications for individual devices may be seen in the **Basic Info** and the **Detailed Info** panels for the device.

To control how you receive notifications, change the notification settings.

Viewing and Filtering Historical Device Notifications

The occurrence or change in state of any notification is recorded as an event on the Dashboard, and may be viewed through the Event Log. A subset of the event log can be viewed through the following panels:

The **Basic Info** panel or the **Device Detail** panel displays individual devices.

The **Basic Info** Panel shows only the last 24 hours worth of events.

The **Device Detail** panel shows all historical data for the device that is available.



Note The **Device Detail** panel can be filtered to help isolate those events you are interested in. See [Event Log](#), on [page 22](#) for more information on viewing and filtering historical events.

Event Log

Open the Event Log screen to search for events that happen across your network. This screen provides an interface where you can search and sort through the events generated across the network. Up to 500,000 of these events are stored for a maximum of 90 days. You can use the filter controls provided to limit the events displayed based on any combination of the following parameters:

Add a **Time** to specify the start and end times for the period of interest. Only events occurring in this period will be displayed.

Add a **Severity** filter to select the level of events to display. You can also check the *Higher* checkbox to include events with a higher severity level.

Add the **Type** filter to select one or more event types to display. The types are arranged in a tree structure, and selecting a type will automatically include all event types underneath the selected type in the tree.

Use the **Device** filter to display events by one or more devices. As you type, matching devices will be displayed. You can also specify devices by name, IP address, or MAC address.

Events that match the filter conditions will be displayed in a table. You can also sort the information in the table using the column headings.

Monitoring Profile

Monitoring Profiles control the data that is collected from devices and the notifications that are generated.

Active notifications are also visible in the **Notification Center** and are displayed in the device information views. Changes in notifications are also recorded in the **Event Log**.

Reporting monitors collect the data used for the wireless reports and traffic graphs in the monitoring dashboard.

Modify a Monitoring Profile

To modify a monitoring profile, follow the steps below.

1. Navigate to **Assurance > Monitoring > Monitoring Profiles**.
2. Make changes to the notification and reporting monitors as required. You can restore the monitor settings to the defaults by clicking the **Reset to defaults** button.



CHAPTER 7

Reports

This chapter contains the following sections:

- [Lifecycle](#), on page 23
- [End of Life](#), on page 24
- [Maintenance](#), on page 25

Lifecycle

The **Lifecycle** Report provides a high level view of the status of the network devices, taking into account both software and hardware lifecycle status. The following table describes the information provided in this report.

Field	Description
Hostname	The hostname of the device.
Device Type	The type of device.
Model	The model number of the device.
Week of Manufacture	The date of manufacture for the device, displayed as week number and year.
Firmware Update Available	Displays the latest firmware version available for the device, or states that the device firmware is currently up to date.
Firmware Version	Displays the current firmware version running on the device.
End of Life Status	Specifies if an End of Life bulletin has been published for the device and the date of the next key milestone in the End of Life process.
Maintenance Status	Specifies if the device is currently under warranty or covered by a support contract.

The row in the table for a device that may require attention is color-coded to indicate the urgency. For example, a device with a published End of Life bulletin will be colored orange if the End of Support milestone has not been reached, and red if the device is no longer supported by Cisco.

The Search box located at the top of the report can be used to filter the results. Enter text in the Search box to limit the number of entries that are displayed with the matching text.

The column selection icon at the top left of the report can be used to customize the information displayed. Click on the icon and then use the check boxes that appear to select the columns you wish to include in the report.

End of Life

The **End of Life Report** lists any devices that have an **End of Life** bulletin published, along with key dates in the End of Life process, and the recommended replacement platform. The following table describes the information provided:

Table 4: End of Life Report

Field	Description
Product ID	The product ID or part number of the device.
Name	The hostname of the device.
Device Type	The type of device.
Current Status	The stage at which the End of Life process of the product is at.
Date of Announcement	The date the End of Life bulletin was published.
Last Date of Sale	The date after which the product will no longer be sold by Cisco.
Last Date of Software Releases	The date after which no more software versions will be released for the product.
Last Date for New Service Contract	The last date for taking out a new support contract on the device.
Last Date for Service Renewal	The last date for renewing an existing support contract on the device.
Last Date of Support	The date after which Cisco will no longer provide support for the product.
Recommended Replacement	The recommended replacement product.
Product Bulletin	The product bulletin number and a link to the bulletin on the Cisco website.

Each row of the table is color-coded to indicate the stage of the End of Life process the device is at. For example, a device that has past the Last Date of Sale but not yet reached the Last Date of Support will be colored orange, and a device that is past the Last Date of Support is colored red.

Maintenance

The **Maintenance** Report lists all network devices which includes the warranty and support contract status information for each of them. The following table describes the information provided in this report.

Field	Description
Hostname	The hostname of the device.
Device Type	The type of device.
Model	Model number of the device.
Serial Number	The serial number for the device.
Status	The current support status of the device.
Coverage End Date	The date at which the current support contract will expire.
Warranty End Date	The date at which the warranty for the device will expire.

Each row of the table is color-coded to indicate the support status for the device. For example, a device that is approaching the expiry date of the warranty or support contract will be colored orange, while a device that is out of warranty and does not have a current support contract will be colored red.

The Search box located at the top of the report can be used to filter the results. Enter text in the Search box to limit the number of entries that are displayed with the matching text.

The column selection icon at the top left of the report can be used to customize the information displayed. Click on the icon and then use the check boxes that appear to select the columns you wish to include in the report.



CHAPTER 8

Administration

This chapter contains the following sections:

- [Discovery, on page 27](#)
- [Device Credentials, on page 27](#)
- [Users, on page 28](#)
- [Login Attempts, on page 30](#)

Discovery

The Cisco Business Dashboard Lite builds an initial list of devices in the network from listening to mDNS (aka Bonjour, please check your device setting to make sure Bonjour is enabled on the Management VLAN) advertisements. The Cisco Business Dashboard Lite then connects to each device using a supported protocol and gathers additional information such as CDP & LLDP adjacency tables. This information is used to identify additional devices in the network, and the process repeats until all devices have been discovered.

Cisco Business Dashboard Lite may not always be able to discover network devices in other VLANs or subnets using only the automated discovery processes. When this occurs, it can be beneficial to have the dashboard explicitly search the IP address ranges associated with those VLANs or subnets. To search an IP address range, do the following:

1. Navigate to **Administration > Discovery**.
2. Specify the IP address ranges to search.
3. Click **Save**.

Based on the input, the Dashboard Lite will search the specified address ranges for devices with an active web server and attempt to connect to the device HTTPS port (443) using the credentials provided. If the dashboard is successful in accessing the device, it will be added to the inventory and will be managed in the same way as any other device in the network.

Device Credentials

For Cisco Business Dashboard Lite to fully discover and manage the network, it needs credentials to authenticate with the network devices. When a device is first discovered, the **Cisco Business Dashboard Lite** will attempt to authenticate with the device using the default username: `cisco`, password: `cisco`. If this attempt fails,

a notification will be generated and valid credentials must be supplied by the user. To supply valid credentials, follow the steps below.

1. Navigate to **Administration > Device Credentials**. The first table on this page lists all the devices that have been discovered that require credentials.
2. Enter valid credentials into the **Username/Password** fields. You may click the **+**(plus) icon next to the corresponding field to enter up to three **Cisco Business Dashboard Lite** credentials. Ensure that passwords are entered using plain text.
3. Click **Apply**. The **Cisco Business Dashboard Lite** will test each credential against each device that requires that type of credential. If the credential is valid, it will be stored for later use with that device.
4. Repeat steps 2 to 3 as necessary until every device has valid credentials stored.

To enter a single credential for a specific device, follow the steps below.

1. Click the **Edit** icon shown against the device in the discovered devices table. A popup will appear prompting you to enter a credential that corresponds to the Credential Type selected.
2. Enter a username and password credential in the fields provided.
3. Click **Apply**. To close the window without applying, click the **✕** on the top right corner of the pop-up.

Underneath the **Add New Credential** section is a table showing the identity for each device for which has a valid credential stored and the time that credential was last used. To display the stored credential for a device, you may click the **Show Password** icon next to the device. To hide the credentials again, click the **Hide Password** icon. You may also show and hide credentials for all devices using the button at the top of the table. You may also delete credentials that are no longer required. To delete stored credentials, follow the steps below.

1. Navigate to **Administration > Device Credentials**.
2. In the **Saved Credentials** table, select the check box against one or more sets of credentials to be deleted. You may also select the checkbox at the top of the table to select all credentials.
3. Click **Delete Selected Credentials**.

To delete a credential for a single device, you may also click the **Delete** icon next to the device.

Users

The **User Management** page allows you to control how users are granted access to Cisco Business Dashboard Lite, change settings that affect how those users interact with the Dashboard.

Cisco Business Dashboard Lite has settings to control the dashboard features that are available using the Dashboard Access drop-down list. The options available for these settings include:

- **Administrator**—An Administrator has full access to Dashboard features including the ability to maintain the system.
- **Operator**—An Operator has similar power to an Organization Administrator, but cannot manage users.
- **Read only**—A Read only user can only view network information, they cannot make any changes.

Cisco Business Dashboard Lite allows users to be authenticated against the local user database.

When the Cisco Business Dashboard Lite is first installed, a default **Administrator** is created in the local user database with the username and password both set to `cisco`.



Note User settings can be managed by **Administrators** only.

Add a New User to the Local User Database

1. Navigate to **Administration>Users** and select the **Users** tab.
2. Click the **+** (plus) icon to create a new user.
3. In the fields provided, enter a username, display name, email address and password, and specify the Dashboard Access settings. You may also provide contact details for the user.
4. Click **Save**.

Modify a User

1. Navigate to **Administration>Users** and select the **Users** tab.
2. Select the radio button next to the user that needs to be changed and click the **Edit** icon.
3. Make the modifications as required.
4. Click **Save**.

Delete a User

1. Navigate to **Administration>Users** and select the **Users** tab.
2. Select the radio button next to the user that needs to be deleted and click **delete** at the top of the table.

Change password complexity

To enable or change password complexity requirements, follow these steps.

1. Navigate to **Administration>Users** and select the **User Settings** tab.
2. Select the **Local** tab under **Authentication Source**, modify the **User Password Complexity** settings as required and click **Save**.

Restore Access when All Administrative Access has been Lost

If administrative access to the Cisco Business Dashboard Lite application is lost, follow these steps to recover the same access.

1. Log on the server of the Dashboard Lite, open the Dashboard Lite Server Application.
2. Click the **Tools > Recover Password** menu.

After that, the local user authentication is enabled, and the default Administrator with username `cisco` and password `cisco` is restored.

Change session timeouts

To change idle and absolute timeouts for user sessions, follow these steps.

1. Navigate to **Administration>Users** and select the **User Settings** tab.
2. Modify the **User Session** parameters as required and click **Save**. Hover over the help icons to see allowable ranges for these parameters.

Login Attempts

Cisco Business Dashboard Lite keeps a log of every attempt made to log in and out of the system, both successful and unsuccessful. To view the log, navigate to **Administration>Login Attempts**. The table displays the following information:

Field	Description
Username	The username associated with the event.
Display Name	The display name for the user.
IP	The IP address of the device from which the user logged in.
Type	The type of event including: <ul style="list-style-type: none"> • LOGIN • LOGOUT
Status	Indicates if the attempt succeeded or failed.
Timestamp	The date and time the event took place.

You may use the search box above the table to show only entries that match a particular user or IP address.



CHAPTER 9

System

This chapter contains the following sections:

- [Privacy Settings, on page 31](#)
- [Log Settings, on page 32](#)

Privacy Settings

Some of the features of Cisco Business Dashboard Lite require the use of online services hosted by Cisco and result in the sharing of certain information with Cisco. These services include:

- **Lifecycle Reporting**—This feature includes the generation of the **Lifecycle Report, End of Life Report and Maintenance Report** in Cisco Business Dashboard Lite. Lifecycle Reporting is enabled by default.
- **Software Updates**— Notification of the availability of software updates for network devices, and the ability to have those updates automatically applied. Software Updates are enabled by default.

All of these features are subject to the [Cisco Privacy Policy](#) and you may enable or disable them at any time. The **Privacy Settings** page is displayed during the initial setup of the Dashboard, allowing you to disable any of the default enabled features prior to any network data being collected. More detail for each of these features and the information shared may be found below.

Lifecycle Reporting

Cisco Business Dashboard Lite provides information on the lifecycle state of each of the Cisco devices in the network. In order to do this, the Dashboard must provide Cisco with the product ID, serial number and hardware and software versions for each Cisco device. The IP address of the Dashboard may also be recorded. No personal or sensitive information will be intentionally collected during this process.

To disable the generation of lifecycle reports, follow the steps below.

1. Navigate to **System>Privacy Settings**.
2. Un-check the check boxes for the reports you wish to disable.
3. Click **Save**.

Software Updates

Use of this feature requires Cisco Business Dashboard Lite to send the product ID and hardware and software version information for each device to Cisco. Your local IP address may also be recorded. No personal or sensitive information will be intentionally collected during this process.

To disable the use of automatic software updates, do the following:

1. Navigate to **System>Privacy Settings**.
2. Un-check the check boxes for both device firmware checks and Cisco Business Dashboard Lite application checks.
3. Click **Save**.

Log Settings

The Log Settings page allows you to control the amount of detail included in log files. The default logging level is Info, but you can reduce the number of messages logged by selecting Warn or Error, or view more detail by selecting Debug.

To change the log levels for the Dashboard, follow the steps below.

1. Navigate to **System > Log Settings**.
2. Use the radio buttons to select the desired logging level.
3. Click **Save**.

The log files for the Dashboard can be found in the directory %LOCALAPPDATA%\CiscoBusiness\DashboardLite/logs on the local file-system. You may click Download Log File to download an archive of the contents of this directory. It may take several minutes to collect all the data.



CHAPTER 10

Job Management

This chapter contains the following sections:

- [About Jobs and Job Center, on page 33](#)
- [Viewing and Filtering Jobs, on page 33](#)

About Jobs and Job Center

Any tasks or actions carried out by Cisco Business Dashboard Lite are referred to as Jobs and are tracked in the Job Center. Jobs include both user-initiated jobs and jobs initiated automatically by the system

The Job Center lists all jobs that are currently executing or have occurred in the past on the Jobs tab, including details such as the type of job, affected devices, and the current status or whether the job completed successfully.

Viewing and Filtering Jobs

To view currently active jobs and historical jobs, follow the steps below.

-
- Step 1** In the Home window, click the Job Center icon on the top right corner of the global tool bar. The number badge on the icon specifies the total number of currently executing jobs. Currently active and historical jobs are listed on the Jobs tab in the Job Center. Information such as the Job Type, who it was created by and when, and status information are all displayed. You may click on the Job Type parameter for a specific job to display more detailed information
- Step 2** The Filter box limits the jobs displayed in the table. By default, all jobs will be listed. To change an existing filter, double-click on that filter to change the setting. To add a new filter, click on the Filter by attributes label and select a filter from the drop-down list.
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CHAPTER 11

FAQs

This chapter contains the following sections:

- [General FAQs, on page 35](#)
- [Discovery FAQs, on page 35](#)
- [Configuration FAQs, on page 36](#)
- [Security Consideration FAQs, on page 36](#)

General FAQs

What languages are supported by the Cisco Business Dashboard Lite?

Currently only English is supported. In future release Cisco Business Dashboard Lite is planned to be translated into the following languages:

- Chinese
- French
- German
- Japanese
- Portuguese
- Spanish

Discovery FAQs

What protocols does Cisco Business Dashboard Lite use to manage my devices?

Cisco Business Dashboard Lite uses a variety of protocols to discover and manage the network. Exactly which protocols are using for a particular device will vary between device types.

The protocols used include:

- Multicast DNS and DNS Service Discovery (aka *Bonjour*, see *RFCs 6762 & 6763*)
- Cisco Discovery Protocol (CDP)
- Link Layer Discovery Protocol (see *IEEE specification 802.1AB*)

- RESTCONF (See <https://datatracker.ietf.org/doc/draft-ietf-netconf-restconf/>)
- Proprietary web services APIs

How does Cisco Business Dashboard Lite discover my network?

The Cisco Business Dashboard Lite builds an initial list of devices in the network from listening to mDNS advertisements. The Cisco Business Dashboard Lite then connects to each device using a supported protocol and gathers additional information such as CDP & LLDP adjacency tables. This information is used to identify additional devices in the network, and the process repeats until all devices have been discovered.

Does Cisco Business Dashboard Lite do network scans?

The Cisco Business Dashboard Lite does not actively scan the broader network. You may explicitly search the IP address ranges for manageable devices. If this is done, then the dashboard will attempt to connect to webserver HTTPS ports on each IP address in the specified ranges to determine if a device is manageable.

Configuration FAQs

What happens when a new device is discovered? Will its configuration be changed?

If network configuration profiles have been enabled, then that configuration will be applied to newly discovered devices.

What happens when I disable a network configuration profile?

Configuration for the device will not change.

Security Consideration FAQs

What port ranges and protocols are required by Cisco Business Dashboard Lite?

The following table lists the protocols and ports used by Cisco Business Dashboard Lite:

Table 5: Cisco Business Dashboard Lite - Protocols and Ports

Port	Direction	Protocol	Usage
TCP 4443	Inbound	HTTPS	Secure web access to the Dashboard.
TCP 443	Outbound	HTTPS	Management of devices with secure web services enabled. Access Cisco web services for information such as software updates, support status, and end of life notices.
UDP 5353	Inbound/Outbound	mDNS	Multicast DNS service advertisements from the local network. Used for device discovery.

What Cisco servers does Cisco Business Dashboard Lite communicate with and why?

The following table lists the Cisco servers that Cisco Business Dashboard Lite communicates with, and the purpose of that conversation:

Table 6: Cisco Business Dashboard Lite - Cisco Servers

Hostname	Purpose
apix.cisco.com	Used to retrieve software update information and product lifecycle information. This server is only used if software updates or lifecycle reporting are enabled in System > Privacy Settings .
dl.cisco.com download-ssc.cisco.com	Used to download software update files from Cisco. These servers are only used if software updates are enabled in System > Privacy Settings and you execute an upgrade operation for a network device or for Cisco Business Dashboard Lite.
cloudsso.cisco.com	Used to authenticate Cisco Business Dashboard Lite prior to communicating with apix.cisco.com. This server is only used if software updates or lifecycle reporting are enabled in System > Privacy Settings .

What processes are required by Cisco Business Dashboard Lite?

The following table lists the processes used by Cisco Business Dashboard Lite:

Table 7: Cisco Business Dashboard Lite - Processes

Process	Additional Details
Dashboard Essential Processes	
“<Install Directory>/jdk/bin/javaw.exe” ... -jar “<Install Directory>/lib/launcher.jar”	The main Cisco Business Dashboard Lite server application
“<Install Directory>/jdk/bin/java.exe” ... -jar “<Install Directory>/lib/cbdlite.jar”	Web Server
“<Install Directory>/mongodb/bin/mongod.exe”	Database services

Does Cisco Business Dashboard Lite have ‘backdoor’ access to my devices?

No. When Cisco Business Dashboard Lite discovers a supported device, it will attempt to access the device using credentials provided in **Administration > Device Credentials** page.

How secure are the credentials stored in Cisco Business Dashboard Lite?

Credentials for accessing Cisco Business Dashboard Lite are irreversibly hashed using the SHA512 algorithm. Credentials for devices are reversibly encrypted using the AES-128 algorithm.

How do I recover a lost password for the web UI?

If you have lost the password for all the admin accounts in the web UI, you can recover the password by logging on the server of the Dashboard Lite, open the Dashboard Lite Server Application, and click the **Tools > Recover Password** menu. This tool resets the password for the cisco account to the default of cisco, or, if the cisco account has been removed, it will recreate the account with the default password.