



## CHAPTER 6

# Archiving Configurations and Managing them using Configuration Archive

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Configuration Archive maintains an active archive of the configuration of devices managed by LMS. It enables you to perform the following tasks:

- Fetch, archive, and deploy device configurations
- Search and generate reports on archived data
- Compare and label configurations, compare configurations with a baseline, and check for compliance.

You can also perform some of the Configuration Archive tasks using command line utility `cwcli config`.

You can also export the configuration data using the `cwcli export config` command.



Note

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Device configuration archive file size should be less than or equal to 2.5 MB.

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See [CLI Utilities](#) for further details on `cwcli config` and `cwcli export config` commands.

This chapter gives information on performing Configuration Archive tasks (see [Performing Configuration Archive Tasks](#) for details).

This chapter contains:

- [Performing Configuration Archive Tasks](#)
- [Checking Configuration Archival Status](#)
- [Scheduling Sync Archive Job](#)
- [Using the Config Fetch Protocol Usage Report](#)
- [Generating an Out-of-Sync Report](#)
- [Scheduling Sync on Device Job](#)
- [Using the Configuration Version Tree](#)
- [Understanding the Config Viewer Window](#)
- [Viewing the Configuration Version Summary](#)

- [Configuration Quick Deploy](#)
- [Configuring Labels](#)
- [Using Search Archive](#)
- [Comparing Configurations](#)
- [Using Configuration Archive Job Browser](#)

## Performing Configuration Archive Tasks

Configuration Archive allows you to:

- Check archival status  
You can check the overall status of the configuration archive (For example, Successful, Partially Successful, etc.).  
See [Checking Configuration Archival Status](#) for further details.
- Update the archive  
In addition to scheduling configuration archive update, you can also update the archive manually. This ensures that you have the latest configurations.  
See [Scheduling Sync Archive Job](#) for more details. To define the Configuration Collection Settings, see *Administration of Cisco Prime LAN Management Solution 4.2*.
- Determine Configuration Protocol usage details  
You can view the protocol usage details for successful configuration fetches for devices. You can also change the transport protocol order after analyzing the protocol usage trends.  
See [Using the Config Fetch Protocol Usage Report](#) for more details.
- Determine out-of-sync configuration files  
You can list the devices for which running configurations are out-of-sync- with the startup configuration.  
See [Generating an Out-of-Sync Report](#) and [Scheduling Sync on Device Job](#) for further details.
- View Version Tree  
You can view all configuration versions of selected devices in the form of a graphical display.  
See [Using the Configuration Version Tree](#) for further details.
- View Version Summary  
You can view the latest three archived configurations for selected devices. It also has a link to view a particular configuration running on the device and to generate differences between versions in the archive.  
See [Viewing the Configuration Version Summary](#) for further details.
- Search for device configuration files  
You can search the archive for configuration containing text patterns for selected devices.  
See [Using Search Archive](#) for further details.

- Create custom configuration queries (See [Creating a Custom Query](#).)

You can create and run custom queries that generate reports. These reports display device configuration files from the archive for the devices you specify. You can use custom queries while searching archives.

- Compare configurations

You can compare the following:

- Startup and running configurations
- Running and latest archived configurations
- Two configuration versions of the same device
- Two configuration versions of different devices
- Base configuration and latest version of different devices

See [Comparing Configurations](#) for further details.

- Configuration Quick Deploy

You can create an immediate job to deploy the version of configuration that you are viewing on the device. You can deploy the configuration either in the Overwrite or Merge mode. You can also use job-based password.

See [Configuration Quick Deploy](#) for further details.

- Configuration Archive Job Browser

You can see the status of your Configuration Archive jobs.

See [Using Configuration Archive Job Browser](#) for further details.

- Label Configuration

You can select configuration files from different managed devices and then group and label them.

See [Configuring Labels](#) for further details.

- Set the debug mode for Configuration Archive

You can set the debug mode for Configuration Archive feature in the Log Level Settings dialog box (**Admin > System > Debug Settings**).

See *Administration of Cisco Prime LAN Management Solution 4.2* for more details.

## Checking Configuration Archival Status

After you add devices, their configurations are gathered and stored in the configuration archive. You can check the overall status of the configuration archive (Successful, Partially Successful, and Failed). It provides the status of the last archival attempt.

Refresh (Icon)	Click on this icon to refresh the configuration archive status window.
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Note

View Permission Report (**Reports > System > Users > Permission**) to check if you have the required privileges to perform this task.

To check the configuration archive status:

**Step 1** Select **Configuration > Configuration Archive > Summary**.

The Configuration Archival Summary dialog window appears with the following information.

Archival Status	Description
Successful	Number of devices for which all supported configurations have been fetched successfully. Click <b>No.of Devices</b> to see the <a href="#">Successful Devices Report</a> .
Failed	Number of devices for which fetch of all supported configurations has failed. Click <b>No.of Devices</b> to see the <a href="#">Failed Devices Report</a> .
Partial Successful	Number of devices for which fetch of any one of the supported configurations has failed. Number of Catalyst 5000 devices for which sub-modules were not pulled into archive. Only the main configuration of supervisor engine module is archived for Catalyst 5000 devices. Click <b>No.of Devices</b> to see the <a href="#">Partially Successful Devices Report</a> .
Configuration Never Collected	Number of devices for which the supported configurations has never been collected. Click <b>No.of Devices</b> to see the <a href="#">Configuration Never Collected Devices Report</a> .

**Step 2** Select one or all of the Config Archival Status and click **Sync Archive** to schedule an immediate job to update the archive status.

You can check the status of your scheduled *Sync Archive* job by selecting **Configuration > Job Browsers > Configuration Archive**.

## Configuration Archival Reports

The following are the Config Archival reports:

- [Successful Devices Report](#)
- [Failed Devices Report](#)
- [Partially Successful Devices Report](#)
- [Configuration Never Collected Devices Report](#)

## Successful Devices Report

A device appears in this report if all supported configurations have been fetched successfully.



**Note**

These dates do not necessarily reflect when the archive was last updated.

This report contains the following information:

Column Names	Description
Device Name	Device Name as entered in Device and Credential Repository. Click on the device name to launch the Troubleshooting page.
Config Type	Defines the type of configuration PRIMARY, SECONDARY, or VLAN. <ul style="list-style-type: none"> <li>PRIMARY/SECONDARY—Contains the Running and Startup configuration files information.</li> <li>VLAN—Contains running vlan.dat configuration file information. This config type does not contain Startup configuration file information.</li> </ul> For ONS devices, the PRIMARY configuration type displays the configuration information from the active CPU, at that instance.
File Type	Defines the configuration file type as either Running or Startup configuration.
Accessed At	Date and time at which LMS pulled running configuration from device in an attempt to archive. The configuration is archived only if there has been a change.
Description	Displays the archival status.

## Failed Devices Report

A device appears in this report if fetch for all of the supported configurations has failed. This report also contains the reasons configuration could not be pulled.

This report contains the following information:

Column Names	Description
Device Name	Device Name as entered in Device and Credential Repository. Click on the device name to launch the Troubleshooting page.
Config Type	Defines the type of configuration as PRIMARY, SECONDARY, or VLAN. <ul style="list-style-type: none"> <li>PRIMARY/SECONDARY—Contains information about the Running and Startup configuration files.</li> <li>VLAN—Contains running vlan.dat configuration file information. This configuration type does not contain Startup configuration file information.</li> </ul> For ONS devices, the PRIMARY configuration type displays the configuration information from the active CPU, at that instance.
File Type	Defines the configuration file type as either Running or Startup configuration.
Accessed At	Date and time that LMS pulled running configuration from device in an attempt to archive. The configuration is archived only if there has been a change.
Description	Reason why LMS could not pull running and startup configuration from device.

If you have enabled TACACS for a device and configured custom TACACS login and passwords prompts, you may experience Telnet problems, since LMS may not recognize the prompts.

To make your prompts recognizable, you must edit the TacacsPrompts.ini file in:

- *NMSROOT*\objects\cmf\data\TacacsPrompts.ini (On Windows)
- *NMSROOT*/objects/cmf/data/TacacsPrompts.ini (On Solaris and Soft Appliance)

*NMSROOT* is the LMS install directory. For Solaris and Soft Appliance, it will be /opt/CSCOpX.

## Partially Successful Devices Report

A device shows up in this report if fetch for any one of the supported configurations has failed.

The Partially Successful Devices report lists the Catalyst 5000 family devices for which sub-module information could not be pulled from the device. Only the main configuration of the supervisory module is archived for Catalyst 5000 devices.

This report contains the following information:

Column Names	Description
Device Name	Device Name as entered in Device and Credential Repository. Click on the device name to launch the Troubleshooting page.
Config Type	Defines the type of configuration as PRIMARY, SECONDARY, or VLAN. <ul style="list-style-type: none"> <li>• PRIMARY/SECONDARY—Contains the Running and Startup configuration files information.</li> <li>• VLAN—Contains running vlan.dat configuration file information. This configuration type does not contain Startup configuration file information.</li> </ul> For ONS devices, the PRIMARY configuration type displays the configuration information from the active CPU, at that instance.
File Type	Defines the configuration file type as either Running or Startup configuration.
Accessed At	Date and time that LMS pulled running configuration from device in an attempt to archive. The configuration is archived only if there has been a change.
Description	Reason why LMS could not pull running or startup configuration from device.

## Configuration Never Collected Devices Report

A device appears in this report if fetch for the supported configuration has never been collected.

This report contains the following information:

Column Names	Description
Device Name	Device Name as entered in Device and Credential Repository. Click on the device name to launch the Troubleshooting page.
Config Type	Defines the type of configuration as PRIMARY, SECONDARY, or VLAN. <ul style="list-style-type: none"> <li>PRIMARY/SECONDARY—Contains the Running and Startup configuration files information.</li> <li>VLAN—Contains running vlan.dat configuration file information. This configuration type does not contain Startup configuration file information.</li> </ul> For ONS devices, the PRIMARY configuration type displays the configuration information from the active CPU, at that instance.
File Type	Defines the configuration file type as either Running or Startup configuration.
Accessed At	Date and time that LMS pulled running configuration from device in an attempt to archive. The configuration is archived only if there has been a change.
Description	Reason why LMS could not pull running or startup configuration from device.

## Scheduling Sync Archive Job

You can schedule a job to update the configuration archive for a selected group of devices.

You have an option to poll device configuration before updating the archive and to fetch Startup configuration.



Note

View Permission Report (**Reports > System > Users > Permission**) to check if you have the required privileges to perform this task.



Note

When config collection is fetched via TFTP protocol, ensure Read-Write Community String is configured in DCR under SNMP credential section.

To schedule a job to update the device configuration:

**Step 1** Select **Configuration > Configuration Archive > Synchronization**.

The Sync Archive dialog box appears.

**Step 2** Select either:

- **Device Selector** — To schedule a job for a static set of devices.

The sync archive job fails if devices are removed from the DCR. For example, a sync archive job is scheduled to run for all the devices that are part of the selected group in Device Selector. If a device, part of the selected group in Device Selector, is deleted from DCR while the job is running then the job fails for that particular device. However, the job succeeds for the remaining devices in the group, but the status of the job still remains failed.

Or

- **Group Selector** — To schedule a job for a dynamic group of devices.

The job is scheduled only for the devices that are present in the selected group at the time when the job is run. The customizable group selector for jobs evaluates static groups also as dynamic during run time.

**Step 3** Enter the following information:

Field	Description
<b>Scheduling</b>	
Run Type	<p>You can specify when you want to run the Sync Archive job.</p> <p>To do this, select one of these options from the drop-down menu:</p> <ul style="list-style-type: none"> <li>• Immediate—Runs this task immediately.</li> <li>• 6 - hourly—Runs this task every 6 hours, starting from the specified time.</li> <li>• 12 - hourly—Runs this task every 12 hours, starting from the specified time.</li> <li>• Once—Runs this task once at the specified date and time.</li> <li>• Daily—Runs daily at the specified time.</li> <li>• Weekly—Runs weekly on the specified day of the week and at the specified time.</li> <li>• Monthly—Runs monthly on the specified day of the month and at the specified time.</li> </ul> <p>The subsequent instances of periodic jobs will run only after the earlier instance of the job is complete.</p> <p>For example, if you have scheduled a daily job at 10:00 a.m. on November 1, the next instance of this job will run at 10:00 a.m. on November 2 only if the earlier instance of the November 1 job has completed.</p> <p>If the 10.00 a.m. November 1 job has not completed before 10:00 a.m. November 2, the next job will start only at 10:00 a.m. on November 3.</p>
Date	<p>You can select the date and time (hours and minutes) to schedule the job.</p> <p>The Date field is enabled only if you have selected an option other than Immediate in the Run Type field.</p>
<b>Job Information</b>	
Job Description	Enter a description for the job. This is mandatory. You can enter only alphanumeric characters.
E-mail	<p>Enter e-mail addresses to which the job sends messages at the beginning and at the end of the job.</p> <p>You can enter multiple e-mail addresses separated by commas.</p> <p>Configure the SMTP server to send e-mails in the View / Edit System Preferences dialog box (Admin &gt; System &gt; System Preferences).</p> <p>We recommend that you configure the LMS E-mail ID in the View / Edit System Preferences dialog box (Admin &gt; System &gt; System Preferences). When the job starts or completes, an e-mail is sent with the LMS E-mail ID as the sender's address.</p>
<b>Job Options</b>	
Poll device before configuration collection	<p>Configuration Archive polls the device and compares the time of change currently on the device with the time of last archival of configuration to determine if configuration has changed on a device.</p> <p>If the polling is not supported on the device, then configuration fetch will be initiated without checking for the changes.</p> <p>See “Understanding Configuration Retrieval and Archival” section in <i>Administration Guide for Cisco Prime LMS 4.2</i> for further details on configuration polling.</p>
Fetch startup config	Configuration Archive fetches the startup configuration.



**Step 4** Click **Submit**.

A message appears, *Job ID is created successfully*.

Where *ID* is a unique Job number.

**Step 5** Click **OK**.

You can check the status of your scheduled *Sync Archive* job by selecting **Configuration > Job Browsers > Configuration Archive**.

## Using the Config Fetch Protocol Usage Report

You can view the configuration protocol usage details for successful configuration fetches using the Config Fetch Protocol Usage Report.

**Note**

View Permission Report (**Reports > System > Users > Permission**) to check if you have the required privileges to perform this task.

Select **Configuration > Configuration Archive > Protocol Usage Summary** to generate a Config Fetch Protocol Usage Report.

The Config Fetch Protocol Usage Report window displays the following information:

Column Name	Description
Protocol	Protocols used by LMS for configuration fetches.
Config Type	<p>The Configuration types for the various protocols. The available types are:</p> <ul style="list-style-type: none"> <li>Running — Count of the successful running configuration fetches for each protocol</li> <li>Startup — Count of the successful startup configuration fetches for each protocol</li> <li>VLAN — Count of the successful VLAN configuration fetches for each protocol. This configuration fetch is supported by only Telnet and SSH protocols.</li> </ul> <p>Click on the Count link to view a detailed report for a protocol and corresponding Config Type. The detailed report shows the list of devices which are accessed using a particular protocol and for which successful Config Fetch has happened.</p> <p>Example:</p> <p>If you click on a Count link, 20, for Telnet protocol and Running config type, a detailed report is generated with the following fields:</p> <ul style="list-style-type: none"> <li>Device Name — Name of each device.</li> <li>Accessed At — Date and time at which each device was accessed for Config Fetch purpose.</li> <li>Config Type — Configuration type for each device.</li> <li>File Type — Configuration file type for each device.</li> </ul> <p>This detailed report shows only the devices for which Telnet has successfully fetched configurations. You can use the export icon to export the list of devices from this detailed report to the device selector.</p>

Column Name	Description
Edit Settings (Button)	Click this button, if you want to change the transport protocol order. For more information, see <i>Administration of Cisco Prime LAN Management Solution 4.2</i> for further details.
Refresh (Icon)	Refreshes the Config Fetch Protocol Usage Report.

## Generating an Out-of-Sync Report

You can generate an Out-of-Sync report for the group of devices for which running configurations are not synchronized with the startup configuration.



### Note

View Permission Report (**Reports > System > Users > Permission**) to check if you have the required privileges to perform this task.

Select **Configuration > Compliance > Out-of-Sync Summary** to generate an Out-of-sync report. The Startup and Running Out-Of-Sync Summary window displays the following information:

Column Name	Description
Device Name	Device Name as entered in Device and Credential Repository.
Startup	Startup configuration of the device. This configuration is fetched from the configuration archive. Click on the displayed date to view the configuration.
Diff	Difference between the archived Startup and archived Running configurations. Click on the icon to see the difference between the archived Startup and archived Running configurations.
Running	Running configuration of the device. This configuration is fetched from the configuration archive. Click on the displayed date to see detailed information on the Running configuration.
Sync on Device (Button)	Use this button to schedule a Sync on device job. You can schedule a Sync on device job to copy the running configuration of a device to the startup configuration. For more information see, <a href="#">Scheduling Sync on Device Job</a> .

## Scheduling Sync on Device Job

You can schedule a Sync on device job using the Sync on Device button on Startup and Running Out-Of-Sync Summary window.



### Note

View Permission Report (**Reports > System > Users > Permission**) to check if you have the required privileges to perform this task.

To schedule a Sync on device job:

- Step 1** Select **Configuration > Compliance > Out-of-Sync Summary**.  
The Startup and Running Out-Of-Sync Summary dialog box appears.
- Step 2** Select a device.
- Step 3** Click **Sync on Device**.  
The Job Schedule and Options dialog box appears.
- Step 4** Enter the following information:

Field	Description
<b>Scheduling</b>	
Run Type	<p>You can specify when you want to run the Startup and Running Out-Of-Sync Summary report.</p> <p>To do this, select one of these options from the drop-down menu:</p> <ul style="list-style-type: none"> <li>• Immediate—Runs the report immediately.</li> <li>• Once—Runs the report once at the specified date and time.</li> <li>• Daily—Runs daily at the specified time.</li> <li>• Weekly—Runs weekly on the specified day of the week and at the specified time.</li> <li>• Monthly—Runs monthly on the specified day of the month and at the specified time.</li> </ul> <p>The subsequent instances of periodic jobs will run only after the earlier instance of the job is complete.</p> <p>For example, if you have scheduled a daily job at 10:00 a.m. on November 1, the next instance of this job will run at 10:00 a.m. on November 2 only if the earlier instance of the November 1 job has completed.</p> <p>If the 10.00 a.m. November 1 job has not completed before 10:00 a.m. November 2, the next job will start only at 10:00 a.m. on November 3.</p>
Date	<p>You can select the date and time (hours and minutes) to schedule the job.</p> <p>The Date field is enabled only if you have selected an option other than Immediate in the Run Type field.</p>
<b>Job Information</b>	
Job Description	Enter a description for the job. This is mandatory. You can enter only alphanumeric characters.
E-mail	<p>Enter e-mail addresses to which the job sends messages at the beginning and at the end of the job.</p> <p>You can enter multiple e-mail addresses separated by commas.</p> <p>Configure the SMTP server to send e-mails in the View / Edit System Preferences dialog box (Admin &gt; System &gt; System Preferences).</p> <p>We recommend that you configure the LMS E-mail ID in the View / Edit System Preferences dialog box (Admin &gt; System &gt; System Preferences). When the job starts or completes, an e-mail is sent with the LMS E-mail ID as the sender's address.</p>
Approver Comments	<p>Enter comments for the job approver.</p> <p>This field appears only if you have enabled Job Approval for Configuration Archive.</p>
Maker E-Mail	<p>Enter the e-mail-ID of the job creator. This is a mandatory field.</p> <p>This field appears only if you have enabled Job Approval for Configuration Archive.</p>

Field	Description
<b>Job Options</b>	
Job Password	<ul style="list-style-type: none"> <li>If you have enabled the Enable Job Password option and disabled the User Configurable option in the Job Policy dialog box (Admin &gt; Network &gt; Configuration Job Settings &gt; Config Job Policies) enter the device login user name and password and device Enable password.</li> <li>If you have enabled the Enable Job Password option and enabled the User Configurable option in the Job Policy dialog box (Admin &gt; Network &gt; Configuration Job Settings &gt; Config Job Policies) either: <ul style="list-style-type: none"> <li>Enter the device login user name and password and device Enable password</li> </ul> or <ul style="list-style-type: none"> <li>Disable the Job Password option in the Job Schedule and Options dialog box.</li> </ul> </li> </ul>

**Step 5** Click **Submit**.

A message appears, Job *ID* is created successfully.

Where *ID* is a unique Job number.

**Step 6** Click **OK**.

You can check the status of your scheduled *Copy Running Config to Startup* job by selecting **Configuration > Job Browsers > Configuration Archive**.

## Using the Configuration Version Tree

You can view all configuration versions of the selected devices in the form of a graphical display. You can also perform a configuration quick deploy for a selected device.



### Note

View Permission Report (**Reports > System > Users > Permission**) to check if you have the required privileges to perform this task.

To view the configuration Version Tree:

**Step 1** Select **Configuration > Configuration Archive > Views > Version Tree**

The Device Selection dialog box appears.

**Step 2** Select a device. See *Inventory Management with Cisco Prime LAN Management Solution 4.2* for information on how to use the Device Selector.

**Step 3** Click **OK**.

The Config Version Tree dialog box appears.

**Step 4** Click either the configuration version which is a hyper link or select the radio button for the configuration version.

To expand the configuration version folder, click on the plus icon and select the configuration version to view the configuration.

The Config Viewer dialog box appears. See [Understanding the Config Viewer Window](#) for further information.

If you want to perform a configuration quick deploy ([Configuration Quick Deploy](#)), click the Deploy button.

## Understanding the Config Viewer Window

The Config Viewer is a HTML-based window that displays the configurations of specified devices.


You can specify how you want to view the contents of the configurations by selecting one of the options under Show:

- Click **Raw** to view data exactly as it appears in the configuration file.
- Click **Processed** to view data with the commands ordered and grouped.

The Config Viewer window contains two columns.

Column	Description
Configlets	<p>Click on any configlets to display the corresponding information. The available configlets vary from device to device; the following are examples:</p> <ul style="list-style-type: none"> <li>• All—Entire contents of the configuration files.</li> <li>• SNMP—SNMP configuration commands. For example, <code>snmp-server community public RO</code>.</li> <li>• IP Routing—IP routing configuration commands. For example, <code>router abcd 100</code>.</li> <li>• Interface folder—The different interface configuration commands. For example, <code>Interface Ethernet0</code> and <code>Interface TokenRing</code>.</li> <li>• Global—Global configuration commands. For example <code>no ip address</code>.</li> <li>• Line con 0—configuration commands for line console 0.</li> <li>• IP—IP configuration commands. For example, <code>ip http server</code>.</li> </ul>
Configuration file name	View the contents of the configuration file.

The buttons on the Config Viewer are:

Button	Description
Download Config (Icon)	<p>Downloads the configuration file to the client machine.</p> <p>This option to download the configuration file is available only in the Raw mode. The configuration file will be downloaded through the Web browser with the file name convention as <i>DeviceName-Version_Number.txt</i>.</p> <p>You can download the configuration file only if you have the privileges of a Network Administrator.</p> <p> <b>Note</b> The Credentials in the configuration file will be exposed and shown as clear text.</p>
Export (Icon)	<p>Export the configuration file.</p> <ul style="list-style-type: none"> <li>• If you are using the Raw mode then the exported file format is cfg. The file name convention is <i>DeviceName-VersionNumber.cfg</i>.</li> <li>• If you are using the Processed mode then the exported file format is XML. The file name convention is <i>DeviceName-VersionNumber.xml</i>.</li> </ul> <p>Where <i>DeviceName</i> is the device name as entered in Device and Credential Repository and <i>VersionNumber</i> is the device configuration version.</p> <p>The default directory to which Configuration Archive file is exported is:</p> <p>On Solaris and Soft Appliance server, /var/adm/CSCOPx/files/rme/dema/configexport</p> <p>On Windows server, NMSROOT\files\rme\dcma\configexport</p>

Button	Description
Export (continue)	<p>To export a file:</p> <ol style="list-style-type: none"> <li>1. Click on the icon. The Export Config File dialog box appears.</li> <li>2. Enter the folder name on the LMS server. You must enter the default export directory. You cannot enter any other directory. or Browse to select a folder on the LMSserver. The Server Side File Browser dialog box appears. <ol style="list-style-type: none"> <li>a. Select a folder on the LMS server.</li> <li>b. Click <b>OK</b>.</li> </ol> <p>The Browse button takes you to the default directory. It does not allow you to change this default export directory.</p> </li> <li>3. Click <b>OK</b>. If you have exported configuration in the Raw mode, the notification message displays, Config file exported as <i>ExportedFolder\DeviceName-VersionNumber.cfg</i> If you have exported configuration in the Processed mode, the notification message displays, Config file exported as <i>ExportedFolder\DeviceName-VersionNumber.XML</i> Where <i>ExportedFolder</i> is the location where configuration file is exported.</li> <li>4. Click <b>OK</b>.</li> </ol>
Print (Icon)	Generates a format that can be printed.
Compare with previous version	<p>Compares configuration with previous version. When you click on this button, a new window Config Diff Viewer opens to show configurations side by side.</p> <p>See <a href="#">Understanding the Config Diff Viewer Window</a> for further details.</p> <p>This button gets activated only if you have a previous version of the configuration.</p>
Compare with next version	<p>Compares configuration with next version. When you click on this button, a new window Config Diff Viewer opens to show configurations side by side.</p> <p>See <a href="#">Understanding the Config Diff Viewer Window</a> for further details.</p> <p>This button gets activated only if you have a next version of configuration.</p>
Edit	<p>Launches Config Editor window.</p> <p>This button is active only if you are viewing the configuration version from the archive.</p> <p>See <a href="#">Editing and Deploying Configurations Using Config Editor</a> for further details.</p>
Deploy	<p>Perform a quick configuration deploy.</p> <p>This button is active only if you are viewing the configuration version from the archive.</p> <p>See <a href="#">Configuration Quick Deploy</a>.</p>

## Viewing the Configuration Version Summary

You can view all archived configurations for selected devices. It also provides a link to view a particular configuration running on the device and to generate differences between versions in the archive.

You can view the last three configuration versions for each device regardless of the number of versions stored in the archive.



### Note

View Permission Report (**Reports > System > Users > Permission**) to check if you have the required privileges to perform this task.

To view the Config Summary, follow this workflow:

- Step 1** Select **Configuration > Configuration Archive > Views > Version Summary**.  
The Device Selection dialog box appears.
- Step 2** Select a device. See *Inventory Management with Cisco Prime LAN Management Solution 4.2* for information on how to use the Device Selector.
- Step 3** Click **OK**.  
The Summary of Archived Versions window appears with the information in [Table 6-1](#).

**Table 6-1** Fields in the Summary of Archived Versions Window

Column	Description
Device Name	Device Name as entered in Device and Credential Repository. Click on the device name to launch the Troubleshooting page.
Config Type	Defines the type of configuration as PRIMARY, SECONDARY, or VLAN. <ul style="list-style-type: none"> <li>PRIMARY/SECONDARY—Contains the Running and Startup configuration files information.</li> <li>VLAN—Contains running vlan.dat configuration file information. This configuration type does not contain Startup configuration file information.</li> </ul> For ONS devices, the PRIMARY configuration type displays the configuration information from the active CPU, at that instance.
Startup	Configuration running when device was started. This configuration is fetched from the device. Click on the Startup icon to view the Startup configuration.
Diff	Differences between Startup and Running configurations. To view the difference between Startup and Running configurations, click on the Diff icon.
Running	Configuration currently running on device. Click on the Running icon to view the Running configuration. The configuration that appears, is fetched from the device. This happens if the fetched configuration is different from the latest configuration that is in the archive. Otherwise, the latest configuration from the archive appears.
Diff	Differences between the Running Configuration on the device and the most recent archived configuration. To view the difference between the two running configurations, click on the Diff icon.



Table 6-1 Fields in the Summary of Archived Versions Window (continued)

Column	Description
Latest	<p>Displays date and time of most recent configuration archive. The time shown here is the time when the file was actually archived. If the file was archived on 03/07/2004 5.00 PM PST, that's the time that will appear in this report. Time will be shown based on the client's time zone.</p> <p>To view the device configuration, click on <b>Date</b> and <b>Time</b>.</p> <p>The Archived At fields that appear in other configuration reports shows the last time the configuration was taken from the device in an attempt to archive. The system archives the configuration only if there is a change in the newly obtained configuration when compared with the archived one. So there could be different time values.</p>
Diff	<p>Differences between the most recent and the second most recent archived configurations.</p> <p>To view the difference between the two running configurations, click on the Diff icon.</p>
Latest-1	<p>Date and time the second most recent configuration was archived.</p> <p>To view the device configuration, click on <b>Date</b> and <b>Time</b>.</p>
Diff	<p>Differences between the second most recent and third most recent configurations in archive.</p> <p>To view the difference between the two running configurations, click on the Diff icon.</p>
Latest-2	<p>Date and time the third most recent configuration was archived.</p> <p>To view the device configuration, click on <b>Date</b> and <b>Time</b>.</p>

## Configuration Quick Deploy

You can create an immediate job to deploy the version of configuration being viewed on the device. You can deploy the configuration either in overwrite or merge mode.

### Features of Configuration Quick Deploy

The following are the features of Configuration Quick Deploy:

- It can be performed for both running and startup configurations of all categories of devices.
- The job is executed immediately. Therefore Job approval should not be enabled at the time of Configuration Quick Deploy.
- The jobs cannot be rolled back.
- The jobs use TFTP, Telnet, SSH, SCP, RCP, HTTPs transport protocols.
- It provides an option to select either merge or overwrite mode when you deploy configuration on a device.
- It cannot be performed for VLAN configurations. However, you can deploy VLAN configurations using the CLI command, `cwcli config put`. See [Overview: cwcli config Command](#) for more information.
- It is supported for configuration versions in the archive only. That is, you cannot deploy for configuration version available on a device.
- The jobs use the same protocol order that you have specified in the Config Transport Settings (**Admin > Collection Settings > Config > Config Transport Settings**).

## Performing a Configuration Quick Deploy

You can perform a configuration quick deploy using the Config Viewer window.

For example, you can launch Config Viewer window by clicking on Startup configuration or Running Configuration links while performing tasks such as generating Out-Of-Sync Summary report, viewing the Version Summary report etc.



**Note** View Permission Report (**Reports > System > Users > Permission**) to check if you have the required privileges to perform this task.

**Step 1** Click **Deploy** on the Config Viewer ([Understanding the Config Viewer Window](#)) window.

The Job Option Details dialog box appears.

**Step 2** Enter the following information:

Field	Description
<b>Job Information</b>	
E-mail	<p>Enter e-mail addresses to which the job sends messages at the beginning and at the end of the job. You can enter multiple e-mail addresses separated by commas.</p> <p>Configure the SMTP server to send e-mails in the View / Edit System Preferences dialog box (Admin &gt; System &gt; System Preferences).</p> <p>We recommend that you configure the LMS E-mail ID in the View / Edit System Preferences dialog box (Admin &gt; System &gt; System Preferences). When the job starts or completes, an e-mail is sent with the LMS E-mail ID as the sender's address.</p>
<b>Job Options</b>	
Job Password	<ul style="list-style-type: none"> <li>• If you have enabled the Enable Job Password option and disabled the User Configurable option in the Job Policy dialog box (Admin &gt; Network &gt; Configuration Job Settings &gt; Config Job Policies) enter the device login user name and password and device Enable password.</li> <li>• If you have enabled the Enable Job Password option and enabled the User Configurable option in the Job Policy dialog box (Admin &gt; Network &gt; Configuration Job Settings &gt; Config Job Policies) either: <ul style="list-style-type: none"> <li>– Enter the device login user name and password and device Enable password</li> <li>or</li> <li>– Disable the Job Password option in the Job Schedule and Options dialog box.</li> </ul> </li> </ul>

Field	Description
<b>Deploy Mode</b>	
Overwrite	<p>Select the Overwrite option, if you want to replace the existing running configuration on the device, with the selected configuration.</p> <p>This is the default option for the configuration deployment.</p> <p>The configuration that you have selected is compared with the latest running configuration in the Configuration Archive. (LMS assumes that the latest running configuration in the archive is the same as the configuration currently running on the device.)</p> <p>The Overwrite mode ensures that the running configuration on the device is overwritten with the selected configuration. This means, after the configuration is successfully deployed, the selected configuration and the running configuration on the device are the same.</p>
Merge	<p>Select the Merge option, if you want to add incremental configuration to the device.</p> <p>The configuration that you have selected is deployed on to the device as is. This means, the existing running configuration of the device is updated incrementally with the commands in the selected configuration.</p> <p>The selected running configuration is not compared with the running configuration in the Configuration Archive.</p> <p>We recommend that you use this option on newly deployed devices. This is because, the Merge option effectively deploys the entire configuration from the archive, on to the device.</p>

**Step 3** Click **Submit**.

An immediate Quick Deploy of Configuration on Device job will be scheduled.

A message appears, *Job ID* is created successfully.

Where *ID* is a unique Job number.

**Step 4** Click **OK**.

You can check the status of your scheduled *Config Quick Deploy* job by selecting **Configuration > Job Browsers > Configuration Archive**.

**What Happens During Configuration Quick Deploy**

Before Configuration Management deploys the configuration on the device, it verifies whether the device is locked.

The deploy process follows the configured transport protocol order and the fallback option is active.

At end of this task, Configuration Management will:

- Unlock the device
- Check in the new version of configuration if the deploy completes successfully.

After uploading the configuration on the device, Configuration Management writes to the Change Audit log.

## Configuring Labels

A label is a name given to a group of customized selection of configuration files. You can select configuration files from different devices, group and label them.

These labeled files are not purged along with the other configuration files. You have to explicitly select the Purge labeled files option to purge the labeled files. These labeled files are not purged if this option is not enabled.

You can purge the label config files using **Admin > Network > Purge Settings**.

See *Inventory Management with Cisco Prime LAN Management Solution 4.2* for further details.

The Label Config window displays the following information:

Column	Description
Label Name	Displays the label name.
Description	Displays the label description.
Created by	Displays the user who created this label.
Created on	Displays the label creation time.

You can click on any column heading to sort the information by that column. If you double-click a heading, the order is reversed.

The Label Configs window contains the following buttons:

Button	Description
Create	Create a label. See <a href="#">Creating a Label</a> for further details.
Edit	Edit a labeled configuration. See <a href="#">Editing a Labeled Configuration</a> for further details. This button is active only after you select a Label.
View	View a labeled configuration. See <a href="#">Viewing the Labeled Configuration</a> for further details. This button is active only after you select a Label.
Delete	Delete labeled configuration. See <a href="#">Deleting the Labeled Configuration</a> for further details. This button is active only after you select a Label.

## Creating a Label

You can use Label Configuration to create a group of configuration files from selected devices.



**Note**

View Permission Report (**Reports > System > Users > Permission**) to check if you have the required privileges to perform this task.

You can create a label file using the following workflow:

- Step 1** Select **Configuration > Configuration Archive > Label Configs**.  
The Label Configs dialog box appears.
- Step 2** Click **Create**.  
The Device Selection dialog box appears.
- Step 3** In Device Selector pane, select the devices. See *Inventory Management with Cisco Prime LAN Management Solution 4.2* for information on how to use the Device Selector.
- Step 4** Go to the Label selection pane and:
- Enter the Label Name. You can enter up to 64 characters.
  - Enter the Label Description. You can enter up to 128 characters.
- Step 5** Go to the Config Type pane and select Primary or VLAN.

Option	Description
Primary	Contains the Running and Startup configuration files information.
VLAN	Contains running vlan.dat configuration file information. This configuration type does not contain Startup configuration file information.

- Step 6** Go to the Version pane and select **Latest** to include the most recent configuration only, or **All** to view all configuration versions.
- If you have selected Latest, you can click **Finish** button in the Select Devices page and complete the Label creation.
  - If you have selected All, go to [Step 7](#).
- Step 7** Click **Next**.  
The Select Configs to be Labelled dialog box appears.
- To view the configuration, select a configuration version file from the left pane and click **View**. The Config Viewer ([Understanding the Config Viewer Window](#)) window appears.
  - To add the selected configuration, select a configuration version file from the left pane and click **Add**.
  - To remove the selected configuration, select a configuration version file from the right pane and click **Remove**.

**Step 8** Click **Finish**.

A message appears, `Label LabelName created successfully`.

Where *LabelName* is the name of the label that you entered.

**Step 9** Click **OK**.

---

## Editing a Labeled Configuration

You can make the following changes to a label:

- Modify the Label Description.
- Remove configuration files from the Selected Versions list.
- Add new configuration files from the Devices list.



**Note** View Permission Report (**Reports > System > Users > Permission**) to check if you have the required privileges to perform this task.

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You can edit a label file using the following workflow:

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**Step 1** Select **Configuration > Configuration Archive > Label Configs**.

The Label Configs dialog box appears.

**Step 2** Select a label and click **Edit**.

The Device Selection dialog box appears. The devices that are already part of the labeled file are selected.

**Step 3** Go to the Device Selector pane and select a new device or deselect a device. See *Inventory Management with Cisco Prime LAN Management Solution 4.2* for information on how to use the Device Selector.

**Step 4** Go to the Version pane and select **Latest** to include the most recent configuration only, or **All** to view all configuration versions.

**Step 5** Click **Next**.

The Label Details dialog box appears with the current details of the label.

**Step 6** Do either of the following:

- Change the Label Description. You can enter up to 128 characters.
- Select a configuration version file from the left pane, click **Add** to add the selected configuration file.
  - If you selected **Latest** in the previous dialog box, the left pane will show devices and the latest archived configuration file. The right pane contains labeled configuration.
  - If you selected **All** in the previous dialog box, the left pane will show devices and all available archived configuration files. The right pane contains labeled configuration.



**Note** You can select only one configuration file for a device.

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- To remove the selected configuration, select a configuration version file from the right pane and click **Remove**.
- To view the configuration, select a configuration version file from the left pane and click **View**. The Config Viewer ([Understanding the Config Viewer Window](#)) window appears.

**Step 7** Click **Finish**.

A message appears, Label *LabelName* updated.

Where *LabelName* is the name of the label as entered by you.

**Step 8** Click **OK**.

## Viewing the Labeled Configuration

You can view configurations of a label from the label listing.



**Note** View Permission Report (**Reports > System > Users > Permission**) to check if you have the required privileges to perform this task.

**Step 1** Select **Configuration > Configuration Archive > Label Configs**.

The Label Configs dialog box appears.

**Step 2** Select a label and click **View**.

The Label Config Viewer window appears with the following information:

Column Name	Description
Device Name	Device Name as entered in Device and Credential Repository.
Config Type	<p>Defines the type of configuration PRIMARY, SECONDARY, or VLAN.</p> <ul style="list-style-type: none"> <li>• PRIMARY/SECONDARY—Contains the Running and Startup configuration files information.</li> <li>• VLAN—Contains running vlan.dat configuration file information. This configuration type does not contain Startup configuration file information.</li> </ul> <p>For ONS devices, the PRIMARY configuration type displays the configuration information from the active CPU, at that instance.</p>
Version	<p>Version of configuration file.</p> <p>Click on the version to display Config Viewer (see <a href="#">Understanding the Config Viewer Window</a>), which shows contents of corresponding configuration file.</p> <p>In the Config Viewer window, you can click the Deploy button if you want to perform a Configuration Quick Deploy (<a href="#">Configuration Quick Deploy</a>)</p>
Created On	Date and time at which configuration file was created.
Change Description	Description of the configuration change.

## Deleting the Labeled Configuration

You can delete a label from the list of labels in the label configuration dialog box:



### Note

View Permission Report (**Reports > System > Users > Permission**) to check if you have the required privileges to perform this task.

**Step 1** Select **Configuration > Configuration Archive > Label Configs**.

The Label Configs dialog box appears.

**Step 2** Select the labels and click **Delete**.

A message appears, Are you sure you want to delete the label(s)?

**Step 3** Click **OK** to delete the labels.

## Using Search Archive

You can search the archive for configuration containing text patterns for selected devices. You can specify ten different combinations of patterns or strings as part of search criteria.

For example:

- Search all devices for configurations having pattern `set banner motd` and `set banner exec`.
- Search all devices for configurations having pattern `set banner motd` and `set banner exec` and `set password`.

You can also specify an option to ignore or consider the case sensitive property.

You can create a custom configuration query that searches information about the specified configuration files.

If you monitor devices X, Y, and Z every morning, you can create a custom query on them. When you run the query, LMS quickly gathers all the archived configuration files for these devices and displays them in a report.

The Custom Queries window displays the following information:

Column	Description
Query Name	Custom Query name.
Description	Custom Query description.
Created By	User who created this Custom Query.
Created On	Custom Query creation time.

You can click on any column heading to sort the information by that column. If you double-click a heading, the order is reversed.



The Custom Queries window contains the following buttons:

Button	Description
Create	Create a custom query. See <a href="#">Creating a Custom Query</a> for further details.
Edit	Edit a custom query. See <a href="#">Editing a Custom Query</a> for further details. This button is active only after you select a custom query.
Run	Run a custom query. See <a href="#">Running a Custom Query</a> for further details. This button is active only after you select a custom query.
Delete	Delete custom queries. See <a href="#">Deleting the Custom Queries</a> for further details. This button is active only after you select a custom query.

The user who creates the custom query has full permission to perform tasks such as edit and run on the Custom Queries.

See [Searching Archive](#) for the procedure to search the configuration with and without a search pattern.

## Creating a Custom Query

To create a custom query:



Note

View Permission Report (**Reports > System > Users > Permission**) to check if you have the required privileges to perform this task.

**Step 1** Select **Configuration > Configuration Archive > Views > Custom Queries**.

The Custom Queries dialog box appears

**Step 2** Click **Create**.

**Step 3** Do any of the following:

- Enter the Custom Query name. You can enter up to 64 characters.
- Enter the Custom Query description. You can enter up to 128 characters.
- Enter patterns to search for, for example, http server. You can enter text patterns up to 64 characters.  
To search for more than one pattern, enter the second and third patterns in the Pattern 2 and Pattern 3 fields. You can specify ten different combinations of patterns as part of search criteria.  
You cannot search for special characters or regular expressions, for example, Control-C, boot\*, etc.
- Select the search criteria **Contains/Does Not Contain**.
- If you have entered string as a search pattern, you can select **Match Any** to search for any given pattern string or **Match All** to search for all pattern strings.
- Click **Match Case** to perform a case-sensitive search, which is more efficient when you know the exact pattern you want to match. By default, Match Case is disabled.

**Step 4** Click **OK**.

A message appears, Custom Query *CustomQueryName* created successfully.

Where *CustomQueryName* is the name of the custom query as entered by you.

**Step 5** Click **OK**.

## Running a Custom Query

To run a custom query:



**Note**

View Permission Report (**Reports > System > Users > Permission**) to check if you have the required privileges to perform this task.

**Step 1** Select **Configuration > Configuration Archive > Views > Custom Queries**.

The Custom Queries dialog box appears.

**Step 2** Select a Custom Query and click **Run**.

The Device Selection dialog box appears.

**Step 3** Select the devices. See *Inventory Management with Cisco Prime LAN Management Solution 4.2* for information on how to use the Device Selector.

**Step 4** Click **OK**.

The Custom Query Search Result window appears with the following information:

Column Name	Description
Device Name	Device Name as entered in Device and Credential Repository. Click on the device name to launch the Troubleshooting page.
Version	Versions of configuration file. Click on the version to display Config Viewer (see <a href="#">Understanding the Config Viewer Window</a> ), which shows contents of corresponding configuration file. In the Config Viewer window, you can click on the Deploy button if you want to perform a configuration quick deploy ( <a href="#">Configuration Quick Deploy</a> )
Created On	Date and time at which the configuration file was created.

You can perform the following tasks from this window:

- Select the devices and click **NetConfig** to make any changes to the device configuration using NetConfig templates.
- Select a device and click **Edit** to edit the device configuration using the Config Editor application.

## Editing a Custom Query

You can edit the Custom Query description and modify the search patterns and their criteria. To edit a custom query:



**Note** View Permission Report (**Reports > System > Users > Permission**) to check if you have the required privileges to perform this task.

- 
- Step 1** Select **Configuration > Configuration Archive > Views > Custom Queries**.  
The Custom Queries dialog box appears.
- Step 2** Select a Custom Query and click **Edit**.  
The Custom Query Window appears.
- Step 3** Do any of the following:
- Update the Custom Query description. You can enter up to 128 characters.
  - Either add a new search pattern or delete or update an existing search pattern and its criteria. You can enter up to 64 characters.
  - Modify the string search option Match Any to Match All or vice versa.
  - Enable or Disable the case-sensitive search.
- Step 4** Click **OK**.  
A message appears, Custom Query *CustomQueryName* updated successfully.  
Where *CustomQueryName* is the name of the Custom Query.
- Step 5** Click **OK**.
- 

## Deleting the Custom Queries

To delete the custom queries:



**Note** View Permission Report (**Reports > System > Users > Permission**) to check if you have the required privileges to perform this task.

- 
- Step 1** Select **Configuration > Configuration Archive > Views > Custom Queries**.  
The Custom Queries dialog box appears.
- Step 2** Select a Custom Query and click **Delete**.  
A message appears, The query will be deleted.
- Step 3** Click **OK**.
-

## Searching Archive

You can search the device configuration file with or without the search pattern. You can also narrow down your search using Label Configuration files and Custom Queries.

You can view the search report in two ways:

- [Search Archive Result](#)
- [Device Configuration Quick View Report](#)



### Note

View Permission Report (**Reports > System > Users > Permission**) to check if you have the required privileges to perform this task.

To search the configuration archive:

**Step 1** Select **Configuration > Configuration Archive > Views > Search Archive**.

The Search Archive dialog box appears.

**Step 2** Enter the following:

Field	Description
<b>Left Pane</b>	
Label Config	Enable this option and select a label name. The configuration version options Latest and All are disabled.
Device Selector	Select the devices. See <i>Inventory Management with Cisco Prime LAN Management Solution 4.2</i> for information on how to use the Device Selector. If you have selected Label Config, you need not select devices. If you have selected any devices, only the devices that are specified in the label configuration are searched. Other devices are ignored.
Version	Select <b>Latest</b> to search the most recent configuration only or <b>All</b> to search all configuration versions. If you have selected Label Config, then you cannot specify the versions.
View Type	Select one of these view types: <ul style="list-style-type: none"> <li>• <b>Version</b> to view the Device Configuration Version Report. This displays all versions of the configuration, the time and date the configurations were archived, and reason for archival.</li> <li>• <b>Quick View</b> to view the Device Configuration Quick View Report. This displays the contents of the configuration files.</li> </ul>
<b>Right Pane</b>	
Custom Query	Select a Custom Query. The search patterns that are defined in the Custom Query appear in the Pattern Details text boxes. In addition to Custom Query search patterns, you can also add additional search patterns.

Field	Description
Pattern Details	<p>Perform the following tasks:</p> <ul style="list-style-type: none"> <li>Enter patterns to search for, for example, <i>http server</i>. You can enter text patterns up to 64 characters.</li> </ul> <p>To search for more than one pattern, enter the second and third patterns in the Pattern 2 and Pattern 3 fields. You can specify ten different combinations of patterns as part of search criteria.</p> <p>You cannot search for special characters, for example, <i>Control-C</i>, <i>boot*</i>.</p> <p>You can also search the device configuration file without the search pattern. The search will list all archived configuration for all selected devices.</p> <ul style="list-style-type: none"> <li>If you have selected the version as <b>Latest</b>, the search will list latest archived configuration for all selected devices.</li> <li>If you have selected the version as <b>All</b>, the search will list all archived configurations for all selected devices</li> </ul> <ul style="list-style-type: none"> <li>Select the search criteria <b>Contains/Does Not Contain</b>.</li> <li>If you have entered string as a search pattern, you can select <b>Match Any</b> to search for any given pattern string or <b>Match All</b> to search for all pattern strings</li> <li>Click <b>Match Case</b> to perform a case-sensitive search, which is more efficient when you know the exact pattern you want to match. By default, Match Case is disabled.</li> </ul>
Date Range	<p>Select any of the following Date Range types:</p> <ul style="list-style-type: none"> <li><b>As on</b>—Search config archives on or before the specified date and time.</li> <li><b>From</b>—Search config archives for the specified period.</li> <li><b>Last</b>—Search config archives for the last <i>N</i> number of days, weeks, months or years; where <i>N</i> is the value entered for the number of days, weeks, months or years.</li> </ul> <p>The following maximum values for <i>N</i> can be specified:</p> <ul style="list-style-type: none"> <li>Days—The maximum number of days that can be specified is 999.</li> <li>Weeks—The maximum number of weeks that can be specified is 999.</li> <li>Months—The maximum number of months that can be specified is 99.</li> <li>Years—The maximum number of years that can be specified is 9.</li> </ul> <p>If you have selected <b>Latest</b> as the version, the Date Range option searches for the most recent config archives.</p>

**Step 3** Click **Search**.

Based on your View type selection, either [Search Archive Result](#) or [Device Configuration Quick View Report](#) appears.

## Search Archive Result

The Search Archive Result displays information about the device configurations. The Search Archive Result contains the following details of the selected configurations:

Column Name	Description
Device Name	Device Name as entered in Device and Credential Repository. Click on the device name to launch the Troubleshooting page.
Config Type	Defines the type of configuration PRIMARY, SECONDARY, or VLAN. <ul style="list-style-type: none"> <li>PRIMARY/SECONDARY—Contains the Running and Startup configuration files information.</li> <li>VLAN—Contains running vlan.dat configuration file information. This config type does not contain Startup configuration file information.</li> </ul> For ONS devices, the PRIMARY config type displays the configuration information from the active CPU, at that instance.
Version	Versions of configuration file. Click on the version to display Config Viewer (see <a href="#">Understanding the Config Viewer Window</a> ), which shows contents of the corresponding configuration file.
Created On	Date and time at which the configuration file was created.
Change Description	Cause of configuration change.

You can perform the following tasks from this window:

- Select the devices and click **NetConfig** to make changes to the device configuration using NetConfig templates.
- Select a device and click **Edit** to edit the device configuration using the Config Editor application.

## Device Configuration Quick View Report

The Device Configuration Quick View report lists the devices, configuration version numbers, and configuration details of the device configuration version you specified.

You can specify how you want to view the contents of the configurations by selecting one of the options under Show:

- Click **Raw** to view data exactly as it appears in the configuration file. There are two panes, one lists all devices and the other displays the configuration.
- Click **Processed** to view data with the commands ordered and grouped. There are three panes, one lists all devices, the second pane lists all configlets, and the third pane displays the configuration.

Column	Description
Devices	Device Name as entered in Device and Credential Repository. Click on the device name to launch the Troubleshooting page.
Configlets	You can click on any configlets to display the corresponding information. The available configlets vary from device to device. The following are examples: <ul style="list-style-type: none"> <li>• All—The entire contents of the configuration files.</li> <li>• SNMP—SNMP configuration commands. For example, <code>snmp-server community public RO</code>.</li> <li>• IP Routing—IP routing configuration commands. For example, <code>router abcd 100</code>.</li> <li>• Interface folder—The different interface configuration commands. For example, <code>Interface Ethernet0</code> and <code>Interface TokenRing</code>.</li> <li>• Global—Global configuration commands. For example <code>no ip address</code>.</li> <li>• Line con 0—Configuration commands for line console 0.</li> <li>• IP—IP configuration commands. For example, <code>ip http server</code>.</li> </ul>
Configuration file name	You can view the contents of configuration file.

The following buttons are available on the Config Viewer:

Button	Description
Export (Icon)	Exports the configuration file. <ul style="list-style-type: none"> <li>• If you are using the Raw mode then the exported file format is cfg. The file name convention is <i>DeviceName-VersionNumber.cfg</i>.</li> <li>• If you are using the Processed mode then the exported file format is XML and the file name convention is <i>DeviceName-VersionNumber.xml</i>.</li> </ul> <p>Where <i>DeviceName</i> is the Device Name as entered in Device and Credential Repository and <i>VersionNumber</i> is the device configuration version.</p> <p>The default directory where Configuration Archive file is exported is:</p> <p>On Solaris and Soft Appliance server, /var/adm/CSCOpX/files/rme/dcma/configexport</p> <p>On Windows server, NMSROOT\files\rme\dcma\configexport</p>

Button	Description
Export (continue)	<p>To export a file:</p> <ol style="list-style-type: none"> <li>1. Click on the icon. The Export Config File dialog box appears.</li> <li>2. Enter the folder name on the LMS server. You must enter the default export directory. You cannot enter any other directory. or Browse to select a folder on the LMS server. The Server Side File Browser dialog box appears.               <ol style="list-style-type: none"> <li>a. Select a folder on the LMS server.</li> <li>b. Click <b>OK</b>.</li> </ol> <p>The Browse button takes you to the default directory. The Server Side File Browser does not allow you to change this default export directory.</p> </li> <li>3. Click <b>OK</b>. If you have exported configuration in the Raw mode, the notification message displays, Config file exported as <i>ExportedFolder\DeviceName-VersionNumber.cfg</i> If you have exported configuration in the Processed mode, the notification message displays, Config file exported as <i>ExportedFolder\DeviceName-VersionNumber.XML</i> Where <i>ExportedFolder</i> is the location to which the configuration file is exported.</li> <li>4. Click <b>OK</b>.</li> </ol>
Print (Icon)	Generates a format that can be printed.
Compare with previous version	<p>Compares configuration with the previous version. When you click on this button, a new window Config Diff Viewer opens to show configurations side by side.</p> <p>See <a href="#">Understanding the Config Diff Viewer Window</a> for further details.</p> <p>This button is active only if you have a previous version of configuration.</p>
Compare with next version	<p>Compares configuration with the next version. When you click this button, a new window Config Diff Viewer opens to show configurations side by side.</p> <p>See <a href="#">Understanding the Config Diff Viewer Window</a> for further details.</p> <p>This button is active only if you have a next version of configuration.</p>
Edit	<p>Launches Config Editor window.</p> <p>This button is active only if you are viewing the configuration version from the archive.</p> <p>See <a href="#">Editing and Deploying Configurations Using Config Editor</a> for further details.</p>
Deploy	<p>You can perform a configuration quick deploy.</p> <p>This button is active only if you are viewing the configuration version from the archive.</p> <p>See <a href="#">Configuration Quick Deploy</a>.</p>



# Comparing Configurations

You can compare two device configuration files from version to version or from device to device. You can also compare the configuration when a device was started with the current configuration, and the current configuration with the most recently archived configuration.

You can list the commands that have to be excluded while comparing configurations.

To do this select **Admin > Collection Settings > Config > Config Compare Exclude Commands Configuration**.

You can compare the configurations in these ways:

- **Startup vs. Running**—Compares the configuration when the device was started with the current configuration. These configurations are fetched from the device.  
See [Comparing Startup vs. Running Configurations](#).
- **Running vs. Latest Archived**—Compares the running configuration with the most recently archived configuration. The Running configuration is fetched from the device.  
See [Comparing Running vs. Latest Archived Configurations](#).
- **Two Versions of the Same Device**—Compares two archived configuration versions.  
See [Comparing Two Configuration Versions of the Same Device](#).
- **Two Versions of Different Devices**—Compares any two configurations in the configuration archive.  
See [Compare Two Configuration Versions of Different Devices](#).
- **Base Config vs. Latest Version of Different Devices**—Compares the base configuration of a device with the latest configuration of other devices.. These configurations are fetched from the device.  
See [Compare Base Config vs. Latest Configuration Version of Multiple Devices](#).

## Comparing Startup vs. Running Configurations

You can compare the configuration when a device was started with the current configuration. These configurations are fetched from the device.



Note

---

View Permission Report (**Reports > System > Users > Permission**) to check if you have the required privileges to perform this task.

---

To compare Startup vs. Running configurations:

- 
- Step 1** Select **Configuration > Configuration Archive > Compare Configs**.  
The Compare Configurations dialog box appears.
- Step 2** Select **Startup vs. Running** and click **Compare**.  
The Device Selection dialog box appears.
- Step 3** Select a device. See *Inventory Management with Cisco Prime LAN Management Solution 4.2* for information on how to use the Device Selector.
- Step 4** Click **OK**.  
The [Understanding the Config Diff Viewer Window](#) window appears.
- 

## Comparing Running vs. Latest Archived Configurations

You can compare the configuration currently running on a device with the most recent configuration stored in the configuration archive. The Running configuration is fetched from the device.



**Note** View Permission Report (**Reports > System > Users > Permission**) to check if you have the required privileges to perform this task.

---

To compare Running vs. latest archived configurations:

- 
- Step 1** Select **Configuration > Configuration Archive > Compare Configs**.  
The Compare Configurations dialog box appears.
- Step 2** Select **Running vs. Latest Archived** and click **Compare**.  
The Device Selection dialog box appears.
- Step 3** Select a device. See *Inventory Management with Cisco Prime LAN Management Solution 4.2* for information on how to use the Device Selector.
- Step 4** Click **OK**.  
The [Understanding the Config Diff Viewer Window](#) window appears.
-

## Comparing Two Configuration Versions of the Same Device

You can compare two different archived configurations of the same device.



**Note**

View Permission Report (**Reports > System > Users > Permission**) to check if you have the required privileges to perform this task.

To compare two versions of the same device:

- 
- Step 1** Select **Configuration > Configuration Archive > Compare Configs**.  
The Compare Configurations dialog box appears.
- Step 2** Select **Two Versions of the Same Device** and click **Compare**.  
The Device Selection dialog box appears.
- Step 3** Select a device. See *Inventory Management with Cisco Prime LAN Management Solution 4.2* for information on how to use the Device Selector.
- Step 4** Click **Next**.  
The Select First Configuration dialog box appears with the following information:

Column Name	Description
Config Version	Versions of configuration file.
File Type	Defines the configuration file type as either Running or Startup configuration.
Config Type	Defines the type of configuration PRIMARY, SECONDARY, or VLAN. <ul style="list-style-type: none"> <li>PRIMARY/SECONDARY—Contains the Running and Startup configuration files information.</li> <li>VLAN—Contains running vlan.dat configuration file information. This configuration type does not contain Startup configuration file information.</li> </ul> For ONS devices, the PRIMARY configuration type displays the configuration information from the active CPU, at that instance.
Created On	Date and time at which the configuration file was created.

- Step 5** Click on the first configuration to compare and click **Next**.  
The Select Second Configuration dialog box appears with the same information as the Select First Configuration window.
- Step 6** Click on the second configuration to compare it with first configuration and click **Finish**.  
The [Understanding the Config Diff Viewer Window](#) appears.
-

## Compare Two Configuration Versions of Different Devices

You can compare two archived versions of a configuration of the same or different devices.



**Note** View Permission Report (**Reports > System > Users > Permission**) to check if you have the required privileges to perform this task.

To compare two versions of different devices:

**Step 1** Select **Configuration > Configuration Archive > Compare Configs**.

The Compare Configurations dialog box appears.

**Step 2** Select **Two Versions of Different Devices** and click **Compare**.

The Select Device and Pattern dialog box appears.

**Step 3** Perform the following and click **Next**:

Field	Description
<b>Left Pane</b>	
Device Selector	Select the devices. See <i>Inventory Management with Cisco Prime LAN Management Solution 4.2</i> for information on how to use the Device Selector.
Version	Select <b>Latest</b> to view the most recent configuration or <b>All</b> to view all configuration versions.
<b>Right Pane</b>	
Pattern Details	Perform the following tasks: <ol style="list-style-type: none"> <li>Enter patterns to search for, for example, http server. You can enter text patterns up to 64 characters. To search for more than one pattern, enter the second and third patterns in the Pattern 2 and Pattern 3 fields. You can specify ten different combinations of patterns as part of search criteria. You cannot search for special characters or regular expressions, for example, Control-C, boot*. You can search the device configuration file without the search pattern.</li> <li>Select the search criteria <b>Contains/Does Not Contain</b>. If you have entered string as a search pattern, you can select <b>Match Any</b> to search for any given pattern string or <b>Match All</b> to search for all pattern strings.</li> <li>Click <b>Match Case</b> to perform a case-sensitive search, which is more efficient when you know the exact pattern you want to match. By default, Match Case is disabled.</li> </ol>

The Select First Configuration dialog box appears with the following information:

Column Name	Description
Device Name	Device Name as entered in Device and Credential Repository.
Config Version	Versions of configuration file.
File Type	Defines the configuration file type as either Running or Startup configuration.
Config Type	<p>Defines the type of configuration PRIMARY, SECONDARY, or VLAN.</p> <ul style="list-style-type: none"> <li>PRIMARY/SECONDARY—Contains the Running and Startup configuration files information.</li> <li>VLAN—Contains running vlan.dat configuration file information. This configuration type does not contain Startup configuration file information.</li> </ul> <p>For ONS devices, the PRIMARY configuration type displays the configuration information from the active CPU, at that instance.</p>
Created On	Date and time at which the configuration file was created.

**Step 4** Click on the first configuration to compare and click **Next**.

The Select Second Configuration dialog box appears with the same information as the Select First Configuration window.

**Step 5** Click on the second configuration to compare with first configuration and click **Finish**.

The [Understanding the Config Diff Viewer Window](#) window appears.

## Compare Base Config vs. Latest Configuration Version of Multiple Devices

You can compare and sync the base configuration of a device with the latest configuration version of multiple devices. The base configuration can be Running, Startup, or User archives.



### Note

View Permission Report (**Reports > System > Users > Permission**) to check if you have the required privileges to perform this task.

To compare the base configuration with the latest configuration version of different devices:

- 
- Step 1** Select **Configuration > Configuration Archive > Compare Configs**.  
The Compare Configurations dialog box appears.
- Step 2** Select **Base Config vs. Latest Version of Multiple Devices** and click **Compare**.  
The Select a Base Device dialog box appears.
- Step 3** Select a base device. See *Inventory Management with Cisco Prime LAN Management Solution 4.2* for information on how to use the Device Selector.
- Step 4** Click **Next**.  
The Select Config Version of the Base Device to Compare dialog box appears.
- Step 5** Select the configuration version of the base device from the Config Version tree.
- If you check **Filter Same Device Category Devices**, it displays devices that belong to the base device category. These devices are displayed in the Select Other Devices to Compare page.
  - If you uncheck **Filter Same Device Category Devices**, it displays all devices that belong to other device categories that are managed by LMS. These devices are displayed in the Select Other Devices to Compare page.
- Step 6** Click **Next**.  
The Select Other Devices to Compare dialog box appears.
- Step 7** Select the devices to compare with the configuration of the base device.  
You can select devices using the Device Selector. See *Inventory Management with Cisco Prime LAN Management Solution 4.2* for information on how to use the Device Selector.
- Step 8** Click **Next**.  
The Add Exclude Commands dialog box appears.
- Step 9** Do the following in the Add Exclude Commands dialog box:

Field/Button	Description
Exclude Commands	<p>Enter the exclude commands one in each line.</p> <p>For example,</p> <pre>ip address.*, end.*, exec-timeout.*, length.*, ntp clock-period.*</pre> <p>The commands will be excluded while comparing configuration.</p> <p>You can enter multiple commands separated by commas.</p> <p>For more information, see <a href="#">Examples for Exclude Commands</a>.</p>
View Base Config (Button)	<p>Click <b>View Base Config</b> to launch the Config Viewer window.</p> <p>See <a href="#">Understanding the Config Viewer Window</a> for further information.</p>

**Step 10 Click Finish.**

The Compare Config window appears, displaying the following details:

Field Name/Buttons	Description
<b>Summary</b>	
Total No.of Device(s) selected for comparison	Number of devices selected for comparison.
Number of Compliant devices	Number of devices that comply with the base configuration.
Number of Non-Compliant devices	Number of devices that do not comply with the base configuration.
Number of Excluded devices	Number of devices excluded from comparison.
Base Device	Name of the base device.
Base Config Type	Configuration type of the base device.
Base Config Branch	Configuration branch version of the base device. For example, DeviceArchive.
<b>Non-Compliant Devices</b>	
Device Name	Device Name as entered in Device and Credential Repository.
Latest Version	<p>Version of configuration file against which the compliance was checked.</p> <p>Click on the version to display Config Viewer (see <a href="#">Understanding the Config Viewer Window</a>). This shows the contents of corresponding configuration file against which the compliance was checked.</p>
Diff	<p>Differences between base configuration and the latest configuration version of multiple devices.</p> <p>To view the difference between the base configuration and the latest configuration version of other devices, click on the Diff icon. The Config Diff Viewer window appears. For more information, see <a href="#">Understanding the Config Diff Viewer Window</a>.</p>

Field Name/Buttons	Description
<b>Excluded Devices</b>	
Device Name	Device Name as entered in Device and Credential Repository.
Reason for Exclusion	Displays the cause for exclusion.
<b>Buttons</b>	
Export (Icon)	Exports the data to a file of PDF or CSV format.
Print (Icon)	Generates a format that can be printed.

**Step 11** Click **Diff** to view the differences between base configuration and the latest configuration version of multiple devices.

The Config Diff Viewer window appears. For more information, see [Understanding the Config Diff Viewer Window](#).

**Step 12** Click **Deploy** to sync the base configuration with the latest configuration.

The Job Options Details pop-up window appears, displaying the following details:

Field	Description
<b>Job Information</b>	
E-mail	Enter the e-mail address.
Retain new config additions in <<config version>>	Check to retain new config additions in the configuration file.
<b>Job Options</b>	
Job Password	Check to enable Job Password option
Login username	Enter the login username.
Password	Enter the login password.
Enable password	Enter the enable password.
Submit (button)	Click <b>Submit</b> to run the job.

**Step 13** Enter the Job Information and Job Option details.

**Step 14** Click **Submit** to run the job.

#### Examples for Exclude Commands

This section contains examples for exclude commands:



Scenario	Command Type (Examples)
To exclude anything after IP Address	ip address .*
To exclude IP address range from 172.20.115.1 to 255	ip address 172\\.20\\.115\\.(25[0-5] 2[0-4][0-9] [01]?[0-9][0-9]?) 255.255.255.128
To exclude SNMP host that contain either inside or outside characters	snmp host \\b(inside outside) 10.77.203.176 community public

For more information, see the regex API guide for Java 1.4.2 from Oracle <http://download.oracle.com/javase/1.4.2/docs/api/java/util/regex/Pattern.html> for other patterns.

## Understanding the Config Diff Viewer Window

The Configuration Version Compare report shows the differences between the two selected configurations. You can access the Configuration Version Compare report by comparing device configurations.

You can specify how you want to view the differences between the configurations by selecting one of the options under Show:

- Click **Raw** to view the differences between the two raw configurations.
- Click **Processed** to view the differences with the commands ordered and grouped.

The color conventions that are used on Config Diff Viewer are:

- Black—All unchanged text.
- Red—Lines that have changed from one version to another.
- Blue—Lines that have been added or deleted from one of the versions.

The Configuration Versions Compare report has three columns:

Column	Description
Configlets	<p>You can click on any configlet to display the corresponding information. The available configlets vary from device to device. The following are examples:</p> <ul style="list-style-type: none"> <li>• <b>Diffs</b>—Displays the differences between the two configuration files (if you selected more than one).</li> <li>• <b>All</b>—The entire contents of the configuration files.</li> <li>• <b>SNMP</b>—SNMP configuration commands. For example, <code>snmp-server community public RO</code>.</li> <li>• <b>IP Routing</b>—IP routing configuration commands. For example, <code>router abcd 100</code>.</li> <li>• <b>Interface folder</b>—The different interface configuration commands. For example, <code>interface Ethernet0</code> and <code>interface TokenRing</code>.</li> <li>• <b>Global</b>—Displays global configuration commands. For example <code>no ip address</code>.</li> <li>• <b>Line con 0</b>—Displays configuration commands for line console 0.</li> <li>• <b>IP</b>—Displays IP configuration commands. For example, <code>ip http server</code>.</li> </ul>
First configuration file	Contains the contents of the first configuration file.
Second configuration file	Contains the contents of the second configuration file.

The buttons on the Config Diff Viewer are:

Button	Description
Export (Icon)	<p>Export the configuration file.</p> <ul style="list-style-type: none"> <li>• If you are using the Raw mode then the exported file format is <code>cfg</code>. The file name convention is <i>DeviceName-VersionNumber.cfg</i>.</li> <li>• If you are using the Processed mode then the exported file format is XML. The file name convention is <i>DeviceName-VersionNumber.xml</i>.</li> </ul> <p>Where <i>DeviceName</i> is the device name as entered in Device and Credential Repository and <i>VersionNumber</i> is the device configuration version.</p> <p>The default directory where Configuration Archive file is exported is:</p> <p>On Solaris and Soft Appliance server,  <code>/var/adm/CSCOpX/files/rme/dcma/configexport</code></p> <p>On Windows server,  <code>NMSROOT\files\rme\dcma\configexport</code></p>

Button	Description
Export (continue)	<p>To export a file:</p> <ol style="list-style-type: none"> <li>1. Click on the icon. The Export Config File dialog box appears.</li> <li>2. Enter the folder name on the LMS server. You must enter the default export directory. You cannot enter any other directory. or Browse to select a folder on the LMS server. The Server Side File Browser dialog box appears.               <ol style="list-style-type: none"> <li>a. Select a folder on the LMS server.</li> <li>b. Click <b>OK</b>.</li> </ol> <p>The Browse button takes you to the default directory. It does not allow you to change this default export directory.</p> </li> <li>3. Click <b>OK</b>. If you have exported configuration in the Raw mode, the notification message displays, <code>Config file exported as ExportedFolder\DeviceName-VersionNumber.cfg</code> If you have exported configuration in the Processed mode, the notification message displays, <code>Config file exported as ExportedFolder\DeviceName-VersionNumber.XML</code> Where <i>ExportedFolder</i> is the location where configuration file is exported.</li> <li>4. Click <b>OK</b>.</li> </ol> <p>This option is not available in the Config Diff Viewer page when you compare Base Config vs. Latest Version of Different Devices.</p>
Print (Icon)	<p>Generates a format that can be printed.</p> <p>This option is not available in the Config Diff Viewer page when you compare Base Config vs. Latest Version of Different Devices.</p>

## Using Configuration Archive Job Browser

You can browse the Configuration Archive jobs that are registered on the system. From the Archive Management Jobs dialog box you can also retry, delete, stop jobs and view a job's details.

This section details:

- [Retrying a Config Job](#)
- [Stopping a Config Job](#)
- [Deleting the Config Jobs](#)
- [Viewing the Configuration Archive Job Details](#)

The Archive Management Jobs window displays the following information:

Column Name	Description
Job ID	<p>Unique number assigned to the job when it is created.</p> <p>For periodic jobs such as Daily, Weekly, etc., the job IDs are in the number.x format. The x represents the number of instances of the job. For example, 1001.3 indicates that this is the third instance of the job ID 1001.</p> <p>Click on the Job ID to view the Configuration Archive job details (see <a href="#">Viewing the Configuration Archive Job Details</a>).</p>
Job Type	<p>Type of the configuration job.</p> <ul style="list-style-type: none"> <li>• Sync Archive—Appears if you had scheduled a Sync Archive job (<b>Configuration &gt; Configuration Archive &gt; Synchronization</b>).</li> <li>• Get Config—Appears if you had scheduled a configuration fetch job using the CLI command, <code>cwcli config get</code>.</li> <li>• Put Config—Appears if you had scheduled a configuration retrieve job using the CLI command, <code>cwcli config put</code>.</li> <li>• Import Config—Appears if you had scheduled a job that retrieved the configuration from a file and if you had transferred it to the device using the CLI command, <code>cwcli config import</code>.</li> <li>• Write to Running Config—Appears if you had scheduled a job that downloaded the differences between the specified configuration file and the latest configuration version in the archive for the specified device, using the CLI command, <code>cwcli config write2run</code>.</li> </ul>

Column Name	Description
Job Type (Continue)	<ul style="list-style-type: none"> <li>Write to Startup Config—Appears if you had scheduled a job that erased the contents of the device Startup configuration and if you wrote contents of a specified file as new Startup configuration, using the CLI command, <code>cwcli config write2start</code>.</li> <li>Copy Running Config to Startup—Appears if you had scheduled a job that overwrote with the Startup configuration of the device with the Running configuration, using the CLI command, <code>cwcli config run2start</code>.</li> <li>Copy Startup Config to Running—Appears if you had scheduled a job that merged the Startup configuration with the Running configuration, using the CLI command, <code>cwcli config start2run</code>.</li> <li>Reload Device—Appears if you had scheduled a job that rebooted the devices, using the CLI command <code>cwcli config reload</code>.</li> <li>Config Quick Deploy—Appears if you had created an immediate Configuration Quick Deploy job, using the Config Viewer window.</li> <li>Compliance Check—Appears if you had scheduled a Compliance Check job (<b>Configuration &gt; Compliance &gt; Compliance Templates &gt; Compliance Check</b> and click the Compliance Check button).</li> <li>Check Compliance and Deploy—Appears if you had scheduled a Compliance Check job with the job option, Check compliance and deploy enabled (<b>Configuration &gt; Compliance &gt; Compliance Templates &gt; Compliance Check</b> and click the Compliance Check button).</li> <li>Deploy Baseline template—Appears if you had scheduled a Baseline Template deploy job (<b>Configuration &gt; Compliance &gt; Compliance Templates &gt; Direct Deploy</b> and click the Deploy button).</li> <li>Deploy Compliance Results—Appears if you had scheduled a Deploy job on the non-complaint devices (<b>Configuration &gt; Compliance &gt; Compliance Templates &gt; Jobs</b> and click the Deploy button).</li> </ul>
Status	<p>Job states:</p> <ul style="list-style-type: none"> <li>Cancelled—Running job stopped by you.</li> <li>Failed—Failed job. Click on the Job ID to view the job details. The number, within brackets, next to Failed status indicates the count of the devices that had failed for that job. This count is displayed only if the status is Failed. For example, If the status displays Failed(5), then the count of devices that had failed is 5.</li> <li>Running—Job still running.</li> <li>Scheduled—Job scheduled to run.</li> <li>Rejected—Job rejected by an approver. Click on the Job ID to view the rejection details.</li> <li>Successful—Job completed successfully</li> <li>Waiting for Approval—Job waiting for approval.</li> </ul>
Description	Job description entered during job definition
Owner	User who created this job.
Scheduled at	Date and time at which the job is scheduled to run.
Completed at	Date and time at which job was completed.
Schedule Type	Run type of the job: Immediate, Once, 6 - hourly, 12 - hourly, Daily, Weekly, and Monthly.

You can click on any column heading to sort information by that column. If you double-click on a heading, the order is reversed.

You can use the Filter button to do a quick search on the Configuration Archive jobs. You can perform filters by using these options:

Filter Options	Description
Job ID	<p>Unique number assigned to the job when it is created.</p> <p>For periodic jobs such as Daily, Weekly, etc., the job IDs are in the number.x format. The x represents the number of instances of the job.</p> <p>For example, 1001.3 indicates that this is the third instance of the job ID 1001.</p>
Job Type	<p>Types of Configuration Archive jobs.</p> <p>For example: Sync Archive, Write to Running Config.</p>
Status	<p>Status of the job.</p> <p>For example: Successful, Failed.</p>
Description	Job description.
Owner	Owner of the job.
Schedule Type	<p>Job schedule Type.</p> <p>For example: Immediate, Weekly.</p>
Refresh (Icon)	Click on this icon to refresh the Configuration Archive Job Browser.

You can perform the following tasks on this window:

- [Retrying a Config Job](#)
- [Stopping a Config Job](#)
- [Deleting the Config Jobs](#)

## Retrying a Config Job

You can retry only a failed job. You cannot retry a job that is scheduled to run periodically (Daily, Weekly, and Monthly).



### Note

View Permission Report (**Reports > System > Users > Permission**) to check if you have the required privileges to perform this task.

To retry a job:

- 
- Step 1** Select **Configuration > Job Browsers > Configuration Archive**.  
The Archive Management Jobs dialog box appears.
  - Step 2** Select a failed job and click **Retry**.  
The Job Schedule and Options dialog box appears.

**Step 3** Enter the following information:

Based on your retry job selection, some of the options may not be visible.

For example, 6 - hourly and 12 -hourly Run Type options are visible only if you are retrying a Sync Archive job. This is not visible for other types of Configuration Archive jobs.

Field	Description
<b>Scheduling</b>	
Run Type	<p>You can specify when you want to run the selected Retry job.</p> <p>To do this, select one of these options from the drop-down menu:</p> <ul style="list-style-type: none"> <li>• 6 - hourly—Runs this task every 6 hours, starting from the specified time.</li> <li>• 12 - hourly—Runs this task every 12 hours, starting from the specified time.</li> <li>• Immediate—Runs this task immediately.</li> <li>• Once—Runs this task once at the specified date and time.</li> <li>• Daily—Runs daily at the specified time.</li> <li>• Weekly—Runs weekly on the specified day of the week and at the specified time.</li> <li>• Monthly—Runs monthly on the specified day of the month and at the specified time.</li> </ul> <p>The subsequent instances of periodic jobs will run only after the earlier instance of the job is complete.</p> <p>For example, if you have scheduled a daily job at 10:00 a.m. on November 1, the next instance of this job will run at 10:00 a.m. on November 2 only if the earlier instance of the November 1 job has completed.</p> <p>If the 10.00 a.m. November 1 job has not been completed before 10:00 a.m. November 2, the next job will start only at 10:00 a.m. on November 3.</p>
Date	<p>You can select the date and time (hours and minutes) at which to schedule a job.</p> <p>The Date field is enabled only if you have selected an option other than Immediate in the Run Type field.</p>

Field	Description
<b>Job Information</b>	
Approver Comments	Enter comments for the job approver. This field appears only if you have enabled job approval for Configuration Archive.
Maker E-Mail	Enter the e-mail-ID of the job creator. This is a mandatory field. This field appears only if you have enabled job approval for Configuration Archive.
Job Password	<ul style="list-style-type: none"> <li>If you have enabled the Enable Job Password option and disabled the User Configurable option in the Job Policy dialog box (<b>Admin &gt; Network &gt; Configuration Job Settings &gt; Config Job Policies</b>) enter the device login user name and password and device Enable password.</li> <li>If you have enabled the Enable Job Password option and enabled the User Configurable option in the Job Policy dialog box (<b>Admin &gt; Network &gt; Configuration Job Settings &gt; Config Job Policies</b>) either: <ul style="list-style-type: none"> <li>Enter the device login user name and password and device Enable password</li> </ul> </li> </ul> <p>Or</p> <ul style="list-style-type: none"> <li>Disable the Job Password option in the Job Schedule and Options dialog box.</li> </ul>
E-mail	Enter e-mail addresses to which the job sends messages at the beginning and at the end of the job. You can enter multiple e-mail addresses separated by commas. Configure the SMTP server to send e-mails in the View / Edit System Preferences dialog box ( <b>Admin &gt; System &gt; System Preferences</b> ). We recommend that you configure the LMS E-mail ID in the View / Edit System Preferences dialog box ( <b>Admin &gt; System &gt; System Preferences</b> ). When the job starts or completes, an e-mail is sent with the LMS e-mail ID as the sender's address.

**Step 4** Click **Submit**.

A message appears, `Job resubmitted successfully`.

**Step 5** Click **OK**.

## Stopping a Config Job

You can stop the following running job types (See [Using Configuration Archive Job Browser](#) for details on the job types):

- Put Config
- Import Config
- Write to Running Config
- Write to Startup Config
- Copy Running Config to Startup
- Copy Startup Config to Running
- Reload Device



- Config Quick Deploy
- Check Compliance and Deploy
- Deploy Baseline template
- Compliance check

**Note**

---

View Permission Report (**Reports > System > Users > Permission**) to check if you have the required privileges to perform this task.

---

To stop an Configuration Archive job:

- 
- Step 1** Select **Configuration > Job Browsers > Configuration Archive**.  
The Archive Management Jobs dialog box appears.
- Step 2** Select a running job and click **Stop**.  
A message appears, *Selected job(s) will be stopped*.
- Step 3** Click **OK**.
- 

## Deleting the Config Jobs

You can delete jobs with status:

- Cancelled
- Failed
- Scheduled
- Rejected
- Successful
- Waiting for Approval

You cannot delete a running job.

**Note**

---

View Permission Report (**Reports > System > Users > Permission**) to check if you have the required privileges to perform this task.

---

To delete jobs:

- 
- Step 1** Select **Configuration > Job Browsers > Configuration Archive**.  
The Archive Management Jobs dialog box appears.
- Step 2** Select a running job and click **Delete**.  
A message appears, *Selected job(s) will be deleted*.
- Step 3** Click **OK**.
-

## Viewing the Configuration Archive Job Details

From the Archive Management Jobs window, you can learn more about one job by viewing its details. You can view these details by clicking the Job ID on the Config Job window.


**Note**

View Permission Report (**Reports > System > Users > Permission**) to check if you have the required privileges to perform this task.

The Archive Management Job Details window contains the following information:

Page/Folder	Description
Execution Summary	<p>Displays summary of completed job:</p> <ul style="list-style-type: none"> <li>• Execution Summary—Information about the job status, start time and end time.</li> <li>• Device Summary—Information about the job completion status on the devices you have selected. For example, number of successful devices where the job is executed successfully.</li> </ul> <p>Click on Device Details folder and device status link and on the Device link to see the complete job execution details.</p> <ul style="list-style-type: none"> <li>• Execution Message (Pre-Execution and Post-Execution)—Information about any e-mails sent.</li> </ul>
Device Details	<p>Contains detailed job results for each device. Displays status folders that correspond to possible device status:</p> <ul style="list-style-type: none"> <li>• Successful Devices—Devices were successfully executed.</li> <li>• Failed Devices—Devices were not successfully executed.</li> <li>• Partially Failed Devices—Job partially failed to run on these devices.</li> <li>• Pending Devices—Job did not try to update devices, even though they were selected.</li> <li>• Not Attempted—Job did not attempt to run on these devices.</li> </ul> <p>Click on <b>Status</b> to see the job details. Details include a record of the entire CLI session between LMS and the device.</p> <p>When the configuration fetch takes unusually long, this error message appears,  Unable to get results of job execution for device. Please retry the job  This could happen because of slow device response, Network latency, etc.</p>
Work Order	<p>Contains the Summary of the job definition such as,</p> <ul style="list-style-type: none"> <li>• Detailed information, such as owner, schedule type, and Job Approval state.</li> <li>• Policies configured for the job, such as E-mail Notification and Job Based Password.</li> <li>• Devices on which the job runs. Also, gives details about the commands.</li> </ul> <p>For retried jobs, these job definitions are not updated. For such jobs the original job definitions are retained.</p>

The buttons on the Job Details window are:

- Delete—You can delete jobs with the following Job Status:
  - Cancelled
  - Failed
  - Scheduled
  - Rejected
  - Successful
  - Waiting for Approval

You cannot delete a running job.

- Stop—You can stop the following running job types (See [Using Configuration Archive Job Browser](#) for details on the job types):
  - Put Config
  - Import Config
  - Write to Running Config
  - Write to Startup Config
  - Copy Running Config to Startup
  - Copy Startup Config to Running
  - Reload Device
  - Config Quick Deploy
  - Check Compliance and Deploy
  - Deploy Baseline template
  - Compliance check

