



CHAPTER 11

Editing and Deploying Configurations Using Config Editor

The Config Editor option of the Configuration tab of Resource Manager Essentials, provides easy access to configuration files. Config Editor allows a network administrator with the appropriate security privileges to edit a configuration file that exists in the configuration archive.

The Configuration Management application stores the current, and a user-specified number of previous versions, of the configuration files for all supported Cisco devices maintained in the Inventory. It automatically tracks changes to configuration files and updates the database if a change is made.

You can open the configuration file, change it, and download it to the device.

- To start Config Editor from the CiscoWorks desktop, select **RME > Config Mgmt > Config Editor**.
The Config Editor window appears.
- To set user preferences in Config Editor from the CiscoWorks navigation tree, select **RME > Admin > Config Mgmt > Config Editor**.
The User Preferences window appears.

Config Editor Tasks

Config Editor users can:

- Open a configuration file version of a device for editing.
- Open configuration file version based on search criteria.
- Open an external configuration file.
- Save modified configuration file in private work area on the server and open the saved file when required.
- Save a configuration file in a public location.
- Send configuration file to syntax checker utility.
- Deploy configuration files to the device.
- Send configuration download jobs for approval.
- View all download jobs and perform job management operations.
- List out all the modified files, allow the user to select and download or close the configuration.

- Compare configurations that they are editing with the original configuration file version and other configuration versions of the selected device.
- Open a baseline configuration stored in config archive.

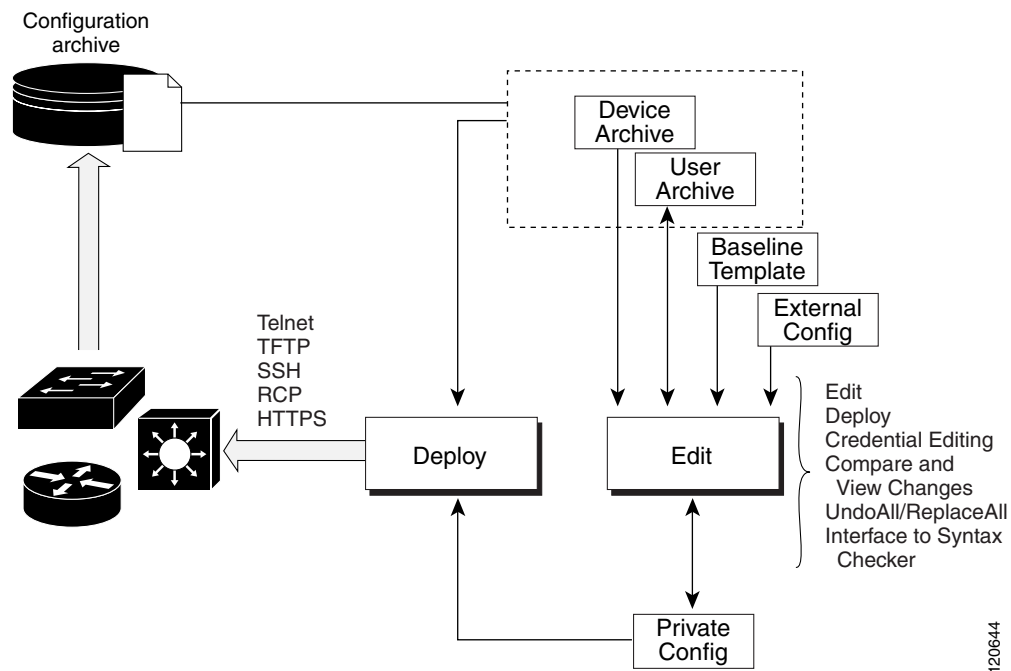
For the new features in this release, see [What's New in this Release](#).

Benefits of Configuration Editor

Config Editor allows you to edit and download configuration files to devices using a GUI instead of the command line interface (CLI). Use Config Editor to edit individual device configurations within RME and then download them back to a device.

A copy of the updated configuration will automatically be stored in the Configuration Archive. See [Figure 11-1](#).

Figure 11-1 Config Editor Functional Flow



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Table 11-1 shows the tasks you can accomplish with the Config Editor option.

Table 11-1 Config Editor Tasks

Task	Description	Action
Open a configuration file.	Open a configuration file for editing. You can open a configuration file in four ways: <ul style="list-style-type: none"> • Device and Version • Pattern Search • Baseline • External Location 	Select RME > Config Mgmt > Config Editor > Config Files.
Edit configuration files from the archives.	Edit a configuration file from the archive.	Select RME > Config Mgmt > Config Editor > Config File > Device and Version > Edit.
Edit a configuration file by pattern	Edit a configuration file by searching for a pattern. A pattern can be any text string.	Select RME > Config Mgmt > Config Editor > Config File > Pattern Search > Finish.
Edit a configuration file by baseline template	Create a baseline configuration from the baseline template maintained in configuration archive.	Select RME > Config Mgmt > Config Editor > Config File > Baseline > Finish.
Edit a configuration file by external location	Associate a device with the selected configuration file from an external location in the server.	Select RME > Config Mgmt > Config Editor > Config File > External Location > Edit.
Print configuration files.	Print a configuration file.	<ol style="list-style-type: none"> 1. Select RME > Config Mgmt > Config Editor. 2. Select the configuration file and click Edit. 3. Select the Print icon at the top right corner.
Remove configuration file from the private area	Remove a configuration file in the private work area on the server.	<ol style="list-style-type: none"> 1. Select RME > Config Mgmt > Config Editor > Private Configs. 2. Select the configuration file and click Edit. 3. Click Delete.
Remove a configuration from the public work area	Remove a configuration file in the public work area on the server.	<ol style="list-style-type: none"> 1. Select RME > Config Mgmt > Config Editor > Public Configs. 2. Select the configuration file and click Edit. 3. Click Delete.
Save a configuration file in the public work area.	Save an edited configuration file in the public work area on the server and retrieve the saved file when required.	<ol style="list-style-type: none"> 1. Select RME > Config Mgmt > Config Editor > Public Configs. 2. Select the configuration file and click Edit. 3. Click Save.

Table 11-1 Config Editor Tasks (continued)

Task	Description	Action
Save a configuration file in the private work area.	Save an edited configuration file in the private work area on the server and retrieve the saved file when required.	<ol style="list-style-type: none"> 1. Select RME > Config Mgmt > Config Editor > Private Configs. 2. Select the configuration file and click Edit. 3. Click Save.
Undo editing or typing changes	Undo editing or typing changes when editing a file. You can undo editing changes of a file in private or public work areas.	<p>To undo editing changes of a file in the private work area:</p> <ol style="list-style-type: none"> 1. Select RME > Config Mgmt > Config Editor > Private Configs. 2. Select the configuration file and click Edit. 3. Click Undo All. <p>To undo editing changes of a file in the public work area:</p> <ol style="list-style-type: none"> 1. Select RME > Config Mgmt > Config Editor > Public Configs. 2. Select the configuration file and click Edit. 3. Click Undo All.
Find and replace text	Find and replace all occurrences of the text when editing a configuration file in the Raw mode or find the text in a particular configlet in the Processed mode	<p>To find and replace text of a file in the private work area:</p> <ol style="list-style-type: none"> 1. Select RME > Config Mgmt > Config Editor > Private Configs 2. Select the configuration file and click Edit. 3. Click Replace All. <p>To find and replace text of a file in the public work area:</p> <ol style="list-style-type: none"> 1. Select RME > Config Mgmt > Config Editor > Public Configs. 2. Select the configuration file and click Edit. 3. Click Replace All.
Export Configuration File Changes	Exporting Changes of a Configuration File to a PDF file.	<ol style="list-style-type: none"> 1. Select RME > Config Mgmt > Config Editor. 2. Select the configuration file and click Edit. 3. Select the Export icon at the top right corner.
Close Configuration File	Close a configuration file.	<p>To close a configuration file in the private work area:</p> <ol style="list-style-type: none"> 1. Select RME > Config Mgmt > Config Editor > Private Configs. 2. Select the configuration file and click Edit. 3. Click Close. <p>To close a configuration file in the public work area:</p> <ol style="list-style-type: none"> 1. Select RME > Config Mgmt > Config Editor > Public Configs. 2. Select the configuration file and click Edit. 3. Click Close.

Table 11-1 Config Editor Tasks (continued)

Task	Description	Action
Configure Job Policies.	Configure a default policy for job properties that applies to all future jobs. You can also specify whether the property can be modified when the job is created.	Select Resource Manager Essentials > Admin > Config Mgmt > Config Job Policies > Config Editor.
Set up the default editing mode.	Set up or change your default editing preferences. Config Editor remembers your preferred mode even across different invocations of the application. You can also change the mode when you open a configuration file using the Device and Version option. However, Config Editor does not remember this change across different invocations of the application. Only the changes made using the Admin tab is remembered.	Select RME > Admin > Config Mgmt > Config Editor.
View changes.	View the changes made to the opened configuration file. RME compares the edited file with the original version.	To view changes made to a configuration file in the private work area: <ol style="list-style-type: none"> 1. Select RME > Config Mgmt > Config Editor > Private Configs. 2. Select the configuration file and click Edit. 3. Click Tools. 4. Select View Changes. To view changes made to a configuration file in the public work area: <ol style="list-style-type: none"> 1. Select RME > Config Mgmt > Config Editor > Public Configs. 2. Select the configuration file and click Edit. 3. Click Tools. 4. Select View Changes.

Table 11-1 Config Editor Tasks (continued)

Task	Description	Action
Compare versions of the configuration files.	Compare the edited file with any version in the Configuration Archive.	<p>To compare versions of configuration files in the private work area:</p> <ol style="list-style-type: none"> 1. Select RME > Config Mgmt > Config Editor > Private Configs. 2. Select the configuration file and click Edit. 3. Click Tools. 4. Select Compare Config. <p>To compare versions of configuration files in the public work area:</p> <ol style="list-style-type: none"> 1. Select RME > Config Mgmt > Config Editor > Public Configs. 2. Select the configuration file and click Edit. 3. Click Tools. 4. Select Compare Config.
View list of modified files.	View a list of files edited files by all users in private or public work areas.	<ul style="list-style-type: none"> • To view a list of modified configuration files in private work area, select RME > Config Mgmt > Config Editor > Private Configs. • To view a list of modified configuration files in public work area, select RME > Config Mgmt > Config Editor > Public Configs.
Browse and edit Config Editor jobs.	Browse the Config Editor jobs that are registered on the system and edit them as necessary.	Select RME > Config Mgmt > Config Editor > Config Editor Jobs > Edit.
View job details.	View detailed information about a registered Config Editor job and perform job management operations. You can also edit a job from its detailed view.	Select RME > Config Mgmt > Config Editor > Config Editor Jobs.
Deploy a config	Define a deploy job. Defines jobs to deploy configuration files to the device.	Select RME > Config Mgmt > Config Editor > Config Editor Jobs > Create.
Copy a job	Copy a job	Select RME > Config Mgmt > Config Editor > Config Editor Jobs > Copy.
Delete a job	Delete a job	Select RME > Config Mgmt > Config Editor > Config Editor Jobs > Delete.
Stop a job	Stop a job	Select RME > Config Mgmt > Config Editor > Config Editor Jobs > Stop.

Table 11-1 Config Editor Tasks (continued)

Task	Description	Action
Check the configuration file syntax.	Check the syntax of the configuration file with external syntax checker that is registered in CMIC Link registration.	<p>To check the configuration syntax of a file in the private work area:</p> <ol style="list-style-type: none"> 1. Select RME > Config Mgmt > Config Editor > Private Configs. 2. Select the configuration file and click Edit. 3. Click Tools 4. Click External Syntax Checker. <p>To check the configuration syntax of a file in the public work area:</p> <ol style="list-style-type: none"> 1. Select RME > Config Mgmt > Config Editor > Public Configs. 2. Select the configuration file and click Edit. 3. Click Tools 4. Click External Syntax Checker.
Update DCR after deploy	Updating DCR after successfully deploying credential commands. This is applicable only for Telnet/SSH based download.	User configurable. An option is provided in the job creation flow.

Setting Up Preferences

You can use this feature to set up your editing preferences. Config Editor remembers your preferred mode, even across different invocations of the application.

You can change the mode using the Device and Version, Pattern Search, Baseline or External Configuration option but the changes do not affect the default settings.

To set up preferences:

Step 1 Select **RME > Admin > Config Mgmt > Config Editor**.

The User Preferences dialog box appears.

Step 2 Set the default edit mode:

- Select **Processed** to display the file in the Processed mode.

The configuration file appears at the configlet level (a set of related configuration commands). The default is Processed.

- Select **Raw** to display the file in the Raw mode.

The entire file appears as shown in the device.

Step 3 Click **Apply** to apply the set preferences.

Overview: Editing a Configuration File

The Editor is a core component in Config Editor. It acts as the interface to open a configuration file, make a local copy, save the changed configuration and commit the changes back to original location.

You can edit a file by:

- Selecting device and version of configuration file
- Searching for a pattern
- Selecting a baseline configuration file
- Selecting a configuration file stored in an external location

You can edit a previously opened file, that is, a file from your private area or public work area.

You can edit the files in either the Raw or Processed mode.

- Raw mode—The entire file is displayed. After you open a file in a specific mode, you can view it only in that mode.
- Processed mode—Only the file commands are displayed at the configlet (set of related configuration commands) level.

Working With the Configuration Editor

You can use the editor to:

- Edit and save changes to the configuration file in public or private work area.
- Undo editing or typing changes
- Replace a string in opened configuration files
- Compare configuration files with the same device configuration
- View changes made in the configuration file
- Run Syntax Checker

The Editor window opens in Raw or Processed mode, based on your preferences.

To launch the Editor:

Step 1 Select **RME > Config Mgmt > Config Editor**.

Step 2 Open a configuration file using any of the following methods:

- Using the selection criteria. See [Overview: Opening a Configuration File](#)
- [Using Private Configs](#)
- [Using Public Configs](#)
- [Using Device Center](#)

Using Private Configs

- a. Select **RME > Config Mgmt > Config Editor > Private Configs** to open a configuration file stored in private work area.

The List of Private Configs window appears.

- b. Select the configuration and click **Edit**.

Using Public Configs

- a. Select **RME > Config Mgmt > Config Editor > Public Configs** to open a configuration file stored in public work area.

The Public Configs window appears.

- b. Select the configuration and click **Edit**.

Using Device Center

- a. In the CiscoWorks LMS Portal home page, select **Device Troubleshooting > Device Center**.

The Device Center dialog box appears.

- b. Select a device using device selector.

The functions available appears.

- c. Select **Management tasks > Edit config**

The Editor window appears.

Step 3 Edit the credential commands in the Raw or Processed mode. See [Processed Mode](#) and [Raw Mode](#).

Step 4 Select any of the following:

- **Save** to save changes to the configuration file. See [Saving a Configuration File](#).
 - **Save As** to save changes to the configuration file to a specified location.
 - **Undo All** to undo editing or typing changes. See [Undoing All](#).
 - **Replace All** to replace a string in the opened configuration files. See [Replacing All](#).
 - **Tools...** to launch the Config Editor tools. See [Selecting Configuration Tools](#).
 - **Close** to close the Config Editor window. See [Closing a Configuration File](#).
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Processed Mode

The configuration file appears at the configlet level (a set of related configuration commands). The default is Processed.

In the Processed mode, Editor window is divided into two panes.

- The left pane displays the configuration tree according to the grouping of configlets.
- The right pane displays the commands of configlets in two sections:
 - The lower section, called the credential area contains all the credential commands with the credentials masked. Click on the encrypted link to modify credentials.
 - The upper section, called the non-credential area contains only non-credential commands. The non-credential commands are editable.

Raw Mode

The entire file appears as shown in the device. After you open a file in a specific mode, you can view it only in that mode.

In Raw mode there are two sections for the entire configuration.

- The upper section, called the non-credential area contains only non-credential commands. The non-credential commands are editable.
- The lower section contains all the credential commands with the credentials masked. The credential commands can be edited.



Note

Do not delete or edit the placeholder that describes the credential position. If you do so, the file generates errors.

Editing Configuration Files by Handling Interactive Commands in Config Editor Jobs

An interactive command is the input you will have to enter, after a command runs.

For example, in the case of Catalyst 5000 series devices, the command is:

```
set vtp v2 enable
```

This command enables version 2 of VTP on the device. This command is an interactive command and requires user intervention after running the command.

You can download this command through ConfigEditor using:

```
#INTERACTIVE
set vtp v2 enable<R>y
#ENDS_INTERACTIVE
```

In Resource Manager Essentials, such commands can be included in config jobs run using Config Editor. You can handle interactive commands by editing configuration files.

To edit configuration files using interactive commands:

Step 1 Select **RME > Config Mgmt > Config Editor > Private Configs** to open a configuration file stored in private work area.

The List of Private Configs window appears.

Or

Select **RME > Config Mgmt > Config Editor > Public Configs** to open a configuration file stored in public work area.

The Public Configs window appears.

You can also perform any of the editor operations by opening a configuration file for editing by Device and Version, Pattern Search, Baseline and External Location.

For more details see, [Overview: Opening a Configuration File](#).

Step 2 Click **Edit**.

The Editor window appears.

- Step 3** Enter an interactive command in the configuration file, in the upper section that contains only non-credential commands using the following syntax:

```
#INTERACTIVE
command1<R>response1<R>response2
command2<R>response1<R>response2<R>response3
command3<R>response1
command4<R>response1<R>response2
#ENDS_INTERACTIVE
```

<R> tag is case-sensitive and this must be entered in uppercase only.

- Step 4** Enter modification comments in the Change Description field.
-

Modifying Credentials

You can use this feature to modify or delete the credentials of a configuration file. To do this:

- Step 1** Select **RME > Config Mgmt > Config Editor > Private Configs** to open a configuration file stored in private work area.

The List of Private Configs window appears.

Or

Select **RME > Config Mgmt > Config Editor > Public Configs** to open a configuration file stored in public work area.

The Public Configs window appears.

You can also perform any of the editor operations by opening a configuration file for editing by Device and Version, Pattern Search, Baseline and External Location.

For more details see, [Overview: Opening a Configuration File](#).

- Step 2** Click **Edit**.

The Editor window appears.

- Step 3** Click the masked credential link in the With Credentials pane. (The masked credential appears as multiple *s.)

The Modify Credentials dialog box appears.

Step 4 Enter the information required to modify credentials.

Field	Description
Modify	Modifies credentials of the selected configlets.
Delete	Deletes the existing credentials of the selected configlets.
Modify Mode	
Old Credential	Old credential appears in clear text in a non-editable text box.
New Credential	Enter the new password of the selected configlets. This field is editable when you select the Modify option.
Confirm Credential	Enter the new password of the selected configlets again to confirm the new value. This field is editable when you select the Modify option.

Step 5 Click **Submit** to record changes.

The changes are reflected in the Editor window.

Step 6 Enter modification comments in the Change Description field.

Removing a Configuration File

You can use this feature to remove configuration files from private work area or public work area using Config Editor.

To remove a configuration file stored in the private work area:

Step 1 Select **RME > Config Mgmt > Config Editor > Private Configs**.

The List of Private Configs window appears.

Step 2 Select the configuration files that need to be removed.

Step 3 Click **Delete**.

To remove a configuration file stored in the public work area or the user archive:

Step 1 Select **RME > Config Mgmt > Config Editor > Public Configs**.

The Public Configs window appears.

Step 2 Select the configuration files that need to be removed.

Step 3 Click **Delete**.

You can also perform any of the editor operations by opening a configuration file for editing by Device and Version, Pattern Search, Baseline and External Location. For more details see, [Overview: Opening a Configuration File](#).

Saving a Configuration File

You can use this feature to save your changes to the configuration file. The changes can be saved in either private area or public area. You can open the file later to modify it or to deploy it to the device.

To save a configuration file:

Step 1 Select **RME > Config Mgmt > Config Editor > Private Configs** to open a configuration file stored in private work area.

The List of Private Configs window appears.

Or

Select **RME > Config Mgmt > Config Editor > Public Configs** to open a configuration file stored in public work area.

The Public Configs window appears.

You can also perform any of the editor operations by opening a configuration file for editing by Device and Version, Pattern Search, Baseline and External Location. For more details see, [Overview: Opening a Configuration File](#).

Step 2 Select the configuration file and click **Edit**.

The Editor window appears.

Step 3 Click **Save**.

The Save Config dialog box appears, only if you are saving the configuration file for the first time. The subsequent saving of a file is done directly to its previously saved location.

Step 4 Enter the information required to save a configuration file.

Field	Description	Usage Notes
Public	Saves the files in the public area.	None.
Private	Saves the files in the private area.	When a configuration from list of private config is opened and saved in the public area (user archive) with the same name as the private configuration, the private configuration with that name gets deleted. However, the reverse is not true. That is when a config is opened from the public area (user archive) location and saved in the private area, the public configuration is not deleted.
Branch Name	Name of branch.	Private area for you where configuration files are stored locally.

Step 5 Click either:

- **Submit** to save the configuration file.

Or

- **Cancel** to return to the previous setting.

After the configuration file opened from Device Archive is saved to the private or public (user archive), all the subsequent operations (compare, show changes) behave as if the configuration is opened from a private or public location.

Undoing All

You can use this feature to undo editing or typing changes. To do this:

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- Step 1** Select **RME > Config Mgmt > Config Editor > Private Configs** to open a configuration file stored in private work area.
- The List of Private Configs window appears.
- Or
- Select **RME > Config Mgmt > Config Editor > Public Configs** to open a configuration file stored in public work area.
- The Public Configs window appears.
- You can also perform any of the editor operations by opening a configuration file for editing by Device and Version, Pattern Search, Baseline and External Location. For more details see, [Overview: Opening a Configuration File](#).
- Step 2** Select the configuration file and click **Edit**.
- The Editor window appears.
- Step 3** Edit the configuration file.
- Step 4** Click **Undo All**.
- A message window appears with the message:
- Do you want to discard all the changes?
- Step 5** Click either:
- **OK** to return to the last saved configuration file.
- Or
- **Cancel** to avoid making any changes.
-

Replacing All

You can use this feature to search for and replace text in the file. To do this:

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- Step 1** Select **RME > Config Mgmt > Config Editor > Private Configs** to open a configuration file stored in private work area.
- The List of Private Configs window appears.
- Or
- Select **RME > Config Mgmt > Config Editor > Public Configs** to open a configuration file stored in public work area.
- The Public Configs window appears.
- You can also perform any of the editor operations by opening a configuration file for editing by Device and Version, Pattern Search, Baseline and External Location. For more details see, [Overview: Opening a Configuration File](#).

- Step 2** Select the configuration file and click **Edit**.
The Editor window appears.
- Step 3** Click **Replace All**.
The Replace All dialog box appears.
- Step 4** Enter the text to search for in the Find field.
- Step 5** Enter the replacement text in the Replace With field.
- Step 6** Click either:
- **Replace All** to replace all instances of the text in the text area.
Or
 - **Cancel** to avoid making any changes.
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Printing a Configuration File

You can use this feature to print the configuration file. To do this:

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- Step 1** Select **RME > Config Mgmt > Config Editor > Private Configs** to open a configuration file stored in private work area.
The List of Private Configs window appears.
Or
Select **RME > Config Mgmt > Config Editor > Public Configs** to open a configuration file stored in public work area.
The Public Configs window appears.
You can also perform any of the editor operations by opening a configuration file for editing by Device and Version, Pattern Search, Baseline and External Location. For more details see, [Overview: Opening a Configuration File](#).
- Step 2** Select the configuration file and click **Edit**.
The Editor window appears.
- Step 3** Select the Print icon at the top right corner.
A new browser window appears. The details are in PDF format. You can print the information, using the Print option provided by the browser.
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Exporting Changes of a Configuration File

You can use this feature to export the configuration file to PDF format. To do this:

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- Step 1** Select **RME > Config Mgmt > Config Editor > Private Configs** to open a configuration file stored in private work area.
- The List of Private Configs window appears.
- Or
- Select **RME > Config Mgmt > Config Editor > Public Configs** to open a configuration file stored in public work area.
- The Public Configs window appears.
- You can also perform any of the editor operations by opening a configuration file for editing by Device and Version, Pattern Search, Baseline and External Location. For more details see, [Overview: Opening a Configuration File](#).
- Step 2** Select the configuration file and click **Edit**.
- The Editor window appears.
- Step 3** Select the Export icon at the top right corner.
- A new browser window appears. The details are in PDF format.
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Deploying a Configuration File

You can use this feature to deploy a configuration file to a device.

To deploy a configuration file:

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- Step 1** Select **RME > Config Mgmt > Config Editor > Private Configs** to open a configuration file stored in private work area.
- The List of Private Configs window appears.
- Or
- Select **RME > Config Mgmt > Config Editor > Public Configs** to open a configuration file stored in public work area.
- The Public Configs window appears.
- You can also perform any of the editor operations by opening a configuration file for editing by Device and Version, Pattern Search, Baseline and External Location. For more details see, [Overview: Opening a Configuration File](#).
- Step 2** Select the configuration file and click **Deploy**.
- The Job Option Details dialog box appears.

Step 3 Enter the following information:

Field	Description
Job Information	
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 (Common Services > Server > Admin > System Preferences).</p> <p>We recommend that you configure the CiscoWorks E-mail ID in the View / Edit System Preferences dialog box (Common Services > Server > Admin > System Preferences). When the job starts or completes, an e-mail is sent with the CiscoWorks E-mail ID as the sender's address.</p>
Job Options	
Job Password	<ul style="list-style-type: none"> • If you have enabled the Enable Job Password option and disabled the User Configurable option in the Job Policy dialog box (Resource Manager Essentials > Admin > Config Mgmt > Config Job Policies) enter the device login user name and password and device Enable password. • If you have enabled the Enable Job Password option and enabled the User Configurable option in the Job Policy dialog box (Resource Manager Essentials > Admin > Config Mgmt > Config Job Policies) either: <ul style="list-style-type: none"> – Enter the device login user name and password and device Enable password or <ul style="list-style-type: none"> – Disable the Job Password option in the Job Schedule and Options dialog box.
Deploy Mode	
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. (RME 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> <p>Overwrite mode supports Write2Run of the configuration only.</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> <p>Merge mode supports both Write2Run and Write2Start of the configuration.</p>

Step 4 Click **Submit**.

An immediate 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 5 Click **OK**.

You can check the status of your scheduled *Config Editor Deploy* job by selecting **RME > Config Mgmt > Config Editor > Config Editor Jobs**.

-
- Configurations edited from Raw mode (.RAW) can be downloaded to both Startup or Running configuration of the device.
 - Configurations edited from Processed mode (.PROC) can only be downloaded to the Running configuration of the device.

Closing a Configuration File

You can use this feature to close the configuration file without exiting the application. If the file contains unsaved changes, you are prompted to save before closing.

To close the configuration file:

Step 1 Select **RME > Config Mgmt > Config Editor > Private Configs** to open a configuration file stored in private work area.

The List of Private Configs window appears.

Or

Select **RME > Config Mgmt > Config Editor > Public Configs** to open a configuration file stored in public work area.

The Public Configs window appears.

You can also perform any of the editor operations by opening a configuration file for editing by Device and Version, Pattern Search, Baseline and External Location.

For more details see, [Overview: Opening a Configuration File](#).

Step 2 Select the configuration file and click **Edit**.

The Editor window appears.

Step 3 Click **Close**.

If the file contains any unsaved changes, a message window appears with the message:

You have done some changes since last save. Do you want to the save the changes?

- Step 4** Click either:
- **OK** to save the configuration file in a private area.
Your changes are saved.
- Or
- **Cancel** to ignore your changes.
-

Selecting Configuration Tools

You can use this feature to choose a configuration tool from the list of configuration tools. The list of configuration tools available are as follows:

- [Comparing Versions of Configuration Files](#)
- [Displaying Your Changes](#)
- [Overview: Syntax Checker](#)

To select a configuration tool:

- Step 1** Select **RME > Config Mgmt > Config Editor > Private Configs** to open a configuration file stored in private work area.

The List of Private Configs window appears.

Or

Select **RME > Config Mgmt > Config Editor > Public Configs** to open a configuration file stored in public work area.

The Public Configs window appears.

You can also perform any of the editor operations by opening a configuration file for editing by Device and Version, Pattern Search, Baseline and External Location.

For more details see, [Overview: Opening a Configuration File](#).

- Step 2** Select the configuration file and click **Edit**.

The Editor window appears.

Step 3 Click **Tools**.

The Select Tool dialog box appears with the following tools:

Option	Description
Compare Config	Compares the current file with any earlier version in the configuration archive.
View Changes	Displays the changes made in the opened file.
External Syntax Checker	<ol style="list-style-type: none"> 1. Select this option to check the configuration file using an external syntax checker that is registered with Cisco Management Integration Center (CMIC). 2. Click Submit. Config Editor launches the URL, displaying the configuration commands and sysobject ID of the device as input to the external syntax checker. 3. View the output displayed by the external syntax checker. 4. Modify the commands in Config Editor.

Step 4 Select a tool.**Step 5** Click either:

- **Submit** to launch the tool.

Or

- **Cancel** to close the window.

Comparing Versions of Configuration Files

You can use this feature to compare the current file with any earlier version in the configuration archive.

The Compare option is enabled only if a file is open.

To compare versions of configuration files:

Step 1 Select **RME > Config Mgmt > Config Editor > Private Configs** to open a configuration file stored in private work area.

The List of Private Configs window appears.

Or

Select **RME > Config Mgmt > Config Editor > Public Configs** to open a configuration file stored in public work area.

The Public Configs window appears.

You can also perform any of the editor operations by opening a configuration file for editing by Device and Version, Pattern Search, Baseline and External Location.

For more details see, [Overview: Opening a Configuration File](#).

- Step 2** Select the configuration file and click **Edit**.
The Editor window appears.
- Step 3** Click **Tools**.
The Select Tool dialog box appears.
- Step 4** Select **Compare Config**.
- Step 5** Click either:
- **Submit** to view the Version Selector dialog box and proceed to the next step.
Or
 - **Cancel** to close the window without making any changes.
- Step 6** Select a version with which you want to compare the current open file, from the list of other versions.
The Configuration Compare Report appears.
- Step 7** Select the View mode.
- Step 8** Click **Processed** to display files in Processed mode. This is the default option.
Files appear at the configlet level (a set of related configuration commands).
- Step 9** Click **Raw** to display the files in Raw mode.
The entire file appears.
If you want to print the report, click **Print**.
-

Displaying Your Changes

You can use this feature to display the changes made in the opened file. The text file in archive is compared with the opened version.

The View Changes option is enabled only if a file is open

To display the changes in the open file:

-
- Step 1** Select **RME > Config Mgmt > Config Editor > Private Configs** to open a configuration file stored in private work area.
The List of Private Configs window appears.
Or
Select **RME > Config Mgmt > Config Editor > Public Configs** to open a configuration file stored in public work area.
The Public Configs window appears.
You can also perform any of the editor operations by opening a configuration file for editing by Device and Version, Pattern Search, Baseline and External Location.
For more details see, [Overview: Opening a Configuration File](#).
- Step 2** Select the configuration file and click **Edit**.
The Editor window appears.

- Step 3** Click **Tools**.
The Select Tool dialog box appears.
- Step 4** Select **View Changes** option.
- Step 5** Click either:
- **Submit** to view the differences in a new window.
- Or
- **Cancel** to close the window without making any changes.
-

Overview: Syntax Checker

Config Editor provides ways to check the syntax of config commands using syntax checker. Config Editor checks syntax using the [Interface to External Syntax Checker](#).

Interface to External Syntax Checker

The external syntax checker has to be registered with Cisco Management Integration Center (CMIC) using Link Registration.

For details see, [Registering an External Syntax Checker Application With CMIC](#). Config Editor queries CMIC to check if the application is registered with the name “Config Syntax Checker”.

If the application is registered, Config Editor knows the External Syntax Checker URL to be launched and parameters to be passed to the syntax checker.

Config Editor launches the URL with two parameters, deviceSysObjID and cfgCmds:

- **deviceSysObjID**—sysObjectID of the device. External Syntax Checker uses deviceSysObjID to identify the device type.
- **cfgCmds**—List of commands for which the syntax has been checked.

ConfigEditor launches the External Syntax Checker URL in POST method. When the URL is launched you can view the configuration commands for which the syntax has been checked.

To validate the results and correct the commands in Config Editor:

-
- Step 1** On the CiscoWorks LMS Portal home page, select **RME > Config Mgmt > Config Editor > Config Files**.
- Step 2** Select **Device and Version** in the Selection Area page.
- Step 3** Click **Go**.
The Device and Version dialog box appears.
- Step 4** Select the required device for which you wish to check the syntax using Device Selector.

Step 5 Select the information required to open a configuration file.

Field	Description
Version	
Latest	Select the latest version of the configuration file.
Earlier	Select an earlier version of the configuration file.
Version Number	<p>Version number of the configuration file. This option is enabled when you select Earlier in the version field.</p> <p>This field is not editable.</p> <p>To enter the version number:</p> <ol style="list-style-type: none"> 1. Click Select to open the Version Tree dialog box. 2. Select the desired version. 3. Either: <ul style="list-style-type: none"> – Click OK to select the version Or – Click Cancel to close the window.

Step 6 Click **Edit** to edit a configuration file
The Configuration Editor dialog box appears.

Step 7 Click **Tools**.
The Select Tool dialog box appears with the tools.

Step 8 Select **External Syntax Checker**.

Step 9 Click **Submit** to launch the tool.
Config Editor launches the External Syntax Checker URL.

Registering an External Syntax Checker Application With CMIC

Use CiscoWorks LMS Portal home page to register any External Syntax Checker Application.
To register an external syntax checker application with CMIC:

Step 1 On the CiscoWorks LMS Portal home page, select **Common Services > Homepage > Link Registration**.

The Registered Links window appears.

Step 2 Click **Registration** in the Links Registrations Status page.

The Enter Link Attributes window appears.

Step 3 Enter the inputs for the following fields:

Field	User Notes
Name	Enter Config Syntax Checker.
URL	Enter the External Syntax Checker URL.
Display Location	Select Third Party.

The Registered Links window appears with the list of registered links.

Viewing the List of Modified Configs

You can use this feature to display a list of modified configuration files by all users in private work area (select **Private Configs**) or public work area (select **Public Configs**).

To list out all the modified files:

Step 1 Select **RME > Config Mgmt > Config Editor > Private Configs** to open a configuration file stored in private work area.

The List of Private Configs window appears.

Or

Select **RME > Config Mgmt > Config Editor > Public Configs** to open a configuration file stored in public work area.

The Public Configs window appears.

You can also perform any of the editor operations by opening a configuration file for editing by Device and Version, Pattern Search, Baseline and External Location.

For more details see, [Overview: Opening a Configuration File](#).

Step 2 Do any of the following:

- Select the file and click **Edit** to edit an opened configuration file.
The Configuration Editor dialog box appears.
- Select the file and click **Deploy** to deploy a job.
The Select Configs dialog box appears.
- Select the file and click **Delete** to remove an opened configuration file.
The screen is refreshed and the file is removed.

You can open a raw config in processed format. However, you cannot open a processed config in raw format.

Overview: Opening a Configuration File

You can use this feature to open a configuration file for editing.

You can open a configuration file by:

- **Device and Version**—Opens a configuration file from the archive.
- **Pattern Search**—Opens a configuration file by searching for a pattern.
- **Baseline**—Opens a configuration file using a baseline template stored in the device configuration management repository.
- **External Location**—Opens a configuration file stored in an external location

If another user has opened the configuration file, config editor opens another copy of the file.

To open a configuration file:

Step 1 Select **RME > Config Mgmt > Config Editor > Config Files**.

Step 2 Select an option in the Selection Area page.

Step 3 Click **Go**.

The Option dialog box opens in a new window.

Opening a Configuration File - By Device and Version

You can use this feature to open a configuration file from the archive. The file opens in read-write mode according to your edit permissions.

The file appears in either a Raw or Processed mode, based on your preferences.

To open a configuration file from the archive:

Step 1 Select **RME > Config Mgmt > Config Editor > Config Files**.

Step 2 Select **Device and Version** in the Selection Area page.

Step 3 Click **Go**.

The Device and Version dialog box appears.

Step 4 Select the required device using the Device Selector.

Step 5 Select the information required to open a configuration file.

Field	Description
Version	
Latest	Select the latest version of the configuration file.
Other	Select an earlier version of the configuration file.

Field	Description
Version Number	Version number of the configuration file. This option is enabled when you select Other in the version field. This field is not editable. To enter the version number: <ol style="list-style-type: none"> 1. Click Select to open the Version Tree dialog box. 2. Select the version you need. 3. Either: <ul style="list-style-type: none"> • Click OK to select the version Or <ul style="list-style-type: none"> • Click Cancel to close the window.
Format	
Raw	Displays the entire configuration file. After you open a file in a specific mode, you can view it only in that mode.
Processed	Displays only the commands.

Step 6 Click either:

- **Edit** to edit a configuration file
The configuration editor dialog box appears.
- Or
- **Reset** to clear all fields and get to the default setting.

Opening a Configuration File - By Pattern Search

You can use this feature to open a configuration file by

- Selecting a label set in Config Archive
- Selecting a custom query of default patterns
- Searching for a pattern.

A pattern can be any text string. The file is displayed in either a Raw or Processed mode, based on your preferences.

To open a configuration file:

Step 1 Select **RME > Config Mgmt > Config Editor > Config Files**.

Step 2 Select **Pattern Search** in the Selection Area page.

Step 3 Click **Go**.

The Pattern Search dialog box appears.

Step 4 Do any of the following:

- [Open a configuration file by selecting a label set in Config Archive](#)
- [Open a configuration file by selecting a custom query of default pattern](#)
- [Open a configuration file by searching for a pattern](#)

Open a configuration file by selecting a label set in Config Archive

- a. Select **Label** to enable the Select a Config Label drop-down list box
- b. Select the required label from the Select a Config Label drop-down list box

Open a configuration file by selecting a custom query of default pattern

Select the required **Custom Query** from the Select Custom Query drop-down list box.

Open a configuration file by searching for a pattern

- a. Enter a pattern in the editable Pattern Column. For example, `http server`.
To search for more than one pattern, enter the second and third patterns in the Pattern 2 and Pattern 3 fields and so on. You cannot search for special characters. For example, `control-C`.
- b. Click the corresponding Contains/Does not contain row to view the selection drop-down list box.
- c. Select **Include** if you wish to search for configurations that match the patterns you entered and select **Exclude** if you wish to search for configurations that do *not* match the patterns you entered. Select the required devices using the Device Selector.

Step 5 Select the required options:

Field	Description
Setting	
Match Any	Searches for configurations that have at least one of the patterns you entered.
Match All	Searches for configurations that include all patterns you entered.
Match Case	Searches for configurations that are identical to the pattern entered.
Search Versions	
Latest	Searches in the latest version of the configuration file
All	Searches in all the versions of the configuration file

Step 6 Click **Next**

The Search Archive Result window appears in the Pattern Search Results page with the search results. The columns in this window are:

Column	Description
Device Name	Name of the device
Version	Version of the configuration file
Created On	Date on which the configuration file is created
Change Description	Modification comments

- Step 7** Select any of the following:
- **Edit** to open the selected configuration file in a pop up window for editing. The search result page will be retained. You can select some other configuration from the search result page and open that for editing.
 - **Back** to return to the Pattern Search page.
 - **Finish** to complete the search.
 - **Cancel** to return to the Selection Criteria page.
-

Opening a Configuration File - By Baseline

You can use this feature to open a baseline configuration template maintained in the configuration archive. You can create a baseline configuration from the baseline template by replacing all the variables that appear in the configuration.

Config Editor does not check whether you have changed the template variables.



Note

The baseline template will be opened only in Raw format.

To open a baseline configuration template:

Step 1 Select **RME > Config Mgmt > Config Editor > Config Files**.

Step 2 Select **Baseline** in the Selection Area page.

Step 3 Click **Go**.

The Baseline Config dialog box appears.

Step 4 Select the required devices using the Device Selector.

Step 5 Click **Next**

The Baseline Template window appears with the following details:

Column	Description
Baseline Name	Name of the Baseline template.
Description	Brief description about the template.
Created On	Date on which the template was created.

Step 6 Select a Baseline template based on the device type.

Step 7 Select any of the following:

- **Back** to return to the Baseline Config page.
 - **Finish** to associate the selected template to a device.
 - **Cancel** to return to the Selection Criteria page.
-

While editing baseline template, you are required to replace variables that appear in the template with actual values.

For example, in the following line [msg] is the variable.
 banner motd [msg]

You should replace [msg] with actual value.

Baseline Configuration Editor

You can use this feature to edit the Baseline template of the configuration file. To do this:

Step 1 Select **RME > Config Mgmt > Config Editor > Config Files**.

Step 2 Select **Baseline** in the Selection Area page.

Step 3 Click **Go**.

The Baseline Config dialog box appears.

Step 4 Select the required devices using the Device Selector.

Step 5 Click **Next**.

The Baseline Template window appears with the following details:

Column	Description
Baseline Name	Name of the Baseline template.
Description	Brief description about the template.
Created On	Date on which the template was created.

Step 6 Select a Baseline template based on the device type.

Step 7 Click **Finish**.

The Baseline Configuration Editor dialog box appears.

Step 8 Edit the text area. (The upper section contains only non-credential commands and is called the text area.)

Step 9 Enter comments for changes in baseline in the Change Description field.

Step 10 Select any of the following:

- **Save** to save changes to the configuration file.
- **Undo All** to undo editing or typing changes.
- **Replace All** to replace a string in the opened configuration files.
- **Tools...** to launch the Config Editor tools.
- **Close** to close the Config Editor window.

Opening an External Configuration File

You can use this feature to associate a device with the selected configuration file from an external location (other than archive) in the server. The file appears in either a Raw or Processed mode, based on your preferences.

For example, if you associate the selected configuration to an IOS device in the Processed mode, then the given configuration is processed based on the IOS rules defined in RME.

The file in the archive can be opened with a specified format from the temp directory on the local server or from another file system mapped drive or any mount. The file opened is validated for format with DCMA.

To open a configuration file from an external location:

Step 1 Select **RME > Config Mgmt > Config Editor > Config Files**.

Step 2 Select **External Location** in the Selection Area page.

Step 3 Click **Go**.

The External File Selection dialog box appears.

Step 4 Click **Browse** to select the external file location.

The External Config Selector dialog box appears with the following fields:

Field	Description	Usage Notes
File	Location of the file	Enter the file location. For example, D:/CSCOpX
Directory content	Name of the directory	Select the directory. For example, bin/
Drive	Name of the drive	Select the drive. For example, D:\

Step 5 Click either:

- **OK** to enter the external location.
- Or
- **Cancel** to return to the External File Selection page.

Step 6 Select the required devices using the Device Selector.

Step 7 Either:

- Click **Edit** to edit a configuration file
 - The configuration editor dialog box appears.
 - Or
 - Click **Reset** to clear all fields and get to the default setting.
-

You can control the access to directories/folders present on the server. There is a property file for this purpose:

NMSROOT/MDC/tomcat/webapps/rme/WEB-INF/classes/com/cisco/nm/rmeng/config/cfgedit/ConfigEditor.properties.

This file has two variables:

- *DIR_LIST*—You can mention all the directories or files separated by pipe symbol (`|`).
- *ALLOW*—You can be set as true or false. If you set the value as true, means you can access only those directories or files given as values for the variable *DIR_LIST*. If you set the value as false, you cannot access those directories or files given as values for the variable *DIR_LIST*.

The default values for the variables are:

- *DIR_LIST*—`etc/passwd`
- *ALLOW*—`false`

What Happens During Configuration Deployment in Overwrite and Merge Modes

Overwrite Mode

Config Editor assumes that the latest archived version is the same as the running configuration on the device.

Before Config Editor downloads the archived configuration on the device, it compares the archived version (which you have modified) with the latest version. The application then overwrites the running configuration on the device with the archived version. This means, after the configuration is successfully deployed, the selected configuration and the running configuration on the device are the same.

For example, assume that the archived version contains commands a, b, c, and d; and that the latest running version, contains commands a, b, e, f, and g. After the archived configuration has been restored, the currently running configuration on the device, will contain commands a, b, c, and d.

Ensure that all the required commands are in the archived version. You can review the work order and make necessary changes by editing the archived version, if required.

This is the default mode for the configuration deployment.

Merge Mode

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.

The selected running configuration is not compared with the running configuration in the Configuration Archive.

We recommend that you use this mode on newly deployed devices. This is because, the Merge option effectively deploys the entire configuration from the archive, on to the device.

Overview: Downloading a Configuration File

To download a configuration file to the device and to the archive, you must:

- Start creating a download job.
- Select the configuration file on which the job will run.
- Configure the job properties.
- Set the job approvers.
- Review the job work order.

When a job starts to download, the users on the job approver list are notified by e-mail. At least one approver must approve the job before it can run. Make sure that an approver list with the approvers you want exists.

If there is no approver list but you have the correct access privileges, you must modify or create approver lists, using the Job Approval option (Select **RME**> **Admin**> **Approval**). Otherwise, contact your system administrator.

Starting a New Download Job

You can use the Create Config Download Job wizard to define and schedule a download job.

Step 1 Select **RME > Config Mgmt > Config Editor > Config Editor Jobs**.

The Config Deploy Job Browser window appears.

Step 2 Click **Create**.

The Create Config Download Job wizard appears.

All dialog boxes of the wizard contain the following buttons:

Button	Description
Back	Returns to the previous page.
Next	Returns to the next page.
Finish	Completes creation of jobs.
Cancel	Cancels creation of job.

Selecting Configs

You can use the Select Configs dialog box to select configuration files of devices on which the download job will run.

You must start a new download job before you start selecting configuration files. To do this:

-
- Step 1** Select a configuration file on which to run the job using device selector on the left pane.
- The select configuration file dialog has two panes.
- Left Pane—The Device Selector appears.
 - Right Pane—The list of selected configuration files appear.
- Step 2** Click either:
- **Add Latest** to move the latest version of the selected configuration file to the Selected Configuration Files pane
- Or
- **Add Other Version** to move any version of the selected configuration file to the Selected Configuration Files pane
- Step 3** Do any of the following:
- Click **Next** to proceed to the Job Schedule and Options dialog box.
 - Click **Cancel** to stop creating a download job.
 - Select a configuration file from the Selected Configuration Files pane and click **Delete** to remove a configuration file.
-

Scheduling a Job

This feature allows you to assign a job name, schedule the job and set job options.

Before scheduling a job you must:

1. Start a new download job.
2. Select Configs.

To schedule a job:

Step 1 Enter the following information in the Job Schedule and Options dialog box.

Field	Description/Action	Usage Notes
Scheduling		
Run Type	Schedules the job to run immediately or in the future. Select either Once or Immediately.	You can specify when you want to run the job. To define this, select an option from the drop down menu: Once—Job will run once in the future. You can specify the Starting Date and Time for the job to be run Immediately—Job will run immediately. This option is not available if Job Approval is enabled.
Date	Date on which you want to run the job.	Select date for the job to run. If Run Type is Immediate, the system date is automatically selected.
At	Time when you want to run the job in the future.	Select time for the job to run. If Run Type is Immediate, the system time is automatically selected.
Job Info		
Job Description	Enter job description.	Make each description unique so you can easily identify jobs.
E-mail	Allows you to enter the e-mail addresses to which the job will send status notices. Separate multiple addresses with commas.	E-mail notification is sent when job is created, started, deleted, canceled, and completed.
Comments	Allows you to enter comments.	
Approval Comment	Allows you to enter approval comments.	This field is not active if approval comments were not set using RME administration approval. Select RME > Admin > Approval to set approval comments. For more information, see Approving and Rejecting Jobs Online help.
Maker E-mail	Mail ID of the person who created the job.	This field is not active if approvers were not set using RME administration approval. Select RME > Admin > Approval to set approval comments. For more information, see Approving and Rejecting Jobs Online help.

Field	Description/Action	Usage Notes
Job Options		
Fail on mismatch of Configuration Version	Select this option, if you want to cause the job to be considered Failed, if there is a version mismatch.	A job is considered Failed when the most recent configuration version in the configuration archive is not identical to the configuration that was running when you created the job.
Sync archive before running a job	Select this option if you want to archive the running configuration before making configuration changes.	Synchronize archive before running a job policy gets selected when Fail on mismatch of Configuration Version policy is selected.
Delete Config after Download	Select this option if you want to delete the configuration file after download.	Applicable only to private configuration files.
Copy running to Startup	Select this option if you want to copy the running configuration to the startup configuration on each device after configuration changes are made successfully.	This does not apply to Catalyst OS devices.
Enable Job Password	Select this option to enable username and password.	
User Name	Enter the username configured on the device.	This field is editable only when you select the Enable Job Password option. RME ignores the username in the RME database and uses the newly entered username instead.
Password	Enter the password for the device.	This field is editable only when you select the Enable Job Password option. RME ignores the password in the RME database and uses the newly entered password instead.
Enable User Name	Enter the name of the enable user configured on the device.	This field is editable only when you select the Enable Job Password option. RME ignores the password in the RME database and uses the newly entered password instead.
Enable Password	Enter the enable password configured on the device.	This field is editable only when you select the Enable Job Password option. RME ignores the password in the RME database and uses the newly entered password instead.

Field	Description/Action	Usage Notes
Failure Policy	Specify what the job should do if it fails to run on the device.	<p>Select Ignore Failure and Continue from the drop-down list box to continue the job and make configuration changes to the remaining devices, configured by the job</p> <p>Or</p> <p>Select Stop on Failure to stop making changes to the remaining devices.</p>
Execution	Mode in which the job is executed. There are two options, Parallel and Sequential.	<p>Select Parallel to run the job on multiple devices at same time</p> <p>Or</p> <p>Select Sequential to run the job one device at a time.</p> <p>Click Device Order.</p> <p>The Set Device Order dialog box appears.</p> <p>Use the Up and Down arrows to move a device up or down.</p> <p>Click Done.</p>
Download Mode	Mode in which the configuration file is downloaded. The two modes are Overwrite and Merge.	<p>Do either of the following:</p> <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. (RME 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> <p>Overwrite mode supports only Write2Run of the configuration.</p> <p>Or</p> <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> <p>Merge mode supports both Write2Run and Write2Start of the configuration.</p>

Field	Description/Action	Usage Notes
Push Config to	The method in which the Configuration is pushed. The two methods are Running and Startup	<p>Do either of the following:</p> <p>Select the Running option, if you want to replace the existing running configuration on the device, with the selected configuration file. This is also referred to as Write2Run.</p> <p>Or</p> <p>Select the Startup option, if you want to erase the contents of the device's startup configuration and write the contents of the given file as the device's new startup configuration. This is also referred to as Write2Start.</p> <p>Configurations edited from Raw mode (.RAW) can be downloaded to both Startup or Running configuration of the device.</p> <p>Configurations edited from Processed mode (.PROC) can only be downloaded to the Running configuration of the device.</p>
Update RME credentials after deploy	Update the credentials in DCR after deployment, if the deployed commands include any credentials commands.	<p>Choose this option if you want to update the DCR with the deployed credentials commands such as SNMP community strings, Telnet username/password etc.</p> <p>Write2Start does not support changing the RME credentials after deployment.</p>

Step 2 Select any of the following:

- **Back** to return to the Select Configs dialog box.
- **Next** to proceed to the Job Summary dialog box.
- **Cancel** to stop creating a Download job.

Configuring Job Policies for Config Editor

You can configure a default policy for job properties that applies to all future jobs.

You can also specify if the property can be modified when the job is created.

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

To do this:

Step 1 Select **RME > Admin > Config Mgmt > Config Job Policies**.

The Config Job Policies dialog box appears.

Step 2 Select **Config Editor** from the application drop-down list.

Step 3 Enter the following information in Config Job Policies dialog box.

Field Name	Description	Usage Notes
<p>Failure Policy</p> <p>This appears only if you select either Config Editor or NetConfig application.</p>	<p>Specify what the job should do if it fails to run on the device.</p> <p>You can stop or continue job, and roll back configuration changes to failed device or all devices configured by the job.</p> <p>You can select one of these options:</p> <ul style="list-style-type: none"> • Stop on failure—Stops the job on failure. • Ignore failure and continue—Continues the job on failure. • Rollback device and stop—Rolls back the changes on the failed device and stops the job. This is applicable only to NetConfig application. • Rollback device and continue—Rolls back the changes on the failed device and continues the job. This is applicable only to NetConfig application. • Rollback job on failure—Rolls back the changes on all devices and stops the job. This is applicable only to NetConfig application. 	<p>You can create rollback commands for a job in the following ways:</p> <ul style="list-style-type: none"> • Using a system-defined template. <p>Rollback commands are created automatically by the template.</p> <p>The Banner system-defined template does not support rollback. You cannot create rollback commands using this template.</p> <ul style="list-style-type: none"> • Creating a user template. <p>Allows you to enter rollback commands into the template.</p> <p>When you use the Adhoc and Telnet Password templates, you cannot create rollback commands.</p>
<p>E-mail Notification</p> <p>This appears for all the applications in the dropdown list.</p>	<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 (Common Services > Server > Admin > System Preferences).</p> <p>We recommend that you configure the CiscoWorks E-mail ID in the View / Edit System Preferences dialog box (Common Services > Server > Admin > System Preferences).</p> <p>When the job starts or completes, an e-mail is sent with the CiscoWorks E-mail ID as the sender's address.</p>	<p>Notification is sent when job is started and completed.</p> <p>Notification e-mails include a URL to enter to display job details. If you are not logged in, log in using login panel.</p>
<p>Sync Archive before Job Execution</p> <p>This appears if you select either Config Editor or NetConfig application.</p>	<p>The job archives the running configuration before making configuration changes.</p>	<p>None.</p>
<p>Copy Running Config to Startup</p> <p>This appears if you select either Config Editor or NetConfig application.</p>	<p>The job writes the running configuration to the startup configuration on each device after configuration changes are made successfully.</p>	<p>Does not apply to Catalyst OS devices.</p>

Field Name	Description	Usage Notes
<p>Enable Job Password</p> <p>This appears for all the applications in the dropdown list.</p>	<p>The Job Password Policy is enabled for all the jobs.</p> <p>The Archive Management, Config Editor, and NetConfig jobs use this username and password to connect to the device, instead of taking these credentials from the Device and Credential Repository.</p> <p>These device credentials are entered while scheduling a job.</p>	None.
<p>Fail on Mismatch of Config Versions</p> <p>This appears if you select either the Config Editor or NetConfig application.</p>	<p>The job will be considered a failure when the most recent configuration version in the configuration archive is not identical to the most recent configuration version that was in the configuration archive when you created the job.</p>	None.
<p>Delete Config after download</p> <p>This appears if you select Config Editor.</p>	<p>The configuration file is deleted after the download.</p>	
<p>Execution Policy</p> <p>This appears for all the applications in the dropdown list.</p>	<p>Allows you to configure the job to run on multiple devices at the same time (Parallel execution) or in sequence (Sequential Execution).</p>	<p>If you select Sequential execution, you can click Device Order in the Job Schedule and Options dialog box to set the order of the job.</p> <ol style="list-style-type: none"> 1. Select a device in the Set Device Order dialog box. 2. Either: <ul style="list-style-type: none"> • Click the Move Up or Move Down arrows to change its place in the order. Click Done to save the current order. Or • Close the dialog box without making any changes.
<p>User Configurable</p>	<p>Select this check box next to any field to make corresponding policy user configurable.</p>	<p>You can configure a user-configurable policy while defining job. You cannot modify non-user-configurable policies.</p>

Reviewing the Work Order

The work order summarizes the job you created. If you find any changes missing when you review the work order you can go back and change the options.

Complete the following prerequisite steps of the job definition process:

1. Start a new download job.
2. Select configs.
3. Configure job properties.
4. Set job approvers, if Job Approval is enabled.

To review the work order:

Step 1 Review the information in the Work Order dialog box. The fields in this dialog box are:

Field	Description
General Info	Detailed information about the job, such as owner, description and schedule.
Job Approval Info	Status of approval.
Job Policies	Policies configured for the job. Edit in Job Properties dialog box.
Devices	Devices on which the job will run. Edit in Device Selector dialog box.
Device Commands	Commands that the job will run.
Username	Username of the job owner.

- To modify the job, return to any previous dialog box and change the information.
- To return to a previous dialog box, click **Back** until the dialog box appears.

Step 2 Click **Finish** in the Work Order dialog box to register the job.

Viewing the Status of all Deployed Jobs

You can use this feature to view the status of all pending, running, and completed jobs. You can create a new job or edit, copy, stop and delete a job that you have opened.

You can only Edit one job at a time while you can Stop or Delete multiple jobs at a time.

To view all the downloaded jobs:

Step 1 Select **RME > Config Mgmt > Config Editor > Config Editor Jobs**.

The List of Deploy Jobs window appears with the list of all the jobs.

Column	Description
Job ID	Unique number assigned to job at creation. Never reused.
Run Status	Job states: <ul style="list-style-type: none"> • Canceled • Suspended • Missed start • Rejected • Succeeded • Succeeded with info • Failed, Crashed • Failed at start • Running.
Description	Description of the job, as entered during job definition.
Owner	Name of the user who owns the configuration file.
Scheduled On	Date and time the job is scheduled to run.
Completed At	Date and time at which the job is completed.
Schedule Type	Job schedule types: <ul style="list-style-type: none"> • Suspended • Scheduled • Waiting for approval • Rejected • Canceled.
Status	Status of running or completed jobs: Job Started, Progress, Job Cancelled, Job Failed, Job Successful. Pending jobs have no status.

Step 2 Click one of the following buttons:

Button	Description	Usage Notes
Create	Creates a new job.	<ol style="list-style-type: none"> 1. Click Create. The Create Config Deploy Job wizard appears. 2. Use the wizard to define and schedule a download job.
Edit	<p>Edits pending job.</p> <p>The Job definition opens with the current information, including Job ID.</p> <p>You can edit the job in the same way as you can define and schedule a new job.</p>	<p>Click Edit to edit only jobs you own.</p> <p>If the job start time occurs during editing, it will run without the edits. In such a case, you can complete your edits, reschedule the job, and re-edit it.</p> <p>To prevent job from running unedited:</p> <ol style="list-style-type: none"> 1. Complete edits before job start time. 2. Cancel job and create new one.
Copy	<p>Copies job.</p> <p>You can edit the job in the same way as you can define and schedule a new job.</p>	<p>Click Copy.</p> <p>The Job definition opens with the current information and the new ID except job schedule details filled in.</p>
Stop	Stops a running job.	<ol style="list-style-type: none"> 1. Click Stop. You are prompted to confirm stopping a job. 2. Click OK. <p>You can stop only the jobs that you own. Admin level users can stop all jobs.</p>
Delete	Removes the job from the Job Scheduler.	<ol style="list-style-type: none"> 1. Click Delete. You are prompted to confirm stopping a job. 2. Click OK or Cancel. <p>You can remove only the jobs that you own. Admin level users can remove all jobs.</p>