



Making a Device Configuration Change Using a Template

For security reasons, your company's policy is to change device Telnet passwords every three months. As the network administrator, you can accomplish this task with a system-defined template.

What You Need—Prerequisites

In this scenario, you will use these applications:

- Configuration Management
- NetConfig

Before you begin creating a system-defined template, ensure that you have completed these tasks:

- Set the transport protocol order for the NetConfig job to download and to fetch configurations.

For downloading the configurations, the protocols used are Telnet and SSH, and the default order is:

- Telnet
- SSH (Secure Shell)

For fetching the configurations, the protocols used are Telnet, TFTP, SSH, and rcp, and the default order is:

- TFTP (Trivial File Transport Protocol)
- Telnet
- rcp (remote copy protocol)
- SSH (Secure Shell)

You can specify the transport protocol order in the Transport tab of the Configuration Job Setup dialog box. (To invoke the Configuration Job Setup dialog box, select **Resource Manager Essentials > Administration > Configuration Management > Configuration Job Setup.**)

- Specify the job password policy for the NetConfig job. If you enable the job password policy, for NetConfig jobs, you have the option of entering a username and password for running a specific job.

If you enter a username and password, NetConfig uses this username and password to connect to the device, instead of taking these credentials from the Essentials database.

To use this option of entering a username and password for running a specific job, you should enable the job password policy for NetConfig jobs using the Password Policy tab of the Configuration Job Setup dialog box, in the Configuration Management application. To invoke the Configuration Job Setup dialog box, select **Resource Manager Essentials > Administration > Configuration Management > Configuration Job Setup.**

You can set the job password to be mandatory, or user configurable.

If you do not enable the job password policy, then NetConfig takes the device credentials from the Essentials database to connect to the device.

- Ensure that you have the appropriate permission to use the Telnet Password template.

To change Telnet passwords using this application, you must have permission to use the Telnet Password template. If you have Network Administrator permissions, you can use any template. If you do not, a network administrator must assign your permissions.

For details, see the Essentials online help.

How To Do It—Procedures

The purpose of this scenario is to show you how you can use specific applications to perform these tasks. This will help you understand how to use the applications to perform similar tasks in your network.

Step 1 Select **Resource Manager Essentials > Configuration Management > NetConfig**.

The NetConfig application window opens.

Step 2 Select **Jobs > New Job**.

The New Job wizard appears with the Device Category dialog box open.

Step 3 Select IOS from the Select Device Category drop-down list box, then click Next.

The Select Devices dialog box appears.



Note Each NetConfig job can run on only one device category. You must create a separate job for each additional category of devices that you want to configure.

Step 4 Select all the Cisco IOS devices in the inventory using the device selector, then click **Next**.

The Apply Template dialog box appears, unless you selected any devices whose configurations are not archived.

If you selected any devices whose configurations are not archived in the configuration archive, a dialog box appears listing those devices. Click one of the buttons:

- **Open Archive Status.** Opens the Archive Status dialog box in the CiscoWorks window, where you can troubleshoot devices and add their configurations to the archive.
- **Cancel.** Cancels device selection and returns you to Select Devices dialog box.
- **Continue.** Removes devices whose configurations are not archived and continues the Job Definition wizard at the Apply Template dialog box.

- Step 5** Apply the Telnet Password configuration template by following these steps in the Apply Templates dialog box.
- Select **Telnet Password** from the Select Template drop-down list.
 - Select **enable** from the Action drop-down list.
 - Select **vtty** from the Line drop-down list. Note that selecting vty will enable the password on all vty lines on each device.
 - Enter the new Telnet password in the Password and Verify text boxes, then click **Add**.

The template and its corresponding configuration commands appear in the CLI commands viewer at the bottom of the dialog box.

- Step 6** Click **Next**.

The Job Properties dialog box appears.

- Step 7** Enter a description in the Description text box.

If the Job Password option has been set and is user configurable, you can select it for this job (see the Essentials online help for details about using the Job Password option).

- Step 8** Select any other job properties to apply to the job, then click **Next**.

- If Job Approval is enabled, the Set Approver dialog box appears. Select an approver list and enter any other optional information, then click **Next**.
- If Job Approval is not enabled, the Work Order dialog box appears.

- Step 9** Review the work order.

If you had selected the Job Password option in the previous (Job Properties) dialog box, then enter your device username and password.

If you need to edit the job, click **Back** to return to previous dialog boxes, make the necessary changes, then click **Next** until the Work Order dialog box appears.

- Step 10** Click **Finish**.

The job is registered and runs, unless it is scheduled to run in the future.

- Step 11** Note the job ID number that appears.

- Step 12** Repeat the process for each device category for which you have devices.

- Step 13** Verify that each job runs successfully. Refer to the section “[Where You Should End Up—Verification](#)” for more information.
- Step 14** After each job runs successfully, you can copy it to create a job that will change the Telnet passwords again in 3 months. To do this:
- Select **Jobs > Job Browser**.
The Job Browser dialog box appears.
 - Select the record of the job you want to copy, then click **Copy Job**.
The job definition opens with a new job ID assigned.
 - Set the schedule to start the job on the next day on which you must change the Telnet password, using the Job Properties dialog box.



Note You can edit any part of the job except the device category.

- Click **Next** until the Work Order dialog box appears.
 - Review the work order and make changes to the job definition, if needed.
 - Click **Finish** to register the new job.
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Where You Should End Up—Verification

After the job runs, the device configurations of the selected devices are changed. You should verify that the process was successful:

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- Step 1** Select **Resource Manager Essentials > Configuration Management > NetConfig**.
The NetConfig application window opens.
- Step 2** Select **Jobs > Job Browser**.
The Job Browser dialog box appears.
- Step 3** Locate the job’s record and check its Status entry to determine if it completed successfully.

Step 4 Select the job record and click **Job Details**.

The Job Details dialog box appears.

- If the job failed, review the Download Summary page and the device details for each device to determine why it failed.
- If the job completed successfully, click the Check Credentials button to verify that the new Telnet password is working correctly.

For more information about browsing jobs and job details, see the online help.
