Provision a Routing Profile

Provision a Router

Before you begin

Make sure that you have defined the following global network settings before provisioning a routing profile:

- Network servers, such as AAA, DHCP, and DNS. For more information, see Configure Global Network Servers.

- Device credentials, such as CLI, SNMP, HTTP, and HTTPS. For more information, see Add Global CLI Credentials, Add Global SNMPv2c Credentials, Add Global SNMPv3 Credentials, and Add Global HTTPS Credentials.

- IP address pools. For more information, see Configure IP Address Pools.

- Service provider profiles. For more information, see Configure Service Provider Profiles.

Step 1 From the top-left corner, click the menu icon and choose **Provision** > **Network Devices** > **Inventory**.

The **Inventory** window is displayed with the discovered devices listed.

Step 2 To view devices available in a particular site, click **Global** and choose the desired site, building, or floor.

All the devices available in the selected site are displayed in the **Inventory** window.

Step 3 At the top of the **Inventory** window, click **Routers**.

Step 4 Check the check box next to the device that you want to provision.

Step 5 Click **Assign** under the site and then, in the **Assign Device to Site** window, click **Choose a site**.

Step 6 From the **Actions** drop-down list, choose **Provision** > **Provision Device**.

Step 7 To provision a router, do the following:

    a. Review the details in the **Confirm Profile** page and click **Next**.

    b. Review the details in the **Router WAN Configuration** page.

If you are provisioning a virtual router, this page is not displayed.

1. If you chose gigabit Ethernet as the line interface, click **O**. If you choose a static IP address, enter the WAN IP address. If you choose DHCP, enter the IP address from the DHCP server. If the primary WAN is already configured using PnP, you can choose **Do not Change**. From the **Interface Name** drop-down list, choose the interface that is configured as the primary WAN.

2. If you chose cellular as the line interface, click **O**, choose **IP Negotiated**, choose the **Interface Name** from the drop-down list, and enter the **Access Point Name (APN)**. Depending on your service provider, check the **PAP** or **CHAP** check box.

3. Enter the **IP SLA Address** for the backup WAN interface if you have multiple service providers.

4. Click **Next**.

c. Review the details in the **Router LAN Configuration** page.

1. Choose the **Interface** from the drop-down list.

2. Choose the **IP-Pool/IP** from the drop-down list.

3. Choose the **IP Address Pool** from the drop-down list.

4. Click **Next**.

d. Review the details in the **Integrated Switch Configuration** page.

Depending on your configuration, this page may not be displayed.

e. Review the details in the **Summary** page by expanding the drop-down menus for the various specifications, settings, and configurations.

Step 8   Click **Deploy**.

Step 9   In the **Provision Router device(s)** slide-in pane, depending on the Visibility and Control of Configurations settings, choose an available option.

   • **Now**: Immediately deploy the configurations.

   • **Later**: Schedule the date and time and define the time zone of the deployment.

   • **Generate configuration preview**: Review the configurations before deploying them.

   If only visibility is enabled or both visibility and control are enabled, **Generate configuration preview** is chosen by default, and **Now** and **Later** are dimmed (unavailable). For more information, see Visibility and Control of Device Configurations.

Step 10   Click **Apply**.

Step 11   On the **Performing Initial Checks** window, address the following issues to continue with your current deployment:

   • Pending Operations: Wait for all pending operations to deploy or discard them.

   • Device Compliance: Fix, acknowledge, or ignore all issues.

   If you ignore any noncompliant devices, this activity is captured on the **Audit Logs** window.

   • After addressing all the issues, click **Recheck** in the bottom-right corner of the window and make sure that all the validations are successful.

For more information, see Network Provisioning Prechecks.

If you chose **Now** or **Later**, click **Submit**, and the device configurations will deploy at the scheduled time. You can view the task on the **Tasks** window.

Step 12 After deploying the configuration on the devices, the **Task Progress** bar displays the progress of the ongoing provisioning task under **Activities** > **Tasks** (which you can view by clicking the task name).

Step 13 If you chose **Generate configuration preview**, depending on the Visibility and Control of Configurations settings, do the following:

   a. On the **Preparing Devices and Configuration Models** window, wait for the system to prepare the devices and generate the device configurations. This can take some time, so you can click **Exit and Preview Later**. To view the work item later, go to the **Tasks** window.

   b. On the **Preview Configuration** window, review the device configurations.

      For more information, see Visibility and Control of Device Configurations.

   c. Do one of the following:

      • When you're ready, click **Deploy** or **Submit for Approval**.

      • If you're not ready to deploy the configurations or submit them for ITSM approval, click **Exit and Preview Later**. Later, go to the **Tasks** window, open the work item, and click **Deploy** or **Submit for Approval**.

   Note You can submit the device configurations for ITSM approval and deploy them without previewing all the configurations.

   d. In the slide-in pane, indicate when you want to deploy the configuration, choose a time zone, and if visibility and control are enabled, add notes for the IT administrator.

   e. Click **Submit**.

      You can check the work item's approval status or the task's deployment status on the **Tasks** window. If the work item isn't approved, you need to resubmit the work item for ITSM approval. When it's approved, it's deployed at the scheduled time.

The **Provision Status** column in the **Device Inventory** window shows **SUCCESS** after a successful deployment.

Click **SUCCESS** to see a detailed provisional log status.

VPC Inventory Collection

After successful cloud inventory collection, the **Cloud** tab in the **Provision** section provides a view of the collected AWS VPC Inventory. The navigation on the left can be expanded to show the cloud regions for a cloud profile or access key. You can filter the left navigation items by keyword and click to see the VPCs just for the selected region or access key.

In the VPC Inventory view you can also click on a VPC to see more details about it, like the subnets and virtual instances in that VPC and some more details about them. AWS VPC inventory collection is scheduled to occur at the default interval for all inventory collection and can also be triggered on demand by using the **Sync** action from the gear menu for a cloud access key. The status of the inventory collection can be viewed by clicking on **Show Sync Status** in the **VPC Inventory** view.