

Service Provisioning



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Service Provisioning

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About the Documentation

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Documentation and Release Notes

To obtain the most current version of all Juniper Networks® technical documentation, see the product documentation page on the Juniper Networks website at <http://www.juniper.net/techpubs/>.

If the information in the latest release notes differs from the information in the documentation, follow the product Release Notes.

Juniper Networks Books publishes books by Juniper Networks engineers and subject matter experts. These books go beyond the technical documentation to explore the nuances of network architecture, deployment, and administration. The current list can be viewed at <http://www.juniper.net/books>.

Documentation Conventions

Table 1 on page x defines notice icons used in this guide.

Table 1: Notice Icons

Icon	Meaning	Description
	Informational note	Indicates important features or instructions.
	Caution	Indicates a situation that might result in loss of data or hardware damage.
	Warning	Alerts you to the risk of personal injury or death.
	Laser warning	Alerts you to the risk of personal injury from a laser.

Table 2 on page x defines the text and syntax conventions used in this guide.

Table 2: Text and Syntax Conventions

Convention	Description	Examples
Bold text like this	Represents text that you type.	To enter configuration mode, type the configure command: <code>user@host> configure</code>
Fixed-width text like this	Represents output that appears on the terminal screen.	<code>user@host> show chassis alarms</code> <code>No alarms currently active</code>
<i>Italic text like this</i>	<ul style="list-style-type: none"> Introduces or emphasizes important new terms. Identifies book names. Identifies RFC and Internet draft titles. 	<ul style="list-style-type: none"> A policy <i>term</i> is a named structure that defines match conditions and actions. <i>Junos OS System Basics Configuration Guide</i> RFC 1997, <i>BGP Communities Attribute</i>
<i>Italic text like this</i>	Represents variables (options for which you substitute a value) in commands or configuration statements.	Configure the machine's domain name: <code>[edit]</code> <code>root@# set system domain-name <i>domain-name</i></code>
Text like this	Represents names of configuration statements, commands, files, and directories; configuration hierarchy levels; or labels on routing platform components.	<ul style="list-style-type: none"> To configure a stub area, include the stub statement at the <code>[edit protocols ospf area area-id]</code> hierarchy level. The console port is labeled CONSOLE.
< > (angle brackets)	Enclose optional keywords or variables.	<code>stub <default-metric <i>metric</i>>;</code>

Table 2: Text and Syntax Conventions (*continued*)

Convention	Description	Examples
(pipe symbol)	Indicates a choice between the mutually exclusive keywords or variables on either side of the symbol. The set of choices is often enclosed in parentheses for clarity.	broadcast multicast (<i>string1</i> <i>string2</i> <i>string3</i>)
# (pound sign)	Indicates a comment specified on the same line as the configuration statement to which it applies.	rsvp { # Required for dynamic MPLS only
[] (square brackets)	Enclose a variable for which you can substitute one or more values.	community name members [community-ids]
Indentation and braces ({ })	Identify a level in the configuration hierarchy.	[edit] routing-options { static { route default { nexthop <i>address</i> ; retain; } } }
;(semicolon)	Identifies a leaf statement at a configuration hierarchy level.	
GUI Conventions		
Bold text like this	Represents graphical user interface (GUI) items you click or select.	<ul style="list-style-type: none"> In the Logical Interfaces box, select All Interfaces. To cancel the configuration, click Cancel.
> (bold right angle bracket)	Separates levels in a hierarchy of menu selections.	In the configuration editor hierarchy, select Protocols>Ospf .

Documentation Feedback

We encourage you to provide feedback, comments, and suggestions so that we can improve the documentation. You can send your comments to techpubs-comments@juniper.net, or fill out the documentation feedback form at <https://www.juniper.net/cgi-bin/docbugreport/>. If you are using e-mail, be sure to include the following information with your comments:

- Document or topic name
- URL or page number
- Software release version (if applicable)

Requesting Technical Support

Technical product support is available through the Juniper Networks Technical Assistance Center (JTAC). If you are a customer with an active J-Care or JNASC support contract,

or are covered under warranty, and need post-sales technical support, you can access our tools and resources online or open a case with JTAC.

- JTAC policies—For a complete understanding of our JTAC procedures and policies, review the *JTAC User Guide* located at <http://www.juniper.net/us/en/local/pdf/resource-guides/7100059-en.pdf>.
- Product warranties—For product warranty information, visit <http://www.juniper.net/support/warranty/>.
- JTAC hours of operation—The JTAC centers have resources available 24 hours a day, 7 days a week, 365 days a year.

Self-Help Online Tools and Resources

For quick and easy problem resolution, Juniper Networks has designed an online self-service portal called the Customer Support Center (CSC) that provides you with the following features:

- Find CSC offerings: <http://www.juniper.net/customers/support/>
- Search for known bugs: <http://www2.juniper.net/kb/>
- Find product documentation: <http://www.juniper.net/techpubs/>
- Find solutions and answer questions using our Knowledge Base: <http://kb.juniper.net/>
- Download the latest versions of software and review release notes: <http://www.juniper.net/customers/csc/software/>
- Search technical bulletins for relevant hardware and software notifications: <https://www.juniper.net/alerts/>
- Join and participate in the Juniper Networks Community Forum: <http://www.juniper.net/company/communities/>
- Open a case online in the CSC Case Management tool: <http://www.juniper.net/cm/>

To verify service entitlement by product serial number, use our Serial Number Entitlement (SNE) Tool: <https://tools.juniper.net/SerialNumberEntitlementSearch/>

Opening a Case with JTAC

You can open a case with JTAC on the Web or by telephone.

- Use the Case Management tool in the CSC at <http://www.juniper.net/cm/>.
- Call 1-888-314-JTAC (1-888-314-5822 toll-free in the USA, Canada, and Mexico).

For international or direct-dial options in countries without toll-free numbers, see <http://www.juniper.net/support/requesting-support.html>.

PART 1

Overview

- Understanding Service Provisioning for Media Flow Controllers with Media Flow Activate on page 3

CHAPTER 1

Understanding Service Provisioning for Media Flow Controllers with Media Flow Activate

- [Provisioning Services Overview on page 3](#)

Provisioning Services Overview

This topic describes what needs to be in place before you can provision a service. With the **Service Provisioning** workspace, you can push your configured service design to selected Media Flow Controllers.

Before you can provision sites, you must create services to provision by using the **Service Design** workspace. See *Creating Network Optimization Services*, *Creating HTTP Reverse Proxy Services*, and *Creating Content Ingest Services* for more information about creating these services.

Provisioning services pushes all the configurations of a service to the selected Media Flow Controllers.



NOTE: See the *Juniper Networks Media Flow Controller Administrators Guide* for detailed information about provisioning transparent or reverse proxy services (deployments).

Related Documentation

- [Provisioning Services on page 7](#)
- [Managing Provisioned Services on page 13](#)
- *Service Design Overview*
- *Media Flow Activate Overview*
- *Understanding Media Flow Controller Management with Media Flow Activate*
- *Quick Reference to Tasks in Media Flow Activate*

PART 2

Administration

- [Managing Services for Media Flow Controllers with Media Flow Activate on page 7](#)

CHAPTER 2

Managing Services for Media Flow Controllers with Media Flow Activate

- [Provisioning Services on page 7](#)

Provisioning Services

Use the **Service Provisioning** workspace to push your service design to selected Media Flow Controllers.

Before you begin, you must have discovered Media Flow Controller devices and created at least one service from the **Service Design** workspace. See *Creating Network Optimization Services*, *Creating HTTP Reverse Proxy Services*, and *Creating Content Ingest Services* for more information about creating a Network Optimization, HTTP Reverse Proxy, or Content Ingest service, respectively.

To provision services to managed Media Flow Controllers:

1. From the left navigation panel, click the plus sign (+) adjacent to **Service Provisioning**.
2. Click one of the following links:
 - **Network Optimization**—To provision a transparent proxy service
 - **HTTP Reverse Proxy**—To provision a reverse proxy service
 - **Content Ingest**—To provision a content ingest service

When you provision a reverse proxy service, you can bind the service to a resource pool. The resources that are made available to the domains or websites configured in the service are then governed by the resource pool parameters. However, if you do not bind any resource pool, the service is bound to the global resource pool.

To bind a service to a resource pool, select the resource pool in the **Resource pool** column.

For a reverse proxy or content ingest service, you can also view the services that have been previously provisioned on the device by clicking **View** in the **Current Service List** column.

Figure 1: HTTP Reverse Proxy Provisioning - Select Devices

Service Provisioning > HTTP Reverse Proxy

Select Devices 0 Items Selected Select: Page | None Search: Name

Name	Running Image	IP Address	Connection St...	Managed Status	Resource pool	Current Servic...
mfc-165	mfc-12.2.4-qa	10.157.34.1...	up	In Sync	Global Select	View
mfc-163	mfc-12.2.4-qa	10.157.34.1...	up	In Sync	Global Select	View
mfc-152	mfc-12.2.3-qa	10.157.43.1...	up	In Sync	Global Select	View
mfc-164	mfc-12.2.4-qa	10.157.34.1...	up	In Sync	Global Select	View
mfc-191	mfc-12.2.3-qa	10.157.43.1...	up	In Sync	Global Select	View

User resource pool appears here

3. Select the Media Flow Controller devices that you want to provision and click **Next**. The **Select Service Instances** page is displayed.
4. Select the **Service Instances** that you designed and click **Next**. The selected services are provisioned to the selected Media Flow Controllers.
5. Click **Finish**. A pop-up is displayed with a status message and the Job ID: “**Please click on the Job ID link for details.**”

To view the status of provisioned services:

1. From the left navigation panel, click the plus sign (+) adjacent to **Service Design**. Click **Network Opt Services** to display the configured transparent proxy services. Click **HTTP Reverse Proxy Services** to display the configured reverse proxy services. Click **Content Ingest Service** to display the configured content ingest services.
2. Select the service for which you want to view the status.
3. On the **Actions** list, select **Manage Provisioned Devices**. Verify the progress of the services that you have provisioned.

You can also track the provisioning of the services with the **Job Management** workspace.

To view the status of provisioned services:

1. From the left navigation panel, click the plus sign (+) adjacent to **Job Management**. The **Job Management** inventory landing page is displayed. You can see graphs for current **Job Types**, **State of Jobs Run**, and **Average Execution Time per Completed Job**.
2. Click **Manage Jobs**. The **Manage Jobs** page is displayed. You see the job ID, name, percentage of job completed, state of the job, job type (Provisioning, Restart Service, Software Upgrade, or Restart Devices), summary of the job, scheduled start time, user details, recurrence details (if applicable), and the retry group Id.



NOTE: In the Job Management workspace, a Media Flow Activate Provisioning Job shows a list of services that are provisioned, list of devices on which these services are provisioned, and whether the services were successfully initiated or not. If the services were successfully initiated, the Job Management workspace shows the corresponding job ID. The Restart Service job shows information about the set of devices, that this operation was initiated, and whether the operation is successfully initiated or not.

See the *Juniper Networks Media Flow Controller Administrators Guide* for detailed information about provisioning transparent or reverse proxy services (deployments).

**Related
Documentation**

- [Managing Provisioned Services on page 13](#)
- [Provisioning Services Overview on page 3](#)
- *Job Management Workspace Overview*
- *Resource Pools Overview*
- *Provisioning Resource Pools to MFC Devices*
- *Media Flow Activate Overview*
- *Quick Reference to Tasks in Media Flow Activate*

PART 3

Configuration

- [Provisioning Services for Media Flow Controllers with Media Flow Activate on page 13](#)

CHAPTER 3

Provisioning Services for Media Flow Controllers with Media Flow Activate

- [Managing Provisioned Services on page 13](#)

Managing Provisioned Services

Purpose View the status of all devices provisioned with a service on the basis of the status of the provisioned service.

Action To view the status of a provisioned service:

1. Select a service from the **Service Design** workspace (that is, from the **Network Optimization Services** page, **HTTP Reverse Proxy Services** page, or the **Content Ingest Services** page).
2. On the **Actions** list, select **Manage Provisioned Devices**. The **Manage Provisioned Devices** page is displayed, showing each Media Flow Controller provisioned with the service you selected in Step 1.

Meaning The **Manage Provisioned Devices** page displays the following status information for the selected service:

- **Name**—Media Flow Controllers provisioned with the service
- **IP Address**—IP addresses of the Media Flow Controllers provisioned with the service
- **Resource pool**—Resource pools associated with the Media Flow Controllers for the specific service (reverse proxy)



NOTE: If the service is not associated with a user-defined resource pool, the service is associated with the “Global” resource pool, by default. For more information about resource pools, see *Resource Pools Overview*.

- **Service Status**—Whether the service is active or inactive

- **Managed Status**—Whether the device inventory information in the Junos Space database matches the current configuration information on the Media Flow Controller device. The "Managed Status" of the device can be one of the following:
 - **In Sync**—Indicates that the Media Flow Controller device configuration and the configuration information in the Junos Space database are in sync. It is recommended that you provision the services, only when the configurations are in sync.
 - **Out of Sync**—Indicates that the Media Flow Controller device configuration and the configuration information in the Junos Space database are out of sync. This usually happens when configurations are made to the device but are not yet committed. Wait till the configurations are in sync before you provision a service to a device.
 - **Synchronizing**—Indicates that the resync job has begun. The "Managed Status" of the device changes to "In Sync" after the resync job has completed.
 - **Sync Failed**—Indicates that resynchronization has failed.

To resolve this issue, try resynchronizing the managed device by following the steps mentioned in the "Resynchronizing Managed Devices" section of the *Junos Space Network Application Platform User Guide*. If resynchronization does not rectify the issue, you must delete the device and rediscover it.

- **Device Status**—Whether the device is Up (discovered and functioning); or Down (not functioning)
- **Provisioning Status**—Whether the provisioning job is Successful (completed) or Failed (not completed) and the Provision Job identification number (Click the Provision job ID on the Job Management > Manage Jobs page for more details about that provisioning job.)

In the **Manage Provisioned Devices** page, you can sort the data and even choose what columns you want to display by:

- Mousing over a column and clicking the list.
- Selecting **Sort Ascending** or **Sort Descending** to sort the data in ascending or descending order.
- Selecting **Columns** and choosing the columns to display. By default, the following columns are not displayed on the **Manage Provisioned Devices** page: **Id**, **Configuration**, and **Ref**. Select these columns, if you want the information for these columns to be displayed, as well.

Use the **Search** option to display specific Media Flow Controllers by filtering using their names or tags.

From this page, you can select Media Flow Controllers and then select one of the following options:

- **Provision Again**—Provision the service again. Select this option, if the **Provisioning Status** is Failed, or if you have modified the service.
- **De-provision**—Remove the association of the device with this service. A confirmation dialog box is displayed; click **Ok** to complete the deletion. First, the service configurations

are deleted from the selected Media Flow Controllers; then the service association with the selected Media Flow Controllers is deleted from Media Flow Activate.

You may consider deprovisioning a service for the following reasons:

- When you no longer want to cache the content for a website and you want to remove the service completely from Media Flow Controller.
- When any of the Media Flow Controllers is in inconsistent state due to some error.
- **Activate**—Activate the service. A newly created service is inactive by default and you must explicitly activate it.

When a service is provisioned for the first time, the service is in the active state.

- **De-activate**—Deactivate the service. Media Flow Controller drains the connections when a service is deactivated. No new connections are accepted and no new requests are accepted in the current connections. Any existing traffic is brought to a graceful shutdown.

You can deactivate a service when you want to make numerous changes to the service configuration—for example, when you want to update the website and you do not want visitors to the website during the update.



.....
CAUTION: Deactivation of a service disrupts the service.
.....

- **Cancel**—Exit the **Manage Provisioned Devices** page; no changes are made.

See the *Juniper Networks Media Flow Controller Administrators Guide* for detailed information about provisioning the transparent or reverse proxy services (deployments).

Related Documentation

- *Service Design Overview*
- *Creating Network Optimization Services*
- *Creating HTTP Reverse Proxy Services*
- *Creating Content Ingest Services*
- [Provisioning Services Overview on page 3](#)
- *Media Flow Activate Overview*
- *Quick Reference to Tasks in Media Flow Activate*

PART 4

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