

# Juniper NETWORKS SSR120 Smart Router User Guide

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## Begin

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This guide walks you through the simple steps to get a new cloud-ready Juniper Networks® SSR120 router up and running in the Juniper Mist™ cloud portal. You can onboard a single device using your mobile phone, or one or more devices using your computer. Once onboarded, we'll walk you through the steps to create a basic configuration.

You'll need your Juniper Mist WAN Assurance subscription and your login credentials for the Juniper Mist portal.

### Meet the SSR120

The Juniper Networks SSR120 network appliance is part of the Juniper® Session Smart™ Router portfolio. The SSR120 features four 1 GbE ports and two 1 GbE RJ-45/SFP combo ports.

The SSR120 runs the FIPS 140-2 Level 1 compliant Juniper® Session Smart™ Router (SSR) software, which provides secure and resilient WAN connectivity.

The SSR120 is available in models with or without LTE support.



## Onboarding the SSR120

The SSR120 comes ready to install and manage using the Juniper Mist™ Cloud portal. You can onboard one or more routers using your computer, or a single router using your mobile phone.

To onboard your SSR120 using your mobile phone, see “Onboard the SSR120 using the Mist AI Mobile App” on page 3.

To manually onboard your SSR120, see “Onboard the SSR120 using a Web Browser” on page 3.

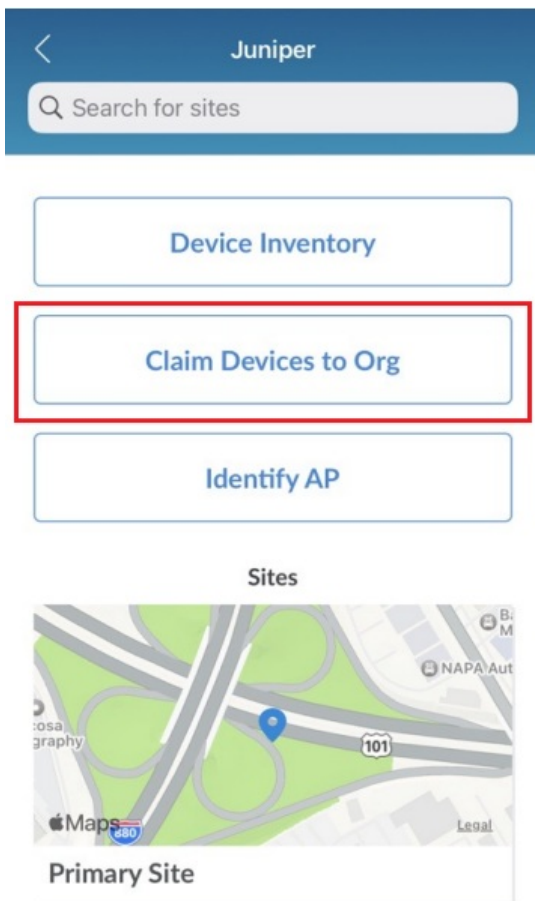
To perform either onboarding process, you will need to locate the SSR120 claim code label on the rear panel of your device.



## Onboard the SSR120 Using the Mist AI Mobile App

### From your mobile phone:

1. Download and install the Mist AI app from the Google Play Store or Apple App Store.
2. Open the Mist AI app and log in using your account. If you do not have an account, see Create a Mist Account and refer to the documentation for details about the account.
3. Select your organization.
4. Tap Claim Devices to Org and focus the camera on the QR code on the claim code label. The app will claim the device and add it into your organization's inventory.



5. On the **Claim Devices to Org** screen, tap **Device Inventory** → **Routers** → **Unassigned**. Review the MAC address

### Onboarding Complete!

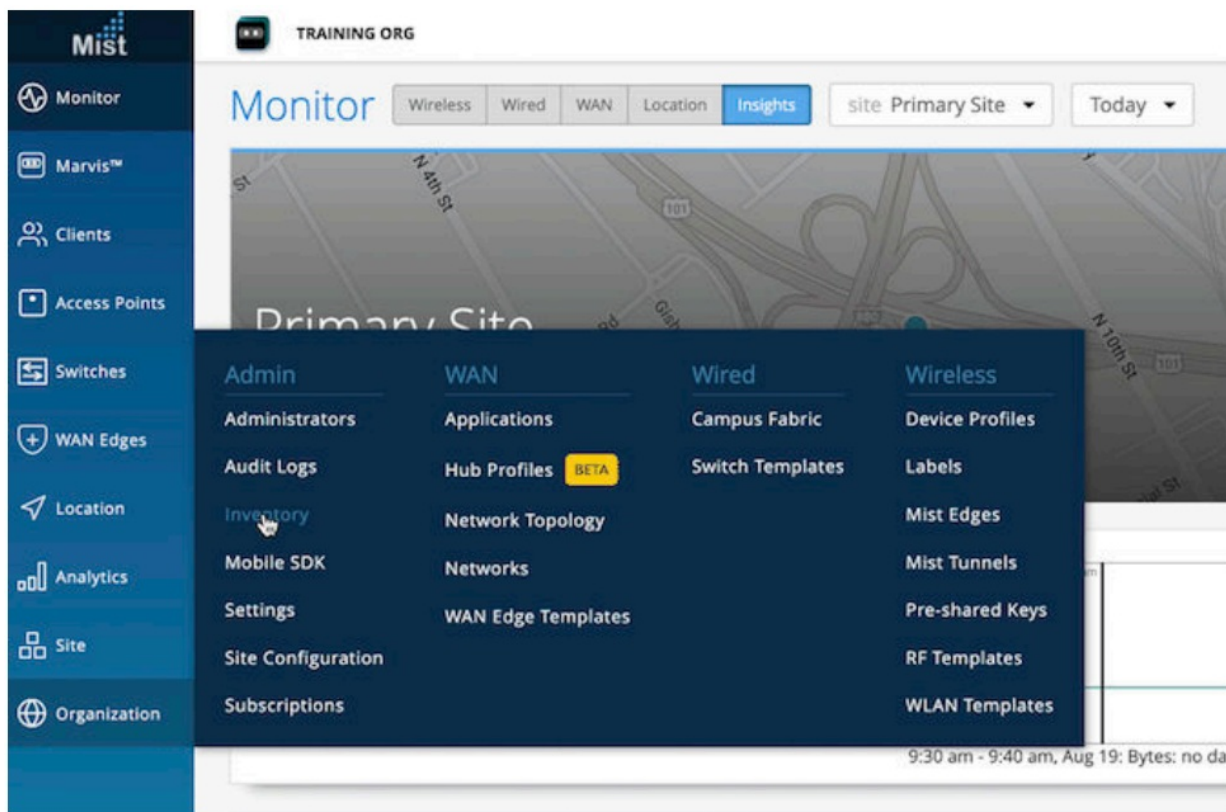
Finally, the SSR120 is in your inventory! To provision the SSR120, see “Step 2: Up and Running” on page 4 and continue with **Add the Network**.

### Onboard the SSR120 Using a Web Browser

**Onboarding Mist VR switches**— When you purchase Mist VR switches, we provide you with an activation code along with your PO number. Make a note of this code.

**Onboarding a single switch**— Locate the QR code on your switch and make a note of the alphanumeric claim code directly above it.

1. Log in to your account at [my.mist.com](https://my.mist.com). If you do not have an account, see **Create a Mist Account** and **Claim Devices to Org** for details about creating one.
2. Log in to your Mist **Claim Devices to Org** dashboard.



3. Navigate to your organization's inventory, and select the WAN tab at the top.
  4. Select the Claim WAN Edges button in the upper right of the inventory screen.
  5. Add the claim code into the list of devices to claim.
  6. Clear the Assign claimed WAN edges to site check box. This places the device into inventory, to be assigned to a site later.
  7. Click the Claim button to claim the device into your inventory.
- If you claim Mist routers, expect a slight delay for the Router Claim Results window to pop up.
- Review the information and Close the window.
- View your new router or routers on the Inventory page. Expect to see the status as Disconnected.

## Onboarding Complete!

For the SSR120 is in your inventory! To provision the SSR120, see "Step 2: Up and Running" on page 4 and continue with Add the Network.

## Up and Running

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The SSR120 has been onboarded to the Juniper Mist™ cloud. To provision the SSR120 with ZTP, log in to your Mist portal and begin the WAN configuration.

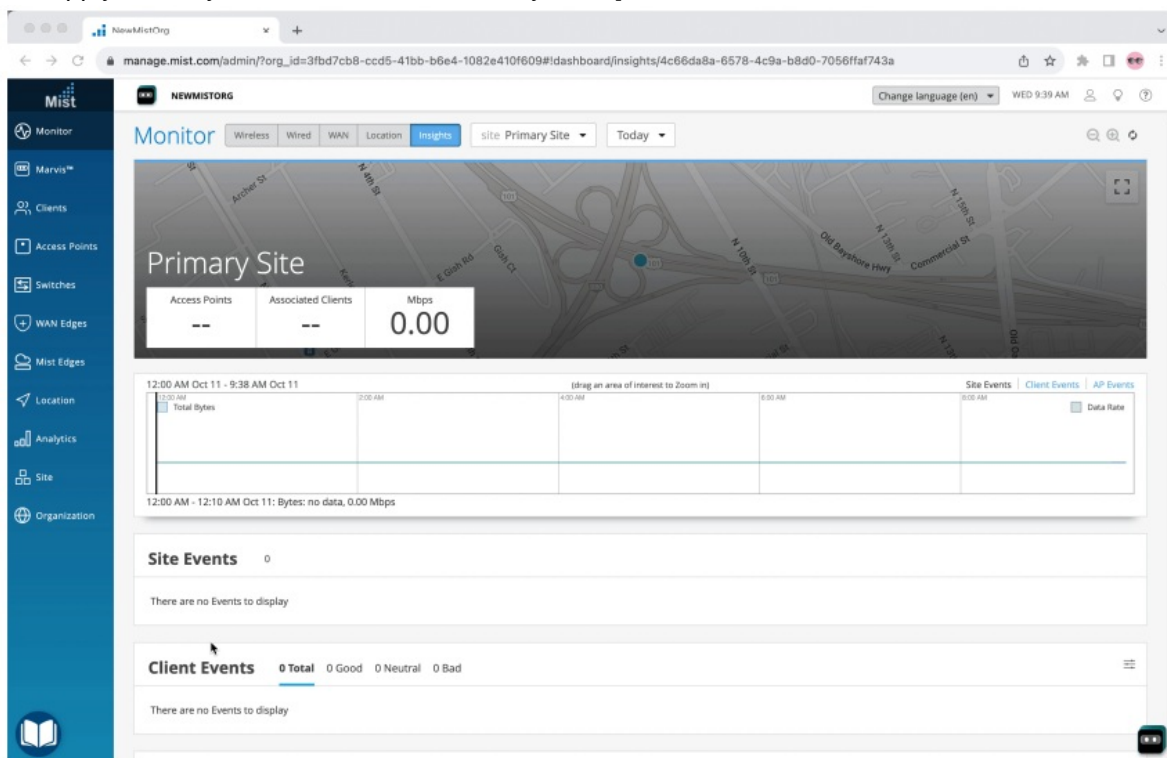
onC]trbn] your SSR device is made simple through the use of the SSR WAN Edge Templates.

## Create a Template

The WAN Edge Templates provide you with the basic network conC]tr- on in a single step, and allow for re usable and consistent conC]tr- on for every SSR device you deploy. The template provides device sr;cbCck, rr;conC]tr; 7 WAN interfaces, LAN interfaces, a |r-Lc steering policy, and an -rrVbc- on policy. You simply name the template and select the device type

1. From the the or]-nbz- on sidebar menu, select **WAN Edge Templates**.
2. Select **Create Template** in the upper right.
3. Give the template a name.
4. Place a checkmark in the Create **from Device Model** box.
5. Select your SSR model from the dropdown.
6. Click **Create**.

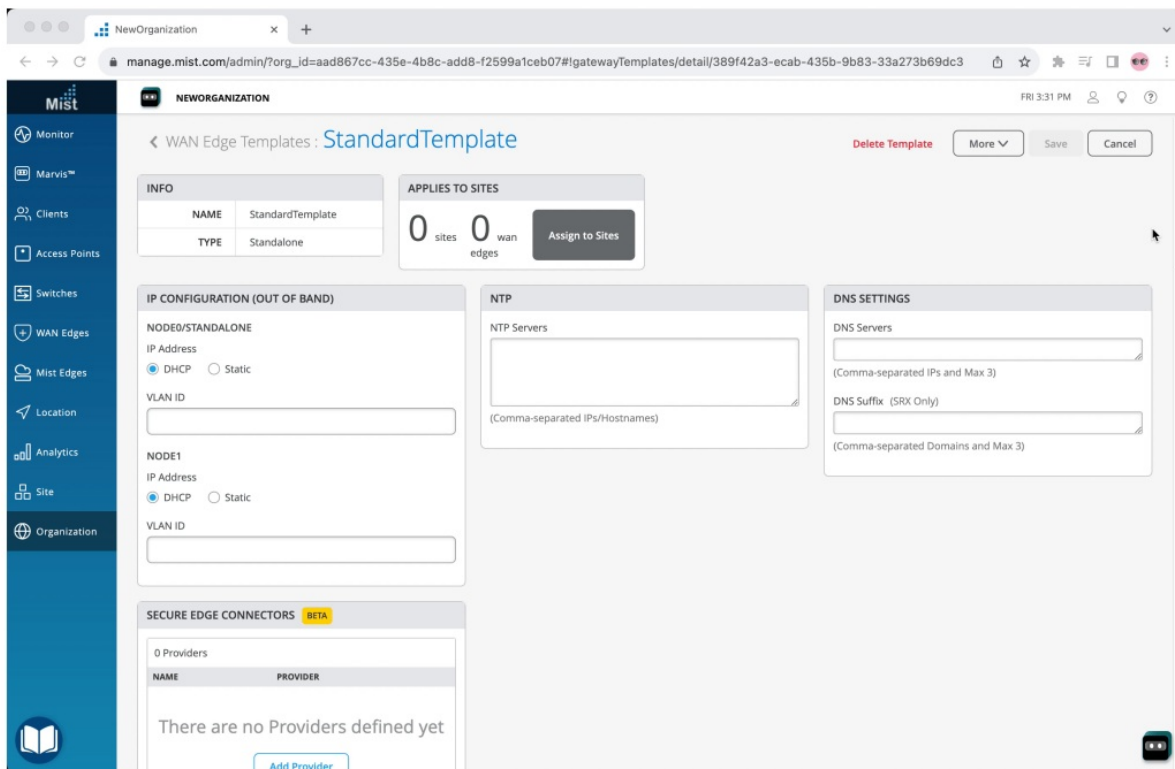
The device template is displayed. Scroll down through the template to see the rr;conC]tr; 7 WAN interfaces, LAN interfaces, \$r-Lc Steering, and rrVbc- on Policies. Great job! You now have a working WAN Edge template you can apply to many sites and devices across your or]-nbz- onf.



## Assign the Template to a Site

Now that you have set up a template, you need to assign it to the site where your SSR will be deployed.

1. Scroll to the top and click **Assign to Site**.
2. Select the site from the list where you want the template applied.
3. Click **Apply**.



Great work! All that remains is to associate the SSR120 with a site.

## Assign the SSR120 to a Site

Once you associate the SSR120 with a site and a template, the working connection will be complete.

1. Select **WAN Edges** on the VMC sidebar, and navigate to your organization's WAN Edges Inventory.
2. Select your SSR120 and assign it to your site.
3. If you are configuring a Mist-managed router (SSR Software version 6.x and greater), check the **Manage with Mist** checkbox. For version 5.4.x and greater conductor-managed routers, make sure there is no check mark in the **Manage with Mist** checkbox from Mist under **Manage with Mist**.
4. Select **Assign to Site**.

Congratulations you now have a Mist-claimed SSR120, and a basic connection ready to send to your device!

## Install the SSR120 Hardware

Your SSR120 hardware has several features that must be installed depending on your use and environment. Refer to the SSR120 Hardware Installation Guide to complete the following procedures:

- Rack, Wall, or Surface mounting
- LTE Antenna Install
- SIM Card Install
- Connecting Power

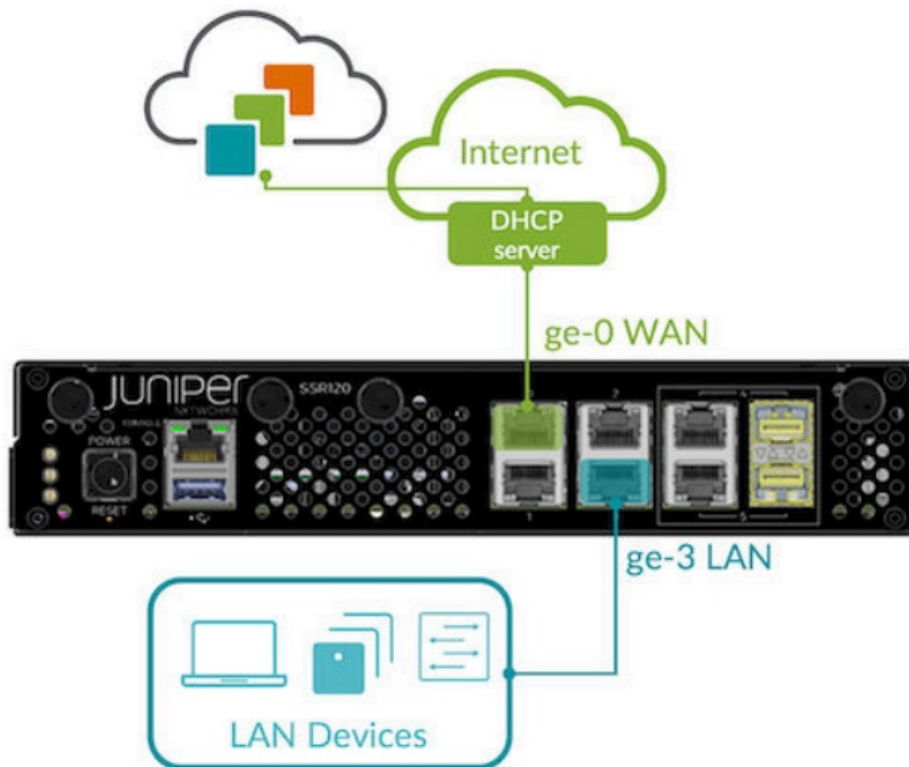
Please return here to follow those procedures to complete the network connection.

## Connect your SSR120 to the Mist Cloud



Your SSR120 uses port 0 (ge-0-0) as a default WAN port to contact Mist for zero-touch provisioning (ZTP). You'll need to set up port 3 (ge-0-3) with a LAN network.

1. Connect port 0 to an Ethernet WAN link that can provide:
  - DHCP address assignment
  - Connectivity to the Internet and Mist (see Firewall Requirements)
2. Connect SSR port 3 to your LAN devices, including:
  - Mist-managed Juniper EX switches
  - Mist APs
  - User devices



Great job, your SSR120 is now connected to the Mist cloud! In just a few minutes, Mist will send the template-driven configuration down to your device. Once the configuration has been applied, it will begin forwarding sessions from LAN to WAN as described by your policy.

Head over to the WAN Edges menu on the Mist sidebar, select your device, and watch events as the device completes ZTP.

As your client devices connected to the LAN are assigned addresses from the WAN Edge DHCP server and begin sending sessions, telemetry will populate the insights page, and Marvis will start analyzing it on your behalf.

For conductor-managed devices, the views for Cloud Telemetry are configuration; in the SSR GUI and CLI.

## Keep Going

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Now that you've done the bnb-V conC]tr- onk, your SSR120 is ready to use. Here are some things you can do next:

## What's Next?

If you want to	Then
Get an overview of Configuration and Configuration Management on the SSR120	See the SSR Configuration Management section of the SSR Documentation in the Juniper Networks TechLibrary

## General Information

If you want to	Then
See all documentation available for the SSR120	See the SSR120 Documentation in the Juniper Networks TechLibrary
Get more details about installing and maintaining the SSR120 hardware	See the SSR120 Hardware Guide
See all documentation available for SSR software	Visit Session Smart Router Documentation in the Juniper Networks TechLibrary

If you want to	Then
Stay up-to-date about new and changed features and known and resolved issues	See the SSR Release Notes

## Learn with Videos

Here are some great video and training resources that will help you expand your knowledge of SSR Software


If you want to	Then
Learn about Virtual Router Redundancy Protocol for the SSR	See SSR Virtual Router Redundancy Protocol on the SSR YouTube page
Learn about BFD for Traditional Routing	See BFD for Traditional Routing on the SSR YouTube page
Learn about Configuration Concurrency with the SSR	See Configuration Concurrency on the SSR YouTube page
Learn about Service Route Redundancy and Vectors	See Service Route Redundancy and Vectors on the SSR YouTube page
Get short, concise tips and instructions that provide quick answers, clarity, and insight into specific features and functions of Juniper technologies	See Learning with Juniper on Juniper Networks main YouTube page
View a list of free technical training offered by Juniper	Visit the Getting Started page on the Juniper Learning Portal

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## Documents / Resources

	<a href="#">Juniper NETWORKS SSR120 Smart Router</a> [pdf] User Guide SSR120, SSR120 Smart Router, Smart Router, Router
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## References

- [Get Started with Free Juniper Training](#)
- [Mist Systems](#)
- [Mist Systems](#)
- [Session Smart Router \(formerly 128T\) Documentation | Juniper Networks](#)
- [SSR120 Documentation | Juniper Networks](#)
- [SSR120 Hardware Guide | Juniper Networks](#)
- [Unpack and Mount an SSR120 | Juniper Networks](#)
- [Mist | Quick Start | Step 1: Begin | Juniper Networks](#)
- [Configuration Management on the SSR | SSN Docs](#)
- [SSR 5.4 Release Notes | SSN Docs](#)
- [User Manual](#)