How to Set Up Your SRX550 High Memory Services Gateway

The SRX550 High Memory Services Gateway is a large branch office gateway that combines security, routing, switching, and WAN interfaces with next-generation firewall and advanced threat mitigation capabilities for cost-effective, secure connectivity across distributed enterprise locations. The services gateway simplifies network complexity, protects and prioritizes network resources, and improves user and application experience. The SRX550 High Memory Services Gateway comes with 4 GB of DRAM memory and 8 GB of flash memory.

**Package Contents**

- SRX550
- AC power supply
- Screws
- Mounting brackets
- RJ45 cable
- Power cable
- DB9 adapter
- USB cable
- USB 0 and USB 1 ports
- Power button
- AUX port
- Reset Config button
- Gigabit Ethernet ports
- SFP Ethernet ports
- Mounting bracket
- ESD point
- Power supply slots
- ACE slot
- Air filter cover
- Grounding point
- Storage slot
- LEDS (Serial console port, USB console port, AUX port, Mini-PIM slots, GPIM slots)

**Specification**

<table>
<thead>
<tr>
<th>Specification</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Dimensions (H x W x D)</td>
<td>3.5 in. x 17.5 in. x 18.2 in. (8.89 cm x 44.45 cm x 46.23 cm)</td>
</tr>
<tr>
<td>Chassis weight</td>
<td>21.96 lb (9.96 kg)</td>
</tr>
<tr>
<td>Average power consumption</td>
<td>85 W</td>
</tr>
<tr>
<td>Average heat dissipation</td>
<td>238 BTU/hr</td>
</tr>
<tr>
<td>Relative humidity</td>
<td>5% to 90%, noncondensing</td>
</tr>
<tr>
<td>Noise level</td>
<td>51.8 dB per ISO 7779 standard</td>
</tr>
</tbody>
</table>
Factory-Default Settings

Security Policies

<table>
<thead>
<tr>
<th>Source Zone</th>
<th>Destination Zone</th>
<th>Policy Action</th>
</tr>
</thead>
<tbody>
<tr>
<td>trust</td>
<td>untrust</td>
<td>permit</td>
</tr>
<tr>
<td>trust</td>
<td>trust</td>
<td>permit</td>
</tr>
</tbody>
</table>

NAT Rules

<table>
<thead>
<tr>
<th>Source Zone</th>
<th>Destination Zone</th>
<th>Policy Action</th>
</tr>
</thead>
<tbody>
<tr>
<td>trust</td>
<td>untrust</td>
<td>Source NAT to untrust zone interface</td>
</tr>
</tbody>
</table>

Interfaces

<table>
<thead>
<tr>
<th>Port Label</th>
<th>Interface</th>
<th>Security Zone</th>
<th>DHCP State</th>
<th>IP Address</th>
</tr>
</thead>
<tbody>
<tr>
<td>0/0</td>
<td>ge-0/0/0</td>
<td>untrust</td>
<td>Client</td>
<td>Unassigned</td>
</tr>
<tr>
<td>0/1</td>
<td>ge-0/0/1</td>
<td>trust</td>
<td>Server</td>
<td>192.168.1.1/24</td>
</tr>
<tr>
<td>0/2</td>
<td>ge-0/0/2</td>
<td>trust</td>
<td>Server</td>
<td>192.168.2.1/24</td>
</tr>
<tr>
<td>0/3</td>
<td>ge-0/0/3</td>
<td>trust</td>
<td>Server</td>
<td>192.168.3.1/24</td>
</tr>
<tr>
<td>0/4</td>
<td>ge-0/0/4</td>
<td>trust</td>
<td>Server</td>
<td>192.168.4.1/24</td>
</tr>
<tr>
<td>0/5</td>
<td>ge-0/0/5</td>
<td>trust</td>
<td>Server</td>
<td>192.168.5.1/24</td>
</tr>
</tbody>
</table>

Services

<table>
<thead>
<tr>
<th>Services</th>
</tr>
</thead>
<tbody>
<tr>
<td>SSH</td>
</tr>
<tr>
<td>HTTPS</td>
</tr>
<tr>
<td>NETCONF over SSH</td>
</tr>
</tbody>
</table>

Screens

<table>
<thead>
<tr>
<th>Screens</th>
</tr>
</thead>
<tbody>
<tr>
<td>Screens</td>
</tr>
<tr>
<td>Basic set of screens are enabled on the untrust zone</td>
</tr>
</tbody>
</table>

Initial Configuration Process

1. Install Device in a Rack
2. Connect the Grounding Cable
3. Power On the Device
4. Verify the Settings
5. Configure Using J-Web

Install the Device in a Rack

1. Position a mounting bracket on each side of the chassis. Use a Phillips (+) screwdriver, number 2 to install the screws that secure the mounting brackets to the chassis. Use either the front mount position or the center mount position.

2. Have one person grasp the sides of the device, lift it, and position it in the rack. Align the bottom hole in each mounting bracket with a hole in each rack rail, making sure that the chassis is level.
3. Have a second person install a mounting screw into each of the two aligned holes. Use a number-3 Phillips screwdriver to tighten the mounting screws.

4. Install the second screw in each mounting bracket.

5. Verify that the mounting screws on one side of the rack are aligned with the mounting screws on the opposite side and that the device is level.

**Connect the Grounding Cable**

1. Attach an ESD strap to an ESD point and place the other end of the strap around your bare wrist.
2. Connect the grounding cable to a proper earth ground.
3. Place the grounding cable lug over the grounding point on the upper rear of the chassis.

4. Secure the grounding cable lug to the grounding point with the screws.

**NOTE:** The device should be permanently connected to ground during normal operation. A licensed electrician must attach a cable lug to the grounding cable. A cable with an incorrectly attached lug can damage the device.

**Power On the Device**

1. If you are using the AC model, perform the following steps:
   a. Connect the power supply adapter to the power supply point on the device and to a power source. We recommend using a surge protector. You must allow the device between five and seven minutes to boot after you power it on.
   b. Secure the power cord to the cable tie holder using a tie-wrap.
2. If you are using the DC model, perform the following steps:

**WARNING:** Before performing the following procedure, ensure that there is no power in the DC circuit. To ensure that all power is cut off, locate the circuit breaker on the panel board that services the DC circuit, switch the circuit breaker to the OFF (0) position, and tape the switch handle of the circuit breaker in the OFF position.

a. Ensure that the voltage across the DC power source cable leads is 0 V and that the cable leads do not become active while you are connecting DC power.

b. Verify that the DC power cables are correctly labeled before making connections to the power supply. In a typical power distribution scheme where the return is connected to chassis ground at the battery plant, you can use a multimeter to verify the resistance of the -48V and RTN DC cables to chassis ground:
   - The cable with very high resistance (indicating an open circuit) to chassis ground will be connected to the V- (input) DC power input terminal.
   - The cable with very low resistance (indicating a closed circuit) to chassis ground will be connected to the V+ (return) DC power input terminal.

c. Remove the clear plastic cover from the terminal studs on the faceplate.

d. Remove the screws on the terminals by using a Phillips (+) screwdriver, number 2.

e. Secure each positive (+) DC source power cable lug to a RTN (return) terminal. Secure each negative (−) DC source power cable lug to a -48V (input) terminal.

f. Replace the clear plastic cover over the terminal studs on the faceplate.

g. Remove the tape from the switch handle of the circuit breaker on the panel board that services the DC circuit and switch the circuit breaker to the ON (|) position.

3. Note the following LED indications. Wait until the STATUS LED is solid green before proceeding to the next step.

<table>
<thead>
<tr>
<th>LED</th>
<th>State</th>
</tr>
</thead>
<tbody>
<tr>
<td>Power</td>
<td>• Solid green (receiving power).</td>
</tr>
<tr>
<td>STATUS</td>
<td>• Solid green (operating normally).</td>
</tr>
<tr>
<td>ALARM</td>
<td>• Amber (operating normally—the LED might glow amber if a rescue configuration is not set. This is not a panic condition).</td>
</tr>
<tr>
<td>MPIM-1 and MPIM-2</td>
<td>• Off (Mini-PIM not present or not detected).</td>
</tr>
<tr>
<td></td>
<td>• Solid green (Mini-PIM is operating normally).</td>
</tr>
<tr>
<td></td>
<td>• Red (Mini-PIM hardware failure or counterfeit check failed).</td>
</tr>
<tr>
<td>HA</td>
<td>• Off (HA not enabled).</td>
</tr>
<tr>
<td></td>
<td>• Solid green (all HA links are available).</td>
</tr>
<tr>
<td>RPS</td>
<td>• Solid green (redundant power supply is operating normally).</td>
</tr>
<tr>
<td>ACE</td>
<td>• The ACE LED is not functional.</td>
</tr>
<tr>
<td>STORAGE</td>
<td>• Solid green (the services gateway is transferring data to or from the optional storage device).</td>
</tr>
</tbody>
</table>
Configure the Device Using J-Web

To configure the device using J-Web, follow the steps in this section.

Connect the Management Device

1. Connect any of the network ports numbered 0/1 through 0/5 on the services gateway to the Ethernet port on the management device, using an RJ-45 cable.

2. Ensure that the management device acquires an IP address. The IP address should be on the corresponding IP subnet for the interface you connected to in step 1. The device functions as a DHCP server and will assign an IP address to the management device.

For example, if you are connected to port 0/1, then the IP address of the management device should be from the 192.168.1.x network. If an IP address is not assigned to the management device, manually configure an IP address to the management device. Do not assign the 192.168.1.1 IP address to the management device, as this IP address is assigned to the device. You can use the `ipconfig` (or `ifconfig` for Macintosh or Linux users) command to verify the IP address.

Refer to the Interfaces table on page 2 for information on the subnet for each interface.

Log In to J-Web

1. Access the J-Web interface using the URL `https://192.168.1.1` (if connected to port 0/1). For ports other than 0/1, access the services gateway using the URL `http://192.168.x.1`, where x is the port number. Refer to the Interfaces table on page 2. The recommended browser is Internet Explorer version 9 or 10, or Mozilla Firefox version 38 (or later).

2. Select one of the following setup modes:

   - Guided Setup (uses a dynamic IP address)—Allows you to set up the device in a custom security configuration. You can select either the Basic or the Expert option.
   - Default Setup (uses a dynamic IP address)—Allows you to quickly set up the device with the default configuration. Any additional configuration can be done after the wizard setup is completed.
   - High Availability—Allows you to set up a chassis cluster with a default basic configuration.

   NOTE: The initial configuration requires that you specify the device name and root password. You can skip all the other steps and go directly to the Confirm & Apply page to apply the configuration.
Configure the Device Using the Guided Setup Mode

1. Connect port 0/0 to the ISP device to obtain a dynamic IP address.

2. Select the expertise level as Basic or Expert.

   - **Basic**
   - **Expert**

3. Configure the basic settings:
   a. Device name
   b. Password for the root account
   c. Time

4. Configure the security topology:
   a. Internet zone (Untrust)
   b. Internal zones (Trust)
   c. DMZ

5. Configure the security policy:
   a. Licenses (Security services)
   b. DMZ policy
   c. Internet and internal policies
   d. Remote VPN

6. Configure Network Address Translation:
   a. Internal Source NAT
   b. Internal Destination NAT
   c. DMZ Destination NAT
7. Review the settings and click **Apply Settings**.

8. Click **Done** to complete the setup.

**Configure the Device Using the Default Setup Mode**

1. Connect port **0/0** to the ISP device to obtain a dynamic IP address.

   **NOTE:** Verify that the management device is connected to port **0/1** on the services gateway before proceeding to the next step.

2. Configure the basic settings – device name, root account information, and system time.

**Configure the security policy – licenses.**

3. Review the settings and click **Apply Settings**. Click **Done** to complete the setup.

You can also configure the services gateway using the CLI, by connecting to the Console port. For details, see the [SRX550 High Memory Services Gateway Hardware Guide](#).

**Verify the Settings**

Access [http://www.juniper.net](http://www.juniper.net) to ensure that you are connected to the Internet. This connectivity ensures that you can pass traffic through the services gateway.

If the page does not load, perform the following checks to see if you can identify the problem:

- Verify your configuration settings, and ensure that you have applied the configuration.
• Check if the ISP-supplied device connecting your SRX Series device to the Internet is turned on and working properly. Try turning it off and on again.

After you complete these steps, the SRX Series device can pass traffic from any trust port to the untrust port.

**Change the Configuration Settings (Optional)**

After you complete the initial setup configuration, you can access the J-Web setup wizard by clicking **Configuration Wizards > Set Up**. You can either edit the existing settings or create a new configuration. If you choose to create a new configuration, then all the current configuration in the services gateway will be deleted.

**Power Off the Device**

To power off the device, press the Power button on the front of the device and hold it for 10 seconds. To remove power completely from the device, unplug the AC power cord or DC power supply cable. After powering off a power supply, wait at least 60 seconds before turning it back on.

**NOTE:** Graceful shutdown is not supported on the SRX550 High Memory Services Gateway.

**Reset the Configuration**

Use the **RESET CONFIG** button to restore the device to the factory-default configuration or to a rescue configuration. To press the **RESET CONFIG** button, insert a small probe (such as a straightened paper clip) into the pinhole on the front panel.

Pressing and quickly releasing the **RESET CONFIG** button loads and commits the rescue configuration. The rescue configuration is a previously committed, valid configuration set through J-Web or the CLI. The STATUS LED is solid amber during this time.

Pressing and holding the **RESET CONFIG** button for 15 seconds or more, until the STATUS LED is solid amber, deletes all configurations (backup configurations and rescue configuration), and loads and commits the factory configuration.

**NOTE:** After resetting the device, check the device status by viewing the LEDs on the front panel. For information on the LED states, see the Power On the Device section.

**Next Steps:**

For information on configuring features on your services gateway, refer to the following:

- Junos OS Documentation/Feature Configuration
- Getting Started Knowledge Base Article
  [https://kb.juniper.net/InfoCenter/index?page=content&id=KB15694](https://kb.juniper.net/InfoCenter/index?page=content&id=KB15694)

**Reference**

Technical Support
[http://www.juniper.net/support/requesting-support.html](http://www.juniper.net/support/requesting-support.html)

SRX550 High Memory Services Gateway Hardware Guide

Supported Transceivers
[https://pathfinder.juniper.net/hct/product/#prd=SRX550%20HM](https://pathfinder.juniper.net/hct/product/#prd=SRX550%20HM)