Statement of Volatility

Introduction

Dated: 11-09-2020

Purpose

The purpose of this document is to provide direction to identify volatile and non-volatile storages and remove non-volatile (NV) storage from the Juniper Networks' SRX4200, namely the SRX4200-CHAS.

Scope

This document only addresses the SRX4200-CHAS. While other platforms offered by Juniper Networks may contain similar hardware components, this document only applies to the SRX4200-CHAS. Furthermore, this document only provides directions for the identification, sanitization and removal of NV storage components. It does not address destruction procedures for those components. As all of the NV storage components used in the SRX4200 are commercial off-the-shelf (COTS) components, directions for destruction of those components are left to the customer's governing department, agency, or office.

FRU Overview

SRX4200 Services Gateway Front Panel

Figure 1 shows the front panel of the SRX4200 Services Gateway.

Figure 1: SRX4200 Services Gateway

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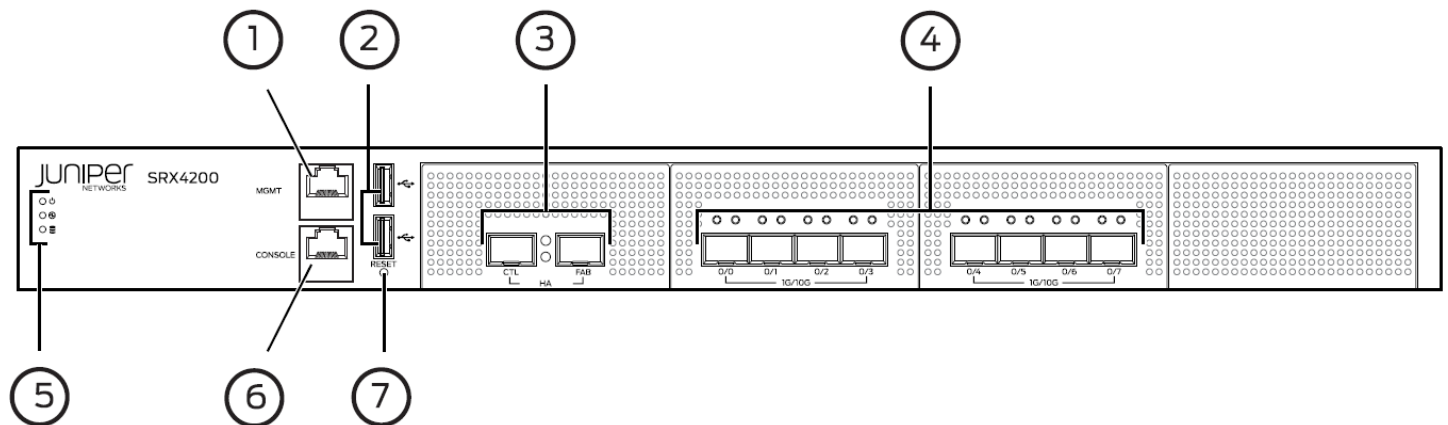
Below table lists the components on the front panel of the services gateway.

Table 1: SRX4200 Services Gateway Components on the Front Panel

Number	Component	Description
1	Management port	Gigabit Ethernet port to connect to the device over the network.
2	USB ports	Two USB 2.0 ports that accept a USB storage device.
3	HA ports	Two 10-Gigabit Ethernet ports, CTL (control port) and FAB (fabric port), to synchronize data and maintain state information in a chassis cluster setup. These ports support enhanced small form-factor pluggable (SFP+) transceivers.
4	SFP+ ports	Eight 1-Gigabit Ethernet/10-Gigabit Ethernet SFP+ ports for network traffic.
5	LEDs	Indicate component and system status at a glance.
6	Console port	Connects a laptop to the services gateway for CLI management. The port uses an RJ-45 serial connection, is configured as DTE, and supports the RS-232 (EIA-232) standard.
7	Reset button	Returns the services gateway to the factory-default configuration.

Figure 2 shows the chassis status LEDs that are located on the front panel of the SRX4200 Services Gateway.

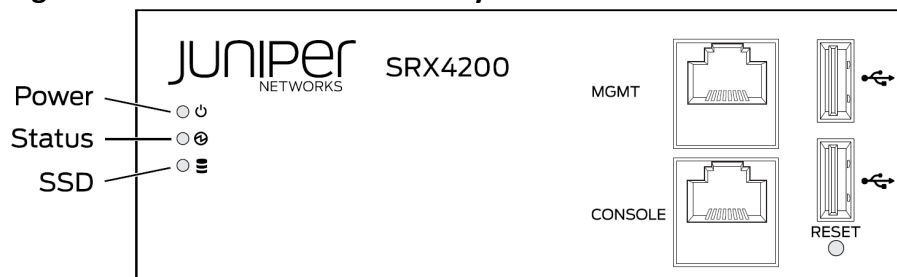**Figure 2: SRX4200 Services Gateway Front Panel LEDs**

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Table 2 SRX4200 Services Gateway Front Panel LEDs

LED	Description
Power	• Solid green—receiving power

Status	• Solid green—operating normally
	• Solid red—critical alarm
	  • Hardware component failure
	  • Software module failure
	  • Fan failure (atleast one)
	• Blinking red—noncritical alarm
	  • The other HA node is in the lost, disabled, or ineligible state.
	• Off—the system is not receiving power

The management port has two LEDs that indicate link activity and status of the management port. Table 3 describes the management port LEDs.

Table 3 Management Port LEDs

LED	Description
Link/Activity (LED on the left)	• Solid amber—A link is established, but there is no activity on the link. • Blinking amber—There is link activity. • Off—There is no link established.
Speed (LED on the right)	• Solid green—100-Mbps link is established. • Solid amber—1000-Mbps link is established. • Off—There is no link established.

Each HA port has one status LED located between the ports. Figure 3 shows the LEDs. The upper LED (callout 1) displays the status for the port on the right and the lower LED (callout 2) displays the status for the port on the left. Table 4 describes the LEDs.

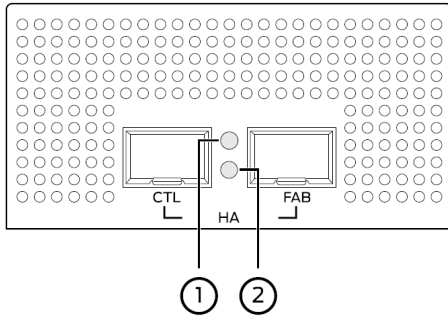< Enter Document Title >

Figure 3: HA Port LEDs

Table 4: HA Port LEDs

LED	Description
Status LED	• Solid amber—A link is established. • Blinking amber—There is link activity. • Off—There is no link established.

Each SFP+ port has two status LEDs located above the port. Below table 5 describes the LEDs. Figure 4 shows the LEDs.
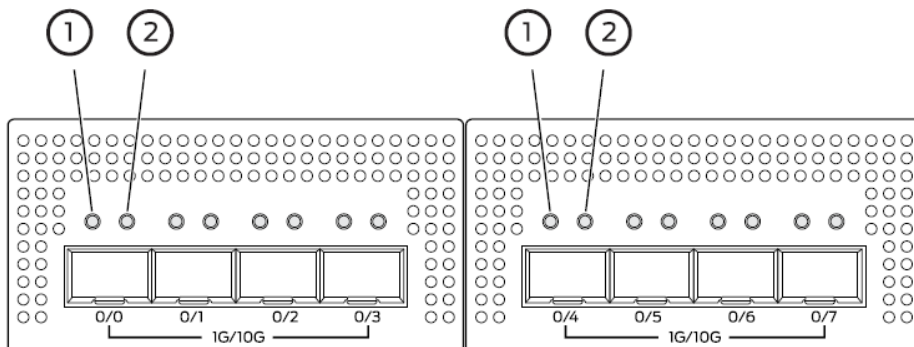
Figure 4: Network Port LEDs

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Table 5: Network Port LEDs

Callout	LED	Description
1	Link (LED on the left)	• Solid green—There is link activity. • Off—There is no link established.
2	Speed/Activity (LED on the right)	• Solid amber—10G/1G link is established. • Blinking amber—There is activity on the 10G/1G link. • Off—There is no link established.

SRX4200 Services Gateway Back Panel

Figure 5 shows the back panel of the SRX4200 Services Gateway, and Table 6 lists and describes the back-panel components.

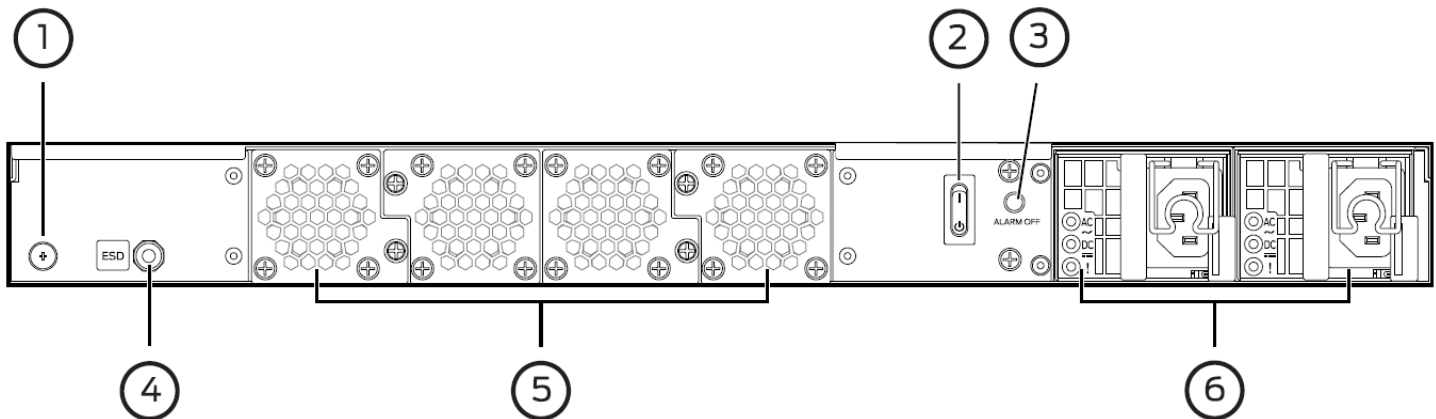**Figure 5: SRX4200 Services Gateway Back Panel**

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Table 6: SRX4200 Services Gateway Back Panel Components

Number	Component	Description
1	Grounding point	Connects the services gateway chassis to earth ground.
2	Power switch	Use the Power switch to power on or power off the services gateway.
3	Alarm Off button	Use this button to turn off an alarm triggered because of an abnormal DC output voltage caused by any of the following: • Only one power supply unit is plugged in. • The AC power cord is not plugged in. • The power supply unit is not functional and there is no DC output.
4	ESD point	For personal safety, while working on the services gateway, use the ESD outlet to plug in an ESD grounding strap to prevent your body from sending static charges to the services gateway.
5	Fan trays	Four fan trays for cooling the services gateway and its components. Each fan tray contains two fans. Three fan trays are required for proper air flow across the chassis internal components. The fourth fan tray provides redundancy.
6	Power supply	Two power supply slots. Each power supply contains a power cord outlet. Two 650-W DC or AC power supplies are provided with the services gateway.

SRX4200 Services Gateway Physical Specifications

The SRX4200 Services Gateway chassis is a rigid sheet metal structure that houses all the components. Table 7 lists the physical specifications of the SRX4200 Services Gateway chassis.

You can mount the SRX4200 Services Gateway on a standard 19-in. four-post rack or in a standard 19-in. enclosed cabinet.

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Table 7: Physical Specifications for the Services Gateway Chassis

Description	Value
Chassis height	1.75 in. (4.45 cm)
Chassis width	17.48 in. (44.40 cm)
Chassis depth	25 in. (63.50 cm)
Weight	• Services gateway with 2 AC power supplies: 29 lb (13.15 kg) • Services gateway with 2 DC power supplies: 28.8 lb (13.06 kg) • AC power supply: 2.3 lb (1.04 kg) • DC power supply: 2.2 lb (0.99 kg)

Volatile Memory

Definition: Memory where the content is lost when power is removed.

Table 8 Volatile Memory

Type of Memory	Size	Reference Designator	User Accessible	Function	Process to clear
SDRAM DDR4	64GB	JDDR0 to JDDR15	No	CPU RAM	Yes

Note: 64GB=8*8GB, SRX4200 uses 8*8GB RDIMM.

Non-Volatile Memory

Definition: Memory where the content is retained when power is removed.

Table 9 Non-volatile Memory

Type of Memory	Size	Reference Designator	User Accessible	Function	Process to clear
SSD	240G	JSATA1 to JSATA4	No	Junos installation	Yes
FLASH	16M	U7	No	Bios installation	Yes

Note: SRX4200 uses 2*240GB SSD working as RAID 1, thus user accessible capacity is 240GB.

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Programmable Device

Definition: A programmable logic device (**PLD**) is an electronic component used to build reconfigurable digital circuits. Unlike a logic gate, which has a fixed function, a **PLD** has an undefined function at the time of manufacture. Before the **PLD** can be used in a circuit it must be programmed, that is, reconfigured.

Table 10 Programmable Devices

Type of Memory	Size	Reference Designator	User Accessible	Function	Process to Clear
CPLD	640 Look-up Tables (LUTs)	U113	No	Logic control	Yes

Power Down and Removal of Non-Volatile Storage

1. Power down the device.
2. Remove the screw on the top cover and then remove the top cover.
3. Locate the SSD bracket, unscrew the locking screw on the SSD bracket and remove the cables which are connected to the two SSDs.
4. Take the SSD bracket out of the chassis.
5. Remove the screw on the SSD bracket.

System Power Down

1. First execute the CLI command "request system power-off" to shut down the device gracefully. Wait for positive feedback that the shutdown is complete. Please DON'T remove the AC/DC input until all the LEDs on the front panel are OFF.
2. Turn off the AC/DC input and remove the power cord.

Sanitization Process and Associated JUNOS Commands

1. Execute the CLI command "show system storage detail" to show the system storage:

```
root@srx4200> show system storage detail
Filesystem       1024-blocks     Used     Avail  Capacity  Mounted on
/dev/gpt/junos     4180302     943466   2902412      25% /.mount
/dev/gpt/config    1624476        948   1493572       0% /.mount/config
/dev/gpt/var      14616688    5593104   7854252      42% /.mount/var
tmpfs              2662416        316   2662100       0% /.mount/tmp
tmpfs               533216        752    532464       0% /.mount/mfs
host_corefiles    124718024     397832 117961816       0% /.mount/var/crash/corefiles
```

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```
host_volatile      32965496        4  32965492      0%  /.mount/var/log/host
host_log           124718024    397832 117961816      0%  /.mount/var/log/hostlogs
host_traffic_log   124718024    397832 117961816      0%  /.mount/var/traffic-log
host_local         124718024    397832 117961816      0%  /.mount/var/db/host
host_aamwd         124718024    397832 117961816      0%  /.mount/var/db/aamwd
host_geoip         124718024    397832 117961816      0%  /.mount/var/db/geoip
host_secinteld     124718024    397832 117961816      0%  /.mount/var/db/secinteld
host_app_disk      10272304    989780  8737676     10%  /.mount/var/install_disk
host_tmp           124718024    397832 117961816      0%  /.mount/var/host-mnt/var/tmp
```

2. Execute the CLI command "request system zeroize" to erase all the user data including configuration and log files. The system will reboot automatically and set the device to the factory default configuration.

```
root@srx4200> request system zeroize
warning: System will be rebooted and may not boot without configuration
Erase all data, including configuration and log files? [yes,no] (no)
```