IDENTIFICATION OF VOLATILE AND NON-VOLATILE STORAGE AND SANITIZATION OF SYSTEM COMPONENTS

JUNIPER NETWORKS SRX4120

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1 INTRODUCTION

1.1 Purpose

The purpose of this document is to provide direction to identify and remove all non-volatile (NV) storage from the Juniper Networks SRX4120 platform. Non-Volatile (NV) storage is a system memory that can store user data information and system configuration data even when system not powered. Volatile (V) storage is a system memory that only retains data or its contents while system powered but when system powered off or interrupted, its data or contents are immediately lost.

1.2 Scope

This document only addresses the SRX4120 platform. While other platforms offered by Juniper Networks may contain similar hardware components, this document only applies to these devices. Furthermore, this document only provides direction for the identification 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 SRX4120 are commercial off-the-shelf (COTS) components, directions for destruction of those components are left to the governing Department, Agency, or Office.

2 EQUIPMENT OVERVIEW

2.1 Identification of Chassis

The SRX4120 Firewall is a next generation firewall that is ideal for small-medium enterprise edge, campus edge, and data center networks. It also supports secure VPN router deployments for distributed enterprise use cases.

The SRX4120 is a 1-U chassis with eight 1GbE MACsec ports, eight 10GbE SFP+ MACsec ports, four 25GbE SFP28 MACsec ports, two 100G QSFP MACsec ports, and two 1GbE SFP HA MACsec ports. It comes with two 120 GB solid-state drive (SSD) for storage and 2x 16GB DDR4 RDIMM for system memory.

SRX4120 is designed to fit in a standard 19" rack with 1.74” height and 17.28” width and 18.20” depth. It supports cooling air flow from front-to-back direction. The individual fan units and PSUs are hot-swappable.

Front view consists of: 8x 1G/2.5G/5G/10G BASE-T RJ45, 4x 1/10/25G SFP28, 8x 1/10G SFP+, 2x 10G/25G/40G/50G/100G QSFP28, 2x 1G SFP HA, 1x RJ45 MGNT, 1x Console RJ45, USB3.0/2.0 Type A Combo, Reset button, Front Panel LEDs (Power, STAT, Alarm, HA, Storage, RPS, SSD)

Rear view consists of: 4 Fan Trays (3+1 redundant) AFO (FRU), 1 + 1 redundant

hot-swappable PSUs 450W AC or 650W DC (Only one PSU would be shipped with SRX4120).

2.2 Description of Field Replaceable Units (FRU)

The power supplies and fan modules are hot-swappable. You can remove and replace them without powering off the system or disrupting system functions.

None of these components contain NV RAM. All NV RAM is either soldered or installed onto the system boards.

3 POWER DOWN AND REMOVAL OF NON-VOLATILE STORAGE

In order to ensure that no user data or system configurations remain resident on an SRX4120 platform, the following steps must be performed:

1. Power must be removed from the system to clear all volatile storage.
2. The NOR Flash and NAND Flash storage devices must be removed from the board.

A detailed process is included in the following sections.

3.1 System Power Down

Power down the system by removing any connected power cords from power supply.

3.2 Disassembly of the SRX4120 Chassis and Identification of NV storage

The SRX4120 contains NV storage that are socketed and soldered to the system board. In order to access the memories for removal, refer to the following steps:

1. Remove the power supply from the system.
2. Remove the ear-mounts on both left and right side of the chassis if any.
3. Remove all screws from the top and sides of the system (Figure 3-1)



Figure 3-1: Top side screws removal

4. Remove all screws from left and right sides of chassis (Figure 3-2)



Figure 3-2: Left and Right sides screws removal

5. Remove the screws from the top of the chassis to access the NVME SSD device. Use a Philips screwdriver to remove the SSD's (Figure 3-3).

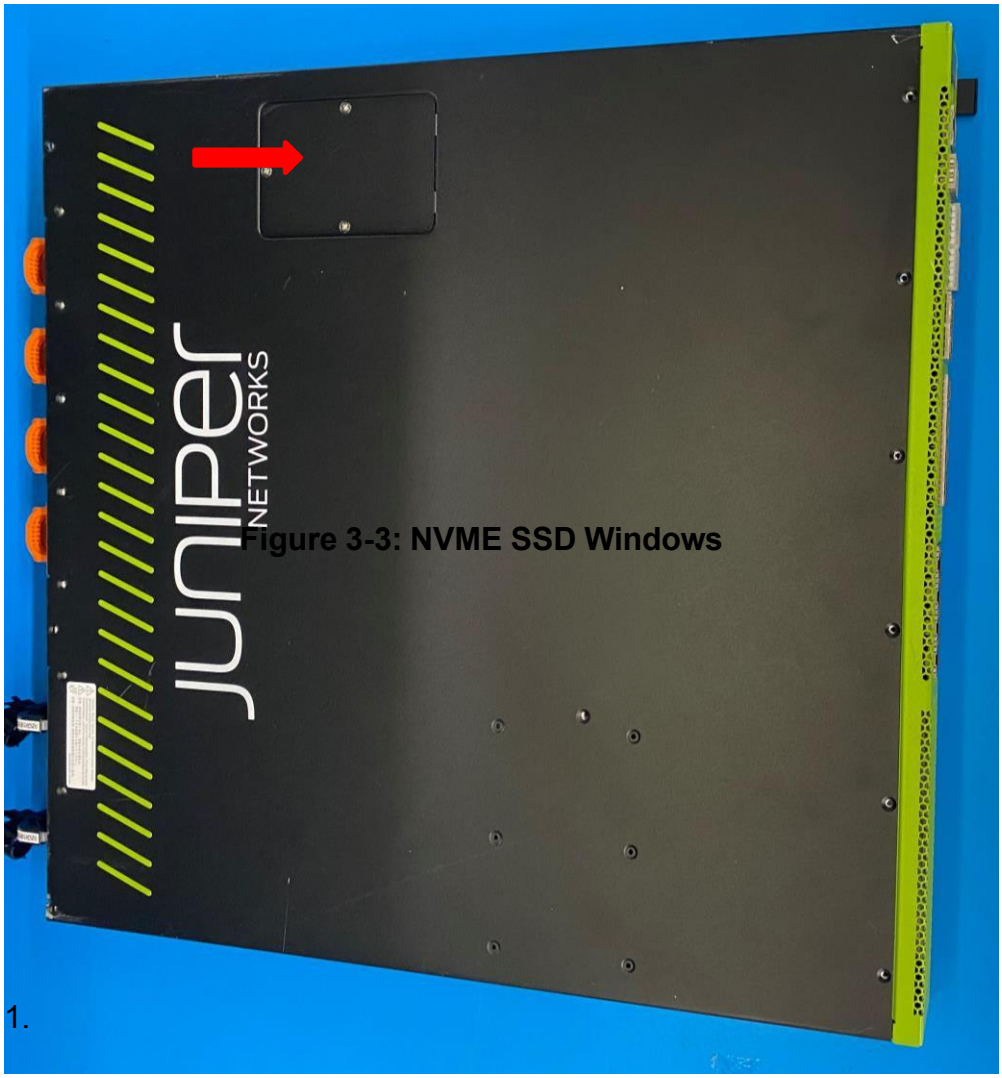


Figure 3-3: NVME SSD Windows

1.

Figure 3-4: NVME SSD Windows

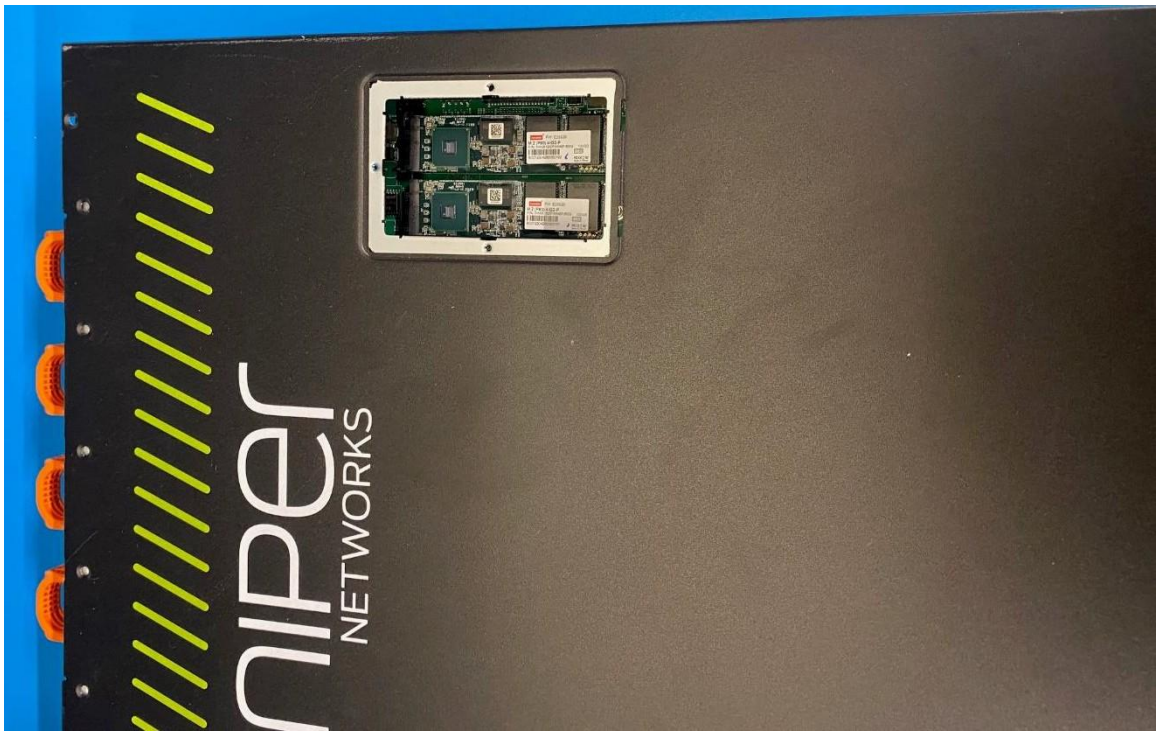


Figure 3-5: NVME SSD Windows

6. Locate NV storage devices on SRX4120 board (Figure 3-5).

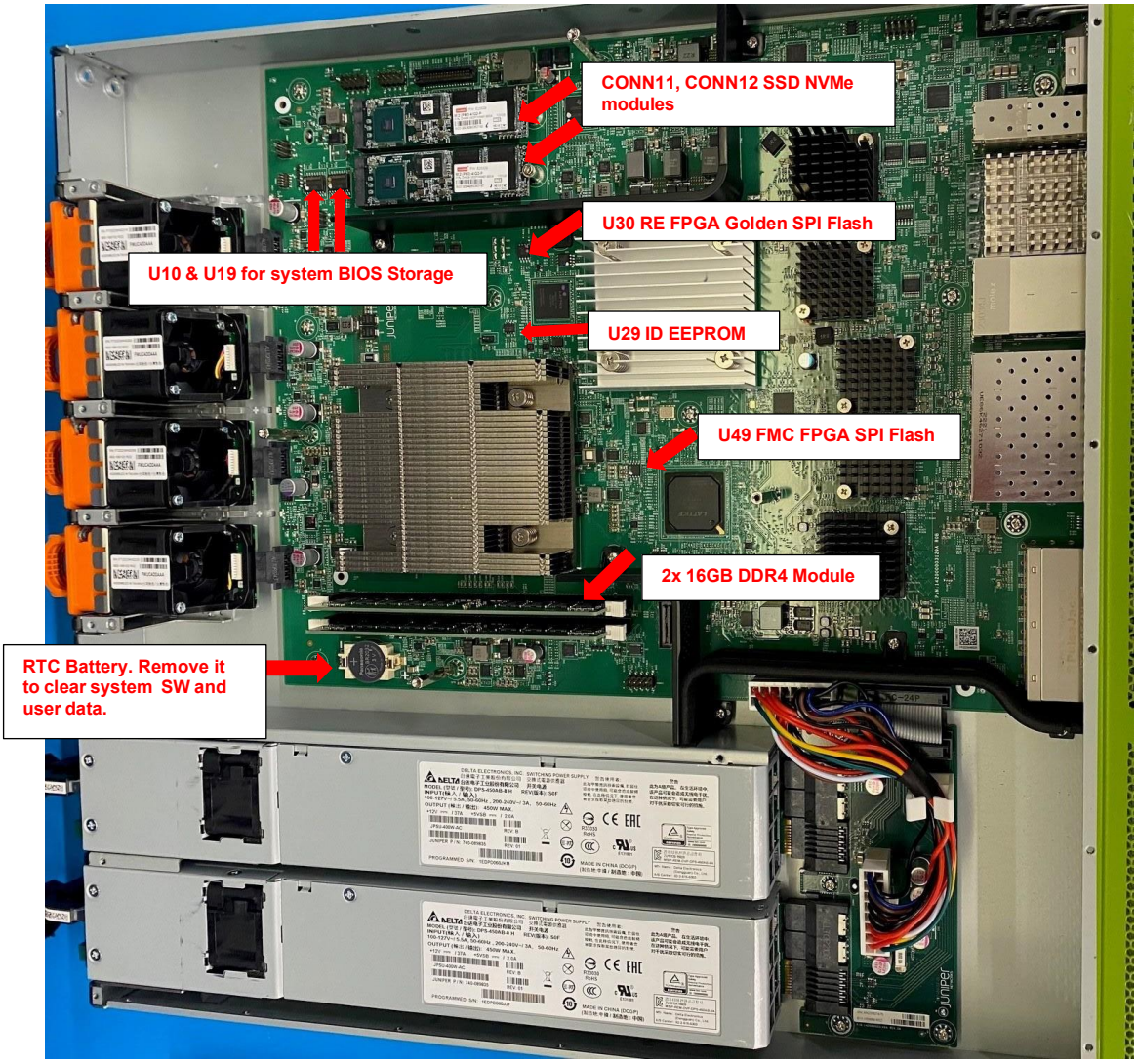


Figure 3-6: Locate NV storage devices on SRX4120 board

7. Removal of the NOR and NAND Flash devices from the board.

   a. Once the NV storage devices have been located, unsolder these devices from the board.

   NOTE: Before removal, ensure J-TAC and the appropriate account team have been notified of your intentions.