

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

**JUNIPER NETWORKS
EX4300-48MP**

**REVISION 1.0
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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 EX4300-48MP 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 EX4300-48MP 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 the NV storage components used in the EX4300-48MP 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

Juniper Networks EX4300-48MP Ethernet Switches provide connectivity for high-density environments and scalability for growing networks. These switches can be deployed wherever you need high density of Gigabit Ethernet ports or redundancy. Typically, EX4300-48MP switches are used in large branch offices, campus wiring closets, and data centers. In datacenters, EX4300-48MP switches can be positioned as top-of-rack switches; the top devices in a rack to provide connectivity for all the devices in the rack. Juniper Networks EX Series Ethernet Switches run Junos OS, which provides Layer2 and Layer3 switching, routing, and security services.

The 48-port EX4300-48MP switches with multigigabit ports—EX4300-48MP and provide 24 built-in 10/100/1000BASE-T Ethernet network ports, 24 built-in 100/1000/2500/5000/10000BASE-T Ethernet network ports, and four built-in 40-Gigabit Ethernet quad small form-factor pluggable plus (QSFP+) ports that can house 40-Gigabit QSFP+ transceivers. The 24 built-in 10/100/1000BASE-T Ethernet network ports support 10 Mbps, 100 Mbps, and 1 Gbps speeds. The 24 built-in 100/1000/2500/5000/10000BASE-T Ethernet network ports support 100Mbps, 1Gbps, 2.5 Gbps, 5 Gbps, and 10 Gbps speeds. All network ports are equipped for PoE++ and provide upto 95watts of power EX4300-48MP is designed to fit in a standard 19" rack.



Figure 2-1: EX4300-48MP

2.2 Description of Field Replaceable Units (FRU)

The power supply, fan tray, Uplink modules and transceivers 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 board.

3 POWER DOWN AND REMOVAL OF NON-VOLATILE STORAGE

In order to ensure that no user data or system configurations remain resident on a EX4300-48MP platform, the following steps must be performed:

1. Power must be removed from the system to clear all volatile storage.
2. The SATA Flash modules must be removed from the system board sockets.
3. Other SPI/BIOS Flash/EEPROM components shown for reference only, they don't store any user or configuration data

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 EX4300-48MP Chassis and Identification of NV storage

The EX4300-48MP does contain NV storages that is replaceable as well as it is soldered to the system board. To access the memory for removal, refer to the following steps:

1. Removing ear-mounts on both left and right side.
2. Remove power supplies Blank PSU, and Fan modules from the system (Figure 3-1)
 - a. Move latch towards PSU Handle and Pull PSU out of Chassis.
 - b. Unfasten the captive screws and remove the Blank PSU.
 - c. Unfasten the captive screws for each fan FRU, unlatch and pull out the Fan FRU out of the chassis.

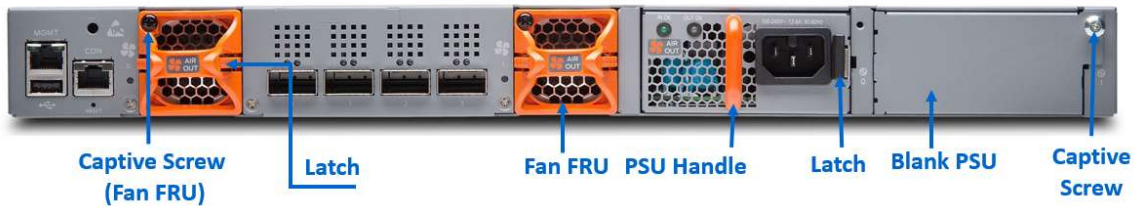


Figure 3-1: PSU FRUs, FAN FRUs

3. Remove thirteen screws on top side (Figure 3-2).



Figure 3-2: Top cover screws

Remove twelve screws on left side and right side of top cover (Figure 3-3) Slide and lift to remove the Top cover.



Figure 3-3: Side screws of Top Cover

4. Locate Volatile memory DIMM and Battery on the Main board (Figure 3-4).

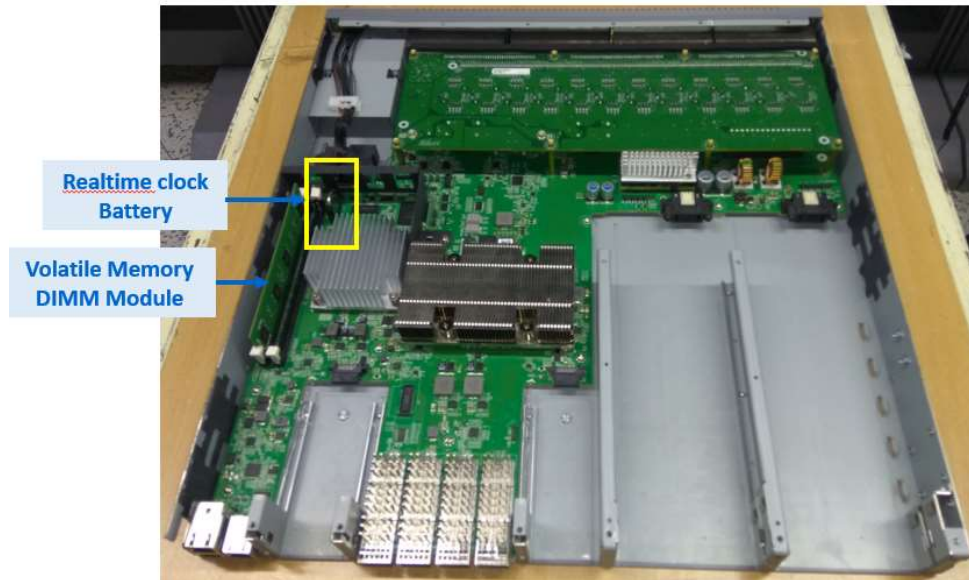


Figure 3-4: Locate DIMM and Battery

5. Locate NV storage SATA SSD module on Main Board (Figure 3-5).
Note: Remove the screw and unplug the SATA SSD module from its socket.

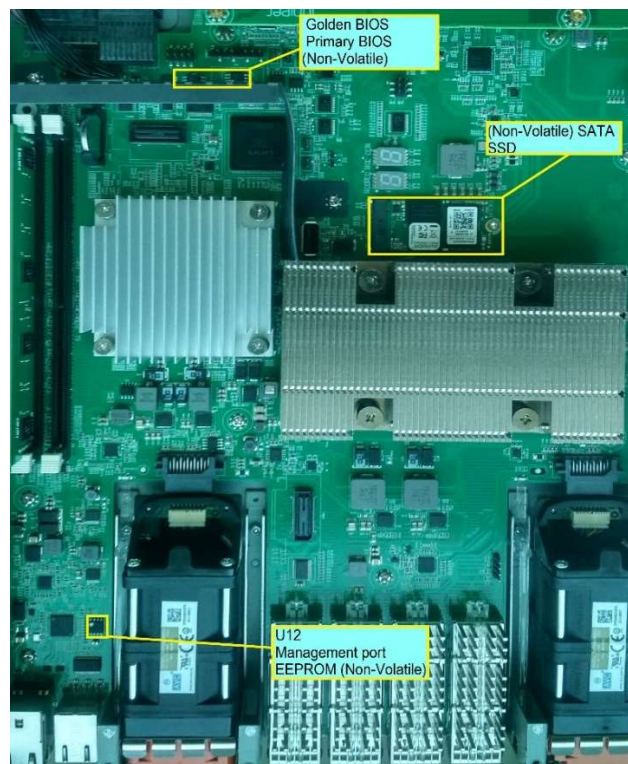


Figure 3-5: Locate NV storage SATA SSD, BIOS Flash and Management port EEPROM

6. Locate Management port EEPROM on the Main Board (Figure 3-5).
7. Locate BIOS FLASH on the Main Board (Figure 3-5).

3.3 Remove Non-volatile components from the System Board

- a. Remove the screw and unplug the SATA SSD Module from its socket.
(Figure 3-5)

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

3.4 Follow the assembly procedure in reverse order to assemble the EX4300-48MP Chassis.