

**Sun Blade 6000 Ethernet Switched NEM 24p  
10GbE**

Security Guide



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# Sun Blade 6000 Ethernet Switched NEM 24p 10GbE Security Guide

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This document provides an overview of the product and general security guidelines for the Sun Blade 6000 Ethernet Switched NEM 24p 10GbE.

The following sections are in this chapter:

- [“Product Overview” on page 1](#)
- [“Understanding Security Principles” on page 2](#)
- [“Understanding Security Features” on page 2](#)
- [“Understanding Security Considerations for Developers” on page 3](#)
- [“Download Updates Securely” on page 4](#)

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## Product Overview

The Sun Blade 6000 Ethernet Switched NEM 24p 10GbE is a multipurpose connectivity module for the Sun Blade 6000 Modular System. The switched NEM supports connection to external devices through 10GbE SFP+ ports and QSFP ports. The switched NEM connects server modules (blades) in a Sun Blade 6000 Modular System chassis with disk modules in the same chassis.

It is important to understand that having access to the blades does not compromise the security of the NEM in general. Blades do not have direct access to the switched NEM firmware.

All policies that need to be set up in the switched NEM are only accessible through Oracle ILOM.

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# Understanding Security Principles

The principles described in this section are fundamental to using any NEM securely.

## Keep Software Up To Date

Keeping all software and firmware versions and patches up to date is one of the primary principles of good security. It is important that you keep the embedded firmware on the switched NEM up to date. Firmware is only accessible to system administrators who have access to Oracle ILOM after logging in.

## Monitor System Activity

Oracle ILOM has a message log that logs system activity. Switched NEM firmware upgrade activity will be included in the system log.

After three consecutive crashes of the configuration, the system will save the failing configuration file and revert to factory-default configuration to ensure availability. Oracle ILOM generates an alert message in the message log when this happens.

## Keep Up To Date on Latest Security Information

Oracle continually improves its software and documentation. Check the product release notes often for updates:

<http://download.oracle.com/docs/cd/E19285-01/index.html>

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# Understanding Security Features

You cannot access the switched NEM firmware directly. All requests are managed by proxy through Oracle ILOM.

The following sections describe the features that are available to securely use the switched NEM.

# AAA

Switched NEM security features are accessible only through the CMM ILOM. The following critical security features provided by Oracle ILOM:

- Authentication ensures that only authorized individuals get access to the system and data.
- Authorization is required to access system privileges and data. Authorization builds on authentication to ensure that individuals get only appropriate access.
- Audits allow administrators to detect attempted breaches of the authentication mechanisms and attempted or successful breaches of access control.

For more information, refer to the Oracle ILOM 3.0 documentation collection at:

<http://www.oracle.com/pls/topic/lookup?ctx=ilom30>

## Logging Information

All logging information is available only through Oracle ILOM.

## Switched NEM Configuration

Custom configurations can be saved, and settings can be reset to factory defaults.

## Firmware/EEPROM Upgrades

Upgrades are allowed only through Oracle ILOM. For detailed instructions for installing firmware, refer to the *Sun Blade 6000 Ethernet Switched NEM 24p 10GbE User's Guide* at:<http://www.oracle.com/pls/topic/lookup?ctx=SB6K-24p-10GbE>

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# Understanding Security Considerations for Developers

All software and firmware running on Oracle's Sun Blade 6000 Switched NEM 24p 10GbE are provided by Oracle. Customers cannot develop their own software to run on the switched NEM.

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# Download Updates Securely

The switched NEM ships with all firmware installed. No installation is required. You must download all software components for update (such as patches and new firmware releases) from the Oracle web download site after logging in. You will be required to provide service contract information and credentials.

Note that the switched NEM firmware is only upgradeable through Oracle ILOM.

For information about installing new firmware, refer to the *Sun Blade 6000 Ethernet Switched NEM 24p 10GbE Product Notes*. For detailed instructions for installing firmware, refer to the *Sun Blade 6000 Ethernet Switched NEM 24p 10GbE User's Guide*. Access both documents at:

<http://www.oracle.com/pls/topic/lookup?ctx=SB6K-24p-10GbE>