

Oracle 1Gb and 10Gb Ethernet Adapters Security Guide

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Oracle 1Gb and 10Gb Ethernet Adapters

This document provides the following security guidelines for Oracle's 1Gb and 10Gb Ethernet adapters.

- [“Product Overview” on page 7](#)
- [“Security Principles” on page 8](#)
- [“User Authentication” on page 8](#)
- [“Security Considerations for Developers” on page 8](#)

Product Overview

The security guidelines in this document apply to Oracle's 1Gb and 10Gb Ethernet adapters listed in the following table:

Adapter	Number of Ports	Form Factor	Transfer Rate	Network Interconnect
Oracle Quad 10Gb Ethernet Adapter	2 QSFP ports. [†]	Low profile	10GbE	CR4-DAC copper, SR4/LR4 Fiber Module
Sun Dual Port GbE PCIe 2.0 LPA, MMF	2	Low profile	1GbE	Multimode fiber
Sun Quad Port GbE PCIe 2.0 LPA, UTP	4	Low profile	1GbE	Unshielded twisted-pair
Sun Quad Port GbE PCIe 2.0 EM, MMF	4	ExpressModule	1GbE	Multimode fiber
Sun Quad Port GbE PCIe 2.0 EM, UTP	4	ExpressModule	1GbE	Unshielded twisted-pair
				(Shielded twisted-pair for NEBS Compliance)
Sun Dual Port 10GBASE-T Adapter [‡]	2	Low profile	10GbE	Unshielded twisted-pair
Sun Dual Port 10GBASE-T ExpressModule [*]	2	ExpressModule	10GbE	Unshielded twisted-pair
				(Shielded twisted-pair for NEBS compliance)
Sun Dual Port 10GbE SFP+ PCIe 2.0 LPA	2	Low profile	10GbE	Fiber long reach and short reach
Sun Dual Port 10GbE SFP+ PCIe 2.0 EM	2	ExpressModule	10GbE	Fiber long reach and short reach
Sun Dual 10GbE Fiber Expansion Module	2	Expansion module	10GbE	Fiber long reach and short reach

[†]There are two QSFP connector ports, port 0 and port 1. Only the top port, port 0, can be configured as a 4x10GbE port. By using a splitter cable, customers can get four 10GbE ports.

‡Formerly called the Sun Dual Port 10 GbE PCIe 2.0 Low Profile Adapter, BASE-T.

*Formerly called the Sun Dual Port 10 GbE PCIe 2.0 ExpressModule, BASE-T.

Security Principles

The principles described in this section are fundamental to using any Ethernet network adapters securely.

Software Updates

These adapters ship with all of the firmware installed. Installation is not required in the field.

Software updates for Oracle Solaris drivers are available through Oracle Solaris patches and updates. Software updates for Oracle Linux and Oracle VM (OVM) drivers for all other operating systems are available from <http://www.oracle.com>. If firmware updates are ever needed, contact Oracle support to arrange for support or check <https://support.oracle.com> for the latest updates and procedures for this particular product.

Refer to the product notes provided with your adapter for late-breaking news or information about firmware update requirements or other security information.

User Authentication

All operating systems in general, and Oracle Solaris in particular, require you to log in with root credentials to administer the cards and to upgrade the drivers or firmware.

Security Considerations for Developers

All software and firmware running on the adapters are provided by Oracle. Customers cannot develop their own software to run on these adapters.

Hard Drives

Hard drives are often used to store sensitive information. To protect this information from unauthorized disclosure, sanitize hard drives prior to reusing, decommissioning, or disposing of them.

- Use disk-wiping tools such as the Oracle Solaris `format (1M)` command to completely erase all data from the disk drive.
- Organizations should refer to their data protection policies to determine the most appropriate method to sanitize hard drives.
- If required, take advantage of Oracle's Customer Data and Device Retention Service <http://www.oracle.com/us/support/library/data-retention-ds-405152.pdf>.

