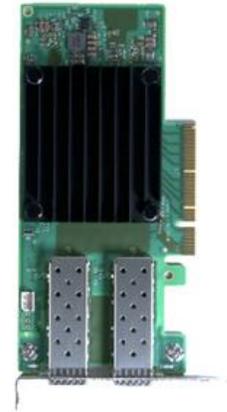ORACLE

# Frequently Asked Questions Oracle Dual Port 100 Gb and 25 Gb Ethernet Adapters, Mellanox

Modern, high-performance enterprise clouds demand unique capabilities from the supporting networking infrastructure. To efficiently tap into the cloud's physical resources, infrastructure must support the network and storage needs of high-density, virtualized servers and also be capable of virtualizing L2 network infrastructure to enable virtual servers to be interconnected with secure virtual networks. To cater to these requirements, Oracle offers this new high performance ethernet adapter enabling cloud deployments to augment their virtualization technologies and leverage overlay networking technologies.

## Oracle Dual Port 100 Gb Ethernet Adapter, Mellanox

Oracle Dual Port 100 Gb Ethernet Adapter is an ideal server interface for next-generation cloud-enabled data centres. The adapter brings leading edge performance and resources necessary to unleash the full power of multicore, high-performance servers and storage systems. With industry leading throughput, dramatically reduced CPU and system resource utilization and consolidated software-defined I/O services for servers and storage systems, Oracle Dual Port 100 Gb Ethernet Adapter provides the most-efficient, flexible, and high-performance server interface for cloud deployments.

## Oracle Dual Port 25 Gb Ethernet Adapter, Mellanox

Oracle Dual Port 25 Gb Ethernet Adapter brings the essential features for deploying network infrastructure in next-generation clouds to Oracle servers and storage systems. The adapter supports network and storage convergence, dramatically expands resources for server virtualization, and offloads network virtualization from the CPU.

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## Customer Benefits

### Virtualization for the Cloud

Oracle Dual Port 100 Gb Ethernet Adapter provides the server virtualization, I/O convergence, and network virtualization features required for high-performance cloud deployments. The adapter has the network resources to deploy up to 254 virtual machines on a single server. With two 100 Gb Ethernet ports, the adapter delivers 4x the bandwidth of 25 Gb adapters to support the network and storage needs of more virtual machines.

For customers with requirements for lesser resources, the new Oracle 25 Gb adapter supports up to 128 virtual machines while delivering 2.5x the bandwidth of 10 Gb adapters. With these two adapters, customers have a choice to further expand the capabilities of their server infrastructure.

To achieve full virtualization of both the server and network infrastructure, the adapter provides support for overlay networks allowing virtual machines to connect to isolated virtual networks that share the Ethernet physical infrastructure.

## Frequently Asked Questions

**Q:** What is the Oracle Dual Port 100 Gb and 25 Gb Ethernet Adapters?

**A:** Oracle Dual Port 100 Gb and 25 Gb Ethernet Adapters enables high performance and flexibility for deploying network infrastructure in the next-generation clouds to Oracle servers and storage systems. With unique capabilities, to support 254 and 128 virtual machines respectively, Oracle Dual Port 100 Gb and 25 Gb Ethernet Adapters enable you to augment your server and network infrastructure.

**Q:** What server systems support the Oracle Dual Port 100 Gb and 25 Gb Ethernet Adapters?

**A:** Currently, the 100 Gb Ethernet Adapter is supported in Oracle Server x9 and in Oracle SPARC T8-1, T8-2, T8-4, and M8-8 servers. The 25 Gb adapter card is supported in Oracle server X9. Refer to the Product Notes document for list of servers that support this adapter card which is updated as new information becomes available. Also, Oracle Server Technologies site with the Technical Details pages for SPARC and x86 servers include Supported I/O Cards documents for the various server models.

**Q:** What operating systems are required by the Oracle Dual Port 100 Gb and 25 Gb Ethernet Adapters?

**A:** Refer to the Product Notes document for the required operating systems for each supported server system. This document is updated as new information becomes available.

**Q:** Does the Oracle Dual Port 100 Gb Ethernet Adapter support lower speeds (i.e. 25 Gbps)?

**A:** Yes, the 100 GbE card supports 100 Gbps, 40 Gbps, 25 Gbps and 10 Gbps switch port connections. Refer to the Product Notes and its Ethernet Transceivers and Cables Supported section for more information.

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**Q:** Does the Oracle Dual Port 25 Gb Ethernet Adapter support lower speeds (i.e. 10 Gbps)?

**A:** Yes, the 25 GbE card supports 25 Gbps, 10 Gbps  and 1 Gbps switch port connections. Refer to the Product Notes and its Ethernet Transceivers and Cables Supported section for more information.

**Q:** What types of cabling are supported with the 100 GbE adapter?

**A:** The adapter supports cables and transceivers that plug into the QSFP28 ports of the adapter. These include 3 meters and 5 meters Direct Attach Copper (DAC) cables for shorter lengths as well a QSFP SR transceivers and fiber cables for up to 100 meter in length. Refer to Refer to the Product Notes and its Ethernet Transceivers and Cables Supported section for more information.

**Q:** What types of cabling are supported with the 25 GbE adapter?

**A:** The adapter supports cables and transceivers that plug into the SFP28 ports of the adapter. These include 1, 2, 3 and 5 meters Direct Attach Copper (DAC) cables for shorter lengths as well a SFP+ and ASP28 transceivers and fiber cables for up to 100 meter in length. Refer to Refer to the Product Notes and its Ethernet Transceivers and Cables Supported section for more information.

**Q:** Where can I find the product manuals for the 100 Gb and 25 Gb Ethernet adapters?

**A:** Go to Oracle Documentation 25/100 Gb Ethernet Adapter library page for Product Notes, User's guide, and other documentation.

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