

NVME-oF - NVM Express over Fabrics

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NVME-oF

NVME-oF enables NVMe message-based commands to transfer data between a host computer and a target solid-state storage device or system over a network such as Ethernet, Fibre Channel, and InfiniBand. Tunneling NVMe commands through an RDMA fabric provides a high throughput and a low latency.

For information on how to configure NVME-oF, please refer to the <u>HowTo Configure NVMe</u> <u>over Fabrics</u> Community post.

i) Note

The --with-nvmf installation option should **not** be specified, if nvmetcp kernel module is used. In this case, the native Inbox nvme-tcp kernel module will be loaded.

NVME-oF Target Offload

i) Note

This feature is only supported for ConnectX-5 adapter cards family and above.

NVME-oF Target Offload is an implementation of the new NVME-oF standard Target (server) side in hardware. Starting from ConnectX-5 family cards, all regular IO requests can be processed by the HCA, with the HCA sending IO requests directly to a real NVMe PCI device, using peer-to-peer PCI communications. This means that excluding connection management and error flows, no CPU utilization will be observed during NVME-oF traffic.

• For instructions on how to configure NVME-oF target offload, refer to <u>HowTo</u> <u>Configure NVME-oF Target Offload</u> Community post. • For instructions on how to verify that NVME-oF target offload is working properly, refer to <u>Simple NVMe-oF Target Offload Benchmark</u> Community post.

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