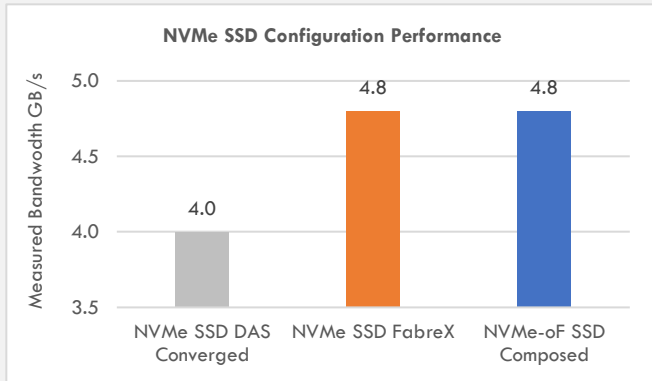
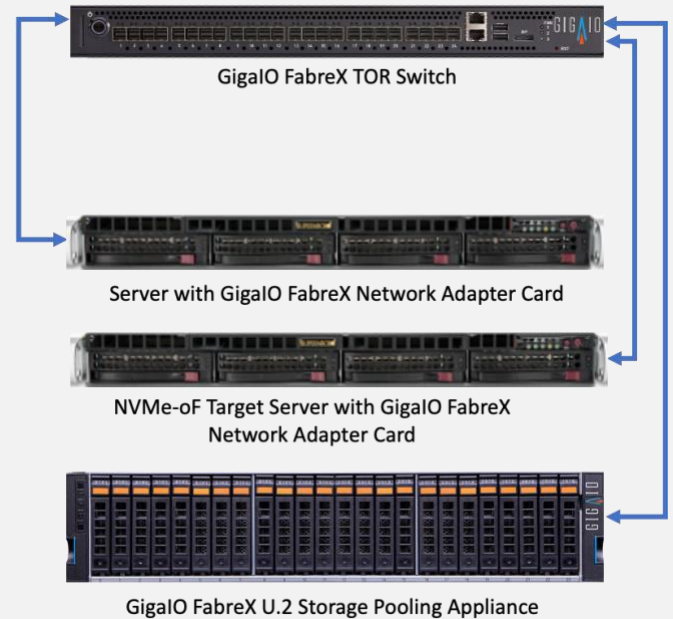


## FabreX NVMe-oF Delivers DAS Performance with NAS Sharing and Flexibility



## Configuration



# FabreX Native PCIe Network Optimizes Performance of Composable Infrastructure and NVMe-oF Architecture

**Converged configuration** – The converged configuration is a 1U server with the SSD storage inside the server connected using the internal PCIe bus.

**Composed configuration** – GigalIO composed architecture is a single 1U server connected to the FabreX™ PCIe Network fabric. The FabreX system uses a single JBOF with identical U.2 SSD drives as the converged configuration.

**NVMe-oF target configuration** – The NVMe-oF configuration uses a second 1U server connected to the FabreX switch. This second server is now composed as the NVMe-oF target server.

**Results Summary** – FIO is the benchmark with a read block size of 128KB. The SSDs are configured as x2, data is read from 2 SSD drives in parallel to maximize bandwidth.

The converged configuration or DAS (Direct Attached Storage) returned a 4.0 MB/sec read bandwidth.

The FabreX compose configuration or NAS (Network Attached Storage) return 20% higher bandwidth at 4.8 MB/sec.

The NVMe-oF target configuration also returned a 4.8 MB/sec read bandwidth, identical to the composed configuration.

In both the composed and NVMe-oF configurations the performance is 20% higher compared to converged.

NVMe-oF deliver better performance than DAS with the flexibility and sharing of NAS – performance without compromise.

GigalIO FabreX is a Rack-Scale composable infrastructure solution that delivers the unlimited flexibility and agility of the cloud, at a fraction of the cost. Benefits include:

**Improved system agility** by disaggregating system resources on the fly and creating shared resource pools that can then be dynamically composed in real-time.

**Slashed Total Cost of Ownership** by enabling device sharing which increases resource utilization and eliminates over provisioning, resulting in reduced CapEx and OpEx.

**Simplified and automated** system set-up, administration and serviceability with freedom of choice for management tools from powerful CLI and Redfish APIs to ready-to-run, off-the-shelf enterprise-class orchestration software.

**Seamless support** for any PCIe-compliant device including servers, CPUs, memory, 3D-XPoint, storage, GPUs, FPGAs, specialty ASICs and NICs.

**Blazing system performance** with industry leading PCIe latency and bandwidth throughout the rack and beyond. As PCIe resources are added they immediately benefit from the native PCIe performance as all data transfers and buffers are completely eliminated.

Visit [www.gigaio.com](http://www.gigaio.com) to discover more about GigalIO and FabreX, the industry's only pure PCIe Network Fabric.