

# TGA 1000 Gateway – Flexible, Transparent Data Access



## Features

**Transparent Client Access:** NFS clients can easily access data on high performance storage appliances.

**Flexible Connection Options:** Gigabit Ethernet, 10Gb Ethernet and Infiniband

**Improves Head Node Performance:** Provides more bandwidth for other tasks.

**Simplicity:** Delivered fully configured and ready to go to minimize setup time. Includes complete lights out management, monitoring and real-time storage optimization tools.

## Terascale Gateway Appliance Provides Flexible Data Access and Improves Cluster Performance

Terascale's scalable storage appliances are the single best choice for organizations who demand the highest levels of file-based storage throughput performance. Our cost-effective appliances leverage Lustre™, the very highest throughput parallel file system, and are easy to deploy, easy to manage, and highly reliable.

All our appliances leverage the Terascale Integrated Storage Information System (TISIS™), including the software, monitoring / management agents, file system, and user interface that maximizes system up-time and provides real-time storage optimization. With its data collection capabilities, TISIS combines different views enabling administrators to track metrics including bandwidth usage, capacity consumption, client node access, and specific job resource usage. With TISIS organizations are able to understand and optimize their storage infrastructure and perform data driven capacity, throughput, and utilization analysis, scheduling optimization and complete system management.

The Terascale Gateway Appliance (TGA) 1000 is dedicated to providing access between Terascale high throughput storage appliances and the rest of an organization. Often, a High Performance Computing (HPC) cluster and its data are isolated from the rest of an organization. Typically, this is to maximize performance by providing a dedicated network to the cluster nodes. While this provides the best performance within the cluster, clients from outside the cluster have limited access to the data on the cluster storage. The TGA 1000 enables data access from outside the dedicated cluster network. Typical uses include:

**Desktop access:** allow users to easily access results without going through any of the dedicated cluster compute nodes.

**Backup:** leverage existing backup solutions based on standard protocols like NFS to ensure the survival of your data.

**Analysis Preparation:** data placement while getting ready to run a simulation.

**Data Transfer:** move data to lower performance archiving environments including tape or large disk farms.

The TGA 1000 provides support for access via NFS enabling users to leverage standard protocols to access the data without putting clients on cluster nodes. The appliance acts as an NFS mount point or SMB2 connection, making requests to the Terascale storage on behalf of the user. Additionally, the TGA 1000 can be used as a Lustre router, enabling users to get direct Lustre access to their data from different networking environments, allowing links between Ethernet networks and dedicated cluster networks.

The Terascale TGA 1000 is delivered as a fully configured, integrated data access solution managed as part of a complete Terascale storage environment.

## Terascale TGA 1000 Gateway Specifications

### Terascale TGA 1000 Solution:



File System:	Standard Lustre parallel file system
Client Networking Options:	Gigabit Ethernet 10 Gigabit Ethernet InfiniBand (QDR, DDR, SDR)
Key Features	Access by NFS clients on different networks Access by Lustre clients on different networks  Single appliance fully ready to go  Managed through TISIS management solution
Dimensions	H: 2U – 3.5" (8.89cm), D: 26.8" (68.07cm), W: Standard 19" (48.3 cm)

### Terascale TISIS Management Solution:

Key Features	Integrated management Extensive storage experience not required Complete remote control including system on, reset, and shutdown SNMP support for both commands and reporting Comprehensive status/error reporting and alerts
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