The Economics of Simple
The Cost Benefits of Enterprise-Grade Reliability in HPC Storage

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Simplicity as Innovation
2019 Hyperion HPC Site Survey*

Purpose
- Identify key challenges in HPC storage deployment, contrast TCO vs. acquisition cost, and determine the benefits of simplified management

Survey Participants
- Data center planners and managers
- Purchasing decision makers
- HPC storage system managers/users

Regions Covered
- Asia
- EMEA
- North America

*Most Important HPC Storage Purchase Criteria*

- Performance: 57%
- Initial purchase price: 37%
- Long-term value (TCO): 37%
- HPC infrastructure fit: 24%
- Scalability/upgradability: 18%
- Architecture: 14%
- Vendor support: 14%
- Number and skill set of staff required: 10%
- Energy efficiency: 8%
- Recovery/resilience: 8%
- Longevity of the selected solution: 6%
- Software support: 6%
- Network connectivity: 4%
- Floor space (footprint): 2%

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Why Is Simplicity Disruptive?

The Economics of Simple

Most Challenging Storage Infrastructure Operational Aspect (%)

- Recruiting/training storage experts (38%)
- Storage system installation time and cost (16%)
- Tuning and optimization time and cost (18%)
- Administration time and cost (22%)
- System downtime (6%)
What Does Simplicity Do for the End User?

The Economics of Simple

- **78%** Of HPC sites report storage-related issues negatively impact user productivity
  - 42% of HPC sites experience storage failures monthly

- **60%** Of HPC sites require more than one dedicated person to manage their storage
  - 18% of HPC sites require four or more dedicated staff to manage their storage systems

- **32%** Of HPC sites using Lustre, BeeGFS, or Spectrum Scale spend more than $300k annually on storage management staffing
  - 19% spend over $500k to support storage infrastructure

- **25%** Of HPC sites estimate a day of downtime costs more than $100K
  - 10% reporting more than $500K in downtime costs
Leadership Performance & Simplicity

No Need to Trade One for the Other

Panasas v. Competition MB/s/100 HDD

Panasas ActiveStor Ultra
BeeGFS
Lustre ClusterStor L300
GPFS ESS GL4S
How You Can Help?
Consider What the Impact of Simplicity Can Have on Your HPC Operations

**Highest Performance**
Consistently fast regardless of workload.

**Frustration-Free**
Set it and forget it.

**Flexibility**
Dynamically adapt to changing workloads.

**Lowest IT Support Cost**
Competitive acquisition cost combined with lowest cost of operation.

**Reliability**
Uninterrupted user experience.

**Timely, Quality Support**
Single vendor problem resolution. No finger pointing.
Thank You

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