Excellent Performance

- World-leading clustered metadata technology
- Large directory support and fast filename lookup
- Supports data & metadata intensive workload
- Near linear aggregated read/write throughput with the increase of storage nodes
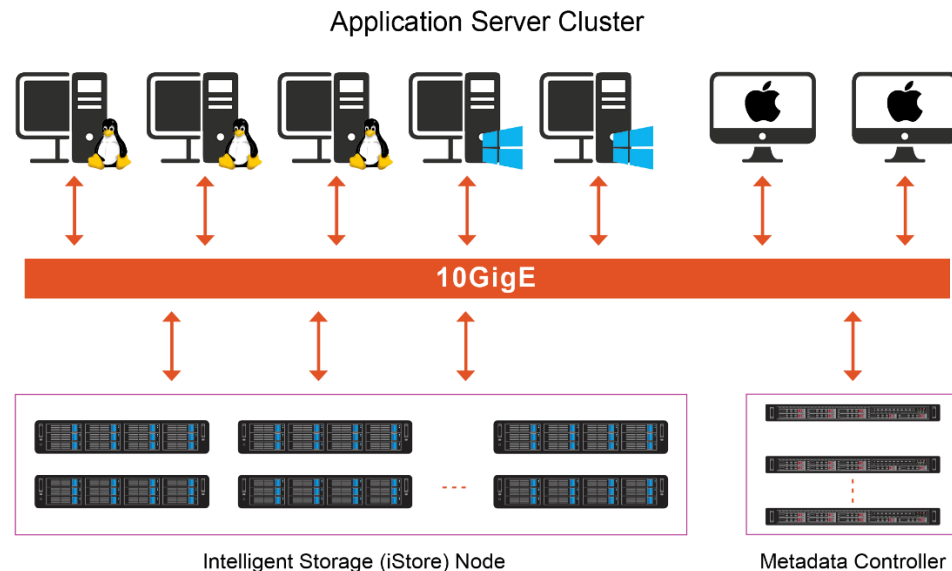
Superior Reliability

- No single point of failure
- Automatic failure detection
- Fast data recovery

Best TCO

- Pay as you grow
- Single management interface
- Predictable scale up capacity and performance.

Scala Storage is a scale out storage solutions designed for large-scale, data-intensive applications. With a fully POSIX-compliant parallel file system (ScalaFS) and other software components, Scala Storage scale out solutions provides the best price and performance storage solution. Scala Storage has proven customer successes in Internet, oil & gas, life sciences & bioinformatics, media & entertainment, video surveillance, education and government for high performance computer (HPC) storage solutions.

Application Server Cluster — 10GigE — Intelligent Storage (iStore) Node — Metadata Controller

Scalability

Scala Storage capacity and performance is based on linear expansion. Based on a non-disruptive systems expansion and predictable capacity and performance increase, Scala Storage Scale Out Solution provides best ROI for your storage budget and growth.

Performance

Scala Storage is designed for data & metadata intensive workload. It utilizes ~90% of network performance. Scala Storage File System (ScalaFS) is optimized for both large files (>10GB) and small files (KB-sized). Large files are striped as 64MB sections across storage (iStore) node. The aggregate throughput grows linearly when adding more iStore node.

With world's leading clustered metadata technology, ScalaFS enables the support of large directories and fast filename lookup, ideal for Big Data/Cloud management. Supporting up to 4,000 computing nodes, with hundreds of GB/s aggregated throughput.

Metadata servers can also scale up linearly. Scala Storage supports more than 200 billion filename lookups with up to 128 metadata servers, offering hundreds of thousands of files per second.

Reliability

Scala Storage systems are design with no single point of failure. Both data path and data storage have built-in redundant path in order to prevent possible down time. In addition, Data is replicated across iStore node networks to prevent disk, server or network failures.

Built-in automatic failure-detecting mechanisms can detect hardware failures and self-healing process provides recovery automatically. The process is totally transparent to applications and no manual recovery is required.

Compared to traditional RAID controller, recovery time is only 1/5 of the time required to recover from hard drive failure.

Load Balancing

Traditional storage uses RAID as the physical unit and LUN as the logical unit, which limits data allocation and tends to result in an unbalanced load. Scala Storage evenly distributes data and replicas in parallel to different iStore nodes, ensuring all the disks have the same level of utilization. When customers add new servers for more capacities, system workloads will be balanced automatically to maintain the utilization and increase the overall performance.

Best Total Costs of Ownership

Scala Storage provides a complete solution for your storage needs. With predictable performance and capacity to increase by adding additional iStore node, customers are only need to pay as you grow. Our price/performance solution is competitive to all of the other commercial scale-out solutions.

Fast Deployment and Easy Management

All storages are preconfigured with either 144TB or 216TB configuration. IT or storage administration only takes less than 15mins for deployment. With automatic load balance and non-disruptive upgrade, iStore nodes can be added with just a few clicks to scale out the solution which are all transparent to the application servers or computing node.

Scala Storage includes a centralized management GUI, ScalaManager, to configure, manage, and monitor the systems. Only one administrator can easily manage a cluster with PB level of storage.

About Scala Storage

Scala Storage has redefined storage solutions to solve these challenges with Scala Storage Scale Out System, Scala File Systems and ScalaManager. These storage solutions implementations are designed for enterprise, private and public cloud computing, and are delivered across a variety of industries. Scala Storage is scalable from hundreds of terabytes all the way up to petabytes, while still providing predictable increasing linear performance and high availability storage structure. The Scala Storage family delivers extreme capacity and performance, and significantly reduces an organization's capital expense, operational expense and total cost of ownership.