



SGI Overview

HPC User Forum
Dearborn, Michigan
September 17th, 2012

SGI Market Strategy

■ HPC

- Commercial
Scientific
Modeling &
Simulation

Big Data

Hadoop
In-memory
Analytics
Archive

Cloud

Public
Private
Government

sgi

Providing Customers with **Trusted** Technical Computing Solutions

sgi.

Four Solution Pillars

Compute

- SGI® ICE
- SGI® UV
- Rackable™
- Big Data Solutions
- Prism

Storage

- Modular Storage
- InfiniteStorage
- ArcFiniti™

Software

- Management Center
- Performance Suite
- DMF
- XFS
- OpenFOAM®
- LiveArc®

Services

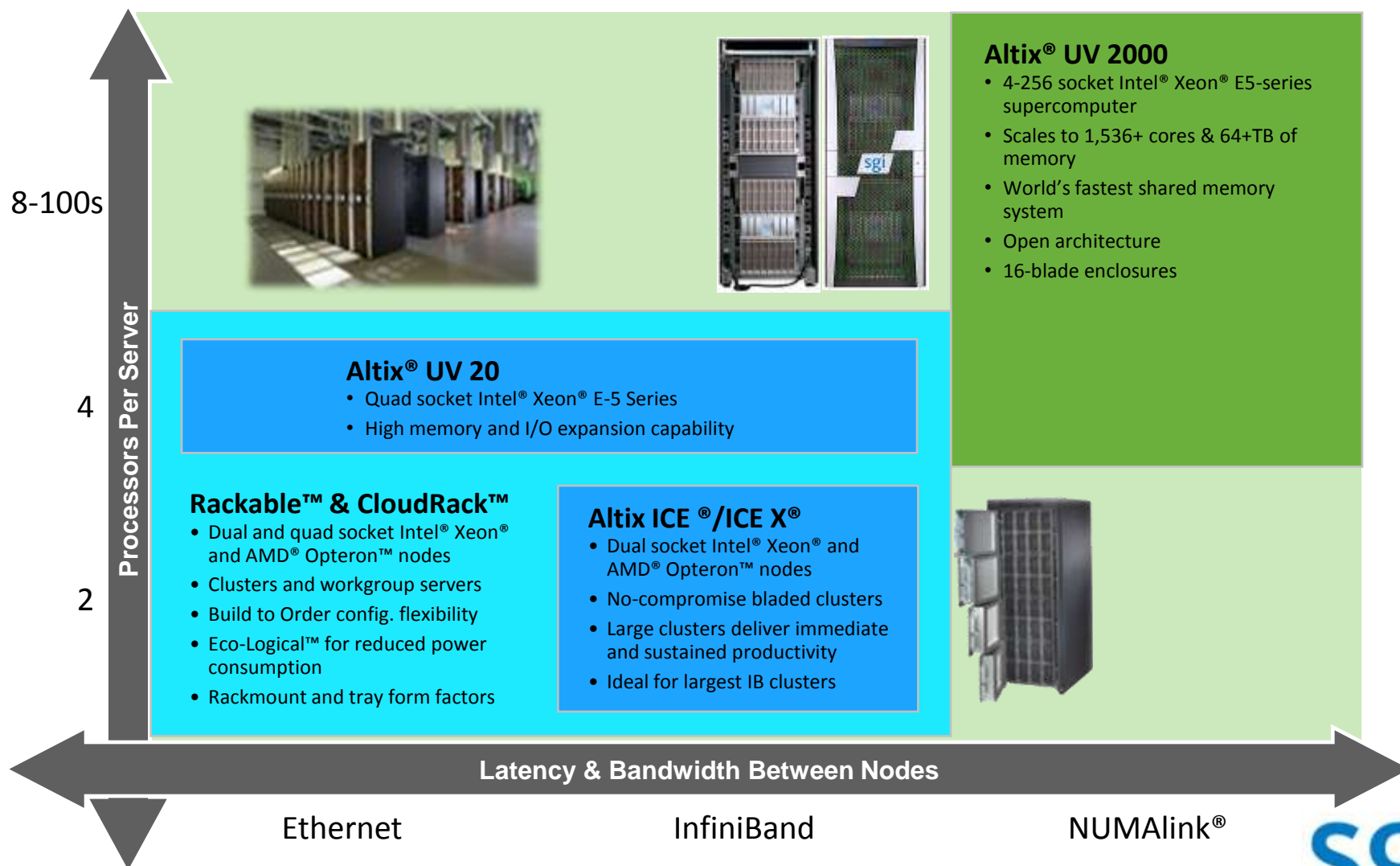
- Consulting Services
- Implementation Services
- Support Services

Designed to work together. Designed to scale.



SGI Server Portfolio

Performance Optimized for FEA/CAE workloads



SGI Storage Portfolio

Tailored to meet customer workflow requirements

JBOD

- **IS1000 Series**
Half Depth JBOD
- **IS2000 Series**
Full Depth JBOD

InfiniteStorage RAID Platforms

Entry RAID

- **IS5000**
 - Entry RAID
 - 6 Gb/s SAS
 - SAS and/or SSD drives
 - 192 drives max

Mid-Range

- **IS4600**
 - Mixed Use RAID
 - FC or IB HBAs
 - Optional 4U 60-drive dense tray
 - 480 drives max

Performance

- **IS6120**
 - Performance RAID
 - SSD, SAS, SATA drives intermix
 - 120 drives max
- **IS15000**
 - Extreme bandwidth, density & scalability
 - 600 drives per rack
 - 1200 drives max
- **IS16000**
 - 10GB/s Reads and writes
 - 300k Random HDD read IOPS

Persistent Data Stores

MAID

- **COPAN 400M**
Native MAID
- **COPAN 400T/TX**
VTL

Tape Libraries

- **Spectra Logic**
 - T50e
 - T120
 - T200
 - T380
 - T680
 - T950
 - T-Finity

Integrated Archive

ArcFiniti

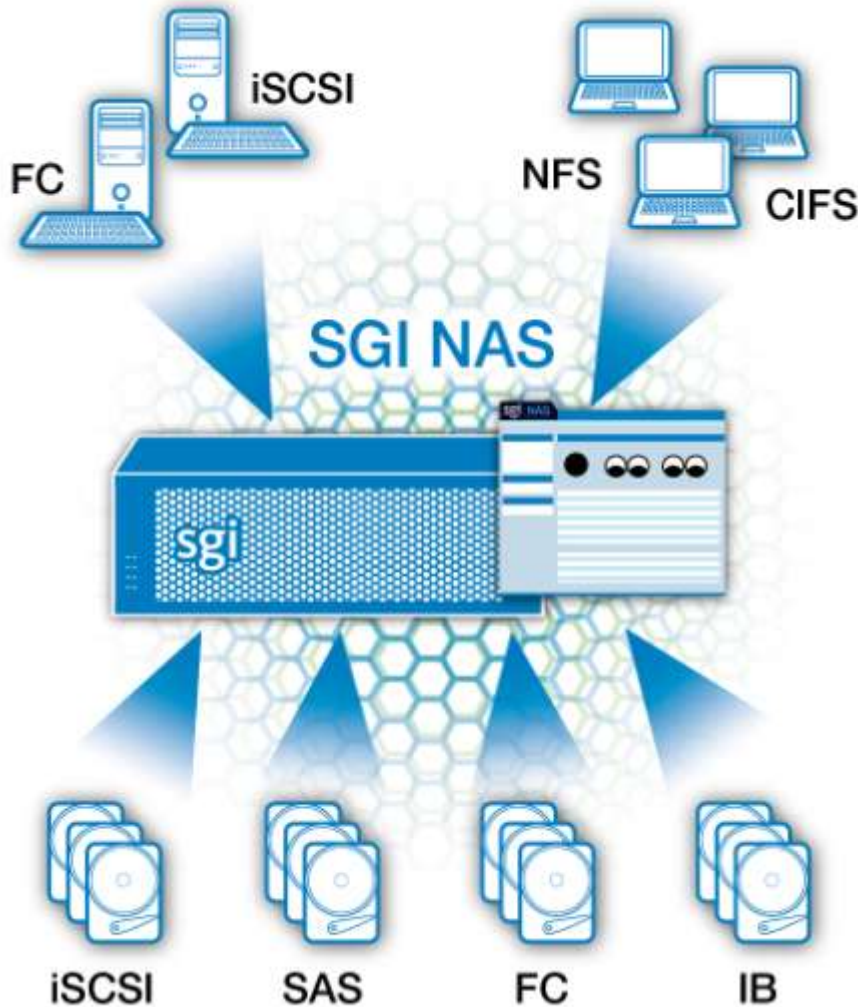
- Network-accessible Disk-based archive solution.
- Up to 1.44 PB in a single rack.
- Leveraging MAID

InfiniteStorage Server Platforms

InfiniteStorage Servers

- | | |
|---|---|
| <ul style="list-style-type: none"> • ISS3009 <ul style="list-style-type: none"> - Half-depth, 3U 9 Drives • ISS3012 <ul style="list-style-type: none"> - Half-depth, 3U 12 Drives • ISS3118 <ul style="list-style-type: none"> - Full-depth, 3U 18 Drives | <ul style="list-style-type: none"> • ISS3500 <ul style="list-style-type: none"> - 4U – 36 Drives - IB, GigE & 10GigE - 6GB/s SAS - SAS, SATA & SSD - ISER, iSCSI, NFS, CIFS |
|---|---|

SGI NAS



- Unified storage:
 - Block and file
- Integrating Open Storage software solution with modular, scalable hardware
- Offers unmatched enterprise features at substantial savings:
 - End to end data integrity
 - Unlimited file size & snaps
 - Synchronous and ZFS replication



SGI InfiniteStorage Software & File Systems

Aligned to customer workflow

For clients requiring:

- HSM
- Transparent multi-tier data migration
- A methodology to “green” their storage
- Minimize administrative overhead

DMF

- Enables “online” access to “offline” data
- Dramatic cost reductions in large environments
- Rules-based migration, enables fine tuning of storage resources at file and volume levels
- Maintains data in online state during migration
- Partial-file migration for rapid access

For clients requiring:

- Digital Asset Management
- Data Classification
- Tools to enable collaboration across disparate data environments
- Workflow management

LiveArc

- Digital asset and knowledge management platform
- General (collaborative) application platform
- Components can be used to create a diverse range of applications
- Extensible service-oriented architecture (SOA)
- XODB, XML-based Object Database
- Written in platform neutral Java

For clients requiring:

- High bandwidth Access to Scale-up SSI servers
- Real-time, streaming workloads
- DMF back-end

CXFS

- Instant multi-OS, multi-platform, no copy, data sharing
- Enables multiple file systems in a cluster
- High availability with automatic failure detection and recovery

For clients requiring:

- Scalable FS to scale-out clusters
- Scalable to 100+ GB/s
- Linux only
- HPC Environment
- IB, GigE or 10 GigE
- DMF back-end

Lustre

- Medium to huge clusters with greater than 4GB/s requirements
- Best solution for very large clusters
- Open source solution
- Object-based file system, requires object storage server



Sgi CAE Customers



Mercedes-Benz



Thank you