HIGH PERFORMANCE COMPUTING AND STORAGE SOLUTIONS

Turn-key Linux High Performance Computing and Storage solutions designed and built for scientific computing

Aeon Computing HPC solutions are built with the latest compute, storage, software tools, and fabric technologies to accelerate any application. Each solution is tailored to your specific application, physical requirements, and budgetary needs. In addition to these dynamics, Aeon cluster systems employ the latest methodologies in deploying, managing, and optimizing a HPC resource.

TURN IDEAS INTO REALITY

Are you making safer cars, curing disease, discovering new pools of energy, re-writing science, or pushing the limits of scientific computing? Your work is unique, your system should be too. Aeon Computing HPC solutions are tailored to your application and overall needs be it, space, power/cooling, budget, or other factors that are limiting your success.

Application Snap-shot:
- CFD / FEA (Navier-Stokes)
- Rendering
- Climate Modeling
- Comp. Chem
- Bioinformatics
- Geophysical (PSDM, Reservoir Sim.)
- Physics

> TECHNOLOGY

Processing:
AMD Opteron 6200 processors
Intel Xeon E5 and E7 processors
Nvidia Fermi & ATi Firestream GPU

Interconnect:
Intel / Qlogic
Mellanox
Gnodal
Myricom
Arista

Storage File Systems:
Lustre
Gluster
Hadoop

Software Tools:
Adaptive Computing
ScaleMP
ROCKs
Intel
PGI

Operating System Support:
CentOS, Redhat Enterprise Linux, SUSE, custom kernels, OpenIndiana, Nexenta, Windows HPC Server 2008 R2

> KEY FEATURES

Application & ROI Ready:
Desgined from the ground up to maximize applicaiton efficiency and reduce CAPEX/OPEX

Computational Platforms:
Eclipse 7 - Intel 4-64 core nodes, up to 1TB of memory per node
Eclipse-vSMP - ScaleMP powered virtual SMP machines running Intel Xeon CPUs
Sirius - AMD Opteron 12-64 core nodes, up to 512GB of memory per node

Interconnects/Fabrics:
56Gb FDR, 40Gb QDR & 20Gb DDR Infiniband (single & dual-rail)
40 Gigabit Ethernet, 10Gigabit Ethernet

Storage Platforms and File systems:
EclipseSL - Lustre combined OSS and OST high-performance storage system
EclipseSA - 2way Server + High-performance Storage in one system
        Linux or ZFS (OpenIndiana or Nexenta)
EclipseSDP - Linux based storage appliance with RAID-6 Silent Data Protection
        IB SRP storage target, Fibrechannel target, iSCSI target
NFS & NFS-RDMA over Infiniband
DAS RAID - Fibre, SAS, and SATA external Storage arrays
Lustre - Parallel Global File system
Hadoop - Distributed File system
Gluster - Fuse based Distributed File system

Software Tools
Compute suites (eXludus multi-core optimization)
Compiler suites
Schedulers
Optimized MPI
Hardware monitoring and management

intel Technology Provider Platinum 2012

AMD

AEON COMPUTING