

Scyld ClusterWare Suite

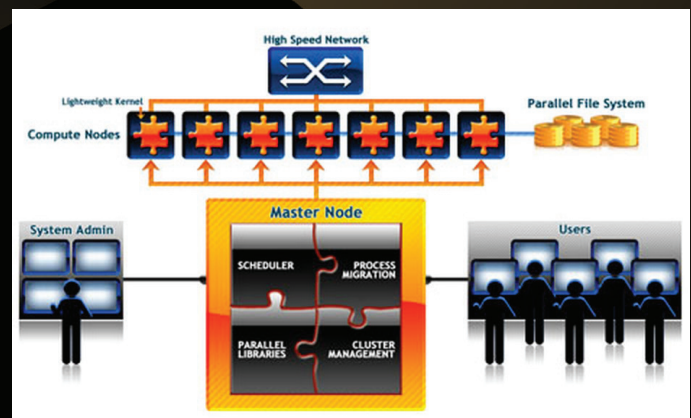
Complete HPC provisioning, management, and toolkit suite

Features

- ✓ Provides an out-of-the box, HPC-optimized compute cluster
- ✓ Highly tuned for HPC workloads with pre-bundled OS optimizations
- ✓ Single system install for simplified change management
- ✓ Includes HPC schedulers and MPI implementations
- ✓ Supports hundreds of HPC applications, as well as Hadoop workflows
- ✓ Includes optimizations and support for Infiniband networks
- ✓ Seamless integration with directory services such as LDAP, AD and NIS
- ✓ Worldwide Commercial Support from HPC experts

"After evaluating multiple cluster management products, we chose Scyld ClusterWare for the processing of large amounts of image data. Scyld ClusterWare contains a robust, easy-to-use and unique Single System Image architecture, which we believe will resonate well with researchers using the SOLiD platform for a wide variety of applications"

Dr. Timothy Burcham, Senior Director of SOLiD R&D at Life Technologies



Rapid Provisioning and Change Management

Scyld ClusterWare is designed for extremely rapid provisioning paired with the ability to instantly update compute node farms by applying changes to a single master node. This allows your HPC cluster to be easily administered without consuming system administration cycles.

Pre-bundled HPC software with Commercial Support

Scyld ClusterWare comes bundled with the software necessary for HPC environments, such as MPI implementations and schedulers. These software packages are optimized, tested, and commercially supported by Penguin Computing. Our over 15 years of HPC expertise provides a world class support team with the experience needed to support HPC clusters.

Pre-bundled OS and Network Optimizations

Scyld ClusterWare manages OS settings, drivers, and Infiniband environments that are necessary for proper performance and functionality inside an HPC environment. Less time administering, more time computing.

Single System Install for Cluster Consistency

Scyld ClusterWare uses one set of configuration files on the master node. Compute nodes are provisioned using software images on the master, and libraries and device drivers are loaded as needed. This design eliminates the possibility of version and configuration inconsistencies and makes management of Scyld ClusterWare almost as easy as managing a single system.

Ready for 3rd-Party Applications & Compilers

Scyld ClusterWare is designed and tested to provide an environment that can readily run Open Source and commercial applications for bioinformatics, CFD, FEA, weather forecasting, chemistry & physics modeling, and much more. Our software suite is additionally optimized to readily integrate with 3rd-party compilers such as Intel® Compilers and Portland Group's PGI®.

A single virtual process space over the cluster

There is one cluster-wide (or unified) process space. All process can be accessed from one system (the master). This creates a unified view of independent machines. Process commands on master like 'ps' or 'top' will output jobs that are running on all nodes.

Centralized reporting and diagnostics

All jobs and system issues are reported to the master node so there is a centralized location for all diagnostics.