



## powerful Linux cluster solutions

*HP and Scali work together to test, certify and support Scali cluster solutions on HP ProLiant servers, the best-selling industry-standard servers for Linux.*

Scali is a leader in developing advanced cluster management and high-end message passing interface (MPI) software, which is interoperable on the leading network interconnects in the industry. Organizations are able to leverage high performance and reliable parallel processing platforms while substantially reducing their technology investment and improving their price performance ratios.

### Scali solutions on hp ProLiant servers

Scali and HP have partnered to deliver Scali Manage™ and Scali MPI Connect™ — advanced Linux cluster solutions that improve the performance of compute and communication intensive applications in technical and scientific computing marketplaces. Our companies work together to test, certify and support Scali cluster solutions on HP ProLiant servers, the best-selling industry-standard servers for Linux.

Scali offers a total solution, which includes Scali Manage, Scali MPI Connect, professional services and ongoing support and maintenance. Scali Manage and Scali MPI Connect provide customers with the unique functionality to run and manage multiple and mixed interconnect environments, including Gigabit Ethernet, TCP/IP, Myrinet, Infiniband™ and SCI, with the option for lean protocols and/or protocol bypassing.

### customer profile

Among the marketplaces that benefit from our solution:

- automotive industry performing simulated crash tests
- design and analysis using Computational Fluid Dynamics (CFD)
- oil exploitation industry processing seismic data
- weather and environmental forecasting
- satellite image processing
- bio informatic processing

### Scali Manage™

Scali Manage provides comprehensive tools for system installation, configuration, management and monitoring in addition to support for the leading cluster interconnects and platforms. The total solution is a proven computing environment that reduces cost, increases efficiency and improves the price performance ratios associated with running high performance clusters.

### rapid time-to-solution

Scali Manage provides a rapid, flexible and easy-to-use system for installing and configuring the operating system, middleware, communication modules, third party applications and user data.





### **centralized management**

The application functions as a centralized point of installation and ongoing management regardless of the number of clusters, applications, interconnects and hardware platforms.

### **autonomous interconnect compatibility**

Companies are able to leverage a single management system for their diverse network of enterprise clusters.

### **maximum efficiency and reliability**

System administration tasks can be performed simultaneously, reducing manual errors and the time required for maintenance. Reliability is increased through robust functionality, such as resource management, monitoring, alarms, and remote out-of-band operations.

### **advanced monitoring capabilities**

Scali Manage includes comprehensive tools for monitoring variables, such as CPU load, Ethernet traffic, disk space, swap usage, fan-speed and temperature.

### **single user interface**

Scali Manage has both a graphical user interface (GUI) and command line interface that is consistent regardless of the type of interconnect or cluster.

### **superior platform**

ProLiant servers are designed to offer the highest levels of availability and reliability. They come with intelligent manageability tools, so you can

manage and scale them more easily and cost-effectively, with less staff. And ProLiant servers offer easy serviceability so repair, reconfiguring and redeployment consume fewer resources.

### **Scali MPI Connect™**

Scali MPI Connect is a fully-integrated message passing interface (MPI) solution that enables companies to take advantage of diverse high-performance interconnects and utilize demanding application software capabilities.

#### **Scali MPI Connect highlights:**

- high bandwidth, low latency performance
- ease of installation and management
- interconnect interoperability
- high reliability and system scalability

#### **key interconnects and standards:**

- TCP/IP
- Gigabit Ethernet with DET (Direct Ethernet Transport)
- SCI
- Myrinet
- Infiniband

#### **MPI performance**

Scali has consistently demonstrated outstanding performance with low message latency for Linux clusters. Highly optimized algorithms for message passing through a direct data transport mechanism eliminates overhead and reduces latency. The MPI is thread-safe and -hot, enabling any mixture of message passing and shared memory programming.

### **Interconnect interoperability**

Scali leverages the Direct Access Transport (DAT) interface to run Scali MPI Connect on the leading interconnect platforms and standards in the industry. Interconnect interoperability enables Scali MPI Connect to dynamically select the transport medium at runtime.

### **reliability, fault tolerance and failover**

Scali MPI Connect is designed for extensive reliability, availability and serviceability. The MPI operates transparently to transient network errors, interconnect resets or change of routing tables. It also supports failover between interfaces by automatically switching to an alternate network if available.

### **hp ProLiant servers supporting Scali**

- ProLiant DL360 G2/G3
- ProLiant DL380 G2/G3
- HP Server rx2600 (Itanium 2)
- HP Server rx5670 (Itanium 2)

From servers to handhelds and desktops to storage, HP engineers and optimizes our systems to run Linux across the enterprise. To find out more about why so many companies are making the smart move to Linux, talk to us.

### **for more information**

For more information about the Scali solutions, access: [www.scali.com](http://www.scali.com)

For more information about Linux at HP, access: [www.hp.com/linux](http://www.hp.com/linux) or [www.hp.com/techservers/clusters/linux\\_clusters.html](http://www.hp.com/techservers/clusters/linux_clusters.html)

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