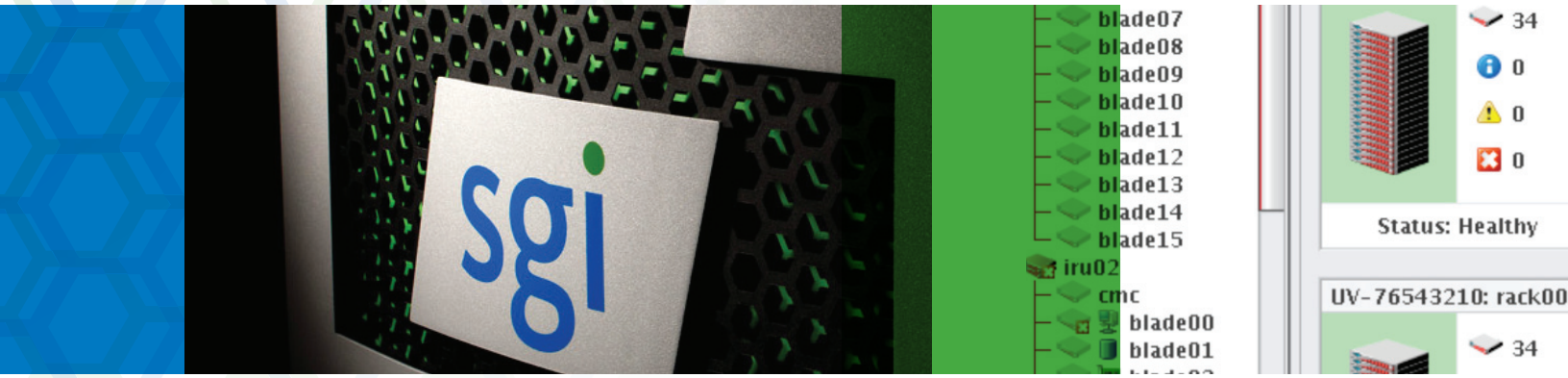
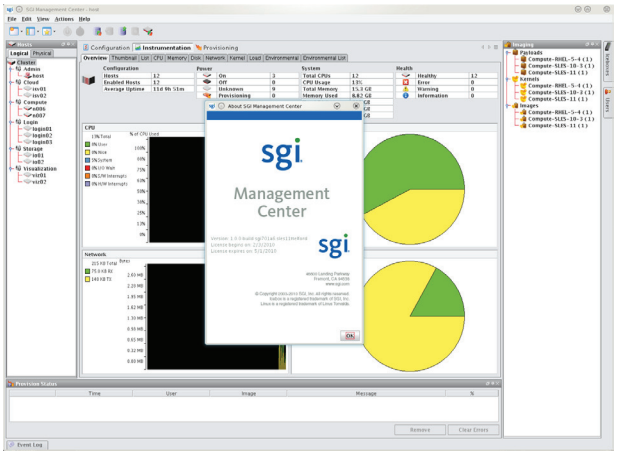
SGI Management Center
Premium Edition

A comprehensive and complete system for installing, managing, and monitoring your SGI computing systems.



SGI Management Center—Premium Edition provides a single, consistent, and powerful management interface for all SGI systems from individual servers, to clusters, to SGI® UV™ systems. SGI Management Center provides a comprehensive but customizable interface to monitor essential system metrics and initiate management actions from a single point of control. SGI Management Center reduces the time and resources spent administering the system by streamlining software maintenance procedures and automating repetitive tasks. The comprehensive features of SGI Management Center lower total cost of system ownership, increase productivity, and provide a better return on your SGI investment.



Key Features & Benefits:

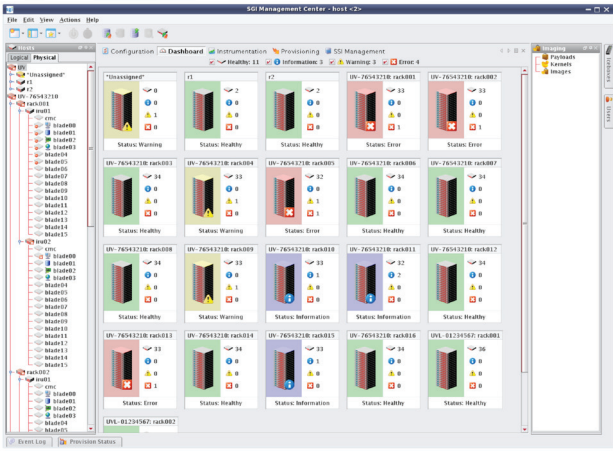
High Speed Bare Metal Provisioning

Through multicast technology, an image can be copied to every system server in the same amount of time it takes to copy an image to a single server. All changes can be made to the entire system quickly and all servers can be identically configured with the same applications and libraries in a known working state. Multicast provisioning significantly decreases the amount of downtime during system maintenance periods or software updates and means systems can be working in a matter of minutes instead of hours or days.

Version Controlled Image Management

Version-controlled image management is built into SGI Management Center—Premium Edition. It tracks the changes to the OS or kernel over time. These images are easily deployed onto servers in the system. If problems arise after an OS, application, or kernel upgrade, the system can easily be returned to a known working state. SGI Management Center also provides tools that view the differences between revisions, and to import, copy, or delete revisions. Updates to images and payloads are stored as changes to the originals so they significantly save on disk space but keep a full revision history. Multi-user support allows changes to be tested locally prior to checking changes into the global repository or applying changes to the entire system.

Feature	Details
Integrated system management console	Single point-of-control access to your entire system
Full system health monitoring	Over 120 selectable metrics from hardware and software sources for each server
Centralized remote, server control	Remote serial console access, KVM, power and beacon control using SGI Roamer, IPMI, and other interfaces
Logical and physical reporting	Aggregated reporting by server function, location, or other criteria
Configurable dashboards	Customizable, at a glance status of servers, racks, and entire systems
Event management	Selectable system event reporting and actions streamline system operations
Bare-metal, high speed provisioning	Multi-cast provisioning to all servers simultaneously minimizes startup time
Fully flexible image management	Individual control of kernels, distributions, applications, and file systems
Version control	Image version control built-in including rollbacks, import, and cloning
Dynamic provisioning	Workload driven Linux reprovisioning improves productivity and ease of use
Remote client access	Full function Windows® and Linux remote management clients
Scalabilty to the largest systems	Scalability from 1 to to 10,000s of servers or sockets
Memory fault analysis	Centralized display and analysis of memory errors for improved RAS and system utilization
GPU Monitoring	Reports GPU frequency, memory frequency and usage, GPU temperature
High-availability (HA)	System management failover for assured access in business critical systems
Power Monitoring	Power Data, Utilization and trend, by node, rack, and overall system



Customizable, color-coded dashboards instantaneously show the status of all servers in the system, from one to thousands, with the ability to easily click down to more detailed information as needed.

Workload Driven Dynamic Provisioning

Through a built-in user job interface for Altair PBS Professional, users can specify an image to be provisioned, automatically optimizing the user's computing environment with the exact server image needed for the specific application being run.

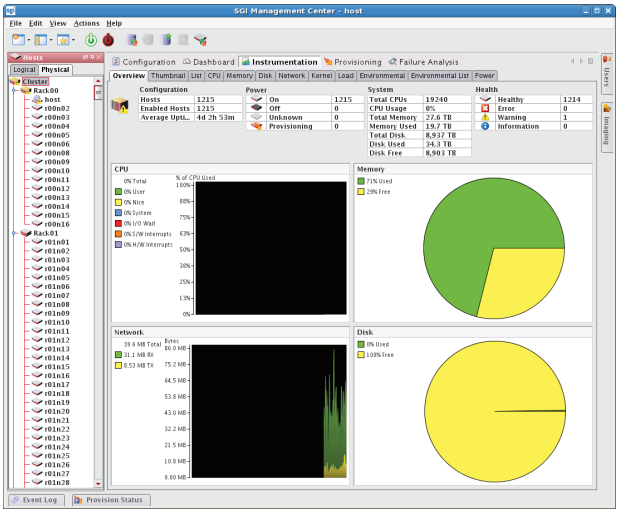
Simple to Use

An advanced GUI streamlines workflow by putting all common tasks into easily accessible locations. All actions can be achieved with just a few mouse clicks. SGI Management Center adds dockable drag-and-drop panels which can be arranged to create user dashboards that depict workflow. All options and preferences are easy to configure through the GUI.

SGI Management Center also includes a command-line interface for host and user management, version control, and provisioning for users who prefer to keep their hands on the keyboard or do management through scripts.

Heterogeneous Platform Support

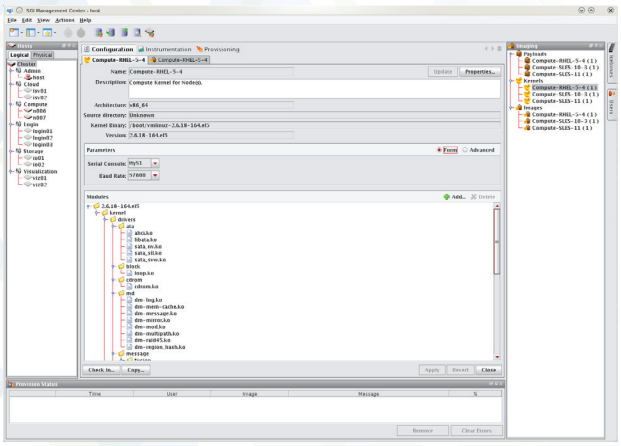
IPMI 2.0 support makes it easy to configure IPMI, provide remote console access, power on/reset, and environmental monitoring; including temperature, fan speeds, voltages and other metrics provided by IPMI. SGI Management Center also supports power on/reset and monitoring on a variety of platform management controllers including SGI Roamer. SGI Management Center is compatible with the popular boot protocols Etherboot and PXE.



SGI Management Center scales with your SGI system. Here a system of almost 10,000 cores is monitored from a single window showing rack layout, performance metrics, system statistics, and system health …all at glance. The rich GUI allows full customization of the display with both physical and logical depiction of servers allowing administrators to display information as is most effective.

Built-in User management

Administrators have full control over user access and can define types of password protected privileges for each user by their role or membership in defined groups. Administrator defined groups allow for easy extension of entire sets of privileges to different users. Role definition supports access, for example, for users, guests, system administrators, group administrators, and other defined roles.



SGI Management Center – Premium Edition incorporates powerful image management and version control tools and utilities. Images can be displayed and managed at a detailed level with functions included to view, compare, copy, and import images. Version control ensures the reliability of images and the ability to easily revert to a previous image using the automatically maintained revision history.

Memory Fault Analysis

A fault analysis panel improves RAS by allowing administrators to pin-point critical errors and warnings within their system. This panel has a dashboard view as well as detailed views. The panel monitors and manages memory errors, memory page availability, memory servicing through repair tags and logs, and bus errors. Additional modules for different hardware will be added with new releases.

GPU Monitoring

GPUs used to accelerate processing have become a part of nearly every high-performance computing system. SGI Management Center Premium Edition allows the system administrator to monitor all the GPUs in a system for overall health, power usage, on-board memory usage, and GPU as well as memory processing speed.

Power Monitoring

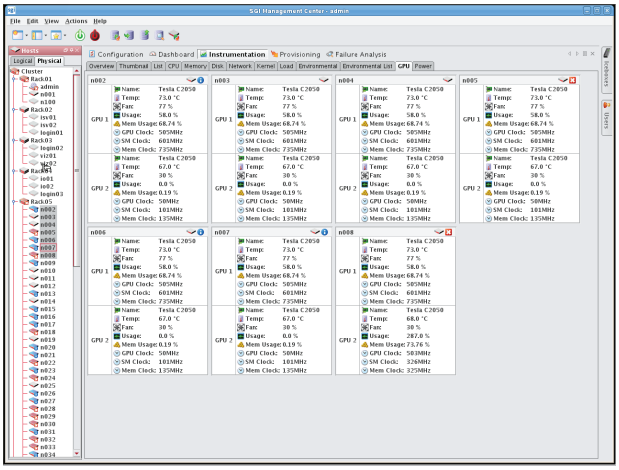
Datacenter managers have become increasingly concerned about the power usage in their datacenter. Often on the edge of power capability or budget, they want to monitor their power requirements. SGI Management Center—Premium Edition allows real-time monitoring of actual power and inlet temperature data aggregated to rack, system, and user-defined logical groups. It provides delta inlet temperature in the rack for thermal monitoring. The data can be logged and saved to understand trends and perform capacity planning and key metrics can be queried such as minimum, maximum or average rack power, and energy cost.

Requirements and Availability

SGI Management Center – Premium Edition is available for SGI® Rackable™, and CloudRack servers, SGI® ICE™, and SGI® UV systems.

SGI Management Center support Novell SLES 10 and 11, Red Hat RHEL 5 and 6, and CentOS 5 and 6.

SGI Management Center—Premium Edition may be enhanced with the addition of SGI Management Center—Power Option for monitoring and policy driven dynamic management of system electrical load from individual servers through cabinets to entire systems. SGI Management Center — Powered Option works with Intel® Power Node Manager enabled servers to give you unprecedented control over your power consumption and enables you to maximize your effective computing per watt.



More high-performance compute systems are utilizing GPUs as a compute element to maximize performance per watt. The GPU Monitoring capability of SGI Management Center Premium Edition allows the monitoring of GPU health, temperature, fan spead (if actively cooled), memory usage, as well as GPU and memory speed.

Features	Standard	Premium	Power Option
Full system monitoring/metrics	•	•	
Console management	•	•	
Events and alerts	•	•	
Bare metal provisioning	•	•	
Image management	•	•	
Version control	•	•	
User management	•	•	
Version control	•	•	
User management	•	•	
Version control	•	•	
User management	•	•	
Memory fault analysis		•	
System BIOS flashing (ICE X)		•	
GPU monitoring		•	
HA		•	
Power monitoring		•	•
Power management			•

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