

Simulation Cluster Manager

Quick optimized cluster deployment to full cluster management

BENEFITS

- Increased operational efficiency—shortened simulation cycle time and better decision making
- Simplified cluster management with short learning curve
- Optimized resource utilization—engineer productivity and compute resources
- Improved system uptime—software, OS, and hardware node maintenance without shutdown

FEATURES

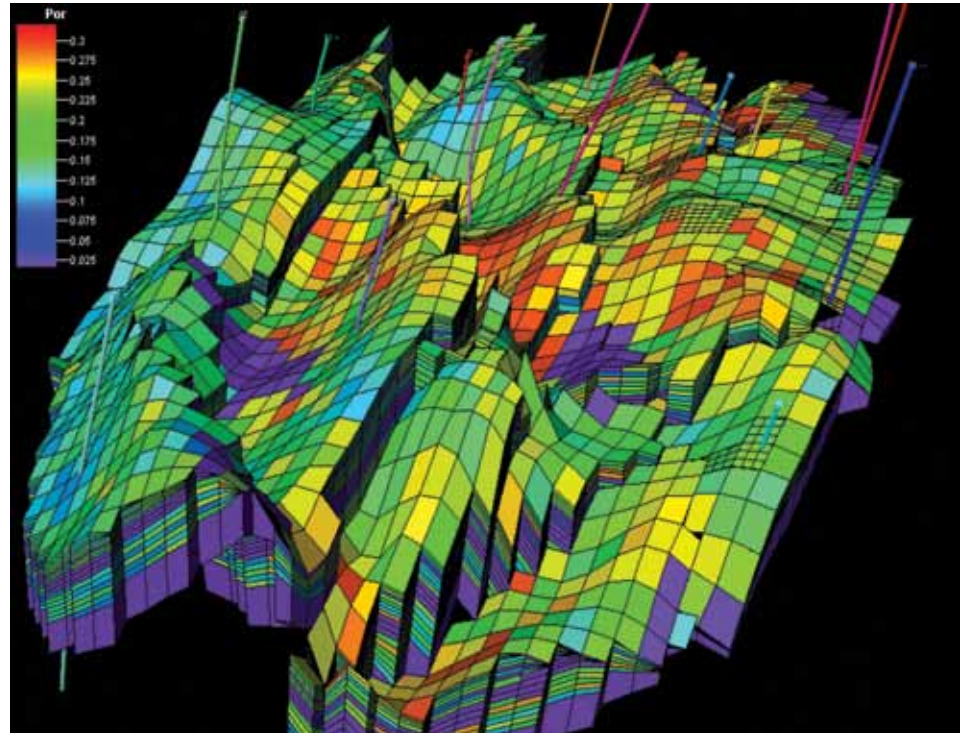
- Seamless integration with ECLIPSE and INTERSECT applications
- Technology utilization monitoring and reporting
- Robust workload scheduling
- Simulation run submission tool
- User-friendly, Web-based interface for access anywhere
- Online system software upgrades
- Red Hat® Enterprise Linux® (RHEL) distribution and support options

Simulation Cluster Manager (SCM) is a suite of solutions jointly developed by Schlumberger Information Solutions (SIS) and Platform Computing. SCM is a complete, all-in-one high-performance computing (HPC) solution specifically designed for petroleum engineers to make the most of their Schlumberger ECLIPSE* and INTERSECT* reservoir simulation applications. Making it easy to harness the power, flexibility, and scalability of a reservoir simulation cluster, SCM can quickly get the cluster up and running, dramatically simplifying engineers' experience while enhancing their productivity. The solution completely scales to requirements, whether the cluster is small or large.

The most complete HPC cluster solution

SCM Base

The SCM base module allows the user to quickly deploy, redeploy, monitor, and manage ECLIPSE and INTERSECT cluster resources and software licenses with unprecedented ease. The module ensures maximum uptime and can transparently synchronize files to cluster nodes without any downtime or reinstallation. It enables timely decisions and proactive management of compute resources against business demand. By correlating workload information with system load, users can easily identify issues with their clusters and troubleshoot job issues. During capacity planning, the Web portal allows the user to run detailed reports and analyses that quantify needs and remove the guesswork from capacity expansion.



Reservoir model. The Simulation Cluster Manager is an enabling infrastructure for complex reservoir evaluation.

Simulation Cluster Manager

Load-sharing facility (LSF)

SCM includes a robust workload scheduling capability, which is based on Platform LSF—the industry’s most powerful, comprehensive, policy-driven workload management solution for engineering and distributed computing environments. By scheduling workloads intelligently according to policy, SCM improves end user productivity with minimal system administrative effort. In addition, it allows engineers to easily access and share all computing resources while decreasing time between simulation iterations.

Application support center (PAC)

SCM comes complete with job submission templates for ECLIPSE and INTERSECT software. By configuring these templates based on the application settings in an environment, users can start using their clusters without writing scripts. These self-documenting, user-friendly interfaces help minimize job submission errors. SCM also includes standard benchmark tests to ensure that your cluster will deliver the best performance without manual tuning.

Unified Web portal

While command line-savvy users can continue to use the command line interface, SCM provides a unified Web portal that makes it easy to submit, monitor, and manage jobs from any machine with a Web browser. No other third-party software installation is required to use and manage the cluster from workstation, PC, laptop, or mobile device. As changes are made to the cluster configuration, SCM automatically reconfigures key components, ensuring that jobs are allocated to the appropriate resources.

Out-of-the-box RHEL for HPC compute support

SCM ensures that the complete solution from application to hardware is preintegrated and supported as a whole stack, including RHEL. With technical support for RHEL included, issues are resolved painlessly through a single vendor. Version control ensures that only RHEL updates specific to HPC are included. SCM also comes with special pricing for RHEL for HPC compute support.

About Platform Computing

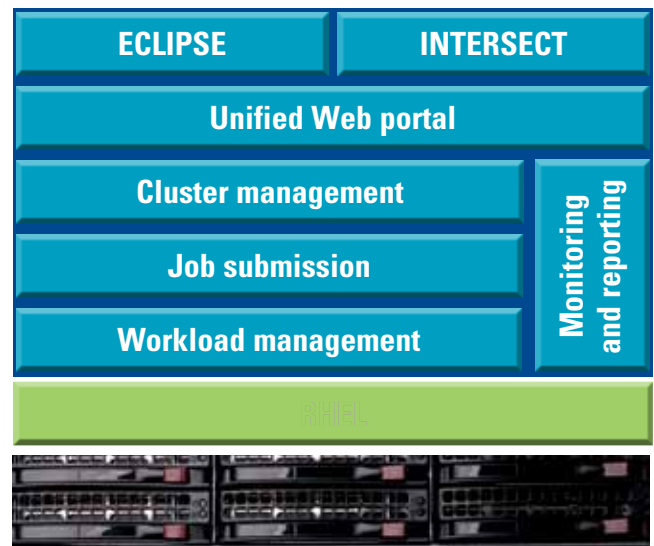
Platform Computing is the leader in cluster, grid, and cloud management software—serving more than 2,000 of the world’s most demanding organizations. For 18 years, our workload and resource management solutions have delivered IT responsiveness and lower costs for enterprise and HPC applications.

Schlumberger Information Solutions

Schlumberger Information Solutions (SIS) is an operating unit of Schlumberger that provides software, information management, IT, and related services. SIS collaborates closely with oil and gas companies to solve today’s tough reservoir challenges with an open business approach and comprehensive solution deployment. Through our technologies and services, oil and gas companies empower their people to improve business performance by reducing exploration and development risk and optimizing operational efficiencies.

E-mail sisinfo@slb.com or contact your local Schlumberger representative to learn more.

SCM architecture



SCM is the most complete reservoir simulation cluster solution.



www.slb.com/eclipse

