



Platform™

Platform LSF®
The Leading HPC Management Software Product



Accelerate and Manage HPC Performance

Add-ons to Platform LSF®:

- Platform LSF MultiCluster
- Platform LSF License Scheduler
- Platform LSF Session Scheduler
- Platform Process Manager
- Platform Analytics
- Platform RTM
- EnginFrame™

Other Complementary Products:

- Platform MPI
- Platform Manager™

The Platform LSF family of add-on products is the industry's most powerful, comprehensive, set of policy-driven High Performance Computing (HPC) solutions for accelerating and managing applications in engineering and scientific distributed computing environments. This product family helps manage and intelligently optimize expensive and complex IT environments delivering higher IT efficiency, faster business results, dramatically reduced cost of computing, and guaranteed service execution.

As a key component of the Platform Accelerate suite, Platform LSF provides a solution that manages enterprise IT supply and decouples resource demand from resource supply. Platform LSF delivers a superior grid-enabled solution that is optimized for resolving technical computing problems. As pioneers in HPC management software, Platform Computing has successfully deployed its product solutions with over 2,000 customers, spanning multiple industries, geographies and applications.

Better, faster, computing

Platform LSF manages and accelerates workload processing for compute- or data-intensive applications resulting in better, faster and cheaper product designs. With Platform LSF an organization can intelligently schedule and guarantee the completion of workloads across a distributed, virtualized IT environment. Platform LSF fully utilizes all IT infrastructure resources regardless of operating system or the architecture to ensure policy-driven, prioritized service levels for always-on access to resources reducing risk and complexity.

A comprehensive set of intelligent scheduling policies including Fairshare, Preemption, Application Encapsulation, Advance Reservation, Resource Reservation and Service Level Agreement (SLA) based Scheduling resulting in the following benefits:

- Ensures the right resources are automatically allocated to the right users for maximum efficiency
- Meets service level agreements for various users and projects
- Provides extensive control to support multiple policy centers
- Ensures workload is executed reliably and on time
- Ensures optimal resource utilization



Higher quality, more reliable results – faster

Platform LSF ensures that all available resources are fully utilized in pursuit of corporate objectives. By delivering maximum computing power, it accelerates the performance of the most demanding, compute- or data-intensive applications in industries including:

- Electronics
- Oil & Gas
- Government & Research
- Educational Institutions
- Industrial Manufacturing
- Life Sciences
- Financial Services

Reduce operational & infrastructure costs

Platform LSF helps reduce the Total Cost of Ownership (TCO), while improving the return on IT investments (ROI). Along with its add-on and complementary products, it enables IT to improve the service provided to stakeholders by better SLA management and greater flexibility, visibility and control of job scheduling. By ensuring maximum utilization of existing IT infrastructure, more work is done with fewer resources, reducing additional hardware and administration costs.

Unifying multiple systems including commodity-based hardware such as less expensive desktops or Linux-based servers, cost effectively creates a single dedicated HPC infrastructure with additional compute power. Cost savings on additional application licenses can be achieved by optimally sharing licenses across an organization.

Improve user productivity

Platform's workload management software allows you to fully utilize hardware resources whether they are just down the hall or half way around the globe, so users get more work done in a shorter amount of time. Platform products provide rich decision-support information, such as resource utilization trends, to ensure service levels are maintained and project goals are met, as user demand increases. Platform products also increase the productivity of users including designers, researchers and scientists, enabling them to run more jobs, significantly reducing the time to bring new products to the market.

Leverage investments in existing heterogeneous resources

Platform LSF pools computational resources and manages application workload across highly distributed environments – from single and local departmental clusters to an enterprise-wide, globally dispersed, multi-cluster grid. Platform products enable support of any mix of hardware systems including desktops, servers and supercomputers.

Deep partner network delivers integrated solutions

Platform has partnered and integrated with more than 100 key industry-leading application vendors including Cadence, Mentor Graphics, Synopsys, Magma, Abaqus, MSC Nastran, Schlumberger Eclipse, MathWorks Matlab and Blast. Platform's strategic partnerships with Dell, HP, IBM, Intel, Microsoft, Red Hat and SAS round out the company's ability to deliver well-integrated, comprehensive HPC management solutions.

Add-on products

Platform LSF MultiCluster

Extend resource sharing to many clusters

Platform LSF MultiCluster extends an organization's reach to share resources beyond a single Platform LSF cluster to span across various geographical locations. It provides a single machine image when connecting multiple hardware clusters together. With Platform LSF MultiCluster, local ownership and control is maintained ensuring priority access to any local cluster while providing global access across an enterprise grid. Organizations using Platform LSF MultiCluster complete workload processing faster with increased computing power, enhancing productivity and turnaround to results.

Platform LSF License Scheduler

Apply business policy to license sharing

Software tools represent one of the single largest expenses and often dwarf the cost of computing infrastructure. By using Platform LSF License Scheduler, organizations can realize dramatic reductions in additional application license purchases and increase overall access to license resources. Platform LSF License Scheduler manages floating software licenses with policies for application license optimizing the usage of all application licenses across Platform LSF clusters by allocating licenses to users based on an organization's established distribution policy.

Platform LSF Session Scheduler

High throughput, low latency scheduling

Platform LSF Session Scheduler provides a new approach to scheduling large numbers of short duration jobs. Hundreds or even thousands of users can now process jobs individually comprised of over 50,000 tasks per user with exceptionally low-latency and minimal involvement of the Platform LSF workload scheduler.

Platform Process Manager

Design and monitor workflows

Platform Process Manager enables customers to accurately design and monitor the scheduling and execution of grid-enabled workloads in real-time. Platform Process Manager delivers complete automation across a global, virtualized heterogeneous environment so that organizations can reach results sooner and ensure the reliability of complex mission-critical processes. It tailors complex workflows with multiple decision points and submits these as entities of work to the scheduler.

Platform Analytics

Scalable and reliable business decision solution

Platform Analytics is a business decision solution for High Performance Computing (HPC) environments. It provides timely, complete, and trustworthy information to support capacity planning decisions regarding compute hardware resources, software licenses, capacity planning and resource scheduling.

Add-on products

Platform RTM

Centralized monitoring and management

Platform RTM (Report, Track and Monitor) is Platform Computing's operational management environment for Platform LSF. It provides immediate improvements in near-real-time cluster visibility, manageability and availability. Platform RTM is built on Cacti, an open-source data center management tool.

EnginFrame™

Web Portal for end users

EnginFrame from NICE, is a Web-based front-end for job submission, tracking and integrated data management for HPC applications and other services. Virtually any enterprise computing asset can be accessed through a dynamic environment that can be tailored to match the specific users' skills or access rights.

Complementary products

Platform MPI

Improve parallel application performance and robustness

Platform MPI is a fully integrated message passage interface (MPI) that enables users to build high performance applications. Platform MPI lets application developers support a wider range of customer environments while lowering the number of binaries required. Platform MPI delivers faster performance through optimizing MPI communication and core affinity.

Platform Manager™

Cluster Life Cycle Management

Platform Manager tackles the full range of challenges presented by total cluster lifecycle management. Platform Manager provides application-aware HPC infrastructure management through its integration with Platform. With Platform Manager, you can automate the installation, configuration, updating, and monitoring of the most complex multi-vendor environments through a single integrated, user-friendly interface.

Industry Challenges and Solutions

Industry Challenge	Platform Solution
Dramatically accelerate time-to-market and results	<ul style="list-style-type: none"> High performance architecture improves workload throughput <ul style="list-style-type: none"> driving even the largest clusters at greater than 95% utilization Clustering distributed IT resources into a single virtual supercomputer delivers processing power as needed
Reduce operational & infrastructure costs	<ul style="list-style-type: none"> Maximum utilization rates and system scalability delivers more power with fewer resources Leverage commodity-based hardware and open industry standards Optimize utilization of application licenses Detailed analytics and reporting to support fact-based project planning decisions
Minimize business risk by increasing system reliability	<ul style="list-style-type: none"> Fault-tolerant, and fail-over capabilities ensure always-on computing Compliant with open industry standards
Improve quality of results	<ul style="list-style-type: none"> Failed jobs are automatically re-run Guaranteed service levels and execution

Platform™

Platform Computing is a pioneer and the global leader in High Performance Computing (HPC) management software. The company delivers integrated software solutions that enable organizations to improve time-to-results and reduce computing costs. Many of the world's largest companies rely on Platform to accelerate compute or data intensive applications and manage cluster and grid systems. Platform has over 2,000 global customers and strategic relationships with Dell™, HP, IBM®, Intel®, Microsoft®, Red Hat® and SAS®, along with the industry's broadest support for HPC applications. Building on 16 years of market leadership, Platform continues to define the HPC market. Visit www.platform.com.

World Headquarters
Platform Computing Inc.
3760 14th Avenue
Markham, Ontario
L3R 3T7 Canada
Tel: +1 905 948 8448
Fax: +1 905 948 9975
Toll-free tel: 1 877 528 3676
info@platform.com

Sales - Headquarters
Toll-free tel: 1 877 710 4477
Tel: +1 905 948 8448

North America
New York: +1 646 290 5070
San Jose: +1 408 392 4900
Detroit: +1 248 359 7820

Europe
Basingstoke: +44 (0) 1256 883756
London: +44 (0) 20 7977 1480
Paris: +33 (0) 1 41 10 09 20
Düsseldorf: +49 2102 61039 0
Munich: +49 89 517397 52
Oslo: +44 1256 883756
info-europe@platform.com

Asia-Pacific
Beijing: +86 10 82276000
Xi'an: +86 029 87607400
asia@platform.com
Tokyo: +81 (0)3-6302-2901
info-japan@platform.com
Singapore: +65 6307 6590
lliew@platform.com