

Integrating MathWorks[™] Parallel Computing Tools with Platform LSF[®]

Benefits

- No set up required to integrate MathWorks Parallel Computing Toolbox and MATLAB[®] Distributed Computing Server with Platform LSF
- Dramatically improves the performance of MATLAB and Simulink models
- Increases productivity gains
- Achieves lowest cost of ownership by allowing you to leverage existing hardware for greater utilization
- Reduces operational risk and complexity with proven technology

Solution Highlights

- High performance, flexible, scalable grid platform
- High-level parallel MATLAB language for easier parallel programming with minimal code changes to serial code
- Comprehensive set of intelligent scheduling policies
- Advanced self-management, with self-healing and self-adaptive capabilities
- Heterogeneous platform support
- Comprehensive, extensible, and standards-based security




Improve application utilization with grid computing

Engineers, scientists and financial analysts worldwide use MathWorks MATLAB and Simulink to accelerate their research, reduce development time, improve model simulation speed, and control project costs. Parallel Computing Toolbox and MATLAB Distributed Computing Server extend their ability to solve compute or data-intensive problems by providing access to powerful high-level parallel MATLAB constructs. The integration with Platform LSF provides tremendous performance gains by accelerating calculations using MATLAB and Simulink models across a distributed grid infrastructure.

Benefits of the integration of Platform LSF and MathWorks products

Parallel Computing Toolbox and MATLAB Distributed Computing Server directly support Platform LSF. As a result, the products can be used in most compute environments managed by Platform LSF without any extra setup. Users can take advantage of Platform LSF's advanced capabilities directly from their MATLAB environment.



Reduce the Total Cost of Ownership through intelligent policy based scheduling across all environments

By deploying Platform and MathWorks products together, customers benefit from extensive application and heterogeneous infrastructure support, utilizing a comprehensive set of intelligent scheduling policies. This integration provides added-value to customers running complex computations using a broad spectrum of applications supporting industries including:

- Aerospace and Defense
- Automotive
- Biotech, Pharmaceutical and Medical
- Communications
- Computers and Office Equipment
- Electronics
- Financial Services
- Industrial Automation and Machinery
- Semiconductors

The Platform Computing solution for MathWorks products enables intelligent, policy-driven scheduling of compute or data intensive applications to perform complex simulations and solve analytical problems. Users can intelligently schedule and guarantee the completion of mixed MATLAB and other workloads across a distributed IT environment, fully utilizing all IT resources including unused computing capacity on servers, workstations and desktops of various operating systems. By harnessing these unused cycles, any organization can benefit from the increase of compute efficiency, increase in performance with the added benefit from a reduction in the Total Cost of Ownership of hardware and a reduction in the cost of the management of that hardware.

For large computing requirements, complex scheduling or security requirements, this solution enables the distribution of MATLAB applications on a well supported, production hardened solution combining the MATLAB Distributed Computing Server and Platform LSF.

On-demand resource management

Underpinning Platform LSF is the scalable application infrastructure software Platform Enterprise Grid Orchestrator™ (EGO). Platform EGO provides a flexible and modular way to orchestrate virtualization and business-critical applications into a single, cohesive, efficient system. By de-coupling resource management from workload management, Platform EGO can effectively allocate, prioritize and manage the supply of resources with business policies across all enterprise resources. This functionality provides organizations scalable architecture while improving application performance and utilization, as well as better Service Level Agreement (SLA) management.

Platform Support & Services best practices

- Experience with over two thousand customer deployments
- Work with leading Financial Services customers to deploy internal cloud, utility computing and shared resource model IT infrastructures
- Results in quicker integration, maximum systems utilization and optimal application performance
- Net benefit: lower TCO and faster application deployment and production

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