



Highlights

- Simplify application management
 - Improve your productivity
 - Reduce the complexity of resource management
 - Gain in-depth insight into processes
-

IBM Spectrum LSF Application Center

*Application-centric workload submission
and management*

IBM® Spectrum LSF Application Center provides a flexible, application-centric interface for cluster users and administrators. Available as an optional add-on module to IBM Spectrum LSF, IBM Spectrum LSF Application Center enables users to interact with intuitive, self-documenting interfaces. This results in improved user satisfaction and productivity. By standardizing access to applications, IBM Spectrum LSF Application Center makes it simpler to enforce site policies and address security concerns.

Application management made simple

A collection of tools and interfaces makes managing your applications intuitive and simple to learn, yet also offers in-depth insight into processes, providing quick return on investment.

Unified application interface

IBM Spectrum LSF Application Center provides a single interface to manage applications, users, resources and data. Application users and administrators can enjoy full visibility into resources systems, applications and software licenses depending on their role. Administrators can access multiple cluster and workload-related reports as well as additional management tools.



Web-enabled application workload submission

IBM Spectrum LSF Application Center is designed to simplify application integration and workload submission for users. The web-based interface enables remote job monitoring, ready access to job-related data and the capability to perform operations such as stopping, suspending, resuming or re-queuing jobs through a web browser. You can browse remote files on a shared file system from the IBM Spectrum LSF Application Center browser window. This allows you to easily manage and select input files for job submission, and you can drag and drop files to be uploaded. You can also maintain multiple console sessions to multiple jobs simultaneously. Whether applications are interactive, parametric or parallel, they can be readily integrated with IBM Spectrum LSF Application Center.

Ease of use

Many applications involve multistep, time-critical workflows. For users with IBM Spectrum LSF Process Manager, IBM Spectrum LSF Application Center provides a web-based Flow Editor that offers a consolidated, integrated environment to visually create, edit and monitor workflows. You can manage workflows end-to-end through the web-based interface, and also trigger and monitor multiple flows.

Enhanced information displays make job monitoring faster and simpler. Displays include estimated start time for pending jobs, reasons for pending, job progress and other job details. A light client for Windows desktops enables users to submit a job, receive job notifications and retrieve data about the results when the job is completed. A mobile client for iOS and Android devices provides users with job notifications, job lists and a job dashboard, all through a convenient interface.

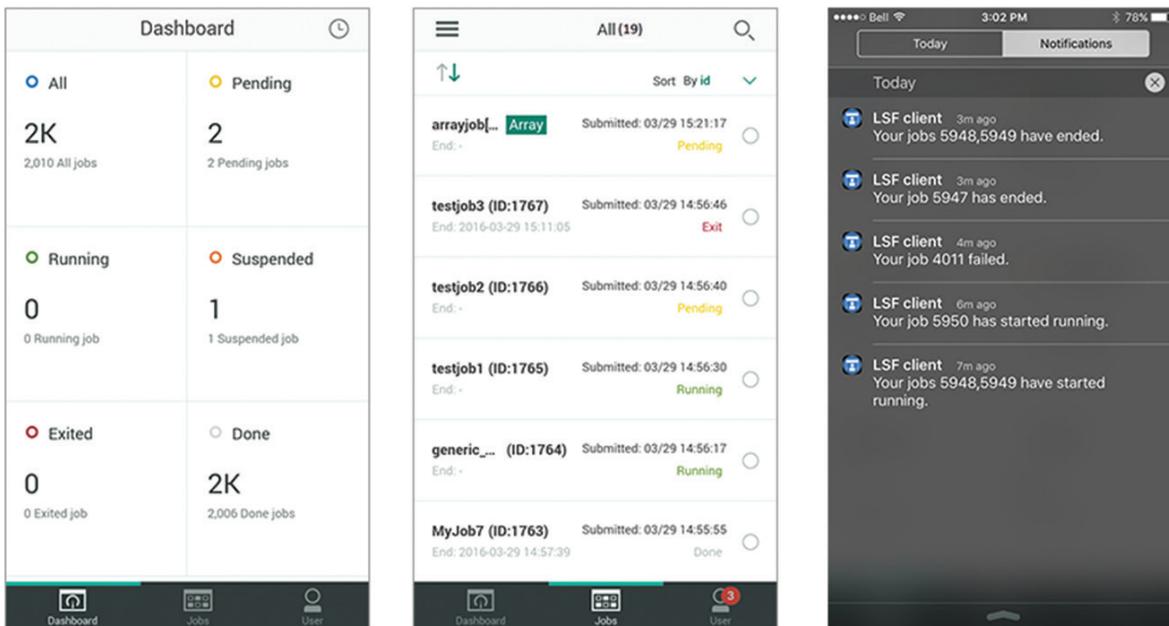


Figure 1. The IBM Spectrum LSF Application Center mobile client for iOS and Android provides users enhanced display options.

Powerful interface builder

A powerful interface builder lets users assemble standard web components into easy-to-use application interfaces. The interface builder includes a library of IBM Spectrum LSF-aware primitives (select IBM Spectrum LSF queues, host models, user groups and so forth), which can be readily extended with custom plug-ins to meet specific application requirements. Links between on-screen elements and variables controlling how jobs are submitted to the cluster are well documented and simple to follow.

Reliable scale-out

Enterprise clients rely on IBM Spectrum LSF Application Center to run applications and manage workloads 24x7. IBM Spectrum LSF Application Center now embeds the IBM WebSphere® Liberty profile, which provides high performance, scale out and high availability. The ability to create web-server clusters allows for greater scalability, as well as high availability of the environment.

Integrated commercial application support

IBM Spectrum LSF Application Center comes complete with job submission templates for:

- ABAQUS
- ANSYS
- BLAST
- CATIA
- CFX
- Citrix
- ClustalW
- CMGL_GEM
- CMGL_IMEX
- CMGL_STARS
- DCV
- Eclipse

- Exceed
- FLUENT
- HMMER
- LS-DYNA
- MATLAB
- NASTRAN
- NWChem
- RGS
- STAR-CCM+
- VNC

By configuring these templates based on the application settings in your environment, users can start running jobs without writing custom wrapper scripts. In addition, intuitive, self-documenting scripting guidelines help simplify the creation of additional job submission templates, resulting in reduced setup time while minimizing user errors during workload submissions.

Smart data handling

IBM Spectrum LSF Application Center provides users with direct, real-time access to source, intermediate and resulting data files for viewing or post-processing. By supporting data handling capabilities such as the ability to upload, retrieve, copy, rename, remove or compress files, users can manage their own data. In addition, because users and groups share common server-side data areas, duplication of data is reduced and collaboration is improved.

Improved productivity

IBM Spectrum LSF Application Center can be configured to use enterprise-level single sign-on infrastructure. With easy-to-use interfaces, managing applications is intuitive and simple to learn, yet users have in-depth insight into processes. This leads to quick return on investment by ensuring users can work efficiently, in a secure environment, from anywhere.

Reduced training and support requirements

The application workload submission templates in IBM Spectrum LSF Application Center work the way users expect, using terminology they recognize and exposing only relevant options. As a result, training requirements are reduced, and users are more productive. By eliminating the possibility of erroneous job submissions that waste precious compute cycles or software license features, cluster use is also improved.

Secure application access anytime, from anywhere

With security features that include SSL encryption, data and job partitioning and multiple authentication mechanisms, high-performance computing (HPC) applications can be deployed as a utility, providing access 24 hours a day, seven days a week to users from any device with a browser. With the ability to restrict shell access to users who really need it, and to control how users interact with applications, your HPC resources are more secure and easier to manage.

Simplified resource management

By simplifying resource management, costs are reduced, resources are preserved and employees can work more efficiently. User roles provide flexibility in delegating rights to teams or projects aligned with business priorities. Access controls based on role, group or individual IDs determine what users can do, what templates they can use and what they can monitor.

IBM Spectrum LSF Application Center enables group-level administrators to monitor and manage jobs and data for any member of their project team or department. By bringing administration closer to the work group, the workload for cluster administrators is reduced, service levels are improved and project leaders are better able to ensure resources are being allocated in an optimal fashion to meet business requirements.

Why IBM?

IBM Spectrum Computing offers a comprehensive portfolio of software defined infrastructure solutions designed to help your organization deliver IT services in the most efficient way possible, optimizing resource utilization to speed time to results and reduce costs. These offerings help maximize the potential of your infrastructure to accelerate your analytics, HPC, Hadoop, Apache Spark and cloud-native applications at any scale. The core value of the portfolio is simplifying simulations and analysis to help you uncover insights into your business or science and get higher-quality products to market faster.

For more information

To learn more about IBM Spectrum LSF Application Center, contact your IBM representative or IBM Business Partner, or visit: ibm.com/systems/spectrum-computing/products/lsf/resources.html



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