

Quick start guide

IBM Spectrum LSF Suite Community Edition quick start guide

Version 10.2 Fix Pack 12

This guide describes a quick and easy way to get up and running with the product.

Note:

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About this task

Product overview

IBM Spectrum LSF Suite Community Edition is a no-charge community edition of the IBM Spectrum LSF (LSF) workload management platform. LSF is a powerful workload management system for distributed computing environments. LSF provides a comprehensive set of intelligent, policy-driven scheduling features that enable you to utilize all of your compute infrastructure resources and ensure optimal application performance.

Its robust workload applications management capabilities are accessible using the latest design in web-based interfaces, making it powerful and simple to use.

Additional information is available through the website for [IBM Spectrum LSF Suite Community Edition](#). If you need more comprehensive support, a paid support offering is available from IBM.

Procedure

1. LSF Suite Community Edition offering components

LSF Suite Community Edition 10.2 Fix Pack 12 includes the following IBM Spectrum Computing components:

IBM Spectrum LSF 10.1 Fix Pack 12

IBM Spectrum LSF is a powerful workload management platform for demanding, distributed HPC environments. It provides a comprehensive set of intelligent, policy-driven scheduling features that enable you to use all of your compute infrastructure resources and ensure optimal application performance.

IBM Spectrum LSF Application Center 10.2 Fix Pack 12

IBM Spectrum LSF Application Center provides a flexible, easy to use interface for cluster users and administrators. IBM Spectrum LSF Application Center is the full-featured offering, including job submission, monitoring, reporting, application templates, simplified application configuration, extended template and page customization, visualization support through VNC, and configurable user access control. The IBM Spectrum LSF Application Center desktop client is also included and the IBM Spectrum LSF Application Center mobile client is free for download through your mobile App Store.

2. Limitations and restrictions

- Installation and operation of LSF Suite Community Edition is limited to 10 hosts, including hosts added dynamically. Each host must be a single or dual socket node and have up to 64 total cores. Other nodes are not supported.

- LSF Suite Community Edition supports 2,500 active (started and pending) jobs in the system.
- The LSF multicluster capability has the following limitations in LSF Suite Community Edition:
 - Job forwarding to a remote queue is supported, but a submission cluster in LSF Suite Community Edition cannot receive jobs from a remote cluster. The submission queue can configure the **SNDJOBS_TO** parameter, but the **RCVJOBS_FROM** parameter is ignored.
 - The resource leasing mode is not supported.
 - The **HostExport** parameter in the `lsb.resources` file is ignored.
- LSF Application Center is limited to 10 users logged in at the same time. There is no limit for mobile users.
- The number of GPUs is limited to one per host in LSF Suite Community Edition.
- GPU automatic detection is enabled by default in LSF Suite Community Edition and cannot be changed. This means that GPU collection using the legacy ELIM method is disabled.
- The following LSF components and features are disabled in LSF Suite Community Edition:
 - LSF Connector for Kubernetes
 - LSF Data Manager
 - LSF resource connector
 - The LSF/XL feature

3. Access the software packages

Download the LSF Suite Community Edition offering distribution package for your environment from the [IBM website](#):

[IBM website](#)

LSF Suite Community Edition is supported on 64-bit x86 Linux systems, IBM POWER LE (Little Endian) Linux systems, and Linux on ARM V8 systems.

For LSF Suite Community Edition, download one of the following files:

64-bit x86 Linux systems

`lsfsce10.2.0.12-x86_64.tar.gz`

IBM POWER Linux on Power (Little Endian) systems

`lsfsce10.2.0.12-ppc64le.tar.gz`

Linux on ARM V8

`lsfsce10.2.0.12-armv8.tar.gz`

4. Access the documentation

Access the documentation for the LSF Suite Community Edition components on IBM Knowledge Center:

- [IBM Spectrum LSF 10.1 Fix Pack 12](#)
- [IBM Spectrum LSF Application Center 10.2 Fix Pack 12](#)

5. Evaluate the hardware and system configuration

The LSF Suite Community Edition installation requires the following:

- A computing environment that consists of 2 to 10 hosts
- A host that has at least one network interface to act as the LSF master host
- A supported operating system that is preinstalled on the LSF master host
- Compute hosts that can be set to boot over a network

The LSF Suite Community Edition must meet the minimum hardware and software requirements of the installed components.

For details about system hardware and software requirements for LSF Suite Community Edition installation, and for more information about hardware and software compatibility of LSF Suite

Community Edition components, see the system requirements information in IBM Knowledge Center and on the IBM Spectrum LSF wiki:

- [IBM Spectrum LSF system requirements](#)
- [IBM Spectrum LSF Application Center system requirements](#)

6. Plan system environment before installation

Before deploying LSF Suite Community Edition, decide on a network topology and system configuration. See more information on planning your environment here:

- [Plan your LSF installation](#)
- [Preparing to install IBM Spectrum LSF Application Center](#)

7. Get started

After you install LSF Suite Community Edition, you can start configuring your applications and completing other administrative tasks.

Important: After installing IBM Spectrum LSF, you must specify `LSF_STRICT_CHECKING=ENHANCED` in the `lsf.conf` file, then restart the IBM Spectrum LSF cluster to ensure that your cluster remains secure. If you are using multiple IBM Spectrum LSF clusters, you must restart all IBM Spectrum LSF to apply this configuration parameter. For more details, refer to the README for IBM Spectrum LSF Version 10.1 Fix Pack 12 ([Readme_600488.html](#)).

See more about getting started with LSF Suite Community Edition components here:

- [Getting started with IBM Spectrum LSF](#)
- [IBM Spectrum LSF Application Center overview](#)

Learn more about administering LSF Suite Community Edition here:

- [Administering IBM Spectrum LSF](#)
- [Administering IBM Spectrum LSF Application Center](#)

What to do next

More information

For more information about LSF Suite Community Edition components, refer to the following resources:

- [IBM Spectrum Computing community](#)

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- Learn more about IBM Spectrum Computing products on blogs and wikis, and benefit from the expertise and experience of others.
- Share your experience in wikis and forums to collaborate with the broader software defined computing user community.

- [IBM Knowledge Center](#)

IBM Knowledge Center gathers all IBM product information into one easy-to-access place. Search across the entire IBM content library, or narrow your search to individual LSF Suite Community Edition components.

- [IBM Spectrum LSF products](#)
- [IBM Redbooks®](#)

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