

IBM® Spectrum LSF Suite Community Edition quick start guide

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

Product overview

IBM Spectrum LSF Suite Community Edition (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 LSF Suite Community Edition. If you need more comprehensive support, a paid support offering is available from IBM.

1 Step 1: LSF Suite Community Edition components

IBM Spectrum LSF Suite Community Edition 10.2 Fix Pack 15 includes the following IBM Spectrum Computing components:

IBM Spectrum LSF 10.1 Fix Pack 15

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.

Fix Pack 15 also includes a new **IBM Spectrum LSF Web Services** (LSF Web Services) component for x86 and ARM, which allows you to access to your LSF from anywhere, making it easier for your to connect to your LSF cluster.

IBM Spectrum LSF Application Center 10.2 Fix Pack 12

LSF Application Center provides a flexible, easy to use interface for cluster users and administrators. 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 LSF Application Center desktop client is also included and the LSF Application Center mobile client is free for download through your mobile App Store.

2 Step 2: Limitations and restrictions

- Installation and operation of LSF Suite Community Edition is limited to ten 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 ten users logged in at the same time. There is no limit for mobile users.
- 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 Step 3: Access the software installation packages

Download the LSF Suite Community Edition offering distribution package for your environment from the [IBM web site](#).

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

`lsfsce10.2.0.15-x86_64.tar.Z`

IBM POWER Linux on Power (Little Endian) systems

`lsfsce10.2.0.15-ppc64le.tar.Z`

Linux on ARM V8

`lsfsce10.2.0.15-armv8.tar.Z`

4 Step 4: Access the documentation

Find LSF Suite Community Edition content in IBM Documentation:

- [IBM Spectrum LSF](#) including [IBM Spectrum LSF Web Services](#) documentation.
- [LSF Application Center](#) documentation.

5 Step 5: Evaluate the hardware and system configuration

The requirements for LSF Suite Community Edition are as follows:

- A computing environment that consists of two to ten hosts.
- A host that has at least one network interface to act as the LSF management host.
- A supported operating system that is preinstalled on the LSF management 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 Documentation:

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

You can also find system requirements from the LSF wiki

6 Step 6: Plan your system environment

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 LSF Application Center](#)

7 Step 7: Install LSF Suite Community Edition

Follow the installation topics for steps to install each of the LSF Suite Community Edition offering distribution packages that you previously downloaded:

- See the [LSF installation topics](#) to install IBM Spectrum LSF.
- See the [IBM Spectrum LSF Web Services installation topic](#) to install LSF Web Services.
- See the [IBM Spectrum LSF Application Center installation topics](#) to install LSF Application Center.

8 Step 8: Get fixes from IBM Fix Central

After you install LSF and LSF Application Center, use [IBM Fix Central](#) to find and download the fixes supported for LSF products. From IBM Fix Central, you can search, select, order, and download fixes for your system with a choice of delivery options. For the steps, see [Getting fixes from IBM Fix Central](#).

9 Step 9: Get started

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

Important: After installing LSF, you must specify `LSF_STRICT_CHECKING=ENHANCED` in the `lsf.conf` file, then restart the LSF cluster to ensure that your cluster remains secure. If you are using multiple LSF clusters, you must restart all of them to apply this configuration parameter. For more details, refer to the readme file for LSF Version 10.1 Fix Pack 15.

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

- [Getting started with LSF](#)
- [LSF Web Services](#)
- [LSF Application Center overview](#)

Learn more about administering LSF Suite Community Edition here:

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

More information

For more information about LSF Suite Community Edition, see the following resources:

- [LSF Suite Community Edition site](#)
- [IBM Documentation](#)
- The IBM Spectrum LSF product wiki on [IBM Community](#)
- [IBM Redbooks®](#)

Access technical support information for all IBM products from the [IBM Support Portal](#).