

Platform LSF
Version 9 Release 1.3

Migrating on Windows



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Note

Before using this information and the product it supports, read the information in "Notices" on page 5.

First edition

This edition applies to version 9, release 1 of IBM Platform LSF (product number 5725G82) and to all subsequent releases and modifications until otherwise indicated in new editions.

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Migrate Your Windows Cluster to LSF 9.1.3

This document describes how to migrate a Windows cluster to LSF 9.1.3 from LSF 7, LSF 7 Updates 1-6, LSF 8.0, LSF 8.0.1, LSF 8.3, and LSF 9.1.

If you have LSF 6.x, you must first migrate your Windows cluster to Platform LSF version 7.

What is migration?

A direct upgrade of a Windows cluster to LSF 9.1.3 is not supported. Migration lets you transfer both workload and configuration from the original cluster after you have installed a new LSF 9.1.3 cluster.

It is important to follow this procedure exactly, or the new cluster may not work properly afterwards. Do not remove or rename any files or directories from the original cluster unless a procedure tells you to do so.

How to migrate your cluster

The original (pre-LSF 9.1.3) cluster is working properly.

Complete the following steps to migrate your cluster.

1. Back up existing configuration files and work directories
2. Uninstall the existing cluster
3. Install LSF 9.1.3
4. Copy and edit LSF configuration and work files
5. Copy EGO configuration and work files
6. Start the new cluster

Back up existing configuration files and work directories

You must back up files and directories. The shared directory is indicated by *share_dir* in the following procedure.

1. Does your existing cluster use the *share_dir* directory to store configuration files and work directories?
 - If *no*, go to step 2.
 - If *yes*, back up directories in the *share_dir* directory.

Your existing directory structure should be as follows:

LSF_ENVDIR (for LSF 7 Update 2 through 6, LSF 8.0 LSF 8.0.1, LSF 8.3 and LSF 9.1): *share_dir*\conf

LSF_ENVDIR (other): *share_dir*\lsf\conf

LSB_CONFDIR (for LSF 7 Update 2 through 6, LSF 8.0 LSF 8.0.1, LSF 8.3 and LSF 9.1): *share_dir*\conf\lsbatch

LSB_CONFDIR (other): *share_dir*\lsf\conf\lsbatch

LSB_SHAREDIR (for LSF 7 Update 2 through 6, LSF 8.0 LSF 8.0.1, LSF 8.3 and LSF 9.1): *share_dir*\work\

LSB_SHAREDIR (other): *share_dir*\lsf\work\

EGO_CONFDIR (for LSF 7 Update 2 through 6, LSF 8.0 LSF 8.0.1, LSF 8.3 and LSF 9.1): *share_dir*\conf\ego\cluster_name\kernel

EGO_CONFDIR (other): *share_dir*\kernel\conf\

EGO_WORKDIR (for LSF 7 Update 2 through 6, LSF 8.0 LSF 8.0.1, LSF 8.3 and LSF 9.1): *share_dir*\work\cluster_name\ego

EGO_WORKDIR (other): *share_dir*\kernel\work

share_dir\gui\conf

2. If your existing cluster configuration files are not in the *share_dir* directory, back up directories from your existing cluster.

If you have LSF 7 Update 2, back up whole conf and work directories:

- C:\LSF_7.0\conf
- C:\LSF_7.0\work

If you have another version of LSF 7, back up the following:

- a. **LSF_ENVDIR**
For example, C:\LSF_7.0\conf\
 - b. **LSB_CONFDIR**
For example, C:\LSF_7.0\conf\lsbatch
 - c. **LSB_SHAREDIR**
For example, C:\LSF_7.0\work
 - d. **EGO_CONFDIR**
For example, C:\LSF_7.0\ego\kernel\conf
 - e. **EGO_WORKDIR**
For example, C:\LSF_7.0\ego\kernel\work
 - f. **LSF_TOP**\ego\gui\conf
For example, C:\LSF_7.0\ego\gui\conf

Uninstall the existing cluster

If your existing cluster does not use the *share_dir* directory, you must back up existing configuration files and work directories before you uninstall the cluster.

1. Uninstall the current cluster (LSF 7 or LSF 7 Update 1-6, LSF 8.0, LSF 8.0.1 and LSF 9.1).
2. Reboot the master hosts.
3. Remove the old installation directories within **LSF_TOP**.

Install LSF 9.1.3

Download and install LSF 9.1.3 using the same cluster name and cluster administrator that you have for your existing cluster.

Copy and edit LSF configuration and work files

Note:

LSF 7 Updates 3 and higher and LSF 9.1.3 no longer use the *ego.cluster* and *ego.shared* files. Therefore, if you are updating from LSF Update 3 or higher to LSF 9.1.3, you do not need to do the following for the *ego.cluster* and *ego.shared* files.

In this procedure, *_old* refers to configuration file paths for the existing cluster, and *_new* refers to configuration file paths for the new cluster.

1. If upgrading from anything older than LSF 7 Update 3, migrate the old `ego.cluster` file to the new `lsf.cluster` file.
 - a. Open the old `ego.cluster` file from `EGO_CONFDIR_old\`
 - b. Open the new `lsf.cluster` file from `LSF_ENVDIR_new\`
 - c. Migrate the following sections from the old `ego.cluster` file to the new `lsf.cluster` file:
 - Hosts section
 - Parameters section
 - Resource Map
2. Migrate values from the old `lsf.conf` file to the new `lsf.conf` file:
 - a. Open the old `lsf.conf` file from `LSF_ENVDIR_old\`
 - b. Open the new `lsf.conf` file from `LSF_ENVDIR_new\`
 - c. Migrate the values from the old file to the new one.

Remember: The new `lsf.conf` file contains the correct configuration path values for the LSF 9.1.3 directory structure changes.

3. If upgrading from anything older than Update 3, copy the old `ego.shared` file as `lsf.shared` to the new cluster.
Copy `EGO_CONFDIR_old\ego.shared` to `LSF_ENVDIR_new\lsf.shared`
4. Copy the old `passwd.lsfuser` file to the new cluster.
Copy `LSF_ENVDIR_old\passwd.lsfuser` to `LSF_ENVDIR_new\passwd.lsfuser`
5. Copy all old LSF batch configuration files to the new cluster.
Copy `LSB_CONFDIR_old\cluster_name\configdir*` to `LSB_CONFDIR_new\cluster_name\configdir\`
6. Copy all old LSF batch work files to the new cluster.
Copy `LSB_SHAREDIR_old\cluster_name*` to `LSB_SHAREDIR_new\cluster_name\`

Copy EGO configuration and work files

1. Does your existing cluster define an EGO consumer tree, an EGO resource group or EGO users?
 - If *no*, go to step 2.
 - If *yes*, copy all old EGO XML configuration files to the new cluster, and then go to step 2.
Copy `EGO_CONFDIR_old*.xml` to `EGO_CONFDIR_new\`
2. Copy the old EGO password file to the new cluster:
Copy `EGO_CONFDIR_old\passwd.ego` to `EGO_CONFDIR_new\passwd.ego`
3. Copy the old EGO work directory to the new cluster:
Copy `EGO_WORKDIR_old*` to `EGO_WORKDIR_new\`

Start the new cluster

1. Start the new LSF 9.1.3 cluster.
`lsfstartup`
2. Activate all queues to start jobs remaining from the original cluster.
To activate all LSF queues, run:
`badadmin qact all`
3. Submit all new work to the new cluster.

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