# Migrating Platform™ LSF™ Version 7 to Update 5 on Windows

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# Migrate Your Windows Cluster to LSF 7 Update 5

This document describes how to migrate a Windows cluster to LSF 7 Update 5 from LSF 7, LSF 7 Update 1, or LSF 7 Update 2. If you have LSF 6.x, see "Migrating Your Windows Cluster to Platform LSF Version 7".

# What is migration?

A direct upgrade of a cluster to LSF 7 Update 5 is not supported. Migration lets you transfer both workload and configuration from the original cluster after you have installed a new LSF 7 Update 5 cluster.

It is important to follow the 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

**Prerequisites:** The original (pre-LSF 7 Update 5) cluster is working properly.

Complete the following steps to migrate your cluster.

- Back up existing configuration files and work directories on page 2
- 2 Uninstall the existing cluster on page 3
- Install LSF 7 Update 5 on page 4 3
- Copy and edit LSF configuration and work files on page 4
- Copy EGO configuration and work files on page 5
- Copy GUI configuration files on page 5
- Start the new cluster on page 5

## Back up existing configuration files and work directories

You must back up files and directories only if your existing cluster does not use a shared directory. The shared directory is indicated by *share\_dir* in the following procedure.

- Does your existing cluster use the *share\_dir* directory to store configuration files and work directories?
  - If *no*, go to step 2.
  - If yes, you do not need to back up files or directories. Your existing configuration and work files will not be removed when you uninstall the older version of LSF 7.

Your existing directory structure should be as follows:

```
LSF_ENVDIR (Update 2): share_dir\conf
LSF_ENVDIR (other): share_dir\lsf\conf
LSB_CONFDIR (Update 2): share_dir\conf\lsbatch
```

```
LSB_CONFDIR (other): share_dir\lsf\conf\lsbatch
LSB_SHAREDIR (Update 2): share_dir\work\
LSB_SHAREDIR (other): share_dir\lsf\work\
EGO_CONFDIR (Update 2): share_dir\conf\ego\cluster_name\kernel
EGO_CONFDIR (other): share_dir\kernel\conf\
EGO_WORKDIR (Update 2): share_dir\work\cluster_name\ego
EGO_WORKDIR (other): share_dir\kernel\work
share dir\qui\conf
```

2 If your existing cluster configuration files are not in the *share\_dir* directory, then back up directories from your existing cluster.

If you have 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, 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\eqo\qui\conf

For example, C:\LSF\_7.0\ego\gui\conf

## Uninstall the existing cluster

**Prerequisites:** If your existing cluster *does not* use the *share\_dir* directory, perform the procedure Back up existing configuration files and work directories on page 2 before you uninstall the cluster.

**3** Remove the old installation directories within LSF\_TOP.

Uninstall the current cluster (LSF 7 or LSF 7 Update 1 or LSF 7 Update 2 or LSF 7 Update 3).

<sup>2</sup> Reboot the master hosts.

#### Install LSF 7 Update 5

Download and install LSF 7 Update 5 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 3,4 and 5 no longer use the ego.cluster and ego.shared files. Therefore, if you are updating from LSF Update 3 or 4 to LSF Update 5, 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 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\_01d\
  - **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 1sf.conf file contains the correct configuration path values for the LSF 7 Update 5 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.

```
cp -f EGO_CONFDIR_old\ego.shared LSF_ENVDIR_new\lsf.shared
```

4 Copy the old passwd.lsfuser file to the new cluster.

```
 \begin{array}{lll} {\tt cp -f LSF\_ENVDIR\_{\it o1d} \backslash passwd.lsfuser} \\ {\tt LSF\_ENVDIR\_{\it new} \backslash passwd.lsfuser} \end{array}
```

5 Copy all old LSF batch configuration files to the new cluster.

```
cp -f LSB_CONFDIR_old\cluster_name\configdir\*
LSB_CONFDIR_new\cluster_name\configdir\
```

6 Copy all old LSF batch work files to the new cluster.

```
cp -rf LSB_SHAREDIR_old\cluster_name\*
LSB_SHAREDIR_new\cluster_name\
```

#### Copy EGO configuration and work files

- 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.

```
cp -f EGO_CONFDIR_old\*.xml EGO_CONFDIR_new\
```

2 Copy the old EGO password file to the new cluster:

```
cp -f EGO_CONFDIR_old\passwd.ego EGO_CONFDIR_new\passwd.ego
```

3 Copy the old EGO work directory to the new cluster:

```
cp -rf EGO_WORKDIR_old\* EGO_WORKDIR_new\
```

#### Copy GUI configuration files

If you have Update 2, copy the existing GUI configuration directory to the new location:

```
cp -f share_dir_old\conf\gui\cluster_name\conf\*
share_dir_new\conf\gui\cluster_name\conf\
```

For other versions of LSF, copy all GUI configuration files as shown in the following examples.

- 1 cp -f share\_dir\_old\gui\conf\wsm.conf share dir new\conf\qui\cluster name\conf\
- 2 cp -f share\_dir\_old\gui\conf\pmcconf\\* share\_dir\_new\conf\gui\cluster\_name\conf\pmcconf\
- 3 cp -f share\_dir\_old\gui\conf\useracl\\* share\_dir\_new\conf\gui\cluster\_name\conf\useracl\
- 4 cp -f share\_dir\_old\gui\conf\userconf\\* share\_dir\_new\conf\gui\cluster\_name\conf\userconf\
- 5 cp -f share\_dir\_old\gui\conf\server.xml share\_dir\_new\conf\gui\cluster\_name\conf\server.xml

## Start the new cluster

- 1 Start the new LSF 7 Update 5 cluster. 1sfstartup
- 2 Activate all queues to start jobs remaining from the original cluster.

#### Start the new cluster

To activate all LSF queues, run: badmin qact all

3 Submit all new work to the new cluster.

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