# Migrate Platform LSF Version 7 to Update 6 on Windows

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# Migrate Your Windows Cluster to LSF 7 Update 6

This document describes how to migrate a Windows cluster to LSF 7 Update 6 from LSF 7 or LSF 7 Updates 1-5. If you have LSF 6.x, you must first migrate your Windows cluster to Platform LSF version 7 (information is provided in a separate document).

# What is migration?

A direct upgrade of a cluster to LSF 7 Update 6 is not supported. Migration lets you transfer both workload and configuration from the original cluster after you have installed a new LSF 7 Update 6 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

The original (pre-LSF 7 Update 6) 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 7 Update 6
- 4. Copy and edit LSF configuration and work files
- 5. Copy EGO configuration and work files
- 6. Copy GUI configuration files
- 7. Start the new cluster

## 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.

- 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*, you do not need to back up files or directories. Your existing configuration and work files are *not* be removed when you uninstall the older version of LSF 7.

Your existing directory structure should be as follows:

LSF\_ENVDIR (for Update 2 only): *share\_dir*\conf

LSF\_ENVDIR (other): *share\_dir*\lsf\conf

LSB\_CONFDIR (for Update 2 only): *share\_dir*\conf\l sbatch

LSB\_CONFDIR (other):  $share_dir \leq s \leq conf \leq start$ 

LSB\_SHAREDIR (for Update 2 only): *share\_dir*\work\

LSB\_SHAREDIR (other): *share\_dir*\lsf\work\

EGO\_CONFDIR (for Update 2 only): *share\_di* r\conf\ego\*cl* ust er\_name \kernel

EGO\_CONFDIR (other): *share\_dir*\kernel \conf \

EGO\_WORKDIR (for Update 2 only): *share\_dir*\work\*cluster\_name*\ego

EGO\_WORKDIR (other): *share\_dir*\kernel \work

*share\_di r*\gui \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 $\conf\l sbatch$ 

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\_T0P\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 1-5).
- 2. Reboot the master hosts.
- 3. Remove the old installation directories within LSF\_TOP.

## Install LSF 7 Update 6

1. Download and install LSF 7 Update 6 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, 5, and 6 no longer use the ego. cl uster and ego. shared files. Therefore, if you are updating from LSF Update 3, 4, or 5 to LSF Update 6, you do not need to do the following for the ego. cl uster 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. cl ust er file to the new l sf. cl ust er file.
  - a) Open the old ego. cl ust er file from EGO\_CONFDI R\_ol d
  - b) Open the new l sf. cl ust er file from LSF\_ENVDI R\_*new*
  - c) Migrate the following sections from the old ego. cl ust er file to the new lsf. cl ust er file:
    - Hosts section
    - Parameters section
    - Resource Map
- 2. Migrate values from the old l sf. conf file to the new l sf. conf file:
  - a) Open the old l sf. conf file from LSF\_ENVDI R\_ol d
  - b) Open the new l sf. conf file from LSF\_ENVDI R\_*new*
  - c) Migrate the values from the old file to the new one.

#### **Remember:**

The new  $l \, sf. \, conf$  file contains the correct configuration path values for the LSF 7 Update 6 directory structure changes.

3. If upgrading from anything older than Update 3, copy the old ego. shared file as 1 sf. shared to the new cluster.

#### cp -f EGO\_CONFDIR\_old\ego.shared LSF\_ENVDIR\_new\lsf.shared

4. Copy the old passwd. 1 sfuser file to the new cluster.

#### cp -f LSF\_ENVDIR\_old\passwd.lsfuser LSF\_ENVDIR\_new\passwd.lsfuser

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

- 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.

#### 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\gui\cluster\_name\conf\
- 2. cp -f share\_dir\_old\gui\conf\pmcconf\\* share\_dir\_new\conf\gui\cluster\_name\conf \pmcconf\
- 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 6 cluster.

#### Isfstartup

2. Activate all queues to start jobs remaining from the original cluster.

To activate all LSF queues, run:

#### badmin qact all

3. Submit all new work to the new cluster.