Migrating Platform LSF Version 7 to Platform LSF Version 8 on Windows

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Migrate Your Windows Cluster to LSF 8

This document describes how to migrate a Windows cluster to LSF 8 from LSF 7 or LSF 7 Updates 1-6. 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 8 is not supported. Migration lets you transfer both workload and configuration from the original cluster after you have installed a new LSF 8 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 8) 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 8
- 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): share_dir\conf

LSF_ENVDIR (other): $share_dir \leq share_dir \leq share_di$

LSB_CONFDIR (for LSF 7 Update 2 through 6): share_dir\conf\l sbatch

LSB_CONFDIR (other): $share_dir \leq share_dir \leq share_d$

LSB_SHAREDIR (for LSF 7 Update 2 through 6): share_di r\work\

LSB_SHAREDIR (other): share_dir\l sf\work\

EGO_CONFDIR (for LSF 7 Update 2 through 6): $share_dir \land conf \cdot ego \land cluster_name \land kernel$

EGO_CONFDIR (other): share_dir\kernel \conf\

EGO_WORKDIR (for LSF 7 Update 2 through 6): 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 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_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).
- 2. Reboot the master hosts.
- 3. Remove the old installation directories within LSF_TOP.

Install Platform LSF 8

1. Download and install LSF 8 using the same cluster name and cluster administrator that you have for your existing cluster.

Copy and edit Platform LSF configuration and work files

Note:

LSF 7 Updates 3 and higher and LSF 8 no longer use the ego. cl uster and ego. shared files. Therefore, if you are updating from LSF Update 3 or higher to LSF 8, 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. cluster file to the new 1 sf. cluster file.
 - a) Open the old ego. cluster file from EGO_CONFDI R_old\
 - b) Open the new l sf. cl ust er file from LSF_ENVDI R_ $new \setminus$
 - c) Migrate the following sections from the old ego. cl uster file to the new l sf. cl uster 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 1 sf. conf file from LSF_ENVDI R_old
 - 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 8 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. I 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-fLSB_CONFDIR_old\cluster_name\configdir* LSB_CONFDIR_new\cluster_name\configdir\

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:

 ${\tt cp-rf~EGO_WORKDIR_{\it old}} {\tt ^*EGO_WORKDIR_{\it new}} {\tt }$

Start the new cluster

1. Start the new LSF 8 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.