IBM Platform LSF
Version 9 Release 1 Modification 3

Readme

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Note
Before using this information and the product it supports, read the information in "Notices" on page 7.

First edition

This edition applies to version 9, release 1, modification 3 of Platform Process Manager(product number 5725G82) and to all subsequent releases and modifications until otherwise indicated in new editions.

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Chapter 1. Interactive Logon

Use the interactive logon option to modify the Windows Logon Type on the execution host (the host running the job)from **logon as a batch job** to **logon interactively** when jobs are run on the execution host.

About interactive logon

In order for jobs to run, the Windows user account privilege **logon as a batch job** must be set on all Windows hosts that can run jobs for Windows submission user accounts. A job fails if the submitting Windows user account does not have this privilege on the execution host.

Enabling interactive logon is an alternative to setting the **logon as a batch job** privilege for all users running work on Windows hosts.

In environments where it is not desirable to assign a **logon as a batch job** privilege to all Windows user accounts, you can enable the interactive logon option and assign the **logon interactively** privilege to all Windows user accounts instead. LSF uses **logon interactively** instead of **logon as a batch job** when running jobs.

Scope

Operating system	• Windows hosts (all supported Platforms).
Not required for	• UNIX execution hosts. • User account mapping UNIX hosts.
Application	• This option applies to Windows execution hosts.
Dependencies	• On Windows hosts that may run work, you must grant the **logon interactively** privilege to Windows user accounts.
Limitations	• You can configure this option and use l**ogon interactively** or use **logon as a batch job**. You cannot use both at the same time.

LSB_LOGON_INTERACTIVE

Syntax

LSB_LOGON_INTERACTIVE=Y | y | N | n

Description

If LSB_LOGON_INTERACTIVE is set to Y or y in `lsf.conf`, LSF executes jobs on the Windows host with the **logon interactively** Windows Logon Type.

If LSB_LOGON_INTERACTIVE is set to N, n, or any other value in `lsf.conf`, LSF executes jobs on the Windows host with the **logon as a batch job** Windows Logon Type.

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If LSB_LOGON_INTERACTIVE is not set in `lsf.conf`, LSF executes jobs on the Windows host:

- With the **logon as a batch job** Windows Logon Type when the operating system on the Windows execution host is earlier thanVista.
- With the **logon interactively** Windows Logon Type when the operating system on the Windows execution host is Vista or later.

Default

LSB_LOGON_INTERACTIVE=N, LSF executes jobs on the Windows host with the **logon as a batch job** Windows Logon Type.

Enable interactive logon

Before you begin

Prerequisites:

Set the **logon interactively** privilege for submission Windows user accounts on all hosts where a job submitted by these Windows users could run.

Procedure

1. Ast the LSF administrator, set LSB_LOGON_INTERACTIVE=Y in `lsf.conf`.

   This setting authorizes Windows user accounts that have the **logon interactively** privilege set in the local security policy on the host that runs the job.

   Important:

   The job will fail if the submission user account does not have the **logon interactively** privilege on the Windows execution host.
2. Run **`badmin reconfig`**.

Chapter 2. Automatically create the LSF hosts file on Linux/UNIX

The LSF `hosts` file located in $LSF_CONFDIR associates host names and IP addresses in LSF. This is useful for hosts with multiple IP addresses and different official host names configured at the system level. You can use the command **hostsfilesetup** to automatically create the LSF `hosts` file for all hosts in your cluster, and to update the LSF `hosts` file.

About this task

Procedure

1. Install LSF and set up the `lsf.cluster.`*`cluster_name`* file with the official name of hosts.
2. As root or the LSF primary administrator, log on to one of the master candidate hosts and use `hostsfilesetup` to automatically create the `$LSF_CONFDIR/hosts` file.

   ```
   $ hostsfilesetup
   ```

   Note: The LSF primary administrator or root must be able to access all UNIX/Linux hosts in the cluster with password-less rsh or ssh from the host on which this command is run. If password-less rsh is not configured, access to remote hosts fails. If password-less ssh is not configured, the user account running this command is prompted for a password.

hostsfilesetup

Creates or updates the LSF hosts file

Synopsis

hostsfilesetup [**-m** *host_name*[**,***host_name*,...] |**-m all**] [**-v ipv4** | **-v ipv6**][**-r rsh** | **-r ssh**]

hostsfilesetup -h | **-V**

Description

You must be root or the primary LSF administrator to run this command have access to all UNIX/Linux hosts in the cluster with password-less rsh or ssh from the host on which this command is run. If password-less rsh is not configured, access to remote hosts fails. If password-less ssh is not configured, the user account running this command is prompted for a password.

This command is only available on Linux/UNIX from LSF server hosts that have access to the `lsf.cluster.`*`cluster_name`* file, and from LSF master candidate hosts.

By default, when no options are used, creates the LSF hosts file (`$LSF_CONFDIR/hosts`) and maps host names to IP addresses and host aliases, for all hosts in the cluster defined in the `lsf.cluster.`*`cluster_name`*file. By default, uses the shell defined by the parameter LSF_RSH in the `lsf.conf` file to log in to each host to discover IP address and alias information. If LSF_RSH is not defined and a

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shell is not specified, rsh is used. IP addresses are written in dotted quad notation(IPv4) in the $LSF_CONFDIR/hosts file.

The $LSF_CONFDIR/hosts file has the following format:

ip_address official_host_name [*alias* [*alias* ...]]

For example, host1.example.com has two network interfaces and would be listed in the hosts file as:

```
190.123.55.77 host1.example.com alias-AA
190.123.55.88 host1.example.com alias-BB
```

Note: In certain cases, **hostsfilesetup** may not be able to retrieve all aliases for a host. If any host aliases are missing, you manually add them to the hosts file.

When a new file is created, the file is owned by the primary LSF administrator. If the hosts file exists, original file ownership permissions are maintained.

Options

-m host_name[,host_name,...] |-m all

Updates the $LSF_CONFDIR/hosts file and adds entries to map IP addresses to host names and aliases for the specified hosts. The host names that you specify must be the same names as listed in the *lsf.cluster.cluster_name* file.

If the keyword all is used, updates entries for all hosts in the lsf.cluster.*cluster_name* file.

-v ipv4 | -v ipv6

Specifies whether entries in the hosts file are written in a dotted quad notation (IPv4) or IP Next Generation (IPv6) format.

If you specify ipv6, ensure LSF_ENABLE_SUPPORT_IPV6=y in lsf.conf.

-r rsh | -r ssh

Indicates whether to use rsh or ssh to log on to the specified hosts to discover host IP and alias information.

-h

Prints the command usage to stderr and exits.

-V

Prints the product release version to stderr and exits.

Examples

Create the $LSF_CONFDIR/hosts file, include all hosts in the cluster, and use IPv4 format to write to the file and rsh to log in to each host to discover IP address and aliases:

```
$ hostsfilesetup -r rsh
```

Update the $LSF_CONFDIR/hosts file: hosts host1.example.com,host2example.com, IPv4 format to write to the file, rsh to log in to each host to discover IP address and aliases:

```
$ hostsfilesetup -m host1.example.com,host2.example.com -r rsh
```

Update the entire $LSF_CONFDIR/hosts file, include all hosts in the cluster, and use IPv4 format and ssh:

```
$ hostsfilesetup -m all -r ssh
```

Overwrite the existing $LSF_CONFDIR/hosts file, include all hosts in the cluster, and use IPv6 format and ssh:

```
$ hostsfilesetup -v ipv6 -r ssh
```

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