

Platform Application Center  
Version 9 Release 1 Modification 2

## *Release Notes*





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Version 9 Release 1 Modification 2

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**Note**

Before using this information and the product it supports, read the information in “Notices” on page 25.

**First edition**

This edition applies to version 9, release 1, modification 2 of IBM Platform Application Center (product number 5725G88) and to all subsequent releases and modifications until otherwise indicated in new editions.

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## Contents

### Chapter 1. What's new . . . . . 1

Optimize your MySQL database with mysqltools.sh . . . . .	1
Monitor and manage user sessions in the Logged In Users page . . . . .	1
Enforce licenses in the Login Settings page . . . . .	1
Improved Security . . . . .	2
IBM Technical Computing community . . . . .	2

### Chapter 2. Issues fixed in this release. . 3

### Chapter 3. Differences between IBM Platform Application Center editions . . 5

### Chapter 4. Requirements . . . . . 7

New installation requirements . . . . .	7
Installation location requirements . . . . .	7
Installation user account . . . . .	8
Failover requirements . . . . .	8
Database requirements . . . . .	8
LSF requirements . . . . .	9

System requirements . . . . .	11
Download required Platform Application Center binaries. . . . .	13
Upgrade requirements. . . . .	13
Required installed Platform Application Center version . . . . .	13
Download required Platform Application Center binaries. . . . .	14
Synchronize times between LSF and Platform Application Center . . . . .	14
Ensure the LSF LSB_SHAREDIR is accessible . . . . .	14
Configure LSF events for Platform Application Center . . . . .	14
Additional requirements for LSF 8.x only . . . . .	15

### Chapter 5. Known Issues and Limitations . . . . . 17

### Notices . . . . . 25

Trademarks . . . . .	27
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## Chapter 1. What's new

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### Optimize your MySQL database with mysqltools.sh

Use the new tool `mysqltools.sh` to reduce the size of database tables and improve database speed.

`mysqltools.sh` contains two subcommands: **df** for defragment, and **optimize** for database optimization.

- Use the **df** subcommand only when initially your database tables are all stored in one file to separate data tables into their own files.
- Use the **optimize** subcommand every so often to rebuild indexes in your Platform Application Center database. This subcommand optimizes tables for the Platform Application Center database with the MySQL command OPTIMIZE.

Command usage:

```
mysqltools.sh df -u user_name [-p password] -f file_name [-s]
mysqltools.sh optimize -u user_name [-p password] -d database_name[-s]
mysqltools.sh -h | -V
```

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### Monitor and manage user sessions in the Logged In Users page

The number of open sessions in Platform Application Center can affect system performance.

In the new page **System & Settings > Logged In Users**, you can view the number of users that are currently logged in, each user's open sessions, and the last activity time in each session. The number of sessions include connections to Platform Application Center through a web browser or through the Platform Application Center Web Services API.

From the **Logged In Users** page, you can monitor the number of open sessions per user, kill a user's session, or log a user out of the system.

To configure the timeout value of user sessions, edit the parameter `<session-timeout>30</session-timeout>` in `$GUI_CONFDIR/web.xml`. The default session timeout value is 30 minutes.

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### Enforce licenses in the Login Settings page

In **System & Settings > Usage Statistics**, you compare product usage against the licensed amounts that you configured in `$GUI_CONFDIR/entitlement.conf`.

In the new page **System & Settings > Settings > Login Settings**, you can now view the number of licenses configured in `entitlement.conf`, and configure to prevent additional users from logging in when the licensed number of concurrent users has been reached. The **Login Settings** page and the **Resources Dashboard** pages also provide an alert when all licenses are in use and, when the number of logged in users exceeds the licensed amount.

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## Improved Security

The following security vulnerabilities have been fixed in this release:

- Apache Struts 2 issue s2-015: <http://struts.apache.org/development/2.x/docs/s2-015.html>
- Apache Struts 2 issue s2-016: <http://struts.apache.org/release/2.3.x/docs/s2-016.html>
- Apache Struts 2 issue s2-017: <http://struts.apache.org/release/2.3.x/docs/s2-017.html>
- Spring security CRLF injection issue: <https://jira.springsource.org/browse/SEC-1790>

The Java version used in Platform Application Center is now IBM Java 7.

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## IBM Technical Computing community

You can now find the Platform Application Center wiki under the IBM Platform LSF Product Family. Here you have access to best practices, latest documentation, troubleshooting, and frequently asked questions.

Connect. Learn. Share. Collaborate and network with the IBM Platform Computing experts at the IBM Technical Computing community. Access the Technical Computing community on IBM Service Management Connect at <http://www.ibm.com/developerworks/servicemanagement/tc/>. Join today!

Service Management Connect is a group of technical communities for Integrated Service Management (ISM) professionals. Use Service Management Connect the following ways:

- Connect to become involved with an ongoing, open engagement among other users, system professionals, and IBM developers of Platform Computing products.
- Learn about IBM Technical Computing products on blogs and wikis, and benefit from the expertise and experience of others.
- Share your experience in wikis and forums to collaborate with the broader Technical Computing user community.



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## Chapter 2. Issues fixed in this release

You can find a list of issues fixed in Platform Application Center 9.1.2.0 in the file `pac9.1.2_fixed_bugs.pdf`. This file is available On Platform Application Center's IBM Service Management Connect at <https://www.ibm.com/developerworks/community/wikis/home?lang=en#!/wiki/IBM%20Platform%20LSF%20Wiki/page/IBM%20Platform%20Application%20Center>.



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## Chapter 3. Differences between IBM Platform Application Center editions

IBM® Platform Application Center(Platform Application Center) is available in two editions: Basic Edition and Standard Edition.

IBM Platform Application Center Basic Edition provides basic job submission, and job and host monitoring.

IBM Platform Application Center Standard Edition provides not only basic job submission and job and host monitoring, but also default application templates, role-based access control, reporting, customization, and remote visualization capabilities.

The following table highlights the differences between the editions.

Feature	IBM Platform Application Center Basic Edition	IBM Platform Application Center Standard Edition
Generic job submission	✓	✓
Job and host monitoring	✓	✓
Built-in reporting		✓
Specific application job submission		✓
Built-in application templates		✓
Custom applications and templates		✓
Custom job data repositories		✓
SDK to extend application templates and create custom pages		✓
Notifications when job status changes		✓
Branding customization capabilities		✓
Support for remote 2D/3D visualization		✓
Web Services API		✓
Role-based access control		✓
LSF® Scheduler Dashboard		✓
Product Usage Statistics	✓	✓
Manage user sessions	✓	✓
Enforce licenses	✓	✓

Feature	IBM Platform Application Center Basic Edition	IBM Platform Application Center Standard Edition
Integration with IBM Platform Process Manager for web-based flow submission, monitoring and control		✓
Integration with IBM Platform Analytics reports for advanced web-based analysis and reporting on LSF data		✓
Integration with IBM Platform License Scheduler for web-based license usage monitoring	✓	✓

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## Chapter 4. Requirements

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### New installation requirements

#### Installation location requirements

##### Access to LSF

The installation location must have access to the IBM Platform LSF environment(LSF). LSF must be installed and accessible. Get the location of LSF and know the value of LSF\_ENVDIR.

##### Memory requirements

Ensure the installation location has enough memory. The following indicates the Minimum recommended hardware for the Platform Application Center web server.

Item	Small cluster (Up to)	Medium cluster (Up to)	Large cluster (Up to)
Active jobs	5000	50,000	500,000
Job throughput	10,000 jobs/day	100,000 jobs/day	1 million jobs/day
Hosts	100	1000	6000
Active users	50	200	1000
Concurrent users	10	40	200
Time to keep job information and data (default)	14 days	14 days	14 days
Minimum recommended hardware for the Platform Application Center web server	1 CPU, 4 cores each Memory: 8 GB Disk type: Normal	2 CPUs, 4 cores each Memory: 16 GB Disk type: Faster	2 CPUs, 8 cores each Memory: 24 GB Disk type: Faster
Tuning required?	No	Yes	Yes

#### Disk space requirements

##### Disk size

Each host should have at least 800 MB of local disk space to install. To support ongoing logging of important data, 2 GB or more is recommended.

##### Job data

Make sure you have enough space for job data. By default, all job data is stored under the directory /home/.

#### Platform Application Center web server host

- For new installations, a requirement is that you do not have any existing versions of Platform Application Center installed.
- For upgrades, you must have installed Platform Application Center 8.0, 8.0.1, 8.0.2, 8.3, 9.1.0.0, or 9.1.1.0

- For best performance, do not use the LSF master host as the Platform Application Center web server host.
- If failover is required, the Platform Application Center host must be one of the LSF master candidates.
- If failover is not required, any LSF server or client host can be the Platform Application Center web server host as long as the host can read the following:
  - \$LSF\_ENVDIR
  - \$LSF\_SERVERDIR
  - \$LSB\_SHAREDIR

## **Installation location requirements when using Platform Process Manager**

If you have IBM Platform Process Manager(Platform Process Manager):

- If Platform Process Manager is locally installed, you must install Platform Application Center on the same host.
- If Platform Process Manager is installed on a shared filesystem, the Platform Application Center must be installed on a host that can access the shared filesystem.

## **Installation user account**

You must be root to install.

## **Failover requirements**

- Get the name of the LSF master and LSF master candidate hosts as indicated with the parameter LSF\_MASTER\_LIST in `lsf.conf`.
- You have two LSF master candidate hosts to act as failover hosts.
- You have enabled EGO in your cluster. This is required to support failover for Platform Application Center.
- You have a shared file system in which to install Platform Application Center. This is required in case the host on which Platform Application Center is installed goes down.
- If you are enabling MySQL failover:
  - You have MySQL Community Edition or MySQL Enterprise, version 5.5 or higher.
  - MySQL is installed locally on two LSF master candidate hosts, and it is installed in the same local directory on both hosts.
  - Both LSF master candidate hosts have the same MySQL version.

## **Database requirements**

### **Supported databases**

- MySQL 5.0, 5.1, 5.5, 5.6 Community Edition and Enterprise. For better performance, MySQL 5.6 is recommended.
- Oracle 10g, 11.2 Enterprise Edition for production clusters

### **MySQL requirements**

- Check that MySQL is installed and running.
- Get the location of the MySQL JDBC driver. You will need it for installation. Versions 5.1.13 and higher are supported.

If the MySQL JDBC driver is not installed, you can download it from:

<http://www.mysql.com/downloads/connector/j/>

**Important:** After download, you will need to manually extract the MySQL JDBC driver package to a local directory on the Platform Application Center host.

- Get the MySQL root user password. You will need it for installation. The default for MySQL is no password.

### Oracle requirements

- Check your Oracle database is properly configured and running.
- Check you have a user name, password, and URL to access the database.
- Ensure you installed the latest JDBC driver (ojdbc14.jar or newer) for the Oracle database. This driver is available from the following URL:

[http://www.oracle.com/technology/software/tech/java/sqlj\\_jdbc/index.html](http://www.oracle.com/technology/software/tech/java/sqlj_jdbc/index.html)

## LSF requirements

### LSF and LSF add-ons product versions

**Important:** If you are using LSF 8.0, 8.0.1 or 8.3, you need to download and install the fix pack.

- Fix pack for LSF 8.3:

<http://www.ibm.com/support/fixcentral/swg/selectFixes?parent=Platform+Computing&product=ibm/Other+software/Platform+LSF&release=All&platform=All&function=fixId&fixids=lsf-8.3-build209549&includeSupersedes=0>

- Fix pack for LSF 8.0.1:

<http://www.ibm.com/support/fixcentral/swg/selectFixes?parent=Platform+Computing&product=ibm/Other+software/Platform+LSF&release=All&platform=All&function=fixId&fixids=lsf-8.0.1-build209240&includeSupersedes=0>

	Supported with			
	IBM Platform LSF	IBM Platform Process Manager	IBM Platform Analytics	IBM Platform License Scheduler
IBM Platform Application Center Basic Edition	<ul style="list-style-type: none"><li>• 9.1, 9.1.1, 9.1.1.1, 9.1.2 Express® Edition</li><li>• 9.1, 9.1.1, 9.1.1.1, 9.1.2 Standard Edition</li><li>• 8.3 Express Edition</li><li>• 8.3 Standard Edition</li><li>• 8.0.1</li><li>• 8.0</li></ul>	-	-	9.1, 9.1.1, 9.1.2

	Supported with			
	IBM Platform LSF	IBM Platform Process Manager	IBM Platform Analytics	IBM Platform License Scheduler
IBM Platform Application Center Standard Edition	<ul style="list-style-type: none"> <li>9.1, 9.1.1, 9.1.1.1, 9.1.2 Express Edition</li> <li>9.1, 9.1.1, 9.1.1.1, 9.1.2 Standard Edition</li> <li>8.3 Express Edition</li> <li>8.3 Standard Edition</li> <li>8.0.1</li> <li>8.0</li> </ul>	9.1, 9.1.2	9.1, 9.1.2	9.1, 9.1.1, 9.1.2

## Synchronize times between LSF and Platform Application Center

The clock time on both the LSF master and the Platform Application Center web server must be the same. Ensure these times are synchronized.

## Ensure the LSF LSB\_SHAREDIRE is accessible

Platform Application Center requires read access to the LSF work directory, defined in the LSF configuration file \$LSF\_ENVDIR/lsf.conf with the parameter LSB\_SHAREDIRE.

## Configure LSF events for Platform Application Center

You need to configure LSF to log events so that Platform Application Center can retrieve job information.

1. Log on to the LSF master host as the LSF administrator.
2. Set the LSF environment.
3. Edit the \$LSF\_ENVDIR/lsbatch/cluster\_name/configdir/lsb.params configuration file.
  - a. Add the parameter ALLOW\_EVENT\_TYPE and define the following events.  
If you do not plan to use Standard reports, use the following configuration.  
These are the required events for the **Jobs** page in Platform Application Center to work properly:

```
ALLOW_EVENT_TYPE=JOB_NEW JOB_STATUS JOB_FINISH2 JOB_START JOB_EXECUTE JOB_EXT_MSG JOB_SIGNAL JOB_REQUEUE JOB_MODIFY2
JOB_SWITCH METRIC_LOG
```

If you plan on using Standard reports, use the following configuration:

```
ALLOW_EVENT_TYPE=JOB_NEW JOB_START JOB_START_ACCEPT JOB_STATUS JOB_FORWARD \
MIG JOB_ACCEPT JOB_SWITCH JOB_FINISH JOB_MODIFY2 UNFULFILL JOB_SIGACT \
JOB_SIGNAL JOB_EXECUTE JOB_REQUEUE JOB_CLEAN JOB_EXCEPTION JOB_EXT_MSG \
JOB_ATTN_DATA JOB_CHUNK SBD_UNREPORTED_STATUS PRE_EXEC_START JOB_FORCE \
JOB_MOVE JOB_RUN_RUSAGE METRIC_LOG
```

- b. Enable event streaming by setting ENABLE\_EVENT\_STREAM=Y.  
Event streaming in your LSF cluster is required so that data can be loaded into the Platform Application Center database.

**Important:** The LSF stream file name must be lsb.stream to work with Platform Application Center. This is the default name.

- c. Check whether the parameter LSB\_QUERY\_PORT is set in lsf.conf. If LSB\_QUERY\_PORT is set, then set NEWJOB\_REFRESH=Y in lsb.params.



This is required because when `LSB_QUERY_PORT` is set, newly submitted job information is not immediately available, and as a result, Platform Application Center is unable to display job details when a job is submitted.

4. Run **badmin reconfig** to reconfigure `mbatchd`.

## LSF and IBM Platform MultiCluster

If using LSF with IBM Platform MultiCluster, ensure the first cluster name listed in the configuration file `lsf.shared` is the local cluster name, as this is used by LSF to detect the `lsb.stream` file location.

## Additional requirements for LSF 8.x only

### Install the Fix Pack for LSF 8.0.1 and 8.3:

Install the fix pack for LSF 8.0.1 and LSF 8.3.

- Fix pack for LSF 8.3:  
`http://www.ibm.com/support/fixcentral/swg/selectFixes?parent=Platform+Computing&product=ibm/Other+software/Platform+LSF&release=All&platform=All&function=fixId&fixids=lsf-8.3-build209549&includeSupersedes=0`
- Fix pack for LSF 8.0.1:  
`http://www.ibm.com/support/fixcentral/swg/selectFixes?parent=Platform+Computing&product=ibm/Other+software/Platform+LSF&release=All&platform=All&function=fixId&fixids=lsf-8.0.1-build209240&includeSupersedes=0`

### Define how to manage the `lsb.stream` file for LSF 8.x:

1. Log in as LSF administrator to the Platform Application Center web server.
2. Set your Platform Application Center environment:  
For example:
  - For **cs**h or **tc**sh:  
`% source /opt/pac/cshrc.platform`
  - For **sh**, **ksh**, or **ba**sh:  
`$ . /opt/pac/profile.platform`
3. Edit the `$PERF_CONFDIR/dataloader/lsbevents.properties` file and set:  
`AUTO_DELETE_STREAM_FILE=Y`  
`REMAINED_STREAM_FILE=10`  
The number in `REMAINED_STREAM_FILE` represents the number of files and can be smaller or larger depending on your site requirements.

## System requirements

### Supported operating systems

- Linux 2.6 glibc 2.3 x86 64 bit, Red Hat 5.6, 5.7, 5.8, and 6.0, 6.1, 6.2, 6.3
- Linux 2.6 glibc 2.3 x86 64 bit, SUSE 11.0, 11.1, 11.2
- Linux for Power Systems™ Servers (Linux 2.6, glibc 2.3 or glibc 2.11): Red Hat Enterprise 5.6, 5.7, 5.8, 6.0, 6.1, 6.2, 6.3 and SUSE 11.0, 11.1, 11.2

### Supported authentication

- Password File
- NIS
- LDAP

- AD (Active Directory)
- X509

## Supported web browsers

### Linux

- Firefox 3.6, 10.0

### Windows

- Internet Explorer 8, 9
- Firefox 16, 17.07, 20, 21, 22, 23, 24
- Google Chrome 26, 27, 28, 29, 30

### Important:

Adobe Flash version 8 or later is required to access report charts.

## Supported Java Runtime Environment (JRE) in browser

- JRE 1.6.0\_10 or higher is required.  
JRE1.6.0\_25 or higher is required for Internet Explorer 9.
- For Exceed on Demand integrations, JRE 1.7 or higher is required on the browser for application templates to work properly.
- The JRE add-on must be enabled.

**Important:** A supported Java™ Runtime Environment(JRE) version must be enabled at the system level on the host on which the browser is running. Otherwise, Platform Application Center will not work properly. Select **Start > System > Control Panel > Java** and check that a supported version of the JRE is enabled.

## Tested applications and versions

The following versions of supported applications have been tested with Platform Application Center:

**Note:** These are tested application versions. Job submission forms can be customized to support other versions.

Application	Tested Versions
ABAQUS	<ul style="list-style-type: none"> <li>• 6.9-1</li> </ul>
ANSYS	<ul style="list-style-type: none"> <li>• V121</li> <li>• V120</li> <li>• V110</li> <li>• V100</li> </ul>
BLAST	<ul style="list-style-type: none"> <li>• 2.2.20</li> </ul>
CATIA	<ul style="list-style-type: none"> <li>• V5R20 Windows 7</li> </ul>
CFX	<ul style="list-style-type: none"> <li>• CFX-5 (Ansys Suite)</li> </ul>
CLUSTALW	<ul style="list-style-type: none"> <li>• 2.1</li> </ul>

Application	Tested Versions
CMGL_GEM	<ul style="list-style-type: none"> <li>• 2008.12</li> <li>• 2009.13</li> </ul>
CMGL_IMEX	<ul style="list-style-type: none"> <li>• 2008.11</li> <li>• 2009.11</li> </ul>
CMGL_STARS	<ul style="list-style-type: none"> <li>• 2008.12</li> <li>• 2009.11</li> </ul>
DCV	<ul style="list-style-type: none"> <li>• NICE DCV Server 2012.0-4557 on LSF compute hosts</li> <li>• RealVNC Visualization Edition (VE) 4.5.1 Viewer on user workstations</li> </ul>
ECLIPSE	<ul style="list-style-type: none"> <li>• 2009.1</li> <li>• 2010</li> </ul>
Exceed	<ul style="list-style-type: none"> <li>• Exceed on Demand server 13.8 SP1 (Platform Application Center web server)</li> <li>• Exceed on Demand Client 13.8 SP1</li> </ul> <p><b>Important:</b> For Exceed application templates to work properly, JRE 1.7 or higher is required on the browser.</p>
FLUENT	<ul style="list-style-type: none"> <li>• 12.1.2</li> <li>• 12.0.16</li> <li>• 6.3.26</li> </ul>
HMMER	<ul style="list-style-type: none"> <li>• 3.0</li> </ul>
LS-DYNA	<ul style="list-style-type: none"> <li>• 971</li> <li>• 970</li> </ul>
MATLAB	<ul style="list-style-type: none"> <li>• R2011a</li> </ul>
NASTRAN	<ul style="list-style-type: none"> <li>• MSC 2008</li> </ul>
NWCHEM	<ul style="list-style-type: none"> <li>• 6.0</li> </ul>
RGS	<ul style="list-style-type: none"> <li>• HP Remote Graphic Software 5.4.7/5.4.8</li> </ul>
STAR-CCM+	<ul style="list-style-type: none"> <li>• 6.02</li> </ul>

## Download required Platform Application Center binaries

Download the IBM Platform Application Center(Platform Application Center) 9.1.2.0 package.

- If you have Platform Application Center Enterprise version, download IBM Platform Application Center Standard Edition.
- If you have Platform Application Center free version, download IBM Platform Application Center Basic Edition.

## Upgrade requirements

### Required installed Platform Application Center version

You must have installed Platform Application Center 8.0, 8.0.1, 8.0.2, 8.3, 9.1.0.0, 9.1.1.0

## Download required Platform Application Center binaries

Download the IBM Platform Application Center(Platform Application Center) 9.1.2.0 package.

- If you have the Platform Application Center Enterprise version, download IBM Platform Application Center Standard Edition.
- If you have the Platform Application Center free version, download IBM Platform Application Center Basic Edition.

## Synchronize times between LSF and Platform Application Center

The clock time on both the LSF master and the Platform Application Center web server must be the same. Ensure these times are synchronized.

## Ensure the LSF LSB\_SHAREDIRE is accessible

Platform Application Center requires read access to the LSF work directory, defined in the LSF configuration file `$LSF_ENVDIR/lsf.conf` with the parameter `LSB_SHAREDIRE`.

## Configure LSF events for Platform Application Center

You need to configure LSF to log events so that Platform Application Center can retrieve job information.

1. Log on to the LSF master host as the LSF administrator.
2. Set the LSF environment.
3. Edit the `$LSF_ENVDIR/lsbatch/cluster_name/configdir/lsb.params` configuration file.
  - a. Add the parameter `ALLOW_EVENT_TYPE` and define the following events.

If you do not plan to use Standard reports, use the following configuration. These are the required events for the **Jobs** page in Platform Application Center to work properly:

```
ALLOW_EVENT_TYPE=JOB_NEW JOB_STATUS JOB_FINISH2 JOB_START JOB_EXECUTE JOB_EXT_MSG JOB_SIGNAL JOB_REQUEUE JOB_MODIFY2  
JOB_SWITCH METRIC_LOG
```

If you plan on using Standard reports, use the following configuration:

```
ALLOW_EVENT_TYPE=JOB_NEW JOB_START JOB_START_ACCEPT JOB_STATUS JOB_FORWARD \  
MIG JOB_ACCEPT JOB_SWITCH JOB_FINISH JOB_MODIFY2 UNFULFILL JOB_SIGACT \  
JOB_SIGNAL JOB_EXECUTE JOB_REQUEUE JOB_CLEAN JOB_EXCEPTION JOB_EXT_MSG \  
JOB_ATT_DATA JOB_CHUNK SBD_UNREPORTED_STATUS PRE_EXEC_START JOB_FORCE \  
JOB_MOVE JOB_RUN_RUSAGE METRIC_LOG
```

- b. Enable event streaming by setting `ENABLE_EVENT_STREAM=Y`.

Event streaming in your LSF cluster is required so that data can be loaded into the Platform Application Center database.

**Important:** The LSF stream file name must be `lsb.stream` to work with Platform Application Center. This is the default name.

- c. Check whether the parameter `LSB_QUERY_PORT` is set in `lsf.conf`. If `LSB_QUERY_PORT` is set, then set `NEWJOB_REFRESH=Y` in `lsb.params`.

This is required because when `LSB_QUERY_PORT` is set, newly submitted job information is not immediately available, and as a result, Platform Application Center is unable to display job details when a job is submitted.
4. Run **badmadmin reconfig** to reconfigure `mbatchd`.

## Additional requirements for LSF 8.x only

### Install the Fix Pack for LSF 8.0.1 and 8.3

Install the fix pack for LSF 8.0.1 and LSF 8.3.

- Fix pack for LSF 8.3:  
<http://www.ibm.com/support/fixcentral/swg/selectFixes?parent=Platform+Computing&product=ibm/Other+software/Platform+LSF&release=All&platform=All&function=fixId&fixids=lsf-8.3-build209549&includeSupersedes=0>
- Fix pack for LSF 8.0.1:  
<http://www.ibm.com/support/fixcentral/swg/selectFixes?parent=Platform+Computing&product=ibm/Other+software/Platform+LSF&release=All&platform=All&function=fixId&fixids=lsf-8.0.1-build209240&includeSupersedes=0>

### Define how to manage the `lsb.stream` file for LSF 8.x

1. Log in as LSF administrator to the Platform Application Center web server.
2. Set your Platform Application Center environment:

For example:

- For **cs**h or **tc**sh:  

```
% source /opt/pac/cshrc.platform
```
  - For **sh**, **ksh**, or **bash**:  

```
$ . /opt/pac/profile.platform
```
3. Edit the `$PERF_CONFDIR/dataloader/lsbevents.properties` file and set:  

```
AUTO_DELETE_STREAM_FILE=Y  
REMAINED_STREAM_FILE=10
```

The number in `REMAINED_STREAM_FILE` represents the number of files and can be smaller or larger depending on your site requirements.



## Chapter 5. Known Issues and Limitations

Category	Issue	Description
Job status	Job status PSUSP is incorrectly displayed as Pending when a job is requeued	A job is submitted through LSF, then the <b>brequeue</b> command is used to requeue the job on the command-line. In LSF, the job state is PSUSP but in Platform Application Center, the job state displayed is Pending.
Hosts page	The LSF ok_power status is displayed as OK	On the Hosts page, the LSF host status ok_power is displayed as OK.
System Services page	File Descriptors display as NaN% on Power Linux	On Power Linux, in <b>System &amp; Settings &gt; System Services, System Services Dashboard</b> , the <b>File Descriptors</b> chart displays NaN% for free and used file descriptors.
Log files	IOException while loading persisted sessions in catalina.out	<p>The log file catalina.out displays "IOException while loading persisted sessions..." when Platform Application Center restarted and users have not logged out prior to restart.</p> <p>These messages do not affect Platform Application Center functionality and can be ignored.</p>
Application templates: CATIA	CATIA job does not display the Visualize icon and displays the message "Cannot open file" after upgrading Platform Application Center 8.3 to 9.1.1	<p>This is caused by the fact that the file CATIA.cmd in 8.3 does not define \${CWD_OPT} in the <b>bsub</b> command.</p> <p>To fix this issue, edit the file CATIA.cmd in \$GUI_CONFDIR/application/draft/CATIA or \$GUI_CONFDIR/application/published/CATIA if your application is published, and add \${CWD_OPT} in JOB_RESULT to the bsub command.</p> <p>For example:JOB_RESULT=~ /bin/sh -c "bsub -B -N \${OUTPUT_FILE_LOCATION_OPT} \${CWD_OPT} \${JOB_NAME_OPT} \${COPY_FILE_OPT} \${RES_REQ_OPT} \${PRE_EXEC_OPT} \${POST_EXEC_OPT} start_catia.bat 2&gt;&amp;1 ""</p>
DCV	A Linux DCV job does not run when a local operating system user's home directory is not /home	<p>When the Platform Application Center web server and the DCV server are on different hosts, local operating system user accounts are used, and the user's home directory is not /home, Linux DCV jobs do not run. This is due to the fact that local operating system user accounts on a host are different user accounts, even though they may have the same name.</p> <p>Platform Application Center requires that a user's home directory and the job directory be shared and accessible to other users. Ensure local user home directories are shared to run a Linux DCV job.</p>

Category	Issue	Description
Internet Explorer, Firefox	Platform Application Center host cannot have underscores in the host name	This is a known issue in Internet Explorer and Firefox. On Internet Explorer, setting cookies fails when the host name of the server contains underscores (_). This issue prevents users from logging in to Platform Application Center. On Firefox, this issue causes downloading and uploading files to fail. To work around the problem, change the host name to remove underscores or use the IP address to access the Platform Application Center server.
Internet Explorer 8 or 9 Compatibility View	Pages do not display properly with Internet Explorer 8 or 9 in Compatibility View	<p>Pages do not display properly when using Internet Explorer 8 or 9 in Compatibility View.</p> <p>Workaround:</p> <ol style="list-style-type: none"> <li>1. In Internet Explorer 8 or 9, select <b>Tools &gt; Compatibility View Settings</b>.</li> <li>2. In the dialog, make sure all these checkboxes are unchecked: <ul style="list-style-type: none"> <li>• <b>Include updated website lists from Microsoft</b></li> <li>• <b>Display intranet sites in Compatibility View</b></li> <li>• <b>Display all websites in Compatibility View</b></li> </ul> </li> </ol>
Jobs: job name	When the job name contains a forward slash "/" the job directory path is incorrect	<p>For example, if the job name is /tmp, the job directory also becomes /tmp instead of the default /home/user_name.</p> <p>Workaround: Do not use a forward slash "/" in the job name. This is because the job name is used to name the job directory.</p>
Jobs: job group	In the Jobs page, hovering the mouse on a striped state for a job group does not display the number of exited jobs	In the Jobs page, state column, hovering your mouse over a striped state for a job group does not indicate the number of exited jobs, even if there are exited jobs in the job group.
Jobs	File list display limitation	If a folder in a file list contains more than 4000 files or folders, can only can display a maximum of 4000 files in a file selection list.
Jobs: input files	Special characters in file names	Special characters single quote ('), double quote (") and dollar sign (\$) are not supported in file names. File management and file selection in Platform Application Center will not work properly for files with these characters in the file name.



Category	Issue	Description
Jobs: input files	When an input file contains include statements and the file is larger than 100 MB, Platform Application Center hangs	<p>In <b>Jobs &gt; Submission Forms</b>, when you add an input file with a size larger than 100 MB and it has include statements to other input files, Platform Application Center hangs.</p> <p>This is caused by a JVM memory overflow as the default setting is 64 MB.</p> <p>To increase the memory on the JVM:</p> <ol style="list-style-type: none"> <li>1. In the <b>Java Control Panel</b>, select the <b>Java</b> tab and click the <b>View</b> button. The <b>Java Runtime Environment Settings</b> dialog is displayed.</li> <li>2. In <b>Runtime Parameters</b>, change the value to at least 500 MB. For example: -Xmx500m</li> </ol>
Jobs: input files	File upload from a browser on Windows 7 takes a long time	<p>On Windows 7, it is recommended to tune Windows.</p> <p>From a command prompt, run this batch command as local administrator:</p> <pre>reg.exe ADD HKLM\SYSTEM\CurrentControlSet\services\AFD\Parameters /v DefaultSendWindow1 /t REG_DWORD /d 1640960 /f</pre>
Job notifications	Job notification does not record status change from Exited to Pending	When job status changes from Exited to Pending the status change is not updated. For example, if you requeue an Exited job, status changes to Pending in LSF but the change is not displayed. When the job starts running, the status notification message changes to "Exited to Running". The Exited to Pending change is not shown.
Jobs: Safari browser	Included file names overlap in submission form	<p>Applies only to Safari 5.1.7.</p> <p>In <b>Jobs &gt; Submission Forms</b>, when a form has the <b>Use include files</b> field and you add include files, the include files name overlap.</p>
Jobs: Safari browser	Selecting a job selects the whole window	<p>Applies only to Safari 5.1.7.</p> <p>In <b>Jobs &gt; Jobs</b> and <b>Jobs By State</b> pages, when you select a job, the whole window gets selected.</p>
Jobs: Safari browser	Tooltip for job array status does not display correct information	<p>Applies only to Safari 5.1.7.</p> <p><b>Jobs &gt; Job Data &gt; By Job</b>, when you mouse over the job status in the Job Status column, the tooltip does not display for a job array.</p>
Jobs: Safari browser	Filter rules do not display properly in the Jobs page	<p>Applies only to Safari 5.1.7.</p> <p>In the Jobs page, when you click the ON button to display filter rules, the filter rules do not display properly.</p>

Category	Issue	Description
LSF	Failed in an LSF library call: Internal library error when a job is submitted	<p>This error occurs when a job is submitted through Platform Application Center. Platform Application Center uses the privileged ports 1 to 1024 to send requests to LSF. When too many requests are coming in to LSF at the same time, all ports are in use. As a result, LSF API calls fail and the library call message is displayed.</p> <p>To resolve this issue:</p> <ol style="list-style-type: none"> <li>1. Log in as LSF administrator to any host in the cluster.</li> <li>2. Edit the <code>lsf.conf</code> configuration file and set: <code>LSF_NON_PRIVILEGED_PORTS=Y</code></li> <li>3. Run <b>badmin reconfig</b> to reconfigure mbatchd.</li> </ol>
LSF	When a job is submitted, Platform Application Center displays the message " Job submitted. Job details are temporarily unavailable"	<p>This issue is caused when <code>LSB_QUERY_PORT</code> is set in <code>lsf.conf</code> and <code>NEWJOB_REFRESH=N</code> in <code>lsb.params</code>. Newly submitted job information is not immediately available, and as a result, Platform Application Center is unable to display job details when a job is submitted.</p> <ol style="list-style-type: none"> <li>1. Log in as LSF administrator to any host in the cluster.</li> <li>2. Edit the <code>lsb.params</code> configuration file and set: <code>NEWJOB_REFRESH=Y</code></li> <li>3. Run <b>badmin reconfig</b> to reconfigure mbatchd.</li> </ol>
LSF	Cannot generate Service Level Agreement (SLA) reports	<p>If LSF 8.0 is used with Platform Application Center, Service Level Agreement (SLA) reports for resource-based SLA cannot be generated. Only reports for time-based SLA can be generated.</p>
Log files	<code>/var/logs/messages</code> has multiple lines added for each action in Platform Application Center	<p>For each user request, an action will be logged in the operating system <code>/var/logs/messages</code> file. This causes the log file to increase in size very quickly. The workaround is to disable the system log for <code>/bin/sh -c</code>.</p>
MySQL failover	After upgrading from Platform Application Center 8.0 to 9.1.1 and enabling failover and MySQL failover, cannot find the mysql service	<p>When upgrading Platform Application Center 8.0 with failover to 9.1.1 and enabling MySQL failover, there is no <code>mysql</code> service displayed when services are displayed with the <b>egosh service list</b> command.</p> <p>This is due to the fact that the MySQL failover feature did not exist in Platform Application Center 8.0. Contact Technical Support for details on enabling MySQL failover in 9.1.1 in this situation.</p>

Category	Issue	Description
MySQL	Jobs page is displaying with error message: Cannot convert value '2012-12-05 17:52:18.000000' from column 23 to TIMESTAMP	<p>If you are using MySQL Server 5.6, the driver <code>mysql-connector-java-5.1.6.jar</code> does not work due to a bug inside the driver. This is mentioned as a bug fixed in the MySQL 5.1.7 JDBC Connector package: Connector/J failed to parse TIMESTAMP strings for nanos correctly. (Bug #39911) in <a href="http://dev.mysql.com/doc/refman/5.1/en/cj-news-5-1-7.html">http://dev.mysql.com/doc/refman/5.1/en/cj-news-5-1-7.html</a>.</p> <p>Workaround: Download and install the MySQL 5.1.7 JDBC driver from: <a href="http://dev.mysql.com/downloads/connector/j/">http://dev.mysql.com/downloads/connector/j/</a>.</p>
Reports	Unable to produce or copy report to new custom report: Invalid report configuration file (Service Level Agreement(SLA)) message	Applies to MySQL and Oracle databases. In <b>Reports &gt; Job Reports</b> , when a user selects the Service Level Agreement (SLA) report and clicks <b>Produce Report</b> or <b>Copy to New Custom Report</b> , the error message "Invalid report configuration file (Service Level Agreement(SLA))" is displayed.
Oracle, job groups, job arrays	Administrator user sees message "View restricted by Administrator" when attempting to view jobs in a job array or job group with Oracle database	Applies only to Oracle databases. The administrator is unable to view the jobs within a job array or job group from the <b>Jobs</b> page, <b>Jobs</b> subtab.
Oracle, DCV	When a DCV session is shared, filtering by user in the <b>Jobs</b> page displays "ORA-00933: SQL command not properly ended"	<p>Applies only to Oracle databases.</p> <p>When a user shares his DCV session and another user attempts to view that user's job in the Jobs page by filtering by user, an error message is displayed and the user cannot view the job.</p>
Online Help: Google Chrome	Search button wraps incorrectly in online help when using Google Chrome	When using Google Chrome, the online help Search button wraps incorrectly and is located below the search field.
Page display	Login dialog has layout issues and after login nothing is displayed or the navigation pane seems crumpled.	After logging in to Platform Application Center, nothing is displayed or the navigation pane seems crumpled. This issue is caused when Platform Application Center is upgraded from but the browser cache has not been cleared on user workstations. To resolve this problem, clear the cache of all browsers after a Platform Application Center upgrade.
VNC	VNC does not work after Platform Application Center uninstalled and reinstalled on the same host	If you install Platform Application Center and then for some reason uninstall and reinstall on the same host, VNC does not work. This is caused by the fact that the VNC server is still running. Manually clean up VNC processes after uninstalling Platform Application Center and before reinstalling.
VNC	Per-job remote Console is supported for shared disk installation only	For per-job remote consoles, Platform Application Center creates a VNC session file in <code>\$GUI_WORKDIR</code> , which must be located a shared location (for example, <code>/opt/pac</code> ). Platform Application Center cannot create a VNC session on compute nodes if <code>\$GUI_WORKDIR</code> is a local directory. You must install Platform Application Center in a shared location enable failover to use the per-job remote consoles.

Category	Issue	Description
VNC	Cannot connect to server when opening a remote console	When a user tries to open a remote console through <b>Remote Consoles &gt; Open my console</b> , a VNC console window is displayed, but cannot connect to the server. No VNC session is created on the master host. To work around the problem, check \$GUI_WORKDIR/.vnc directory. Remove any \${user} subdirectory for the user having a problem connecting. This will remove the VNC session file created in \$GUI_WORKDIR/.vnc/\${user}, and the user should be able to connect successfully.
VNC	Changing the window size does not take effect with <b>Session mode per user</b> in remote consoles when using VNC	<p>In <b>Settings &gt; Page Settings</b> under <b>Remote Consoles</b>, when you select <b>Session mode per user</b> and change the display size, it does not take effect, the display size is the same as before when using VNC.</p> <p>This situation arises when a user's VNC session already exists. Platform Application Center does not recreate the VNC session, it uses the existing one. To have display size changes take effect, clean up the VNC settings in the user's home directory and start a VNC session through Platform Application Center.</p>
Web Services: pacclient.py	pacclient.py displays "@: Event not found." and "IOError" when the user password is "!@#In123"	<p>When using <b>pacclient.py</b>, if your password has special characters, use a backslash (\) before specifying the password. For example, if your password is !@#In123, specify:</p> <p>\!@#In123</p>
RGS	Linux run level 5 required for RGS jobs	<p>LSF RGS jobs require run level 5 in order to use <b>startx</b> to start the RGS sender process. If the run level is not 5, the X-Windows server cannot start. Make sure the Linux run level on your system is set to 5 (the default may be 3 or some other value on your system).</p> <ol style="list-style-type: none"> <li>Edit /etc/inittab and modify the following: <pre># Default runlevel. The runlevels used by RHS are: # 0-halt (Do NOT set initdefault to this) # 1-Single user mode # 2-Multiuser, without NFS (The same as 3, # if you do not have networking) # 3-Full multiuser mode # 4-unused # 5-X11 # 6-reboot (Do NOT set initdefault to this) # id:5:initdefault:</pre> </li> <li>Reboot the machine to make the change take effect, or log on as root and start the X Server manually: <pre>/sbin/init 5</pre> </li> </ol>

Category	Issue	Description
Process Manager	Job Flows Global View display limitation	In the <b>Job Flows &gt; Global View</b> , there is a limit to the number of dependencies that can be displayed. If the number of dependencies is more than 48, the name will be missing on some items in the view. The issue appears only on Firefox 3.6 with Shockwave 10 Flash plug-in when the number of dependencies in the view is greater than 48.
Process Manager	Process Manager Job Templates are not supported	Platform Process Manager Job Templates are not supported in Platform Application Center. Use Platform Application Center application templates for job submissions to job flows.
Process Manager, X.509	Process Manager does not work when the user logs in through an X.509-enabled certificate: the message "Permission denied" is displayed and scripts are displayed	When a user uses X.509 authentication with Platform Application Center, the user is unable to access flows and Platform Process Manager related pages in Platform Application Center.



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