

PBS Analytics™ 13.0

# Frequently Asked Questions (FAQ)



Altair

PBS Works™

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## **PBS Analytics 13.0 Frequently Asked Questions**

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# Frequently Asked Questions

This FAQ is designed to answer commonly asked questions about PBS Analytics™ (PBSA). It provides basic information, sometimes about fairly complex topics, and may direct you to more detailed information. Questions are grouped into the following categories:

1. [Installation](#)
2. [Upgrades](#)
3. [Services](#)
4. [Log files](#)
5. [Configuration](#)
6. [Parsing and Caching](#)
7. [Login](#)
8. [Decimation](#)
9. [Licensing](#)
10. [Troubleshooting](#)

# 1 Installation

## 1.1 What are the supported platforms?

Linux 64 bit

- SLES 10 SP4, SLES 11 SP2 and SLES 11 SP3
- RHEL 5.4+ and 6.x
- CentOS 5.5+ and 6.x

## 1.2 What are the supported browsers?

Windows

- Firefox 10.x ESR+ (Only Enterprise Service Release is supported)
- Chrome 15-43
- Internet Explorer 9-11

Linux

- Firefox 10.x ESR+ (Only Enterprise Service Release is supported)

Mac OS X

- Safari 6+ (limited testing)

**1.3 Can I install PBSA 13.0 on a machine where Compute Manager 12.x or 13.x is already installed?**

Yes.

**1.4 Can I have both the old and new versions of PBSA installed on my machine?**

No, you can not install and use two versions of PBSA on the same machine.

**1.5 What is the default installation location for PBSA?**

`/opt/altair/pbsa/13.0`

**1.6 What are the default ports used by PBSA?**

- The default http port for the PBSA web application is 9000.
- The default https port for the PBSA web application is 9143.
- The default https port for the PBSA data collector is 9343.
- The default port for the PBSA database is 9200.

**1.7 Can I connect to multiple data collectors located in different time zones?**

Yes, only PBSA version 12.3 or later supports connections with multiple data connectors in different time zones.

**1.8 How do I determine the installation location of PBSA?**

**Web application and parser**

The installation location of the web application and parser is stored in the following file on the machine where the web application and parser are installed:

- `/etc/pbsworks-pbsa.conf`

**Data collector**

The installation location of the data collector is stored in the following file on the machine where the data collector is installed:

- `/etc/pbsworks-dc.conf`

## 2 Upgrades

### 2.1 Do I need to reinstall and reparse in order to upgrade from 12.x to 13.0?

Yes. Currently, there is no upgrade path from PBSA 12.x to PBSA 13.0. Depending upon which version of PBSA is currently running at your site, you may be able to preserve your user charts, dashboards, and slideshows. For more information see the “Migrating to PBSA 13.0” chapter of the *PBS Analytics 13.0 Administrator’s Guide* for steps for completing this migration.

### 2.2 Before uninstalling PBSA 12.3.x or PBSA 12.4.x, can I preserve the user charts, dashboards, and slideshows for use by PBSA 13.0?

Yes. The migration to PBSA 13.0 involves installing PBSA 13.0 on the same machine as PBSA 12.3.x or 12.4.x, and then running a migration tool installed with PBSA 13.0.

See the “Migrating to PBSA 13.0” chapter of the *PBS Analytics 13.0 Administrator’s Guide* for steps for completing this migration.

### 2.3 Before uninstalling versions of PBSA prior to 12.3.x, can I preserve the user charts, dashboards, and slideshows for use by PBSA 13.0?

No. User charts, dashboards, and slideshows created with versions of PBSA prior to 12.3.x cannot be preserved and used by PBSA 13.0. They must be recreated once PBSA 13.0 is installed.

## 3 Services

### 3.1 What are the steps to start, stop, and restart the PBSA web application and parser service?

Run these commands to start, stop, and restart the PBSA web application and parser service. These commands must be issued on the machine where the web application and parser are installed:

```
/etc/init.d/pbsworks-pbsa start
/etc/init.d/pbsworks-pbsa stop
/etc/init.d/pbsworks-pbsa restart
```

### 3.2 What are the steps to start, stop, and restart the PBSA data collector service?

Run these commands to start, stop, and restart the data collector service. These commands must be issued on the machine where the data collector is installed:

```
/etc/init.d/pbsworks-dc start
/etc/init.d/pbsworks-dc stop
/etc/init.d/pbsworks-dc restart
```

## 4 Log files

### 4.1 Where is the PBSA parser log file located?

The parser log file is located at:

```
INSTALL_DIR/portal/logs/parser.log
```

### 4.2 Where is the PBSA data collector log file located?

The data collector log file is located at:

```
INSTALL_DIR/dc/logs/dc.log
```

### 4.3 Where is the PBSA web application log file located?

The PBSA web application log file is located at:

```
INSTALL_DIR/portal/logs/pbsworks.log
```

### 4.4 How do I change the logging behavior, the log file size, or the number of backups of the log file?

For more information about configuring logging see “Configuring logging” in the *PBS Analytics Administrator’s Guide*.

# 5 Configuration

## 5.1 What are PBSA commands?

PBSA commands are a set of scripts used to generate and update PBSA configuration files. Using the command line you can create, add, update and delete configuration files, as well as reset the database. Two sets of commands are available:

Commands for configuring the PBSA web application and parser:

```
<INSTALL_DIR>/portal/scripts/pbsa-commands/bin
```

Commands for configuring the PBSA data collector:

```
<INSTALL_DIR>/dc/scripts/pbsa-commands/bin
```

For more information about the PBSA commands, see the “PBSA Commands” chapter in the *PBS Analytics Administrator’s Guide*.

## 5.2 How can I get more information to use a specific PBSA command?

To get usage information for a PBSA command, use the -h option after typing the name of the command at the Linux command line. For example,

```
pbsa-config-nodes -h
```

## 5.3 How do I change the ports used by the PBSA or the data collector services?

The steps are documented in the section “Changing the ports used by PBSA” in the *PBS Analytics Administrator’s Guide*.

## 6 Parsing and Caching

### 6.1 How do I determine if the parsing process is complete?

View the parser log file located at:

```
INSTALL_DIR/portal/logs/parser.log
```

If the PBS Professional accounting logs are parsed properly with no errors, you will see the following message indicating that parsing is complete:

```
INFO, 08 Jun 2015 14:53:44,996 -{AnalyticsApplication.java: 300} - Parser has
completed parsing the accounting logs.
INFO, 08 Jun 2015 14:53:44,996 -{AnalyticsApplication.java: 301} - Analytics
engine is now being initialized with the parsed accounting log data. Please do
not login to the web application until this process is complete.
INFO, 08 Jun 2015 14:53:44,996 -{AnalyticsApplication.java: 302} - To check for
completion of the initialization process, view the web application log file
pbsworks.log.
```

### 6.2 What is cache population? How can I ensure that cache population is completed?

Cache population is a caching mechanism that improves chart rendering time.

To determine if cache population is completed, look for the following entry in the `pbsworks.log` file:

```
INFO, 08 Jun 2015 13:52:24,376 -{DefaultCubeCacheStrategy.java: 60} - OTB Cube
cache completed
INFO, 08 Jun 2015 13:52:24,376 -{CachePrimingWorker.java: 109} - OTB Cube cach-
ing completed in 4800 ms
```

## 7 Login

### 7.1 What is the web address of the PBSA login page?

The http web address of the PBSA login page is:

```
http://<hostname/IP address>:<port number>/pbsworks
```

For example: `http://localhost:9000/pbsworks`

The https web address of the PBSA login page is:

```
https://<hostname/IP address>:<port number>/pbsworks
```

For example: `https://localhost:9143/pbsworks`

If your site is already using the listed ports for another purpose, PBSA may use a non-default port. Contact your systems administrator if you cannot connect to PBSA through either of these URL's.

### 7.2 What credentials do I require to login to the PBSA application?

Use your SSH credentials to login to PBSA.

## 8 Decimation

### 8.1 What is decimation and how is it implemented by PBSA?

Many times, charts have an unnecessary number of data points relative to the number of pixels that can be displayed by a browser or a desktop application. To technically improve the rendering of charts by the web browser, PBSA uses a decimation or downsampling strategy to reduce the number of plot points displayed in a chart. This provides a more usable chart that shows trends and patterns.

Configurable limitations are set for both the x and y coordinates that essentially filter the data that is plotted on the chart. PBSA is configured to display a maximum of 150 points on the x-axis, and 50 points on the y-axis in the case of stacked and XYZ charts.

When a chart is plotted using the decimated data subset, it will differ from the exported dataset which will contain the complete data.

All statistical calculations performed on the plotted chart are based on the decimated data and not on the fully available data.

#### **Example:**

If you are plotting days on the x-axis of a chart and there is 900 days of data, PBSA will decimate the x-axis value (i.e divide 900 by maximum number of possible points, which is 150) and show the data in intervals of 6 days ( $900/150=6$ ).

### 8.2 How can I configure the decimation value?

The steps for configuring the decimation value is documented in section “Configuring plot point decimation” in the *PBS Analytics Administrator’s Guide*.

## 9 Licensing

### 9.1 What are the licensing options available for PBSA?

For information about the licensing options available for PBSA, see the “Licensing” section of the *PBS Analytics Administrator’s Guide*.

### 9.2 Which file contains the PBSA license server hostname and port number?

The license server information is located in the file at the following location:

```
<INSTALL_DIR>/portal/binaries/framework/data/factorySetting.xml
```

### 9.3 How do I change the license server information?

For more information about configuring the license server, see “Configuring the license server” in the *PBS Analytics Administrator’s Guide*.

### 9.4 How do I change licensing from Base to Standard or Standard to Advanced?

For more information about changing the license option, see “Changing the license option” in the *PBS Analytics Administrator’s Guide*.

## 10 Troubleshooting

### 10.1 What should I do if the installer stops without completing the installation?

For more information about troubleshooting the installation of PBSA see “Troubleshooting the installation of PBSA” in the *PBS Analytics Administrator’s Guide*.

### 10.2 I have installed PBS Analytics and it is up and running. However, it is not accessible from a different machine. What could be wrong?

Check the following:

- Are all the ports used by PBSA open and accessible?

Or

- Stop the iptable by using the following command:

```
/etc/init.d/iptables stop
```

### 10.3 PBSA is unable to start due to a port conflict. What do I do?

PBSA is unable to start/restart and the following error was written to the Apache Tomcat web server log file:

```
<INSTALL_DIR>/portal/thirdparty/apache/tomcat/logs/catalina.out.
```

```
ERROR, 26 Sep 14 19:24:03,066 -  
{Http11Protocol.java: 182}  
- Error initializing endpoint  
java.net.BindException: Address already in use: JVM_Bind <null>:9000
```

This message indicates a port conflict as a process is already using the port (see highlighted port in the above error message) which has been previously configured for PBSA. Two solutions are available for resolving the port conflict:

1. Use the Linux command `netstat -tulpn` or `lsof -i` to determine which process is using the port. Stop the process and then start PBSA.
2. Change the ports that are being used by PBSA - see “Changing the ports used by PBSA” in the Troubleshooting chapter of the *PBS Analytics Administrator’s Guide*.