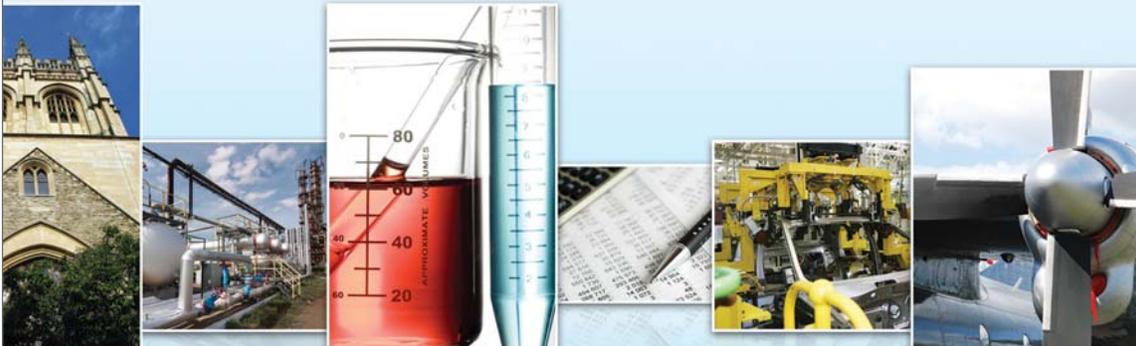


PBS Analytics™ 13.1

Frequently Asked Questions (FAQ)



 Altair | PBS Works™

PBS Works is a division of  Altair

Intellectual Property Rights Notice: Copyrights, Trademarks, Trade Secrets, Patents & Third Party Software Licenses

Updated: June 28, 2016.

Altair® PBS Works™ 13.1

Enabling On-Demand Computing™

Copyright© 1994-2016 Altair Engineering Inc. All Rights Reserved.

Special Notice: Pre-release versions of Altair software are provided 'as is', without warranty of any kind. Usage is strictly limited to non-production purposes.

Compute Manager™ 2007-2016; Display Manager™ 2007-2016; PBS™ 1994-2016; PBS Professional® 1994-2016; PBS Application Services™ 2008-2016; PBS Analytics™ 2007-2016; and PBS Desktop™ 2007-2012; PBS Portal™ 2007-2011; e-BioChem™ 2007-2013; e-Compute™ 2000-2007; e-Render™ 2006-2010; OpenPBS® 1994-2003 and Personal PBS® 2007-2012.

Other Altair software applications include:

Altair Simulation Cloud Suite: Simulation Manager™ 2003-2016; Compute Manager™ 2003-2016; Display Manager™ 2003-2016; and Process Manager™ 2003-2016.

Altair® HyperWorks®: HyperMesh® 1990-2016; HyperCrash® 2001-2016; OptiStruct® 1996-2016; RADIOSS® 1986-2016; HyperView® 1999-2016; HyperView Player® 2001-2016; HyperStudy® 1999-2016; HyperGraph® 1995-2016; MotionView® 1993-2016; MotionSolve® 2002-2016; HyperForm® 1998-2016; HyperXtrude® 1999-2016; Process Manager™ 2003-2016; Templex™ 1990-2016; TextView™ 1996-2016; MediaView™ 1999-2016; TableView™ 2013-2016; BatchMesher™ 2003-2016; HyperMath® 2007-2016; HyperWeld® 2009-2016; HyperMold® 2009-2016; ManufacturingSolutions™ 2005-2016; solidThinking® 1993-2016; solidThinking Inspire® 2009-2016; solidThinking Evolve® 1993-2016; Durability Director™ 2009-2016; Suspension Director™ 2009-2016; AcuSolve® 1997-2016; AcuConsole® 2006-2016; SimLab® 2004-2016; Virtual Wind Tunnel™ 2012-2016; and FEKO™ (©1999-2014 Altair Development S.A. (Pty) Ltd.; ©2014-2016 Altair Engineering, Inc.); MDS™ 2011-2016 and VisSim™ 1989-2016.

Altair Packaged Solution Offerings (PSOs) Copyright© 2008-2016

Automated Reporting Director™ 2008-2016; Impact Simulation Director™ 2010-2016; Model Mesher Director™ 2010-2016; Model Verification Director™ 2013-2016; Squeak and Rattle Director™ 2012-2016; Virtual Gauge Director™ 2012-2016; Weld Certification Director™ 2014-2016

Altair intellectual property rights are protected under U.S. and international laws and treaties. Additionally, Altair software is protected under patent #6,859,792 and other patents pending. All other marks are the property of their respective owners.

ALTAIR ENGINEERING INC. Proprietary and Confidential. Contains Trade Secret Information.

Not for use or disclosure outside of Altair and its licensed clients. Information contained in Altair software shall not be decompiled, disassembled, “unlocked”, reverse translated, reverse engineered, or publicly displayed or publicly performed in any manner. Usage of the software is only as explicitly permitted in the end user software license agreement. Copyright notice does not imply publication.

[Third party software licenses](#)

AcuConsole contains material licensed from Intelligent Light (www.ilight.com) and used by permission.

Software Security Measures:

Altair Engineering Inc. and its subsidiaries and affiliates reserve the right to embed software security mechanisms in the Software for the purpose of detecting the installation and/or use of illegal copies of the Software. The Software may collect and transmit non-proprietary data about those illegal copies. Data collected will not include any customer data created by or used in connection with the Software and will not be provided to any third party, except as may be required by law or legal process or to enforce our rights with respect to the use of any illegal copies of the Software. By using the Software, each user consents to such detection and collection of data, as well as its transmission and use if an illegal copy of the Software is detected. No steps may be taken to avoid or detect the purpose of any such security mechanisms.

Technical Support

Location	Telephone	Email
Australia	+1 800 174 396	pbs-support@india.altair.com
China	+86 21 6117 1666	es@altair.com.cn
France	+33 1 4133 0992	pbssupport@europe.altair.com
Germany	+49 7031 6208 22	pbssupport@europe.altair.com
India	+91 80 66 29 4500 +1 800 425 0234 (Toll Free)	pbs-support@india.altair.com
Italy	+39 800 905595	pbssupport@europe.altair.com
Japan	+81 3 5396 2881	pbs@altairjp.co.jp
Korea	+82 70 4050 9200	support@altair.co.kr
Malaysia	+91 80 66 29 4500 +1 800 425 0234 (Toll Free)	pbs-support@india.altair.com
North America	+1 248 614 2425	pbssupport@altair.com
Russia	+49 7031 6208 22	pbssupport@europe.altair.com
Scandinavia	+46 46 460 2828	pbssupport@europe.altair.com

Location	Telephone	Email
Singapore	+91 80 66 29 4500 +1 800 425 0234 (Toll Free)	pbs-support@india.altair.com
South America	+55 11 3884 0414	br_support@altair.com
UK	+44 1926 468 600	pbssupport@europe.altair.com

This document is proprietary information of Altair Engineering, Inc.

Frequently Asked Questions

This Frequently Asked Questions (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:

- [Installation](#)
- [Upgrades](#)
- [Services](#)
- [Log Files](#)
- [Configuration](#)
- [Parsing and Caching](#)
- [Login](#)
- [Decimation](#)
- [Licensing](#)
- [Troubleshooting](#)

Installation

1. What are the supported platforms?

Linux 64 bit

- SLES 11 SP2 and SLES 11 SP3
- RHEL 5.4+, 6.x, and 7.x
- CentOS 5.5+, 6.x, and 7.x

2. What are the supported browsers?

Windows

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

Linux

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

Mac OS X

- Safari 6+ (limited testing)

3. Can I install PBSA13.1 on a machine where Compute Manager 12.x or 13.x is already installed?

Yes.

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.

5. What is the default installation location for PBSA?

`/opt/altair/pbsa/13.1`

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.

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.

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`

Upgrades

1. Do I need to reinstall and reparse in order to upgrade from 12.x to 13.1?

Yes. Currently, there is no upgrade path from PBSA 12.x to PBSA 13.1. 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 13.1” chapter of the *PBS Analytics 13.1 Administrator’s Guide* for steps for completing this migration.

2. Before uninstalling PBSA 12.4.x or PBSA 13.0.x, can I preserve the user charts, dashboards, and slideshows for use by PBSA 13.1?

Yes. The migration to PBSA 13.1 involves installing PBSA 13.1 on the same machine as PBSA 12.4.x or 13.0.x, and then running a migration tool installed with PBSA 13.1.

See the “Migrating to PBSA 13.1” chapter of the *PBS Analytics 13.1 Administrator’s Guide* for steps for completing this migration.

3. Before uninstalling versions of PBSA prior to 12.4.x, can I preserve the user charts, dashboards, and slideshows for use by PBSA 13.1?

No. User charts, dashboards, and slideshows created with versions of PBSA prior to 12.4.x cannot be preserved and used by PBSA 13.1. They must be recreated once PBSA 13.1 is installed.

Services

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
```

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
```

Log Files

1. Where is the PBSA parser log file located?

The parser log file is located at:

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

2. Where is the PBSA data collector log file located?

The data collector log file is located at:

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

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. 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 13.1 Administrator’s Guide*.

Configuration

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 13.1 Administrator’s Guide*.

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
```

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 13.1 Administrator’s Guide*.

Parsing and Caching

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 2016 14:53:44,996 -{AnalyticsApplication.java: 300} - Parser has completed parsing the accounting logs.
```

```
INFO, 08 Jun 2016 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 2016 14:53:44,996 -{AnalyticsApplication.java: 302} - To check for completion of the initialization process, view the web application log file pbsworks.log.
```

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 2016 13:52:24,376 -{DefaultCubeCacheStrategy.java: 60} - OTB Cube cache completed
```

```
INFO, 08 Jun 2016 13:52:24,376 -{CachePrimingWorker.java: 109} - OTB Cube caching completed in 4800 ms
```

Login

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.

2. What credentials do I require to login to the PBSA application?

Use your SSH credentials to login to PBSA.

Decimation

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 ($900/150=6$).

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 13.1 Administrator’s Guide*.

Licensing

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 13.1 Administrator’s Guide*.

2. Which file contains the PBSA license server hostname and port number?

The license server information is located in the file:

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

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 13.1 Administrator’s Guide*.

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 13.1 Administrator’s Guide*.

Troubleshooting

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 13.1 Administrator’s Guide*.

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
```

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:

- Use the Linux command `netstat -tulpn` or `lsof -i` to determine which process is using the port. Stop the process and then start PBSA.
- Change the ports that are being used by PBSA - see “Changing the ports used by PBSA” in the Troubleshooting chapter of the *PBS Analytics 13.1 Administrator’s Guide*.