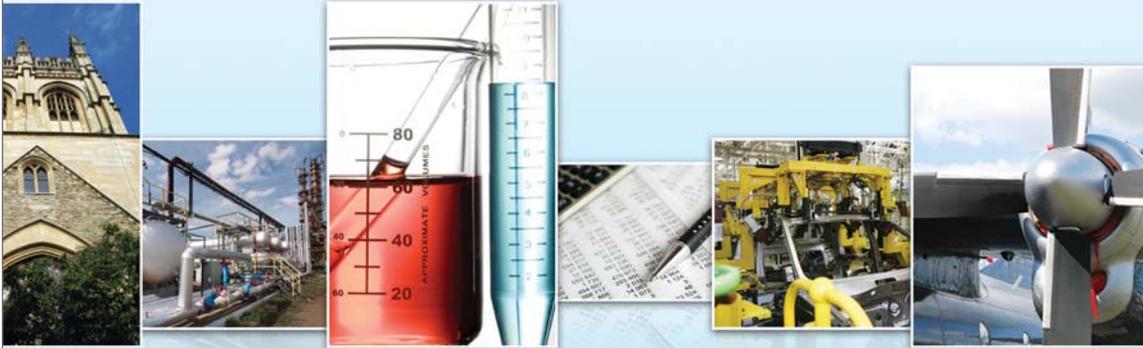PBS Analytics™ 13.1

Release Notes

Altair | PBS Works™

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Updated: June 28, 2016.

Altair® PBS Works™ 13.1
Enabling On-Demand Computing™
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PBS Analytics Release Notes

These release notes describe the new features, bug fixes, and known issues for PBS Analytics (PBSA) 13.1. To obtain the latest release package, contact your Altair sales representative by writing to sales@altair.com or support@altair.com. For more information, visit us at www.pbsworks.com.

Please see the following sections for more information:

- Supported Platforms and Browsers
- Upgrade, Compatibility & Installation Considerations
- New Features
- Resolved Issues
- Known Issues

Supported Platforms and Browsers

PBSA is supported on the following Linux 64 bit platforms:

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

The following browsers are supported:

On Windows:

- Firefox 10.x ESR+ (Only Enterprise Service Release is supported. Please refer to https://www.mozilla.org/en-US/firefox/organizations/.
- Chrome 15-43
- Internet Explorer 10-11

On Linux:

- Firefox 10.x ESR+ (Only Enterprise Service Release is supported. Please refer to https://www.mozilla.org/en-US/firefox/organizations/.

On Mac OS X:

- Safari 6+ (limited testing)

Upgrade, Compatibility & Installation Considerations

Installation Considerations

A script called `pbsa-setup-counsellor` can be used to inspect the accounting logs for a PBS Professional complex and return information that is useful for installing and configuring PBSA. This script can be downloaded along with the PBSA installation binaries. For more information about this command see the section "Analyzing a PBS Professional Complex" in the *PBS Analytics 13.1 Administrator's Guide*.

Additionally, PBSA must be installed on a machine that is running Python 2.4 or greater, and an LM-X license server version 12.0.3 or above is required to provide licensing services for PBSA 13.1.

Review the chapter "Preparing to Install PBSA" in the *PBS Analytics 13.1 Administrator's Guide* before installing PBSA.

Migrating versions of PBSA prior to 12.4.x to 13.1

Due to major changes to chart definitions introduced in PBSA 12.4, 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.

For more information see the "Migrating to PBSA 13.1" chapter of the *PBS Analytics 13.1 Administrator's Guide*.

Migrating PBSA version 12.4.x and 13.0.x

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

For more information see the "Migrating to PBSA 13.1" chapter of the *PBS Analytics 13.1 Administrator's Guide*.

New Features

This section provides information about the new features of PBSA 13.1:

Quota Utilization Performance Reporting

Improved Job Counting

Performance Improvements

Platform and Browser Support

New Chart Property Displays Date Range of Chart Data

Faster Restart Time After Performing Maintenance Activities

Removal of Parser Cycle Delay

Configuring Time-Week Dimension Format

Quota Utilization Performance Reporting

In previous versions of PBSA, the percentage of utilization of numerical consumable resources for some Dimensions such as users and groups was always reported as 100%, because the data necessary to calculate this utilization was not available. A new feature of PBSA 13.1 allows the percentage of utilization of numerical consumable resources such as CPUs, memory, and nodes to be calculated for the following Dimensions:

- Account
- Group
- Project
- Queue
- Software
- User

It is possible to add additional Dimensions by editing the PBSA configuration file `INSTALL_DIR/portal/services/pbsa/config/pbsaconfig.properties`, and adding Dimensions to the value of `quota-types=User,Group,Queue,Project,Software,Account`. For more information see "Adding Dimensions for Quota Based Reporting" in the *PBS Analytics Administrator's Guide*.

Some level of server-side configuration is necessary to provide quota values for this new feature. However, if this configuration is not performed, PBSA continues to report 100% utilization as in previous versions. For information see "Configuring and Enabling Quota Based Reporting" in the *PBS Analytics Administrator's Guide*.

Currently, PBSA does not do any validation of entered quota values against actual PBS Professional complex capacity. Please make sure that the quota values are correct when configuring this feature. This enhancement is planned for the next release of PBSA.

Improved Job Counting

PBSA 13.0 displayed job counts for each state. This technique made the overall job count for the day inaccurate. Based on customer feedback, PBSA now counts jobs based on the state of the job at the end of the day.

The following tables describes the differences between PBSA 13.0 and 13.1. The shaded area indicates the days on which a job ran.

Table 1. Counting Jobs Comparison - PBSA 13.0 vs. 13.1

Job	Jan1	Jan 2	Jan 3	Jan 4	Jan 5
1					
2					
3					
4					
5					
PBSA 13.0	3 Running 1 Finished	4 Running	4 Running 1 Finished	3 Running 1 Finished	2 Running 2 Finished
PBSA 13.1	2 Running 1 Finished	4 Running	3 Running 1 Finished	2 Running 1 Finished	2 Finished

Performance Improvements

Enhancements have been made to improve caching performance for clusters with a high number of nodes and several years of data. For more information see "Parsing and Caching Benchmarking Data" in the *PBS Analytics Administrator's Guide*.

Platform and Browser Support

PBSA now supports RHEL 7.x and CentOS 7.x on Linux 64 bit platforms. Support for SLES 10 and Internet Explorer 9 is being dropped.

New Chart Property Displays Date Range of Chart Data

A new chart property, **Show Date Filter**, has been added. When enabled, this property displays the data range of the chart data in the title of the chart Measure. By default, this chart property is enabled to display the date range.

Faster Restart Time After Performing Maintenance Activities

In previous versions of PBSA, a restart of PBSA due to maintenance activities, such as changing the license server, caused a long delay before PBSA became available due to a repetition of the caching cycle. Additionally, whenever the service was restarted, a parsing cycle was initiated. Improvements have been made so that the cached data is preserved, eliminating the long delay after maintenance activities requiring a restart of PBSA. Caching and parsing only takes place at the daily scheduled parser time (defaults to 1:00 am).   If there is a need to initiate caching and parsing, remove the file `INSTALL_DIR/portal/services/pbsa/parser/modules/pbsdata/config/temp/tempCacheFile` and restart PBSA.

Removal of Parser Cycle Delay

In previous versions of PBSA, the parsing cycle started a configurable number of minutes after the PBSA service started. This delay gave the Data Collector time to copy the PBS accounting logs to the machine where the Parser was installed. The guess work for configuring this delay has been removed, as PBSA automatically coordinates the copying of data from all Data Collectors and begins parsing once all accounting logs are copied.

Configuring Time-Week Dimension Format

By default, PBSA considers a week to begin on Sunday and end on Saturday. With PBSA 13.1, you can configure the Time-Week Dimension to start on Monday and end on Sunday. Additionally, you can configure PBSA to display the Time-Week Dimension in one of the following formats:

Table 2. Formats for the Time-Week Dimension

Time-Week Format	Description
Year and Week Number	Year and week number in the format YYYY-Weekww, where YYYY indicates the four-digit year and Weekww is the week number prefixed by the word Week, ranging from Week1 through Week53
Date Range of Week	Beginning and end date of week in the format YYYY-MM-DD to YYYY-MM-DD
Week End Date	End date of the week in the format YYYY-MM-DD
Week Start Date	Start date of the week in the format YYYY-MM-DD

For more information on how to configure the Time-Week Dimension see "Configuring the Time-Week Dimension" in the *PBS Analytics Administrator's Guide*.

Resolved Issues

This section provides information about issues that have been resolved with PBSA 13.1:

PBSA-2082 PBSA Parser should not stop parsing when a Data Collector is misconfigured

PBSA-2978 Wrong jobs count when PBSA Server time zone is later than PBS Pro time zone

PBSA-2979 Projected end time of running jobs is estimated as end of the day of parse cycle

PBSA-3008 Formula support in PBS Analytics schema is not working as expected

PBSA-3026 In Advanced Time dimension - Quarter filters are not working as expected

PBSA-3029 Node and Vnode filters shows subset of the nodes present in the system

PBSA-3037 Node availability is duplicated when parsing and caching is out of sync

PBSA-3048 Raw job data export is not working correctly when node/vnode filters are applied

PBSA-3049 Incorrect node walltime for jobs running on multiple nodes

PBSA-3308 Export functionality not working correctly when a node filer is applied to the chart

PBSA-3312 Job data export should create a zip and export the csv file

351565 Time zone difference between PBSA and PBS Pro servers causes inaccurate job counts

351585 End time of running jobs is estimated as end of the day of the parser cycle

PBSA-2082 PBSA Parser should not stop parsing when a Data Collector is misconfigured

Summary: During the installation of a Data Collector, the value that was entered for the location of the PBS accounting log directory contained white spaces. This issue caused the Parser to hang while processing the PBS accounting logs records.

Resolution: This issue is fixed by trimming the white space that was inadvertently added to the location of the PBS accounting logs.

PBSA-2978 Wrong jobs count when PBSA Server time zone is later than PBS Pro time zone

Summary: For Workload style charts, the count for running jobs is incorrect when the PBSA Server time zone is later than PBS Professional Server time zone. After analysis, it was determined that the difference in the time zones between the two servers was not being taken into account.

Resolution: The time difference between the two time zones is now being taken into account, therefore the time frame for running jobs is being reported accurately.   For example: The PBS Professional Server is located in a GMT time zone and the PBSA Server is located in IST time zone. There is a 5.5 hour difference between the two time zones. IST is 5.5 hours ahead of GMT, therefore, 5.5 hours will be added to the end time of running jobs when the accounting logs are parsed by PBSA.

PBSA-2979 Projected end time of running jobs is estimated as end of the day of parse cycle

Summary: The projected end time of running jobs is estimated as the end of the day of the parse cycle. For jobs that are running when the parsing cycle begins (default is 1:00 am), walltime was calculated based on a projected end time equal to the end of that day. This gave an inaccurate walltime result for jobs that only ran for a few hours.

Resolution: For jobs that are running when the parsing cycle begins, the end time of the job is projected to be when the parsing cycle begins. For more information see Improved Job Counting.

PBSA-3008 Formula support in PBS Analytics schema is not working as expected

Summary: Support for the definition of formulas for calculating site-specific measures is not working.

Resolution: Formula definitions did not support using a previously defined measure.   This issue is now fixed. For more information about formula support see "Creating a New Measure Based on a Formula" in the *PBS Analytics 13.1 Administrator's Guide.*

PBSA-3026 In Advanced Time dimension - Quarter filters are not working as expected

Summary: The **Time-Advanced** filters **This Quarter** and **Last Quarter** were not working causing charts to display the entire date range of data.

Resolution: This issue has been fixed and the filters are now working correctly.

PBSA-3029 Node and Vnode filters shows subset of the nodes present in the system

Summary: **Node** and **Virtual Node** filters showed a subset of the nodes present in the system. Only those nodes on which jobs were running were displayed in the filter.

Resolution: This issue is fixed. The filter now shows nodes that are both available and being used.

PBSA-3037 Node availability is duplicated when parsing and caching is out of sync

Summary: Node availability is duplicated when a parsing cycle was missed because caching took longer than the Parser delay which by default is 15 minutes.

Resolution: The node availability import code is now totally encapsulated on the query engine side which will avoid any time based synchronization issues with the Parser.

PBSA-3048 Raw job data export is not working correctly when node/vnode filters are applied

Summary: The export functionality is not working when a **Node** and **Virtual Node** filter is applied to the chart. The exported CSV file displays information about all nodes.

Resolution: Node filtering was not working, therefore information for all nodes was reported. Node filtering is fixed and working as expected.

PBSA-3049 Incorrect node walltime for jobs running on multiple nodes

Summary: PBSA 13.0 is incorrectly calculating node walltime for jobs running on multiple nodes.   For example, node walltime for a job running on 3 nodes with each nodes using 4 cores was being calculated based on 12 cores even when the chart was filtered by a specific node.

Resolution: The node walltime is now being calculated based on the cores used per node.

PBSA-3308 Export functionality not working correctly when a node filer is applied to the chart

Summary: The export functionality is not working in PBSA 13.0.5 when a node filter is applied to the chart. The exported CSV file displays information about all nodes.

Resolution: Node filtering was not working, therefore information for all nodes was reported. Node filtering is fixed and working as expected.

PBSA-3312 Job data export should create a zip and export the csv file

Summary: When exporting job data for a chart where multiple Measures have been assigned, the job data exported was incorrect.

Resolution: The data for each chart Measure is written to its own CSV file and all CSV files are zipped into a single file that is exported. The naming convention for the CSV files are: `<ChartName>_<Measure>_<Order>.csv`, where `Order` is the order in which the Measures are sorted in the chart.

351565 Time zone difference between PBSA and PBS Pro servers causes inaccurate job counts

Summary: Workload style charts are displaying an incorrect number of running jobs when the time zone of the PBSA Server is later than the PBS Professional Server time zone.

Resolution: This issue has been resolved. For more information see PBSA-2978 Wrong jobs count when PBSA Server time zone is later than PBS Pro time zone

351585 End time of running jobs is estimated as end of the day of the parser cycle

Summary: The projected end time of running jobs in PBSA 13.0 is estimated differently then PBSA 12.4. The lowest level of granularity of time for PBSA is a day. Therefore, PBSA does not have real time information for running jobs.

Resolution: This issue has been resolved. For more information see Improved Job Counting.

Known Issues

This section provides information about known issues with PBSA 13.1:

296171 Cannot install DC in a separate installation process from Web Application & Parser

296175 The Values attribute "Hide Empty Values" is only applied for 2 dimensional charts

296176 Print preview is not working for "Table" charts when there are many chart data points

296178 Security Enhanced Linux (SELinux) should be disabled as it is not supported by PBSA

296409 It is difficult to view charts when there are many chart legends attached to the chart

311236 Handling of PBS Pro records which are corrupted or have insufficient information

329263 Supply Demand charts by week show a dip in available resources at the end of the year

329266 pbsa-config-nodes and pbsa-setup-counsellor mistakenly report a node as down

331524 Moving dimension from Z-Axis to X-axis and vice-versa is broken in 12.4

331528 Number of Available nodes and Available CPUs are same on UI

331534 Chart rendering stops when single user runs the slide show from 4 different browsers

332009 PDF export shows black boxes rather than letters and numbers

333854 Total Available Cores is not equal to the summation of Used Cores and Unused Cores

333865 Chart is not released by the mouse when it is dragged to the same category using IE9

351568 Parsing may stop after long (90+ days) usage of the product with some database errors

351569 Charts created using Time-Holiday are not migrated from 12.3 to 13.0

351576 Intermittently, the PBSA Database does not get created during installation

PBSA-2931 Charts do not display or report errors after reparsing the PBS accounting logs

PBSA-3331 MS Excel unable to open large CSV files created when exporting data from PBSA

PBSA-3345 Intermittently, using "back" to go to a previous installation step causes errors

PBSA-3354 Intermittent UI scrollbar issues and sluggishness with IE11

PBSA-3355 The PBSA database sporadically stops but recovers immediately

PBSA-3364 GUI images are not displayed properly when locale is set to Japanese

PBSA-3399 Removing a default exit reason using pbsa-config-exits is not working

PBSA-3413 Overutilization of resources reported for the Dimension nodeclass

PBSA-3415 Incorrect chart data when cores used and unused are plotted as separate measures

PBSA-3416 Quota based charts report available resources rather than unused resources

PBSA-3418 Parsing stops with an SQL exception while inserting data into the database

296171 Cannot install DC in a separate installation process from Web Application & Parser

Summary: If the PBSA Web Application and Parser have been installed on a machine, the Data Collector cannot be installed on that same machine in a separate installation process.

Work Around: Install the PBSA Web Application, Parser, and Data Collector as part of a single installation process. See sections "Deployment Option One" and "Install on a Single Server" in the *PBS Analytics Administrator's Guide*.

296175 The Values attribute "Hide Empty Values" is only applied for 2 dimensional charts

Summary: When a chart filter is applied to a Values, the ability to hide empty values (values that are equal to 0) is disabled for charts that are three dimensional.

Work Around: There is no workaround at the present time.

296176 Print preview is not working for "Table" charts when there are many chart data points

Summary: For charts having a chart type of "Table", an empty page is displayed in Print Preview when there are too many data points in the chart.

Work Around: Export the data to a Comma Separated Values (CSV) file and open it using your favorite spreadsheet tool.

296178 Security Enhanced Linux (SELinux) should be disabled as it is not supported by PBSA

Summary: PBSA does not support SELinux. You may experience some unpredictable behavior when SELinux is enabled.

Work Around: SELinux can be disabled by changing parameters in the file that controls the state of SELinux:

1. Edit `/etc/selinux/config`.

2. Change the following parameters:

    `SELINUX=disabled`

    `SELINUXTYPE=targeted`

3. Restart PBSA.

4. Check the status of SELinux using the command: `sestatus`

You should see:

```
SELinux status: disabled
```

296409 It is difficult to view charts when there are many chart legends attached to the chart

Summary: Charts are being squeezed into a relatively small viewing area when there are too many chart legends.

Work Around: Enable the **Hide Legends** chart property to eliminate chart legends. Once this chart property is applied to the chart, the chart will be rendered in a larger viewing area.

311236 Handling of PBS Pro records which are corrupted or have insufficient information

Summary: When an accounting log record fails validation, the entry is written to file in a unsupported directory. A unsupported directory is created for each Data Collector. The unsupported directories are located in: `INSTALL_DIR/portal/services/pbsa/parser/modules/pbsdata`

The following job records will not be parsed and are written to the unsupported directory:
- E or R record with resources_used.mem attribute either missing or a value of 0
- any record with the exec_host attribute missing
- a job array main record
- any record with the user or group information missing
- any record with the start epoch attribute either missing or a value of 0
- any record with the qtime epoch attribute either missing or a value of 0
- E or R record with the end epoch attribute either missing or a value of 0
- E or R record with the resources_used.walltime attribute missing: Walltime will be calculated as "end – start"
- E or R record with a negative or very large walltime value: Walltime will be calculated as "end – start"

Work Around: A message will be written to the `parser.log` file describing the reason for discarding the record. Due to a dependency upon PBS Professional, these records will not be parsed. You may need to make changes to PBS Professional to rectify the issue. For more information see "Analyze Unsupported Records" in the *PBS Analytics Administrator's Guide.*

329263 Supply Demand charts by week show a dip in available resources at the end of the year

Summary: This issue is due to the end of the year falling on a weekday. The beginning date of every week is considered to be Sunday and ends on Saturday.

Work Around: There is no workaround available. A fix is scheduled for an upcoming release of PBSA.

329266 pbsa-config-nodes and pbsa-setup-counsellor mistakenly report a node as down

Summary: Nodes are incorrectly identified as down or offline by the scripts `pbsa-config-nodes` and `pbsa-setup-counsellor`, because the word "down" or "offline" in the comment of the `pbsnodes -av` output is misinterpreted.

Work Around: There is no workaround available. A fix is scheduled for an upcoming release of PBSA.

331524 Moving dimension from Z-Axis to X-axis and vice-versa is broken in 12.4

Summary: Dimensions cannot be moved to and from the X-axis to the Z-axis using drag and drop with PBSA 12.4. This behavior has been available with previous versions of PBSA.

Work Around: Delete the dimension from the X or Z axis, and drag the dimension from the Dimension list to the appropriate axis.

331528 Number of Available nodes and Available CPUs are same on UI

Summary: PBSA will display the number of cores when a user plots a chart for the available number of nodes.

Work Around: There is no workaround available. A fix is scheduled for an upcoming release of PBSA.

331534 Chart rendering stops when single user runs the slide show from 4 different browsers

Summary: A chart is not rendered as expected when a single user opens four different browsers, logs into PBSA, and runs the same slideshow.

Work Around: Login as a different user for each slideshow.

332009 PDF export shows black boxes rather than letters and numbers

Summary: When a chart is exported to a PDF, all the letters and number are displayed as black boxes because fonts are not installed on the machine where PBSA is installed.

Work Around: Install the Core Fonts for X.Org package xorg-x11-fonts-core for SLES platforms.

333854 Total Available Cores is not equal to the summation of Used Cores and Unused Cores

Summary: This issue occurs when the PBS Professional accounting log data does not match the node information present in the node details configuration file.

Work Around: This is a corner case and there is no workaround for this issue.

333865 Chart is not released by the mouse when it is dragged to the same category using IE9

Summary: When a chart is dragged and released in the same category using IE9, the chart is not being released by the mouse.

Work Around: This is an event handling issue specific to IE9. There is no workaround available. A fix is scheduled for an upcoming release of PBSA.

351568 Parsing may stop after long (90+ days) usage of the product with some database errors

Summary: Parsing intermittently stops after running 90+ consecutive days with database errors logged in the `parser.log` file. This issue causes the Web Application's Progress Indicator Screen to remain in a suspended state, making the Web Application inaccessible.

The error logged has the following format:

```
Unable to create XXXX table
```

For example:

```
Unable to create rc_event_resource_occupancy table
```

Work Around: PBSA has an internal health check component which should be able to recover the product from this situation within 24 hours. In case this health check fails to recover the system, then a PBSA data reset is required. The data reset will trigger the recreation of the database and will reparse the accounting logs. All of the user created reports will be retained.

351569 Charts created using Time-Holiday are not migrated from 12.3 to 13.0

Summary: The PBSA 13.0 Migration Tool does not migrate PBSA 12.3 charts having the Time-Holiday Dimension assigned as a chart filter, or to the x-axis, or z-axis. When this issue occurs the following message is written to the `pbsworks.log` file:

> "Error occurred while loading the Chart.Details:-Record Not Found in Cube Tree id: [Day Dimension.Holiday Hierarchy]".

Work Around: Follow these steps to correct this issue:

1. Navigate to the directory `INSTALL_DIR/portal/services/pbsa/repository`

2. Execute the command:

    ```
    find ./ -type f -exec sed -i -e 's/Day Dimension.Holiday Hierarchy/Holiday Dimen-
    sion.Holiday Hierarchy/g' {} \;
    ```

351576 Intermittently, the PBSA Database does not get created during installation

Summary: A message similar to the following is displayed in the log file when the database is not created: `Database has not been created.`

Work Around: Uninstall PBSA and re-install the product. For more information about uninstalling PBSA, see the *PBSA 13.1 Administrator's Guide.*

PBSA-2931 Charts do not display or report errors after reparsing the PBS accounting logs

Summary: When the PBSA dataset is reset and the accounting log data that is parsed is a different dateset than what was originally parsed, errors may be reported if charts are created with static filters. For example, when a chart filters for a specific user who is not part of the most recently parsed dataset.

Work Around: Edit the chart and change the filter to use values from the current dataset.

PBSA-3331 MS Excel unable to open large CSV files created when exporting data from PBSA

Summary: When opening large CSV files using Microsoft Excel, the error message `File not loaded completely` is displayed and Excel only loads a portion of the data contained in the CSV file.

Work Around: The worksheet limitations of Excel have been reached. For more information see https://support.office.com/en-us/article/Excel-specifications-and-limits-ca36e2dc-1f09-4620-b726-67c00b05040f?ui=en-US&rs=en-US&ad=US#bmworksheetworkbook. For CSV files greater than 60 MB, it is recommended to use a tool other than MS Excel for opening the file.

PBSA-3345 Intermittently, using "back" to go to a previous installation step causes errors

Summary: Intermittent errors occur during the installation of PBSA in console mode when the "back" option is used to go to a previous installation step. Installation steps may be skipped and errors are reported for valid installation data.

Work Around: Quit the installation by entering "quit" and restart the installation process.

PBSA-3354 Intermittent UI scrollbar issues and sluggishness with IE11

Summary: Scrollbars are not being rendered correctly with IE11 and the UI response time is slow as compared to Firefox or Chrome.

Work Around: It is recommended to use Firefox or Chrome browsers as the slow response time is an issue with the performance of IE11's Javascript engine and not PBSA.

PBSA-3355 The PBSA database sporadically stops but recovers immediately

Summary: Sporadically the PBSA database stops but recovers immediately and `unable to connect to database` messages are observed in the PBSA log files.

Work Around: PBSA has a Guardian process architecture that ensures that the PBSA database and any other PBSA processes are recovered automatically without human intervention. Ordinarily when the database stops, PBSA recovers and charts render normally. However, if the database becomes corrupted and `unable to connect to database` messages continue to be observed in the log files, it is recommended to reset the database to correct the situation without losing any of the charts created by the user.   For information about resetting the database see the chapter "Reparsing the Accounting Logs" in the *PBS Analytics Administrator's Guide*.

PBSA-3364 GUI images are not displayed properly when locale is set to Japanese

Summary: After setting the locale to Japanese, images in the PBSA web application are not displaying properly.

Work Around: If you require localization support, contact your PBS Works Product Management team.

PBSA-3399 Removing a default exit reason using pbsa-config-exits is not working

Summary: Removing one of the default exit reasons "Successful" or "Unsuccessful" using the following command is not working: `pbsa-config-exits --reason=Successful --remove`

After removing the exit reason and issuing the command `pbsa-config-exits --show`, the exit reason is still displayed. Additionally, when one of the default exit reasons is manually removed from the exit code configuration file, the PBSA web application still displays the exit reason even after reparsing the PBS accounting logs.

Work Around: Using the `pbsa-config-exits` command, add a new exit reason and then remove the default category. The removal of the default category will then work.

PBSA-3413 Overutilization of resources reported for the Dimension nodeclass

Summary: Overutilization of resources such as CPUs and memory is reported for the Dimension nodeclass. This occurs when node configuration information is not available for a specified year.

Work Around: For percentage utilization reports, apply proper time filters depending on the dates for which node configuration information is available rather than viewing the percentage utilization report for the entire range of data.

When the node configuration information does not have available information for all nodes, then apply filters for specific nodes for which availability is known.
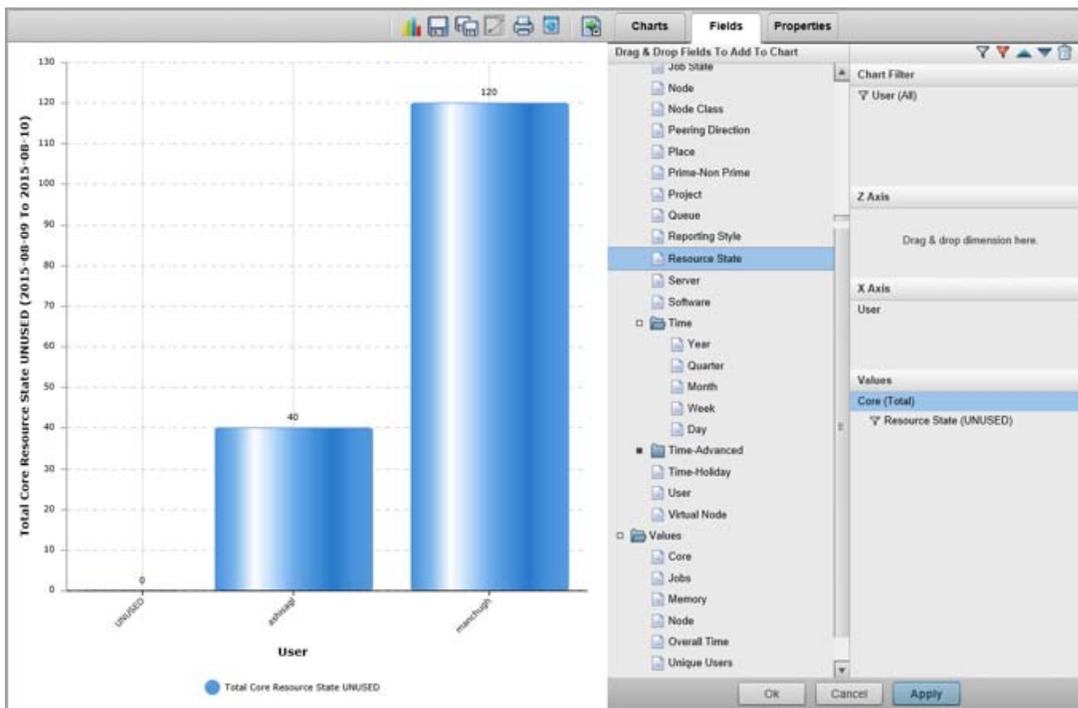
PBSA-3415 Incorrect chart data when cores used and unused are plotted as separate measures

Summary: There seems to be an issue with the cores used and unused data when the Measures are added to the chart as separate Measures and when cores used is plotted as the first Measure.
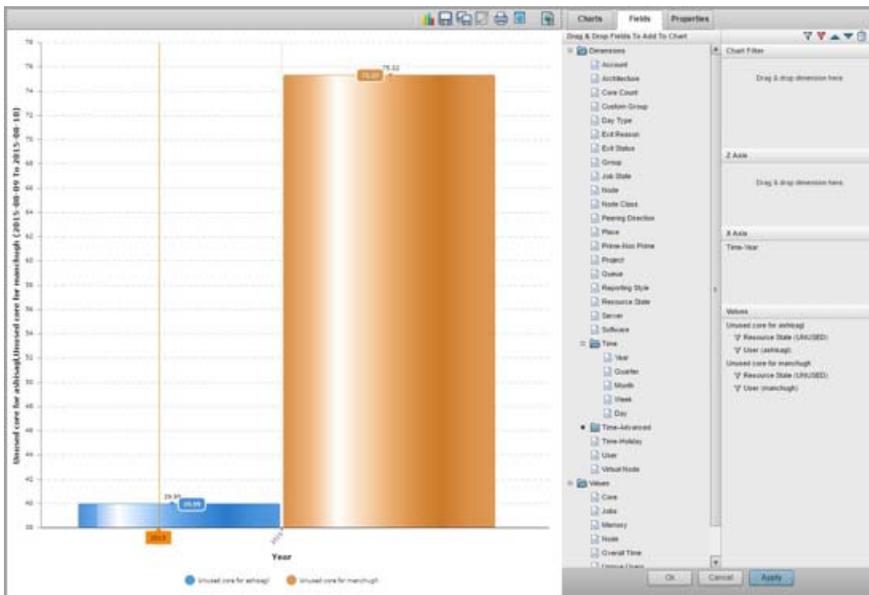
Work Around: Change the order of the Measures. Place the cores unused Measure first (Measure = Cores with a resource state of "UNUSED" applied as a filter), and the cores used Measure second (Measure = Cores with a resource state of "USED" applied as a filter).

PBSA-3416 Quota based charts report available resources rather than unused resources

Summary: When plotting unused resources for a quota enabled Dimension, PBSA reports unused resources as available resources. For example, in the below image the chart is displaying available cores rather than unused cores.

Work Around: Instead of using chart filters, use measure level filters to breakdown specific values as in the image below:

PBSA-3418 Parsing stops with an SQL exception while inserting data into the database

Summary: Parsing stops with an SQL exception while inserting data into the database because a custom resource was defined having the same name as a default key.

Work Around: Provide a unique name for the new custom resource that does not conflict with one of the default custom resource keys. For a list of default keys see the table "Default keys" in the section "Converter Class API" in the *PBS Analytics 13.1 Administrator's Guide*.