DBPLUS
better performance

DBPLUS
Performance Monitor for Oracle
description of changes in version 2019.3

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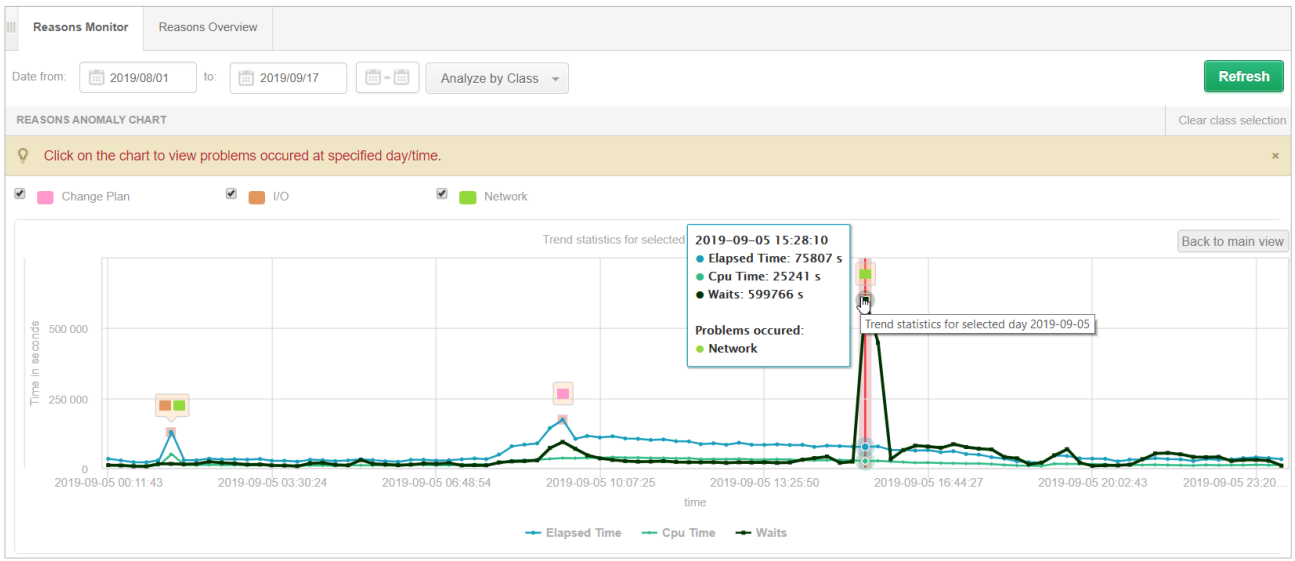
Below is a list of changes in the DBPLUS Performance Monitor system for monitoring Oracle databases.

1 New in version 2019.3

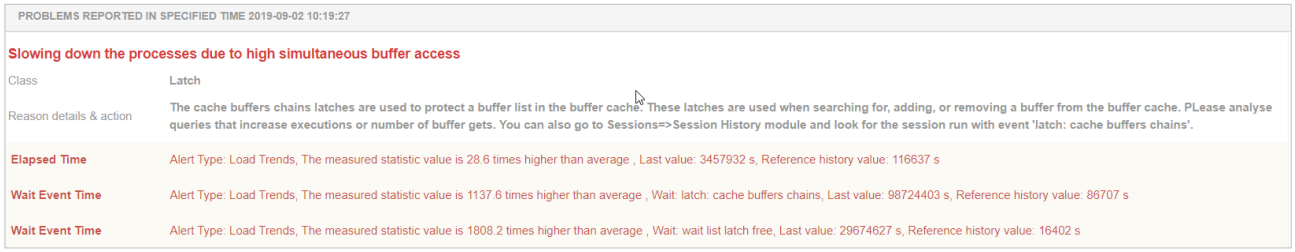
1.1 *Anomaly Monitor*

In the new version of the application the Anomaly Monitor module has been improved. The method of alert detection and presentation has been modified. After entering the screen, a graph from the last 14 days is presented, where a performance problem occurred. The date range can be freely modified. The screen presents problems grouped by class (Analyze by Class), it is also possible to change the presentation and group them by reason of problems (Analyze Reason) by default.

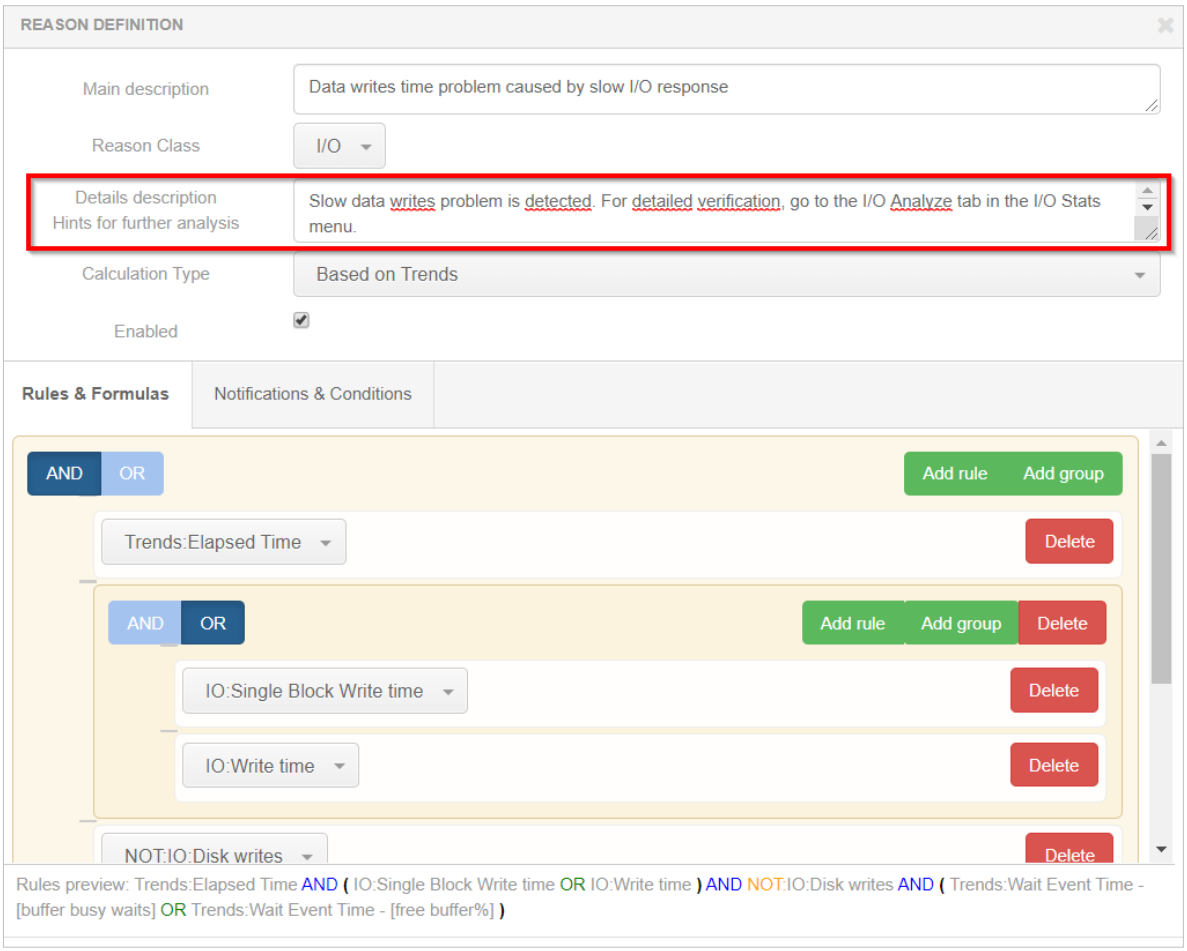
Problems on the chart are highlighted by colored icons (a different color for each class / reason). For further analysis, select the day on which the problems occurred. After select a specific day (point on the graph) a detailed graph for a given day will be presented, especially the moment when performance problems occurred. Each point on the graph represents a given snap (15 minutes). By choosing a point on the graph you receive information on statistics that have been exceeded at the moment and information on the cause of the problem.



In the new version, the Anomaly Monitor module has been extended with problem detection, which additionally analyzes database performance at a given time and presents the result of this analysis in the form of a problem.



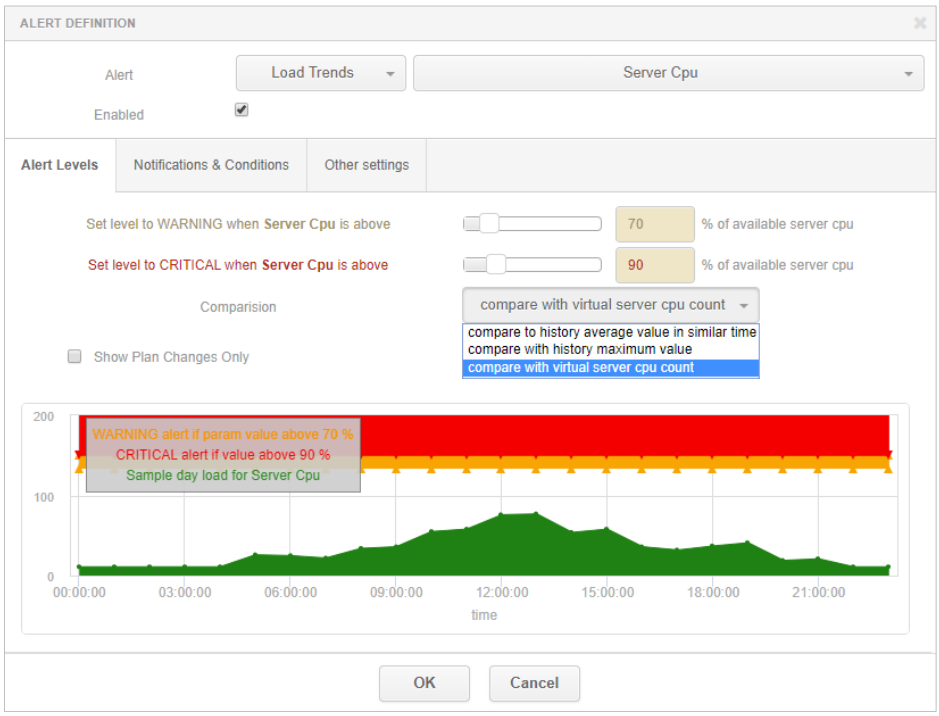
As part of defining the causes of the problem in the Alerts settings menu in the Reasons & Problems definitions tab for a given problem cause, you can specify and add a detailed description of the problem with an indication of the place for detailed analysis.



1.1.1 New alerts definition

A new alert based on CPU utilization statistics has been added to the new version of the application. This alert can be set by comparing threshold values to:

- History average value in similar time,
- History maximum value,
- Virtual server CPU count.



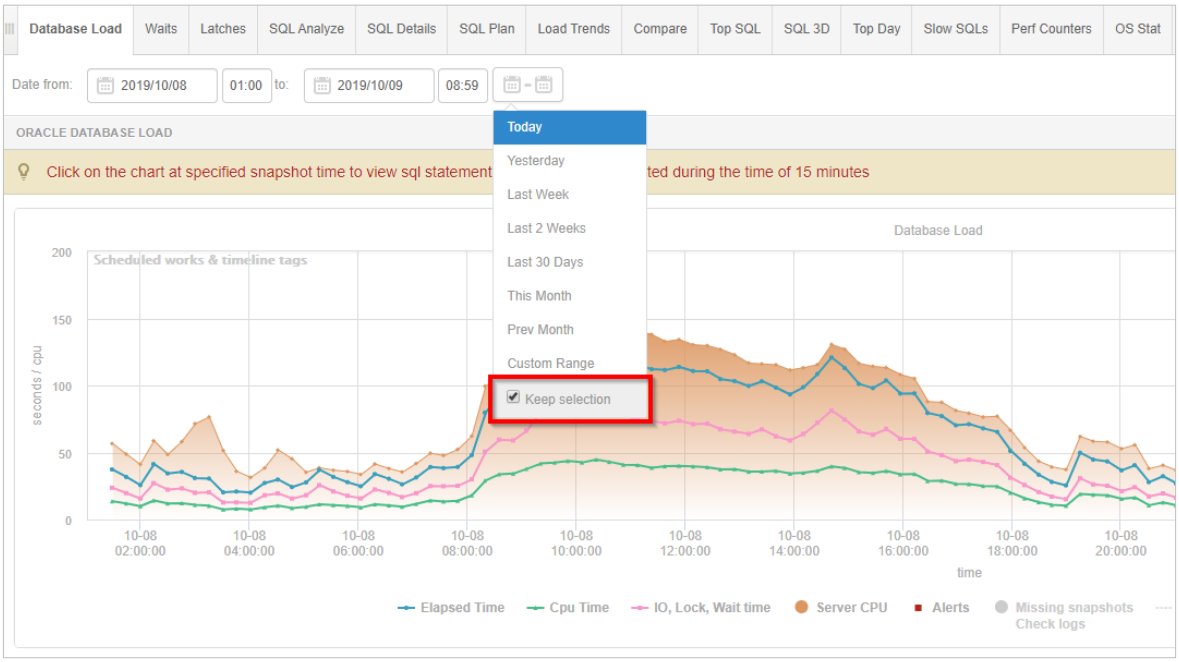
1.2 *Remind and sharing settings*

In the new version we have added the functionality to remember changes made on a selected tab in the database details. Currently, each page refresh, change of date or moving to a different tab results in a return to the default settings for a given tab. The introduced change consists in remembering the settings of the given tab for:

- date
- column selection in the table,
- series on the chart,
- grouping
- choices in the dropdown box,
- checkbox options.

Each setting will be remembered within a given tab. The selections made on each tab will be remembered.

If you want the selected date range to be the same for most tab, You need do select [Keep selection].



Remembering the date ("Keep selection" function) does not work on the tabs:

- Load Trends (viewing data over a large time range),
- SQL Top SQL (detailed data viewed for 1 day range),
- SQL 3D (detailed data viewed for 1 day range).

When you exit from details to the Dashboard screen, changing the database or close the application, the settings will be restored to their default settings.

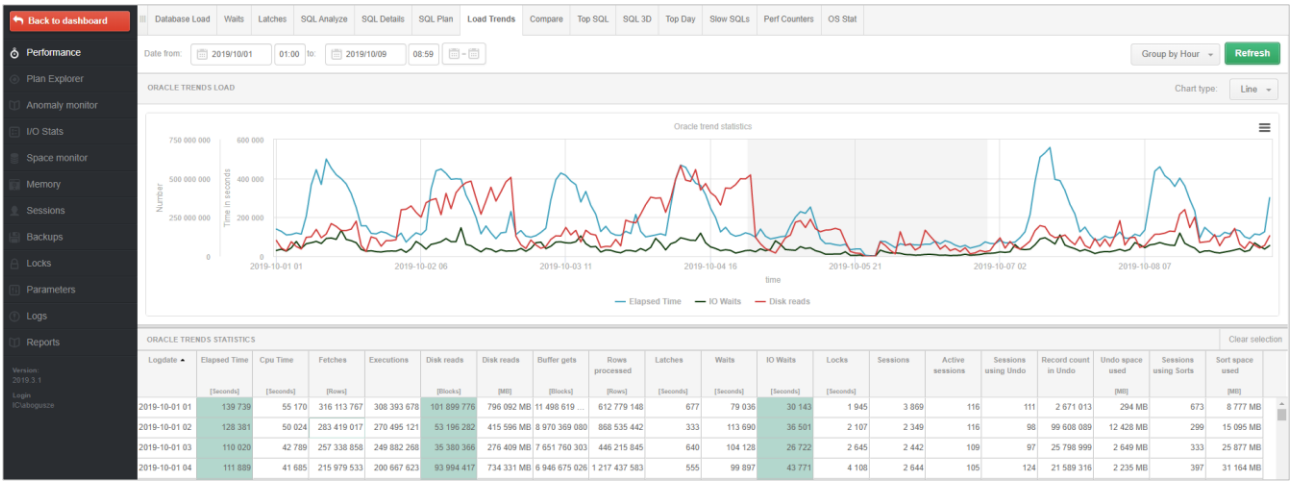
1.3 *Addition hours:minutes to time filter*

In the latest version of the application we have added the functionality to present data in a narrower range than today. Until now, in most charts, data could only be filtered for a given day. In this version, we have also added the hour and minute to the date, which allows you to narrow down the range of displayed data.

The changes made to pages:

- Instance Load,
- Waits (Overview / Analyze),
- Latches,
- Load Trends,
- Slow SQLs,
- Perf Counters,
- OS Stat,
- I/O Stats (Analyze / Archivelogs),
- Session history,
- Locks history.

An example of the Load Trends tab has a limited view presents below:

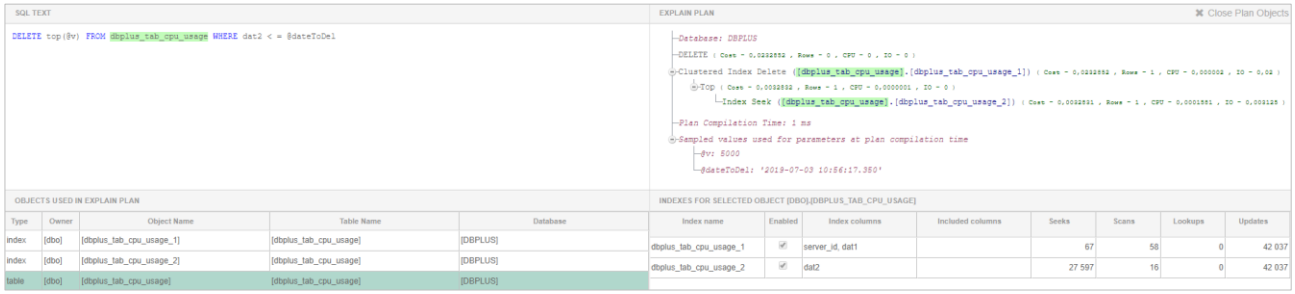


If a narrow time range is selected, in addition to the data presentation on the chart, the performance statistics under the chart are also calculated to make them match the selected range.

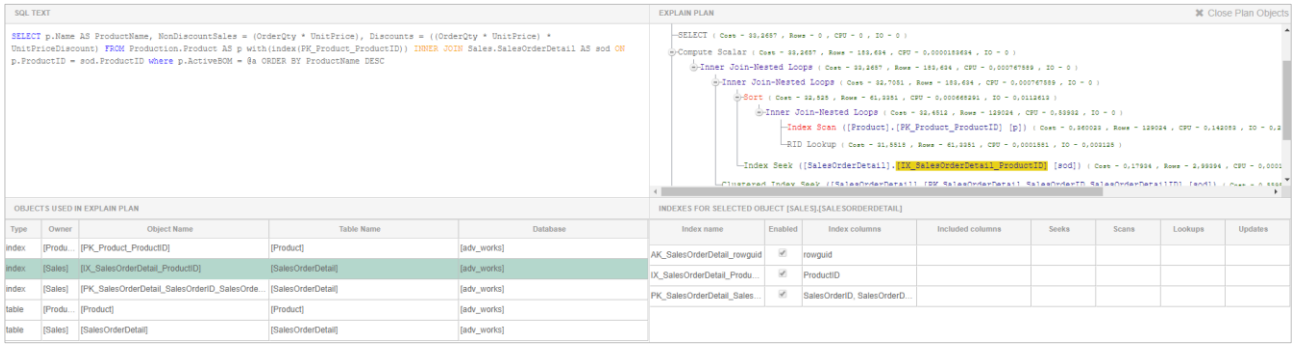
1.4 *Improvements in Show Plan Objects*

In the latest version, the object highlighting function has been added in the Show Plan Objects window in the query details. After selecting the object in the table [OBJECTS USED IN EXPLAIN PLAN] - the table or index will be highlighted in the content of the query and the query plan.
Depending on the object, tables are highlighted in green, index in yellow.

View for the selected table:

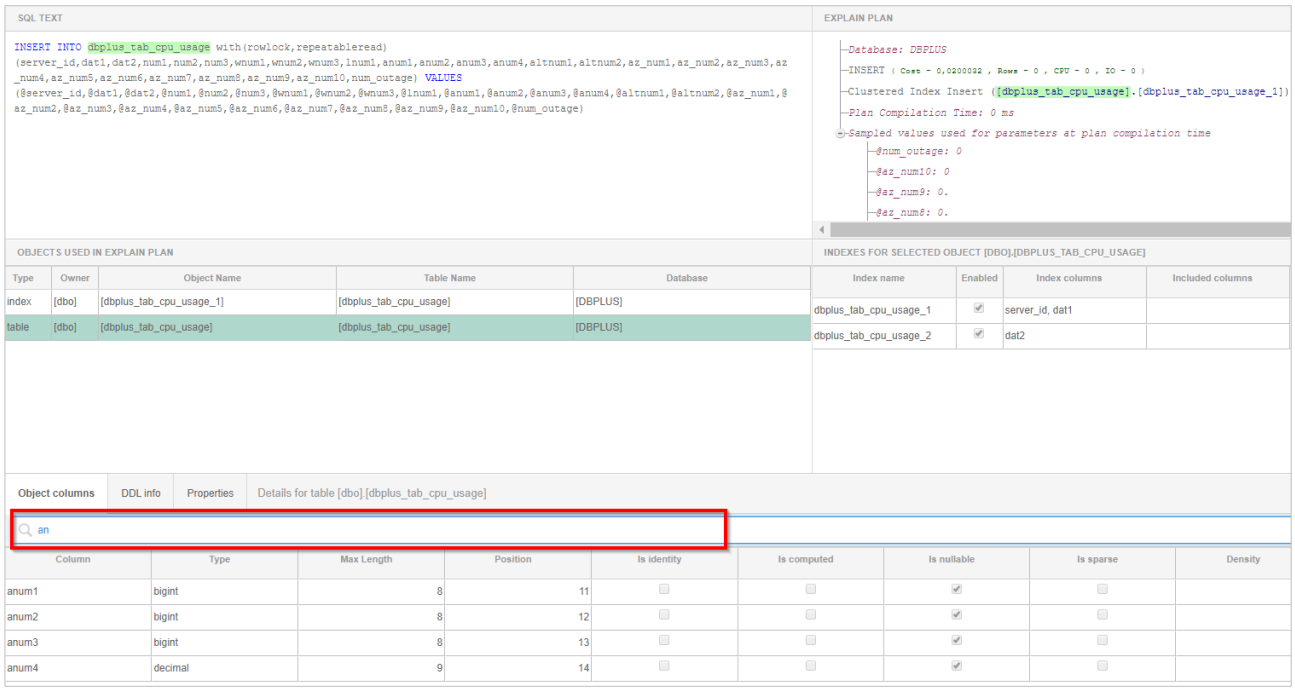


View for the selected index:



In case there is a view in the query, then the table object will not be highlighted in the view content.

A column search engine has also been added, after select an object you can filter the columns by enter their name in the search field. The columns will filter according to the value entered.

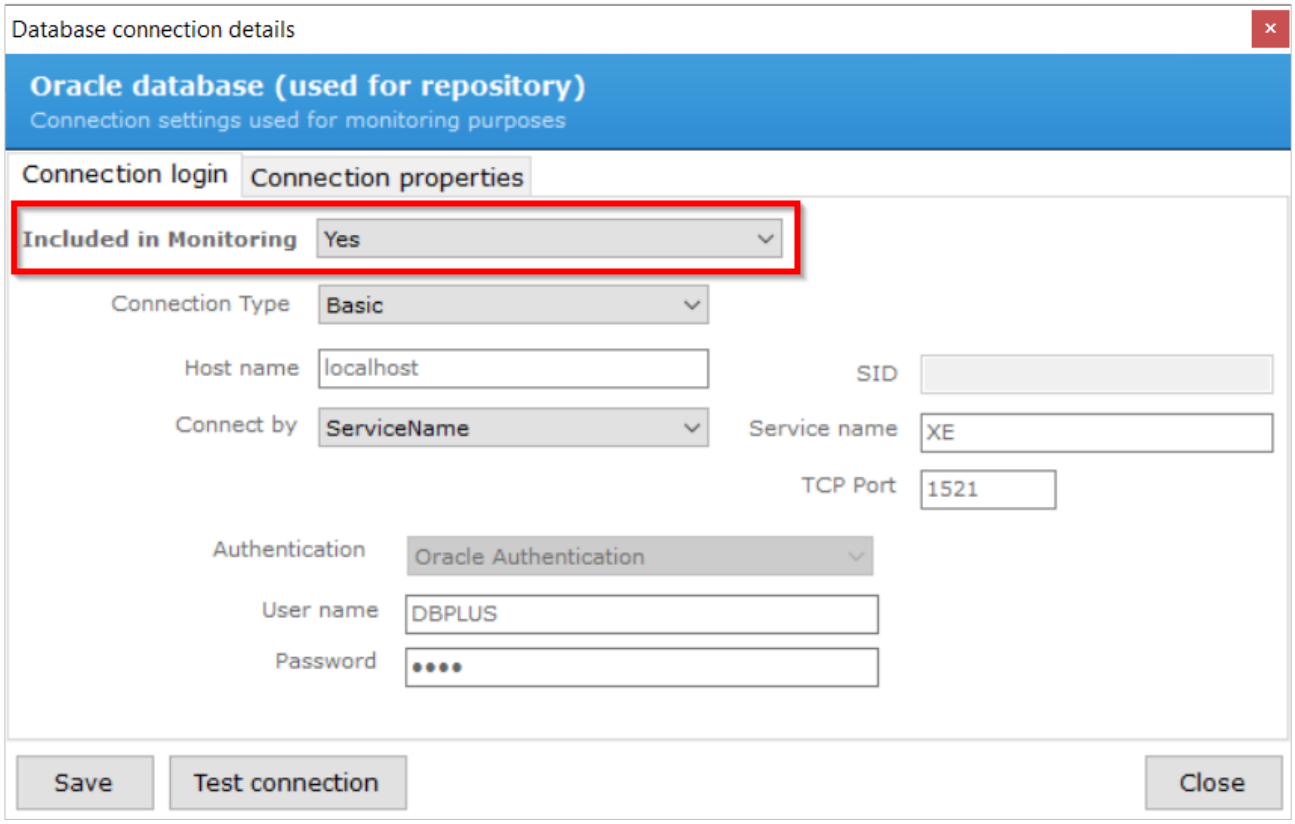


1.5 *General improvements*

1.5.1 Ability to view statistics for a disabled database

In the new version of the application, the ability to view statistics for a database that was previously excluded from monitoring has been added. Data collected during monitoring are saved in the repository database. If the database has been excluded from monitoring and deleted, it is still

possible to view the statistics collected. To do this, change the flag in the [Included in Monitoring] field to 'Yes' and save the change.



1.5.2 Improve deleting historical data

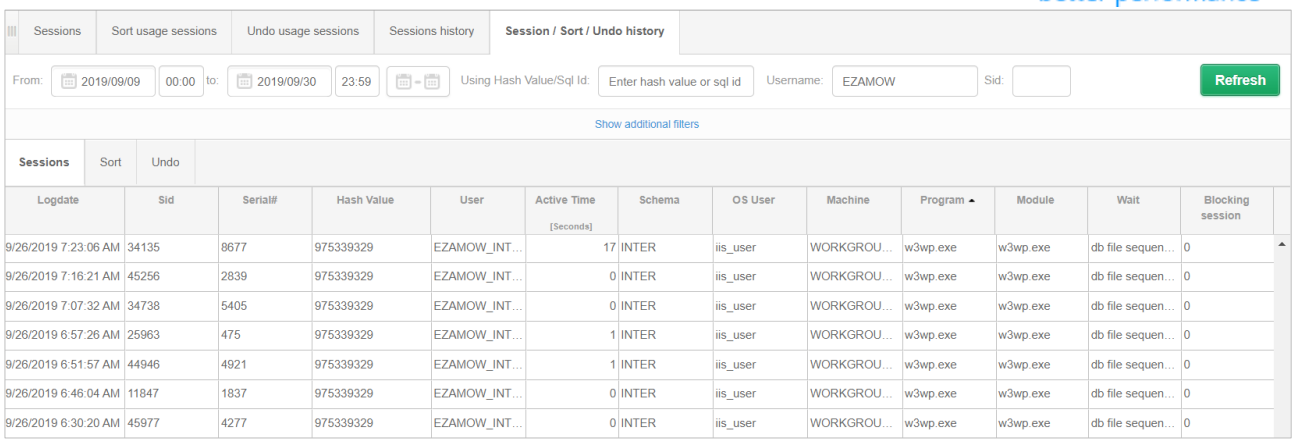
In the new version we have corrected the problem related to deleting historical data. By default, detailed data is kept for up to 30 days (default value, depending on the KEEP_SNAPSHOT_HISTORY_DAYS parameter settings). The problem occurred in specific cases when the delete thread was started on a database that was not available. In this case, the data was not deleted. The problem has been fixed.

1.5.3 Improvement in the authorization module

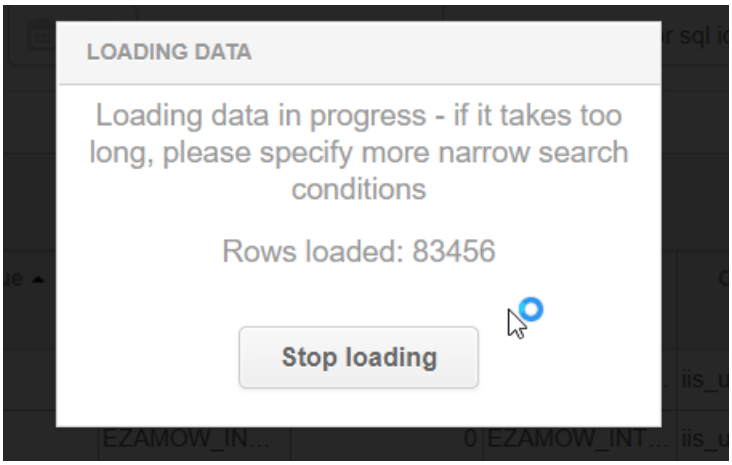
The new version includes an amendment that applies to page permissions in the application (Security menu). The problem was in the scenario when the user shared their own and domain group permissions, where many different permission profiles were used. The problem was the lack of access to all screens despite the permissions assigned to the login.

1.5.4 Improvements in session history

In the new version, the way of viewing session history available in the Session menu in the Session / Sort / Undo history tab has been modified. After selecting the search filter, the result is returned, the first 10,000 records sorted by date from the latest to the oldest. To download the remaining records, just move the slider to the last returned records, which will top up the remaining data. In addition, each click on the column heading in the table will download all for the selected range in the filter.

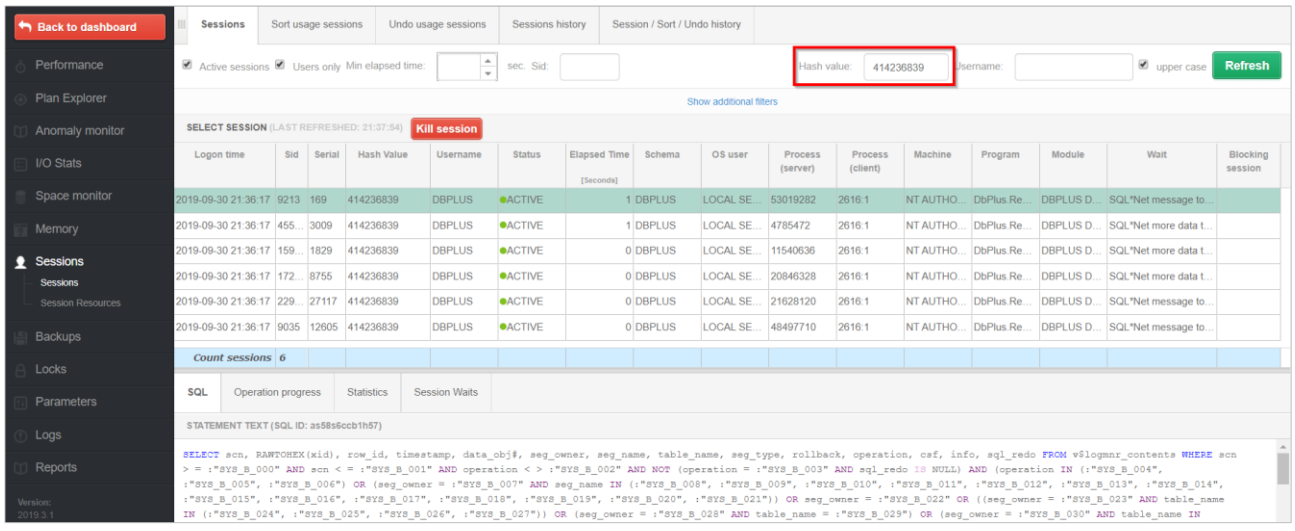


If the data in the filter is too general and the returned results contain many records, a message will be displayed with information about the number of records loaded. After loading the data, the message will close automatically. The user can stop loading at any time by clicking the [Stop loading] button.



1.5.5 Searching for sessions online

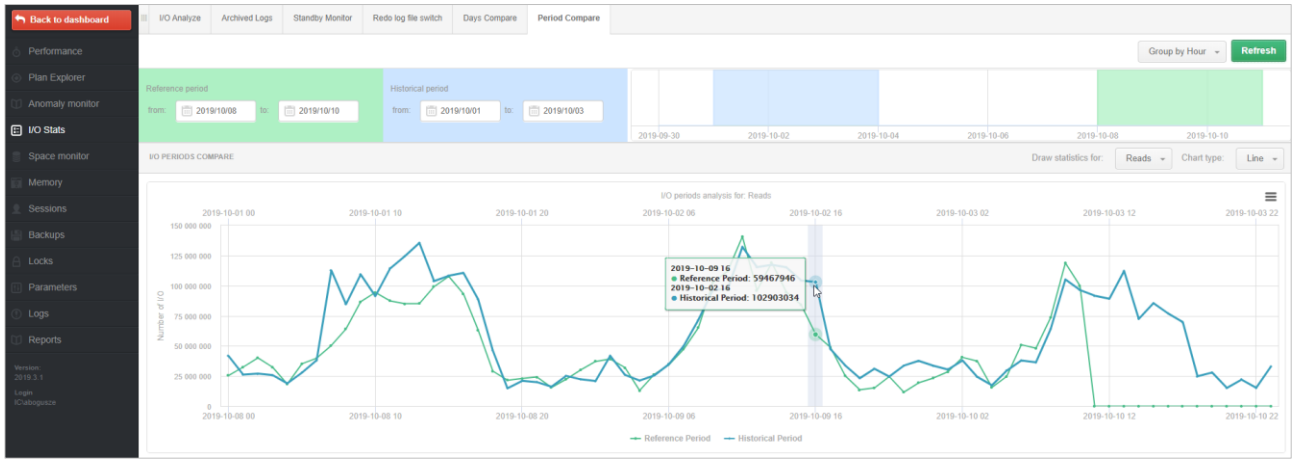
The new version has an additional Hash value filter added to search for queries on the online session page (Sessions menu). After entering the Hash value (or Sql id) in the search field, the list of queries will be filtered only for the selected query. The functionality also works with other filters.



1.5.6 Improve Period compare tabs

In the new version we have improved the performance of the statistics comparison tool for the selected range [Period Compare]. Comparing statistics for a selected period of time is available in:

- I/O Stats menu,
- Performance menu in the Waits tab,
- Performance menu on the Compare tab.



In each of the aforementioned tabs, period comparison is available in groups for hours and days. By choosing a point on the graph, we will receive information about the value of a given statistic for a selected hour or day depending on the selected grouping level.