

DBPLUS Performance Monitor description of changes in version 2018.2.1

Date: 22 August 2018



Contents

1 New i	in version 2018.2.1	3
1.1 Se	essions screen	3
1.1.1	History screen for sessions using sorting	3
1.1.2	Session History screen available as chart	
1.1.3	Sort Usage Sessions screen	4
1.1.4	Fixed Session Resources display	4
1.2 Ad	dded notifications on DBPLUS Performance Monitor functioning	5
1.2.1	Insufficient space in repository database	
1.2.2	Inactive DBPLUSORACLECATHER service	5
1.3 Fi	xed SQL Find feature	
1.3.1	Search for queries with special characters	5
1.4 Fi	xed alert functioning	6
1.4.1	Improved SQL Query alert functioning	
1.4.2		
1.5 G	eneral improvements	7
1.5.1	Improved data presentation in charts	
1.5.2	New configuration parameters	
1.5.3	Improved presentation in the Locks screen	
1.5.4	Improved query plan displaying speed	8
1.5.5	Improved data presentation in search fields	
1.5.6	Expanded non-performance wait list	8



Below is a list of changes to the Oracle database monitoring system DBPLUS Performance Monitor.

1 New in version 2018.2.1

1.1 Sessions screen

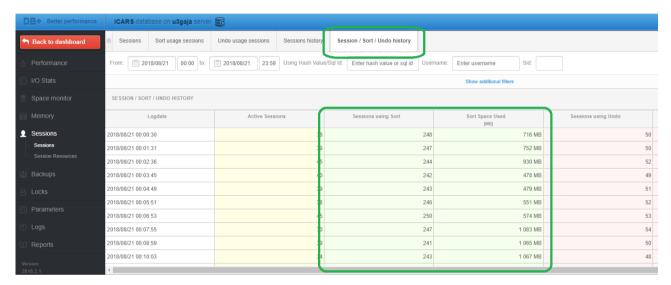
1.1.1 History screen for sessions using sorting

In the new version, a feature displaying data on sessions using sorting has been added to the session history screen (Database Analysis -> Sessions -> Sessions/Sort/Undo history).

This information is shown in new columns (in green):

- Sessions using Sort,
- Sort Space Used.

The columns contain information on the number of sessions that used temporary space in a given unit of time, and how much space was used for this purpose respectively.



Additionally, when a specific line is selected, detailed information for the given snapshot is shown, including data on the number of active sessions (Sessions), sessions using sorting (Sort), and sessions using Undo (Undo).



Information on sessions using sorting have been limited to the 20 largest sessions in terms of space use. Sessions outside the top twenty are aggregated in one line labelled: Grouped sessions (number of the other grouped sessions (s)).



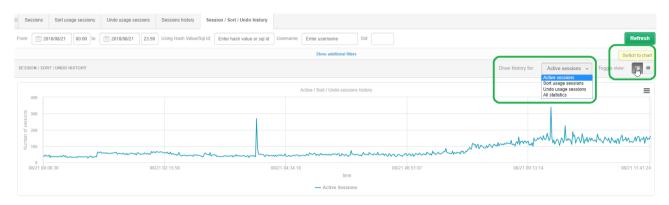


Additionally, a new column titled Program has been added to the Undo tab, showing information about the program from which a session was launched.



1.1.2 Session History screen available as chart

The screen also provides a new chart generation feature, accessed by changing the view using "Switch to chart".



Four charts are available, showing:

- active sessions,
- sessions using Sort,
- sessions using Undo,
- · collective chart containing all statistics.

When the cursor is moved over a point on the chart, detailed information about the session will be shown, depending on the chart type.

1.1.3 Sort Usage Sessions screen

Information on the database instance number which the given chart applies to has been added to the chart in the new version. If the database was in RAC, charts in older versions were not labelled properly.

1.1.4 Fixed Session Resources display

Issues with displaying session details (Instance Analysis -> Performance -> Sessions -> Sessions Resources) have been fixed in the new version. The issue occurred for databases where large numbers of sessions were running, and involved long waiting times for applications to display results. The performance issue has been fixed.



1.2 Added notifications on DBPLUS Performance Monitor functioning

A notification about issues with the functioning of the DBPLUS tool has been added in the system. Among others, this mechanism warns the user about:

- running out of space or insufficient space in the DBPLUS repository database,
- inactive DBPLUSORACLECATHERA service, which is responsible for data collection.

1.2.1 Insufficient space in repository database

If there is insufficient space in the schema of the database which is the repository dedicated for DBPLUS for data collection, a message notifying the user about this event will appear.

The top bar, e.g. on the Dashboard page, will turn orange and a message about insufficient space will be displayed - "Repository Space Warning".



Error information is saved in the Logs tab. If there is insufficient space, logs are stored in the DbplusCatcherServiceErrors.txt file in the C:\ProgramData\DBPLUS\DPM.Oracle.Web folder, or on the server containing the DBPLUS software.

1.2.2 Inactive DBPLUSORACLECATHER service

If an issue with the functioning of monitoring is detected, the top bar on every page of the system will turn orange and an appropriate message will be displayed.

To rectify the problem, check the status of the DBPLUSORACLECATCHER service on the server where DBPLUS software is installed, and reinitialise the service.



1.3 Fixed SQL Find feature

Statement by text search for queries containing special characters has been fixed.

1.3.1 Search for queries with special characters

Query search at the Sql Find page (Instance Analysis -> Performance -> SQL Details -> Find SQL) has been fixed in the new version. "Statement by text" search for queries containing special characters has been improved.

In earlier versions, searching for queries containing certain characters (e.g. "+") did not work; this has now been corrected.



1.4 Fixed alert functioning

Fixes related to detecting emergency situations in the monitored databases have been implemented in the new version.

1.4.1 Improved SQL Query alert functioning

The new version improves the functioning of SQL Query alerts, the issue was related to a HINT that did not work. The issue resulted in changing the query plan for the alert calculation feature. The alerts now work faster and without errors.

1.4.2 Fixed historical value calculation

The new version corrects the method of calculating reference values for trend-based alerts. In earlier versions, the calculation could be disrupted if failures (deviations from the general trend) in the database occurred one after another. The issue has now been fixed.

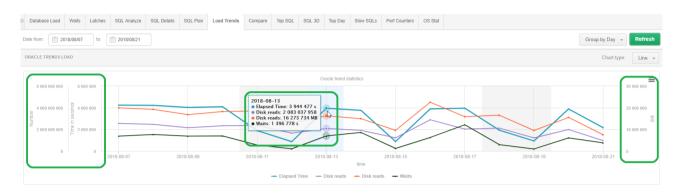


1.5 General improvements

1.5.1 Improved data presentation in charts

The new version improves data presentation in charts. Large values will now be displayed with thousands separators (spaces). This applies to values shown on the Y axis, as well as tooltips displayed when hovering over points on the chart.

The improvement applies to charts in the Load Trends, Sql details, I/O Stats and other tabs.



1.5.2 New configuration parameters

Two new parameters controlling the functioning of the DBPLUS have been added in the new version:

STATEMENT_LENGTH_LIMIT	4000	Setting used during collecting statistics data for running queries. It's the maximum sql statement length that will be stored in system repository. Statements with length greater than STATEMENT_LENGTH_LIMIT will be truncated. To switch off this setting please use value 0.	Edit	
STORE_ONETIME_STATEMENT_TEXT	ON	Setting used during collecting statistics data for running queries. It lets to store (or not) the statement text for the queries running only once.	Edit	

- STATEMENT_LENGTH_LIMIT

This parameter applies to storing the contents of queries executed on the database. If a query is longer than 4000 characters, only the first 4000 characters will be stored. The default value is set at 4000. To disable this limit, set the parameter to 0.

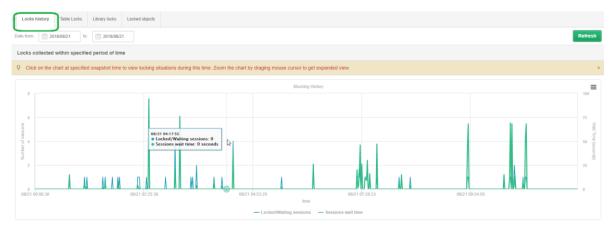
- STORE_ONETIME_STATEMENT_TEXT

The other parameter applies to storing the content of queries that have been run on the database only once. The parameter is on by default, which means that all information will be stored.

The parameters only work for queries that appeared in the monitoring after the parameters have been implemented.

1.5.3 Improved presentation in the Locks screen

The order in which tabs are shown on the Locks page (Instance Analysis -> Locks) has been changed in the new application version. Now, when you enter the page, the first tab displayed will be Locks History. This tab shows information about the occurrence of locks in the given period.





1.5.4 Improved query plan displaying speed

There was an issue in earlier versions related to the speed of displaying query plans greater than 100 thousand characters or with more than 2000 nodes.

The new version improves the feature related to displaying query plans with large numbers of characters. Query plans in the latest version will be displayed faster.

1.5.5 Improved data presentation in search fields

In earlier versions, an issue related to the functioning of certain browsers could occur. When Enter was pressed in a search field, the value entered in the field was stored in the dropdown, which was later displayed incorrectly. The new version fixes this issue.

1.5.6 Expanded non-performance wait list

New waits not belonging to the performance wait group have been added to the DBPLUS Performance Monitor dictionary. This is:

Backup waits: MML create a backup piece

The wait is not related to issues in the database, it is related to waiting for the Media Management Library layer as part of backup creation.