

DBPLUS
Performance Monitor for Oracle
description of changes in version 2023.1

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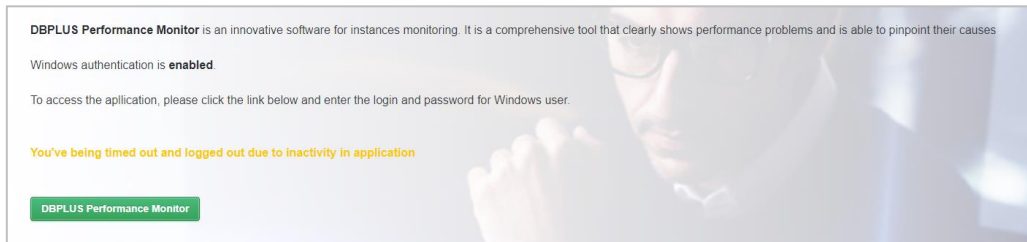
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Below is a list of changes to the DBPLUS Performance Monitor system for Oracle database monitoring.

New in 2022.4 version

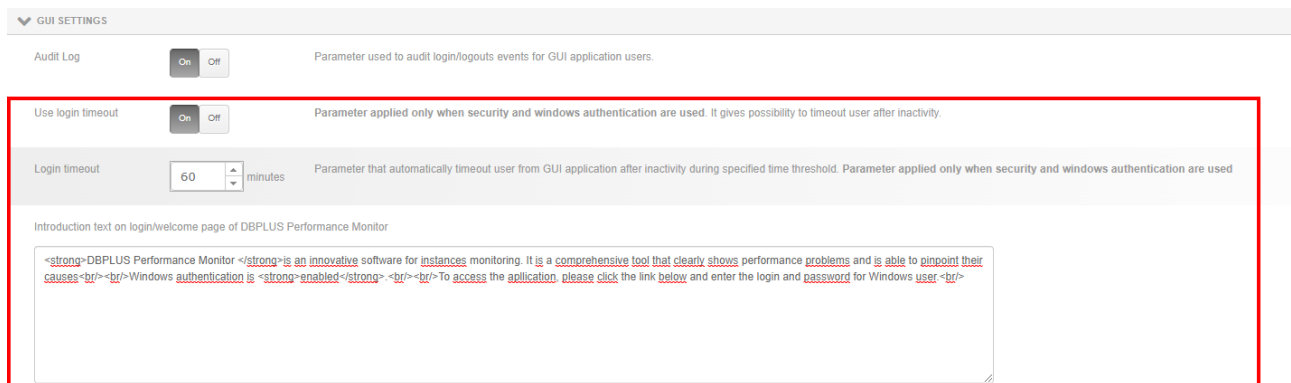
1 Logging out of the application after user inactivity

In the latest version, functionality has been added to log out a Performance Monitor application user after detected inactivity. If the application detects that the user does not perform actions on the browser tab with the DBPLUS application for a period of 60 minutes (default value), logout from the application will occur and a screen with logout information will be displayed.



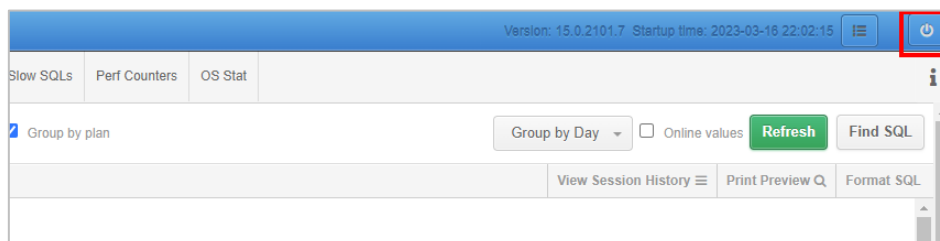
The **Use login timeout** and **Login timeout** parameter, available in the Configuration > Settings menu in the GUI Settings section, is responsible for the mechanism's operation. The parameter is available from the Global settings level and applies to the operation of the entire application for a given database platform.

In addition, the message that is presented after logout is configurable. From the settings level you can freely change the description according to your needs.



The functionality is enabled by default immediately after the upgrade and the time after which the disconnection occurs is 60 minutes by default.

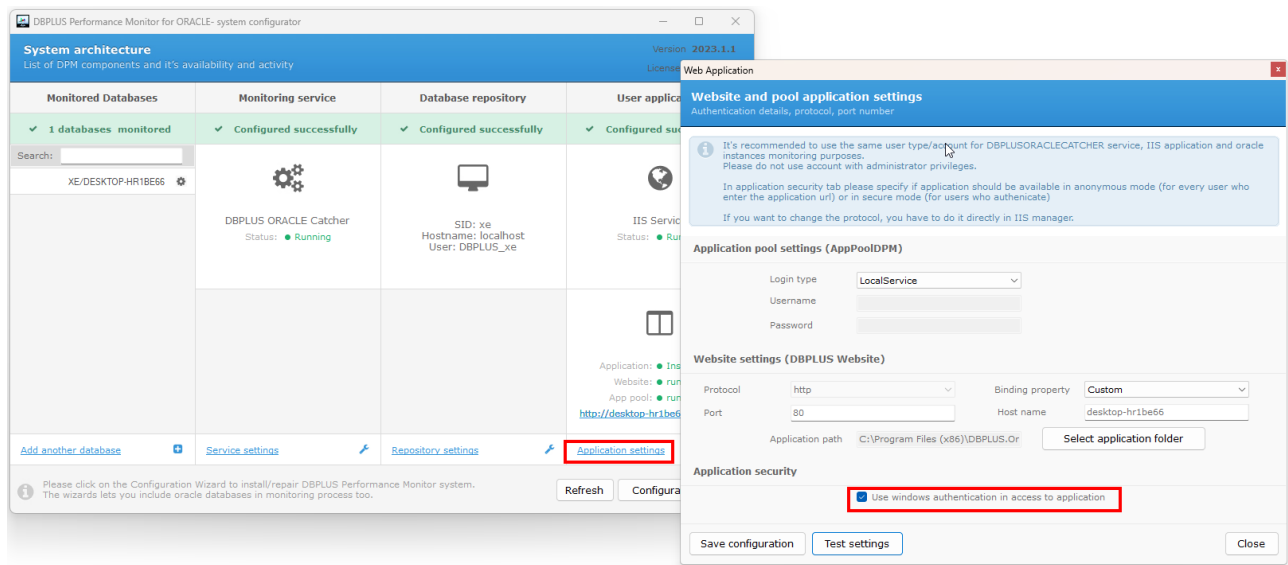
In addition, a button for logging out of the application by the user has been added.



Logging out will display a message with the content, according to the configuration available in the Configuration menu.

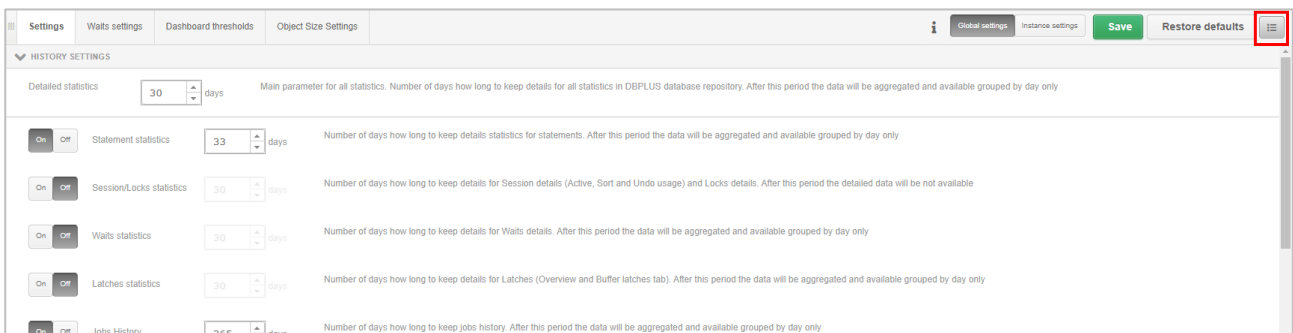


Note: The logout functionality is available only for the application for which the Windows Authentication option has been enabled, accessible from the DBPLUS Configuration Wizard from the level of the Windows server on which the application has been installed.



2 DBPLUS application configuration change history

Functionality for tracking changes in DBPLUS Performance Monitor application parameter settings has been added. Starting with the latest version, changes in parameter values available from the **Configuration > Settings** menu level are recorded in the history. Changes are tracked both from the level of global settings (Global settings), as well as parameters at the level of a dedicated instance.



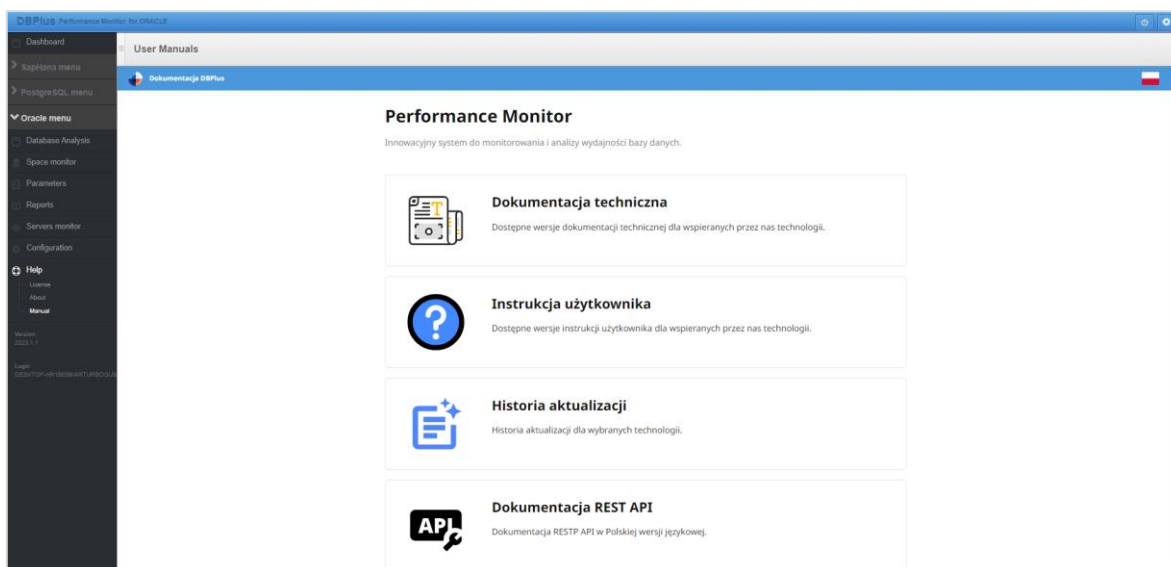
An example view of setting changes available in DBPLUS application.

SETTINGS MODIFICATION HISTORY Close					
Date from:	<input type="text" value="2023/04/01"/>	to:	<input type="text" value="2023/04/04"/>	<input type="button" value="Refresh"/>	
User	Settings Server	Change time	Parameter name	Old value	New value
DESKTOP-HR1BE66VARTURBOGUSZE...	DESKTOP-HR1BE66VARTURBOGUSZE...	2023-04-04 17:13:47	Minimal query Elapsed Time	0.5	0.01
DESKTOP-HR1BE66VARTURBOGUSZE...	Global	2023-04-04 17:10:23	Statement statistics	30	33
DESKTOP-HR1BE66VARTURBOGUSZE...	Global	2023-04-04 16:36:50	Introduction text	le...	D...
DESKTOP-HR1BE66VARTURBOGUSZE...	Global	2023-04-04 15:47:10	Login timeout	0	1
DESKTOP-HR1BE66VARTURBOGUSZE...	Global	2023-04-04 15:46:33	Login timeout	1	0
DESKTOP-HR1BE66VARTURBOGUSZE...	Global	2023-04-04 15:38:26	Login timeout	60	1
DESKTOP-HR1BE66VARTURBOGUSZE...	Global	2023-04-04 15:08:30	Login timeout	40	60
DESKTOP-HR1BE66VARTURBOGUSZE...	Global	2023-04-03 10:35:36	Introduction text	D...	le...
DESKTOP-HR1BE66VARTURBOGUSZE...	Global	2023-04-03 10:35:21	Login timeout	60	40
DESKTOP-HR1BE66VARTURBOGUSZE...	Global	2023-04-03 10:35:00	Monitor jobs	ON	OFF

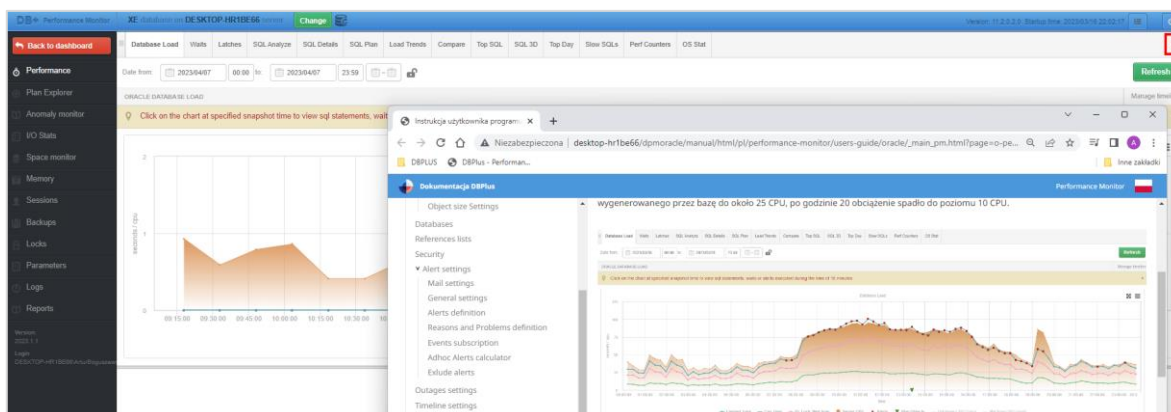
3 User documentation in the application

A new version of documentation has been added in the latest version. The documentation is collectively available as before in the main menu Help > Manual.

In addition to the standard user's manual describing the operation of the functionalities included in the application, technical documentation is also available, as well as an update history describing changes for recent versions of the application.



In addition, access to the user manual is available from any page in the application by clicking on the "i" icon in the upper right corner. Clicking on a given page will open a manual showing a description of the functionality for the dedicated page in the application.



3.1. Headings in tables

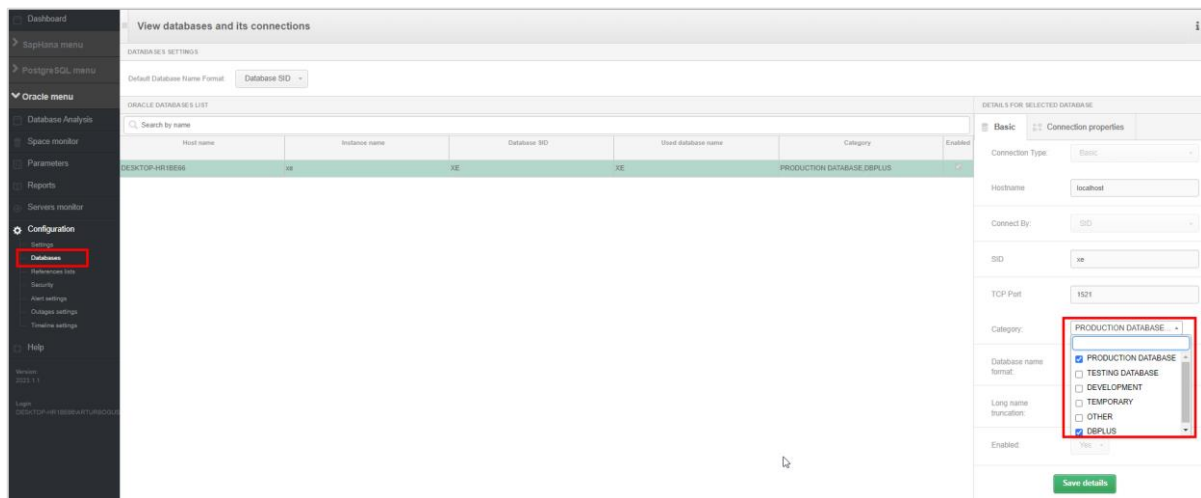
Another change concerns the addition of information about the data available in the tables accessible from the application. Starting with the latest version, for each table after hovering over the header

Database Load Waits Latches SQL Analyze SQL Details SQL Plan Load Trends Compare Top SQL SQL 3D Top Day Slow SQLs Perf Counters OS Stat														
117635117 From: 2023/04/21 00:00 To: 2023/04/21 23:59 Group by plan Online values Refresh Find SQL														
STATEMENT TEXT View Session History Print Preview Q Format SQL														
SELECT SUBSTR(name, 1, :a) name, SUM(shareable_mem) mem, COUNT(*) cnt FROM v\$db_object_cache GROUP BY SUBSTR(name, 1, :a) HAVING SUM(shareable_mem) > :b ORDER BY mem DESC														
SQL STATISTICS (SQL ID: 4bupg82bdfy16) Grid view: General statistics														
Date	Plan hash	Elapsed Time (seconds)	Cpu Time (seconds)	Rows processed	Fetches	Executions	Parse Calls	Disk Reads (blocks)	Disk Reads (bytes)	Buffers Get (blocks)	Buffer Quality (%)	Module	Action	Elapsed Time per 1 Exec (seconds)
2023-04-21 09	4143676030	0.3	0.3	Number of rows returned by the query in the time period		4	4	0	0	0	0	Snapper		0.0034
2023-04-21 10	4143676030	0.2	0.1			2	2	0	0	0	0	Snapper		0.0031

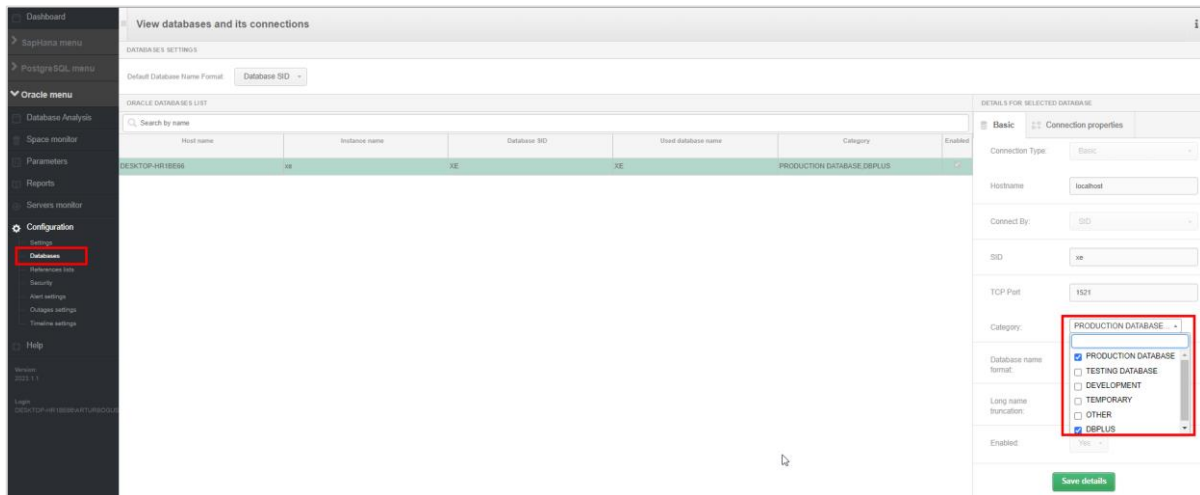
4 Assigning categories for monitored instances

In the latest version of the application, we have added functionality for assigning multiple categories to monitored instances. Until now, the functionality allowed assigning one category to one database. As of the latest version, we have changed this limitation, allowing you to assign multiple categories for a given database.

Assigning categories to a database is possible from the Configuration > Databases menu. On the screen, the user selects instances from the list and then in the menu on the right indicates in the **Category** field the correct category for the instance. After making changes, save the changes.



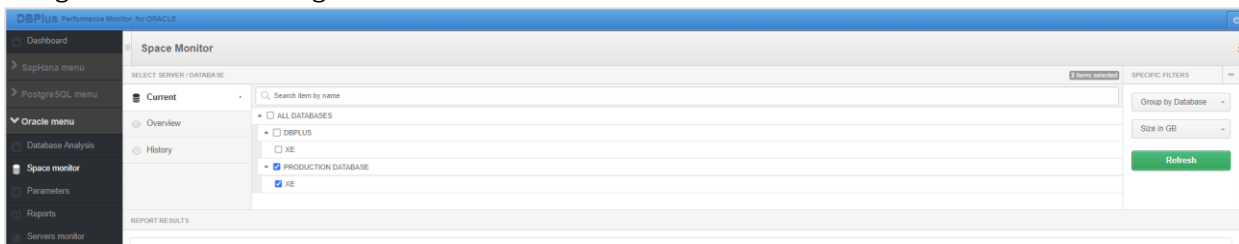
In addition, on the Dashboard screen in the Category group field, you can be redirected directly to the screen in which you can assign a category to an instance by selecting **Assign category** option.



Pages on which categories were used have also been modified and adapted to support the assignment of multiple categories. The changes apply in particular to screens in the main menu such as:

- Space monitor
- Parameters
- Reports

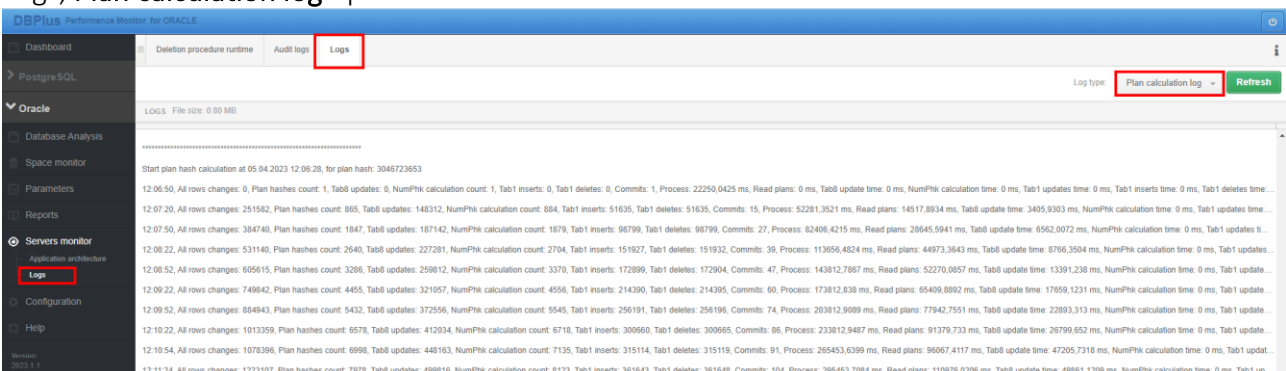
On these pages, we have changed the way to select instances for search by searching for instances using filters and selecting via checkbox.



5 Improved monitoring of execution plans

In the latest version, the problem of Oracle generating the same plan identifier (Plan hash) for different versions of an INSERT/SELECT query has been handled.

The fix involves changing the way plans are read and written to the DBPLUS repository. Correcting the problem requires recalculating the currently collected plans and saving them back to the repository. The recalculation process will be started immediately after the update and will perform the recalculation of currently collected plans in the background. The user can verify the status of the recalculation process, which is available from Server Monitor > Logs, **Plan calculation log** option.



Plans for queries run after the update are already saved in a new way and will not be recalculated additionally.

6 Adding Audit log functionality

In the latest version of the application, functionality for tracking login and logout of DBPLUS users has been added. Every event of logging in and logging out a user from the application is logged.

The functionality is available regardless of the enabled Windows Authentication functionality.

If Authentication by domain account is not enabled, the value Anonymous is entered in the log in User field.

Logging information is available in the Servers monitor > Logs menu under Audit logs .

The data is kept for a period of 30 days (default). The user can change the settings based on the parameter in the Configuration settings menu under HISTORY SETTINGS.

On Off Backups 1095 days Number of days how long to keep backup details. After this period the data will not be available

On Off Trace session history 30 days Number of days how long to keep history details for session traces. After this period the data will not be available

On Off Audit log history 30 days Number of days how long to keep history for audit logs (login/logouts). After this period the data will not be available

QUERY STATISTICS SETTINGS

Minimal query Elapsed Time 0.5 seconds Param used as a threshold/minimal value for Elapsed/Cpu Time above which query statistics (for all executions) is included by monitoring process. Param is a number of seconds and default value is 0.5.

Monitor tracewrite statements On Off Enable or disable in monitoring process TRACEWRITE statements ran from Sql Profiler tool. It's recommended to disable such type of statements to have better visibility on the Instance Load for business sql queries.

7 Improvements and enhancements

10.1. Pooling property management

In the latest version, we have added pool management options for the monitoring user. Management is done from the Configuration Wizard and consists of setting the connection limit of the application user (GUI).

The settings are available from after entering the [Cog] settings for each monitored database instance. The administrator has the ability to set, among other things, the minimum and maximum pool of connections that the Performance Monitor application will establish when used by the End User.

DBPLUS Performance Monitor for ORACLE- system configurator

System architecture Version 2023.1.1
List of DPM components and it's availability and activity License Information

Monitored Databases	Monitoring service	Database repository	User application
✓ 1 databases monitored	Database connection details	Oracle database (used for repository)	

Search: XE/DESKTOP-HR1BEG6

Connection login **Connection properties** Export Standby DBs

Connection Pooling for GUI application

☒ Use connection pooling

Min pool size: 5 Max pool size: 100 Connection lifetime: 200

Other details

Connection timeout: 100 Application name: DBPLUS Performance Monitor

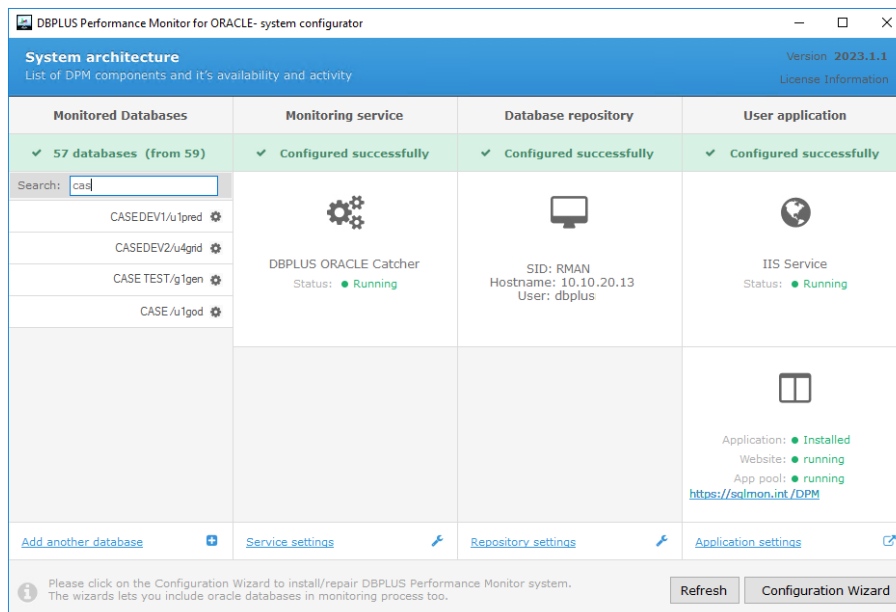
Save Test connection Remove database from monitoring Close

When setting the connection pool at the **repository database** level, special care should be taken to ensure that the **connection pool is not too low**. The Performance monitor application displays most of the data using connections to the repository database. If the value in the **Max pool size** field is set too low, it may cause the end user to wait longer for the application to present the data.

10.2. DBPLUS Configuration Wizard level improvements

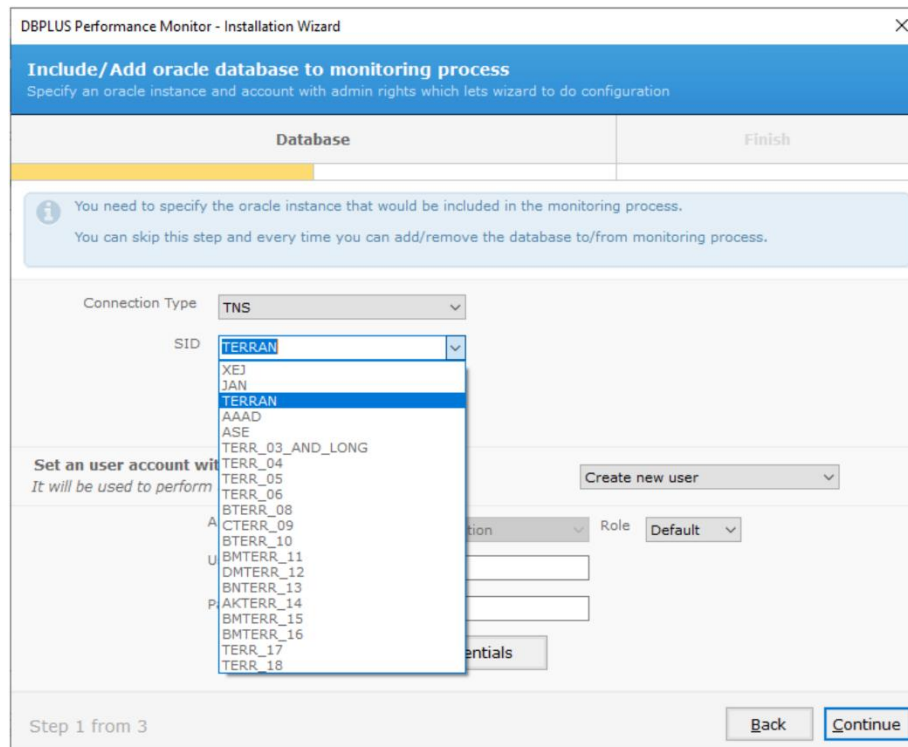
Search for monitored instance

In the latest version, we added instance search at the Configuration Wizard level. The search works on lowercase and uppercase letters, regardless of whether we started from the beginning of the name or search for a character in the middle of the instance name.



Instance search from TNS file

During the process of adding database instances to monitoring, if you choose to connect via TNS file, the application has added an option to display the names of instances that have been read from the TNS file.



Note: In order for the prompting of instances from the TNS file to work, you must first indicate the folder in which the file is located using the program available in the Windows menu: DBPLUS TNS settings.

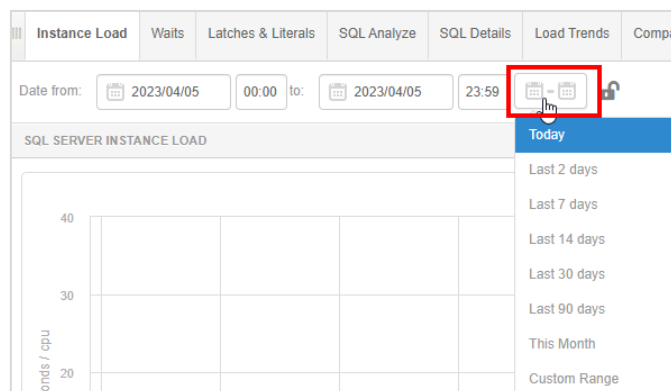
10.3. Improved RMAN Backup status information

In the latest version, we have improved the scripts that check information on the status of backups performed by RMAN functionality. The fix related to the surge of incorrectly reported Backup status information.

The fix also applies to the visibility on the chart of backups that have not completed successfully.

10.4. Calendar filter dictionary

In the latest version, we added the ability to configure default calendar filters. From the latest version, users have the ability to modify the calendar filters available on the application pages. Changing the settings will cause modifications for all users of the application.



The dictionary data can be found on the page in the Configuration > References lists menu at the **Calendar lists** level.

Dashboard

PostgreSQL

Oracle

SQL Server

Instance Analysis

Space monitor

Accounts

Backups

Parameters

Reports

Server's monitor

Configuration

Settings

References lists

Security

Alert settings

Reference types management

REFERENCE

List Name

Server types

Database types

System/Database categories

Application Vendors

Reason class

Calendar lists

REFERENCE LIST ITEMS

Enter the name for new item

Name

Active

Today

☒

Yesterday

☐

Last 2 days

☒

Last 3 days

☐

Last 5 days

☐

Last 7 days

☒

Last 14 days

☒

Last 30 days

☒

Last 90 days

☒

This Week

☐

Prev Week

☐

This Month

☒

Prev Month

☐

This Year

☐

Save