DBPLUS
better performance

DBPLUS
Performance Monitor for PostgreSQL
description of changes in version 2023.4

Date: December 2023.

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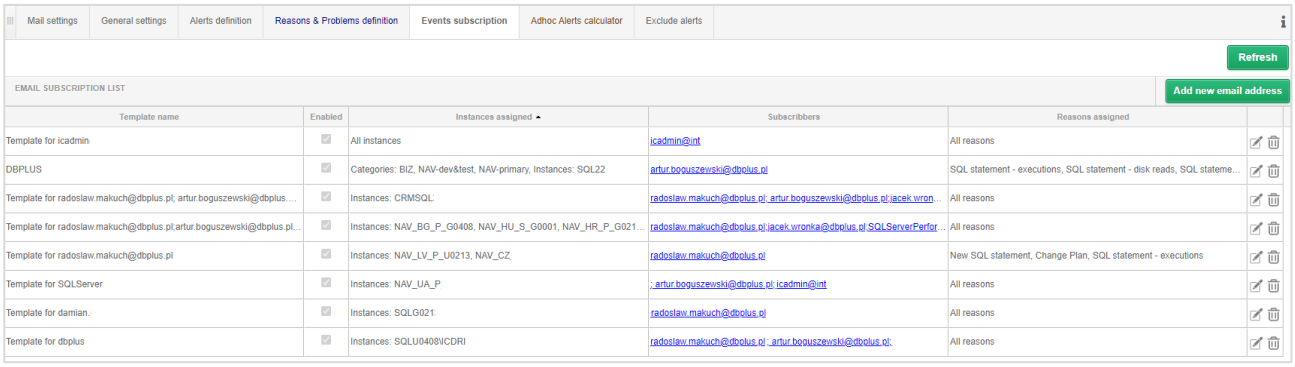
The following is a list of changes to DBPLUS Performance Monitor for monitoring PostgreSQL databases.

New in version 2023. 4

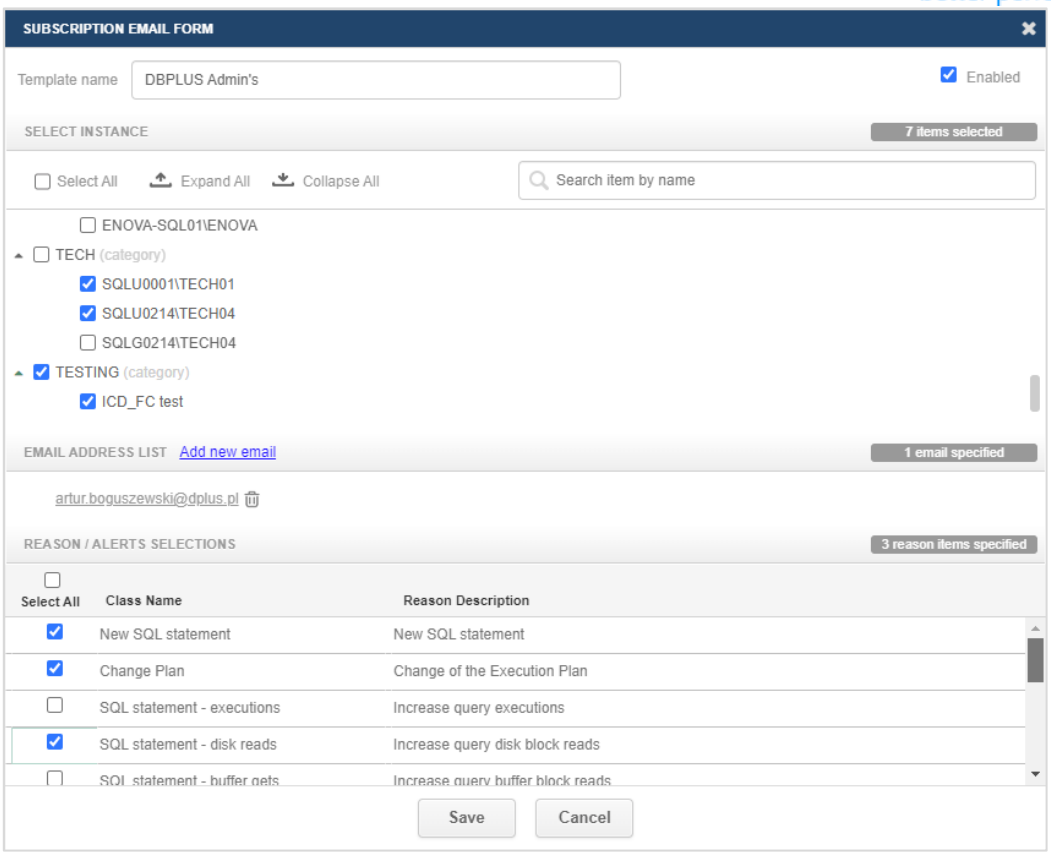
1 Manage email sending from the app

In the latest version of the application, the functionality for managing the sending of email addresses informing about alerts has been modified. Alert information is sent based on events detected by the Anomaly Monitor module. This module analyzes performance trends in the monitored instance and if a problem occurs, the information will be presented in the Performance Monitor application and, if email dispatch has been configured, information about the event will be sent to the specified address.
The improvement introduced in the latest version allows full configuration of email dispatch. The user can indicate which events are to be informed by email.

Configuration is available from the Configuration - Alert setings menu under the **Events subscription** tab.



After uploading the latest application update, the email subscription data will be aggregated and grouped, a template name will be created for each entry - **Template name.**
By default, each entry will contain email sending configurations for each event (alert) **Reasons assigned** will be completed with the value All reason.
The user can add a new entry, change the configuration or delete the shipping configuration.
Adding a new configuration is possible using the **[Add new email address]** button. Within the configuration, the user first indicates for which instances you want alert information to be sent. Instances are grouped into categories. The user has the option to select the entire category or a single instance.



The next step is to add an email address to which information about performance problems will be sent. You can add one or multiple email addresses as part of the configuration.
The last step is to select events for which information is to be sent. The list of events depends on the alerts configured in the **Reasons & Problems** tab **definitions** supplemented with detections sewn in the application code. By default, the following events are available:

- SQL statement - time increase - Increase of query processing time

Indicates an increase in the duration of the Elasped time query.

- SQL statement - executions - Increase query executions

An increase in the number of executions of a given query compared to the statistics collected by monitoring.

- SQL statement - disk reads - Increase query disk block reads

The event reports the return of the number of data blocks read by the query under investigation.

- SQL statement - buffer gets - Increase query buffer block reads

The event informs about the increase in the number of blocks read in memory by the query.

- Online - PostgreSQL instance is not available

Event information is sent when the monitored instance is not available.

- New SQL statement

The event informs about a new query that is executed on the monitored instance, which accounts for a significant share of instance utilization.

- Client - High network wait detections

Verifies the level of network-related waits.

- Lock - High any locking wait detections

The event reports the occurrence of blockages in the monitored instance.

- Change Plan - Change of the Execution Plan

It is responsible for monitoring the query plans. When a query runs on multiple plans, their statistics are compared. If it is detected that the query is running on a suboptimal plan, information about such an event is displayed as a change of execution plan.

- Based on wait - High wait detections

Detection examines trends for waits affecting the performance of the monitored instance. Historical data collected by monitoring is compared with the level of a given wait

- I/O - Increase of query processing time caused by I/O

Informs the user about problems with the operation of the disk array.

2 Minor fixes and improvements

2.1. Improved query parsing mechanism

In the latest version, we have added exceptions for the query parsing mechanism to generate an execution plan. Queries of type: call, cusror or pl-sql batch will not be subject to the parsing mechanism due to the lack of an execution plan.

2.2. Improved grouping of instances on the Dashboard screen

At the request of some of our customers, we have added the ability to filter database instances which have several categories assigned. For this purpose, we have added a checkbox **[Common]** after selecting which only those instances will be displayed that meet the condition of assigning categories selected in the field **Category filter**.
Categories can be assigned in the **Configuration - Servers** menu, by selecting a category in the details for the instance.