



# EDB

## Release Notes

*Release 8.3.0*

**EnterpriseDB**

Dec 26, 2021



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The Postgres Enterprise Manager (PEM) documentation describes the latest version of PEM 8 including minor releases and patches. The release notes in this section provide information on what was new in each release. For new functionality introduced after 8.0.0 in a minor or patch release, there are also indicators within the content about what release introduced the feature.

| Version                   | Release Date | Upstream Merges                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          | Accessibility Conformance                                                                       |
|---------------------------|--------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------|
| [8.3.0](05_830_rel_notes) | 24 Nov 2021  | pgAdmin [5.7]( <a href="https://www.pgadmin.org/docs/pgadmin4/5.7/release_notes_5_7.html#bug-fixes">https://www.pgadmin.org/docs/pgadmin4/5.7/release_notes_5_7.html#bug-fixes</a> )                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     | NA                                                                                              |
| [8.2.0](06_820_rel_notes) | 09 Sep 2021  | pgAdmin [5.4]( <a href="https://www.pgadmin.org/docs/pgadmin4/5.4/release_notes_5_4.html#bug-fixes">https://www.pgadmin.org/docs/pgadmin4/5.4/release_notes_5_4.html#bug-fixes</a> ),<br>[5.5]( <a href="https://www.pgadmin.org/docs/pgadmin4/5.5/release_notes_5_5.html#bug-fixes">https://www.pgadmin.org/docs/pgadmin4/5.5/release_notes_5_5.html#bug-fixes</a> ),<br>and [5.6]( <a href="https://www.pgadmin.org/docs/pgadmin4/5.6/release_notes_5_6.html#bug-fixes">https://www.pgadmin.org/docs/pgadmin4/5.6/release_notes_5_6.html#bug-fixes</a> )                                                                                                                                                                               | NA                                                                                              |
| [8.1.1](07_811_rel_notes) | 22 Jul 2021  | NA                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       | NA                                                                                              |
| [8.1.0](08_810_rel_notes) | 16 Jun 2021  | pgAdmin [5.0]( <a href="https://www.pgadmin.org/docs/pgadmin4/5.3/release_notes_5_0.html#bug-fixes">https://www.pgadmin.org/docs/pgadmin4/5.3/release_notes_5_0.html#bug-fixes</a> ),<br>[5.1]( <a href="https://www.pgadmin.org/docs/pgadmin4/5.3/release_notes_5_1.html#bug-fixes">https://www.pgadmin.org/docs/pgadmin4/5.3/release_notes_5_1.html#bug-fixes</a> ), [5.2]( <a href="https://www.pgadmin.org/docs/pgadmin4/5.3/release_notes_5_2.html#bug-fixes">https://www.pgadmin.org/docs/pgadmin4/5.3/release_notes_5_2.html#bug-fixes</a> ),<br>and [5.3]( <a href="https://www.pgadmin.org/docs/pgadmin4/5.3/release_notes_5_3.html#bug-fixes">https://www.pgadmin.org/docs/pgadmin4/5.3/release_notes_5_3.html#bug-fixes</a> ) | [Conformance Report]( <a href="https://www.enterprisedb.com">https://www.enterprisedb.com</a> ) |

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| Version                   | Release Date | Upstream Merges                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           | Accessibility Conformance                                                                       |
|---------------------------|--------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------|
| [8.0.1](09_801_rel_notes) | 3 Mar 2021   | pgAdmin [4.29]( <a href="https://www.pgadmin.org/docs/pgadmin4/4.29/release_notes_4_29.html#bug-fixes">https://www.pgadmin.org/docs/pgadmin4/4.29/release_notes_4_29.html#bug-fixes</a> ),<br>[4.30]( <a href="https://www.pgadmin.org/docs/pgadmin4/4.30/release_notes_4_30.html#bug-fixes">https://www.pgadmin.org/docs/pgadmin4/4.30/release_notes_4_30.html#bug-fixes</a> ),<br>and [5.0]( <a href="https://www.pgadmin.org/docs/pgadmin4/5.3/release_notes_5_0.html#bug-fixes">https://www.pgadmin.org/docs/pgadmin4/5.3/release_notes_5_0.html#bug-fixes</a> )      | NA                                                                                              |
| [8.0.0](10_800_rel_notes) | 9 Dec 2020   | pgAdmin [4.27]( <a href="https://www.pgadmin.org/docs/pgadmin4/4.29/release_notes_4_27.html#bug-fixes">https://www.pgadmin.org/docs/pgadmin4/4.29/release_notes_4_27.html#bug-fixes</a> ),<br>[4.28]( <a href="https://www.pgadmin.org/docs/pgadmin4/4.29/release_notes_4_28.html#bug-fixes">https://www.pgadmin.org/docs/pgadmin4/4.29/release_notes_4_28.html#bug-fixes</a> ),<br>and [4.29]( <a href="https://www.pgadmin.org/docs/pgadmin4/4.29/release_notes_4_29.html#bug-fixes">https://www.pgadmin.org/docs/pgadmin4/4.29/release_notes_4_29.html#bug-fixes</a> ) | [Conformance Report]( <a href="https://www.enterprisedb.com">https://www.enterprisedb.com</a> ) |
|                           |              |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |                                                                                                 |

Often only select issues are included in the upstream merges. The specific issues included in the merges are listed in the release note topics.

## VERSION 8.3.0

New features, enhancements, bug fixes, and other changes in PEM 8.3.0 include:

| Type        | Description                                                                                                                                                      | ID                                                                                                             |
|-------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------|
| New Feature | New roles, pem_manage_dashboard and pem_manage_chart for creating and managing charts and dashboards are added.                                                  | PEM-728                                                                                                        |
| Enhancement | Supports proxy in the PEM agent webhook configuration [Support Ticket #72432].                                                                                   | PEM-4185                                                                                                       |
| Enhancement | Support Export/Import Custom charts and Custom Dashboards using PEM GUI and RESTapi.                                                                             | PEM-4300,<br>PEM-4325,<br>PEM-3443,<br>PEM-4215                                                                |
| Enhancement | Mask the username from the login related errors when displaying on GUI and return generic error message. [Support Ticket #1341245]                               | PEM-4150                                                                                                       |
| Enhancement | Support for PostgreSQL, EDB Postgres Advanced Server and EDB Postgres Extended version 14 is added.                                                              | PEM-4091                                                                                                       |
| Enhancement | Support for monitoring status and activities for bdr.stat_subscription and bdr.stat_relation on BDR (Bi-Directional Replication) dashboards and probes is added. | PEM-4179                                                                                                       |
| Bug Fix     | Support for the truncate table with restart identity.                                                                                                            | [#2538]( <a href="https://redmine.postgresql.org/issues/2538">https://redmine.postgresql.org/issues/2538</a> ) |
| Bug Fix     | Make code folding case insensitive in the code mirror.                                                                                                           | [#4264]( <a href="https://redmine.postgresql.org/issues/4264">https://redmine.postgresql.org/issues/4264</a> ) |

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| Type    | Description                                                                                                        | ID                                                                                                             |
|---------|--------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------|
| Bug Fix | The database and server information displays on the maintenance process watcher dialog.                            | [#4629]( <a href="https://redmine.postgresql.org/issues/4629">https://redmine.postgresql.org/issues/4629</a> ) |
| Bug Fix | Allow the referenced table to be the same as the local table in one to many relationship for ERD Tool.             | [#6495]( <a href="https://redmine.postgresql.org/issues/6495">https://redmine.postgresql.org/issues/6495</a> ) |
| Bug Fix | Make closing tabs to be smarter by focusing on the appropriate tab when the user closed a tab.                     | [#6625]( <a href="https://redmine.postgresql.org/issues/6625">https://redmine.postgresql.org/issues/6625</a> ) |
| Bug Fix | Set PSQLRC and PSQL_HISTORY environment variables to any specific path to have user separate psql history files.   | [#6691]( <a href="https://redmine.postgresql.org/issues/6691">https://redmine.postgresql.org/issues/6691</a> ) |
| Bug Fix | Table chart rendering for numeric metrics is enhanced. [Support Ticket #880817]                                    | PEM-2251                                                                                                       |
| Bug Fix | A notification banner displays on the monitoring panel when user tries to access excluded database dashboard.      | PEM-4218                                                                                                       |
| Bug Fix | User can use the same internal SMTP TLS settings for 2FA & Email alerts both.                                      | PEM-4262                                                                                                       |
| Bug Fix | The maxlength of url & payload to allow long values in webhook module is increased. [Support Ticket #75367]        | PEM-4326                                                                                                       |
| Bug Fix | The SQL query to revoke privileges on objects like tables are correctly displayed in SQL tab.                      | [#4567]( <a href="https://redmine.postgresql.org/issues/4567">https://redmine.postgresql.org/issues/4567</a> ) |
| Bug Fix | The user can paste the updated table header in safari 12 and 13 browsers.                                          | [#4815]( <a href="https://redmine.postgresql.org/issues/4815">https://redmine.postgresql.org/issues/4815</a> ) |
| Bug Fix | Ensure that trigger function SQL should have 'create or replace function' instead of 'create function' only.       | [#5849]( <a href="https://redmine.postgresql.org/issues/5849">https://redmine.postgresql.org/issues/5849</a> ) |
| Bug Fix | The images can be exported for the relations where the lines are over the nodes.                                   | [#6531]( <a href="https://redmine.postgresql.org/issues/6531">https://redmine.postgresql.org/issues/6531</a> ) |
| Bug Fix | The columns with sequences do not get altered unnecessarily with a schema diff tool.                               | [#6564]( <a href="https://redmine.postgresql.org/issues/6564">https://redmine.postgresql.org/issues/6564</a> ) |
| Bug Fix | The Decimal number is appended for character varying fields while downloading the data in CSV format.              | [#6572]( <a href="https://redmine.postgresql.org/issues/6572">https://redmine.postgresql.org/issues/6572</a> ) |
| Bug Fix | The data output panel display is partially fixed.                                                                  | [#6536]( <a href="https://redmine.postgresql.org/issues/6536">https://redmine.postgresql.org/issues/6536</a> ) |
| Bug Fix | The whitespace in function bodies are applied while generating the script using schema diff tool.                  | [#6620]( <a href="https://redmine.postgresql.org/issues/6620">https://redmine.postgresql.org/issues/6620</a> ) |
| Bug Fix | Enables PEM to retrieve user permissions in case of nested roles which helps to terminate the session for AWS RDS. | [#6641]( <a href="https://redmine.postgresql.org/issues/6641">https://redmine.postgresql.org/issues/6641</a> ) |

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| Type    | Description                                                                            | ID                                                                                                             |
|---------|----------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------|
| Bug Fix | The errors related to HTML tags shown in the error message for JSON editor are fixed.  | [#6668]( <a href="https://redmine.postgresql.org/issues/6668">https://redmine.postgresql.org/issues/6668</a> ) |
| Bug Fix | Fixed UnboundLocalError where local variable 'user_id' referenced before assignment.   | [#6671]( <a href="https://redmine.postgresql.org/issues/6671">https://redmine.postgresql.org/issues/6671</a> ) |
| Bug Fix | Renamed 'Auto rollback?' to 'Auto rollback on error?'.                                 | [#6682]( <a href="https://redmine.postgresql.org/issues/6682">https://redmine.postgresql.org/issues/6682</a> ) |
| Bug Fix | The JSON editor issue of hiding the first record.                                      | [#6684]( <a href="https://redmine.postgresql.org/issues/6684">https://redmine.postgresql.org/issues/6684</a> ) |
| Bug Fix | Ensure that deleting a database should not automatically connect to the next database. | [#6685]( <a href="https://redmine.postgresql.org/issues/6685">https://redmine.postgresql.org/issues/6685</a> ) |
| Bug Fix | Multiple query tool tabs does not get closed for the single close event.               | [#6710]( <a href="https://redmine.postgresql.org/issues/6710">https://redmine.postgresql.org/issues/6710</a> ) |



## VERSION 8.2.0

New features, enhancements, bug fixes, and other changes in PEM 8.2.0 include:

| Type        | Description                                                                                                                                                                                             | ID                                                  |
|-------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------|
| New Feature | Two-Factor Authentication for PEM Server to decrease risk of unauthorized access. See [2FA Authentication](../pem_inst_guide_linux/04_installing_postgres_enterprise_manager/07_1_configuring_2         | PEM-3680, PEM-4090                                  |
| New Feature | View, edit, and format JSON data rendered in an effective way in the Query Tool.                                                                                                                        | [#5198](https://redmine.postgresql.org/issues/5198) |
| Enhancement | Ability to exclude a particular database from PEM monitoring [Support Ticket #1196669]. See [Exclude a database from PEM Monitoring](../pem_admin/02_registering_server/manually-registering-a-server). | PEM-3824                                            |
| Enhancement | Support Export/Import Custom Probes and Custom Alert Templates using PEM GUI and RESTapi.                                                                                                               | PEM-4160, PEM-4183                                  |
| Enhancement | Highlight the long running queries on the dashboards.                                                                                                                                                   | [#1975](https://redmine.postgresql.org/issues/1975) |
| Enhancement | Do not block the query editor window while running a query.                                                                                                                                             | [#3920](https://redmine.postgresql.org/issues/3920) |
| Enhancement | Copy SQL from main window to query tool.                                                                                                                                                                | [#4904](https://redmine.postgresql.org/issues/4904) |
| Enhancement | Set the binary path for the different database server versions.                                                                                                                                         | [#5370](https://redmine.postgresql.org/issues/5370) |

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| Type        | Description                                                                                                            | ID                                                                                                             |
|-------------|------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------|
| Enhancement | Provide maximum width of the column when ‘Re-size by data?’ option in the preferences is set to True.                  | [#6559]( <a href="https://redmine.postgresql.org/issues/6559">https://redmine.postgresql.org/issues/6559</a> ) |
| Bug Fix     | New ids are updated to probe schedule table after re-registering agent/server. [Support Ticket #1324590]               | PEM-4178                                                                                                       |
| Bug Fix     | Query Tool can snap the Data Output panel back after it is detached.                                                   | [#4189]( <a href="https://redmine.postgresql.org/issues/4189">https://redmine.postgresql.org/issues/4189</a> ) |
| Bug Fix     | Replace the keyboard shortcut issue in the query tool on the standard keyboard layout.                                 | [#6388]( <a href="https://redmine.postgresql.org/issues/6388">https://redmine.postgresql.org/issues/6388</a> ) |
| Bug Fix     | Detaching the query editor panel gives a blank white panel.                                                            | [#6398]( <a href="https://redmine.postgresql.org/issues/6398">https://redmine.postgresql.org/issues/6398</a> ) |
| Bug Fix     | The Query Tool does not change the connection string as per the <i>Query Tool tab title</i> .                          | [#6404]( <a href="https://redmine.postgresql.org/issues/6404">https://redmine.postgresql.org/issues/6404</a> ) |
| Bug Fix     | Remove leading whitespace and replace it with ‘[...]’ in the Query Tool data grid, so cells don’t look empty.          | [#6427]( <a href="https://redmine.postgresql.org/issues/6427">https://redmine.postgresql.org/issues/6427</a> ) |
| Bug Fix     | Users can search in <i>all types</i> or <i>subscriptions</i> in search objects without having access to subscriptions. | [#6448]( <a href="https://redmine.postgresql.org/issues/6448">https://redmine.postgresql.org/issues/6448</a> ) |
| Bug Fix     | Users can add members while creating a Login/Role group.                                                               | [#6466]( <a href="https://redmine.postgresql.org/issues/6466">https://redmine.postgresql.org/issues/6466</a> ) |
| Bug Fix     | The properties panel of the Role displays the calendar.                                                                | [#6469]( <a href="https://redmine.postgresql.org/issues/6469">https://redmine.postgresql.org/issues/6469</a> ) |
| Bug Fix     | Execute/Refresh button should not be disabled when we run the empty query.                                             | [#6489]( <a href="https://redmine.postgresql.org/issues/6489">https://redmine.postgresql.org/issues/6489</a> ) |
| Bug Fix     | New Connection Drop Down has lost default maintenance database, auto-select, and tab-through functionality.            | [#6505]( <a href="https://redmine.postgresql.org/issues/6505">https://redmine.postgresql.org/issues/6505</a> ) |
| Bug Fix     | The Decimal number is appended for character varying fields while downloading the data in CSV format.                  | [#6520]( <a href="https://redmine.postgresql.org/issues/6520">https://redmine.postgresql.org/issues/6520</a> ) |
| Bug Fix     | The Directory selection issue with the folder dialog.                                                                  | [#6536]( <a href="https://redmine.postgresql.org/issues/6536">https://redmine.postgresql.org/issues/6536</a> ) |
| Bug Fix     | The setting ‘Open in new browser tab’ is visible and not based on the value of ‘ENABLE_PSQL’.                          | [#6541]( <a href="https://redmine.postgresql.org/issues/6541">https://redmine.postgresql.org/issues/6541</a> ) |

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| Type    | Description                                                                                                                   | ID                                                  |
|---------|-------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------|
| Bug Fix | Copy/paste issues for PSQL tool terminal.                                                                                     | [#6547](https://redmine.postgresql.org/issues/6547) |
| Bug Fix | Disable email deliverability check that was introduced in flask-security-too by default to maintain backward compatibility.   | [#6550](https://redmine.postgresql.org/issues/6550) |
| Bug Fix | Incorrect column name listed in the properties of Index.                                                                      | [#6557](https://redmine.postgresql.org/issues/6557) |
| Bug Fix | Paste is not working through Right-Click option on PSQL.                                                                      | [#6574](https://redmine.postgresql.org/issues/6574) |
| Bug Fix | TypeError 'NoneType' object is not subscriptable.                                                                             | [#6580](https://redmine.postgresql.org/issues/6580) |
| Bug Fix | Incorrect tablespace options in the drop-down for move objects dialog.                                                        | [#6586](https://redmine.postgresql.org/issues/6586) |
| Bug Fix | Titles in query tabs are different.                                                                                           | [#6618](https://redmine.postgresql.org/issues/6618) |
| Bug Fix | Incorrect binary path issue when the user deletes the binary path from the preferences.                                       | [#6619](https://redmine.postgresql.org/issues/6619) |
| Bug Fix | Ensure that all the required options should be loaded when the Range data type is selected while creating a custom data type. | [#6643](https://redmine.postgresql.org/issues/6643) |
| Bug Fix | Dashboard server activity issue when active_since parameter is None.                                                          | [#6650](https://redmine.postgresql.org/issues/6650) |
|         |                                                                                                                               |                                                     |



**VERSION 8.1.1**

The bug fix in PEM 8.1.1 is:

| Type    | Description                                                                                                                                            | ID       |
|---------|--------------------------------------------------------------------------------------------------------------------------------------------------------|----------|
| Bug Fix | REST API tokens are being generated but clients are unable to access the endpoints when using the valid tokens in a service. [Support Ticket: RT71632] | PEM-3893 |



**VERSION 8.1.0**

New features, enhancements, bug fixes, and other changes in PEM 8.1.0 include:

| Type        | Description                                                                                                                                                                                                                                                                                                                                                                           | ID                                                  |
|-------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------|
| New Feature | BDR (Bi-Directional Replication) dashboards and probes to monitor status and activities for Admin, Nodes, and Groups. For example, if replication starts falling behind, the administrator will be alerted and can take proactive action. See [Monitoring BDR Nodes](../pem_ent_feat/17_monitoring_BDR_nodes/).                                                                       | PEM-3893                                            |
| New Feature | Kerberos security and authentication for PEM Web Client through GSSAPI or Active Directory Domain Services. Prevent password interception and prove identity required by highly regulated industries. [Support Ticket #1044678] See [Configuring the PEM Server to use Kerberos Authentication](../pem_inst_guide_linux/04_installing_postgres_enterprise_manager/06_configuring_the_ | PEM-3559                                            |
| New Feature | Entity-Relationship Diagram (ERD) design tool that graphically represents database tables, columns, and interrelationships. Conceptualize database design before building or reverse engineering. See [The ERD Tool](../pem_ent_feat/04_pem_erd_tool/).                                                                                                                               | [#6397](https://redmine.postgresql.org/issues/6397) |
| New Feature | Logical replication support to manage publications and subscriptions for core logical replication in Postgres. Send incremental changes across different database versions or platforms.                                                                                                                                                                                              | [#5912](https://redmine.postgresql.org/issues/5912) |
| New Feature | Quick Search option to locate features and relevant help articles with a guided user experience. Type three characters to start displaying matching possibilities.                                                                                                                                                                                                                    | [#6148](https://redmine.postgresql.org/issues/6148) |

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| Type        | Description                                                                                                                                      | ID                                                                                                             |
|-------------|--------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------|
| Enhancement | EDB Postgres Extended (used by BDR Enterprise) certified for monitoring and administration.                                                      | PEM-4015                                                                                                       |
| Enhancement | Configuration parameters for Audit Manager, Tuning Wizard, and Log Manager no longer require a restart of the database. [Support Ticket #649078] | PEM-795,<br>PEM-1465,<br>PEM-3829                                                                              |
| Enhancement | Manage the privileges for a package node with Grant Wizard.                                                                                      | [#1591]( <a href="https://redmine.postgresql.org/issues/1591">https://redmine.postgresql.org/issues/1591</a> ) |
| Enhancement | Maximize/restore the window for the properties dialog.                                                                                           | [#4064]( <a href="https://redmine.postgresql.org/issues/4064">https://redmine.postgresql.org/issues/4064</a> ) |
| Enhancement | While examining the group role, display the login roles.                                                                                         | [#5404]( <a href="https://redmine.postgresql.org/issues/5404">https://redmine.postgresql.org/issues/5404</a> ) |
| Enhancement | Set automatic width of columns by content size in the data output window.                                                                        | [#5954]( <a href="https://redmine.postgresql.org/issues/5954">https://redmine.postgresql.org/issues/5954</a> ) |
| Enhancement | Support for cache busting webpack chunk files.                                                                                                   | [#5477]( <a href="https://redmine.postgresql.org/issues/5477">https://redmine.postgresql.org/issues/5477</a> ) |
| Enhancement | SSL support for creating a subscription.                                                                                                         | [#6201]( <a href="https://redmine.postgresql.org/issues/6201">https://redmine.postgresql.org/issues/6201</a> ) |
| Enhancement | Support for the creation of Nested Table and Varying Array Type for Advanced Server.                                                             | [#6407]( <a href="https://redmine.postgresql.org/issues/6407">https://redmine.postgresql.org/issues/6407</a> ) |
| Enhancement | Comment column in the properties panel for View and Materialized View collection node.                                                           | [#6416]( <a href="https://redmine.postgresql.org/issues/6416">https://redmine.postgresql.org/issues/6416</a> ) |
| Bug Fix     | Process the alert if there is an error while processing alert detailed information. [Support Ticket #1201865]                                    | PEM-1032                                                                                                       |
| Bug Fix     | Remove the obsolete data of a deleted database from pemhistory on the next purge. Support Ticket #1055978]                                       | PEM-3810                                                                                                       |
| Bug Fix     | Flapping does not end when at least a one-time alert triggered during the flapping period. [Support Ticket #1165155]                             | PEM-3966                                                                                                       |
| Bug Fix     | Getting 404 for REST API of agent probe history. [Support Ticket #1219795]                                                                       | PEM-3974                                                                                                       |
| Bug Fix     | The <i>A user expires in N days</i> alert template code failing on Postgres. [Support Ticket #1235289]                                           | PEM-3988                                                                                                       |
| Bug Fix     | Check for sslutils for version 1.3 in the configure script. [Support Ticket #1284690]                                                            | PEM-4042                                                                                                       |

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| Type    | Description                                                                                                                                                 | ID                                                                                                             |
|---------|-------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------|
| Bug Fix | Correct OID for binding variable <i>downObjects</i> for AgentsDown and ServersDown alerts. [Support Ticket #1300113]                                        | PEM-4073                                                                                                       |
| Bug Fix | Read the log configuration data from the system probe tables for the selected servers in the Log Manager. [Support Ticket #1262817]                         | PEM-4029                                                                                                       |
| Bug Fix | Skip the PEM Server registration when installing using only a web server option to avoid duplicate entries in the server listing. [Support Ticket #1210935] | PEM-3977                                                                                                       |
| Bug Fix | Alignment issues under preferences for the German language.                                                                                                 | [#4014]( <a href="https://redmine.postgresql.org/issues/4014">https://redmine.postgresql.org/issues/4014</a> ) |
| Bug Fix | Issue with renaming the database by another user.                                                                                                           | [#4203]( <a href="https://redmine.postgresql.org/issues/4203">https://redmine.postgresql.org/issues/4203</a> ) |
| Bug Fix | Drag and drop object is not correct in CodeMirror for properties dialog.                                                                                    | [#4436]( <a href="https://redmine.postgresql.org/issues/4436">https://redmine.postgresql.org/issues/4436</a> ) |
| Bug Fix | Adding/updating records fails if the table name contains a percent sign.                                                                                    | [#4438]( <a href="https://redmine.postgresql.org/issues/4438">https://redmine.postgresql.org/issues/4438</a> ) |
| Bug Fix | Ensure that autovacuum and analyze scale factors should be editable with more than two decimals.                                                            | [#4784]( <a href="https://redmine.postgresql.org/issues/4784">https://redmine.postgresql.org/issues/4784</a> ) |
| Bug Fix | % displayed twice in Explain Analyze for query and table.                                                                                                   | [#4847]( <a href="https://redmine.postgresql.org/issues/4847">https://redmine.postgresql.org/issues/4847</a> ) |
| Bug Fix | Rename text 'table' to 'relation' in the Statistics tab for Explain Analyze.                                                                                | [#4849]( <a href="https://redmine.postgresql.org/issues/4849">https://redmine.postgresql.org/issues/4849</a> ) |
| Bug Fix | Properties tab for Collection Nodes is unresponsive after switching the tabs.                                                                               | [#4959]( <a href="https://redmine.postgresql.org/issues/4959">https://redmine.postgresql.org/issues/4959</a> ) |
| Bug Fix | Save button is enabled for functions/procedures by default when opening the Properties dialog.                                                              | [#5073]( <a href="https://redmine.postgresql.org/issues/5073">https://redmine.postgresql.org/issues/5073</a> ) |
| Bug Fix | Hanging symlinks in a directory causes Select file dialog to break.                                                                                         | [#5119]( <a href="https://redmine.postgresql.org/issues/5119">https://redmine.postgresql.org/issues/5119</a> ) |
| Bug Fix | Ensure that the Query Tool tab should be closed after server disconnection when auto-commit/auto-rollback is set to false.                                  | [#5519]( <a href="https://redmine.postgresql.org/issues/5519">https://redmine.postgresql.org/issues/5519</a> ) |
| Bug Fix | Data is displayed in the wrong order when executing the query repeatedly.                                                                                   | [#5555]( <a href="https://redmine.postgresql.org/issues/5555">https://redmine.postgresql.org/issues/5555</a> ) |
| Bug Fix | Ensure that cell content is auto-selected when editing the cell data.                                                                                       | [#5810]( <a href="https://redmine.postgresql.org/issues/5810">https://redmine.postgresql.org/issues/5810</a> ) |

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Table 1 – continued from previous page

| Type    | Description                                                                                                                                   | ID                                                                                                             |
|---------|-----------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------|
| Bug Fix | Ensure that SQL formatter should not add extra tabs and format the SQL correctly.                                                             | [#5869]( <a href="https://redmine.postgresql.org/issues/5869">https://redmine.postgresql.org/issues/5869</a> ) |
| Bug Fix | Shortcut keys are not working with manage macro.                                                                                              | [#5908]( <a href="https://redmine.postgresql.org/issues/5908">https://redmine.postgresql.org/issues/5908</a> ) |
| Bug Fix | Encoding issue when database encoding set to SQL_ASCII and name of the column is in ASCII character.                                          | [#6018]( <a href="https://redmine.postgresql.org/issues/6018">https://redmine.postgresql.org/issues/6018</a> ) |
| Bug Fix | Ensure that the user should not change the connection when a long query is running.                                                           | [#6082]( <a href="https://redmine.postgresql.org/issues/6082">https://redmine.postgresql.org/issues/6082</a> ) |
| Bug Fix | Flickering issue with the input box on check constraints.                                                                                     | [#6106]( <a href="https://redmine.postgresql.org/issues/6106">https://redmine.postgresql.org/issues/6106</a> ) |
| Bug Fix | User is unable to update column-level privileges from the security tab.                                                                       | [#6117]( <a href="https://redmine.postgresql.org/issues/6117">https://redmine.postgresql.org/issues/6117</a> ) |
| Bug Fix | Ensure that the user should be able to kill the session from Dashboard if the user has a 'pg_signal_backend' role.                            | [#6159]( <a href="https://redmine.postgresql.org/issues/6159">https://redmine.postgresql.org/issues/6159</a> ) |
| Bug Fix | Cursor shifts its focus to the wrong window for all the Query Tool related model dialogs.                                                     | [#6161]( <a href="https://redmine.postgresql.org/issues/6161">https://redmine.postgresql.org/issues/6161</a> ) |
| Bug Fix | Correct the syntax for 'CREATE TRIGGER', use 'EXECUTE FUNCTION' instead of 'EXECUTE PROCEDURE' from Postgres v11 onwards.                     | [#6220]( <a href="https://redmine.postgresql.org/issues/6220">https://redmine.postgresql.org/issues/6220</a> ) |
| Bug Fix | User is not able to create the subscription.                                                                                                  | [#6230]( <a href="https://redmine.postgresql.org/issues/6230">https://redmine.postgresql.org/issues/6230</a> ) |
| Bug Fix | Ensure that SQL formatter should not use tab size if 'Use spaces?' set to false.                                                              | [#6233]( <a href="https://redmine.postgresql.org/issues/6233">https://redmine.postgresql.org/issues/6233</a> ) |
| Bug Fix | Ensure that the view/edit data panel should not be opened for unsupported nodes using the keyboard shortcut.                                  | [#6206]( <a href="https://redmine.postgresql.org/issues/6206">https://redmine.postgresql.org/issues/6206</a> ) |
| Bug Fix | User is unable to create a subscription if the host/IP address for connection is 127.0.0.1.                                                   | [#6253]( <a href="https://redmine.postgresql.org/issues/6253">https://redmine.postgresql.org/issues/6253</a> ) |
| Bug Fix | Ensure that proper error messages should be shown on the properties and statistics tab in case of insufficient privileges for a subscription. | [#6259]( <a href="https://redmine.postgresql.org/issues/6259">https://redmine.postgresql.org/issues/6259</a> ) |
| Bug Fix | 'Create Slot' option is disabled in case of the same IP/host provided but the port is different.                                              | [#6260]( <a href="https://redmine.postgresql.org/issues/6260">https://redmine.postgresql.org/issues/6260</a> ) |

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Table 1 – continued from previous page

| Type    | Description                                                                                                                                   | ID                                                                                                             |
|---------|-----------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------|
| Bug Fix | User is not able to change the connection in the Query Tool when any SQL file is opened.                                                      | [#6272]( <a href="https://redmine.postgresql.org/issues/6272">https://redmine.postgresql.org/issues/6272</a> ) |
| Bug Fix | Ensure that the strings in the LDAP auth module are translatable.                                                                             | [#6274]( <a href="https://redmine.postgresql.org/issues/6274">https://redmine.postgresql.org/issues/6274</a> ) |
| Bug Fix | Schema diff shows the wrong SQL when comparing triggers with different when clauses.                                                          | [#6281]( <a href="https://redmine.postgresql.org/issues/6281">https://redmine.postgresql.org/issues/6281</a> ) |
| Bug Fix | Ensure that the template database should be visible while creating the database.                                                              | [#6286]( <a href="https://redmine.postgresql.org/issues/6286">https://redmine.postgresql.org/issues/6286</a> ) |
| Bug Fix | String index out of range error where the dependent tab is in focus and selecting any publication or table.                                   | [#6292]( <a href="https://redmine.postgresql.org/issues/6292">https://redmine.postgresql.org/issues/6292</a> ) |
| Bug Fix | Procedure creation failed when providing the Volatility option.                                                                               | [#6293]( <a href="https://redmine.postgresql.org/issues/6293">https://redmine.postgresql.org/issues/6293</a> ) |
| Bug Fix | Dependent tab threw an error when selecting any Login/Group role.                                                                             | [#6294]( <a href="https://redmine.postgresql.org/issues/6294">https://redmine.postgresql.org/issues/6294</a> ) |
| Bug Fix | While selecting the row which was deleted just before the selection operation.                                                                | [#6306]( <a href="https://redmine.postgresql.org/issues/6306">https://redmine.postgresql.org/issues/6306</a> ) |
| Bug Fix | Incorrect values were visible in the Dependents tab for publication.                                                                          | [#6307]( <a href="https://redmine.postgresql.org/issues/6307">https://redmine.postgresql.org/issues/6307</a> ) |
| Bug Fix | Copy/paste rows in view data paste the wrong value for Boolean type.                                                                          | [#6312]( <a href="https://redmine.postgresql.org/issues/6312">https://redmine.postgresql.org/issues/6312</a> ) |
| Bug Fix | Ensure that the primary key should be visible properly in the Table dialog.                                                                   | [#6316]( <a href="https://redmine.postgresql.org/issues/6316">https://redmine.postgresql.org/issues/6316</a> ) |
| Bug Fix | Ensure that toggle buttons are accessible by most screen readers.                                                                             | [#6317]( <a href="https://redmine.postgresql.org/issues/6317">https://redmine.postgresql.org/issues/6317</a> ) |
| Bug Fix | Ensure that the grantor name should be visible properly for the Security tab in the Table dialog.                                             | [#6323]( <a href="https://redmine.postgresql.org/issues/6323">https://redmine.postgresql.org/issues/6323</a> ) |
| Bug Fix | Ensure that the file format for the storage manager should be 'All files' and for other dialogs, it should remember the last selected format. | [#6325]( <a href="https://redmine.postgresql.org/issues/6325">https://redmine.postgresql.org/issues/6325</a> ) |
| Bug Fix | Ensure that while comparing domains check function dependencies should be considered in schema diff.                                          | [#6327]( <a href="https://redmine.postgresql.org/issues/6327">https://redmine.postgresql.org/issues/6327</a> ) |

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Table 1 – continued from previous page

| Type    | Description                                                                                                                                                | ID                                                                                                             |
|---------|------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------|
| Bug Fix | Wrong SQL is showing for the child partition tables.                                                                                                       | [#6329]( <a href="https://redmine.postgresql.org/issues/6329">https://redmine.postgresql.org/issues/6329</a> ) |
| Bug Fix | Sizing issue of help dialog for Query Tool when open in the new browser tab.                                                                               | [#6333]( <a href="https://redmine.postgresql.org/issues/6333">https://redmine.postgresql.org/issues/6333</a> ) |
| Bug Fix | CSV download quotes the numeric columns.                                                                                                                   | [#6341]( <a href="https://redmine.postgresql.org/issues/6341">https://redmine.postgresql.org/issues/6341</a> ) |
| Bug Fix | Cannot unpack non-iterable response object error when selecting any partition.                                                                             | [#6344]( <a href="https://redmine.postgresql.org/issues/6344">https://redmine.postgresql.org/issues/6344</a> ) |
| Bug Fix | Ensure that we should not allow opening external files that are dragged into it.                                                                           | [#6355]( <a href="https://redmine.postgresql.org/issues/6355">https://redmine.postgresql.org/issues/6355</a> ) |
| Bug Fix | Users are unable to see data of the partitions using the View/Edit data option.                                                                            | [#6375]( <a href="https://redmine.postgresql.org/issues/6375">https://redmine.postgresql.org/issues/6375</a> ) |
| Bug Fix | A connection warning should be displayed when the user clicks on Explain or Explain Analyze and the database server is disconnected from the browser tree. | [#6376]( <a href="https://redmine.postgresql.org/issues/6376">https://redmine.postgresql.org/issues/6376</a> ) |
| Bug Fix | Schema diff does not create DROP DEFAULT statements for columns.                                                                                           | [#6377]( <a href="https://redmine.postgresql.org/issues/6377">https://redmine.postgresql.org/issues/6377</a> ) |
| Bug Fix | Foreign data wrapper properties are not visible if the host option contains two host addresses.                                                            | [#6379]( <a href="https://redmine.postgresql.org/issues/6379">https://redmine.postgresql.org/issues/6379</a> ) |
| Bug Fix | Ensure that Backup and Restore should work on shared servers.                                                                                              | [#6385]( <a href="https://redmine.postgresql.org/issues/6385">https://redmine.postgresql.org/issues/6385</a> ) |
| Bug Fix | The filter 'Include/Exclude By Selection' is not working for null values.                                                                                  | [#6392]( <a href="https://redmine.postgresql.org/issues/6392">https://redmine.postgresql.org/issues/6392</a> ) |
| Bug Fix | Ensure that the user should not be able to add duplicate panels.                                                                                           | [#6399]( <a href="https://redmine.postgresql.org/issues/6399">https://redmine.postgresql.org/issues/6399</a> ) |
| Bug Fix | Current debug line is not visible in the 'Dark' theme.                                                                                                     | [#6409]( <a href="https://redmine.postgresql.org/issues/6409">https://redmine.postgresql.org/issues/6409</a> ) |
| Bug Fix | Duplicate columns are visible in the browser tree, which is owned by two sequences.                                                                        | [#6413]( <a href="https://redmine.postgresql.org/issues/6413">https://redmine.postgresql.org/issues/6413</a> ) |
| Bug Fix | Help message was not displaying correctly on the Login/Group role.                                                                                         | [#6414]( <a href="https://redmine.postgresql.org/issues/6414">https://redmine.postgresql.org/issues/6414</a> ) |

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Table 1 – continued from previous page

| Type    | Description                                                                     | ID                                                                                                             |
|---------|---------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------|
| Bug Fix | Query editor is not being closed if the user clicks on the 'Don't Save' button. | [#6417]( <a href="https://redmine.postgresql.org/issues/6417">https://redmine.postgresql.org/issues/6417</a> ) |
| Bug Fix | File dialog shows incorrect files for the selected file types.                  | [#6443]( <a href="https://redmine.postgresql.org/issues/6443">https://redmine.postgresql.org/issues/6443</a> ) |
| Bug Fix | Duplicate SQL issue for tables with more than one partition.                    | [#6478]( <a href="https://redmine.postgresql.org/issues/6478">https://redmine.postgresql.org/issues/6478</a> ) |



## VERSION 8.0.1

Enhancements, bug fixes, and other changes in PEM 8.0.1 include:

| Type        | Description                                                                                                                           | ID                                                                                                             |
|-------------|---------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------|
| Enhancement | Allowing the dash (-) character in the superuser name that is provided during configuration. [Support Ticket #1055435]                | PEM-3577                                                                                                       |
| Enhancement | Gracefully closing the operating system resources during batch probe and command execution to avoid errors. [Support Ticket #1048713] | PEM-3881                                                                                                       |
| Enhancement | Improved support for Unicode string handling in pemAgent. [Support Ticket #1153153]                                                   | PEM-3901                                                                                                       |
| Enhancement | Option to hide or unhide the Dashboard, Statistics, Dependents, and Dependencies tabs.                                                | [#5091]( <a href="https://redmine.postgresql.org/issues/5091">https://redmine.postgresql.org/issues/5091</a> ) |
| Enhancement | Improve the explain plan details by showing popup instead of tooltip on clicking of the specified node.                               | [#5488]( <a href="https://redmine.postgresql.org/issues/5488">https://redmine.postgresql.org/issues/5488</a> ) |
| Enhancement | Added appropriate help message and a placeholder for letting users know about the account password expiry for Login/Group Role.       | [#5973]( <a href="https://redmine.postgresql.org/issues/5973">https://redmine.postgresql.org/issues/5973</a> ) |
| Enhancement | Added informative message when there is no difference found for schema diff.                                                          | [#6122]( <a href="https://redmine.postgresql.org/issues/6122">https://redmine.postgresql.org/issues/6122</a> ) |
| Enhancement | Added 'Count Rows' option to the partition sub tables.                                                                                | [#5282]( <a href="https://redmine.postgresql.org/issues/5282">https://redmine.postgresql.org/issues/5282</a> ) |
| Bug Fix     | Dashboard refresh not displaying BART. [Support Ticket #1046037] backups.                                                             | PEM-3549                                                                                                       |
| Bug Fix     | Bundle pgaevent.dll in agent Windows installer to suppress event message log error. [Support Ticket #1106021]                         | PEM-3845                                                                                                       |
| Bug Fix     | BART restore failing when the agent is not bound with the BART server. [Support Ticket #1129454]                                      | PEM-3903                                                                                                       |
| Bug Fix     | Pressing the back button shows another instance of the main page inside of the Query Tool tab.                                        | [#4892]( <a href="https://redmine.postgresql.org/issues/4892">https://redmine.postgresql.org/issues/4892</a> ) |

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Table 1 – continued from previous page

| Type    | Description                                                                                                                                | ID                                                                                                             |
|---------|--------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------|
| Bug Fix | The focus is not properly set on the filter text editor after closing the error dialog.                                                    | [#5809]( <a href="https://redmine.postgresql.org/issues/5809">https://redmine.postgresql.org/issues/5809</a> ) |
| Bug Fix | Ensure that username should be visible in the ‘Connect to Server’ popup when service and user name are both specified.                     | [#5871]( <a href="https://redmine.postgresql.org/issues/5871">https://redmine.postgresql.org/issues/5871</a> ) |
| Bug Fix | Ensure that the ‘template1’ database should not be visible after pg_upgrade.                                                               | [#5875]( <a href="https://redmine.postgresql.org/issues/5875">https://redmine.postgresql.org/issues/5875</a> ) |
| Bug Fix | False error is shown while adding a new foreign key from the table dialog when a foreign key already exists and Auto FK Index set to true. | [#5886]( <a href="https://redmine.postgresql.org/issues/5886">https://redmine.postgresql.org/issues/5886</a> ) |
| Bug Fix | The Save button is enabled by default in Macro.                                                                                            | [#5905]( <a href="https://redmine.postgresql.org/issues/5905">https://redmine.postgresql.org/issues/5905</a> ) |
| Bug Fix | Remove the extra line after the Manage Macros menu while clearing all macros.                                                              | [#5906]( <a href="https://redmine.postgresql.org/issues/5906">https://redmine.postgresql.org/issues/5906</a> ) |
| Bug Fix | Ensure that ‘Clear All Rows’ should not work if there is no existing macro available and the user does not specify any value.              | [#5907]( <a href="https://redmine.postgresql.org/issues/5907">https://redmine.postgresql.org/issues/5907</a> ) |
| Bug Fix | The server is disconnected with an error message displayed if the user creates Macro with invalid SQL.                                     | [#5929]( <a href="https://redmine.postgresql.org/issues/5929">https://redmine.postgresql.org/issues/5929</a> ) |
| Bug Fix | Ensure that the macro query result should be downloaded properly.                                                                          | [#5965]( <a href="https://redmine.postgresql.org/issues/5965">https://redmine.postgresql.org/issues/5965</a> ) |
| Bug Fix | Ensure that dirty indicator (*) should not be visible when renaming the tabs.                                                              | [#5991]( <a href="https://redmine.postgresql.org/issues/5991">https://redmine.postgresql.org/issues/5991</a> ) |
| Bug Fix | The escape character is shown when the server/database name has some special characters.                                                   | [#5992]( <a href="https://redmine.postgresql.org/issues/5992">https://redmine.postgresql.org/issues/5992</a> ) |
| Bug Fix | Update Flask-BabelEx to the latest.                                                                                                        | [#5997]( <a href="https://redmine.postgresql.org/issues/5997">https://redmine.postgresql.org/issues/5997</a> ) |
| Bug Fix | Schema diff doesn’t show the result of compare if source schema has tables with RLS.                                                       | [#5998]( <a href="https://redmine.postgresql.org/issues/5998">https://redmine.postgresql.org/issues/5998</a> ) |
| Bug Fix | An illegal argument is showing for trigger SQL when a trigger is created for View.                                                         | [#6003]( <a href="https://redmine.postgresql.org/issues/6003">https://redmine.postgresql.org/issues/6003</a> ) |
| Bug Fix | Autocomplete issue where it is not showing any suggestions if the schema name contains escape characters.                                  | [#6045]( <a href="https://redmine.postgresql.org/issues/6045">https://redmine.postgresql.org/issues/6045</a> ) |
| Bug Fix | The state of the Save File icon does not match the dirty editor indicator.                                                                 | [#6046]( <a href="https://redmine.postgresql.org/issues/6046">https://redmine.postgresql.org/issues/6046</a> ) |

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Table 1 – continued from previous page

| Type    | Description                                                                                               | ID                                                                                                             |
|---------|-----------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------|
| Bug Fix | The dirty indicator stays active even if all changes were undone.                                         | [#6047]( <a href="https://redmine.postgresql.org/issues/6047">https://redmine.postgresql.org/issues/6047</a> ) |
| Bug Fix | Ensure that the rename panel should be disabled when the SQL file opened in the query tool.               | [#6058]( <a href="https://redmine.postgresql.org/issues/6058">https://redmine.postgresql.org/issues/6058</a> ) |
| Bug Fix | Extra parentheses issue around joins for Views.                                                           | [#6061]( <a href="https://redmine.postgresql.org/issues/6061">https://redmine.postgresql.org/issues/6061</a> ) |
| Bug Fix | Accessibility issues in schema diff module.                                                               | [#6065]( <a href="https://redmine.postgresql.org/issues/6065">https://redmine.postgresql.org/issues/6065</a> ) |
| Bug Fix | Issue on refreshing files in Query Tool.                                                                  | [#6069]( <a href="https://redmine.postgresql.org/issues/6069">https://redmine.postgresql.org/issues/6069</a> ) |
| Bug Fix | Accessibility issues in various dialogs.                                                                  | [#6077]( <a href="https://redmine.postgresql.org/issues/6077">https://redmine.postgresql.org/issues/6077</a> ) |
| Bug Fix | TypeError exception in schema diff when selected any identical object.                                    | [#6084]( <a href="https://redmine.postgresql.org/issues/6084">https://redmine.postgresql.org/issues/6084</a> ) |
| Bug Fix | The dependencies tab showing multiple owners for the objects having shared dependencies.                  | [#6087]( <a href="https://redmine.postgresql.org/issues/6087">https://redmine.postgresql.org/issues/6087</a> ) |
| Bug Fix | Issue of deleting records when the user tries to delete multiple records.                                 | [#6098]( <a href="https://redmine.postgresql.org/issues/6098">https://redmine.postgresql.org/issues/6098</a> ) |
| Bug Fix | Ensure that the user should be able to specify an older date for the account expiration of the role/user. | [#6120]( <a href="https://redmine.postgresql.org/issues/6120">https://redmine.postgresql.org/issues/6120</a> ) |
| Bug Fix | The database list in the new connection window is not visible.                                            | [#6121]( <a href="https://redmine.postgresql.org/issues/6121">https://redmine.postgresql.org/issues/6121</a> ) |
| Bug Fix | Sequences are not created.                                                                                | [#6128]( <a href="https://redmine.postgresql.org/issues/6128">https://redmine.postgresql.org/issues/6128</a> ) |
| Bug Fix | Ensure that verbose logs should be visible for Utility (Backup, Maintenance) jobs.                        | [#6140]( <a href="https://redmine.postgresql.org/issues/6140">https://redmine.postgresql.org/issues/6140</a> ) |
| Bug Fix | Ensure that the current value of the sequence should be ignored while comparing using schema diff.        | [#6144]( <a href="https://redmine.postgresql.org/issues/6144">https://redmine.postgresql.org/issues/6144</a> ) |
| Bug Fix | Strikethrough is not visible for rows selected for deletion after scrolling.                              | [#6157]( <a href="https://redmine.postgresql.org/issues/6157">https://redmine.postgresql.org/issues/6157</a> ) |
| Bug Fix | User was unable to change the background color for a server.                                              | [#6178]( <a href="https://redmine.postgresql.org/issues/5091">https://redmine.postgresql.org/issues/5091</a> ) |

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| Type    | Description                                                                        | ID                                                                                                             |
|---------|------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------|
| Bug Fix | Utility (Backup, Maintenance) jobs are failing when the log level is set to DEBUG. | [#6208]( <a href="https://redmine.postgresql.org/issues/5091">https://redmine.postgresql.org/issues/5091</a> ) |

## VERSION 8.0.0

New features, enhancements, bug fixes, and other changes in PEM 8.0.0 include:

| Type        | Description                                                                                                                                                                                                                                     | ID                                                  |
|-------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------|
| New Feature | <b>Security Best Practices:</b> [ <i>PEM Security Best Practices</i> ](../pem_security_best_practices) documentation is available from our docs website. It will help you to setup PEM in a secure way to minimize the risk of vulnerabilities. | PEM-3802,<br>PEM-3805                               |
| New Feature | <b>Webhooks:</b> You can now use PEM to send event based notifications to webhook endpoints like third party systems or partner applications.                                                                                                   | PEM-3819                                            |
| Enhancement | <b>Performance Diagnostics:</b> Use the Performance Diagnostic tool with PostgreSQL 10 or later versions after installing 'edb_wait_states' plugin.                                                                                             | NA                                                  |
| Enhancement | <b>PEM Backend Database:</b> The PEM Server (backend database) supports only PostgreSQL or EDB Postgres Advanced Server versions 11 or later.                                                                                                   | NA                                                  |
| Enhancement | <b>Enhanced Alerting:</b> You can now replace alert placeholders inside the script and also can view more informative and contextual alert details. [Support Ticket #1051538, #891377]                                                          | PEM-3612,<br>PEM-3613,<br>PEM-2501                  |
| Enhancement | <b>Enhanced BART Integration:</b> Configure 'bart_socket_name' and also parameters such as '-checksum-algorithm' and '-disable-checksum' through PEM.                                                                                           | PEM-3669                                            |
| Enhancement | You can use the Macros feature in the Query tool.                                                                                                                                                                                               | [#1402](https://redmine.postgresql.org/issues/1402) |
| Enhancement | You can use the trigger function under the respective trigger node.                                                                                                                                                                             | [#2519](https://redmine.postgresql.org/issues/2519) |

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| Type        | Description                                                                                                                                                                        | ID                                                                                                             |
|-------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------|
| Enhancement | You can download the utility files at the client side using Storage Manager.                                                                                                       | [#3318]( <a href="https://redmine.postgresql.org/issues/3318">https://redmine.postgresql.org/issues/3318</a> ) |
| Enhancement | You can use the open Query tool tab to change the database connection.                                                                                                             | [#3794]( <a href="https://redmine.postgresql.org/issues/3794">https://redmine.postgresql.org/issues/3794</a> ) |
| Enhancement | You can rename the Query tool and Debugger tab.                                                                                                                                    | [#4230]( <a href="https://redmine.postgresql.org/issues/4230">https://redmine.postgresql.org/issues/4230</a> ) |
| Enhancement | You can ignore the owner while comparing the objects through Schema diff tool.                                                                                                     | [#5200]( <a href="https://redmine.postgresql.org/issues/5200">https://redmine.postgresql.org/issues/5200</a> ) |
| Enhancement | Improved installation and upgrade guide as per customer feedback. [Support Ticket # 1101462]                                                                                       | PEM-3808                                                                                                       |
| Bug Fix     | Documented that while configuring the pem server, certificates must be present in data directory of back-end database server in the installation guides. [Support Ticket # 729238] | PEM-672                                                                                                        |
| Bug Fix     | Connections not getting released when the user disconnects the database server. [Support Ticket #969833]                                                                           | PEM-3184                                                                                                       |
| Bug Fix     | Fixed an issue where BART integration isn't working, when BART is installed at custom location. [Support Ticket # 1088574]                                                         | PEM-3737                                                                                                       |
| Bug Fix     | Do not include detailed alert information while sending SNMP traps. [Support Ticket #1069206, #1115277]                                                                            | PEM-3791                                                                                                       |
| Bug Fix     | Two database connections made for failed login attempts which result in locking the user profile. [Support Ticket #1103288]                                                        | PEM-3816                                                                                                       |
| Bug Fix     | Package deployment and streaming replication deprecation warning is added in Upgrade and Migration Guide. [Support Ticket #1021617]                                                | PEM-3799                                                                                                       |
| Bug Fix     | Ensure that some fields should be disabled for the trigger in edit mode.                                                                                                           | [#4639]( <a href="https://redmine.postgresql.org/issues/4639">https://redmine.postgresql.org/issues/4639</a> ) |
| Bug Fix     | Added a useful message when the explain plan is not used and empty.                                                                                                                | [#4806]( <a href="https://redmine.postgresql.org/issues/4806">https://redmine.postgresql.org/issues/4806</a> ) |

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| Type    | Description                                                                                                      | ID                                                                                                             |
|---------|------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------|
| Bug Fix | File extension is stripped on renaming a file.                                                                   | [#4855]( <a href="https://redmine.postgresql.org/issues/4855">https://redmine.postgresql.org/issues/4855</a> ) |
| Bug Fix | Ensure that the 'ctrl + a' shortcut does not move the cursor in the SQL Editor.                                  | [#5131]( <a href="https://redmine.postgresql.org/issues/5131">https://redmine.postgresql.org/issues/5131</a> ) |
| Bug Fix | Fixed an issue where schema diff is showing identical tables as different due to default vacuum settings.        | [#5826]( <a href="https://redmine.postgresql.org/issues/5826">https://redmine.postgresql.org/issues/5826</a> ) |
| Bug Fix | Fixed reverse engineering SQL where parenthesis is not properly arranged for View/MView definition.              | [#5830]( <a href="https://redmine.postgresql.org/issues/5830">https://redmine.postgresql.org/issues/5830</a> ) |
| Bug Fix | Fixed 'can't execute an empty query' message if the user changes the option of Auto FK Index.                    | [#5835]( <a href="https://redmine.postgresql.org/issues/5835">https://redmine.postgresql.org/issues/5835</a> ) |
| Bug Fix | Fixed an issue where the server is not able to connect using the service.                                        | [#5841]( <a href="https://redmine.postgresql.org/issues/5841">https://redmine.postgresql.org/issues/5841</a> ) |
| Bug Fix | Ensure that query history should be listed by date/time in descending order.                                     | [#5842]( <a href="https://redmine.postgresql.org/issues/5842">https://redmine.postgresql.org/issues/5842</a> ) |
| Bug Fix | Fixed an issue where the 'PARALLEL UNSAFE' option is missing from reverse engineering SQL of function/procedure. | [#5843]( <a href="https://redmine.postgresql.org/issues/5843">https://redmine.postgresql.org/issues/5843</a> ) |
| Bug Fix | Fixed an issue where 'Rows X' column values were not visible properly for Explain Analyze in Dark theme.         | [#5853]( <a href="https://redmine.postgresql.org/issues/5853">https://redmine.postgresql.org/issues/5853</a> ) |
| Bug Fix | Ensure that the user should be able to change the start value of the existing sequence.                          | [#5855]( <a href="https://redmine.postgresql.org/issues/5855">https://redmine.postgresql.org/issues/5855</a> ) |
| Bug Fix | Ensure that search object functionality works with case insensitive strings.                                     | [#5858]( <a href="https://redmine.postgresql.org/issues/5858">https://redmine.postgresql.org/issues/5858</a> ) |
| Bug Fix | Fixed invalid literal issue when fetching dependencies for Materialized View.                                    | [#5882]( <a href="https://redmine.postgresql.org/issues/5882">https://redmine.postgresql.org/issues/5882</a> ) |
| Bug Fix | Fixed an issue where the user is unable to change the macro name.                                                | [#5885]( <a href="https://redmine.postgresql.org/issues/5885">https://redmine.postgresql.org/issues/5885</a> ) |
| Bug Fix | Fixed an issue where the suffix for Toast table size is not visible in the Statistics tab.                       | [#5895]( <a href="https://redmine.postgresql.org/issues/5895">https://redmine.postgresql.org/issues/5895</a> ) |
| Bug Fix | Ensure that macros should be run on the older version of Safari and Chrome.                                      | [#5911]( <a href="https://redmine.postgresql.org/issues/5911">https://redmine.postgresql.org/issues/5911</a> ) |
| Bug Fix | Fixed an issue where a mismatch in the value of 'Estimated row' for functions.                                   | [#5914]( <a href="https://redmine.postgresql.org/issues/5914">https://redmine.postgresql.org/issues/5914</a> ) |

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| Type    | Description                                                                                                       | ID                                                                                                             |
|---------|-------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------|
| Bug Fix | Fixed an issue where non-closable tabs are getting closed.                                                        | [#5923]( <a href="https://redmine.postgresql.org/issues/5923">https://redmine.postgresql.org/issues/5923</a> ) |
| Bug Fix | Ensure that folder rename should work properly in Storage Manager.                                                | [#5943]( <a href="https://redmine.postgresql.org/issues/5943">https://redmine.postgresql.org/issues/5943</a> ) |
| Bug Fix | Fixed an issue where a long file name is not visible on the process watcher dialog.                               | [#5950]( <a href="https://redmine.postgresql.org/issues/5950">https://redmine.postgresql.org/issues/5950</a> ) |
| Bug Fix | Fixed an issue where connection to the server is on wait state if a different user is provided.                   | [#5953]( <a href="https://redmine.postgresql.org/issues/5953">https://redmine.postgresql.org/issues/5953</a> ) |
| Bug Fix | Ensure that Grant Wizard should include foreign tables.                                                           | [#5959]( <a href="https://redmine.postgresql.org/issues/5959">https://redmine.postgresql.org/issues/5959</a> ) |
| Bug Fix | Fixed an issue where the debugger's custom tab title did not apply when opened in the new browser tab.            | [#5974]( <a href="https://redmine.postgresql.org/issues/5974">https://redmine.postgresql.org/issues/5974</a> ) |
| Bug Fix | Fixed an issue where the dynamic tab title has not applied the first time for the debugger panel.                 | [#5978]( <a href="https://redmine.postgresql.org/issues/5978">https://redmine.postgresql.org/issues/5978</a> ) |
| Bug Fix | Added the appropriate server icon based on the server type in the new connection dialog.                          | [#5983]( <a href="https://redmine.postgresql.org/issues/5983">https://redmine.postgresql.org/issues/5983</a> ) |
| Bug Fix | Fixed an issue where the process watcher dialog throws an error for the database server which is already removed. | [#5985]( <a href="https://redmine.postgresql.org/issues/5985">https://redmine.postgresql.org/issues/5985</a> ) |