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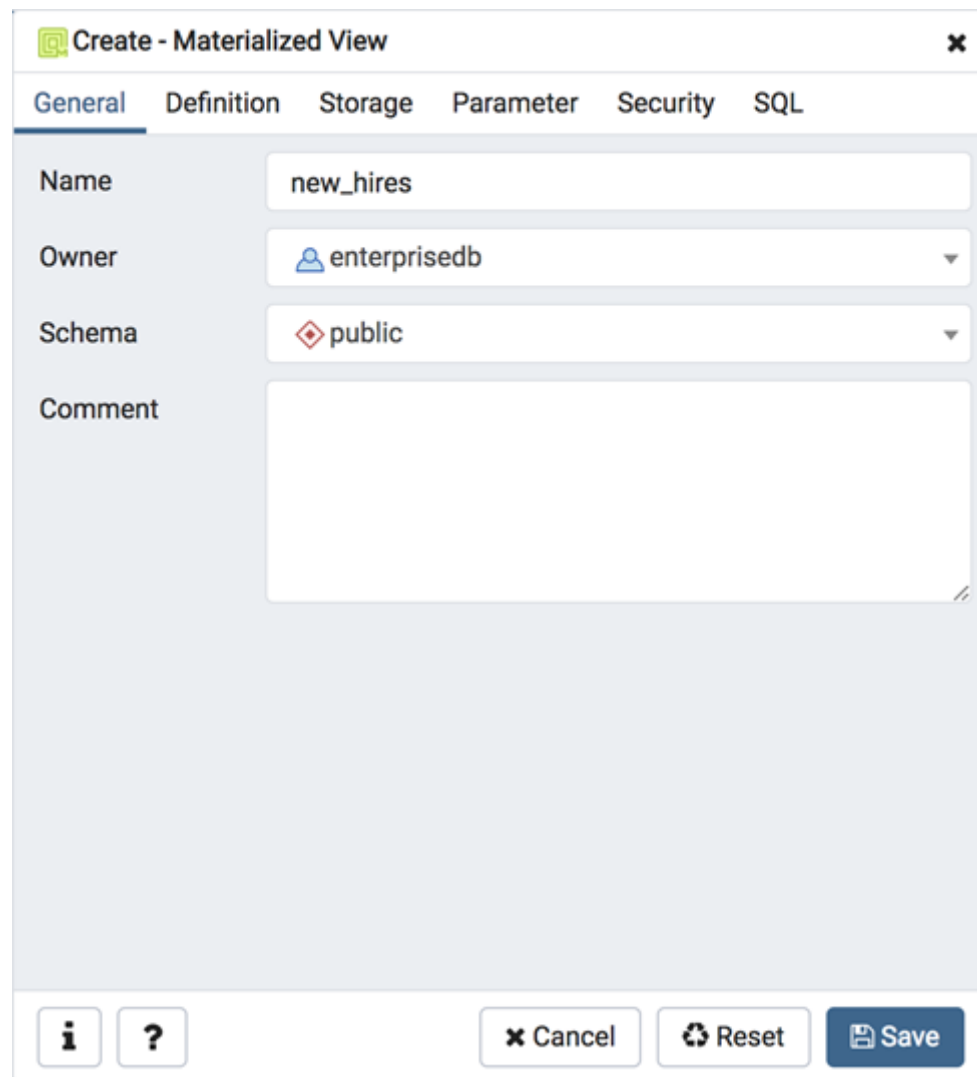
Warning: This documentation is for a pre-release version of pgAdmin 4

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Use the *Materialized View* dialog to define a materialized view. A materialized view is a stored or cached view that contains the result set of a query. Use the REFRESH MATERIALIZED VIEW command to update the content of a materialized view.

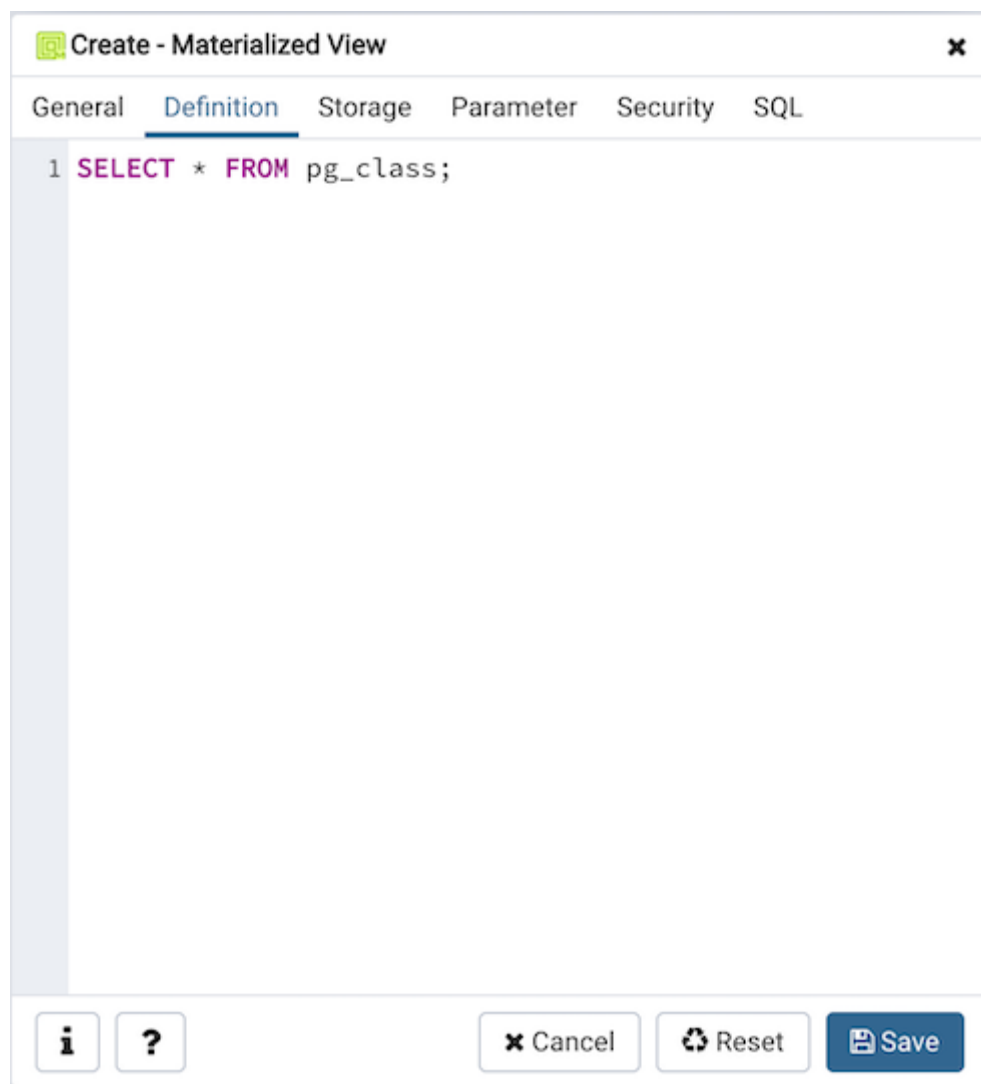
The *Materialized View* dialog organizes the development of a materialized_view through the following dialog tabs: *General*, *Definition*, *Storage*, *Parameter*, and *Security*. The *SQL* tab displays the SQL code generated by dialog selections.

The image shows a screenshot of a software dialog box titled "Create - Materialized View". It has a tabbed interface with six tabs: "General", "Definition", "Storage", "Parameter", "Security", and "SQL". The "General" tab is currently selected and highlighted. Inside the "General" tab, there are four fields: "Name" with the text "new_hires", "Owner" with a dropdown menu showing "enterprisedb", "Schema" with a dropdown menu showing "public", and "Comment" with a large empty text area. At the bottom of the dialog, there are three buttons: "Cancel", "Reset", and "Save". There are also information and help icons on the left side of the bottom bar.

Use the fields in the *General* tab to identify the materialized view:

- Use the *Name* field to add a descriptive name for the materialized view. The name will be displayed in the *pgAdmin* tree control.
- Use the drop-down listbox next to *Owner* to select the role that will own the materialized view.
- Select the name of the schema in which the materialized view will reside from the drop-down listbox in the *Schema* field.
- Store notes about the materialized view in the *Comment* field.

Click the *Definition* tab to continue.



The screenshot shows the 'Create - Materialized View' dialog box with the 'Definition' tab selected. The SQL editor contains the query: `1 SELECT * FROM pg_class;`. The dialog has tabs for General, Definition, Storage, Parameter, Security, and SQL. At the bottom, there are buttons for information, help, Cancel, Reset, and Save.

Use the text editor field in the *Definition* tab to provide the query that will populate the materialized view. Please note that updating the definition of existing materialized view would result in loss of Parameter(Table, Toast), Security(Privileges & Security labels), Indexes and other dependent objects.

Click the *Storage* tab to continue.



The screenshot shows the 'Create - Materialized View' dialog box with the 'Storage' tab selected. The 'With Data' switch is set to 'Yes'. The 'Tablespace' dropdown menu is set to 'pg_default'. The 'Fill Factor' field is empty. The dialog has tabs for General, Definition, Storage, Parameter, Security, and SQL. At the bottom, there are buttons for information, help, Cancel, Reset, and Save.

Use the fields in the *Storage* tab to maintain the materialized view:

- Move the *With Data* switch to the Yes position to specify the materialized view should be populated at creation time. If not, the materialized view cannot be queried until you invoke REFRESH MATERIALIZED VIEW.

- Use the drop-down listbox next to *Tablespace* to select a location for the materialized view.
- Use the *Fill Factor* field to specify a fill factor for the materialized view. The fill factor for a table is a percentage between 10 and 100. 100 (complete packing) is the default.

Click the *Parameter* tab to continue.

Label	Value	Default value
ANALYZE scale factor		0.10
ANALYZE base threshold		50
FREEZE maximum age		200,000,000
VACUUM cost delay		20
VACUUM cost limit		-1
VACUUM scale factor		0.20
VACUUM base threshold		50
FREEZE minimum age		50,000,000
FREEZE table age		150,000,000

Use the tabs nested inside the *Parameter* tab to specify VACUUM and ANALYZE thresholds; use the *Table* tab and the *Toast Table* tab to customize values for the table and the associated toast table. To change the default values:

- Move the *Custom auto-vacuum?* switch to the *Yes* position to perform custom maintenance on the materialized view.
- Move the *Enabled?* switch to the *Yes* position to select values in the *Vacuum table*. Provide values for each row in the *Value* column.

Click the *Security* tab to continue.

Create - Materialized View

General Definition Storage Parameter **Security** SQL

Grantee	Privileges	Grantor
<div> <div> <div></div> <div>enterprisedb</div> </div> </div>	<div> <div> <input checked="" type="checkbox"/> ALL <input checked="" type="checkbox"/> WITH GRANT OPTION </div> <div> <input checked="" type="checkbox"/> INSERT <input checked="" type="checkbox"/> WITH GRANT OPTION </div> <div> <input checked="" type="checkbox"/> SELECT <input checked="" type="checkbox"/> WITH GRANT OPTION </div> <div> <input checked="" type="checkbox"/> UPDATE <input checked="" type="checkbox"/> WITH GRANT OPTION </div> <div> <input checked="" type="checkbox"/> DELETE <input checked="" type="checkbox"/> WITH GRANT OPTION </div> <div> <input checked="" type="checkbox"/> TRUNCATE <input checked="" type="checkbox"/> WITH GRANT OPTION </div> <div> <input checked="" type="checkbox"/> REFERENCES <input checked="" type="checkbox"/> WITH GRANT OPTION </div> <div> <input checked="" type="checkbox"/> TRIGGER <input checked="" type="checkbox"/> WITH GRANT OPTION </div> </div>	<div> <div> <div></div> <div>enterprise</div> </div> </div>

Security Labels

Provider	Security Label
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Use the *Security* tab to assign privileges and define security labels.

Use the *Privileges* panel to assign privileges to a role. Click the *Add* icon (+) to set privileges for the materialized view:

- Select the name of the role from the drop-down listbox in the *Grantee* field.
- Click inside the *Privileges* field. Check the boxes to the left of one or more privileges to grant the selected privilege to the specified user.
- The current user, who is the default grantor for granting the privilege, is displayed in the *Grantor* field.

Click the *Add* icon (+) to assign additional privileges; to discard a privilege, click the trash icon to the left of the row and confirm deletion in the *Delete Row* popup.

Use the *Security Labels* panel to define security labels applied to the materialized view. Click the *Add* icon (+) to add each security label selection:

- Specify a security label provider in the *Provider* field. The named provider must be loaded and must consent to the proposed labeling operation.
- Specify a security label in the *Security Label* field. The meaning of a given label is at the discretion of the label provider. PostgreSQL places no restrictions on whether or how a label provider must interpret security labels; it merely provides a mechanism for storing them.

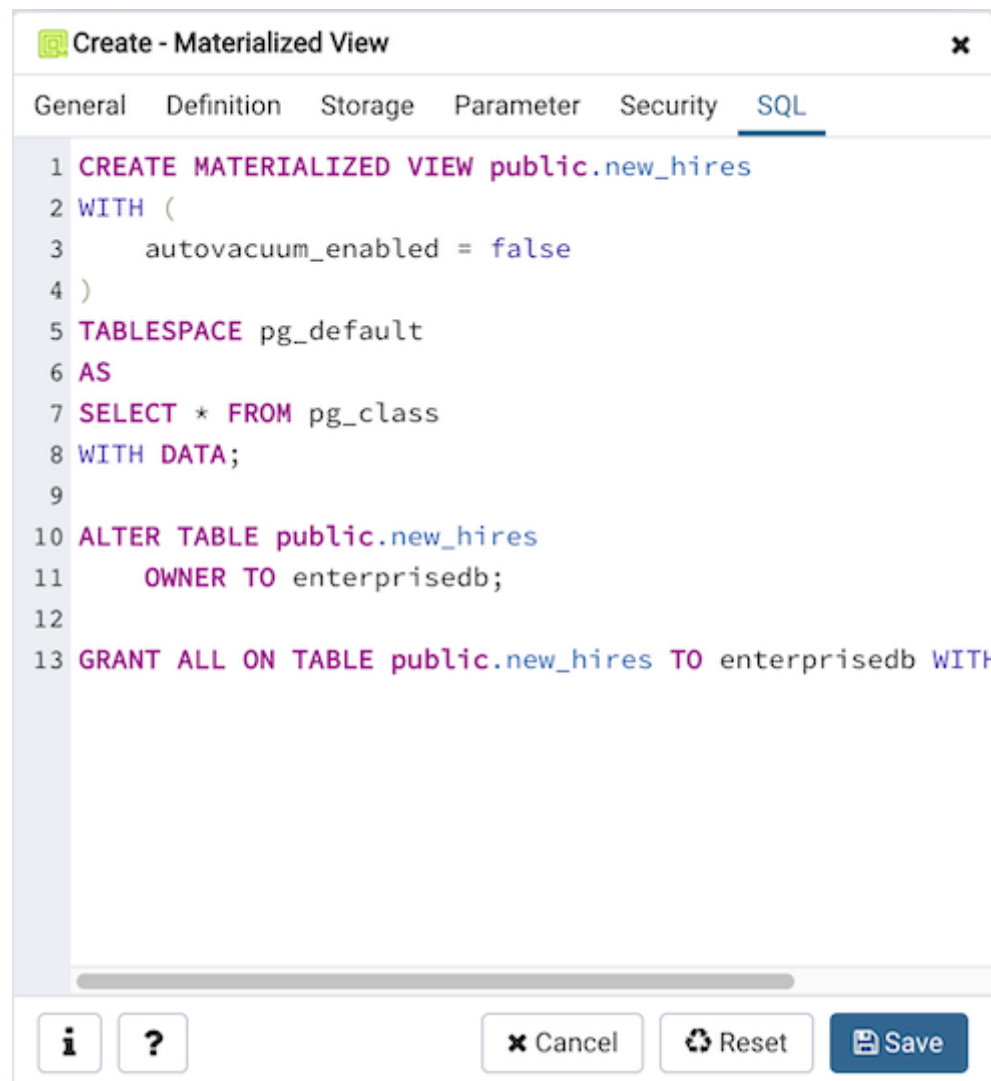
Click the *Add* icon (+) to assign additional security labels; to discard a security label, click the trash icon to the left of the row and confirm deletion in the *Delete Row* popup.

Click the *SQL* tab to continue.

Your entries in the *Materialized View* dialog generate a SQL command (see an example below). Use the SQL tab for review; revisit or switch tabs to make any changes to the SQL command.

Example ¶

The following is an example of the sql command generated by user selections in the *Materialized View* dialog:



The example shown creates a query named *new_hires* that stores the result of the displayed query in the *pg_default* tablespace.

- Click the *Info* button (i) to access online help.
- Click the *Save* button to save work.
- Click the *Cancel* button to exit without saving work.
- Click the *Reset* button to restore configuration parameters.