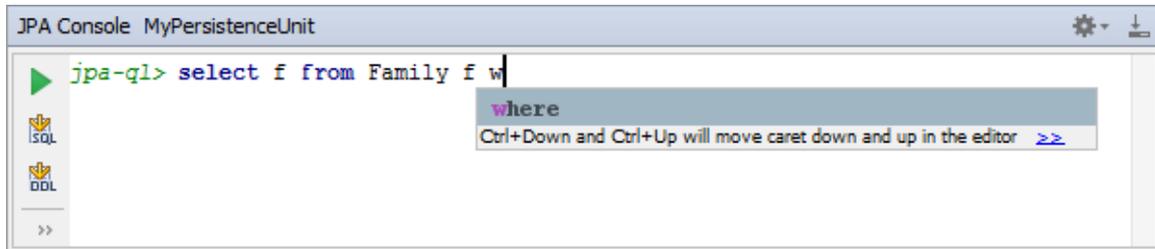


JPA Console Tool Window

From the [Persistence tool window](#) (for a persistence unit or any node within it):

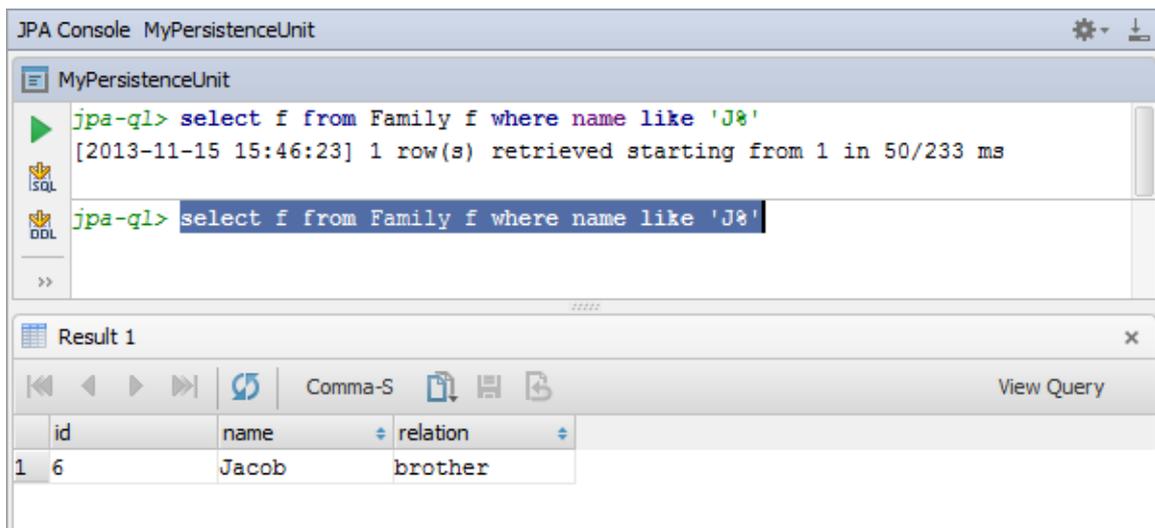
-  on the title bar
- **Console** from the context menu
- **Ctrl+Shift+F10**

When you open the **JPA Console** tool window, first, the input pane opens. This is where you compose your JPQL queries.

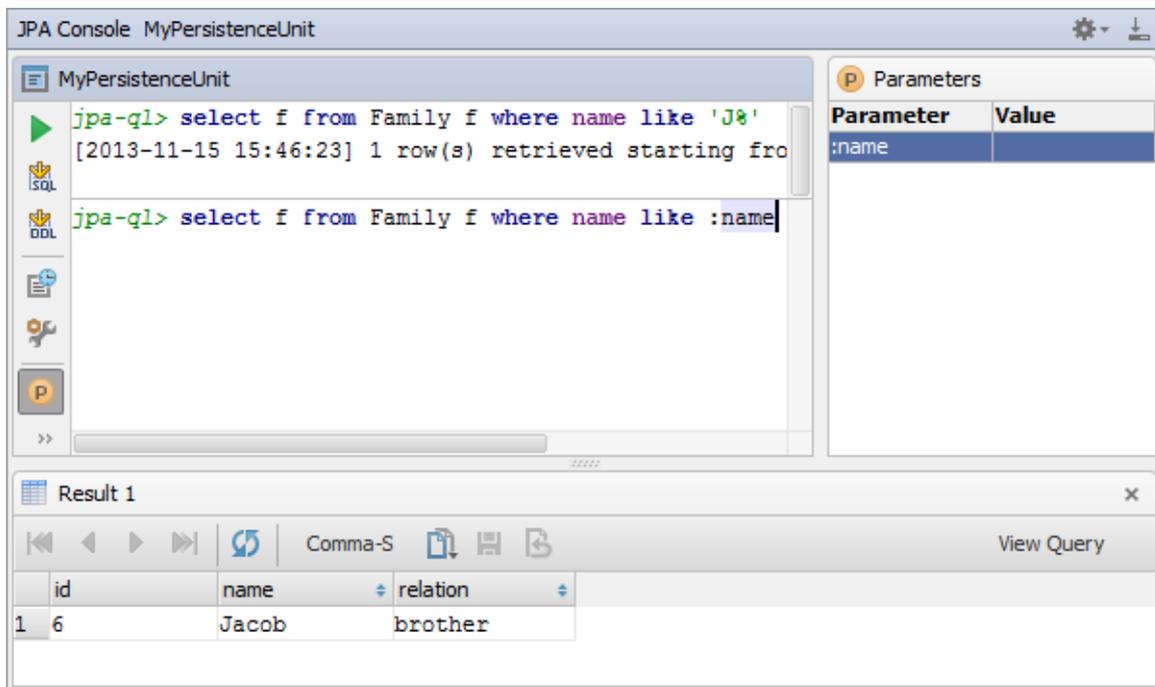


Then, when you run your first query () , the output pane opens above the input pane. Basically, this is the log of operations performed in the console.

If your query retrieves data (e.g. `select`), also the Result pane opens showing the retrieved data in table format.



Additionally, you can open the **Parameters** pane () to manage parameters in your queries.



On this page:

- [Toolbar icons and shortcuts](#)
- [Output pane](#)
- [Result pane](#)
- [Parameters pane](#)

See also, [Working with the JPA Console](#).

Toolbar icons and shortcuts

Most of the functions in the **Hibernate Console** tool window are accessed by means of the toolbar icons and associated keyboard shortcuts.

Item	Shortcut	Description
 Execute Query	Ctrl+Enter	Use this icon or shortcut to run the current query.
 Generate SQL	Ctrl+Shift+Enter	Use this icon or shortcut to generate an SQL equivalent of the current query. The generated SQL statement will be shown in the output pane.
 Generate DDL	Ctrl+Shift+Alt+Enter	Use this icon or shortcut to generate DDL SQL statements (CREATE TABLE, ALTER TABLE and DROP TABLE) for all the objects (classes) associated with the corresponding persistence unit. The generated statements will be shown in the output pane.
	Ctrl+Alt+E	Use this icon or shortcut to open a dialog that shows all the queries that you have run in the console. See also, Running auto-memorized queries .

Item	Shortcut	Description
 Settings		Use this icon to open the Database page of the Settings dialog to view or edit the settings for the Database, Hibernate and JPA consoles, the Table Editor and the Database tool window.
 View Parameters		Use this icon to open or close the Parameters pane .
 Restore Layout		Use this icon to restore the original tool window layout (after the rearrangements that you have made).
 Terminate Process		Use this icon or shortcut to terminate execution of the current query.
 Close	Ctrl+Shift+F4	Use this icon or shortcut to close the console.

Output pane

This pane shows the queries that you have run as well as the information about their execution. When errors occur, the corresponding information is also shown in this pane.

For each of the events (queries and errors), the following information is provided:

- Timestamp, that is, when the event took place.
- For data manipulation operations - how many rows were affected (e.g. changed or deleted). For data retrieval operations - how many rows were retrieved.
- Duration in milliseconds. If the query execution involves processing the data received from the database, the execution time is shown as x/y ms, where x is the time taken to receive the data, and y is the total time of generating the query result which includes both receiving and processing the data.

Use the following context menu commands:

- **Copy** (Ctrl+C or Ctrl+Insert) to copy the text selected in the output pane to the clipboard.
- **Compare with Clipboard** to compare the text selected in the output pane with the contents of the clipboard.
- **Clear All** to clear all the contents of the output pane.

Result pane

This pane shows the data retrieved from the database in table format. You can sort the data as well as perform other, associated tasks.

- [Main functions](#)
- [Using the header row](#)

Main functions. Most of the functions in the Result pane are accessed by means of controls on the toolbar, context menu commands for the data cells, and associated keyboard shortcuts.

Item	Shortcut	Description
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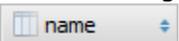
Item	Shortcut	Description
		<p>These icons and corresponding commands are for switching between the result set pages, i.e. the pages that show the retrieved data.</p> <p>A fixed number of rows shown simultaneously is referred to as a <i>result set page</i>. If this number is less than the number of rows that satisfy the query, only a subset of all the rows is shown at a time.</p> <p>In such cases, you can use , ,  and  to switch between the subsets. (If all the rows are currently shown, these icons and the corresponding commands are inactive.)</p> <p>The result set page size is set on the Database page of the Settings dialog.</p>
 First Page		<p>Use this icon or command to switch to the first of the result set pages to see the first series of rows.</p>
 Previous Page	Ctrl+Alt+Up	<p>Use this icon, command or shortcut to switch to the previous result set page to see the previous series of rows.</p>
 Next Page	Ctrl+Alt+Down	<p>Use this icon, command or shortcut to switch to the next result set page to see the next series of rows.</p>
 Last Page		<p>Use this icon or command to switch to the last of the result set pages to see the last series of rows.</p>
 Reload Page	Ctrl+R	<p>Use this icon, command or shortcut to refresh the current table view. Use this function to:</p> <ul style="list-style-type: none"> ■ Synchronize the data shown with the actual contents of the database. ■ Apply the Result set page size setting after its change.
		<p>Use this button or command to open a menu in which you can select an active data extractor. The Configure Extractors command in that menu opens the Data Extractors dialog that lets you manage the data extractors and their settings.</p> <p>(A data extractor is a named set of settings that define how to convert table data into CSV, TSV and other formats.)</p>

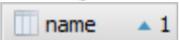
Item	Shortcut	Description
 / Copy All To Clipboard / Save All To File		<p>Use this icon and/or associated commands:</p> <ul style="list-style-type: none"> ■ Copy All To Clipboard. Use this command to copy the table data onto the clipboard. ■ Save All To File. Use this command to save the table data in a file. In the dialog that opens, specify the location and name of the file. <p>Note:</p> <ul style="list-style-type: none"> ■ The data extractor which is currently active is applied. ■ If only a subset of corresponding rows is currently shown, all the appropriate rows are copied to the clipboard or saved in a file anyway. (The number of rows currently shown may be limited by the Result set page size parameter.)
 Save LOB		Use this icon or command to save the large object (LOB ) currently selected in the table in a file.
 Reset Columns Order and Visibility		Use this icon to restore the initial table view after reordering or hiding the columns, or sorting the data. As a result, the data, generally, becomes unsorted, the columns appear in the order they are defined in the corresponding query, and all the columns are shown.
View Query		Use this button to view the query which was used to generate the table. To close the pane where the query is shown, press Escape.
Go To Row	Ctrl+G	Use this command or shortcut to switch to a specified row. In the dialog that opens, specify the row number to go to.

Using the header row. In the Result pane, you can use the cells in the header row (i.e. the row where column names are shown) for:

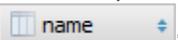
- [Sorting data](#)
- [Reordering columns](#)
- [Hiding and showing columns](#)

You can sort table data by any of the columns by clicking the cells in the header row.

Each cell in this row has a sorting marker in the right-hand part and, initially, a cell may look something like this: . The sorting marker in this case indicates that the data is not sorted by this column.

If you click the cell once, the data is sorted by the corresponding column in the ascending order. This is indicated by the sorting marker appearance: . The number to the right of the marker (1 on the picture) is the sorting level. (You can sort by more than one column. In such cases, different columns will have different sorting levels.)

When you click the cell for the second time, the data is sorted in the descending order. Here is how the sorting marker indicates this order: .

Finally, when you click the cell for the third time, the initial state is resorted. That is, sorting by the corresponding column is canceled: .

Here is an example of a table where data are sorted by two of its columns.

	id	name	relation
1	3	Dylan	brother
2	6	Jack	brother
3	1	Harry	father
4	2	Chloe	mother
5	5	Alice	sister
6	4	Emily	sister

To restore the initial "unsorted" state for the table, use .

To reorder columns, use drag-and-drop for the corresponding cells in the header row. To restore the initial order of columns, use .

	id	relation	name
1	3	brother	ylan
2	6	brother	ack
3	1	father	arry
4	2	mother	hloe
5	5	sister	lice
6	4	sister	mily

To hide a column, right-click the corresponding header cell and select **Hide column**.

To show a hidden column:

1. Do one of the following:

- Right-click any of the cells in the header row and select **Column List**.
- Press **Ctrl+F12**.

In the list that appears, the names of hidden columns are shown struck through.

	id	name
1	5	Alice
2	2	Chloe
3	3	Dylan
4	4	Emily
5	1	Harry
6	6	Jack

test.family

- id SMALLINT
- name VARCHAR A-1
- relation VARCHAR

Narrow down on typing

2. Select (highlight) the column name of interest and press `Console.TableResult.ColumnVisibility`.
3. Press **Enter** or **Escape** to close the list.

To show all the columns, use .

See also, [Using the structure view to sort the data, and hide and show the columns.](#)

Parameters pane

To open or close the **Parameters** pane, use  on the toolbar.

Shown in the two-column table are all the parameters detected in the input pane along with their values.

To start editing a value, double-click the corresponding table cell, or click the cell and press **F2** or **Alt+Enter**. To indicate that you have finished editing a value, press **Enter** or click a different cell. To quit the editing mode and restore an initial value, press **Escape**.

When you select a row containing a parameter in the table, the corresponding parameter is highlighted in the input pane. Similarly, when you select the header row (**Parameter - Value**), the overall query is highlighted.

See Also

Procedures:

- [Working with the JPA Console](#)
- [Working with the Hibernate Console](#)
- [Relational Databases](#)

Web Resources:

- [Developer Community](#) 