Documentation Query Shortcuts

November 5, 2019

1 Introduction

The WebUI supports the creation of query shortcuts which appear below the normal query input field. These shortcuts facilitate looking for data as query strings which are used frequently. They can be stored and reused.
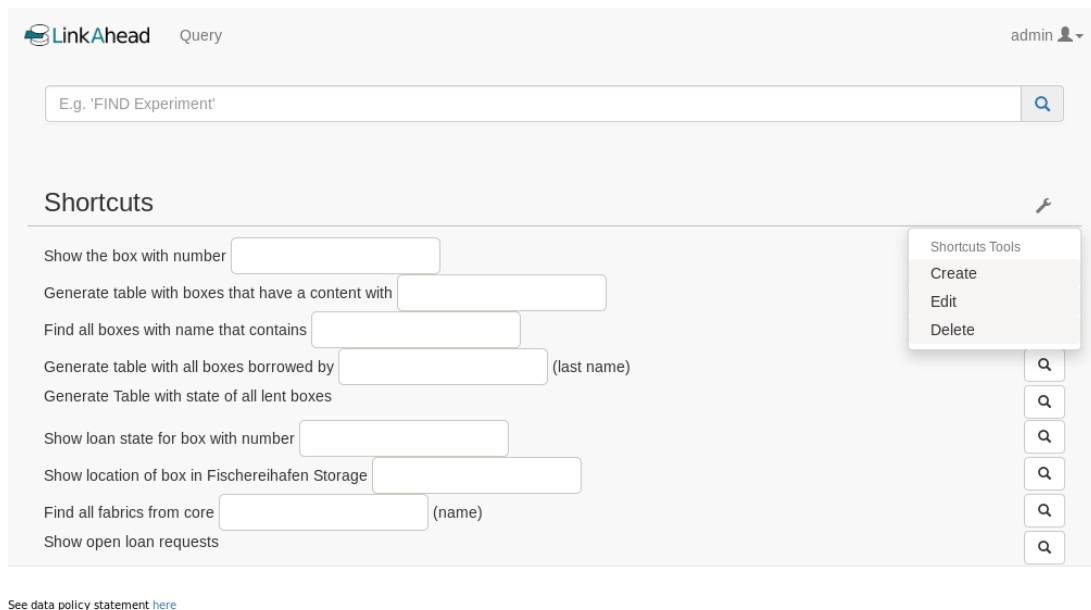

Figure 1: The Shortcuts in the Query Panel; Note the Toolbox for in the top right

There are two ways to integrate query templates into the WebUI:

- Global shortcuts are integrated by the webmaster only. They are defined and stored in a `./conf/ext/json/globale_query_shortcuts.json` in the root directory of the webui.

- User-defined templates can be defined by users and are only visible for the user who created them. In this sense, user-defined shortcuts are also private, whereas global shortcuts are always publicly visible.

2 User-defined Query Shortcuts

2.1 Create a New Shortcut

New Query Shortcuts can be generated by any authenticated user with sufficient write permissions.

In the web interface, click `Query`. In the `Shortcuts` section, click the wrench (on the right side).

In the drop-down menu, click `Create`.

It now opens a form with two input fields, `Description` and `Query`.
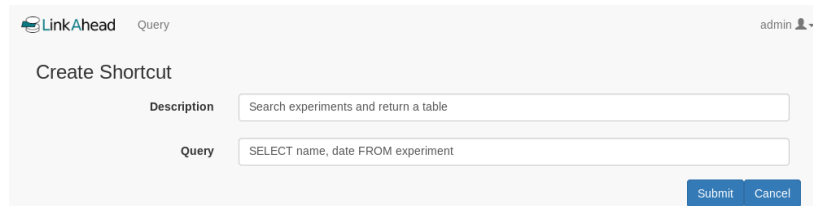

Figure 2: The view to create a new shortcut

See 2.4 and 2.5 for further explanation of the components of a Query Shortcut.

Edit the fields and click `Submit` for the creation of the new shortcut or click `Cancel` to cancel the process.

The new shortcut is shown in the shortcuts section.
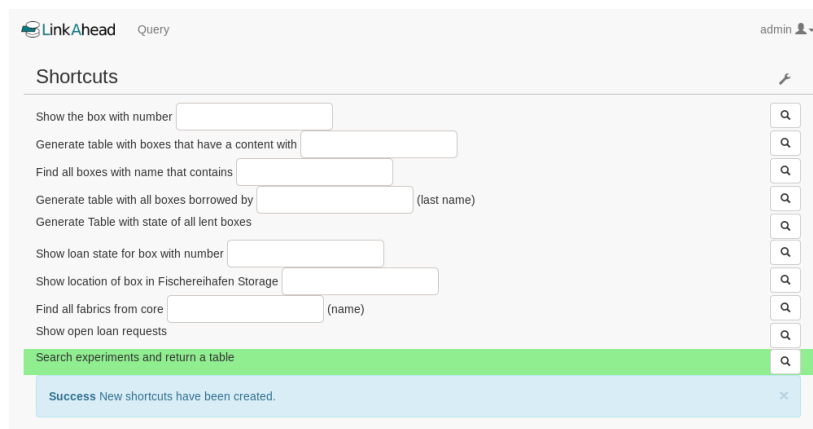

Figure 3: The view when creation was successful

2.2 Change an Existing Shortcut

Existing Query Shortcuts which are visible in your shortcuts section can be edited directly in the shortcuts section.

In the web interface, click `Query`. In the `Shortcuts` section, click the wrench (on the right side).

In the drop-down menu, click `Edit`.

Every editable shortcut (note: global shortcuts are not editable in the webinterface at all) will receive a new button `Edit`

Click `Edit` of the shortcut that is to be changed.

It now opens a form with two input fields, `Description` and `Query`, pre-filled.

See 2.4 and 2.5 for further explanation of the components of a Query Shortcut.

Figure 4: Choosing which shortcut to edit

Edit the fields and click `Submit` for the creation of the new shortcut or click `Cancel` to cancel the process.

The updated shortcut is shown in the shortcuts section.

See the

2.3 Delete an Existing Shortcut

Existing Query Shortcut which are visible in your shortcuts section can be edited directly in the shortcuts section.

In the web interface, click `Query`. In the `Shortcuts` section, click the wrench (on the right side).

In the drop-down menu, click `Delete`.

Figure 5: Choosing which shortcuts to delete

Every user-defined shortcut (note: global shortcuts are not deletable in the webinterface at all) will receive checkbox and `Delete` and `Cancel` buttons appear at the bottom of the shortcuts section.

Check all shortcuts which are to be deleted and click `Delete` or click `Cancel` to cancel the deletion.

All deleted shortcuts are marked as deleted afterwards and will not appear again in the shortcuts section after reload.

2.4 Basic Shortcut

The `Description` is a verbose definition of the query, e.g. "Search for experiments and return a table.". It will be the text that is visible in the shortcuts section.

The `Query` is the query that will be executed with the shortcut. It adheres to the definition of the CaosDB Query Language (CQL).

The corresponding query of our example is `SELECT date, name FROM Experiment`.

2.5 Advanced Shortcut

The basic shortcut does not allow for any parameterization. It is just a plain string or like a bookmark.

Advanced shortcuts use a special syntax, where text placeholders are used to define parameters of the shortcut. The parameters can be set by the user at the time of the execution. An example can best illustrate what that means:

Suppose you want to search for experiments by their year. The query for that would be `SELECT date, name FROM Experiment WITH date IN 2018`.

Now, the actual year in the query can be made editable by replacing the year `2018` with {year}.

The `Description` now must also contain this placeholder {year}, e.g. "Search for experiements conducted in year {year}". When the shortcut is displayed in the shortcuts section below the query input field, the placeholder is replaced by a text input field and the user can insert a year and execute the shortcut with the year being inserted into the query.

2.5.1 Placeholders

The placeholders have simple rules. A placeholder always starts and ends with curly brackets, like in the example {year}. The text inside the brackets (the placeholder's *id*) may contain any combination of alphanumeric signs (0-9,a-z,A-Z). The use of special characters like colons, commas or the like is discouraged. They are reserved for future extensions of the placeholders. Apart from that, you are free to choose any placeholder *id* that seems suitable for you.

Both components of the query shortcut (description and query) must contain the same set of placeholders, otherwise the query shortcuts might not work as intended. If there is a {year} in the query, there must be a {year} in the description.

Each placeholder *id* must occur only once in both components – if you need to use two years in your shortcut you have to use {year1} and {year2} or any other combinations of placeholder *ids*.