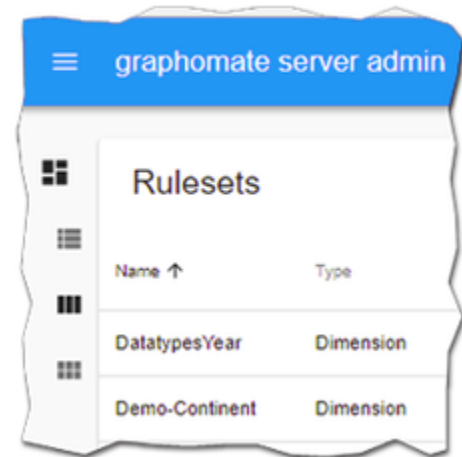
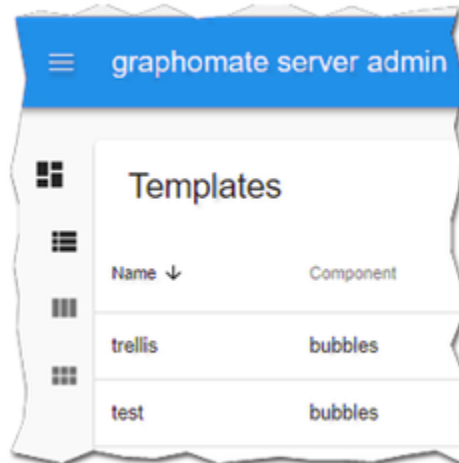


## User Manual for the graphomate server 1.1



Version – as of June 2019

<https://www.graphomate.com>

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- Config
- Admin
  - Templates
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- Properties
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## Installation

The installation of the *graphomate server* should be carried out by a person with the necessary knowledge and access rights (e. g. system administrator).

1. Move the `graphomate-server.war` to the `webapps` directory of the BI platform's tomcat server (e. g. `C:\Program Files (x86)\SAP BusinessObjects\tomcat\webapps`).

Depending on the Tomcat configuration used, a restart is required to deploy the WAR file.

2. To test if the server has been installed successfully
  - a. The server URL is `http://<URL OF BIP>/graphomate-server`, e. g. <http://bip.super-corp.com:8080/graphomate-server>
  - b. When you open it in the browser, you should see some information about the server.
3. If you like to view the *admin panel* you can add a `/admin` to the server URL.

## Config

When the *graphomate server* is accessed for the first time it will create a folder called *graphomate* at the *tomcat root* folder with initial content. In this folder a file called *auditing.db* will be created which contains the data for the audits. Besides there will be three subfolders. The *templates* folder where templates will be stored, the *rulesets* folder where rulesets will be stored and the *config* folder where two *.ini*-files will be created.

### ***access.ini***

#### Initial

```
protected=true
username=admin
password=graphomate
```

The parameter *protected* defines if the *admin* should be protected by username and password. Set to *false* to deactivate the protection.

If set to *true* the *admin* will prompt for the *username* and *password* which are defined in the parameters with the identical name.

### ***config.ini***

#### Initial

```
[templates]
allow_list=true
allow_create=true
allow_update=true
allow_delete=true
[rulesets]
allow_list=true
allow_create=true
allow_update=true
allow_delete=true
[audits]
enable=true
component_white_list=
```

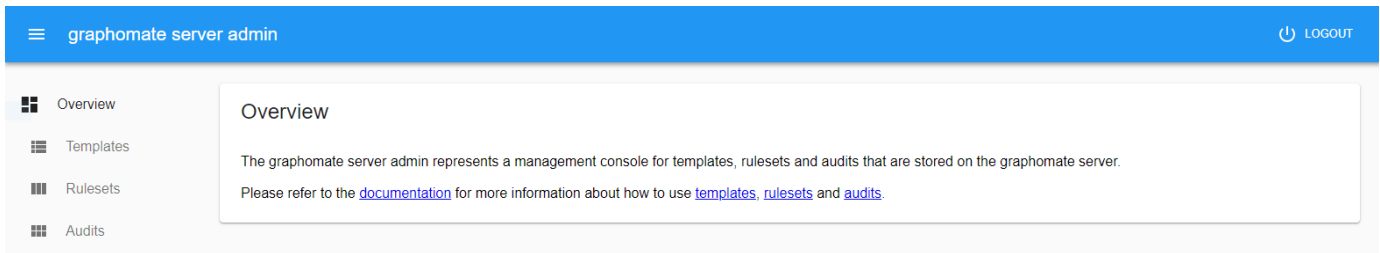
Parameters beginning with *allow\_* are boolean and define if the mentioned operation will be disabled on the API of the *graphomate server*. The header written in square brackets define for which resource the next parameters will match.

For the *auditing* the *enable* parameter enables the auditing in general. It can take up to three days until the clients will check if the auditing is enabled.

The *component\_white\_list* is a list of component names or regular expressions separated by comma. It defines which

components should be tracked by the standalone *auditing component*.

## Admin



The screenshot shows the Graphomate Server Admin interface. At the top, there is a blue header bar with the text "graphomate server admin" on the left and a "LOGOUT" button on the right. Below the header, there is a sidebar on the left with a menu containing four items: "Overview", "Templates", "Rulesets", and "Audits". The "Overview" item is selected and highlighted. The main content area on the right displays the "Overview" section. It contains the following text: "The graphomate server admin represents a management console for templates, rulesets and audits that are stored on the graphomate server. Please refer to the [documentation](#) for more information about how to use [templates](#), [rulesets](#) and [audits](#)."

The *graphomate admin* represents a management console for templates, rulesets and audits that are stored on the *graphomate server*.

It can be accessed via `http://<URL OF BIP>/graphomate-server/admin`, e. g. `http://bip.super-corp.com:8080/graphomate-server/admin`.

The credentials for the login have to be set in the [Config](#).

## Templates

graphomate server admin
LOGOUT

- Overview
- Templates**
- Rulesets
- Audits

### Templates

[ADD FILTER](#)
[REFRESH](#)
[EXPORT ALL](#)
[IMPORT](#)

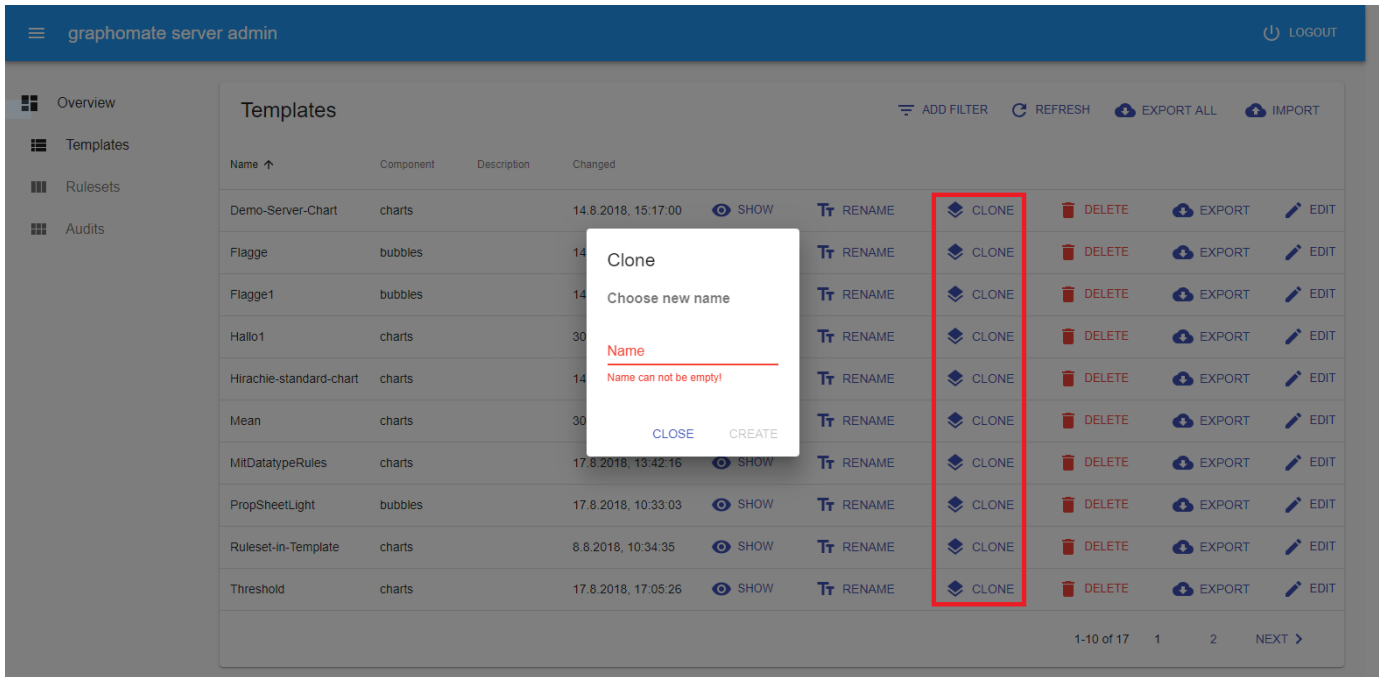
Name ↑	Component	Description	Changed						
Demo-Server-Chart	charts		14.8.2018, 15:17:00	SHOW	RENAME	CLONE	DELETE	EXPORT	EDIT
Flagge	bubbles		14.8.2018, 11:05:37	SHOW	RENAME	CLONE	DELETE	EXPORT	EDIT
Flagge1	bubbles		14.8.2018, 12:20:01	SHOW	RENAME	CLONE	DELETE	EXPORT	EDIT
Hallo1	charts		30.8.2018, 10:28:35	SHOW	RENAME	CLONE	DELETE	EXPORT	EDIT
Hirarchie-standard-chart	charts		14.8.2018, 13:18:44	SHOW	RENAME	CLONE	DELETE	EXPORT	EDIT
Mean	charts		30.8.2018, 09:14:44	SHOW	RENAME	CLONE	DELETE	EXPORT	EDIT
MitDatatypeRules	charts		17.8.2018, 13:42:16	SHOW	RENAME	CLONE	DELETE	EXPORT	EDIT
PropSheetLight	bubbles		17.8.2018, 10:33:03	SHOW	RENAME	CLONE	DELETE	EXPORT	EDIT
Ruleset-in-Template	charts		8.8.2018, 10:34:35	SHOW	RENAME	CLONE	DELETE	EXPORT	EDIT
Threshold	charts		17.8.2018, 17:05:26	SHOW	RENAME	CLONE	DELETE	EXPORT	EDIT

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1
2
NEXT >

Templates are collections of property sets which are divided by the corresponding graphomate extension. They can be created in Lumira Designer by using a compatible graphomate component like graphomate *bubbles*, *charts*, *tables*, *tiles*. To do so, you need to choose the *Server Tab* in the *Additional Properties Sheet*.

In the admin all templates which are existing on the server can be administrated. By clicking on the row header the templates will be sorted by the content of the corresponding row. By clicking on *ADD FILTER*, the displayed templates can be selected according to specific criteria. In the list of templates you can choose to *rename* a template, *clone* a template, delete a template, *export* a template or *edit* its contents. In addition to that it is possible to *export all* templates, *import* a template or a collection of templates.

## Clone Template



The screenshot shows the 'graphomate server admin' interface. On the left is a navigation menu with 'Overview', 'Templates', 'Rulesets', and 'Audits'. The main area is titled 'Templates' and contains a table with columns: Name, Component, Description, Changed, and a set of action buttons (SHOW, RENAME, CLONE, DELETE, EXPORT, EDIT). The 'CLONE' buttons for several templates are highlighted with a red box. A modal dialog titled 'Clone' is open, prompting the user to 'Choose new name' with a text input field containing 'Name' and a red error message 'Name can not be empty!'. The dialog has 'CLOSE' and 'CREATE' buttons at the bottom.

Name	Component	Description	Changed	SHOW	RENAME	CLONE	DELETE	EXPORT	EDIT
Demo-Server-Chart	charts		14.8.2018, 15:17:00	SHOW	RENAME	CLONE	DELETE	EXPORT	EDIT
Flagge	bubbles		14.8.2018, 15:17:00	SHOW	RENAME	CLONE	DELETE	EXPORT	EDIT
Flagge1	bubbles		14.8.2018, 15:17:00	SHOW	RENAME	CLONE	DELETE	EXPORT	EDIT
Hallo1	charts		30.8.2018, 17:05:26	SHOW	RENAME	CLONE	DELETE	EXPORT	EDIT
Hirarchie-standard-chart	charts		14.8.2018, 15:17:00	SHOW	RENAME	CLONE	DELETE	EXPORT	EDIT
Mean	charts		30.8.2018, 17:05:26	SHOW	RENAME	CLONE	DELETE	EXPORT	EDIT
MitDatatypeRules	charts		17.8.2018, 13:42:16	SHOW	RENAME	CLONE	DELETE	EXPORT	EDIT
PropSheetLight	bubbles		17.8.2018, 10:33:03	SHOW	RENAME	CLONE	DELETE	EXPORT	EDIT
Ruleset-in-Template	charts		8.8.2018, 10:34:35	SHOW	RENAME	CLONE	DELETE	EXPORT	EDIT
Threshold	charts		17.8.2018, 17:05:26	SHOW	RENAME	CLONE	DELETE	EXPORT	EDIT

You can clone a template with all its contents by clicking on the *CLONE* button in the templates list. When doing so a dialog will prompt for the name of the cloned template. A valid name can consist out of letters, numbers and dashes.



## Edit Template

In the template edit mode the contents of a template can be modified. It is divided in five tabs which will be described in the following table.

### GENERAL

☰ Template "CHRTSTMP1"
🔄 🗑️

- ☰ Overview
- ☰ Templates
- ☰ Rulesets
- ☰ Audits

☰ LIST 🔄 REFRESH

General	▼
Charts Properties	▼
Charts JSON	▼
UI-5 Extension Javascript Code	▼
UI-5 Extension XML Code	▼

💾 SAVE
💾 SAVE AND CLOSE

☰ Template "CHRTSTMP1"
🔄 🗑️

- ☰ Overview
- ☰ Templates
- ☰ Rulesets
- ☰ Audits

☰ LIST 🔄 REFRESH

**General**

Name  
CHRTSTMP1

---

Component  
charts

---

Tags

---

Description

---

Author

---

URL  
http://cloud.graphomate.com:8081/graphomate-server/templates/comgraphomatecharts\_CHRTSTMP1

---

Created  
12/8/2018, 9:53:17 AM

---

In the *GENERAL* tab the fields for the name and the component are deactivated. To rename a template you could use the [rename button](#) in the templates list.

The corresponding graphomate component can not be changed, because the property set in a template can be only applied to the same component which was a well used to create the template.

The field for the tags can be filled with a list of tags which are separated by comma. The description and the author are free text fields.

In the *Created* and *Changed* Fields nothing can be changed, because the Changed timestamp will be updated automatically once the template is saved.

## \* PROPERTIES

The screenshot shows the 'PROPERTIES' configuration page for a template named 'CHRTSTMPLT1'. The page has a blue header bar with a menu icon, the template name, and refresh/plus icons. On the left is a sidebar with navigation options: Overview, Templates, Rulesets, and Audits. The main content area is titled 'Template "CHRTSTMPLT1"' and contains a 'LIST' and 'REFRESH' button. Below this is a 'General' section with a dropdown arrow. The 'Charts Properties' section is expanded, showing a warning message: 'Please be aware, that some properties in this list are named differently than in the Propertysheets.' Below the warning are five categories of properties, each with a dropdown arrow: Boolean Properties, Number Properties, String Properties, Color Properties, and Extended Properties. At the bottom of the main content area are three sections: 'Charts JSON', 'UI-5 Extension Javascript Code', and 'UI-5 Extension XML Code', each with a dropdown arrow. At the very bottom of the page are two buttons: 'SAVE' and 'SAVE AND CLOSE'.

The *PROPERTIES* themselves are divided in five categories which are explained below.

## Boolean Properties

The screenshot displays the Graphomate server interface for editing a chart template named "CHRTSTMPLT1". The interface is divided into a left sidebar and a main content area. The sidebar contains navigation options: Overview, Templates, Rulesets, and Audits. The main content area has a blue header with the template name and icons for refresh and help. Below the header, there are tabs for "General" and "Charts Properties". The "Charts Properties" tab is active, showing a warning message: "Please be aware, that some properties in this list are named differently than in the Propertiesheets." Below this, a section titled "Boolean Properties" lists ten properties, each with a toggle switch:

- Activate On New Data
- Calculate Deviations From Null
- Check Only Leading Values For Peaking
- Deviation Pin Line Black
- Ending Line Visible
- Fixed Category Width
- Flip Value Axis
- Force Before Separators
- Force First Value Label

The boolean properties are simple *true* / *false* switches. If the slider appears blue and is moved to the right the property is activated. The grey slider on the left indicates a deactivated property.

To toggle a change click on the slider or the name of the property.

## Number Properties

The screenshot shows the configuration interface for a template named "CHRTSTMPLT1". The interface is divided into a left sidebar and a main content area. The sidebar contains navigation options: Overview, Templates, Rulesets, and Audits. The main content area has a blue header with a menu icon, the template name, and refresh/clear icons. Below the header, there are several sections: "General", "Charts Properties", "Boolean Properties", and "Number Properties". The "Number Properties" section is expanded and shows four adjustable properties: "Axis Thickness" (value 1), "Bar Width" (value 0.5), "Category Count" (value 0), and "Category Width" (value 50). A warning message is displayed above the "Boolean Properties" section: "Please be aware, that some properties in this list are named differently than in the Propertiesheets." At the top right of the main content area, there are "LIST" and "REFRESH" buttons.

All properties that represent numbers can be adjusted in this section.

## String Properties

The screenshot shows a web interface for configuring a template named "CHRTSTMPLT1". On the left is a navigation menu with "Overview", "Templates", "Rulesets", and "Audits". The main content area has a blue header with a menu icon, the template name, and refresh/clear icons. Below the header are several expandable sections: "General", "Charts Properties", "Boolean Properties", "Number Properties", and "String Properties". The "String Properties" section is expanded, showing fields for "Chart Type" (value: bar), "Comparison Group", "Extended Number Format" (value: -.||.1|1|), and another "Extended Number Format" field (value: -.||.1|1|)%25). A warning message is displayed above the "Boolean Properties" section: "Please be aware, that some properties in this list are named differently than in the Property sheets."

The string properties can be changed here. With string properties there is an exception, some of them only work with a specified set of choices. There is no mechanism that stops you from entering invalid values.

This could result in unwanted behavior when the template is applied to a graphomate component. Please refer to the manual of the specific component.

## Color Properties

Template "CHRTSTMPLT1"

Rulesets

Audits

General

Charts Properties

Please be aware, that some properties in this list are named differently than in the Property sheets.

Boolean Properties

Number Properties

String Properties

Color Properties

Deviation Bad Color  
#FF0000

Font Color  
#000000

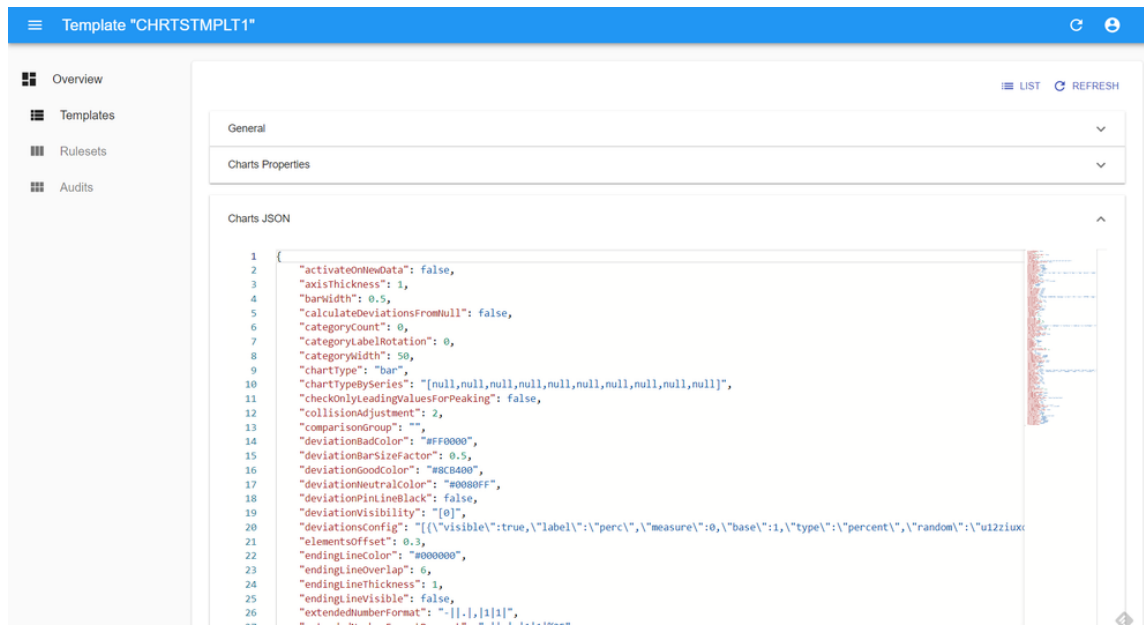
Color properties can be changed by using the color picker which opens on click on the chosen property.

## Extended Properties

The screenshot displays the 'Extended Properties' configuration page for a template named 'CHRTSTMPLT1'. The left sidebar contains navigation links for Overview, Templates, Rulesets, and Audits. The main content area is organized into several sections: 'General', 'Charts Properties', 'Boolean Properties', 'Number Properties', 'String Properties', 'Color Properties', and 'Extended Properties'. A warning message is present: 'Please be aware, that some properties in this list are named differently than in the Property sheets.' Under the 'Extended Properties' section, two properties are listed: 'Chart Type By Series' and 'Deviation Visibility', each with an 'EDIT' button. The top right of the main content area features 'LIST' and 'REFRESH' buttons.

The properties which are more complicated and hence are saved as JSON can be edited by clicking on the *EDIT* button of the specific property. A dialog opens containing the sub-properties. Clicking *OK* will **not** save the changes. It is necessary to click the *SAVE* button after the dialog is closed by clicking *OK*.

## \* JSON



The screenshot displays the 'Template "CHRTSTMP1"' interface. On the left, a sidebar contains navigation options: Overview, Templates, Rulesets, and Audits. The main content area is divided into sections: 'General', 'Charts Properties', and 'Charts JSON'. The 'Charts JSON' section is expanded, showing a code editor with the following JSON configuration:

```
1 {
2   "activateOnNewData": false,
3   "axisThickness": 1,
4   "barWidth": 0.5,
5   "calculateDeviationsFromNull": false,
6   "categoryCount": 0,
7   "categoryLabelRotation": 0,
8   "categoryWidth": 50,
9   "chartType": "bar",
10  "chartTypeBySeries": "[null,null,null,null,null,null,null,null,null]",
11  "checkOnlyLeadingValuesForPeaking": false,
12  "collisionAdjustment": 2,
13  "comparisonGroup": "",
14  "deviationBadColor": "#FF0000",
15  "deviationBarSizeFactor": 0.5,
16  "deviationGoodColor": "#BCB400",
17  "deviationNeutralColor": "#0080FF",
18  "deviationPinLineBlack": false,
19  "deviationVisibility": "[0]",
20  "deviationsConfig": [{"visible": true, "label": "percl", "measure": 0, "base": 1, "type": "percent", "random": "u12ziux"},
21  "elementsOffset": 0.3,
22  "endingLineColor": "#000000",
23  "endingLineOverlap": 6,
24  "endingLineThickness": 1,
25  "endingLineVisible": false,
26  "extendedNumberFormat": "-|-.|,|1|1|",
  --
```

The JSON representation of the properties can be changed manually. This is necessary if you want to add new items to a JSON array for example.

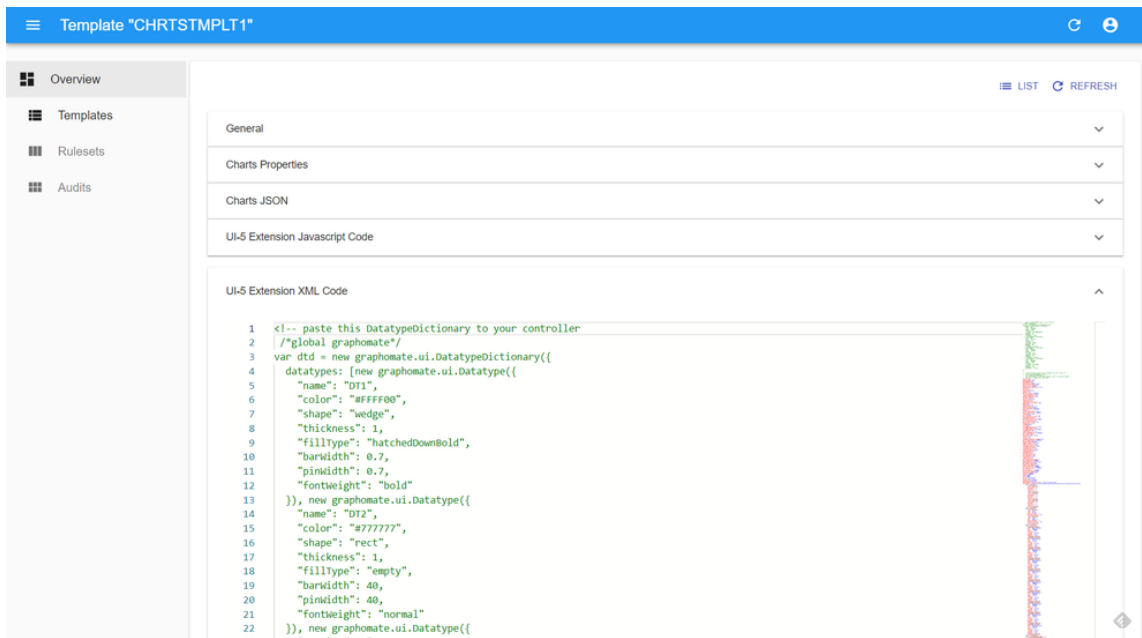


## UI-5 Extension Javascript Code

```
1  /*global graphomate*/
2  var dtd = new graphomate.ui.DatatypeDictionary({
3    datatypes: [new graphomate.ui.Datatype({
4      "name": "DT1",
5      "color": "#FFFF00",
6      "shape": "wedge",
7      "thickness": 1,
8      "fillType": "hatchedDownBold",
9      "barswidth": 0.7,
10     "pimwidth": 0.7,
11     "fontWeight": "bold"
12   }), new graphomate.ui.Datatype({
13     "name": "DT2",
14     "color": "#777777",
15     "shape": "rect",
16     "thickness": 1,
17     "fillType": "empty",
18     "barswidth": 40,
19     "pimwidth": 40,
20     "fontWeight": "normal"
21   }), new graphomate.ui.Datatype({
22     "name": "DT3",
23     "color": "#000000",
24     "shape": "circle",
25     "thickness": 1,
```

This section displays UI5 code that can be used to add graphomate for UI5 components to an UI5 Javascript application. The parts that need to be customized are documented by comments in the code.

## UI-5 Extension XML Code

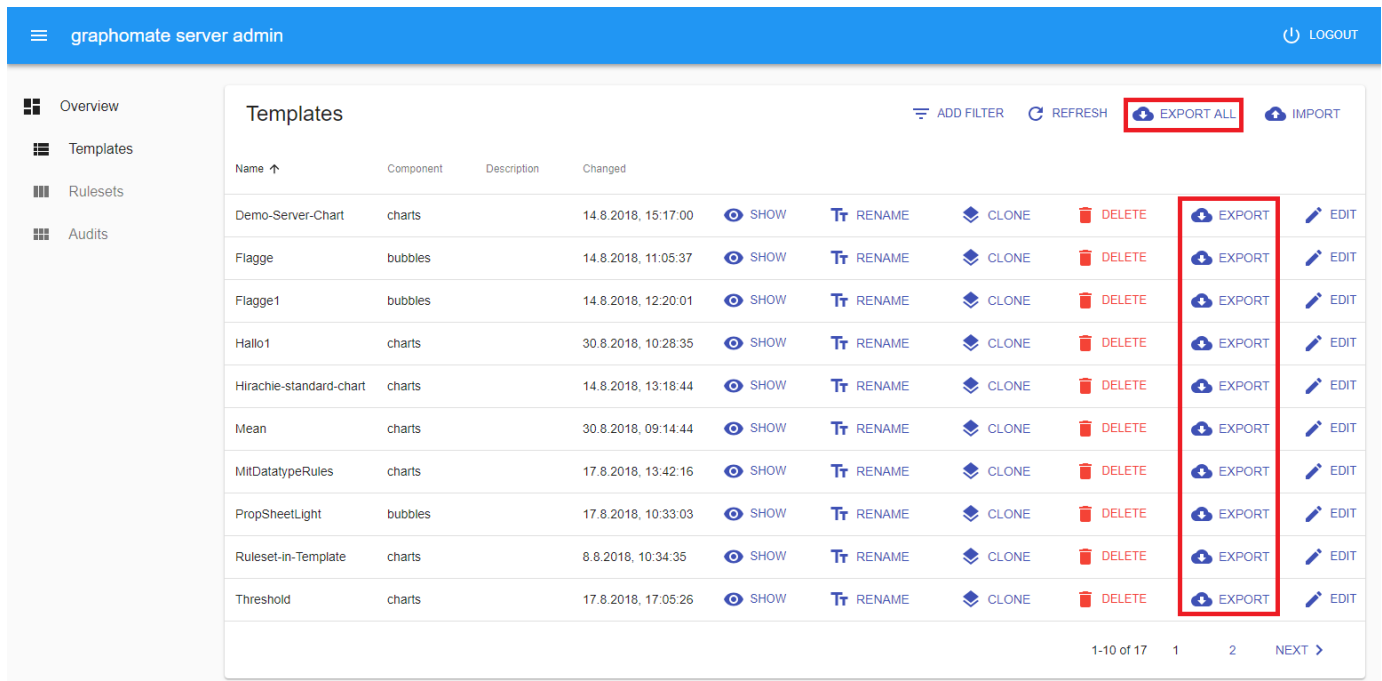


```
1 <!-- paste this DatatypeDictionary to your controller
2 /*global graphomate*/
3 var dtd = new graphomate.ui.DatatypeDictionary({
4   datatypes: [new graphomate.ui.Datatype({
5     "name": "D01",
6     "color": "#FFFF00",
7     "shape": "wedge",
8     "thickness": 1,
9     "fillType": "hatchedDownBold",
10    "barwidth": 0.7,
11    "pinwidth": 0.7,
12    "fontWeight": "bold"
13  }), new graphomate.ui.Datatype({
14    "name": "D02",
15    "color": "#777777",
16    "shape": "rect",
17    "thickness": 1,
18    "fillType": "empty",
19    "barwidth": 40,
20    "pinwidth": 40,
21    "fontWeight": "normal"
22  })], new graphomate.ui.Datatype({
```

This section displays UI5 code that can be used to add graphomate for UI5 components to an UI5 XML view. The parts that need to be customized are documented by comments in the code.

By clicking the *SAVE* button the changes will be saved but the admin will stay in edit mode. Clicking the *SAVE AND CLOSE* button will result in saving the changes and going back to the list view.

## Export Template



The screenshot shows the 'Templates' management interface in the graphomate server admin. The interface includes a navigation menu on the left with 'Overview', 'Templates', 'Rulesets', and 'Audits'. The main content area displays a table of templates with columns for Name, Component, Description, and Changed. Action buttons for each template include SHOW, RENAME, CLONE, DELETE, EXPORT, and EDIT. The 'EXPORT ALL' button at the top right of the table is highlighted with a red box, and the 'EXPORT' button for the 'Demo-Server-Chart' template is also highlighted with a red box. The table contains 11 rows of template data.

Name ↑	Component	Description	Changed	SHOW	RENAME	CLONE	DELETE	EXPORT	EDIT
Demo-Server-Chart	charts		14.8.2018, 15:17:00	SHOW	RENAME	CLONE	DELETE	EXPORT	EDIT
Flagge	bubbles		14.8.2018, 11:05:37	SHOW	RENAME	CLONE	DELETE	EXPORT	EDIT
Flagge1	bubbles		14.8.2018, 12:20:01	SHOW	RENAME	CLONE	DELETE	EXPORT	EDIT
Hallo1	charts		30.8.2018, 10:28:35	SHOW	RENAME	CLONE	DELETE	EXPORT	EDIT
Hirarchie-standard-chart	charts		14.8.2018, 13:18:44	SHOW	RENAME	CLONE	DELETE	EXPORT	EDIT
Mean	charts		30.8.2018, 09:14:44	SHOW	RENAME	CLONE	DELETE	EXPORT	EDIT
MitDatatypeRules	charts		17.8.2018, 13:42:16	SHOW	RENAME	CLONE	DELETE	EXPORT	EDIT
PropSheetLight	bubbles		17.8.2018, 10:33:03	SHOW	RENAME	CLONE	DELETE	EXPORT	EDIT
Ruleset-in-Template	charts		8.8.2018, 10:34:35	SHOW	RENAME	CLONE	DELETE	EXPORT	EDIT
Threshold	charts		17.8.2018, 17:05:26	SHOW	RENAME	CLONE	DELETE	EXPORT	EDIT

A template with all its contents can be exported by clicking the *EXPORT* button in the template list. The browser will start the download of file which starts with the graphomate component id and after an underscore the template name will follow. The file extension will be *.gmt* which stands for *graphomate template*.

All templates can be exported together by clicking the *EXPORT ALL* button above the template list. A download of a file called *graphomate\_templates\_<date>.zip* will be started.

Both a single template and the collection of templates can be imported to the server.

## Filter Template

The screenshot shows the 'Templates' page in the graphomate server admin interface. The page has a blue header with 'graphomate server admin' and a 'LOGOUT' button. On the left, there is a sidebar with navigation options: Overview, Templates, Rulesets, and Audits. The main content area is titled 'Templates' and contains a table of templates. Above the table are buttons for 'ADD FILTER', 'REFRESH', 'EXPORT ALL', and 'IMPORT'. A search box for 'Component' is also visible, with a red box highlighting it. The table has columns for Name, Component, Description, and Changed. Each row in the table has a set of action buttons: SHOW, RENAME, CLONE, DELETE, EXPORT, and EDIT.

Name ↑	Component	Description	Changed						
Demo-Server-Chart	charts		14.8.2018, 15:17:00	SHOW	RENAME	CLONE	DELETE	EXPORT	EDIT
Flagge	bubbles		14.8.2018, 11:05:37	SHOW	RENAME	CLONE	DELETE	EXPORT	EDIT
Flagge1	bubbles		14.8.2018, 12:20:01	SHOW	RENAME	CLONE	DELETE	EXPORT	EDIT
Hallo1	charts		30.8.2018, 10:28:35	SHOW	RENAME	CLONE	DELETE	EXPORT	EDIT
Hirarchie-standard-chart	charts		14.8.2018, 13:18:44	SHOW	RENAME	CLONE	DELETE	EXPORT	EDIT
Mean	charts		30.8.2018, 09:14:44	SHOW	RENAME	CLONE	DELETE	EXPORT	EDIT
MitDatatypeRules	charts		17.8.2018, 13:42:16	SHOW	RENAME	CLONE	DELETE	EXPORT	EDIT
PropSheetLight	bubbles		17.8.2018, 10:33:03	SHOW	RENAME	CLONE	DELETE	EXPORT	EDIT
Ruleset-in-Template	charts		8.8.2018, 10:34:35	SHOW	RENAME	CLONE	DELETE	EXPORT	EDIT
Threshold	charts		17.8.2018, 17:05:26	SHOW	RENAME	CLONE	DELETE	EXPORT	EDIT

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By clicking on *ADD FILTER* right above the list of templates, you can restrict the selection of templates. Select *Tag* to display templates with a specific tag or *Name* to display templates that contain the selected text in the name. Similarly, you can select templates based on their *description* or *author*. In addition, templates that are assigned to a specific *component* can be filtered. All filters can also be used simultaneously.

## Import Template

graphomate server admin LOGOUT

- Overview
- Templates
- Rulesets
- Audits

### Templates

ADD FILTER REFRESH EXPORT ALL **IMPORT**

Name ↑	Component	Description	Changed						
Demo-Server-Chart	charts		14.8.2018, 15:17:00	SHOW	RENAME	CLONE	DELETE	EXPORT	EDIT
Flagge	bubbles		14.8.2018, 11:05:37	SHOW	RENAME	CLONE	DELETE	EXPORT	EDIT
Flagge1	bubbles		14.8.2018, 12:20:01	SHOW	RENAME	CLONE	DELETE	EXPORT	EDIT
Hallo1	charts		30.8.2018, 10:28:35	SHOW	RENAME	CLONE	DELETE	EXPORT	EDIT
Hirarchie-standard-chart	charts		14.8.2018, 13:18:44	SHOW	RENAME	CLONE	DELETE	EXPORT	EDIT
Mean	charts		30.8.2018, 09:14:44	SHOW	RENAME	CLONE	DELETE	EXPORT	EDIT
MitDatatypeRules	charts		17.8.2018, 13:42:16	SHOW	RENAME	CLONE	DELETE	EXPORT	EDIT
PropSheetLight	bubbles		17.8.2018, 10:33:03	SHOW	RENAME	CLONE	DELETE	EXPORT	EDIT
Ruleset-in-Template	charts		8.8.2018, 10:34:35	SHOW	RENAME	CLONE	DELETE	EXPORT	EDIT
Threshold	charts		17.8.2018, 17:05:26	SHOW	RENAME	CLONE	DELETE	EXPORT	EDIT

1-10 of 17 1 2 NEXT >

A template or a collection of templates which has been **exported** can be as well imported. By clicking the **IMPORT** button above the template list the browser will prompt for the file to import. Choose the template with the **.gmt** extension or the collection of templates with the **.zip** extension and it will be saved on the server. Existing templates will not be overwritten.

## Rename Template

The screenshot shows the 'graphomate server admin' interface. On the left is a navigation menu with 'Overview', 'Templates', 'Rulesets', and 'Audits'. The main area is titled 'Templates' and contains a table with columns: Name, Component, Description, Changed, and actions. The table lists several templates, including 'Demo-Server-Chart', 'Flagge', 'Flagge1', 'Hallo1', 'Hirachle-standard-chart', 'Mean', 'MIDatatypeRules', 'PropSheetLight', 'Ruleset-in-Template', and 'Threshold'. A red box highlights the 'RENAME' button for the 'Demo-Server-Chart' template. A 'Rename' dialog box is open, prompting the user to 'Choose new name' with a text input field and a 'Name can not be empty!' error message. The dialog has 'CLOSE' and 'SAVE' buttons.

Name	Component	Description	Changed	Actions
Demo-Server-Chart	charts		14.8.2018, 15:17:00	SHOW, RENAME, CLONE, DELETE, EXPORT, EDIT
Flagge	bubbles		14.8.2018, 11:05:37	SHOW, RENAME, CLONE, DELETE, EXPORT, EDIT
Flagge1	bubbles			RENAME, CLONE, DELETE, EXPORT, EDIT
Hallo1	charts			RENAME, CLONE, DELETE, EXPORT, EDIT
Hirachle-standard-chart	charts			RENAME, CLONE, DELETE, EXPORT, EDIT
Mean	charts			RENAME, CLONE, DELETE, EXPORT, EDIT
MIDatatypeRules	charts			RENAME, CLONE, DELETE, EXPORT, EDIT
PropSheetLight	bubbles		17.8.2018, 10:33:03	SHOW, RENAME, CLONE, DELETE, EXPORT, EDIT
Ruleset-in-Template	charts		8.8.2018, 10:34:35	SHOW, RENAME, CLONE, DELETE, EXPORT, EDIT
Threshold	charts		17.8.2018, 17:05:26	SHOW, RENAME, CLONE, DELETE, EXPORT, EDIT

You can rename a template by clicking on the *RENAME* button in the templates list. When doing so a dialog will prompt for the new name of the template. A valid name can consist out of letters, numbers and dashes.

## Rulesets

graphomate server admin
LOGOUT

- Overview
- Templates
- Rulesets**
- Audits

### Rulesets

Name ↑	Type	Description	Changed						
ChartsExample	Dimension		9/19/2018, 2:50:23 PM	SHOW	RENAME	CLONE	DELETE	EXPORT	EDIT
DatatypesYear	Dimension		8/29/2018, 5:10:10 PM	SHOW	RENAME	CLONE	DELETE	EXPORT	EDIT
DateTest	Property Dimension		9/18/2018, 4:28:38 PM	SHOW	RENAME	CLONE	DELETE	EXPORT	EDIT
Demo-Continent	Dimension		8/14/2018, 2:27:26 PM	SHOW	RENAME	CLONE	DELETE	EXPORT	EDIT
Demo-Datatype	Dimension		8/14/2018, 3:32:09 PM	SHOW	RENAME	CLONE	DELETE	EXPORT	EDIT
MonthOrder	Dimension		8/20/2018, 11:44:44 AM	SHOW	RENAME	CLONE	DELETE	EXPORT	EDIT
RegionResult	Dimension		8/20/2018, 10:00:15 AM	SHOW	RENAME	CLONE	DELETE	EXPORT	EDIT
RegionResult2	Dimension		8/15/2018, 2:41:23 PM	SHOW	RENAME	CLONE	DELETE	EXPORT	EDIT
RegionResult3	Dimension		9/11/2018, 2:13:08 PM	SHOW	RENAME	CLONE	DELETE	EXPORT	EDIT
brain-twister	Dimension		9/13/2018, 12:19:56 PM	SHOW	RENAME	CLONE	DELETE	EXPORT	EDIT

ADD FILTER
REFRESH
EXPORT ALL
IMPORT
CREATE

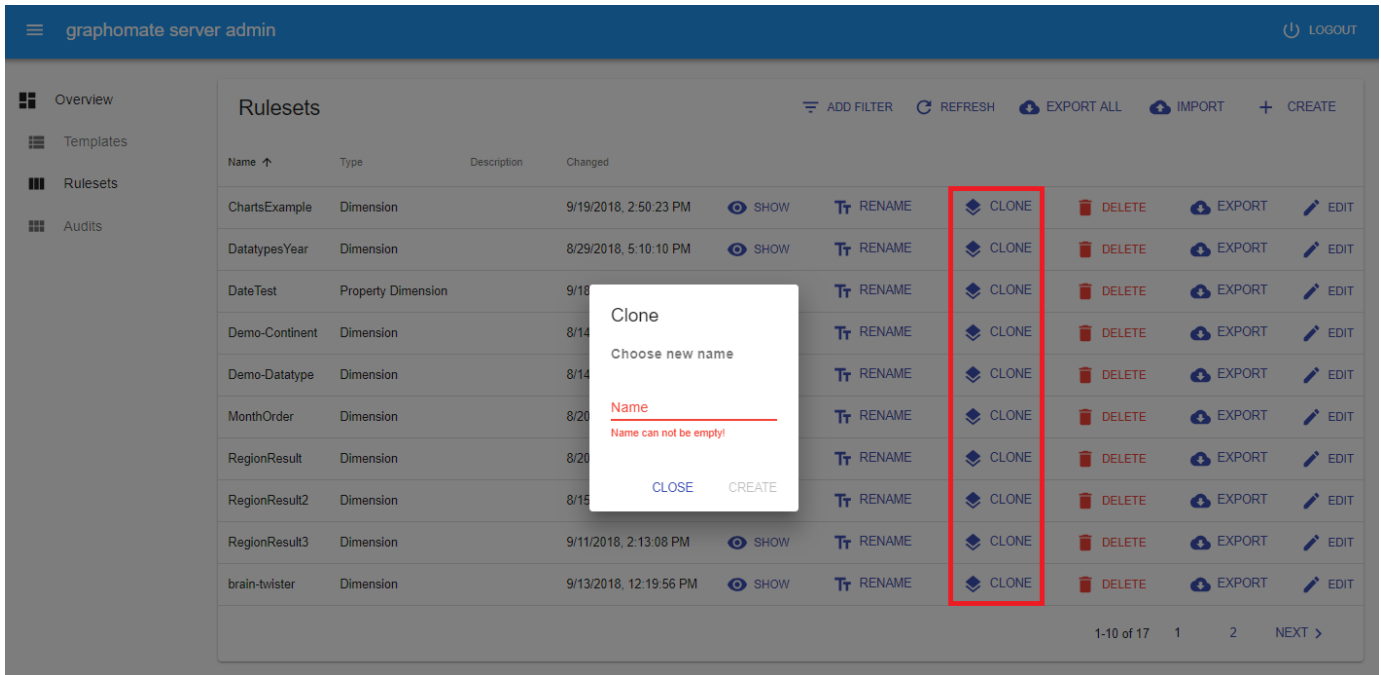
1-10 of 17    1    2    NEXT >

A ruleset is a collection of complex rules that defines how a compatible component (currently: graphomate charts) should extend its data. According to the rules, a component can derive new information based on the data assigned to it. With the help of a ruleset, for example, a graphomate charts component can derive data types from an existing month dimension.

All rulesets available on the server can be managed in the admin area. By clicking on the column header, the templates are sorted according to the content of the corresponding column. By clicking on **ADD FILTER**, the displayed rulesets can be selected according to specific criteria. In the list of rulesets a ruleset can be **renamed**, **cloned**, **deleted**, **exported** or its content **edited**. It is also possible to **export** or **import** all or one of the rulesets.



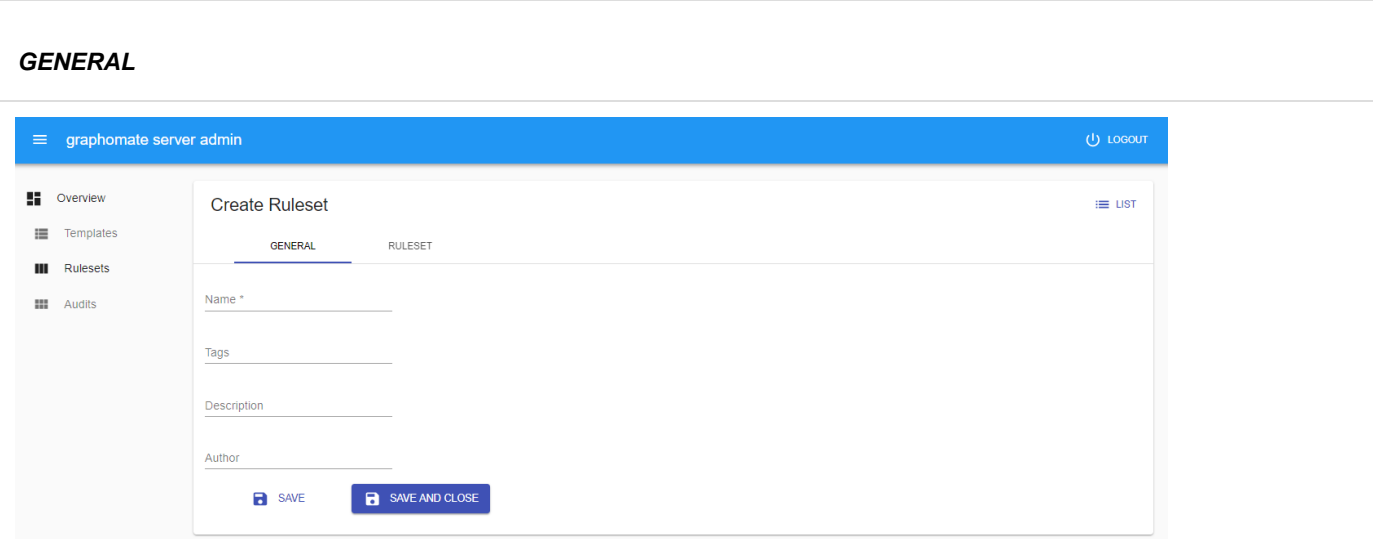
### Clone Ruleset



You can clone a ruleset with all its contents by clicking on the **CLONE** button in the ruleset list. When doing so a dialog will prompt for the name of the cloned ruleset. A valid name can consist out of letters, numbers and dashes.

## Create Ruleset

In the ruleset create mode a new ruleset can be created. It is divided in two tabs which will be described in the following table.



The screenshot shows the 'Create Ruleset' form in the 'GENERAL' tab. The form is part of the 'graphomate server admin' interface. The left sidebar contains navigation links for Overview, Templates, Rulesets, and Audits. The main content area has a blue header with 'graphomate server admin' and a 'LOGOUT' button. The form title is 'Create Ruleset' with a 'LIST' link. The 'GENERAL' tab is active, showing four text input fields: 'Name \*', 'Tags', 'Description', and 'Author'. At the bottom, there are two buttons: 'SAVE' and 'SAVE AND CLOSE'.

In the *GENERAL* tab the field for the name is mandatory. A valid name can consist out of letters, numbers and dashes.

The field for the tags can be filled with a list of tags which are separated by comma. The description and the author are free text fields.

### RULESET

graphomate server admin LOGOUT

- Overview
- Templates
- Rulesets**
- Audits

#### Create RuleSet LIST

**GENERAL** **RULESET**

Output Type: **Dimension** | Output Name: \_\_\_\_\_ | Default Result: \_\_\_\_\_ | Error Result: \_\_\_\_\_ +

Result: \_\_\_\_\_ + + +

OR

Type	Dimension Member (...)	Dimension Name	Operator	equal	Member Name	↑	↓	+	+	+
Type	Dimension Member (...)	Dimension Name	Operator	equal	Member Name	↑	↓	+	+	+

SAVE SAVE AND CLOSE

In the *RULESET* tab the definition of the ruleset can be created by using the Rulesbuilder.

By clicking the *SAVE* button the changes will be saved and the admin will change to edit mode. Clicking the *SAVE AND CLOSE* button will result in saving the changes and going back to the list view.

## Edit Ruleset

In the ruleset edit mode the contents of a ruleset can be modified. It is divided in three tabs which will be described in the following table.

The screenshot displays the 'Edit Ruleset' interface for a ruleset named 'DateRuleNovember'. The interface is titled 'GENERAL' and features a sidebar with navigation options: Overview, Templates, Rulesets, and Audits. The main content area shows the 'General' tab with the following fields:

- Name:** DateRuleNovember (disabled)
- Tags:** date
- Description:** (empty text field)
- Author:** (empty text field)
- Created:** 2/26/2019, 3:20:30 PM
- Changed:** 5/27/2019, 4:21:34 PM

At the bottom of the form, there are two buttons: 'SAVE' and 'SAVE AND CLOSE'. The 'Rules' section is currently empty and has a dropdown arrow.

In the *GENERAL* tab the field for the name is deactivated. To rename a ruleset you could use the [rename button](#) in the ruleset list.

The field for the tags can be filled with a list of tags which are separated by comma. The description and the author are free text fields.

In the Fields for *Created* and *Changed* nothing can be changed, because the Changed timestamp will be updated automatically once the ruleset is saved.

## RULES

The screenshot shows the 'Rules' configuration page for a ruleset named 'DateRuleNovember'. The interface includes a sidebar with navigation options: Overview, Templates, Rulesets, and Audits. The main content area is titled 'Rules' and contains a table for defining rules. The table has columns for Output Type, Property Type, Data Types, Default Result, and Error Result. A single rule is defined with the following details:

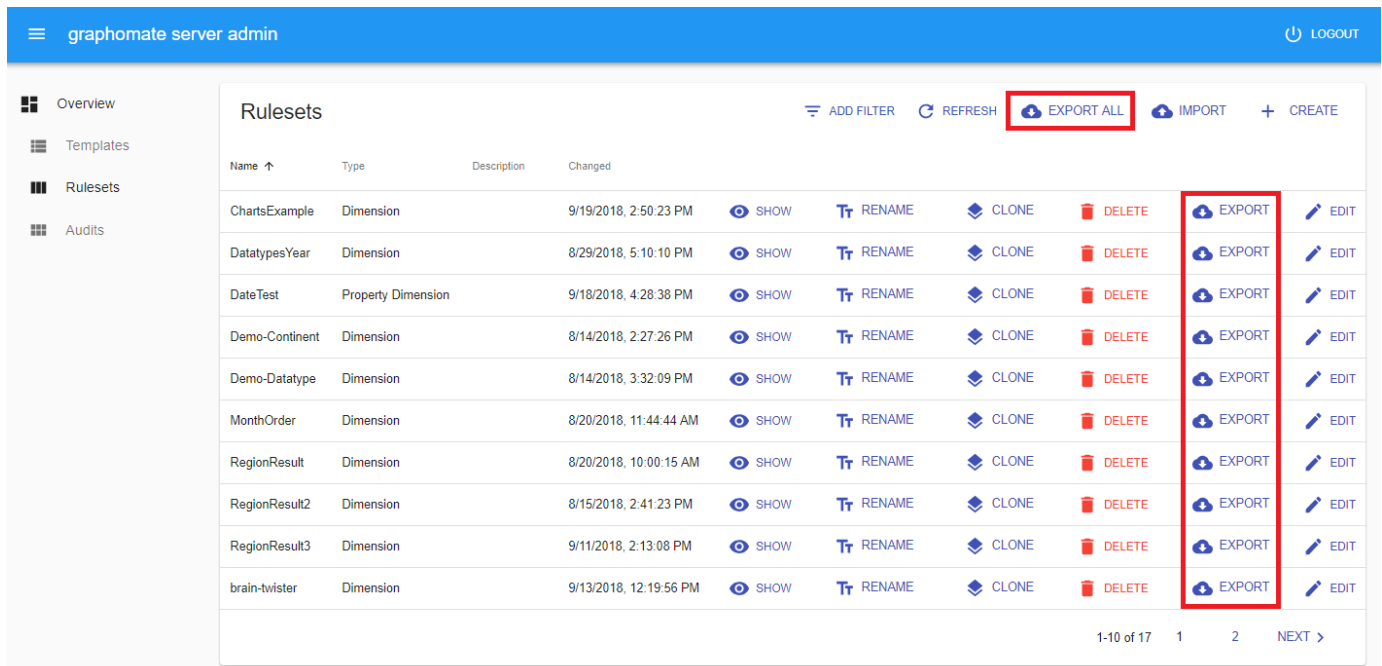
Output Type	Property Type	Data Types	Default Result	Error Result
Property Dimension	Data Types		DEFAULT	ERROR

Below the table, there is a 'Result' field containing 'FC'. An 'OR' toggle is present. The rule configuration includes a 'Type' dropdown set to 'Dimension Memb...', a 'Dimension Key' field with 'DS:131.DIM.id\_452', an 'Operator' dropdown set to 'before (time)', and a 'Member Key' field with '(currentDate(YYYY-MM-D))'. At the bottom of the interface, there are two buttons: 'SAVE' and 'SAVE AND CLOSE'.

In the *RULESET* tab the definition of the ruleset can be modified by using the [Rulesbuilder](#).

By clicking the *SAVE* button the changes will be saved but the admin will stay in edit mode. Clicking the *SAVE AND CLOSE* button will result in saving the changes and going back to the list view.

## Export Ruleset



The screenshot shows the 'Rulesets' management interface. At the top, there are buttons for 'ADD FILTER', 'REFRESH', 'EXPORT ALL', 'IMPORT', and 'CREATE'. The 'EXPORT ALL' button is highlighted with a red box. Below the buttons is a table with columns: Name, Type, Description, Changed, and a set of action buttons (SHOW, RENAME, CLONE, DELETE, EXPORT, EDIT). The 'EXPORT' button for the 'ChartsExample' ruleset is also highlighted with a red box. The table lists several rulesets, including 'ChartsExample', 'DatatypesYear', 'DateTest', 'Demo-Continent', 'Demo-Datatype', 'MonthOrder', 'RegionResult', 'RegionResult2', 'RegionResult3', and 'brain-twister'.

Name ↑	Type	Description	Changed	SHOW	RENAME	CLONE	DELETE	EXPORT	EDIT
ChartsExample	Dimension		9/19/2018, 2:50:23 PM	SHOW	RENAME	CLONE	DELETE	EXPORT	EDIT
DatatypesYear	Dimension		8/29/2018, 5:10:10 PM	SHOW	RENAME	CLONE	DELETE	EXPORT	EDIT
DateTest	Property Dimension		9/18/2018, 4:28:38 PM	SHOW	RENAME	CLONE	DELETE	EXPORT	EDIT
Demo-Continent	Dimension		8/14/2018, 2:27:26 PM	SHOW	RENAME	CLONE	DELETE	EXPORT	EDIT
Demo-Datatype	Dimension		8/14/2018, 3:32:09 PM	SHOW	RENAME	CLONE	DELETE	EXPORT	EDIT
MonthOrder	Dimension		8/20/2018, 11:44:44 AM	SHOW	RENAME	CLONE	DELETE	EXPORT	EDIT
RegionResult	Dimension		8/20/2018, 10:00:15 AM	SHOW	RENAME	CLONE	DELETE	EXPORT	EDIT
RegionResult2	Dimension		8/15/2018, 2:41:23 PM	SHOW	RENAME	CLONE	DELETE	EXPORT	EDIT
RegionResult3	Dimension		9/11/2018, 2:13:08 PM	SHOW	RENAME	CLONE	DELETE	EXPORT	EDIT
brain-twister	Dimension		9/13/2018, 12:19:56 PM	SHOW	RENAME	CLONE	DELETE	EXPORT	EDIT

1-10 of 17 1 2 NEXT >

A ruleset with all its contents can be exported by clicking the *EXPORT* button in the ruleset list. The browser will start the download of file with the name of the ruleset. The file extension will be *.gmr* which stands for *graphomate ruleset*.

All rulesets can be exported together by clicking the *EXPORT ALL* button above the ruleset list. A download of a file called *graphomate\_rulesets\_<date>.zip* will be started.

Both a single ruleset and the collection of rulesets can be [imported](#) to the server.

## Filter Ruleset

☰ Rulesets
🔄 👤

- ☰ Overview
- ☰ Templates
- ☰ Rulesets
- ☰ Audits

✕ Tag ✕ Name ✕ Description

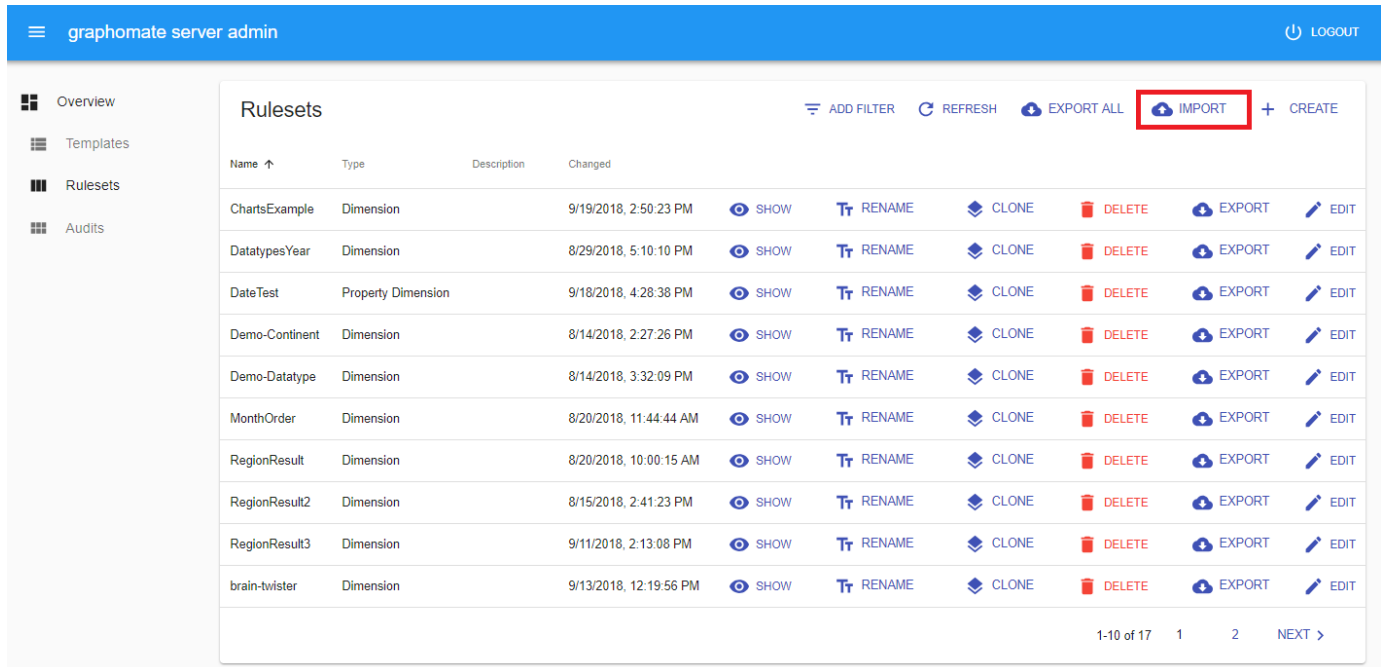
🔄 REFRESH 📄 EXPORT ALL 📄 IMPORT + CREATE

Name ↑	Type	Description	Changed					
DateRuleNovember	Property Dimension		5/27/2019, 4:21:34 PM	🔄 RENAME	📄 CLONE	🗑️ DELETE	📄 EXPORT	✎ EDIT
LmDe-Waterfall-Minus	Property Dimension		2/19/2019, 5:04:34 PM	🔄 RENAME	📄 CLONE	🗑️ DELETE	📄 EXPORT	✎ EDIT
LmDe-Waterfall-SMinus	Property Dimension		2/19/2019, 5:04:21 PM	🔄 RENAME	📄 CLONE	🗑️ DELETE	📄 EXPORT	✎ EDIT
LmDe-Waterfall-Summe	Property Dimension		2/19/2019, 5:04:10 PM	🔄 RENAME	📄 CLONE	🗑️ DELETE	📄 EXPORT	✎ EDIT
LmDe-Waterfall-all	Property Dimension		2/20/2019, 12:23:42 PM	🔄 RENAME	📄 CLONE	🗑️ DELETE	📄 EXPORT	✎ EDIT
MO-DateRule	Property Dimension		2/25/2019, 4:43:37 PM	🔄 RENAME	📄 CLONE	🗑️ DELETE	📄 EXPORT	✎ EDIT
MO-DateRule-ExcelDatum	Property Dimension		2/25/2019, 4:14:24 PM	🔄 RENAME	📄 CLONE	🗑️ DELETE	📄 EXPORT	✎ EDIT
MO-Demo-Dimension	Property Dimension		2/18/2019, 4:09:25 PM	🔄 RENAME	📄 CLONE	🗑️ DELETE	📄 EXPORT	✎ EDIT
MO-Demo-Measure	Property Dimension		2/11/2019, 4:27:07 PM	🔄 RENAME	📄 CLONE	🗑️ DELETE	📄 EXPORT	✎ EDIT
MO-Waterfall-all	Property Dimension		2/21/2019, 3:01:03 PM	🔄 RENAME	📄 CLONE	🗑️ DELETE	📄 EXPORT	✎ EDIT

Rows per page: 10 ▾ 1-10 of 17 1 2 NEXT >

By clicking on **ADD FILTER** right above the list of rulesets, you can restrict the selection of rulesets. Select *Tag* to display rulesets with a specific tag or *Name* to display rulesets that contain the selected text in the name. Similarly, you can select rulesets based on their *description* or *author*. All filters can also be used simultaneously.

## Import Ruleset



The screenshot shows the 'graphomate server admin' interface. On the left is a navigation menu with 'Overview', 'Templates', 'Rulesets', and 'Audits'. The main content area is titled 'Rulesets' and contains a table of rule sets. Above the table are buttons for 'ADD FILTER', 'REFRESH', 'EXPORT ALL', 'IMPORT' (highlighted with a red box), and 'CREATE'. The table has columns for Name, Type, Description, and Changed, and each row includes action buttons for SHOW, RENAME, CLONE, DELETE, EXPORT, and EDIT.

Name ↑	Type	Description	Changed	SHOW	RENAME	CLONE	DELETE	EXPORT	EDIT
ChartsExample	Dimension		9/19/2018, 2:50:23 PM	SHOW	RENAME	CLONE	DELETE	EXPORT	EDIT
DatatypesYear	Dimension		8/29/2018, 5:10:10 PM	SHOW	RENAME	CLONE	DELETE	EXPORT	EDIT
DateTest	Property Dimension		9/18/2018, 4:28:38 PM	SHOW	RENAME	CLONE	DELETE	EXPORT	EDIT
Demo-Continent	Dimension		8/14/2018, 2:27:26 PM	SHOW	RENAME	CLONE	DELETE	EXPORT	EDIT
Demo-Datatype	Dimension		8/14/2018, 3:32:09 PM	SHOW	RENAME	CLONE	DELETE	EXPORT	EDIT
MonthOrder	Dimension		8/20/2018, 11:44:44 AM	SHOW	RENAME	CLONE	DELETE	EXPORT	EDIT
RegionResult	Dimension		8/20/2018, 10:00:15 AM	SHOW	RENAME	CLONE	DELETE	EXPORT	EDIT
RegionResult2	Dimension		8/15/2018, 2:41:23 PM	SHOW	RENAME	CLONE	DELETE	EXPORT	EDIT
RegionResult3	Dimension		9/11/2018, 2:13:08 PM	SHOW	RENAME	CLONE	DELETE	EXPORT	EDIT
brain-twister	Dimension		9/13/2018, 12:19:56 PM	SHOW	RENAME	CLONE	DELETE	EXPORT	EDIT

1-10 of 17 1 2 NEXT >

A ruleset or a collection of rulesets which has been exported can be as well imported. By clicking the *IMPORT* button above the ruleset list the browser will prompt for the file to import. Choose the ruleset with the *.gmr* extension or the collection of rulesets with the *.zip* extension and it will be saved on the server. Existing rulesets will not be overwritten.



## Rename Ruleset

The screenshot shows the 'graphomate server admin' interface. On the left is a navigation menu with 'Overview', 'Templates', 'Rulesets', and 'Audits'. The main area displays a 'Rulesets' table with columns for Name, Type, Description, and Changed. The table lists several rulesets, including 'ChartsExample', 'DatatypesYear', 'DateTest', 'Demo-Continent', 'Demo-Datatype', 'MonthOrder', 'RegionResult', 'RegionResult2', 'RegionResult3', and 'brain-twister'. Each row has a 'RENAME' button highlighted with a red box. A 'Rename' dialog box is open over the 'DateTest' row, containing a text input field with the error message 'Name can not be empty!' and 'CLOSE' and 'SAVE' buttons.

Name ↑	Type	Description	Changed	SHOW	RENAME	CLONE	DELETE	EXPORT	EDIT
ChartsExample	Dimension		9/19/2018, 2:50:23 PM	SHOW	RENAME	CLONE	DELETE	EXPORT	EDIT
DatatypesYear	Dimension		8/29/2018, 5:10:10 PM	SHOW	RENAME	CLONE	DELETE	EXPORT	EDIT
DateTest	Property Dimension		9/18/2018, 12:13:08 PM	SHOW	RENAME	CLONE	DELETE	EXPORT	EDIT
Demo-Continent	Dimension		8/14/2018, 12:13:08 PM	SHOW	RENAME	CLONE	DELETE	EXPORT	EDIT
Demo-Datatype	Dimension		8/14/2018, 12:13:08 PM	SHOW	RENAME	CLONE	DELETE	EXPORT	EDIT
MonthOrder	Dimension		8/20/2018, 12:13:08 PM	SHOW	RENAME	CLONE	DELETE	EXPORT	EDIT
RegionResult	Dimension		8/20/2018, 12:13:08 PM	SHOW	RENAME	CLONE	DELETE	EXPORT	EDIT
RegionResult2	Dimension		8/15/2018, 12:13:08 PM	SHOW	RENAME	CLONE	DELETE	EXPORT	EDIT
RegionResult3	Dimension		9/11/2018, 2:13:08 PM	SHOW	RENAME	CLONE	DELETE	EXPORT	EDIT
brain-twister	Dimension		9/13/2018, 12:19:56 PM	SHOW	RENAME	CLONE	DELETE	EXPORT	EDIT

You can rename a ruleset by clicking on the *RENAME* button in the ruleset list. When doing so a dialog will prompt for the new name of the ruleset. A valid name can consist out of letters, numbers and dashes.

## Rulesbuilder

### Overview

GENERAL		RULESET		
Output Type		Output Name	Default Result	Error R
Dimension	▼	Quarter	Q4	ERR

The title shows the currently opened ruleset. The Ruleset tab contains the so-called Rulesbuilder. Here different rules can be created which can be applied to the data of the graphomate charts in order to derive information afterwards. A ruleset serves as a description for a newly generated dimension whose values are generated by applying rules.

In addition to a set of rules, a ruleset has the following properties:

- **Output Type:** If 'Dimension' is selected, a new dimension is created that is visible to the user. 'Property Dimension' leads to an invisible dimension that can only be used for special features of the components (Data Types, Number Format,...) and is not displayed in the component itself.
- **Output Name:** The name of the new dimension to be created based on the rules.
- **Default Result:** The name of the standard member that is to be assigned to all data points to which no rule applies. A 'data point' in this context refers to a cell in the tabular drilldown of the data.
- **Error Result:** The name of the member that is to be assigned to all data points when an error occurred during processing. An error could be caused, for example, by an invalid date format or a character string for number comparisons.

The plus button on the right side adds another rule to the ruleset.

Result  
Q1

OR

Type	Dimension Name	Operator	Member Name
Dimension Member (Name)	Month	equal	January
Dimension Member (Name)	Month	equal	February
Dimension Member (Name)	Month	equal	March

For each existing data point of a data source, the system checks whether at least one of the rules applies to it. The first applicable rule determines the value that the respective data point receives in the new dimension. A rule therefore consists of the following elements:

- **Result:** The name of the member which gets assigned to data points that satisfy this rule.
- **Expression Group:** A group of logically linked expressions. We offer the logical operators AND and OR. Groups of expressions can be nested as desired. To add new expressions or expression groups, use the two plus buttons on the right side.
- **Expression:** A line consists of 4 elements and is called 'expression'. It is applied to data points to be evaluated logically (true/false). The following evaluation properties are available for this:
  - **Type:** Defines the type of the base of the expression.
  - **Key/Name:** Defines the basic dimension or key figure of the expression.
  - **Operator:** Determines the operation between base value and comparison value.
  - **Member Name/Key/Value:** Sets the comparison value with which the base is compared using the operator.

In the example above, a new value named 'Q1' is created to get assigned to each data point for which one of the expressions (OR link) is positively validated. For example, the first expression validates positively for a data point if the name of the member from the dimension with the name 'Month' corresponds to the text 'January'.

Result  
Q2

AND

Type	Dimension Name	Operator	Member Name
Dimension Member (Name)	Month	after (order)	March
Dimension Member (Name)	Month	before (order)	July

In this example, a member 'Q2' is defined that gets applied to all data points of the new dimension to which the following two expressions apply (AND linked):

- A data point whose name of its member from the dimension with the name 'Month' occurs in the list of members after the member with the name 'March'. This condition therefore includes all months that follow March in the list of known members (April to December assuming that the members of the datasource are in the correct order).
- A data point whose name of its member from the dimension with the name 'Month' occurs before the expression with the name 'July'. This condition therefore includes all months prior to July (January to June).

The intersection of the two sets of data points (AND linked) are all those whose members for the dimension 'Month' correspond to the months April, May and June. This gives them the value 'Q2' for the new dimension 'Quarter'.

Result  
Q3

OR

Type	Dimension Key	Operator	Member Key
Dimension Member (Key)	month00000001	ends	ly
Dimension Member (Key)	month00000001	begins	A
Dimension Member (Key)	month00000001	reg ex	^Sep

The same principle can also be applied to the keys of the dimensions and members, whereby in most cases it must be ensured that internal keys are used. In this cryptic example, the first expression would correspond to the month 'July', the second to the month 'April' and 'August' and the last would match the month 'September'.

## Expression Type

In addition to the 'Dimension Member' type used in the example, the 'Measure Value' type can also be used for expressions. This allows you to define an expression based on data values. In this case, the internal key or name of the key figure must be entered in the 'Measure Key/Name' field. Analogous to the above examples, the value of a data point can then be compared with a freely selectable 'member value' using an operator.

## Operators

Different operators can be selected for different 'expression types'. All string comparisons are considered case insensitive. The following operators are available in all cases:

- equal: Checks whether the base value corresponds exactly to the entered comparison value.
- not equal: Checks whether the base value does not correspond to the entered comparison value.

For the 'Dimension Member (Key/Name)' type, the following operators can be selected:

- contains: Checks whether the base name/key contains the entered comparison name/key.
- begins: Checks whether the base name/key starts with the entered comparison name/key.
- ends: Checks whether the base name/key ends with the entered comparison name/key.
- reg ex: Checks whether the regular expression entered applies to the base name/key.
- before (order): Checks whether the base name/key occurs in the list of members before the specified comparison member/key. This operator only refers to the predetermined order of members which is not necessarily an alphabetical or ascending one.
- after (order): Checks whether the base name/key occurs in the list of members after the specified comparison member/key. This operator only refers to the predetermined order of members which is not necessarily an alphabetical or ascending one.
- before (time): Checks whether the base value is temporally before the comparison value. Can only be used in conjunction with a specified date format. For this, either {currentDate(format, locale)} or {date(date, format, locale)} must be used for the comparison value (see section 'Examples').
- after (time): checks whether the base value is temporally after the comparison value. Can only be used in conjunction with a specified date format. For this, either {currentDate(format, locale)} or {date(date, format, locale)} must be used for the comparison value (see section 'Examples').

The following operators are possible for the 'Measure Value (Key/Name)' type:

- less: Checks whether the base value is smaller than the entered comparison value.
- greater: Checks whether the base value is greater than the entered comparison value.
- less or equal: Checks whether the base value is less or equal to the entered comparison value.
- greater or equal: Checks whether the base value is greater or equal to the entered comparison value.

## Wildcards

Result: AC

OR

Type	Dimension Name	Operator	Member Name
Dimension Member (Name)	Month	equal	{currentDate(MMM,en)}

### CURRENT DATE

For the 'Expression Type' 'Dimension Member (Key)' or 'Dimension Member (Name)' the member key or name to be checked can be wildcarded. This feature only applies to a small amount of use cases because we do not yet offer formatter functions to match the output of the wildcard to the actual format of member keys or names. However, it can be helpful in scenarios in which the keys or names of values correspond to generally valid date formats. In the example, a new member is created with the name 'AC'. All data points that have a member with the name 'August' (as of the Month this text was written) for their dimension with the name 'Month' get assigned the data type 'AC'. The wildcard expression is structured as follows: **{currentDate(format, locale)}** - where the format must correspond to a valid [momentjs](#) format and the locale ('de', 'fr' or 'en') is optional.

For example, {currentDate(MMMM,en)} corresponds to the current, written out, English month name.

### NULL

For the 'Expression Type' 'Measure Value (Key)' or 'Measure Value (Name)' the member key or name to be checked can be wildcarded using **{NULL}**, which allows a comparison with null values. So if data points can contain a null value and should be checked for it, a comparative operator can be used in conjunction with **{NULL}**.



## Further Examples

The screenshot shows the Graphomate query builder interface. At the top, the result is labeled "PP". Below this, there is a logical expression builder. The expression is structured as follows:

- An "OR" operator (indicated by an orange toggle) connects two main branches.
- The first branch (orange) consists of a single clause: "Dimension Member (Name)" with a dropdown arrow, "Year" as the dimension name, "before (time)" as the operator, and "{currentDate(YYYY)}" as the member name.
- The second branch (blue) is connected by an "AND" operator (indicated by a blue toggle) and contains two clauses:
  - The first clause (blue) has "Dimension Member (Name)" with a dropdown arrow, "Month" as the dimension name, "before (time)" as the operator, and "{currentDate(MMM,en)}" as the member name.
  - The second clause (blue) has "Dimension Member (Name)" with a dropdown arrow, "Year" as the dimension name, "equal" as the operator, and "{currentDate(YYYY)}" as the member name.

Each clause has a copy icon and a delete icon to its right. The interface also includes a search bar at the top right and a result preview area at the top left.

Suppose there is a time hierarchy of months and years, and you want to assign data type PP to all data points in the past. To do this, expressions must be logically linked using the different levels of the time hierarchy. This example includes all data points that are dated with past years or lie in the current year before the current month.

## Audits

Graphomate Auditing is used to determine how many different users use specific Graphomate extensions.

The auditing is automatically activated when the server is installed.

All data is stored in a H2 Database. This database is stored at the *tomcat root* in a folder called *graphomate* named *auditing.db*.

The screenshot shows the 'Audits' page in the Graphomate Admin interface. The page has a blue header with a menu icon and the title 'Audits'. On the left, there is a sidebar with navigation options: Overview, Templates, Rulesets, and Audits (selected). The main content area displays a table of audit records. At the top right of the table, there are two buttons: 'EXPORT' and 'ANONYMIZED EXPORT'. The table has three columns: 'Created' (with a downward arrow), 'Path', and 'Type'. There are four rows of data. At the bottom right of the table, it says 'Rows per page: 10' and '1-4 of 4'.

Created ↓	Path	Type
5/27/2019, 12:09:12 PM	C:\Program Files (x86)\SAP BusinessObjects\tomcat\graphomate\anonymized_audit_20190527120912.csv	Anonymized
5/27/2019, 12:09:08 PM	C:\Program Files (x86)\SAP BusinessObjects\tomcat\graphomate\audit_20190527120908.csv	Unanonymized
2/26/2019, 2:23:58 PM	C:\Program Files (x86)\SAP BusinessObjects\tomcat\graphomate\anonymized_audit_20190226142358.csv	Anonymized
2/26/2019, 2:23:54 PM	C:\Program Files (x86)\SAP BusinessObjects\tomcat\graphomate\audit_20190226142354.csv	Unanonymized

### Export

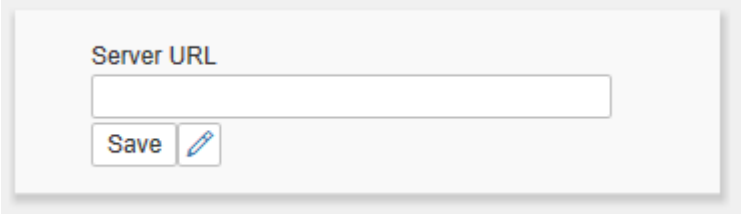
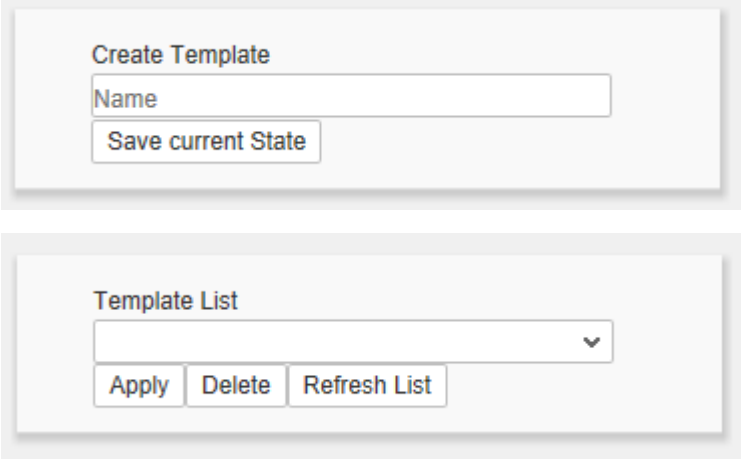
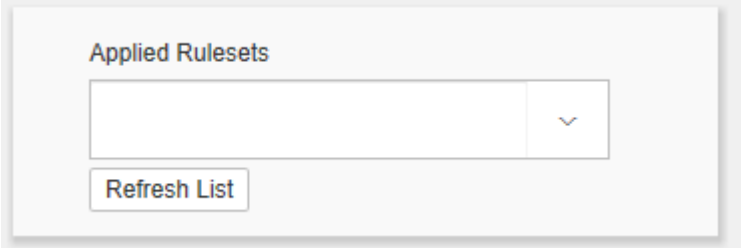
To export the Auditing data, you need to log in to the Admin, and click on Audits. Then you should click the "EXPORT" button. The export will run in the background, and will show a dialog when it's finished. It will tell you the path on the server where the csv file can be found. All usernames in the exported file are anonymized, and can't be translated back to the real usernames.

The data will be exported with the following layout:

id	date of measure	username	name of component	name of SAP product	name of application
1	11.07.2018	mmustermann	com.graphomate.charts	Lumira Designer	TestReport

## Properties

Here are the Properties described which are located in the *Additional Properties Sheet* of Lumira Designer extensions that are compatible with the *graphomate server*.

<p><b>SERVER CONFIGURATION</b></p> <p>Here you can enter the <i>Server URL</i> to which the component should connect and from which it should retrieve the templates.</p> <p>If you have specified the URL to the server, a check mark indicates that a connection could be established.</p> <p>If another server is used later, you can also press the button next to the Save button and edit the <i>Server URL</i>.</p> <p>The hyperlink below the buttons allows you to jump to the admin.</p>	
<p><b>TEMPLATING CONFIGURATION</b></p> <p>If the current settings are to be saved as a template, a new template name can be entered in the input field with the name <i>Create Template</i> and confirmed by clicking the <i>Save current State</i> button. If the naming convention entered is correct, the template is saved on the server and a toast with the corresponding message is displayed in the lower part of the Additional Property Sheet. However, if the name entered does not meet the expected naming conventions, a toast with the permitted characters is displayed accordingly.</p> <p>Templates stored on the server can be retrieved and applied via the Template List. Just select the desired template and press the <i>Apply</i> button. If you want to delete a template, select the template in the list and press the <i>Delete</i> button. If changes have been made to the templates on the server side, the list must be updated via the <i>Refresh List</i> button. Changes should then be visible.</p>	
<p><b>APPLIED RULESETS</b></p> <p>The dropdown menu displays all rulesets which are stored at the graphomate server. A ruleset is applied when the checkbox is activated.</p>	

## Known Issues

At the moment there are no Known Issues

