trueChart Menubar

Documentation

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1. Introduction

trueChart Menubar is an extension for *Qlik Sense* that provides a customizable menu bar for centralized navigation, interaction and selection using buttons and select lists based on existing data and utilizing individually configurable actions such as ‘Go to a certain sheet’ that can be attached to triggers like ‘when the item is clicked’ or ‘when the item is loaded’.

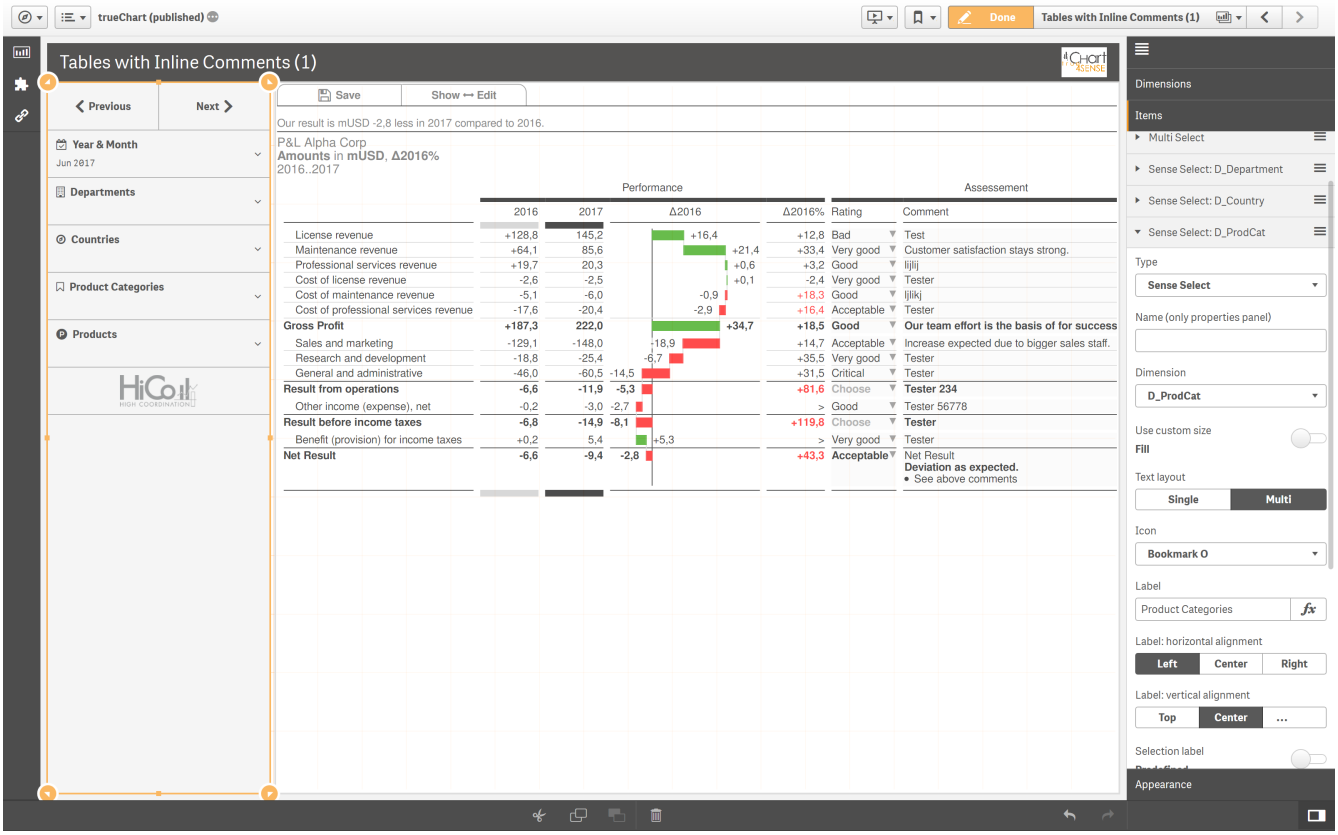

Figure 1. Qlik Sense showing a sheet in edit mode with a trueChart Menubar (left) next to trueChart (center) with the menu bar’s options in the properties panel (right).

2. Installing trueChart Menubar

2.1. Installation on *Qlik Sense Desktop*

To install trueChart Menubar for *Qlik Sense Desktop*, you just have to put the contents of the trueChart Menubar ZIP file into the directory `%USERPROFILE%\Documents\Qlik\Sense\Extensions`.

2.2. Installation on *Qlik Sense Server*

To install trueChart Menubar for *Qlik Sense Server*, go into the *Qlik Sense Management Console* (QMC) and navigate to *Extensions* via the sidebar. Then click on the *Import* button which opens the *Import extension file* dialog where you can browse and import the trueChart Menubar ZIP file.

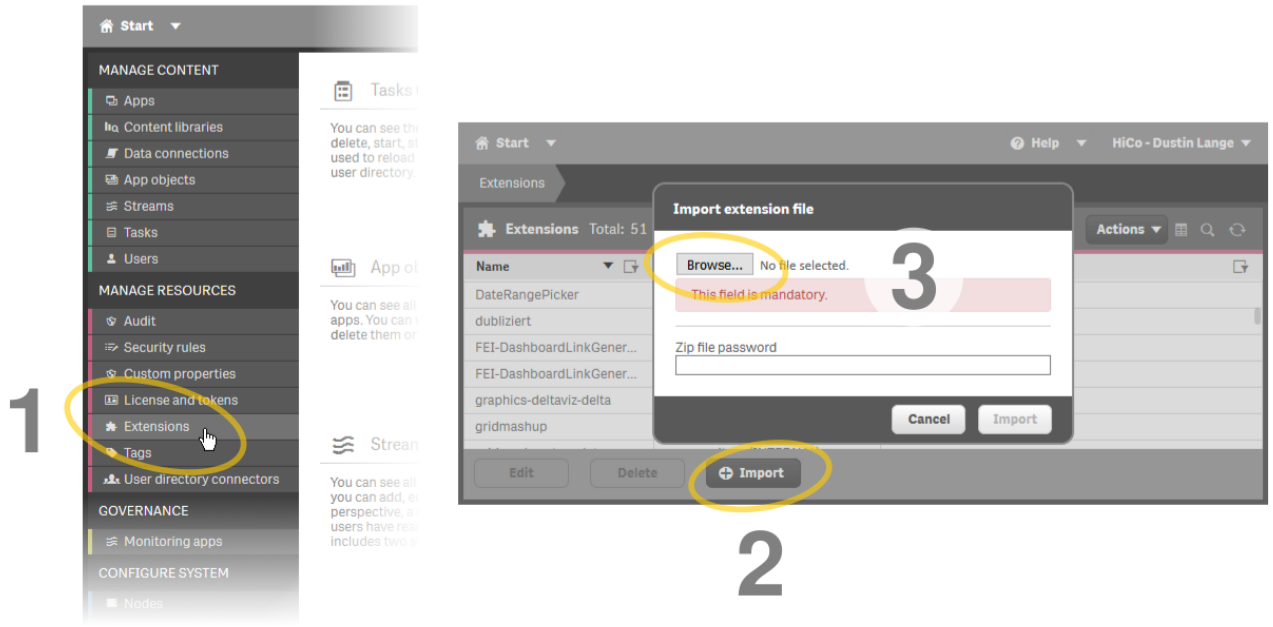

Figure 2. Importing the extension ZIP file in the QMC.

3. Creating a new menu bar

After installing trueChart Menubar you can add a new menu bar to your sheet in *Edit mode* by dragging the entry from the extension sidebar into your sheet. You can add as many menus to your sheet as you need and each can be set up differently.

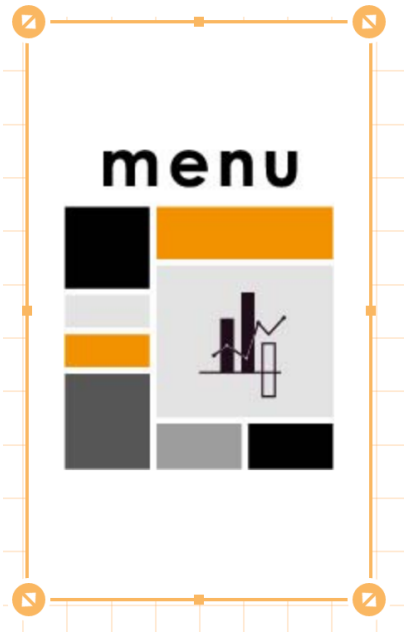

Figure 3. A new empty menu bar

trueChart Menubar features three panes in the properties panel — *Dimensions*, *Items*, and *Appearance* — which are covered in the following sections.

4. Defining dimensions in the *Dimensions* pane

The *Dimensions* pane is used to define all the dimensions needed for the *Select* items of trueChart Menubar.

Add a new dimension to the menu by clicking on *Add Dimension*. Then you can either enter the dimension's name in the *Dimension* input box or select the dimension out of the dropdown list, which fills the input box automatically. The dimension's name is subsequently used as the *Dimension Title*. This value is only for usage in trueChart Menubar and can be changed if desired.

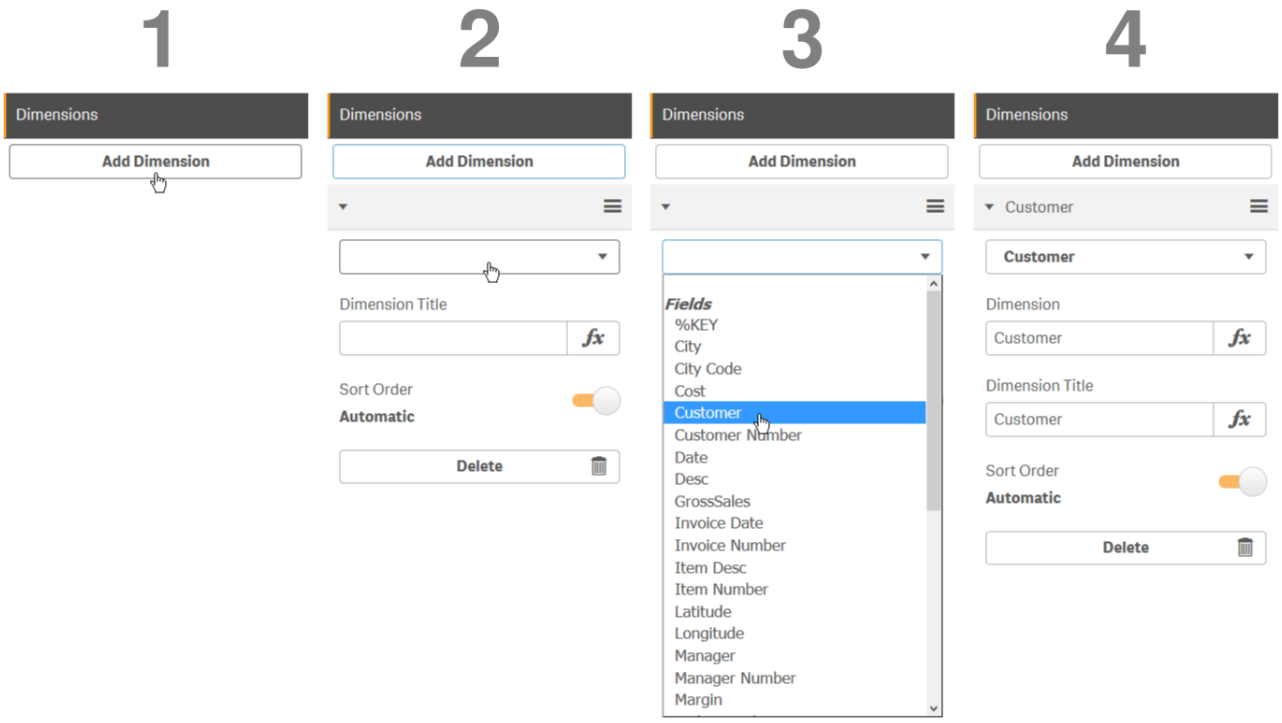

Figure 4. Adding a new dimension to the menu using the dimensions dropdown list.

The dimensions defined here can be later used in the *Single Select*, *Multi Select* or *Sense Select* items.

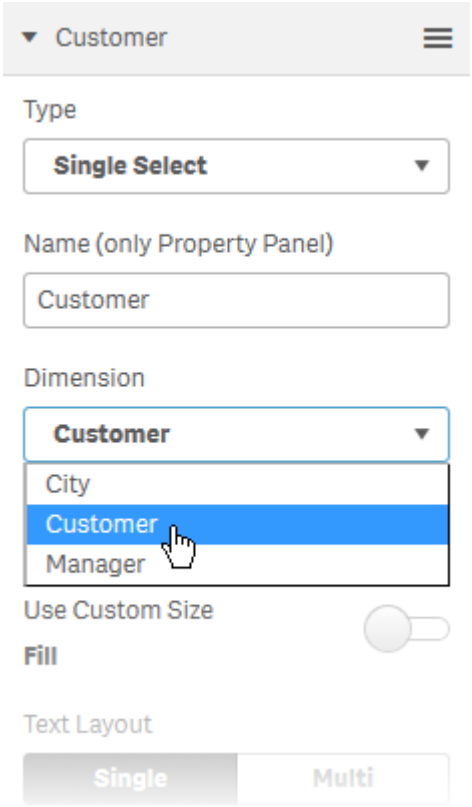

Figure 5. Using the predefined dimensions in a Single Select.

4.1. Sorting

The sort order can be set to *Automatic* or *User Defined*. When the latter is chosen, you can set your desired sorting order which can be one or multiple of:

Load Order

This is the original order of the records in the data source.

Selection State

Shows the currently selected values first. For *Sense Selects* this is the default.

Frequency

Sorts the values by the frequency of occurrence.

Numeric

Sorts the values numerically.

Alphabet

Sorts the values alphabetically.

Expression

Use a custom expression to control sorting.

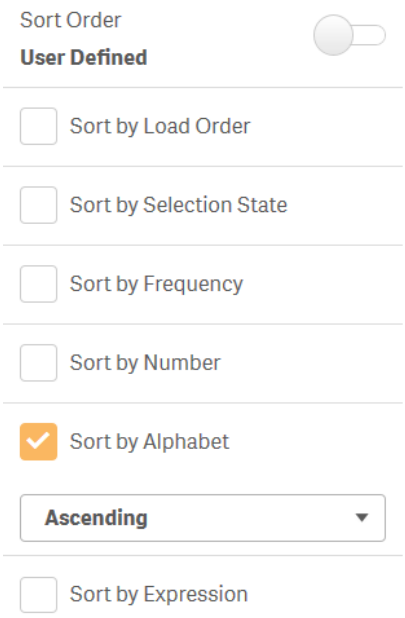

Figure 6. User-defined sorting options for dimensions

5. Items of trueChart Menubar

5.1. Adding items

trueChart Menubar features seven different item types:

- Button
- Button Container
- Button Dropdown
- Multi Select
- Single Select
- Sense Select
- Variable Dropdown

To create a new item, open *Items* in the properties panel and click on *Add Items*. This will create a new *Button Container* including a new button called *My Button* by default. The item type can be changed by clicking on the *Type* drop-down list, which gives you the selection between the different types mentioned above.

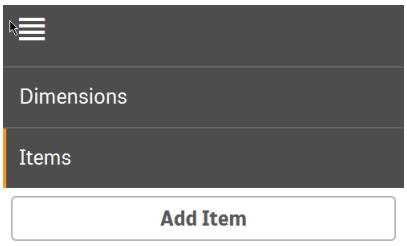

Figure 7. Adding items

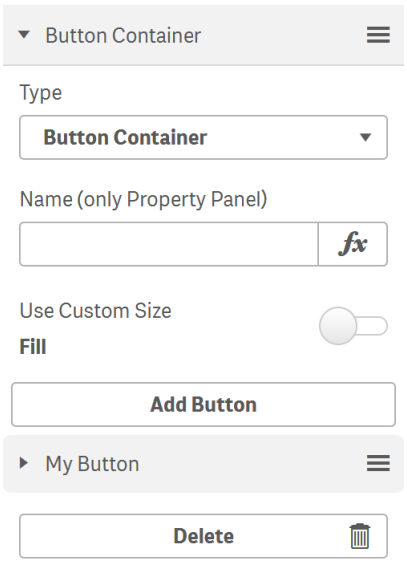

Figure 8. Initial items

The first thing you want to do every time you create a new item is giving them distinctive names in the properties panel by using the field *Name (only Property Panel)*. This will help you to identify your items in the properties panel when the configuration of your menu bar grows larger.

5.1.1. Reoccurring properties

There are some properties that trueChart Menubar's items have in common. These are:

Name (only Property Panel)	This is the name of the item used in the property panel.
Use Custom Size	By default, the item spans over the entire available area. Set this to *Custom* to define a custom height or width depending on the menu's orientation.
Text Layout	Can be set to *Single* for a single line or *Multi* for a multi-line to show a selection in a *Select* item.
Label: Alignment horizontal	Sets the horizontal alignment of the item's label.
Label: Alignment Vertical	Sets the vertical alignment of the item's label.
Selection Label	For selectable items sets the preferred label of the selection displayed on the item.
Icon	Many item labels can have icons you can select from a list.
Tooltip	The tooltip's text to appear when the user hovers over the item.

5.2. Buttons

Buttons are grouped by states that are defined by conditional expressions. This allows you to use different settings for the button depending on which of the given conditions is true.

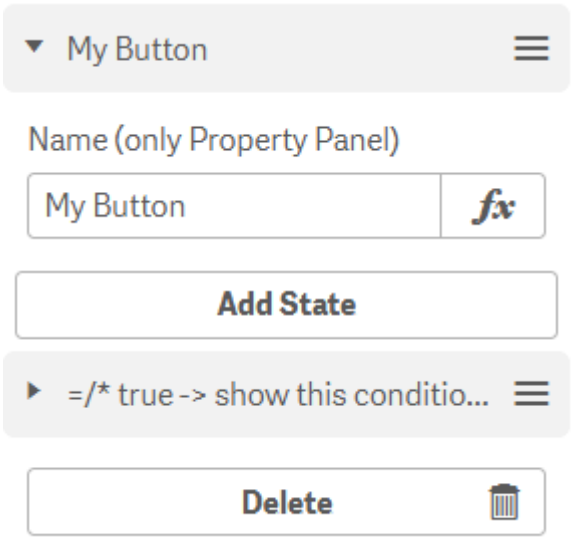

Figure 9. Default properties of a newly created button with one state. Additional states can be created by clicking on Add State.

If more than one condition returns `true` at the same time the first (i.e. uppermost) state will be chosen.

If you don't need your button to act differently on given conditions just use a single state with the condition `='true'` which is also the default when creating a new button.

5.2.1. The Button Editor

The *Button Editor* is a powerful tool for setting both a button's appearance and its behavior, i.e. the action triggered when the button is pressed. It will be opened when you click on *State Settings* in one of the button's states.

Features

The settings are divided into five categories (General, Layout, Style, Color and Actions) covered in the following sections.

General

The *General* tab features five options:

Type

The *Type* list gives you a selection of various predefined button appearances, all of which can be fine-tuned in the adjacent tabs. Apart from that, you can choose between *simple*, *image*, and *custom* in the *General* section. The latter two of which can be used to create an image-based or custom-CSS-based button respectively.

State

The *State* list is a sub-list of the *Type* list and covers the *normal*, *active* and *disabled* state of the previously chosen type.

Icon

Using the *Icon* option you can define an additional icon for the button out of the Font Awesome or Qlik Sense icon repository.

Text

The *Text* field is the text used as the label on the button.

Tooltip

With the *Tooltip* option, you can define the text shown when the user hovers over the button.

Help other users to understand your button's effect by describing it in the tooltip.

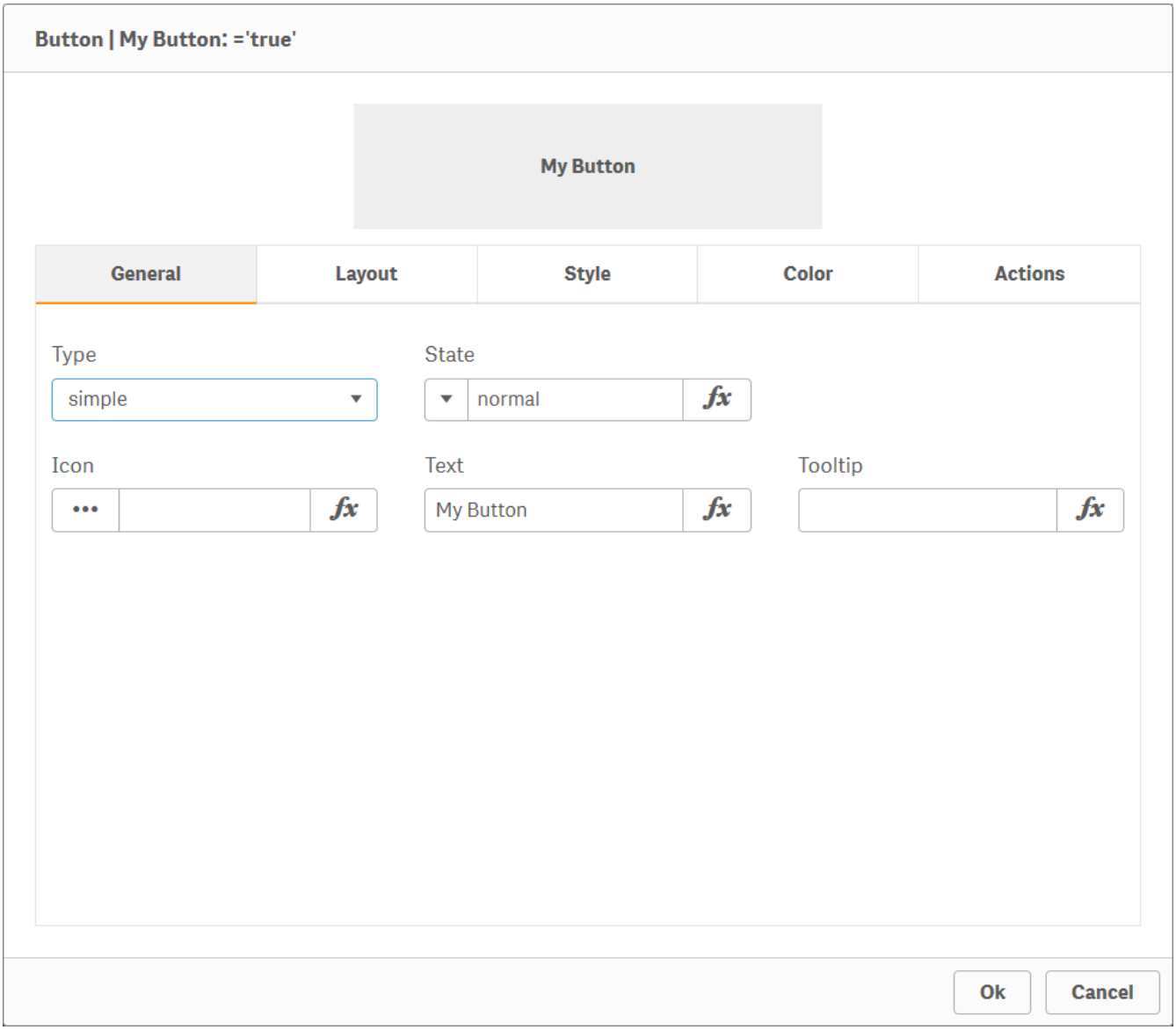

Figure 10. The Button Editor showing the first tab (General).

Image

If you've chosen the *image* type you can additionally define an *Image url*, the *Position*, and *Size* of your background image in the *Image* section.

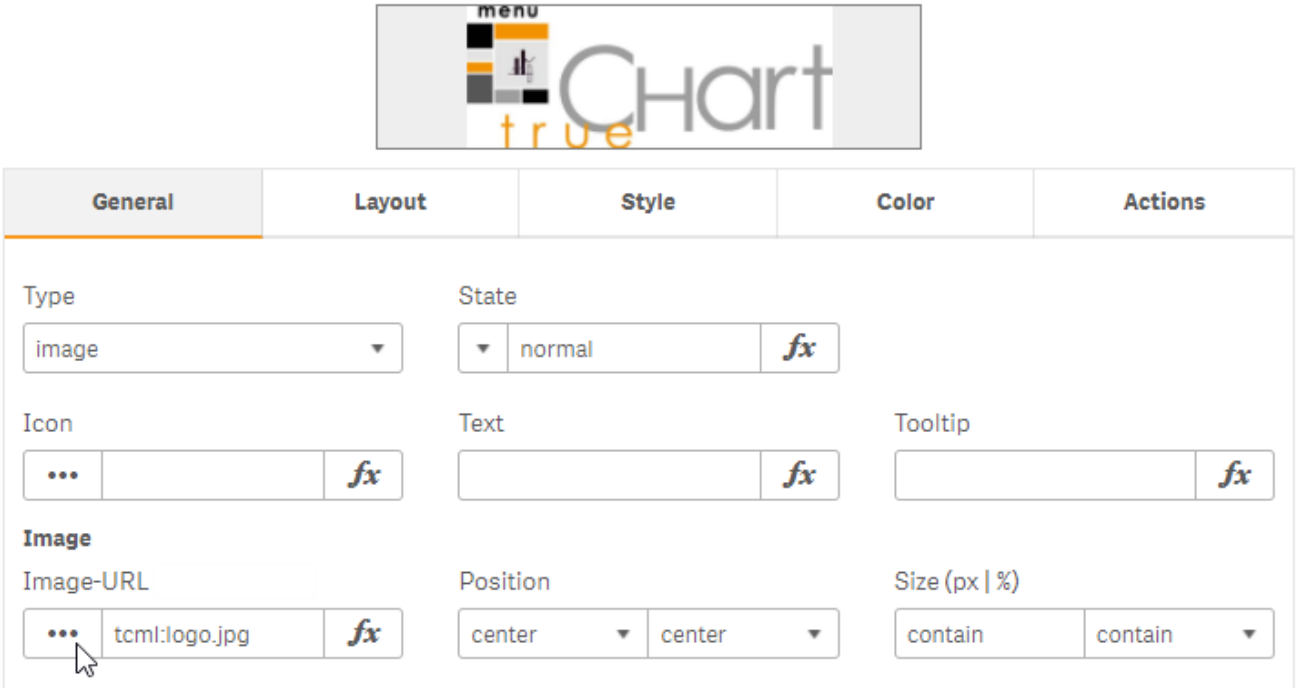

Figure 11. The Button Editor as Image type with specific input elements.

To be able to display images with an image button, these images must first be saved (uploaded) to the trueChart Image Library and selected from there. All images of the trueChart Image Library are stored within the Sense app and are automatically available in duplicated and exported apps.

The trueChart Image Library could not changed in published apps since theese are read only in Sense. Existiing images still could be reused.

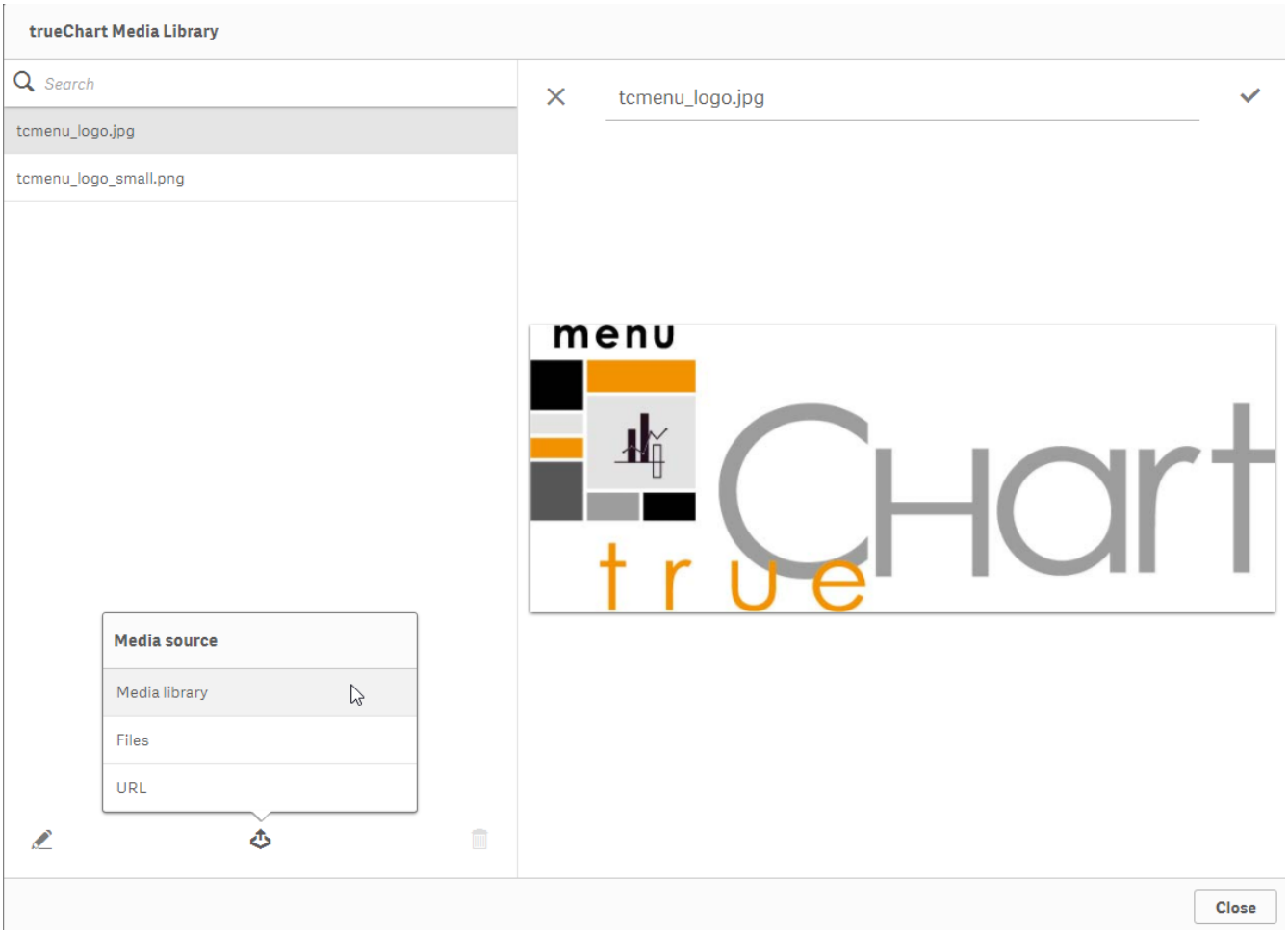

Figure 12. The trueChart Image Libary dialog to import, export, insert, rename and delete images.

The trueChart Image Library offers the possibility to import images from different sources, so you can take pictures from the Sense media libraries, upload one or more files directly or via a URL. Other features available in the trueChart Image Library are: Rename, Replace / Update, Delete. The image download is not supported in ie11.

Since the contents of the image library are saved globally in an app, they can not be copied to an other app when copying an extension object. The recommended way to do this is: first export the necessary images in the source app and then import them again into the target mage library. Since the used image has the same names, these images then will be displayed correctly in the copied objects.

Custom css

If you've chosen the *custom* type you can define your own CSS rules on the button, giving you the maximal flexibility for the button's appearance.

Layout

The *Layout* tab is for defining the metrics of the button. You can set...

Dimension

In the *Dimension* section, you can set the width and height of the button inside its boundaries. This is set to `100%` by default but can be set to any value using CSS units or `auto` to make the button as large as its contents demands.

Position

In the *Position* section, you can set the horizontal and vertical alignment of the button inside its boundaries, which is only effective if the respective width or height is set to a value other than `100%`.

Content alignment

In the *Content alignment* section, you can define the alignment of the button's text and the icon. The *Text* alignment is only effective for multiple lines of text on the button.

Content position

In the *Content position* section, you can set the horizontal and vertical alignment of the content itself (i.e. the text and the icon together). This is only effective if the respective width or height of the button is not set to `auto`.

Padding

With the *Padding* setting, you can disable a predefined padding by choosing *Off* or override the default padding by choosing *On* which allows you to set the values in CSS `padding` syntax.

Margin

With the *Margin* setting, you can disable a predefined margin by choosing *Off* or override the default margin by choosing *On* which allows you to set the values in CSS `margin` syntax.

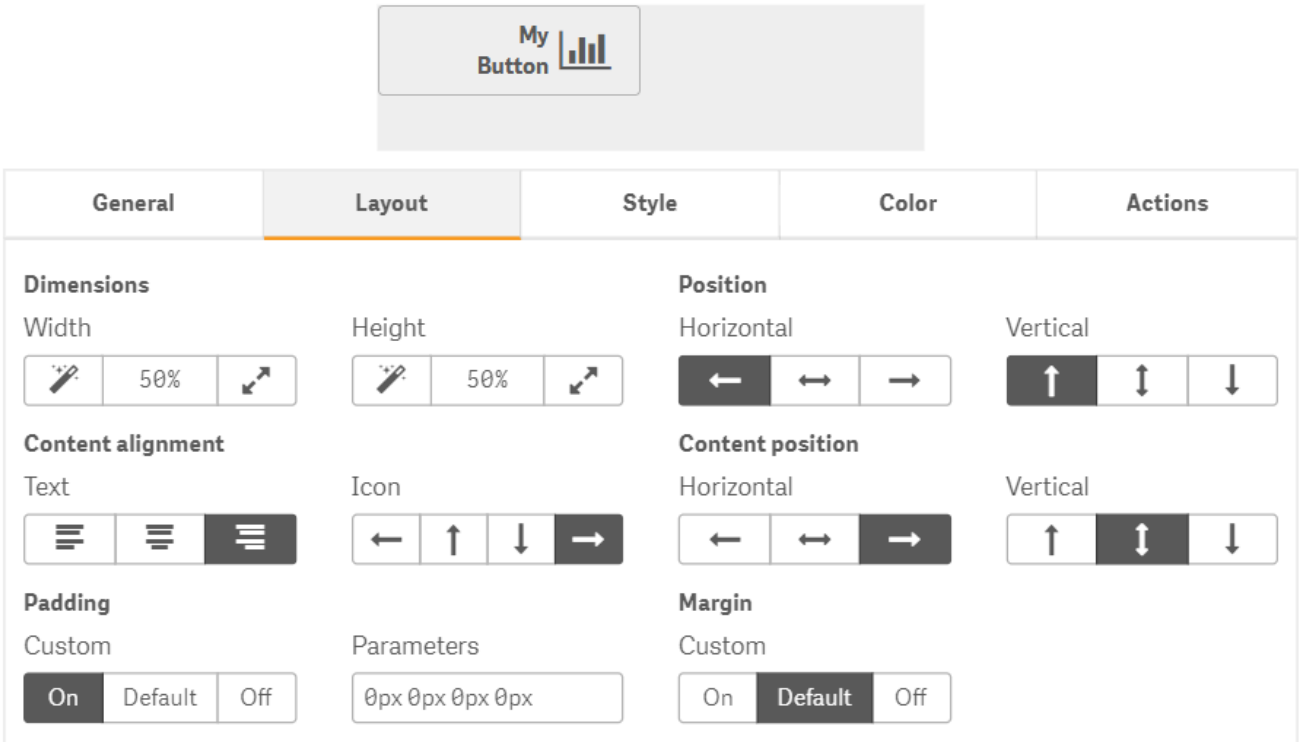

Figure 13. An example showing the different layout settings and its effects on the button's appearance.

Style

In the *Style* tab, you can set the visual appearance of the button's content including:

Font settings

In the *Font* section, you can set the font properties, i.e. *Family*, *Weight*, *Style*, and *Size*.

Icon size

Icons have a fixed size, but you can change the scaling in the *Icon* section using the *Size* slider to choose between 1x, 1.5x, 2x, 3x, 4x or 5x.

Background repetition

If you defined a background on your button you can control how the background is repeated with the *Repeat* setting in the *Background* section.

Border

With the *Border* setting, you can disable a predefined border by choosing *Off* or override the default border by choosing *On* which allows you to set the border's color, radius, width, and style. The radius is given in CSS `border-radius` syntax.

Shadow

The same applies for the button's shadow in the *Shadow* section. By using *On* you can define a custom border according to the CSS `box-shadow` syntax:
`none|h-shadow v-shadow blur spread color |inset|initial|inherit`.

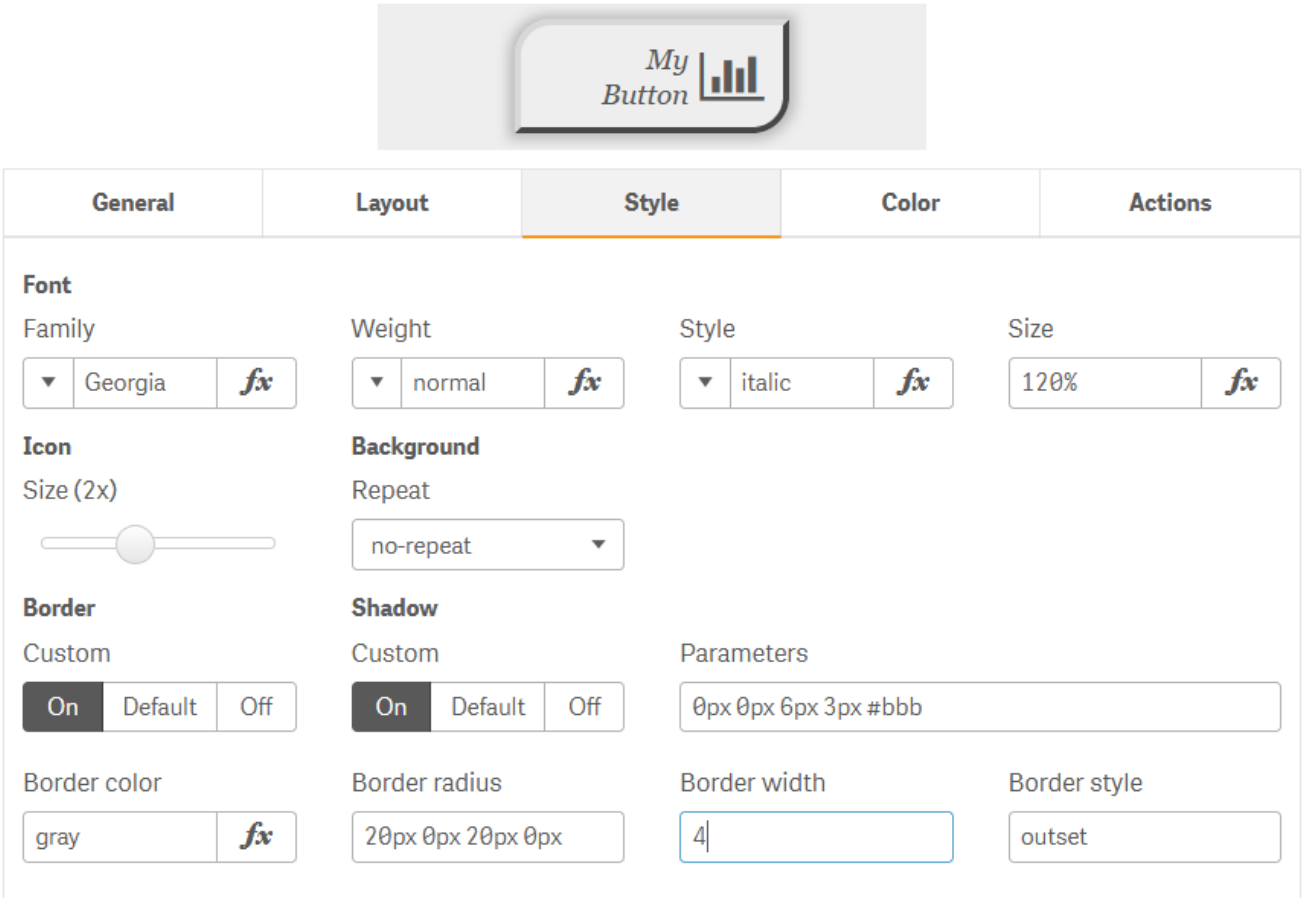

Figure 14. An example showing the different style settings and its effects on the button's appearance.

Color

The *Color* tab is used to set the colors for the *normal* and *hover* state of the button. This overrides the colors you've set in the *Colors* section of the *Appearance* pane and those given by the button type in the *General* tab of the *Button Editor*. For a detailed list of accepted color expressions, refer to Appendix A.1.

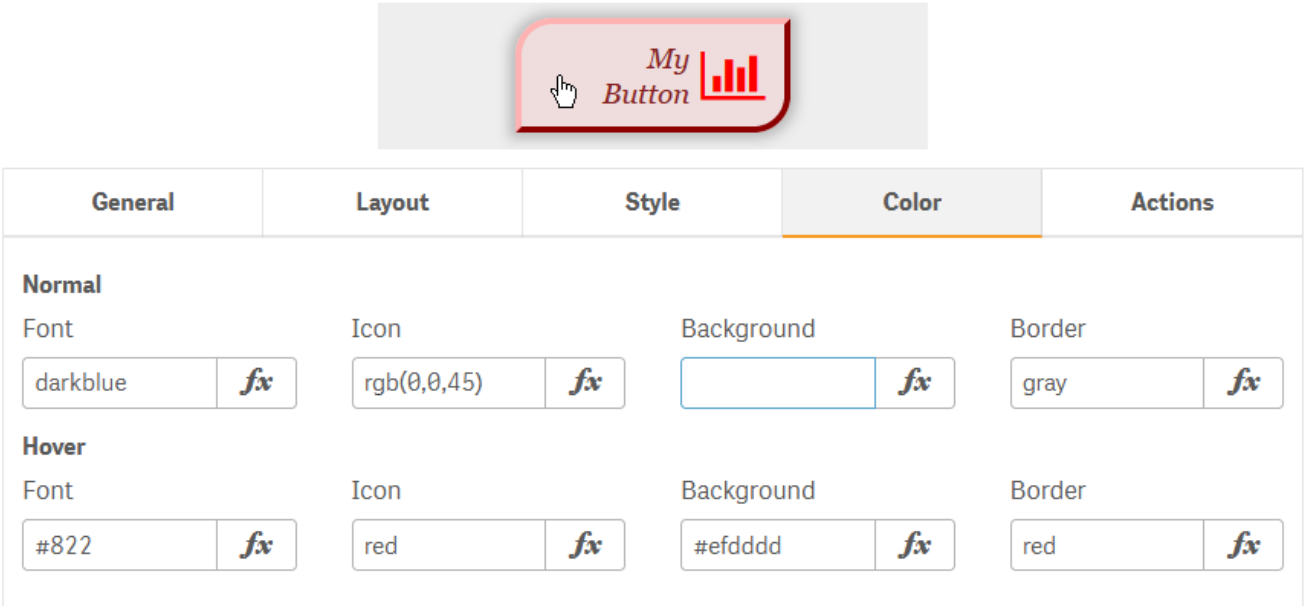

Figure 15. An example showing the different color settings and its effects on the button's appearance with the button in the hover state.

Actions

In the *Actions* tab, you can define triggers, that is the actions to take effect when a certain event on the button is triggered.

Possible events to attach actions are:

On click

Triggered when the user clicks the button.

Buttons without triggers and actions, for example, when used as text or image placeholders, do not apply hover effects. In order to achieve this behavior, all triggers must be removed via the delete icon.

Before navigation

Triggered when the sheet is closed or changed.

On load

Triggered when the element loads. This can be used to define initial actions like making selections.

To avoid critical actions being scattered all over other different items, *On load* actions like those for initial selections should be defined on a designated element (such as an otherwise non-functional button that serves to show the company's logo).

On selection

Triggered when the button is selected.

Custom

Define your own event you can give a custom name. This can be used by involving `HiCo.performCustomTrigger("triggername", "triggerdata")` in a custom action.

For every event, you can define one or multiple actions, such as *Go to sheet* to change the view to a different sheet or *Select match* to alter the current selection.

A full list of provided actions can be found in Appendix B.

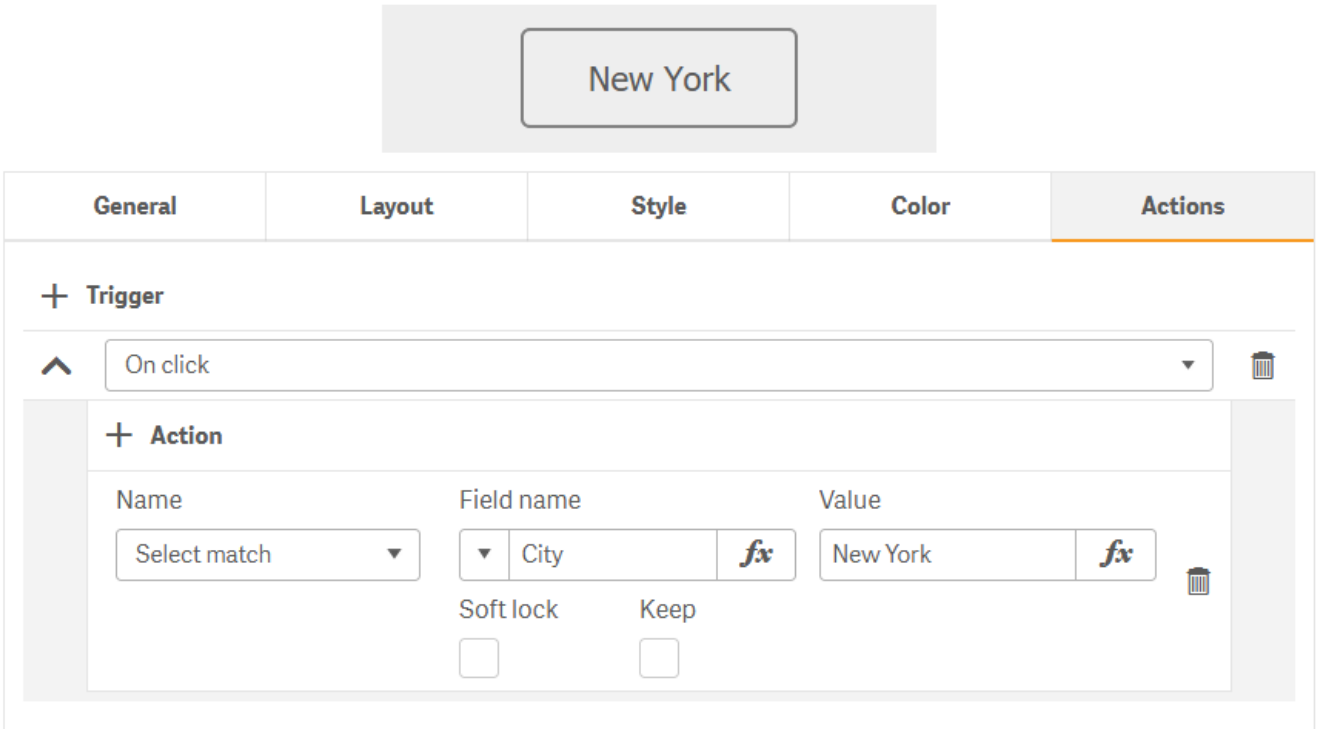

Figure 16. This example establishes an action that sets the City field to New York for the current selection on click of the button.

5.2.2. Using Expressions

Apart from static values, every input box that features Qlik Sense's *fx* icon also accepts Sense expressions.

5.3. Arranging buttons using *Button Container*

The *Button Container* is an item to group multiple buttons together while inverting the orientation. That means, if your menu is oriented vertically, the buttons in the container will be arranged horizontally and vice verse.

Figure 17. A vertically and horizontally arranged menu bar, each featuring two plain buttons and another two buttons in a Button Container in between.

5.4. Button Dropdown

The *Button Dropdown* is a drop-down list that contains a variable number of buttons that will unfold after the user clicks the dropdown element and are otherwise hidden. The buttons are added in the same fashion as in a *Button Container*.

5.5. Selects

Selects are drop-down lists that can be prefilled with existing data from previously defined dimensions. trueChart Menubar offers three different types of selects, explained in the following sections.

5.5.1. Single Select

A *Single Select* is a drop-down list that allows the user to make selections for **one** dimension defined in the *Dimension* input box.

Figure 18. A simple Single Select

The element can have a custom icon defined via the *Icon* list and label using the *Label* input box. The latter can be arranged by using the label alignment options for horizontal and vertical alignment (*Label: Alignment Horizontal* and *Label: Alignment Vertical*).

The *Text Layout* option can be set to either *Single* or *Multi* which switches between a single-line and multi-line arrangement of label and selection label.

The *Single Select* item also allows to set a *Default Value* from a fixed string or a evaluated expression. This value is automatically set when opening or changing to the sheet and can be changed afterwards but ensures that the corresponding dimension can never be unset in the selection.

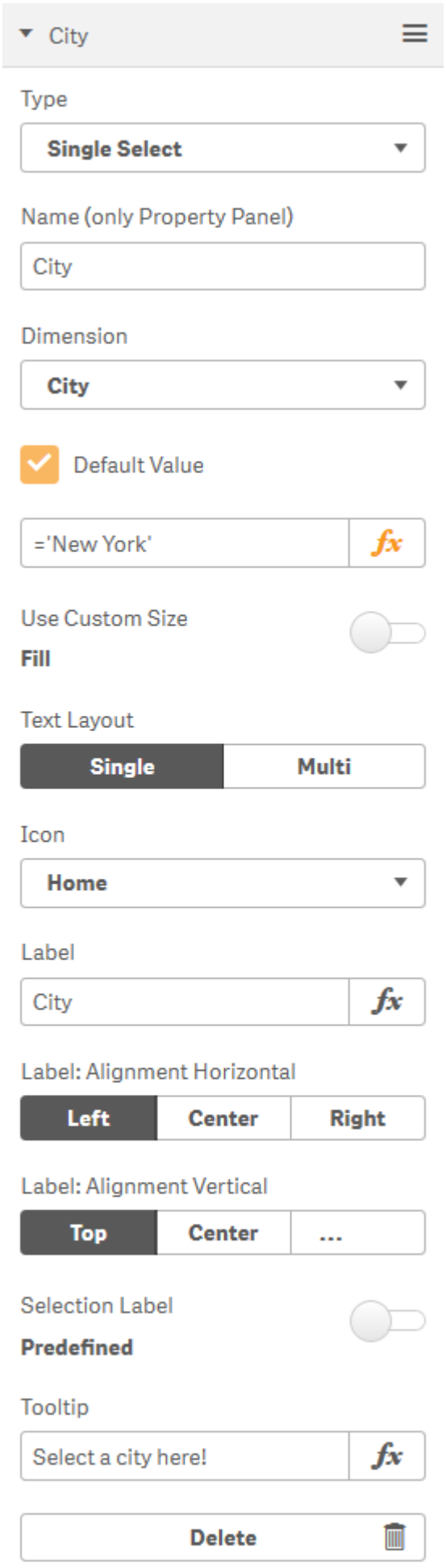

Figure 19. Properties of Single Select with some example settings.

Just like the *Label*, the *Selection Label* is customizable. By default (*Predefined*) it shows the current selection or the number of items selected if they don't fit on the element, but can be also set to a custom values or expression.

5.5.2. Multi Select

The *Multi Select* is a drop-down list that allows the user to make selections from **more** than one dimension at the same time. Just like the *Button Container*, it can be seen as an item containing multiple *Single Selects*, each configurable independently.

To do so, the properties panel features a button *Add Single Select* to add as many *Single Select* items to the *Multi Select* as desired. They are configured the same way as stand-alone *Single Select* items.

Apart from that, you can set the same text and layout options for the parent *Multi Select* as for a *Single Select*.

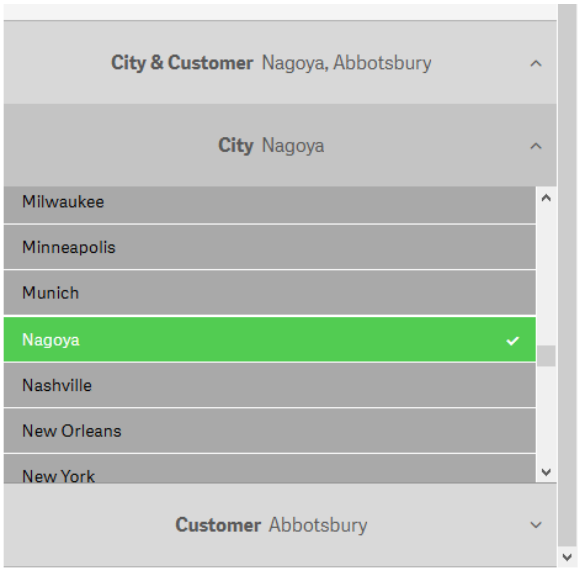

Figure 20. A simple Multi Select for two dimensions, City, and Customer, called 'City & Customer.'

5.5.3. Sense Select

Sense Selects use the native selection widget of Qlik Sense and is otherwise configured the same way as a *Single Select* but you cannot define a default value.

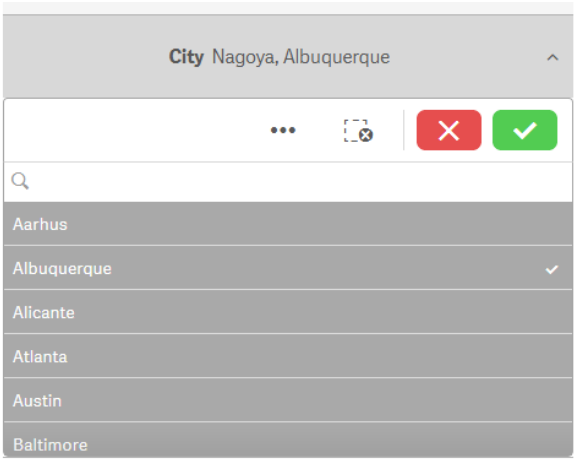

Figure 21. Example for a Sense Select with two selections for a given dimension.

5.6. Variable Dropdown

The *Variable Dropdown* element is a drop-down list that allows setting custom values to Qlik Sense variables. Every item in the list represents a value that will be set when the user selects the item. These variables can be used to control other aspects of your apps.

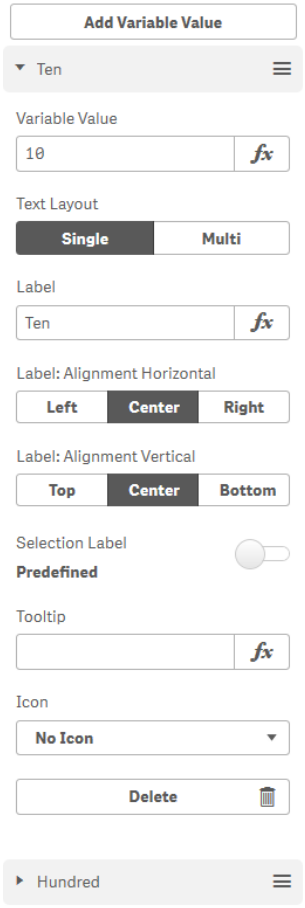

Figure 22. The definition for a variable value in the properties panel setting the number `10` to the defined variable `results`.

Before using variables you need to create them. This can be done by opening *Variables* and clicking the *Create new* button to create a new variable.

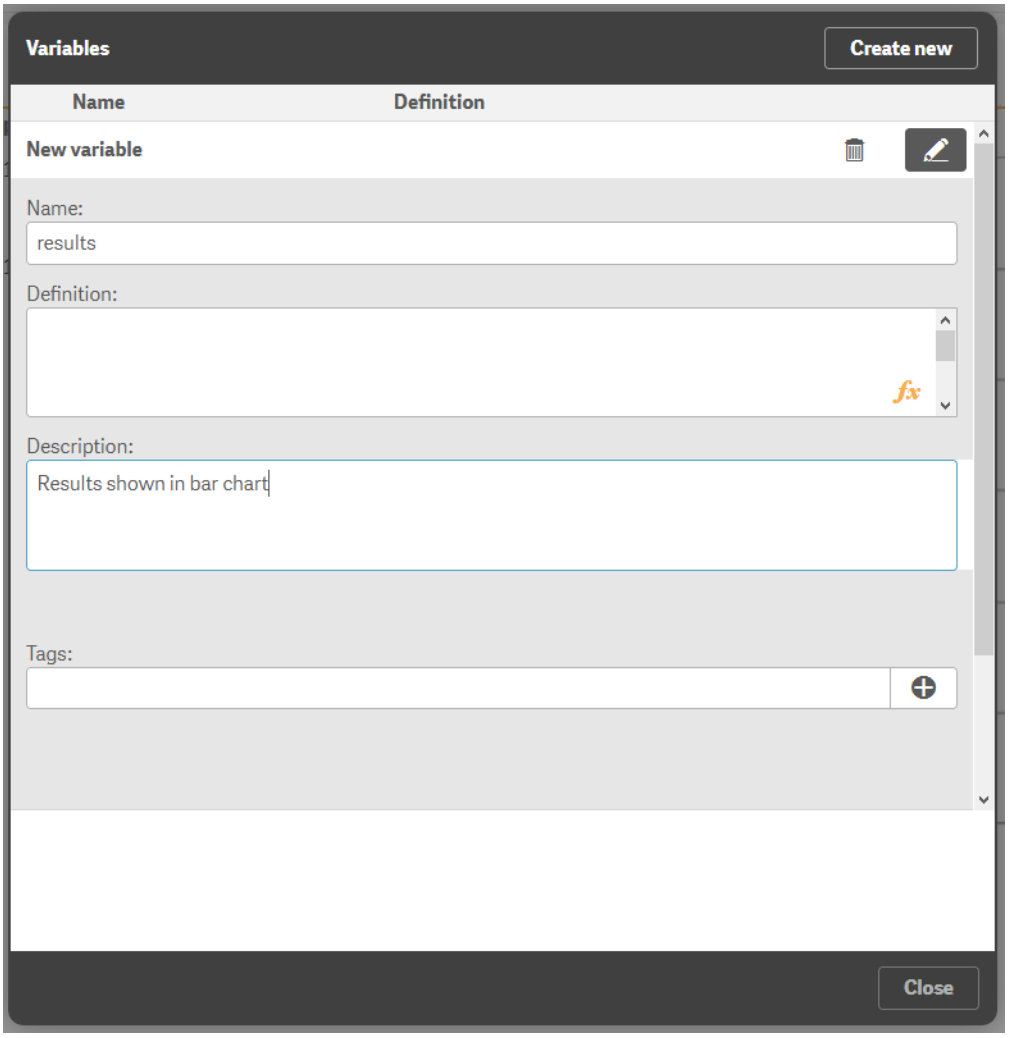

Figure 23. Creating a new variable in the Variables dialog.

In the properties panel of the *Variable Dropdown* element, define the variable name in the *Variable Name* input box and add as many selectable values as desired by clicking on *Add Variable Value*. There you can define the value itself, the label and all the custom alignment settings for each of the added values separately.

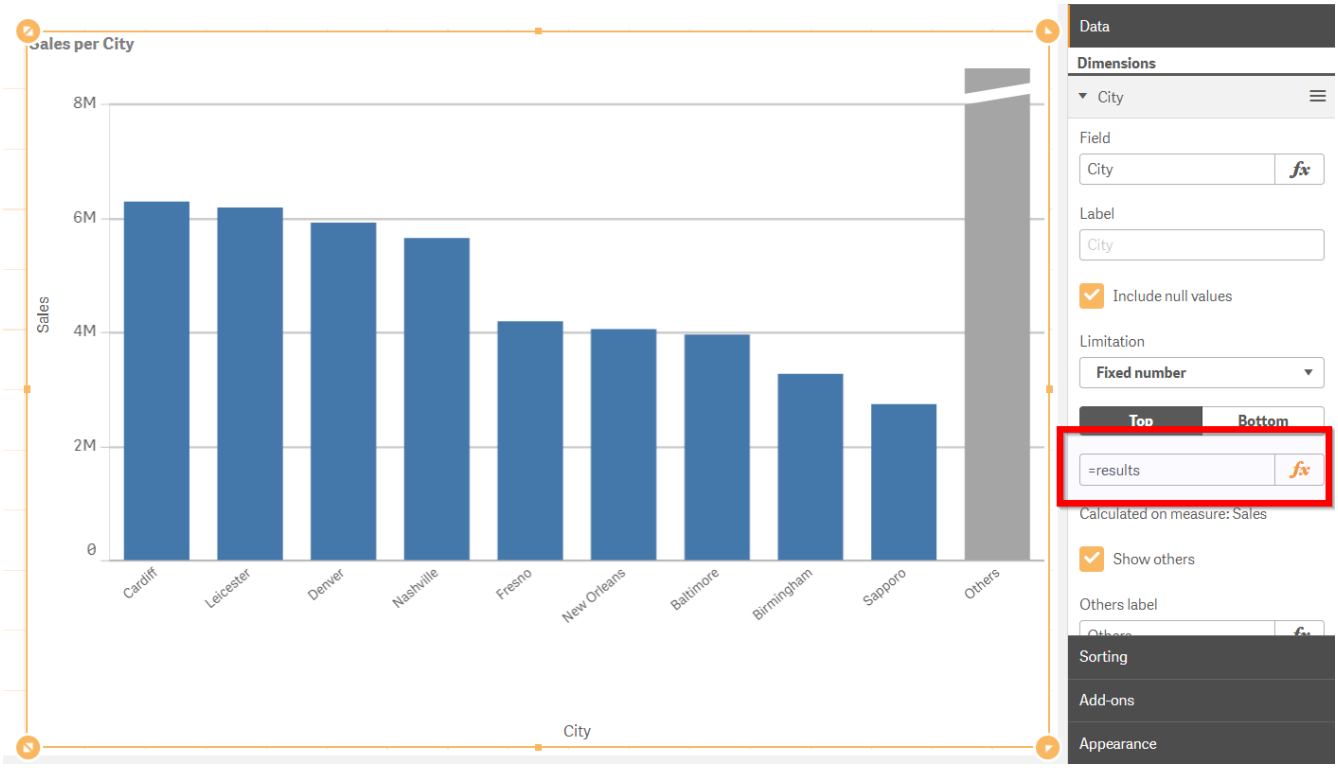

Figure 24. A bar chart that uses a variable as the number of displayed results.

6. The *Add-ons* pane

In the *Data handling* section of the *Add-ons* pane there are two options to control calculation and rendering of either trueChart Menubar itself or other charts/extensions that support *calculation conditions*.

Calculation condition

Use the *Calculation condition* input box to define a Sense variable that is checked to be `true` before the actual rendering ('calculation') takes place. It's also possible to use any function or expression here. The *Displayed message* is the message to be shown unless the condition is `true` and can be customized.

Calculation condition variable

The *Calculation condition variable* is the opposite of the *Calculation condition*: It is do define a variable that is set to `true` as soon as trueChart Menubar initialized all the default selections you may have set in *Single Selects* and to be used by other extensions supporting this *Data handling* feature.

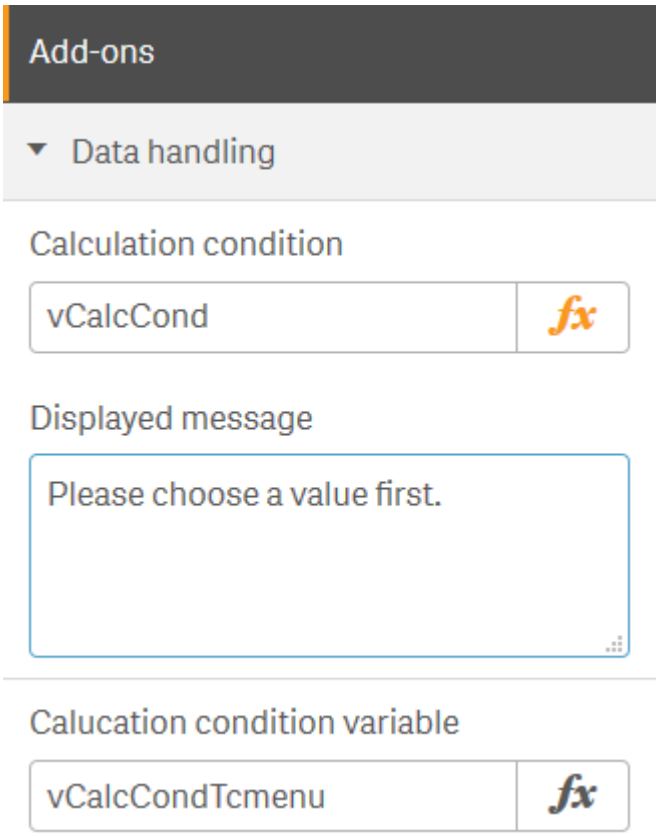

Figure 25. The calculation condition properties in the Data handling section.

7. The *Appearance* pane

7.1. General

The *General* pane features two options:

- Show titles
  - Show the title in the menu box
- Show details
  - This option has currently no effects.

7.2. Layout

Orientation

Define the orientation of the menu which can be either horizontal or vertical. This has no effect on small mobile devices where the orientation is adjusted automatically to vertical.

Width Setting

When the menu is oriented vertically the items can be set to be stretched to the maximum width (*Fill*) or you can define a custom width (*Custom*).

Height Setting

When the menu is oriented horizontally the menu bar can take all the available height (*Fill*) or you can define a custom height (*Custom*).

In vertical orientation this setting is used to use the background color over entire height (*Fill*) or only to the last menu item (*Automatic*).

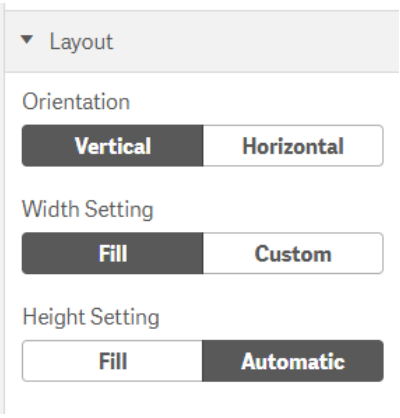

Figure 26. The Layout section in the Appearance pane

7.3. Position

In the *Position* section, you can set the position of the menu bar inside its boundaries when the width or height is set to values in pixel other than *Automatic*. For example, the value 0 for Top removes the distance to the edge or next object above the menu completely.

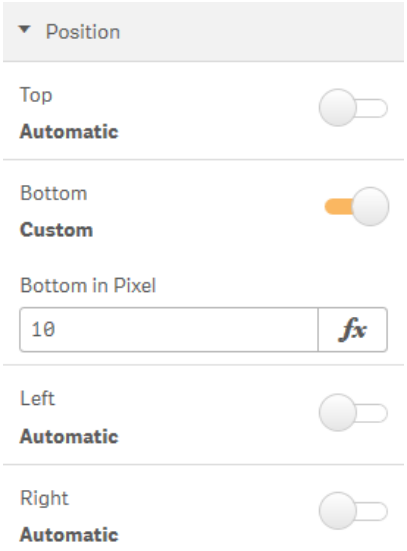

Figure 27. The Position section showing default and individual settings.

7.4. Colors

The *Colors* section is to define the default colors of the menu to be inherited by its items. These can be configured by entering color expressions, setting predefined colors or choosing with the color picker. For a detailed list of accepted color expressions, refer to Appendix A.1.

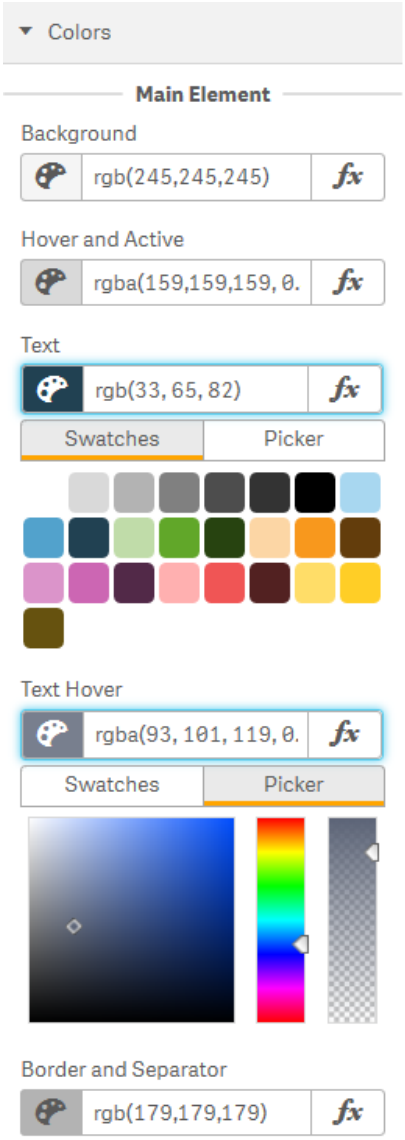

Figure 28. Part of the Colors section in the Appearance pane showing preselected colors and the color picker.

7.5. Text

The *Text* section features all settings to take effect on the font, such as:

- Font family
- Font weight
- Font style
- Font size

These are set separately for general *Labels* and also *Selection Labels*, i.e. selected values showing on trueChart Menubar's elements.

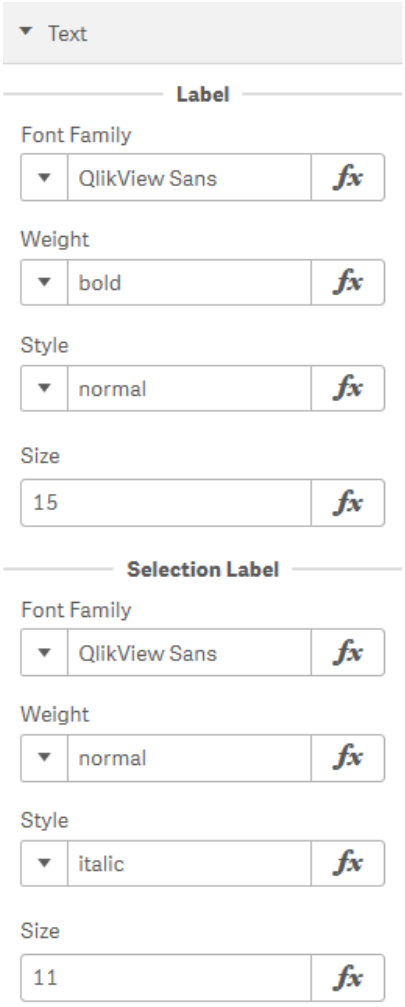

Figure 29. The Text section in the Appearance pane.

7.6. Display

In the *Display* section, you can set the visibility of the Sense menu, selection, and title bar. The bars can be permanently hidden (*Hide*), displayed (*Show* = default setting) or (not) displayed depending on an expression.

If the Sense menu is not visible and the Edit mode is not available for this reason, it can be simply activated by Ctrl + E.

When using several menu objects on a sheet, ensure that all menus are defined identically for these settings. Otherwise, one menu could hide a bar and another could show this bar again, depending on which menu object is loaded as last one by Sense.

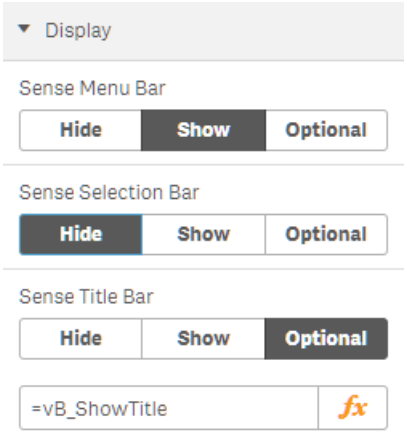

Figure 30. Define visibility of Sense menu, selection and title bar

7.7. Info

The *Info* section shows general information, such as version number of trueChart Menubar.

It also provides a link to open this documentation.

Appendix A: List of useful CSS definitions for button styling

The *Button Editor* makes heavy use of CSS definitions for styling buttons. The following lists give an overview on frequently used CSS properties.

A.1. Colors

The following color expressions can be used in trueChart Menubar:

- Color names: `black`, `white`, `red`, etc.
- Hex values, three or six digits: `#f80`, `#ff8800`
- Hex values, four or eight digits (alpha channel): `#f087`, `#ff008877`
- RGB and RGBA: `rgb(255,127,0)`, `rgba(255,127,0,.5)` or `rgb(255 127 0)`, `rgba(255 127 0 / .5)`
- HSL and HSLA: `hsl(360,100%,50%)`, `hsla(360,100%,50%,.8)` or `hsl(360 100% 50%)`, `hsla(360 100% 50% / .8)`
- ARGB: `=argb(127,255,63,15)` with the alpha channel being a value between `0` and `255`.

Appendix B: List of actions for triggers

The following actions can be attached to events that trigger a button.

B.1. None

Action	Parameters
None	*No parameters.*

B.2. Custom

Action	Parameters
Custom	A custom JS function to be executed with the *Custom* event.

B.3. Navigation

Action	Parameters
Next sheet/page	*No parameters.*
Previous sheet/page	*No parameters.*
Go to sheet	*Sheet id* of the sheet to go to; can be entered manually or automatically by using the drop-down list.

Action	Parameters
Go to story	*Story id* of the story to go to; can be entered manually or automatically by using the drop-down list.
Go to url	Specify the URL in the *Url* input box and the target in the *Target* list. The *Mashup only* option restricts the action to mashups.

B.4. Sense

Action	Parameters
Set variable	Specify the variable and value to be set in the *Sense variable* and *Variable content* input box. The *Keep* option keeps the value unchanged if it's already set.
Select value(s)	Select the field and value(s) in the *Field name* and *Value(s)* input box. The *Toggle* option will toggle between selected states. The *Soft lock* option sets locked selections to be overridden. The *Keep* option sets existing selections for the selected field to remain unchanged. The *Add* option sets the values to be added to the existing selection.
Select match	Specify the field to be selected and value(s) in the *Field name* and *Value(s)* input box. The *Soft lock* option sets locked selections to be overridden. The *Keep* option sets existing selections for the selected field to remain unchanged.
Select alternative	Specify the field to be selected in the *Field name* input box. The *Soft lock* option sets locked selections to be overridden.
Select excluded	Specify the field to be selected in the *Field name* input box. The *Soft lock* option sets locked selections to be overridden.
Select possible	Specify the field to be selected in the *Field name* input box. The *Soft lock* option sets locked selections to be overridden.
Select all	Specify the field to be selected in the *Field name* input box. The *Soft lock* option sets locked selections to be overridden.
Clear field	Select the field to be cleared in the *Field name* input box.
Clear other	Select the field in the *Field name* input box. The *Soft lock* option sets locked selections to be overridden.
Clear all	Set the *Locked also* option to also clear locked selections.
Lock field	Select the field in the *Field name* input box.
Lock all	Set the *Locked also* option to also clear locked selections.
Unlock all	*No parameters.*
Apply bookmark	*Bookmark id* which can be entered manually or automatically by using the drop-down list.
Reload data	Set the desired mode in the *Mode* list. Set the *Partial* option to do only a partial reload.

B.5. Other

Action	Parameters
Toggle fullscreen	Expression which must result 0 (disable fullscreen), 1 (go to fullscreen) or can be empty (toggles current fullscreen mode). This action is only on click trigger avaliable, due to browser security restrictions.