

CSS Styling for JavaScript Views and Widget/Quickform Nodes (Legacy)

KNIME AG, Zurich, Switzerland Version 4.2 (last updated on 2020-07-13)

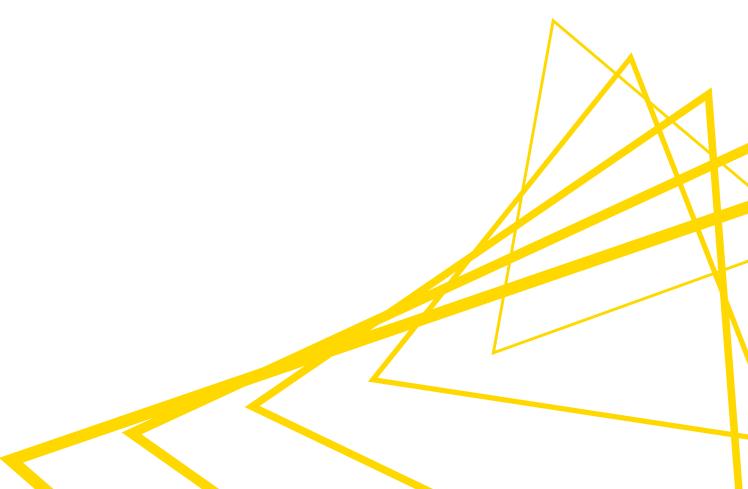


Table of Contents

CSS Styling in Knime Analytics Platform 4.2	I
CSS Styling for JavaScript Views and Widget/Quickform nodes	1
Setup & Example	1
Description of CSS Classes	5
General	5
Groups	б
Widgets / Quickforms	7
Table based	8
Specifiers	8
Containers	9
Classes by Node	9
JavaScript	9
Widgets / Quickforms10	6

CSS Styling in KNIME Analytics Platform 4.2

With KNIME Analytics Platform 4.2 we introduced the legacy flag for JavaScript Views and Widget/Quickform nodes.

We ensure backward compatibility for the use of CSS styling for JavaScript Views and Widget/Quickform nodes.

Workflows that contain these nodes and have been created with KNIME Analytics Platform version < 4.2 will have the legacy flag enabled by default and their behaviour will be the same as before also in KNIME Analytics Platform version 4.2.

Workflows that contain these nodes and are created with KNIME Analytics Platform version 4.2 will have the legacy flag disabled but you can always enable it from the layout editor, as explained in KNIME Components Guide.

CSS Styling for JavaScript Views and Widget/Quickform nodes

This guide is designed to be used as a reference for CSS styling in JavaScript views and Widget/Quickform nodes.

We have introduced CSS classes. CSS classes are used by designers to define different sections that can be styled in CSS. You can use them in KNIME Analytics Platform now to edit certain visual elements of a JavaScript view.

To help you get started, below you'll first find instructions on how to set up custom CSS and then we provide a list of all classes with a general description of what they represent.

Setup & Example

The CSS rules can be stored in a single string and passed to nodes through a flow variable. To output such a flow variable we need a CSS Editor node. The node's configuration dialog consists of three parts as shown in the screenshot below.

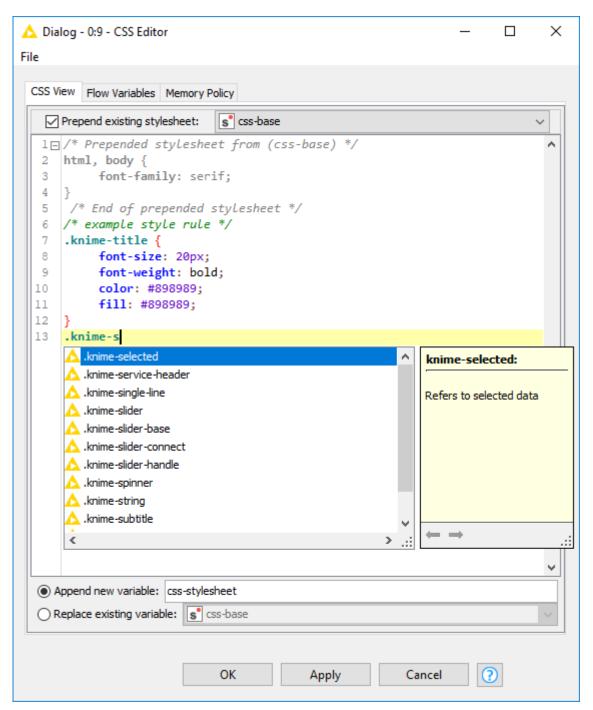


Figure 1. CSS Editor node, with which JavaScript views can be styled

The checkbox at the top allows you to add existing stylesheets to the beginning of the code. When you check this option you can subsequently choose a CSS stylesheet that has already been connected from the drop-down list. The content of that stylesheet is displayed in gray in the CSS Editor below for reference purposes. This functionality allows you to combine multiple stylesheets and reuse them in your nodes.

The custom CSS is now inserted underneath the prepended stylesheet (in gray). Press CTRL + Space to open a new window. Autocompletion can help you find the right CSS class.

After writing your custom CSS you can either append a new flow variable to the CSS code or

replace an existing one. The node appends a new flow variable, called "css-stylesheet" by default.

To use the newly created custom CSS connect the flow variable port of the "CSS Editor" to the flow variable port of the view it should customize. The resulting workflow could look like this:

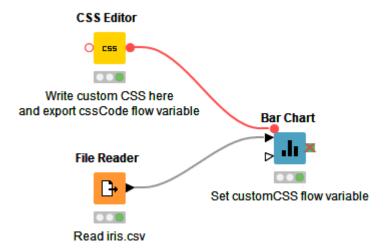


Figure 2. Example workflow, which styles a Bar Chart node

To apply custom styles in a bar chart, for example, you need to set the "customCSS" flow variable:

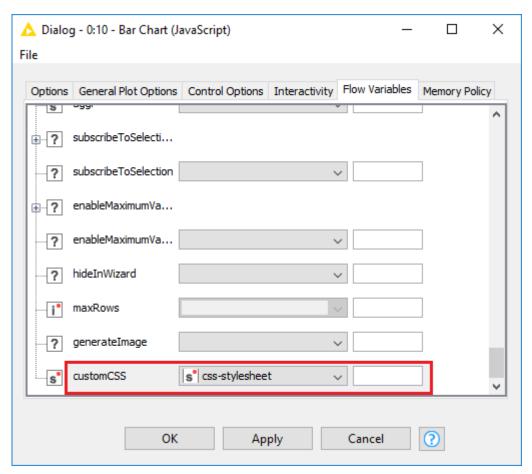


Figure 3. Selecting the newly created stylesheet in the customCSS row

In the example below the color of the title is changed to green, font weight is changed to bold, and the font style and size of the tick labels have also been changed to italic and 16 px.

```
.knime-title {
    fill: green;
    font-weight: bold;
}

text.knime-tick-label {
    font-style: italic;
    font-size: 16px;
}
```

After executing the node and opening its view you can see (on the right) that the styles have been successfully applied: the title is in green and the names on the x-axis are written in italics. The chart on the left shows a non styled view for reference:



Figure 4. Unstyled bar chart (left) vs. styled bar chart (right): title color is changed to green and font-style on x-axis is changed to italic

Description of CSS Classes

What follows is a description of all the CSS classes and where they are used. We divided the classes into the following categories:

- General classes related to general components that can be found in most views
- Groups classes that are grouped by a parent class
- Quickforms classes relative to interaction forms and other redundant components common in Widget/Quickform nodes
- Table Based classes used in views showing a table
- **Specifiers** classes that can additionally be used to specify which of the displayed elements should be styled
- Containers classes used to wrap together different elements in a separate section or division

General

knime-title - view's title

knime-subtitle - view's subtitle

knime-label - text component of the labels in the view (e.g. on sectors of pie chart, or values

of box plot)

Groups

Multiple CSS classes can have a hierarchical structure. An HTML or SVG tag with a given class (e.g. knime-axis-label) can belong to another tag with some parent class (e.g. knime-axis). Here we show you classes that belong to the same parent class as groups.

knime-axis - group of components representing a single axis. The tag with this class usually also uses one of those two specifier classes: knime-x or knime-y.

The user can style the x axis in the following way:

```
.knime-axis.knime-x {
    display: none;
}
```

or both axes like this:

```
.knime-axis {
    display: none;
}
```

In both cases all of the selected axis components are affected:

- knime-axis-label text component of the axis label
- knime-axis-line line or path component of the axis
- knime-axis-max-min group of components related to max or min axis values
- knime-tick group of components related to a certain axis tick (for slider it represents pips group)
 - knime-tick-label text component of the axis tick (for slider it represents a pip label)
 - knime-tick-line line or path component of the axis tick (for slider it represents a pip tick)

knime-legend - group of components representing the legend

- knime-legend-symbol graphic component of the symbol legend (e.g. a colorful circle)
- knime-legend-label text component of the legend

knime-tooltip - group of components representing the tooltip. This also serves as a styling for collapsed columns in the Data Explorer (when they are displayed in an extra row), using knime-tooltip-caption and knime-tooltip-value.

- knime-tooltip-caption text component for tooltipcaption
- knime-tooltip-color container for tooltip color guide
- knime-tooltip-key text component representing tooltip key
- knime-tooltip-value text component representing tooltip value

knime-tab - tab component, e.g. in the Data Explorer

knime-spinner - spinner component

knime-slider - slider component

- knime-slider-base base of slider
- knime-slider-handle handle(s) of slider
- knime-slider-connect connect bar(s) of slider

Widgets / Quickforms

knime-qf-title - title of widget/quickform. This one is called "Label" in the node dialog, but don't mix it up with knime-qf-label

knime-qf-label - label in front of input controls (e.g. "Date", "Time" in Date&Time or "User",
"Password" in Credentials)

knime-qf-input - input component. It can be used with a specifier (e.g. knime-boolean)

knime-qf-select - select component. It can be used with specifiers like knime-single-line
or knime-multi-line

knime-qf-button - button control

knime-qf-tree - tree component

knime-qf-text - text of output components

knime-qf-error - element to display error messages

Table based

knime-table - table

knime-table-control-text - text of control elements, like Search, Paging etc.

knime-table-search - search group

knime-table-paging - pagination group

knime-table-info-info group

knime-table-length - length group

knime-table-buttons - buttons group

knime-table-row-table row

knime-table-cell - table cell

knime-table-header - table header specificator

knime-table-footer - table footer specificator

Specifiers

knime-x, knime-y-specifies the dimension when needed. It should be used in combination with other classes, e.g. knime-axis.

knime-boolean - checkboxes (e.g. in Boolean Input or row selection in Table View nodes)

knime-double - text box to type in a double number (e.g. in Double Input or Table Editor)

knime-integer - text box to type in an integer number

knime-string - text box to type in a string

knime-datetime - group of text boxes and other user interface components to type in a date and time. It can be combined with the following classes:

- knime-date components to input dates
- knime-time components to input a time of the Time part
- · knime-now the "Now button" with which you can insert the current date and time

knime-timezone - components to input Timezone

knime-image - class to style a generic image

- knime-png class to style a PNG image
- knime-svg class to style an SVG image

knime-single-line - for single-line components

knime-multi-line - for multi-line components

knime-editable - refers to editable data

knime-selected - refers to selected data

knime-filter - refers to filter/search elements

Containers

knime-service-header - component with control buttons (menu, selection etc.)

knime-layout-container - wrapper component for a chart

knime-svg-container - component with svg plot

knime-qf-container - wrapper container of a QuuckForm control

knime-table-container - wrapper container of a table based view

Classes by Node

In the next section you can see a list of all the CSS classes for each node.

JavaScript

Bar Chart (JavaScript)

General: knime-title, knime-subtitle

Groups: knime-axis, knime-axis-label, knime-axis-line, knime-axis-max-min, knime-tick,

knime-tick-label, knime-tick-line, knime-legend, knime-legend-symbol, knime-legend-label, knime-tooltip, knime-tooltip-caption, knime-tooltip-color, knime-tooltip-key, knime-tooltip-value, knime-slider, knime-slider-base, knime-slider-handle, knime-slider-connect

Specifiers: knime-x, knime-y

Containers: knime-service-header, knime-layout-container, knime-svg-container

Box Plot (JavaScript)

General: knime-title, knime-subtitle, knime-label

Groups: knime-axis, knime-axis-line, knime-tick, knime-tick-label, knime-tick-line

Specifiers: knime-x, knime-y

Containers: knime-service-header, knime-layout-container, knime-svg-container

Conditional Box Plot (JavaScript)

General: knime-title, knime-subtitle, knime-label

Groups: knime-axis, knime-axis-label, knime-axis-line, knime-tick, knime-tick-label, knime-tick-line

Specifiers: knime-x, knime-y

Containers: knime-service-header, knime-layout-container, knime-svg-container

Data Explorer (JavaScript)

General: knime-title, knime-subtitle, knime-label

Groups: knime-axis, knime-axis-line, knime-tick, knime-tick-label, knime-tick-line knime-tooltip, knime-tooltip-caption, knime-tooltip-value, knime-tab

Table Based: knime-table, knime-table-control-text, knime-table-search, knime-table-paging, knime-table-info, knime-table-length, knime-table-buttons, knime-table-row, knime-table-cell, knime-table-header, knime-table-footer

Specifiers: knime-x, knime-y, knime-boolean, knime-double, knime-integer, knime-string,

knime-image, knime-png, knime-svg, knime-single-line, knime-filter

Containers: knime-service-header, knime-table-container

Decision Tree View (JavaScript)

General: knime-title, knime-subtitle

Containers: knime-service-header, knime-layout-container, knime-svg-container

Tagged Document Viewer (JavaScript)

General: knime-title, knime-subtitle

Groups: knime-document-inner-title, knime-document-title

Table Based: knime-table, knime-table-control-text, knime-table-paging, knime-table-info, knime-table-length, knime-table-row, knime-table-cell

Containers: knime-service-header, knime-table-container

Generic JavaScript View

Containers: knime-service-header (if the settings menu is added in the code).

Heatmap (JavaScript)

General: knime-title, knime-subtitle, knime-label

Groups: knime-tooltip, knime-tooltip-caption, knime-tooltip-value, knime-double knime-axis, knime-x, knime-y, knime-tick, knime-tick-label, knime-tick-line knime-legend, knime-legend-symbol, knime-legend-label

Containers: knime-layout-container, knime-svg-container

Hierarchical Cluster Assigner (JavaScript)

General: knime-title, knime-subtitle, knime-axis-label

Groups: knime-axis, knime-x, knime-y, knime-tick, knime-tick-label, knime-tick-line

Containers: knime-layout-container, knime-svg-container

Labeling Widget (JavaScript)

General: knime-title, knime-subtitle

Groups: knime-tiles, knime-tile-title, knime-tiles-rowtitle

Table Based: knime-table, knime-table-control-text, knime-table-search, knime-table-paging, knime-table-info, knime-table-length, knime-table-buttons, knime-table-row, knime-table-cell, knime-table-header, knime-table-footer

Specifiers: knime-boolean, knime-double, knime-integer, knime-string, knime-datetime, knime-date, knime-time, knime-timezone, knime-image, knime-png, knime-svg, knime-single-line, knime-selected, knime-filter

Containers: knime-service-header, knime-table-container

Lift Chart (JavaScript)

General: knime-title, knime-subtitle

Groups: knime-axis, knime-axis-label, knime-axis-line, knime-tick, knime-tick-label, knime-tick-line knime-legend, knime-legend-symbol, knime-legend-label

Specifiers: knime-x, knime-y

Containers: knime-service-header, knime-layout-container, knime-svg-container

Line Plot (JavaScript)

Containers: knime-service-header

Line Plot does not support other CSS classes at the moment.

Network Viewer (JavaScript)

General: knime-title, knime-subtitle

Containers: knime-service-header

Network Viewer cannot make use of CSS classes as it is drawn on a canvas.

OPTICS Cluster Assigner

General: knime-title, knime-subtitle, knime-label

Groups: knime-axis, knime-tick, knime-tick-label, knime-tick-line, knime-tooltip, knime-tooltip-value

Specifiers: knime-y, knime-selected

Containers: knime-service-header, knime-layout-container, knime-svg-container

Parallel Coordinates Plot (JavaScript)

General: knime-title, knime-subtitle, knime-label

Groups: knime-axis, knime-axis-label, knime-axis-line, knime-tick, knime-tick-label, knime-tick-line, knime-legend, knime-legend-symbol, knime-legend-label

Specifiers: knime-x, knime-y, knime-selected

Containers: knime-service-header, knime-layout-container, knime-svg-container

Partial Dependence/ICE Plot (JavaScript)

General: knime-title, knime-subtitle

Groups: knime-axis, knime-axis-label, knime-tick, knime-tick-label, knime-tick-line

Specifiers: knime-x, knime-y

Containers: knime-service-header, knime-layout-container, knime-svg-container

Pie/Donut Chart (JavaScript)

General: knime-title, knime-subtitle, knime-label

Groups: knime-legend, knime-legend-symbol, knime-legend-label, knime-tooltip, knime-tooltip-caption, knime-tooltip-color, knime-tooltip-key, knime-tooltip-value

Specifiers: knime-x

Containers: knime-service-header, knime-layout-container, knime-svg-container

ROC Curve (JavaScript)

General: knime-title, knime-subtitle

Groups: knime-axis, knime-axis-label, knime-axis-line, knime-tick, knime-tick-label, knime-tick-line, knime-legend, knime-legend-symbol, knime-legend-label, knime-tooltip, knime-tooltip-color, knime-tooltip-key, knime-tooltip-value

Specifiers: knime-x, knime-y

Containers: knime-service-header, knime-layout-container, knime-svg-container

Scatter Plot (JavaScript)

Containers: knime-service-header

Scatter Plot does not support other CSS classes at the moment.

Scorer (JavaScript)

General: knime-title, knime-subtitle, knime-label

Table Based: knime-table, knime-table-row, knime-table-cell, knime-table-header

Specifiers: knime-double, knime-integer, knime-string, knime-selected

Containers: knime-service-header

Stacked Area Chart (JavaScript)

General: knime-title, knime-subtitle

Groups: knime-axis, knime-axis-label, knime-axis-line, knime-axis-max-min, knime-tick, knime-tick-label, knime-tick-line, knime-legend, knime-legend-symbol, knime-legend-label, knime-tooltip, knime-tooltip-caption, knime-tooltip-color, knime-tooltip-key, knime-tooltip-value

Specifiers: knime-x, knime-y

Containers: knime-service-header, knime-layout-container, knime-svg-container

Sunburst Chart (JavaScript)

General: knime-title, knime-subtitle, knime-label

Groups: knime-legend, knime-legend-symbol, knime-legend-label, knime-tooltip, knime-tooltip-color, knime-tooltip-key, knime-tooltip-value

Specifiers: knime-selected

Containers: knime-service-header, knime-layout-container, knime-svg-container

Table Editor (JavaScript)

General: knime-title, knime-subtitle

Table Based: knime-table, knime-table-control-text, knime-table-search, knime-table-paging, knime-table-info, knime-table-length, knime-table-buttons, knime-table-row, knime-table-cell, knime-table-header, knime-table-footer

Specifiers: knime-boolean, knime-double, knime-integer, knime-string, knime-datetime, knime-date, knime-time, knime-timezone, knime-image, knime-png, knime-svg, knime-single-line, knime-editable, knime-selected, knime-filter

Containers: knime-service-header, knime-table-container

Table View (JavaScript)

General: knime-title. knime-subtitle

Table Based: knime-table, knime-table-control-text, knime-table-search, knime-table-paging, knime-table-info, knime-table-length, knime-table-buttons, knime-table-row, knime-table-cell, knime-table-header, knime-table-footer

Specifiers: knime-boolean, knime-double, knime-integer, knime-string, knime-datetime, knime-date, knime-time, knime-timezone, knime-image, knime-png, knime-svg, knime-single-line, knime-selected, knime-filter

Tag Cloud (JavaScript)

General: knime-title, knime-subtitle

Containers: knime-service-header

Tile View (JavaScript)

General: knime-title, knime-subtitle

Groups: knime-tiles, knime-tile-title, knime-tiles-rowtitle

Table Based: knime-table, knime-table-control-text, knime-table-search, knime-table-paging, knime-table-info, knime-table-length, knime-table-buttons, knime-table-row, knime-table-cell, knime-table-header, knime-table-footer

Specifiers: knime-boolean, knime-double, knime-integer, knime-string, knime-datetime, knime-date, knime-time, knime-timezone, knime-image, knime-png, knime-svg, knime-single-line, knime-selected, knime-filter

Containers: knime-service-header, knime-table-container

Widgets / Quickforms

Autocomplete Text Widget / Autocomplete Text Input

Quickforms: knime-qf-title, knime-qf-input, knime-qf-error

Specifiers: knime-string, knime-single-line

Containers: knime-service-header, knime-qf-container

Boolean Widget / Boolean Input

Quickforms: knime-qf-title, knime-qf-input, knime-qf-error

Specifiers: knime-x, knime-y, knime-boolean

Column Filter Widget / Column Filter

Quickforms: knime-qf-title, knime-qf-select, knime-qf-button, knime-qf-error

Specifiers: knime-single-line, knime-multi-line

Containers: knime-service-header, knime-qf-container

Column Selection Widget / Column Selection

Quickforms: knime-qf-title, knime-qf-select, knime-qf-error

Specifiers: knime-single-line, knime-multi-line

Containers: knime-service-header, knime-qf-container

Credentials Widget / Credentials Input

Quickforms: knime-qf-title, knime-qf-label, knime-qf-input, knime-qf-error

Specifiers: knime-string, knime-single-line

Containers: knime-service-header, knime-qf-container

Date&Time Widget / Date&Time Input

Groups: knime-spinner

Quickforms: knime-qf-title, knime-qf-label, knime-qf-input, knime-qf-select, knime-qf-button, knime-qf-error

Specifiers: knime-integer, knime-datetime, knime-date, knime-time, knime-now, knime-timezone, knime-single-line

Containers: knime-service-header, knime-qf-container

Double Widget / Double Input

Groups: knime-spinner

Quickforms: knime-qf-title, knime-qf-input, knime-qf-error

Specifiers: knime-double

Containers: knime-service-header, knime-qf-container

File Chooser Widget / File Chooser

Quickforms: knime-qf-title, knime-qf-tree, knime-qf-error

Containers: knime-service-header, knime-qf-container

File Download Widget / File Download

Quickforms: knime-qf-title, knime-qf-error

Specifiers: knime-string, knime-single-line

Containers: knime-service-header, knime-gf-container

File Upload Widget / File Upload

Quickforms: knime-qf-title, knime-qf-label, knime-qf-button, knime-qf-error

Specifiers: knime-string, knime-single-line

Containers: knime-service-header, knime-qf-container

Image Output Widget / Image Output

Quickforms: knime-qf-title, knime-qf-error

Containers: knime-service-header, knime-gf-container

Integer Widget / Integer Input

Groups: knime-spinner

Quickforms: knime-qf-title, knime-qf-input, knime-qf-error

Specifiers: knime-integer

List Box Widget / List Box Input

Quickforms: knime-qf-title, knime-qf-input, knime-qf-error

Specifiers: knime-string, knime-multi-line

Containers: knime-service-header, knime-qf-container

Molecule String Input

Quickforms: knime-qf-title, knime-qf-error

Containers: knime-service-header, knime-qf-container

Multiple Selections Widget / Multiple Selections

Quickforms: knime-qf-title, knime-qf-label, knime-qf-select, knime-qf-button, knime-qf-error

Specifiers: knime-single-line, knime-multi-line

Containers: knime-service-header, knime-qf-container

Interactive Range Slider Filter Widget / Range Slider Filter Definition

General: knime-label

Groups: knime-tick, knime-tick-label, knime-tick-line, knime-tooltip, knime-tooltip-value, knime-slider, knime-slider-base, knime-slider-handle, knime-slider-connect

Quickforms: knime-qf-error

Containers: knime-service-header

Single Selection Widget / Single Selection

Quickforms: knime-qf-title, knime-qf-label, knime-qf-select, knime-qf-error

Specifiers: knime-single-line

Slider Widget / Slider Input

Groups: knime-tick, knime-tick-label, knime-tick-line, knime-tooltip, knime-tooltip-value, knime-slider, knime-slider-base, knime-slider-handle, knime-slider-connect

Quickforms: knime-qf-title, knime-qf-error

Containers: knime-service-header, knime-qf-container

String Widget / String Input

Quickforms: knime-qf-title, knime-qf-input, knime-qf-error

Specifiers: knime-string, knime-single-line, knime-multi-line

Containers: knime-service-header, knime-qf-container

Text Output Widget / Text Output

Quickforms: knime-qf-title, knime-qf-text, knime-qf-error

Specifiers: knime-multi-line

Containers: knime-service-header, knime-qf-container

Interactive Value Filter Widget / Value Filter

Quickforms: knime-qf-title, knime-qf-select, knime-qf-button, knime-qf-error

Specifiers: knime-single-line, knime-multi-line

Containers: knime-service-header, knime-qf-container

Value Selection Widget / Value Selection

Quickforms: knime-qf-title, knime-qf-select, knime-qf-error

Specifiers: knime-single-line, knime-multi-line



KNIME AG Technoparkstrasse 1 8005 Zurich, Switzerland www.knime.com info@knime.com

The KNIME® trademark and logo and OPEN FOR INNOVATION® trademark are used by KNIME AG under license from KNIME GmbH, and are registered in the United States. KNIME® is also registered in Germany.