Widgets

With this Widget API, you can access and retrieve data, get and set properties as well as modify the interface for all of Wakanda's widgets.

The Widget class contains all the properties and methods that are common to all Wakanda widgets. However, not all the properties and methods are available to all widgets: some widgets do not make use of certain methods or properties and therefore do or return nothing.

The following widgets have their own specific functions:

- Auto Form
- Component
- Container
- Grid
- Grid Column
- Login Dialog
- Matrix
- Menu Bar
- Progress Bar
- Query Form
- Slider
- Tab View

The Grid Column class can only be applied to the Grid widget. To use any of these functions, you must first use the column( ) function to retrieve the *column* object needed to define the Grid's column.

Syntax

For these methods, you must use the following two notations for a widget whose ID is "widgetID":

```
var myValue = $$('widgetID').getValue();
        //or you could also write
WAF.widgets.widgetID.getValue();
```

For a property, you can write the following:

```
var myObj = $$('widgetID').format;
```

If you are in the context of the widget, you can write:

```
var myValue = this.getValue();
var myObj = this.format;
```

Auto Form

Besides the methods in the Widget class that you can apply to an Auto Form widget, you can also use these methods that are specific to the Auto Form widget:

For the Auto Form widget, you can perform all the actions in the footer buttons:

- addEntity( ): Add a new entity.
- dropEntity( ): Drop the current entity.
- findEntity( ): Query the datasource with the data entered in the widgets.
- nextEntity( ): Go to the next entity.
- prevEntity( ): Go to the previous entity.
- saveEntity( ): Save the current entity.

addEntity( )

void **addEntity**( )

Description

addEntity( ) allows you to add a new entity to the Auto Form widget.

dropEntity( )

void **dropEntity**( )

Description

dropEntity( ) allows you to drop the current entity in the Auto Form widget.

findEntity( )

void **findEntity**( )

Description

The findEntity( ) function allows you to find the entities whose values were entered in the widgets in the Auto Form widget. Before starting the query, you can use the clear( ) function to clear the values in the Auto Form.

nextEntity( )

void **nextEntity**( )

Description

With nextEntity( ), you can go to the next entity in the Auto Form widget.

prevEntity( )

void **prevEntity**( )

Description

With prevEntity( ), you can go to the previous entity in the Auto Form widget.

saveEntity( )

void **saveEntity**( )

Description

saveEntity( ) allows you to save the data entered in the Auto Form widget. Remember to create an entity beforehand in the Auto Form by calling the addEntity( ) method.

Button

The **Button** widget inherits from the Widget class; however, not all the properties and functions are available to it.
To set the title of a button, use the **setLabelText( )** method.

Chart

The Chart widget inherits from the Widget class; however, not all the properties and functions are available to it.
***Note**: This widget is only available in the development branch for Wakanda.*

Checkbox

The Checkbox widget inherits from the Widget class; however, not all the properties and functions are available to it.

Combo Box

The Combo Box widget inherits from the Widget class; however, not all the properties and functions are available to it.

Component

Besides the methods in the Widget class that you can apply to a Component widget, you can also use these methods that are specific to the Component widget:

- loadComponent( ): Load a new Web Component into the Component widget.
- removeComponent( ): Remove the current Web Component from the Component widget.

loadComponent( )

void **loadComponent**(String *webComponent*)

Parameter	Type	Description
webComponent	String	Path of the Web Component to load

Description

This method allows you to load a Web Component already present in your project into the Component widget on your Interface page.

If you have defined a Web Component in the **Path** property for your Component widget and have deselected the **Load by default** property, you can call **loadComponent( )** without passing the Web Component's path as the parameter as long as you have not already removed the Web Component by calling removeComponent( ).

Example

If, for example, you have a Component widget whose ID is "myDialog" and have selected the **Modal** property and deselected the **Load by default** property, you can show the Web Component as a modal dialog by simply writing the following line of code:

```
$$('myDialog').loadComponent("inputEmployeeDialog.waComponent");
```

To close the modal dialog, you can write the following line of code:

```
$$('myDialog').removeComponent();
```

removeComponent( )

void **removeComponent**

Description

This method allows you to remove the Web Component currently loaded in the Component widget.

Example

See the example for the loadComponent( ) method.

Container

Besides the methods in the Widget class for the Container widget, you can also use the methods below:

- getSplitPosition( ): Get the splitter position of the Container widget.
- setSplitPosition( ): Set the splitter position for the Container widget.

collapseSplitter( )

void **collapseSplitter**( )

Description

The collapseSplitter( ) function collapses the first container in a previously split Container widget.

expandSplitter( )

void **expandSplitter**( )

Description

The expandSplitter( ) function expands the first container in a previously split Container widget.

getSplitPosition( )

Number **getSplitPosition**( )

Returns	Number	Position of the container's splitter

Description

This method allows you to retrieve the current position of the Container widget's splitter. The position is expressed in pixels. Remember that when you split a Container widget, each split area is a Container.

Example

Retrieve the Container's splitter's current position when it is moved manually:

```
var myposition = $$('container1').getSplitPosition();
```

setSplitPosition( )

void **setSplitPosition**(Number *number*)

Parameter	Type	Description
number	Number	Splitter position (in pixels) for the Container to set

Description

Set the position of the splitter in the Container widget. The position is expressed in pixels. Remember that when you split a Container widget, each split area is also a Container.

If the Container widget does not have an existing splitter, this function does nothing.

Example

Set the position of the splitter in the Container to 120 pixels:

```
$$('container1').setSplitPosition(120);
```

toggleSplitter( )

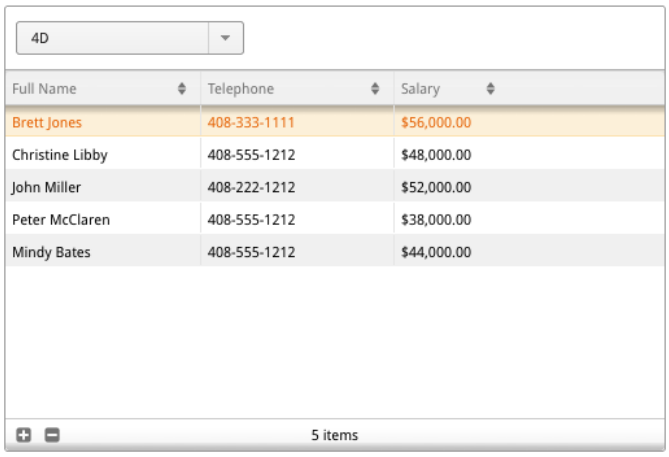
void **toggleSplitter**( )

Description

The toggleSplitter( ) function toggles the first container in a previously split Container widget. If the first container in the split Container widget is hidden, it will be displayed. If it is displayed, it will be hidden.

Example

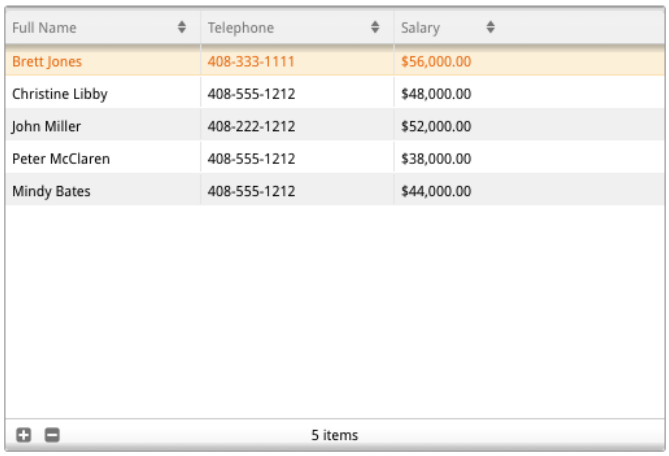
For the following Container widget was split horizontally:



We call the toggleSplitter( ) function to show and/or hide the top container of the Container widget:

```
$$('staffContainer').toggleSplitter();
```

The Container widget then appears as shown below:



By calling the above line of code a second time, the top container reappears.

***Note**: You can also use the collapseSplitter( ) and expandSplitter( ) functions.*

Display Error

The **Display Error** widget inherits from the Widget class; however, not all the properties and functions are available to it.

The Display Error widget is generally referenced by a widget and you can display (by using the **setErrorMessage( )** function) or clear (by using the **clearErrorMessage( )** function) the error message in this widget (by using these two functions on the widget that has set the Display Error widget's ID in its properties).

You can also define the Display Error widget ID for a particular widget by using the **setErrorDiv( )** function and retrieve the ID by using the **getErrorDiv( )** function.

Grid

Besides the methods in the Widget class that you an apply to the Grid widget, the following methods allow you to set or retrieve properties for a specific column or the actual Grid:

- column( ): returns the *column* object to then call any of the functions below:
- - getFormattedValue( ): retrieves the formatted value in the cell defined by *column* and the currently selected row.
  - getValueForInput( ): retrieves the value in the cell defined by *column* and the currently selected row.
  - setBackgroundColor( ): sets the background color for the entire *column* (including the header).
  - setColor( ): sets the text color for the entire *column* (including the header).
  - setFormat( ): sets the format for the data in the *column*.
  - setRenderer( ): define a function to be applied to each cell in the *column*.
  - setTextSize( ): set the text size for the entire *column* (including the header).
  - setWidth( ): set the width of the *column*.
- setReadOnly( ): set the Grid to read-only or read/write mode.
- setSelectionMode( ): set the selection mode to either "single" or "mulitple".
- setSortIndicator( ): set the column's sort indicator to show either ascending (up arrow) or descending (down arrow) order.

column( )

Column **column**(Number | String *columnRef*)

Parameter	Type	Description
columnRef	Number, String	Column name (e.g., "lastName") or column number (e.g., 3) in the Grid
Returns	Column	Column of the grid

Description

column( ) returns an object of type *Column* to which you can apply other functions in the Grid Column class.

For example, you can use this function in one of two ways:

```
$$("employeeGrid").column(2).getFormattedValue();
        // or
$$("employeeGrid").column("lastName").getFormattedValue();
```

setReadOnly( )

void **setReadOnly**(Boolean *mode*)

Parameter	Type	Description
mode	Boolean	True = Read only mode; False = Read/write mode

Description

With **setReadOnly( )**, you can set the Grid to be in read only or read/write mode, which is a property in the Properties tab. If you pass *true* to *mode*, the Grid will be in read only mode and the and buttons in the Grid's footer will be removed. If you pass *false* to *mode*, the Grid will be in read/write mode.

setSelectionMode( )

void **setSelectionMode**(String *mode*)

Parameter	Type	Description
mode	String	Pass "single" for single selection mode and "multiple" for multiple selection mode

Description

setSelectionMode( ) allows you to set the selection mode of the Grid widget to either "single" or "multiple". For more information, you can refer to the Grid Properties section.

Example

Set the Grid to multiple selection mode:

```
$$('employeeGrid').setSelectionMode("multiple");
```

To set it back to single selection mode:

```
$$('employeeGrid').setSelectionMode("single");
```

setSortIndicator( )

void **setSortIndicator** (column , sortOrder)

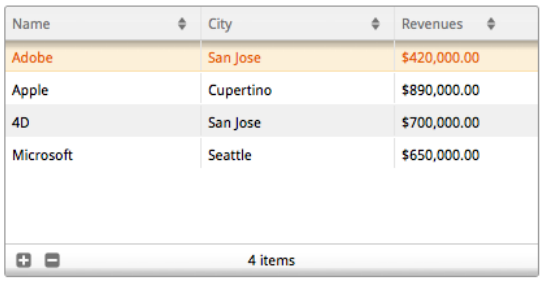
Parameter	Type	Description
column	Number	Column number (starting at 0 for the first column)
sortOrder	String	"asc" = ascending order; "desc" = descending order

Description

setSortIndicator( ) allows you to define the sorting arrow in the header of the column in the Grid widget. This method does not sort the column.

Example

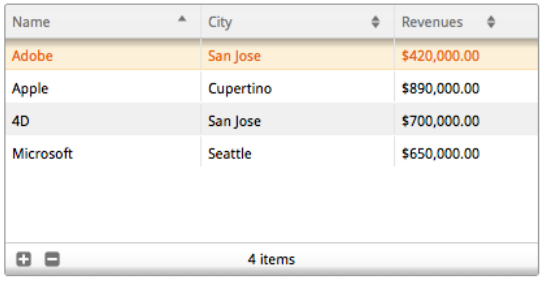
For example, if we have the following Grid displayed:



Once we make the following call:

```
$$('dataGrid1').setSortIndicator(0,"asc");
```

The Grid will appear as follows:



***Note**: The data in the column is not sorted.*

Grid Column

A *column* object, which is a part of the Grid widget, is returned by the column( ) function of the Grid class. Once you have a *column* object, you can call any of the functions in this class:

You can retrieve the *column* object in one of two ways:

```
var colObject;
colObject = $$("employeeGrid").column(2);
        // or
colObject = $$("employeeGrid").column("lastName");
```

Then, you can use any of the functions in this class as shown below:

```
var myValue = colObject.getFormattedValue();
```

getFormattedValue( )

String **getFormattedValue**

Returns String Formatted value in the column defined by column() and the selected row

Description

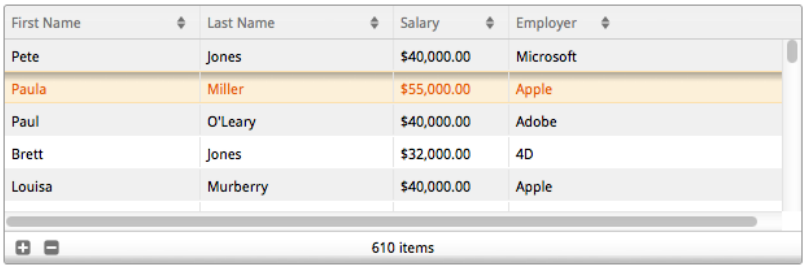
getFormattedValue( ) allows you to retrieve the formatted value in a cell defined by *column* and the currently selected row.

Example

In the Grid below, if we execute the following line of code:

```
$$('employeeGrid').column(3).getFormattedValue();
```

The value returned would be:
$55,000.00



If we execute the following line of code:

```
$$('employeeGrid').column(3).getValueForInput();
```

The value returned would be:
55000

getValueForInput( )

void **getValueForInput**

Description

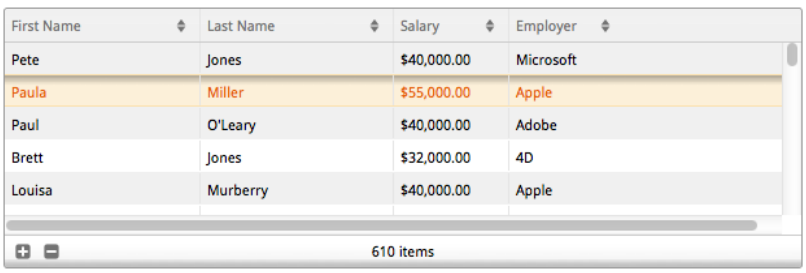
getValueForInput( ) allows you to retrieve the value in a cell defined by *column* and the currently selected row.

Example

In the Grid below, if we execute the following line of code:

```
$$('employeeGrid').column(3).getValueForInput();
```

The value returned would be:
55000



If we execute the following line of code:

```
$$('employeeGrid').column(3).getFormattedValue();
```

The value returned would be:
$55,000.00

setBackgroundColor( )

void **setBackgroundColor**([String *backgroundColor*])

Parameter	Type	Description
backgroundColor	String	Background color

Description

setBackgroundColor( ) allows you to set *column*'s background color *to backgroundColor*. This modification applies to the entire column along with its header.

backgroundColor can be expressed as:

- an HTML color value, i.e., "blue",
- a HEX value, i.e., "#CCC" or "#39C488", or
- a RGB value, i.e., #ff00ff.

Example

The following line sets the background color for the second column:

```
$$('employeeGrid').column(2).setBackgroundColor("#C30");
```

To reset it back to the background color it was defined with:

```
$$('employeeGrid').column(2).setBackgroundColor("");
```

setFormat( )

void **setFormat**(String *format*)

Parameter	Type	Description
format	String	Display format for the data in the column defined by column()

Description

setFormat( ) allows you to set the display format to *format* for the data in *column*.

Example

This example formats the Salary column in the Grid:

```
$$('employeeGrid').column("salary").setFormat("$###,###,##0.00");
```

The column will be formatted as shown below:

setRenderer( )

void **setRenderer**(Function *function*)

Parameter	Type	Description
function	Function	Function to call for each cell in the column

Description

setRenderer( ) allows you to call a function for each cell in a *column*. The parameter that you define in your function is an object that contains the data. For example, if you named the parameter *object*, *object.value* will contain the value in the cell.

Example

The following example modifies the data in the "lastName" column so that the text is in uppercase:

```
$$('employeeGrid').column('lastName').setRenderer(
    function(myCell) {
        return myCell.value.toUpperCase();
    }
);
```

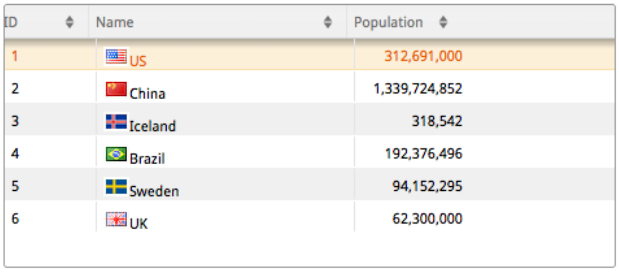
Example

This example places a flag icon (whose filename is the same as the country) in the column next to the country name:

```
$$('countryGrid').column(2).setRenderer(
    function(myCell) {
```

```
        var myimage="images/country/"+myCell.value.toLowerCase()+".png";
        return "<img src="+myimage+" alt=\"\">"+ myCell.value;
    }
);
```

The result is the following:



ID	Name	Population
1	US	312,691,000
2	China	1,339,724,852
3	Iceland	318,542
4	Brazil	192,376,496
5	Sweden	94,152,295
6	UK	62,300,000

setTextColor( )

void **setTextColor**([String *textColor*])

Parameter	Type	Description
textColor	String	Text color

Description

setColor( ) allows you to set *column*'s text color *to textColor*. This modification applies to the entire column along with its header.
textColor can be expressed as:

- an HTML color value, i.e., "blue",
- a HEX value, i.e., "#CCC" or "#39C488", or
- a RGB value, i.e., #ff00ff.

Example

The following example sets the color of the text in the second column of the Grid:

```
$$('employeeGrid').column(2).setTextColor("#C30");
```

To reset the color back to the one defined for the Grid:

```
$$('employeeGrid').column(2).setTextColor("");
```

setTextSize( )

void **setTextSize**(Number *textSize*)

Parameter	Type	Description
textSize	Number	Size of the text in pixels (e.g., 12 for 12px)

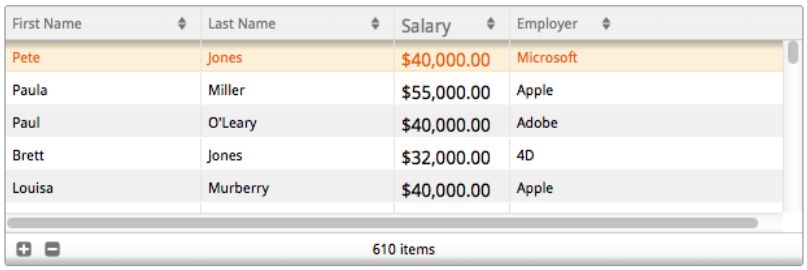
Description

setTextSize( ) allows you to set the text size of the column to *textSize* in your Grid widget. When you set the text size of the column, the header is also modified.

Example

The following example sets the text size for the third column to 14 pixels:

```
$$('employeeGrid').column(3).setTextSize(14);
```



First Name	Last Name	Salary	Employer
Pete	Jones	$40,000.00	Microsoft
Paula	Miller	$55,000.00	Apple
Paul	O'Leary	$40,000.00	Adobe
Brett	Jones	$32,000.00	4D
Louisa	Murberry	$40,000.00	Apple

610 items

setWidth( )

void **setWidth**(Number *width*)

Parameter	Type	Description
width	Number	Width of the column in pixels

Description

setWidth( ) sets the column width to *width* (expressed in pixels) for *column*.

Example

This example sets the width of the third column to 150 pixels:

```
$$('employeeGrid').column(3).setWidth(150);
```

Image

The Image widget inherits from the Widget class; however, not all the properties and functions are available to it.

Login Dialog

Besides the methods in the Widget class for the Login Dialog widget, the methods below are specific to this widget:

- login( ): Login a user into the application by passing the *username* and *password*.
- showLoginDialog( ): Display the login dialog for the Login Dialog widget.
- logout( ): Log the current user out of the application.
- refresh( ): Refresh the display of the current user in the Login Dialog widget.

login( )

void **login**(String *username*, String *password*)

Parameter	Type	Description
username	String	Username of the user to login
password	String	Password for the user to login

Description

With this method, you can pass the *username* and *password* to login a user in the Login Dialog widget.

Example

The following example allows you to login using the Login Dialog widget without displaying the dialog to enter the username and password:

```
$$('login1').login("jsmith","3b97c1a5");
```

Once the user has successfully logged in, the Login Dialog widget displays the information defined in the Login Status section on the Properties tab:

logout( )

void **logout**( )

Description

logout allows you to log the current user out of the application through the Login Dialog widget displayed on the Interface page.

Example

Log the current user out of the application:

```
$$('login1').logout();
```

Once the user has been logged out, the information in the Login Dialog section of the Properties tab appears.

refresh( )

void **refresh**( )

Description

refresh( ) allows you to refresh the Login Dialog widget to display the current user.

Example

Refresh the Login Dialog widget:

```
$$('login1').refresh();
```

showLoginDialog( )

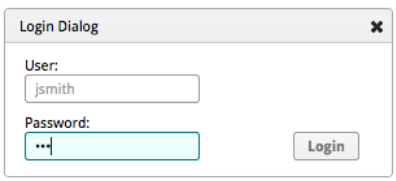
void **showLoginDialog**( )

Description

This method allows you to display the login dialog so that the user can enter his/her username and password for the Login Dialog widget.
If you make the following call:

```
$$('login1').showLoginDialog();
```

The following dialog appears:



Matrix

Besides the methods in the Widget class for the Matrix widget, the methods below are specific to this widget:

- getCurrentPage( ): Retrieves the current page number displayed in the Matrix widget.
- getDisplayedRow( ): Get the displayed row in Matrix widget.
- getTotalPages( ): Get the total number of pages in the Matrix widget.
- goTo( ): Display the *nth* element in the Matrix widget.
- goToFirst( ): Display the first element in the Matrix widget.
- goToLast( ): Display the last element in the Matrix widget.
- goToNextPage( ): Display the next page in the Matrix widget.
- goToPreviousPage( ): Display the previous page in the Matrix widget.

getCurrentPage( )

Number **getCurrentPage**( )

Returns	Number	Current page displayed in the Matrix

Description

getCurrentPage( ) returns the current page number in the Matrix widget. The first page is numbered as 0.

Example

This example returns the current page displayed for Matrix.

```
var currentPage=$$('matrix1').getCurrentPage();
```

getDisplayedRow( )

Number **getDisplayedRow**( )

Returns	Number	Currently displayed row in the Matrix widget

Description

This method returns the currently displayed row in the Matrix widget.

getTotalPages( )

Number **getTotalPages**( )

Returns	Number	Number of pages in the Matrix widget

Description

This method returns the total number of pages in the Matrix widget.

goTo( )

void **goTo**(Number *element*)

Parameter	**Type**	**Description**
element	Number	Go to a specific element in the Matrix

Description

goTo( ) allows you to go to a specific *element* in the Matrix widget.

Example

If you have 100 elements in the Matrix widget, you can display the 30th element by doing the following:

```
$$('matrix1').goTo(30);
```

goToFirst( )

void **goToFirst**( )

Description

goToFirst( ) allows you to display the first element in the Matrix widget.

goToLast( )

void **goToLast**( )

Description

goToLast( ) allows you to display the last element in the Matrix widget.

goToNextPage( )

void **goToNextPage**( )

Description

goToNextPage( ) allows you to display the next page in the **Matrix** widget.

goToPreviousPage( )

void **goToPreviousPage**( )

Description

goToPreviousPage( ) allows you to display the previous page in the **Matrix** widget.

Menu Bar

The Menu Bar widget inherits from the Widget class; however, not all the properties and functions are available to it.
It does, however, have one function specific to a Menu Item in a Menu Bar widget:

- renameMenuItem( ): Modify the text in a specific Menu Item.

renameMenuItem( )

void **renameMenuItem** (menuItemText)

Parameter	Type	Description
menuItemText	String	Text to display for the Menu Item

Description

The **renameMenuItem( )** function allows you to modify the title of a Menu Item, which is a part of the Menu Bar widget.
The Tab View widget is also made up of a Menu Bar widget and each tab is a Menu Item.

Example

In the following example, we retrieve the IDs that are a part of the tab and modify them:

```
var tabObject = $$('tabView1').getSelectedTab();
var tabNumber = tabObject.index //returns the tab number
$$(tabObject.menuItem.id).renameMenuItem("My Tab"); //Menu bar item ID
$$(tabObject.container.id).setBackgroundColor("#9c0"); //Container ID
```

Progress Bar

These methods can be applied to the **Progress Bar** widget:

- **startListening( )**: Start sending requests to the server in order to display the progress of the session.
- **stopListening( )**: Stops sending requests to the server.
- **userBreak( )**: Sends a request to the server to interrupt the session.

startListening( )

void **startListening**( )

Description

startListening( ) begins sending requests to the server in order to display the progress of the session associated with the **Progress Bar** widget.

Example

The following example shows how to start and stop listening to the requests sent to the server:

```
$$("progressBar1").startListening();
ds.Company.callMethod({ method:"searchCompanies", onSuccess: function()
    {
        $$("progressBar1").stopListening();
    }
 }, searchCriteria, "progressBarRef");
```

For more information about how to set up a Progress Indicator, refer to the **ProgressIndicator( )** method.

stopListening( )

void **stopListening**( )

Description

stopListening( ) stops sending requests to the server in order to display the progress of the session associated with the widget.

userBreak( )

void **userBreak**( )

Description

userBreak( ) sends a request to the server to interrupt the session.

Example

The following example interrupts the session that progressBar1 is listening to:

```
$$("progressBar1").userBreak();
```

Query Form

Besides the methods in the **Widget** class that you can apply to a **Query Form** widget, you can also use the following method, which is specific to the Query Form widget:

- **findEntity( )**: Query the datasource with the data entered in the fields of the Query Form.

To clear the values in the Query Form, use the **clear( )** function.

findEntity( )

void **findEntity**( )

Description

The findEntity( ) function allows you to find the entities whose values were entered in the fields of the Query Form widget. You can also use the **clear( )** function to clear the values in the Query Form.

Radio Button Group

The **Radio Button Group** widget inherits from the Widget class; however, not all the properties and functions are available to it.

Slider

Besides the methods in the Widget class for the Slider widget, the addHandle( ) function is specific to this widget and allows you to add a handle to the Slider.

***Note**: The addHandle( ) function is only available in the Development Branch of Wakanda.*

addHandle( )

void **addHandle**(Number *number*)

Parameter	Type	Description
number	Number	Position of the handle

Description

***Note**: This function is only available in the Development Branch of Wakanda.*

With **addHandle( )**, you can add an additional handle to the Slider widget on your Interface page. The value passed to *number* must be between the minimum and maximum values defined for the Slider widget. You can only add one additional handle to a Slider widget.

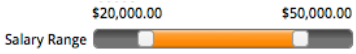
When you call the getValue( ) method for the Slider widget, it returns an array with the value of each handle. If you only have one handle, only one value will be returned.

Example

If our Slider widget has a handle at 50000, we can add a second handle so that we can define a range instead of just one value:

```
$$('salarySlider').addHandle(20000);
```

For our example below, the getValue( ) method returns: [20000, 50000].



Tab View

The Tab View widget inherits from the Widget class; however, not all the properties and functions are available to it.

This widget also has its own set of functions:

- addTab( ): Add a new tab the Tab View widget.
- countTabs( ): Retrieve the number of tabs in the Tab View widget.
- getSelectedTab( ): Get the currently selected tab's number, Menu Item widget ID and Container widget ID.
- getTabContainer( ): Get the tab's Container widget ID.
- removeTab( ): Remove a tab from the Tab View widget.
- selectTab( ): Select a specific tab.

***Note**: This widget is only available in the development branch for Wakanda.*

addTab( )

void **addTab**(String *title*)

Parameter	Type	Description
title	String	Title of the tab to add

Description

The **addTab( )** function allows you to add a tab to the Tab View widget by passing its *title* as parameter.

countTabs( )

Number **countTabs**( )

Returns	Number	Number of tabs currently in the Tab View widget

Description

The **countTabs( )** function returns the number of tabs currently displayed in the Tab View widget.

getSelectedTab( )

Object **getSelectedTab**( )

Returns	Object	Object defining the currently selected tab in the Tab View widget

Description

The getSelectedTab( ) function returns an object that defines the currently selected tab in the Tab View widget.

The object that is returned contains three properties:

- **index**: a number representing the currently selected tab
- **menuItem**: an object that defines Menu Item widget for the tab
- **container**: an object that defines the container for the tab

The **id** property in the tab and container objects is the main one that can be useful to you.

Example

In the following example, we retrieve the IDs that are a part of the tab and modify them:

```
var tabObject = $$('tabView1').getSelectedTab();
var tabNumber = tabObject.index //returns the tab number
$$(tabObject.menuItem.id).renameMenuItem("My Tab"); //Menu bar item ID
$$(tabObject.container.id).setBackgroundColor("#9c0"); //Container ID
```

getTabContainer( )

Object **getTabContainer**(Number *tabNumber*)

Parameter	Type	Description
tabNumber	Number	Tab number in the Tab View widget
Returns	Object	Container object for the tab in the Tab View widget

Description

The **getTabContainer( )** function returns the Container object for the tab specified by *tabNumber* in the Tab View widget.

The **id** property can then be passed to other functions in the Widgets API.

The following example shows you how to retrieve the ID for the Container widget that makes up the Tab View widget.

```
var containerID = $$('tabView1').getTabContainer(2).id;
```

removeTab( )

void **removeTab**(Number *tab*)

Parameter	Type	Description
tab	Number	Number of the tab to remove

Description

The **removeTab( )** function allows you to remove a tab displayed in the Tab View widget defined by the *tab* parameter. The tab number is defined by the tabs that are currently displayed, and are numbered from left to right or from top to bottom.

selectTab( )

void **selectTab**(Number *tab*)

Parameter	Type	Description
tab	Number	Number of the tab

Description

The **selectTab( )** function allows you to select a specific tab and display its contents in the Tab View widget. The tab number is defined by the tabs that are currently displayed, and are numbered from left to right or from top to bottom.

Text

The Text widget inherits from the Widget class; however, not all the properties and functions are available to it.

Text Input

The Text Input widget inherits from the Widget class; however, not all the properties and functions are available to it.

Widget

All of Wakanda's widgets inherit the properties and methods in the **Widget** class. However, not all the properties and methods are available to all widgets: some widgets do not make use of certain methods or properties and therefore do or return nothing.

There are also other instances in which a property does not exist for a particular widget in the GUI Designer, yet you can still set it through the API. For example, the **Combo Box** widget does not have the Draggable property; however, you can still make it draggable by calling **draggable( )**.

config

Description

This property returns an object that defines all the widget's properties. If you have created your own widget, all the properties with the "data" prefix are also included.
Each widget will return different properties. The following properties are common to most widgets (if they are available in the widget's Properties tab):

Property	Description	Example
class	CSS classes	"waf-widget waf-textField default inherited "
data-binding	Source/Source In property	"employee.salary" or "employee"
data-draggable	Draggable property	null
data-errorDiv	Display Error property	myErrorDiv
data-format	Format property	"$###,###,#00.00"
data-label	Label property	"Salary"
data-label-position	Position of label (in Styles tab)	"left"
data-lib	Data Library	"WAF"
data-resizable	Resizable property	null
data-type	Widget type	"textField"
id	ID property	"textField1"
tabindex	Tabindex property	null
type	Type of data	"text"
value	Value	null

***Note**: All Boolean values return either "true" or null. By default, any string value left blank returns null.*

Below are the properties per widget when you make a call to **config:**

```
var myObject = $$('widgetID').config;
```

Auto Form

Besides the *class*, *id*, *data-binding*, *data-errorDiv*, *data-draggable*, *data-resizable*, *data-type*, and *data-lib* properties, the Auto Form returns the following properties:

Property	Description	Example
data-column	Columns	"[{'title':'First Name','sourceAttID':'firstName'},{'title':'Last Name','sourceAttID':'lastName'},{'title':'Gender','sourceAttID':'gender'}]"
data-column-attribute	Attributes	"firstName,lastName,fullName,gender"
data-column-name	Attribute Titles	"First Name,Last Name,Gender"
data-columns	Public Attributes in Datasource	"ID,firstName,lastName,fullName,gender,telephone, birthday,salary,photo,employer,employerName"
data-display-error	Display Error	"true"
data-resize-each-widget	Allow to resize each widget property	"true"
data-withoutTable	With Included widgets property	"true"

The object returned for a column in an Auto Form has the following properties:

Property	Description
title	Label for the attribute
sourceAttID	Attribute property

Button widget

Besides the *class*, *id*, *data-binding*, *data-type*,*data-lib*,and *tabindex* properties, the Button widget returns the following properties:

Property	Description	Example
data-action	Action property	"simple"
data-link	Link property	null
data-state-1	Default state icon (Styles tab)	"/images/002_47.png"
data-state-2	Hover state icon (Styles tab)	"/images/002_48.png"
data-state-3	Active state icon (Styles tab)	"/images/002_49.png"
data-state-4	Disabled state icon (Styles tab)	"/images/002_50.png"
data-target	Target property	"_blank"
data-text	Text property	null

Checkbox widget

Besides the *class*, *id*, *data-binding*, *data-errorDiv*, *data-type*, *data-label*, *data-label-position*, *data-lib*,and *tabindex* properties, the Checkbox widget returns the following properties:

Property	Description	Example
data-checked	Checked property	true
data-link	Link property	null
data-icon-active	Active state icon (Styles tab)	null
data-icon-default	Default state icon (Styles tab)	"/images/002_48.png"
data-icon-hover	Hover state icon (Styles tab)	null
data-icon-selected	Selected state icon (Styles tab)	null

Combo Box widget

Besides the *class*, *id*, *data-binding*, *data-type*, *data-label*, *data-label-position*, *data-lib*,and *tabindex* properties, the Combo Box widget returns the following properties:

Property	Description	Example
data-autoDispatch	Auto Dispatch property	"true"
data-binding-key	Key property	"name"
data-binding-options	Attributes properties	"[name] "
data-binding-out	Source Out property	"country.name"
data-editable	Autocomplete property	"true"

Component widget

Besides the *class*, *id*, *data-draggable*, *data-resizable*, *data-type*, and *data-lib* properties, the Component widget returns the following properties:

Property	Description	Example
data-modal	Modal property	"false"
data-start-load	Load by default property	null

Grid widget

Besides the *class*, *id*, *data-binding*, *data-errorDiv*, *data-type*, *data-label*, *data-label-position*, *data-lib*, *data-resizable*, and *data-draggable* properties, the Grid widget returns the following properties:

Property	Description	Example
data-column	Columns	"[{'sourceAttID':'fullName','colID':'fullName','width':'150','title':'fullname'}, {'sourceAttID':'fromTime','colID':'fromTime','width':'100','title':'fromTime'}, {'sourceAttID':'toTime','colID':'toTime','width':'100','title':'toTime'}]"
data-display-error	Display Error property	"true"
data-footer-hide	Hide footer property	null
data-readOnly	Read only property	null
data-selection-mode	Selection mode property	"single"

The object returned for a column in a Grid has the following properties:

Property	Description
sourceAttID	Attribute property
colID	ID for the column (based on Attribute property)
width	Width of the column
title	Label for the column
format	Format of the data (only appears if it was defined)
readOnly	Read Only property for the column (only appears if it was checked)

Image widget

Beisdes the *class*, *id*, *data-binding*, *data-label*, *data-label-position*, *data-type*, and *data-lib* properties, the Image widget returns the following properties:

Property	Description	Example
data-fit	Fit property (0=to container, 1=to width, 2=to height, 3=container to image, 4=to container (proportionately))	"4"
data-link	Link property	null
data-src	Src property	null
data-target	Target property	"_blank"

Matrix widget

Besides the *class*, *id*, *data-draggable*, *data-resizable*, *data-lib*, *data-scrollbar*, and *data-type* properties, the Matrix widget returns the following properties:

Property	Description	Example
data-fit	Auto Fit property	"false"

data-margin	Margin property	null
data-scrollbar	Maximum Value property	"true"
data-scrolling	Scrolling property	"vertical"

Menu Bar widget

Besides the *class*, *id*, *data-lib*, and *data-type* properties, the Menu Bar widget returns the following properties:

Property	Description	Example
data-display	Display property	"horizontal"
data-subMenuShow	Show Submenus property	"hover"
data-tab-margin	Margin property	null

Query Form

Beisdes the *class*, *id*, *data-binding*, *data-draggable*, *data-resizable*, *data-type*, and *data-lib* properties, the Query Form widget returns the following properties:

Property	Description	Example
data-column	Attributes	"[{'title':'ID','sourceAttID':'ID'},{'title':'lastName','sourceAttID':'lastName'}]"
data-column-attribute	Attribute property	"ID,lastName"
data-column-name	Attribute title property	"ID,lastName"
data-columns	Public attributes in datasource	"ID,firstName,lastName,fullName,gender,telephone, birthday,salary,photo,employer,employerName"
data-withoper	Show Operators property	null

Radio Group widget

Beisdes the *class*, *id*, *data-binding*, *data-label*, *data-label-position*, *data-draggable*, *data-resizable*, *data-type*, *tabindex*, and *data-lib* properties, the Radio Group widget returns the following properties:

Property	Description	Example
data-autoDispatch	Auto Dispatch property	"true"
data-binding-key	Key property	"name"
data-binding-options	Atttriutes Display property	"[name] "
data-binding-out	Source Out property	null
data-display	Display property	"vertical"
data-icon-active	Active state icon (Styles tab)	null
data-icon-default	Default state icon (Styles tab)	"/images/002_48.png"
data-icon-hover	Hover state icon (Styles tab)	null
data-icon-selected	Selected state icon (Styles tab)	null

Slider widget

Besides the *id*, *data-binding*, *data-errorDiv*, *data-type*, *data-label*, and *data-label-position*, the Slider widget returns the following properties:

Property	Description	Example
data-maxValue	Maximum Value property	"200000"
data-minValue	Minimum Value property	"10000"
data-orientation	Orientation property	"horizontal"
data-range	Range property	"min"
data-step	Step property	"10000"

Tab View widget

Besides the *class*, *id*, *data-type*, *data-draggable*, *data-resizable*, and *data-lib* properties, the Tab View widget returns the following properties:

Property	Description	Example
data-menu-position	Tab Position property	"false"
data-padding	Padding property	null

Text widget

Besides the *class*, *id*, *data-binding*, *data-format*, *data-label*, *data-label-position*, *data-type*, and *data-lib* properties, the Text widget returns the following properties:

Property	Description	Example
data-autoWidth	Auto resize property	"true"
data-link	Link property	null
data-overflow	Scrollbar property	"Horizontal"
data-target	Target property	"_self"
data-text	Text property (when no datasource is defined)	null

Text Input widget

Besides the *class*, *id*, *data-binding*, *data-format*, *data-errorDiv*, *data-label*, *data-label-position*, *data-type*, *tabindex*, and *data-lib* properties, the Text Input widget returns the following properties:

Property	Description	Example
data-autocomplete	Auto-Complete property	null
data-datapicker-icon-only	Display calendar when icon is clicked property	"false"
data-datapicker-on	Allow calendar for dates	"true"
data-multiline	Multi-Line property	"false"
data-password	Password field property	"false"

domNode

Description

The DOM node is the actual HTML tag created for the widget.

Example

If we try to find out the following proeprty of our widget:

```
var myDomNode = $$('textField5').domNode;
```

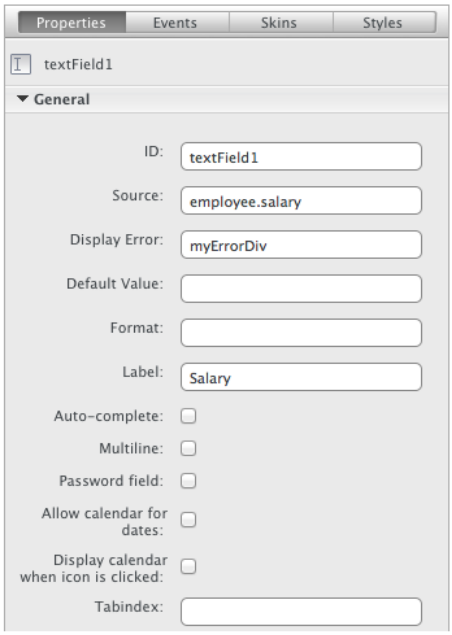
The following text will be returned:

```
<input id="textField5" class="waf-widget waf-textField default inherited AF_InputOK" type="text" data-format="$###,###,#00.00"
data-binding="employee.salary" data-constraint-right="false" data-constraint-bottom="false" data-constraint-top="true"
data-constraint-left="true" data-datapicker-icon-only="false" data-datapicker-on="true" data-password="false" data-multiline="fal
data-label-position="left" data-label="salary" data-lib="WAF" data-type="textField" name="textField5">
```

errorDiv

Description

You can define the Display Error ID, which corresponds to the Display Error widget, in the widget's Properties tab like the one shown below for the Text Input widget:



Example

If we want to find out the value in the **Display Error** property, we write:

```
var myErrorDivID = $$('textField1').errorDiv;  // returns "myErrorDiv"
```

format

Description

This property returns an object containing the format entered in the widget's **Format** property in the Properties tab.

Example

If we want to find out the format for our Text Input widget, we can write:

```
var myFormatObj = $$('textField1').format;
```

myFormatObj will contain one property:

```
{ format="$###,###,##0.00"}
```

id

Description

This property contains the widget's ID as defined in the Properties tab.

kind

Description

The kind property returns the type of widget. Below is a table with the values returned and the actual widget name displayed in Wakanda:

Widget Name	Kind
Auto Form	autoForm
Chart	chart
Checkbox	checkbox
Combo Box	combobox
Component	component
Container	container
Grid	dataGrid
Button	button
Display Error	errorDiv
Image	image
Login Dialog	login
Matrix	matrix
Menu Item	menuItem
Menu Bar	menuBar
Query Form	queryForm
Progress Bar	progressBar
Radio Button Group	radioGroup
Slider	slider
Text	richText
Tab View	tabView
Text Input	textField

Below is the list of Experimental widgets:

Widget Name	Kind
File Upload	fileUpload
Google Chart	googleChart
Google Maps	googleMap
Yahoo! Weather	yahooWeather

label

Description

When you add text in the **Label** property for a widget, a Label widget is created. This property contains the HTML tag for the Label widget.

If you make the following call for a Text Input widget:

```
var myLabel = $$('textField1').label;
```

myLabel returns the HTML tag for the Label widget:

```
<label id="label2" class="waf-widget waf-label default inherited " data-constraint-top="true"
data-constraint-left="true" data-valign="middle" for="textField1" data-lib="WAF" data-type="label"
style="width: auto;">
```

Here are the properties for this **Label** widget:

Property	Description
id	Label ID
class	CSS class for Label widget
data-constraint-top	Top constraint defined in the Styles tab
data-constraint-left	Left constraint defined in the Styles tab
data-valign	vAlign defined in the Styles tab
for	Label widget defined for the widget
data-lib	Data library
data-type	Widget type (label)
style	Other styles defined in the Styles tab

renderId

Description

This property is the same as id.

source

Description

source provides you with all the information regarding the datasource bound to the widget. All the properties and methods for the datasource are contained in this object as defined in the Server Datasources.

If the datasource defined for the widget is a datastore class, all the public attributes are added as properties. An additional property, **length**, defines the total number of entites in the datastore class.

If the datasource is of type Array, there will be a property for each of the attributes defined for the array and the **length** property, which defines number of elements in the array.

If the datasource is of type Variable, the ID of the JavaScript Variable will be indicated as another property.

If no datasource is defined for the widget, this property returns *null*.

If we have a Text Input widget whose Source is "employee.salary", we can obtain the values in the other attributes in the Employee datastore class through the **source** property:

```
var myFirstName, myID, myTotalEntities;
myFirstName = $$('textField1').source.firstName; // returns "Pete"
myID = $$('textField1').source.ID; // returns 3 (entity's ID)
myTotalEntities = $$('textField1').source.length; // returns 544 (total number of entities in the datastore class)
```

sourceAtt

Description

sourceAtt provides you with all the information regarding the datasource bound to the widget. All the properties and methods for the datasource are contained in this object.

All the methods are defined in the Server Datasources (Attribute).

This object has a few properties that you can access:

Property	Description
name	Name of the attribute
kind	Attribute kind (see Attribute Categories)
type	Attribute type (see Storage Attribute Types for storage attribute types)

If no datasource is defined for the widget, this property returns *null*.

To retrieve the value defined in the widget's datasource, you can write **sourceAtt.getValue()**.

Example

If we have a Text widget whose source is employee.lastName, the following data is returned for the properties in the **sourceAtt** object:

```
var attName,attKind,attType,attValue;
attName=$$('richText2').sourceAtt.name;    // returns lastName
attKind=$$('richText2').sourceAtt.kind;     // returns storage
attType=$$('richText2').sourceAtt.type;     // returns string
attValue=$$('richText2').sourceAtt.getValue();     // returns "Smith"
```

sources

Description

The **sources** property returns an object with an object for each datasource used in the Component widget. If, for example, you are using two datasources "employee" and "company," this property contains an object with two objects of type server datasource: "employee" and "company".

For more information about server datasources, refer to the Server Datasources chapter.

addChild( )

void **addChild**(Widget *widget*)

Parameter	Type	Description
widget	Widget	Widget to add as a child

Description

addChild( ) allows you to add a widget as a "child," which means that it will be contained in the "parent" widget.

This function is useful when you want to include a widget (already available on your Interface page) inside of a Container widget. Because each tab in a Tab View widget is made up of a Container widget and a Menu Item, you can also add a widget to a tab's Container widget.

To position each widget you include into the Container widget, you must use the move( ) function.

If you want to remove the "child" from the "parent" widget, you can use the destroy( ) function.

Example

The following example adds a Button widget to the Container widget:

```
$$('container1').addChild($$('button1')); //add this widget (already on your page) to the Container
$$('button1').move(10,10);
```

addChildren( )

void **addChildren**(Widget *widget* [,..., Widget *widget*N])

Parameter	Type	Description
widget	Widget	Widgets to add as children

Description

addChildren( ) allows you to add widgets as "children," which means that they will be contained in the "parent" widget.

This function is useful when you want to include widgets (already available on your Interface page) inside of a Container widget. Because each tab in a Tab View widget is made up of a Container widget and a Menu Item, you can also add one or more widgets to the tab's Container widget.

To position each widget you include into the Container widget, you must use the move( ) function.

Example

The following example allows you to add a Button widget and a Component widget into a new tab in the Tab View widget:

```
$$('tabView1').addTab("New Tab"); //add a new tab to our Tab View
var newlyAddedTab=$$('tabView1').countTabs(); //newly created tab is the last one; therefore, the number returned by countTabs()
var myContainer=$$('tabView1').getContainer(newlyAddedTab); //get the newly created tab's Container ID
$$(myContainer.id).addChildren($$('button2'),$$('component2')); //add the following widgets (already on your page) to the tab's C

$$('button2').show(); //the button was hidden previously offscreen
$$('button2').move(20,20); //position the button inside the Container

$$('component2').loadComponent();//load component (by default it was not loaded)
$$('component2').move(20,50); //position the component inside the Container
```

addClass( )

void **addClass**(String *cssClass*)

Parameter	Type	Description
cssClass	String	CSS class to add to the widget

Description

With this method, you can add a CSS class to your widget by passing it in *cssClass*. If you want to remove it, call the removeClass( ) method.

Example

The following example adds the "myCustomClass" CSS class to a widget:

```
$$('firstName').addClass('myCustomClass');
```

addListener( )

void **addListener**(String *event* , String *callback* [, Object *options*])

Parameter	Type	Description
event	String	Event to add the listener to (e.g., "click")
callback	String	Callback associated to the event
options	Object	Options to add to the callback

Description

Use this method to add a listener to the widget for a specific *event*. You can add as many listeners to a widget for an *event*. To remove a listener, call removeListener( ).
event is a jQuery event, like "click", "dblclick", and "focus". Refer to the jQuery API, to see which form, mouse, and keyboard events are supported.

Example

In the following example, we add a listener to a button. Each time it is clicked, an alert is displayed:

```
$$('button1').addListener('click',function() { alert("Button was clicked."); });
```

In this example, you can add a listener to the same button with *options* defined:

```
$$('button1').addListener('click',function(event) { alert(event.data.title + event.data.msg); },
{msg: "Button was clicked", title: "MESSAGE: "});
```

clear( )

void **clear**( )

Description

This method clears the value displayed in the widget.
When called for the Text Input, Slider, Checkbox, Image, and Text widgets, the value displayed is cleared.
When used with the Auto Form widget, all the values in the Text Input, Slider, Checkbox, Image, and Text widgets are cleared.

Example

The example below clears the value defined in a Slider:

```
$$('slider0').clear()
```

clearErrorMessage( )

void **clearErrorMessage**( )

Description

Clears the error message for the widget displayed in the associated Display Error widget.
You define the Display Error widget in the Properties tab for widgets like Text Input, Checkbox, Slider, and Grid.

Example

If you want to clear the error message that appears for a Text Input widget, you call **clearErrorMessage( )** as shown below:

```
$$('textField3').clearErrorMessage()
```

If there is any text displayed in the Display Error widget whose ID was specified in the Text Input widget's **Display Error** property, it will be cleared.

destroy( )

void **destroy**( )

Description

This method deletes the widget from the Interface page and removes all the listeners associated to it.

disable( )

void **disable**( )

Description

disable( ) allows you to disable the data entry in a widget.
You can use this function on the following widgets:

Widget	Description
Text Input	Disable the widget
Container	Disable the Slider and its handle(s)
Grid	Cells become read-only and if the footer is displayed, the + and the - buttons are removed

***Note**: Other widgets will be added to this list.*

draggable( )

void **draggable**(Boolean *boolean*)

Parameter	Type	Description
boolean	Boolean	True = activate the draggable option for a widget; False = disactivate it

Description

This method allows you to activate or disactivate the draggable option for the widget.
Pass *True* to make the widget draggable and *False* to not allow it to be draggable.

Example

To make a widget draggable:

```
$$('dataGrid1').draggable(true);
```

To make it no longer draggable:

```
$$('dataGrid1').draggable(false);
```

enable( )

void **enable**( )

Description

enable( ) allows you to enable data entry in a widget.
You can use this function on the following widgets:

Widget	Description
Text Input	Enable the widget
Container	Enable the Slider and its handle(s)
Grid	Cells become enabled and if the footer is displayed, the + and the - buttons are displayed

***Note**: Other widgets will be added to this list.*

focus( )

void **focus**( )

Description

This method allows you to put the focus on a widget on the Interface page. For the Text Input widget, the cursor is also placed in it as well.
To check if the Text Input widget already has the focus, call **hasFocus( )**.

In this example, we put the focus on a Text Input widget and add a message to the Display Error widget (defined for the "firstName" Text Input widget):

```
$$('firstName').focus();
$$('firstName').setErrorMessage("The First Name field is mandatory.");
```

getChildren( )

Array **getChildren**( )

Returns Array Returns an array of objects where each object defines a widget included in the main widget

Description

This method returns an array of objects where each object defines a widget included in the parent widget. The parent widget contains "children" widgets.

getChildren( ) is useful when you want to know which widgets are inside of a widget, like a **Container**.

Example

If you call this method on a Container widget that contains other widgets:

```
$$('container1').getChildren();
```

It will return an array of objects:

```
[Object { id="combobox1", kind="combobox", divID="combobox1", ...},
Object { id="label2", kind="label", divID="label2", ...},
Object { id="textField1", kind="textField", divID="textField1", ...},
Object { id="label3", kind="label", divID="label3", ...},
Object { id="textField2", kind="textField", divID="textField2", ...},
Object { id="label4", kind="label", divID="label4", ...},
Object { id="button1", kind="button", divID="button1", ...}]
```

getErrorDiv( )

String **getErrorDiv**( )

Returns	String	jQuery reference to the Display Error widget defined for the widget

Description

This method returns the jQuery reference to the Display Error widget ID defined in the properties for the widget. You can also dynamically set the **Display Error** widget ID for a widget by calling **setErrorDiv( )**.

This example allows you to retrieve the Display Error widget ID for the Text Input widget:

```
var myErrorDiv;
myErrorDiv=$$('textField3').getErrorDiv();
 //myErrorDiv returns the following: [div#myErrorDivWidget.waf-widget]
 //where myErrorDivWidget is the Display Error widget ID defined for the Text Input widget
```

getHeight( )

Number **getHeight**( )

Returns	Number	Height of the widget

Description

getHeight( ) returns the height of the widget.

getLinks( )

Array **getLinks**( )

Returns	Array	Returns an array of objects where each object defines a widget linked to the main widget

Description

This method returns an array of objects where each object defines a widget linked to the main widget. A widget can contain "linked" widgets.

getLinks( ) is useful when you want to know which widgets are linked to a widget, like for a **Tab View** that is made up of multiple "linked" widgets (i.e., (a **Menu Bar** and one or more **Container** widgets).

Example

If you call this method on a Tab View widget:

```
$$('tabView1').getLinks();
```

It will return an array of objects:

```
[Object { id="menuBar1", kind="menuBar", divID="menuBar1", ...},
Object { id="container3", kind="container", divID="container3", ...},
Object { id="container4", kind="container", divID="container4", ...}]
```

getPosition( )

Object **getPosition**

Returns	Object	Object with four properties (bottom, left, top, and right) defining the widget's position

Description

getPosition( ) returns the widget's position in an object containing four properties: **bottom**, **left**, **top**, and **right**.

Example

The following example retrieves the position of a Grid:

```
gridPositions = $$('dataGrid1').getPosition();
    //top position is gridPositions.top
    //left position is gridPositions.left
    //bottom position is gridPositions.bottom
    //right position is gridPositions.right
$$('dataGrid1').move(gridPositions.left, gridPositions.top + 20); //move the grid 20 pixels down and 50 pixels to the left
```

```
    //or
$$('dataGrid1').setTop(gridPositions.top + 20); //move the grid 20 pixels to the left
```

getTheme( )

String **getTheme**( )

Returns	String	Theme(s) defined for the widget

Description

This method returns the theme(s) defined for the widget. **getTheme( )** returns either the selected theme for the widget defined on the Widget Skins tab. If "Inherited" is selected (which is the value by default), the Interface Page's theme will be returned after "Inherited."

Example

In our example, we retrieve the theme for a widget:

```
var myTheme;
myTheme = $$('firstName').getTheme();
```

If a Theme was selected for Text Input widget (even if another Theme was selected for the Interface Page), it will return the selected theme for the Text Input widget. Otherwise, **getTheme( )** returns the widget's theme and then the Interface page's theme, i.e., "inherited metal".

getValue( )

String **getValue**( )

Returns	String	Value displayed in the widget

Description

This method returns the value displayed in the widget.

Below is a tab that defines the values returned for the different widgets:

Widget	Value
Checkbox	If checked, returns "checked" otherwise it returns ""
Combo Box	Selected value
Image	Either the URL to get to the image if defined by the **Src** property or the REST request to view it if the image is in the datastore
Radio Button Group	Selected value
Slider	Currently displayed value (based on the **Step** property in the **Properties** tab)
Text	Currently displayed value
Text Input	Currently displayed value

You can format values for widgets of type Text and Text Input in its **Properties** tab in the GUI Designer or the actual attribute bound to a widget in the Datastore Model Designer.

To retrieve the actual value from the datasource, you must use the sourceAtt property as shown below:

```
$$('myWidget').sourceAtt.getValue();
```

Example

To retrieve the formatted value displayed in a widget:

```
$$('salary').getValue();  //returns $44,000.00
```

To get the actual value in the widget (without formatting), you can write the following:

```
$$('salary').sourceAtt.getValue();  //returns 44000
```

getWidth( )

Number **getWidth**( )

Returns	Number	Width of the widget in pixels

Description

getWidth( ) returns the width of the widget.

hasFocus( )

Boolean **hasFocus**( )

Returns	Boolean	True = widget has the focus; False = widget does not have the focus

Description

The **hasFocus( )** method returns *True* if the widget has the focus and *False* if it does not. To put the focus on a particular widget, call focus( ).

hide( )

void **hide**([String *mode*])

Parameter	Type	Description
mode	String	Pass "visibility" to hide the widget (visibility:"hidden"). Otherwise, it will be removed from the Interface page (display:"none").

Description

This method hides the widget on the Interface page.

If you have layered widgets, pass "visibility" to this method to make sure that the other widgets are resized correctly. If you pass "visibility" to hide the widget, the CSS generated is visibility:"hidden". Otherwise, the CSS generated is display:"none".

You can show a hidden widget by using the **show( )** method or toggle (if it's visible, hide it and if it's hidden, show it) it by calling **toggle( )**.

link( )

void **link**(Widget *widget*)

Parameter	Type	Description
widget	Widget	Widget to link

Description

link( ) allows you to link a widget to another widget.

This function is useful when you create your own widget and want to link multiple widgets together. We have linked multiple widgets (a **Menu Bar** and one or more **Container** widgets) for a **Tab View** widget.

To find out which widgets are linked to a specific widget, you can use the **getLinks( )** function.

Example

The following example links a Button widget with a Text Input widget:

```
$$('saveDialogButton').link($$('nameField'));
```

move( )

void **move**(String | Number *left*, String | Number *top*)

Parameter	Type	Description
left	String, Number	Left coordinate of the new position for the widget
top	String, Number	Top coordinate of the new position for the widget

Description

This method allows you to move the widget to its new *left* and *top* coordinates. The *left* and *top* coordinates can be expressed as numbers or strings.

Example

The following example shows two ways to move a widget on your Interface page:

```
$$('title').move(10,10);
```

```
$$('title').move("10px","10px");
```

redraw( )

void **redraw**( )

Description

This method allows you to redraw the widget on the Interface page.

removeClass( )

void **removeClass**([String *cssClass*])

Parameter	Type	Description
cssClass	String	CSS class to remove from the widget

Description

This method removes the *cssClass* from the widget. If you do not pass a *cssClass*, all the classes defined for the widget will be removed. If you want to add a CSS class to a widget, call the **addClass( )** method.

Example

Remove the "myCustomClass" from the widget's CSS class property:

```
$$('firstName').removeClass('myCustomClass');
```

removeListener( )

void **removeListener**(String *event* [, String *callback*])

Parameter	Type	Description
event	String	Event for which to remove the listener
callback	String	Callback for the event

Description

With this method, you can remove a particular listener or all listeners previously added by the **addListener( )** method. To remove a particular listener, you must pass not only the *event*, but also the *callback*. To remove all listeners for an event, pass only the *event*.

Example

The following example removes all listeners added to the widget for the "click" *event*:

```
$$('button1').removeListener('click');
```

resizable( )

void **resizable**(Boolean *boolean*)

Parameter	Type	Description
boolean	Boolean	True = activate the resizable option for the widget; False = disactivate it

Description

This method activates or disactivates the ability to resize the widget. **resizable( )** can only be applied to widgets that have the **Resizable** option available in the Properties tab. Pass *True* to activate the ability to resize the widget and *False* to disactivate it.

Example

To make the Grid resizable:

```
$$('dataGrid1').resizable(true);
```

resize( )

void **resize**(String | Number *height*, String | Number *width*)

Parameter	Type	Description
height	String, Number	Height for the widget
width	String, Number	Width for the widget

Description

This method resizes the widget to its new *height* and *width*. The *height* and *width* can be expressed as a number or string.

Example

The following example shows two ways to resize a widget on your Interface page:

```
$$('lastName').resize(20,200);
```

```
$$('lastName').resize("20px","200px");
```

setBackgroundColor( )

void **setBackgroundColor**(String *backgroundColor*)

Parameter	Type	Description
backgroundColor	String	Background color

Description

This method sets the widget's background color to *backgroundColor*. *backgroundColor* can be expressed as:

- an HTML color value, i.e., "blue",
- a HEX value, i.e., "#CCC" or "#39C488", or
- a RGB value, i.e., #ff00ff.

Example

Set the background color for a container:

```
$$('formContainer').setBackgroundColor("#650092");
```

setBottom( )

void **setBottom**(Number *bottom*)

Parameter	Type	Description
bottom	Number	Number of pixels for the widget's bottom position

Description

setBottom( ) sets the bottom position of the widget. Passing no value to this function clears the value for the widget's bottom position.
For more information about the positioning of a widget, refer to the **Size & Position** section in the **GUI Designer** manual.

setErrorDiv( )

void **setErrorDiv**(String *errorDiv*)

Parameter	Type	Description
errorDiv	String	Display Error widget ID for the widget

Description

With this method, you can set the Display Error for the widget if it has the Display Error property in its Properties tab. To get the existing **Display Error** widget ID, use the **getErrorDiv( )** method.

setErrorMessage( )

void **setErrorMessage**(String *message*)

Parameter	Type	Description
message	String	Error message to display

Description

Sets the error message for the widget that will be displayed in the associated Display Error widget. If the widget (e.g., Text Input, Slider, or Checkbox widgets) has the **Display Error** property and nothing is entered, this function displays the error message in an alert.

In this example, we set the error message for the Display Error widget that is associated to a Text Input widget:

```
$$('email').setErrorMessage("Please enter a valid email address.")
```

setHeight( )

void **setHeight**(Number *height*)

Parameter	Type	Description
height	Number	Height of the widget

Description

The setHeight( ) function allows you to set the height of the widget by passing its new height to the *height* parameter.

setLabelText( )

void **setLabelText**(String *labelText*)

Parameter	Type	Description
labelText	String	Text to set for the widget's label or Button's text

Description

Set the text for the widget's label or the Button widget's text by passing it to **setLabelText( )**.

Example

Set the label text for a Text Input widget:

```
$$('firstName').setLabelText("First Name");
```

Example

Change the Button widget's title:

```
$$('button1').setLabelText("Click here");
```

setLabelTextColor( )

void **setLabelTextColor**(String *textColor*)

Parameter	Type	Description
textColor	String	Color to set the label text

Description

This method sets the widget's label's text color to *textColor*. *textColor* can be expressed as:

- an HTML color value, i.e., "blue",
- a HEX value, i.e., "#CCC" or "#39C488", or
- a RGB value, i.e., #ff00ff.

Example

Set the color of the label text:

```
$$('firstName').setLabelTextColor("#650092");
```

setLeft( )

void **setLeft**(Number *left*)

Parameter	Type	Description
left	Number	Number of pixels for the widget's left position

Description

setLeft( ) sets the left position of the widget. Passing no value to this function clears the value for the widget's left position.
For more information about the positioning of a widget, refer to the Size & Position section in the GUI Designer manual.

setParent( )

void **setParent** (widget)

Parameter	Type	Description
widget	Widget	Widget to define as parent

Description

With **setParent( )**, you can set a Container widget as the parent of a widget
You must also position the widget you include into the Container widget by using the move( ) function.

Example

The following example allows you to add a Button widget and a Component widget into a new tab in the Tab View widget:

```
$$('tabView1').addTab("New Tab"); //add a new tab to our Tab View
var newlyAddedTab=$$('tabView1').countTabs(); //newly created tab is the last one; therefore, the number returned by countTabs()
var myContainer=$$('tabView1').getContainer(newlyAddedTab); //get the newly created tab's container ID

$$('button2').show();
$$('button2').setParent($$(myContainer.id)); //the button was hidden previously offscreen
$$('button2').move(20,20); //move the button inside the Container

$$('component2').setParent($$(myContainer.id)); //the button was hidden previously offscreen
$$('component2').loadComponent();//load component (by default it was not loaded)
$$('component2').move(20,50); //move the component inside the Container
```

setRight( )

void **setRight**(Number *right*)

Parameter	Type	Description
right	Number	Number of pixels for the widget's right position

Description

setRight( ) sets the right position of the widget. Passing no value to this function clears the value for the widget's right position.
For more information about the positioning of a widget, refer to the **Size & Position** section in the **GUI Designer** manual.

setTabIndex( )

void **setTabIndex**(Number *tabIndex*)

Parameter	Type	Description
tabIndex	Number	Tab index for the widget

Description

With this method, you can set the widget's tab index defined in the **Tabindex** property on the widget's Properties tab.

setTextColor( )

void **setTextColor**(String *textColor*)

Parameter	Type	Description
textColor	String	Text color

Description

This method sets the widget's text color to *textColor*. *textColor* can be expressed as:

- an HTML color value, i.e., "blue",
- a HEX value, i.e., "#CCC" or "#39C488", or
- a RGB value, i.e., #ff00ff.

Example

Set the color of the text typed in a Text Input widget:

```
$$('firstName').setTextColor("#650092");
```

setTop( )

void **setTop**(Number *top*)

Parameter	Type	Description
top	Number	Number of pixels for the widget's top position

Description

setTop( ) sets the top position of the widget. Passing no value to this function clears the value for the widget's top position.
For more information about the positioning of a widget, refer to the **Size & Position** section in the **GUI Designer** manual.

setValue( )

void **setValue**(String *value*)

Parameter	Type	Description
value	String	Value to set in the widget

Description

With this method, you can set the value for a widget. The value entered is not saved until you save the entity in the datasource.

Widget	Value
Checkbox	Pass "checked" for true otherwise ""
Combo Box	A value defined for the widget
Image	A path to the image file (URL or path relative to the project)
Radio Button Group	A value defined for the widget
Slider	Any value in the range of the widget

Text	Any value
Text Input	Any value

Example

The following example assigns an image in our project's images folder to an Image widget:

```
$$('image1').setValue("images/myImage.jpg")
```

setWidth( )

void **setWidth**(Number *width*)

Parameter	Type	Description
width	Number	Width of the widget

Description

Use the **setWidth( )** function to set the width of the widget by passing the new width to the *width* parameter.

show( )

void **show**( )

Description

With this method, you can show a hidden widget on the Interface page. You can hide a widget by using the **hide( )** method or toggle (if it's visible, hide it and if it's hidden, show it) it by calling **toggle( )**.

toggle( )

void **toggle**(String *mode*)

Parameter	Type	Description
mode	String	Pass "visibility" to hide the widget (visibility:"hidden"). Otherwise, it will be removed from the Interface page (display:"none").

Description

This method allows you to toggle the display of the widget. If it is visible, it is hidden and if it is hidden, it is made visible. You can also use the **hide( )** method to hide the widget and the **show( )** method to show it.

unlink( )

void **unlink**(Widget *widget*)

Parameter	Type	Description
widget	Widget	Widget to unlink

Description

unlink( ) allows you to unlink one widget from another widget.

This function is useful when you create your own widget and want to link multiple widgets together. We have linked multiple widgets (a **Menu Bar** and one or more **Container** widgets) for a **Tab View** widget.

To find out which widgets are linked to a specific widget, you can use the **getLinks( )** function.

Example

The following example unlinks a Button widget and a Text Input widget (if they were previously linked):

```
$$('saveDialogButton').unlink($$('nameField'));
```