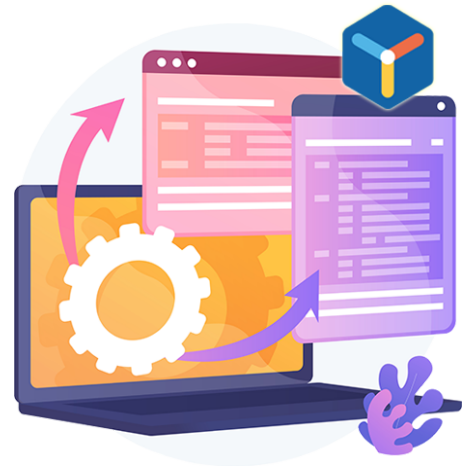




**Y**[wai]

Web Application Innovator



# VSCode User Manual

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## 1. A Pure Web Development Platform, Y[wai]

### A. What is Y[wai]

Y[wai] is a web development platform based on the web. It is the new development platform that succeeds our X-Internet solution, Winvader, and continues the strengths of Winvader.

Y[wai] supports standard web systems. Both the web systems developed in Y[wai] and Y[wai] are developed in standard web fashion. Y[wai] is the acronym for Web Application Innovator, which stands for transforming the web development and maintenance process quickly and easily.



Y[wai] builds the front-end of web-based business systems. It is the only development platform that uses standard HTML and JavaScript from the point of development to the point of execution.

This allows you to develop using HTML, CSS, JavaScript directly without conversion, and provides many types of integrated development environments and HTML-tagged components.

---

# 1. A Pure Web Development Platform, Y[wai]

## B. Structure and Features

Y[wai] always uses the standard web method. Unlike other solutions that convert web screens and scripts into dedicated development tools, Y[wai] uses standard web method from development to execution.

### Rapid Adaptation

No or very little training on development tools is required. It's similar to the web development method in general, so it's easy to adapt.

- ✓ Web designers can design and apply in a normal way.
- ✓ Web developers can easily adapt and apply.
- ✓ Developers can easily figure out codes and screens that have already been developed.

### Performance & Reliability

It uses fewer objects and code than converted HTML and JavaScript, since it develops directly from HTML and Script. It uses less memory and loads faster.

- ✓ It uses less system memory.
- ✓ Loading speed of the screen is fast.
- ✓ It uses less network usage.

### Flexible Development

You can use web libraries or components in parallel with your development. You can use your development time efficiently and reflect various needs.

- ✓ Various Runtime Libraries can be used in parallel.
- ✓ Various external components can be used in parallel.

---

Y[wai] provides a variety of environments, development methods, standardization and encourages your creativity. And it provides several development tools and functions to be suitable for various development and operation environments.

#### Various Development Environments

- It provides an IDE based on the web without installation. ✓
- It provides an IDE based on Eclipse. ✓
- It provides an IDE based on Visual Studio Code of Microsoft. ✓

You can select and use the appropriate development tool depending on various types of development, operation, maintenance, and the development scope of the developer.

#### Optional Standardization

- Standardizing of data definition, processing, and communication. ✓
- Standardizing of multi languages and dictionary. ✓
- Standardizing of common module and common screen. ✓
- Standardizing of 3rd party library that can use project. ✓
- Standardizing of project theme. ✓

You can pick and choose each part of your development to standardize, depending on your development environment and requirements. You can choose 0~100% development standardization, rather than compulsory standardization by development tools.

#### Extended Web

- Extended functions can be used by using waiBrowser. ✓  
(You need to install it on the user's PC.)
- Extended functions can be used by using waiClient. ✓  
(You need to install it on the user's PC.)

If you use waiBrowser and waiClient, you can perform functions that are difficult to handle with a typical web browser.

---

Y[wai] provides all parts for front-end development.

## IDE

It provides an integrated development environment for editing HTML and developing scripts in a WYSIWYG way. It uses the best code editor for your type of IDE.

- ✓ Web IDE  
It provides an IDE based on the web without installation.
- ✓ waiEclipse IDE  
It provides IDE based on Eclipse.
- ✓ VSCode IDE  
It provides an IDE based on Visual Studio Code of Microsoft.

## waiServer

You can perform team development and standard development with waiServer. It provides automatic update function of waiBrowser and operational functions such as log search and remote support for each user are available.

- ✓ Managing developers, operators, and their permission.
- ✓ Managing source version and distribution functions.
- ✓ Managing all standardization development and sharing development resources.
- ✓ Managing waiBrowser version and automatic update.
- ✓ Log search and remote support for each user.

## waiBrowser

You can perform functions that are difficult to handle with a typical web browser with waiBrowser. Automatic interfacing is built in so that developers can easily add and use functions in the form of standard C# DLLs. All of functions of waiBrowser is interfaced with JavaScript on the web screen.

- ✓ DLL Interface
- ✓ File Control
- ✓ Shell Processing
- ✓ TCP/IP - WebSocket Server
- ✓ Zip / Unzip
- ✓ Clipboard Control
- ✓ System Status Monitoring
- ✓ Remote Control Client
- ✓ Screen Capture
- ✓ QR / Barcode Processing

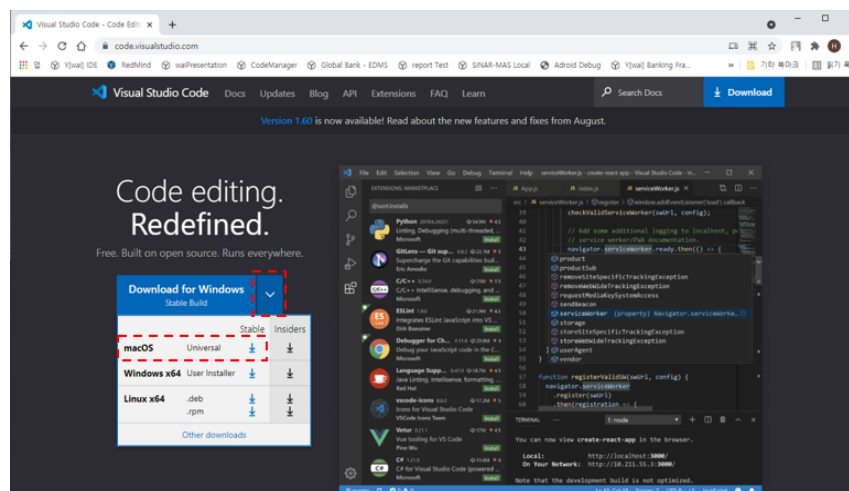
## 2. Start Y[wai]

### A. Install VSCode Extension

#### ■ Install Microsoft Visual Studio Code

Y[wai] is a purely web-based web building tool. It provides purely web-based components and a WYSIWYG Designer(IDE). waiVSCode is provided as an Extension in the Visual Studio Code environment. So, you have to install Visual Studio Code to use waiVSCode.

You can download and install Visual Studio Code(hereafter: VSCode) from <https://code.visualstudio.com/>.

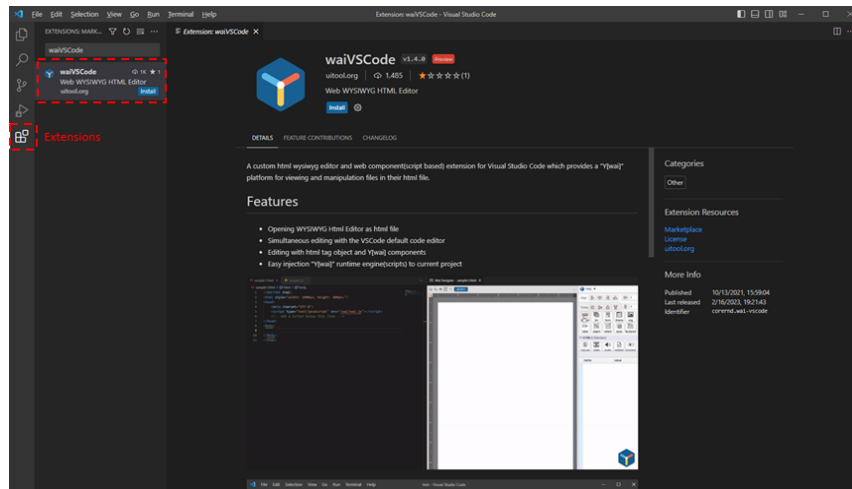


## ■ Install waiVSCode Extension

After running VSCode, select the Extension tab in the Activity Bar.

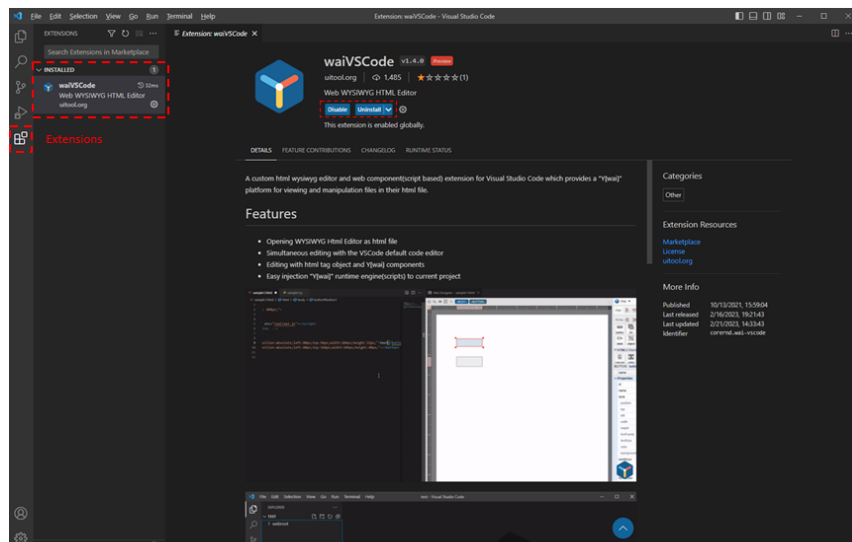
If you search for 'waiVSCode' or 'wysiwyg', you can check the waiVSCode Extension.

Please install the detected waiVSCode extension, then restart VSCode.



## ■ Confirm waiVSCode Extension

If you check the Extensions Tab after running VSCode, the installed waiVSCode extension will be displayed. You can disable waiVSCode with the 'Disable' button or delete it with the 'Uninstall' button.



---

## 2. Start Y[wai]

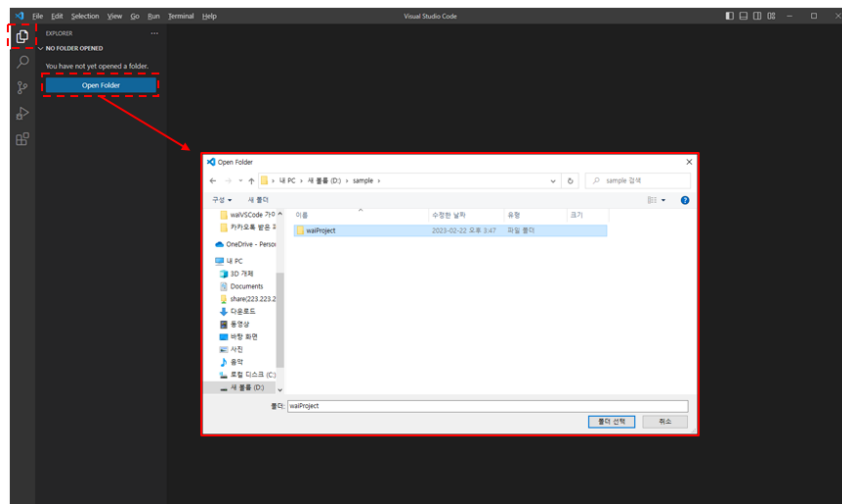
### B. Open Wai Designer

#### ■ Select Folder

Decide which folder you want to use in your project.

Select the Explorer Tab in the left sidebar and click the 'Open Folder' button.

When the file selection window opens, select the folder you want to use in your project.

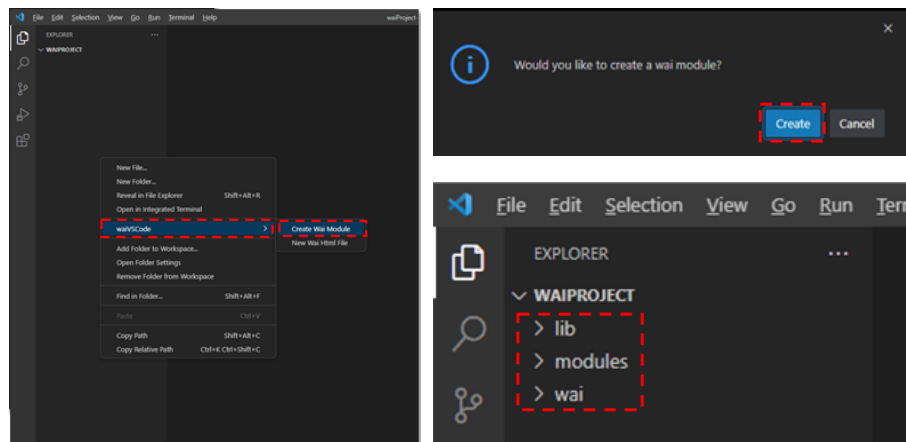


## ■ Create Wai Module

Explorer Tab will be organized based on the selected project folder.

Select an area inside a folder and you can check a blue border. Right-click in that area and select the 'Create Wai Module' menu under the 'waiVSCode' menu. When the confirmation window appears, click the 'Create' button to create the Wai Module.

The folders and files(Wai Module) are the Y[wai] component and the Y[wai] Runtime Engine.

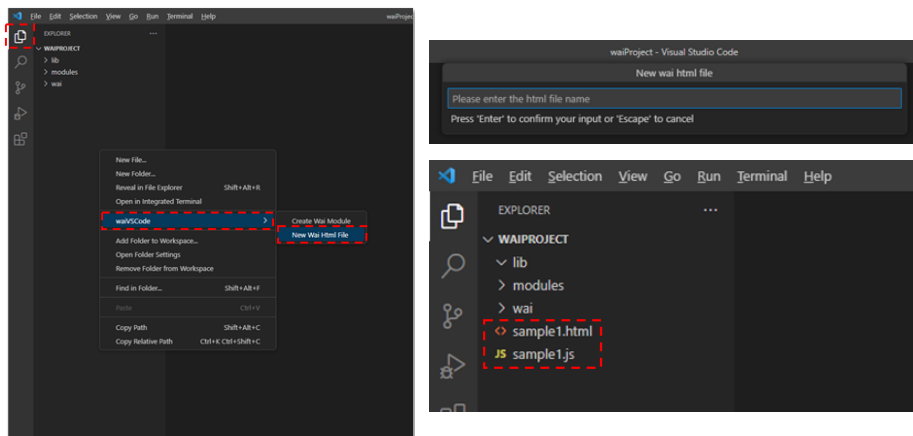


## ■ Create New HTML File

On the Explorer Tab, right-click on the path where you want to generate the HTML file.

Click the 'New Wai Html File' button under the 'waiVSCode' menu and enter the name of the HTML file you want to create and press the enter key, when the 'New wai html file' input box appears.

You can check that the HTML and Javascript files of the entered filename are created

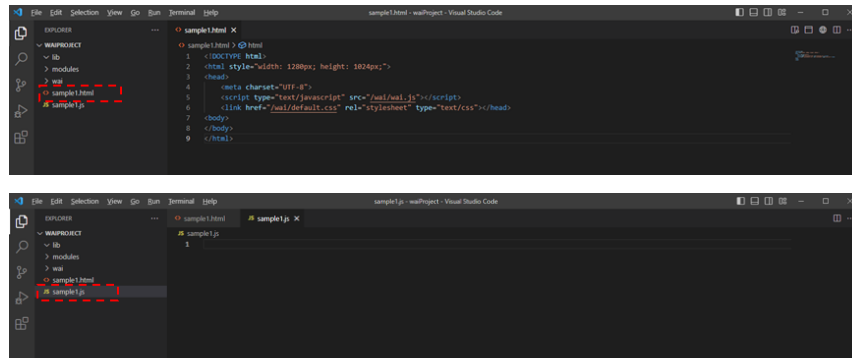




## ■ Confirm New HTML File

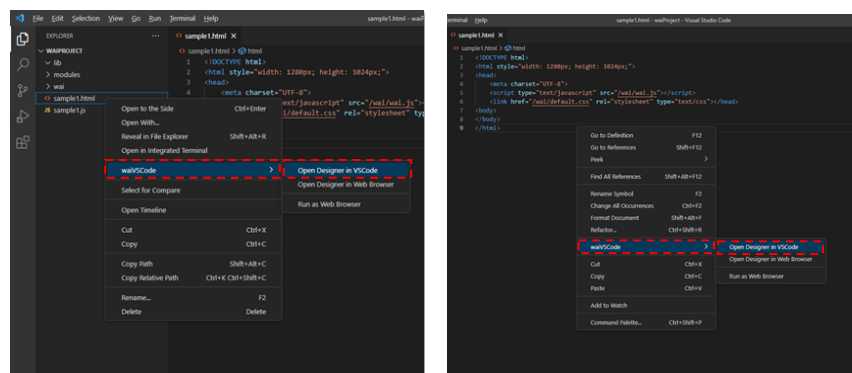
If you open the HTML file you generated, you can check the source of the default template. It contains the Wai Module that you created in the project folder and the .js file will be automatically generated with the same name as the HTML file.

When the HTML file runs, the Wai Module will automatically connect(load) the js file, even if you don't code the script in the HTML. It may be better to separate HTML and js source.



## ■ Open Wai Designer in VSCode

Right-click the HTML file in the Explorer Tab 'waiVSCode' and click the 'Open Designer in VSCode' menu under the 'waiVSCode' menu. Or right-click in the open HTML editor area and click the 'Open Designer in VSCode' menu under the 'waiVSCode' menu.





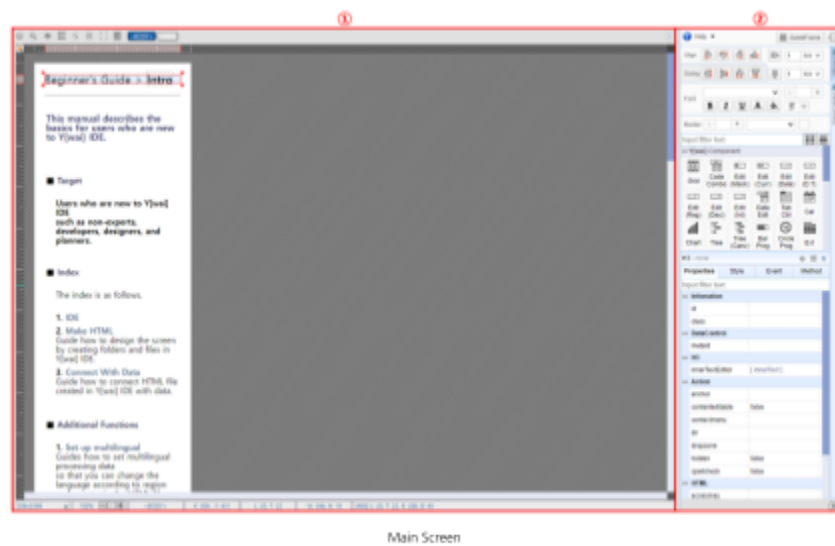
### 3. Y[wai] IDE

### A. WYSIWYG Editor

### a. About WYSIWYG Editor

You can easily create designs and properties of various objects and edit web screens. Y[wai] provides many functions to efficiently create and edit HTML pages.

## ■ Main Screen



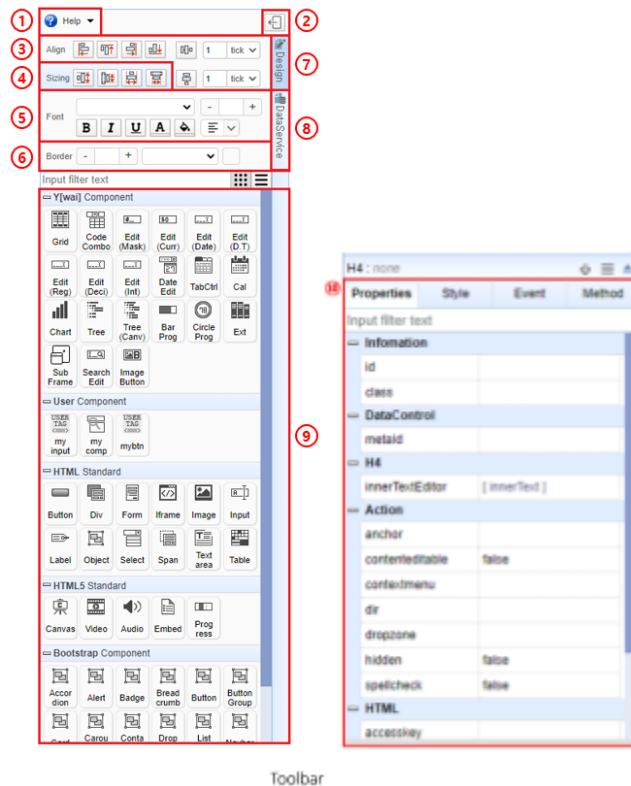
### ① WYSIWYG Screen

You can edit the design of an object.

## ② Toolbar

A collection of tools available on the WYSIWYG screen.

## ■ Toolbar



Toolbar

- ① Help  
Calls the help page.
- ② Change Position (Left/Right)  
Puts the toolbar to the left or right.
- ③ Align (Design Tools)  
Aligns the position and spacing of components you have selected.
- ④ Sizing (Design Tools)  
Changes the size of components you have selected.

---

⑤ Font

Sets the font of components you have selected.

⑥ Border

Sets the border of components you have selected.

⑦ Design Mode

Converts the HTML code and shows it in WYSIWYG Editor mode.

⑧ DataService Mode

Provides the features for processing data.

(It is only available when integrated with waiServer.)

⑨ Component Palette

You can use tags from Y[wai] Component, HTML, and HTML5.

⑩ Property Editor

You can edit the properties of the objects you have selected.

---

## ■ Design Tools

You can select several objects and adjust their alignment, height, width, and spacing at once. And when setting several objects at once, if you hover the mouse cursor on the button, you can preview the results with a red dotted line to minimize errors.



### ① Align Control

Aligns multiple selected objects.

### ② Sizing Control

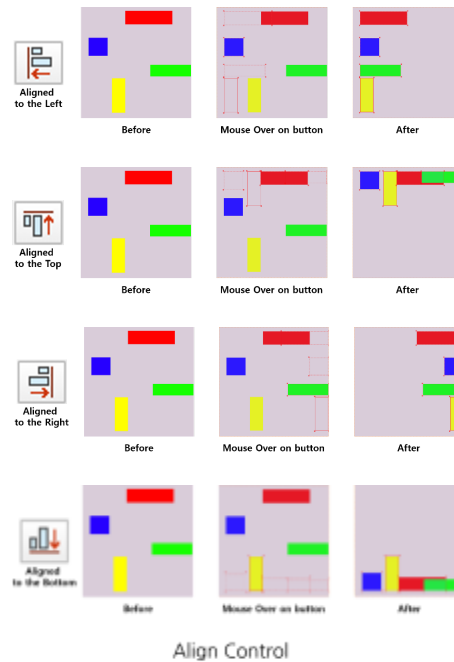
Sets the width and height of multiple selected objects.

### ③ Separation Space Control

Sets the left, right, top and bottom spacing between objects.

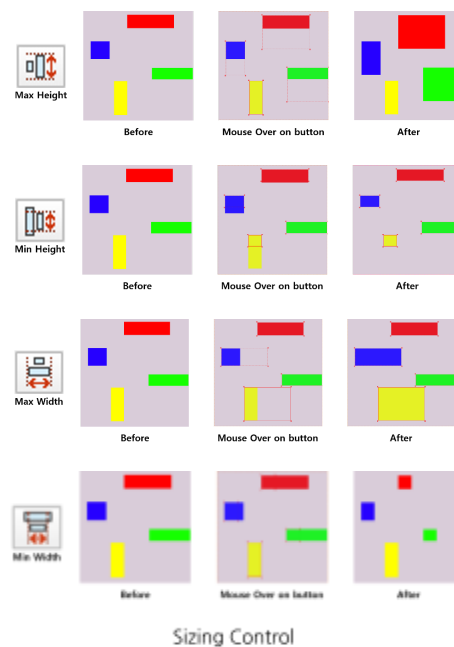
## ■ Align Control

It aligns to the position of the furthest object.



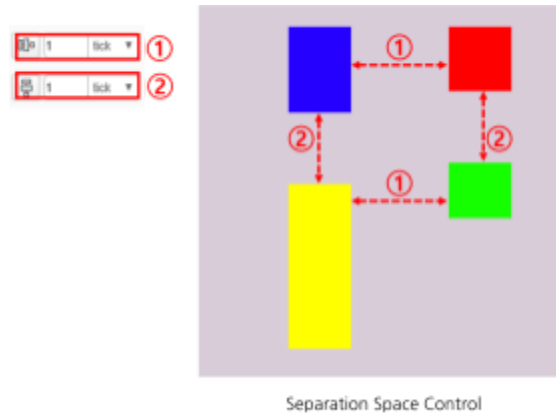
## ■ Sizing Control

It sets the height and width of the object to match the maximum height and minimum height, maximum width and minimum width.



## ■ Separation Space Control

It aligns the horizontal and vertical spacing of multiple selected objects in px or the set snap(tick) unit.



### ① Horizontal Separation Space

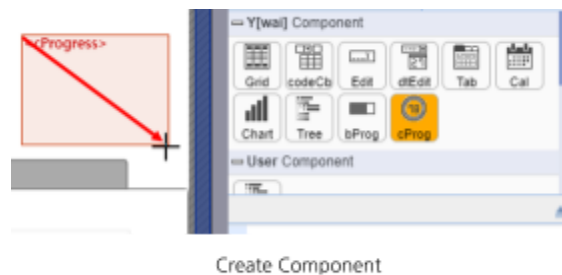
Sets the horizontal spacing between selected objects.

### ② Vertical Separation Space

Sets the vertical spacing between selected objects.

## ■ Component Palette

You can select various components in the component palette and drag to create them. Press ESC or click the component again to deselect it.



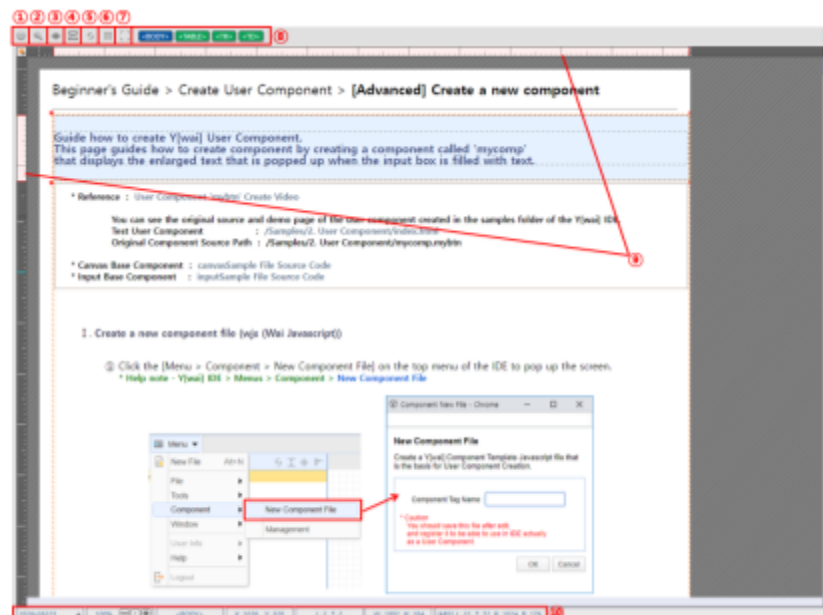


### 3. Y[wai] IDE

#### A. WYSIWYG Editor

##### b. Design Mode

###### ■ Main Screen



Main Screen

- ① Editing Options  
Sets the options available for each mode.
- ② Search Object  
Searches for component objects.
- ③ View Size  
Sets the size of the screen.
- ④ Hidden Object Viewer  
Shows hidden component objects.

---

⑤ Reload Page

Refreshes the page you're working on.

⑥ Show Guideline

Displays the guidelines in the designer background.

⑦ Show Outline

Shows an outline of all components.

⑧ Depth Selector

Displays and selects the parent objects of the selected object.

⑨ Ruler

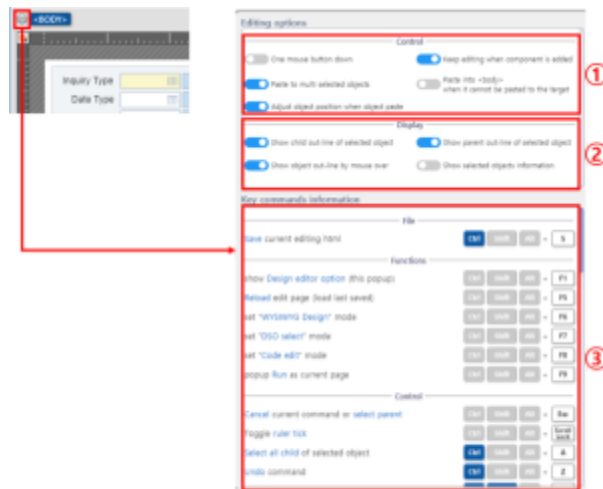
Moves or sets the position of an object.

⑩ Position / Size

Displays the position and size of selected objects.

Modifies options for HTML page size.

## ■ Editing Options



Editing Options

### ① Control

Sets mouse button events, copy and paste options, and more.

- ✓ One mouse button down
- ✓ Keep editing when component is added
- ✓ Paste to multi selected objects
- ✓ Paste into <body> when it cannot be pasted to the target

### ② Display

Sets the effect displayed on the screen.

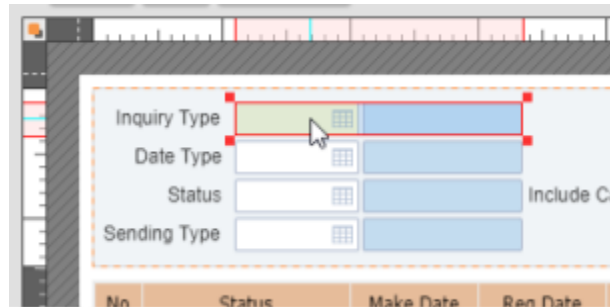
- ✓ Show child out-line of selected object
- ✓ Show parent out-line of selected object
- ✓ Show object out-line by mouse over
- ✓ Show selected objects information

### ③ Key commands information

Shortcut settings bar.

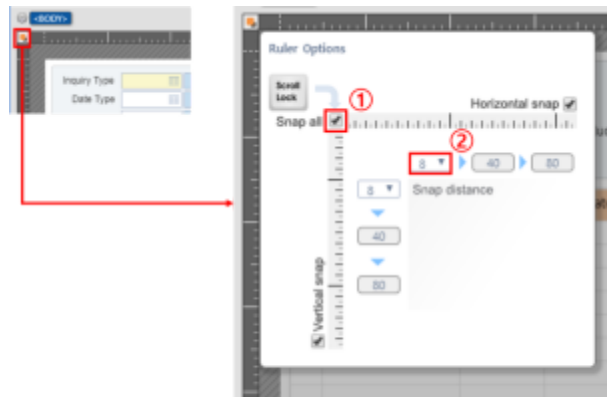
## ■ Ruler

It moves or sets the position of an object. The object you select is displayed as a red line. If there are any parent objects, it will be displayed with a white background.



Select the object

Click the top left button to set the ruler options.



Ruler Options

### ① Snap On / Off

Enables or disables the interval setting.

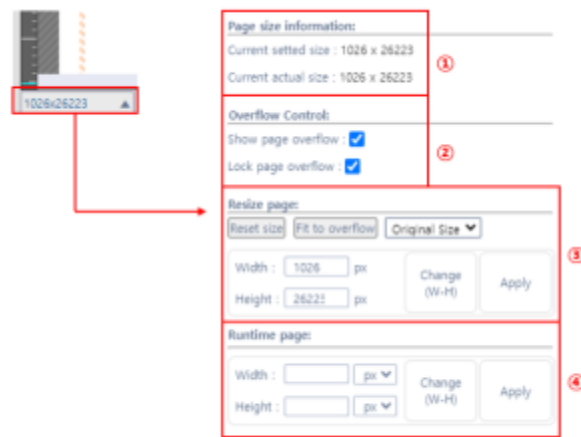
You can use it easily with the ScrollLock key and set the horizontal and vertical separately.

### ② Snap Distance

Adjusts the spacing horizontally and vertically.

## ■ Position / Size

It displays the size of the HTML you are designing and the position of your mouse on the design screen. Select the object to check the size of the object and click HTML Page Size to set screen adjustment options.



Position and Size

### ① Page Size Information

Compares the currently set page size to the actual page size.  
You can check whether to overflow.

### ② Overflow Control

Sets for areas that exceed the set size.

- ✓ Show page overflow : Showing or hiding overflowed areas.
- ✓ Lock page overflow : Moving or not moving objects into overflowed areas.

### ③ Resize Page

Resizes the page.

You can resize to fit the screen size of a particular device.

### ④ Runtime Page

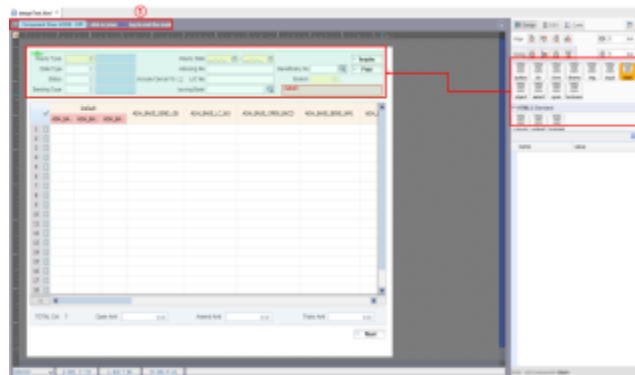
Sets the screen size at runtime.

---

## ■ Component Draw Mode

If you select the component from the toolbar, component draw mode will be activated.

You can add components in a row, and they will be coloured green if they have a parent object.



Component Draw Mode

### ① Exit Component Draw Mode

Press ESC or click the component.

---

## ■ Mouse Control

You can use various functions using mouse controls and keyboard shortcuts.

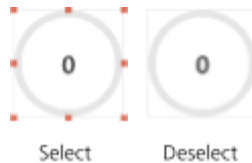
### ① Create Object

Select a component from the component palette and create it.

- ✓ Left Click + Drag : Creates the object.
- ✓ Alt + Left Click + Drag :  
Creates an object in the <body> tag, ignoring the generated object.

### ② Select / Deselect Object

- ✓ Left Click : Selects or deselects the object clicking the left mouse button.



- ✓ Shift + Left Click : Selects or deselects several objects additionally.



- ✓ Drag : Drags to select or deselect areas of the object.



---

③ Move

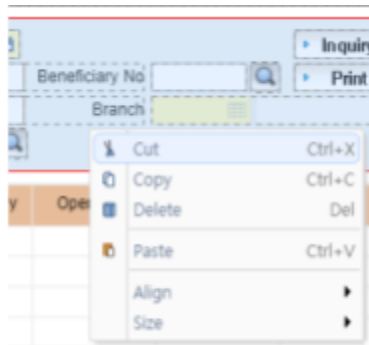
- ✓ Drag : Moves the selected object.

④ Resize

- ✓ Drag : Resizes in snaps.
- ✓ Ctrl + Drag : Resizes ignoring snaps.

⑤ Menu

- ✓ Right Click : Shows the menu window.
- ✓ Select + Right Click : Shows the menu window of the selected object.



The menu window of the selected object



---

## ■ Key Control

### ① Base

- ✓ Ctrl + S : Saves the editing screen.
- ✓ F1 : Opens Editing Options.
- ✓ F5 : Refreshes the editing screen. (Loads recent saves.)
- ✓ F6 : Runs the design mode.
- ✓ F9 : Previews the editing screen.

### ② Basic Control

- ✓ ESC : Cancels the command or selects the parent object.
- ✓ ScrollLock : Enables or disables the ruler.
- ✓ Ctrl + A : Selects all child objects of the selected object.  
(If you unselect the object, all objects in <body> will be selected.)
- ✓ Ctrl + Z : Undo.
- ✓ Ctrl + Y : Redo.

### ③ Object Default Control

- ✓ Delete : Deletes the object.
- ✓ Ctrl + C : Copies the object.
- ✓ Ctrl + X : Cuts the object.
- ✓ Ctrl + V : Pastes the object.

### ④ Object Move Control

- ✓ ← : Moves left by a ruler unit(snap).
- ✓ ↑ : Moves up by a ruler unit(snap).
- ✓ → : Moves right by a ruler unit(snap).
- ✓ ↓ : Moves down by a ruler unit(snap).
- ✓ Ctrl + ← : Moves left by 1px.
- ✓ Ctrl + ↑ : Moves up by 1px.
- ✓ Ctrl + → : Moves right by 1px.
- ✓ Ctrl + ↓ : Moves down by 1px.

---

#### ⑤ Object Size Control

- ✓ Shift + ← : Reduces the object width by a ruler unit(snaps).
- ✓ Shift + ↑ : Reduces the object height by a ruler unit(snaps).
- ✓ Shift + → : Increases the object width by a ruler unit(snap).
- ✓ Shift + ↓ : Increases the object height by a ruler unit(snap).
- ✓ Ctrl + Shift + ← : Reduces the object width by 1px.
- ✓ Ctrl + Shift + ↑ : Reduces the object height by 1px.
- ✓ Ctrl + Shift + → : Increases the object width by 1px.
- ✓ Ctrl + Shift + ↓ : Increases the object height by 1px.

#### ⑥ Multi-Selected Objects Align Control

- ✓ Ctrl + Alt + ← : Aligns multiple selected objects to the left.
- ✓ Ctrl + Alt + ↑ : Aligns multiple selected objects to the top.
- ✓ Ctrl + Alt + → : Aligns multiple selected objects to the right.
- ✓ Ctrl + Alt + ↓ : Aligns multiple selected objects to the down.

#### ⑦ Multi-Selected Objects Size Control

- ✓ Ctrl + Shift + Alt + ← :  
Sets the width of multiple selected objects to the minimum width.
- ✓ Ctrl + Shift + Alt + ↑ :  
Sets the width of multiple selected objects to the minimum height.
- ✓ Ctrl + Shift + Alt + → :  
Sets the width of multiple selected objects to the maximum width.
- ✓ Ctrl + Shift + Alt + ↓ :  
Sets the width of multiple selected objects to the maximum height.

#### ⑧ Select Object in Component Draw Mode

It does not work in Korean input mode.

- |                                    |                                   |
|------------------------------------|-----------------------------------|
| ✓ B : Selects button component.    | ✓ L : Selects label component.    |
| ✓ C : Selects codecombo component. | ✓ M : Selects img component.      |
| ✓ D : Selects dateedit component.  | ✓ S : Selects select component.   |
| ✓ E : Selects edit component.      | ✓ T : Selects tabctrl component.  |
| ✓ G : Selects grid component.      | ✓ V : Selects div component.      |
| ✓ I : Selects input component.     | ✓ X : Selects textarea component. |

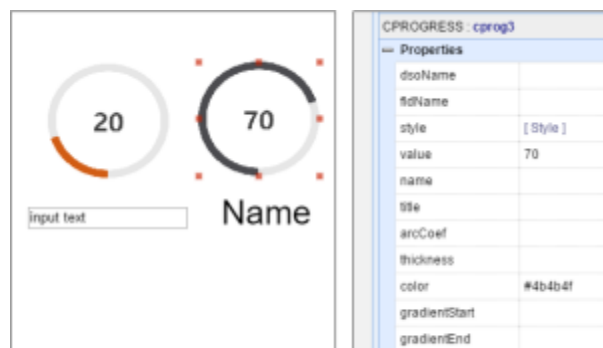
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### 3. Y[wai] IDE

#### A. WYSIWYG Editor

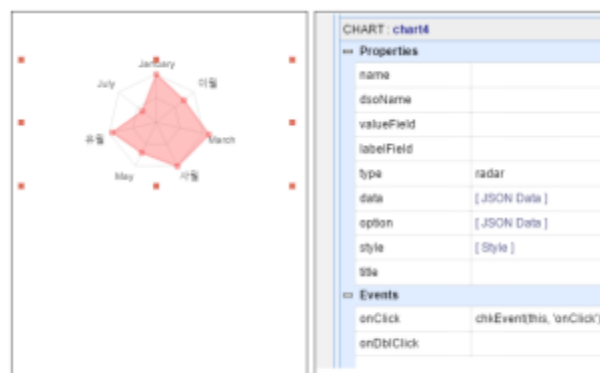
##### c. Property Editor

The WYSIWYG Editor provides the Property Editor to efficiently modify and control the properties of objects. You can quickly and easily customize objects using the Property Editor, without having to know the properties or events of the object. It also supports various property windows and provides a convenient user interface.



Property Editor with WYSIWYG Editor

If you select an object in the WYSIWYG Editor when in the design mode, the Property Editor will be displayed. And it will show the properties and event list of the selected object and the property values entered in the code.



Property Editor Structure

When you select an object in the WYSIWYG Editor, the Property Editor on the left side of the screen displays the properties and events of the object. You can check [Component Name: Object ID] at the top, which displays a list of properties and events for the selected object.



If you select objects with different properties, they will be marked with [Multi-Select] at the top and only the common properties will be shown. If you select objects with the same properties, they will be marked with [Multi-Select: Component] at the top. If you select the objects with the same property values, the values will be displayed as they are. And if they are different, they will be marked with [notEqual].

You can edit the property values of several objects at once.

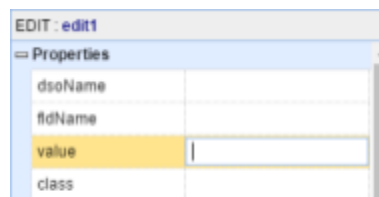
---

You can quickly and easily edit the properties of objects in the property item, where you can edit the properties of the object. The property of objects controls the property values based on the characteristics of the object.

### ■ Text

Enter a common text value.

You can enter a string or number depending on the properties of the object.



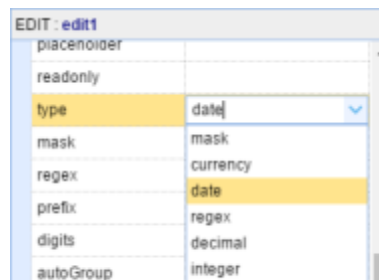
EDIT: edit1	
Properties	
dsoName	
fidName	
value	
class	

Text Field

### ■ Select

The defined property values are displayed as a Select Box.

You can select a property value.

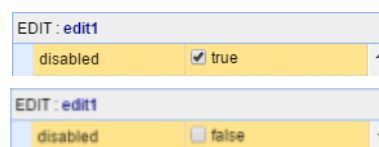


EDIT: edit1	
Properties	
placeholder	
readonly	
type	date
mask	mask
regex	currency
prefix	date
digits	regex
autoGroup	decimal
	integer

Select Field

### ■ Boolean

It displays the value of a Boolean property by checking it as true or false.



EDIT: edit1	
disabled	<input checked="" type="checkbox"/> true

EDIT: edit1	
disabled	<input type="checkbox"/> false

Boolean Field

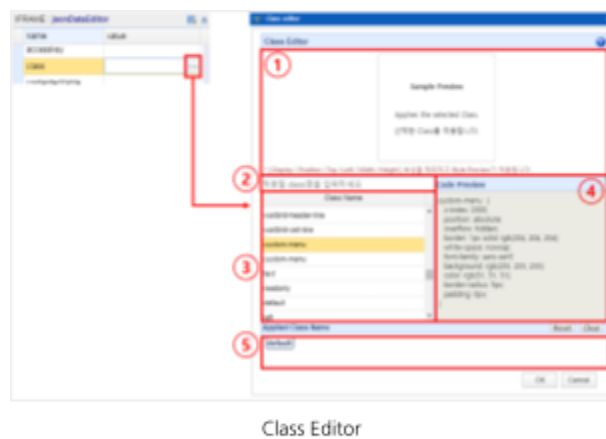
---

It also supports sub editors to help you edit properties efficiently.

## ■ Class Editor

It connects a class from a CSS file loaded on the page you are editing, or a class source you've coded directly on the page.

When a list of class names that you can connect to is displayed, you can select the class name you want and preview the source on the right. Also, you can preview the selected class property applied at the top, and the class name is added at the bottom. A style excluding display, position, top, left, width, and height properties is applied.



### ① Sample Preview

You can preview how the selected class will look when applied.

### ② Search

You can find the class you want by searching for it.

### ③ List

Shows a list of class names that can be linked to the current page, or have been searched for.

---

④ Code Preview

Shows the code for the selected class.

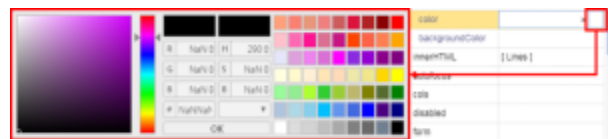
⑤ Class List

Double-click the class you want to apply in the list to add it as a button in the class list.

You can delete the class from the list by selecting the button.

■ Color Editor

It helps you choose the color you want easily. Click the button in the color section in the Property Editor of the object to pop up the Color Editor.

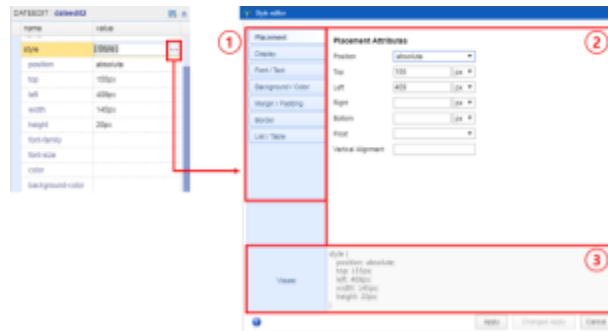


Color Editor

You can set the color you want by entering RGB or HSB values. And the built-in colors make choosing a color even easier.

## ■ Style Editor

It edits and applies the style properties of the selected object. Styles are represented collectively in Properties as [Style] and are linked to the style property in the Property Editor.



Style Editor

### ① Style Attribute Tabs

Provides styles as a tab, grouped by property.

- ✓ Placement : Sets the position and position style of objects.
- ✓ Display : Sets display-related properties of objects.
- ✓ Font/Text : Sets the font and text.
- ✓ Background/Color : Sets the background and color properties.
- ✓ Margin/Padding : Sets margin properties.
- ✓ Border : Sets border properties.
- ✓ List/Table : Sets the list and table properties.
- ✓ Others : Sets other properties

### ② Attributes Detail

You can modify the style property in the tab.

### ③ CSS Code Viewer

You can preview the properties you've modified or applied in code.



## ■ Chart Option Editor

It helps you easily set options for the chart component.

You can conveniently select options using the Chart Option Editor for bar, line, radar, pie, polararea, and doughnut chart. Click the button in the option section to pop up the Chart Option Editor in the Property Editor of the chart component.

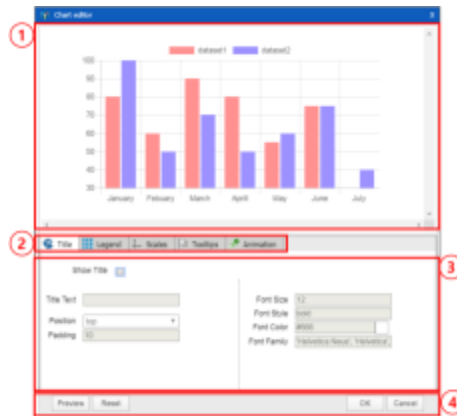


Chart Option Editor

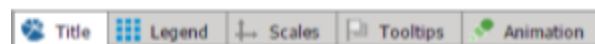
### ① Preview

You can preview the chart in full size as you change the options.

### ② Tab

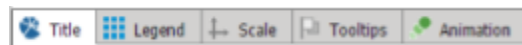
The options tab for the features of the chart.

Different types of charts display different tabs and options.



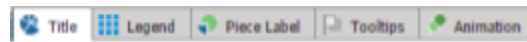
Bar / Line

- ✓ Title : Sets the title of a chart.
- ✓ Legend : Sets the legend of a chart.
- ✓ Scale : Sets the x and y axis options of a chart.
- ✓ Tooltips : Sets tooltips to show data information when hovering over a chart.  
(It is common to chart.)
- ✓ Animation : Sets up animations in a chart.  
(It is common to chart.)



Radar / PolarArea

- ✓ Scale : Sets the axis options of a chart.



Pie / Doughnut

- ✓ Piece Label : Sets the label option for data segments in a chart.

### ③ Edit Option

Sets the option for each tab.

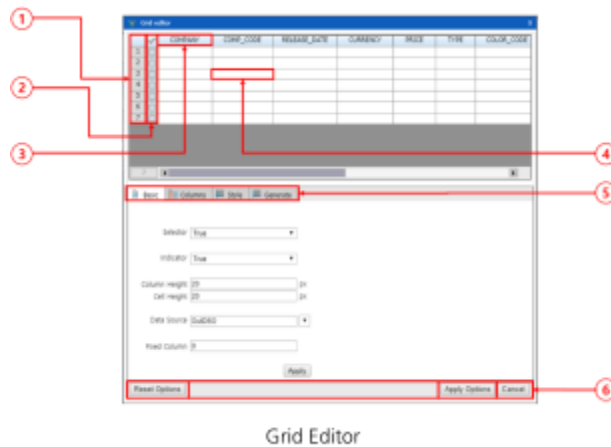
### ④ Button

- ✓ Preview : Previews how the option you have changed looks in the Chart Preview.
- ✓ Reset : Resets the Chart Option Editor.
- ✓ Apply Options : Applies options you have changed.
- ✓ Cancel : Cancels the Chart Option Editor.

## ■ Grid Editor

Design your own grid.

Click the button in the options section to pop up the Grid Editor in the Property Editor of grid objects.



### ① Indicator

Displays the row number of the data.

### ② Selector

Select a specific row.

You can copy or delete the specific rows you have selected.

### ③ Header

Displays column names and column group names and more.

### ④ Cell

Shows the item values in the data.

### ⑤ Editing Item

- ✓ Basic : Edits common properties of the Grid.
- ✓ Columns : Edits individual properties of selected columns.
- ✓ Style : Creates, edits, and deletes styles that can be applied to columns.
- ✓ Generate : Automatically creates columns by linking DSO.

---

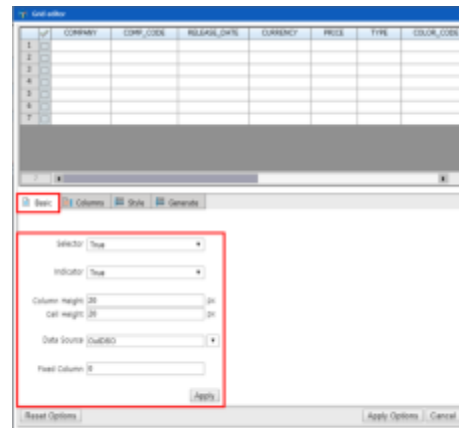
⑥ Option Button

- ✓ Reset Option : Resets to option before editing.
- ✓ Apply Option : Applies the edited options.
- ✓ Cancel : Cancels the edited options.

---

## ■ Grid Editor / Basic Tab

It edits common properties.

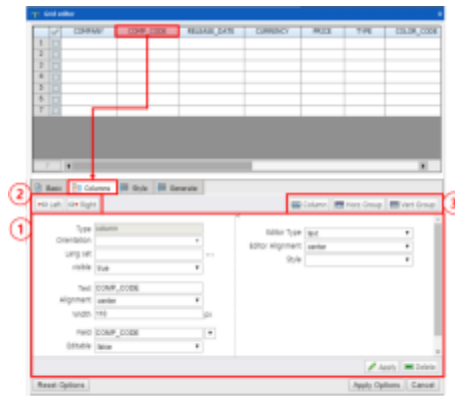


Basic Tab

- ✓ Selector : Sets whether to show the selector. (True/False)
- ✓ Indicator : Sets whether to show the indicator. (True/False)
- ✓ Column Height : Sets the height of the header.
- ✓ Cell Height : Sets the height of the cell.
- ✓ Data Source : Selects the DSO to link to Grid.
- ✓ Fixed Column : Sets the number of Grid columns to be fixed from the left.
- ✓ Apply : Applies your settings.

## ■ Grid Editor / Columns Tab

It edits the individual properties of a column. The Column Edit window opens when you select the column you want to edit in the Grid Editor.



Columns Tab

### ① Editing Item

Edits the selected column in detail.

- ✓ Type : Indicates whether the column is a group or regular column.
- ✓ Orientation : Choose between horizontal and vertical if the column is a group.
- ✓ Text : Sets the text displayed in the column.
- ✓ Alignment : Aligns the text displayed in the column. (left/center/right)
- ✓ Width : Sets the width of the column.
- ✓ Field : Selects the field name of the DSO object linked to the column.
- ✓ Editor Type : Sets the type of the column. (Text/lookup/calcEdit/Currency/Date)
- ✓ Editor Alignment : Aligns cells by column. (left/center/right)
- ✓ Style : Sets the style to apply to the column (You can view and edit these styles in the Styles tab.)
- ✓ Apply : Applies your settings.
- ✓ Delete : Deletes the selected column.

### ② Move Column

Moves the selected column.

### ③ Add / Group Column

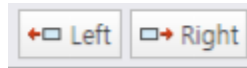
Adds a column or groups selected columns.

---

### [Change Column Position]

#### ① Button

Click the button to move it by one space.



Button

#### ② Drag & Drop

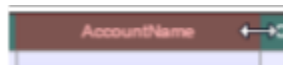
Press the left mouse button and drag & drop to the position you want.



Drag & Drop

### [Change Column Size]

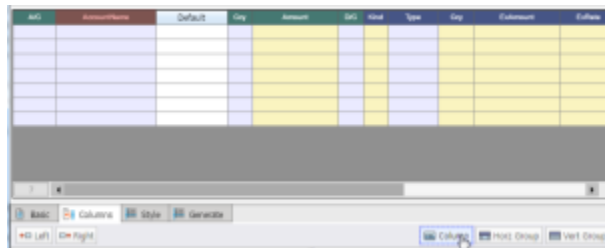
You can change it in Width, or press the left mouse button and move the cursor.



Change the size by moving the mouse.

### [Create Column]

Select the left column where you want to create a column and click the column button.  
A default column will be created.



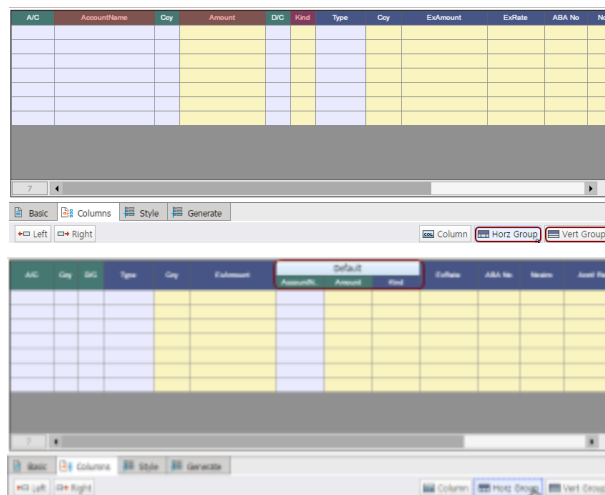
Create Column

### [Create Group]

Press Ctrl or Shift and select the columns you want to group one by one.

Press Horz Group or Vert Group to create a default group, depending on the type of the group.

Select the newly created group and change its name and style.

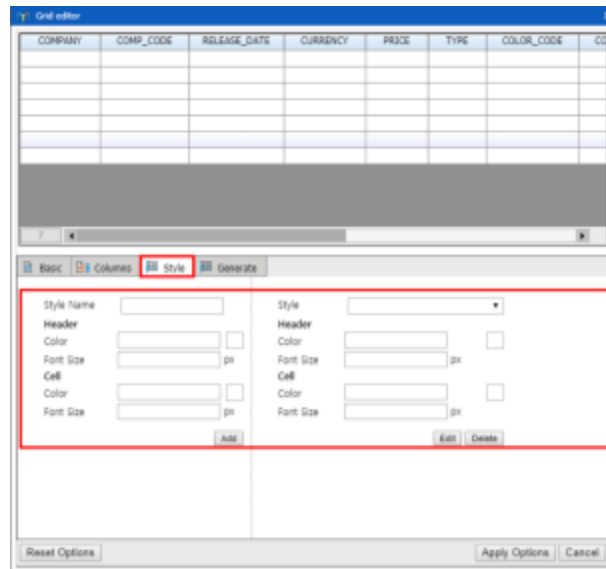


Create Group



## ■ Grid Editor / Style Tab

It edits the style of columns.

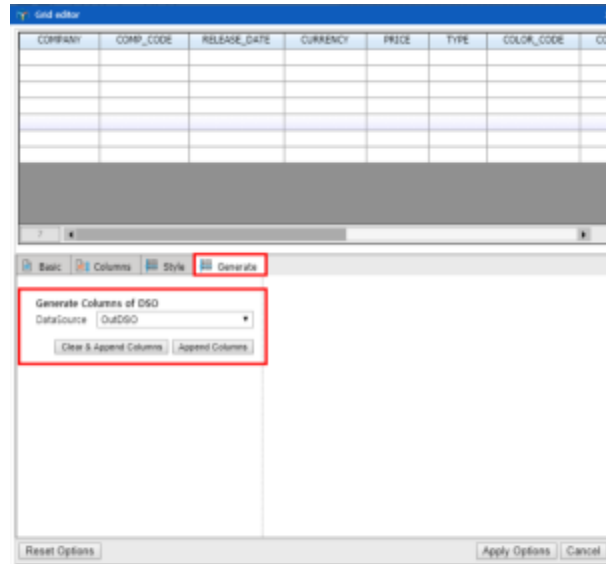


Style Tab

- ✓ Style Name : Sets the name of a style.
- ✓ Header : The style of the header.
- ✓ Color : The color of the style.
- ✓ Font Size : The font size of the header.
- ✓ Cell : The style of the cell.
- ✓ Color : The color of the cell.
- ✓ Font Size : The font size of the cell.
- ✓ Add : Adds the new style.
- ✓ Edit : Edits the style of the selected name.
- ✓ Delete : Deletes the style of the selected name.

## ■ Grid Editor / Generate Tab

It automatically creates columns by linking DSO.



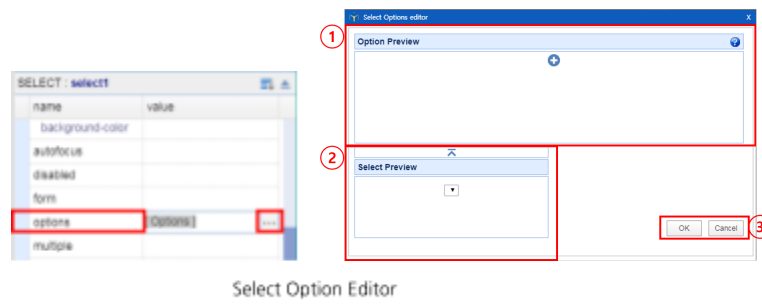
Generate Tab

- ✓ DataSource : Select the DSO to use when generating columns automatically.
- ✓ Clear & Append Columns : Clears all existing columns and appends a column within the DSO.
- ✓ Append Columns : Appends a column within a DSO to an existing column.

## ■ Select Option Editor

It helps you easily enter the option tag of the Select Tag.

Click the button in the options section to pop up the Select Option Editor in the Property Editor of the select object.



### ① Option Preview

Creates, edits, and deletes the option tag.

### ② Select Preview


Displays the select tag created according to the value set in the Option Preview.

### ③ Confirm Option

Applies or cancels your settings.

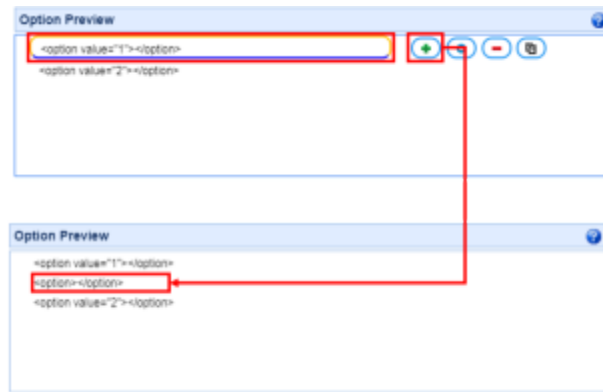
---

### [Create Option Tag]

Click the  button to create an option tag.


Select the option tag and click the create button.

The position that will be created under this tag is indicated by the blue line.

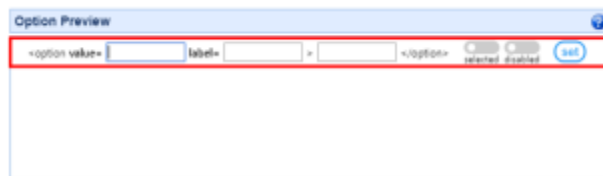


Create Select Option

### [Modify Option Tag]

Click the  button to modify an option tag.


You can set various values such as value, label, selected, disabled.

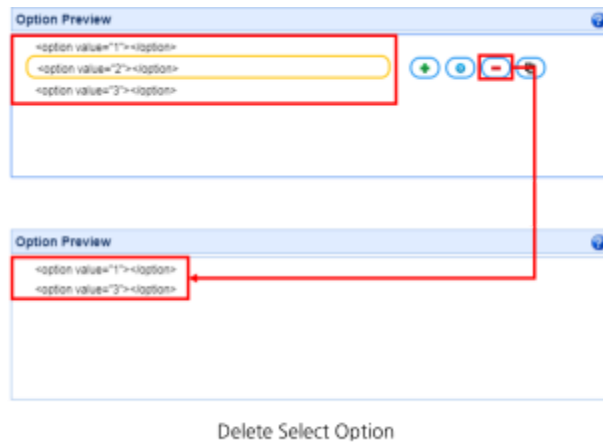


Modify Select Option


---

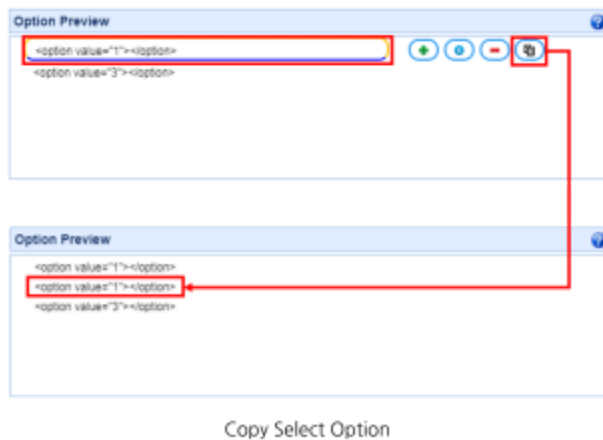
### [Delete Option Tag]

Click the  button to delete an option tag.  
Select the option tag you want to delete and click the delete button.



### [Copy Option Tag]

Click the  button to copy an option tag.  
Select the option tag you want to copy and click the copy button.  
The position that will be created under this tag is indicated by the blue line.



## ■ Chart Data Editor

It helps you to easily enter data of the chart component.

You can easily draw charts using the Chart Data Editor for bar, line, radar, pie, polarArea, and doughnut charts. Click the button in the data section to pop up the Chart Data Editor in the Property Editor of the chart component.

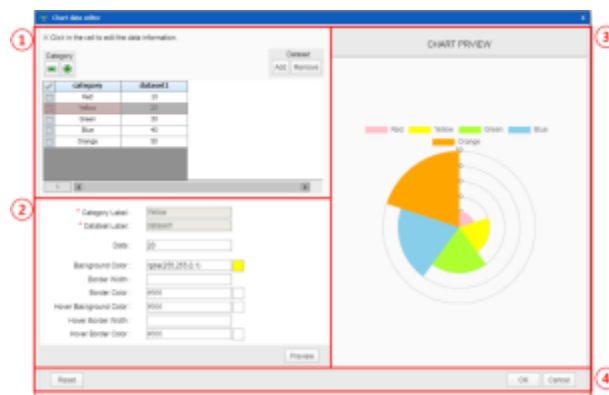


Chart Data Editor

### ① Data Grid

You can check the data in your chart.

Use the top buttons to edit the table, and click on a cell to bring up the data entry area.

### ② Edit Data

You can change the data information in your chart.

### ③ Preview

You can change and preview the data in your chart.

The preview will be at the size that will actually be applied.

### ④ Button

- ✓ Preview : Preview a chart with the data you've changed in Chart Preview.
- ✓ Reset : Resets the Chart Data Editor.
- ✓ Apply : Applies the changed data
- ✓ Cancel : Cancels the Chart Data Editor.

## ■ DSO Editor

It helps connect various components and data services.

The DSO Editor makes it easy to set and apply the properties of dsoName, fldName, valueField, and labelField. If you select the above property in the Property Editor of components, the DSO Editor will pop up.



### ① Set dsoName

Information about the data service linked to the page is displayed in the DSO table.

If you click on a DSO, the information for that DSO will be displayed, and you will not be able to set a field name.

### ② Set fldName, valueField, and labelField

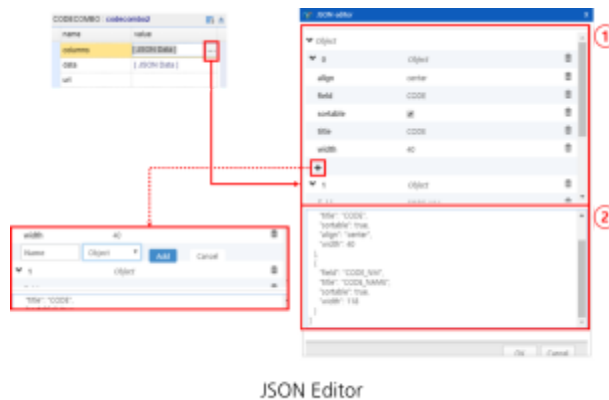
Information about the data service linked to the page is displayed in the DSO table.

The Field Name is enabled and allows you to set both the DSO name and the field name.

## ■ JSON Editor

It supports editing JSON data of objects.

JSON Editor displays the JSON source as a tree to make it easier to read. It also provides the features to collapse, expand, move the index between arrays, and delete fields. JSON Data is marked as [JSON Data] in the properties window and is linked to data properties in Chart, CodeCombo, Grid components, and more.



### ① Data Edit Area

Adds, modifies, and deletes data.

It is presented in the form of a tree view.

### ② Preview Area

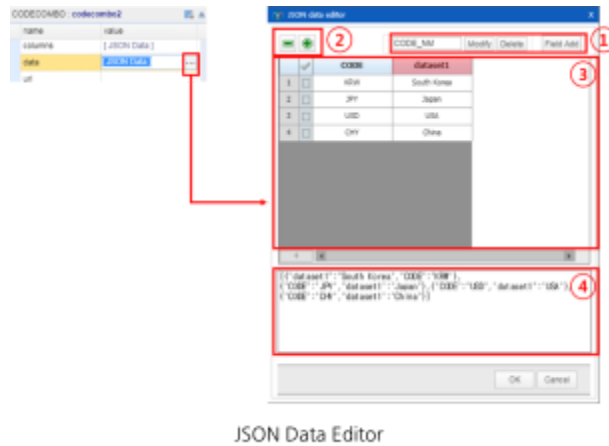
The data that has been modified in the Data Edit Area is converted to JSON-type code and displayed.



## ■ JSON Data Editor

It supports editing JSON data of objects.

JSON Data Editor displays the data as a table and as code in JSON. It makes it easy to enter and set data for Grid and CodeCombo components.



### ① DataSet Control Button

Creates or deletes columns in the grid, and renames headers.

### ② Row Control Button

Adds or deletes a row in the grid.

### ③ Data Edit Area

Displays the data as a table in grid format.

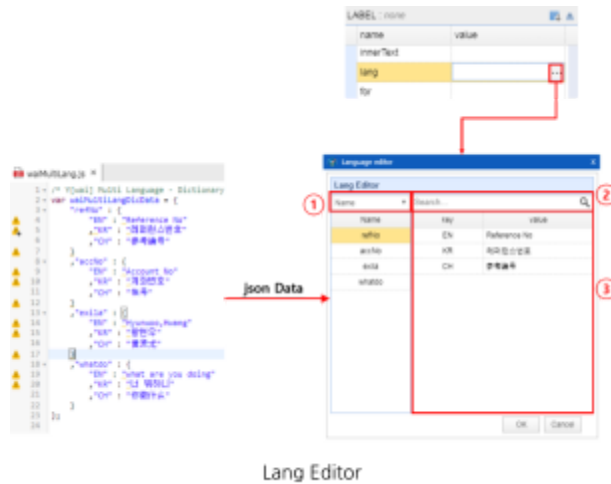
You can change the data by clicking on the cell and header.

### ④ Preview Area

The data that has been modified in the Data Edit Area is converted to JSON-type code and displayed.

## ■ Lang Editor

It links the data that manages the multilingualism of the object to the Lang property.



### ① Search Conditions

Set the search conditions with the name of the Lang data and the value(key) of the name.

### ② Search

Provides a search function.

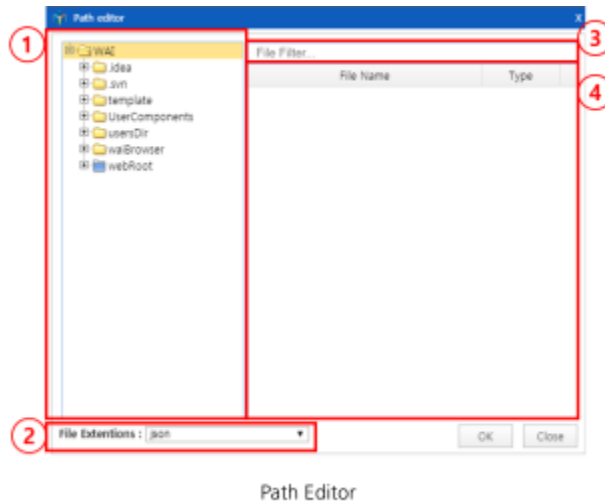
### ③ Multilingual Data List

Reads the values in data and displays them as a list to make them easier to read.

## ■ Path Editor

It helps you easily enter the URL path.

Click the button in the url section to pop up the Path Editor in the Property Editor of the object.



When you select a directory from the list on the left, a list of files appears on the right. Click the file you want to link to the URL.

### ① Directory List

Displays the directory entries of the project in tree format.

### ② File Extensions

You can select and check the extensions you want to link to a property.

### ③ Search Input

You can enter a file name that matches the search value.

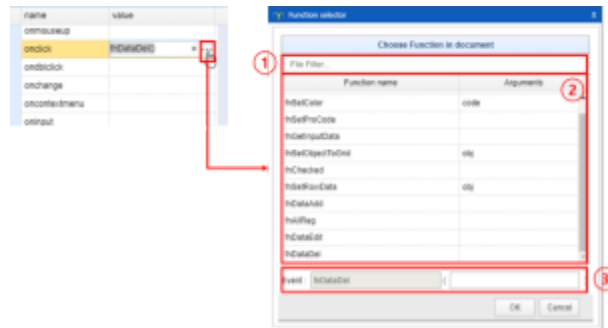
### ④ File List

Displays a list of the directory file you've selected.

## ■ Script Editor

It sets the event of objects.

The Script Editor displays a list of the functions you've already scripted.



Script Editor

### ① Search

You can search by function name.

### ② Function List

Displays a list of the event functions that have been registered.

### ③ Event

Displays the function selected in the Function List. You can modify the argument values.

## [Rules for Creating Function Name]

Remove 'on' from the event name of the function and add the tag(component) id or name.

Duplicate function names are separated by '\_index'. (divBlur\_1, divBlur\_2...)

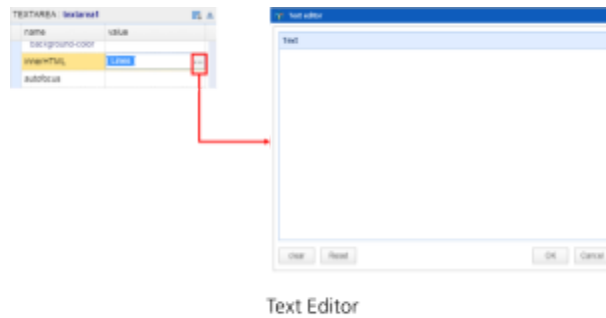
	Tag id O	Tag id X
onevent	id + Event	Tag name + Event
duplicate function name	id(TagName) + Event + _number	

---

## ■ Text Editor

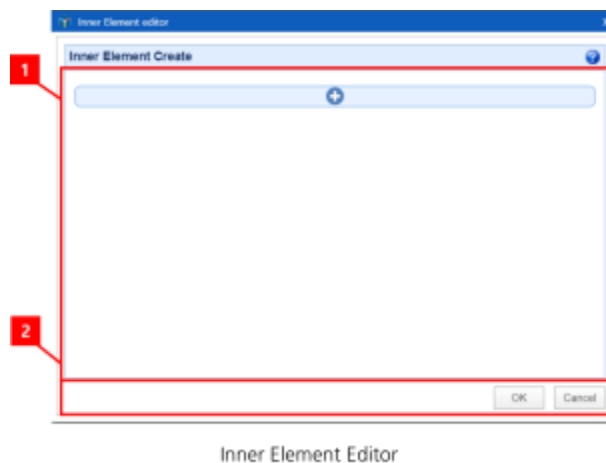
You can enter multiple lines of text and apply it.

Text Editor is linked to the innerText property of tags such as <textArea>.



## ■ Inner Element Editor

It helps you easily apply the Inner Element to objects such as video, audio, object, external Tag, and more. In the object's Property Editor, Click the button in the elements section to pop up the Inner Element Editor in the Property Editor of the object.



### ① Edit Elements

Create, modify, and delete element tags.

### ② Confirm Elements

Confirm or cancel what you've written.

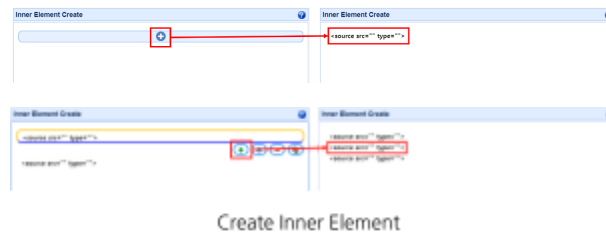
---

## [Create Element]


Click the  button or  button to create an element.

Select the object and click the create button.

The position that will be created under this element is indicated by the blue line.




## [Modify Element]

Click the  button to modify an element.

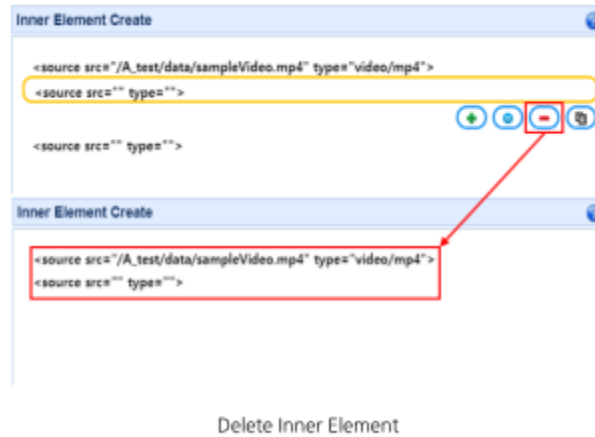
You can set the property of this object.




## [Delete Element]

Click the  button to delete an element.

Select the element you want to delete and click the delete button.



## [Copy Element]

Click the  button to copy an element.

Select the element you want to copy and click the copy button.

The position that will be created under this element is indicated by the blue line.



---

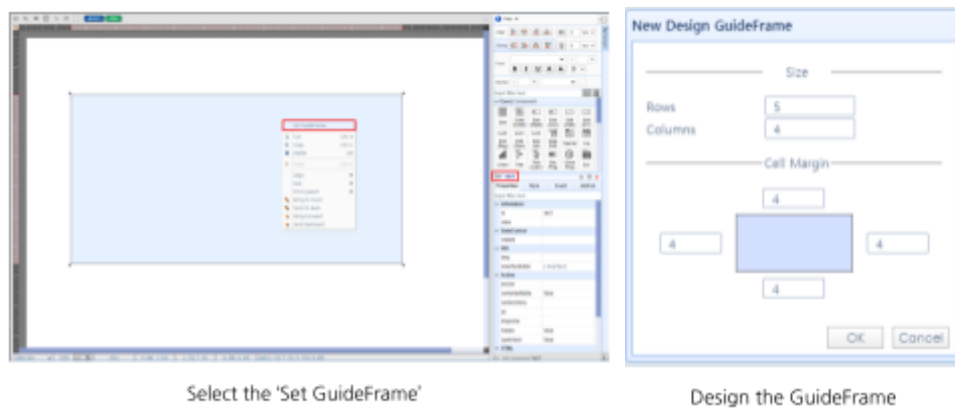
### 3. Y[wai] IDE

#### A. WYSIWYG Editor

##### d. GuideFrame

Edit the GuideFrame.

When configuring screens, you can easily create screens by presetting frames to place components in.

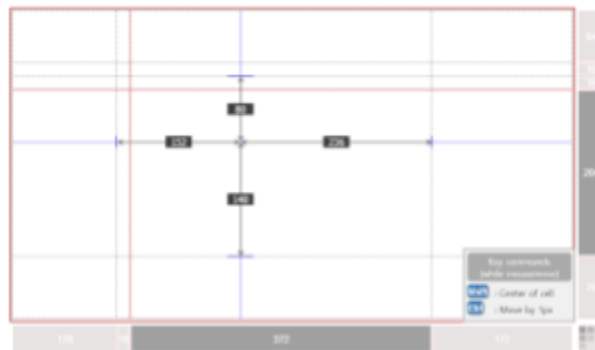


GuideFrame can be applied in a div component.

Right-click on the div component and select the Set GuideFrame to bring up the 'New Design GuideFrame' window.

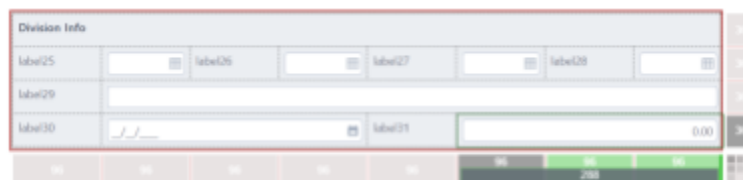
After entering the configuration information such as rows, columns, and margins, press the [OK] button to create the GuideFrame.





Adjust rows and columns with the mouse.

Once the GuideFrame is created, you can adjust the cells, rows, and columns by using the mouse.



Place components in the GuideFrame.

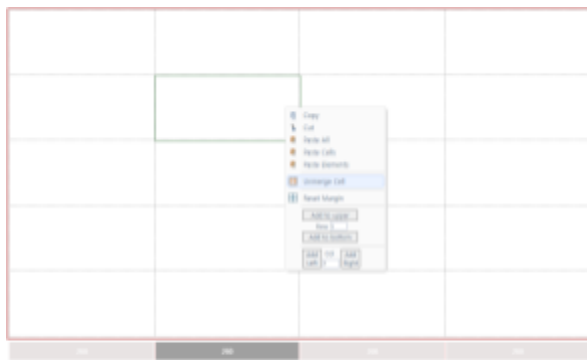
You can only add one component to a cell.

Add a component by selecting the component you want to add and positioning it in the cell of the GuideFrame you want.

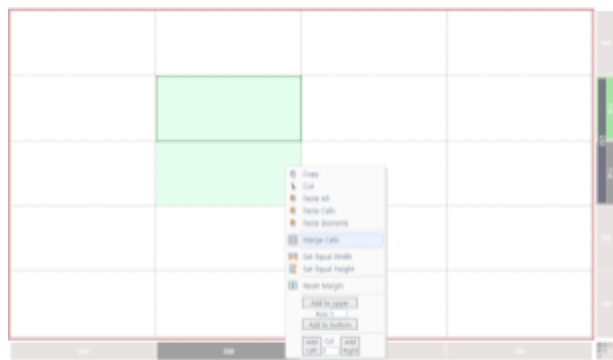
You can select a div component with a GuideFrame applied to it, or a component you've added to a cell in the GuideFrame, by double-clicking on it.

When you configure and save a screen using GuideFrame, a file with the extension gf is created in the same path as the html file you are editing, with the same name.

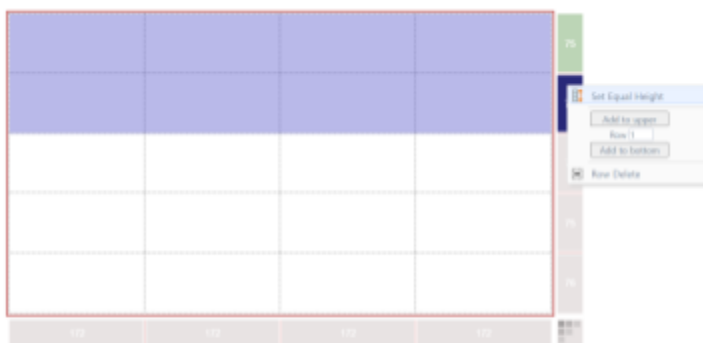
This gf file is used to save or retrieve the GuideFrame information you have applied to the html file.



Edit the GuideFrame  
(If you select a single cell.)



Edit the GuideFrame  
(If you select more than one cell.)



Edit the GuideFrame  
(If you select rows using the ruler.)



Edit the GuideFrame  
(If you select columns using the ruler.)

### ① Copy

Copies the selected cells including internal elements.

### ② Cut

Cuts the selected cells including internal elements.

### ③ Paste All

Pastes the copied or cut cell and its internal elements.

### ④ Paste Cells

Pastes the copied or cut cell.

### ⑤ Paste Elements

Pastes the internal elements of the copied or cut cell.

---

⑥ Merge/Unmerge Cell

Merges or unmerges the cells.

⑦ Reset Margin

Resets the margin.

⑧ Set Equal Height/Width

Sets the selected cells to the same height/weight.

⑨ Row/Column Add

Adds a row/column.

⑩ Row/Column Delete

Deletes the selected row/column.

---

## 4. Y[wai] Component and HTML, HTML5

### A. How To Use

Y[wai] Components are provided as an HTML tag.

This means that the HTML rendering and the JavaScript processing are the same.

#### ■ Basic Guide

Y[wai] Components are represented in HTML in the same way as an HTML tag.

format	example
<code>&lt;TagName property="property value" ...&gt;&lt;/TagName&gt;</code>	<code>&lt;edit id="edit1" type="currency"&gt;&lt;/edit&gt;</code>

Components that can have data or options within their tags are represented in HTML in the following way.

format	example
<code>&lt;TagName property="property value" ...&gt;     { Option : JSON Data } &lt;/TagName&gt;</code>	<pre>&lt;codecombo id="combo1"&gt;   "columns" : [     [       {"field":"id","title":"key","width":80,"sortable":true,"align":"left"},       {"field":"text","title":"value","width":80},       {"field":"status","title":"비고","width":50}     ],     "data" : [       {"text":"FI-SW-01","id":"EST-1","status":"Y"},       {"text":"FL-DLH-02","id":"EST-16","status":"Y"},       {"text":"K9-DL-01","id":"EST-10","status":"Y"}     ]   ] &lt;/codecombo&gt;</pre>

When representing JSON Data within a component tag, omit the first curly braces. ( { }

Different components may have different internal formats. Please check the Component Help, or use the property editor of Y[wai] IDE.

■ Usage

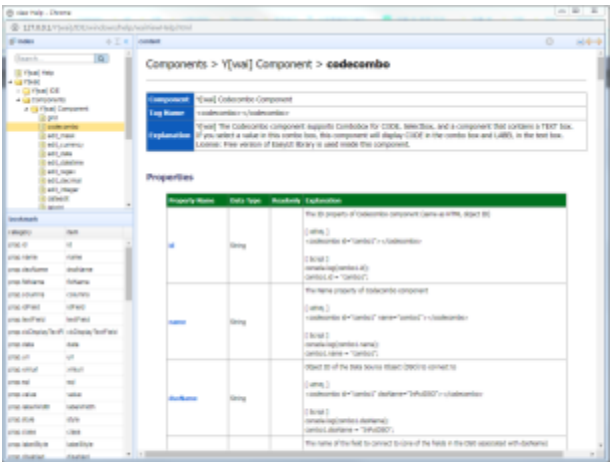
Y[wai] Components can be controlled in JavaScript by using the id of the component. It is the same as how to control HTML, HTML5 objects. Each component has different properties, methods, and events, so please refer to the Component Help.

When you select a component using the Y[wai] IDE, the Property Editor displays its properties, methods, and events, and you can enter or modify values.

format	example
<code>objectID.property = property value;</code> <code>objectID.method name( method argument );</code>	<pre>&lt;script type="text/javascript"&gt; function btnClick() {     <u>Edit1.value = '123-45-6789';</u>     <u>Edit1.focus();</u> } &lt;/script&gt;</pre>

You can check a variety of component-specific examples in the Component Examples.

You can also click the Help menu in the Y[wai] IDE to open the help page on the web. You can find more information about each component.




---

## 4. Y[wai] Component and HTML, HTML5


### B. About Components

#### ■ Y[wai] Component


##### ① Grid

	Inputs and outputs data using a grid. Editing features are provided for each option.
example	<pre>&lt;grid id="grid1" dsoName="gridData"&gt;   { option : JSON Data } &lt;/grid&gt;</pre>

##### ② CodeCombo


	Selects a specific row and enters it in the grid. It can display code descriptions by using optional readonly input and output controls.
example	<pre>&lt;codecombo id="cc1" xmlurl="/xmldb/F829.xml"&gt;   { option : JSON Data } &lt;/codecombo&gt;</pre>

##### ③ Edit


	Inputs and outputs data as Mask, Currency, Date, DateTime, Regex, Decimal, and Integer for the Type property. The input is automatically restricted for options and no errors are thrown about the input values.
example	<pre>&lt;edit id="edit1" type="mask" mask="999-99-9999"&gt;&lt;/edit&gt;</pre>

---


#### ④ DateEdit

	<p>Provides an input method such as Type="date" in the Edit component.</p> <p>Has a button that displays the calendar as a popup.</p> <p>You can select the language of the calendar with the Lang property.</p>
<b>example</b>	<pre>&lt;dateedit id="de1" lang="Korean"&gt;&lt;/dateedit&gt;</pre>

#### ⑤ tabControl


	<p>Supports tab type.</p>
<b>example</b>	<pre>&lt;tabControl id="tabControl1"&gt;   &lt;tabPage id="tabPage0" style="display: block;"&gt;&lt;/tabPage&gt;   &lt;tabPage id="tabPage1" style="display: none;"&gt;&lt;/tabPage&gt; &lt;/tabControl&gt;</pre>

#### ⑥ Calendar


	<p>Supports calendar.</p> <p>You can select and set the date.</p> <p>You can select the language of the calendar with the Lang property.</p> <p>If the date is not set, it is set to the system date.</p>
<b>example</b>	<pre>&lt;calendar id="cal1" lang="Korean"&gt;&lt;/calendar&gt;</pre>

---


## ⑦ Chart

	Displays data as a bar, line, radar, polarArea, pie and doughnut for the Type property. Provides features such as tooltips, animations, and more, for options.
example	<pre>&lt;chart id="chart1" type="bar"&gt;   { option : JSON Data } &lt;/chart&gt;</pre>

## ⑧ TreeView

	Supports a list formatting in a Tree structure, and displays data as a Tree structure. You can set the initial value of the tree with a URL in JSON format. Provides an Animation, ContextMenu, and more, for options.
example	<pre>&lt;treeview id="tree1" url="testData/tree_data2.json"&gt;   { option : JSON Data } &lt;/treeview&gt;</pre>


## ⑨ cTree

	Supports a list formatting in a Tree structure, and displays data as a Tree structure. You can set the initial value of the tree with a URL in JSON format. Built on Canvas, which allows for faster object creation, unlike the Treeview.
example	<pre>&lt;ctree id="tree1" url="testData/tree_data2.json"&gt;   { option : JSON Data } &lt;/ ctree &gt;</pre>


---




## ⑩ BarProgress

	Supports progress as a bar. Animates a value from 0 to 100.
<b>example</b>	<code>&lt; bprogress id="bp1" value="65"&gt;&lt;/bprogress&gt;</code>

## ⑪ CircleProgress


	Supports progress as a circle. Animates a value from 0 to 100.
<b>example</b>	<code>&lt; cprogress id="cp1" value="78"&gt;&lt;/cpprogress&gt;</code>

## ⑫ External


	Supports a 3rd Party Library. Defines objects and applies the 3rd Party Library.
<b>example</b>	<pre>&lt;external id=" external1" createType="elements"&gt;</pre> <p>You can define objects in two tagging ways.</p> <ol style="list-style-type: none"> <li> <pre>&lt;elem tag="table"&gt;&lt;/elem&gt; &lt;elem tag="div" id="plist47"&gt;&lt;/elem&gt;</pre> </li> <li> <pre>&lt;custHtml&gt;   &lt;table&gt;&lt;/table&gt;   &lt;div id="plist47"&gt;&lt;/div&gt; &lt;/custHtml&gt;</pre> </li> </ol> <pre>&lt;/external&gt;</pre>

---


### ⑬ SubFrame

	Calls another HTML page and uses it as a partial screen.
<b>example</b>	<code>&lt;subFrame id="subFrame1" screen="/biz/dp/DP10.html"&gt;&lt;/subFrame&gt;</code>

### ⑭ SearchEdit

	The input box(wai edit component) and button are combined. You can input, output, and modify data.
<b>example</b>	<code>&lt;searchEdit id="searchEdit1"&gt;&lt;/searchEdit&gt;</code>


### ⑮ ImageButton

	The image area and button are combined.
<b>example</b>	<code>&lt;imgButton id="imgButton1"&gt;&lt;/imgButton&gt;</code>


---

## ■ HTML Standard


### ① Button

	Creates a button. You can design flexibly including images and text.
<b>example</b>	<code>&lt;button id="btn1" onclick="func();" &gt;&lt;/button&gt;</code>

### ② Div

	Specifies the area of the document. Uses the id attribute or class attribute to specify the identifier. You can use it for commenting on several paragraphs that are part of the same section.
<b>example</b>	<code>&lt;button id="btn1" onclick="func();" &gt;&lt;/button&gt;</code>

### ③ Form


	Scopes to the top-level element of the form so that the web page can interact with it.
<b>example</b>	<code>&lt;form action="demo_form.asp" method="get"&gt; First name: &lt;input type="text" name="fname"&gt;&lt;br&gt; Last name: &lt;input type="text" name="lname"&gt;&lt;br&gt; &lt;input type="submit" value="Submit"&gt; &lt;/form&gt;</code>

---


#### ④ Iframe

	Displays another HTML document at a random location in an HTML document. You can put another web document or notepad at the size you want in the middle of a web document.
<b>example</b>	<code>&lt;iframe src="http://www.corebank.co.kr"&gt;&lt;/iframe&gt;</code>

#### ⑤ Img


	Inserts a picture into your document. If you want to link to another document in your image, you can use it within an <code>&lt;a&gt;</code> tag.
<b>example</b>	<code>&lt;img src="smiley.gif" alt="Smiley face" height="42" width="42"&gt;</code>

#### ⑥ Input


	Specifies the input fields where you can enter data. The input field may change in different ways for the type.
<b>example</b>	<code>&lt;input id="in1" type="text" value="input01"&gt;</code>

---


### ⑦ Label

	<p>Gives a label to the user interface.</p> <p>Synchronizes the label and the control by specifying the same value for the For property of label label as the ID property of control.</p> <p>Includes text and controls in the label area.</p>
<b>example</b>	<pre>&lt;label for="male"&gt;Male&lt;/label&gt;</pre>

### ⑧ Object


	<p>Displays objects such as images, audio, java applets, and flash.</p> <p>One of the data or type attributes should be present.</p>
<b>example</b>	<pre>&lt;object width="400" height="400" data="helloworld.swf"&gt;&lt;/object&gt;</pre>

### ⑨ Select


	<p>Creates a drop-down list.</p> <p>It should contain at least one option.</p> <p>You can group items using the &lt;optgroup&gt; tag.</p>
<b>example</b>	<pre>&lt;select id="sel1"&gt;   &lt;option value="volvo"&gt;Volvo&lt;/option&gt;   &lt;option value="saab"&gt;Saab&lt;/option&gt; &lt;/select&gt;</pre>

---


## ⑩ Span

	Used as an inline element. You can use it with global properties such as class, lang, dir.
<b>example</b>	<code>&lt;span style="color : blue"&gt;blue&lt;/span&gt;</code>

## ⑪ TextArea

	Creates a control for editing several lines of text. The default text reflects any whitespace characters or line breaks in the code.
<b>example</b>	<code>&lt;textarea rows="4" cols="50"&gt; option : TEXT Data &lt;/textarea&gt;</code>


## ⑫ Table

	Defines an HTML Table. It consists of a <code>&lt;table&gt;</code> element and one or more <code>&lt;tr&gt;</code> , <code>&lt;th&gt;</code> , and <code>&lt;td&gt;</code> elements. <code>&lt;tr&gt;</code> defines the table row, <code>&lt;th&gt;</code> the table header, and <code>&lt;td&gt;</code> the table cell.
<b>example</b>	<code>&lt;table border="1"&gt;   &lt;tr&gt;&lt;th&gt;&lt;/th&gt;&lt;/tr&gt;   &lt;tr&gt;&lt;td&gt;&lt;/td&gt;&lt;/tr&gt; &lt;/table&gt;</code>


---

## ■ HTML5 Standard


### ① Canvas

	Provides a bitmap canvas that depends on the script and resolution. Renders graphs, game graphics, and visual images in real time.
<b>example</b>	<code>&lt;canvas id="myCanvas"&gt;&lt;/canvas&gt;</code>

### ② Video


	Plays videos and media. The browser itself supports video without a plugin.
<b>example</b>	<code>&lt;video id="video1" src="/A_test/data/sampleVideo.mp4"&gt;&lt;/video&gt;</code>

### ③ Audio


	Inserts the sound file into your web page. You can use it to add music or other audio to a web page.
<b>example</b>	<code>&lt;video id="video1" src="/A_test/data/sampleVideo.mp4"&gt;&lt;/video&gt;</code>

---

#### ④ Embed

	Launches an external application that is installed in the browser and requires a plugin.
<b>example</b>	<code>&lt;embed src="helloworld.swf"&gt;</code>

#### ⑤ Progress

	Displays the progress of the task. Includes the current and maximum values inline so you can check your progress.
<b>example</b>	<pre>&lt;table border="1"&gt;   &lt;tr&gt;&lt;th&gt;&lt;/th&gt;&lt;/tr&gt;   &lt;tr&gt;&lt;td&gt;&lt;/td&gt;&lt;/tr&gt; &lt;/table&gt;</pre>



---

## 5. Y[wai] Component Help

### A. Grid

Inputs and outputs data using a grid.

#### ■ Properties

property	data type	read only	description
id	string		ID property of the grid component. (It is the same as the HTML object ID.)
dsoName	string		The object ID of the DSO to link.
style	string		Style property of grid.
option	variable		Option property of JSON to set on grid.
data	variable		Data in JSON format to be set on the grid.
editorMode	variable		Edits the grid component. (true: enabled / false: disabled)
FormatString	string		Sets the text value of a grid column. ex) ^Ref No;^Cust No;<Customer Name
ColumnsWidth	string		Sets the width of a grid column. (separator) ex) 120px;55px;110px
FieldMapping	string		The field name to link to the grid. (separator) ex) REF_NO;BASE_CIX_NO;BASE_CUST_ENM

## ■ Methods

function	description	argument	return
exportExcel	Saves the contents of the current grid to an excel file.	fileName (string) (The excel file name)	file (Outputs the excel file when the conversion is complete.)
AddColumn	Appends the columns displayed in the grid.	data (string) (The column value to add)	
DelColumn	Deletes the columns displayed in the grid.	columnName (string) (The column name to delete)	
getCheckeRows	Checks that a row of grid is selected.	column (number) (The column index to set)	boolean (whether to select)
getCheckedRows	Gets the data for the selected rows in the Select of the grid.		string (The data for the selected row)
setCheckAll	Selects all rows in the grid.		
setUnCheckAll	Cancels all rows in the grid.		
getSelection	Gets the data for the selected row in the grid.		string (The data for the selected row)
setColumnVisible	Sets the Visible for columns displayed in the grid.	column (number) (The index of the column to set)  visible (boolean) (visible setting)	
setColumnOption	Sets the Editor Option for the column displayed in the grid.	column (number) (The index of the column to set)  option (string) (option setting)	
SetRecordset	Sets the data displayed in the grid.	rs (string) (The new grid data)	
SyncToDSO	Aligns the position of record selection by DSO.		

SyncToGRID	Aligns the position of record selection by grid.		
getSelectIndex	Gets the index of the currently selected row.		number (The index of the currently selected row)
SetValue	Sets a value in a field in the currently selected row.	fieldName (string) (The field name to set)  fieldValue (string) (The value to change)	
GetValue	Gets a value in a field in the currently selected row.	fieldName (string) (The field name to set)	string (The value of field)
Refresh	Redraws the grid.		
SelectRow	Selects the specified row.	RowNo (number) (The index of the row to select)	
EditPost	Reflects your editing made in the grid in the DSO.		
SetColumnEditing	Sets the editable for the specified column.	column (number) (The index of the column to set)  editable (boolean) (The index of the row to select)	
GetData	Returns data from a grid as JSON.		string (The data in the grid)
SetData	Sets data from a grid as JSON.	fieldName (string) (The field name to set)	
GetGrid	Returns the option and data from a grid.		string (The option and data in the grid)
SetGrid	Sets the option and data from a grid as JSON.		
clear	Deletes the grid data.		
reset	Resets the grid.		
GetLookupValue	Gets the newFldName of the	xmlid	string

	orgFldName that matches the value passed in the xml.	(string) (xml id)  orgFldName (string) (The name of the field to find)  NewFldName (string) (The field name to get)  value (string) (The value to find)	(The value of the field)
moveNextEditColumn	Moves to a column that can be edited after the currently selected column.		
AddRow	Adds a row at the end.		
AddPreRow	Adds a new row before the currently selected row.		
AddNextRow	Adds a new row after the currently selected row.		
RecordCount	Returns the RecordCount of the grid.		number (RecordCount of the grid)

## ■ Events

event	description
oncellclick	Fires when clicking on a specific cell.
oncelldblclick	Fires when double-clicking on a specific cell.
oneditchanged	Fires when the value of a specific cell in the grid changes.
oneditvaluechanged	Fires when the value of a specific cell in the grid changes.
oncolumnheaderclick	Fires when clicking on a specific column in the grid.
onrecordchange	Fires when clicking on a different row in the grid than before.
onfocusedrecordchanged	Fires when clicking on a different row in the grid than before.
onrecordclick	Fires when clicking on a specific cell.

---

## ■ Options

The grid option in JSON format, which is set within the Grid Component tag.

They were developed to be set within a tag rather than as a tag attribute, since grid settings are more content-heavy than other components.

```
<grid id="grid1" dsoName="gridData">
  option : 'option value',
  style : {
  },
  columns : [
    { column setting 1 },
    { column setting 2 },
    { column setting 3 }
  ]
</grid>
```

The option and style items can be omitted. They are set to their default values in such cases. You should set the column, and each column is an object.

option	type	description
fixColumn	number	The number of horizontal scrolling fixed columns. (based on left) (default: 0) The fixed horizontal scrolling settings without columns.

---

## ■ Style

A style can be declared as an object in JSON.

You can specify a declared style as the style for a specific column, and a style as the style for several columns.

```
"style" : {  
  
  "custCol1":{  
    "header":{  
      "color":["#EAEAFF','#A0A0FF','#4040AA'],  
      "font":"normal 12px arial blue"  
    },  
    "cell":{  
      "color":["#FFFFFF','#A0FFA0','#EAFFEA'],  
      "font":"normal 11px arial darkgrey"  
    }  
  }  
}
```

You can specify this declared style as "style":"custCol1" in the column settings.

By modifying the styles in `grid/styles/default.css`, you can change all of the styles of the grid without declaring separate styles.

---

## ■ Column

You can set the column of the grid.

Columns are declared in the order they are declared, starting from the left, with the first column declared being the leftmost.

Each column has a type attribute.

If the type is a group, it can have child columns in the child.

column property	type	description
type	string (option)	Sets to a value in a group or column. If set to group, child columns can be set to children. (default: column)
text	string	The text displayed at the head of the column.
width	number	The left and right width of the column. (in pixels)
orientation	string (option)	Sets the direction to group columns when the type of the column is a group. Can be set to vertical or horizontal. (default: horizontal)
field	string	The fldName linked to the column. (Specifies one of the field names of the DSO declared in dsoName.)
visible	boolean	Sets the visibility of a column. (default: true)
alignment	string	Aligns the text displayed at the head of a column (default: left) (Can be set to right or center.)
editor	variable	Sets the screen display of cells in a column and editor. Default to text editor if there is no setting.

## ■ Column Editor

Each column in the grid can specify whether it is visible or not, and editor.

The settings vary depending on the editor specified, and the default properties are shown below.

editor property	type	description
type	string (option)	Selects an editor type. You can choose from text, date, mask, currency, combo, calculator, and LookupComboBox. (default: text)
alignment	string	Aligns the data displayed in the cells of a column. (default: left) (Can be set to right or center.)

```
columns: [
  {text:"1",field:"field1",width:30,"visible":true,"style":"custCol1"},
  {text:"2",field:"field2",width:60,"visible":true,"style":"custCol1"},
  {text:"3",field:"field3",width:50,"visible":true,"style":"custCol1"},
  {
    "type":"group",
    "text":"직원정보",
    "width":220,
    "orientation":"vertical",
    "columns":[
      {
        "type":"group",
        "text":"기본정보",
        "visible":true,
        "columns":[
          {text:"성명",field:"field1","alignment":"left","editor":{"type":"text"}},
          {text:"직급",field:"field2","visible":true,"editor":{"type":"text","alignment":"center"}},
          {text:"ID",field:"field3","alignment":"right","editor":{"type":"text","alignment":"right"}}
        ]
      },
      {text:"부서명",field:"field4"}
    ]
  },
  {text:"상태",field:"field5",width:60,"visible":true,"style":"custCol1"},
  {
    "type":"group",
    "text":"프로젝트",
    "width":360,
    "height":90,
    "columns":[
      {text:"프로젝트명",field:"field6",width:140},
      {text:"담당업무",field:"field7"},
      {
        "type":"group",
        "text":"작업진행",
        "columns":[
          {text:"부분",field:"field8"},
          {text:"전체",field:"field9","style":"custCol2"}
        ]
      }
    ]
  },
  {
    "type":"group",
    "text":"근무시간",
    "width":75,
    "orientation":"vertical",
    "columns":[
      {text:"아근",field:"field10","sortType":"number"},
      {text:"휴가Win연차",field:"field11"}
    ]
  }
]
```

Column Editor Example



---

## 5. Y[wai] Component Help

### B. CodeCombo

It supports Combobox and Selectbox for Code and includes Textbox.

When you select a value in the Combobox, the code is displayed in the Combobox and the label is displayed in the Textbox.

#### ■ Properties

property	data type	read only	description
id	string		ID property of the codecombo component. (It is the same as the HTML object ID.)
name	string		The name property of codecombo.
dsoName	string		The object ID of the DSO to link.
fldName	string		The field name to link. (Selects one of the fields of the DSO linked to dsoName.)
columns	variable		The column to set in the panel of combobox.
idField	string		The field to be the code for the combobox. (default: CODE)
textField	string		The field to be the label for the combobox. (default: CODE_NM)
cbDisplayTextField	boolean		If there is no label field, it returns true. If true, the textField is displayed in the combobox.
data	variable		The data in JSON format to set in the panel of the combobox.
url	string		The url of the JSON file for setting data in the panel of the combobox.
xmlurl	string		The url of the XML file for setting data in the panel of the combobox.
sql	string		The sql statement for setting data in the panel of the combobox.

value	string		The currently displayed value of codecombo.
labelWidth	string		The fixed length of width for the label textbox where the textField is displayed.
style	string		The current style of codecombo.
class	string		The current class of codecombo.
labelStyle	string		The current style of textbox.
disabled	boolean		The disabled property in codecombo. (true: disabled / false: enabled)
readonly	boolean		The readonly property in codecombo. (true: disabled / false: enabled)
editable	boolean		Edits the combobox of codecombo. (true: disabled / false: enabled)
editType	string		The editing type of codecombo. (All, Number, Uppercase, Lowercase)
panelWidth	string		The horizontal length of the panel in combobox. (default: component length)
panelHeight	string		The vertical length of the panel in combobox. (default: 150px)
showHeader	boolean		The grid header of combobox. (true: show(default) / false: not show)
fitColumns	boolean		Automatically resizes the width of each field in the grid of combobox to fit the panel width. (default: false)
btnImg	string		The combo button image URL for codecombo.
dropdownkeycode	string		Drops down the panel of combobox with a specific keycode.
title	string		The title property of codecombo.
tabindex	number		The tabindex property of codecombo.
itemCount	number	read only	The number of data currently set in the combobox.
codeId	string	read only	The property that provides information only.
codeName	string	read only	The property that provides information only.

## ■ Methods

function	description	argument	return
focus	Moves focus to codecombo.		
getValue	Gets the selected value(code) of codecombo. Gets all values as strings for multiple selections.		<b>string</b> (Returns the selected value(code) of codecombo.)
getSelectIndex	Gets the index of the selected value of codecombo as a number.		<b>number</b> (Returns the index of the selected value of codecombo.)
getSelected	Gets information from the selected row of codecombo as an object.		<b>variable</b> (Returns information from the selected row of codecombo.)
getText	Gets the label name(CODE_NM) of the selected value of codecombo. Gets all label names of values as strings for multiple selections.		<b>string</b> (Returns the label name of the selected value of codecombo.)
getData	Gets the grid data of codecombo combobox.		<b>variable</b> (Returns the data currently set in the grid of the codecombo combobox.)
setValue	Enters a random value(code) in codecombo. Enters all values as strings for codecombo with multiple selections.	<b>value</b> (string) (The random value to enter(code))	
setSelectIndex	Enters a random index in codecombo.	<b>index</b> (string) (The random index number)	
setData	Enters a new grid data in codecombo combobox.	<b>data</b> (variable) (The new grid data)	
clear	Deletes all new grid data in the codecombo combobox. All values entered in the url, xmlurl, sql and data fields will		

	be deleted.		
addItem	Appends new data to the codecombo combobox.	<b>code</b> (string) (The CODE value to add)  <b>label</b> (string) (The display content of the code value to add)	
deleteItem	Deletes a random data in codecombo combobox.	<b>index</b> (number) (The index number of the data to delete)	
itemIndex	Gets the index number of a random data in codecombo combobox.	<b>code</b> (string) (A random code value)	<b>number</b> (Returns the index number of a random value in codecombo.)
itemValue	Gets the code of a random data as an index in codecombo combobox. The fieldName is not required. (default: CODE_NAME)	<b>index</b> (string) (A random index number)  <b>fieldName</b> (string) (A random field name)	<b>string</b> (Returns the value(code) of the index in codecombo)
sort	Sorts on a random field in the data of codecombo. (default: asc sorting) (If no sortOrder is entered.)	<b>fieldName</b> (string) (The field name to sort)  <b>sortOrder</b> (string) (sortOrder: asc/desc)	
hideColumn	Hides a random field in the grid panel of codecombo combobox.	<b>fieldName</b> (string) (The field name to hide)	
showColumn	Show a random field hidden in the grid panel of codecombo combobox.	<b>fieldName</b> (string) (The field name to show)	

## ■ Events

event	argument	description
onclick		Fires when clicking on an object.
ondblclick		Fires when double-clicking on an object.
onkeydown		Fires when pressing a key.
onkeypress		Fires while pressing a key.
onkeyup		Fires when releasing a key.
onmousedown		Fires when pressing down the mouse button.
onmouseup		Fires when clicking and releasing the mouse button.
onmouseover		Fires when the mouse cursor moves over an object.
onblur		Fires when an object loses focus.
onfocus		Fires when an object gets focus.
oncontextmenu		Fires when right-clicking on codecombo.
onSelect	<b>evt.args.index</b> (number) (The index number of the selected row in the grid panel)  <b>evt.args.rowData</b> (variable) (Information in the selected row)	Fires when a row is selected in the grid panel of a codecombo combobox. You can get information for the selected row.
onChange	<b>evt.args.newValue</b> (string) (The changed value)  <b>evt.args.oldValue</b> (string) (The value before it was changed)	Fires when the value selected for codecombo changes.
onShowPanel		Fires when the grid panel of codecombo combobox is opened.
onHidePanel		Fires when the grid panel of codecombo combobox is closed.
onLoadSuccess		Fires when the component is successfully loaded.

---

onLoadError		Fires when codecombo is loaded with an error.
onSortColumn	<div>evt.args.column (string) (The sorted field name)</div> <div>evt.args.order (string) (sortOrder: asc/desc)</div>	Fires when sorting the grid of a codecombo combobox.

---

## 5. Y[wai] Component Help

### C. Edit\_mask

You can specify the masking type you want.

Please enter the type property as a mask, and set the masking format in the mask property to use it.

If the mask property is not entered, the format `*****` is applied by default.

```
<edit type="mask" mask="*****"></edit>
```

The mask property is formatted with the following symbols.

symbol	description
*	Alphabet (upper and lower case) Enter numbers. (A-Z, a-z, 0-9)
&	Alphabet (upper case) Enter numbers. (A-Z, 0-9)
a	Alphabet (upper and lower case) (A-Z, a-z)
A	Alphabet (upper case) (A-Z)
9	Enter only numbers. (0-9)
[ ]	You can omit input in the mask format in square brackets. ex) mask="aa[99][**]**"
	OR ex) "a 9" → a or 9, "(aaa) (999)" → aaa or 999
{n}	Repeats for n times. ex) mask="9{5}" (The mask format in which a number is entered five times.)
{n,m}	Repeats from n to m. ex) mask="9{3,5}" (The mask format in which a number is entered three to five times.)

## ■ Properties

property	data type	read only	description
id	string		ID property of the edit component. (It is the same as the HTML object ID.)
dsoName	string		The object ID of the DSO to link.
fldName	string		The field name to link. (Selects one of the fields of the DSO linked to dsoName.)
name	string		The name property of edit.
style	string		The style property of edit.
value	string		The value property of edit.
class	string		The class property of edit.
tabIndex	number		The tabIndex property of edit.
title	string		The title property of edit.
autofocus	boolean		Sets the autofocus of edit.
disabled	boolean		The disabled property of edit. (true: disabled / false: enabled(default))
readonly	boolean		The readonly property of edit. (true: readonly / false: readable and writable(default))
maxlength	number		The maximum length of text.
placeholder	string		The placeholder property of edit. (Shows hints.)
type	string (option)		Sets the masking type. (mask, currency, date, regex, decimal, integer)
mask	string		The masking type.
defaultValue	string		Fills the non-masking area with the set value.
dataLength	number	read only	The length of the value of the value property
displayMask	boolean		Sets whether to show a masking preview.



---

## ■ Methods

function	description	argument	return
focus	Moves focus on an object.		
unmaskedValue	Gets the unmasked value.		string (Returns the value of the unmasked input object.)
getValue	Gets the current value of the object displayed on the screen.		string (Returns the value of the input object.)

## ■ Events

event	argument	description
onkeydown		Fires when pressing a key.
onkeypress		Fires while pressing a key.
onkeyup		Fires when releasing a key.
onblur		Fires when an object loses focus.
onfocus		Fires when an object gets focus.
onclick		Fires when clicking on an object.
ondblclick		Fires when double-clicking on an object.
onmousedown		Fires when pressing down the mouse button.
onmouseover		Fires when the mouse cursor moves over an object.
onmouseup		Fires when clicking and releasing the mouse button.
onchange	<code>evt.args.newValue</code> (string) (The changed value)  <code>evt.args.oldValue</code> (string) (The value before it was changed)	Fires when the value of an object changes. You can get information about the value before it was changed and the value after it was changed.
oncontextmenu		Fires when right-clicking on an object.
oncomplete		Fires when input is complete for the input format.
onincomplete		Fires when losing focus after incomplete input.
oncleared		Fires when all input values are cleared.
onZeroMskComplete		Fires by pressing the enter key when the type is mask.  (If the mask properties are all of the same type and <code>defaultValue</code> can be applied to this mask, and enter part of the masking input value or press the enter key without entering any value, it will fill the non-masking area with <code>defaultValue</code> .)

---

## 5. Y[wai] Component Help

### D. Edit\_currency

It supports amount input forms.

Use the type property by entering currency.

```
<edit type='currency'></edit>
```

#### ■ Properties

property	data type	read only	description
id	string		ID property of the edit component. (It is the same as the HTML object ID.)
dsoName	string		The object ID of the DSO to link.
fldName	string		The field name to link. (Selects one of the fields of the DSO linked to dsoName.)
name	string		The name property of edit.
style	string		The style property of edit.
value	string		The value property of edit.
class	string		The class property of edit.
tabIndex	number		The tabIndex property of edit.
title	string		The title property of edit.
autofocus	boolean		Sets the autofocus of edit.
disabled	boolean		The disabled property of edit. (true: disabled / false: enabled(default))
readonly	boolean		The readonly property of edit. (true: readonly / false: readable and writable(default))
placeholder	string		The placeholder property of edit. (Shows hints.)
type	string (option)		Sets the masking type. (mask, currency, date, regex, decimal, integer)
prefix	string		The symbol of currency.

---

digits	number		The number of decimal places.
autoGroup	boolean		Sets whether to set automatic division of integer digits.
groupSize	number		The length to divide by integer digits.
groupSeparator	string		The integer digit divisor.
integerDigits	number		The total length of integer digits.
allowMinus	boolean		Sets whether to show the minus sign.

## ■ Methods

function	description	argument	return
focus	Moves focus on an object.		
unmaskedValue	Gets the unmasked value.		<b>string</b> (Returns the value of the unmasked input object.)
getValue	Gets the current value of the object displayed on the screen.		<b>string</b> (Returns the value of the input object.)

---

## ■ Events

event	argument	description
onkeydown		Fires when pressing a key.
onkeypress		Fires while pressing a key.
onkeyup		Fires when releasing a key.
onblur		Fires when an object loses focus.
onfocus		Fires when an object gets focus.
onclick		Fires when clicking on an object.
ondblclick		Fires when double-clicking on an object.
onmousedown		Fires when pressing down the mouse button.
onmouseover		Fires when the mouse cursor moves over an object.
onmouseup		Fires when clicking and releasing the mouse button.
onchange	evt.args.newValue (string) (The changed value)  evt.args.oldValue (string) (The value before it was changed)	Fires when the value of an object changes. You can get information about the value before it was changed and the value after it was changed.
oncontextmenu		Fires when right-clicking on an object.
oncomplete		Fires when input is complete for the input format.
onincomplete		Fires when losing focus after incomplete input.
oncleared		Fires when all input values are cleared.

---

## 5. Y[wai] Component Help

### E. Edit\_date

It supports date input forms.

Use the type property by entering date.

A yyyy/mm/dd mask is applied by default.

```
<edit type='date'></edit>
```

#### ■ Properties

property	data type	read only	description
id	string		ID property of the edit component. (It is the same as the HTML object ID.)
dsoName	string		The object ID of the DSO to link.
fldName	string		The field name to link. (Selects one of the fields of the DSO linked to dsoName.)
name	string		The name property of edit.
style	string		The style property of edit.
value	string		The value property of edit.
class	string		The class property of edit.
tabIndex	number		The tabIndex property of edit.
title	string		The title property of edit.
autofocus	boolean		Sets the autofocus of edit.
disabled	boolean		The disabled property of edit. (true: disabled / false: enabled(default))
readonly	boolean		The readonly property of edit. (true: readonly / false: readable and writable(default))
maxlength	number		The maximum length of text.
placeholder	string		The placeholder property of edit. (Shows hints.)

type	string (option)		Sets the masking type. (mask, currency, date, regex, decimal, integer)
dateOrder	string (option)		The display order of year/month/day. (yyyymmdd(default) / ddmmyyyy / mmddyyyy)
dateSeparator	string (option)		The date separator. ( [ / ] (default) / [ - ] / [ . ] )

## ■ Methods

function	description	argument	return
focus	Moves focus on an object.		
unmaskedValue	Gets the unmasked value.		string (Returns the value of the unmasked input object.)
getValue	Gets the current value of the object displayed on the screen.		string (Returns the value of the input object.)

---

## ■ Events

event	argument	description
onkeydown		Fires when pressing a key.
onkeypress		Fires while pressing a key.
onkeyup		Fires when releasing a key.
onblur		Fires when an object loses focus.
onfocus		Fires when an object gets focus.
onclick		Fires when clicking on an object.
ondblclick		Fires when double-clicking on an object.
onmousedown		Fires when pressing down the mouse button.
onmouseover		Fires when the mouse cursor moves over an object.
onmouseup		Fires when clicking and releasing the mouse button.
onchange	evt.args.newValue (string) (The changed value)  evt.args.oldValue (string) (The value before it was changed)	Fires when the value of an object changes. You can get information about the value before it was changed and the value after it was changed.
oncontextmenu		Fires when right-clicking on an object.
oncomplete		Fires when input is complete for the input format.
onincomplete		Fires when losing focus after incomplete input.
oncleared		Fires when all input values are cleared.



---

## 5. Y[wai] Component Help

### F. Edit\_datetime

It supports time input types.

Use the type property by entering datetime.

A hh:mm:ss mask is applied by default.

```
<edit type="datetime"></edit>
```

#### ■ Properties

property	data type	read only	description
id	string		ID property of the edit component. (It is the same as the HTML object ID.)
dsoName	string		The object ID of the DSO to link.
fldName	string		The field name to link. (Selects one of the fields of the DSO linked to dsoName.)
name	string		The name property of edit.
style	string		The style property of edit.
value	string		The value property of edit.
class	string		The class property of edit.
tabIndex	number		The tabIndex property of edit.
title	string		The title property of edit.
autofocus	boolean		Sets the autofocus of edit.
disabled	boolean		The disabled property of edit. (true: disabled / false: enabled(default))
readonly	boolean		The readonly property of edit. (true: readonly / false: readable and writable(default))
maxlength	number		The maximum length of text.
placeholder	string		The placeholder property of edit. (Shows hints.)

---

type	string (option)		Sets the masking type. (mask, currency, date, regex, decimal, integer)
------	--------------------	--	---

## ■ Methods

function	description	argument	return
focus	Moves focus on an object.		
unmaskedValue	Gets the unmasked value.		string (Returns the value of the unmasked input object.)
getValue	Gets the current value of the object displayed on the screen.		string (Returns the value of the input object.)

---

## ■ Events

event	argument	description
onkeydown		Fires when pressing a key.
onkeypress		Fires while pressing a key.
onkeyup		Fires when releasing a key.
onblur		Fires when an object loses focus.
onfocus		Fires when an object gets focus.
onclick		Fires when clicking on an object.
ondblclick		Fires when double-clicking on an object.
onmousedown		Fires when pressing down the mouse button.
onmouseover		Fires when the mouse cursor moves over an object.
onmouseup		Fires when clicking and releasing the mouse button.
onchange	evt.args.newValue (string) (The changed value)  evt.args.oldValue (string) (The value before it was changed)	Fires when the value of an object changes. You can get information about the value before it was changed and the value after it was changed.
oncontextmenu		Fires when right-clicking on an object.
oncomplete		Fires when input is complete for the input format.
onincomplete		Fires when losing focus after incomplete input.
oncleared		Fires when all input values are cleared.

---

## 5. Y[wai] Component Help

### G. Edit\_regex

It supports regular expression input.

Enter regex in the type property, and enter the format in the regex property to use it.

If the regex property is not entered, the format (010|011|016)-?[0-9]{3,4}-?[0-9]{4} is applied by default.

```
<edit type='regex' regex='(010|011|016)-[0-9]{3,4}-[0-9]{4}'></edit>
```

#### ■ Properties

property	data type	read only	description
id	string		ID property of the edit component. (It is the same as the HTML object ID.)
dsoName	string		The object ID of the DSO to link.
fldName	string		The field name to link. (Selects one of the fields of the DSO linked to dsoName.)
name	string		The name property of edit.
style	string		The style property of edit.
value	string		The value property of edit.
class	string		The class property of edit.
tabIndex	number		The tabIndex property of edit.
title	string		The title property of edit.
autofocus	boolean		Sets the autofocus of edit.
disabled	boolean		The disabled property of edit. (true: disabled / false: enabled(default))
readonly	boolean		The readonly property of edit. (true: readonly / false: readable and writable(default))
maxlength	number		The maximum length of text.
placeholder	string		The placeholder property of edit. (Shows hints.)

---

type	string (option)		Sets the masking type. (mask, currency, date, regex, decimal, integer)
regex	string		Enters a regular expression format.

## ■ Methods

function	description	argument	return
focus	Moves focus on an object.		
unmaskedValue	Gets the unmasked value.		string (Returns the value of the unmasked input object.)
getValue	Gets the current value of the object displayed on the screen.		string (Returns the value of the input object.)

---

## ■ Events

event	argument	description
onkeydown		Fires when pressing a key.
onkeypress		Fires while pressing a key.
onkeyup		Fires when releasing a key.
onblur		Fires when an object loses focus.
onfocus		Fires when an object gets focus.
onclick		Fires when clicking on an object.
ondblclick		Fires when double-clicking on an object.
onmousedown		Fires when pressing down the mouse button.
onmouseover		Fires when the mouse cursor moves over an object.
onmouseup		Fires when clicking and releasing the mouse button.
onchange	evt.args.newValue (string) (The changed value)  evt.args.oldValue (string) (The value before it was changed)	Fires when the value of an object changes. You can get information about the value before it was changed and the value after it was changed.
oncontextmenu		Fires when right-clicking on an object.
oncomplete		Fires when input is complete for the input format.
onincomplete		Fires when losing focus after incomplete input.
oncleared		Fires when all input values are cleared.

---

## 5. Y[wai] Component Help

### H. Edit\_decimal

It supports decimal input formats.

Use the type property by entering decimal.

```
<edit type='decimal'></edit>
```

#### ■ Properties

property	data type	read only	description
id	string		ID property of the edit component. (It is the same as the HTML object ID.)
dsoName	string		The object ID of the DSO to link.
fldName	string		The field name to link. (Selects one of the fields of the DSO linked to dsoName.)
name	string		The name property of edit.
style	string		The style property of edit.
value	string		The value property of edit.
class	string		The class property of edit.
tabIndex	number		The tabIndex property of edit.
title	string		The title property of edit.
autofocus	boolean		Sets the autofocus of edit.
disabled	boolean		The disabled property of edit. (true: disabled / false: enabled(default))
readonly	boolean		The readonly property of edit. (true: readonly / false: readable and writable(default))
placeholder	string		The placeholder property of edit. (Shows hints.)
type	string (option)		Sets the masking type. (mask, currency, date, regex, decimal, integer)
digits	number		The number of decimal places.

---

autoGroup	boolean		Sets whether to set automatic division of integer digits.
groupSize	number		The length to divide by integer digits.
groupSeparator	string		The integer digit divisor.
integerDigits	number		The total length of integer digits.
allowMinus	boolean		Sets whether to show the minus sign.

## ■ Methods

function	description	argument	return
focus	Moves focus on an object.		
unmaskedValue	Gets the unmasked value.		string (Returns the value of the unmasked input object.)
getValue	Gets the current value of the object displayed on the screen.		string (Returns the value of the input object.)



## ■ Events

event	argument	description
onkeydown		Fires when pressing a key.
onkeypress		Fires while pressing a key.
onkeyup		Fires when releasing a key.
onblur		Fires when an object loses focus.
onfocus		Fires when an object gets focus.
onclick		Fires when clicking on an object.
ondblclick		Fires when double-clicking on an object.
onmousedown		Fires when pressing down the mouse button.
onmouseover		Fires when the mouse cursor moves over an object.
onmouseup		Fires when clicking and releasing the mouse button.
onchange	evt.args.newValue (string) (The changed value)  evt.args.oldValue (string) (The value before it was changed)	Fires when the value of an object changes. You can get information about the value before it was changed and the value after it was changed.
oncontextmenu		Fires when right-clicking on an object.
oncomplete		Fires when input is complete for the input format.
onincomplete		Fires when losing focus after incomplete input.
oncleared		Fires when all input values are cleared.

---

## 5. Y[wai] Component Help

### I. Edit\_integer

It supports integer input types.

Use the type property by entering integer.

```
<edit type='integer'></edit>
```

#### ■ Properties

property	data type	read only	description
id	string		ID property of the edit component. (It is the same as the HTML object ID.)
dsoName	string		The object ID of the DSO to link.
fldName	string		The field name to link. (Selects one of the fields of the DSO linked to dsoName.)
name	string		The name property of edit.
style	string		The style property of edit.
value	string		The value property of edit.
class	string		The class property of edit.
tabIndex	number		The tabIndex property of edit.
title	string		The title property of edit.
autofocus	boolean		Sets the autofocus of edit.
disabled	boolean		The disabled property of edit. (true: disabled / false: enabled(default))
readonly	boolean		The readonly property of edit. (true: readonly / false: readable and writable(default))
maxlength	number		The maximum length of text.
placeholder	string		The placeholder property of edit. (Shows hints.)
type	string (option)		Sets the masking type. (mask, currency, date, regex, decimal, integer)

---

## ■ Methods

function	description	argument	return
focus	Moves focus on an object.		
unmaskedValue	Gets the unmasked value.		string (Returns the value of the unmasked input object.)
getValue	Gets the current value of the object displayed on the screen.		string (Returns the value of the input object.)

---

## ■ Events

event	argument	description
onkeydown		Fires when pressing a key.
onkeypress		Fires while pressing a key.
onkeyup		Fires when releasing a key.
onblur		Fires when an object loses focus.
onfocus		Fires when an object gets focus.
onclick		Fires when clicking on an object.
ondblclick		Fires when double-clicking on an object.
onmousedown		Fires when pressing down the mouse button.
onmouseover		Fires when the mouse cursor moves over an object.
onmouseup		Fires when clicking and releasing the mouse button.
onchange	evt.args.newValue (string) (The changed value)  evt.args.oldValue (string) (The value before it was changed)	Fires when the value of an object changes. You can get information about the value before it was changed and the value after it was changed.
oncontextmenu		Fires when right-clicking on an object.
oncomplete		Fires when input is complete for the input format.
onincomplete		Fires when losing focus after incomplete input.
oncleared		Fires when all input values are cleared.

---

## 5. Y[wai] Component Help

### J. DateEdit

It supports calendar formats.

It consists of an input object and a calendar where you can enter date values.

Click the icon to the right of the input object to pop up the calendar.

Sunday is set as the default for the first day of the week, and English is set as the default for the language.

#### ■ Properties

property	data type	read only	description
id	string		ID property of the DateEdit component. (It is the same as the HTML object ID.)
dsoName	string		The object ID of the DSO to link.
fldName	string		The field name to link. (Selects one of the fields of the DSO linked to dsoName.)
name	string		The name property of edit.
style	string		The style property of edit.
value	string		The value property of edit.
class	string		The class property of edit.
tabIndex	number		The tabIndex property of edit.
title	string		The title property of edit.
disabled	boolean		The disabled property of edit. (true: disabled / false: enabled(default))
readonly	boolean		The readonly property of edit. (true: readonly / false: readable and writable(default))
lang	string (option)		The display language of the calendar. (English(default) / Korean / Chinese)
dateOrder	string (option)		The display order of year/month/day. (yyyymmdd(default) / ddmmyyyy / mmddyyyy)

autoCheck	boolean		Whether to set an input format.
validate	boolean		Checks date validity.
placeholder	string		The placeholder property of edit. (Shows hints.)
calWidth	number		The width of the calendar. (in px)
calHeight	number		The height of the calendar. (in px)
btnImg	string		The url of the button image in the calendar.
firstDay	string (option)		The first day of the week. (Sun(default) / Mon / Tue / Wed / Thu / Fri / Sat)
dateSeparator	string (option)		The date separator. ( [ / ] (default) / [ - ] / [ . ] )
todayText	string		Changes the text of the today button on the calendar.
closeText	string		Changes the text of the close button on the calendar.

## ■ Methods

function	description	argument	return
focus	Moves focus on an object.		
unmaskedValue	Gets the unmasked value.		string (Returns the value of the unmasked input object.)
getValue	Gets the current value of the object displayed on the screen.		string (Returns the value of the input object.)
setValue	Sets the date value to enter in the object.	value (string) (The date value to enter)	

---

## ■ Events

event	argument	description
onkeydown		Fires when pressing a key.
onkeypress		Fires while pressing a key.
onkeyup		Fires when releasing a key.
onblur		Fires when an object loses focus.
onfocus		Fires when an object gets focus.
onclick		Fires when clicking on an object.
ondblclick		Fires when double-clicking on an object.
onmousedown		Fires when pressing down the mouse button.
onmouseover		Fires when the mouse cursor moves over an object.
onmouseup		Fires when clicking and releasing the mouse button.
oncontextmenu		Fires when right-clicking on an object.
onSelect		Fires clicking on a date in the calendar.
onChange	<code>evt.args.newDate</code> (string) (The changed value)  <code>evt.args.oldDate</code> (string) (The value before it was changed)	Fires when the value of an object changes. You can get information about the value before it was changed and the value after it was changed.

---

## 5. Y[wai] Component Help

### K. tabControl

It supports tab types.

#### ■ Properties

property	data type	read only	description
id	string		ID property of the tabControl component. (It is the same as the HTML object ID.)
index	string		The index property of tabControl.
tabTextAlign	string		Aligns all title texts of tabControl.
tabTitleWidth	string		Aligns all title widths of tabControl.
tabFontFamily	string		Aligns all title fonts of tabControl.
tabFontSize	string		The size property of all title fonts on tabControl.
[tabPage] id	string		The id property of tabPage.
[tabPage] title	string		The title property of tabPage.
[tabPage] iconSrc	string		The icon property of tabPage.



---

## ■ Methods

function	description	argument	return
addTab	Adds a new tabPage.		
removeTab	Deletes a specific tabPage.	index (number) (The tabPage index to delete)	
setTitle	Sets a title name for a specific tabPage.	index (number) (The tabPage index to change the title)  titleNm (string) (The title name to change)	

## ■ Events

event	argument	description
onLoaded		Called when the tabControl is loaded.
onTabClick	evt.args.index	Called when a tab in tabControl is clicked.
onTabChanging	evt.args.index	Called when a tab in tabControl changes.

---

## 5. Y[wai] Component Help

### L. Calendar

It supports calendars.

You can select a date and move to the next or previous month.

Sunday is set as the default for the first day of the week, and English is set as the default for the language.

#### ■ Properties

property	data type	read only	description
id	string		ID property of the calendar component. (It is the same as the HTML object ID.)
index	string		The index property of tabControl.
dsoName	string		The object ID of the DSO to link.
fldName	string		The field name to link. (Selects one of the fields of the DSO linked to dsoName.)
name	string		The name property of calendar.
style	string		The style property of calendar.
value	string		The value property of calendar.
title	string		The title property of calendar.
lang	string (option)		The display language of the calendar. (English(default) / Korean / Chinese)
dateOrder	string (option)		The dateOrder of year/month/day. (yyyymmdd(default) / ddmmyyyy / mmddyyyy)
firstDay	string (option)		The first day of the week. (Sun(default) / Mon / Tue / Wed / Thu / Fri / Sat)

---

## ■ Methods

function	description	argument	return
getValue	Gets the selected date value from an object		string (Returns the date value of the object)
setValue	Sets the date value to enter in the object.	value (string) (The date value to enter)	

## ■ Events

event	argument	description
onSelect		Fires clicking on a date in the calendar.

---

## 5. Y[wai] Component Help

### M. Chart

It is used as a Canvas chart.

It displays the current value on the screen, and sub-values pop up when the focus is on the chart for options.

#### ■ Properties

property	data type	read only	description
id	string		The id property of the chart component. (It is the same as the HTML object ID.)
name	string		The name property of chart.
dsoName	string		The object ID of the DSO to link.
valueField	string		The field name to link. (Selects one of the fields of the DSO linked to dsoName.)
labelField	string		The label field name to link. (Selects one of the fields of the DSO linked to dsoName.)
type	string (option)		The display types of chart. (Bar, Doughnut, Pie, Line, PolarArea, Radar)
data	string		The current value of the chart.
option	string		The options of the chart.
style	string		The styles of the chart.
title	string		The title property of chart.

## ■ Methods

function	description	argument	return
getData	Gets all sub-values of a chart. (The type of value: Variant)		variable (Returns all data of the chart)
update	Updates a specific data in a chart. (One part(data) of a group(dataset) can be updated.)	<b>value</b> (number) (The value to update)  <b>dataset</b> (number) (The array index number of the group containing the part(data) to update)  <b>data</b> (number) (The array index number of the part of the data in the group(dataset) to update)	
addData	Adds a random sub-values to a chart.	<b>dataArray</b> (variable) (The array of values equal to the number of groups(dataset))	
removeData	Deletes sub-values in a chart. Deletes from the first value(data) in the chart.	<b>index</b> (variable: option) (The array index number of value(data) to delete)	
clear	Deletes all sub-values of the chart.		
setData	Gets the value(data) of a new chart and redraws the chart. (The option is not required to be entered.)	<b>data</b> (variable) (The value of a new chart)  <b>option</b> (variable: option) (The option of a new chart)	
setOption	Enters a new option in the chart.	<b>option</b> (variable) (The option of a new chart)	

---

## ■ Events

event	argument	description
onclick	<b>evt</b> (variable) (Full information about the chart)  <b>evt.args.data</b> (variable) (Information about the selected data)	Fires when clicking on an object. You can get information about specific data.
ondblclick	<b>evt</b> (variable) (Full information about the chart)  <b>evt.args.data</b> (variable) (Information about the selected data)	Fires when double-clicking on an object. You can get information about specific data.

---

## ■ Options

The chart option in JSON format, which is set within the Chart Component tag.

They were developed to be set within a tag rather than as a tag attribute, since chart options are more content-heavy than other components.

```
<chart id="chart1" >
  "data" : [ Data Value ],
  "option" : { Option Value }
</chart >
```

The option and data items can be omitted. They are set to their default values in such cases.

option	type	description
Title Options		
Show Title (title.display)	boolean	Whether to display a title.
Title Text (title.text)	string	The text of the title.
Position (title.position)	string	The display position of the title.
Padding (title.padding)	number	The margin of the title.
Font Size (title.fontSize)	number	The font size.
Font Style (title.fontStyle)	string	The font style.
Font Color (title.fontColor)	string	The font color.
Font Family (title.fontFamily)	string	Fonts.
Legend Options		
Show Legend (legend.display)	boolean	Whether to display a legend.
Reverse (legend.reverse)	boolean	Whether to reverse the legend of the data.

<b>Position</b> (legend.position)	string	The display position of a legend.
<b>Padding</b> (legend.labels.padding)	number	The margin of the legend.
<b>Box Width</b> (legend.labels.boxWidth)	number	The horizontal length of the databox.
<b>Use Point Style</b> (legend.labels.usePointStyle)	boolean	Whether to display as a point(circle).
<b>Font Size</b> (legend.labels.fontSize)	number	The font size.
<b>Font Style</b> (legend.labels.fontStyle)	string	The font style.
<b>Font Color</b> (legend.labels.fontColor)	string	The font color.
<b>Font Family</b> (legend.labels.fontFamily)	string	Fonts.
<b>Tooltips Options</b>		
<b>Tooltips</b> (tooltips.enabled)	boolean	Whether to display data information on mouseover.
<b>Mode</b> (tooltips.mode)	string	Tooltip mode. (nearest: the closest data / index: the corresponding label data)
<b>Intersect</b> (tooltips.intersect)	boolean	Whether to apply only when intersecting data.
<b>Fill Color</b> (tooltips.backgroundColor)	string	The background color of the tooltip.
<b>Y Padding</b> (tooltips.yPadding)	number	The inner y-axis margin of the tooltip.
<b>X Padding</b> (tooltips.xPadding)	number	The inner x-axis margin of the tooltip.
<b>Corner Radius</b> (tooltips.cornerRadius)	number	Box round in the tooltip.
<b>Border Color</b> (tooltips.borderColor)	string	The color of the box round in the tooltip.
<b>Border Width</b> (tooltips.borderWidth)	number	The width of the box round in the tooltip.
<b>Caret Size</b> (tooltips.caretSize)	number	The size of the point in the tooltip.



<b>Caret Padding</b> (tooltips.caretPadding)	number	The margin of the point in the tooltip.
<b>Title Font Size</b> (tooltips.titleFontSize)	number	The size of the title font in the tooltip.
<b>Title Font Style</b> (tooltips.titleFontStyle)	string	The style of the title font in the tooltip.
<b>Title Font Color</b> (tooltips.titleFontColor)	string	The color of the title font in the tooltip.
<b>Title Font Family</b> (tooltips.titleFontFamily)	string	The title font of the tooltip.
<b>Body Font Size</b> (tooltips.bodyFontSize)	number	The font size of the tooltip.
<b>Body Font Color</b> (tooltips.bodyFontColor)	string	The font color of the tooltip.
<b>Body Font Style</b> (tooltips.bodyFontStyle)	string	The font style of the tooltip.
<b>Body Font Family</b> (tooltips.bodyFontFamily)	string	Fonts of the tooltip.
<b>Display Colors</b> (tooltips.displayColors)	boolean	Whether to display data colors.
<b>Animation Options</b>		
<b>Duration</b> (animation.duration)	number	The effect speed.
<b>Easing Effects</b> (animation.easing)	string	The effect type.
<b>Animation Scale</b> (animation.animateScale)	boolean	Whether to apply effects to scales of PolarArea, pie, and doughnut.
<b>Scales Options</b>		
<b>Show xAxes Line</b> (scales.xAxes.display)	boolean	Whether to display scale lines.
<b>Show Guide Line</b> (scales.xAxes.gridLines.display)	boolean	Whether to display X-axis guidelines.
<b>Guide Line Color</b> (scales.xAxes.gridLines.color)	string	The color of X-axis guidelines.
<b>Border Dash</b> (scales.xAxes.gridLines.borderDash)	array	The dashed line of X-axis guidelines.
<b>Line Width</b>	number	The width of X-axis guidelines.

(scales.xAxes.gridLines.lineWidth)		
<b>offsetGridLines</b> (scales.xAxes.gridLines.offsetGridLines)	boolean	If true, tick marks move between labels. Default value set to true in the bar chart.
<b>Show Scale Label</b> (cales.xAxes.ticks.display)	boolean	Whether to display X-axis scale line labels.
<b>Font Size</b> (scales.xAxes.ticks.fontSize)	number	The font size.
<b>Font Style</b> (scales.xAxes.ticks.fontStyle)	string	The font style.
<b>Font Color</b> (scales.xAxes.ticks.fontColor)	string	The font color.
<b>Font Family</b> (scales.xAxes.ticks.fontFamily)	string	Fonts.
<b>Show Scale Title</b> (scales.xAxes.scaleLabel.display)	boolean	Whether to display scale line titles.
<b>Title Text</b> (scales.xAxes.scaleLabel.labelString)	string	The text of the label.
<b>Font Size</b> (scales.xAxes.scaleLabel.fontSize)	number	The font size.
<b>Font Style</b> (scales.xAxes.scaleLabel.fontStyle)	string	The font style.
<b>Font Color</b> (scales.xAxes.scaleLabel.fontColor)	string	The font color.
<b>Font Family</b> (scales.xAxes.scaleLabel.fontFamily)	string	Fonts.
<b>Padding</b> (scales.xAxes.scaleLabel.padding)	number	The margin of the label.
<b>Line Height</b> (scales.xAxes.scaleLabel.lineHeight)	number	The vertical length of the label.
<b>Show Guide Line</b> (scales.yAxes.gridLines.display)	boolean	Whether to display Y-axis guidelines.
<b>Guide Line Color</b> (scales.yAxes.gridLines.color)	string	The color of the Y-axis guidelines.
<b>Border Dash</b> (scales.yAxes.gridLines.borderDash)	array	The dashed line of Y-axis guidelines.
<b>Line Width</b> (scales.yAxes.gridLines.lineWidth)	number	The width of Y-axis guidelines.

<b>Zero Line Color</b> (scales.yAxes.gridLines.zeroLineColor)	string	The color of the zero line.
<b>Zero Line Width</b> (scales.yAxes.gridLines.zeroLineWidth)	number	The width of the zero line.
<b>Zero Border Dash</b> (scales.yAxes.gridLines.zeroLineBorderDash)	array	The dashed line of the zero line.
<b>Show Scale Label</b> (scales.yAxes.ticks.display)	boolean	Whether to display Y-axis scale line labels.
<b>Min</b> (scales.yAxes.ticks.min)	number	The minimum value.
<b>Max</b> (scales.yAxes.ticks.max)	number	The maximum value.
<b>Step Size</b> (scales.yAxes.ticks.stepSize)	number	The interval of scale values.
<b>Font Size</b> (scales.yAxes.ticks.fontSize)	number	The font size.
<b>Font Style</b> (scales.yAxes.ticks.fontStyle)	string	The font style.
<b>Font Color</b> (scales.yAxes.ticks.fontColor)	string	The font color.
<b>Font Family</b> (scales.yAxes.ticks.fontFamily)	string	Fonts.
<b>Show Scale Title</b> (scales.yAxes.scaleLabel.display)	boolean	Whether to display scale line titles.
<b>Title Text</b> (scales.yAxes.scaleLabel.labelString)	string	The text of the label.
<b>Font Size</b> (scales.yAxes.scaleLabel.fontSize)	number	The font size.
<b>Font Style</b> (scales.yAxes.scaleLabel.fontStyle)	string	The font style.
<b>Font Color</b> (scales.yAxes.scaleLabel.fontColor)	string	The font color.
<b>Font Family</b> (scales.yAxes.scaleLabel.fontFamily)	string	Fonts.
<b>Padding</b> (scales.yAxes.scaleLabel.padding)	number	The margin of the label.
<b>Line Height</b> (scales.yAxes.scaleLabel.lineHeight)	number	The vertical length of the label.

Scale Options		
Show Guide Line (scale.gridLines.display)	boolean	Whether to display Y-axis guidelines.
Guide Line Color (scale.gridLines.color)	string	The color of the guidelines.
Line Width (scale.gridLines.lineWidth)	number	The width of the guidelines.
Show Scale Label (scale.pointLabels.display)	boolean	Whether to display point labels.
Font Size (scale.pointLabels.fontSize)	number	The font size.
Font Style (scale.pointLabels.fontStyle)	string	The font style.
Font Color (scale.pointLabels.fontColor)	string	The font color.
Font Family (scale.pointLabels.fontFamily)	string	Fonts.
Padding (scale.pointLabels.padding)	number	The margin of labels.
Line Height (scale.pointLabels.lineHeight)	number	The vertical length of the label.
Show Scale Label (scale.ticks.display)	boolean	Whether to display scale line labels.
Min (scale.ticks.min)	number	The minimum value.
Max (scale.ticks.max)	number	The maximum value.
Step Size (scale.ticks.stepSize)	number	The interval of scale values.
Font Size (scale.ticks.fontSize)	number	The font size.
Font Style (scale.ticks.fontStyle)	string	The font style.
Font Color (scale.ticks.fontColor)	string	The font color.
Font Family (scale.ticks.fontFamily)	string	Fonts.

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PieceLabel Options		
<b>Show Piece Label</b> (showPieceLabel.enabled)	number	Whether to display point labels.
<b>Mode</b> (showPieceLabel.mode)	string	Point label mode.
<b>Font Size</b> (showPieceLabel.fontSize)	string	The font size of the point label.
<b>Font Style</b> (showPieceLabel.fontStyle)	string	The font style of the point label.
<b>Font Color</b> (showPieceLabel.fontColor)	string	The font color of the point label.
<b>Font Family</b> (showPieceLabel.fontFamily)	string	Fonts of the point label.

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## 5. Y[wai] Component Help

### N. TreeView

It supports list formats in a tree structure.

#### ■ Properties

property	data type	read only	description
id	string		The id property of the TreeView component. (It is the same as the HTML object ID.)
name	string		The name property of treeview.
dsoName	string		The object ID of the DSO to link.
fldName	string		The field name to link. (Selects one of the fields of the DSO linked to dsoName.)
url	string		The url of the JSON file for setting data in the treeview.
data	variable		The data in JSON format to set in the treeview.
data - fixed data	string		The fixed values that exist when defining the data property.
style	string		The current style of treeview.
animate	boolean		Animates a treeview.
lines	boolean		Displays node lines in a treeview.
checkbox	boolean		Sets whether to display a checkbox in front of all nodes. Displays checkboxes by returning a true value when a set function is specified.
cascadeCheck	boolean		Sets whether to check cascade.
onlyLeafCheck	boolean		Sets whether to display checkboxes only in front of leaf nodes.
dnd	boolean		Sets whether to enable drag & drop.
editable	boolean		Edits the selected node.

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formatter	string		The formatter function of treeview.
title	string		The title property of treeview.
nodeId	number	read only	The index of the currently selected node.
nodeLevel	number	read only	The level of the currently selected node.
nodeValue	string	read only	The text of the currently selected node.
selected	boolean	read only	Whether the currently selected node exists.
hasChildren	boolean	read only	Whether there are children of the currently selected node.
nodeCount	number	read only	Total number of nodes in the treeview.

## ■ Methods

function	description	argument	return
loadData	Loads data to a treeview.	<b>data</b> (variable) (A new treeview data)	
getData	Gets full data node information from treeview.		<b>variable</b> (Returns the data currently set in the treeview)
find	Finds target by node id in treeview.	<b>nodeId</b> (number) (Node ID)	<b>variable</b> (Returns Node information for a Node ID)
getNode	Gets the node information of the target from a treeview.	<b>target</b> (variable) (Node target)	<b>variable</b> (Returns the node information of Node ID)
getSelected	Gets the selected node information from treeview. Gets information about the selected node and its children.		<b>variable</b> (Returns the selected node information from treeview)
isLeaf	Gets whether the target in the treeview is bottom of the list.	<b>target</b> (variable) (Node target)	<b>boolean</b> (Returns whether the target in the treeview is the bottom of the list)
select	Selects a random target in the treeview.	<b>target</b> (variable) (Node target)	
unselect	Deselects selected states in a treeview.		
collapse	Collapses nodes of the target in the treeview.	<b>target</b> (string) (Node target to collapse)	
expand	Expands nodes of the target in the treeview.	<b>target</b> (string) (Node target to expand)	
collapseAll	Collapses all nodes in a treeview.		
expandAll	Expands all nodes in a treeview.		
expandTo	Expands Node from treeview to target.	<b>target</b> (string) (Node target)	



toggle	Alternately opens and closes nodes in target in treeview.	target (string) (Node target)	
clear	Deletes data from a treeview.		
clearNodeStrData	Deletes all strData from the currently selected Node information in the treeview.		
addNode	Adds a child node to the Node of the target in the treeview.	<p>pId (number) (Node ID to which you want to add the child node)</p> <p>text (string) (The text to be displayed on the node to add)</p> <p>imgIndex (number) (The image index to be displayed on the node to add)</p> <p>selIndex (number) (The image index displayed when a node is selected to add)</p> <p>key (string) (The key of the Node information to add) (You can distinguish between node information.)</p>	
addChildEx	<p>Add a child node to the currently selected node in the treeview.</p> <p>You can move the node to the key later by entering the key. (.MoveNodeEx(Key )</p>	<p>text (string) (The text to be displayed on the node to add)</p> <p>imgIndex (number) (The image index to be displayed on the node to add)</p> <p>selIndex (number) (The image index displayed when a node is selected to add)</p> <p>key (string) (The key of the Node information to add) (You can distinguish between node information.)</p>	
addNodeStrData	Adds strData to the currently selected Node in the treeview.	strData (variable) (Node strData information)	

edit	Changes information about the currently selected node in the treeview.	<b>text</b> (string) (The text to be displayed on the node to add)  <b>imgIndex</b> (number) (The image index to be displayed on the node to add)  <b>selIndex</b> (number) (The image index displayed when a node is selected to add)	
editNodeStrData	Changes strData of strIndex in the information of the currently selected Node in the treeview.	<b>strIndex</b> (number) (The index of strData in Node information)  <b>strData</b> (variable) (strData information in Node information)	
delete	Deletes a node from a treeview.	<b>nodeId</b> (number) (Node ID)	
deleteChildren	Deletes all children of the currently selected node in the treeview.		
getCurrentStrData	Gets strData for strIndex of the currently selected Node information in the treeview.	<b>strIndex</b> (number) (The index of strData in Node information)	<b>string</b> (Returns strData for the strIndex in the current Node information)
moveNode	Selects the node in the treeview by Node ID.	<b>nodeId</b> (number) (Node ID)	
moveParent	Selects the parent node of the currently selected node in the treeview.		
moveNodeEx	Selects the node with the information containing the key value in the treeview.	<b>key</b> (string) (The key value contained in the node information)	
moveFirstChild	Selects the first child node among the children of the currently selected node in the treeview.		
moveNextChild	Selects the node next to itself among the sibling nodes of the currently selected node in the		

	treeview.		
moveLastChild	Selects the last child node among the children of the currently selected node in the treeview.		
expandEx	Expands the currently selected node in the treeview. Expands only the currently selected node if the argument is false. Expands all child nodes if the argument is true.	TF (boolean) (Whether to expand all children of the selected node)	
collapseEx	Collapses the currently selected node in the treeview. Collapses only the currently selected node if the argument is false. Collapses all child nodes if the argument is true.	TF (boolean) (Whether to collapse all children of the selected node)	
getChecked	Gets the nodes with the checked state. (Available status values: checked, unchecked, indeterminate) Returns a checked Node if no state is assigned.	code (variable) (none: Gets checked nodes) (unchecked: Gets unchecked nodes) (indeterminate: Gets indeterminate nodes) (checked, indeterminate: Gets checked and indeterminate nodes)	variable (Returns information about checked nodes in the treeview.)
check	Sets the specified Node to checked.	target (variable) (Node target)	
uncheck	Sets the specified Node to unchecked.	target (variable) (Node target)	
enableDnd	Enables the drag & drop feature.		
disableDnd	Disables the drag & drop feature.		
beginEdit	Starts editing a Node.	target (variable) (Node target)	
endEdit	Finishes editing a Node.	target (variable) (Node target)	

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cancelEdit	Undo editing a Node.	target (variable) (Node target)	
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## ■ Events

event	argument	description
onContextMenu	evt.args.e (variable) (right-clicked event)  evt.args.node (variable) (Information about the right-clicked node)	Fires when right-clicking on a treeview. Gets the event and node information for the right-clicked position to pop up a context menu.
onLoadSuccess		Fires when the treeview is successfully loaded.
onLoadError		Fires when the treeview is loaded with an error.
onClick	evt.args.node (variable) (Information about the clicked node)	Fires when clicking on a treeview. You can get information about the node you have clicked on.
onDbclick		Fires when pressing the treeview button to open the grid panel.
onBeforeExpand	evt.args.node (variable) (Information about the node to expand.)	Fires before the node of target is expanded in the treeview.
onExpand	evt.args.node (variable) (Information about the expanded node)	Fires when the node of target is expanded in the treeview.
onBeforeCollapse	evt.args.node (variable) (Information about the node to collapse)	Fires before the node of target is collapsed in the treeview.
onCollapse	evt.args.node (variable) (Information about the collapsed node)	Fires when the node of target is collapsed in the treeview.
onBeforeSelect	evt.args.node (variable) (Information about the node to select)	Fires before selecting the target in treeview.
onSelect	evt.args.node (variable) (Information about the selected node)	Fires when selecting the target in treeview.
onBeforeCheck	evt.args.node (variable) (Information about the node to check)  evt.args.checked	Fires before clicking the checkbox. Returns false if the check action is canceled.

	(boolean) (Whether to check)	
onCheck	<b>evt.args.node</b> (variable) (Information about the checked node)  <b>evt.args.checked</b> (boolean) (Whether to check)	Fires when clicking on the checkbox .
onBeforeDrag	<b>evt.args.node</b> (variable) (Information about the node to drag)	Fires before dragging a Node.
onStartDrag	<b>evt.args.node</b> (variable) (Information about the node to drag)	Fires when you start dragging a Node.
onStopDrag	<b>evt.args.node</b> (variable) (Information about the dragged Node)	Fires when dragging a Node and stopping.
onDragEnter	<b>evt.args.target</b> (variable) (The target node to drop)  <b>evt.args.source</b> (variable) (The source node to drag)	Fires when entering a node into a target node that can be dragged and dropped. If false is returned, reject the drop.
onDragOver	<b>evt.args.target</b> (variable) (The target node to drop)  <b>evt.args.source</b> (variable) (The source node to drag)	Fires when dragging a node over the tree.
onDragLeave	<b>evt.args.target</b> (variable) (The target node to drop)  <b>evt.args.source</b> (variable) (The source node to drag)	Fires when dragging a node and leaving on a target node that can drop the node.
onBeforeDrop	<b>evt.args.target</b> (variable) (The target node to drop)  <b>evt.args.source</b> (variable) (The source node to drag)  <b>evt.args.point</b> (string) (Displays drop execution) (possible value: append, top, bottom)	Fires before dropping a Node.

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onDrop	<b>evt.args.target</b> (variable) (The target node to drop)  <b>evt.args.source</b> (variable) (The source node to drag)  <b>evt.args.point</b> (string) (Information about where to drop) (possible value: append, top, bottom)	Fires when dropping a Node.
onBeforeEdit	<b>evt.args.node</b> (variable) (Information about the Node to edit)	Fires before editing a Node.
onAfterEdit	<b>evt.args.node</b> (variable) (Information about the edited Node)	Fires after editing a Node.
onCancelEdit	<b>evt.args.node</b> (variable) (Information about the edited Node)	Fires when you cancel editing a Node.

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## 5. Y[wai] Component Help

### O. cTree

It is a canvas tree based on Canvas.

It supports list formats in a tree structure.

#### ■ Properties

property	data type	read only	description
id	string		The id property of the cTree component. (It is the same as the HTML object ID.)
name	string		The name property of ctree.
dsoName	string		The object ID of the DSO to link.
fldName	string		The field name to link. (Selects one of the fields of the DSO linked to dsoName.)
url	string		The url of the JSON file for setting data in the ctree.
data	variable		The data in JSON format to set in the ctree.
data - fixed data	string		The fixed values that exist when defining the data property.
disabled	boolean		The disabled property of ctree. (true: disabled / false: enabled(default))
dnd	boolean		The drag & drop feature of ctree. (true: possible / false: impossible(default))
style	string		The current style of ctree.
foldIcon	boolean	read only	The small triangle icon that is created at the front of the Folder Type node. You can open or close a node by clicking its icon.
title	string		The title property of treeview.
nodeId	number	read only	The index of the currently selected node.
nodeLevel	number	read only	The level of the currently selected node.



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nodeValue	string	read only	The text of the currently selected node.
selected	boolean	read only	Whether there is a currently selected node.
hasChildren	boolean	read only	Whether there are children of the currently selected node.
nodeCount	number	read only	The total number of nodes in the tree.

## ■ Methods

function	description	argument	return
loadData	Loads data to a ctree.	<b>data</b> (variable) (A new ctree data)	
getData	Gets full data node information from ctree.		<b>variable</b> (Returns the data currently set in the ctree)
find	Finds target by node id in ctree.	<b>nodeId</b> (variable) (Node ID)	<b>variable</b> (Returns Node information for a Node ID)
getNode	Gets the node information of the target from a ctree.	<b>nodeId</b> (variable) (Node ID)	<b>variable</b> (Returns Node information for a Node ID)
getSelected	Gets the selected node information from ctree. Gets information about the selected node and its children.		<b>variable</b> (Returns the selected node information from ctree)
isLeaf	Gets whether the node in the ctree is bottom of the list. Gets whether the node is bottom of the list when passing a node ID as an argument. Gets whether the currently selected node in the ctree is bottom of the list if no argument.	<b>nodeId</b> (variable) (Node ID)	<b>boolean</b> (Returns whether the node in the ctree is the bottom of the list.)
select	Selects a node in the ctree.	<b>nodeId</b> (variable) (Node ID)	
unselect	Deselects selected states in a ctree.		
collapse	Collapses a node in a ctree. Collapses the currently selected node in the ctree if there is no argument.	<b>nodeId</b> (variable) (Node ID to collapse)	
expand	Expands a node in a ctree. Expands the currently selected node in the ctree if there is no	<b>nodeId</b> (variable) (Node ID to expand)	

	argument.		
collapseAll	Collapses all nodes in a ctree.		
expandAll	Expands all nodes in a ctree.		
expandTo	Expands the node in the ctree to the corresponding node and selects.	nodeId (variable) (Node ID)	
toggle	Alternately opens or closes nodes in a ctree. Opens or closes the currently selected node if there is no argument.	nodeId (variable) (Node ID)	
clear	Deletes data from a ctree.		
clearNodeStrData	Deletes all strData from the currently selected node information in the ctree.		
addNode	Adds a child node to a Node in a ctree.	pId (variable) (Node ID to add the child node)  text (string) (The text to be displayed on the node to add)  type (string) (The type to be displayed on the node to add)  strData (variable) (StrData information of the node to add)  nodeId (variable) (ID of the node to add) (You can distinguish between node information.)	
addChildEx	Add a child node to the currently selected node in the ctree.  You can select the node later by entering the ID. (.MoveNodeEx(nodeId))	text (string) (The text to be displayed on the node to add)  type (string) (The type to be displayed on the node to add)  strData (variable)	

		(StrData information of the node to add)  <b>nodeId</b> (variable) (ID of the node to add) (You can distinguish between node information.)	
addNodeStrData	Adds strData to the currently selected Node in the ctree.	<b>strData</b> (variable) (Node strData information)	
edit	Changes information for the currently selected node in the ctree.	<b>text</b> (string) (The text to be displayed on the node to add)  <b>type</b> (string) (The type to be displayed on the node to add)	
editNodeStrData	Changes strData of strIndex in the information of the currently selected Node in the ctree.	<b>strIndex</b> (number) (The index of strData in Node information)  <b>strData</b> (variable) (strData information in Node information)	
delete	Deletes a node from a ctree.	<b>nodeId</b> (variable) (Node ID)	
deleteChildren	Deletes all children of the currently selected node in the ctree.		
getCurrentStrData	Gets strData for strIndex of the currently selected Node information in the ctree.	<b>strIndex</b> (number) (The index of strData in Node information)	<b>string</b> (Returns strData for the corresponding strIndex in the current Node information.)
moveNode	Selects the corresponding node in the ctree by Node ID.	<b>nodeId</b> (variable) (Node ID)	
moveParent	Selects the parent node of the currently selected Node in the ctree.		
moveNodeEx	Selects a node in the ctree with the ID of the node. Selects a node and expands the nodes to that node if you send a value of true to the TF	<b>nodeId</b> (variable) (Node ID)  <b>TF</b> (boolean) (Whether to expand the node to that node)	

	argument. Returns whether the method was processed successfully.	(default: false)))	
moveFirstChild	Selects the first child node among the children of the currently selected node in the ctree.		
moveNextChild	Selects the node next to itself among the sibling nodes of the currently selected node in the ctree.		
moveLastChild	Selects the last child node among the children of the currently selected node in the ctree.		
expandEx	Expands the currently selected node in the ctree. Expands only the currently selected node if the argument is false. Expands all child nodes if the argument is true.	TF (boolean) (Whether to expand all children of the selected node)	
collapseEx	Collapses the currently selected node in the ctree. Collapses only the currently selected node if the argument is false. Collapses all child nodes if the argument is true.	TF (boolean) (Whether to collapse all children of the selected node)	

## ■ Events

event	argument	description
onContextMenu	evt.args.e (variable) (right-clicked event)  evt.args.node (variable) (Information about the right-clicked node)	Fires when right-clicking on a ctree. Gets the event and node information for the right-clicked position to pop up a context menu.
onLoadSuccess		Fires when the ctree is successfully loaded.
onLoadError		Fires when the ctree is loaded with an error.
onClick	evt.args.node (variable) (Information about the clicked node)	Fires when clicking on a ctree. You can get information about the node you have clicked on.
onDbclick		Fires when pressing the ctree button to open the grid panel.
onBeforeExpand	evt.args.node (variable) (Information about the node to expand.)	Fires before the node of target is expanded in the ctree.
onExpand	evt.args.node (variable) (Information about the expanded node)	Fires when the node of target is expanded in the ctree.
onBeforeCollapse	evt.args.node (variable) (Information about the node to collapse)	Fires before the node of target is collapsed in the ctree.
onCollapse	evt.args.node (variable) (Information about the collapsed node)	Fires when the node of target is collapsed in the ctree.
onBeforeSelect	evt.args.node (variable) (Information about the node to select)	Fires before selecting the target in ctree.
onSelect	evt.args.node (variable) (Information about the selected node)	Fires when selecting the target in ctree.
onBeforeDrag	evt.args.node (variable) (Information about the node to drag)	Fires before dragging a Node.
onStartDrag	evt.args.node (variable) (Information about the node)	Fires when you start dragging a Node.

	to drag)	
onStopDrag	<b>evt.args.node</b> (variable) (Information about the dragged Node)	Fires when dragging a Node and stopping.
onDragOver	<b>evt.args.dragNode</b> (variable) (The node to drag)  <b>evt.args.dropTarget</b> (variable) (Information about the target node to drop)  <b>evt.args.dropPoint</b> (variable) (Information about where to drop)	Fires when dragging a node over the tree.
onBeforeDrop	<b>evt.args.dragNode</b> (variable) (The node to drag)  <b>evt.args.dropTarget</b> (variable) (Information about the target node to drop)  <b>evt.args.dropPoint</b> (variable) (Information about where to drop)	Fires before dropping a Node.
onDrop	<b>evt.args.dragNode</b> (variable) (The node to drag)  <b>evt.args.dropTarget</b> (variable) (Information about the target node to drop)  <b>evt.args.dropPoint</b> (variable) (Information about where to drop)	Fires when dropping a Node.

---

## 5. Y[wai] Component Help

### P. Bar Progress

It supports progress in the form of a bar.

It animates a value from 0 to 100.

#### ■ Properties

property	data type	read only	description
id	string		The id property of the Bar Progress. (It is the same as the HTML object ID.)
name	string		The name property of bprogress.
dsoName	string		The object ID of the DSO to link.
fldName	string		The field name to link. (Selects one of the fields of the DSO linked to dsoName.)
style	string		The style property of bprogress.
value	number		The value property of bprogress. (0~100)
title	string		The title property of bprogress.
gradientStart	string		The start value of the gradient for the value color in bprogress. (default: #3aeabb)
gradientEnd	string		The end value of the gradient for the color value in bprogress. (default: #fdd250)
valueText	boolean		Whether to display text representing the value. (true: display(default) / false: do not display)
valueTextColor	string		Sets the font color for ValueText. (default: #000000)
emptyFill	string		The background color for bprogress. (default: #e6e6e6)
linecap	string (option)		The end shape of bprogress. (butt / round)



duration	number		The duration of animation. (default:1200 (1.2 seconds))
animationStartValue	number (option)		The display start value of animation. (0: left → right(default) / 1: right → left)
unit	string		Display units for the value property. (default: No unit)

## ■ Methods

function	description	argument	return
getValue	Gets the value of an object.		number (Returns the value of the input object)
setValue	Sets the value to be entered in the object.	value (number) (The value to enter)	

## ■ Events

event	argument	description
onclick		Fires when clicking on an object.
onDrawEnd		Fires when the animation ends.

---

## 5. Y[wai] Component Help

### Q. Circle Progress

It supports progress in the form of a circle.

It animates a value from 0 to 100.

#### ■ Properties

property	data type	read only	description
id	string		The id property of the Circle Progress. (It is the same as the HTML object ID.)
name	string		The name property of cprogress.
dsoName	string		The object ID of the DSO to link.
fldName	string		The field name to link. (Selects one of the fields of the DSO linked to dsoName.)
style	string		The style property of cprogress.
value	number		The value property of cprogress. (0~100)
title	string		The title property of cprogress.
arcCoef	number (option)		Circumference shape of an object. (0~10(default)) If the value is 10: Circle shape For values of 10 or less: Fan shape
thickness	number		Thickness of an object (default: 20) Enter a value greater than 1.
gradientStart	string		The start value of the gradient for the value color in cprogress. (default: #3aeabb)
gradientEnd	string		The end value of the gradient for the value color in cprogress. (default: #fdd250)
valueText	boolean		Whether to display text representing the value. (true: display(default) / false: do not display)
valueTextColor	string		Sets the font color for ValueText.

			(default: #000000)
emptyFill	string		The background color for cprogress. (default: #e6e6e6)
reverse	boolean		The start direction of the animation. (true: Counterclockwise / false: Clockwise(default))
linecap	string (option)		The end shape of cprogress. (butt / round)
duration	number		The duration of animation. (default: 1200 (1.2 seconds))
animationStartValue	number (option)		The display start value of animation. (0: left → right(default) / 1: right → left)
unit	string		Display units for the value property. (default: No unit)

## ■ Methods

function	description	argument	return
getValue	Gets the value of an object.		number (Returns the value of the input object)
setValue	Sets the value to be entered in the object.	value (number) (The value to enter)	

## ■ Events

event	argument	description
onclick		Fires when clicking on an object.
onDrawEnd		Fires when the animation ends.

---

## 5. Y[wai] Component Help

### R. External

It supports 3rd party libraries.

You can define an object and apply 3rd party libraries.

#### ■ Properties

property	data type	read only	description
id	string		The id property of the External. (It is the same as the HTML object ID.)
name	string		The name property of external.
disabled	boolean		Whether external is disabled. (true: disable / false: enable(default))
readonly	boolean		The readonly property of external. (true: disable / false: enable(default))
style	string		The style property of external.
title	string		The title property of external.
tabindex	number		The tabindex property of external.
createType	string	read only	The createType of external. To create an object using a third-party library : elements: Create with <elem>. (default ) customHtml: Create with your own html.
elements	variable		The <elem> object to apply the 3rd party library to. (You can use as external_grid.elements)
customHtml	string		The <elem> object to apply the 3rd party library to. (You can use as external_grid.elements)

---

## ■ Methods

function	description	argument	return
focus	Moves focus on an object.		
clear	Deletes objects applied to external.		
reload	Reloads an object.		

## ■ Events

event	argument	description
oninit		Fires when an object is loaded. (Calls a function that applies a 3rd party library to this event.)

---

## 5. Y[wai] Component Help

### 5. SubFrame

It inserts another HTML page within the component.

You can use the subFrame Manager to register HTML pages and call the registered pages you have registered from subFrame components.

(※ It can be used in integrations with waiServer.)

#### ■ Properties

property	data type	read only	description
id	string		The id property of the SubFrame. (It is the same as the HTML object ID.)
name	string		The name property of subFrame.
screen	string		The path to the html file to load within the subFrame.
window	variable	read only	The contentWindow object of the html page within the subFrame.
style	string		The style property of subFrame.

---

## 5. Y[wai] Component Help

### T. Search Edit

It combines an input box (wai edit component) with a button.

You can input, output, and modify data.

#### ■ Properties

property	data type	read only	description
id	string		The id property of the SearchEdit. (It is the same as the HTML object ID.)
value	string		The value of SearchEdit.
name	string		The name property of SearchEdit.
style	string		The current style of SearchEdit.
class	string		The current class of SearchEdit.
dsoName	string		The object ID of the DSO to link.
fldName	string		The field name to link. (Selects one of the fields of the DSO linked to dsoName.)
metald	string		metald
bindFieldId	string		bindFieldId
EDIT component	variable		The property of wai edit component.
anchor	string		Automatically adjusts position and size based on the parent object.
disabled	boolean		Whether SearchEdit is disabled. (true: disabled / false: enabled(default))
readonly	boolean		The readonly property of SearchEdit. (true: disabled / false: enabled(default))
tabindex	number		The TabIndex property of SearchEdit.
title	string		The title property of SearchEdit.
hideClearButton	boolean		Returns whether the clear button is hidden.

hideSearchButton	boolean		Returns whether the search button is hidden
searchPosition	string		Returns the position of the search button. (left or right of the input box)
clearButtonImage	boolean		Returns the image of the clear button.
searchButtonImage	string		Returns the image of the search button.
buttonFocusable	boolean		Returns focus settings to buttons.

## ■ Methods

function	description	argument	return
focus	Moves focus on an object.		
getValue	Gets the value of an object.		string
unmaskedValue	Gets the unmasked value.		string
setValue	Sets the value to be entered in the object.	string	
clear	Sets the value of the search input to an empty value.		
getEditComponent	Returns the object of the Edit component to which the control belongs.		variable
search	Fires a search event.		

## ■ Events

event	argument	description
onKeyDown		Fires when pressing a key.
onKeyPress		Fires while pressing a key.
onKeyUp		Fires when releasing a key.
onblur		Fires when an object loses focus.
onfocus		Fires when an object gets focus.



onclick		Fires when clicking on an object.
ondblclick		Fires when double-clicking on an object.
onmousedown		Fires when pressing down the mouse button.
onmouseover		Fires when the mouse cursor moves over an object.
onmouseup		Fires when clicking and releasing the mouse button.
onChange	evt.args.newValue (string) (The changed value)  evt.args.oldValue (string) (The value before it was changed)	Fires when the value of an object changes and loses focus. You can get information about the value before it was changed and the value after it was changed.
onContextmenu		Fires when right-clicking on a SearchEdit.
oncomplete	evt.args.value (string) (The currently entered value)	Fires when input is complete for the input format.
onincomplete	evt.args.value (string) (The currently entered value)	Fires when losing focus after incomplete input.
oncleared		Fires when all inputs are cleared.
onSearch	evt.args.value (string) (The currently entered value)	Fires when the value of the input is searched by clicking the enter key or search button on Searchinput.

---

## 5. Y[wai] Component Help

### U. Image Button

It combines an image area with a button.

#### ■ Properties

property	data type	read only	description
id	string		The id property of the ImageButton. (It is the same as the HTML object ID.)
value	string		The value of ImageButton.
name	string		The name property of ImageButton.
style	string		The current style of ImageButton.
class	string		The current class of ImageButton.
metald	string		metald
anchor	string		Automatically adjusts position and size based on the parent object.
disabled	boolean		Whether ImageButton is disabled. (true: disabled / false: enabled(default))
readonly	boolean		The readonly property of ImageButton. (true: disabled / false: enabled(default))
tabindex	number		The TabIndex property of ImageButton.
title	string		The title property of ImageButton.
image	string		The URL of the image to be displayed on the button.
imageAlign	string		The image position.
imageSize	string		The image size.
group	string		The group name of buttons.

---

## ■ Methods

function	description	argument	return
focus	Moves focus on an object.		
click	Fires a click event.		
setText	Changes the text displayed on the button.	string	
setImage	Changes the image displayed on the button.	string	

## ■ Events

event	argument	description
onblur		Fires when an object loses focus.
onfocus		Fires when an object gets focus.
onclick		Fires when clicking on an object.
ondblclick		Fires when double-clicking on an object.
onmousedown		Fires when pressing down the mouse button.
onmouseover		Fires when the mouse cursor moves over an object.
onmouseup		Fires when clicking and releasing the mouse button.
onKeyDown		Fires when pressing a key.
onKeyPress		Fires while pressing a key.
onKeyUp		Fires when releasing a key.
onContextMenu		Fires when right-clicking on ImageButton.

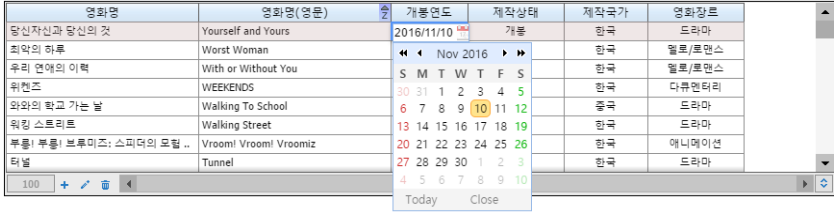
## 6. Y[wai] Component Example

### A. Grid

#### ■ Basic Properties

style, option, data, editorMode, FormatString, ColumnsWidth, FieldMapping

property	source
style	style="position: relative; width: 861; height: 204; border: 1px solid rgb(234, 234, 234);"
option	<pre>"options" : { "editable":false , "columnHeight":20 , "cellHeight":20 , "fixColumn":0 , "indicator":{"show":false,"width":30} , "selector":{"show":false,"width":20,"checked":"none"} , "selection":{"rowSelect":true,"multiSelect":false} , "columns" : [{     "text":"영화명"     , "alignment":"center"     , "width":200     , "type":"column"     , "height":20     , "editable":false     , "visible":true     , "sortable":true     , "sortType":"string"     , "field":"movieNm"     , "style":""     , "editor":{"type":"text","alignment":"left"}   },{     "text":"영화명(영문)"     , "alignment":"center"     , "width":200     , "type":"column"     , "height":20     , "editable":false     , "visible":true     , "sortable":true     , "sortType":"string"     , "field":"movieNmEn"     , "style":""</pre>

	<pre> , "editor": {"type": "text", "alignment": "left"} }, { ~~~~~ } , "style" : {} , "effect": {"columnHighlight": true} , "size": {"vertScrollWidth": 19} , "footer": {"show": true, "height": 24} } </pre>
data	<pre> grid3.SetData(movieList2016); // movieList2016 is JSON format data declared as a variable. </pre>
editorMode	<pre> grid3.editorMode=true; </pre>
result	
	

## ■ Style Properties

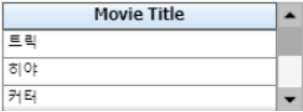
mask, text, password, codecombo, date, currency, checkbox, calculator, button, image

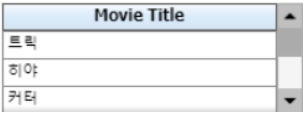
property	source																
mask	example																
	<pre>"mask": "#####-999999" "mask": "[999]9999-9999" "mask": "9999/99/99 99:99:99" "mask": "999999-999999"</pre>																
	columns																
	<pre>"columns" : [ {   "field": "FIELD_VALUE",   "editable": true,   "width": 150,   "editor": {     "alignment": "center",     "type": "mask",     "mask": "#####-999999",     "text": "주민번호"   }, }, {   "field": "FIELD_VALUE2",   "editable": true,   "width": 150,   "editor": {     "alignment": "center",     "type": "mask",     "mask": "[999]9999-9999",     "text": "핸드폰"   }, }, {   "field": "FIELD_VALUE3",   "editable": true,   "width": 150,   "editor": {     "alignment": "center",     "type": "mask",     "mask": "9999/99/99 99:99:99",     "text": "시간"   }, }, {   "field": "FIELD_VALUE4",   "editable": true,   "width": 150,   "editor": {     "alignment": "center",     "type": "mask",     "mask": "999999-999999",     "text": "주민번호"   }, } ]</pre>																
result																	
<table><tr><td>주민번호</td><td>핸드폰</td><td>시간</td><td>주민번호</td></tr><tr><td>#####-1234567</td><td>[010]1234-5678</td><td>2019/03/18 20:40:38</td><td>190911-123456</td></tr></table> <table><tr><td>주민번호</td><td>핸드폰</td><td>시간</td><td>주민번호</td></tr><tr><td>#####-1234567</td><td>[010]1234-5678</td><td><div>20190318 20:40:38</div></td><td>190911-123456</td></tr></table> <div>Edit Mode</div>		주민번호	핸드폰	시간	주민번호	#####-1234567	[010]1234-5678	2019/03/18 20:40:38	190911-123456	주민번호	핸드폰	시간	주민번호	#####-1234567	[010]1234-5678	<div>20190318 20:40:38</div>	190911-123456
주민번호	핸드폰	시간	주민번호														
#####-1234567	[010]1234-5678	2019/03/18 20:40:38	190911-123456														
주민번호	핸드폰	시간	주민번호														
#####-1234567	[010]1234-5678	<div>20190318 20:40:38</div>	190911-123456														

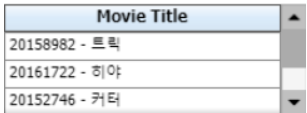
property	source
text	<pre>&lt;grid id="gridText" style="position: relative;height: 41px; width:102px; border: 1px solid rgb(234, 234, 234);" &gt;   "options" : {     "editable":false     ,"columnHeight":20     ,"cellHeight":20     ,"fixColumn":0     ,"indicator":{"show":false,"width":30}     ,"selector":{"show":false,"width":20,"checked":"none"}     ,"selection":{"rowSelect":true,"multiSelect":false}     ,"columns" : [       { "text":"text"         ,"alignment":"center"         ,"width":100         ,"type":"column"         ,"height":20         ,"editable":true         ,"visible":true         ,"sortable":true         ,"sortType":"string"         ,"field":"FIELD_VALUE"         ,"style":""         ,"editor":{"type":"text","alignment":"left"}       }     ]     ,"effect":{"columnHighlight":true}      ,"size":{"columnWidth":75,"columnHeight":20,"cellHeight":20,"vertScrollWidth":19}     ,"footer":{"show":false,"height":24}   },   "data" : [     {"FIELD_VALUE":"REF00001"}   ] &lt;/grid&gt;</pre>
result	
<div><div><div>text</div><div>REF00001</div></div><div><div>text</div><div>REF00001</div></div><div>Edit Mode</div></div>	

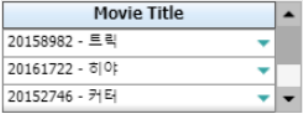
property	source
password	example
	<pre>"editor":{"alignment":"center","type":"password","mask":"*"} "excelMask":"./g","excelSymbols":"*"</pre>
	columns
	<pre>"columns" : [   {     "text":"Movie Title"     ,"alignment":"center"     ,"width":200     ,"type":"column"     ,"height":20     ,"editable":"true"     ,"visible":true     ,"sortable":true     ,"sortType":"string"     ,"field":"FIELD_VALUE"     ,"style":""     ,"editor":{"alignment":"left","type":"password","mask":"*"}     ,"excelMask":"./g","excelSymbols":"*"   } ]</pre>
result	
<div><div><div>Movie Title</div><div>*****</div><div>*****</div><div>*****</div></div><div><div>Movie Title</div><div>*****</div><div>*****</div><div>*****</div></div><div>Edit Mode</div></div>	



property	source
codecombo (data load)  XML file load	example
	<xml id="F945" src="/F945.xml" style="display: none;"></xml>
	columns
	<pre>"columns" : [   {     "text": "Movie Title"     , "alignment": "center"     , "width": 200     , "type": "column"     , "height": 20     , "editable": true     , "visible": true     , "sortable": true     , "sortType": "string"     , "field": "FIELD_VALUE"     , "style": ""     , "editor": {       "type": "LookupComboBox"       , "listsource": "F945"       , "alignment": "left"       , "keyfieldnames": "CODE"       , "dropdownwidth": "200px"       , "dropdownheight": "100px"       , "dispField": "CODE_NM"     }     , "droplist": "CODE, CODE, 50, center; CODE_NM, CODE_NM, 130, left"   } ]</pre>
result	
	

property	source
codecombo (data load)  JSON load	example
	<pre>var json_data =[{CODE:"20158982" , CODE_NM:"트릭"} ,{CODE:"20161722" , CODE_NM:"히야"} ,{CODE:"20152746" , CODE_NM:"커터"} ,{CODE:"20154910" , CODE_NM:"터널"} ,{CODE:"20144444" , CODE_NM:"아가씨"} ,{CODE:"20158482" , CODE_NM:"동주"} ,{CODE:"20130979" , CODE_NM:"덕혜옹주"}]  그리드ID.SetJsonStorage("F945",json_data);</pre>
	columns
	<pre>"columns" : [ { "text":"Movie Title" ,"alignment":"center" ,"width":200 ,"type":"column" ,"height":20 ,"editable":true ,"visible":true ,"sortable":true ,"sortType":"string" ,"field":"FIELD_VALUE" ,"style":"" ,"editor":{ "type":"LookupComboBox" ,"codeName":"F945" ,"alignment":"left" ,"keyfieldnames":"CODE" ,"dropdownwidth":"200px" ,"dropdownheight":"100px" ,"dispField":"CODE_NM" } ,"droplist":"CODE,CODE,50,center;CODE_NM,CODE_NM,130,left" } ]</pre>
result	
	

property	source
codecombo (display format)  mask	example
	"mask":"keyfieldnames - dispField"
	columns
	<pre> "columns" : [   {     "text":"Movie Title"     ,"alignment":"center"     ,"width":200     ,"type":"column"     ,"height":20     ,"editable":true     ,"visible":true     ,"sortable":true     ,"sortType":"string"     ,"field":"FIELD_VALUE"     ,"style":""     ,"editor":{       "type":"LookupComboBox"       "mask":"keyfieldnames - dispField"       ,"codeName":"F945"       ,"alignment":"left"       ,"keyfieldnames":"CODE"       ,"dropdownwidth":"200px"       ,"dropdownheight":"100px"       ,"dispField":"CODE_NM"        ,"droplist":"CODE,CODE,50,center;CODE_NM,CODE_NM,130,left"     }   } ] </pre>
result	
	

property	source
codecombo (display format)  showIcon	example
	"showIcon":true
	columns
	<pre> "columns" : [   {     "text":"Movie Title"     ,"alignment":"center"     ,"width":200     ,"type":"column"     ,"height":20     ,"editable":true     ,"visible":true     ,"sortable":true     ,"sortType":"string"     ,"field":"FIELD_VALUE"     ,"style":""     ,"editor":{       "type":"LookupComboBox"       "showIcon":true,       "mask":"keyfieldnames - dispField"       ,"codeName":"F945"       ,"alignment":"left"       ,"keyfieldnames":"CODE"       ,"dropdownwidth":"200px"       ,"dropdownheight":"100px"       ,"dispField":"CODE_NM"        ,"droplist":"CODE,CODE,50,center;CODE_NM,CODE_NM,130,left"     }   } ] </pre>
result	
	

property	source
date	<pre>&lt;grid id="griddate" style="position: relative;height: 41px; width:142px; border: 1px solid rgb(234, 234, 234);" &gt;   "options" : {     "editable":false     ,"columnHeight":20     ,"cellHeight":20     ,"fixColumn":0     ,"indicator":{"show":false,"width":30}     ,"selector":{"show":false,"width":20,"checked":"none"}     ,"selection":{"rowSelect":true,"multiSelect":false}     ,"columns" : [       { "text":"date"         ,"alignment":"center"         ,"width":140         ,"type":"column"         ,"height":20         ,"editable":true         ,"visible":true         ,"sortable":true         ,"sortType":"string"         ,"field":"FIELD_VALUE"         ,"style":""         ,"editor":{"type":"date","alignment":"center","dateOrder":"ddmmyyyy"}       }     ]     ,"effect":{"columnHighlight":true}      ,"size":{"columnWidth":75,"columnHeight":20,"cellHeight":20,"vertScrollWidth":19}     ,"footer":{"show":false,"height":24}   }, "data" : [     {"FIELD_VALUE": "20170307"}   ] &lt;/grid&gt;</pre>
result	
<div><div><div>date</div><div>07/03/2017</div></div><p>If you run the script below in that component,</p><pre>griddate.gridObj.option.columns[0].editor.dateOrder ="yyymmdd"; var grdData = [{"FIELD_VALUE": "20170307"}]; griddate.SetData(grdData); griddate.Refresh();</pre></div> <div><div><div>date</div><div>2017/03/07</div></div><p>it will display the date in the form of yyymmdd.</p></div> <div><div><div>date</div><div>2017/03/07</div><div>2017/03/07</div><div>Mar 2017</div><div>S M T W T F S</div><div>26 27 28 1 2 3 4</div><div>5 6 7 8 9 10 11</div><div>12 13 14 15 16 17 18</div><div>19 20 21 22 23 24 25</div><div>26 27 28 29 30 31 1</div><div>2 3 4 5 6 7 8</div><div>Today Close</div></div><div>Edit Mode</div></div>	

property	source
currency	<pre> &lt;grid id="gridcurrency" style="position: relative;height: 41px; width:142px; border: 1px solid rgb(234, 234, 234);" &gt;   "options" : {     "editable":false     ,"columnHeight":20     ,"cellHeight":20     ,"fixColumn":0     ,"indicator":{"show":false,"width":30}     ,"selector":{"show":false,"width":20,"checked":"none"}     ,"selection":{"rowSelect":true,"multiSelect":false}     ,"columns" : [       { "text":"currency"         ,"alignment":"center"         ,"width":140         ,"type":"column"         ,"height":20         ,"editable":true         ,"visible":true         ,"sortable":true         ,"sortType":"string"         ,"field":"FIELD_VALUE"         ,"style":""         ,"editor":{"type":"currency"           ,"alignment":"right"           ,"prefix" : "¥"           ,"digits" : "2"         }       }     ]     ,"effect":{"columnHighlight":true}      ,"size":{"columnWidth":75,"columnHeight":20,"cellHeight":20,"vertScrollWidth":19}     ,"footer":{"show":false,"height":24}   }, "data" : [     {"FIELD_VALUE":"1004"}   ] &lt;/grid&gt; </pre>
	option
	<p>prefix : currency symbol (default: no currency symbol)</p> <p>digits : The number of decimal places (default: digits="2")</p>

## result

currency
¥ 1,004.00

If you run the script below in that component,

```
gridcurrency.gridObj.option.columns[0].editor.prefix='$';  
gridcurrency.Refresh();
```

currency
\$1,004.00

it will be converted into dollars.

currency
\$1,004.00

Edit Mode

property	source
checkbox	<pre> &lt;grid id="gridcheckbox" style="position: relative;height: 41px; width:142px; border: 1px solid rgb(234, 234, 234);" &gt;   "options" : {     "editable":false     ,"columnHeight":20     ,"cellHeight":20     ,"fixColumn":0     ,"indicator":{"show":false,"width":30}     ,"selector":{"show":false,"width":20,"checked":"none"}     ,"selection":{"rowSelect":true,"multiSelect":false}     ,"columns" : [       { "text":"checkbox"         ,"alignment":"center"         ,"width":140         ,"type":"column"         ,"height":20         ,"editable":true         ,"visible":true         ,"sortable":true         ,"sortType":"string"         ,"field":"FIELD_VALUE"         ,"style":""         ,"editor":{"type":"checkbox","alignment":"center"}       }     ]     ,"effect":{"columnHighlight":true}      ,"size":{"columnWidth":75,"columnHeight":20,"cellHeight":20,"vertScrollWidth":19}     ,"footer":{"show":false,"height":24}   }, "data" : [     {"FIELD_VALUE":"true"}   ] &lt;/grid&gt; </pre>
result	
<div>checkbox</div> <div><input checked="" type="checkbox"/></div>	



property	source
calculator	<pre> &lt;grid id="grid1" style="height: 204px;width:700px; border: 1px solid rgb(234, 234, 234);" &gt;   "options" : {     "editable":false     ,"columnHeight":20     ,"cellHeight":20     ,"fixColumn":0     ,"indicator":{"show":true,"width":30}     ,"selector":{"show":false,"width":20}     ,"conditionalstyle":[ ]     ,"columns" : [       {         "text": "Movie Title"         ,"width":260         ,"type": "column"         ,"height":20         ,"editable":false         ,"visible":true         ,"sortable":true         ,"sortType": "string"         ,"field": "movieNm"         ,"style": ""         ,"editor":{"type": "text", "alignment": "left"}       }       ,{         "text": "Sales Amount"         ,"width":200         ,"type": "column"         ,"height":20         ,"editable":true         ,"visible":true         ,"sortable":true         ,"sortType": "string"         ,"field": "salesAcc"         ,"style": ""         ,"editor":{"type": "CalcEdit", "displayformat": "", "0", "alignment": "right"}       }       ,{         "text": "Movie Audience"         ,"width":190         ,"type": "column"         ,"height":20         ,"editable":false         ,"visible":true         ,"sortable":true         ,"sortType": "string" </pre>

```

,"field": "audiAcc"
,"style": ""
,"editor": { "type": "currency", "digits": "0", "alignment": "right" }
}
]
,"style": {}
,"effect": { "columnHighlight": true }
,"size": { "vertScrollWidth": 19 }
,"footer": { "show": true, "height": 24 }
}

```

option

',' : It displays thousand units.

ex) 0.00 → 1,234.56

result

	Movie Title	Sales Amount	Movie Audience
1	미션임파서블:고스트프로토콜	40,541,108,500	5,328,435
2	마이 웨이	13,002,897,500	1,739,543
3	셀러블즈 : 그림자 게임	10,678,327,500	1,442,861
4	퍼펙트 게임	6,640,940,000	895,416
5	프렌즈: 몬스터섬의비밀	1,523,037,000	202,909
6	라이온 킹	1,841,625,000	171,285
7	오작합 연애	20,634,684,500	2,823,060
8	극장판 포켓몬스터 베스트 위시 "비크티니와 벽의..	1,897,120,000	285,959

property	source
button	<pre>//assign event to button function load(){     grid1.onButtonClick = function(grid, column, Index, RecNo){         var data = grid1.GetData(column.field);         alert("ButtonClick Index : " + Index + " RecNo: " + RecNo + " Data: " + data[RecNo][column.field]);     } }  &lt;grid id="grid1" style="height: 204px;width:700px; border: 1px solid rgb(234, 234, 234);" &gt;     "options" : {         "editable":false         ,"columnHeight":20         ,"cellHeight":20         ,"fixColumn":0         ,"indicator":{"show":true,"width":30}         ,"selector":{"show":false,"width":20,"checked":"none"}         ,"selection":{"rowSelect":true,"multiSelect":false}         ,"conditionalstyle":[ ]         ,"columns" : [             {                 "text":"Movie Title"                 ,"alignment":"center"                 ,"width":200                 ,"type":"column"                 ,"height":20                 ,"editable":false                 ,"visible":true                 ,"sortable":true                 ,"sortType":"string"                 ,"field":"movieNm"                 ,"style":""                 ,"editor":{"type":"text","alignment":"left"}             }             ,{                 "text":"Production Status"                 ,"alignment":"center"                 ,"width":100                 ,"type":"column"                 ,"height":20                 ,"editable":false                 ,"visible":true                 ,"sortable":true                 ,"sortType":"string"                 ,"field":"prdtStatNm"             }         ]     } &lt;/grid&gt;</pre>

```

,"style":""
,"editor":{"type":"button","alignment":"center"}
}
,{
"text":"Production Country"
,"alignment":"center"
,"width":87
,"type":"column"
,"height":20
,"editable":false
,"visible":true
,"sortable":true
,"sortType":"string"
,"field":"nationAlt"
,"style":""
,"editor":{"type":"text","alignment":"center"}
}
,{
"text":"Movie genre"
,"alignment":"center"
,"width":100
,"type":"column"
,"height":20
,"editable":false
,"visible":true
,"sortable":true
,"sortType":"string"
,"field":"genreAlt"
,"style":""
,"editor":{"type":"text","alignment":"center"}
}
]
,"style":{}
,"effect":{"columnHighlight":true}
,"size":{"vertScrollWidth":19}
,"footer":{"show":true,"height":24}
}

```

### result

	Movie Title	Production St..	Production ..	Movie genre
1	트릭	개봉	한국	스릴러,드라마
2	히야	개봉	한국	드라마
3	커터	개봉	한국	범죄,드라마
4	타널	개봉	한국	드라마
5	아가씨	개봉	한국	스릴러,드라마
6	동주	개봉	한국	드라마
7	덕혜옹주	개봉	한국	사극,드라마
8	곡성	개봉	한국	미스터리,스릴러..









property	source
	example
image	<pre> &lt;!DOCTYPE html&gt; &lt;html lang="en" style="width:1280px;height:1024px"&gt; &lt;head&gt;   &lt;meta charset="UTF-8"&gt;   &lt;title&gt;&lt;/title&gt;   &lt;script type="text/javascript" src="/Y[wai]/wai.js"&gt;&lt;/script&gt;   &lt;link href="/css/default.css" rel="stylesheet" type="text/css"&gt;  &lt;/head&gt; &lt;body&gt;    &lt;grid id="grid1" style="height: 204px;width:700px; border: 1px solid rgb(234, 234, 234);" &gt;     "options" : {       "editable":false       ,"columnHeight":20       ,"cellHeight":20       ,"fixColumn":0       ,"indicator":{"show":true,"width":30}       ,"selector":{"show":false,"width":20}       ,"columns" : [         {           "text": "Movie Title"           ,"alignment": "center"           ,"width":200           ,"field": "movieNm"           ,"editor":{"type": "text", "alignment": "left"}         }         ,{           "text": "Country"           ,"alignment": "center"           ,"width":60           ,"field": "nationImg"           ,"editor":{"type": "image", "alignment": "center", "imgmode" : "stretch"}         }         ,{           "text": "Production Country"           ,"alignment": "center"           ,"width":87           ,"field": "nationAlt"           ,"editor":{"type": "text", "alignment": "center"}         }         ,{           "text": "Movie genre"           ,"alignment": "center"           ,"width":100 </pre>

	<pre>       , "field": "genreAlt"       , "editor": { "type": "text", "alignment": "center" }     }   ]   , "style": {}   , "effect": { "columnHighlight": true }   , "size": { "vertScrollWidth": 19 }   , "footer": { "show": true, "height": 24 }   },   "data": [ { "movieNm": "곡성", "nationImg": ".css/images/Korea.png", "nationAlt": "한국", "genreAlt": "미스터리, 스릴러, 드라마" }, { "movieNm": "밀정", "nationImg": ".css/images/Korea.png", "nationAlt": "한국", "genreAlt": "액션" }, { "movieNm": "나쁜놈은 죽는다", "nationImg": ".css/images/China.png", "nationAlt": "중국, 한국", "genreAlt": "코미디, 액션" }, { "movieNm": "당신자신과 당신의 것", "nationImg": ".css/images/Korea.png", "nationAlt": "한국", "genreAlt": "드라마" }, { "movieNm": "사랑은 부영부영", "nationImg": ".css/images/France.png", "nationAlt": "프랑스", "genreAlt": "드라마, 코미디, 멜로/로맨스" }, { "movieNm": "트릭", "nationImg": ".css/images/Korea.png", "nationAlt": "한국", "genreAlt": "스릴러, 드라마" }, { "movieNm": "서프러제트", "nationImg": ".css/images/America.png", "nationAlt": "미국", "genreAlt": "드라마" }, { "movieNm": "줄리에타", "nationImg": ".css/images/Spain.png", "nationAlt": "스페인", "genreAlt": "드라마" }, { "movieNm": "도성풍운 3", "nationImg": ".css/images/HongKong.png", "nationAlt": "홍콩", "genreAlt": "코미디, 드라마" }, { "movieNm": "아가씨", "nationImg": ".css/images/Korea.png", "nationAlt": "한국", "genreAlt": "스릴러, 드라마" } ] &lt;/grid&gt;  &lt;/body&gt; &lt;/html&gt; </pre>
	<div data-bbox="964 1352 1045 1381">options</div> <div data-bbox="591 1415 695 1444"><b>imgmode</b></div> <div data-bbox="591 1486 1419 1885"> <p>Normal It is placed in the top left corner of the column header. If the image is larger than the column header, it will be cropped.</p> <p>Stretch Images within a column header are stretched or shrunk to fit the size of the column header.</p> <p>Center If the column header is larger than the image, the image will be centered. If the image is larger than the column header, the image is centered on the column header and the outer edges are cropped.</p> </div>

Zoom

Increases or decreases the size of an image while maintaining its aspect ratio.

### result

	Movie Title	Country	Production ..	Movie genre
1	국성		한국	미스터리,스릴러..
2	물정		한국	액션
3	나쁜놈은 죽는다		중국,한국	코미디,액션
4	당신자신과 당신의 것		한국	드라마
5	사랑은 부영부영		프랑스	드라마,코미디,..
6	트릭		한국	스릴러,드라마
7	서프러제트		미국	드라마
8	올리타		스페인	드라마

10

## ■ Data Binding

remote data, local data, scroll performance

feature	example
<p>remote data</p> <p>You can use remote data binding by specifying a web service that returns data in JSON or remote endpoint.</p>	<pre> &lt;!DOCTYPE html&gt; &lt;html lang="en" style="width:1280px;height:1024px"&gt; &lt;head&gt;   &lt;meta charset="UTF-8"&gt;   &lt;title&gt;&lt;/title&gt;   &lt;script type="text/javascript" src="/Y[wai]/wai.js"&gt;&lt;/script&gt;   &lt;link href="/css/default.css" rel="stylesheet" type="text/css"&gt;   &lt;script type="text/javascript" src="/testData/searchMovieList2016.js"&gt;&lt;/script&gt;   &lt;script type="text/javascript"&gt;     \$(document).ready(function() {       grid1.SetData(movieList2016);     });   &lt;/script&gt; &lt;/head&gt; &lt;body&gt; &lt;grid id="grid1" style="height: 504px;width: 1000px; border: 1px solid rgb(234, 234, 234); position: relative;"&gt;   "options" : {     "editable":false     ,"columnHeight":20     ,"cellHeight":20     ,"fixColumn":0     ,"contextmenu":true     ,"indicator":{"show":true,"width":30}     ,"selector":{"show":false,"width":20,"type":"check"}     ,"aggregate": [ { "field": "grid_index", "expression": "count" ,"alias" : "count" },       { "field": "audience", "expression": "SUM" ,"alias" : "sum"     ,"displayformat":",0" },       { "field": "audience", "expression": "average","alias" : "average"     ,"displayformat":",0.00"},       { "field": "audience", "expression": "min" ,"alias" : "min","displayformat":",0"},       { "field": "audience", "expression": "max","alias" : "max"     ,"displayformat":",0"}]     ,"columns" : [       {"text":"Movie code","alignment":"center","width":100,"field":"movieCd","editor":{"type": "text","alignment":"center"},"summaryTemplate" : "Count: #=count#"}       ,{"text":"Korea","alignment":"center","width":100,"field":"movieNm","edit </pre>



```

or":{"type":"text","alignment":"left"}}

,{"text":"English","alignment":"center","width":100,"field":"movieNmEn","
editor":{"type":"text","alignment":"left"}}
,{"text":"Year of
production","alignment":"center","width":80,"height":20,"field":"prdtYear
","editor":{"type":"text","alignment":"center"}}
,{"text":"Open
year","alignment":"center","width":80,"field":"openDt","editor":{"type":"da
te","alignment":"center","dtOrder":"yyymmdd","dtSeparator":"/"}}

,{"text":"Audience","alignment":"center","width":150,"field":"audience","e
ditor":{"type":"CalcEdit","displayformat":"",
,"alignment":"right"},"summaryTemplate": "Total Audience: #=sum#"}

,{"text":"Country","alignment":"center","width":200,"field":"nationAlt","ed
itor":{"type":"text","alignment":"center"},"summaryTemplate": "Average
Audience: #=average#"}
,{"text":"Movie
genre","alignment":"center","width":150,"height":20,"field":"genreAlt","e
ditor":{"type":"text","alignment":"center"},"summaryTemplate": "Min :
#=min# Max : #=max#"}
}
,"style":{}
,"effect":{"columnHighlight":true}
,"size":{"vertScrollWidth":19}
,"footer":{"show":true,"height":24}
}
</grid>

</body>
</html>

```

## result

	Movie code	Korea	English	Year of pr.	Open year	Audience	Country	Movie genre
1	20158982	트릭	Trick	2016	2016/07/13		한국	스릴러,드라마
2	20161722	히야	HIYA	2015	2016/03/10		한국	드라마
3	20152746	커터	Eclipse	2016	2016/03/30		한국	범죄,드라마
4	20154910	터널	Tunnel	2016	2016/08/10		한국	드라마
5	20144444	아가씨	The Handmaiden	2016	2016/06/01		한국	스릴러,드라마
6	20158482	동주	DONGJU: The Po...	2015	2016/02/17		한국	드라마
7	20150979	역여왕	The Last Princess	2016	2016/08/03		한국	사극,드라마
8	20140194	곡성	THE WAILING	2016	2016/05/12		한국	미스터리,스릴러,드라마
9	20169730	당신자신과 당신..	Yourself and Yours	2016	2016/11/10		한국	드라마
10	20159646	죽영	The Age of Shad...	2016	2016/09/07		한국	역전
11	20153443	아수라	Asura : The City ...	2016	2016/09/28		한국	범죄,액션
12	20150901	올레	DETOUR	2016	2016/08/25		한국	드라마,코미디
13	20145502	남과 여	A Man and A Wo...	2015	2016/02/25		한국	멜로/로맨스
14	20165723	메이킹 패밀리	Making Family	2016	2016/11/28		한국,중국	멜로/로맨스,드라마
15	20140704	비밀은 없다	The Truth Benea...	2015	2016/06/23		한국	스릴러
16	20142406	탈영 종말동: 사..	The Phantom De...	2016	2016/05/04		한국	드라마,액션
17	20164527	부름! 부름! 부름..	Vroom! Vroom! ..	2016	2016/12/15		한국	애니메이션
18	20161694	저자 유한준 2 - ..		2016	2016/11/10		한국	다큐멘터리
19	20162206	브룩클린	Brooklyn	2016	2016/04/21		미국	드라마,멜로/로맨스
20	20165521	극장판 포러스트..		2015	2016/07/07		한국,일본	애니메이션,드라마,판타지
21	20155321	최악의 하루	Worst Woman	2016	2016/08/25		한국	멜로/로맨스
22	20161961	나는 용인이다	The Witness	2015	2016/09/14		한국,중국	미스터리,스릴러
23	20154803	우리 연애의 이력	With or Without ..	2015	2016/06/29		한국	멜로/로맨스

feature	example
<p>local data</p> <p>You can use local data binding by providing a JavaScript object/JSON array using the datasource data property of grid.</p>	<pre> &lt;!DOCTYPE html&gt; &lt;html lang="en" style="width:1280px;height:1024px"&gt; &lt;head&gt;   &lt;meta charset="UTF-8"&gt;   &lt;title&gt;&lt;/title&gt;   &lt;script type="text/javascript" src="/Y[wai]/wai.js"&gt;&lt;/script&gt;   &lt;link href="/css/default.css" rel="stylesheet" type="text/css"&gt;  &lt;/head&gt; &lt;body&gt; &lt;grid id="grid1" style="height: 504px;width: 1000px; border: 1px solid rgb(234, 234, 234); position: relative;"&gt;   "options" : {     "editable":false     ,"columnHeight":20     ,"cellHeight":20     ,"fixColumn":0     ,"contextmenu":true     ,"indicator":{"show":true,"width":30}     ,"selector":{"show":false,"width":20,"type":"check"}     ,"columns" : [       {"text":"Movie code", "alignment":"center", "width":100, "field":"movieCd", "editor":{"type": "text", "alignment":"center"} , "summaryTemplate" : "Count: #=count#"}        ,{"text":"Korea", "alignment":"center", "width":100, "field":"movieNm", "edit or":{"type":"text", "alignment":"left"}}        ,{"text":"English", "alignment":"center", "width":100, "field":"movieNmEn", " editor":{"type":"text", "alignment":"left"}}       ,{"text":"Year of production", "alignment":"center", "width":80, "height":20, "field":"prdtYear ", "editor":{"type":"text", "alignment":"center"}}       ,{"text":"Open year", "alignment":"center", "width":80, "field":"openDt", "editor":{"type":"da te", "alignment":"center", "dtOrder":"yyymmdd", "dtSeparator":"/"}}        ,{"text":"Audience", "alignment":"center", "width":150, "field":"audience", "e ditor":{"type":"CalcEdit", "displayformat":"", , "alignment":"right"}, "summaryTemplate" : "Total Audience: #=sum#"}        ,{"text":"Country", "alignment":"center", "width":200, "field":"nationAlt", "ed itor":{"type":"text", "alignment":"center"}, "summaryTemplate" : "Average Audience: #=average#"}       ,{"text":"Movie </pre>

	<pre> genre","alignment":"center","width":150,"height":20,"field":"genreAlt","e ditor":{"type":"text","alignment":"center"},"summaryTemplate":"Min : #=min# Max : #=max#"} ] ,"style":{} ,"effect":{"columnHighlight":true} ,"size":{"vertScrollWidth":19} ,"footer":{"show":true,"height":24} }, "data":[ { "movieCd": "20158982", "audience": "38093", "movieNm": "트릭", "movieNmEn": "Trick", "prdtYear": "2016", "openDt": "20160713", "typeNm": "장편", "prdtStatNm": "개봉", "nationImg": "/css/images/Korea.png", "nationAlt": "한국", "genreAlt": "스릴러,드라마", "repNationNm": "한국", "repGenreNm": "스릴러", "directors": [{ "peopleNm": "이창열" }], "companys": [{ "companyCd": "20160481", "companyNm": "엘씨오픽쳐스" }], . . . { "movieCd": "20166984", "audience": "0", "movieNm": "위험한 유혹", "movieNmEn": "As I Lay Dying", "prdtYear": "2013", "openDt": "20161228", "typeNm": "장편", "prdtStatNm": "개봉", "nationImg": "/css/images/America.png", "nationAlt": "미국", "genreAlt": "드라마", "repNationNm": "미국", "repGenreNm": "드라마", "directors": [{ </pre>
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```

"peopleNm": "제임스 프랭코"
}},
"companys": []
} ]
</grid>

</body>
</html>

```

## result

	Movie code	Korea	English	Year of pr..	Open year	Audience	Country	Movie genre
1	20158982	트릭	Trick	2016	2016/07/13	38,093	한국	스릴러,드라마
2	20161722	히아	HIYA	2015	2016/03/10	21,495	한국	드라마
3	20152746	커터	Eclipse	2016	2016/03/30	19,399	한국	범죄,드라마
4	20154910	터널	Tunnel	2016	2016/08/10	7,120,166	한국	드라마
5	20144444	아가씨	The Handmaiden	2016	2016/06/01	42,889,698	한국	스릴러,드라마
6	20158482	동주	DONGJU: The Po..	2015	2016/02/17	1,176,920	한국	드라마
7	20150979	역적:홍길동	The Last Princess	2016	2016/08/03	5,599,606	한국	사극,드라마
8	20140194	곡성	THE WAILING	2016	2016/05/12	6,877,896	한국	미스터리,스릴러,드라마
9	20169730	당신자신과 당신..	Yourself and Yours	2016	2016/11/10	180,000	한국	드라마
10	20159646	불경	The Age of Shad..	2016	2016/09/07	7,499,735	한국	역전
11	20153443	아수라	Asura : The City ..	2016	2016/09/28	2,594,749	한국	범죄,액션
12	20150901	출타	DETOUR	2016	2016/08/25	66,419	한국	드라마,코미디
13	20145502	남과 여	A Man and A Wo..	2015	2016/02/25	203,457	한국	멜로/로맨스
14	20165723	메이킹 패밀리	Making Family	2016	2016/11/28	205	한국,중국	멜로/로맨스,드라마
15	20140704	비밀은 없다	The Truth Benea..	2015	2016/06/23	250,958	한국	스릴러
16	20142406	탐정 조질동: 사..	The Phantom De..	2016	2016/05/04	1,430,960	한국	드라마,액션
17	20164527	부릉! 부릉! 브루..	Vroom! Vroom! ..	2016	2016/12/15	11,000	한국	애니메이션
18	20161694	재자 속한들 2 - ..		2016	2016/11/10	9,533	한국	다큐멘터리
19	20162206	브루클린	Brooklyn	2016	2016/04/21	51,000	미국	드라마,멜로/로맨스
20	20165521	국장반 프리콜스..		2015	2016/07/07	9,629	한국,일본	애니메이션,드라마,판타지
21	20155321	최악의 하루	Worst Woman	2016	2016/08/25	408	한국	멜로/로맨스
22	20161961	나는 줄인이다	The Witness	2015	2016/09/14	1,407	한국,중국	미스터리,스릴러
23	20154803	우리 연애의 이력	With or Without ..	2015	2016/06/29	3,043	한국	멜로/로맨스

feature	example
scroll performance	SetData(1,000 Data) 1000 Download Time 0.005 second SetData Time 0.354 second
Loads a large amount of data.	Setdata(10,000 Data) 10000 Downloaded Time 0.029 second SetData Time 0.128 second
	SetData(100,000 Data) 100000 Downloaded Time 0.215 second SetData Time 1.18 second

result

	Movie code	Korea	English	Year of pr..	Movie type	Productio..	Open year	Country	
1	20227670	그리고 집	I'm Here	2022	단편	기타		한국	
2	20224442	필한이는 자라서	When You Grow Up	2022	단편	기타		한국	
3	20224443	원수막	The Banners	2022	단편	기타		한국	
4	20212179	해피해피 이혼파티	Happyhappy Divorceparty	2021	단편	기타		한국	
5	20212381	평양창면	Pyeongyang Neangmyeon	2019	단편	기타		한국	
6	20212385	초토화작전	Scorched Earth	2022	장편	기타		한국	
7	20227679	필수에게 자유를	Free Chol Soo Lee	2022	장편	기타		미국	
8	20212393	정순	Jeong-sun	2020	장편	기타		한국	
9	20212372	장기자랑	The Talent Show	2022	장편	가톨릭비		한국	
10	20228571	작은 정원	Little Garden	2022	장편	기타		한국	
11	20212378	유니버스	Universe Department Store	2020	장편	기타		한국	
12	20211382	오마루	Hommage	2021	장편	재봉	2022/05/26	한국	
13	20224319	오 물거운 나의 집	Home Sweet Home	2022	단편	기타		한국	
14	20217027	열집사랑	Next Door	2022	장편	재봉	2022/11/03	한국	
15	20212370	엄마, 영순	A Mother Youngsoon	2019	장편	기타		한국	
16	20225826	완지기	A Good Boy	2022	장편	기타		한국	
17	20211567	수프와 이데올로기	Soup and Ideology	2021	장편	재봉	2022/10/20	한국	
18	20227654	수라	Sura: A Love Song	2022	장편	기타		한국	
19	20200506	섬이없는지도	Map without Island	2021	장편	후반작업		한국	
20	20212353	상주어리	Sanctuary	2021	장편	기타		한국	
21	20225522	사랑합니다 고객님	I Love You, Customer	2021	단편	기타		한국	
22	20230340	에브리씽 에브리웨어 올 앳 원스+	Everything Everywhere All At Once	2022	장편	가톨릭정	2023/03/01	미국	
23	20230641	오토라는 남자	A Man Called Otto	2022	장편	가톨릭정	2023/03/29	미국	
1000									

## ■ Export

PDF, excel, image

feature	example
<p>export to PDF</p> <p>GridID.exportPdf("Download file name");</p>	<pre> &lt;script&gt;   function Export(){     grid1.exportPdf();   } &lt;/script&gt; &lt;grid id="grid1" style="height: 204px; border: 1px solid rgb(234, 234, 234); position: relative;"   "options" : {     "editable":false     ,"columnHeight":20     ,"cellHeight":20     ,"fixColumn":0     ,"conditionalstyle":""     ,"appendmode":false     ,"autohiddencols":false     ,"autofit":false     ,"contextmenu":true     ,"indicator":{"show":false,"width":30}     ,"selector":{"show":false,"width":20,"type":"check"}     ,"columns" : [       {"text":"Movie code","alignment":"center","width":100,"type":"column","height":20,"edit able":false,"visible":true,"sortable":true,"sortType":"string","field":"movieC d","style":"","editor":{"type":"text","alignment":"center"}}       ,{"text":"Movie Title"       ,"type":"group"       ,"width":200       ,"height":20       ,"visible":true       ,"orientation":"horizontal"       ,"columns" : [         {"text":"Korea","alignment":"center","width":100,"type":"column","height" :20,"editable":"false","visible":"true","sortable":true,"sortType":"string","fiel d":"movieNm","style":"","editor":{"type":"text","alignment":"left"}}         ,{"text":"English","alignment":"center","width":100,"type":"column","heigh t":20,"editable":"false","visible":"true","sortable":true,"sortType":"string","fiel d":"movieNmEn","style":"","editor":{"type":"text","alignment":"left"}}       ]     ]   }</pre>

	<pre>     }     }      ,{"text":"Year of production","alignment":"center","width":80,"type":"column","height":20, "editable":false,"visible":true,"sortable":true,"sortType":"string","field":"prdtYear","style":"","editor":{"type":"text","alignment":"center"}}     ,{"text":"Open year","alignment":"center","width":80,"type":"column","height":20,"editable":false,"visible":true,"sortable":true,"sortType":"string","field":"openDt","style":"","editor":{"type":"date","alignment":"center","dtOrder":"yyyymmdd","dtSeparator":"/"}}     ,{"text":"Movie type","alignment":"center","width":100,"type":"column","height":20,"editable":false,"visible":true,"sortable":true,"sortType":"string","field":"typeNm","style":"","editor":{"type":"text","alignment":"center"}}      ,{"text":"Status","alignment":"center","width":200,"type":"column","height":20,"editable":false,"visible":true,"sortable":true,"sortType":"string","field":"prdtStatNm","style":"","editor":{"type":"text","alignment":"center"}}      ,{"text":"Country","alignment":"center","width":200,"type":"column","height":20,"editable":false,"visible":true,"sortable":true,"sortType":"string","field":"nationAlt","style":"","editor":{"type":"text","alignment":"center"}}      ,{"text":"Movie genre","alignment":"center","width":100,"type":"column","height":20,"editable":false,"visible":true,"sortable":true,"sortType":"string","field":"genreAlt","style":"","editor":{"type":"text","alignment":"center"}}     ]     , "style":{}     , "effect":{"columnHighlight":true}     , "size":{"vertScrollWidth":19}     , "footer":{"show":true,"height":24}     },     "data":[     {     "movieCd": "20158982",     "audience": "38093",     "movieNm": "트릭",     "movieNmEn": "Trick",     "prdtYear": "2016",     "openDt": "20160713",     "typeNm": "장편",     "prdtStatNm": "개봉",     "nationImg": ".css/images/Korea.png",     "nationAlt": "한국", </pre>
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}],
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"companyNm": "엘씨오픽쳐스"
}],
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.
.
{
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"movieNm": "위험한 유혹",
"movieNmEn": "As I Lay Dying",
"prdtYear": "2013",
"openDt": "20161228",
"typeNm": "장편",
"prdtStatNm": "개봉",
"nationImg": ".css/images/America.png",
"nationAlt": "미국",
"genreAlt": "드라마",
"repNationNm": "미국",
"repGenreNm": "드라마",
"directors": [{
"peopleNm": "제임스 프랭코"
}],
"companys": []

```

## result

Movie code	Movie Title		Year of pr..	Open year	Movie type	Status	Country
	Korea	English					
20158982	트릭	Trick	2016	2016/07/13	장편	개봉	한국
20161722	히야	HIYA	2015	2016/03/10	장편	개봉	한국
20152746	커터	Eclipse	2016	2016/03/30	장편	개봉	한국
20154910	터널	Tunnel	2016	2016/08/10	장편	개봉	한국
20144444	아가씨	The Handmaiden	2016	2016/06/01	장편	개봉	한국
20158482	동주	DONGJU; The Po..	2015	2016/02/17	장편	개봉	한국
20150979	국여공주	The Last Princess	2016	2016/08/03	장편	개봉	한국
20140194	국성	THE WALLING	2016	2016/05/12	Save Excel Save PDF Save Image	개봉	한국
20169730	당신자신과 당신..	Yourself and Yours	2016	2016/11/10		개봉	한국
20159646	달집	The Age of Shad..	2016	2016/09/07		개봉	한국
20153443	아수라	Asura : The City ..	2016	2016/09/28		개봉	한국
20150901	올레	DETOUR	2016	2016/08/25	장편	개봉	한국
20145502	남과 여	A Man and A Wo..	2015	2016/02/25	장편	개봉	한국
20165723	메이킹 패밀리	Making Family	2016	2016/11/28	장편	개봉	한국,중
20140704	비밀은 없다	The Truth Benea..	2015	2016/06/23	장편	개봉	한국
20142406	탐정 홍길동: 사..	The Phantom De..	2016	2016/05/04	장편	개봉	한국
20164527	부릉! 부릉! 부루..	Vroom! Vroom! ..	2016	2016/12/15	장편	개봉	한국



feature	example
<p>export to excel</p> <p>GridD.exportExcel("Download file name");</p>	<pre> &lt;script&gt;   function Export(){     grid1.exportExcel();   } &lt;/script&gt; &lt;grid id="grid1" style="height: 204px; border: 1px solid rgb(234, 234, 234); position: relative;"&gt;   "options" : {     "editable":false     ,"columnHeight":20     ,"cellHeight":20     ,"fixColumn":0     ,"conditionalstyle":""     ,"appendmode":false     ,"autohiddencols":false     ,"autofit":false     ,"contextmenu":true     ,"indicator":{"show":false,"width":30}     ,"selector":{"show":false,"width":20,"type":"check"}     ,"columns" : [       {"text":"Movie code","alignment":"center","width":100,"type":"column","height":20,"edit able":false,"visible":true,"sortable":true,"sortType":"string","field":"movieC d","style":"","editor":{"type":"text","alignment":"center"}}       ,{"text":"Movie Title"       ,"type":"group"       ,"width":200       ,"height":20       ,"visible":true       ,"orientation":"horizontal"       ,"columns" : [  {"text":"Korea","alignment":"center","width":100,"type":"column","height" :20,"editable":"false","visible":"true","sortable":true,"sortType":"string","fiel d":"movieNm","style":"","editor":{"type":"text","alignment":"left"}}  , {"text":"English","alignment":"center","width":100,"type":"column","heigh t":20,"editable":"false","visible":"true","sortable":true,"sortType":"string","fi eld":"movieNmEn","style":"","editor":{"type":"text","alignment":"left"}}       ]     }      ,{"text":"Year of </pre>

	<pre> production", "alignment": "center", "width": 80, "type": "column", "height": 20, "editable": false, "visible": true, "sortable": true, "sortType": "string", "field": "prdtYear", "style": "", "editor": { "type": "text", "alignment": "center" } , { "text": "Open year", "alignment": "center", "width": 80, "type": "column", "height": 20, "editable": false, "visible": true, "sortable": true, "sortType": "string", "field": "openDt", "style": "", "editor": { "type": "date", "alignment": "center", "dtOrder": "yyyymmdd", "dtSeparator": "/" } , { "text": "Movie type", "alignment": "center", "width": 100, "type": "column", "height": 20, "editable": false, "visible": true, "sortable": true, "sortType": "string", "field": "typeNm", "style": "", "editor": { "type": "text", "alignment": "center" }  , { "text": "Status", "alignment": "center", "width": 200, "type": "column", "height": 20, "editable": false, "visible": true, "sortable": true, "sortType": "string", "field": "prdtStatNm", "style": "", "editor": { "type": "text", "alignment": "center" }  , { "text": "Country", "alignment": "center", "width": 200, "type": "column", "height": 20, "editable": false, "visible": true, "sortable": true, "sortType": "string", "field": "nationAlt", "style": "", "editor": { "type": "text", "alignment": "center" }  , { "text": "Movie genre", "alignment": "center", "width": 100, "type": "column", "height": 20, "editable": false, "visible": true, "sortable": true, "sortType": "string", "field": "genreAlt", "style": "", "editor": { "type": "text", "alignment": "center" } } , "style": {} , "effect": { "columnHighlight": true } , "size": { "vertScrollWidth": 19 } , "footer": { "show": true, "height": 24 } }, "data": [ { "movieCd": "20158982", "audience": "38093", "movieNm": "트릭", "movieNmEn": "Trick", "prdtYear": "2016", "openDt": "20160713", "typeNm": "장편", "prdtStatNm": "개봉", "nationImg": "/css/images/Korea.png", "nationAlt": "한국", "genreAlt": "스릴러, 드라마", "repNationNm": "한국", "repGenreNm": "스릴러", "directors": [{ </pre>
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```

"peopleNm": "이창열"
}},
"companys": [{
"companyCd": "20160481",
"companyNm": "엘씨오픽쳐스"
}],
.
.
.
{
"movieCd": "20166984",
"audience": "0",
"movieNm": "위험한 유혹",
"movieNmEn": "As I Lay Dying",
"prdtYear": "2013",
"openDt": "20161228",
"typeNm": "장편",
"prdtStatNm": "개봉",
"nationImg": "/css/images/America.png",
"nationAlt": "미국",
"genreAlt": "드라마",
"repNationNm": "미국",
"repGenreNm": "드라마",
"directors": [{
"peopleNm": "제임스 프랭코"
}],
"companys": []

```

## result

Movie code	Movie Title		Year of pr..	Open year	Movie type	Status	Country
	Korea	English					
20158982	트릭	Trick	2016	2016/07/13	장편	개봉	한국
20161722	히야	HIYA	2015	2016/03/10	장편	개봉	한국
20152746	커터	Eclipse	2016	2016/03/30	장편	개봉	한국
20154910	터널	Tunnel	2016	2016/08/10	장편	개봉	한국
20144444	아가씨	The Handmaiden	2016	2016/06/01	장편	개봉	한국
20158482	동주	DONGJU; The Po...	2015	2016/02/17	장편	개봉	한국
20150979	역해술주	The Last Princess	2016	2016/07/13	장편	개봉	한국
20140194	곡성	THE WAILING	2016	2016/07/13	장편	개봉	한국
20169730	당신자신과 당신..	Yourself and Yours	2016	2016/11/28	장편	개봉	한국
20159646	탈영	The Age of Shad..	2016	2016/07/13	장편	개봉	한국
20153443	아수라	Asura : The City ..	2016	2016/07/13	장편	개봉	한국
20150901	출례	DETOUR	2016	2016/08/10	장편	개봉	한국
20145502	남과 여	A Man and A Wo...	2015	2016/02/25	장편	개봉	한국
20165723	메이킹 패밀리	Making Family	2016	2016/11/28	장편	개봉	한국, 중국
20140704	비밀은 없다	The Truth Benea...	2015	2016/06/23	장편	개봉	한국
20142406	환영 호텔들: 사...	The Phantom De...	2016	2016/05/04	장편	개봉	한국
20164527	부릉! 부릉! 브루...	Vroom! Vroom! ..	2016	2016/12/15	장편	개봉	한국

feature	example
<p>export to image</p> <p>GridID.exportImage("Download file name");</p>	<pre> &lt;script&gt;   function Export(){     grid1.exportImage();   } &lt;/script&gt; &lt;grid id="grid1" style="height: 204px; border: 1px solid rgb(234, 234, 234); position: relative;"&gt;   "options" : {     "editable":false     , "columnHeight":20     , "cellHeight":20     , "fixColumn":0     , "conditionalstyle":""     , "appendmode":false     , "autohiddencols":false     , "autofit":false     , "contextmenu":true     , "indicator":{"show":false,"width":30}     , "selector":{"show":false,"width":20,"type":"check"}     , "columns" : [       {"text":"Movie code","alignment":"center","width":100,"type":"column","height":20,"edit able":false,"visible":true,"sortable":true,"sortType":"string","field":"movieC d","style":"","editor":{"type":"text","alignment":"center"}}       ,{"text":"Movie Title"       , "type":"group"       , "width":200       , "height":20       , "visible":true       , "orientation":"horizontal"       , "columns" : [  {"text":"Korea","alignment":"center","width":100,"type":"column","height" :20,"editable":"false","visible":"true","sortable":true,"sortType":"string","fiel d":"movieNm","style":"","editor":{"type":"text","alignment":"left"}}  , {"text":"English","alignment":"center","width":100,"type":"column","heigh t":20,"editable":"false","visible":"true","sortable":true,"sortType":"string","fi eld":"movieNmEn","style":"","editor":{"type":"text","alignment":"left"}}       ]     }      , {"text":"Year of </pre>

```

production", "alignment": "center", "width": 80, "type": "column", "height": 20,
"editable": false, "visible": true, "sortable": true, "sortType": "string", "field": "prdtYear", "style": "", "editor": { "type": "text", "alignment": "center" }}
, { "text": "Open
year", "alignment": "center", "width": 80, "type": "column", "height": 20, "editable": false, "visible": true, "sortable": true, "sortType": "string", "field": "openDt", "style": "", "editor": { "type": "date", "alignment": "center", "dtOrder": "yyyymmdd", "dtSeparator": "/" }}
, { "text": "Movie
type", "alignment": "center", "width": 100, "type": "column", "height": 20, "editable": false, "visible": true, "sortable": true, "sortType": "string", "field": "typeNm", "style": "", "editor": { "type": "text", "alignment": "center" }}

, { "text": "Status", "alignment": "center", "width": 200, "type": "column", "height": 20, "editable": false, "visible": true, "sortable": true, "sortType": "string", "field": "prdtStatNm", "style": "", "editor": { "type": "text", "alignment": "center" }}

, { "text": "Country", "alignment": "center", "width": 200, "type": "column", "height": 20, "editable": false, "visible": true, "sortable": true, "sortType": "string", "field": "nationAlt", "style": "", "editor": { "type": "text", "alignment": "center" }}

, { "text": "Movie
genre", "alignment": "center", "width": 100, "type": "column", "height": 20, "editable": false, "visible": true, "sortable": true, "sortType": "string", "field": "genreAlt", "style": "", "editor": { "type": "text", "alignment": "center" }}
]
, "style": {}
, "effect": { "columnHighlight": true }
, "size": { "vertScrollWidth": 19 }
, "footer": { "show": true, "height": 24 }
},
"data": [
{
"movieCd": "20158982",
"audience": "38093",
"movieNm": "트릭",
"movieNmEn": "Trick",
"prdtYear": "2016",
"openDt": "20160713",
"typeNm": "장편",
"prdtStatNm": "개봉",
"nationImg": "/css/images/Korea.png",
"nationAlt": "한국",
"genreAlt": "스릴러, 드라마",
"repNationNm": "한국",
"repGenreNm": "스릴러",
"directors": [{

```

```

"peopleNm": "이창열"
}},
"companys": [{
"companyCd": "20160481",
"companyNm": "엘씨오픽쳐스"
}],
.
.
.
{
"movieCd": "20166984",
"audience": "0",
"movieNm": "위험한 유혹",
"movieNmEn": "As I Lay Dying",
"prdtYear": "2013",
"openDt": "20161228",
"typeNm": "장편",
"prdtStatNm": "개봉",
"nationImg": "/css/images/America.png",
"nationAlt": "미국",
"genreAlt": "드라마",
"repNationNm": "미국",
"repGenreNm": "드라마",
"directors": [{
"peopleNm": "제임스 프랭코"
}],
"companys": []

```

## result

Movie code	Movie Title		Year of pr.	Open year	Movie type	Status	Country
	Korea	English					
20158982	트릭	Trick	2016	2016/07/13	장편	가봉	한국
20161722	히야	HIYA	2015	2016/03/10	장편	가봉	한국
20152746	커터	Eclipse	2016	2016/03/30	장편	가봉	한국
20154910	터널	Tunnel	2016	2016/08/10	장편	가봉	한국
20144444	아가씨	The Handmaiden	2016	2016/06/01	장편	가봉	한국
20158482	동주	DONGJU: The Po...	2015	2016/02/17	장편	가봉	한국
20150979	역해울주	The Last Princess	2016	Save Excel	장편	가봉	한국
20140194	극성	THE WAILING	2016	}	장편	가봉	한국
20169730	당신자신과 당신..	Yourself and Yours	2016	Save PDF	장편	가봉	한국
20159646	일정	The Age of Shad..	2016	}	장편	가봉	한국
20153443	아수라	Asura : The City ..	2016	Save Image	장편	가봉	한국
20150901	돌출	DETOUR	2016	2016/08/25	장편	가봉	한국
20145502	남과 여	A Man and A Wo..	2015	2016/02/25	장편	가봉	한국
20165723	메이킹 패밀리	Making Family	2016	2016/11/28	장편	가봉	한국,중국
20140704	비밀은 없다	The Truth Benea..	2015	2016/06/23	장편	가봉	한국
20142406	탐정 종길동: 사..	The Phantom De..	2016	2016/05/04	장편	가봉	한국
20164527	부릉! 부릉! 부릉..	Vroom! Vroom! ..	2016	2016/12/15	장편	가봉	한국

## ■ Column

column grouping, column fixed, column image

feature	source
	example
<p><b>column grouping</b></p> <p>A column containing a data column and a group of sub-columns. The child columns are aligned horizontally or vertically.</p> <p>The child column group can align the child columns in a different direction than the parent column group.</p> <p>The column group may or may not be displayed in the header. It is not displayed in the data row.</p>	<pre> &lt;!DOCTYPE html&gt; &lt;html lang="en" style="width:1280px;height:1024px"&gt; &lt;head&gt;   &lt;meta charset="UTF-8"&gt;   &lt;title&gt;&lt;/title&gt;   &lt;script type="text/javascript" src="/Y[wai]/wai.js"&gt;&lt;/script&gt;   &lt;link href="/css/default.css" rel="stylesheet" type="text/css"&gt;  &lt;/head&gt; &lt;body&gt; &lt;grid id="grid1" style="height: 404px; border: 1px solid rgb(234, 234, 234); position: relative;"&gt;   "options" : {     "editable":false     ,"columnHeight":20     ,"cellHeight":20     ,"fixColumn":0     ,"conditionalstyle":""     ,"appendmode":false     ,"autohiddencols":false     ,"autofit":false     ,"contextmenu":true     ,"indicator":{"show":false,"width":30}     ,"selector":{"show":false,"width":20,"type":"check"}     ,"columns" : [       {"text":"Movie code","alignment":"center","width":100,"field":"movieCd","editor":{"type": "text","alignment":"center"}}       ,{"text":"Movie Title"       ,"type":"group"       ,"width":200       ,"height":20       ,"visible":true       ,"orientation":"horizontal"       ,"alignment":"center"       ,"style":""       ,"columns" : [        {"text":"Korea","alignment":"center","width":100,"visible":"true","sortable" :true,"sortType":"string","field":"movieNm","editor":{"type":"text","alignme </pre>

	<pre> nt":"left"}}  ,{"text":"English","alignment":"center","width":100,"visible":"true","sortable":true,"sortType":"string","field":"movieNmEn","editor":{"type":"text","alignment":"left"}} ] } ,{"text":"Year of production","alignment":"center","width":80,"field":"prdtYear","editor":{"type":"text","alignment":"center"}} ,{"text":"Open year","alignment":"center","width":80,"field":"openDt","editor":{"type":"date","alignment":"center","dtOrder":"yyymmdd","dtSeparator":"/"}} ,{"text":"Movie type","alignment":"center","width":100,"field":"typeNm","editor":{"type":"text","alignment":"center"}} ,{"text":"Production" ,"type":"group" ,"width":200 ,"height":20 ,"visible":true ,"orientation":"vertical" ,"columns": [  {"text":"Status","alignment":"center","width":200,"field":"prdtStatNm","editor":{"type":"text","alignment":"center"}}  ,{"text":"Country","alignment":"center","width":200,"field":"nationAlt","editor":{"type":"text","alignment":"center"}} ] } ,{"text":"Movie genre","alignment":"center","width":100,"field":"genreAlt","editor":{"type":"text","alignment":"center"}} ] ,"style":{} ,"effect":{"columnHighlight":true} ,"size":{"vertScrollWidth":19} ,"footer":{"show":true,"height":24} } ,"data":[  {"movieCd":"20158982","audience":"38093","movieNm":"트릭","movieNmEn":"Trick","prdtYear":"2016","openDt":"20160713","typeNm":"장편","prdtStatNm":"개봉","nationImg":"","css/images/Korea.png","nationAlt":"한국","genreAlt":"스릴러,드라마","repNationNm":"한국","repGenreNm":"스릴러","directors":[{"peopleNm":"이창열"}],"companys":[{"companyCd":"20160481","companyNm":"엘씨오픽쳐스"}]} . </pre>
--	---



```

{
  "movieCd": "20166984",
  "audience": "0",
  "movieNm": "위험한 유혹",
  "movieNmEn": "As I Lay Dying",
  "prdtYear": "2013",
  "openDt": "20161228",
  "typeNm": "장편",
  "prdtStatNm": "개봉",
  "nationImg": ".css/images/America.png",
  "nationAlt": "미국",
  "genreAlt": "드라마",
  "repNationNm": "미국",
  "repGenreNm": "드라마",
  "directors": [
    {
      "peopleNm": "제임스 프랭코"
    }
  ],
  "companys": []
}

```

options

orientation

vertical

Groups the columns vertically.

horizontal

Groups the columns horizontally.

result

Movie code	Movie Title		Year of pr..	Open year	Movie type	Production		Movie genre
	Korea	English				Status	Country	
20161722	히어	HIYA	2015	2016/03/10	장편	개봉 한국	드라마	
20152746	커터	Eclipse	2016	2016/03/30	장편	개봉 한국	범죄, 드라마	
20154910	터널	Tunnel	2016	2016/08/10	장편	개봉 한국	드라마	
20144444	아가씨	The Handmaiden	2016	2016/06/01	장편	개봉 한국	스릴러, 드라마	
20158482	동주	DONGJU: The Po..	2015	2016/02/17	장편	개봉 한국	드라마	
20150979	역적:올주	The Last Princess	2016	2016/08/03	장편	개봉 한국	사극, 드라마	
20140194	곡성	THE WAILING	2016	2016/05/12	장편	개봉 한국	미스터리, 스릴러..	

feature	source
column fixed	example
	<pre> &lt;grid id="grid1" style="height: 204px; border: 1px solid rgb(234, 234, 234);" &gt;   "options" : {     "editable":false     , "columnHeight":20     , "cellHeight":20     , "fixColumn":2     , "indicator":{"show":false,"width":30}     , "selector":{"show":false,"width":20}     , "columns" : [       {         "text":"Movie code"         , "alignment":"center"         , "width":100         , "type":"column"         , "height":20         , "editable":false         , "visible":true         , "sortable":true         , "sortType":"string"         , "field":"movieCd"         , "style":""         , "tooltip":false         , "editor":{"type":"text","alignment":"center"}       }     ],     {       "text":"Movie Title"       , "alignment":"center"       , "width":200       , "type":"column"       , "height":20       , "editable":false       , "visible":true       , "sortable":true       , "sortType":"string"       , "field":"movieNm"       , "style":""       , "tooltip":false       , "editor":{"type":"text","alignment":"left"}     }   ],   {     "text":"Movie Title(English)"     , "alignment":"center"     , "width":200 </pre>

```

, "type": "column"
, "height": 20
, "editable": false
, "visible": true
, "sortable": true
, "sortType": "string"
, "field": "movieNmEn"
, "style": ""
, "tooltip": false
, "editor": { "type": "text", "alignment": "left" }
}
, { "text": "Year of production"
, "alignment": "center"
, "width": 80
, "type": "column"
, "height": 20
, "editable": false
, "visible": true
, "sortable": true
, "sortType": "string"
, "field": "prdtYear"
, "style": ""
, "tooltip": false
, "editor": { "type": "text", "alignment": "center" }
}
, {
"text": "Open year"
, "alignment": "center"
, "width": 80
, "type": "column"
, "height": 20
, "editable": false
, "visible": true
, "sortable": true
, "sortType": "string"
, "field": "openDt"
, "style": ""
, "tooltip": false













, "editor": { "type": "date", "alignment": "center", "dtOrder": "yyyymmdd", "dtSe
parator": "/" }
}
, {
"text": "Movie type"
, "alignment": "center"
, "width": 100
, "type": "column"
, "height": 20
, "editable": false

```

	<pre> , "visible": true , "sortable": true , "sortType": "string" , "field": "typeNm" , "style": "" , "tooltip": false , "editor": { "type": "text", "alignment": "center" } } , {   "text": "Production Status" , "alignment": "center" , "width": 100 , "type": "column" , "height": 20 , "editable": false , "visible": true , "sortable": true , "sortType": "string" , "field": "prdtStatNm" , "style": "" , "tooltip": false , "editor": { "type": "text", "alignment": "center" } } , {   "text": "Production Country" , "alignment": "center" , "width": 87 , "type": "column" , "height": 20 , "editable": false , "visible": true , "sortable": true , "sortType": "string" , "field": "nationAlt" , "style": "" , "tooltip": false , "editor": { "type": "text", "alignment": "center" } } , {   "text": "Movie genre" , "alignment": "center" , "width": 100 , "type": "column" , "height": 20 , "editable": false , "visible": true , "sortable": true , "sortType": "string" , "field": "genreAlt" </pre>
--	---



feature	source
column image	example
	<pre> &lt;!DOCTYPE html&gt; &lt;html lang="en" style="width:1280px;height:1024px"&gt; &lt;head&gt;   &lt;meta charset="UTF-8"&gt;   &lt;title&gt;&lt;/title&gt;   &lt;script type="text/javascript" src="/Y[wai]/wai.js"&gt;&lt;/script&gt;   &lt;link href="/css/default.css" rel="stylesheet" type="text/css"&gt;  &lt;/head&gt; &lt;body&gt;  &lt;grid id="grid1" style="height: 504px; border: 1px solid rgb(234, 234, 234); position: relative;"&gt;   "options" : {     "editable":false     ,"columnHeight":20     ,"cellHeight":20     ,"fixColumn":0     ,"contextmenu":true     ,"indicator":{"show":true,"width":30}     ,"selector":{"show":false,"width":20,"type":"check"}     ,"columns" : [       {"text":"","img": "/Y[wai]/res/indiCursor.png","alignment":"center"     ,"alignment":"center","type":"column","width":100,"field":"normal","editor     ":"type":"text","alignment":"center"}}       {"text":"","img": "/Y[wai]/res/indiCursor.png","imgmode":"stretch"     ,"alignment":"center","type":"column","width":100,"field":"stretch","editor     ":"type":"text","alignment":"left"}}       {"text":"","img": "/Y[wai]/res/indiCursor.png","imgmode":"center"     ,"alignment":"center","type":"column","width":100,"field":"center","editor     ":"type":"text","alignment":"left"}}       {"text":"","img": "/Y[wai]/res/indiCursor.png","imgmode":"zoom"     ,"alignment":"center","type":"column","width":100,"field":"zoom","editor     ":"type":"text","alignment":"center"}}     ]     ,"style":{}     ,"effect":{"columnHighlight":true}     ,"size":{"vertScrollWidth":19}     ,"footer":{"show":true,"height":24}   },   "data":[  {"normal":"normal","stretch":"stretch","center":"center","zoom":"zoom"} ] </pre>

	<div>&lt;/grid&gt;</div> <div>&lt;/body&gt;</div> <div>&lt;/html&gt;</div>										
	<div>options</div> <div><div>imgmode</div><div>Normal</div><div>It is placed in the top left corner of the column header. If the image is larger than the column header, it will be cropped.</div><div>Stretch</div><div>Images within a column header are stretched or shrunk to fit the size of the column header.</div><div>Center</div><div>If the column header is larger than the image, the image will be centered. If the image is larger than the column header, the image is centered on the column header and the outer edges are cropped.</div><div>Zoom</div><div>Increases or decreases the size of an image while maintaining its aspect ratio.</div></div>										
	<div>result</div> <div><table><tr><td></td><td></td><td></td><td></td><td></td></tr><tr><td>1</td><td>normal</td><td>stretch</td><td>center</td><td>zoom</td></tr></table><div><div>1</div><div></div></div></div>						1	normal	stretch	center	zoom
											
1	normal	stretch	center	zoom							

■ Paging

lazy loading, paging

feature	source
<div>lazy loading</div> <div>Lazy loading can be implemented in a grid by reading the next data when scrolling the last row.</div>	example
	<pre>&lt;!DOCTYPE html&gt; &lt;html&gt; &lt;head&gt;   &lt;meta http-equiv="Content-Type" content="text/html; charset=utf-8"&gt;   &lt;title&gt;Grid&lt;/title&gt;   &lt;script type="text/javascript" src="https://uitool.org/Y[wai]/wai.js"&gt;&lt;/script&gt;   &lt;script type="text/javascript" src="https://uitool.org/Y[wai]/IDE/support/testData/searchMovieList2016.js"&gt;&lt;/script&gt;   &lt;script type="text/javascript" src="https://uitool.org/Y[wai]/IDE/support/testData/searchMovieList2017.js"&gt;&lt;/script&gt;   &lt;style&gt;     body {       font-family: sans-serif;       font-size: 13px;     }   &lt;/style&gt;   &lt;script type="text/javascript"&gt;  /***** ***** *   Initial settings (TEST area) ***** *****/ var fnInit = function(){   grid1.SetData(movieList2016);  }; function onScrollToBottom(){   console.log("onScrollToBottom");   grid1.AppendData(movieList2017); } function onScrollChanged( event){   var idx = event.args["Index"];   console.log("onScrollChanged" , idx); }</pre>



```

/*****
*****
*   Grid Data Setting area
*****
*****/

</script>
</head>
<body>

<h2>Lazy Loading</h2>
<div style="margin: 20px;">
  <p>* Lazy Loading in the grid can be implemented by reading the next
  data when the last row is scrolled.
</div>

<div style="margin: 20px; width:700px;border: 1px solid; background:
rgb(250, 250, 250);">
  <grid id="grid1" style="height: 204px; border: 1px solid rgb(234, 234,
234);" onscrolltobottom="onScrollToBottom(event)"
onscrollchanged="onScrollChanged(event)">
    "options" : {
      "editable":false
      ,"columnHeight":20
      ,"cellHeight":20
      ,"fixColumn":0
      ,"indicator":{"show":false,"width":30}
      ,"selector":{"show":false,"width":20}
      ,"columns" : [
        {
          "text":"Movie code"
          ,"alignment":"center"
          ,"width":100
          ,"field":"movieCd"
          ,"style":""
          ,"editor":{"type":"text","alignment":"center"}
        }
        ,{
          "text":"Movie Title"
          ,"alignment":"center"
          ,"width":200
          ,"field":"movieNm"
          ,"style":""
          ,"editor":{"type":"text","alignment":"left"}
        }
      ]
    }
  </grid>
</div>

```

	<pre> ,{   "text": "Movie Title(English)"   , "alignment": "center"   , "width": 200   , "field": "movieNmEn"   , "style": ""   , "editor": { "type": "text", "alignment": "left" } } ,{   "text": "Year of production"   , "alignment": "center"   , "width": 80   , "field": "prdtYear"   , "style": ""   , "editor": { "type": "text", "alignment": "center" } } ,{   "text": "Open year"   , "alignment": "center"   , "width": 80   , "field": "openDt"    , "editor": { "type": "date", "alignment": "center", "dtOrder": "yyyymmdd", "dtSeparator": "/" } } ,{   "text": "Movie type"   , "alignment": "center"   , "width": 100   , "field": "typeNm"   , "editor": { "type": "text", "alignment": "center" } } ,{   "text": "Production Status"   , "alignment": "center"   , "width": 100   , "field": "prdtStatNm"   , "editor": { "type": "text", "alignment": "center" } } ,{   "text": "Production Country"   , "alignment": "center"   , "width": 87   , "field": "nationAlt"   , "editor": { "type": "text", "alignment": "center" } } ,{   "text": "Movie genre"   , "alignment": "center"   , "width": 100 </pre>
--	---

```

, "type": "column"
, "field": "genreAlt"
, "editor": { "type": "text", "alignment": "center" }
}
]
, "style": {}
, "effect": { "columnHighlight": true }
, "size": { "vertScrollWidth": 19 }
, "footer": { "show": true, "height": 24 }
}
</grid>
</div>

</body>
</html>

```

#### function

```

$(document).ready(function() {
    //Called when scrolling to the last row of the grid
    grid1.onScrollToBottom = function(){
        console.log("onScrollToBottom");
        grid1.AppendData(movieList2017);
    }
    //Called when scrolling
    grid1.onScrollChanged = function( idx){
        console.log("onScrollChanged" , idx);
    }
});

```

#### result

Movie code	Movie Title	Movie Title(English)	Year of pr..	Open year	
20158982	트릭	Trick	2016	2016/07/13	
20161722	히야	HIYA	2015	2016/03/10	
20152746	커터	Eclipse	2016	2016/03/30	
20154910	터널	Tunnel	2016	2016/08/10	
20144444	아가씨	The Handmaiden	2016	2016/06/01	
20158482	동주	DONGJU; The Portrait of A Poet	2015	2016/02/17	
20150979	덕혜옹주	The Last Princess	2016	2016/08/03	
20140194	곡성	THE WAILING	2016	2016/05/12	

feature	examples
<p><b>paging</b></p> <p>A grid can implement its own paging handling.</p>	<pre> &lt;!DOCTYPE html&gt; &lt;html lang="en" style="width:1280px;height:1024px"&gt; &lt;head&gt;   &lt;meta charset="UTF-8"&gt;   &lt;title&gt;&lt;/title&gt;    &lt;link rel="stylesheet" type="text/css" href="http://uitool.org/wai/waiAll.css"&gt;   &lt;script type="text/javascript" src="/Y[wai]/wai.js"&gt;  &lt;/script&gt; &lt;link href="/css/default.css" rel="stylesheet" type="text/css"&gt;  &lt;style&gt;   ul {     list-style:none;     padding-left:0px;     text-align: center;     display: inline-block;     border: 1px solid #ccc;     border-right: 0;   }   ul li {     text-align: center;     float: left;   }   ul li a {     display: block;     font-size: 14px;     padding: 9px 12px;     border-right: solid 1px #ccc;     box-sizing: border-box;   }   ul li.on {     background: #eda712;   }    ul li.on a {     color: #fff;   } &lt;/style&gt; &lt;script&gt;   function setPaging() {     grid1.setPaging(true,10); </pre>

```

        //Calling the paging display
        paging(grid1, 1);
    }

    function onPageChanging(event){
        var grid = event.args["grid"];
        var curPage = event.args["curPage"];
        console.log("old" ,curPage);
    }
    function onPageChanged(event){
        var grid = event.args["grid"];
        var curPage = event.args["curPage"];
        console.log("new" ,curPage);
    }

</script>
</head>
<body>

<grid id="grid1" style="width:1000px; height: 300px; border: 1px solid
rgb(234, 234, 234);" onpagechanging="onPageChanging(event)"
onpagechanged="onPageChanged(event)">
    "options" : {
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        ,"columnHeight":20
        ,"cellHeight":20
        ,"fixColumn":0
        ,"indicator":{"show":false,"width":30}
        ,"selector":{"show":false,"width":20}
        ,"columns" : [
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            "text":"Movie code"
            ,"alignment":"center"
            ,"width":100
            ,"field":"movieCd"
            ,"tooltip":false
            ,"editor":{"type":"text" ,"alignment":"center"}
        }
        ,{
            "text":"Movie Title"
            ,"alignment":"center"
            ,"width":200
            ,"field":"movieNm"
            ,"tooltip":false
            ,"editor":{"type":"text" ,"alignment":"left"}
        }
        ,{
            "text":"Movie Title(English)"
            ,"alignment":"center"

```

```

,"width":200
,"field":"movieNmEn"
,"tooltip":false
,"editor":{"type":"text","alignment":"left"}
}
,{
"text":"Year of production"
,"alignment":"center"
,"width":80
,"field":"prdtYear"
,"style":""
,"tooltip":false
,"editor":{"type":"text","alignment":"center"}
}
,{
"text":"Open year"
,"alignment":"center"
,"width":80
,"field":"openDt"
,"style":""
,"tooltip":false
,"editor":{"type":"date","alignment":"center","dtOrder":"yyymmdd","dtSe
parator":"/"}
}
,{
"text":"Movie type"
,"alignment":"center"
,"width":100
,"field":"typeNm"
,"style":""
,"tooltip":false
,"editor":{"type":"text","alignment":"center"}
}
,{
"text":"Production Status"
,"alignment":"center"
,"width":100
,"field":"prdtStatNm"
,"style":""
,"tooltip":false
,"editor":{"type":"text","alignment":"center"}
}
,{
"text":"Production Country"
,"alignment":"center"
,"width":87
,"field":"nationAlt"
,"style":""
,"tooltip":false

```

	<pre> , "editor": { "type": "text", "alignment": "center" } } , {   "text": "Movie genre" , "alignment": "center" , "width": 100 , "field": "genreAlt" , "style": "" , "tooltip": false , "editor": { "type": "text", "alignment": "center" } } ] , "style": {} , "effect": { "columnHighlight": true } , "size": { "vertScrollWidth": 19 } , "footer": { "show": true, "height": 24 } }, "data": [  { "movieCd": "20158982", "movieNm": "트릭", "movieNmEn": "Trick", "prdtYear": "2016", "openDt": "20160713", "typeNm": "장편", "prdtStatNm": "개봉", "nationImg": "/css/images/Korea.png", "nationAlt": "한국", "genreAlt": "스릴러, 드라마", "repNationNm": "한국", "repGenreNm": "스릴러", "directors": [ { "peopleNm": "이창열" } ], "companys": [ { "companyCd": "20160481", "companyNm": "엘씨오피쳐스" } ], . . . { "movieCd": "20166984", "movieNm": "위험한 유혹", "movieNmEn": "As I Lay Dying", "prdtYear": "2013", "openDt": "20161228", "typeNm": "장편", "prdtStatNm": "개봉", "nationImg": "/css/images/America.png", "nationAlt": "미국", "genreAlt": "드라마", "repNationNm": "미국", "repGenreNm": "드라마", "directors": [ { "peopleNm": "제임스 프랭코" } ], "companys": [ ] } ] &lt;/grid&gt;  &lt;button onClick='setPaging()'&gt;setPaging&lt;/button&gt;  &lt;ul id="pagingul"&gt;&lt;/ul&gt;  &lt;script&gt;  function paging(grid, currentPage) {   let pageCount = 5; //the number of pages to display in paging   let totalPage = grid.getPageCount();    if(totalPage&lt;pageCount){     pageCount=totalPage; </pre>
--	---

```

    }

    let pageGroup = Math.ceil(currentPage / pageCount); // page group
    let last = pageGroup * pageCount; //The last page number to be
    displayed

    if (last > totalPage) {
        last = totalPage;
    }

    let first = last - (pageCount - 1); //The number of the first page to be
    displayed
    let next = last + 1;
    let prev = first - 1;
    let pageHtml = "";
    if (prev > 0) {
        pageHtml += "<li><a href='#' id='prev'> prev </a></li>";
    }

    //Displaying the paging number
    for (var i = first; i <= last; i++) {
        if (currentPage == i) {
            pageHtml +=
                "<li class='on'><a href='#' id='" + i + "'"> " + i + "</a></li>";
        } else {
            pageHtml += "<li><a href='#' id='" + i + "'"> " + i + "</a></li>";
        }
    }
    if (last < totalPage) {
        pageHtml += "<li><a href='#' id='next'> next </a></li>";
    }

    $("#pagingul").html(pageHtml);

    //Paging number click event
    $("#pagingul li a").click(function () {

        let $id = $(this).attr("id");
        selectedPage = $(this).text();

        if ($id == "next") selectedPage = next;
        if ($id == "prev") selectedPage = prev;

        //Recalling the paging display
        paging(grid, selectedPage);
        console.log("selectedPage", selectedPage);
        grid.setPage(selectedPage);
    });
}

```



</script>  
</body>  
</html>

## result

Movie code	Movie Title	Movie Title(English)	Year of pr...	Open year	Movie type	Production St...	Production ..	Movie
20158982	트릭	Trick	2016	2016/07/13	장편	가봉	한국	스릴리
20161722	히야	HIYA	2015	2016/03/10	장편	가봉	한국	드라
20152746	커터	Eclipse	2016	2016/03/30	장편	가봉	한국	범죄, 스
20154910	터널	Tunnel	2016	2016/08/10	장편	가봉	한국	드라
20144444	아가씨	The Handmaiden	2016	2016/06/01	장편	가봉	한국	스릴리
20158482	동주	DONGJU: The Portrait of A Poet	2015	2016/02/17	장편	가봉	한국	드라
20150979	역적:올주	The Last Princess	2016	2016/08/03	장편	가봉	한국	사극, 스
20140194	곡성	THE WAILING	2016	2016/05/12	장편	가봉	한국	미스터리
20169730	당신자신과 당신의 것	Yoursel and Yours	2016	2016/11/10	장편	가봉	한국	드라
20159646	밀정	The Age of Shadows	2016	2016/09/07	장편	가봉	한국	역

100

12345next

## ■ Functionality

aggregates, grouping, filtering, popup editing

feature	source
<p><b>aggregates</b></p> <p>You can see the results of an aggregate calculation at the bottom of the grid group or column when displaying numbers in a grid.</p> <p>Supports the most commonly used aggregation features.</p>	example
	<pre> &lt;!DOCTYPE html&gt; &lt;html lang="en" style="width:1280px;height:1024px"&gt; &lt;head&gt;   &lt;meta charset="UTF-8"&gt;   &lt;title&gt;&lt;/title&gt;   &lt;script type="text/javascript" src="/wai/wai.js"&gt;&lt;/script&gt;   &lt;link href="/css/default.css" rel="stylesheet" type="text/css"&gt;  &lt;/head&gt; &lt;body&gt; &lt;grid id="grid1" style="height: 504px;width: 1000px; border: 1px solid rgb(234, 234, 234); position: relative;"&gt;   "options" : {     "editable":false     ,"columnHeight":20     ,"cellHeight":20     ,"fixColumn":0     ,"conditionalstyle":""     ,"appendmode":false     ,"autohiddencols":false     ,"autofit":false     ,"contextmenu":true     ,"indicator":{"show":true,"width":30}     ,"selector":{"show":false,"width":20,"checked":"none","type":"check"}     ,"group":[       {"field": "typeNm", "title" : "Movie type" }       ,{"field": "prdtYear", "title" : "Year of production"}     ]     ,"aggregate": [ { "field": "grid_index", "expression": "count" ,"alias" : "count" },       { "field": "audience", "expression": "SUM" ,"alias" : "sum"     ,"displayformat":",0" },       { "field": "audience", "expression": "average","alias" : "average"     ,"displayformat":",0.00"},       { "field": "audience", "expression": "min" ,"alias" : "min","displayformat":",0"},       { "field": "audience", "expression": "max","alias" : "max"     ,"displayformat":",0"} ] , "columns" : [       {"text":"Movie </pre>

	<pre> code", "alignment": "center", "width": 100, "field": "movieCd", "editor": {"type": "text", "alignment": "center"}, "summaryTemplate": "Count: #{count#}", "groupSummaryTemplate": "Count: #{count#}"  ,{ "text": "Korea", "alignment": "center", "width": 100, "field": "movieNm", "edit or": {"type": "text", "alignment": "left"}}  ,{ "text": "English", "alignment": "center", "width": 100, "field": "movieNmEn", " editor": {"type": "text", "alignment": "left"}} ,{ "text": "Year of production", "alignment": "center", "width": 80, "height": 20, "field": "prdtYear", "editor": {"type": "text", "alignment": "center"}}  ,{ "text": "Audience", "alignment": "center", "width": 150, "field": "audience", "e ditor": {"type": "CalcEdit", "displayformat": "", , "alignment": "right"}, "summaryTemplate": "Total Audience: #{sum#}", "groupSummaryTemplate": "Audience: #{sum#}"  ,{ "text": "Country", "alignment": "center", "width": 200, "field": "nationAlt", "ed itor": {"type": "text", "alignment": "center"}, "summaryTemplate": "Average Audience: #{average#}", "groupSummaryTemplate": "Average Audience: #{average#}" ,{ "text": "Movie genre", "alignment": "center", "width": 150, "height": 20, "field": "genreAlt", "e ditor": {"type": "text", "alignment": "center"}, "summaryTemplate": "Min : #{min#} Max : #{max#}" } , "style": {} , "effect": {"columnHighlight": true} , "size": {"vertScrollWidth": 19} , "footer": {"show": true, "height": 24} }, "data": [  {"movieCd": "20158982", "movieNm": "트릭", "movieNmEn": "Trick", "prdtYear": "2016", "openDt": "20160713", "typeNm": "장편", "prdtStatNm": "개봉", "nati onImg": "/css/images/Korea.png", "nationAlt": "한국", "genreAlt": "스릴러, 드 라마", "repNationNm": "한국", "repGenreNm": "스릴러", "directors": [{"peopleNm": "이창열"}], "companys": [{"companyCd": "20160481", "companyNm": "엘 씨오픽쳐스"}], . . . {movieCd": "20166984", "movieNm": "위험한 유혹", "movieNmEn": "As I Lay Dying", "prdtYear": "2013", "openDt": "20161228", "typeNm": "장편", "prdtSta tNm": "개봉", "nationImg": "/css/images/America.png", "nationAlt": "미국", "g enreAlt": "드라마", "repNationNm": "미국", "repGenreNm": "드라마", "directors": [{"peopleNm": "제임스 프랭코"}], "companys": [ ] </pre>
--	--

	</grid>  </body> </html>
	options
	expression  count The number of items  average Average value  max Maximum value  min Minimum value
result	

	Movie code	Korea	English	Year of pr..	Audience	Country	Movie genre
▼ Movie type : 공포(1 rows)							
▼ Year of production : 2016 ( 1 rows )							
1	20154242	무서운 이야기 3..	Horror Stories III	2016	97,000	한국	공포(호러)
	Count: 1				Audience: 97,000	Average Audience: 97,000.00	
	Count: 1				Audience: 97,000	Average Audience: 97,000.00	
▼ Movie type : 장편 ( 99 rows )							
▼ Year of production : 2011 ( 1 rows )							
2	20164622	마가 사이클론..	SUPER STORM	2011	0	캐나다	액션,드라마,SF
	Count: 1				Audience: 0	Average Audience: 0.00	
▼ Year of production : 2013 ( 1 rows )							
3	20166984	위대한 유혹	As I Lay Dying	2013	0	미국	드라마
	Count: 1				Audience: 0	Average Audience: 0.00	
▼ Year of production : 2014 ( 2 rows )							
4	20141589	결함기함	End of Winter	2014	4,235	한국	드라마
5	20153467	미스 미스터리	Meet Miss Anxiety	2014	46	중국	드라마,멜로/로맨스
	Count: 2				Audience: 4,281	Average Audience: 2,140.50	
▼ Year of production : 2015 ( 34 rows )							
6	20161722	미아	HIVA	2015	21,495	한국	드라마
7	20158482	동주	DONGJU; The Po..	2015	1,176,920	한국	드라마
8	20145502	남과 여	A Man and A Wo..	2015	203,457	한국	멜로/로맨스
9	20140704	비밀은 없다	The Truth Benea..	2015	250,958	한국	스릴러
10	20165521	국장만 프리덤스..		2015	9,629	한국,일본	액션,드라마,판타지
Σ	Count: 100				Total Audience: 121,137,596	Average Audience: 1,211,375.96	Min : 0 Max : 42,889,698

feature	examples
grouping	<pre> &lt;!DOCTYPE html&gt; &lt;html lang="en" style="width:1280px;height:1024px"&gt; &lt;head&gt;   &lt;meta charset="UTF-8"&gt;   &lt;title&gt;&lt;/title&gt;   &lt;script type="text/javascript" src="/Y[wai]/wai.js"&gt;&lt;/script&gt;   &lt;link href="/css/default.css" rel="stylesheet" type="text/css"&gt; &lt;/head&gt; &lt;body&gt; &lt;grid id="grid1" style="height: 404px; border: 1px solid rgb(234, 234, 234);" &gt;   "options" : {     "editable":false     ,"columnHeight":20     ,"cellHeight":20     ,"fixColumn":0     ,"indicator":{"show":false,"width":30}     ,"selector":{"show":false,"width":20}     ,"group":[       { "field": "typeNm", "title" : "Movie type"}       ,{ "field": "prdtYear", "title" : "Year of production"}     ]     ,"columns" : [       {         "text":"Movie code"         ,"alignment":"center"         ,"width":100         ,"field":"movieCd"         ,"tooltip":false         ,"editor":{"type":"text","alignment":"center"}       }       ,{         "text":"Movie Title"         ,"alignment":"center"         ,"width":200         ,"field":"movieNm"         ,"tooltip":false         ,"editor":{"type":"text","alignment":"left"}       }       ,{         "text":"Movie Title(English)"         ,"alignment":"center"         ,"width":200         ,"field":"movieNmEn"         ,"tooltip":false         ,"editor":{"type":"text","alignment":"left"}       }     ]   } </pre>

```

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    ,"tooltip":false

    ,"editor":{"type":"date","alignment":"center","dtOrder":"yyymmdd","dtSe
    parator":"/"}
    }
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    ,"style":""
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    ,"width":100
    ,"field":"prdtStatNm"
    ,"style":""
    ,"tooltip":false
    ,"editor":{"type":"text","alignment":"center"}
    }
    ,{
    "text":"Production Country"
    ,"alignment":"center"
    ,"width":87
    ,"field":"nationAlt"
    ,"style":""
    ,"tooltip":false
    ,"editor":{"type":"text","alignment":"center"}
    }
    ,{
    "text":"Movie genre"
    ,"alignment":"center"
    ,"width":100

```

```

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,"editor": { "type": "text", "alignment": "center" }
}
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,"style": {}
,"effect": { "columnHighlight": true }
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,"footer": { "show": true, "height": 24 }
},
"data": [

{"movieCd": "20158982", "movieNm": "트릭", "movieNmEn": "Trick", "prdtYear": "2016", "openDt": "20160713", "typeNm": "장편", "prdtStatNm": "개봉", "nationImg": "/css/images/Korea.png", "nationAlt": "한국", "genreAlt": "스릴러,드라마", "repNationNm": "한국", "repGenreNm": "스릴러", "directors": [{"peopleNm": "이창열"}], "companys": [{"companyCd": "20160481", "companyNm": "엘씨오픽쳐스"}],
.
.
.

{"movieCd": "20166984", "movieNm": "위험한 유혹", "movieNmEn": "As I Lay Dying", "prdtYear": "2013", "openDt": "20161228", "typeNm": "장편", "prdtStatNm": "개봉", "nationImg": "/css/images/America.png", "nationAlt": "미국", "genreAlt": "드라마", "repNationNm": "미국", "repGenreNm": "드라마", "directors": [{"peopleNm": "제임스 프랭코"}], "companys": [
]
}
</grid>

</body>
</html>

```

## result

Movie code	Movie Title	Movie Title(English)	Year of pr..	Open year	Movie type	Production St..	Production
Movie type : 올니버스 ( 1 rows )							
Year of production : 2016 ( 1 rows )							
20158242	무서운 이야기 3 : 화성에서 온 소녀	Horror Stories III	2016	2016/06/01		개봉	한국
Movie type : 장편 ( 99 rows )							
Year of production : 2011 ( 1 rows )							
20164622	여가 사이클론 스톰	SUPER STORM	2011	2016/11/21		개봉	캐나다
Year of production : 2013 ( 1 rows )							
20166984	위험한 유혹	As I Lay Dying	2013	2016/12/28		개봉	미국
Year of production : 2014 ( 2 rows )							
20141589	결함기원	End of Winter	2014	2016/04/21		개봉	한국
20153467	미스 히스터리	Meet Miss Anxiety	2014	2016/04/04		개봉	중국
Year of production : 2015 ( 34 rows )							
20161722	히어	HIYA	2015	2016/03/10		개봉	한국
20158482	동주	DONGJU: The Portrait of A Poet	2015	2016/02/17		개봉	한국
20145502	남과 여	A Man and A Woman	2015	2016/02/25		개봉	한국
20140704	비밀은 없다	The Truth Beneath	2015	2016/06/23		개봉	한국
20165521	극장판 프리즘스톤 울스타 슬릭션		2015	2016/07/07		개봉	한국,일본
20161961	나는 줄인이다	The Witness	2015	2016/09/14		개봉	한국,중국

feature	source
	example
<p>filtering</p> <p>Displays only the filtered content.</p>	<pre> &lt;!DOCTYPE html&gt; &lt;html lang="en" style="width:1280px;height:1024px"&gt; &lt;head&gt;   &lt;meta charset="UTF-8"&gt;   &lt;title&gt;&lt;/title&gt;   &lt;script type="text/javascript" src="/Y[wai]/wai.js"&gt;&lt;/script&gt;   &lt;link href="/css/default.css" rel="stylesheet" type="text/css"&gt;   &lt;script type="text/javascript"&gt;     \$(document).ready(function(){       grid1.setColumnFilterApply("prdtYear" );       grid1.setColumnFilterApply("typeNm" );       grid1.setColumnFilterApply("prdtStatNm" );     });   &lt;/script&gt; &lt;/head&gt; &lt;body&gt; &lt;grid id="grid1" style="height: 504px;width: 1000px; border: 1px solid rgb(234, 234, 234); position: relative;"&gt;   "options" : {     "editable":false     ,"columnHeight":20     ,"cellHeight":20     ,"fixColumn":0     ,"contextmenu":true     ,"indicator":{"show":true,"width":30}     ,"selector":{"show":false,"width":20,"type":"check"}     ,"columns" : [       {         "text":"Movie Title"         ,"alignment":"center"         ,"width":200         ,"field":"movieNm"         ,"style":""         ,"editor":{"type":"text","alignment":"left"}       }       ,{"text":"Year of production"         ,"alignment":"center"         ,"width":80         ,"field":"prdtYear"         ,"style":""         ,"editor":{"type":"text","alignment":"center"}       }       ,{         "text":"Movie type" </pre>



	<pre> ,"alignment":"center" ,"width":100 ,"field":"typeNm" ,"style":"" ,"editor":{"type":"text","alignment":"center"} } ,{ "text":"Production Status" ,"alignment":"center" ,"width":100 ,"field":"prdtStatNm" ,"style":"" ,"editor":{"type":"text","alignment":"center"} } ,{ "text":"Production Country" ,"alignment":"center" ,"width":87 ,"field":"nationAlt" ,"style":"" ,"editor":{"type":"text","alignment":"center"} } ,{ "text":"Movie genre" ,"alignment":"center" ,"width":100 ,"field":"genreAlt" ,"style":"" ,"editor":{"type":"text","alignment":"center"} } ] ,"style":{} ,"effect":{"columnHighlight":true} ,"size":{"vertScrollWidth":19} ,"footer":{"show":true,"height":24} }, "data":[  {"movieCd":"20158982","movieNm":"트릭","movieNmEn":"Trick","prdtYear":"2016","openDt":"20160713","typeNm":"장편","prdtStatNm":"개봉","nationImg":"/css/images/Korea.png","nationAlt":"한국","genreAlt":"스릴러,드라마","repNationNm":"한국","repGenreNm":"스릴러","directors":[{"peopleNm":"이창열"}],"companys":[{"companyCd":"20160481","companyNm":"엘씨오피쳐스"}], . . . {"movieCd":"20166984","movieNm":"위험한 유혹","movieNmEn":"As I Lay Dying","prdtYear":"2013","openDt":"20161228","typeNm":"장편","prdtSta </pre>
--	---



feature	examples
<p>popup editing</p> <p>The popup editor of grid supports editing data while simply checking the data source.</p>	<pre> &lt;!DOCTYPE html&gt; &lt;html lang="en" style="width:1280px;height:1024px"&gt; &lt;head&gt;   &lt;meta charset="UTF-8"&gt;   &lt;title&gt;&lt;/title&gt;   &lt;script type="text/javascript" src="https://uitool.org/wai/wai.js"&gt;&lt;/script&gt;   &lt;link href="/css/default.css" rel="stylesheet" type="text/css"&gt;   &lt;script type="text/javascript"&gt;  /***** ***** *   Initial settings ( TEST area )  ***** ******/  \$(document).ready(function(){   var json_data =[     {CODE:"2011", CODE_NM:"2011"}     ,{CODE:"2012", CODE_NM:"2012"}     ,{CODE:"2013", CODE_NM:"2013"}     ,{CODE:"2014", CODE_NM:"2014"}     ,{CODE:"2015", CODE_NM:"2015"}     ,{CODE:"2016", CODE_NM:"2016"}     ,{CODE:"2017", CODE_NM:"2017"}]    grid1.SetJsonStorage("years",json_data);    grid1.onButtonClick = function(grid, column, Index, RecNo) {     grid.popupEditor(RecNo);   }  });  /***** ***** *   Grid Data Setting area  ***** ******/  &lt;/script&gt; &lt;/head&gt; &lt;body&gt; </pre>

	<pre> &lt;h2&gt;Popup editing&lt;/h2&gt; &lt;grid id="grid1" style="top:0px;height: 504px;width: 1000px; border: 1px solid rgb(234, 234, 234); position: relative;"&gt;   "options" : {     "editable":false     ,"columnHeight":20     ,"cellHeight":20     ,"fixColumn":0     ,"contextmenu":true     ,"indicator":{"show":true,"width":30}     ,"selector":{"show":false,"width":20,"type":"check"}     ,"columns" : [       {"text":"Movie code","alignment":"center","width":100,"field":"movieCd","editor":{"type": "text","alignment":"center"}}        {"text":"Korea","editable":true,"alignment":"center","width":100,"field":" movieNm","editor":{"type":"text","alignment":"left"}}        {"text":"English","editable":true,"alignment":"center","width":100,"field":" movieNmEn","editor":{"type":"text","alignment":"left"}}       {"text":"Year of production","editable":true,"alignment":"center","width":80,"height":20,"f ield":"prdtYear"       ,"editor":{"type":"LookupComboBox"       ,"codeName":"years","keyfieldnames":"CODE" ,"dropdownwidth":"200px"       ,"dropdownheight":"100px" ,"dispField":"CODE_NM"        ,"droplist":"CODE,CODE,50,center;CODE_NM,CODE_NM,130,left","align ment":"center"}}       {"text":"Open year","editable":true,"alignment":"center","width":80,"field":"openDt","edi tor":{"type":"date","alignment":"center","dtOrder":"yyyymmdd","dtSeparat or":"/"}}        {"text":"Audience","editable":true,"alignment":"center","width":150,"field ":"audience","editor":{"type":"CalcEdit","displayformat":"","       ,"alignment":"right"}}       {"text":"","alignment":"center","width":100,"editable":false,"field":""       ,"editor":{"type":"button","alignment":"center","btnText":"Edit"}}     ]     ,"style":{}     ,"effect":{"columnHighlight":true}     ,"size":{"vertScrollWidth":19}     ,"footer":{"show":true,"height":24}   },   "data":[  {"movieCd":"20158982","movieNm":"트릭","movieNmEn":"Trick","prdtYear </pre>
--	--

```

:"2016", "openDt":"20160713", "typeNm":"장편", "prdtStatNm":"개봉", "nationImg":"./css/images/Korea.png", "nationAlt":"한국", "genreAlt":"스릴러,드라마", "repNationNm":"한국", "repGenreNm":"스릴러", "directors":[{"peopleNm":"이창열"}], "companys":[{"companyCd":"20160481", "companyNm":"엘씨오픽쳐스"}],
.
.
.
{movieCd":"20166984", "movieNm":"위험한 유혹", "movieNmEn":"As I Lay Dying", "prdtYear":"2013", "openDt":"20161228", "typeNm":"장편", "prdtStatNm":"개봉", "nationImg":"./css/images/America.png", "nationAlt":"미국", "genreAlt":"드라마", "repNationNm":"미국", "repGenreNm":"드라마", "directors":[{"peopleNm":"제임스 프랭코"}], "companys":[
]
</grid>

</body>
</html>

```

## result

	Movie code	Korea	English	Year of pr..	Open year	Audience	
1	20158982	트릭	Trick	2016	2016/07/13	38,093	Edit
2	20161722	히아	HIYA	2015	2016/03/10	21,495	Edit
3	20152746	커터	Eclipse	2016	2016/03/30	19,399	Edit
4	20154910	터널	Tunnel	2016	2016/08/10	7,120,166	Edit
5	20144444	아가씨	The Handmaiden	2016	2016/06/01	42,889,698	Edit
6	20158482	동주	DONGJU: The Po..	2015	2016/02/17	1,176,920	Edit
7	20150979	역적올주	The Last Princess	2016	2016/08/03	5,599,606	Edit
8	20140194	곡성	THE WALLING	2016	2016/05/12	6,877,896	Edit
9	20169730	당신자신과 당신..	Yourself and Yours	2016	2016/11/10	180,000	Edit
10	20159646	탈출	The Age of Shad..	2016	2016/09/07	7,499,735	Edit
11	20153443	아수라	Asura : The City ..	2016	2016/09/28	2,594,749	Edit
12	20150901	돌려	DETOUR	2016	2016/08/25	66,419	Edit
13	20145502	남과 여	A Man and A Wo..	2015	2016/02/25	203,457	Edit
14	20165723	메이킹 패밀리	Making Family	2016	2016/11/28	205	Edit
15	20140704	비밀은 없다	The Truth Benea..	2015	2016/06/23	250,958	Edit
16	20142406	탐정 종달종: 사..	The Phantom De..	2016	2016/05/04	1,430,960	Edit
17	20164527	부릉! 부릉! 부루..	Vroom! Vroom! ..	2016	2016/12/15	11,000	Edit
18	20161694	제작 속한줄 2 - ..		2016	2016/11/10	9,533	Edit
19	20162206	브루클린	Brooklyn	2016	2016/04/21	51,000	Edit
20	20165521	극장판 프릭덜스..		2015	2016/07/07	9,629	Edit
21	20155321	최악의 하루	Worst Woman	2016	2016/08/25	408	Edit
22	20161961	나는 용인이다	The Witness	2015	2016/09/14	1,407	Edit
23	20154803	우리 연애의 이력	With or Without ...	2015	2016/06/29	3,043	Edit

## ■ Selector

selector, selector radio

feature	example
<p>selector</p> <p>Selects a row in the grid.</p>	<pre> &lt;!DOCTYPE html&gt; &lt;html lang="en" style="width:1280px;height:1024px"&gt; &lt;head&gt;   &lt;meta charset="UTF-8"&gt;   &lt;title&gt;&lt;/title&gt;    &lt;link rel="stylesheet" type="text/css" href="http://uitool.org/wai/waiAll.css"&gt;   &lt;script type="text/javascript" src="http://uitool.org/wai/wai.js"&gt;  &lt;/script&gt; &lt;link href="/css/default.css" rel="stylesheet" type="text/css"&gt;  &lt;script&gt;   function cellClick(event){     if(event.column.type == "selector"){       var indexs = grid1.getCheckedRowsIndex();        \$('#infoNm1').html('&lt; getCheckedRowsIndex() &gt; Checked index number');       \$('#info1').html('grid1.getCheckedRowsIndex()&lt;br&gt;&lt;br&gt;&lt;br&gt;' + indexs );     }   }   function getCheckedRows(){     var json = grid1.getCheckedRows();      \$('#infoNm1').html('&lt; getCheckedRows() &gt; Output the contents of the checked row');     \$('#info1').html('[ grid1.getCheckedRows() ]&lt;br&gt;&lt;br&gt;&lt;br&gt;' + JSON.stringify(json));   }    function getCheckRows(rownum){     var checked = grid1.getCheckRows(rownum);     if(checked == 0) checked = "true";     else if(checked == -1) checked = "false";     \$('#infoNm1').html('&lt; getCheckedRows() &gt; Output the contents of the checked row');     \$('#info1').html('[ grid1.getCheckedRows() ]&lt;br&gt;&lt;br&gt;&lt;br&gt;' + checked);   } </pre>

```

function setCheckRows(rownum){
    var checked = grid1.getCheckRows(rownum);
    if(checked == 0) checked = "false";
    else if(checked == -1) checked = "true";
    grid1.setCheckRows(rownum , checked);

    var indexs = grid1.getCheckedRowsIndex();

    $('#infoNm1').html('< getCheckedRowsIndex() > Checked index
number');
    $('#info1').html('grid1.getCheckedRowsIndex()<br><br><br>' + indexs
);
}
</script>
</head>
<body>
<grid id="grid1" onclick="cellClick(event)" style="height:
204px;width:700px; border: 1px solid rgb(234, 234, 234);" >
    "options" : {
        "editable":false
        ,"columnHeight":20
        ,"cellHeight":20
        ,"fixColumn":0
        ,"indicator":{"show":false,"width":30}
        ,"selector":{"show":true,"width":20}
        ,"columns" : [
            {
                "text":"Movie Title"
                ,"alignment":"center"
                ,"width":200
                ,"field":"movieNm"
                ,"style":""
                ,"editor":{"type":"text","alignment":"left"}
            }
            ,{"text":"Year of production"
                ,"alignment":"center"
                ,"width":80
                ,"field":"prdtYear"
                ,"style":""
                ,"editor":{"type":"text","alignment":"center"}
            }
            ,{
                "text":"Movie type"
                ,"alignment":"center"
                ,"width":100
                ,"field":"typeNm"
                ,"style":""
                ,"editor":{"type":"text","alignment":"center"}
            }
        ]
    }

```

```

,{
  "text":"Production Status"
  ,"alignment":"center"
  ,"width":100
  ,"field":"prdtStatNm"
  ,"style":""
  ,"editor":{"type":"text","alignment":"center"}
}
,{
  "text":"Production Country"
  ,"alignment":"center"
  ,"width":87
  ,"field":"nationAlt"
  ,"style":""
  ,"editor":{"type":"text","alignment":"center"}
}
,{
  "text":"Movie genre"
  ,"alignment":"center"
  ,"width":100
  ,"field":"genreAlt"
  ,"style":""
  ,"editor":{"type":"text","alignment":"center"}
}
]
,"style":{}
,"effect":{"columnHighlight":true}
,"size":{"vertScrollWidth":19}
,"footer":{"show":true,"height":24}
},
"data":[

{"movieCd":"20158982","movieNm":"트릭","movieNmEn":"Trick","prdtYear":"2016","openDt":"20160713","typeNm":"장편","prdtStatNm":"개봉","nationImg":"/css/images/Korea.png","nationAlt":"한국","genreAlt":"스릴러,드라마","repNationNm":"한국","repGenreNm":"스릴러","directors":[{"peopleNm":"이창열"}],"companys":[{"companyCd":"20160481","companyNm":"엘씨오피컬스"}],
.
.
.
{"movieCd":"20166984","movieNm":"위험한 유혹","movieNmEn":"As I Lay Dying","prdtYear":"2013","openDt":"20161228","typeNm":"장편","prdtStatNm":"개봉","nationImg":"/css/images/America.png","nationAlt":"미국","genreAlt":"드라마","repNationNm":"미국","repGenreNm":"드라마","directors":[{"peopleNm":"제임스 프랭코"}],"companys":[]
}
]
</grid>

```



```

<div style="margin:20px">
    Output the contents of the checked row : <button
onClick='getCheckedRows()'>getCheckedRows</button>
</div>
<div style="margin:20px">
    Change the check state of the row : <input id="Inp_setCheckRows"
style="width:30px" value="0"> <button
onClick='setCheckRows(Inp_setCheckRows.value)'>setCheckRows</button>
</div>
<div style="margin:20px">
    Make sure the row is checked : <input id="Inp_getCheckRows"
style="width:30px" value="0"> <button
onClick='getCheckRows(Inp_getCheckRows.value)'>getCheckRows</button>
</div>

<div style="margin: 20px; border: 1px solid; background: rgb(250, 250, 250);">
    <div id="infoNm1" style="margin: 20px; color: red; font-size: 16px;"></div>
    <div id="info1" style="margin: 20px; font-size: 13px;word-wrap: break-word;">

    </div>
</div>

</body>
</html>

```

## result

	Movie Title	Year of pr..	Movie type	Production St..	Production ..	Movie genre
<input checked="" type="checkbox"/>	트릭	2016	장편	가봉	한국	스릴러,드라마
<input type="checkbox"/>	위아	2015	장편	가봉	한국	드라마
<input type="checkbox"/>	커터	2016	장편	가봉	한국	범죄,드라마
<input type="checkbox"/>	타벌	2016	장편	가봉	한국	드라마
<input type="checkbox"/>	아가씨	2016	장편	가봉	한국	스릴러,드라마
<input type="checkbox"/>	올주	2015	장편	가봉	한국	드라마
<input type="checkbox"/>	죽여줄주	2016	장편	가봉	한국	사극,드라마
<input type="checkbox"/>	죽영	2016	장편	가봉	한국	미스터리,스릴러..

feature	example
<p>selector radio</p> <p>Selects only one row in the grid.</p>	<pre> &lt;!DOCTYPE html&gt; &lt;html lang="en" style="width:1280px;height:1024px"&gt; &lt;head&gt;   &lt;meta charset="UTF-8"&gt;   &lt;title&gt;&lt;/title&gt;    &lt;link rel="stylesheet" type="text/css" href="http://uitool.org/wai/waiAll.css"&gt;   &lt;script type="text/javascript" src="http://uitool.org/wai/wai.js"&gt;  &lt;/script&gt; &lt;link href="/css/default.css" rel="stylesheet" type="text/css"&gt;  &lt;script&gt;   function cellClick(event){     if(event.column.type == "selector"){       var indexs = grid1.getCheckedRowsIndex();        \$('#infoNm1').html('&lt; getCheckedRowsIndex() &gt; Checked index number');       \$('#info1').html('grid1.getCheckedRowsIndex()&lt;br&gt;&lt;br&gt;&lt;br&gt;' + indexs );     }   }   function getCheckedRows(){     var json = grid1.getCheckedRows();      \$('#infoNm1').html('&lt; getCheckedRows() &gt; Output the contents of the checked row');     \$('#info1').html('[ grid1.getCheckedRows() ]&lt;br&gt;&lt;br&gt;&lt;br&gt;' + JSON.stringify(json));   }    function getCheckRows(rownum){     var checked = grid1.getCheckRows(rownum);     if(checked == 0) checked = "true";     else if(checked == -1) checked = "false";     \$('#infoNm1').html('&lt; getCheckedRows() &gt; Output the contents of the checked row');     \$('#info1').html('[ grid1.getCheckedRows() ]&lt;br&gt;&lt;br&gt;&lt;br&gt;' + checked);   }    function setCheckRows(rownum){     var checked = grid1.getCheckRows(rownum);     if(checked == 0) checked = "false";     else if(checked == -1) checked = "true"; </pre>

```

grid1.setCheckRows(rownum , checked);

var indexs = grid1.getCheckedRowsIndex();

$('#infoNm1').html('< getCheckedRowsIndex() > Checked index
number');
$('#info1').html('grid1.getCheckedRowsIndex()<br><br><br>' + indexs
);
}
</script>
</head>
<body>
<grid id="grid1" onclick="cellClick(event)" style="height:
204px;width:700px; border: 1px solid rgb(234, 234, 234);" >
"options" : {
"editable":false
,"columnHeight":20
,"cellHeight":20
,"fixColumn":0
,"indicator":{"show":false,"width":30}
,"selector":{"show":true,"width":20, "type":"radio"}
,"columns" : [
{
"text":"Movie Title"
,"alignment":"center"
,"width":200
,"field":"movieNm"
,"style":""
,"editor":{"type":"text", "alignment":"left"}
}
,{"text":"Year of production"
,"alignment":"center"
,"width":80
,"field":"prdtYear"
,"style":""
,"editor":{"type":"text", "alignment":"center"}
}
,{
"text":"Movie type"
,"alignment":"center"
,"width":100
,"field":"typeNm"
,"style":""
,"editor":{"type":"text", "alignment":"center"}
}
,{
"text":"Production Status"
,"alignment":"center"
,"width":100

```

```

, "field": "prdtStatNm"
, "style": ""
, "editor": { "type": "text", "alignment": "center" }
}
, {
  "text": "Production Country"
, "alignment": "center"
, "width": 87
, "field": "nationAlt"
, "style": ""
, "editor": { "type": "text", "alignment": "center" }
}
, {
  "text": "Movie genre"
, "alignment": "center"
, "width": 100
, "field": "genreAlt"
, "style": ""
, "editor": { "type": "text", "alignment": "center" }
}
]
, "style": {}
, "effect": { "columnHighlight": true }
, "size": { "vertScrollWidth": 19 }
, "footer": { "show": true, "height": 24 }
},
"data": [

{ "movieCd": "20158982", "movieNm": "트릭", "movieNmEn": "Trick", "prdtYear": "2016", "openDt": "20160713", "typeNm": "장편", "prdtStatNm": "개봉", "nationImg": "/css/images/Korea.png", "nationAlt": "한국", "genreAlt": "스릴러, 드라마", "repNationNm": "한국", "repGenreNm": "스릴러", "directors": [ { "peopleNm": "이창열" } ], "companys": [ { "companyCd": "20160481", "companyNm": "엘씨오픽쳐스" } ],
.
.
.

{ "movieCd": "20166984", "movieNm": "위험한 유혹", "movieNmEn": "As I Lay Dying", "prdtYear": "2013", "openDt": "20161228", "typeNm": "장편", "prdtStatNm": "개봉", "nationImg": "/css/images/America.png", "nationAlt": "미국", "genreAlt": "드라마", "repNationNm": "미국", "repGenreNm": "드라마", "directors": [ { "peopleNm": "제임스 프랭코" } ], "companys": [
]
}
]
</grid>

<div style="margin:20px">
  Output the contents of the checked row : <button
onClick='getCheckedRows()'>getCheckedRows</button>

```

```

</div>
<div style="margin:20px">
    Change the check state of the row : <input id="Inp_setCheckRows"
    style="width:30px" value="0"> <button
    onClick='setCheckRows(Inp_setCheckRows.value)')>setCheckRows</butto
    n>
</div>
<div style="margin:20px">
    Make sure the row is checked : <input id="Inp_getCheckRows"
    style="width:30px" value="0"> <button
    onClick='getCheckRows(Inp_getCheckRows.value)')>getCheckRows</butto
    n>
</div>

<div style="margin: 20px; border: 1px solid; background: rgb(250, 250,
250);">
    <div id="infoNm1" style="margin: 20px; color: red; font-size:
16px;"></div>
    <div id="info1" style="margin: 20px; font-size: 13px;word-wrap:
break-word;">

    </div>
</div>

</body>
</html>

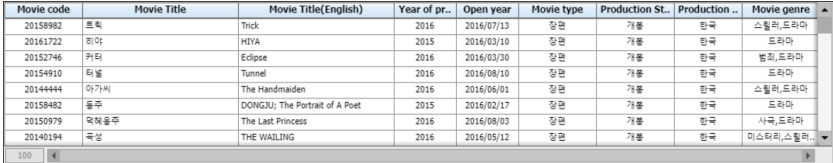
```


### result


	Movie Title	Year of pr..	Movie type	Production St..	Production ..	Movie genre
<input checked="" type="checkbox"/>	트릭	2016	장편	가봉	한국	스릴러,드라마
<input checked="" type="checkbox"/>	피아	2015	장편	가봉	한국	드라마
<input checked="" type="checkbox"/>	귀타	2016	장편	가봉	한국	범죄,드라마
<input checked="" type="checkbox"/>	타넬	2016	장편	가봉	한국	드라마
<input checked="" type="checkbox"/>	아가씨	2016	장편	가봉	한국	스릴러,드라마
<input checked="" type="checkbox"/>	올주	2015	장편	가봉	한국	드라마
<input checked="" type="checkbox"/>	악착공주	2016	장편	가봉	한국	사극,드라마
<input checked="" type="checkbox"/>	극성	2016	장편	가봉	한국	미스터리,스릴러...

## ■ Excel

excel download, excel upload, excel upload nohead

feature	result
<p>excel download</p> <p>GridID.exportExcel("Download file name");</p>	

feature	example
<p>excel upload</p> <p>Uploads only data.</p>	<pre>function ExcelUpload(){     // set on grid in callback function     var file = document.getElementById("excel").files[0];     // console.log( document.getElementById("excel").value ,file);     \$wai.util.ExcelUpload( file, callback) ; } function callback (data){     var j = JSON.parse(data);     grid2.SetData(j.data); }</pre>
result	
	

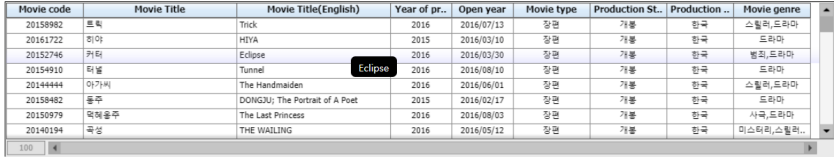
feature	example
<p>excel upload</p> <p>Uploads all.</p>	<pre> alignment fieldName ;,0.00 ,: #,##0 0.00 : 0.00 alignment &lt; : left ^ : center &gt; : right  function ExcelUpload(){ // set on grid in callback function var file = document.getElementById("excel").files[0]; // console.log( document.getElementById("excel").value ,file); \$wai.util.ExcelUpload( file, callback) ; }  function callback (data){ grid2.SetGrid(data); } </pre>
result	
	

feature	example																																																																																	
<div>excel upload nohead</div> <div>If the field name is not defined in excel.</div>	<pre>function ExcelUploadNoHead(){     // field name is not defined in excel     // upload excel separately from the grid     // set on grid in callback function     // ExcelUploadNoHead (file, "field name definition", callback function after upload complete, start row, start column);     var file = document.getElementById("excel").files[0];     \$wai.util.ExcelUploadNoHead( file,"movieCd,movieNm,movieNmEn,prdtYear,openDt,typeNm,prdtStatNm ,nationAlt,genreAlt", NoHeadcallback , 3,2) ; }  function NoHeadcallback (data){     var j = JSON.parse(data);     j = j.data;     grid4.SetData(j); }</pre>																																																																																	
result																																																																																		
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## ■ Tooltip

A tooltip is displayed when you hover over the data area.

feature	source
tooltip	example
	"tooltip":true
	columns
	<pre> "columns" : [   {     "text":"Movie code"     ,"alignment":"center"     ,"width":100     ,"type":"column"     ,"height":20     ,"editable":false     ,"visible":true     ,"sortable":true     ,"sortType":"string"     ,"field":"movieCd"     ,"style":""     ,"tooltip":true     ,"editor":{"type":"text","alignment":"center"}   } ] </pre>
result	
	

## ■ Conditional Style

feature	source
<p>conditional style</p> <p>Changes the row style.</p>	example
	<pre> &lt;!DOCTYPE html&gt; &lt;html lang="en" style="width:1280px;height:1024px"&gt; &lt;head&gt;   &lt;meta charset="UTF-8"&gt;   &lt;title&gt;&lt;/title&gt;   &lt;script type="text/javascript" src="/Y[wai]/wai.js"&gt;&lt;/script&gt;   &lt;link href="/css/default.css" rel="stylesheet" type="text/css"&gt;  &lt;/head&gt; &lt;body&gt; &lt;grid id="grid1" style="height: 204px;width:700px; border: 1px solid rgb(234, 234, 234);" &gt;   "options" : {     "editable":false     ,"columnHeight":20     ,"cellHeight":20     ,"fixColumn":0     ,"indicator":{"show":true,"width":30}     ,"selector":{"show":false,"width":20}     ,"selection":{"rowSelect":true,"multiSelect":false}     ,"conditionalstyle":[       {"field":"grid_index","conditional":"value % 2 == 0","color": "rgba(250, 250, 250, 1)"}       ,{"field":"grid_index","conditional":"value % 2 != 0","color": "rgba(0, 240, 240 , 0.2)"}     ]     ,"columns" : [       {         "text":"Movie Title"         ,"alignment":"center"         ,"width":200         ,"field":"movieNm"         ,"style":""         ,"editor":{"type":"text","alignment":"left"}       }       ,{"text":"Year of production"         ,"alignment":"center"         ,"width":80         ,"field":"prdtYear"         ,"style":""         ,"editor":{"type":"text","alignment":"center"}       }     ]   } </pre>

	<pre> ,{   "text":"Movie type"   ,"alignment":"center"   ,"width":100   ,"field":"typeNm"   ,"style":""   ,"editor":{"type":"text","alignment":"center"} } ,{   "text":"Production Status"   ,"alignment":"center"   ,"width":100   ,"field":"prdtStatNm"   ,"style":""   ,"editor":{"type":"text","alignment":"center"} } ,{   "text":"Production Country"   ,"alignment":"center"   ,"width":87   ,"field":"nationAlt"   ,"style":""   ,"editor":{"type":"text","alignment":"center"} } ,{   "text":"Movie genre"   ,"alignment":"center"   ,"width":100   ,"field":"genreAlt"   ,"style":""   ,"editor":{"type":"text","alignment":"center"} } ] ,"style":{} ,"effect":{"columnHighlight":true} ,"size":{"vertScrollWidth":19} ,"footer":{"show":true,"height":24} } ,"data":[  {"movieCd":"20158982","movieNm":"트릭","movieNmEn":"Trick","prdtYear":"2016","openDt":"20160713","typeNm":"장편","prdtStatNm":"개봉","nationImg": ".css/images/Korea.png","nationAlt":"한국","genreAlt":"스릴러,드라마","repNationNm":"한국","repGenreNm":"스릴러","directors":[{"peopleNm":"이창열"}],"companys":[{"companyCd":"20160481","companyNm":"엘씨오피컷스"}], . . . </pre>
--	--



feature	example
<p>conditional style</p> <p>Changes the style of '2015' and 'Thriller(스릴러)'.</p>	<pre> &lt;!DOCTYPE html&gt; &lt;html lang="en" style="width:1280px;height:1024px"&gt; &lt;head&gt;   &lt;meta charset="UTF-8"&gt;   &lt;title&gt;&lt;/title&gt;   &lt;script type="text/javascript" src="/Y[wai]/wai.js"&gt;&lt;/script&gt;   &lt;link href="/css/default.css" rel="stylesheet" type="text/css"&gt;  &lt;/head&gt; &lt;body&gt; &lt;grid id="grid1" style="height: 204px;width:700px; border: 1px solid rgb(234, 234, 234);" &gt;   "options" : {     "editable":false     ,"columnHeight":20     ,"cellHeight":20     ,"fixColumn":0     ,"indicator":{"show":true,"width":30}     ,"selector":{"show":false,"width":20}     ,"conditionalstyle":[       {"field":"prdtYear","conditional":"value &lt;= 2015","color":"rgba(0, 250, 0, 0.5)","range":"cell"}       ,{"field":"genreAlt","conditional":"value.indexOf('스릴러') &gt; -1","color":"rgba(250, 250, 0, 0.5)","range":"cell"}     ]     ,"columns" : [       {         "text":"Movie Title"         ,"alignment":"center"         ,"width":200         ,"field":"movieNm"         ,"style":""         ,"editor":{"type":"text","alignment":"left"}       }       ,{"text":"Year of production"         ,"alignment":"center"         ,"width":80         ,"field":"prdtYear"         ,"style":""         ,"editor":{"type":"text","alignment":"center"}       }       ,{         "text":"Movie type"         ,"alignment":"center"         ,"width":100         ,"field":"typeNm" </pre>

	<pre> ,"style":"" ,"editor":{"type":"text","alignment":"center"} } ,{ "text":"Production Status" ,"alignment":"center" ,"width":100 ,"field":"prdtStatNm" ,"style":"" ,"editor":{"type":"text","alignment":"center"} } ,{ "text":"Production Country" ,"alignment":"center" ,"width":87 ,"field":"nationAlt" ,"style":"" ,"editor":{"type":"text","alignment":"center"} } ,{ "text":"Movie genre" ,"alignment":"center" ,"width":100 ,"field":"genreAlt" ,"style":"" ,"editor":{"type":"text","alignment":"center"} } } ,"style":{} ,"effect":{"columnHighlight":true} ,"size":{"vertScrollWidth":19} ,"footer":{"show":true,"height":24} } ,"data":[  {"movieCd":"20158982","movieNm":"트릭","movieNmEn":"Trick","prdtYear":"2016","openDt":"20160713","typeNm":"장편","prdtStatNm":"개봉","nationImg":"/css/images/Korea.png","nationAlt":"한국","genreAlt":"스릴러,드라마","repNationNm":"한국","repGenreNm":"스릴러","directors":[{"peopleNm":"이창열"}],"companys":[{"companyCd":"20160481","companyNm":"엘씨오피컬스"}],  . . .  {"movieCd":"20166984","movieNm":"위험한 유혹","movieNmEn":"As I Lay Dying","prdtYear":"2013","openDt":"20161228","typeNm":"장편","prdtStatNm":"개봉","nationImg":"/css/images/America.png","nationAlt":"미국","genreAlt":"드라마","repNationNm":"미국","repGenreNm":"드라마","directors":[{"peopleNm":"제임스 프랭코"}],"companys":[ </pre>
--	---

]
</grid>

</body>
</html>

result

	Movie Title	Year of pr..	Movie type	Production St..	Production ..	Movie genre
1	트릭	2016	장편	개봉	한국	스릴러,드라마
2	미아	2015	장편	개봉	한국	드라마
3	커터	2016	장편	개봉	한국	범죄,드라마
4	터널	2016	장편	개봉	한국	드라마
5	아가씨	2016	장편	개봉	한국	스릴러,드라마
6	동주	2015	장편	개봉	한국	드라마
7	국제시장	2016	장편	개봉	한국	사극,드라마
8	곡성	2016	장편	개봉	한국	미스터리,스릴러

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## ■ Methods

SetGrid, GetGrid, Clear, SelectRow, SetValue, GetValue, AddColumn, DelColumn, RecordCount, DeleteRow, IndicatorShow, SelectorShow, SetColumnVisible, GetSelection, getSelectIndex, getSelectColumn

method	source																																																															
SetGrid	grid1.SetData(movieList);																																																															
result																																																																
<table><tr><th>영화코드</th><th>영화명</th><th>영화명(영문)</th><th>제작연도</th><th>개봉연도</th><th>영화유형</th><th>제작상태</th></tr><tr><td>20158982</td><td>트릭</td><td>Trick</td><td>2016</td><td>2016/07/13</td><td>장편</td><td>개봉</td></tr><tr><td>20161722</td><td>히야</td><td>HIYA</td><td>2015</td><td>2016/03/10</td><td>장편</td><td>개봉</td></tr><tr><td>20152746</td><td>커터</td><td>Eclipse</td><td>2016</td><td>2016/03/30</td><td>장편</td><td>개봉</td></tr><tr><td>20154910</td><td>터널</td><td>Tunnel</td><td>2016</td><td>2016/08/10</td><td>장편</td><td>개봉</td></tr><tr><td>20144444</td><td>아가씨</td><td>The Handmaiden</td><td>2016</td><td>2016/06/01</td><td>장편</td><td>개봉</td></tr><tr><td>20158482</td><td>동주</td><td>DONGJU: The Portrait of A Poet</td><td>2015</td><td>2016/02/17</td><td>장편</td><td>개봉</td></tr><tr><td>20150979</td><td>덕혜옹주</td><td>The Last Princess</td><td>2016</td><td>2016/08/03</td><td>장편</td><td>개봉</td></tr><tr><td>20140194</td><td>곡성</td><td>THE WAILING</td><td>2016</td><td>2016/05/12</td><td>장편</td><td>개봉</td></tr></table>		영화코드	영화명	영화명(영문)	제작연도	개봉연도	영화유형	제작상태	20158982	트릭	Trick	2016	2016/07/13	장편	개봉	20161722	히야	HIYA	2015	2016/03/10	장편	개봉	20152746	커터	Eclipse	2016	2016/03/30	장편	개봉	20154910	터널	Tunnel	2016	2016/08/10	장편	개봉	20144444	아가씨	The Handmaiden	2016	2016/06/01	장편	개봉	20158482	동주	DONGJU: The Portrait of A Poet	2015	2016/02/17	장편	개봉	20150979	덕혜옹주	The Last Princess	2016	2016/08/03	장편	개봉	20140194	곡성	THE WAILING	2016	2016/05/12	장편	개봉
영화코드	영화명	영화명(영문)	제작연도	개봉연도	영화유형	제작상태																																																										
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method	source
GetGrid	grid1.GetData();
result	
<pre> &lt; getData() &gt;  [ 소스 : grid의 전체 데이터를 가지고 옵니다. ]  var node = grid1.getData();  [ 결과 : object로 return 됩니다. ]  [{"movieCd":"20158982","movieNm":"트릭","movieNmEn":"Trick","prdtYear":"2016","openDt":"20160713","typeNm":"장편","prdtStatNm":"개봉","nationAlt":"한국","genreAlt":"스릴러, 드라마","repNationNm":"한국","repGenreNm":"스릴러","directors":[{"peopleNm":"이장열"}],"companys":[{"companyCd":"20160481","companyNm":"엘씨오피컬스"}]}, {"movieCd":"20161722","movieNm":"히야","movieNmEn":"HIYA","prdtYear":"2015","openDt":"20160310","typeNm":"장편","prdtStatNm":"개봉","nationAlt":"한국","genreAlt":"드라마","repNationNm":"한국","repGenreNm":"드라마","directors":[{"peopleNm":"김지연"}],"companys":[{"companyCd":"20168888","companyNm":"(주)알지엔터웍스"}]}, {"movieCd":"20152746","movieNm":"커터","movieNmEn":"Eclipse","prdtYear":"2016","openDt":"20160330","typeNm":"장편","prdtStatNm":"개봉","nationAlt":"한국","genreAlt":"범죄, 드라마","repNationNm":"한국","repGenreNm":"범죄","directors":[{"peopleNm":"정회성"}],"companys":[{"companyCd":"20160308","companyNm":"(주)에픽픽쳐스"}]}, {"movieCd":"20154910","movieNm":"터널","movieNmEn":"Tunnel","prdtYear":"2016","openDt":"20160810","typeNm":"장편","prdtStatNm":"개봉","nationAlt":"한국","genreAlt":"범죄, 드라마","repNationNm":"한국","repGenreNm":"범죄","directors":[{"peopleNm":"정회성"}],"companys":[{"companyCd":"20160308","companyNm":"(주)에픽픽쳐스"}]}]</pre>	



method	source
Clear	grid1.clear();
result	
The data is deleted from the component.	

method	source
SelectRow	grid1.SelectRow(1);
result	
 <p>The second line will be selected.</p>	

method	source
SetValue (field, value)	grid1.SetValue(grid1.getSelectedColumn().field,InpSelectVal);
result	

영화코드	영화명	영화명(영문)
20158982	트릭	Trick
20161722	히야	HIYA
20152746	커타	Eclipse
20154910	터널	Tunnel
20144444	아가씨	The Handmaiden
20158482	동주	DONGJU: The Portrait of a Poet
20150979	죽은 왕녀	The Last Princess

선택한 Row에 지정된 Cell : 테스트 SetValue

영화코드	영화명	영화명(영문)
20158982	트릭	Trick
20161722	히야	HIYA
20152746	커타	Eclipse
20154910	터널	Tunnel
20144444	아가씨	The Handmaiden
20158482	동주	DONGJU: The Portrait of a Poet
20150979	죽은 왕녀	The Last Princess

Select the cells you want to set.

Run the script source.

The value in that cell will be changed.

method	source
GetValue	<pre>var FieldName = grid1.getSelectedColumn().field; returnValue = grid1.GetValue(FieldName);</pre>

result

Movie code	Movie Title	Movie Title(English)
20158982	트릭	Trick
20161722	히야	HIYA
20152746	커타	Eclipse
20154910	터널	Tunnel
20144444	아가씨	The Handmaiden
20158482	동주	DONGJU: The Portrait of A Poet
20150979	죽은 왕녀	The Last Princess
20140194	곡성	THE WAILING

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< GetValue( FieldName ) >

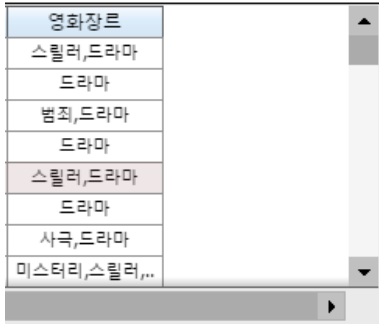
[ Source : Returns the Field value of the selected row. ]

```
var FieldName = grid1.getSelectedColumn().field;
grid1.GetValue(FieldName);
```

[ Result : It is returned as text. ]

The Handmaiden

method	source
AddColumn (column)	<pre>grid1.AddColumn({'text':"Add Column' + ++addFieldCount + ' ', "field": "addCol' + addFieldCount +'", "alignment":"center", "width":120, "height":20 , "visible":true, "editor":{"type":"text", "alignment":"left"}}); addFieldNames.push("addCol" + addFieldCount);</pre>
result	
	

method	source
DelColumn (fieldName)	<pre>grid1.DelColumn(addFieldNames.pop());</pre>
result	
	

method	source
RecordCount	grid1.RecordCount();

result
--------

Movie code	Movie Title	Movie Title(English)
20158982	트릭	Trick
20161722	히야	HIYA
20152746	커터	Eclipse
20154910	터널	Tunnel
20144444	아가씨	The Handmaiden
20158482	동주	DONGJU; The Portrait of A Poet
20150979	덕혜옹주	The Last Princess
20140194	곡성	THE WAILING

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< RecordCount() >

[ Source : Returns the number of rows in the Grid. ]

```
var node = grid1.RecordCount();
```

[ Result : It is returned as text. ]

100

method	source
DeleteRow	grid1.DeleteRow()

result


영화코드	영화명	영화명(영문)	제작연도	개봉연도	영화유형
20158982	트릭	Trick	2016	2016/07/13	장편
20161722	히야	HIYA	2015	2016/03/10	장편
20152746	커터	Eclipse	2016	2016/03/30	장편
20154910	터널	Tunnel	2016	2016/08/10	장편
20144444	아가씨	The Handmaiden	2016	2016/06/01	장편
20158482	동주	DONGJU; The Portrait of A Poet	2015	2016/02/17	장편
20150979	덕혜옹주	The Last Princess	2016	2016/08/03	장편
20140194	곡성	THE WAILING	2016	2016/05/12	장편


100


영화코드	영화명	영화명(영문)	제작연도	개봉연도	영화유형
20158982	트릭	Trick	2016	2016/07/13	장편
20161722	히야	HIYA	2015	2016/03/10	장편
20154910	터널	Tunnel	2016	2016/08/10	장편
20144444	아가씨	The Handmaiden	2016	2016/06/01	장편
20158482	동주	DONGJU; The Portrait of A Poet	2015	2016/02/17	장편
20150979	덕혜옹주	The Last Princess	2016	2016/08/03	장편
20140194	곡성	THE WAILING	2016	2016/05/12	장편
20169730	당신자신과 당신의 것	Yourself and Yours	2016	2016/11/10	장편

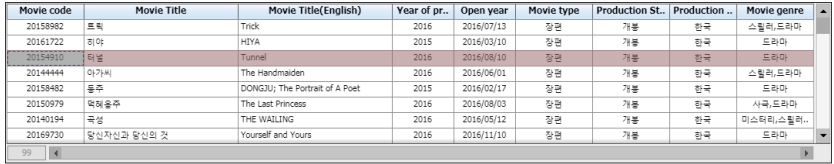
99

The selected row will be deleted.

method	source
IndicatorShow (visible)	grid1.IndicatorShow(true);
result	
 <p>The first column of the grid displays the order of the rows.</p>	

method	source
SelectorShow (visible)	grid1.SelectorShow(true);
result	
 <p>A checkbox is created in the first column of the grid.</p>	

method	source
SetColumnVisible (index, visible)	grid1.setColumnVisible(2, false);
result	
	
<p>영화명(영문) column with a column index of 2 is hidden.</p>	

method	source
GetSelection	grid1.getSelection();
result	
	
<pre>&lt; getSelection() &gt;  [ Source : Returns the selected Record.]  var node = grid1.getSelection();  [ Result : The selected record is returned to JSON. ]  {"movieCd":"20154910","movieNm":"터널","movieNmEn":"Tunnel","prdtYear":"2016","openDt":"20160810","typeNm":"장편","prdtStatNm":"개봉","nationAlt":"한국","genreAlt":"드라마","repNationNm":"한국","repGenreNm":"드라마","directors":["peopleNm":"김성훈"],"company\$":["companyCd":"20100386","companyNm":"(주)이너비엔터테인먼트","companyCd":"20138935","companyNm":"(주)비에이엔터테인먼트"]}</pre>	

method	source
getSelectIndex	grid1.getSelectIndex();

result
--------

Movie code	Movie Title	Movie Title(English)	Y
20158982	트릭	Trick	
20161722	히야	HIYA	
20154910	터널	Tunnel	
20144444	아가씨	The Handmaiden	
20158482	동주	DONGJU; The Portrait of A Poet	
20150979	역적:올주	The Last Princess	
20140194	곡성	THE WALLING	
20169730	당신자신과 당신의 것	Yourself and Yours	

`< getSelectIndex() >`

[ Source : Returns the index of the selected record. ]

```
var node = grid1.getSelectIndex();
```

[ Result : Index is returned as text. ]

3

method	source
getSelectColumn	grid1.getSelectColumn();

result																																																																																	
<table><tr><th>Movie code</th><th>Movie Title</th><th>Movie Title(English)</th><th>Year of pr...</th><th>Open year</th><th>Movie type</th><th>Production St...</th><th>Production ..</th><th>Movie genre</th></tr><tr><td>20158982</td><td>트릭</td><td>Trick</td><td>2016</td><td>2016/07/13</td><td>장편</td><td>가봉</td><td>한국</td><td>스릴러,드라마</td></tr><tr><td>20161722</td><td>히야</td><td>HIYA</td><td>2015</td><td>2016/03/10</td><td>장편</td><td>가봉</td><td>한국</td><td>드라마</td></tr><tr><td>20152746</td><td>카타</td><td>Eclipse</td><td>2016</td><td>2016/03/30</td><td>장편</td><td>가봉</td><td>한국</td><td>범죄,드라마</td></tr><tr><td>20154910</td><td>터널</td><td>Tunnel</td><td>2016</td><td>2016/08/10</td><td>장편</td><td>가봉</td><td>한국</td><td>드라마</td></tr><tr><td>20144444</td><td>아가씨</td><td>The Handmaiden</td><td>2016</td><td>2016/06/01</td><td>장편</td><td>가봉</td><td>한국</td><td>스릴러,드라마</td></tr><tr><td>20158482</td><td>동주</td><td>DONGJU: The Portrait of A Poet</td><td>2015</td><td>2016/02/17</td><td>장편</td><td>가봉</td><td>한국</td><td>드라마</td></tr><tr><td>20150979</td><td>역적:올주</td><td>The Last Princess</td><td>2016</td><td>2016/08/03</td><td>장편</td><td>가봉</td><td>한국</td><td>사극,드라마</td></tr><tr><td>20140194</td><td>곡성</td><td>THE WALLING</td><td>2016</td><td>2016/05/12</td><td>장편</td><td>가봉</td><td>한국</td><td>미스터리,스릴러..</td></tr></table> <div><div>&lt; getSelectColumn() &gt;</div><div>[ Source : Returns the selected Column. ]</div><div>var node = grid1.getSelectColumn();</div><div>[ Result : The selected column is returned as JSON. ]</div><div>{   "text": "Movie code",   "alignment": "center",   "width": 100,   "type": "column",   "height": 20,   "editable": false,   "visible": true,   "sortable": true,   "sortType": "string",   "field": "movieCd",   "style": "",   "editor": {     "type": "text",     "alignment": "center"   } }</div></div>	Movie code	Movie Title	Movie Title(English)	Year of pr...	Open year	Movie type	Production St...	Production ..	Movie genre	20158982	트릭	Trick	2016	2016/07/13	장편	가봉	한국	스릴러,드라마	20161722	히야	HIYA	2015	2016/03/10	장편	가봉	한국	드라마	20152746	카타	Eclipse	2016	2016/03/30	장편	가봉	한국	범죄,드라마	20154910	터널	Tunnel	2016	2016/08/10	장편	가봉	한국	드라마	20144444	아가씨	The Handmaiden	2016	2016/06/01	장편	가봉	한국	스릴러,드라마	20158482	동주	DONGJU: The Portrait of A Poet	2015	2016/02/17	장편	가봉	한국	드라마	20150979	역적:올주	The Last Princess	2016	2016/08/03	장편	가봉	한국	사극,드라마	20140194	곡성	THE WALLING	2016	2016/05/12	장편	가봉	한국	미스터리,스릴러..
Movie code	Movie Title	Movie Title(English)	Year of pr...	Open year	Movie type	Production St...	Production ..	Movie genre																																																																									
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## ■ Events

oncellclick, oncelldbclick, oneditchanged, oncolumnheaderclick, onrecordchange, onrecordclick

```
/*-----  
* SCRIPT - use event  
-----*/  
  
function cellclick(event) {  
    $('#info2').html('');  
    $('#info2').html($('#info2').html() +  
    '<font size="4" color="red"> < oncellclick > </font><br></br>' +  
    ' Fires when a specific cell is clicked.<br>' +  
    '<br>[ Index ] ' + event.Index +  
    '<br>[ RecNo ] ' + event.RecNo  
    );  
}  
  
function celldbclick(event) {  
    $('#info2').html($('#info2').html() +  
    '<br><br><font size="4" color="red"> < oncelldbclick > </font><br></br>' +  
    ' Fires when a specific cell is double-clicked.<br>' +  
    '<br>[ column ] ' + JSON.stringify(event.column) +  
    '<br>[ Index ] ' + event.Index +  
    '<br>[ RecNo ] ' + event.RecNo  
    );  
}  
  
function columnheaderclick(event) {  
    $('#info2').html('');  
    $('#info2').html($('#info2').html() +  
    '<font size="4" color="red"> < oncolumnheaderclick > </font><br></br>' +  
    ' Fires when a specific column is clicked in the grid. <br>' +  
    '<br>[ column ] ' + JSON.stringify(event.column) +  
    '<br>[ Index ] ' + event.Index  
    );  
}  
  
function recordclick(event) {  
    $('#info2').html($('#info2').html() +  
    '<br><br><font size="4" color="red"> < onrecordclick > </font><br></br>' +  
    ' Fires when a specific row is clicked in the grid. <br>' +  
    '<br>[ column ] ' + JSON.stringify(event.column) +  
    '<br>[ ColumnIndex ] ' + event.ColumnIndex +  
    '<br>[ RecNo ] ' + event.RecNo  
    );  
}
```



---

```

}

function recordchange(event) {
    $('#info2').html($('#info2').html() +
        '<br><br><font size="4" color="red"> < onrecordchange > </font><br></br>' +
        '<br> Fires when you click a different row in the grid than before.<br>' +
        '<br>[ column ] ' + JSON.stringify(event.column) +
        '<br>[ ColumnIndex ] ' + event.ColumnIndex +
        '<br>[ RecNo ] ' + event.RecNo
    );
}

function editchanged(event) {
    $('#info2').html($('#info2').html() +
        '<br><br><font size="4" color="red"> < oneditchanged > </font><br></br>' +
        '<br> Fires when the value of a particular cell changes in the grid. <br>' +
        '<br>[ Index ] ' + event.Index +
        '<br>[ RecNo ] ' + event.RecNo +
        '<br>[ oldValue ] ' + event.oldValue +
        '<br>[ newValue ] ' + event.newValue
    );
}

```

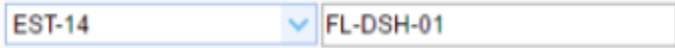
---

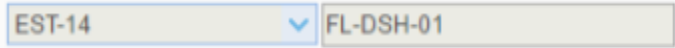
## 6. Y[wai] Component Example

### B. CodeCombo

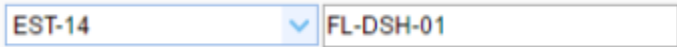
#### ■ Basic Properties

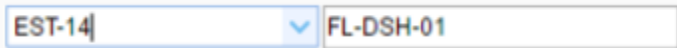
value, disabled, readonly, editable, editType, style, labelWidth, labelStyle, cbDisplayTextField, class, btnImg

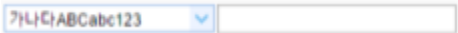



property	source
value	combo1.value = 'EST-14';
result	
 <p>The value that you want is set for the component.</p>	


property	source
disabled	combo1.disabled = true;
result	
 <p>The component is disabled.</p>	

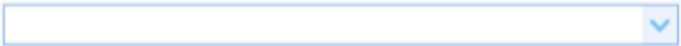
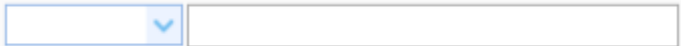
---


property	source
readonly	combo1.readonly = true;
result	
 <p>The component does not work.</p>	

property	source
editable	combo1.editable = true;
result	
 <p>Move the cursor over the combobox to edit it. You can apply the editType property.</p>	

property	source	
editType	combo1.editType = 'all'; combo1.editType = 'number';	combo1.editType = 'uppercase'; combo1.editType = 'lowercase';
result		
<div>  <p>You can enter Korean, upper and lower case letters, and numbers.</p> </div> <div>  <p>You can enter only uppercase letters and numbers.</p> </div> <div>  <p>You can enter only numbers.</p> </div> <div>  <p>You can enter only lowercase letters and numbers.</p> </div>		

property	source
style	combo1.style = 'width:300px;height:30px';
result	
 <p>The component style property will be changed.</p>	

property	source
labelWidth	combo1.labelWidth = '0px'; combo1.labelWidth = '300px';
result	
 <p>The label box will disappear. You can apply the cbDisplayTextField property.</p>  <p>Specify the horizontal length of the label box.</p>	

property	source
labelStyle	combo1.labelStyle = 'background-color: #F5EAEA;;';
result	
 <p>The style property of the label box will be changed.</p>	

property	source
cbDisplayTextField	<div><div>EST-10 ▾ K9-DL-01</div><p>If you set the labelWidth property to 0px in the same state as shown above, the label will disappear and only the box will be displayed.</p><div>EST-10 ▾</div><p>Apply the cbDisplayTextField property.</p></div>
	<pre>combo1.cbDisplayTextField = true; combo1.cbDisplayTextField = false;</pre>
result	
<div><div>K9-DL-01 ▾</div><p>Displays the data value of the TextField shown in the label box.</p><div>EST-10 ▾</div><p>Displays the data value of the basic IdField.</p></div>	

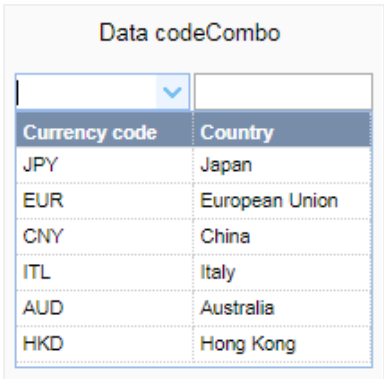
property	source
class	<pre>.classTest1 {   background-color: #99cdff; } combo1.class = 'classTest1';</pre>
result	
<div><div></div><p>Applies the class.</p></div>	

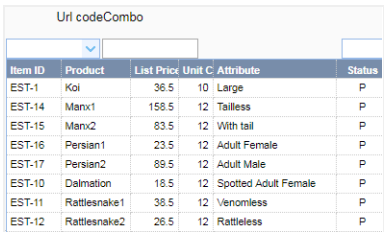
---

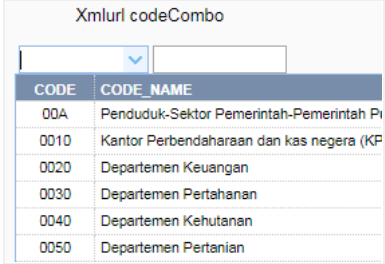
property	source
btnImg	combo1.btnImg = './testData/searchbox_button.png';
result	
<div><div><div></div><div></div></div><div></div></div> <p>Changes the combo button in the combobox.</p>	

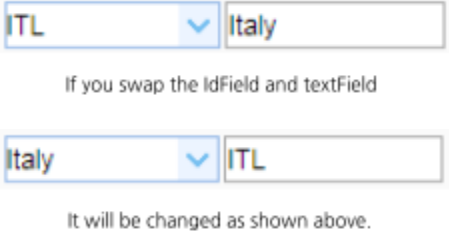
## ■ Data Properties

data, url, xmurl, idField, textField

property	source
data	<pre> combo2_data.data = [   {"CODE": "JPY", "CODE_NM": "일본"},   {"CODE": "EUR", "CODE_NM": "유럽연합"},   {"CODE": "CNY", "CODE_NM": "중국"},   {"CODE": "ITL", "CODE_NM": "이탈리아"},   {"CODE": "AUD", "CODE_NM": "호주"},   {"CODE": "HKD", "CODE_NM": "홍콩"} ]; </pre>
result	
	

property	source
url	<pre> combo1.disabled = true; </pre>
result	
	

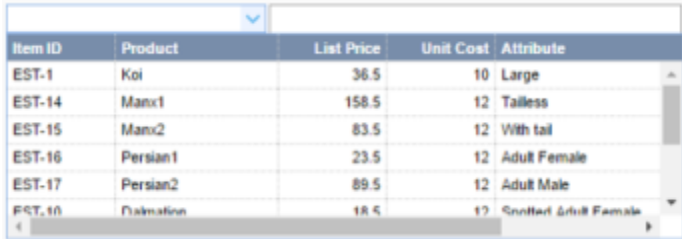
property	source
xmurl	combo2_xmurl.xmlurl= 'testData/F945.xml';
result	
	

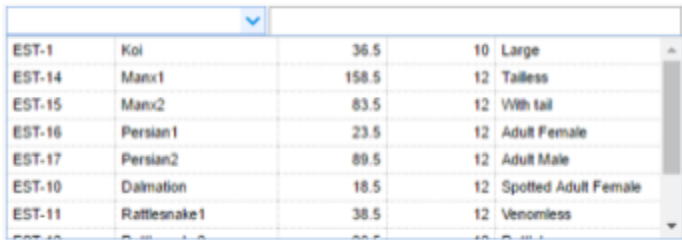
property	source
idField textField	combo2_data.idField = 'CODE_NM'; combo2_data.textField = 'CODE';
result	
	

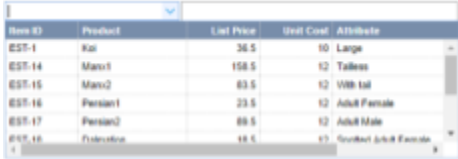
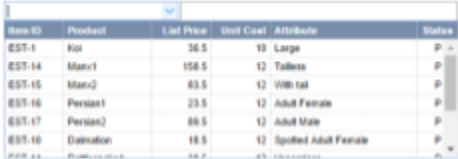



## ■ datagrid(panel) Properties

panelWidth, panelHeight, showHeader, fitColumns, columns, dropdownkeycode, itemCount

property	source
panelWidth panelHeight	combo3.panelWidth = 500px; combo3.panelHeight = 100px;
result	
 <p>The horizontal and vertical length of the panel will be changed.</p>	

property	source
showHeader	combo3.showHeader = true; combo3.showHeader = false;
result	
 <p>If you set that property to false panel, the header of the data table will disappear.</p>	

property	source
fitColumns	<pre> combo3.fitColumns = false; combo3.fitColumns = true; </pre>
result	
<div>  <p>If you set this property to true for a panel that scrolls beyond its horizontal length,</p> </div> <div>  <p>the scroll disappears as the horizontal length is adjusted.</p> </div>	

property	source
columns	<pre> combo3.columns =[   {field:'itemid',title:'Item ID',width:80,sortable:true},   {field:'productname',title:'Product',width:120},   {field:'status',title:'Status',width:60,align:'center'},   {field:'listprice',title:'List Price',width:80,align:'right'},   {field:'unitcost',title:'Unit Cost',width:80,align:'right'},   {field:'attr1',title:'Attribute',width:200} ]; </pre>
result	
 <p>The column will be changed.</p>	


---

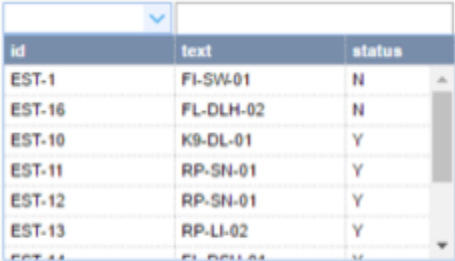
property	source
dropdownkeycode	combo3.dropdownkeycode = 145;
result	
<p>When you press the Scroll Lock key, the panel of the combo box will drop down.</p>	

property	source
itemCount	alert("codecombo data count: "+combo3.itemCount);
result	
<div> <div> 127.0.0.1 says  codecombo data count : 10 </div> <div>OK</div> </div> <p>You can know how much data there is.</p>	

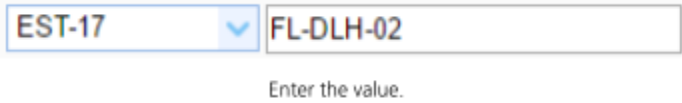
■ Basic Methods

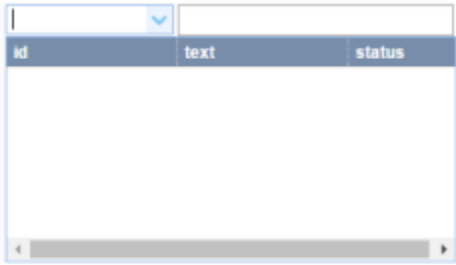
focus, setData, setValue, clear, getValue, getText, getSelected, getData



method	source
focus	<pre>combo4.focus();</pre>
result	
 <p>The cursor moves to the combobox of component.</p>	

method	source
setData (json)	<pre>combo4.setData([     {"text":"FI-SW-01","id":"EST-1","status":"N"},     {"text":"FL-DLH-02","id":"EST-16","status":"N"},     {"text":"K9-DL-01","id":"EST-10","status":"Y"},     {"text":"RP-SN-01","id":"EST-11","status":"Y"},     {"text":"RP-SN-01","id":"EST-12","status":"Y"},     {"text":"RP-LI-02","id":"EST-13","status":"Y"},     {"text":"FL-DSH-01","id":"EST-14","status":"Y"},     {"text":"FL-DSH-01","id":"EST-15","status":"Y"},     {"text":"FL-DLH-02","id":"EST-17","status":"Y"},     {"text":"AV-CB-01","id":"EST-18","status":"Y"} ]);</pre>
result	
 <p>The data is set in the component and is displayed in the panel.</p>	

---


method	source
setValue (value)	combo4.setValue('EST-17');
result	
	

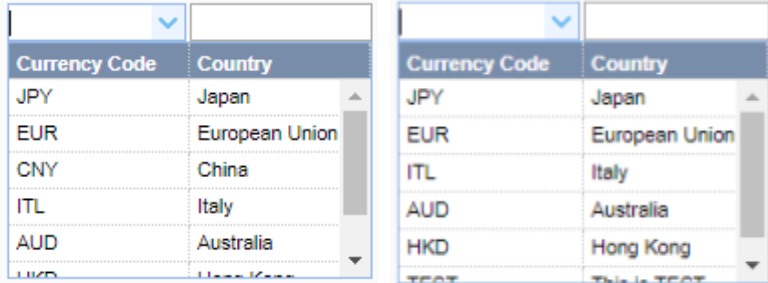
method	source
clear	combo4.clear();
result	
	

method	source
getValue getText getSelected getData	<pre> var val = combo4.getValue(); var text = combo4.getText(); var selVal = combo4.getSelected(); var data = combo4.getData(); alert(".getValue() : " + val + "\n.getText() : " + text + "\n.getSelected() : Displayed in console of developer tools" + "\n.getData() : Displayed in console of developer tools"); console.log(".getValue() : ", val, "\n.getText() : ", text, "\n.getSelected() : ", selVal, "\n.getData() : ", data); </pre>
result	
<div>  <p>Alert screen</p> </div> <div>  <p>Console screen in Developer Tools</p> </div>	

## ■ Item Methods

addItem, deleteItem, itemIndex, itemValue, sort


method	source
addItem (id, text)	combo5.addItem('TEST', '테스트');
result	
 <p>It is inserted into the bottom row of the data table.</p>	

method	source
deleteItem (index)	combo5.deleteItem(2);
result	
 <p>The data in that index will be deleted.</p>	

method	source
itemIndex (value)	combo5.itemIndex('JPY');
result	
<div> 127.0.0.1 says  * The current index of an arbitrary value.  combo5.itemIndex('JPY'); --&gt; 0 <div>OK</div> </div>	


method	source
itemValue (index, fieldName)	combo5.itemValue(2); combo5.itemValue(4,'CODE_NM');
result	
<div> 127.0.0.1 says  * The value of index 2  combo5.itemValue(2); --&gt; ITL    * A specific field of Value (CODE_NM) with index 4,  combo5.itemValue(4,'CODE_NM'); --&gt; Hong Kong <div>OK</div> </div>	




method	source														
sort (fieldName, sortOrder)	combo5.sort('CODE','asc');														
result															
<div><table><thead><tr><th>Currency Code ▲</th><th>Country</th></tr></thead><tbody><tr><td>AUD</td><td>Australia</td></tr><tr><td>EUR</td><td>European Union</td></tr><tr><td>HKD</td><td>Hong Kong</td></tr><tr><td>ITL</td><td>Italy</td></tr><tr><td>JPY</td><td>Japan</td></tr><tr><td>TEST</td><td>This is TEST</td></tr></tbody></table></div> <p>It is aligned in ascending order by the value of the code field in the data.</p>		Currency Code ▲	Country	AUD	Australia	EUR	European Union	HKD	Hong Kong	ITL	Italy	JPY	Japan	TEST	This is TEST
Currency Code ▲	Country														
AUD	Australia														
EUR	European Union														
HKD	Hong Kong														
ITL	Italy														
JPY	Japan														
TEST	This is TEST														

## ■ Column Methods

hideColumn, showColumn

method	source
hideColumn (ColumnNm)	combo6.hideColumn('attr1');
result	
 <p>Hides the value of the data field.</p>	

method	source
showColumn (ColumnNm)	combo6.showColumn('attr1');
result	
 <p>Displays the value of the data field in the data table.</p>	

## ■ Events

onSelect, onChange, onShowPanel, onHidePanel, onLoadSuccess, onLoadError, onSortColumn, onclick, ondblclick, onblur, onfocus, oncontextmenu, onkeydown, onkeypress, onkeyup, onmouseover, onmousedown, onmouseup

```
/*-----  
* BODY  
-----*/  
  
<codecombo id="combo7"  
style="width:300px"  
value="EST-12"  
labelWidth="180px"  
idField="id"  
textField="text"  
url="testData/datagrid_data2.json"  
fitColumns="true"  
  
onSelect      ="eventAll(event);"  
onChange      ="eventAll(event);"  
onShowPanel   ="eventAll(event);"  
onHidePanel   ="eventAll(event);"  
onLoadSuccess ="eventAll(event);"  
onLoadError   ="eventAll(event);"  
onSortColumn  ="eventAll(event);"  
onclick       ="eventAll(event);"  
ondblclick    ="eventAll(event);"  
onblur        ="eventAll(event);"  
onfocus      ="eventAll(event);"  
oncontextmenu ="eventAll(event);"  
onkeydown     ="eventAll(event);"  
onkeypress    ="eventAll(event);"  
onkeyup       ="eventAll(event);"  
onmouseover   ="eventAll(event);"  
onmousedown   ="eventAll(event);"  
onmouseup     ="eventAll(event);"  
>  
"columns" : [  
    {"field":"id", "title":"key", "width":80, "sortable":true, "align":"left"},  
    {"field":"text", "title":"value", "width":80},  
    {"field":"status", "title":"비고", "width":50}  
]  
</codecombo>  
  
/*-----  
* SCRIPT - use event  
-----*/
```

```

function eventAll(obj) {
if(obj.event == "onSelect"){
    console.log('★----- onSelect Event');
    console.log("index : " + obj.args.index + "⚡nrowData : " , obj.args.rowData);
    console.log("rowData : " +
obj.args.rowData.text,obj.args.rowData.id,obj.args.rowData.status);
    console.log('-----★');
}
else if(obj.event == "onChange"){
    console.log('★----- onChange Event');
    console.log("newValue : " + obj.args.newValue + "⚡noldValue : " + obj.args.oldValue);
    console.log('-----★');
}
else if(obj.event == "onShowPanel"){
    console.log('★----- onShowPanel Event');
}
else if(obj.event == "onHidePanel"){
    console.log('★----- onHidePanel Event');
}

    else if(obj.event == "onLoadSuccess"){
        console.log('★----- onLoadSuccess Event');
    }
else if(obj.event == "onLoadError"){
    console.log('★----- onLoadError Event');
}
else if(obj.event == "onSortColumn"){
    console.log('★----- onSortColumn Event');
    console.log("column : " + obj.args.column + "⚡norder : " + obj.args.order);
    console.log('-----★');
}
else if(obj.event == "onclick"){
    console.log('★----- onclick Event');
}
else if(obj.event == "ondblclick"){
    console.log('★----- ondblclick Event');
}
else if(obj.event == "onblur"){
    console.log('★----- onblur Event');
}
else if(obj.event == "onfocus"){
    console.log('★----- onfocus Event');
}
else if(obj.event == "oncontextmenu"){
    console.log('★----- oncontextmenu Event');
}
else if(obj.event == "onkeydown"){
    console.log('★----- onkeydown Event');
}
else if(obj.event == "onkeypress"){

```

---

```
        console.log('★----- onkeypress Event');
    }
    else if(obj.event == "onkeyup"){
        console.log('★----- onkeyup Event');
    }
    else if(obj.event == "onmouseover"){
        console.log('★----- onmouseover Event');
    }
    else if(obj.event == "onmousedown"){
        console.log('★----- onmousedown Event');
    }
    else if(obj.event == "onmouseup"){
        console.log('★----- onmouseup Event');
    }
    }
```


---


## 6. Y[wai] Component Example


### C. Edit

#### ■ Common Properties

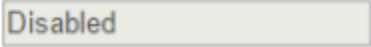
value, class, style, title, disabled, readonly, maxlength, placeholder


property	source
value	<code>edit1.value="abcde";</code>
result	
 <p>Set the value you want.</p>	


property	source
class	<code>edit1.class="className";</code> <code>.className{ Background-color:skyblue; }</code>
result	
 <p>Set the class you want.</p>	


property	source
style	edit1.style="width:150px;border:1px solid blue;"
result	
 <p>Set the style you want.</p>	

property	source
title	edit1.title="Hello";
result	
 <p>Set the title you want.</p>	

property	source
disabled	edit1.disabled=true;
result	
 <p>Disables the object.</p>	

property	source
readonly	edit1.readonly=true;
result	
 <p>Sets the object to read only.</p>	

property	source
maxlength	edit1.maxlength=5;
result	
 <p>Sets the maximum length of the input.</p>	

property	source
placeholder	edit1.placeholder="Enter the ID";
result	
 <p>The object displays a hint.</p>	



## ■ Type Properties

date, datetime, currency, decimal, integer, mask, regex

property	source
date	<code>edit1.type="date";</code>
result	
<div><div>yyyy/mm/dd</div><div>Edits the date input.</div></div>	

property	source
datetime	<code>edit1.type="datetime";</code>
result	
<div><div>10:36:07</div><div>Edits the time input.</div></div>	

property	source
currency	<code>edit1.type="currency";</code>
result	
<div><div>1,222,000.00</div><div>Edits the currency input.</div></div>	

property	source
decimal	edit1.type="decimal";
result	
<div>12165220.00</div> <p>Edits the decimal input.</p>	

property	source
integer	edit1.type="integer";
result	
<div>1123</div> <p>Edits the integer input.</p>	

property	source
mask	edit1.type="mask";
result	
<div>ABcd12</div> <p>Edits the masking type.</p>	

---

property	source
regex	edit1.type="regex";
result	
<div><div>010-0012-9952</div><div>Edits the regular expression type.</div></div>	

■ Sub Properties



date, currency, decimal, mask, regex


property	source
date (dateOrder)	<edit id="dateOrder1" type="date" dateSeparator="ddmmyyyy"></edit>
date (dateSeparator)	<edit id="dateSeparator1" type="date" dateSeparator="-"></edit>
result	
<div><div>2023/06/09</div><div>date display order yyyymmdd (default)</div></div> <div><div>09/06/2023</div><div>date display order ddmmyyyy</div></div> <div><div>06/09/2023</div><div>date display order mmdyyyyy</div></div> <div><div>2024/05/01</div><div>date separator / (default)</div></div>	

property	source
currency (prefix)	<edit id="prefix1" type="currency" prefix="₩"></edit>
currency (digits)	<edit id="digits1" type="currency" digits="3"></edit>
currency (roundType)	<edit id="round1" type="currency" roundType="round"></edit>
result	
<div><div>\$4,835.00</div><div>₩4,835.00</div><div>currency symbol (default: no currency symbol)</div></div> <div><div>279.00</div><div>279.00000</div><div>The number of decimal places (default: 2)</div></div> <div><div>45.00</div><div>Rounding to decimal places (default: round)</div></div>	

property	source
decimal (digits)	<edit id="digits2" type="decimal" digits="3"></edit>
decimal (roundType)	<edit id="round2" type="currency" roundType="round"></edit>
result	
<div> <div>6,578,746</div> <div>6578746</div> <div>The number of decimal places (default: 20 decimal places)</div> </div> <div> <div>45.00</div> <div>Rounding to decimal places (default: round)</div> </div>	


property	source
mask (mask)	<edit id="ma" type="mask" mask="AA99[***]"></edit>
mask (defaultValue)	<edit id="defVal" type="mask" mask="*****" defaultValue="a"></edit>
mask (dataLength)	<edit id="defVal" type="mask" dataLength="5" value="AAA99"></edit>
mask (displayMask)	<edit id="displayMask1" type="mask" mask="9999/99/99" displayMask="false"></edit>

result	
	<div> <div>bc</div> <div>aaaaaaaaabc</div> </div> <div>masking type</div> <div>Fills the empty masking with the default value when blurred on an object after only partial value is entered.</div>
	<div>hsf12</div> <div>value length : 5</div> <div>Displays the value length of the value property. (read only property)</div>
	 <div>Set masking preview on mouse over.</div>

property	source
<div>regex</div> <div>(regex)</div>	<div>&lt;edit id="re" type="regex" regex="[1-9]{1}[0-9]{2}-[0-9]{3}"&gt;&lt;/edit&gt;</div>
result	
	

## ■ Methods

focus, unmaskedValue, getValue

method	source
focus	edit1.focus();
result	
 <p>The cursor moves to the object.</p>	

method	source
unmaskedValue	edit1.unmaskedValue();
result	
<p>Gets the value without masking.</p> <div><div><div>2012/12/31</div><div>→ 20121231</div></div><div><div>121,200.00</div><div>→ 121200</div></div><div><div>ABC_</div><div>→ ABC</div></div></div>	

---

method	source
getValue	edit1.getValue();
result	
Gets the value with masking.	
<div><div>2012/12/31</div><div>→ 2012/12/31</div></div> <div><div>121,200.00</div><div>→ 121,200,00</div></div> <div><div>ABC_</div><div>→ ABC_</div></div>	



## ■ Events

onclick, ondblclick, onkeydown, onkeypress, onkeyup, onmousedown, onmouseup, onmouseover, onblur, onfocus, onchange, oncontextmenu, oncomplete, onincomplete, oncleared, onZeroMskComplete

```
/* -----
* body source
* ----- */
onclick      : <edit id="clikevt1"  onclick="eventAll(event);"></edit>
ondblclick    : <edit id="dblclikevt1" ondblclick="eventAll(event);"></edit>
onkeydown     : <edit id="keydownvt1" onkeydown="eventAll(event);"></edit>
onkeypress    : <edit id="keypressevt1" onkeypress="eventAll(event);"></edit>
onkeyup       : <edit id="keyupevt1"  onkeyup="eventAll(event);"></edit>
onmousedown   : <edit id="mousedownvt1" onmousedown="eventAll(event);"></edit>
onmouseup     : <edit id="mouseupevt1" onmouseup="eventAll(event);"></edit>
onmouseover   : <edit id="mouseovervt1" onmouseover="eventAll(event);"></edit>
onblur        : <edit id="blurevt1"   onblur="eventAll(event);"></edit>
onfocus      : <edit id="focusevt1"  onfocus="eventAll(event);"></edit>
onchange      : <edit id="changevt1"  onchange="eventAll(event);"></edit>
oncontextmenu : <edit id="ctmenuvt1"  oncontextmenu="eventAll(event);"></edit>

oncomplete    : <edit id="oncompleteevt1" type="date" oncomplete="eventAll(event);"></edit>
onincomplete   : <edit id="onincompleteevt1" type="date"
onincomplete="eventAll(event);"></edit>
oncleared      : <edit id="oncleared1evt" type="date" oncleared="eventAll(event);"></edit>

onZeroMskComplete : <edit id="zmevt" type="mask" mask="999999" defaultValue="0"
onZeroMskComplete="eventAll(event);"></edit>

/* -----
* script source
* ----- */
function eventAll(obj){
    if (obj.event == 'onChange') {
        alert("Event : " + obj.event + "WnoldValue: " + obj.args.oldValue + "WnnewValue: " +
obj.args.newValue);
    } else {
        alert("Event : " + obj.event);
    }
}
```


---

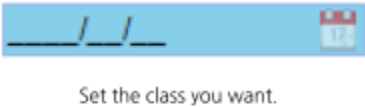
## 6. Y[wai] Component Example


### D. DateEdit

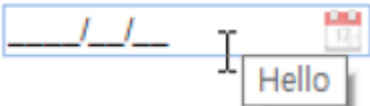
#### ■ Properties

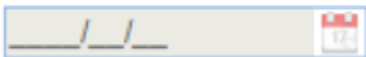
value, class, style, title, disabled, readonly, lang, dateOrder, validate, calWidth, calHeight, btnImg, firstDay, dateSeparator

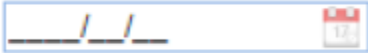
property	source
value	dateedit1.value="abcde"
result	
	

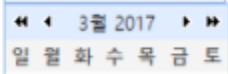
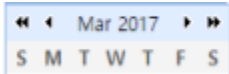

property	source
class	dateedit1.class="className"; .className{ Background-color:skyblue; }
result	
	

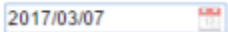
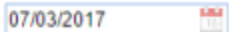
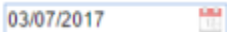
property	source
style	dateedit1.style="width:150px;height:30px;font-size:14px;border:1px solid red;"
result	
 <p>Set the style you want.</p>	

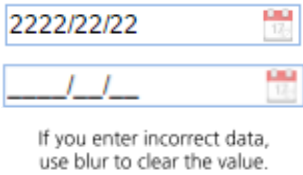
property	source
title	dateedit1.title="Hello";
result	
 <p>Set the title you want.</p>	

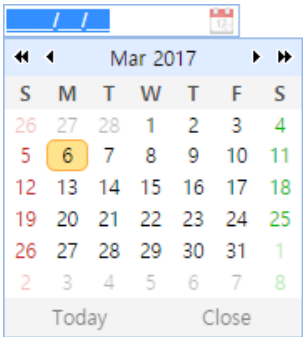
property	source
disabled	dateedit1.disabled=true;
result	
 <p>Disables the object.</p>	

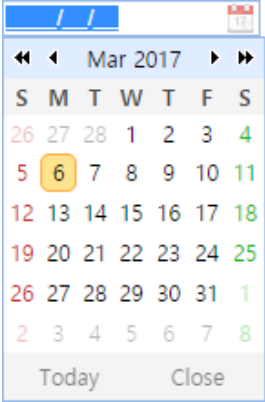
property	source
readonly	<code>dateedit1.readonly=true;</code>
result	
 <p>Sets the object to read only.</p>	


property	source
lang	<code>dateedit1.lang="Korean";</code> <code>dateedit1.lang="English";</code> <code>dateedit1.lang="Chinese";</code>
result	
<p>Set the language that displays at the top of the calendar.</p> <div>    </div> <div> <p>Korean</p> <p>English</p> <p>Chinese</p> </div>	

property	source
dateOrder	<code>dateedit1.dateOrder="yyyymmdd";</code> <code>dateedit1.dateOrder="ddmmyyyy";</code> <code>dateedit1.dateOrder="mmddyyyy";</code>
result	
<div>    </div> <div> <p>yyyymmdd</p> <p>ddmmyyyy</p> <p>mmddyyyy</p> </div>	

property	source
validate	dateedit1.validate=true;
result	
	

property	source
calWidth	dateedit1.calWidth="180px";
result	
	


property	source
calHeight	dateedit1.calHeight="200px";
result	
	

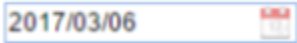
property	source
btnImg	dateedit1.btnImg="이미지경로(imagepath)";
result	
	



## ■ Methods

focus, unmaskedValue, getValue, setValue


method	source
focus	<code>dateedit1.focus();</code>
result	
 <p>The cursor moves to the object.</p>	

method	source
unmaskedValue	<code>dateedit1.unmaskedValue();</code>
result	
 <p>→ 20170306 Gets the value without masking.</p>	

method	source
getValue	<code>dateedit1.getValue();</code>
result	
 <p>→ 2017/03/06 Gets the value with masking.</p>	



---

method	source
setValue	dateedit1.setValue(value);
result	
<div>2016/06/10 </div>	

---

## ■ Events

onclick, ondblclick, onkeydown, onkeypress, onkeyup, onmousedown, onmouseup, onmouseover, onblur, onfocus, oncontextmenu, onSelect, onChange

```
onclick    :<dateedit id="clিকেব1"    onclick="eventAll(event);"></dateedit>
ondblclick :<dateedit id="dblclিকেব1" ondblclick="eventAll(event);"></dateedit>
onkeydown  :<dateedit id="keydownেব1" onkeydown="eventAll(event);"></dateedit>
onkeypress :<dateedit id="keypresেব1" onkeypress="eventAll(event);"></dateedit>
onkeyup    :<dateedit id="keyuেব1"    onkeyup="eventAll(event);"></dateedit>
onmousedown :<dateedit id="mousedownেব1" onmousedown="eventAll(event);"></dateedit>
onmouseup  :<dateedit id="mouseuেব1"  onmouseup="eventAll(event);"></dateedit>
onmouseover :<dateedit id="mouseoverেব1" onmouseover="eventAll(event);"></dateedit>
onblur     :<dateedit id="blureব1"    onblur="eventAll(event);"></dateedit>
onfocus   :<dateedit id="focuseব1"   onfocus="eventAll(event);"></dateedit>
oncontextmenu :<dateedit id="ctmenueব1" oncontextmenu="eventAll(event);"></dateedit>
onSelect   :<dateedit id="selectেব1"  onSelect="eventAll(event);"></dateedit>
onChange   :<dateedit id="changeেব1"  onChange="eventAll(event);"></dateedit>

/* -----
 * script source
 * ----- */

function eventAll(obj){
  if (obj.event == 'onSelect') {
    alert(obj.event + " : " + obj.srcElement.value);
  } else if (obj.event == 'onChange') {
    alert(obj.event + "WnoldDate: " + obj.args.oldDate + "WnnewDate: " + obj.args.newDate);
  } else {
    alert(obj.event);
  }
}
```

## 6. Y[wai] Component Example

### E. TabControl

#### ■ Properties

property	source
id	<pre>&lt;tabControl id="tabControl1" index="0" tabTextAlign="left" tabTitleWidth="120px" tabFontFamily="Tahoma" tabFontSize="13px" onLoaded="tabControl1Loaded(event);" style="position: absolute; left: 40px; top: 56px; width: 624px; height: 464px;"&gt;   &lt;tabPage id="tabPage0" title="chart example" iconSrc="/Y[wai]/IDE/windows/editors/img/icon-pie.gif" style="width: 100%; height: 100%; display: block;"&gt;   &lt;/tabPage&gt;   &lt;tabPage id="tabPage1" title="newTabPage" style="width: 100%; height: 100%; display: none;"&gt;   &lt;/tabPage&gt; &lt;/tabControl&gt;</pre>
index	
tabTextAlign	
tabTitleWidth	
tabFontFamily	
tabFontSize	
[tabPage] id	
[tabPage] title	
[tabPage] iconSrc	
result	
<div><div><div>TabControl (index = 0)</div><div><div>grid examplechart example</div><div><div>Home codeHome titleHome title(English)Year</div><div></div></div></div></div><div><div>grid examplechart example</div><div><div>Home codeHome titleHome title(English)Year</div><div></div></div></div><div><div>TABCONTROL: tabControl</div><div><div>namevalue</div><div>Properties</div><div>idtabControl</div><div>index0</div><div>style[ 0, 0, 0 ]</div><div>positionabsolute</div><div>left40px</div><div>top56px</div><div>width624px</div><div>height464px</div><div>tabTextAlignleft</div><div>tabTitleWidth120px</div><div>tabFontFamilyTahoma</div><div>tabFontSize13px</div></div></div><div>Index value</div><div><div>TABPAGE: tabPage1</div><div><div>namevalue</div><div>Properties</div><div>idtabPage1</div><div>titlegrid example</div><div>iconSrc"/Y[wai]/IDE/windows/editors/img/icon-pie.gif"</div><div>stylewidth: 100%; height: 100%; display: none;</div></div></div><div>TabPage</div></div>	


---

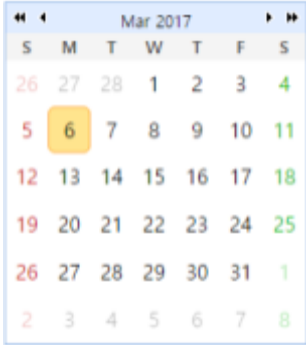
## 6. Y[wai] Component Example

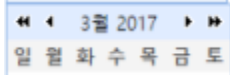
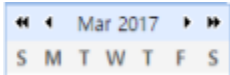

### F. Calendar

#### ■ Properties

value, style, lang, dateOrder, firstDay

property	source
value	calendar1.value="20170122";
result	
 <p>Set the value you want.</p>	

property	source
style	calendar1.style="width:220px;height:250px;font-size:15px;"
result	
 <p>Set the style you want.</p>	

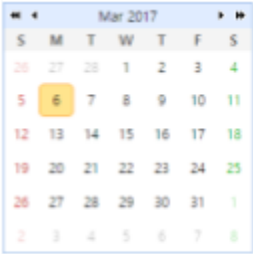
property	source
lang	calendar1.lang="Korean"; calendar1.lang="English"; calendar1.lang="Chinese";
result	
<p>Set the language that displays at the top of the calendar.</p> <div>    </div> <div> <p>Korean</p> <p>English</p> <p>Chinese</p> </div>	

property	source
dateOrder	calendar1.dateOrder="yyymydd"; calendar1.dateOrder="ddmmyyyy"; calendar1.dateOrder="mmdyyyyy";
result	
<div data-bbox="703 611 1006 915"> </div> <p>             The values for the              dateOrder property              (yyymydd: 20170306)              (ddmmyyyy: 06032017)              (mmdyyyyy: 03062017)           </p>	

property	source
firstDay	<div>calendar1.firstDay="sun"; calendar1.firstDay="mon"; calendar1.firstDay="tue"; calendar1.firstDay="wed";</div> <div>calendar1.firstDay="thu"; calendar1.firstDay="fri"; calendar1.firstDay="sat";</div>
result	
<p>Set the start day of the week for the calendar.</p> <div><div><div>« ◀ Mar 2017 ▶ »</div><div>S M T W T F S</div><div>sunday</div></div><div><div>« ◀ Mar 2017 ▶ »</div><div>M T W T F S S</div><div>monday</div></div><div><div>« ◀ Mar 2017 ▶ »</div><div>T W T F S S M</div><div>tuesday</div></div><div><div>« ◀ Mar 2017 ▶ »</div><div>W T F S S M T</div><div>wednesday</div></div><div><div>« ◀ Mar 2017 ▶ »</div><div>T F S S M T W</div><div>thursday</div></div><div><div>« ◀ Mar 2017 ▶ »</div><div>F S S M T W T</div><div>friday</div></div><div><div>« ◀ Mar 2017 ▶ »</div><div>S S M T W T F</div><div>saturday</div></div></div>	

■ Methods

getValue, setValue

method	source
getValue	calendar1.getValue();
result	
<div><p>Gets the value with masking. (yyyyMMdd: 2017/03/06) (ddmmyyyy: 06/03/2017) (mmdyyyy: 03/06/2017)</p></div>	

method	source
setValue	calendar1.setValue(value);
result	
<p>Sets the date value for the dateOrder property value. If you give it a value, such as ID.setValue(); or ID.setValue("");, it will be set to the date of today.</p>	



---

## ■ Events

onSelect

```
/*-----  
* BODY  
-----*/  
<calendar id="calEvent"  
onSelect ="eventAll(event);"  
>  
</ calendar >  
  
/*-----  
* SCRIPT - use event  
-----*/  
function eventAll(obj) {  
    alert("Event : " + obj.event);  
    console.log("Today : ", selEvt.year, selEvt.month, selEvt.day);  
    console.log("Select : ", selEvt.selYear, selEvt.selMonth, selEvt.selDay);  
}
```

# 6. Y[wai] Component Example

## G. Chart

■ Properties

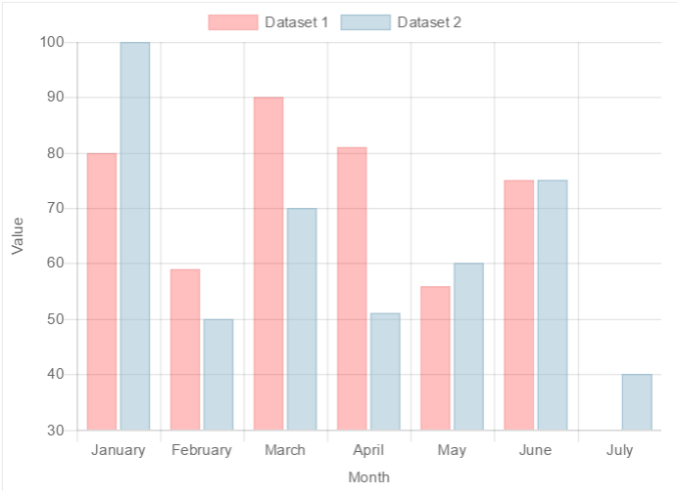
type, data, option, style

✓ Bar

property	source
type	type="bar"
data	<pre>"data" : {   "labels": ["January", "February", "March", "April", "May", "June", "July"],   "datasets": [{     "label": "Dataset 1 ",     "backgroundColor": "rgba(255, 0, 0, 0.25)",     "borderColor": "rgba(220, 0, 0, 0.2)",     "borderWidth": 1,     "hoverBackgroundColor":"rgba(220, 0, 0, 0.5)",     "hoverBorderColor":"rgba(220,0, 0, 0.5)",     "hoverBorderWidth":1,     "data": [80,59,90,81,56,75,30]   }, {     "label": "Dataset 2",     "backgroundColor": "rgba(151,187,205,0.5)",     "borderColor": "rgba(151,187,205,0.8)",     "borderWidth": 1,     "hoverBackgroundColor":"rgba(151,187,205,0.8)",     "hoverBorderColor":"rgba(151,187,205,1)",     "hoverBorderWidth":1,     "data": [100,50,70,51,60,75,40]   }   ] },</pre>
option	<pre>"option": {   "responsive": true,   "tooltips": {     "mode": "index",     "intersect": false   },   "hover": {     "mode": "nearest",</pre>

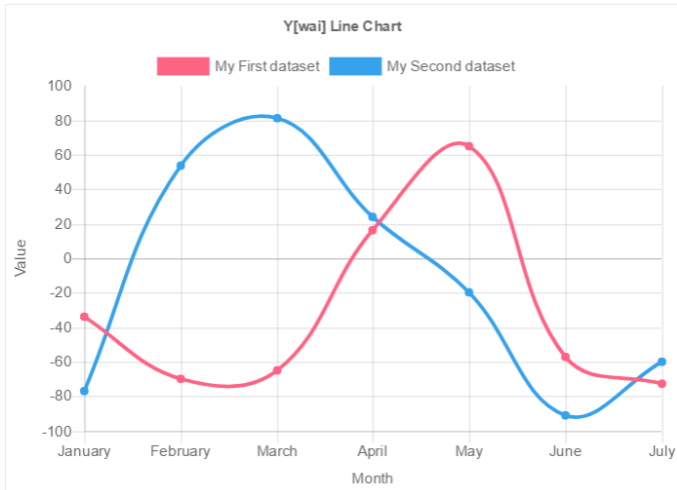
	<pre>        "intersect": true       },       "scales": {         "xAxes": [{           "display": true,           "scaleLabel": {             "display": true,             "labelString": "Month"           }         }],         "yAxes": [{           "display": true,           "scaleLabel": {             "display": true,             "labelString": "Value"           }         }]       }     }   } }</pre>
style	style="position: absolute; top: 47px; left: 21px; width: 300px; height: 300px;"

result



✓ Line

property	source
type	type="line"
data	<pre> "data" : {   "labels": ["January", "February", "March", "April", "May", "June", "July"],   "datasets": [{     "label": "My First dataset",     "backgroundColor": "rgb(255, 99, 132)",     "borderColor": "rgb(255, 99, 132)",     "data": [-34,-70,-65,16,65,-57,-73],     "fill": false   }, {     "label": "My Second dataset",     "fill": false,     "backgroundColor": "rgb(54, 162, 235)",     "borderColor": "rgb(54, 162, 235)",     "data": [-77,54,81,24,-20,-91,-60]   }] }, </pre>
option	<pre> "option": {   "responsive": true,   "title": {     "display": true,     "text": "Y[wai] Line Chart",     "position": "top"   },   "tooltips": {     "mode": "index",     "intersect": false   },   "hover": {     "mode": "nearest",     "intersect": true   },   "scales": {     "xAxes": [{       "display": true,       "scaleLabel": {         "display": true,         "labelString": "Month"       }     }]   }, </pre>

	<pre>"yAxes": [{     "display": true,     "scaleLabel": {         "display": true,         "labelString": "Value"     } }] }</pre>																								
style	style = "position: absolute; top: 47px; left: 21px; -index: 1000; width: 300px; height: 300px;"																								
result																									
 <p>The chart displays two datasets over a seven-month period. The 'My Second dataset' (blue) starts at -80 in January, peaks at 80 in March, and ends at -60 in July. The 'My First dataset' (red) starts at -30 in January, peaks at 65 in May, and ends at -75 in July. The two lines intersect in April at a value of 20.</p> <table><tr><th>Month</th><th>My First dataset</th><th>My Second dataset</th></tr><tr><td>January</td><td>-30</td><td>-80</td></tr><tr><td>February</td><td>-70</td><td>55</td></tr><tr><td>March</td><td>-65</td><td>80</td></tr><tr><td>April</td><td>20</td><td>20</td></tr><tr><td>May</td><td>65</td><td>-20</td></tr><tr><td>June</td><td>-55</td><td>-90</td></tr><tr><td>July</td><td>-75</td><td>-60</td></tr></table>		Month	My First dataset	My Second dataset	January	-30	-80	February	-70	55	March	-65	80	April	20	20	May	65	-20	June	-55	-90	July	-75	-60
Month	My First dataset	My Second dataset																							
January	-30	-80																							
February	-70	55																							
March	-65	80																							
April	20	20																							
May	65	-20																							
June	-55	-90																							
July	-75	-60																							

✓ Radar

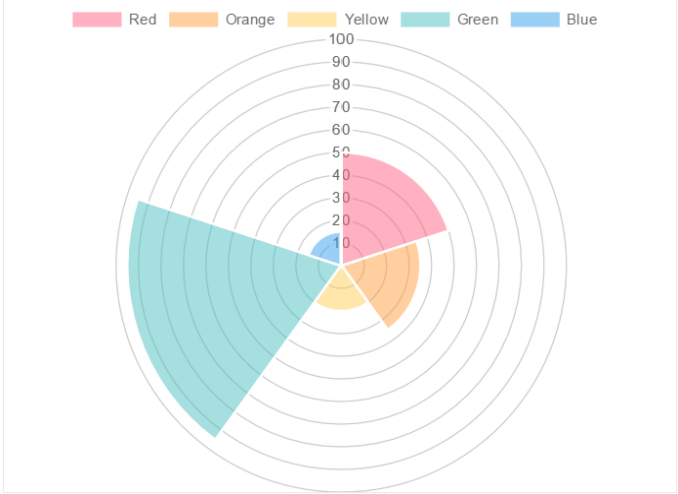
property	source
type	type="radar"
data	<pre> "data" : {   "labels": [ ["Eating", "Dinner"], ["Drinking", "Water"], "Sleeping", ["Designing", "Graphics"], "Coding", "Cycling", "Running"],   "datasets": [{     "label": "My First dataset",     "backgroundColor": "rgba(255, 99, 132, 0.1)",     "borderColor": "rgba(255, 99, 132, 0.5)",     "pointBackgroundColor": "rgba(255, 99, 132, 0.1)",     "data": [65,59,null,81,56,55,40],     "fill": false   },{     "label": "My Second dataset",     "backgroundColor": "rgba(54, 162, 235, 0.1)",     "borderColor": "rgba(54, 162, 235, 0.5)",     "pointBackgroundColor": "rgba(54, 162, 235, 0.1)",     "data": [28,48,40,19,96,27,100]   }] } </pre>
option	<pre> "option" : {   "title" : {     "display":false,     "position":"top"   },   "legend" : {     "display":true,     "reverse":false,     "position":"top",     "labels":{       "usePointStyle":false     }   },   "scale":{     "display" : true,     "gridLines" : { "display" : true },     "pointLabels" : { "display" : true },     "ticks" : { "display" : true }   },   "tooltips" : {     "enabled" : true,     "mode" : "nearest",     "intersect" : true,     "displayColors" : true   } } </pre>

	<pre>}, "animation":{ "animateScale" : false } }</pre>																								
style	style= “position: absolute; top: 47px; left: 21px; z-index: 1000; width: 300px; height: 300px;”																								
result																									
<p>The radar chart displays two datasets across seven categories. The scale ranges from 0 to 100 in increments of 10. The legend indicates that the red line represents 'My First dataset' and the blue line represents 'My Second dataset'.</p> <table><tr><th>Activity</th><th>My First dataset</th><th>My Second dataset</th></tr><tr><td>Eating Dinner</td><td>60</td><td>30</td></tr><tr><td>Drinking Water</td><td>40</td><td>30</td></tr><tr><td>Sleeping</td><td>20</td><td>30</td></tr><tr><td>Designing Graphics</td><td>80</td><td>30</td></tr><tr><td>Coding</td><td>30</td><td>100</td></tr><tr><td>Cycling</td><td>20</td><td>30</td></tr><tr><td>Running</td><td>30</td><td>100</td></tr></table>		Activity	My First dataset	My Second dataset	Eating Dinner	60	30	Drinking Water	40	30	Sleeping	20	30	Designing Graphics	80	30	Coding	30	100	Cycling	20	30	Running	30	100
Activity	My First dataset	My Second dataset																							
Eating Dinner	60	30																							
Drinking Water	40	30																							
Sleeping	20	30																							
Designing Graphics	80	30																							
Coding	30	100																							
Cycling	20	30																							
Running	30	100																							

## ✓ Polar Area

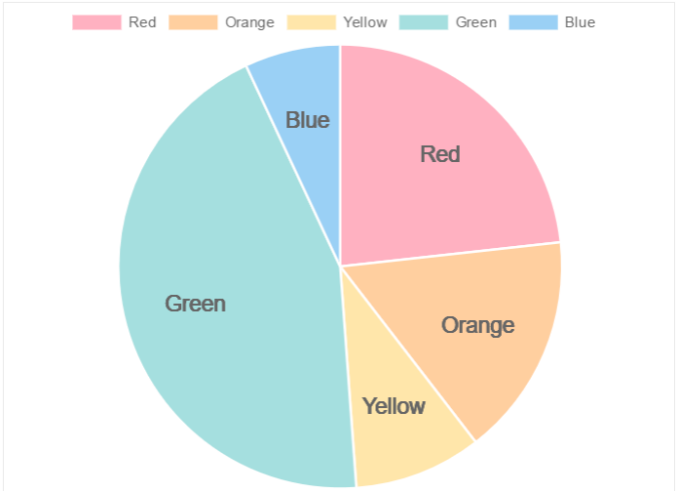
property	source
type	type="polarArea"
data	<pre> "data" : {   "datasets": [{     "data": [50,35,20,95,15],     "backgroundColor": [       "rgba(255, 99, 132, 0.5)",       "rgba(255, 159, 64, 0.5)",       "rgba(255, 205, 86, 0.5)",       "rgba(75, 192, 192, 0.5)",       "rgba(54, 162, 235, 0.5)"     ],     "hoverBackgroundColor": [       "rgba(255, 99, 132, 1)",       "rgba(255, 159, 64, 1)",       "rgba(255, 205, 86, 1)",       "rgba(75, 192, 192, 1)",       "rgba(54, 162, 235, 1)"     ],     "label": "My dataset"   }],   "labels": [     "Red",     "Orange",     "Yellow",     "Green",     "Blue"   ] } </pre>
option	<pre> "option" : {   "title" : {     "display":false,     "position":"top"   },   "legend" : {     "display":true,     "reverse":false,     "position":"top",     "labels":{       "usePointStyle":false     }   },   "scale":{     "display" : true, </pre>



	<pre>"gridLines" : { "display" : true }, "pointLabels" : { "display" : true }, "ticks" : { "display" : true } }, "tooltips" : {   "enabled" : true,   "mode" : "nearest",   "intersect" : true,   "displayColors" : true }, "animation":{ "animateScale" : false } }</pre>
style	style = "position: absolute; top: 47px; left: 21px; z-index: 1000; width: 300px;height: 300px;"
result	
	

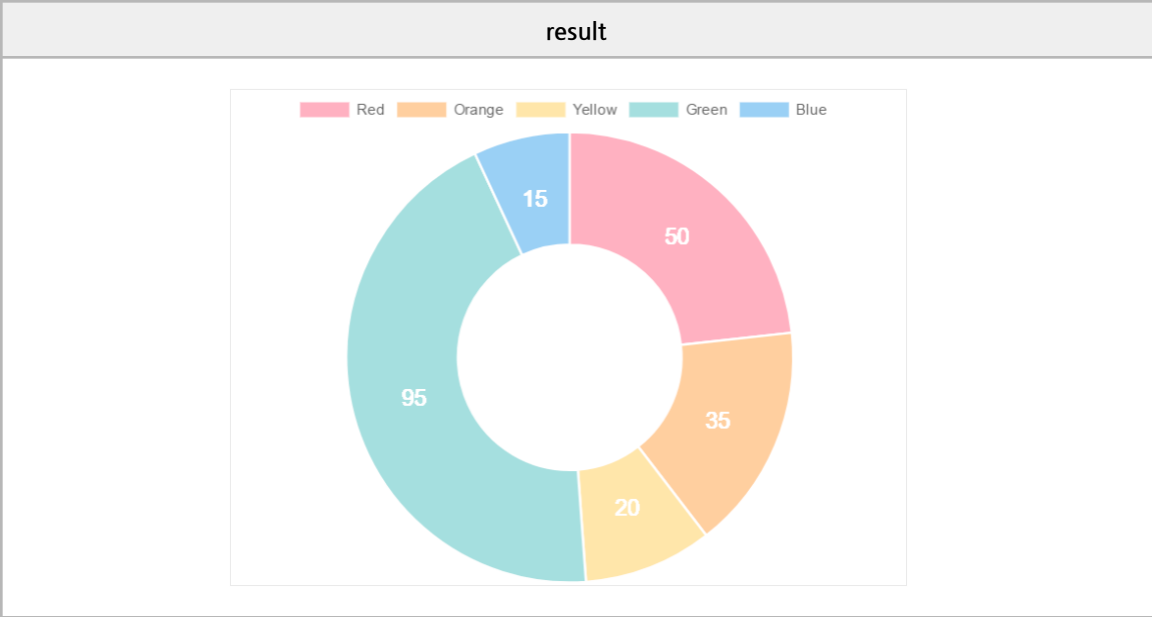
✓ Pie

property	source
type	type="pie"
data	<pre> "data" : {   "datasets": [{     "data": [50,35,20,95,15],     "backgroundColor": [       "rgba(255, 99, 132, 0.5)",       "rgba(255, 159, 64, 0.5)",       "rgba(255, 205, 86, 0.5)",       "rgba(75, 192, 192, 0.5)",       "rgba(54, 162, 235, 0.5)"     ],     "hoverBackgroundColor": [       "rgba(255, 99, 132, 1)",       "rgba(255, 159, 64, 1)",       "rgba(255, 205, 86, 1)",       "rgba(75, 192, 192, 1)",       "rgba(54, 162, 235, 1)"     ],     "label": "Dataset 1"   }],   "labels": [     "Red",     "Orange",     "Yellow",     "Green",     "Blue"   ] } </pre>
option	<pre> "option" : {   "tooltips": {     "enabled" : false   },   "showPieceLabel":{     "enabled": true,     "mode": "label",     "fontSize": 18,     "fontStyle": "bold",     "fontColor": "#666",     "fontFamily": "'Helvetica Neue', 'Helvetica', 'Arial', sans-serif"   } } </pre>

style	style = "position: absolute; top: 47px; left: 21px; z-index: 1000; width: 300px; height: 300px;"
result	
	

## ✓ Doughnut

property	source
type	type="doughnut"
data	<pre> "data" : {   "datasets": [{     "data": [50,35,20,95,15],     "backgroundColor": [       "rgba(255, 99, 132, 0.5)",       "rgba(255, 159, 64, 0.5)",       "rgba(255, 205, 86, 0.5)",       "rgba(75, 192, 192, 0.5)",       "rgba(54, 162, 235, 0.5)"     ],     "label": "Dataset 1"   }],   "labels": [     "Red",     "Orange",     "Yellow",     "Green",     "Blue"   ] } </pre>
option	<pre> "option" : {   "tooltips": {     "enabled" : false   },   "showValue":true,   "showPieceLabel":{     "enabled": true   } } </pre>
style	<pre> style = " position: absolute; top: 47px; left: 21px; z-index: 1000; width: 300px; height: 300px;" </pre>



## ■ Methods

getData, update, addData, removeData, setData

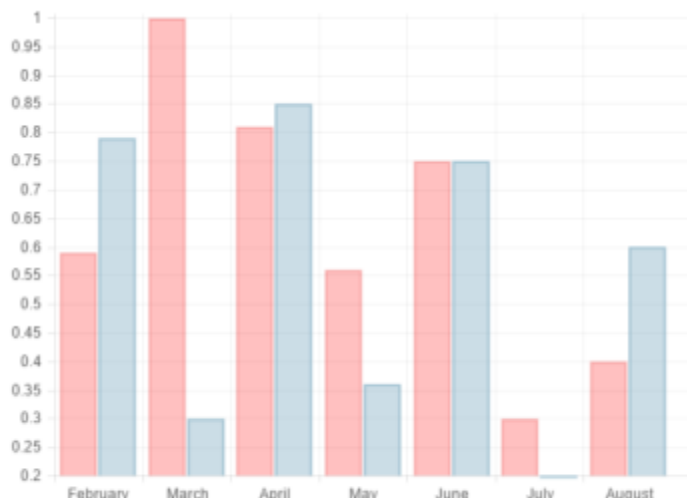
## ✓ Bar

method	source
getData	<pre> function bar_getData(){     var returnValue = bar.getData();      alert(         'It takes an entire data array.'         + '\n\n Check getData object in the console window.'         + '\n\n'         + 'ex) Use the return value to extract the desired value.'         + '\n\n'         + 'returnValue[0].value[0] : '         + returnValue[0].value[0]     );      console.log( 'bar_getData : ' , returnValue ); } </pre>
result	
<div> <div> 127.0.0.1 says  It takes an entire data array.  Check the getData object in the console window.   ex) Use the return value to extract the desired value.  returnValue[0].data[0] : 80 <div>OK</div> </div> <div> </div> </div>	

method	source																								
<div>update</div> <div>(value,dataset,index)</div>	<pre>function bar_update(){   bar.update(6,0,2);   bar.update(8,1,2); }</pre>																								
result																									
<div><table><thead><tr><th>Month</th><th>Dataset 1</th><th>Dataset 2</th></tr></thead><tbody><tr><td>January</td><td>80</td><td>100</td></tr><tr><td>February</td><td>58</td><td>50</td></tr><tr><td>March</td><td>5</td><td>8</td></tr><tr><td>April</td><td>80</td><td>50</td></tr><tr><td>May</td><td>55</td><td>60</td></tr><tr><td>June</td><td>75</td><td>75</td></tr><tr><td>July</td><td>30</td><td>40</td></tr></tbody></table><p>The value of the March data with index 2 is updated.</p></div>		Month	Dataset 1	Dataset 2	January	80	100	February	58	50	March	5	8	April	80	50	May	55	60	June	75	75	July	30	40
Month	Dataset 1	Dataset 2																							
January	80	100																							
February	58	50																							
March	5	8																							
April	80	50																							
May	55	60																							
June	75	75																							
July	30	40																							

method	source																											
<div>addData (data, label)</div>	<pre>function bar_addData(){     bar.addData([40, 60], "August"); }</pre>																											
result																												
<div><table><tr><th>Month</th><th>Red Bar Value</th><th>Blue Bar Value</th></tr><tr><td>January</td><td>0.8</td><td>0.3</td></tr><tr><td>February</td><td>0.6</td><td>0.8</td></tr><tr><td>March</td><td>1.0</td><td>0.3</td></tr><tr><td>April</td><td>0.8</td><td>0.85</td></tr><tr><td>May</td><td>0.55</td><td>0.35</td></tr><tr><td>June</td><td>0.75</td><td>0.75</td></tr><tr><td>July</td><td>0.3</td><td>0.0</td></tr><tr><td>August</td><td>0.4</td><td>0.6</td></tr></table><p>The new data is added.</p></div>		Month	Red Bar Value	Blue Bar Value	January	0.8	0.3	February	0.6	0.8	March	1.0	0.3	April	0.8	0.85	May	0.55	0.35	June	0.75	0.75	July	0.3	0.0	August	0.4	0.6
Month	Red Bar Value	Blue Bar Value																										
January	0.8	0.3																										
February	0.6	0.8																										
March	1.0	0.3																										
April	0.8	0.85																										
May	0.55	0.35																										
June	0.75	0.75																										
July	0.3	0.0																										
August	0.4	0.6																										

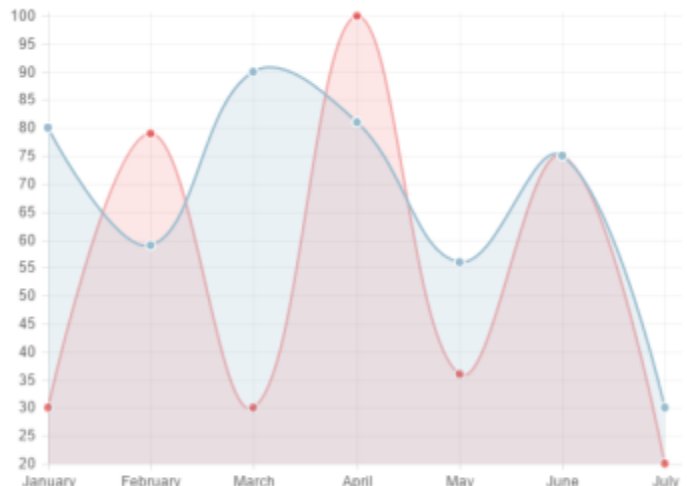


method	source																								
<code>removeData</code> (index)	<pre>function bar_removeData(){     bar.removeData(); }</pre>																								
result																									
 <p>The first piece of data, the January bar data, is deleted.</p> <table><tr><th>Month</th><th>Red Series (approx.)</th><th>Blue Series (approx.)</th></tr><tr><td>February</td><td>0.58</td><td>0.78</td></tr><tr><td>March</td><td>1.00</td><td>0.30</td></tr><tr><td>April</td><td>0.81</td><td>0.85</td></tr><tr><td>May</td><td>0.55</td><td>0.35</td></tr><tr><td>June</td><td>0.75</td><td>0.75</td></tr><tr><td>July</td><td>0.30</td><td>0.00</td></tr><tr><td>August</td><td>0.40</td><td>0.60</td></tr></table>		Month	Red Series (approx.)	Blue Series (approx.)	February	0.58	0.78	March	1.00	0.30	April	0.81	0.85	May	0.55	0.35	June	0.75	0.75	July	0.30	0.00	August	0.40	0.60
Month	Red Series (approx.)	Blue Series (approx.)																							
February	0.58	0.78																							
March	1.00	0.30																							
April	0.81	0.85																							
May	0.55	0.35																							
June	0.75	0.75																							
July	0.30	0.00																							
August	0.40	0.60																							

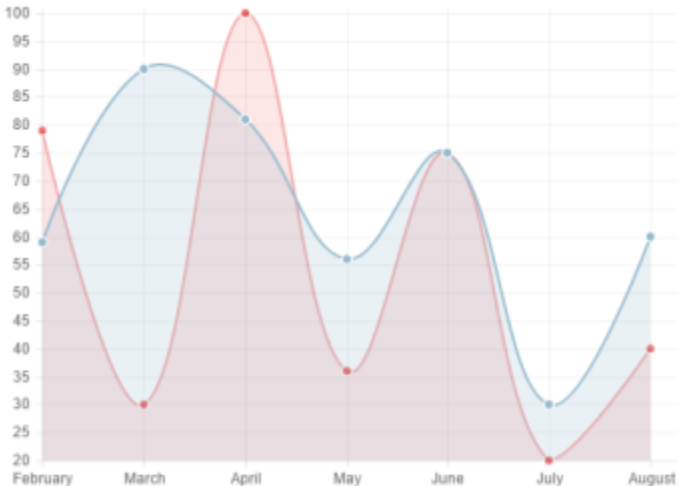
method	source																								
<div>setData (data, option)</div>	<pre>function bar_setData(){     bar.setData(data.barData,option.barOption); }</pre>																								
result																									
<div><table><tr><th>Month</th><th>Red Series</th><th>Blue Series</th></tr><tr><td>January</td><td>1</td><td>5</td></tr><tr><td>February</td><td>2</td><td>4</td></tr><tr><td>March</td><td>3</td><td>3</td></tr><tr><td>April</td><td>4</td><td>2</td></tr><tr><td>May</td><td>5</td><td>5</td></tr><tr><td>June</td><td>6</td><td>7</td></tr><tr><td>July</td><td>7</td><td>5</td></tr></table></div> <div>The new data is set and the chart is loaded.</div>		Month	Red Series	Blue Series	January	1	5	February	2	4	March	3	3	April	4	2	May	5	5	June	6	7	July	7	5
Month	Red Series	Blue Series																							
January	1	5																							
February	2	4																							
March	3	3																							
April	4	2																							
May	5	5																							
June	6	7																							
July	7	5																							

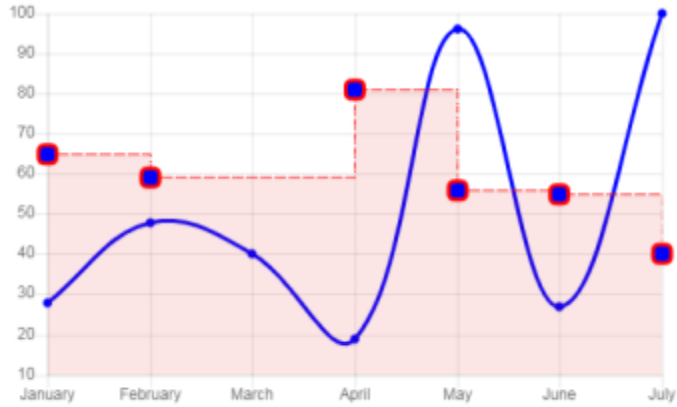
✓ Line

method	source
getData	<pre> function line_getData(){     var returnValue = line_getData();      alert(         'It takes an entire data array..'         + '\n Check getData object in the console window.         \n\n'         + 'ex) Use the return value to extract the desired value.         \n'         + 'returnValue[0].value[0] : '         + returnValue[0].value[0]     );      console.log('line_getData : ' , returnValue ); } </pre>
result	
<div>   </div>	

method	source																								
<div>update (value,dataset,index)</div>	<pre>function line_update(){   line.update(100,0,3);   line.update(30,0,2); }</pre>																								
result																									
 <p>The red graph data for March and April is updated.</p> <table><tr><th>Month</th><th>Blue Series (Original)</th><th>Red Series (Updated)</th></tr><tr><td>January</td><td>80</td><td>30</td></tr><tr><td>February</td><td>60</td><td>80</td></tr><tr><td>March</td><td>90</td><td>30</td></tr><tr><td>April</td><td>80</td><td>100</td></tr><tr><td>May</td><td>55</td><td>35</td></tr><tr><td>June</td><td>75</td><td>75</td></tr><tr><td>July</td><td>30</td><td>20</td></tr></table>		Month	Blue Series (Original)	Red Series (Updated)	January	80	30	February	60	80	March	90	30	April	80	100	May	55	35	June	75	75	July	30	20
Month	Blue Series (Original)	Red Series (Updated)																							
January	80	30																							
February	60	80																							
March	90	30																							
April	80	100																							
May	55	35																							
June	75	75																							
July	30	20																							

method	source																											
<code>addData</code> (data, label)	<pre>function line_addData(){   line.addData([40, 60], "August"); }</pre>																											
result																												
<p>The August data is added.</p> <table><tr><th>Month</th><th>Blue Series Value</th><th>Red Series Value</th></tr><tr><td>January</td><td>80</td><td>30</td></tr><tr><td>February</td><td>60</td><td>78</td></tr><tr><td>March</td><td>90</td><td>30</td></tr><tr><td>April</td><td>80</td><td>98</td></tr><tr><td>May</td><td>55</td><td>35</td></tr><tr><td>June</td><td>75</td><td>75</td></tr><tr><td>July</td><td>30</td><td>20</td></tr><tr><td>August</td><td>60</td><td>40</td></tr></table>		Month	Blue Series Value	Red Series Value	January	80	30	February	60	78	March	90	30	April	80	98	May	55	35	June	75	75	July	30	20	August	60	40
Month	Blue Series Value	Red Series Value																										
January	80	30																										
February	60	78																										
March	90	30																										
April	80	98																										
May	55	35																										
June	75	75																										
July	30	20																										
August	60	40																										


method	source
removeData (index)	<pre>function line_removeData(){     line.removeData(); }</pre>
result	
 <p>The January line data in the first is deleted.</p>	

method	source
<code>setData</code> (data, option)	<pre>function line_setData(){   line.setData(data.lineData);   line.option = option.lineOption; }</pre>
result	
 <p>The new data is set and the chart is loaded.</p>	


## ✓ Radar


method	source
getData	<pre> function radar_getData(){     var returnValue = radar.getData();      alert(         'It takes an entire data array..'         + '\n\n Check getData object in the console window.         \n\n'         + 'ex) Use the return value to extract the desired value.         \n\n'         + 'returnValue[0].value[0] : '         + returnValue[0].value[0]     );      console.log('radar_getData : ', returnValue ); } </pre>
result	
<div> <div> <p>127.0.0.1 says</p> <p>It takes an entire data array. Check the getData object in the console window.</p> <p>ex) Use the return value to extract the desired value. returnValue[0].data[0] : 65</p> <p>OK</p> </div> <div> </div> </div>	



method	source
<code>update</code> (value,dataset,index)	<pre>function radar_update(){   radar.update(100,0,1);   radar.update(50,0,2); }</pre>
result	
 <p>The value of Drinking Water is updated to 100, and the value of Sleeping is updated to 50.</p>	

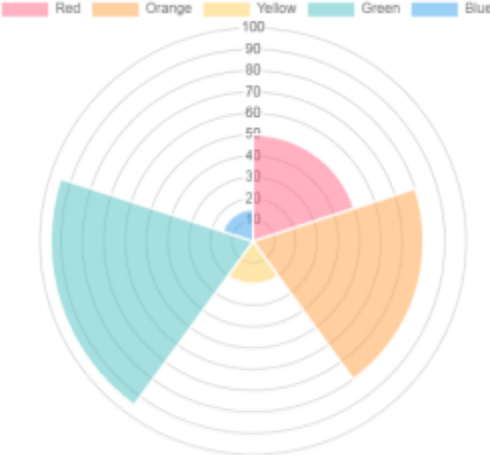
method	source																											
<code>addData</code> (data, label)	<pre>function radar_addData(){   radar.addData([40, 60], "August"); }</pre>																											
result																												
<p>The radar chart displays two data series across eight categories. The blue series, labeled 'Running', shows high values (100) for most categories except 'Eating Dinner' (40) and 'Drinking Water' (60). The red series, labeled 'August', shows high values (100) for 'Eating Dinner', 'Drinking Water', 'Sleeping', 'Designing Graphics', 'Coding', 'Cycling', and 'Running', but a lower value (60) for 'August'.</p> <table><tr><th>Category</th><th>Running (Blue)</th><th>August (Red)</th></tr><tr><td>Eating Dinner</td><td>40</td><td>60</td></tr><tr><td>Drinking Water</td><td>60</td><td>80</td></tr><tr><td>Sleeping</td><td>100</td><td>70</td></tr><tr><td>Designing Graphics</td><td>100</td><td>60</td></tr><tr><td>Coding</td><td>100</td><td>100</td></tr><tr><td>Cycling</td><td>100</td><td>100</td></tr><tr><td>Running</td><td>100</td><td>100</td></tr><tr><td>August</td><td>100</td><td>100</td></tr></table>		Category	Running (Blue)	August (Red)	Eating Dinner	40	60	Drinking Water	60	80	Sleeping	100	70	Designing Graphics	100	60	Coding	100	100	Cycling	100	100	Running	100	100	August	100	100
Category	Running (Blue)	August (Red)																										
Eating Dinner	40	60																										
Drinking Water	60	80																										
Sleeping	100	70																										
Designing Graphics	100	60																										
Coding	100	100																										
Cycling	100	100																										
Running	100	100																										
August	100	100																										

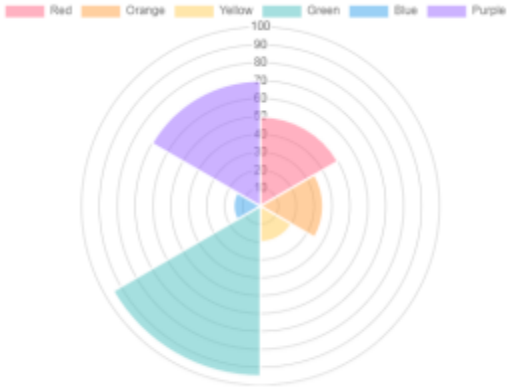
method	source
removeData (index)	<pre>function radar_removeData(){   radar.removeData(); }</pre>
result	
 <p>The Eating Dinner data in the first is deleted.</p>	

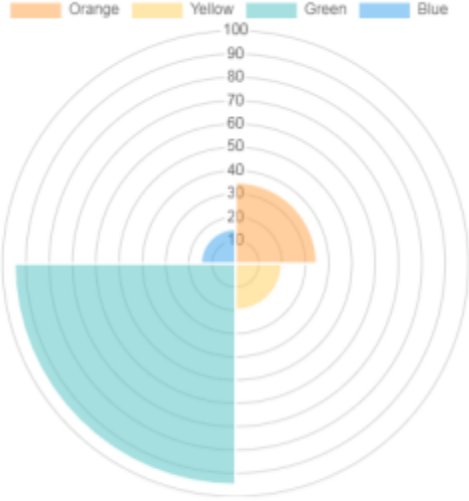
method	source
<code>setData</code> (data, option)	<pre>function radar_setData(){     radar.setData(data.radarData,option.radarOption); }</pre>
result	
 <p>The new data is set and the chart is loaded.</p>	

## ✓ Polar Area

method	source
getData	<pre> function polarArea_getData(){     var returnValue = polarArea.getData();      alert(         'It takes an entire data array.'         + '\nCheck the getData object in the console         window.\n\n'         + 'ex) Use the return value to extract the desired         value.\n'         + 'returnValue[0].value : '+returnValue[0].value     );      console.log('polarArea_getData : ' , returnValue ); } </pre>
result	
<div> <p>It takes an entire data array. Check the getData object in the console window.</p> <p>ex) Use the return value to extract the desired value. returnValue[0].data[0] : 50</p> </div> <div> <pre> polarArea_getData : ▼ [{...}] ⓘ   0:     ▶ backgroundColor: (5) ["rgba(255, 99, 132, 0.5     ▶ data: (5) [50, 35, 20, 95, 15, _chartjs: {...},     ▶ hoverBackgroundColor: (5) ["rgba(255, 99, 132       label: "My dataset"     ▶ _meta: {3: {...}}     ▶ __proto__: Object     length: 1     ▶ __proto__: Array(0) </pre> </div>	

method	source
<code>update</code> (value,index)	<pre>function polarArea_update(){   polarArea.update(250,1); }</pre>
result	
<div><div><div>Red</div><div>Orange</div><div>Yellow</div><div>Green</div><div>Blue</div></div><p>The green data with index of 1 is updated to 250.</p></div>	

method	source
<code>addData</code> (data, index)	<pre>function polarArea_addData(){   polarArea.addData({     value: 130,     color: "#B48EAD",     highlight: "#C69CBE",     label: "Purple"   },1); }</pre>
result	
 <p>The purple data is added to the last index.</p>	


method	source
removeData (index)	<pre>function polarArea_removeData(){   polarArea.removeData(); }</pre>
result	
 <p>The first index, red data, is deleted.</p>	




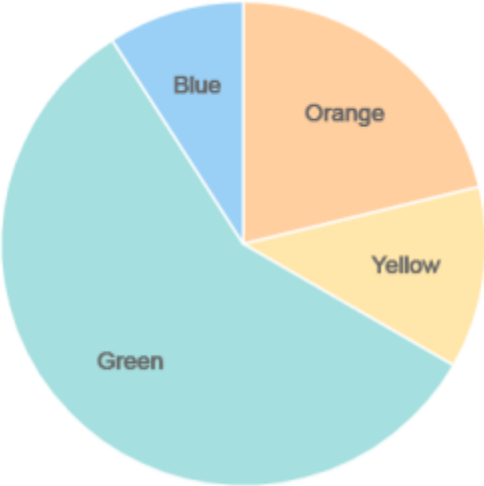
method	source
<code>setData</code> (data, option)	<pre>function polarArea_setData(){     polarArea.setData(data.polarAreaData2); }</pre>
result	
<div><p>Y[wai] PolarArea Chart</p><p>The new data is set and the chart is loaded.</p></div>	

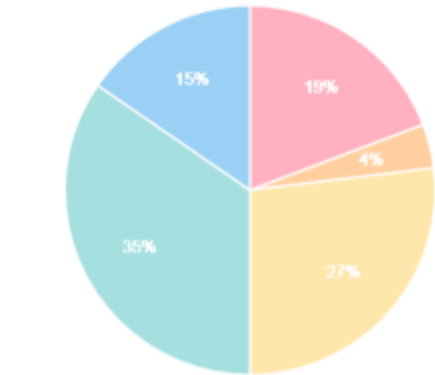
✓ Pie

method	source
getData	<pre>function pie_getData(){     var returnValue = pie.getData();      alert('It takes an entire data array.\\nCheck the getData object in the console window.\\n\\n' + 'ex) Use the return value to extract the desired value.\\n' + returnValue[0].data[0] : '+ returnValue[0].data[0]);     console.log('pie_getData : ' , returnValue); }</pre>
result	
<div> <div> <p>It takes an entire data array. Check the getData object in the console window.</p> <p>ex) Use the return value to extract the desired value. returnValue[0].data[0] : 50</p> </div> <div> <pre>pie_getData : ▼ [{}]</pre> <div> <p>▼ 0:</p> <ul style="list-style-type: none"> <li>▶ backgroundColor: (5) ["rgba(255, 99, 132, 0.5"]</li> <li>▶ data: (5) [50, 35, 20, 95, 15, _chartjs: {...},</li> <li>▶ hoverBackgroundColor: (5) ["rgba(255, 99, 132, 0.5"]</li> <li>▶ label: "Dataset 1"</li> <li>▶ _meta: {4: {...}}</li> <li>▶ __proto__: Object</li> <li>length: 1</li> <li>▶ __proto__: Array(0)</li> </ul> </div> </div> </div>	

method	source
<code>update</code> (value, dataset, index)	<pre>function pie_update(){   pie.update(100,1); }</pre>
result	
<div><div><div>Red</div><div>Orange</div><div>Yellow</div><div>Green</div><div>Blue</div></div><p>The orange data with an index of 1 will be updated.</p></div>	

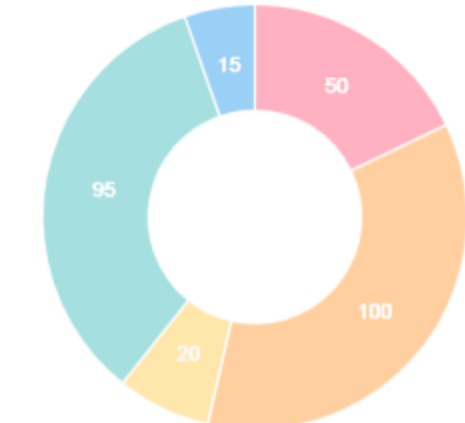
method	source
<code>addData</code> (data, index)	<pre>function pie_addData(){   pie.addData({     value: 130,     color: "#B48EAD",     highlight: "#C69CBE",     label: "Purple"   }); }</pre>
result	
<div><div><div>Red</div><div>Orange</div><div>Yellow</div><div>Green</div><div>Blue</div><div>Purple</div></div><p>The purple data is added to the last index.</p></div>	

method	source
removeData (index)	<pre>function pie_removeData(){     pie.removeData(2); }</pre>
result	
<div><div><div>Orange</div><div>Yellow</div><div>Green</div><div>Blue</div></div><p>The data with an index of 0 is deleted first.</p></div>	

method	source												
<code>setData</code> (data, option)	<pre>function pie_setData(){     pie.setData(data.pieData2,option.pieOption2); }</pre>												
result													
<div><p>Y[wai] Pie Chart</p><p>Red Orange Yellow Green Blue</p><table border="1"><thead><tr><th>Color</th><th>Percentage</th></tr></thead><tbody><tr><td>Red</td><td>19%</td></tr><tr><td>Orange</td><td>4%</td></tr><tr><td>Yellow</td><td>27%</td></tr><tr><td>Green</td><td>35%</td></tr><tr><td>Blue</td><td>15%</td></tr></tbody></table><p>The new data is set and the chart is loaded.</p></div>		Color	Percentage	Red	19%	Orange	4%	Yellow	27%	Green	35%	Blue	15%
Color	Percentage												
Red	19%												
Orange	4%												
Yellow	27%												
Green	35%												
Blue	15%												

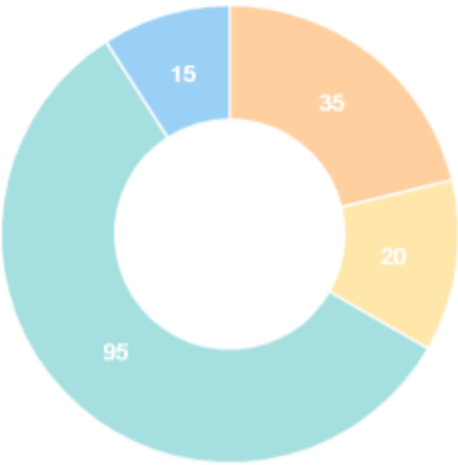
✓ doughnut

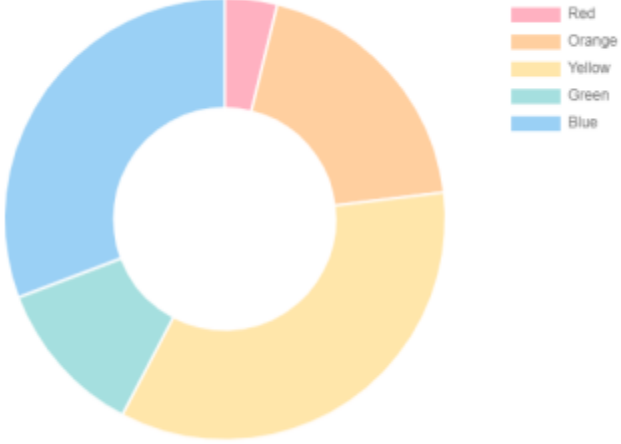
method	source
getData	<pre>function doughnut_getData(){     var returnValue = doughnut.getData();      alert('It takes an entire data array.␣␣Check the getData object in the console window.␣␣␣' + 'ex) Use the return value to extract the desired value.␣␣' + returnValue[0].data[0] : '+ returnValue[0].data[0]);     console.log('doughnut_getData : ' , returnValue ); }</pre>
result	
<p>It takes an entire data array. Check the getData object in the console window.</p> <p>ex) Use the return value to extract the desired value. returnValue[0].data[0] : 50</p>	<pre>doughnut_getData : ▼ [{...}] ⓘ   0:     ▶ backgroundColor: (5) ["rgba(255, 99, 132, 0.1",     ▶ data: (5) [50, 35, 20, 95, 15, _chartjs: {...},       label: "Dataset 1"     ▶ _meta: {5: {...}}     ▶ __proto__: Object     length: 1     ▶ __proto__: Array(0)</pre>

method	source
<code>update</code> (value, dataset, index)	<pre>function doughnut_update(){   doughnut.update(100,1); }</pre>
result	
<div><div><div>Red</div><div>Orange</div><div>Yellow</div><div>Green</div><div>Blue</div></div><p>The orange data with index of 1 is updated to 100.</p></div>	



method	source
addData (data, label)	<pre>function doughnut_addData(){   doughnut.addData({     value: 130,     color: "#B48EAD",     highlight: "#C69CBE",     label: "Purple"   }); }</pre>
result	
 <p>The purple data is added to the last index.</p>	

method	source										
removeData (index)	<pre>function doughnut_removeData(){   doughnut.removeData(); }</pre>										
result											
<div><div><div>Orange</div><div>Yellow</div><div>Green</div><div>Blue</div></div><table border="1"><thead><tr><th>Color</th><th>Value</th></tr></thead><tbody><tr><td>Orange</td><td>35</td></tr><tr><td>Yellow</td><td>20</td></tr><tr><td>Green</td><td>95</td></tr><tr><td>Blue</td><td>15</td></tr></tbody></table><p>The data with an index of 0 is deleted first.</p></div>		Color	Value	Orange	35	Yellow	20	Green	95	Blue	15
Color	Value										
Orange	35										
Yellow	20										
Green	95										
Blue	15										

method	source
<code>setData</code> (data, option)	<pre>function doughnut_setData(){  doughnut.setData(data.doughnutData2,option.doughnutOption2); }</pre>
result	
<div><p>Y[wai] Doughnut Chart</p><p>The new data is set and the chart is loaded.</p></div>	

---

## ■ Events

onclick, ondblclick

```
/*-----  
 * body source  
-----*/  
<chart id="chart_bar" type="bar"  
    onClick="eventAll(event);"  
    onDbClick="eventAll(event);"  
></chart>  
  
/*-----  
 * script source  
-----*/  
function eventAll(obj){  
    if(obj.event == "onclick"){  
        console.log('★----- onClick Event');  
    }  
    else if(obj.event == "ondblclick"){  
        console.log('★----- ondblclick Event');  
    }  
}
```

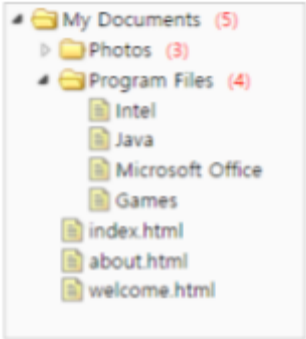
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## 6. Y[wai] Component Example

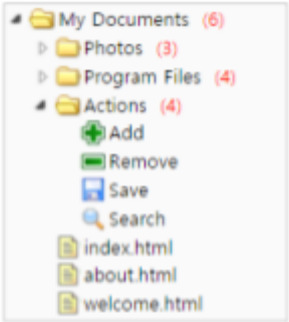
### H. TreeView

#### ■ Basic Properties

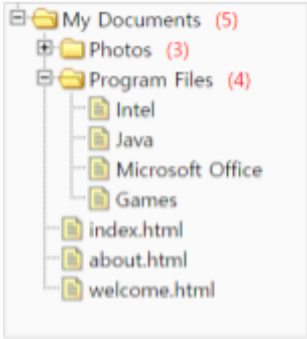
url, data, animate, lines, formatter, style

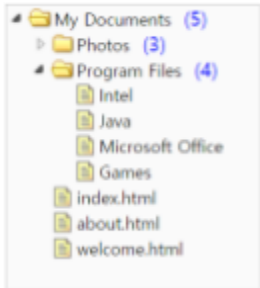
property	source
url	tree1.url='./testData/tree_data1.json';
result	
<div></div> <p>Calls the JSON file at that URL to set the data to the component.</p>	

property	source
data	<pre> function dataAttr() {   tree1.data = [{     "text": "My Documents",     "children": [{       "text": "Photos",       "state": "closed",       "children": [{         "text": "Friend"       }, {         "text": "Wife"       }, {         "text": "Company"       }]     }, {       "text": "Program Files",       "state": "closed",       "children": [{         "text": "Intel"       }, {         "text": "Java"       }, {         "text": "Microsoft Office"       }, {         "text": "Games"       }]     }, {       "text": "Actions",       "children": [{         "text": "Add",         "iconCls": "icon-add"       }, {         "text": "Remove",         "iconCls": "icon-remove"       }, {         "text": "Save",         "iconCls": "icon-save"       }, {         "text": "Search",         "iconCls": "icon-search"       }]     }, {       "text": "index.html"     }, {       "text": "about.html"     }, {       "text": "welcome.html"     }   ] } </pre>

	<pre>    }     }; }</pre>
result	
 <p>Sets the data in JSON form to the component.</p>	

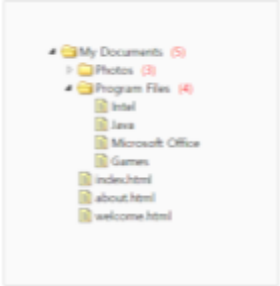
property	source
animate	tree1.animate = 'true';
result	
You can animate the opening and closing of folders in the tree.	

property	source
lines	tree1.lines = 'true';
result	
 <p>The line is displayed in a tree form.</p>	

property	source
formatter	<pre>tree1.formatter = 'myFormatter2';  function myFormatter2(node){   var s = node.text;   if (node.children){     s += "&amp; nbsp;&lt;span     style=W\"color:blue;font-size:14pxW\"&gt;     (" +node.children.length +     ")&lt;/span&gt;";   }   return s; }</pre>
result	
 <p>The number of child nodes is displayed.</p>	

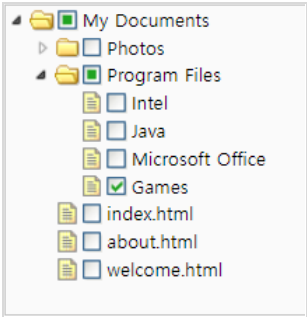


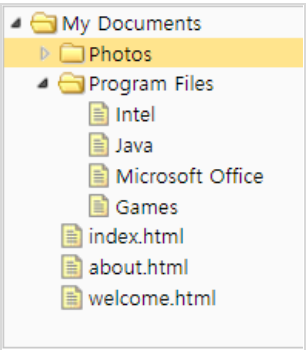
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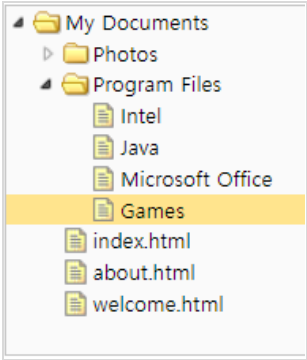
property	source
style	tree1.style = 'margin:40px;height:200px;';
result	
<div></div> <p>Applies the style to the component.</p>	

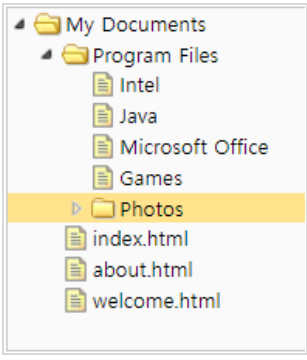
## ■ Edit Properties

checkbox, cascadeCheck, onlyLeafCheck, dnd, editable

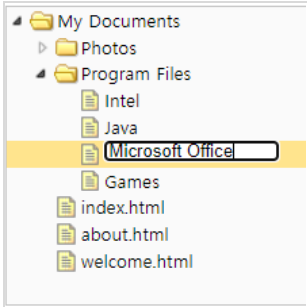
property	source
checkbox	<pre>function checkboxAttr(tf) {   tree11.checkbox = tf; }</pre>
result	
	

property	source
cascadeCheck	<pre>function cascadeCheckAttr(tf) {   tree11.cascadeCheck = tf; }</pre>
result	
	

property	source
onlyLeafCheck	<pre>function onlyLeafCheckAttr(tf) {   tree11.onlyLeafCheck = tf; }</pre>
result	
	

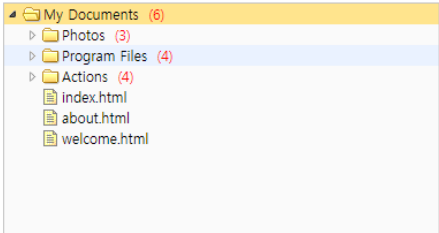
property	source
dnd	<pre>function dndAttr(tf) {   tree11.dnd = tf; }</pre>
result	
	

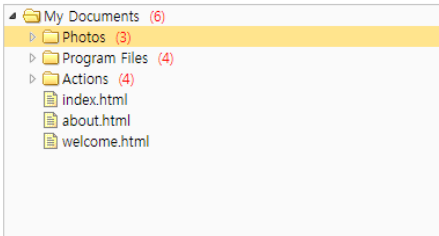
---

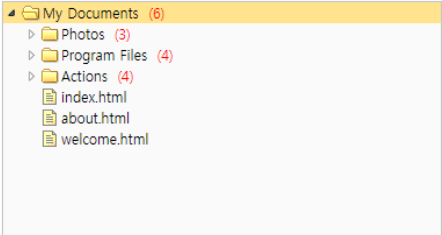
property	source
editable	<pre>function editableAttr(tf) {   tree11.editable = tf; }</pre>
result	
 A screenshot of a file explorer window. The directory tree on the left shows 'My Documents' expanded, containing 'Photos' and 'Program Files'. 'Program Files' is further expanded, showing subfolders 'Intel', 'Java', 'Microsoft Office' (which is highlighted with a yellow background), 'Games', and files 'index.html', 'about.html', and 'welcome.html'.	

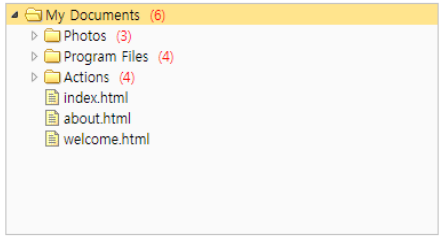
## ■ Readonly Properties

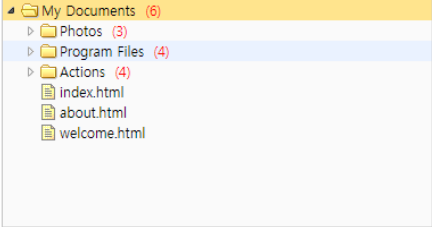
nodeId, nodeLevel, nodeValue, selected, hasChildren, nodeCount

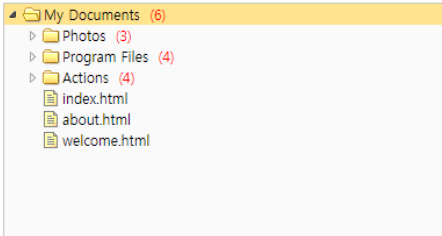
property	source
nodeId	[ Source : ID of node selected in tree ] tree2.nodeId -->
result	
	

property	source
nodeLevel	[ Source : Level of selected node in tree ] tree2.nodeLevel -->
result	
	

property	source
nodeValue	[ Source : Value of selected node in tree ] tree2.nodeValue -->
result	
	

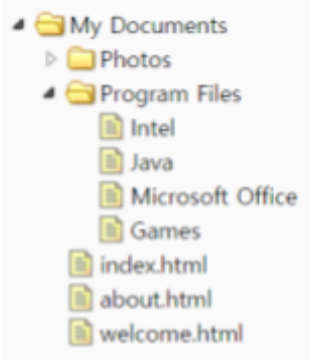
property	source
selected	[ Source : Whether node is selected in tree ] tree2.selected --> false
result	
	

property	source
hasChildren	[ Source : Whether the child node of the selected node in the tree exists ] tree2.hasChildren -->
result	
	

property	source
nodeCount	[ Source : total number of nodes in tree ] tree2.nodeCount --> 18
result	
	

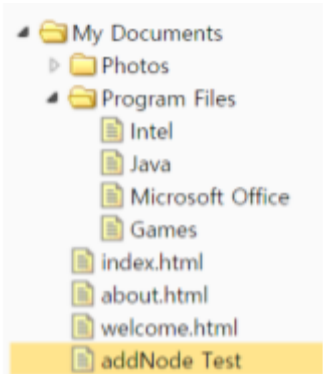
## ■ Data Methods

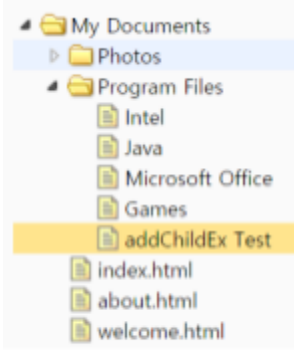
loadData, clear, addNode, addChildEx, delete, deleteChildren, edit

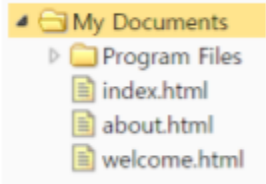
method	source
loadData	<pre>tree3.loadData( [{ "id":0,"text":"My Documents","children":[{"id":1,"text":"Photos","state":"closed","children":[{"text":"Friend","_depth":2,"_tld":2,"_parents":"0,1","type":"file"}, {"id":12,"text":"Wife","_depth":2,"_tld":3,"_parents":"0,1","type":"file"}, {"text":"Company","_depth":2,"_tld":4,"_parents":"0,1","type":"file"}]}, {"_depth":1,"_tld":1,"_parents":"0","type":"folder"}, {"id":2,"text":"Program Files","state":"closed","children":[{"text":"Intel","_depth":2,"_tld":6,"_parents":"0,5","type":"file"}, {"text":"Java","type":"js","_depth":2,"_tld":7,"_parents":"0,5"}, {"text":"Microsoft Office","_depth":2,"_tld":8,"_parents":"0,5","type":"file"}, {"text":"Games","_depth":2,"_tld":9,"_parents":"0,5","type":"file"}]}, {"_depth":1,"_tld":5,"_parents":"0","type":"folder"}, {"id":3,"text":"Actions","state":"closed","children":[{"text":"Add","_depth":2,"_tld":11,"_parents":"0,10","type":"file"}, {"text":"Remove","_depth":2,"_tld":12,"_parents":"0,10","type":"file"}, {"text":"Save","_depth":2,"_tld":13,"_parents":"0,10","type":"file"}, {"text":"Search","_depth":2,"_tld":14,"_parents":"0,10","type":"file"}]}, {"_depth":1,"_tld":10,"_parents":"0","type":"folder"}, {"id":4,"text":"index.html","type":"html","_depth":1,"_tld":15,"_parents":"0"}, {"id":5,"text":"about.html","type":"html","_depth":1,"_tld":16,"_parents":"0"}, {"id":6,"text":"welcome.html","type":"html","_depth":1,"_tld":17,"_parents":"0"}]}, {"_depth":0,"_tld":0,"type":"folder","state":"open"}]);</pre>
result	
 <p>Sets and loads data in JSON form into the component.</p>	

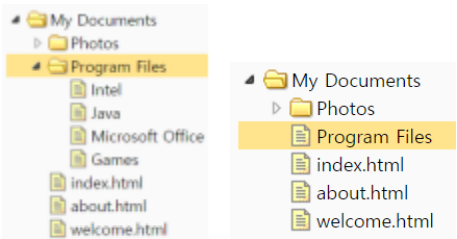


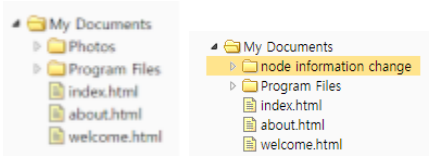
method	source
clear	tree3.clear();
result	
The data is deleted from the component.	

method	source
addNode (pId, text, imgIndex, selIndex, key)	tree3.addNode(0,"addNode Test"); // -1 : nodeId of My Documents
result	
 <p>Adds a sub load to a random load.</p>	

method	source
addChildEx (text, imgIndex, selIndex, key)	<pre>tree3.addChildEx("addChildEx Test");</pre>
result	
 <p>Adds a sub load to the currently selected load.</p>	

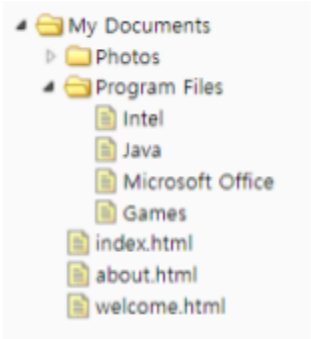
method	source
delete (nodeId)	<pre>tree3.delete(0);</pre>
result	
 <p>Photos loads with an Id of 0 are deleted.</p>	

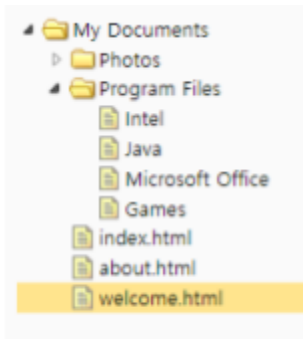
method	source
deleteChildren (nodeId)	tree3.deleteChildren();
result	
 <p>Deletes a child load of the currently selected load.</p>	

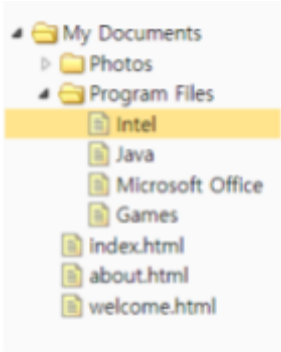
method	source
edit (text,imgIndex,sellIndex)	tree3.edit("Modify the node information.");
result	
 <p>Changes the information for the currently selected load.</p>	

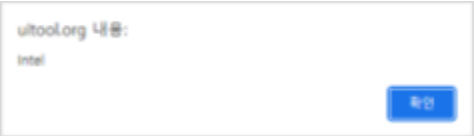
## ■ Get Methods

getData, find, getNode, getSelected, isLeaf

method	source
getData	<pre>tree3.getData();</pre>
result	
 <p>Gets the all data node of the tree.</p>	

method	source
<pre>find (nodeId)</pre>	<pre>var node = tree3.find(11); var stringNode = JSON.stringify(node);</pre>
result	
 <p>Finds and returns the node with Id 11.</p>	

method	source
getNode (target)	<pre>var node_find = tree3.find(5); var node = tree3.getNode(node_find.target);</pre>
result	
<div> <pre>{   "text": "Intel",   "state": "open",   "target": {},   "id": 5 }</pre>  <p>The node is returned as an object.</p> </div>	

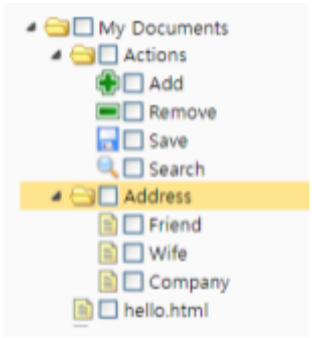
method	source
getSelected	<pre>tree3.getSelected();</pre>
result	
<div>  <p>Returns the information of the selected node in the tree as an object.</p> </div>	

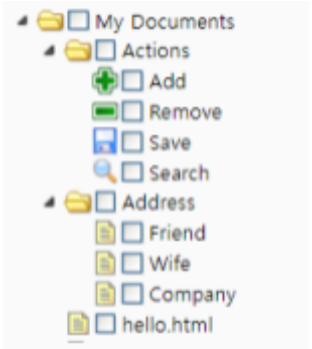
---

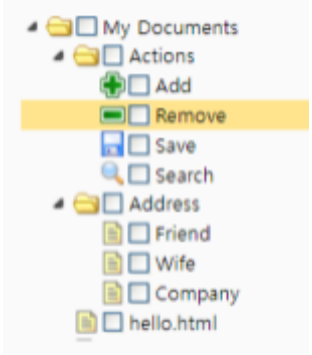
method	source
isLeaf (nodeId)	<pre>var node = tree3.getSelected(); var aa = tree3.isLeaf(node.target);</pre>
result	
<p>Checks whether the target is the lowest node. It returns true or false.</p>	

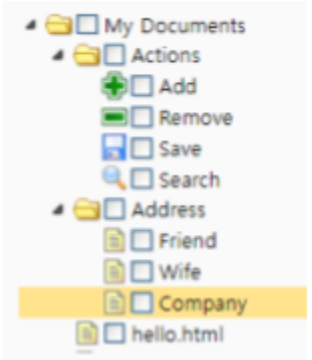
## ■ Select Methods

select, unselect, moveNode, moveNodeEx, moveParent, moveFirstChild, moveLastChild, moveNextChild

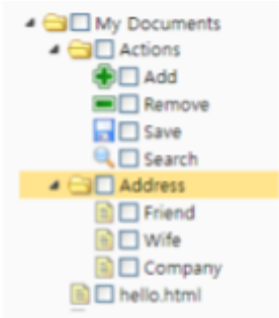
method	source
select (target)	<pre>var node =tree4.find(5); tree4.select(node.target);</pre>
result	
 <p>Selects the target.</p>	

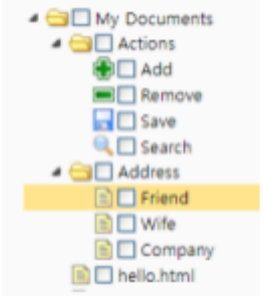
method	source
unselect	<pre>tree4.unselect();</pre>
result	
 <p>Deselects the target.</p>	

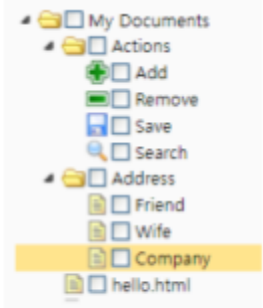
method	source
moveNode (target)	<pre>var node =tree4.moveNode(2); tree4.expandTo(node.target);</pre>
result	
 <p>Moves to the node you want.</p>	

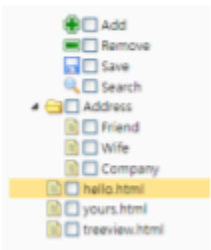
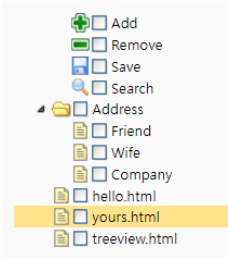
method	source
moveNodeEx (key)	<pre>tree4.moveNodeEx("test_key"); // The nodeId value for Company node is "test_key".</pre>
result	
 <p>Selects a node in the component whose node information contains a random key value.</p>	



method	source
moveParent	tree4.moveParent();
result	
 <p>Selects the parent node of the currently selected node in the component.</p>	

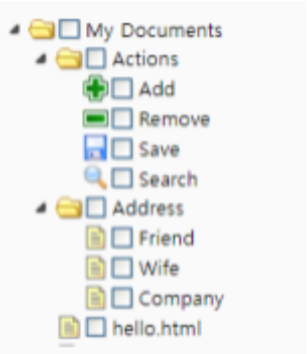
method	source
moveFirstChild	tree4.moveFirstChild();
result	
 <p>Selects the first child node among the children of the currently selected node.</p>	

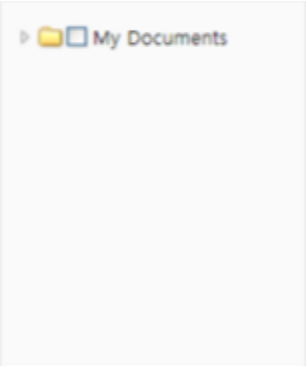
method	source
moveLastChild	tree4.moveLastChild();
result	
<div><p>Selects the last child node among the children of the currently selected node.</p></div>	

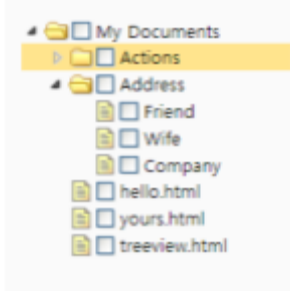
method	source
moveNextChild	tree4.moveNextChild();
result	
<div><div></div><div></div><p>Selects the nodes after itself that are siblings of the currently selected node.</p></div>	

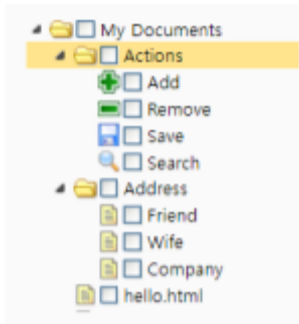
## ■ Action Methods

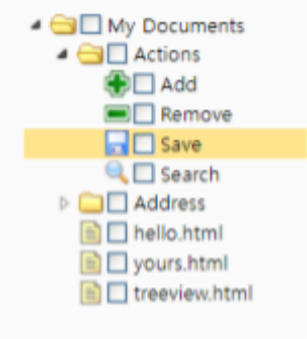
expandAll, collapseAll, collapse, expand, expandTo, toggle, collapseEx, expandEx

method	source
expandAll	tree4.expandAll();
result	
 <p>Expands all nodes in the tree.</p>	

method	source
collapseAll	tree4. collapseAll();
result	
 <p>Collapses all nodes in the tree.</p>	

method	source
collapse (target)	<pre>var node = tree4.getSelected(); tree4.collapse(node.target);</pre>
result	
 <p>Collapses the node in the target.</p>	

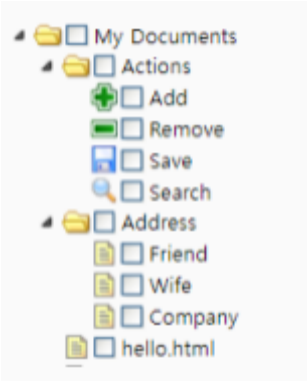
method	source
expand (target)	<pre>tree4. expand();</pre>
result	
 <p>Expands the node in the target.</p>	

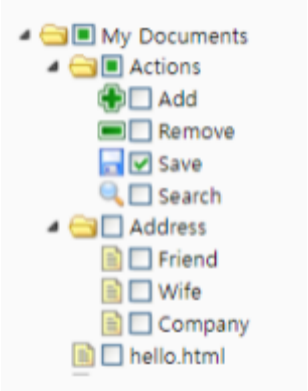
method	source
expandTo (target)	var node =tree4.find(3); tree4.expandTo(node.target);
result	
 <p>Expands to a random save node with nodeId=3 and selects it.</p>	

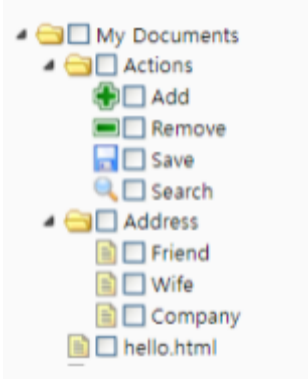
method	source
toggle (target)	var node = tree4.getSelected(); tree4.toggle(node.target);
result	
Alternately expands and collapses the target.	

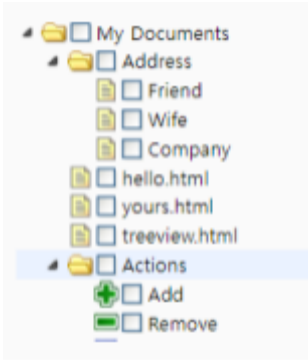
■ Edit Methods

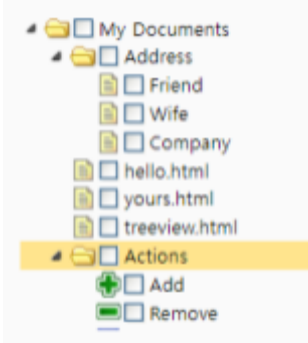
getChecked, check, uncheck, enableDnd, disableDnd, beginEdit

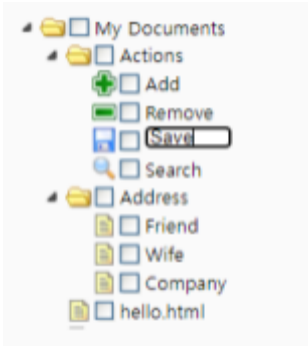
method	source
getChecked	tree4.getChecked(param);
result	
<div><p>Gets the checked node.</p></div>	

method	source
check	<pre>var node = tree3.find(3); tree4.uncheck(node.target);</pre>
result	
<div><p>Checks the target node.</p></div>	

method	source
unchecked	tree4.getChecked(param);
result	
 <p>Unchecks the target node.</p>	

method	source
enableDnd	tree4.enableDnd();
result	
 <p>You can drag and drop.</p>	

method	source
disableDnd	tree4.disableDnd();
result	
 <p>You can't drag and drop.</p>	

method	source
beginEdit	<pre>var node = tree3.find(3); tree4.beginEdit(node.target);</pre>
result	
 <p>Edits the node.</p>	



## ■ Events

onLoadSuccess, onLoadError, onContextMenu, onClick, onDbClick, onBeforeExpand, onExpand, onBeforeCollapse, onCollapse, onBeforeSelect, onSelect, onBeforeCheck, onCheck, onBeforeDrag, onStartDrag, onStopDrag, onDragEnter, onDragOver, onDragLeave, onBeforeDrop, onDrop, onBeforeEdit, onAfterEdit, onCancelEdit

```
/*-----  
* BODY  
-----*/  
<treeview id="tree5" url="./testData/tree_data1.json" animate=true style  
="margin:20px;height:260px;"  
    onContextMenu="eventAll(event);"  
    onLoadSuccess="eventAll(event);"  
    onLoadError="eventAll(event);"  
    onClick="eventAll(event);"  
    onDbClick="eventAll(event);"  
    onBeforeExpand="eventAll(event);"  
    onExpand="eventAll(event);"  
    onBeforeCollapse="eventAll(event);"  
    onCollapse="eventAll(event);"  
    onBeforeSelect="eventAll(event);"  
    onSelect="eventAll(event);"  
    onBeforeCheck="eventAll(event);"  
    onCheck="eventAll(event);"  
    onBeforeDrag="eventAll(event);"  
    onStartDrag="eventAll(event);"  
    onStopDrag="eventAll(event);"  
    onDragEnter="eventAll(event);"  
    onDragOver="eventAll(event);"  
    onDragLeave="eventAll(event);"  
    onBeforeDrop="eventAll(event);"  
    onDrop="eventAll(event);"  
    onBeforeEdit="eventAll(event);"  
    onAfterEdit="eventAll(event);"  
    onCancelEdit="eventAll(event);"  
></treeview>  
  
/*-----  
* JAVASCRIPT  
-----*/  
function eventAll(obj) {  
    if(obj.event == "onContextMenu"){  
        console.log('★---- onContextMenu Event');  
        console.log("e : " , obj.args.e , "Wnnode : " , obj.args.node);  
        $('#menu').menu('show',{
```

```

        left: obj.args.e.pageX,
        top: obj.args.e.pageY
    });
}
else if(obj.event == "onLoadSuccess"){
    console.log('★---- onLoadSuccess Event');
    console.log("node : " , obj.args.node , "Wndata : " , obj.args.data);
}
else if(obj.event == "onLoadError"){
    console.log('★---- onLoadError Event');
}
else if(obj.event == "onClick"){
    console.log('★---- onClick Event');
    console.log("node : " , obj.args.node);
}
else if(obj.event == "onDbClick"){
    console.log('★---- onDbClick Event');
    console.log("node : " , obj.args.node);
}
else if(obj.event == "onBeforeExpand"){
    console.log('★---- onBeforeExpand Event');
    console.log("node : " , obj.args.node);
}
else if(obj.event == "onExpand"){
    console.log('★---- onExpand Event');
    console.log("node : " , obj.args.node);
}
else if(obj.event == "onBeforeCollapse"){
    console.log('★---- onBeforeCollapse Event');
    console.log("node : " , obj.args.node);
}
else if(obj.event == "onCollapse"){
    console.log('★---- onCollapse Event');
    console.log("node : " , obj.args.node);
}
else if(obj.event == "onBeforeSelect"){
    console.log('★---- onBeforeSelect Event');
    console.log("node : " , obj.args.node);
}
else if(obj.event == "onSelect"){
    console.log('★---- onSelect Event');
    console.log("node : " , obj.args.node);
}
else if(obj.event == "onBeforeCheck"){
    console.log('★----- onBeforeCheck Event');
    console.log("node : " , obj.args.node);
    console.log("checked : " , obj.args.checked);
}
}

```

```

else if(obj.event == "onCheck"){
    console.log("node : " , obj.args.node);
    console.log("checked : " , obj.args.checked);
}
else if(obj.event == "onBeforeDrag"){
    console.log('★---- onBeforeDrag Event');
    console.log("node : " , obj.args.node);
}
else if(obj.event == "onStartDrag"){
    console.log('★---- onStartDrag Event');
    console.log("node : " , obj.args.node);
}
else if(obj.event == "onStopDrag"){
    console.log('★---- onStopDrag Event');
    console.log("node : " , obj.args.node);
}
else if(obj.event == "onDragEnter"){
    console.log('★---- onDragEnter Event');
    console.log("target : " , obj.args.target);
    console.log("source : " , obj.args.source);
}
else if(obj.event == "onDragOver"){
    console.log('★---- onDragOver Event');
    console.log("target : " , obj.args.target);
    console.log("source : " , obj.args.source);
}
else if(obj.event == "onDragLeave"){
    console.log('★---- onDragLeave Event');
    console.log("target : " , obj.args.target);
    console.log("source : " , obj.args.source);
}
else if(obj.event == "onBeforeDrop"){
    console.log('★---- onBeforeDrop Event');
    console.log("target : " , obj.args.target);
    console.log("source : " , obj.args.source);
    console.log("point : " , obj.args.point);
}
else if(obj.event == "onDrop"){
    console.log('★---- onDrop Event');
    console.log("target : " , obj.args.target);
    console.log("source : " , obj.args.source);
    console.log("point : " , obj.args.point);
}
else if(obj.event == "onBeforeEdit"){
    console.log('★---- onBeforeEdit Event');
    console.log("node : " , obj.args.node);
}
else if(obj.event == "onAfterEdit"){
    console.log('★---- onAfterEdit Event');

```

```
        console.log("node : " , obj.args.node);
    }
    else if(obj.event == "onCancelEdit"){
        console.log('★---- onCancelEdit Event');
        console.log("node : " , obj.args.node);
    }
}

/-----*
* Functions of the menu to configure onContextMenu
-----*/

function t5_collapse(){
    var node = tree5.getSelected();
    tree5.collapse(node.target);
}
function t5_expand(){
    var node = tree5.getSelected();
    tree5.expand(node.target);
}
```

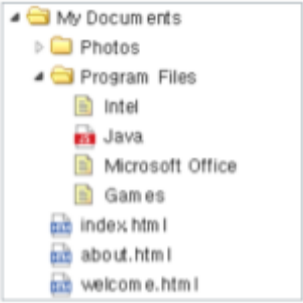
---

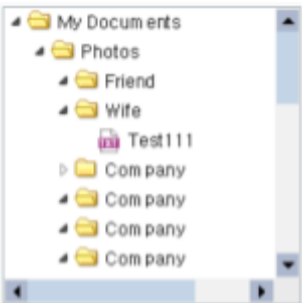
## 6. Y[wai] Component Example

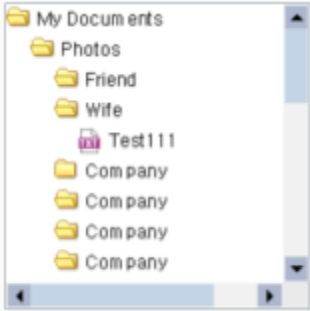
### I. cTree


#### ■ Basic Properties

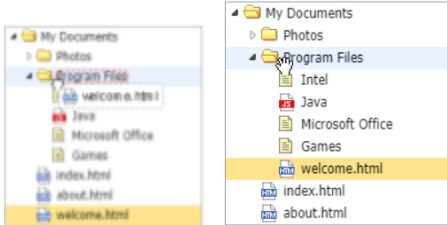
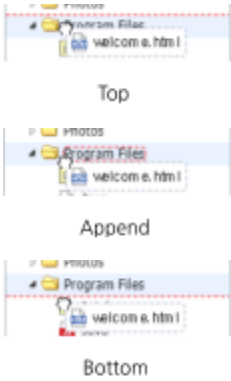
url, data, foldIcon, disabled, drag&drop, style

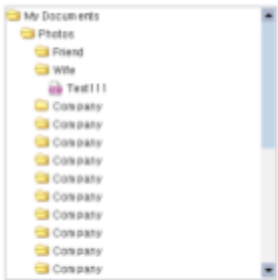
property	source
url	tree1.url='./testData/tree_data1.json';
result	
<div><p>Calls the JSON file at that URL to set the data to the component.</p></div>	

property	source
data	<pre>function dataAttr() {   tree1.data = [{     "text": "My Documents",     "type": "folder",     "state": "open",     "children": [{       "text": "Photos",       "type": "folder",       "state": "open",     }, {       "text": "Wife",       "type": "folder",       "state": "open",       "children": [{         "id": "111",         "text": "Jini",         "type": "txt"       }]     }   ] }; }</pre>
result	
<div></div> <p>Sets the data in JSON form to the component.</p>	

property	source
foldIcon	tree1.foldIcon = false;
result	
 <p>The triangle icons disappear.</p>	

property	source
disabled	<pre>function disabledAttr() {   if (tree1.disabled) tree1.disabled = false;   else tree1.disabled = true; }</pre>
result	
 <p>Disables the objects.</p>	

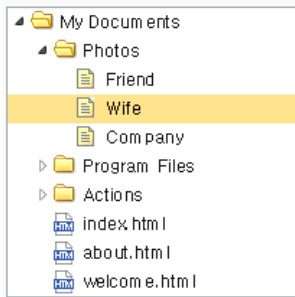
property	source
dnd	tree1.dnd = true;
result	
<div><p>You can drag the node you want to move and drop it where you want.</p><div><p>Top</p><p>Append</p><p>Bottom</p></div></div>	

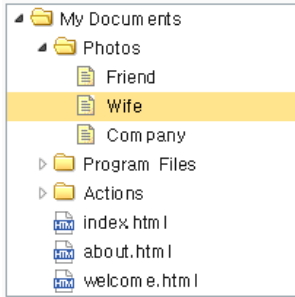
property	source
style	tree1.style = 'width:300px;margin:40px;height:300px;';
result	
<div><p>Applies the style to the component.</p></div>	

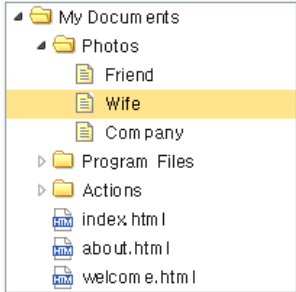


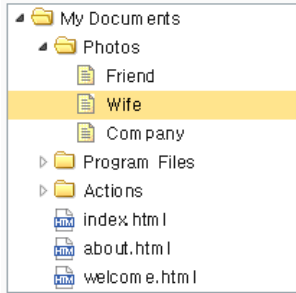
## ■ Readonly Properties

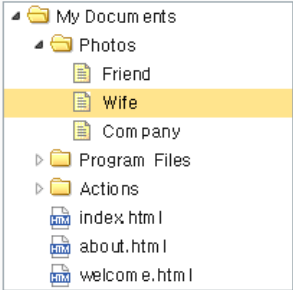
nodeId, nodeLevel, nodeValue, selected, hasChildren, nodeCount

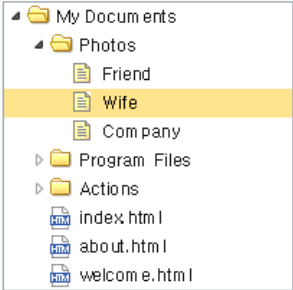
property	source
nodeId	[ Source : ID of node selected in tree ] tree2.nodeId -->
result	
	

property	source
nodeLevel	[ Source : Level of selected node in tree ] tree2.nodeLevel -->
result	
	

property	source
nodeValue	[ Source : Value of selected node in tree ] tree2.nodeValue -->
result	
	

property	source
selected	[ Source : Whether node is selected in tree ] tree2.selected --> false
result	
	

property	source
hasChildren	[ Source : Whether the child node of the selected node in the tree exists ] tree2.hasChildren --> false
result	
	

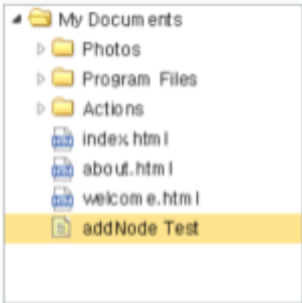
property	source
nodeCount	[ Source : total number of nodes in tree ] tree2.nodeCount --> 18
result	
	

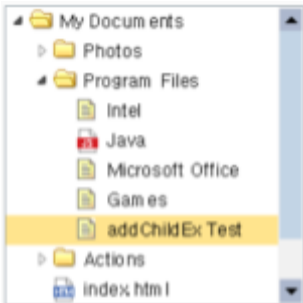
## ■ Data Methods

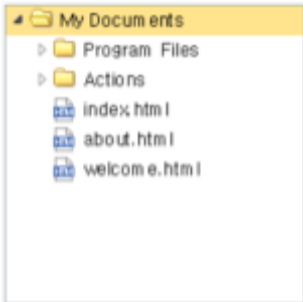
loadData, clear, addNode, addChildEx, delete, deleteChildren, edit

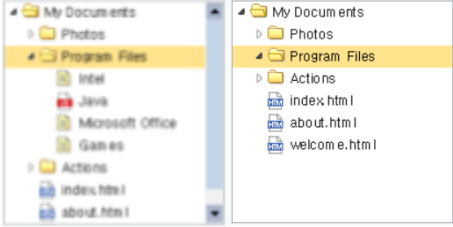
method	source
loadData	<pre>tree3.loadData( [{ "id":0,"text":"My Documents","children":[{"id":1,"text":"Photos","state":"closed","children":[{"text":"Friend","_depth":2,"_tld":2,"_parents":"0,1","type":"file"}, {"id":12,"text":"Wife","_depth":2,"_tld":3,"_parents":"0,1","type":"file"}, {"text":"Company","_depth":2,"_tld":4,"_parents":"0,1","type":"file"}]}, {"_depth":1,"_tld":1,"_parents":"0","type":"folder"}, {"id":2,"text":"Program Files","state":"closed","children":[{"text":"Intel","_depth":2,"_tld":6,"_parents":"0,5","type":"file"}, {"text":"Java","type":"js","_depth":2,"_tld":7,"_parents":"0,5"}, {"text":"Microsoft Office","_depth":2,"_tld":8,"_parents":"0,5","type":"file"}, {"text":"Games","_depth":2,"_tld":9,"_parents":"0,5","type":"file"}]}, {"_depth":1,"_tld":5,"_parents":"0","type":"folder"}, {"id":3,"text":"Actions","state":"closed","children":[{"text":"Add","_depth":2,"_tld":11,"_parents":"0,10","type":"file"}, {"text":"Remove","_depth":2,"_tld":12,"_parents":"0,10","type":"file"}, {"text":"Save","_depth":2,"_tld":13,"_parents":"0,10","type":"file"}, {"text":"Search","_depth":2,"_tld":14,"_parents":"0,10","type":"file"}]}, {"_depth":1,"_tld":10,"_parents":"0","type":"folder"}, {"id":4,"text":"index.html","type":"html","_depth":1,"_tld":15,"_parents":"0"}, {"id":5,"text":"about.html","type":"html","_depth":1,"_tld":16,"_parents":"0"}, {"id":6,"text":"welcome.html","type":"html","_depth":1,"_tld":17,"_parents":"0"}]}, {"_depth":0,"_tld":0,"type":"folder","state":"open"}]);</pre>
result	
 <p>Sets and loads data in JSON form into the component.</p>	

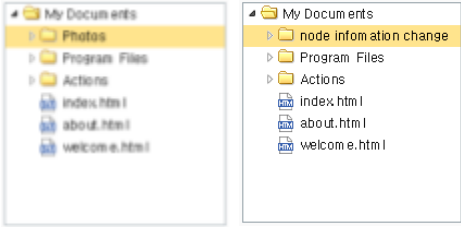
method	source
clear	tree3.clear();
result	
The data is deleted from the component.	

method	source
addNode (pId,text,type,strData,id)	tree3.addNode(0,"addNode Test"); // -1 : nodeId of My Documents
result	
 <p>Adds a sub load to a random load.</p>	

method	source
addChildEx (text,type,strData,id)	<pre>tree3.addChildEx("addChildEx Test");</pre>
result	
 <p>Adds a sub load to the currently selected load.</p>	

method	source
delete (nodeId)	<pre>tree3.delete(1);</pre>
result	
 <p>Photos loads with an Id of 1 will be deleted.</p>	

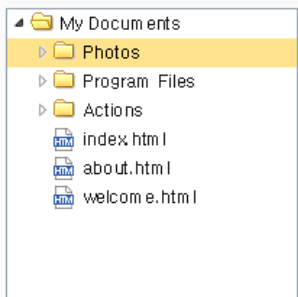
method	source
deleteChildren (nodeId)	tree3.deleteChildren();
result	
 <p>Deletes a child load of the currently selected load.</p>	

method	source
edit (text, type)	tree3.edit("Modify the node information.");
result	
 <p>Changes the information for the currently selected load.</p>	

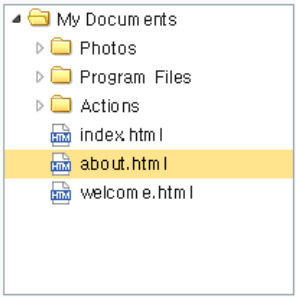
## ■ Get Methods

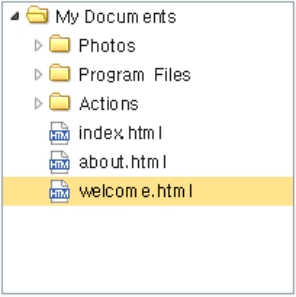
getData, find, getNode, getSelected, isLeaf

method	source
getData	tree3.getData();
result	
Gets all data nodes of the cTree.	

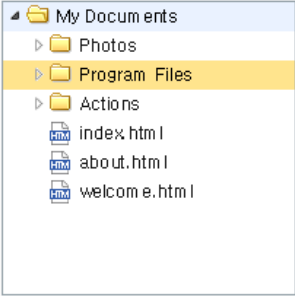
method	source
find (nodeId)	tree3.find(1);
result	
	



method	source
getNode (nodeId)	tree3.getNode(5);
result	
	

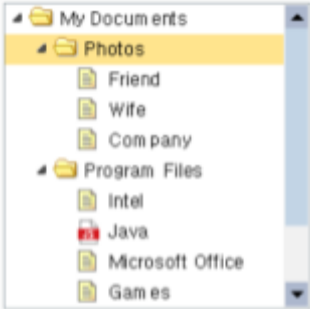
method	source
getSelected	tree3.getSelected();
result	
	

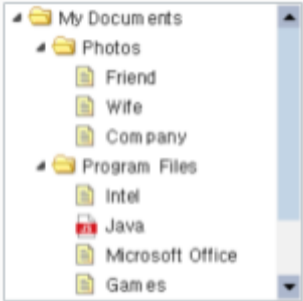
---

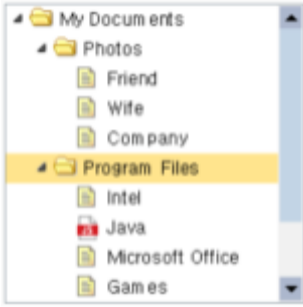
method	source
isLeaf (nodeId)	tree3.isLeaf();
result	
	

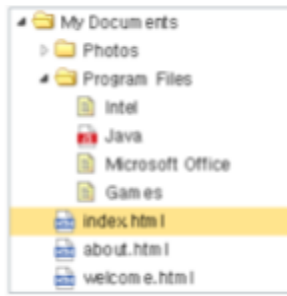
## ■ Select Methods

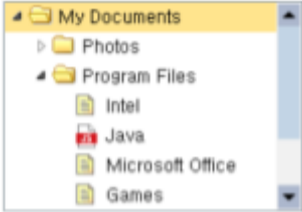
select, unselect, moveNode, moveNodeEx, moveParent, moveFirstChild, moveLastChild, moveNextChild

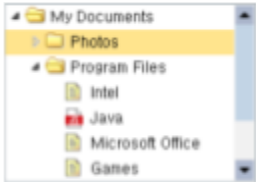
method	source
select (nodeId)	tree4.select(5);
result	
 <p>Selects the node with the corresponding nodeId.</p>	

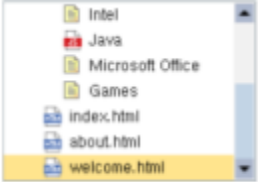
method	source
unselect	tree4.unselect();
result	
 <p>Deselects the object.</p>	

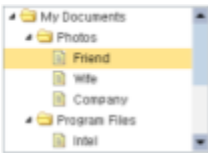

method	source
moveNode (nodeId)	tree4. moveNode(2);
result	
 <p>Moves to the node you want.</p>	

method	source
moveNodeEx (nodeId)	tree4.moveNodeEx("test_key"); // The nodeId value for Company node is "test_key".
result	
 <p>Selects the node whose node information contains a random id value.</p>	

method	source
moveParent	tree4.moveParent();
result	
 <p>Selects the parent node of the currently selected node.</p>	

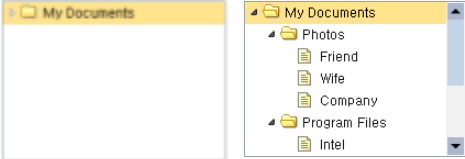
method	source
moveFirstChild	tree4.moveFirstChild();
result	
 <p>Selects the first child node among the children of the currently selected node.</p>	

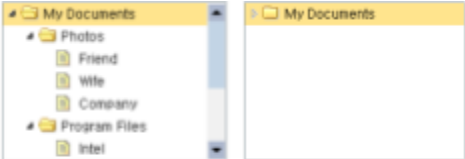
method	source
moveLastChild	tree4.moveLastChild();
result	
<div></div> <p>Selects the last child node among the children of the currently selected node.</p>	

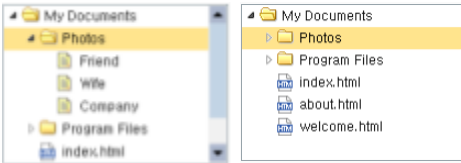
method	source
moveNextChild	tree4.moveNextChild();
result	
<div><div></div><div></div></div> <p>Selects the node after itself that are siblings of the currently selected node.</p>	

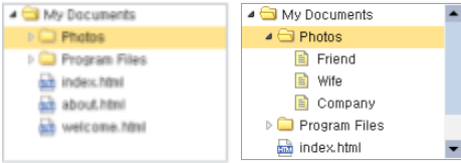
## ■ Action Methods

expandAll, collapseAll, collapse, expand, expandTo, toggle, collapseEx, expandEx

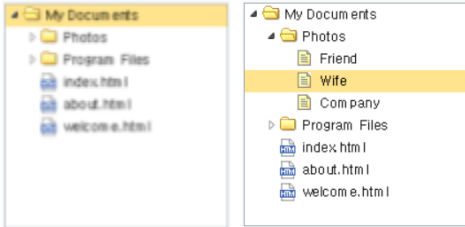
method	source
expandAll	tree4.expandAll();
result	
<div></div> <p>Expands all nodes.</p>	

method	source
collapseAll	tree4.collapseAll();
result	
<div></div> <p>Collapses all nodes.</p>	

method	source
collapse (nodeId)	tree4. collapse();
result	
 <p>Collapses a node with a random nodeId. If no argument is passed, collapses the currently selected node.</p>	

method	source
expand (nodeId)	tree4. expand();
result	
 <p>Expands a node with a random nodeId. If no argument is passed, expands the currently selected node.</p>	



method	source
expandTo (nodeId)	tree4.expandTo(12);
result	
 <p>Expands to the Wife node with a random nodeId=12 and select it.</p>	

method	source
toggle (nodeId)	tree4.toggle(nodeId);
result	
<p>Alternately opens and closes a node with a random nodeId. If no argument is passed, performs with the currently selected node.</p>	

## ■ Events

onLoadSuccess, onLoadError, onContextMenu, onClick, onDbClick, onBeforeExpand, onExpand, onBeforeCollapse, onCollapse, onBeforeSelect, onSelect

```
/*-----
* BODY
-----*/
<ctree id="tree5" url="/testData/tree_data1.json" animate=true style="height:260px;"
    onContextMenu="eventAll(event);"
    onLoadSuccess="eventAll(event);"
    onLoadError="eventAll(event);"
    onClick="eventAll(event);"
    onDbClick="eventAll(event);"
    onBeforeExpand="eventAll(event);"
    onExpand="eventAll(event);"
    onBeforeCollapse="eventAll(event);"
    onCollapse="eventAll(event);"
    onBeforeSelect="eventAll(event);"
    onSelect="eventAll(event);"
    onBeforeDrag="eventAll(event);"
    onStartDrag="eventAll(event);"
    onStopDrag="eventAll(event);"
    onDragOver="eventAll(event);"
    onBeforeDrop="eventAll(event);"
    onDrop="eventAll(event);"
></ctree>

/*-----
* use event
-----*/
function eventAll(obj) {
    if(obj.event == "onContextMenu"){
        console.log('★---- onContextMenu Event');
        console.log("e : ", obj.args.e , "Wnnode : " , obj.args.node);
        $('#menu').menu('show',{
            left: obj.args.e.pageX,
            top: obj.args.e.pageY
        });
    }
    else if(obj.event == "onLoadSuccess"){
        console.log('★---- onLoadSuccess Event');
        console.log("node : " , obj.args.node , "Wndata : " , obj.args.data);
    }
    else if(obj.event == "onLoadError"){
        console.log('★---- onLoadError Event');
    }
}
```

```

else if(obj.event == "onClick"){
    console.log('★---- onClick Event');
    console.log("node : " , obj.args.node);
}
else if(obj.event == "onDbClick"){
    console.log('★---- onDbClick Event');
    console.log("node : " , obj.args.node);
}
else if(obj.event == "onBeforeExpand"){
    console.log('★---- onBeforeExpand Event');
    console.log("node : " , obj.args.node);
}
else if(obj.event == "onExpand"){
    console.log('★---- onExpand Event');
    console.log("node : " , obj.args.node);
}
else if(obj.event == "onBeforeCollapse"){
    console.log('★---- onBeforeCollapse Event');
    console.log("node : " , obj.args.node);
}
else if(obj.event == "onCollapse"){
    console.log('★---- onCollapse Event');
    console.log("node : " , obj.args.node);
}
else if(obj.event == "onBeforeSelect"){
    console.log('★---- onBeforeSelect Event');
    console.log("node : " , obj.args.node);
}
else if(obj.event == "onSelect"){
    console.log('★---- onSelect Event');
    console.log("node : " , obj.args.node);
}
else if(obj.event == "onBeforeDrag"){
    console.log('★---- onBeforeDrag Event');
    console.log("dragNode : " , obj.args.dragNode);
}
else if(obj.event == "onStartDrag"){
    console.log('★---- onStartDrag Event');
    console.log("dragNode : " , obj.args.dragNode);
}
else if(obj.event == "onStopDrag"){
    console.log('★---- onStopDrag Event');
    console.log("dragNode : " , obj.args.dragNode);
}
else if(obj.event == "onDragOver"){
    console.log('★---- onDragOver Event');
    console.log("dragNode : " , obj.args.dragNode);
    console.log("dropTarget : " , obj.args.dropTarget);
    console.log("dropPoint : " , obj.args.dropPoint);
}

```

---

```
}  
    else if(obj.event == "onBeforeDrop"){  
        console.log('★----- onBeforeDrop Event');  
        console.log("dragNode : " , obj.args.dragNode);  
        console.log("dropTarget : " , obj.args.dropTarget);  
        console.log("dropPoint : " , obj.args.dropPoint);  
    }  
    else if(obj.event == "onDrop"){  
        console.log('★----- onDrop Event');  
        console.log("dragNode : " , obj.args.dragNode);  
        console.log("dropTarget : " , obj.args.dropTarget);  
        console.log("dropPoint : " , obj.args.dropPoint);  
    }  
}
```


---

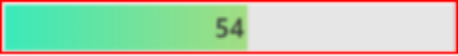
## 6. Y[wai] Component Example


### J. Bar Progress

■ Properties


value, style, gradienstStart, gradientEnd, valueText, valueTextColor, emptyFill, lincecap, duration, animationStartValue, unit


property	source
value	bar1.value=60;
result	
 <p>Set the value you want. (default: 0)</p>	

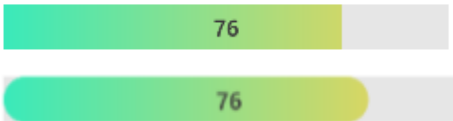
property	source
style	style="width:200px;height:50px; border:1px solid red;"
result	
 <p>Set the style you want.</p>	

property	source
gradientStart gradientEnd	gradientstart = "blue" gradientend = "skyblue"
result	
 <p>Set the progress to the gradient color you want. (gradientstart default: #3aeabb) (gradientend default: #fdd250)</p>	

property	source
valueText	bar1.valueText=true; bar1.valueText=false;
result	
 <p>Sets whether to display the text showing the value. (default: true)</p>	


property	source
valueTextColor	bar1.valueTextColor ="blue";
result	
 <p>Sets the font color of valueText. (default: #000000)</p>	

property	source
emptyFill	bar1.emptyFill =" #ffe1e1";
result	
 <p>Sets the color of the empty space in the progress. (default: #e6e6e6)</p>	

property	source
linecap	bar1.linecap ="butt"; bar1.linecap ="round";
result	
 <p>Sets the end appearance of the progress. (default: butt)</p>	

property	source
duration	bar1.duration =1500;
result	
<p>Sets the duration of the animation. (default: 1200)</p>	

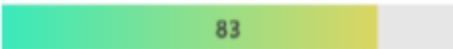
property	source
animationStartValue	<pre>bar1.animationStartValue=0; bar1.animationStartValue=1;</pre>
result	
<p>Sets the start value to display the animation.  0: The progress is filled from left to right.  1: The progress disappears from right to left.</p>	


property	source
unit	<pre>bar1.unit="%";</pre>
result	
 <p>Sets the valueText display unit.</p>	



## ■ Methods

getValue, setValue

method	source
getValue	bar1.getValue();
result	
 Gets the value. (getValue: 83)	

method	source
setValue	bar1.setValue(value);
result	
 Sets the value. (setValue: 48)	

---

## ■ Events

onclick, onDrawEnd

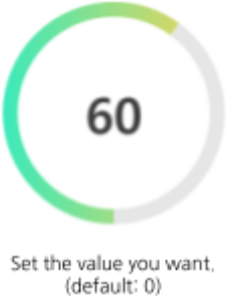
```
/*-----  
* BODY  
-----*/  
<bProgress id="barEvent"  
onClick="eventAll(event);"  
onDrawEnd="eventAll(event);"  
>  
</ bProgress>  
  
/*-----  
* SCRIPT - use event  
-----*/  
function eventAll(obj){  
    if (obj.event == 'onDrawEnd') {  
        console.log(obj.event + " : " + obj.srcElement.value);  
    } else {  
        alert(obj.event);  
    }  
}
```

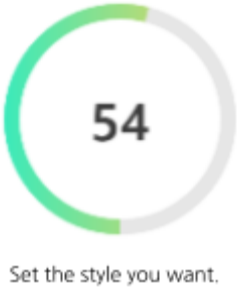
# 6. Y[wai] Component Example


## K. Circle Progress


■ Properties


value, style, arcCoef, thickness, gradientStart, gradientEnd, valueText, valueTextColor, emptyFill, reverse, linecap, duration, animationStartValue, unit


property	source
value	circle1.value=60;
result	
	


property	source
style	style="width:120; height:120px;
result	
	


property	source
arcCoef	circle1.arcCoef=7;
result	
 <p>Sets the circle circumference shape of the progress. (default: 10)</p>	

property	source
thickness	circle1.thickness=60;
result	
 <p>Sets the thickness of the progress. (default: 20)</p>	

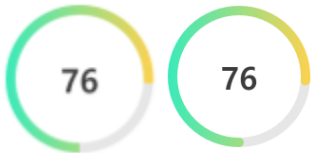
property	source
gradientStart gradientEnd	gradientstart = "blue" gradientend = "skyblue"
result	
 <p>Set the progress to the gradient color you want. (gradientstart default: #3aeabb) (gradientend default: #fdd250)</p>	

property	source
valueText	circle1.valueText=true; circle1.valueText=false;
result	
 <p>Sets whether to display the text showing the value. (default: true)</p>	

property	source
valueTextColor	circle1.valueTextColor = "#e6e6e6";
result	
 <p>Sets the font color of valueText. (default: #000000)</p>	


property	source
emptyFill	circle1.emptyFill = "#ffe1e1";
result	
 <p>Sets the color of the empty space in the progress. (default: #e6e6e6)</p>	

property	source
reverse	circle1.reverse=true; circle1.reverse=false;
result	
Sets the start direction of the animation. true: Counterclockwise false: Clockwise	

property	source
linecap	circle1.linecap ="butt"; circle1.linecap ="round";
result	
 <p>Sets the end appearance of the progress. (default: butt)</p>	

property	source
duration	circle1.duration =1500;
result	
Sets the duration of the animation. (default: 1200)	


property	source
animationStartValue	circle1.animationStartValue=0; circle1.animationStartValue=1;
result	
<p>Set the start value to display the animation.</p> <p>0: Clockwise</p> <p>1: Counterclockwise</p>	


property	source
unit	circle1.unit="%";
result	
 <p>Sets the valueText display unit.</p>	



## ■ Methods

getValue, setValue

method	source
getValue	circle1.getValue();
result	
 <p>Gets the value. (getValue: 70)</p>	

method	source
setValue	circle1.setValue(value);
result	
 <p>Sets the value. (setValue: 48)</p>	

---

## ■ Events

onclick, onDrawEnd

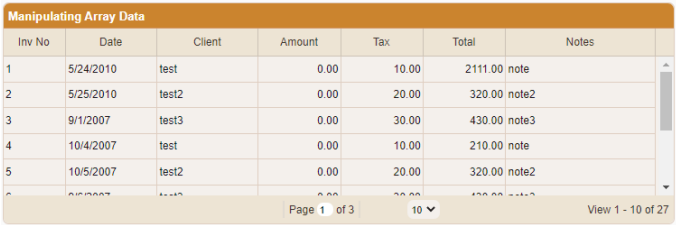
```
/*-----  
* BODY  
-----*/  
<cProgress id="circleEvent"  
onClick="eventAll(event);"  
onDrawEnd="eventAll(event);"  
>  
</ cProgress>  
  
/*-----  
* SCRIPT - use event  
-----*/  
function eventAll(obj){  
    if (obj.event == 'onDrawEnd') {  
        console.log(obj.event + " : " + obj.srcElement.value);  
    } else {  
        alert(obj.event);  
    }  
}
```

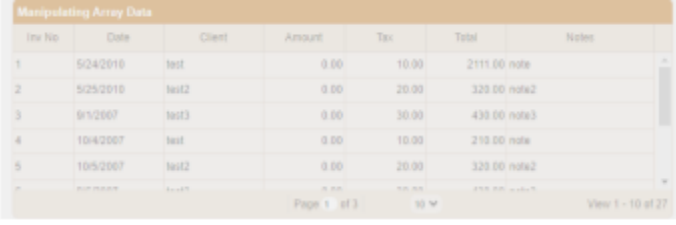
## 6. Y[wai] Component Example

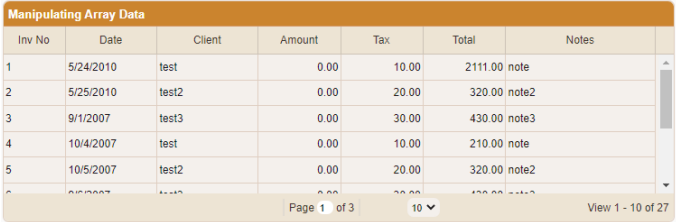
### L. External


#### ■ Properties

name, disabled, readonly, style, createType, elements, customHtml

property	source
name	external1.name = '';
result	
	

property	source
disabled	external1.disabled = true;
result	
 <p>Disables the object.</p>	

property	source
readonly	external1.readonly = true;
result	
	

property	source
style	external2.style = 'width:200px;height:30px;';
result	
 <p>Sets the style you want.</p>	

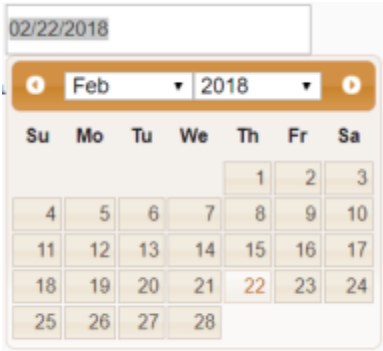
property	source
createType	external2.createType="elements"; external2.createType="customHtml";
result	
You can create objects using elements and customHtml.	

property	source
elements	<pre> &lt;external id="external2" createType="elements"&gt;   &lt;elem tag="div" id="cc1"&gt;&lt;/elem&gt; &lt;/external&gt; </pre>
result	
<div> <input type="text"/> </div> <p>If createType is elements, define the object as an &lt;elem&gt; &lt;/elem&gt; tag. The properties of the elem tag has tag and id.</p>	

property	source
customHtml	<pre> &lt;external id="external2" createType="customHtml"   &lt;custHtml&gt;     &lt;div id="cc1"&gt;&lt;/div&gt;   &lt;/custHtml&gt; &lt;/external&gt; </pre>
result	
<div> <input type="text"/> </div> <p>If createType a customHtml, define the object as an &lt;custHtml&gt; &lt;/custHtml&gt; tag. Create and define an object within the custHtml tag.</p>	

## ■ Methods

focus, clear, reload

method	source
focus	external4.focus();
result	
 <p>Gets the value.</p>	

method	source
clear	external4.clear();
result	
The object to which the library has been applied is cleared.	

method	source
reload	external4.reload();
result	
The object is reloaded.	

## ■ Events

oninit

```
/*-----  
* BODY  
-----*/  
<external id="external1"  
    name="TestName1"  
    title="Test Title !!!"  
    oninit="load_jqGrid(event)"  
    createType="elements"  
    style="position:absolute;left: 120px;top:350px ;width: 700px; height:  
300px;">  
  
    <elem tag="table">  
    </elem>  
    <elem tag="div" id="plist47">  
    </elem>  
  
</external>  
  
/*-----  
* SCRIPT - use event  
-----*/  
function load_jqGrid(e) {  
    var mydata = [  
        {id:"1",invdate:"2010-05-24",name:"test",note:"note",tax:"10.00",total:"2111.00"}  
    ,  
  
    {id:"2",invdate:"2010-05-25",name:"test2",note:"note2",tax:"20.00",total:"320.00"},  
  
    {id:"3",invdate:"2007-09-01",name:"test3",note:"note3",tax:"30.00",total:"430.00"},  
        .....(skip)....  
    ];  
    jQuery(external1.elems[0]).jqGrid({  
        data: mydata,  
        datatype: "local",  
        height: 150,  
        rowNum: 10,  
        rowList: [10,20,30],  
        colNames:['Inv No','Date', 'Client', 'Amount','Tax','Total','Notes'],  
        colModel:[  
            {name:'id',index:'id', width:60, sorttype:"int"},  
            {name:'invdate',index:'invdate', width:90, sorttype:"date",  
formatter:"date"},
```

---

```
        {name:'name',index:'name', width:100},
        {name:'amount',index:'amount', width:80, align:"right",sorttype:"float",
formatter:"number"},
        {name:'tax',index:'tax', width:80, align:"right",sorttype:"float"},
        {name:'total',index:'total', width:80,align:"right",sorttype:"float"},
        {name:'note',index:'note', width:150, sortable:false}
    ],
    pager: "#plist47",
    viewrecords: true,
    caption: "Manipulating Array Data"
});
}
```



---

## 6. Y[wai] Component Example

### M. SubFrame

#### ■ Properties

screen, window

property	source
screen	subFrame1.screen = "/biz/dp/DP10.html";
result	
Calls the screen corresponding to the value of the screen property on the subFrame component.	

property	source
window	console.log(subFrame1.window);
result	
Returns the contentWindow object of the HTML page called in the subFrame component.	


---


## 6. Y[wai] Component Example


### N. Search Edit

#### ■ Properties


disabled, readonly, hideClearButton, hideSearchButton, searchPosition, clearButtonImage, searchButtonImage, buttonFocusable



property	source
disabled	searchEdit1.disabled = true;
result	
	



readonly	searchEdit1.readonly = true;
result	
	



property	source
hideClearButton	searchEdit1.hideClearButton = true;
result	
	

---


property	source
hideSearchButton	searchEdit1.hideSearchButton = true;
result	
<input type="text" value="searchEdit Test"/> 	

searchPositon	searchEdit1.searchPositon = left;
result	
<input type="text" value="searchEdit Test"/>  	

property	source
clearButtonImage	searchEdit1.clearButtonImage = "/css/images/bpDash.png";
result	
<input type="text" value="searchEdit Test"/>  	


searchButtonImage	searchEdit1.searchButtonImage = "/css/images/validatebox_warning.png";
result	
<input type="text" value="searchEdit Test"/>  	

---

property	source
buttonFocusable	searchEdit1.buttonFocusable = false;
result	
	


## ■ Methods

focus, getValue, unmaskedValue, setValue, clear, getEditComponent, search

method	source
focus	<code>searchEdit1.focus();</code>
result	
	

method	source
getValue	<code>searchEdit1.getValue();</code>
result	
Gets the current value.	

method	source
unmaskedValue	<code>searchEdit1.unmaskedValue();</code>
result	
Gets the unmasked value.	

method	source
setValue	searchEdit1.setValue("abcdefg");
result	
 <p>Sets the value.</p>	

clear	searchEdit1.clear();
result	
Sets the value of the search input to an empty value.	

method	source
getEditComponent	searchEdit1.getEditComponent();
result	
<p>Gets the edit object, which is the Y[wai] component contained in searchEdit. You can use all properties and methods of the edit component with this object.</p>	

---

method	source
search	searchEdit1.search();
result	
Fires an event when pressing the search button.	

## ■ Events

onclick, ondblclick, onkeydown, onkeypress, onkeyup, onmousedown, onmouseup, onmouseover, onblur, onfocus, onchange, oncontextmenu, oncomplete, onincomplete, oncleared, onSearch

```
/* -----
* body source
* ----- */
onclick      : <searchEdit id="clickvt1" onclick="eventAll(event);"></searchEdit>
ondblclick   : <searchEdit id="dblclickvt1" ondblclick="eventAll(event);"></searchEdit>
onkeydown    : <searchEdit id="keydownvt1" onkeydown="eventAll(event);"></searchEdit>
onkeypress   : <searchEdit id="keypresvt1" onkeypress="eventAll(event);"></searchEdit>
onkeyup      : <searchEdit id="keyupevt1" onkeyup="eventAll(event);"></searchEdit>
onmousedown  : <searchEdit id="mousedownvt1"
onmousedown="eventAll(event);"></searchEdit>
onmouseup    : <searchEdit id="mouseupevt1" onmouseup="eventAll(event);"></searchEdit>
onmouseover  : <searchEdit id="mouseovervt1" onmouseover="eventAll(event);"></searchEdit>
onblur       : <searchEdit id="blurevt1" onblur="eventAll(event);"></searchEdit>
onfocus     : <searchEdit id="focusevt1" onfocus="eventAll(event);"></searchEdit>
onchange     : <searchEdit id="changevt1" onchange="eventAll(event);"></searchEdit>
oncontextmenu : <searchEdit id="ctmenuevt1" oncontextmenu="eventAll(event);"></searchEdit>

oncomplete   : <searchEdit id="oncompletevt1" oncomplete="eventAll(event);"></searchEdit>
onincomplete : <searchEdit id="onincompletevt1"
onincomplete="eventAll(event);"></searchEdit>
oncleared    : <searchEdit id="oncleared1evt" oncleared="eventAll(event);"></searchEdit>

onSearch : <searchEdit id="onsearchvt1" onSearch="eventAll(event);"></searchEdit>
/* -----
* script source
* ----- */
function eventAll(obj){
  if (obj.event == 'onChange') {
    alert("Event : " + obj.event + "WnoldValue: " + obj.args.oldValue + "WnnewValue: " +
obj.args.newValue);
  } else {
    alert("Event : " + obj.event);
  }
}
```




---

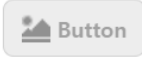
## 6. Y[wai] Component Example

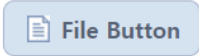
### O. Image Button

#### ■ Properties

disabled, readonly, image, imageAlign, imageSize


property	source
disabled	<code>imgButton1.disabled = true;</code>
result	
	

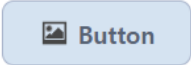
readonly	<code>imgButton1.readonly = true;</code>
result	
	

property	source
image	<code>imgButton1.image = '/css/images/tree_file.png';</code>
result	
	

---

---

property	source
imageAlign	imgButton1.imageAlign = 'right';
result	
	

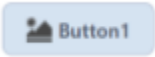
imageSize	imgButton1.imageSize = '13px';
result	
	

## ■ Methods

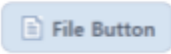
focus, getValue, unmaskedValue, setValue, clear, getEditComponent, search

method	source
focus	<code>imgButton1.focus();</code>
result	
Moves the focus.	

method	source
click	<code>imgButton1.click();</code>
result	
Fires an event when pressing the button.	

method	source
setText	<code>imgButton1.setText('Button1');</code>
result	
 The text area of the button changes to that value.	

---

method	source
setImage	<code>imgButton1.setImage('/css/images/tree_file.png');</code>
result	
<div></div> <p>The image area of the button changes to the image value from that URL.</p>	

---

## ■ Events

onfocus, onclick, ondblclick, onmousedown, onmouseover, onmouseup, onkeydown, onkeypress, onkeyup, oncontextmenu

```
/* -----  
* body source  
* ----- */  
onclick      : <imgButton id="clikevt1" onclick="eventAll(event);"></imgButton>  
ondblclick   : <imgButton id="dblclikevt1" ondblclick="eventAll(event);"></imgButton>  
onkeydown    : <imgButton id="keydownvt1" onkeydown="eventAll(event);"></imgButton>  
onkeypress   : <imgButton id="keypressevt1" onkeypress="eventAll(event);"></imgButton>  
onkeyup      : <imgButton id="keyupevt1" onkeyup="eventAll(event);"></imgButton>  
onmousedown  : <imgButton id="mousedownvt1"  
onmousedown="eventAll(event);"></imgButton>  
onmouseup    : <imgButton id="mouseupevt1" onmouseup="eventAll(event);"></imgButton>  
onmouseover  : <imgButton id="mouseoverevt1" onmouseover="eventAll(event);"></imgButton>  
onfocus     : <imgButton id="focusevt1" onfocus="eventAll(event);"></imgButton>  
oncontextmenu : <imgButton id="ctmenuevt1" oncontextmenu="eventAll(event);"></imgButton>  
  
/* -----  
* script source  
* ----- */  
function eventAll(obj){  
    if (obj.event == onclick ) {  
        alert("Event : " + obj.event);  
    } else {  
        alert("Event : " + obj.event);  
    }  
}
```

---

## 7. waiServer Integration Features

### A. DataService Mode

This is a service call feature using waiServer's Data I/O.

#### ■ Main Screen



#### ① Object Status

Displays the component objects bound to the DataField when selecting a row from the DataService list on the right.

Fields in the input dataset are shown in blue, and fields in the output dataset are shown in red.

#### ② Edit Tool

Adds, deletes, and edit DataServices.

- ✓ Add : Adds a DataService by calling the pop-up window to select DataService.
- ✓ Del : Deletes the DataService checked in the DataService.
- ✓ Edit : Creates, modifies, and deletes DataService by calling the pop-up window to manage DataService.

---

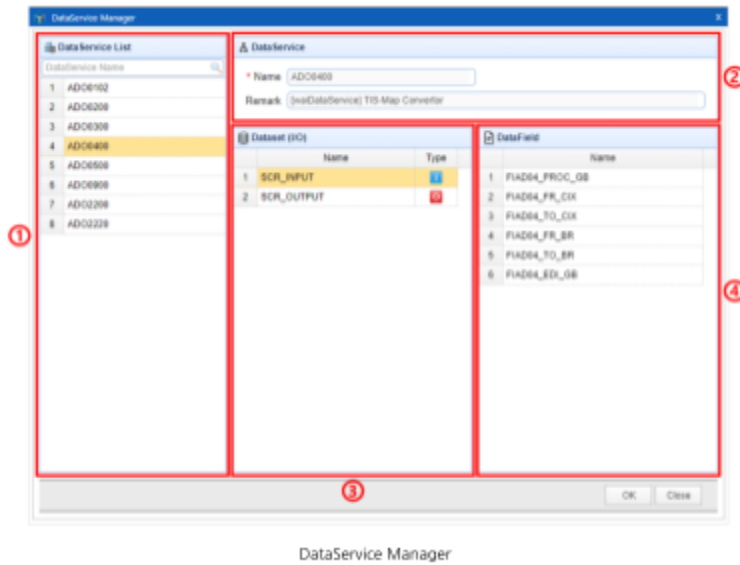
### ③ DataService List

Displays a list of DataServices added to the html file you are working on.

It is shown in a Tree structure and consists of DataService - Dataset - DataField.

The icons on the right show whether it is bound or not.

## ■ DataService Manager (Select)



### ① DataService List

The list of DataService registered with waiServer is searched.

You can look up a specific DataService by inputting the DataService name in the search bar at the top.

Select a DataService from the list and click the [OK] button to add the DataService.

### ② DataService Information

Displays information about the DataService selected in the DataService List.

### ③ Dataset List

The list of datasets of the selected DataService is searched.

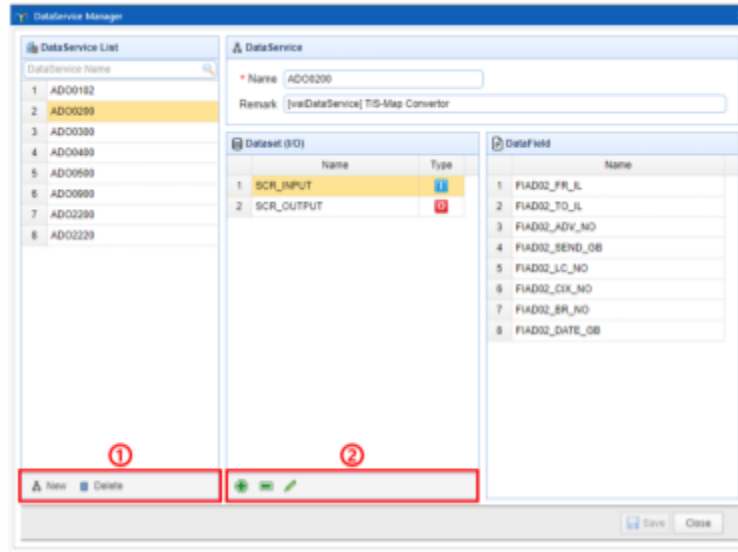
The icons on the right show whether it is inputted or outputted.

### ④ DataField List

The list of DataFields of the selected Dataset is searched.



## ■ DataService Manager (Manage)



DataService Manager

### ① DataService Edit Tool

Register and delete the DataService on waiServer.

- ✓ New : Registers a new DataService with waiServer.

Input the DataService information, add a Dataset, and click the [Save] button to register it.

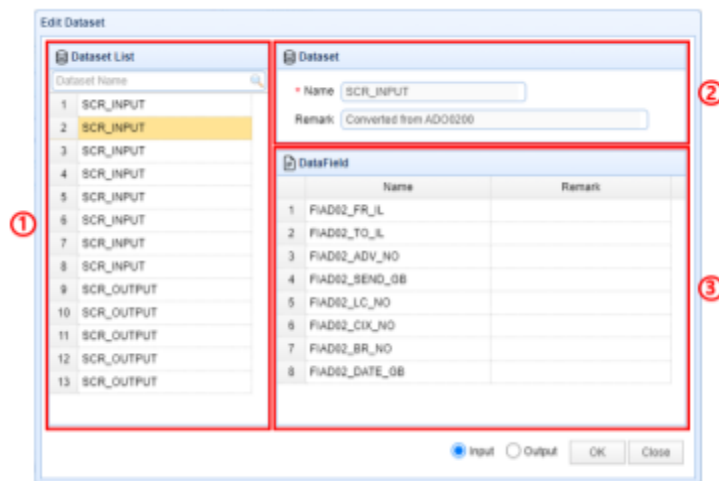
- ✓ Delete : Deletes the DataService selected in the list from waiServer.

### ② Dataset Edit Tool

Add, delete, and edit the Dataset.

- ✓ Add : Adds a Dataset by calling the pop-up window to select Dataset.
- ✓ Del : Deletes the Dataset selected in the Dataset List.
- ✓ Edit : Creates, modifies, and deletes Dataset by calling the pop-up window to manage Dataset.

## ■ Dataset Manager (Select)



Dataset Manager

### ① Dataset List

The list of Dataset registered with waiServer is searched.

You can look up a specific Dataset by inputting the Dataset name in the search bar at the top.

Select a Dataset from the list and check the Input or Output checkbox.

Click the [OK] button to add the dataset.

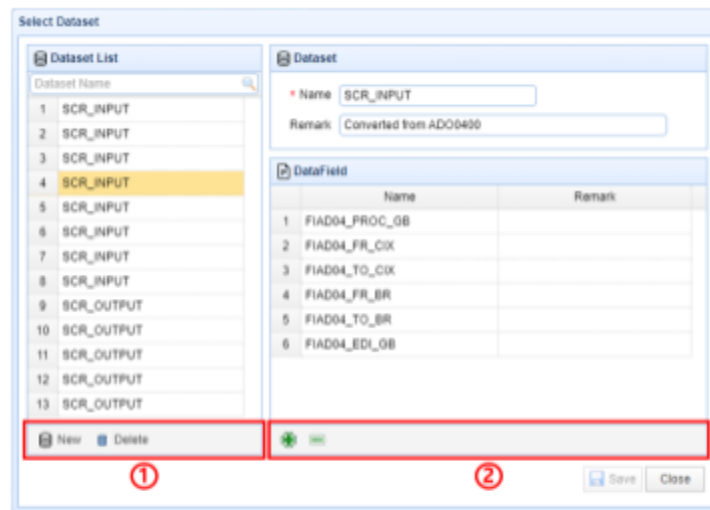
### ② Dataset Information

Displays information about the Dataset selected in the Dataset List.

### ③ DataField List

The list of DataFields of the selected Dataset is searched.

## ■ Dataset Manager (Manage)



Dataset Manager

### ① Dataset Edit Tool

Register and delete the Dataset on waiServer.

- ✓ New : Registers a new Dataset with waiServer.

Input the Dataset information, add a DataField, and click the [Save] button to register it.

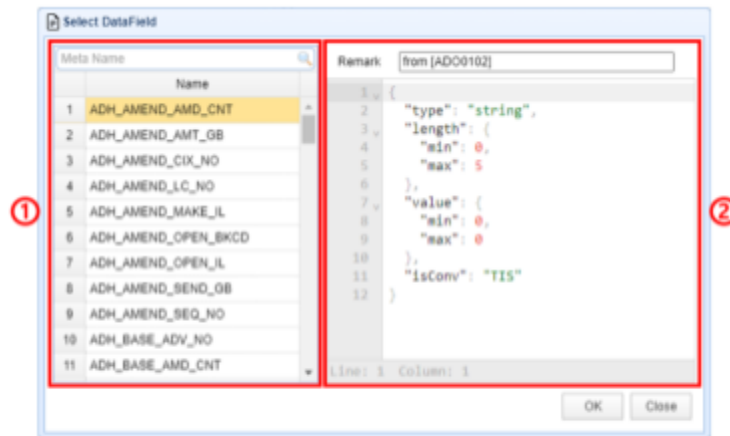
- ✓ Delete : Deletes the Dataset selected in the list from waiServer.

### ② DataField Edit Tool

Add and delete the DataField.

- ✓ Add : Adds a DataField by calling the pop-up window to select DataField.
- ✓ Del : Deletes the DataField selected in the DataField List.

## ■ DataField Manager (Select)



DataField Manager

### ① DataField(Data Meta) List

The list of DataField(Data Meta) registered with waiServer is searched.

You can look up a specific DataField(Data Meta) by inputting the DataField(Data Meta) name in the search bar at the top.

Select a DataField(Data Meta) from the list and click the [OK] button to add the DataField(Data Meta).

### ② DataField(Data Meta) Information

Displays information about the DataField(Data Meta) selected in the DataField(Data Meta) List.

---

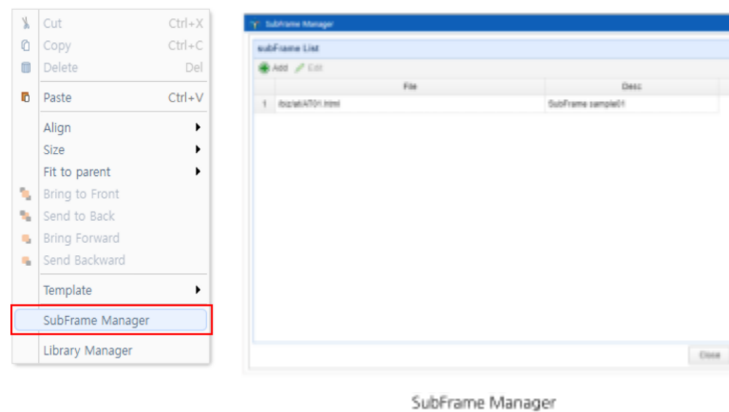
## 7. waiServer Integration Features

### B. SubFrame

This is a feature that calls another HTML page inside the component.

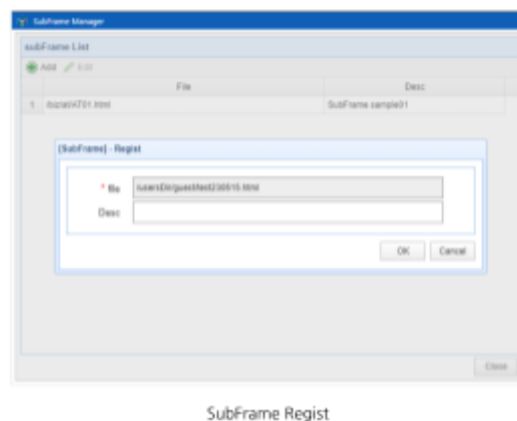
You can use the SubFrame Manager to register HTML pages and call them from SubFrame components.

#### ■ Register SubFrame



If you right-click in the top area of the designer, SubFrame Manager will be activated in the right-click menu. Click the [Add] button in the SubFrame Manager to call the SubFrame Registration pop-up window.

The file you are working on is subject to registration, and you can check the registration information in waiServer.

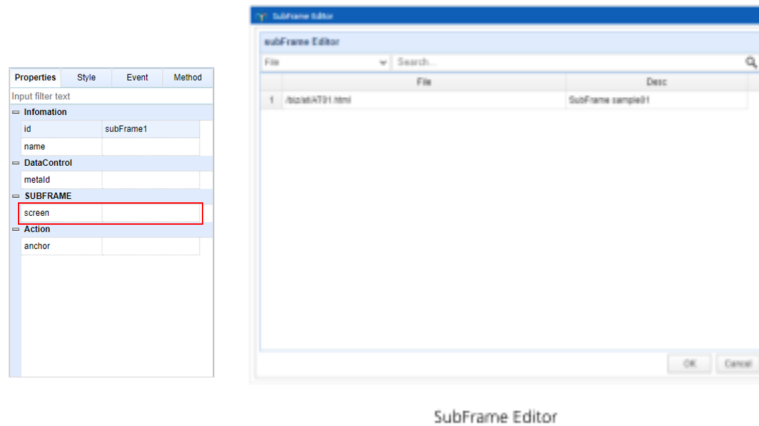


---

## ■ Call SubFrame

Create a SubFrame component in the designer and edit the screen property in the Property Editor to call the SubFrame Editor pop-up window.

Select the HTML page you want to call and click the [OK] button. You can check that the HTML page has been called inside the SubFrame component.



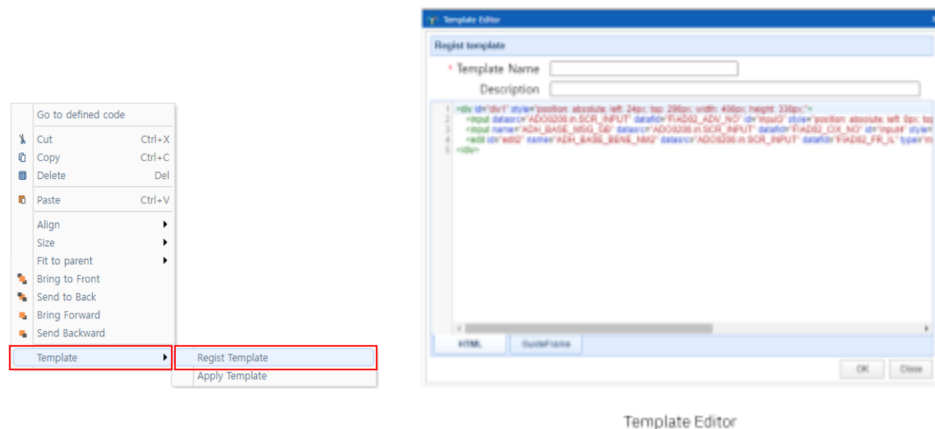
---

## 7. waiServer Integration Features

### C. Template

This is a feature that allows you to register frequently used source code as a template.

#### ■ Register Template



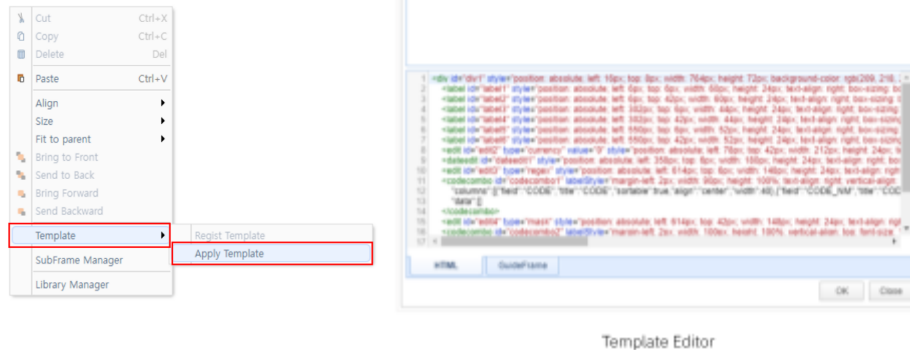
If you right-click on the component you want to register as a template, Template menu will be activated.

Click the Register Template menu to call the Register Template pop-up window.

The entire source, including any child components of the component to be registered, is subject to registration. For components with GuideFrames applied, GuideFrame tab at the bottom contains the GuideFrame information.

Input the information and click the [OK] button to register. You can check the registered information in waiServer.

## ■ Call Template



Right-click where you want to import the template in the designer.

Select Apply Template from Template menu to call Template selection window.

(Apply Template menu is only activated where it can have child components.)

Select a template and click the [OK] button to import the template.

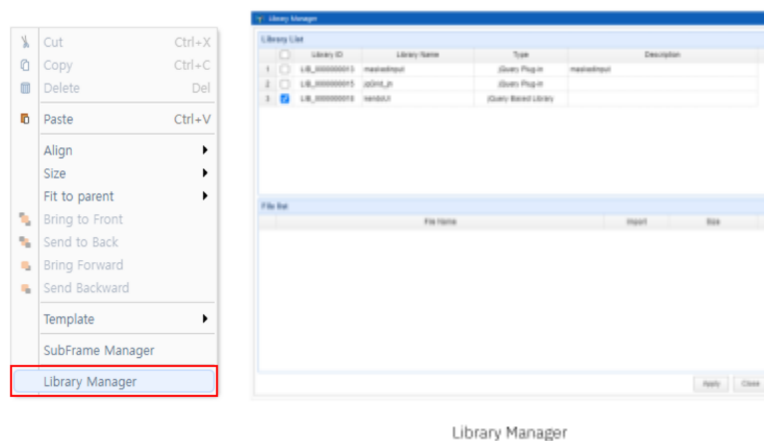
(If an ID that exists on the screen is included in a template, you can't import the template.)



## 7. waiServer Integration Features

## D. Call Libraries

## ■ How To Apply



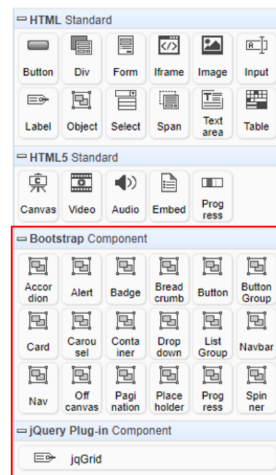
If you right-click in the top area of the designer, Library Manager will be activated. The Library Manager pop-up window shows the libraries registered in waiServer.

Check the checkboxes on the left side of the grid for the libraries you want to apply and click the [Apply] button to apply them.

You can check that the library information has been inputted in the source code.

```
<head>
  <meta charset="UTF-8">
  <script type="text/javascript" src="/wai/wai.js">
    [
      { "type": "library", "id": "LIB_0000000002", "name": "jqGrid-5.7.0-Trial" }
    ]
  </script>
  <link href="/wai/default.css" rel="stylesheet" type="text/css">
</head>
```

## ■ Dynamic Components



If you have configured the component list with the jQuery Plug-in or jQuery Based Library type when registering the library in waiServer, the component list will appear in the components palette when applying the library.

When you draw components in the designer, they are added based on the information configured for each component.

---

## 8. Customer Support & Product Offerings

### A. Customer Support

- Enquire about Product and Technology

- ✓ Corebank Institute of Technology

- ✓ Tel: 070-4774-5391

---

## 8. Customer Support & Product Offerings

### B. Product Offerings

#### ■ Information about Offerings

✓ Company Name

Corebank Co., Ltd.

✓ Address

#A-705, Winners Building, 63, Baekjegobun-ro, Songpa-gu, Seoul, Korea

✓ Number

02-425-6200

✓ Fax

02-425-6209

✓ Homepage

<https://www.corebank.co.kr/corebank/index.html>

✓ Product Site

<https://uitool.org/>