

# SolutionModel

## Return Types

ALIGNMENT ANCHOR CURSOR DEFAULTS JButton JSComponent JSField JSForm JLabel JSMedia JSMethod JSPart JSPortal JSRelation JSRelati  
onItem JSStyle JSTab JSTabPanel JSValueList JSVariable MEDIAOPTION PRINTSLIDING SCROLLBAR

## Method Summary

**JSCompo** #cloneComponent(newName, component)  
**JSCompo** #cloneComponent(newName, component, [newParentForm])  
Makes an exact copy of the given component (JSComponent/JSField/JLabel), gives it a new name and optionally moves it to a new parent form.  
**JSForm** #cloneForm(newName, jsForm)  
Makes an exact copy of the given form and gives it the new name.  
**JSForm** #getForm(name)  
Gets the specified form object and returns information about the form (see JSForm node).  
**JSForm[]** #getForms()  
**JSForm[]** #getForms(datasource)  
**JSForm[]** #getForms([server], [tablename])  
Get an array of forms, that are all based on datasource/servername or tablename.  
**JSMETHOD** #getGlobalMethod(name)  
Gets an existing global method by the specified name.  
**JSMETHOD** #getGlobalMethods()  
The list of all global methods.  
**JSVariable** #getGlobalVariable(name)  
Gets an existing global variable by the specified name.  
**JSVariable**#getGlobalVariables()  
Gets an array of all global variables.  
**JSMedia** #getMedia(name)  
Gets the specified media object; can be assigned to a button/label.  
**JSMedia[]** #getMediaList()  
Gets the list of all media objects.  
**JSRelation** #getRelation(name)  
Gets an existing relation by the specified name and returns a JSRelation Object.  
**JSRelation**#getRelations([primary\_server\_name|primary\_data\_source], [primary\_table\_name])  
Gets an array of all relations; or an array of all global relations if the specified table is NULL.  
**JSStyle** #getStyle(name)  
Gets the style specified by the given name.  
**JSValueLi** #getValueList(name)  
Gets an existing valuelist by the specified name and returns a JSValueList Object that can be assigned to a field.  
**JSValueLi** #getValueLists()  
**JSValueLi[]** Gets an array of all valuelists for the currently active solution.  
**JSForm** #newForm(name, server\_name|data\_source, [table\_name], style, show\_in\_menu, width, height)  
Creates a new JSForm Object.  
**JSMETHOD** #newGlobalMethod(code)  
Creates a new global method with the specified code.  
**JSVariable** #newGlobalVariable(name, type)  
Creates a new global variable with the specified name and number type.  
**JSMedia** #newMedia(name, bytes)  
Creates a new media object that can be assigned to a label or a button.  
**JSRelation** #newRelation(name, primary\_server\_name|primary\_data\_source, [primary\_table\_name], foreign\_server\_name|foreign\_data\_source, [foreign\_table\_name], join\_type)  
Creates a new JSRelation Object with a specified name; includes the primary datasource, optional table name, foreign datasource, optional foreign table name, and the type of join for the new relation.  
**JSStyle** #newStyle(name, content)  
Creates a new style with the given css content string under the given name.  
**JSValueLi** #newValueList(name, type)  
**JSValueLi** #newValueList(name, type)  
Creates a new valuelist with the specified name and number type.  
**Boolean** #removeForm(name)  
Removes the specified form during the persistent connected client session.  
**JSForm** #revertForm(name)  
Reverts the specified form to the original (blueprint) version of the form; will result in an exception error if the form is not an original form.

## Method Details

cloneComponent

**JSComponent** **cloneComponent**(newName, component, [newParentForm])

Makes an exact copy of the given component (JSComponent/JSField/JSLabel), gives it a new name and optionally moves it to a new parent form.

**Parameters**

{String} newName – the new name of the cloned component  
{JSComponent} component – the component to clone  
{JSForm} [newParentForm] – the new parent form

**Returns**

JSComponent – the exact copy of the given component

**Sample**

```
// get an existing field to clone.  
var field = solutionModel.getForm("formWithField").getField("fieldName");  
// get the target form for the copied/cloned field  
var form = solutionModel.getForm("targetForm");  
// make a clone/copy of the field and re parent it to the target form.  
var clone = solutionModel.cloneComponent("clonedField",field,form);  
// show it  
forms["targetForm"].controller.show();
```

**cloneForm****JSForm** **cloneForm**(newName, jsForm)

Makes an exact copy of the given form and gives it the new name.

**Parameters**

{String} newName – the new name for the form clone  
{JSForm} jsForm – the form to be cloned

**Returns**

JSForm – a JSForm

**Sample**

```
// get an existing form  
var form = solutionModel.getForm("existingForm")  
// make a clone/copy from it  
var clone = solutionModel.cloneForm("clonedForm", form)  
// add a new label to the clone  
clone.newLabel("added label",50,50,80,20);  
// show it  
forms["clonedForm"].controller.show();
```

**getForm****JSForm** **getForm**(name)

Gets the specified form object and returns information about the form (see JSForm node).

**Parameters**

{String} name – the specified name of the form

**Returns**

JSForm – a JSForm

**Sample**

```
var myForm = solutionModel.getForm('existingFormName');  
//get the style of the form (for all other properties see JSForm node)  
var styleName = myForm.styleName;
```

**getForms****JSForm[]** **getForms**([server], [tablename])

Get an array of forms, that are all based on datasource/servername or tablename.

**Parameters**

{String} [server] – the datasource or servername  
{String} [tablename] – the tablename

**Returns**

JSForm[] – an array of JSForm type elements

## Sample

```
var forms = solutionModel.getForms(datasource)
for (var i in forms)
    application.output(forms[i].name)
```

## getGlobalMethod

**JSMethod** **getGlobalMethod**(name)

Gets an existing global method by the specified name.

### Parameters

{String} name – the name of the specified global method

### Returns

**JSMethod** – a JSMethod

## Sample

```
var method = solutionModel.getGlobalMethod("nameOfGlobalMethod");
if (method != null) application.output(method.code);
```

## getGlobalMethods

**JSMethod[]** **getGlobalMethods**()

The list of all global methods.

### Returns

**JSMethod[]** – an array of JSMethod type elements

## Sample

```
var methods = solutionModel.getGlobalMethods();
if (methods != null)
    for (var x in methods)
        application.output(methods[x].getName());
```

## getGlobalVariable

**JSVariable** **getGlobalVariable**(name)

Gets an existing global variable by the specified name.

### Parameters

{String} name – the specified name of the global variable

### Returns

**JSVariable** – a JSVariable

## Sample

```
var globalVariable = solutionModel.getGlobalVariable('globalVariableName');
application.output(globalVariable.name + " has the default value of " + globalVariable.defaultValue);
```

## getGlobalVariables

**JSVariable[]** **getGlobalVariables**()

Gets an array of all global variables.

### Returns

**JSVariable[]** – an array of JSVariable type elements

## Sample

```
var globalVariables = solutionModel.getGlobalVariables();
for (var i in globalVariables)
    application.output(globalVariables[i].name + " has the default value of " + globalVariables[i].defaultValue);
```

## getMedia

**JSMedia** **getMedia**(name)

Gets the specified media object; can be assigned to a button/label.

### Parameters

{String} name – the specified name of the media object

### Returns

**JSMedia** – a JSMedia element

## Sample

```
var myMedia = solutionModel.getMedia('button01.gif')
//now set the imageMedia property of your label or button
//myButton.imageMedia = myMedia
// OR
//myLabel.imageMedia = myMedia
```

## getMediaList

**JSMedia[] getMediaList()**

Gets the list of all media objects.

### Returns

**JSMedia[]** – a list with all the media objects.

## Sample

```
var mediaList = solutionModel.getMediaList();
    if (mediaList.length != 0 && mediaList != null) {
        for (var x in mediaList) {
            application.output(mediaList[x]);
        }
    }
```

## getRelation

**JSRelation getRelation(name)**

Gets an existing relation by the specified name and returns a JSRelation Object.

### Parameters

**{String} name** – the specified name of the relation

### Returns

**JSRelation** – a JSRelation

## Sample

```
var relation = solutionModel.getRelation('name');
    application.output("The primary server name is " + relation.primaryServerName);
    application.output("The primary table name is " + relation.primaryTableName);
    application.output("The foreign table name is " + relation.foreignTableName);
    application.output("The relation items are " + relation.getRelationItems());
```

## getRelations

**JSRelation[] getRelations([primary\_server\_name/primary\_data\_source], [primary\_table\_name])**

Gets an array of all relations; or an array of all global relations if the specified table is NULL.

### Parameters

**[primary\_server\_name/primary\_data\_source]** – the specified name of the server or datasource for the specified table

**[primary\_table\_name]** – the specified name of the table

### Returns

**JSRelation[]** – an array of all relations (all elements in the array are of type JSRelation)

## Sample

```
var relations = solutionModel.getRelations('server_name','table_name');
    if (relations.length != 0)
        for (var i in relations)
            application.output(relations[i].name);
```

## getStyle

**JSStyle getStyle(name)**

Gets the style specified by the given name.

### Parameters

**{String} name** – the specified name of the style

### Returns

**JSStyle** – a JSStyle

## Sample

```
var style = solutionModel.getStyle('my_existing_style')
style.content = 'combobox { color: #0000ff;font: italic 10pt "Verdana";}'
```

getValueList

**JSValueList** **getValueList**(name)

Gets an existing valuelist by the specified name and returns a JSValueList Object that can be assigned to a field.

**Parameters**

{String} name – the specified name of the valuelist

**Returns**

JSValueList – a JSValueList object

## Sample

```
var myValueList = solutionModel.getValueList('myValueListHere')
//now set the valueList property of your field
//myField.valuelist = myValueList
```

getValueLists

**JSValueList[]** **getValueLists**()

Gets an array of all valuelists for the currently active solution.

**Returns**

JSValueList[] – an array of JSValueList objects

## Sample

```
var valueLists = solutionModel.getValueLists();
if (valueLists != null && valueLists.length != 0)
    for (var i in valueLists)
        application.output(valueLists[i].name);
```

newForm

**JSForm** **newForm**(name, server\_name|data\_source, [table\_name], style, show\_in\_menu, width, height)

Creates a new JSForm Object.

NOTE: See the JSForm node for more information about form objects that can be added to the new form.

**Parameters**

name – the specified name of the form

server\_name|data\_source – the specified name of the server or datasource for the specified table

[table\_name] – the specified name of the table

style – the specified style

show\_in\_menu – if true show the name of the new form in the menu; or false for not showing

width – the width of the form in pixels

height – the height of the form in pixels

**Returns**

JSForm – a new JSForm object

## Sample

```
var myForm = solutionModel.newForm('newForm', 'myServer', 'myTable', 'myStyleName', false, 800, 600)
//now you can add stuff to the form (under JSForm node)
//add a label
myForm.newLabel('Name', 20, 20, 120, 30)
//add a "normal" text entry field
myForm.newTextField('dataProviderNameHere', 140, 20, 140,20)
```

newGlobalMethod

**JSMethod** **newGlobalMethod**(code)

Creates a new global method with the specified code.

**Parameters**

{String} code – the specified code for the global method

**Returns**

JSMethod – a JSMethod object

## Sample

```
var method = solutionModel.newGlobalMethod('function myglobalmethod(){currentcontroller.newRecord()}')
```

newGlobalVariable

**JSVariable newGlobalVariable(name, type)**

Creates a new global variable with the specified name and number type.

NOTE: The global variable number type is based on the value assigned from the SolutionModel-JSVariable node; for example: JSVariable.INTEGER.

### Parameters

{String} name – the specified name for the global variable

{Number} type – the specified number type for the global variable

### Returns

**JSVariable** – a JSVariable object

## Sample

```
var myGlobalVariable = solutionModel.newGlobalVariable('newGlobalVariable',JSVariable.INTEGER);
myGlobalVariable.defaultValue = 12;
```

newMedia

**JSMedia newMedia(name, bytes)**

Creates a new media object that can be assigned to a label or a button.

### Parameters

{String} name – The name of the new media

{byte[]} bytes – The content

### Returns

**JSMedia** – a JSMedia object

## Sample

```
var myMedia = solutionModel.newMedia('button01.gif',bytes)
//now set the imageMedia property of your label or button
//myButton.imageMedia = myMedia
// OR
//myLabel.imageMedia = myMedia
```

newRelation

**JSRelation newRelation**

(name, primary\_server\_name|primary\_data\_source, [primary\_table\_name], foreign\_server\_name|foreign\_data\_source, [foreign\_table\_name], join\_type)  
Creates a new JSRelation Object with a specified name; includes the primary datasource, optional table name, foreign datasource, optional foreign table name, and the type of join for the new relation.

### Parameters

name – the specified name of the new relation

primary\_server\_name|primary\_data\_source – the specified name of the primary server or datasource

[primary\_table\_name] – the specified name of the primary table

foreign\_server\_name|foreign\_data\_source – the specified name of the foreign server or datasource

[foreign\_table\_name] – the specified name of the foreign table

join\_type – the type of join for the new relation; JSRelation.INNER\_JOIN, JSRelation.LEFT\_OUTER\_JOIN

### Returns

**JSRelation** – a JSRelation object

## Sample

```
var rel = solutionModel.newRelation
('myRelation','myPrimaryServerName','myPrimaryTableName','myForeignServerName','myForeignTableName',JSRelation.
INNER_JOIN);
application.output(rel.getRelationItems());
```

newStyle

**JSStyle newStyle(name, content)**

Creates a new style with the given css content string under the given name.

NOTE: Will throw an exception if a style with that name already exists.

### Parameters

{String} name – the name of the new style

{String} content – the css content of the new style

**Returns****JSStyle** – a JSStyle object**Sample**

```
var form = solutionModel.newForm('myForm', 'myServer', 'myTable', null, true, 1000, 800);
if (form.transparent == false)
{
    var style = solutionModel.newStyle('myStyle', 'form { background-color: yellow; }');
    style.text = style.text + 'field { background-color: blue; }';
    form.styleName = 'myStyle';
}
var field = form.newField('columnTextDataProvider', JSField.TEXT_FIELD, 100, 100, 100, 50);
forms['myForm'].controller.show();
```

**newValueList****JSValueList** **newValueList**(name, type)

Creates a new valuelist with the specified name and number type.

**Parameters**{**String**} name – the specified name for the valuelist{**Number**} type – the specified number type for the valuelist; may be JSValueList.CUSTOM\_VALUES, JSValueList.DATABASE\_VALUES, JSValueList.EMPTY\_VALUE\_ALWAYS, JSValueList.EMPTY\_VALUE\_NEVER**Returns****JSValueList** – a JSValueList object**Sample**

```
var v11 = solutionModel.newValueList("customText", JSValueList.CUSTOM_VALUES);
v11.customValues = "customvalue1\ncustomvalue2";
var v12 = solutionModel.newValueList("customid", JSValueList.CUSTOM_VALUES);
v12.customValues = "customvalue1|1\ncustomvalue2|2";
var form = solutionModel.newForm("customValueListForm", controller.getDataSource(), null, true, 300, 300);
var combo1 = form.newComboBox("globals.text", 10, 10, 120, 20);
combo1.valuelist = v11;
var combo2 = form.newComboBox("globals.id", 10, 60, 120, 20);
combo2.valuelist = v12;
```

**removeForm****Boolean** **removeForm**(name)

Removes the specified form during the persistent connected client session.

NOTE: Make sure you call history.remove first in your Servoy method (script).

**Parameters**{**String**} name – the specified name of the form to remove**Returns****Boolean** – true if form has been removed, false if form could not be removed**Sample**

```
//first remove it from the current history, to destroy any active form instance
var success = history.removeForm('myForm')
//removes the named form from this session, please make sure you called history.remove() first
if(success)
{
    solutionModel.removeForm('myForm')
}
```

**revertForm****JSForm** **revertForm**(name)

Reverts the specified form to the original (blueprint) version of the form; will result in an exception error if the form is not an original form.

NOTE: Make sure you call history.remove first in your Servoy method (script) or call form.controller.recreateUI() before the script ends.

**Parameters**{**String**} name – the specified name of the form to revert**Returns****JSForm** – a JSForm object

## Sample

```
// revert the form to the original solution form, removing any changes done to it through the solution model.  
var revertedForm = solutionModel.revertForm('myForm')  
// add a label on a random place.  
revertedForm.newLabel("MyLabel",Math.random()*100,Math.random()*100,80,20);  
// make sure that the ui is up to date.  
forms.myForm.controller.recreateUI();
```