

# JSValueList

## Constants Summary

Number	<a href="#">CUSTOM_VALUES</a> Constant to set the valueListType of a JSValueList.
Number	<a href="#">DATABASE_VALUES</a> Constant to set the valueListType of a JSValueList.
Number	<a href="#">EMPTY_VALUE_ALWAYS</a> Constant to set/get the addEmptyValue property of a JSValueList.
Number	<a href="#">EMPTY_VALUE_NEVER</a> Constant to set/get the addEmptyValue property of a JSValueList.

## Property Summary

Number	<a href="#">addEmptyValue</a> Property that tells if an empty value must be shown next to the items in the value list.
String	<a href="#">customValues</a> A string with the elements in the valuelist.
String	<a href="#">dataSource</a> Compact representation of the names of the server and table that are used for loading the data from the database.
JSValueList	<a href="#">fallbackValueList</a> Gets or sets the fallback valuelist.
JSMethod	<a href="#">globalMethod</a> A global method that provides the data for the valuelist.
String	<a href="#">name</a> The name of the value list.
String	<a href="#">relationName</a> The name of the relation that is used for loading data from the database.
String	<a href="#">separator</a> A String representing the separator that should be used when multiple display dataproviders are set, when the value list has the type set to database values.
String	<a href="#">serverName</a> The name of the database server that is used for loading the values when the value list has the type set to database values.
void	<a href="#">setFallbackValueList</a>
String	<a href="#">sortOptions</a> Sort options that are applied when the valuelist loads its data from the database.
String	<a href="#">tableName</a> The name of the database table that is used for loading the values when the value list has the type set to database values.
Boolean	<a href="#">useTableFilter</a> Flag that tells if the name of the valuelist should be applied as a filter on the 'valuelist_name' column when retrieving the data from the database.
Number	<a href="#">valueListType</a> The type of the valuelist.

## Method Summary

Object[]	<a href="#">getDisplayDataProviderIds()</a> Returns an array of the dataproviders that will be used to display the valuelist value.
Object[]	<a href="#">getReturnDataProviderIds()</a> Returns an array of the dataproviders that will be used to define the valuelist value that is saved.
UUID	<a href="#">getUUID()</a> Returns the UUID of the value list
void	<a href="#">setDisplayDataProviderIds()</a> Set the display dataproviders.
void	<a href="#">setDisplayDataProviderIds(dataprovider1)</a> Set the display dataproviders.
void	<a href="#">setDisplayDataProviderIds(dataprovider1, dataprovider2)</a> Set the display dataproviders.
void	<a href="#">setDisplayDataProviderIds(dataprovider1, dataprovider2, dataprovider3)</a> Set the display dataproviders.

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```
void      setReturnDataProviderIds\(\)
          Set the return dataproviders.
void      setReturnDataProviderIds\(dataprovider1\)
          Set the return dataproviders.
void      setReturnDataProviderIds\(dataprovider1, dataprovider2\)
          Set the return dataproviders.
void      setReturnDataProviderIds\(dataprovider1, dataprovider2, dataprovider3\)
          Set the return dataproviders.
```

## Constants Details

### CUSTOM\_VALUES

Constant to set the valueListType of a JSValueList.  
 Sets the value list to use a custom list of values.  
 Also used in solutionModel.newValueList(...) to create new valuelists

#### Returns

[Number](#)

#### Sample

```
var vlist = solutionModel.newValueList('options', JSValueList.DATABASE_VALUES);
vlist.valueListType = JSValueList.CUSTOM_VALUES; // Change the type to custom values.
vlist.customValues = "one\ntwo\nthree\nfour";
```

### DATABASE\_VALUES

Constant to set the valueListType of a JSValueList.  
 Sets the value list to use values loaded from a database.  
 Also used in solutionModel.newValueList(...) to create new valuelists

#### Returns

[Number](#)

#### Sample

```
var vlist = solutionModel.newValueList('options', JSValueList.CUSTOM_VALUES);
vlist.valueListType = JSValueList.DATABASE_VALUES; // Change the type to database values.
vlist.dataSource = 'db:/example_data/parent_table';
vlist.setDisplayDataProviderIds('parent_table_text');
vlist.setReturnDataProviderIds('parent_table_text', 'parent_table_id');
vlist.separator = ' ## ';
vlist.sortOptions = 'parent_table_text desc';
```

### EMPTY\_VALUE\_ALWAYS

Constant to set/get the addEmptyValue property of a JSValueList.

#### Returns

[Number](#)

#### Sample

```
var vlist = solutionModel.newValueList('options', JSValueList.CUSTOM_VALUES);
vlist.customValues = "one\ntwo\nthree\nfour";
vlist.addEmptyValue = JSValueList.EMPTY_VALUE_ALWAYS;
var cmb = form.newComboBox('my_table_text', 10, 10, 100, 20);
cmb.valuelist = vlist;
```

### EMPTY\_VALUE\_NEVER

Constant to set/get the addEmptyValue property of a JSValueList.

#### Returns

[Number](#)

**Sample**

```
var vlist = solutionModel.newValueList('options', JSValueList.CUSTOM_VALUES);
vlist.customValues = "one\ntwo\nthree\nfour";
vlist.addEmptyValue = JSValueList.EMPTY_VALUE_NEVER;
var cmb = form.newComboBox('my_table_text', 10, 10, 100, 20);
cmb.valuelist = vlist;
```

**Property Details****addEmptyValue**

Property that tells if an empty value must be shown next to the items in the value list.

**Returns**

[Number](#)

**Sample**

```
var vlist = solutionModel.newValueList('options', JSValueList.CUSTOM_VALUES);
vlist.customValues = "one\ntwo\nthree\nfour";
vlist.addEmptyValue = JSValueList.EMPTY_VALUE_NEVER;
var cmb = form.newComboBox('my_table_text', 10, 10, 100, 20);
cmb.valuelist = vlist;
```

**customValues**

A string with the elements in the valuelist. The elements can be separated by linefeeds (custom1 custom2), optional with realvalues ((custom1|1 custom2|2)).

**Returns**

[String](#)

**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("scopes.globals.text",10,10,120,20);
combo1.valuelist = v11;
var combo2 = form.newComboBox("scopes.globals.id",10,60,120,20);
combo2.valuelist = v12;
```

**dataSource**

Compact representation of the names of the server and table that are used for loading the data from the database.

**Returns**

[String](#)

**Sample**

```
var vlist = solutionModel.newValueList('options', JSValueList.DATABASE_VALUES);
vlist.dataSource = 'db:/example_data/parent_table';
vlist.setDisplayDataProviderIds('parent_table_text');
vlist.setReturnDataProviderIds('parent_table_text');
```

**fallbackValueList**

Gets or sets the fallback valuelist.

**Returns**[JSValueList](#)**Sample**

```
var myValueList = solutionModel.getValueList('myValueListHere')
//get fallback value list
var fallbackValueList = myValueList.fallbackValueList
```

**globalMethod**

A global method that provides the data for the valuelist. The global method must provide the data as a JSDataSet.

It is called when the valuelist needs data, it has 3 modes.

real and display params both null: return the whole list

only display is specified, called by a typeahead, return a filtered list

only real value is specified, called when the list doesn't contain the real value for the given record value, this will insert this value into the existing list.

In find mode the record will be the FindRecord which is just like a normal JSRecord (DataRecord) it has the same properties (column/dataproviders) but doesn't have its methods (like isEditing())

**Returns**[JSMethod](#)**Sample**

```
var listProvider = solutionModel.newGlobalMethod('globals', 'function getDataSetForValueList(displayValue,
realValue, record, valueListName, findMode) {' +
    '    ' +
    '    var args = null;' +
    '    /** @type QBSelect<db:/example_data/employees> */' +
    '    var query = databaseManager.createSelect('db:/example_data/employees');' +
    '    /** @type {JSDataSet} */' +
    '    var result = null;' +
    '    if (displayValue == null && realValue == null) {' +
    '        // TODO think about caching this result. can be called often!' +
    '        // return the complete list' +
    '        query.result.add(query.columns.firstname.concat(' ').concat(query.columns.lastname)).add
(query.columns.employeeid);' +
    '        result = databaseManager.getDataSetByQuery(query,100);' +
    '    } else if (displayValue != null) {' +
    '        // TYPE_AHEAD filter call, return a filtered list' +
    '        args = [displayValue + "%", displayValue + "%"]' +
    '        query.result.add(query.columns.firstname.concat(' ').concat(query.columns.lastname)).add
(query.columns.employeeid);' +
    '        root.where.add(query.or.add(query.columns.firstname.lower.like(args[0] + '%')).add(query.
columns.lastname.lower.like(args[1] + '%')));' +
    '        result = databaseManager.getDataSetByQuery(query,100);' +
    '    } else if (realValue != null) {' +
    '        // TODO think about caching this result. can be called often!' +
    '        // real object not found in the current list, return 1 row with display,realvalue that
will be added to the current list' +
    '        // dont return a complete list in this mode because that will be added to the list that
is already there' +
    '        args = [realValue];' +
    '        query.result.add(query.columns.firstname.concat(' ').concat(query.columns.lastname)).add
(query.columns.employeeid);' +
    '        root.where.add(query.columns.employeeid.eq(args[0]));' +
    '        result = databaseManager.getDataSetByQuery(query,1);' +
    '    }' +
    '    return result;' +
    '});'
var vlist = solutionModel.newValueList('vlist', JSValueList.CUSTOM_VALUES);
vlist.globalMethod = listProvider;
```

**name**

The name of the value list.

It is relevant when the "useTableFilter" property is set.

## Returns

[String](#)

## Sample

```
var vlist = solutionModel.newValueList('options', JSValueList.DATABASE_VALUES);
vlist.dataSource = 'db:/example_data/valuelists';
vlist.setDisplayDataProviderIds('valuelist_data');
vlist.setReturnDataProviderIds('valuelist_data');
vlist.useTableFilter = true;
vlist.name = 'two';
```

## relationName

The name of the relation that is used for loading data from the database.

## Returns

[String](#)

## Sample

```
var rel = solutionModel.newRelation('parent_to_child', 'db:/example_data/parent_table', 'db:/example_data/child_table', JSRelation.INNER_JOIN);
rel.newRelationItem('parent_table_id', '=', 'child_table_parent_id');

var vlist = solutionModel.newValueList('options', JSValueList.DATABASE_VALUES);
vlist.dataSource = 'db:/example_data/parent_table';
vlist.relationName = 'parent_to_child';
vlist.setDisplayDataProviderIds('child_table_text');
vlist.setReturnDataProviderIds('child_table_text');
```

## separator

A String representing the separator that should be used when multiple display dataproviders are set, when the value list has the type set to database values.

## Returns

[String](#)

## Sample

```
var vlist = solutionModel.newValueList('options', JSValueList.CUSTOM_VALUES);
vlist.valueListType = JSValueList.DATABASE_VALUES; // Change the type to database values.
vlist.dataSource = 'db:/example_data/parent_table';
vlist.setDisplayDataProviderIds('parent_table_text');
vlist.setReturnDataProviderIds('parent_table_text', 'parent_table_id');
vlist.separator = ' ## ';
vlist.sortOptions = 'parent_table_text desc';
```

## serverName

The name of the database server that is used for loading the values when the value list has the type set to database values.

## Returns

[String](#)

## Sample

```
var vlist = solutionModel.newValueList('options', JSValueList.CUSTOM_VALUES);
vlist.valueListType = JSValueList.DATABASE_VALUES; // Change the type to database values.
vlist.dataSource = 'db:/example_data/parent_table';
vlist.setDisplayDataProviderIds('parent_table_text');
vlist.setReturnDataProviderIds('parent_table_text', 'parent_table_id');
vlist.separator = ' ## ';
vlist.sortOptions = 'parent_table_text desc';
```

## setFallbackValueList

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**Parameters**

[JSValueList](#) vl

**Returns**

void

**sortOptions**

Sort options that are applied when the valuelist loads its data from the database.

**Returns**

[String](#)

**Sample**

```
var vlist = solutionModel.newValueList('options', JSValueList.CUSTOM_VALUES);
vlist.valueListType = JSValueList.DATABASE_VALUES; // Change the type to database values.
vlist.dataSource = 'db:/example_data/parent_table';
vlist.setDisplayDataProviderIds('parent_table_text');
vlist.setReturnDataProviderIds('parent_table_text', 'parent_table_id');
vlist.separator = ' ## ';
vlist.sortOptions = 'parent_table_text desc';
```

**tableName**

The name of the database table that is used for loading the values when the value list has the type set to database values.

**Returns**

[String](#)

**Sample**

```
var vlist = solutionModel.newValueList('options', JSValueList.CUSTOM_VALUES);
vlist.valueListType = JSValueList.DATABASE_VALUES; // Change the type to database values.
vlist.dataSource = 'db:/example_data/parent_table';
vlist.setDisplayDataProviderIds('parent_table_text');
vlist.setReturnDataProviderIds('parent_table_text', 'parent_table_id');
vlist.separator = ' ## ';
vlist.sortOptions = 'parent_table_text desc';
```

**useTableFilter**

Flag that tells if the name of the valuelist should be applied as a filter on the 'valuelist\_name' column when retrieving the data from the database.

**Returns**

[Boolean](#)

**Sample**

```
var vlist = solutionModel.newValueList('options', JSValueList.DATABASE_VALUES);
vlist.dataSource = 'db:/example_data/valuelists';
vlist.setDisplayDataProviderIds('valuelist_data');
vlist.setReturnDataProviderIds('valuelist_data');
vlist.useTableFilter = true;
vlist.name = 'two';
```

**valueListType**

The type of the valuelist. Can be either custom values or database values.

**Returns**

[Number](#)

**Sample**

```
var vlist = solutionModel.newValueList('options', JSValueList.CUSTOM_VALUES);
vlist.valueListType = JSValueList.DATABASE_VALUES; // Change the type to database values.
vlist.dataSource = 'db:/example_data/parent_table';
vlist.setDisplayDataProviderIds('parent_table_text');
vlist.setReturnDataProviderIds('parent_table_text', 'parent_table_id');
vlist.separator = ' ## ';
vlist.sortOptions = 'parent_table_text desc';
```

**Method Details****getDisplayDataProviderIds**

**Object[]** **getDisplayDataProviderIds** ()

Returns an array of the dataproviders that will be used to display the valuelist value.

**Returns**

**Object[]** - An array of Strings representing the names of the display dataproviders.

**Sample**

```
var vlist = solutionModel.newValueList('options', JSValueList.DATABASE_VALUES);
vlist.dataSource = 'db:/example_data/parent_table';
vlist.setDisplayDataProviderIds('parent_table_text', 'parent_table_id');
vlist.setReturnDataProviderIds('parent_table_text');
var dispDP = vlist.getDisplayDataProviderIds();
for (var i=0; i<dispDP.length; i++)
    application.output(dispDP[i]);
var retDP = vlist.getReturnDataProviderIds();
for (var i=0; i<retDP.length; i++)
    application.output(retDP[i]);
```

**getReturnDataProviderIds**

**Object[]** **getReturnDataProviderIds** ()

Returns an array of the dataproviders that will be used to define the valuelist value that is saved.

**Returns**

**Object[]** - An array of Strings representing the names of the return dataprovider.

**Sample**

```
var vlist = solutionModel.newValueList('options', JSValueList.DATABASE_VALUES);
vlist.dataSource = 'db:/example_data/parent_table';
vlist.setDisplayDataProviderIds('parent_table_text', 'parent_table_id');
vlist.setReturnDataProviderIds('parent_table_text');
var dispDP = vlist.getDisplayDataProviderIds();
for (var i=0; i<dispDP.length; i++)
    application.output(dispDP[i]);
var retDP = vlist.getReturnDataProviderIds();
for (var i=0; i<retDP.length; i++)
    application.output(retDP[i]);
```

**getUUID**

**UUID** **getUUID** ()

Returns the UUID of the value list

**Returns**

**UUID**

**Sample**

```
var vlist = solutionModel.newValueList('options', JSValueList.CUSTOM_VALUES);
application.output(vlist.getUUID().toString());
```

**setDisplayDataProviderIds**

void **setDisplayDataProviderIds** ()

Set the display dataproviders. There can be at most 3 of them, combined with the return dataproviders. The values taken from these dataproviders, in order, separated by the separator, will be displayed by the valuelist.

**Returns**

void

**Sample**

```
var vlist = solutionModel.newValueList('options', JSValueList.CUSTOM_VALUES);
vlist.valueListType = JSValueList.DATABASE_VALUES; // Change the type to database values.
vlist.dataSource = 'db:/example_data/parent_table';
vlist.setDisplayDataProviderIds('parent_table_text');
vlist.setReturnDataProviderIds('parent_table_text', 'parent_table_id');
vlist.separator = ' ## ';
vlist.sortOptions = 'parent_table_text desc';
```

**setDisplayDataProviderIds**

void **setDisplayDataProviderIds** (dataprovider1)

Set the display dataproviders. There can be at most 3 of them, combined with the return dataproviders. The values taken from these dataproviders, in order, separated by the separator, will be displayed by the valuelist.

**Parameters**

{[String](#)} dataprovider1 - The first display dataprovider.

**Returns**

void

**Sample**

```
var vlist = solutionModel.newValueList('options', JSValueList.CUSTOM_VALUES);
vlist.valueListType = JSValueList.DATABASE_VALUES; // Change the type to database values.
vlist.dataSource = 'db:/example_data/parent_table';
vlist.setDisplayDataProviderIds('parent_table_text');
vlist.setReturnDataProviderIds('parent_table_text', 'parent_table_id');
vlist.separator = ' ## ';
vlist.sortOptions = 'parent_table_text desc';
```

**setDisplayDataProviderIds**

void **setDisplayDataProviderIds** (dataprovider1, dataprovider2)

Set the display dataproviders. There can be at most 3 of them, combined with the return dataproviders. The values taken from these dataproviders, in order, separated by the separator, will be displayed by the valuelist.

**Parameters**

{[String](#)} dataprovider1 - The first display dataprovider.

{[String](#)} dataprovider2 - The second display dataprovider.

**Returns**

void



**Sample**

```
var vlist = solutionModel.newValueList('options', JSValueList.CUSTOM_VALUES);
vlist.valueListType = JSValueList.DATABASE_VALUES; // Change the type to database values.
vlist.dataSource = 'db:/example_data/parent_table';
vlist.setDisplayDataProviderIds('parent_table_text');
vlist.setReturnDataProviderIds('parent_table_text', 'parent_table_id');
vlist.separator = ' ## ';
vlist.sortOptions = 'parent_table_text desc';
```

**setDisplayDataProviderIds**

void **setDisplayDataProviderIds** (dataprovder1, dataprovder2, dataprovder3)

Set the display dataproviders. There can be at most 3 of them, combined with the return dataproviders. The values taken from these dataproviders, in order, separated by the separator, will be displayed by the valuelist.

**Parameters**

{String} dataprovder1 - The first display dataprovider.  
 {String} dataprovder2 - The second display dataprovider.  
 {String} dataprovder3 - The third display dataprovider.

**Returns**

void

**Sample**

```
var vlist = solutionModel.newValueList('options', JSValueList.CUSTOM_VALUES);
vlist.valueListType = JSValueList.DATABASE_VALUES; // Change the type to database values.
vlist.dataSource = 'db:/example_data/parent_table';
vlist.setDisplayDataProviderIds('parent_table_text');
vlist.setReturnDataProviderIds('parent_table_text', 'parent_table_id');
vlist.separator = ' ## ';
vlist.sortOptions = 'parent_table_text desc';
```

**setReturnDataProviderIds**

void **setReturnDataProviderIds** ()

Set the return dataproviders. There can be at most 3 of them, combined with the display dataproviders. The values taken from these dataproviders, in order, separated by the separator, will be returned by the valuelist.

**Returns**

void

**Sample**

```
var vlist = solutionModel.newValueList('options', JSValueList.CUSTOM_VALUES);
vlist.valueListType = JSValueList.DATABASE_VALUES; // Change the type to database values.
vlist.dataSource = 'db:/example_data/parent_table';
vlist.setDisplayDataProviderIds('parent_table_text');
vlist.setReturnDataProviderIds('parent_table_text', 'parent_table_id');
vlist.separator = ' ## ';
vlist.sortOptions = 'parent_table_text desc';
```

**setReturnDataProviderIds**

void **setReturnDataProviderIds** (dataprovder1)

Set the return dataproviders. There can be at most 3 of them, combined with the display dataproviders. The values taken from these dataproviders, in order, separated by the separator, will be returned by the valuelist.

**Parameters**

{String} dataprovder1 - The first return dataprovider.

**Returns**

void

**Sample**

```
var vlist = solutionModel.newValueList('options', JSValueList.CUSTOM_VALUES);
vlist.valueListType = JSValueList.DATABASE_VALUES; // Change the type to database values.
vlist.dataSource = 'db:/example_data/parent_table';
vlist.setDisplayDataProviderIds('parent_table_text');
vlist.setReturnDataProviderIds('parent_table_text', 'parent_table_id');
vlist.separator = ' ## ';
vlist.sortOptions = 'parent_table_text desc';
```

**setReturnDataProviderIds**

void **setReturnDataProviderIds** (dataprovder1, dataprovder2)

Set the return dataproviders. There can be at most 3 of them, combined with the display dataproviders. The values taken from these dataproviders, in order, separated by the separator, will be returned by the valuelist.

**Parameters**

{String} dataprovder1 - The first return dataprovder.  
 {String} dataprovder2 - The second return dataprovder.

**Returns**

void

**Sample**

```
var vlist = solutionModel.newValueList('options', JSValueList.CUSTOM_VALUES);
vlist.valueListType = JSValueList.DATABASE_VALUES; // Change the type to database values.
vlist.dataSource = 'db:/example_data/parent_table';
vlist.setDisplayDataProviderIds('parent_table_text');
vlist.setReturnDataProviderIds('parent_table_text', 'parent_table_id');
vlist.separator = ' ## ';
vlist.sortOptions = 'parent_table_text desc';
```

**setReturnDataProviderIds**

void **setReturnDataProviderIds** (dataprovder1, dataprovder2, dataprovder3)

Set the return dataproviders. There can be at most 3 of them, combined with the display dataproviders. The values taken from these dataproviders, in order, separated by the separator, will be returned by the valuelist.

**Parameters**

{String} dataprovder1 - The first return dataprovder.  
 {String} dataprovder2 - The second return dataprovder.  
 {String} dataprovder3 - The third return dataprovder.

**Returns**

void

**Sample**

```
var vlist = solutionModel.newValueList('options', JSValueList.CUSTOM_VALUES);
vlist.valueListType = JSValueList.DATABASE_VALUES; // Change the type to database values.
vlist.dataSource = 'db:/example_data/parent_table';
vlist.setDisplayDataProviderIds('parent_table_text');
vlist.setReturnDataProviderIds('parent_table_text', 'parent_table_id');
vlist.separator = ' ## ';
vlist.sortOptions = 'parent_table_text desc';
```