


# Array

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## Supported Clients

SmartClient WebClient NGClient MobileClient

## Property Summary

[Object \[index\]](#) Get an element by index.  
[Number length](#) Get the length of the array.

## Methods Summary

Array	<a href="#">concat(value1)</a>	Returns a new array comprised of this array joined with other array(s) and/or value(s).
Array	<a href="#">concat(value1, value2)</a>	Returns a new array comprised of this array joined with other array(s) and/or value(s).
Array	<a href="#">concat(value1, value2, valueN)</a>	Returns a new array comprised of this array joined with other array(s) and/or value(s).
Boolean	<a href="#">every(callback)</a>	Runs a function on items in the array while that function is returning true.
Boolean	<a href="#">every(callback, thisObject)</a>	Runs a function on items in the array while that function is returning true.
Array	<a href="#">filter(callback)</a>	Runs a function on every item in the array and returns an array of all items for which the function returns true.
Array	<a href="#">filter(callback, thisObject)</a>	Runs a function on every item in the array and returns an array of all items for which the function returns true.
void	<a href="#">forEach(callback)</a>	Runs a function (callback) on every item in the array.
void	<a href="#">forEach(callback, thisObject)</a>	Runs a function (callback) on every item in the array.
Number	<a href="#">indexOf(searchElement)</a>	Returns the first index at which a given element can be found in the array, or -1 if it is not present.
Number	<a href="#">indexOf(searchElement, fromIndex)</a>	Returns the first index at which a given element can be found in the array, or -1 if it is not present.
Boolean	<a href="#">isArray(obj)</a>	Checks whether an object is an array or not.
String	<a href="#">join(delimiter)</a>	Puts all elements in the array into a string, separating each element with the specified delimiter
Number	<a href="#">lastIndexOf(searchElement)</a>	Returns the last index at which a given element can be found in the array, or -1 if it is not present.
Number	<a href="#">lastIndexOf(searchElement, fromIndex)</a>	Returns the last index at which a given element can be found in the array, or -1 if it is not present.
Array	<a href="#">map(callback)</a>	Runs a function on every item in the array and returns the results in an array.
Array	<a href="#">map(callback, thisObject)</a>	Runs a function on every item in the array and returns the results in an array.
Object	<a href="#">pop()</a>	Pops the last string off the array and returns it.
Number	<a href="#">push(value1)</a>	Mutates an array by appending the given elements and returning the new length of the array.
Number	<a href="#">push(value1, value2)</a>	Mutates an array by appending the given elements and returning the new length of the array.
Number	<a href="#">push(value1, value2, valueN)</a>	Mutates an array by appending the given elements and returning the new length of the array.
Object	<a href="#">reduce(f, initialValue)</a>	Reduces the array to a single value by executing a provided function for each value of the array (from left-to-right).
Array	<a href="#">reverse()</a>	Puts array elements in reverse order.
Object	<a href="#">shift()</a>	Decreases array element size by one by shifting the first element off the array and returning it.
Array	<a href="#">slice(begin)</a>	The slice method creates a new array from a selected section of an array.
Array	<a href="#">slice(begin, end)</a>	The slice method creates a new array from a selected section of an array.
Boolean	<a href="#">some(callback)</a>	Runs a function on items in the array while that function returns false.
Boolean	<a href="#">some(callback, thisObject)</a>	Runs a function on items in the array while that function returns false.
Array	<a href="#">sort()</a>	Sorts the array elements in dictionary order or using a compare function passed to the method.
Array	<a href="#">sort(function)</a>	Sorts the array elements in dictionary order or using a compare function passed to the method.
Array	<a href="#">splice(arrayIndex, length)</a>	It is used to take elements out of an array and replace them with those specified.
Array	<a href="#">splice(arrayIndex, length, value1)</a>	It is used to take elements out of an array and replace them with those specified.
Array	<a href="#">splice(arrayIndex, length, value1, value2)</a>	It is used to take elements out of an array and replace them with those specified.
Array	<a href="#">splice(arrayIndex, length, value1, value2, valueN)</a>	It is used to take elements out of an array and replace them with those specified.
Number	<a href="#">unshift(value1, value2, valueN)</a>	Places element data at the start of an array.

## Property Details

[\[index\]](#)  
 Get an element by index.

**Returns**[Object](#)**Supported Clients**

SmartClient, WebClient, NGClient, MobileClient

**Sample**

```
array[0]
```

**length**

Get the length of the array.

**Returns**[Number](#)**Supported Clients**

SmartClient, WebClient, NGClient, MobileClient

**Sample**

```
array.length
```

## Methods Details

**concat(value1)**

Returns a new array comprised of this array joined with other array(s) and/or value(s).

**Parameters**[Object](#) value1;**Returns**[Array](#)**Supported Clients**

SmartClient, WebClient, NGClient, MobileClient

**Sample**

```
array.concat();
```

**concat(value1, value2)**

Returns a new array comprised of this array joined with other array(s) and/or value(s).

**Parameters**[Object](#) value1;[Object](#) value2;**Returns**[Array](#)**Supported Clients**

SmartClient, WebClient, NGClient, MobileClient

**Sample**

```
array.concat();
```

**concat(value1, value2, valueN)**

Returns a new array comprised of this array joined with other array(s) and/or value(s).

**Parameters**[Object](#) value1 ;[Object](#) value2 ;[Object](#) valueN ;

---

**Returns**[Array](#)**Supported Clients**

SmartClient,WebClient,NGClient,MobileClient

**Sample**

```
array.concat();
```

**every(callback)**

Runs a function on items in the array while that function is returning true. It returns true if the function returns true for every item it could visit.

The callback function is invoked with three arguments: the element value, the element index, the array being traversed.

**Parameters**[Function](#) callback ;**Returns**[Boolean](#)**Supported Clients**

SmartClient,WebClient,NGClient,MobileClient

**Sample**

```
function isNumber(value) { return typeof value == 'number'; }
var a1 = [1, 2, 3];
application.output(a1.every(isNumber));
var a2 = [1, '2', 3];
application.output(a2.every(isNumber));
```

**every(callback, thisObject)**

Runs a function on items in the array while that function is returning true. It returns true if the function returns true for every item it could visit.

The callback function is invoked with three arguments: the element value, the element index, the array being traversed.

**Parameters**[Function](#) callback ;[Array](#) thisObject;**Returns**[Boolean](#)**Supported Clients**

SmartClient,WebClient,NGClient,MobileClient

**Sample**

```
function isNumber(value) { return typeof value == 'number'; }
var a1 = [1, 2, 3];
application.output(a1.every(isNumber));
var a2 = [1, '2', 3];
application.output(a2.every(isNumber));
```

**filter(callback)**

Runs a function on every item in the array and returns an array of all items for which the function returns true.

The callback function is invoked with three arguments: the element value, the element index, the array being traversed.

**Parameters**[Function](#) callback ;**Returns**[Array](#)**Supported Clients**

SmartClient,WebClient,NGClient,MobileClient

**Sample**

```
var a1 = ['a', 10, 'b', 20, 'c', 30];
var a2 = a1.filter(function(item) { return typeof item == 'number'; });
application.output(a2);
```

**filter(callback, thisObject)**

Runs a function on every item in the array and returns an array of all items for which the function returns true.  
The callback function is invoked with three arguments: the element value, the element index, the array being traversed.

**Parameters**

**Function** callback ;  
**Array** thisObject;

**Returns**

**Array**

**Supported Clients**

SmartClient, WebClient, NGClient, MobileClient

**Sample**

```
var a1 = ['a', 10, 'b', 20, 'c', 30];
var a2 = a1.filter(function(item) { return typeof item == 'number'; });
application.output(a2);
```

**forEach(callback)**

Runs a function (callback) on every item in the array. The callback function is invoked only for indexes of the array which have assigned values.  
The callback function is invoked with three arguments: the element value, the element index, the array being traversed.

**Parameters**

**Function** callback ;

**Supported Clients**

SmartClient, WebClient, NGClient, MobileClient

**Sample**

```
function printThemOut(element, index, array) {
    application.output("a[" + index + "] = " + element);
}
var a = ['a', 'b', 'c'];
a.forEach(printThemOut);
```

**forEach(callback, thisObject)**

Runs a function (callback) on every item in the array. The callback function is invoked only for indexes of the array which have assigned values.  
The callback function is invoked with three arguments: the element value, the element index, the array being traversed.

**Parameters**

**Function** callback ;  
**Object** thisObject;

**Supported Clients**

SmartClient, WebClient, NGClient, MobileClient

**Sample**

```
function printThemOut(element, index, array) {
    application.output("a[" + index + "] = " + element);
}
var a = ['a', 'b', 'c'];
a.forEach(printThemOut);
```

## indexOf(searchElement)

Returns the first index at which a given element can be found in the array, or -1 if it is not present.

### Parameters

[Object](#) searchElement;

### Returns

[Number](#)

### Supported Clients

SmartClient,WebClient,NGClient,MobileClient

### Sample

```
var a = ['a', 'b', 'a', 'b', 'a'];
application.output(a.indexOf('b'));
application.output(a.indexOf('b', 2));
application.output(a.indexOf('z'));
```

## indexOf(searchElement, fromIndex)

Returns the first index at which a given element can be found in the array, or -1 if it is not present.

### Parameters

[Object](#) searchElement;

[Number](#) fromIndex ;

### Returns

[Number](#)

### Supported Clients

SmartClient,WebClient,NGClient,MobileClient

### Sample

```
var a = ['a', 'b', 'a', 'b', 'a'];
application.output(a.indexOf('b'));
application.output(a.indexOf('b', 2));
application.output(a.indexOf('z'));
```

## isArray(obj)

Checks whether an object is an array or not.

### Parameters

[Object](#) obj;

### Returns

[Boolean](#)

### Supported Clients

SmartClient,WebClient,NGClient,MobileClient

### Sample

```
var a = [1, 2, 3];
application.output(Array.isArray(a)); //prints true
application.output(Array.isArray(23)); //prints false
```

## join(delimiter)

Puts all elements in the array into a string, separating each element with the specified delimiter

### Parameters

[String](#) delimiter;

### Returns

[String](#)

### Supported Clients

SmartClient,WebClient,NGClient,MobileClient

**Sample**

```
var words = new Array("limit","lines","finish","complete","In","Out");
var jwords = words.join(";");
```

**lastIndexOf(searchElement)**

Returns the last index at which a given element can be found in the array, or -1 if it is not present. The array is searched backwards, starting at fromIndex.

**Parameters**

[Object](#) searchElement;

**Returns**

[Number](#)

**Supported Clients**

SmartClient,WebClient,NGClient,MobileClient

**Sample**

```
var a = ['a', 'b', 'c', 'd', 'a', 'b'];
application.output(a.lastIndexOf('b'));
application.output(a.lastIndexOf('b', 4));
application.output(a.lastIndexOf('z'));
```

**lastIndexOf(searchElement, fromIndex)**

Returns the last index at which a given element can be found in the array, or -1 if it is not present. The array is searched backwards, starting at fromIndex.

**Parameters**

[Object](#) searchElement;

[Number](#) fromIndex ;

**Returns**

[Number](#)

**Supported Clients**

SmartClient,WebClient,NGClient,MobileClient

**Sample**

```
var a = ['a', 'b', 'c', 'd', 'a', 'b'];
application.output(a.lastIndexOf('b'));
application.output(a.lastIndexOf('b', 4));
application.output(a.lastIndexOf('z'));
```

**map(callback)**

Runs a function on every item in the array and returns the results in an array. The callback function is invoked with three arguments: the element value, the element index, the array being traversed.

**Parameters**

[Object](#) callback;

**Returns**

[Array](#)

**Supported Clients**

SmartClient,WebClient,NGClient,MobileClient

**Sample**

```
var a = ['a', 'b', 'c'];
var a2 = a.map(function(item) { return item.toUpperCase(); });
application.output(a2);
```

**map(callback, thisObject)**

---

Runs a function on every item in the array and returns the results in an array. The callback function is invoked with three arguments: the element value, the element index, the array being traversed.

**Parameters**

[Object](#) callback ;  
[Array](#) thisObject;

**Returns**

[Array](#)

**Supported Clients**

SmartClient,WebClient,NGClient,MobileClient

**Sample**

```
var a = ['a', 'b', 'c'];
var a2 = a.map(function(item) { return item.toUpperCase(); });
application.output(a2);
```

**pop()**

Pops the last string off the array and returns it.

**Returns**

[Object](#)

**Supported Clients**

SmartClient,WebClient,NGClient,MobileClient

**Sample**

```
var words = new Array("limit","lines","finish","complete","In","Out");
var lastword = words.pop();
```

**push(value1)**

Mutates an array by appending the given elements and returning the new length of the array.

**Parameters**

[Object](#) value1;

**Returns**

[Number](#)

**Supported Clients**

SmartClient,WebClient,NGClient,MobileClient

**Sample**

```
var words = new Array("limit","lines","finish","complete");
words.push("In","Out");
```

**push(value1, value2)**

Mutates an array by appending the given elements and returning the new length of the array.

**Parameters**

[Object](#) value1 ;  
[Object](#) value2 ;

**Returns**

[Number](#)

**Supported Clients**

SmartClient,WebClient,NGClient,MobileClient

**Sample**

```
var words = new Array("limit","lines","finish","complete");
words.push("In","Out");
```

**push(value1, value2, valueN)**

---

Mutates an array by appending the given elements and returning the new length of the array.

**Parameters**

Object value1 ;  
 Object value2 ;  
 Object valueN ;

**Returns**

Number

**Supported Clients**

SmartClient,WebClient,NGClient,MobileClient

**Sample**

```
var words = new Array("limit","lines","finish","complete");
words.push("In","Out");
```

**reduce(f, initialValue)**

Reduces the array to a single value by executing a provided function for each value of the array (from left-to-right).

**Parameters**

**f** Function to execute on each element in the array, taking four arguments: -accumulator: accumulates the callback's return values; it is the accumulated value previously returned in the last invocation of the callback, or initialValue, if supplied (see below). -currentValue: the current element being processed in the array. -currentIndex (Optional): the index of the current element being processed in the array (starts at index 0, if an initialValue is provided, and at index 1 otherwise) -array (Optional): the array reduce() was called upon.

**initialValue** Value to use as the first argument to the first call of the callback. If no initial value is supplied, the first element in the array will be used.

**Returns**

Object Object

**Supported Clients**

SmartClient,WebClient,NGClient,MobileClient

**Sample**

```
var euros = [29.76, 41.85, 46.5];
var sum = euros.reduce( function(total, amount) {
  return total + amount
});
```

**reverse()**

Puts array elements in reverse order.

**Returns**

Array

**Supported Clients**

SmartClient,WebClient,NGClient,MobileClient

**Sample**

```
var words = new Array("limit","lines","finish","complete","In","Out");
words.reverse();
```

**shift()**

Decreases array element size by one by shifting the first element off the array and returning it.

**Returns**

Object

**Supported Clients**

SmartClient,WebClient,NGClient,MobileClient



**Sample**

```
var words = new Array("limit","lines","finish","complete","In","Out");
words.shift();
```

**slice(begin)**

The slice method creates a new array from a selected section of an array.

**Parameters**

[Object](#) begin ;

**Returns**

[Array](#)

**Supported Clients**

SmartClient,WebClient,NGClient,MobileClient

**Sample**

```
var words = new Array("limit","lines","finish","complete","In","Out");
var nwords1 = words.slice(3, 5);
```

**slice(begin, end)**

The slice method creates a new array from a selected section of an array.

**Parameters**

[Object](#) begin ;

[Object](#) end ;

**Returns**

[Array](#)

**Supported Clients**

SmartClient,WebClient,NGClient,MobileClient

**Sample**

```
var words = new Array("limit","lines","finish","complete","In","Out");
var nwords1 = words.slice(3, 5);
```

**some(callback)**

Runs a function on items in the array while that function returns false. It returns true if the function returns true for any item it could visit.

The callback function is invoked with three arguments: the element value, the element index, the array being traversed.

**Parameters**

[Function](#) callback ;

**Returns**

[Boolean](#)

**Supported Clients**

SmartClient,WebClient,NGClient,MobileClient

**Sample**

```
function isNumber(value) { return typeof value == 'number'; }
var a1 = [1, 2, 3];
application.output(a1.some(isNumber));
var a2 = [1, '2', 3];
application.output(a2.some(isNumber));
```

**some(callback, thisObject)**

Runs a function on items in the array while that function returns false. It returns true if the function returns true for any item it could visit.

The callback function is invoked with three arguments: the element value, the element index, the array being traversed.

---

**Parameters**

[Function](#) callback ;  
[Array](#) thisObject;

**Returns**

[Boolean](#)

**Supported Clients**

SmartClient,WebClient,NGClient,MobileClient

**Sample**

```
function isNumber(value) { return typeof value == 'number'; }
var a1 = [1, 2, 3];
application.output(a1.some(isNumber));
var a2 = [1, '2', 3];
application.output(a2.some(isNumber));
```

**sort()**

Sorts the array elements in dictionary order or using a compare function passed to the method.

**Returns**

[Array](#)

**Supported Clients**

SmartClient,WebClient,NGClient,MobileClient

**Sample**

```
var words = new Array("limit","lines","finish","complete","In","Out");
words.sort();
```

**sort(function)**

Sorts the array elements in dictionary order or using a compare function passed to the method.

**Parameters**

[Function](#) function ;

**Returns**

[Array](#)

**Supported Clients**

SmartClient,WebClient,NGClient,MobileClient

**Sample**

```
var words = new Array("limit","lines","finish","complete","In","Out");
words.sort();
```

**splice(arrayIndex, length)**

It is used to take elements out of an array and replace them with those specified.

**Parameters**

[Object](#) arrayIndex ;  
[Object](#) length ;

**Returns**

[Array](#)

**Supported Clients**

SmartClient,WebClient,NGClient,MobileClient

**Sample**

```
var words = new Array("limit","lines","finish","complete","In","Out");
var nwords1 = words.splice(3, 2, "done", "On");
```

**splice(arrayIndex, length, value1)**

---

It is used to take elements out of an array and replace them with those specified.

**Parameters**

Object arrayIndex;  
Object length ;  
Object value1 ;

**Returns**

Array

**Supported Clients**

SmartClient,WebClient,NGClient,MobileClient

**Sample**

```
var words = new Array("limit","lines","finish","complete","In","Out");  
var nwords1 = words.splice(3, 2, "done", "On");
```

**splice(arrayIndex, length, value1, value2)**

It is used to take elements out of an array and replace them with those specified.

**Parameters**

Object arrayIndex;  
Object length ;  
Object value1 ;  
Object value2 ;

**Returns**

Array

**Supported Clients**

SmartClient,WebClient,NGClient,MobileClient

**Sample**

```
var words = new Array("limit","lines","finish","complete","In","Out");  
var nwords1 = words.splice(3, 2, "done", "On");
```

**splice(arrayIndex, length, value1, value2, valueN)**

It is used to take elements out of an array and replace them with those specified.

**Parameters**

Object arrayIndex;  
Object length ;  
Object value1 ;  
Object value2 ;  
Object valueN ;

**Returns**

Array

**Supported Clients**

SmartClient,WebClient,NGClient,MobileClient

**Sample**

```
var words = new Array("limit","lines","finish","complete","In","Out");  
var nwords1 = words.splice(3, 2, "done", "On");
```

**unshift(value1, value2, valueN)**

Places element data at the start of an array.

**Parameters**

Object value1 ;  
Object value2 ;  
Object valueN ;

**Returns**

Number

---

**Supported Clients**

SmartClient,WebClient,NGClient,MobileClient

**Sample**

```
var words = new Array("finish","complete","In","Out");  
words.unshift("limit","lines");
```