

JSDataSet

Property Summary

Number [#rowIndex](#)
Get or set the record index of the dataset.

Method Summary

Boolean	#addColumn (name, [index], [type]) adds a column with the specified name to the dataset.
void	#addHTMLProperty (row, col, name, value) Add an HTML property to an HTML tag produced in getAsHTML().
void	#addRow (index, array) Add a row to the dataset.
void	#addRow (array) Add a row to the dataset.
String	#createDataSource (name) Create a data source from the data set with specified name and using specified types.
String	#createDataSource (name, types) Create a data source from the data set with specified name and using specified types.
String	#getAsHTML ([escape_values], [escape_spaces], [multi_line_markup], [pretty_indent], [add_column_names]) Get the dataset as an html table.
String	#getAsText (column_separator, row_separator, value_delimiter, add_column_names) Get the dataset as formatted text.
Object[]	#getColumnAsArray (index) Get the column data of a dataset as an Array.
String	#getColumnName (index) Get a column name based on index.
ServoyException	#getException () Get the database exception if an error occurred.
Number	#getMaxColumnIndex () Get the number of columns in the dataset.
Number	#getMaxRowIndex () Get the number of rows in the dataset.
Object[]	#getRowAsArray (index) Get the row data of a dataset as an Array.
Object	#getValue (row, col) Get the value specified by row and column position from the dataset.
Boolean	#hadMoreData () Return true if there is more data in the resultset then specified by maxReturnedRows at query time.
Boolean	#removeColumn (index) Remove a column by index from the dataset.
void	#removeRow (row) Remove a row from the dataset.
void	#setValue (row, col, obj) Set the value specified by row and column position from the dataset.
void	#sort (col, sort_direction) Sort the dataset on the given column in ascending or descending.
void	#sort (rowComparator) Sort the dataset using a comparator function.

Property Details

rowIndex

Get or set the record index of the dataset.

Returns

Number

Sample

```
//assuming the variable dataset contains a dataset
//to set the rowIndex:
dataset.rowIndex = 1 //sets the rowIndex to the first row (dataset is 1-based)
//to retrieve the rowIndex of the currently selected row
var currRow = dataset.rowIndex
```

Method Details

addColumn

Boolean addColumn(name, [index], [type])

adds a column with the specified name to the dataset.

Parameters

name – column name.

[index] – column index number between 1 and getMaxColumnIndex().

[type] – the type of column, see JSColumn constants.

Returns

Boolean – true if succeeded, else false.

Sample

```
//assuming the variable dataset contains a dataset
var success = dataset.addColumn('columnName',1);
```

addHTMLProperty

void addHTMLProperty(row, col, name, value)

Add an HTML property to an HTML tag produced in getAsHTML().

For row and col parameters use:

1 = applies to the container

0 = applies to all

>0 = applies to specific cell

Parameters

{Number} row – row number

{Number} col – column number

{String} name – String property name

{String} value – String property value

Returns

void

Sample

```
//adds a container property (to TABLE tag)
dataset.addHTMLProperty(-1,-1,'cellspacing','3');
dataset.addHTMLProperty(-1,-1,'style','border-collapse:collapse;'); //to have a single line border

//adds a row property to all rows (to TR tag)
dataset.addHTMLProperty(0,0,'class','text');

//adds a row property to second row (to TR tag)
dataset.addHTMLProperty(2,0,'class','text');

//adds a column property to all 3rd columns (to TD tag)
dataset.addHTMLProperty(0,3,'class','redcolumn') ;

//adds a specific cell property (to TD tag)
dataset.addHTMLProperty(2,4,'color','blue');

globals.html_field = '<html>'+dataset.getAsHTML()+'</html>';
```

addRow

void **addRow**(index, array)
Add a row to the dataset.

Parameters

{[Number](#)} index – index to add row (1-based)
{[Object](#)[]} array – row data

Returns

void

Sample

```
//assuming the variable dataset contains a dataset
dataset.addRow(new Array(1,2,3,4,5,6,7,7)); //adds a row with 8 columns
dataset.addRow(2, new Array(1,2,3,4,5,6,7,7)); //adds a row with 8 columns after row 2
```

addRow

void **addRow**(array)
Add a row to the dataset. The row will be added as the last row.

Parameters

{[Object](#)[]} array – row data

Returns

void

Sample

```
//assuming the variable dataset contains a dataset
dataset.addRow(new Array(1,2,3,4,5,6,7,7)); //adds a row with 8 columns
dataset.addRow(2, new Array(1,2,3,4,5,6,7,7)); //adds a row with 8 columns after row 2
```

createDataSource

[String](#) **createDataSource**(name)
Create a data source from the data set with specified name and using specified types.
The types are inferred from the data if possible.

Parameters

{[String](#)} name – data source name

Returns

[String](#) – String uri reference to the created data source.

Sample

```
ds.addColumn('my_id'); // note: use regular javascript identifiers so they can be used in scripting
ds.addColumn('my_label');
var uri = ds.createDataSource('mydata', [JSColumn.INTEGER, JSColumn.TEXT]);
var jsform = solutionModel.newForm(fname, uri, null, true, 300, 300);

var query = 'select customerid, address, city, country from customers';
var ds2 = databaseManager.getDataSetByQuery('example_data', query, null, 999);
var uri2 = ds2.createDataSource('mydata2'); // types are inferred from query result
```

createDataSource

String createDataSource(name, types)

Create a data source from the data set with specified name and using specified types.

Parameters

{String} name – data source name

{Object} types – array of types as defined in JSColumn

Returns

String – String uri reference to the created data source.

Sample

```
ds.addColumn('my_id'); // note: use regular javascript identifiers so they can be used in scripting
ds.addColumn('my_label');
var uri = ds.createDataSource('mydata', [JSColumn.INTEGER, JSColumn.TEXT]);
var jsform = solutionModel.newForm(fname, uri, null, true, 300, 300);

var query = 'select customerid, address, city, country from customers';
var ds2 = databaseManager.getDataSetByQuery('example_data', query, null, 999);
var uri2 = ds2.createDataSource('mydata2'); // types are inferred from query result
```

getAsHTML

String getAsHTML([escape_values], [escape_spaces], [multi_line_markup], [pretty_indent], [add_column_names])

Get the dataset as an html table.

Parameters

[escape_values] – if true, replaces illegal HTML characters with corresponding valid escape sequences.

[escape_spaces] – if true, replaces text spaces with non-breaking space tags () and tabs by four non-breaking space tags.

[multi_line_markup] – if true, multiLineMarkup will enforce new lines that are in the text; single new lines will be replaced by
, multiple new lines will be replaced by <p>

[pretty_indent] – if true, adds indentation for more readable HTML code.

[add_column_names] – if false, column headers will not be added to the table.

Returns

String – String html.

Sample

```
//gets a dataset based on a query
//useful to limit the number of rows
var maxReturnedRows = 10;
var query = 'select c1,c2,c3 from test_table where start_date = ?';

//to access data by name, do not use '.' or special characters in names or aliases
var args = new Array();
args[0] = order_date //or new Date();
var dataset = databaseManager.getDataSetByQuery(databaseManager.getDataSourceServerName(controller.
getDataSource()),query,args,maxReturnedRows);

// gets a dataset with escape values; escape spaces (lines will not wrap); no multi-line markup; with pretty
indentation; shows column names
var htmlTable = dataset.getAsHTML(true, true, false, true, true);

//assigns the dataset to a field and sets the display type to HTML_AREA
//assuming the html_field is a global text variable
globals.html_field = '<html>'+dataset.getAsHTML()+ '</html>';

//Note: To display an HTML_AREA field as an HTML page, add HTML tags at the beginning '<html>' and at the end '<
/html>'.
```

getAsText

[String](#) **getAsText**(column_separator, row_separator, value_delimiter, add_column_names)

Get the dataset as formatted text.

Parameters

[{String}](#) column_separator – any specified column separator; examples: tab '\t'; comma ','; semicolon ';'; space ' ' .

[{String}](#) row_separator – the specified row separator; examples: new line '\n'.

[{String}](#) value_delimiter – the specified value delimiter; example: double quote "".

[{Boolean}](#) add_column_names – if true column names will be added as a first row.

Returns

[String](#) – String formatted text.

Sample

```
//assuming the variable dataset contains a dataset
//you can create csv or tab delimited results
var csv = dataset.getAsText(',', '\n', '"', true)
var tab = dataset.getAsText('\t', '\n', '"', true)
```

getColumnAsArray

[Object\[\]](#) **getColumnAsArray**(index)

Get the column data of a dataset as an Array.

Parameters

[{Number}](#) index – index of column (1-based).

Returns

[Object\[\]](#) – Object array of data.

Sample

```
//assuming the variable dataset contains a dataset
var dataArray = dataset.getColumnAsArray(1); //puts the contents from the first column of the dataset into an array
//once you have it as an array you can loop through it or feed it to a custom valuelist for example
```

getColumnName

[String](#) **getColumnName**(index)

Get a column name based on index.

Parameters

[{Number}](#) index – index of column (1-based).

Returns

[String](#) – String column name.

Sample

```
//assuming the variable dataset contains a dataset
var firstColumnName = dataset.getColumnName(1) //retrieves the first columnname into the variable firstColumnName
//using a loop you can get all columnnames in an array:
var query = 'select * from customers';
var dataset = databaseManager.getDataSetByQuery(databaseManager.getDataSourceServerName(controller.
getDataSource()), query, null, 100);
var colArray = new Array()
for (var i = 1; i <= dataset.getMaxColumnIndex(); i++)
{
    colArray[i-1] = dataset.getColumnName(i)
    //note the -1, because an array is zero based and dataset is 1 based.
}
```

getException

[ServoyException](#) **getException**()

Get the database exception if an error occurred.

Returns

[ServoyException](#) – ServoyException exception or null when not available.

Sample

```
//assuming the variable dataset contains a dataset
var dbException = dataset.getException();
```

getMaxColumnIndex

Number getMaxColumnIndex()

Get the number of columns in the dataset.

Returns

Number – int number of columns.

Sample

```
//assuming the variable dataset contains a dataset
for (var i = 1; i <= dataset.getMaxColumnIndex(); i++)
{
    colArray[i-1] = dataset.getColumnName(i)
    //have to subtract 1, because an array is zero based and a dataset is 1 based.
}
```

getMaxRowIndex

Number getMaxRowIndex()

Get the number of rows in the dataset.

Returns

Number – int number of rows.

Sample

```
//assuming the variable dataset contains a dataset
var totalRows = dataset.getMaxRowIndex();
```

getRowAsArray

Object[] getRowAsArray(index)

Get the row data of a dataset as an Array.

Parameters

{**Number**} index – index of row (1-based).

Returns

Object[] – Object array of data.

Sample

```
//assuming the variable dataset contains a dataset
var dataArray = dataset.getRowAsArray(1); //puts the contents from the first row of the dataset into an array
//once you have it as an array you can loop through it
```

getValue

Object getValue(row, col)

Get the value specified by row and column position from the dataset.

Parameters

{**Number**} row – row number, 1-based

{**Number**} col – column number, 1-based

Returns

Object – Object value

Sample

```
//assuming the variable dataset contains a dataset
var dataAtRow2Col1 = dataset.getValue(2, 1);
```

hadMoreData

Boolean hadMoreData()

Return true if there is more data in the resultset then specified by maxReturnedRows at query time.

Returns

Boolean – boolean more data available

Sample

```
var ds = databaseManager.getDataSetByQuery('example_data', 'select order_id from orders', null, 10000)
if (ds.hasMoreData())
{
    // handle large result
}
```

removeColumn

Boolean **removeColumn**(index)

Remove a column by index from the dataset.

Parameters

{**Number**} index – index of column to remove (1-based)

Returns

Boolean – true if succeeded, else false.

Sample

```
//assuming the variable dataset contains a dataset
var success = dataset.removeColumn(1); // removes first column
```

removeRow

void **removeRow**(row)

Remove a row from the dataset.

Parameters

{**Number**} row – row index to remove, -1 for all rows

Returns

void

Sample

```
//assuming the variable dataset contains a dataset
dataset.removeRow(1); //removes the first row
dataset.removeRow(-1); //removes all rows
```

setValue

void **setValue**(row, col, obj)

Set the value specified by row and column position from the dataset.

Use row = -1, to set columnnames.

Parameters

{**Number**} row – row number, 1-based

{**Number**} col – column number, 1-based

{**Object**} obj – the value to be stored at the given row and column.

Returns

void

Sample

```
//assuming the variable dataset contains a dataset
dataset.getValue(2, 1, 'data');
```

sort

void **sort**(col, sort_direction)

Sort the dataset on the given column in ascending or descending.

Parameters

{**Number**} col – column number, 1-based

{**Boolean**} sort_direction – true for ascending, false for descending

Returns

void

Sample

```
//assuming the variable dataset contains a dataset
dataset.sort(1, false)
```

sort

void **sort**(rowComparator)

Sort the dataset using a comparator function.

The comparator function is called to compare two rows, that are passed as arguments, and it will return -1/0/1 if the first row is less/equal/greater than the second row.

Parameters

{[Function](#)} rowComparator – the function used to compare two rows

Returns

void

Sample

```
dataset.sort(mySortFunction);

function mySortFunction(r1, r2)
{
    var o = 0;
    if(r1[0] < r2[0])
    {
        o = -1;
    }
    else if(r1[0] > r2[0])
    {
        o = 1;
    }
    return o;
}
```