

JSDataSet

Property Summary

Number `#rowIndex`
Get or set the record index of the dataset.

Method Summary

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

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');

//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), add by default as last row

{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, [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, when null or not supplied types are inferred from the data if possible.

Returns

String – String uri reference to the created data source.

Sample

```
ds.addColumn('my_id');
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 – boolean 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.getAsString(',')�'\n','''',true)
var tab = dataset.getAsString('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.hadMoreData())
{
    // 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
```

removeRowvoid **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
```

setValuevoid **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');
```

sortvoid **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 – boolean true for ascending, false for descending

Returns

void

Sample

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