

# Security

## Return Types

### Constants Summary

Number	<b>ACCESSIBLE</b>
	Constant representing the accessible flag for form security.
Number	<b>DELETE</b>
	Constant representing the delete flag for table security.
Number	<b>INSERT</b>
	Constant representing the insert flag for table security.
Number	<b>READ</b>
	Constant representing the read flag for table security.
Number	<b>TRACKING</b>
	Constant representing the tracking flag for table security (tracks sql insert/update/delete).
Number	<b>TRACKING_VIEWS</b>
	Constant representing the tracking flag for table security (tracks sql select).
Number	<b>UPDATE</b>
	Constant representing the update flag for table security.
Number	<b>VIEWABLE</b>
	Constant representing the viewable flag for form security.

### Method Summary

Boolean	<b>addUserToGroup(a_userUID, groupName)</b>
	Adds an user to a named group.
Object	<b>authenticate(authenticator_solution, method)</b>
	Authenticate to the Servoy Server using one of the installed authenticators or the Servoy default authenticator.
Object	<b>authenticate(authenticator_solution, method, credentials)</b>
	Authenticate to the Servoy Server using one of the installed authenticators or the Servoy default authenticator.
Boolean	<b>canDelete(dataSource)</b>
	Returns a boolean value for security rights.
Boolean	<b>canInsert(dataSource)</b>
	Returns a boolean value for security rights.
Boolean	<b>canRead(dataSource)</b>
	Returns a boolean value for security rights.
Boolean	<b>canUpdate(dataSource)</b>
	Returns a boolean value for security rights.
Boolean	<b>changeGroupName(oldGroupName, newGroupName)</b>
	Changes the groupname of a group.
Boolean	<b>changeUserName(a_userUID, username)</b>
	Changes the username of the specified userUID.
Boolean	<b>checkPassword(a_userUID, password)</b>
	Returns true if the password for that userUID is correct, else false.
String	<b>createGroup(groupName)</b>
	Creates a group, returns the groupname (or null when group couldn't be created).
Object	<b>createUser(username, password)</b>
	Creates a new user, returns new uid (or null when group couldn't be created or user already exist).
Object	<b>createUser(username, password, userUID)</b>
	Creates a new user, returns new uid (or null when group couldn't be created or user already exist).
Boolean	<b>deleteGroup(groupName)</b>
	Deletes a group, returns true if no error was reported.
Boolean	<b>deleteUser(userUID)</b>
	Deletes an user.
String	<b>getClientID()</b>
	Returns the client ID.
JSDataset	<b>getElementUUIDs(formname)</b>
	Returns the form elements UUID's as dataset, the one with no name is the form itself.
JSDataset	<b>getGroups()</b>
	Get all the groups (returns a dataset).
String	<b>getSystemUserName()</b>
	Retrieves the username of the currently logged in user on operating system level.

---

JSDataSet	<code>getUserGroups()</code>	Get all the groups of the current user.
JSDataSet	<code>getUserGroups(userUID)</code>	Get all the groups for given user UID.
String	<code>getUserName()</code>	Get the current user name (null if not logged in), finds the user name for given user UID if passed as parameter.
String	<code>getUserName(userUID)</code>	Get the current user name (null if not logged in), finds the user name for given user UID if passed as parameter.
String	<code>getUserUID()</code>	Get the current user UID (null if not logged in); finds the userUID for given user_name if passed as parameter.
String	<code>getUserUID(username)</code>	Get the current user UID (null if not logged in); finds the userUID for given user_name if passed as parameter.
JSDataSet	<code>getUsers()</code>	Get all the users in the security settings (returns a dataset).
JSDataSet	<code>getUsers(groupName)</code>	Get all the users in the security settings (returns a dataset).
Boolean	<code>isUserMemberOfGroup(groupName)</code>	Check whatever the current user is part of the specified group
Boolean	<code>isUserMemberOfGroup(groupName, userUID)</code>	Check whatever the user specified as parameter is part of the specified group.
Boolean	<code>login(username, a_userUID, groups)</code>	Login to be able to leave the solution loginForm.
void	<code>logout()</code>	Logout the current user and close the solution, if the solution requires authentication and user is logged in.
void	<code>logout(solutionToLoad)</code>	Logout the current user and close the solution, if the solution requires authentication and user is logged in.
void	<code>logout(solutionToLoad, method)</code>	Logout the current user and close the solution, if the solution requires authentication and user is logged in.
void	<code>logout(solutionToLoad, method, argument)</code>	Logout the current user and close the solution, if the solution requires authentication and user is logged in.
Boolean	<code>removeUserFromGroup(a_userUID, groupName)</code>	Removes an user from a group.
Boolean	<code>setPassword(a_userUID, password)</code>	Set a new password for the given userUID.
void	<code>setSecuritySettings(dataset)</code>	Sets the security settings; the entries contained in the given dataset will override those contained in the current security settings.
Boolean	<code>setUserUID(a_userUID, newUserUID)</code>	Set a new userUID for the given userUID.

## Constants Details

### ACCESSIBLE

Constant representing the accessible flag for form security.

#### Returns

Number

#### Sample

```
var colNames = new Array();
colNames[0] = 'uuid';
colNames[1] = 'flags';
var dataset = databaseManager.createEmptyDataSet(0,colNames);

var row = new Array();
row[0] = '413a4d69-becb-4ae4-8fdd-980755d6a7fb';//normally retrieved via security.getElementUUIDs(....)
row[1] = JSSecurity.VIEWABLE|JSSecurity.ACCESSIBLE; // use bitwise 'or' for both
dataset.addRow(row);//setting element security

row = new Array();
row[0] = 'example_data.orders';
row[1] = JSSecurity.READ|JSSecurity.INSERT|JSSecurity.UPDATE|JSSecurity.DELETE|JSSecurity.TRACKING; //use
bitwise 'or' for multiple flags
dataset.addRow(row);//setting table security

security.setSecuritySettings(dataset); //to be called in solution startup method
```

### DELETE

Constant representing the delete flag for table security.

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

```

var colNames = new Array();
colNames[0] = 'uuid';
colNames[1] = 'flags';
var dataset = databaseManager.createEmptyDataSet(0,colNames);

var row = new Array();
row[0] = '413a4d69-becb-4ae4-8fdd-980755d6a7fb';//normally retreived via security.getElementUUIDs(...)
row[1] = JSSecurity.VIEWABLE|JSSecurity.ACCESSIBLE; // use bitwise 'or' for both
dataset.addRow(row);//setting element security

row = new Array();
row[0] = 'example_data.orders';
row[1] = JSSecurity.READ|JSSecurity.INSERT|JSSecurity.UPDATE|JSSecurity.DELETE|JSSecurity.TRACKING; //use
bitwise 'or' for multiple flags
dataset.addRow(row);//setting table security

security.setSecuritySettings(dataset); //to be called in solution startup method

```

**INSERT**

Constant representing the insert flag for table security.

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

```

var colNames = new Array();
colNames[0] = 'uuid';
colNames[1] = 'flags';
var dataset = databaseManager.createEmptyDataSet(0,colNames);

var row = new Array();
row[0] = '413a4d69-becb-4ae4-8fdd-980755d6a7fb';//normally retreived via security.getElementUUIDs(...)
row[1] = JSSecurity.VIEWABLE|JSSecurity.ACCESSIBLE; // use bitwise 'or' for both
dataset.addRow(row);//setting element security

row = new Array();
row[0] = 'example_data.orders';
row[1] = JSSecurity.READ|JSSecurity.INSERT|JSSecurity.UPDATE|JSSecurity.DELETE|JSSecurity.TRACKING; //use
bitwise 'or' for multiple flags
dataset.addRow(row);//setting table security

security.setSecuritySettings(dataset); //to be called in solution startup method

```

**READ**

Constant representing the read flag for table security.

**Returns**[Number](#)

**Sample**

```

var colNames = new Array();
colNames[0] = 'uuid';
colNames[1] = 'flags';
var dataset = databaseManager.createEmptyDataSet(0,colNames);

var row = new Array();
row[0] = '413a4d69-becb-4ae4-8fdd-980755d6a7fb';//normally retreived via security.getElementUUIDs(....)
row[1] = JSSecurity.VIEWABLE|JSSecurity.ACCESSIBLE; // use bitwise 'or' for both
dataset.addRow(row);//setting element security

row = new Array();
row[0] = 'example_data.orders';
row[1] = JSSecurity.READ|JSSecurity.INSERT|JSSecurity.UPDATE|JSSecurity.DELETE|JSSecurity.TRACKING; //use
bitwise 'or' for multiple flags
dataset.addRow(row);//setting table security

security.setSecuritySettings(dataset); //to be called in solution startup method

```

**TRACKING**

Constant representing the tracking flag for table security (tracks sql insert/update/delete).

**Returns**

[Number](#)

**Sample**

```

var colNames = new Array();
colNames[0] = 'uuid';
colNames[1] = 'flags';
var dataset = databaseManager.createEmptyDataSet(0,colNames);

var row = new Array();
row[0] = '413a4d69-becb-4ae4-8fdd-980755d6a7fb';//normally retreived via security.getElementUUIDs(....)
row[1] = JSSecurity.VIEWABLE|JSSecurity.ACCESSIBLE; // use bitwise 'or' for both
dataset.addRow(row);//setting element security

row = new Array();
row[0] = 'example_data.orders';
row[1] = JSSecurity.READ|JSSecurity.INSERT|JSSecurity.UPDATE|JSSecurity.DELETE|JSSecurity.TRACKING; //use
bitwise 'or' for multiple flags
dataset.addRow(row);//setting table security

security.setSecuritySettings(dataset); //to be called in solution startup method

```

**TRACKING\_VIEWS**

Constant representing the tracking flag for table security (tracks sql select).

**Returns**

[Number](#)

**Sample**

```

var colNames = new Array();
colNames[0] = 'uuid';
colNames[1] = 'flags';
var dataset = databaseManager.createEmptyDataSet(0,colNames);

var row = new Array();
row[0] = '413a4d69-becb-4ae4-8fdd-980755d6a7fb';//normally retreived via security.getElementUUIDs(....)
row[1] = JSSecurity.VIEWABLE|JSSecurity.ACCESSIBLE; // use bitwise 'or' for both
dataset.addRow();//setting element security

row = new Array();
row[0] = 'example_data.orders';
row[1] = JSSecurity.READ|JSSecurity.INSERT|JSSecurity.UPDATE|JSSecurity.DELETE|JSSecurity.TRACKING; //use
bitwise 'or' for multiple flags
dataset.addRow();//setting table security

security.setSecuritySettings(dataset); //to be called in solution startup method

```

**UPDATE**

Constant representing the update flag for table security.

**Returns**

[Number](#)

**Sample**

```

var colNames = new Array();
colNames[0] = 'uuid';
colNames[1] = 'flags';
var dataset = databaseManager.createEmptyDataSet(0,colNames);

var row = new Array();
row[0] = '413a4d69-becb-4ae4-8fdd-980755d6a7fb';//normally retreived via security.getElementUUIDs(....)
row[1] = JSSecurity.VIEWABLE|JSSecurity.ACCESSIBLE; // use bitwise 'or' for both
dataset.addRow();//setting element security

row = new Array();
row[0] = 'example_data.orders';
row[1] = JSSecurity.READ|JSSecurity.INSERT|JSSecurity.UPDATE|JSSecurity.DELETE|JSSecurity.TRACKING; //use
bitwise 'or' for multiple flags
dataset.addRow();//setting table security

security.setSecuritySettings(dataset); //to be called in solution startup method

```

**VIEWABLE**

Constant representing the viewable flag for form security.

**Returns**

[Number](#)

**Sample**

```

var colNames = new Array();
colNames[0] = 'uuid';
colNames[1] = 'flags';
var dataset = databaseManager.createEmptyDataSet(0,colNames);

var row = new Array();
row[0] = '413a4d69-becb-4ae4-8fdd-980755d6a7fb';//normally retreived via security.getElementUUIDs(...)
row[1] = JSSecurity.VIEWABLE|JSSecurity.ACCESSIBLE; // use bitwise 'or' for both
dataset.addRow(row);//setting element security

row = new Array();
row[0] = 'example_data.orders';
row[1] = JSSecurity.READ|JSSecurity.INSERT|JSSecurity.UPDATE|JSSecurity.DELETE|JSSecurity.TRACKING; //use
bitwise 'or' for multiple flags
dataset.addRow(row);//setting table security

security.setSecuritySettings(dataset); //to be called in solution startup method

```

**Method Details****addUserToGroup****Boolean** **addUserToGroup** (a\_userUID, groupName)

Adds an user to a named group.

Note: this method can only be called by an admin.

**Parameters**

{Object} a\_userUID - the user UID to be added

{Object} groupName - the group to add to

**Returns****Boolean** - true if added**Sample**

```

var userUID = security.getUserUID();
security.addUserToGroup(userUID, 'groupname');

```

**authenticate****Object** **authenticate** (authenticator\_solution, method)

Authenticate to the Servoy Server using one of the installed authenticators or the Servoy default authenticator.

Note: this method should be called from a login solution.

**Parameters**

{String} authenticator\_solution - authenticator solution installed on the Servoy Server, null for servoy built-in authentication

{String} method - authenticator method, null for servoy built-in authentication

**Returns****Object** - authentication result from authenticator solution or boolean in case of servoy built-in authentication**Sample**

```

// create the credentials object as expected by the authenticator solution
var ok = security.authenticate('myldap_authenticator', 'login', [scopes.globals.userName, scopes.globals.passWord])
if (!ok)
{
    plugins.dialogs.showErrorDialog('Login failed', 'OK')
}

// if no authenticator name is used, the credentials are checked using the Servoy built-in user management
ok = security.authenticate(null, null, [scopes.globals.userName, scopes.globals.passWord])

```

**authenticate****Object authenticate** (authenticator\_solution, method, credentials)

Authenticate to the Servoy Server using one of the installed authenticators or the Servoy default authenticator.

Note: this method should be called from a login solution, once logged in, the authenticate method has no effect.

**Parameters**

{[String](#)} authenticator\_solution - authenticator solution installed on the Servoy Server, null for servoy built-in authentication

{[String](#)} method - authenticator method, null for servoy built-in authentication

{[Object](#)[]]} credentials - array whose elements are passed as arguments to the authenticator method, in case of servoy built-in authentication this should be [username, password]

**Returns**

[Object](#) - authentication result from authenticator solution or boolean in case of servoy built-in authentication

**Sample**

```
// create the credentials object as expected by the authenticator solution
var ok = security.authenticate('myldap_authenticator', 'login', [scopes.globals.userName, scopes.globals.passWord])
if (!ok)
{
    plugins.dialogs.showErrorDialog('Login failed', 'OK')
}

// if no authenticator name is used, the credentials are checked using the Servoy built-in user management
ok = security.authenticate(null, null, [scopes.globals.userName, scopes.globals.passWord])
```

**canDelete****Boolean canDelete** (dataSource)

Returns a boolean value for security rights.

**Parameters**

{[String](#)} dataSource - the datasource

**Returns**

[Boolean](#) - true if allowed

**Sample**

```
var dataSource = controller.getDataSource();
var canDelete = security.canDelete(dataSource);
var canInsert = security.canInsert(dataSource);
var canUpdate = security.canUpdate(dataSource);
var canRead = security.canRead(dataSource);
application.output("Can delete? " + canDelete);
application.output("Can insert? " + canInsert);
application.output("Can update? " + canUpdate);
application.output("Can read? " + canRead);
```

**canInsert****Boolean canInsert** (dataSource)

Returns a boolean value for security rights.

**Parameters**

{[String](#)} dataSource - the datasource

**Returns**

[Boolean](#) - true if allowed

**Sample**

```
var dataSource = controller.getDataSource();
var canDelete = security.canDelete(dataSource);
var canInsert = security.canInsert(dataSource);
var canUpdate = security.canUpdate(dataSource);
var canRead = security.canRead(dataSource);
application.output("Can delete? " + canDelete);
application.output("Can insert? " + canInsert);
application.output("Can update? " + canUpdate);
application.output("Can read? " + canRead);
```

**canRead****Boolean canRead (dataSource)**

Returns a boolean value for security rights.

**Parameters**

{String} dataSource - the datasource

**Returns**

Boolean - true if allowed

**Sample**

```
var dataSource = controller.getDataSource();
var canDelete = security.canDelete(dataSource);
var canInsert = security.canInsert(dataSource);
var canUpdate = security.canUpdate(dataSource);
var canRead = security.canRead(dataSource);
application.output("Can delete? " + canDelete);
application.output("Can insert? " + canInsert);
application.output("Can update? " + canUpdate);
application.output("Can read? " + canRead);
```

**canUpdate****Boolean canUpdate (dataSource)**

Returns a boolean value for security rights.

**Parameters**

{String} dataSource - the datasource

**Returns**

Boolean - true if allowed

**Sample**

```
var dataSource = controller.getDataSource();
var canDelete = security.canDelete(dataSource);
var canInsert = security.canInsert(dataSource);
var canUpdate = security.canUpdate(dataSource);
var canRead = security.canRead(dataSource);
application.output("Can delete? " + canDelete);
application.output("Can insert? " + canInsert);
application.output("Can update? " + canUpdate);
application.output("Can read? " + canRead);
```

**changeGroupName****Boolean changeGroupName (oldGroupName, newGroupName)**

Changes the groupname of a group.

Note: this method can only be called by an admin.

**Parameters**

{Object} oldGroupName - the old name

{String} newGroupName - the new name

**Returns**

Boolean - true if changed

**Sample**

```
security.changeGroupName('oldGroup', 'newGroup');
```

**changeUserName****Boolean changeUserName (a\_userUID, username)**

Changes the username of the specified userUID.

Note: this method can only be called by an admin user or a normal logged in user changing its own userName.

**Parameters**

{Object} a\_userUID - the userUID to work on  
 {String} username - the new username

**Returns****Boolean** - true if changed**Sample**

```
if(security.changeUserName(security.getUserUID('name1'), 'name2'))  
{  
    application.output('Username changed');  
}
```

**checkPassword****Boolean checkPassword (a\_userUID, password)**

Returns true if the password for that userUID is correct, else false.

**Parameters**

{Object} a\_userUID - the userUID to check the password for  
 {String} password - the new password

**Returns****Boolean** - true if password oke**Sample**

```
if(security.checkPassword(security.getUserUID(), 'password1'))  
{  
    security.setPassword(security.getUserUID(), 'password2')  
}  
else  
{  
    application.output('wrong password')  
}
```

**createGroup****String createGroup (groupName)**

Creates a group, returns the groupname (or null when group couldn't be created).

Note: this method can only be called by an admin.

**Parameters**

{String} groupName - the group name to create

**Returns****String** - the created groupname

**Sample**

```

var deleteGroup = true;
//create a group
var groupName = security.createGroup('myGroup');
if (groupName)
{
    //create a user
    var uid = security.createUser('myusername', 'mypassword');
    if (uid) //test if user was created
    {
        //set a newUID for the user
        var isChanged = security.setUserUID(uid, 'myUserUID')
        // add user to group
        security.addUserToGroup(uid, groupName);
        // if not delete group, do delete group
        if (deleteGroup)
        {
            security.deleteGroup(groupName);
        }
    }
}

```

**createUser****Object** **createUser** (username, password)

Creates a new user, returns new uid (or null when group couldn't be created or user already exist).

Note: this method can only be called by an admin.

**Parameters**

{String} username - the username  
 {String} password - the user password

**Returns**

{Object} - the userUID the created userUID, will be same if provided

**Sample**

```

var removeUser = true;
//create a user
var uid = security.createUser('myusername', 'mypassword');
if (uid) //test if user was created
{
    // Get all the groups
    var set = security.getGroups();
    for(var p = 1 ; p <= set.getMaxRowIndex() ; p++)
    {
        // output name of the group
        application.output(set.getValue(p, 2));
        // add user to group
        security.addUserToGroup(uid, set.getValue(p,2));
    }
    // if not remove user, remove user from all the groups
    if(!removeUser)
    {
        // get now all the groups that that users has (all if above did go well)
        var set = security.getUserGroups(uid);
        for(var p = 1;p<=set.getMaxRowIndex();p++)
        {
            // output name of the group
            application.output(set.getValue(p, 2));
            // remove the user from the group
            security.removeUserFromGroup(uid, set.getValue(p,2));
        }
    }
    else
    {
        // delete the user (the user will be removed from the groups)
        security.deleteUser(uid);
    }
}

```

**createUser****Object** **createUser** (username, password, userUID)

Creates a new user, returns new uid (or null when group couldn't be created or user already exist).

Note: this method can only be called by an admin.

**Parameters**

{**String**} username - the username  
 {**String**} password - the user password  
 {**Object**} userUID - the user UID to use

**Returns**{**Object**} - the userUID the created userUID, will be same if provided**Sample**

```
var removeUser = true;
//create a user
var uid = security.createUser('myusername', 'mypassword');
if (uid) //test if user was created
{
    // Get all the groups
    var set = security.getGroups();
    for(var p = 1 ; p <= set.getMaxRowIndex() ; p++)
    {
        // output name of the group
        application.output(set.getValue(p, 2));
        // add user to group
        security.addUserToGroup(uid, set.getValue(p,2));
    }
    // if not remove user, remove user from all the groups
    if(!removeUser)
    {
        // get now all the groups that that users has (all if above did go well)
        var set =security.getUserGroups(uid);
        for(var p = 1;p<=set.getMaxRowIndex();p++)
        {
            // output name of the group
            application.output(set.getValue(p, 2));
            // remove the user from the group
            security.removeUserFromGroup(uid, set.getValue(p,2));
        }
    }
    else
    {
        // delete the user (the user will be removed from the groups)
        security.deleteUser(uid);
    }
}
```

**deleteGroup****Boolean** **deleteGroup** (groupName)

Deletes a group, returns true if no error was reported.

Note: this method can only be called by an admin.

**Parameters**{**Object**} groupName - the name of the group to delete**Returns**{**Boolean**} - true if deleted

**Sample**

```

var deleteGroup = true;
//create a group
var groupName = security.createGroup('myGroup');
if (groupName)
{
    //create a user
    var uid = security.createUser('myusername', 'mypassword');
    if (uid) //test if user was created
    {
        //set a newUID for the user
        var isChanged = security.setUserUID(uid, 'myUserUID')
        // add user to group
        security.addUserToGroup(uid, groupName);
        // if not delete group, do delete group
        if (deleteGroup)
        {
            security.deleteGroup(groupName);
        }
    }
}

```

**deleteUser****Boolean deleteUser (userUID)**

Deletes an user. returns true if no error was reported.

Note: this method can only be called by an admin.

**Parameters**

{Object} userUID - The UID of the user to be deleted.

**Returns**

Boolean - true if the user is successfully deleted.

**Sample**

```

var removeUser = true;
//create a user
var uid = security.createUser('myusername', 'mypassword');
if (uid) //test if user was created
{
    // Get all the groups
    var set = security.getGroups();
    for(var p = 1 ; p <= set.getMaxRowIndex() ; p++)
    {
        // output name of the group
        application.output(set.getValue(p, 2));
        // add user to group
        security.addUserToGroup(uid, set.getValue(p,2));
    }
    // if not remove user, remove user from all the groups
    if(!removeUser)
    {
        // get now all the groups that that users has (all if above did go well)
        var set =security.getUserGroups(uid);
        for(var p = 1;p<=set.getMaxRowIndex();p++)
        {
            // output name of the group
            application.output(set.getValue(p, 2));
            // remove the user from the group
            security.removeUserFromGroup(uid, set.getValue(p,2));
        }
    }
    else
    {
        // delete the user (the user will be removed from the groups)
        security.deleteUser(uid);
    }
}

```

**getClientID****String getClientID ()**

Returns the client ID.

**Returns**{**String**} - the clientId as seen on the server admin page**Sample**

```
var clientId = security.getClientID()
```

**getElementUUIDs****JSDataset getElementUUIDs (formname)**

Returns the form elements UUID's as dataset, the one with no name is the form itself.

**Parameters**{**String**} formname - the formname to retrieve the dataset for**Returns**{**JSDataset**} - dataset with element info**Sample**

```
var formElementsUUIDDataSet = security.getElementUUIDs('orders_form');
```

**getGroups****JSDataset getGroups ()**

Get all the groups (returns a dataset).

first id column is deprecated!, use only the group name column.

**Returns**{**JSDataset**} - dataset with all the groups**Sample**

```
var removeUser = true;
//create a user
var uid = security.createUser('myusername', 'mypassword');
if (uid) //test if user was created
{
    // Get all the groups
    var set = security.getGroups();
    for(var p = 1 ; p <= set.getMaxRowIndex() ; p++)
    {
        // output name of the group
        application.output(set.getValue(p, 2));
        // add user to group
        security.addUserToGroup(uid, set.getValue(p,2));
    }
    // if not remove user, remove user from all the groups
    if(!removeUser)
    {
        // get now all the groups that that users has (all if above did go well)
        var set =security.getUserGroups(uid);
        for(var p = 1;p<=set.getMaxRowIndex();p++)
        {
            // output name of the group
            application.output(set.getValue(p, 2));
            // remove the user from the group
            security.removeUserFromGroup(uid, set.getValue(p,2));
        }
    }
    else
    {
        // delete the user (the user will be removed from the groups)
        security.deleteUser(uid);
    }
}
```

**getSystemUserName****String getSystemUserName ()**

Retrieves the username of the currently logged in user on operating system level.

**Returns****String** - the os user name**Sample**

```
//gets the current os username
var osUserName = security.getSystemUserName();
```

**getUserGroups****JSDataSet getUserGroups ()**

Get all the groups of the current user.

**Returns****JSDataSet** - dataset with groupnames**Sample**

```
//get all the users in the security settings (Returns a JSDataSet)
var dsUsers = security.getUsers()

//loop through each user to get their group
//The getValue call is (row,column) where column 1 == id and 2 == name
for(var i=1 ; i<=dsUsers.getMaxRowIndex() ; i++)
{
    //print to the output debugger tab: "user: " and the username
    application.output("user:" + dsUsers.getValue(i,2));

    //set p to the user group for the current user
    /** @type {JSDataSet} */
    var p = security.getUserGroups(dsUsers.getValue(i,1));

    for(k=1;k<=p.getMaxRowIndex();k++)
    {
        //print to the output debugger tab: "group" and the group(s)
        //the user belongs to
        application.output("group: " + p.getValue(k,2));
    }
}
```

**getUserGroups****JSDataSet getUserGroups (userUID)**

Get all the groups for given user UID.

**Parameters**

{Object} userUID - to retrieve the user groups

**Returns****JSDataSet** - dataset with groupnames

**Sample**

```
//get all the users in the security settings (Returns a JSDataSet)
var dsUsers = security.getUsers()

//loop through each user to get their group
//The getValue call is (row,column) where column 1 == id and 2 == name
for(var i=1 ; i<=dsUsers.getMaxRowIndex() ; i++)
{
    //print to the output debugger tab: "user: " and the username
    application.output("user:" + dsUsers.getValue(i,2));

    //set p to the user group for the current user
    /** @type {JSDataSet} */
    var p = security.getUserGroups(dsUsers.getValue(i,1));

    for(k=1;k<=p.getMaxRowIndex();k++)
    {
        //print to the output debugger tab: "group" and the group(s)
        //the user belongs to
        application.output("group: " + p.getValue(k,2));
    }
}
```

**getUserName****String getUserName ()**

Get the current user name (null if not logged in), finds the user name for given user UID if passed as parameter.

**Returns****String** - the user name**Sample**

```
//gets the current loggedIn username
var userName = security.getUserName();
```

**getUserName****String getUserName (userUID)**

Get the current user name (null if not logged in), finds the user name for given user UID if passed as parameter.

**Parameters**{**Object**} userUID - the user UID used to retrieve the name**Returns****String** - the user name**Sample**

```
//gets the current loggedIn username
var userName = security.getUserName();
```

**getUserID****String getUserID ()**

Get the current user UID (null if not logged in); finds the userUID for given user\_name if passed as parameter.

**Returns****String** - the userUID**Sample**

```
//gets the current loggedIn username
var userName = security.getUserName();
//gets the uid of the given username
var userUID = security.getUserID(userName);
//is the same as above
//var my_userUID = security.getUserID();
```

**getUserUID****String getUserUID (username)**

Get the current user UID (null if not logged in); finds the userUID for given user\_name if passed as parameter.

**Parameters**{**String**} username - the username to find the userUID for**Returns****String** - the userUID**Sample**

```
//gets the current loggedIn username
var userName = security.getUserName();
//gets the uid of the given username
var userUID = security.getUserUID(userName);
//is the same as above
//var my_userUID = security.getUserUID();
```

**getUsers****JSDataSet getUsers ()**

Get all the users in the security settings (returns a dataset).

**Returns****JSDataSet** - dataset with all the users**Sample**

```
//get all the users in the security settings (Returns a JSDataSet)
var dsUsers = security.getUsers()

//loop through each user to get their group
//The getValue call is (row,column) where column 1 == id and 2 == name
for(var i=1 ; i<=dsUsers.getMaxRowIndex() ; i++)
{
    //print to the output debugger tab: "user: " and the username
    application.output("user:" + dsUsers.getValue(i,2));

    //set p to the user group for the current user
    /** @type {JSDataSet} */
    var p = security.getUserGroups(dsUsers.getValue(i,1));

    for(k=1;k<=p.getMaxRowIndex();k++)
    {
        //print to the output debugger tab: "group" and the group(s)
        //the user belongs to
        application.output("group: " + p.getValue(k,2));
    }
}
```

**getUsers****JSDataSet getUsers (groupName)**

Get all the users in the security settings (returns a dataset).

**Parameters**{**String**} groupName - the group to filter on**Returns****JSDataSet** - dataset with all the users

**Sample**

```
//get all the users in the security settings (Returns a JSDataSet)
var dsUsers = security.getUsers()

//loop through each user to get their group
//The getValue call is (row,column) where column 1 == id and 2 == name
for(var i=1 ; i<=dsUsers.getMaxRowIndex() ; i++)
{
    //print to the output debugger tab: "user: " and the username
    application.output("user:" + dsUsers.getValue(i,2));

    //set p to the user group for the current user
    /** @type {JSDataSet} */
    var p = security.getUserGroups(dsUsers.getValue(i,1));

    for(k=1;k<=p.getMaxRowIndex();k++)
    {
        //print to the output debugger tab: "group" and the group(s)
        //the user belongs to
        application.output("group: " + p.getValue(k,2));
    }
}
```

**isUserMemberOfGroup****Boolean** **isUserMemberOfGroup** (groupName)

Check whatever the current user is part of the specified group

**Parameters**{**String**} groupName - name of the group to check**Returns****Boolean** - dataset with groupnames**Sample**

```
//check whatever user is part of the Administrators group
if(security.isUserMemberOfGroup('Administrators', security.getUserUID('admin')))
{
    // do administration stuff
}
```

**isUserMemberOfGroup****Boolean** **isUserMemberOfGroup** (groupName, userUID)

Check whatever the user specified as parameter is part of the specified group.

**Parameters**{**String**} groupName - name of the group to check  
{**Object**} userUID - UID of the user to check**Returns****Boolean** - dataset with groupnames**Sample**

```
//check whatever user is part of the Administrators group
if(security.isUserMemberOfGroup('Administrators', security.getUserUID('admin')))
{
    // do administration stuff
}
```

**login****Boolean** **login** (username, a\_userUID, groups)

Login to be able to leave the solution loginForm.

Example: Group names may be received from LDAP (Lightweight Directory Access Protocol) - a standard protocol used in web browsers and email applications to enable lookup queries that access a directory listing.

**Parameters**

{String} username - the username, like 'JamesWebb'  
 {Object} a\_userUID - the user UID to process login for  
 {String[]} groups - the groups array

**Returns**

Boolean - true if loggedin

**Sample**

```
var groups = ['Administrators']; //normally these groups are for example received from LDAP
var user_uid = scopes.globals.email; //also this uid might be received from external authentication method
var ok = security.login(scopes.globals.username, user_uid , groups)
if (!ok)
{
    plugins.dialogs.showErrorDialog('Login failure', 'Already logged in? or no user_uid/groups
specified?', 'OK')
}
```

**logout****void logout ()**

Logout the current user and close the solution, if the solution requires authentication and user is logged in.  
 You can redirect to another solution if needed; if you want to go to a different url, you need to call application.showURL(url) before calling security.logout() (this is only applicable for Web Client).  
 An alternative option to close a solution and to open another solution, while keeping the user logged in, is application.closeSolution().

**Returns**

void

**Sample**

```
//Set the url to go to after logout.
//application.showURL('http://www.servoy.com', '_self'); //Web Client only
security.logout();
//security.logout('solution_name');//log out and close current solution and open solution 'solution_name'
//security.logout('solution_name','global_method_name');//log out, close current solution, open solution
'solution_name' and call global method 'global_method_name' of the newly opened solution
//security.logout('solution_name','global_method_name','my_string_argument');//log out, close current
solution, open solution 'solution_name', call global method 'global_method_name' with argument 'my_argument'
//security.logout('solution_name','global_second_method_name',2);
//Note: specifying a solution will not work in the Developer due to debugger dependencies
//specified solution should be of compatible type with client (normal type or client specific(Smart client
only/Web client only) type )
```

**logout****void logout (solutionToLoad)**

Logout the current user and close the solution, if the solution requires authentication and user is logged in.  
 You can redirect to another solution if needed; if you want to go to a different url, you need to call application.showURL(url) before calling security.logout() (this is only applicable for Web Client).  
 An alternative option to close a solution and to open another solution, while keeping the user logged in, is application.closeSolution().

**Parameters**

{String} solutionToLoad - the solution to load after logout

**Returns**

void

**Sample**

```
//Set the url to go to after logout.
//application.showURL('http://www.servoy.com', '_self'); //Web Client only
security.logout();
//security.logout('solution_name');//log out and close current solution and open solution 'solution_name'
//security.logout('solution_name','global_method_name');//log out, close current solution, open solution
'solution_name' and call global method 'global_method_name' of the newly opened solution
//security.logout('solution_name','global_method_name','my_string_argument');//log out, close current
solution, open solution 'solution_name', call global method 'global_method_name' with argument 'my_argument'
//security.logout('solution_name','global_second_method_name',2);
//Note: specifying a solution will not work in the Developer due to debugger dependencies
//specified solution should be of compatible type with client (normal type or client specific(Smart client
only/Web client only) type )
```

**logout****void** **logout** (solutionToLoad, method)

Logout the current user and close the solution, if the solution requires authentication and user is logged in.

You can redirect to another solution if needed; if you want to go to a different url, you need to call application.showURL(url) before calling security.logout() (this is only applicable for Web Client).

An alternative option to close a solution and to open another solution, while keeping the user logged in, is application.closeSolution().

**Parameters**

{[String](#)} solutionToLoad - the solution to load after logout  
 {[String](#)} method - the method to run in the solution to load

**Returns****void****Sample**

```
//Set the url to go to after logout.
//application.showURL('http://www.servoy.com', '_self'); //Web Client only
security.logout();
//security.logout('solution_name');//log out and close current solution and open solution 'solution_name'
//security.logout('solution_name','global_method_name');//log out, close current solution, open solution
'solution_name' and call global method 'global_method_name' of the newly opened solution
//security.logout('solution_name','global_method_name','my_string_argument');//log out, close current
solution, open solution 'solution_name', call global method 'global_method_name' with argument 'my_argument'
//security.logout('solution_name','global_second_method_name',2);
//Note: specifying a solution will not work in the Developer due to debugger dependencies
//specified solution should be of compatible type with client (normal type or client specific(Smart client
only/Web client only) type )
```

**logout****void** **logout** (solutionToLoad, method, argument)

Logout the current user and close the solution, if the solution requires authentication and user is logged in.

You can redirect to another solution if needed; if you want to go to a different url, you need to call application.showURL(url) before calling security.logout() (this is only applicable for Web Client).

An alternative option to close a solution and to open another solution, while keeping the user logged in, is application.closeSolution().

**Parameters**

{[String](#)} solutionToLoad - the solution to load after logout  
 {[String](#)} method - the method to run in the solution to load  
 {[Object](#)} argument - the argument to pass to the method to run

**Returns****void**

**Sample**

```
//Set the url to go to after logout.
//application.showURL('http://www.servoy.com', '_self'); //Web Client only
security.logout();
//security.logout('solution_name');//log out and close current solution and open solution 'solution_name'
//security.logout('solution_name','global_method_name');//log out, close current solution, open solution 'solution_name' and call global method 'global_method_name' of the newly opened solution
//security.logout('solution_name','global_method_name','my_string_argument');//log out, close current solution, open solution 'solution_name', call global method 'global_method_name' with argument 'my_argument'
//security.logout('solution_name','global_second_method_name',2);
//Note: specifying a solution will not work in the Developer due to debugger dependencies
//specified solution should be of compatible type with client (normal type or client specific(Smart client only/Web client only) type )
```

**removeUserFromGroup****Boolean removeUserFromGroup (a\_userUID, groupName)**

Removes an user from a group.

Note: this method can only be called by an admin.

**Parameters**

{Object} a\_userUID - the user UID to be removed  
 {Object} groupName - the group to remove from

**Returns****Boolean** - true if removed**Sample**

```
var removeUser = true;
//create a user
var uid = security.createUser('myusername', 'mypassword');
if (uid) //test if user was created
{
    // Get all the groups
    var set = security.getGroups();
    for(var p = 1 ; p <= set.getMaxRowIndex() ; p++)
    {
        // output name of the group
        application.output(set.getValue(p, 2));
        // add user to group
        security.addUserToGroup(uid, set.getValue(p,2));
    }
    // if not remove user, remove user from all the groups
    if(!removeUser)
    {
        // get now all the groups that that users has (all if above did go well)
        var set =security.getUserGroups(uid);
        for(var p = 1;p<=set.getMaxRowIndex();p++)
        {
            // output name of the group
            application.output(set.getValue(p, 2));
            // remove the user from the group
            security.removeUserFromGroup(uid, set.getValue(p,2));
        }
    }
    else
    {
        // delete the user (the user will be removed from the groups)
        security.deleteUser(uid);
    }
}
```

**setPassword****Boolean setPassword (a\_userUID, password)**

Set a new password for the given userUID.

Note: this method can only be called by an admin user or a normal logged in user changing its own password.

**Parameters**

{Object} a\_userUID - the userUID to set the new password for  
 {String} password - the new password

**Returns**

**Boolean** - true if changed

**Sample**

```
if(security.checkPassword(security.getUserUID(), 'password1'))
{
    security.setPassword(security.getUserUID(), 'password2')
}
else
{
    application.output('wrong password')
}
```

**setSecuritySettings**

**void** **setSecuritySettings** (dataset)

Sets the security settings; the entries contained in the given dataset will override those contained in the current security settings.

NOTE: The security.getElementUUIDs and security.setSecuritySettings functions can be used to define custom security that overrides Servoy security.  
 For additional information see the function security.getElementUUIDs.

**Parameters**

{Object} dataset - the dataset with security settings

**Returns**

**void**

**Sample**

```
var colNames = new Array();
colNames[0] = 'uuid';
colNames[1] = 'flags';
var dataset = databaseManager.createEmptyDataSet(0,colNames);

var row = new Array();
row[0] = '413a4d69-becb-4ae4-8fdd-980755d6a7fb';//normally retreived via security.getElementUUIDs(...)
row[1] = JSSecurity.VIEWABLE|JSSecurity.ACCESSIBLE; // use bitwise 'or' for both
dataset.addRow(row);//setting element security

row = new Array();
row[0] = 'example_data.orders';
row[1] = JSSecurity.READ|JSSecurity.INSERT|JSSecurity.UPDATE|JSSecurity.DELETE|JSSecurity.TRACKING; //use
bitwise 'or' for multiple flags
dataset.addRow(row);//setting table security

security.setSecuritySettings(dataset); //to be called in solution startup method
```

**setUserID**

**Boolean** **setUserID** (a\_userUID, newUserUID)

Set a new userUID for the given userUID.

Note: this method can only be called by an admin.

**Parameters**

{Object} a\_userUID - the userUID to set the new user UID for  
 {String} newUserUID - the new user UID

**Returns**

**Boolean** - true if changed

---

**Sample**

```
var deleteGroup = true;
//create a group
var groupName = security.createGroup('myGroup');
if (groupName)
{
    //create a user
    var uid = security.createUser('myusername', 'mypassword');
    if (uid) //test if user was created
    {
        //set a newUID for the user
        var isChanged = security.setUserUID(uid,'myUserUID')
        // add user to group
        security.addUserToGroup(uid, groupName);
        // if not delete group, do delete group
        if (deleteGroup)
        {
            security.deleteGroup(groupName);
        }
    }
}
```