

Security

Return Types

Constants Summary

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

Method Summary

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

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

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 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
```

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 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

```

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 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

```

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 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

```

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 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

```

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 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

```

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;
//ceate 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, userID)

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} userID - the user UID to use

Returns

Object - the userID 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;
//ceate 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 (userID)

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

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

Parameters

{**Object**} userID - 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 (userID)

Get all the groups for given user UID.

Parameters

{Object} userID - 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 (userID)

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

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

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

getUserUID**String** getUserUID ()

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

Returns**String** - the userID**Sample**

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

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, userID)

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

Parameters

{String} groupName - name of the group to check

{Object} userID - 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 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
```

setUserUID

Boolean **setUserUID** (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;
//ceate 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);
        }
    }
}
```