Security

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Supported Clients

SmartClient WebClient NGClient MobileClient

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.

Methods Summary

Boolean	addUserToGroup(a_userUID, groupName)	Adds an user to a named group.
Object	authenticate(credentials)	Authenticate the given credentials against the mobile service solution.
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	canAccess(formName)	Returns whether form is accessible.
Boolean	canAccess(formName, elementName)	Returns whether element from form is accessible.
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	canView(formName)	Returns whether form is viewable.
Boolean	canView(formName, elementName)	Returns whether element from form is viewable.
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 alreay exist).
Object	createUser(username, password, userUID)	Creates a new user, returns new uid (or null when group couldn't be created or user alreay 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.
Array	getTenantValue()	Retrieve the tenant value for this Client, this value will be used as the value for all tables that have a column marked as a tenant column.
JSDataSet	getUserGroups()	Get all the groups of the current user.
JSDataSet	getUserGroups(userUID)	Get all the groups for given user UID.
String	getUserName()	Get the current user name (null if not logged in), finds the user name for given user UID if passed as parameter.
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.
String	getUserUID()	Get the current user UID (null if not logged in); finds the userUID for given user_name if passed as parameter.
String	getUserUID(username)	Get the current user UID (null if not logged in); finds the userUID 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, userUID)	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, argument)	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.
void	setTenantValue(value)	Set the tenant value for this Client, this value will be used as the value for all tables that have a column marked as a tenant column.
Boolean	setUserUID(a_userUID, newUserUID)	Set a new userUID for the given userUID.

Constants Details

ACCESSIBLE

Constant representing the accessible flag for form security.

Returns

Number

Supported Clients

SmartClient,WebClient,NGClient

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
```

DELETE

Constant representing the delete flag for table security.

Returns

Number

Supported Clients

SmartClient,WebClient,NGClient

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

Supported Clients

SmartClient,WebClient,NGClient

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

Supported Clients

SmartClient,WebClient,NGClient

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

Supported Clients

SmartClient,WebClient,NGClient

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

Supported Clients

SmartClient,WebClient,NGClient

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
```

UPDATE

Constant representing the update flag for table security.

Returns

Number

Supported Clients

SmartClient,WebClient,NGClient

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
```

VIEWABLE

Constant representing the viewable flag for form security.

Returns

Number

Supported Clients

SmartClient,WebClient,NGClient

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
```

Methods Details

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

Supported Clients

SmartClient,WebClient,NGClient

Sample

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

authenticate(credentials)

Authenticate the given credentials against the mobile service solution.
It will set the credentials and then do a sync call to the server.

Parameters

Array 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

Supported Clients

NGClient,MobileClient

Sample

```
// method will return null in mobile client, the same flow as for default login page will happen after calling
this method
security.authenticate(['myusername', 'mypassword']);
```

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

Supported Clients

SmartClient,WebClient,NGClient

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(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
Array	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

Supported Clients

SmartClient,WebClient,NGClient

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])
```

canAccess(formName)

Returns whether form is accessible.

security.canAccess(formName)

Parameters

String formName form name

Returns

Boolean true if accessible

Supported Clients

SmartClient,WebClient,NGClient

Sample

canAccess(formName, elementName)

Returns whether element from form is accessible.

security.canAccess(formName,elementName)

Parameters

String formName form name
String elementName element name from specified form

Returns

Boolean true if accessible

Supported Clients

SmartClient,WebClient,NGClient

Sample

canDelete(dataSource)

Returns a boolean value for security rights.

Parameters

String dataSource the datasource

Returns

Boolean true if allowed

Supported Clients

SmartClient,WebClient,NGClient

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(dataSource)

Returns a boolean value for security rights.

Parameters

String dataSource the datasource

Returns

Boolean true if allowed

Supported Clients

SmartClient,WebClient,NGClient

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(dataSource)

Returns a boolean value for security rights.

Parameters

String dataSource the datasource

Returns

Boolean true if allowed

Supported Clients

SmartClient,WebClient,NGClient

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(dataSource)

Returns a boolean value for security rights.

Parameters

String dataSource the datasource

Returns

Boolean true if allowed

Supported Clients

SmartClient,WebClient,NGClient

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);
```

canView(formName)

Returns whether form is viewable.

```
security.canView(formName)
```

Parameters

String formName form name

Returns

Boolean true if viewable

Supported Clients

SmartClient,WebClient,NGClient

Sample

```
```

canView(formName, elementName)

Returns whether element from form is viewable.

```
security.canView(formName,elementName)
```

Parameters

String formName form name
String elementName element name from specified form

Returns

Boolean true if viewable

Supported Clients

SmartClient,WebClient,NGClient

Sample

```
```

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

Supported Clients

SmartClient,WebClient,NGClient

Sample

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

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

Supported Clients

SmartClient,WebClient,NGClient

Sample

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

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

Supported Clients

SmartClient,WebClient,NGClient

Sample

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

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

Supported Clients

SmartClient,WebClient,NGClient

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(username, password)

Creates a new user, returns new uid (or null when group couldn't be created or user alreay 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

Supported Clients

SmartClient,WebClient,NGClient

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(username, password, userUID)

Creates a new user, returns new uid (or null when group couldn't be created or user alreay 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

Supported Clients

SmartClient,WebClient,NGClient

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(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

Supported Clients

SmartClient,WebClient,NGClient

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(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.

Supported Clients

SmartClient,WebClient,NGClient

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()

Returns the client ID.

Returns

String the clientId as seen on the server admin page

Supported Clients

SmartClient,WebClient,NGClient

Sample

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

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 retieve the dataset for

Returns

JSDataSet dataset with element info

Supported Clients

SmartClient,WebClient,NGClient

Sample

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

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

Supported Clients

SmartClient,WebClient,NGClient

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()

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

Returns

String the os user name

Supported Clients

SmartClient,WebClient,NGClient

Sample

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

getTenantValue()

Retrieve the tenant value for this Client, this value will be used as the value for all tables that have a column marked as a tenant column.
This results in adding a table filter for that table based on that column and the this value.

 A client with tenant value will only receive databroadcasts from other clients that have no or a common tenant value set
 Be sure to not access or depend on records having different tenant values, as no databroadcasts will be received for those

Returns

Array An array of tenant values for this client.

Supported Clients

SmartClient,WebClient,NGClient

Sample

getUserGroups()

Get all the groups of the current user.

Returns

JSDataSet dataset with groupnames

Supported Clients

SmartClient,WebClient,NGClient

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(userUID)

Get all the groups for given user UID.

Parameters

Object userUID to retrieve the user groups

Returns

JSDataSet dataset with groupnames

Supported Clients

SmartClient,WebClient,NGClient

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()

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

Supported Clients

SmartClient,WebClient,NGClient,MobileClient

Sample

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

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

Supported Clients

SmartClient,WebClient,NGClient

Sample

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

getUserUID()

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

Supported Clients

SmartClient,WebClient,NGClient

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();
```

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

Supported Clients

SmartClient,WebClient,NGClient

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()

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

Returns

JSDataSet dataset with all the users

Supported Clients

SmartClient,WebClient,NGClient

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(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

Supported Clients

SmartClient,WebClient,NGClient

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(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

Supported Clients

SmartClient,WebClient,NGClient

Sample

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

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

Supported Clients

SmartClient,WebClient,NGClient

Sample

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

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
Array groups the groups array

Returns

Boolean true if loggedin

Supported Clients

SmartClient,WebClient,NGClient

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()

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().

Supported Clients

SmartClient,WebClient,NGClient,MobileClient

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);
//security.logout('solution_name', {a: 'my_string_argument', p1: 'param1', p2: 'param2'});//log out, close
current solution, open solution 'solution_name', call (login) solution's onOpen with argument 'my_argument' and
queryParams p1,p2
//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(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

Supported Clients

SmartClient,WebClient,NGClient

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);
//security.logout('solution_name', {a: 'my_string_argument', p1: 'param1', p2: 'param2'});//log out, close
current solution, open solution 'solution_name', call (login) solution's onOpen with argument 'my_argument' and
queryParams p1,p2
//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(solutionToLoad, 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
Object argument the argument to pass to the (login) solution onOpen

Supported Clients

SmartClient,WebClient,NGClient

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);
//security.logout('solution_name', {a: 'my_string_argument', p1: 'param1', p2: 'param2'});//log out, close
current solution, open solution 'solution_name', call (login) solution's onOpen with argument 'my_argument' and
queryParams p1,p2
//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(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

Supported Clients

SmartClient,WebClient,NGClient

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);
//security.logout('solution_name', {a: 'my_string_argument', p1: 'param1', p2: 'param2'});//log out, close
current solution, open solution 'solution_name', call (login) solution's onOpen with argument 'my_argument' and
queryParams p1,p2
//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(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

Supported Clients

SmartClient,WebClient,NGClient

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);
//security.logout('solution_name', {a: 'my_string_argument', p1: 'param1', p2: 'param2'});//log out, close
current solution, open solution 'solution_name', call (login) solution's onOpen with argument 'my_argument' and
queryParams p1,p2
//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(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

Supported Clients

SmartClient,WebClient,NGClient

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(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

Supported Clients

SmartClient,WebClient,NGClient

Sample

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

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

Supported Clients

SmartClient,WebClient,NGClient

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
```

setTenantValue(value)

Set the tenant value for this Client, this value will be used as the value for all tables that have a column marked as a tenant column.
This results in adding a table filter for that table based on that column and the this value.

This value will be auto filled in for all the columns that are marked as a tenant column. If you give an array of values then the first array value is used for this.

When a tenant value is set the client will only receive databroadcasts from other clients that have no or a common tenant value set
Be sure to not access or depend on records having different tenant values, as no databroadcasts will be received for those

Parameters

Object value a single tenant value or an array of tenant values to filter tables having a column flagged as Tenant column by.

Supported Clients

SmartClient,WebClient,NGClient

Sample

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

Supported Clients

SmartClient,WebClient,NGClient

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);
                }
        }
}
```