Documentation for SDK for .NET 5.7.0

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SDK for .NET 5.7.0

OpenKM SDK for .NET is a set of software development tools that allows for the creation of applications for OpenKM. The OpenKM SDK for .NET includes a web services library.

This web services library is a complete API layer for accessing OpenKM through REST web services and provides complete compatibility between OpenKM REST web services versions, minimizing changes to your code.

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Compatibility

SDK for .NET version 5.7.0 should be used with:

- **OpenKM Professional version 8.2.8 or later**

Download

Download professional resources from the OpenKM Download Center.

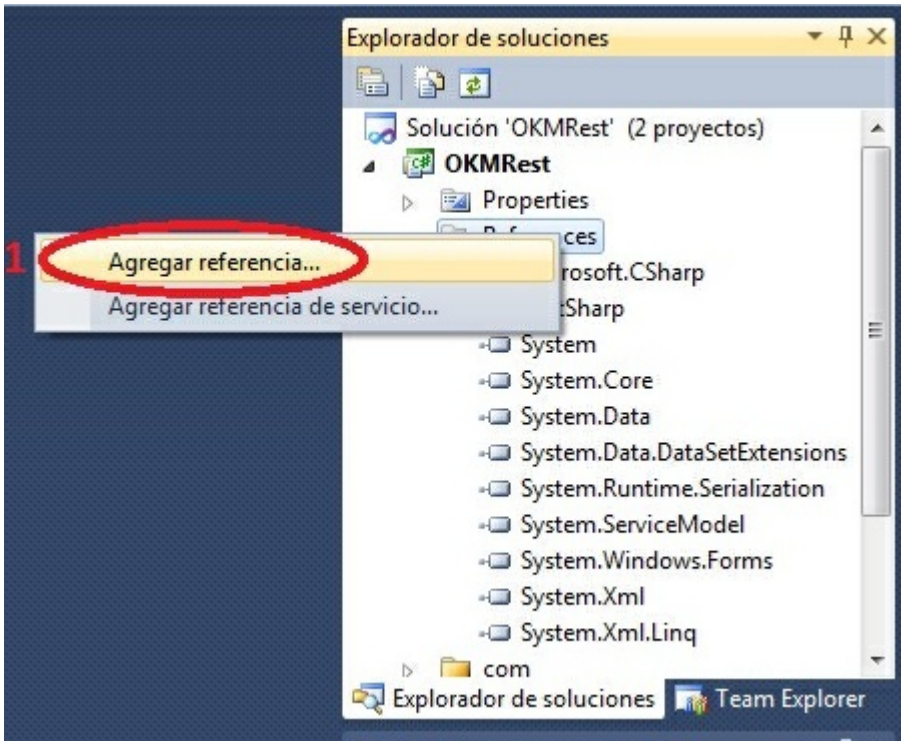
Requirements

- .NET Framework 4.8.0
- Newtonsoft.Json.dll version 12.0.1
- The .NET SDK requires the RestSharp.dll library version v106.10.1.

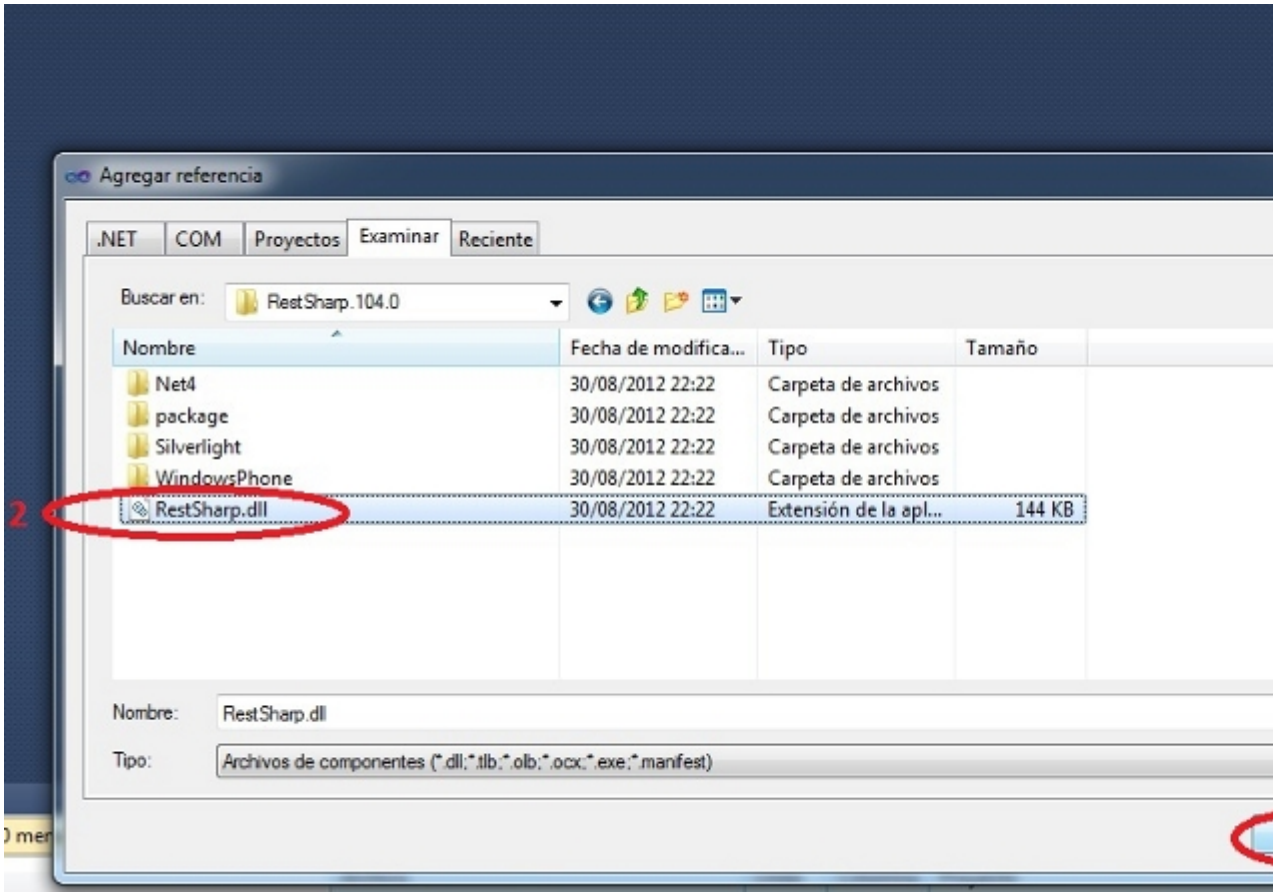
More information about RestSharp is available at http://restsharp.org/.

Visual Studio project configuration

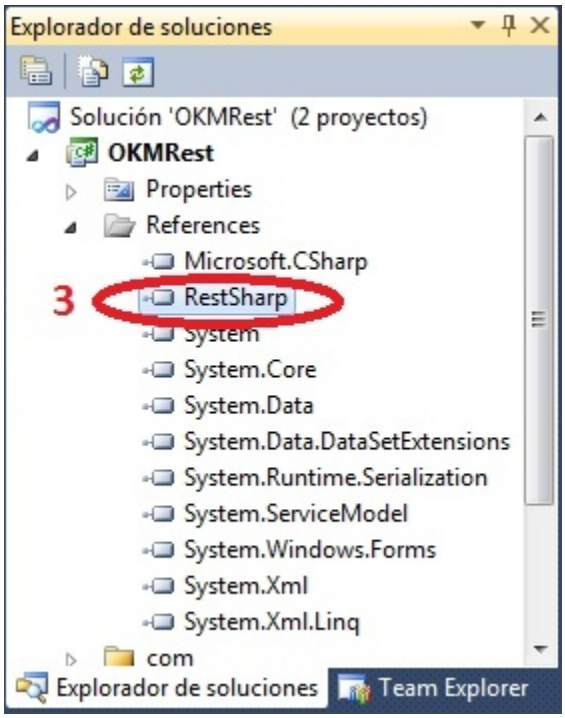
- Download the "**RestSharp.dll**" from here.
- Right-click "**References**" and, in the context menu, choose "**Add Reference**".



- Choose the "**RestSharp.dll**" file from your file system.



- Click the "**Accept**" button.



The DLL library is now configured in your .NET project.

Sample client

Your first class:

```
using System;
using System.Collections.Generic;
using System.Linq;
using System.Text;
using com.openkm.sdk4csharp;
using com.openkm.sdk4csharp.bean;
using com.openkm.sdk4csharp.impl;

namespace OKMRest
{
    class Program
    {
        /**
        * Sample OpenKM JDK client
        */
        static void Main(string[] args)
        {
            String host = "http://localhost:8080/openkm";
            String username = "okmAdmin";
            String password = "admin";
            OKMWebservice ws = OKMWebservicesFactory.newInstance(host);

            try
            {
                ws.login(user, password);
                foreach(Folder fld in  ws.folder.getChildren("14530e37-ac51-4a26-8049-0146a5916dec"))
                {
                    System.Console.WriteLine("Folder -> " + fld.path);
                }
            }
            catch (Exception e)
            {
                System.Console.WriteLine(e.ToString());
            }

            System.Console.ReadKey();
        }
    }
}
```

Basic concepts

Authentication

First, you must create the webservice object:

```
OKMWebservices ws = OKMWebservicesFactory.newInstance(host);
```

Then you should log in using the method "**login**". You can access the "**login**" method from the webservice object "**ws**" as shown below:

```
ws.login(user, password);
```

Once you are logged in to the webservice, the session is kept in the webservice object. Then you can use the other API methods.

At this point you can use all the Repository methods from the "**repository**" class as shown below:

```
ws.repository.getAppVersion();
```

```
using System;
using System.Collections.Generic;
using System.Linq;
using System.Text;
using com.openkm.sdk4csharp;
using com.openkm.sdk4csharp.exception;
using com.openkm.sdk4csharp.impl;

namespace OKMRest
{
    public class Program
    {
        static void Main(string[] args)
        {
            String host = "http://localhost:8080/openkm";
            String username = "okmAdmin";
            String password = "admin";
            OKMWebservice ws = OKMWebservicesFactory.newInstance(host);

            try {
                ws.login(user, password);
                System.Console.WriteLine(ws.repository.getAppVersion().getVersion());
            } catch (RepositoryException e) {
                System.Console.WriteLine(e.ToString());
            } catch (DatabaseException e) {
                System.Console.WriteLine(e.ToString());
            } catch (UnknowException e) {
                System.Console.WriteLine(e.ToString());
            } catch (WebserviceException e) {
                System.Console.WriteLine(e.ToString());
            }
```

```
            System.Console.ReadKey();
        }
    }
}
```

Accessing API

OpenKM API classes are under com.openkm package, as shown at this javadoc API summary.

At the main URL http://docs.openkm.com/javadoc/ you can see all available Javadoc documentation.

At the time of writing this page, the current OpenKM version was 7.1.5, which may change over time.

There is a direct correspondence between the classes and methods in the com.openkm.api packages and those available in the SDK for .NET.

OpenKM API classes:

OpenKM API class	Description	Supported	Implementation	Interface
OKMActivity	Manages the activity log.	Yes	ActivityImpl.cs	BaseActivity.cs
OKMAuth	Manages security and users. For example, add or remove grants on a node, create or modify users, or get the profiles.	Yes	AuthImpl.cs	BaseAuth.cs
OKMBookmark	Manages the user bookmarks.	Yes	BookmarkImpl.cs	BaseBookmark.cs
OKMDashboard	Manages all data shown on the dashboard.	Yes	DashboardImpl.cs	BaseDashboard.cs
OKMDocument	Manages documents. For example, create, move, or delete a document.	Yes	DocumentImpl.cs	BaseDocument.cs
OKMFolder	Manages folders. For example, create, move, or	Yes	FolderImpl.cs	BaseFolder.cs

	delete a folder.			
OKMMail	Manages mail. For example, create, move, or delete a mail.	Yes	MailImpl.cs	BaseMail.cs
OKMNode	Manages general-purpose node actions.	Yes	NodeImpl.cs	BaseNode.cs
OKMNote	Manages notes on any node type. For example, create, edit, or delete a note on a document, folder, mail, or record.	Yes	NoteImpl.cs	BaseNote.cs
OKMNotification	Manages notifications. For example, add or remove subscriptions to a document or a folder.	Yes	NotificationImpl.cs	BaseNotification.cs
OKMProperty	Manages categories and keywords. For example, add or remove keywords on a document, folder, mail, or record.	Yes	PropertyImpl.cs	BaseProperty.cs
OKMPropertyGroup	Manages metadata. For example, add a metadata group or set metadata fields.	Yes	PropertyGroupImpl.cs	BasePropertyGroup.cs
OKMRecord	Manages records. For example, create, move, or delete a record.	Yes	RecordImpl.cs	BaseRecord.cs

OKMRelation	Manages relations between nodes. For example, create a relation (parent-child) between two documents.	Yes	RelationImpl.cs	BaseRelation.cs
OKMRepository	A lot of material related to the repository. For example, get the properties of the main root node (/okm:root).	Yes	RepositoryImpl.cs	BaseRepository.cs
OKMReport	Manages reports. For example, execute reports.	Yes	ReportImpl.cs	BaseReport.cs
OKMSearch	Manages the search feature. For example, manage saved queries or perform a new query on the repository.	Yes	SearchImpl.cs	BaseSearch.cs
OKMStamp	Manages stamps.	Yes	StampImpl.cs	BaseStamp.cs
OKMStats	General repository statistics.	No		
OKMTask	Manages tasks. For example, create a new task.	Yes	TaskImpl.cs	BaseTask.cs
OKMUserConfig	Manages the user's home configuration.	No	UserConfigImpl.cs	BaseUserConfig.cs
OKMWorkflow	Manages workflows. For example, execute a new	Yes	WorkflowImpl.cs	BaseWorkflow.cs

	workflow.			

(*) Indicates that REST support exists for it, but it is still not implemented in the SDK.

Class Hierarchy

Packages detail:

Name	Description
com.openkm.sdk4csharp	The **com.openkm.OKMWebservicesFactory** that returns a **com.openkm.OKMWebservices** object which implements all interfaces. `OKMWebservices ws = OKMWebservicesFactory.newInstance(host, username, password);`
com.openkm.sdk4csharp.bean	Contains all classes resulting from unmarshalling REST objects.
com.openkm.sdk4csharp.definition	All interface classes: • com.openkm.sdk4csharp.definition.BaseActivity • com.openkm.sdk4csharp.definition.BaseAuth • com.openkm.sdk4csharp.definition.AutoCAD • com.openkm.sdk4csharp.definition.Bookmark • com.openkm.sdk4csharp.definition.BaseConversion • com.openkm.sdk4csharp.definition.BaseDashboard • com.openkm.sdk4csharp.definition.BaseDocument • com.openkm.sdk4csharp.definition.BaseFolder • com.openkm.sdk4csharp.definition.BaseFilePlan • com.openkm.sdk4csharp.definition.BaseImport • com.openkm.sdk4csharp.definition.BaseMail • com.openkm.sdk4csharp.definition.BaseNode • com.openkm.sdk4csharp.definition.BaseNote • com.openkm.sdk4csharp.definition.BaseNotification • com.openkm.sdk4csharp.definition.BasePdf • com.openkm.sdk4csharp.definition.BasePlugin

	• com.openkm.sdk4csharp.definition.BaseProperty • com.openkm.sdk4csharp.definition.BasePropertyGroup • com.openkm.sdk4csharp.definition.BaseRecord • com.openkm.sdk4csharp.definition.BaseRelation • com.openkm.sdk4csharp.definition.BaseReport • com.openkm.sdk4csharp.definition.BaseRepository • com.openkm.sdk4csharp.definition.BaseSearch • com.openkm.sdk4csharp.definition.BaseShard • com.openkm.sdk4csharp.definition.BaseStamp • com.openkm.sdk4csharp.definition.BaseTask • com.openkm.sdk4csharp.definition.BaseUserConfig • com.openkm.sdk4csharp.definition.BaseWizard • com.openkm.sdk4csharp.definition.BaseWorkflow
com.openkm.sdk4csharp.impl	All interface implementation classes: • com.openkm.sdk4csharp.impl.ActivityImpl • com.openkm.sdk4csharp.impl.AuthImpl • com.openkm.sdk4csharp.impl.AutocadImpl • com.openkm.sdk4csharp.impl.BookmarkImpl • com.openkm.sdk4csharp.impl.ConversionImpl • com.openkm.sdk4csharp.impl.DashboardImpl • com.openkm.sdk4csharp.impl.DocumentImpl • com.openkm.sdk4csharp.impl.FilePlanImpl • com.openkm.sdk4csharp.impl.FolderImpl • com.openkm.sdk4csharp.impl.ImportImpl • com.openkm.sdk4csharp.impl.MailImpl • com.openkm.sdk4csharp.impl.NodeImpl • com.openkm.sdk4csharp.impl.NoteImpl • com.openkm.sdk4csharp.impl.NotificationImpl • com.openkm.sdk4csharp.impl.PdfImpl • com.openkm.sdk4csharp.impl.ShardImpl • com.openkm.sdk4csharp.impl.PropertyGroupImpl • com.openkm.sdk4csharp.impl.PropertyImpl • com.openkm.sdk4csharp.impl.RecordImpl

	• com.openkm.sdk4csharp.impl.RelationImpl • com.openkm.sdk4csharp.impl.RepositoryImpl • com.openkm.sdk4csharp.impl.SearchImpl • com.openkm.sdk4csharp.impl.ShardImpl • com.openkm.sdk4csharp.impl.StampImpl • com.openkm.sdk4csharp.impl.TaskImpl • com.openkm.sdk4csharp.impl.UserConfigImpl • com.openkm.sdk4csharp.impl.WizardImpl • com.openkm.sdk4csharp.impl.WorkflowImpl
com.openkm.sdk4csharp.util	A couple of utilities. The class com.openkm.sdk4csharp.util.ISO8601 should be used to set and parse metadata date fields.
com.openkm.sdk4csharp.exception	All exception classes.

Activity samples

Basic

Suggested code sample

First, you must create the web service object:

```
OKMWebservices ws = OKMWebservicesFactory.newInstance(host);
```

Then you should log in using the "**login**" method. You can access the "**login**" method from the web service object "**ws**" as shown below:

```
ws.login(user, password);
```

Once you are logged in with the web service, the session is kept in the web service object. Then you can use the other API methods.

At this point, you can use all the Activity methods from the "**activity**" class as shown below:

```
ActivityList results = ws.activity.findActivityLog(0, 20, beginDate, endDate, user, "", item);
```

Methods

findActivityLog

Description:

Method	Return values	Description
findActivityLog(int page, int length, DateTime beginDate, DateTime endDate, String user, String action, String item, String hostname)	**ActivityList**	Returns a list of all activity logs by date, user, action, and item.
The value of the **item** is the UUID of the node (document, folder, mail, or record). The value of the **hostname** is the host from which the activity was originated. An empty string returns activities from all hosts.		

Example:

```
using System;
using System.Collections.Generic;
using System.Linq;
using System.Text;
using com.openkm.sdk4csharp;
using com.openkm.sdk4csharp.bean;
using com.openkm.sdk4csharp.impl;

namespace OKMRest
{
   public class Program
   {
      static void Main(string[] args)
      {
         String host = "http://localhost:8180/openkm";
         String username = "okmAdmin";
         String password = "admin";
         OKMWebservice ws = OKMWebservicesFactory.newInstance(host);

         try
         {
            ws.login(user, password);
            DateTime beginDate = new DateTime(2019, 7, 1);
            DateTime endDate = new DateTime(2019, 8, 1);
            String hostname = "";
            ActivityList activityList = ws.activity.findActivityLog(0, 10, beginDate, endDate, "testUser", "LOGIN", null, h
         }
         catch (Exception e)
         {
            System.Console.WriteLine(e.ToString());
         }
      }
   }
}
```

getActivityActions

Description:

Method	Return values	Description
getActivityActions()	**List<String>**	Returns a list of all activity log actions.

Example:

```
using System;
using System.Collections.Generic;
using System.Linq;
using System.Text;
using com.openkm.sdk4csharp;
using com.openkm.sdk4csharp.bean;

namespace OKMRest
{
   public class Program
   {
      static void Main(string[] args)
      {
         String host = "http://localhost:8180/openkm";
         String username = "okmAdmin";
```

```
            String password = "admin";
            OKMWebservice ws = OKMWebservicesFactory.newInstance(host);

            try
            {
                ws.login(user, password);
                List<string> actions = ws.activity.getActivityActions();
                foreach(string action in actions)
                {
                    System.Console.WriteLine(action);
                }
            }
            catch (Exception e)
            {
                System.Console.WriteLine(e.ToString());
            }
        }
    }
}
```

Auth samples

Basics

The class **com.openkm.sdk4csharp.bean.Permission** contains permission values (READ, WRITE, etc.). You should use it in combination with methods that change or retrieve security grants.

To set READ and WRITE access you should do:

```
int permission = Permission.READ + Permission.WRITE;
```

To check whether you have permission, you should do:

```
// permission is a valid integer value
if ((permission | Permission.WRITE) = Permission.WRITE) {
  // Has WRITE grants.
}
```

In almost all methods, you'll see a parameter named "**nodeId**". The value of this parameter can be a valid node **UUID** (folder, document, mail, record) or a node **path**.

Example of nodeId:

- Using UUID -> "**c41f9ea0-0d6c-45da-bae4-d72b66f42d0f**";

Suggested code sample

First, you must create the webservice object:

```
OKMWebservices ws = OKMWebservicesFactory.newInstance(host);
```

Then you should log in using the "**login**" method. You can access the "**login**" method from the webservice object "**ws**" as shown below:

```
ws.login(user, password);
```

Once you are logged in to the webservice, the session is kept in the webservice object. Then you can use the other API methods.

At this point you can use all the Auth methods of the "**auth**" class, as shown below:

```
Dictionary<String, int> grants = ws.auth.getGrantedRoles("373bcdd0-c082-4e7b-addd-e10ef813946e");
```

Methods

login

Description:

Method	Return values	Description
login(String personalAccessToken)	**String**	Returns the authorized login token.

The login token by **default** has an **expiration time of 24 hours**.

After executing the login method, all subsequent calls will automatically use the authentication token.

Each time the login method is executed, the login token is replaced by a new one.

When a user logs into the application for the first time, an internal method is called that creates user-specific folders, like /okm:trash/userId, etc.

From an API point of view, this method should only be executed the first time a user accesses the API, to create the specific user folder structure.

Otherwise you can get errors, for example PathNotExistsException /okm:trash/userId when deleting objects, because the folders have not been created.

Example:

```
using System;
using System.Collections.Generic;
using System.Linq;
using System.Text;
using com.openkm.sdk4csharp;
using com.openkm.sdk4csharp.impl;

namespace OKMRest
{
   public class Program
   {
      static void Main(string[] args)
      {
         String host = "http://localhost:8080/openkm";
         String username = "okmAdmin";
         String password = "admin";
         OKMWebservice ws = OKMWebservicesFactory.newInstance(host);

         try
         {
            String personalAccessToken = "okmpat-ZRjVfMBcCp2tB1T2Dzbq";
            ws.login(personalAccessToken);
         }
```

```
            catch (Exception e)
            {
               System.Console.WriteLine(e.ToString());
            }
         }
      }
   }
```

login

Description:

Method	Return values	Description
login(String user, String password)	**String**	Returns the authorized login token.

The login token by **default** has an **expiration time of 24 hours**.

After executing the login method, all subsequent calls will automatically use the authentication token.

Each time the login method is executed, the login token is replaced by a new one.

When a user logs into the application for the first time, an internal method is called that creates user-specific folders, like /okm:trash/userId, etc.

From an API point of view, this method should only be executed the first time a user accesses the API, to create the specific user folder structure.

Otherwise you can get errors, for example PathNotExistsException /okm:trash/userId when deleting objects, because the folders have not been created.

Example:

```
using System;
using System.Collections.Generic;
using System.Linq;
using System.Text;
using com.openkm.sdk4csharp;
using com.openkm.sdk4csharp.impl;

namespace OKMRest
{
   public class Program
   {
      static void Main(string[] args)
      {
         String host = "http://localhost:8080/openkm";
         String username = "okmAdmin";
         String password = "admin";
         OKMWebservice ws = OKMWebservicesFactory.newInstance(host);

         try
         {
            ws.login(user, password);
```

```
        }
        catch (Exception e)
        {
            System.Console.WriteLine(e.ToString());
        }
    }
  }
}
```

login

Description:

Method	Return values	Description
String login(String user, String password, int expiration, bool restrictIp)	String	Login process return authentication token.

The login token by default has a variable **expiration** time defined in days.

When **restrictIP** is true, the token **will only work from the source IP address**.

After executing the login method, all subsequent calls will automatically use the authentication token.

Each time the login method is executed, the login token is replaced by a new one.

When a user logs into the application for the first time, an internal method is called that creates user-specific folders, like /okm:trash/userId, etc.

From an API point of view, this method should only be executed the first time a user accesses the API, to create the specific user folder structure.

Otherwise you can get errors, for example PathNotExistsException /okm:trash/userId when deleting objects, because the folders have not been created.

Example:

```
using System;
using System.Collections.Generic;
using System.Linq;
using System.Text;
using com.openkm.sdk4csharp;
using com.openkm.sdk4csharp.impl;

namespace OKMRest
{
   public class Program
   {
      static void Main(string[] args)
      {
         String host = "http://localhost:8080/openkm";
         String username = "okmAdmin";
```

```
            String password = "admin";
            OKMWebservice ws = OKMWebservicesFactory.newInstance(host);
            int days = 7;
            bool restrictIp = true;
            try
            {
               System.Console.WriteLine("Token: " + ws.login(user, password, days, restrictIp));
            }
            catch (Exception e)
            {
               System.Console.WriteLine(e.ToString());
            }
         }
      }
   }
```

logout

Description:

Method	Return values	Description
logout()	**void**	Executes the logout method on the OpenKM side.

The authentication token will be reset.

Example:

```
using System;
using System.Collections.Generic;
using System.Linq;
using System.Text;
using com.openkm.sdk4csharp;
using com.openkm.sdk4csharp.bean;

namespace OKMRest
{
   public class Program
   {
      static void Main(string[] args)
      {
         String host = "http://localhost:8080/openkm";
         String username = "okmAdmin";
         String password = "admin";
         OKMWebservice ws = OKMWebservicesFactory.newInstance(host);

         try
         {
            ws.login(user, password);
            ws.logout();
         }
         catch (Exception e)
         {
            System.Console.WriteLine(e.ToString());
         }
      }
```

```
    }
}
```

getRefreshToken

Description:

Method	Return values	Description
getRefreshToken()	String	Refreshes the current authentication token.

When logged in, an authentication token is set in the OKMWebservice. By default, the authentication token expires in 24 hours. This method allows the replacement of the current token with a new one.

Example:

```
using System;
using System.Collections.Generic;
using System.Linq;
using System.Text;
using com.openkm.sdk4csharp;
using com.openkm.sdk4csharp.impl;

namespace OKMRest
{
    public class Program
    {
        static void Main(string[] args)
        {
            String host = "http://localhost:8080/openkm";
            String username = "okmAdmin";
            String password = "admin";
            OKMWebservice ws = OKMWebservicesFactory.newInstance(host);
            try
            {
                ws.login(user, password);
                String token = ws.getRefreshToken();
                System.Console.WriteLine("New token : " + token);
            }
            catch (Exception e)
            {
                System.Console.WriteLine(e.ToString());
            }
        }
    }
}
```

getGrantedRoles

Description:

Method	Return values	Description

getGrantedRoles(String nodeId)	**Dictionary<String, int>**	Returns the granted roles of a node.

Example:

```
using System;
using System.Collections.Generic;
using System.Linq;
using System.Text;
using com.openkm.sdk4csharp;
using com.openkm.sdk4csharp.impl;

namespace OKMRest
{
   public class Program
   {
      static void Main(string[] args)
      {
         String host = "http://localhost:8080/openkm";
         String username = "okmAdmin";
         String password = "admin";
         OKMWebservice ws = OKMWebservicesFactory.newInstance(host);
         try
         {
            ws.login(user, password);
            Dictionary<String, int> grants = ws.auth.getGrantedRoles("14530e37-ac51-4a26-8049-0146a5916dec");
            foreach (String role in grants.Keys)
            {
                System.Console.WriteLine("role ->" + role);
            }
         }
         catch (Exception e)
         {
            System.Console.WriteLine(e.ToString());
         }
      }
   }
}
```

getGrantedUsers

Description:

Method	Return values	Description
getGrantedUsers(String nodeId)	**Dictionary<String, int>**	Returns the granted users of a node.

Example:

```
using System;
using System.Collections.Generic;
using System.Linq;
using System.Text;
using com.openkm.sdk4csharp;
using com.openkm.sdk4csharp.impl;

namespace OKMRest
```

```
{
   public class Program
   {
      static void Main(string[] args)
      {
         String host = "http://localhost:8080/openkm";
         String username = "okmAdmin";
         String password = "admin";
         OKMWebservice ws = OKMWebservicesFactory.newInstance(host);

         try
         {
            ws.login(user, password);
            Dictionary<String, int> grants = ws.auth.getGrantedUsers("14530e37-ac51-4a26-8049-0146a5916dec");
            foreach (KeyValuePair<string, int> kvp in grants)
            {
               Console.WriteLine("{0} -> {1}", kvp.Key, kvp.Value);
            }
         }
         catch (Exception e)
         {
            System.Console.WriteLine(e.ToString());
         }
      }
   }
}
```

getRoles

Description:

Method	Return values	Description
getRoles(boolean showAll)	**List<String>**	Returns the list of all the roles.
When the showAll variable is set to true, it returns all the roles - enabled and disabled - otherwise it only returns the enabled ones.		

Example:

```
using System;
using System.Collections.Generic;
using System.Linq;
using System.Text;
using com.openkm.sdk4csharp;

namespace OKMRest
{
   public class Program
   {
      static void Main(string[] args)
      {
         String host = "http://localhost:8080/openkm";
         String username = "okmAdmin";
         String password = "admin";
         OKMWebservice ws = OKMWebservicesFactory.newInstance(host);
```

```
            try
            {
               ws.login(user, password);
               foreach (String role in ws.auth.getRoles(false))
               {
                  System.Console.WriteLine(role);
               }
            } catch (Exception e) {
               System.Console.WriteLine(e.ToString());
            }
         }
      }
   }
```

getRolesByUser

Description:

Method	Return values	Description
getRolesByUser(String user)	**List<String>**	Returns the list of all the roles assigned to a user.

Example:

```
using System;
using System.Collections.Generic;
using System.Linq;
using System.Text;
using com.openkm.sdk4csharp;

namespace OKMRest
{
   public class Program
   {
      static void Main(string[] args)
      {
         String host = "http://localhost:8080/openkm";
         String username = "okmAdmin";
         String password = "admin";
         OKMWebservice ws = OKMWebservicesFactory.newInstance(host);

         try
         {
            ws.login(user, password);
            foreach(String role in ws.auth.getRolesByUser("okmAdmin"))
            {
               System.Console.WriteLine(role);
            }
         } catch (Exception e) {
            System.Console.WriteLine(e.ToString());
         }
      }
   }
}
```

getUser

Description:

Method	Return values	Description
getUser(String userId)	**CommonUser**	Returns a user.

Example:

```
using System;
using System.Collections.Generic;
using System.Linq;
using System.Text;
using com.openkm.sdk4csharp;

namespace OKMRest
{
   public class Program
   {
      static void Main(string[] args)
      {
         String host = "http://localhost:8080/openkm";
         String username = "okmAdmin";
         String password = "admin";
         OKMWebservice ws = OKMWebservicesFactory.newInstance(host);

         try
         {
            ws.login(user, password);
            CommonUser user = ws.auth.getUser("okmAdmin");
            System.Console.WriteLine(user.toString());
         }
         catch (Exception e)
         {
            System.Console.WriteLine(e.ToString());
         }
      }
   }
}
```

getUsers

Description:

Method	Return values	Description
getUsers(boolean showAll)	**List<CommonUser>**	Returns the list of all the users.
When the showAll variable is set to true, it returns all the users - enabled and disabled - otherwise it only returns the enabled ones.		

Example:

```
using System;
using System.Collections.Generic;
```

```
using System.Linq;
using System.Text;
using com.openkm.sdk4csharp;

namespace OKMRest
{
   public class Program
   {
      static void Main(string[] args)
      {
         String host = "http://localhost:8080/openkm";
         String username = "okmAdmin";
         String password = "admin";
         OKMWebservice ws = OKMWebservicesFactory.newInstance(host);

         try
         {
            ws.login(user, password);
            foreach (CommonUser user in ws.auth.getUsers(false))
            {
               System.Console.WriteLine(user.toString());
            }
         }
         catch (Exception e)
         {
            System.Console.WriteLine(e.ToString());
         }
      }
   }
}
```

getUsersByRole

Description:

Method	Return values	Description
getUsersByRole(String roleId)	**List<CommonUser>**	Returns the list of all users who have been assigned a role.

Example:

```
using System;
using System.Collections.Generic;
using System.Linq;
using System.Text;
using com.openkm.sdk4csharp;

namespace OKMRest
{
   public class Program
   {
      static void Main(string[] args)
      {
         String host = "http://localhost:8080/openkm";
         String username = "okmAdmin";
         String password = "admin";
         OKMWebservice ws = OKMWebservicesFactory.newInstance(host);

         try
         {
```

```
            ws.login(user, password);
            foreach (CommonUser user in ws.auth.getUsersByRole("ROLE_ADMIN"))
            {
               System.Console.WriteLine(user.toString());
            }
         }
         catch (Exception e)
         {
            System.Console.WriteLine(e.ToString());
         }
      }
   }
}
```

revokeRole

Description:

Method	Return values	Description
revokeRole(String nodeId, String role, int permissions, boolean recursive)	**void**	Removes a role grant from a node.
The parameter recursive only makes sense when the nodeId is a folder or record node. When the parameter recursive is true, the change will be applied to the node and descendants.		

Example:

```
using System;
using System.Collections.Generic;
using System.Linq;
using System.Text;
using com.openkm.sdk4csharp;
using com.openkm.sdk4csharp.bean;

namespace OKMRest
{
   public class Program
   {
      static void Main(string[] args)
      {
         String host = "http://localhost:8180/openkm";
         String username = "okmAdmin";
         String password = "admin";
         OKMWebservice ws = OKMWebservicesFactory.newInstance(host);

         try
         {
            ws.login(user, password);
            // Remove ROLE_USER write grants at the node but not descendants
            ws.auth.revokeRole("14530e37-ac51-4a26-8049-0146a5916dec", "ROLE_USER", Permission.ALL_GRAN

            // Remove all ROLE_ADMIN grants to the node and descendants
            ws.auth.revokeRole("14530e37-ac51-4a26-8049-0146a5916dec", "ROLE_ADMIN", Permission.ALL_GRA
```

```
            }
            catch (Exception e)
            {
                System.Console.WriteLine(e.ToString());
            }
        }
    }
}
```

revokeUser

Description:

Method	Return values	Description
revokeUser(String nodeId, String user, int permissions, boolean recursive)	**void**	Removes a user grant from a node.
The parameter recursive only makes sense when the nodeId is a folder or record node. When the parameter recursive is true, the change will be applied to the node and descendants.		

Example:

```
using System;
using System.Collections.Generic;
using System.Linq;
using System.Text;
using com.openkm.sdk4csharp;

namespace OKMRest
{
    public class Program
    {
        static void Main(string[] args)
        {
            String host = "http://localhost:8080/openkm";
            String username = "okmAdmin";
            String password = "admin";
            OKMWebservice ws = OKMWebservicesFactory.newInstance(host);

            try
            {
                ws.login(user, password);
                // Remove john write grants at the node but not descendants
                ws.auth.revokeUser("14530e37-ac51-4a26-8049-0146a5916dec", "john", Permission.ALL_GRANTS, false

                // Remove all okmAdmin grants at the node and descendants
                ws.auth.revokeUser("14530e37-ac51-4a26-8049-0146a5916dec", "okmAdmin", Permission.ALL_GRANT
            } catch (Exception e) {
                System.Console.WriteLine(e.ToString());
            }
        }
    }
}
```

grantRole

Description:

Method	Return values	Description
grantRole(String nodeId, String role, int permissions, boolean recursive)	**void**	Adds a role grant to a node.
The parameter recursive only makes sense when the nodeId is a folder or record node. When the parameter recursive is true, the change will be applied to the node and descendants.		

Example:

```
using System;
using System.Collections.Generic;
using System.Linq;
using System.Text;
using com.openkm.sdk4csharp;

namespace OKMRest
{
   public class Program
   {
      static void Main(string[] args)
      {
         String host = "http://localhost:8080/openkm";
         String username = "okmAdmin";
         String password = "admin";
         OKMWebservice ws = OKMWebservicesFactory.newInstance(host);

         try
         {
            ws.login(user, password);
            // Add ROLE_USER write grants at the node but not descendants
            ws.auth.grantRole("14530e37-ac51-4a26-8049-0146a5916dec", "ROLE_USER", Permission.ALL_GRAN

            // Add all ROLE_ADMIN grants to the node and descendants
            ws.auth.grantRole("14530e37-ac51-4a26-8049-0146a5916dec", "ROLE_ADMIN", Permission.ALL_GRA
         } catch (Exception e) {
            System.Console.WriteLine(e.ToString());
         }
      }
   }
}
```

grantUser

Description:

	Return

Method	values	Description
grantUser(String nodeId, String userId, int permissions, boolean recursive)	**void**	Adds a user grant to a node.
The parameter recursive only makes sense when the nodeId is a folder or record node. When the parameter recursive is true, the change will be applied to the node and descendants.		

Example:

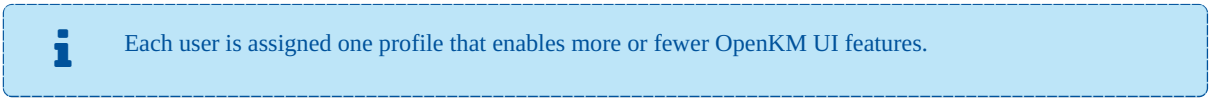
```
using System;
using System.Collections.Generic;
using System.Linq;
using System.Text;
using com.openkm.sdk4csharp;

namespace OKMRest
{
   public class Program
   {
      static void Main(string[] args)
      {
         String host = "http://localhost:8080/openkm";
         String username = "okmAdmin";
         String password = "admin";
         OKMWebservice ws = OKMWebservicesFactory.newInstance(host);

         try
         {
            ws.login(user, password);
            // Add john write grants at the node but not descendants
            ws.auth.grantUser("14530e37-ac51-4a26-8049-0146a5916dec", "john", Permission.ALL_GRANTS, false)

            // Add all okmAdmin grants at the node and descendants
            ws.auth.grantUser("14530e37-ac51-4a26-8049-0146a5916dec", "okmAdmin", Permission.ALL_GRANTS,
         } catch (Exception e) {
            System.Console.WriteLine(e.ToString());
         }
      }
   }
}
```

getProfiles

Description:

Method	Return values	Description
getProfiles(boolean filterByActive)	**List<Profile>**	Returns the list of all profiles.
When the parameter filterByActive is enabled, the method returns only the active profiles; otherwise it returns all available		

profiles.



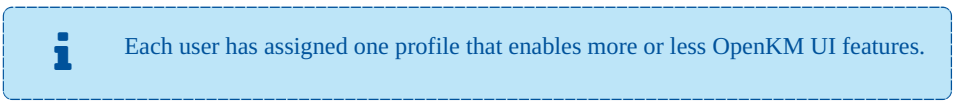
Example:

```
using System;
using System.Collections.Generic;
using System.Linq;
using System.Text;
using com.openkm.sdk4csharp;
using com.openkm.sdk4csharp.bean;

namespace OKMRest
{
   public class Program
   {
      static void Main(string[] args)
      {
         String host = "http://localhost:8080/openkm";
         String username = "okmAdmin";
         String password = "admin";
         OKMWebservice ws = OKMWebservicesFactory.newInstance(host);

         try
         {
            ws.login(user, password);
            foreach (Profile profile in ws.auth.getProfiles(true))
            {
              System.Console.WriteLine(profile.toString());
            }
         } catch (Exception e) {
            System.Console.WriteLine(e.ToString());
         }
      }
   }
}
```

getUserProfile

Description:

Method	Return values	Description
getUserProfile(String userId)	**Profile**	Returns the profile assigned to a user.



Example:

```
using System;
using System.Collections.Generic;
using System.Linq;
using System.Text;
using com.openkm.sdk4csharp;
using com.openkm.sdk4csharp.bean;

namespace OKMRest
{
   public class Program
   {
      static void Main(string[] args)
      {
         String host = "http://localhost:8080/openkm";
         String username = "okmAdmin";
         String password = "admin";
         OKMWebservice ws = OKMWebservicesFactory.newInstance(host);

         try
         {
            ws.login(user, password);
            System.Console.WriteLine(ws.auth.getUserProfile("okmAdmin").toString());
         } catch (Exception e) {
            System.Console.WriteLine(e.ToString());
         }
      }
   }
}
```

setUserProfile

Description:

Method	Return values	Description
setUserProfile(String userId, long profileId)	**void**	Changes the profile assigned to a user.

Each user has assigned one profile that enables more or less OpenKM UI features.

Example:

```
using System;
using System.Collections.Generic;
using System.Linq;
using System.Text;
using com.openkm.sdk4csharp;
using com.openkm.sdk4csharp.bean;

namespace OKMRest
{
   public class Program
   {
      static void Main(string[] args)
      {
         String host = "http://localhost:8080/openkm";
```

```
            String username = "okmAdmin";
            String password = "admin";
            OKMWebservice ws = OKMWebservicesFactory.newInstance(host);

            try
            {
                ws.login(user, password);
                // Set the profile named "default" to the user
                foreach (Profile profile in ws.auth.getProfiles(true))
                {
                    if (profile.name.Equals("Default"))
                    {
                        ws.setUserProfile("okmAdmin", profile.id);
                    }
                }
            } catch (Exception e) {
                System.Console.WriteLine(e.ToString());
            }
        }
    }
}
```

createUser

Description:

Method	Return values	Description
createUser(String user, String password, String email, String name, Boolean active)	**void**	Creates a new user.

Example:

```
using System;
using System.Collections.Generic;
using System.Linq;
using System.Text;
using com.openkm.sdk4csharp;

namespace OKMRest
{
    public class Program
    {
        static void Main(string[] args)
        {
            String host = "http://localhost:8080/openkm";
            String username = "okmAdmin";
            String password = "admin";
            OKMWebservice ws = OKMWebservicesFactory.newInstance(host);

            try
            {
                ws.login(user, password);
                ws.auth.createUser("test", "password.2016", "some@mail.com", "User Name", true);
            }
            catch (Exception e)
            {
                System.Console.WriteLine(e.ToString());
```

```
        }
      }
   }
}
```

deleteUser

Description:

Method	Return values	Description
deleteUser(String userId)	**void**	Deletes a user.

Example:

```
using System;
using System.Collections.Generic;
using System.Linq;
using System.Text;
using com.openkm.sdk4csharp;

namespace OKMRest
{
   public class Program
   {
      static void Main(string[] args)
      {
         String host = "http://localhost:8080/openkm";
         String username = "okmAdmin";
         String password = "admin";
         OKMWebservice ws = OKMWebservicesFactory.newInstance(host);

         try
         {
            ws.login(user, password);
            ws.auth.deleteUser("test");
         }
         catch (Exception e)
         {
            System.Console.WriteLine(e.ToString());
         }
      }
   }
}
```

updateUser

Description:

Method	Return values	Description
updateUser(String userId, String password, String email, String name, Boolean active)	**void**	Updates a user.

Example:

```
using System;
using System.Collections.Generic;
using System.Linq;
using System.Text;
using com.openkm.sdk4csharp;

namespace OKMRest
{
   public class Program
   {
      static void Main(string[] args)
      {
         String host = "http://localhost:8080/openkm";
         String username = "okmAdmin";
         String password = "admin";
         OKMWebservice ws = OKMWebservicesFactory.newInstance(host);

         try
         {
            ws.login(user, password);
            ws.auth.updateUser("test", "newpassword", "some@mail.com", "Test", false);
         }
         catch (Exception e)
         {
            System.Console.WriteLine(e.ToString());
         }
      }
   }
}
```

createRole

Description:

Method	Return values	Description
createRole(String roleId, boolean active)	**void**	Creates a new role.

Example:

```
using System;
using System.Collections.Generic;
using System.Linq;
using System.Text;
using com.openkm.sdk4csharp;

namespace OKMRest
{
   public class Program
   {
      static void Main(string[] args)
      {
         String host = "http://localhost:8080/openkm";
         String username = "okmAdmin";
         String password = "admin";
         OKMWebservice ws = OKMWebservicesFactory.newInstance(host);
```

```
            try
            {
                ws.login(user, password);
                ws.auth.createRole("ROLE_TEST", true);
            }
            catch (Exception e)
            {
                System.Console.WriteLine(e.ToString());
            }
        }
    }
}
```

deleteRole

Description:

Method	Return values	Description
deleteRole(String roleId)	**void**	Deletes a role.

Example:

```
using System;
using System.Collections.Generic;
using System.Linq;
using System.Text;
using com.openkm.sdk4csharp;

namespace OKMRest
{
    public class Program
    {
        static void Main(string[] args)
        {
            String host = "http://localhost:8080/openkm";
            String username = "okmAdmin";
            String password = "admin";
            OKMWebservice ws = OKMWebservicesFactory.newInstance(host);

            try
            {
                ws.login(user, password);
                ws.auth.deleteRole("ROLE_TEST");
            }
            catch (Exception e)
            {
                System.Console.WriteLine(e.ToString());
            }
        }
    }
}
```

updateRole

Description:

Method	Return values	Description
updateRole(String roleId, boolean active)	**void**	Updates a role.

Example:

```
using System;
using System.Collections.Generic;
using System.Linq;
using System.Text;
using com.openkm.sdk4csharp;

namespace OKMRest
{
   public class Program
   {
      static void Main(string[] args)
      {
         String host = "http://localhost:8080/openkm";
         String username = "okmAdmin";
         String password = "admin";
         OKMWebservice ws = OKMWebservicesFactory.newInstance(host);

         try
         {
            ws.login(user, password);
            ws.auth.updateRole("ROLE_TEST", true);
         }
         catch (Exception e)
         {
            System.Console.WriteLine(e.ToString());
         }
      }
   }
}
```

assignRole

Description:

Method	Return values	Description
assignRole(String userId, String roleId)	**void**	Assigns a role to a user.

Example:

```
using System;
using System.Collections.Generic;
using System.Linq;
using System.Text;
using com.openkm.sdk4csharp;

namespace OKMRest
{
   public class Program
   {
```

```
        static void Main(string[] args)
        {
            String host = "http://localhost:8080/openkm";
            String username = "okmAdmin";
            String password = "admin";
            OKMWebservice ws = OKMWebservicesFactory.newInstance(host);

            try
            {
                ws.login(user, password);
                ws.auth.assignRole("test", "ROLE_USER");
            }
            catch (Exception e)
            {
                System.Console.WriteLine(e.ToString());
            }
        }
    }
}
```

removeRole

Description:

Method	Return values	Description
removeRole(String userId, String roleId)	**void**	Removes a role from a user.

Example:

```
using System;
using System.Collections.Generic;
using System.Linq;
using System.Text;
using com.openkm.sdk4csharp;

namespace OKMRest
{
    public class Program
    {
        static void Main(string[] args)
        {
            String host = "http://localhost:8080/openkm";
            String username = "okmAdmin";
            String password = "admin";
            OKMWebservice ws = OKMWebservicesFactory.newInstance(host);

            try
            {
                ws.login(user, password);
                ws.auth.removeRole("test", "ROLE_USER");
            }
            catch (Exception e)
            {
                System.Console.WriteLine(e.ToString());
            }
        }
    }
}
```

changeSecurity

Description:

Method	Return values	Description
changeSecurity(ChangeSecurity changeSecurity)	**void**	Changes the security of a node.

Example:

```
using System;
using System.Collections.Generic;
using System.Linq;
using System.Text;
using com.openkm.sdk4csharp;
using com.openkm.sdk4csharp.bean;

namespace OKMRest
{
   public class Program
   {
      static void Main(string[] args)
      {
         String host = "http://localhost:8080/openkm";
         String username = "okmAdmin";
         String password = "admin";
         OKMWebservice ws = OKMWebservicesFactory.newInstance(host);

         try
         {
            ws.login(user, password);
            Folder fld = ws.folder.createFolder("a978f8e6-aa87-4f0f-b7bc-6f44cb090fdf", "Folder1");
            ChangeSecurity cs = new ChangeSecurity();
            List<GrantedRole> grList = new List<GrantedRole>();
            GrantedRole gr = new GrantedRole();
            gr.role = "ROLE_TEST";
            gr.permissions = Permission.READ | Permission.WRITE;
            grList.Add(gr);
            cs.grantedRolesList = grList;
            ws.auth.changeSecurity(fld.uuid, cs);
         }
         catch (Exception e)
         {
            System.Console.WriteLine(e.ToString());
         }
      }
   }
}
```

overwriteSecurity

Description:

Method	Return values	Description
overwriteSecurity(String uuid, ChangeSecurity	**void**	Overwrites the security of a

changeSecurity)		node.

The ChangeSecurity object is used in the changeSecurity and overwriteSecurity methods.

Although values set in the revokeUsers and revokeRoles variables of the ChangeSecurity object are present, these values will not be taken into consideration when overwriting the security.

Example:

```
using System;
using System.Collections.Generic;
using System.Linq;
using System.Text;
using com.openkm.sdk4csharp;
using com.openkm.sdk4csharp.bean;

namespace OKMRest
{
   public class Program
   {
      static void Main(string[] args)
      {
         String host = "http://localhost:8080/openkm";
         String username = "okmAdmin";
         String password = "admin";
         OKMWebservice ws = OKMWebservicesFactory.newInstance(host);

         try
         {
            ws.login(user, password);
            GrantedUser gu = new GrantedUser();
            gu.user = pherrera;
            gu.permissions = Permission.READ | Permission.WRITE;

            List<GrantedUser> guList = new List<GrantedUser>();
            guList.Add(gu);

            GrantedRole gr = new GrantedRole();
            gr.role = "ROLE_TEST";
            gr.permissions = Permission.READ | Permission.WRITE;

            List<GrantedRole> grList = new List<GrantedRole>();
            grList.Add(gr);

            ChangeSecurity changeSecurity = new ChangeSecurity();
            changeSecurity.recursive = false;
            changeSecurity.grantedUsersList = guList;
            changeSecurity.grantedRolesList = grList;

            ws.auth.overwriteSecurity("4f873d10-654e-4d99-a94f-15466e30a0f6", changeSecurity);
         }
         catch (Exception e)
         {
            System.Console.WriteLine(e.ToString());
         }
      }
   }
}
```

getGrantedUsersAndRoles

Description:

Method	Return values	Description
getGrantedUsersAndRoles(String uuid)	**GrantedUsersAndRolesItem**	Returns the granted users and roles of a node.

Example:

```
using System;
using System.Collections.Generic;
using System.Linq;
using System.Text;
using com.openkm.sdk4csharp;
using com.openkm.sdk4csharp.bean;

namespace OKMRest
{
    public class Program
    {
        static void Main(string[] args)
        {
            String host = "http://localhost:8080/openkm";
            String username = "okmAdmin";
            String password = "admin";
            OKMWebservice ws = OKMWebservicesFactory.newInstance(host);

            try
            {
                ws.login(user, password);
                GrantedUsersAndRolesItem grants = ws.auth.getGrantedUsersAndRoles("15e35aef-f1bb-451e-ac86-3b
                foreach (KeyValuePair<string, int> user in grants.grantedUsers)
                {
                    System.Console.WriteLine(user.Key + "->" + user.Value);
                }
                foreach (KeyValuePair<string, int> role in grants.grantedRoles)
                {
                    System.Console.WriteLine(role.Key + "->" + role.Value);
                }
            }
            catch (Exception e)
            {
                System.Console.WriteLine(e.ToString());
            }
        }
    }
}
```

setUserPermissions

Description:

Method	Return values	Description

setUserPermissions(String uuid, String userId, int permissions, bool recursive)	**void**	Updates user permissions on a node.
The parameter recursive only makes sense when the uuid is a folder or record node. When the parameter recursive is true, the change will be applied to the node and its descendants.		

Example:

```
using System;
using System.Collections.Generic;
using System.Linq;
using System.Text;
using com.openkm.sdk4csharp;
using com.openkm.sdk4csharp.bean;

namespace OKMRest
{
    public class Program
    {
        static void Main(string[] args)
        {
            String host = "http://localhost:8080/openkm";
            String username = "okmAdmin";
            String password = "admin";
            OKMWebservice ws = OKMWebservicesFactory.newInstance(host);

            try
            {
                ws.login(user, password);
                // Set user permissions
                ws.auth.setUserPermissions("22c1d190-f798-489d-b420-2008cb38705b", "user1", Permission.READ + P

                // Update permissions of okmAdmin at the node and descendants
                ws.auth.setUserPermissions("22c1d190-f798-489d-b420-2008cb38705b", "okmAdmin", Permission.ALL_
            }
            catch (Exception e)
            {
                System.Console.WriteLine(e.ToString());
            }
        }
    }
}
```

setRolePermissions

Description:

Method	Return values	Description
setRolePermissions(String uuid, String roleId, int permissions, bool recursive)	**void**	Updates role permissions on a node.

The parameter recursive only makes sense when the uuid is a folder or record node.

When the parameter recursive is true, the change will be applied to the node and its descendants.

Example:

```
using System;
using System.Collections.Generic;
using System.Linq;
using System.Text;
using com.openkm.sdk4csharp;
using com.openkm.sdk4csharp.bean;

namespace OKMRest
{
   public class Program
   {
      static void Main(string[] args)
      {
         String host = "http://localhost:8080/openkm";
         String username = "okmAdmin";
         String password = "admin";
         OKMWebservice ws = OKMWebservicesFactory.newInstance(host);

         try
         {
            ws.login(user, password);
            // Set role permissions
            ws.auth.setRolePermissions("22c1d190-f798-489d-b420-2008cb38705b", "ROLE_USER", Permission.RE

            // Update permissions of ROLE_ADMIN at the node and descendants
            ws.auth.setRolePermissions("22c1d190-f798-489d-b420-2008cb38705b", "ROLE_ADMIN", Permission.A
         }
         catch (Exception e)
         {
            System.Console.WriteLine(e.ToString());
         }
      }
   }
}
```

getUserTenants

Description:

Method	Return values	Description
getUserTenants()	**List<Tenant>**	Returns the list of all tenants.

Example:

```
using System;
using System.Collections.Generic;
using System.Linq;
using System.Text;
using com.openkm.sdk4csharp;
```

```
using com.openkm.sdk4csharp.bean;

namespace OKMRest
{
    public class Program
    {
        static void Main(string[] args)
        {
            String host = "http://localhost:8080/openkm";
            String username = "okmAdmin";
            String password = "admin";
            OKMWebservice ws = OKMWebservicesFactory.newInstance(host);

            try
            {
                ws.login(user, password);
                List<Tenant> tenants = ws.auth.getUserTenants();
                foreach (Tenant tenant in tenants)
                {
                    System.Console.WriteLine(tenant.toString());
                }
            }
            catch (Exception e)
            {
                System.Console.WriteLine(e.ToString());
            }
        }
    }
}
```

setUserTenant

Description:

Method	Return values	Description
setUserTenant(long tenantId)	**void**	Change the assigned tenant for a user.

A user might have access to several tenants but have only one assigned.

Example:

```
using System;
using System.Collections.Generic;
using System.Linq;
using System.Text;
using com.openkm.sdk4csharp;
using com.openkm.sdk4csharp.bean;

namespace OKMRest
{
    public class Program
    {
        static void Main(string[] args)
        {
            String host = "http://localhost:8080/openkm";
```

```
            String username = "okmAdmin";
            String password = "admin";
            OKMWebservice ws = OKMWebservicesFactory.newInstance(host);

            try
            {
               ws.login(user, password);
               long tenantId = 1; // Valid tenant id
               ws.auth.setUserTenant(tenantId);
            }
            catch (Exception e)
            {
               System.Console.WriteLine(e.ToString());
            }
        }
    }
}
```

isAdmin

Description:

Method	Return values	Description
isAdmin()	**bool**	Check if the authenticated user is a member of the administrators.

Example:

```
using System;
using System.Collections.Generic;
using System.Linq;
using System.Text;
using com.openkm.sdk4csharp;
using com.openkm.sdk4csharp.bean;

namespace OKMRest
{
    public class Program
    {
        static void Main(string[] args)
        {
            String host = "http://localhost:8080/openkm";
            String username = "okmAdmin";
            String password = "admin";
            OKMWebservice ws = OKMWebservicesFactory.newInstance(host);

            try
            {
               ws.login(user, password);
               bool isAdmin = ws.auth.isAdmin();
            }
            catch (Exception e)
            {
               System.Console.WriteLine(e.ToString());
            }
        }
    }
}
```

getSessionId

Description:

Method	Return values	Description
getSessionId()	**String**	Get the HTTP session ID.

Example:

```
using System;
using System.Collections.Generic;
using System.Linq;
using System.Text;
using com.openkm.sdk4csharp;
using com.openkm.sdk4csharp.bean;
using com.openkm.sdk4csharp.impl;

namespace OKMRest
{
    public class Program
    {
        static void Main(string[] args)
        {
            String host = "http://localhost:8080/openkm";
            String username = "okmAdmin";
            String password = "admin";
            OKMWebservice ws = OKMWebservicesFactory.newInstance(host);

            try
            {
                ws.login(user, password);
                String id = ws.auth.getSessionId();
            }
            catch (Exception e)
            {
                System.Console.WriteLine(e.ToString());
            }
        }
    }
}
```

hasSecurityRecursive

Description:

Method	Return values	Description
hasSecurityRecursive()	**bool**	Check if the user has permission to propagate security recursively.

The role is set in the configuration parameter named "**default.security.recursive.role**."

Example:

```
using System;
using System.Collections.Generic;
using System.Linq;
using System.Text;
using com.openkm.sdk4csharp;
using com.openkm.sdk4csharp.bean;
using com.openkm.sdk4csharp.impl;

namespace OKMRest
{
    public class Program
    {
        static void Main(string[] args)
        {
            String host = "http://localhost:8080/openkm";
            String username = "okmAdmin";
            String password = "admin";
            OKMWebservice ws = OKMWebservicesFactory.newInstance(host);

            try
            {
                ws.login(user, password);
                bool hasSecurityRecursive = ws.auth.hasSecurityRecursive();
            }
            catch (Exception e)
            {
                System.Console.WriteLine(e.ToString());
            }
        }
    }
}
```

hasTaskManagerAdmin

Description:

Method	Return values	Description
hasTaskManagerAdmin()	**bool**	Check if the user is a member of the "task manager admin" role.

The configuration parameter named "**default.task.manager.admin.role**" is used to indicate the role.

Example:

```
using System;
using System.Collections.Generic;
using System.Linq;
using System.Text;
using com.openkm.sdk4csharp;
using com.openkm.sdk4csharp.bean;
using com.openkm.sdk4csharp.impl;
```

```
namespace OKMRest
{
    public class Program
    {
        static void Main(string[] args)
        {
            String host = "http://localhost:8080/openkm";
            String username = "okmAdmin";
            String password = "admin";
            OKMWebservice ws = OKMWebservicesFactory.newInstance(host);

            try
            {
                ws.login(user, password);
                bool hasSecurityRecursive = ws.auth.hasTaskManagerAdmin();
            }
            catch (Exception e)
            {
                System.Console.WriteLine(e.ToString());
            }
        }
    }
}
```

isLoginLowercase

Description:

Method	Return values	Description
isLoginLowercase()	**bool**	Return true when the user's login must be in lowercase.

Example:

```
using System;
using System.Collections.Generic;
using System.Linq;
using System.Text;
using com.openkm.sdk4csharp;
using com.openkm.sdk4csharp.bean;
using com.openkm.sdk4csharp.impl;

namespace OKMRest
{
    public class Program
    {
        static void Main(string[] args)
        {
            String host = "http://localhost:8080/openkm";
            String username = "okmAdmin";
            String password = "admin";
            OKMWebservice ws = OKMWebservicesFactory.newInstance(host);

            try
            {
                ws.login(user, password);
                System.Console.WriteLine(ws.auth.isLoginLowercase().ToString());
            }
            catch (Exception e)
            {
```

```
            System.Console.WriteLine(e.ToString());
        }
    }
  }
}
```

isPasswordExpired

Description:

Method	Return values	Description
isPasswordExpired()	Boolean	True when the user's password has expired.

By default, password expiration is disabled. Take a look at the configuration parameter named "**user.password.expiration**" in the Security configuration parameters section to enable.

Example:

```
using System;
using System.Collections.Generic;
using System.Linq;
using System.Text;
using com.openkm.sdk4csharp;
using com.openkm.sdk4csharp.bean;
using com.openkm.sdk4csharp.impl;

namespace OKMRest
{
    public class Program
    {
        static void Main(string[] args)
        {
            String host = "http://localhost:8080/openkm";
            String username = "okmAdmin";
            String password = "admin";
            OKMWebservice ws = OKMWebservicesFactory.newInstance(host);

            try
            {
                ws.login(user, password);
                System.Console.WriteLine("Password expired= " + ws.auth.isPasswordExpired().ToString());
            }
            catch (Exception e)
            {
                System.Console.WriteLine(e.ToString());
            }
        }
    }
}
```

getUserToken

Description:

Method	Return values	Description
getUserToken(String userId)	String	Return the auth token for a given user.

This action can only be done by a superuser (a user with ROLE_ADMIN).

Example:

```
using System;
using System.Collections.Generic;
using System.Linq;
using System.Text;
using com.openkm.sdk4csharp;
using com.openkm.sdk4csharp.bean;
using com.openkm.sdk4csharp.impl;

namespace OKMRest
{
    public class Program
    {
        static void Main(string[] args)
        {
            String host = "http://localhost:8080/openkm";
            String username = "okmAdmin";
            String password = "admin";
            OKMWebservice ws = OKMWebservicesFactory.newInstance(host);

            try
            {
                ws.login(user, password);
                String userToken = ws.auth.getUserToken("testUser");
                Console.WriteLine("UserToken: " + userToken);
            }
            catch (Exception e)
            {
                System.Console.WriteLine(e.ToString());
            }
        }
    }
}
```

getUserToken

Description:

Method	Return values	Description
getUserToken(String userId, int expiration, bool restrictIp)	String	Return the auth token for a given user.

This action can only be done by a superuser (a user with ROLE_ADMIN).

Example:

```
using System;
using System.Collections.Generic;
using System.Linq;
using System.Text;
using com.openkm.sdk4csharp;
using com.openkm.sdk4csharp.bean;
using com.openkm.sdk4csharp.impl;

namespace OKMRest
{
    public class Program
    {
        static void Main(string[] args)
        {
            String host = "http://localhost:8080/openkm";
            String username = "okmAdmin";
            String password = "admin";
            OKMWebservice ws = OKMWebservicesFactory.newInstance(host);

            try
            {
                ws.login(user, password);
                String userToken = ws.auth.getUserToken("testUser", 7, true);
                Console.WriteLine("UserToken: " + userToken);
            }
            catch (Exception e)
            {
                System.Console.WriteLine(e.ToString());
            }
        }
    }
}
```

createPersonalAccessToken

Description:

Method	Return values	Description
createPersonalAccessToken(String name, DateTime expiration)	String	Return the personal access token.

You can generate a personal access token for each application that requires access to the API.

Example:

```
using System;
using System.Collections.Generic;
using System.Linq;
using System.Text;
using com.openkm.sdk4csharp;
using com.openkm.sdk4csharp.bean;
using com.openkm.sdk4csharp.impl;

namespace OKMRest
{
    public class Program
    {
        static void Main(string[] args)
        {
            String host = "http://localhost:8080/openkm";

            try
            {
                DateTime today = DateTime.Now;
                DateTime futureDate = today.AddDays(365);// create an expired token
                String personalAccessToken = ws.auth.createPersonalAccessToken("good-pat-test", futureDate);
                OKMWebservices ws= OKMWebservicesFactory.newInstance(Config.HOST);
                ws.login(personalAccessToken);
            }
            catch (Exception e)
            {
               System.Console.WriteLine(e.ToString());
            }
        }
    }
}
```

Bookmark samples

Basic

Suggested code sample

First, you must create the webservice object:

```
OKMWebservices ws = OKMWebservicesFactory.newInstance(host);
```

Then you should log in using the method "**login**". You can access the "**login**" method from the webservice object "**ws**" as shown below:

```
ws.login(user, password);
```

Once you are logged in to the webservice, the session is kept in the webservice object. Then you can use the other API methods.

At this point you can use all the Bookmark methods from the "**bookmark**" class as shown below:

```
ws.bookmark.getUserBookmarks()
```

Methods

getUserBookmarks

Description:

Method	Return values	Description
getUserBookmarks()	**List<Bookmark>**	Returns a list of all the bookmarks for a user.

Example:

```
using System;
using System.Collections.Generic;
using System.Linq;
using System.Text;
using com.openkm.sdk4csharp;
using com.openkm.sdk4csharp.bean;

namespace OKMRest
{
   public class Program
   {
      static void Main(string[] args)
```

```
        {
            String host = "http://localhost:8180/openkm";
            String username = "okmAdmin";
            String password = "admin";
            OKMWebservice ws = OKMWebservicesFactory.newInstance(host);

            try
            {
                ws.login(user, password);
                List<Bookmark> bookmarks = ws.bookmark.getUserBookmarks();
                foreach (Bookmark bm in bookmarks)
                {
                    System.Console.WriteLine(bm.toString());
                }
            }
            catch (Exception e)
            {
                System.Console.WriteLine(e.ToString());
            }
        }
    }
}
```

create

Description:

Method	Return values	Description
create(String uuid, String name)	**Bookmark**	Create a new bookmark.
The value of the **uuid** is the UUID of the node (document, folder, mail, or record).		

Example:

```
using System;
using System.Collections.Generic;
using System.Linq;
using System.Text;
using com.openkm.sdk4csharp;
using com.openkm.sdk4csharp.bean;

namespace OKMRest
{
    public class Program
    {
        static void Main(string[] args)
        {
            String host = "http://localhost:8180/openkm";
            String username = "okmAdmin";
            String password = "admin";
            OKMWebservice ws = OKMWebservicesFactory.newInstance(host);

            try
            {
                ws.login(user, password);
                Bookmark bookmark = ws.bookmark.create("a37f570f-5e7f-4a03-8d04-9b3689be82f1", "Any name");
            }
```

```
            catch (Exception e)
            {
                System.Console.WriteLine(e.ToString());
            }
        }
    }
}
```

rename

Description:

Method	Return values	Description
rename(int bookmarkId, String name)	**void**	Renames a bookmark.

Example:

```
using System;
using System.Collections.Generic;
using System.Linq;
using System.Text;
using com.openkm.sdk4csharp;
using com.openkm.sdk4csharp.bean;

namespace OKMRest
{
    public class Program
    {
        static void Main(string[] args)
        {
            String host = "http://localhost:8180/openkm";
            String username = "okmAdmin";
            String password = "admin";
            OKMWebservice ws = OKMWebservicesFactory.newInstance(host);

            try
            {
                ws.login(user, password);
                int bookmarkId = 1;
                ws.bookmark.rename(bookmarkId, "New name");
            }
            catch (Exception e)
            {
                System.Console.WriteLine(e.ToString());
            }
        }
    }
}
```

delete

Description:

Method	Return values	Description

delete(int bookmarkId)	**void**	Deletes a bookmark.

Example:

```
using System;
using System.Collections.Generic;
using System.Linq;
using System.Text;
using com.openkm.sdk4csharp;
using com.openkm.sdk4csharp.bean;

namespace OKMRest
{
   public class Program
   {
      static void Main(string[] args)
      {
         String host = "http://localhost:8180/openkm";
         String username = "okmAdmin";
         String password = "admin";
         OKMWebservice ws = OKMWebservicesFactory.newInstance(host);

         try
         {
            ws.login(user, password);
            int bookmarkId = 1;
            ws.bookmark.delete(bookmarkId);
         }
         catch (Exception e)
         {
            System.Console.WriteLine(e.ToString());
         }
      }
   }
}
```

Conversion samples

Basic

Suggested code sample

First, you must create the webservice object:

```
OKMWebservices ws = OKMWebservicesFactory.newInstance(host);
```

Then you should log in using the method "**login**". You can access the "**login**" method from the web service object "**ws**" as shown below:

```
ws.login(user, password);
```

Once you are logged in to the web service, the session is kept in the web service object. Then you can use the other API methods.

At this point you can use all the Conversion methods from the "**conversion**" class as shown below:

```
ws.conversion.doc2pdf(is, "test.docx");
```

Methods

doc2pdf

Description:

Method	Return values	Description
doc2pdf(FileStream is, String fileName)	**Stream**	Retrieves the uploaded document converted to PDF format.

The parameter fileName is the document file name. The application uses this parameter to identify the document MIME type by the document extension.

The OpenOffice service must be enabled on the OpenKM server for it to run.

Example:

```
using System;
using System.Collections.Generic;
using System.Linq;
using System.Text;
using com.openkm.sdk4csharp;
using com.openkm.sdk4csharp.util;
using System.IO;

namespace OKMRest
{
   public class Program
   {
      static void Main(string[] args)
      {
         String host = "http://localhost:8080/openkm";
         String username = "okmAdmin";
         String password = "admin";
         OKMWebservice ws = OKMWebservicesFactory.newInstance(host);

         try
         {
            ws.login(user, password);
            FileStream inputFile = new FileStream("C:\\Documents\\test.docx", FileMode.Open);
            Stream tmpFile= ws.conversion.doc2pdf(inputFile, "test.docx");
            inputFile.Close();
            FileStream outputFile = new FileStream("C:\\Documents\\out.pdf", FileMode.OpenOrCreate, FileAccess.R
            tmpFIle.CopyTo(outputFile);
            outputFile.Close();
            tmpFIle.Close();
         }
         catch (Exception e)
         {
            System.Console.WriteLine(e.ToString());
         }
      }
   }
}
```

imageConvert

Description:

Method	Return values	Description
imageConvert(FileStream fs, String fileName, List<String> params, String dstMimeType)	**Stream**	Retrieve the uploaded image with transformations.

The variable fileName is the document file name. The application uses this variable to identify the document MIME type by the document extension.

The parameter dstMimeType is the expected document MIME type of the result.

Using this method, you are actually executing the ImageMagick convert tool on the server side.

You can set many parameters - transformations - in **the params** variable. Take a look at ImageMagick

convert tool to get a complete list of them.

The image convert tool must be enabled on the OpenKM server for it to run.

When the params value is not empty, it must always end with the chain "${fileIn} ${fileOut}".

Ensure there is only one whitespace character as a separator between two parameters.

When building your integrations, we suggest installing ImageMagick software locally and checking your image transformations first from the command line.

Example:

```
using System.Collections.Generic;
using System.Linq;
using System.Text;
using com.openkm.sdk4csharp;
using com.openkm.sdk4csharp.util;
using System.IO;

namespace OKMRest
{
   public class Program
   {
      static void Main(string[] args)
      {
         String host = "http://localhost:8080/openkm";
         String username = "okmAdmin";
         String password = "admin";
         OKMWebservice ws = OKMWebservicesFactory.newInstance(host);

         try
         {
            ws.login(user, password);
            FileStream fileStream = new FileStream("C:\\Documents\\test.jpg", FileMode.Open, FileAccess.Read);
            List<string> param = new List<string>();
            param.Add("-resize 50% ${fileIn} ${fileOut}");
            Stream tmpFIle = ws.conversion.imageConvert(fileStream, test.jpg, param, "image/png");
            fileStream.Close();
            FileStream destFile = new FileStream("C:\\Documents\\test.png", FileMode.OpenOrCreate);
            tmpFIle.CopyTo(destFile);
            destFile.Close();
            tmpFIle.Close();
         }
         catch (Exception e)
         {
            System.Console.WriteLine(e.ToString());
         }
      }
   }
}
```

html2pdf

Description:

Method	Return values	Description

html2pdf(String url)	**Stream**	Retrieves the PDF from a URL.

The HTML to PDF conversion tool must be enabled on the OpenKM server for it to run.

Example:

```
using System.Collections.Generic;
using System.Linq;
using System.Text;
using com.openkm.sdk4csharp;
using com.openkm.sdk4csharp.util;
using System.IO;

namespace OKMRest
{
   public class Program
   {
      static void Main(string[] args)
      {
         String host = "http://localhost:8080/openkm";
         String username = "okmAdmin";
         String password = "admin";
         OKMWebservice ws = OKMWebservicesFactory.newInstance(host);

         try
         {
            ws.login(user, password);
            Stream tmpFile = ws.conversion.html2pdf("http://www.openkm.com");
            FileStream destFile = new FileStream("C:\\Documents\\test.pdf", FileMode.OpenOrCreate);
            tmpFile.CopyTo(destFile);
            destFile.Close();
            tmpFile.Close();
         }
         catch (Exception e)
         {
            System.Console.WriteLine(e.ToString());
         }
      }
   }
}
```

doc2txt

Description:

Method	Return values	Description
doc2txt(FileStream fs, String fileName)	**String**	Extracts the text from the uploaded document.

A Text Extractor must be enabled for the document MIME type on the OpenKM server for it to run.

Example:

```
using System;
using System.Collections.Generic;
using System.Linq;
using System.Text;
using com.openkm.sdk4csharp;
using System.IO;

namespace OKMRest
{
   public class Program
   {
      static void Main(string[] args)
      {
         String host = "http://localhost:8080/openkm";
         String username = "okmAdmin";
         String password = "admin";
         OKMWebservice ws = OKMWebservicesFactory.newInstance(host);

         try
         {
            ws.login(user, password);
            FileStream fileStream = new FileStream("C:\\Documents\\test.docx", FileMode.Open);
            System.Console.WriteLine(ws.conversion.doc2txt(fileStream, "test.docx"));
            fileStream.Close();
         }
         catch (Exception e)
         {
            System.Console.WriteLine(e.ToString());
         }
      }
   }
}
```

img2txt

Description:

Method	Return values	Description
img2txt(FileStream fs, String fileName)	**String**	Extracts the text from the uploaded image.

The OCR engine must be enabled on the OpenKM server for it to run.

Example:

```
using System;
using System.Collections.Generic;
using System.Linq;
using System.Text;
using com.openkm.sdk4csharp;
using System.IO;
```

```
namespace OKMRest
{
    public class Program
    {
        static void Main(string[] args)
        {
            String host = "http://localhost:8080/openkm";
            String username = "okmAdmin";
            String password = "admin";
            OKMWebservice ws = OKMWebservicesFactory.newInstance(host);

            try
            {
                ws.login(user, password);
                FileStream fileStream = new FileStream("C:\\Images\\test.png", FileMode.Open);
                System.Console.WriteLine(ws.conversion.img2txt(fileStream, "test.png"));
                fileStream.Close();
            }
            catch (Exception e)
            {
                System.Console.WriteLine(e.ToString());
            }
        }
    }
}
```

barcode2txt

Description:

Method	Return values	Description
barcode2txt(FileStream fs, String fileName)	**String**	Extracts the barcode text from the uploaded image.

The Barcode tool must be enabled on the OpenKM server for it to run.

Example:

```
using System;
using System.Collections.Generic;
using System.Linq;
using System.Text;
using com.openkm.sdk4csharp;
using System.IO;

namespace OKMRest
{
    public class Program
    {
        static void Main(string[] args)
        {
            String host = "http://localhost:8080/openkm";
            String username = "okmAdmin";
            String password = "admin";
            OKMWebservice ws = OKMWebservicesFactory.newInstance(host);
```

```
            try
            {
                ws.login(user, password);
                FileStream fileStream = new FileStream("C:\\Images\\test.png", FileMode.Open);
                System.Console.WriteLine(ws.conversion.barcode2txt(fileStream, "test.png"));
                fileStream.Close();
            }
            catch (Exception e)
            {
                System.Console.WriteLine(e.ToString());
            }
        }
    }
}
```

CronTab samples

Basics

Suggested code sample

First, you must create the web service object:

```
OKMWebservices ws = OKMWebservicesFactory.newInstance(host);
```

Then you should log in using the "**login**" method. You can access the "**login**" method from the web service object "**ws**" as shown below:

```
ws.login(user, password);
```

Once you are logged in to the web service, the session is kept in the web service object. Then you can use the other API methods.

At this point, you can use all the CronTab methods from the "**cronTab**" class as shown below:

```
List<CronTab> cronTabs = ws.cronTab.findAll();
```

Methods

findAll

Description:

Method	Return values	Description
findAll()	**List<CronTab>**	Returns a list of all CronTab entries registered in the system.

Each **CronTab** object in the returned list contains the following properties:

- **id**: Unique identifier of the cron tab.
- **name**: Name of the cron tab.
- **expression**: Cron expression that defines the execution schedule.
- **className**: Java class name associated with the cron task.
- **active**: Indicates whether the cron tab is currently enabled.
- **lastBegin**: Date and time of the last execution start.

- **lastEnd**: Date and time of the last execution end.
- **error**: Last error message, if any.

Example:

```
using System;
 using System.Collections.Generic;
 using com.openkm.sdk4csharp;
 using com.openkm.sdk4csharp.bean;

 namespace OKMRest
 {
    public class Program
    {
        static void Main(string[] args)
        {
            String host = "http://localhost:8080/openkm";
            String user = "okmAdmin";
            String password = "admin";
            OKMWebservices ws = OKMWebservicesFactory.newInstance(host);

            try
            {
                ws.login(user, password);
                List<CronTab> cronTabs = ws.cronTab.findAll();
                foreach (CronTab ct in cronTabs)
                {
                    System.Console.WriteLine(ct.toString());
                }
            }
            catch (Exception e)
            {
                System.Console.WriteLine(e.ToString());
            }
        }
    }
 }
```

update

Description:

Method	Return values	Description
update(long id, String name, String expression, bool active)	**void**	Updates the configuration of an existing cron tab.

The value of **id** is the unique identifier of the cron tab to be updated.

The value of **name** is the new name to assign to the cron tab.

The value of **expression** is the new cron expression that defines the execution schedule.

The value of **active** determines whether the cron tab should be enabled (true) or disabled (false).

Example:

```
using System;
 using System.Collections.Generic;
 using com.openkm.sdk4csharp;
 using com.openkm.sdk4csharp.bean;

 namespace OKMRest
 {
    public class Program
    {
       static void Main(string[] args)
       {
          String host = "http://localhost:8080/openkm";
          String user = "okmAdmin";
          String password = "admin";
          OKMWebservices ws = OKMWebservicesFactory.newInstance(host);

          try
          {
             ws.login(user, password);
             List<CronTab> cronTabs = ws.cronTab.findAll();
             CronTab ct = cronTabs.Find(c => c.name == "Purge Activity Log");
             // Disable the cron tab
             ws.cronTab.update(ct.id, ct.name, ct.expression, false);
             // Re-enable the cron tab
             ws.cronTab.update(ct.id, ct.name, ct.expression, true);
          }
          catch (Exception e)
          {
             System.Console.WriteLine(e.ToString());
          }
       }
    }
 }
```

reset

Description:

Method	Return values	Description
reset(long id)	**void**	Resets the execution state of a cron tab, clearing its last execution data.

The value of **id** is the unique identifier of the cron tab to be reset.

Example:

```
using System;
 using System.Collections.Generic;
 using com.openkm.sdk4csharp;
 using com.openkm.sdk4csharp.bean;
```

```
namespace OKMRest
{
   public class Program
   {
      static void Main(string[] args)
      {
         String host = "http://localhost:8080/openkm";
         String user = "okmAdmin";
         String password = "admin";
         OKMWebservices ws = OKMWebservicesFactory.newInstance(host);

         try
         {
            ws.login(user, password);
            List<CronTab> cronTabs = ws.cronTab.findAll();
            CronTab ct = cronTabs.Find(c => c.name == "Purge Activity Log");
            ws.cronTab.reset(ct.id);
         }
         catch (Exception e)
         {
            System.Console.WriteLine(e.ToString());
         }
      }
   }
}
```

execute

Description:

Method	Return values	Description
execute(long id)	**void**	Triggers the immediate execution of a cron tab, regardless of its scheduled expression.

The value of **id** is the unique identifier of the cron tab to be executed.

After calling this method, allow some time for the cron task to complete before checking the **lastEnd** property.

Example:

```
using System;
 using System.Collections.Generic;
 using System.Threading;
 using com.openkm.sdk4csharp;
 using com.openkm.sdk4csharp.bean;

 namespace OKMRest
 {
    public class Program
    {
       static void Main(string[] args)
```

```
        {
            String host = "http://localhost:8080/openkm";
            String user = "okmAdmin";
            String password = "admin";
            OKMWebservices ws = OKMWebservicesFactory.newInstance(host);

            try
            {
                ws.login(user, password);
                List<CronTab> cronTabs = ws.cronTab.findAll();
                CronTab ct = cronTabs.Find(c => c.name == "Purge Activity Log");
                ws.cronTab.execute(ct.id);
                // Wait for execution to complete
                Thread.Sleep(5000);
                cronTabs = ws.cronTab.findAll();
                CronTab executed = cronTabs.Find(c => c.name == "Purge Activity Log");
                System.Console.WriteLine("Last execution ended: " + executed.lastEnd);
            }
            catch (Exception e)
            {
                System.Console.WriteLine(e.ToString());
            }
        }
    }
}
```

Dashboard samples

Basic

Suggested code sample

First, you must create the webservice object:

```
OKMWebservices ws = OKMWebservicesFactory.newInstance(host);
```

Then you should log in using the method "**login**". You can access the "**login**" method from the web service object "**ws**" as shown below:

```
ws.login(user, password);
```

Once you are logged in with the web services, the session is kept in the web service object. Then you can use the other API methods.

At this point you can use all the Dashboard methods from "**dashboard**" class as shown below:

```
ws.dashboard.getUserCheckedOutDocuments();
```

Methods

getUserCheckedOutDocuments

Description:

Method	Return values	Description
getUserCheckedOutDocuments(int offset, int limit)	**DashboardResultSet**	Returns a list of the documents being edited by the user.

The parameters "limit" and "offset" allow you to retrieve just a portion of the results of a query.

- The parameter "limit" is used to limit the number of results returned.
- The parameter "offset" tells the API to skip that many results before beginning to return results.

For example, if your query has 1000 results, but you only want to return the first 10, you should use these values:

- limit=10
- offset=0

Now suppose you want to show the results from 11-20, you should use these values:

- limit=10
- offset=10

Example:

```
using System;
using System.Collections.Generic;
using System.Linq;
using System.Text;
using com.openkm.sdk4csharp;
using com.openkm.sdk4csharp.bean;

namespace OKMRest
{
   public class Program
   {
      static void Main(string[] args)
      {
         String host = "http://localhost:8180/openkm";
         String username = "okmAdmin";
         String password = "admin";
         OKMWebservice ws = OKMWebservicesFactory.newInstance(host);

         try
         {
            ws.login(user, password);
            DashboardResultSet resultSet = ws.dashboard.getUserCheckedOutDocuments(0, 5);
            foreach (DashboardResult dashboardResult in resultSet.results)
            {
                System.Console.WriteLine(dashboardResult.node.toString());
            }
         }
         catch (Exception e)
         {
            System.Console.WriteLine(e.ToString());
         }
      }
   }
}
```

getUserLastModifiedDocuments

Description:

Method	Return values	Description
getUserLastModifiedDocuments(int offset, int limit)	**DashboardResultSet**	Returns a list of the most recently modified documents by the user.

The parameters "limit" and "offset" allow you to retrieve just a portion of the results of a query.

- The parameter "limit" is used to limit the number of results returned.
- The parameter "offset" tells the API to skip that many results before beginning to return results.

For example, if your query has 1000 results, but you only want to return the first 10, you should use these values:

- limit=10
- offset=0

Now suppose you want to show the results from 11-20, you should use these values:

- limit=10
- offset=10

Example:

```
using System;
using System.Collections.Generic;
using System.Linq;
using System.Text;
using com.openkm.sdk4csharp;
using com.openkm.sdk4csharp.bean;

namespace OKMRest
{
   public class Program
   {
      static void Main(string[] args)
      {
         String host = "http://localhost:8180/openkm";
         String username = "okmAdmin";
         String password = "admin";
         OKMWebservice ws = OKMWebservicesFactory.newInstance(host);

         try
         {
            ws.login(user, password);
            DashboardResultSet resultSet = ws.dashboard.getUserLastModifiedDocuments(0, 5);
            foreach (DashboardResult dashboardResult in resultSet.results)
            {
                System.Console.WriteLine(dashboardResult.node.toString());
            }
         }
         catch (Exception e)
         {
            System.Console.WriteLine(e.ToString());
         }
      }
   }
}
```

getUserLockedDocuments

Description:

Method	Return values	Description
getUserLockedDocuments(int offset, int limit)	**DashboardResultSet**	Returns a list of the documents locked by the user.

The parameters "limit" and "offset" allow you to retrieve just a portion of the results of a query.

- The parameter "limit" is used to limit the number of results returned.
- The parameter "offset" tells the API to skip that many results before beginning to return results.

For example, if your query has 1000 results, but you only want to return the first 10, you should use these values:

- limit=10
- offset=0

Now suppose you want to show the results from 11-20, you should use these values:

- limit=10
- offset=10

Example:

```
using System;
using System.Collections.Generic;
using System.Linq;
using System.Text;
using com.openkm.sdk4csharp;
using com.openkm.sdk4csharp.bean;

namespace OKMRest
{
   public class Program
   {
      static void Main(string[] args)
      {
         String host = "http://localhost:8180/openkm";
         String username = "okmAdmin";
         String password = "admin";
         OKMWebservice ws = OKMWebservicesFactory.newInstance(host);

         try
         {
            ws.login(user, password);
            DashboardResultSet resultSet = ws.dashboard.getUserLockedDocuments(0, 5);
```

```
            foreach (DashboardResult dashboardResult in resultSet.results)
            {
                System.Console.WriteLine(dashboardResult.node.toString());
            }
        }
        catch (Exception e)
        {
            System.Console.WriteLine(e.ToString());
        }
    }
  }
}
```

getUserLockedRecords

Description:

Method	Return values	Description
getUserLockedRecords(int offset, int limit)	**DashboardResultSet**	Returns a list of the records locked by the user.

The parameters "limit" and "offset" allow you to retrieve just a portion of the results of a query.

- The parameter "limit" is used to limit the number of results returned.
- The parameter "offset" tells the API to skip that many results before beginning to return results.

For example, if your query has 1000 results, but you only want to return the first 10, you should use these values:

- limit=10
- offset=0

Now suppose you want to show the results from 11-20, you should use these values:

- limit=10
- offset=10

Example:

```
using System;
using System.Collections.Generic;
using System.Linq;
using System.Text;
using com.openkm.sdk4csharp;
using com.openkm.sdk4csharp.bean;

namespace OKMRest
{
```

```
    public class Program
    {
        static void Main(string[] args)
        {
            String host = "http://localhost:8180/openkm";
            String username = "okmAdmin";
            String password = "admin";
            OKMWebservice ws = OKMWebservicesFactory.newInstance(host);

            try
            {
                ws.login(user, password);
                DashboardResultSet resultSet = ws.dashboard.getUserLockedRecords(0, 5);
                foreach (DashboardResult dashboardResult in resultSet.results)
                {
                    System.Console.WriteLine(dashboardResult.node.toString());
                }
            }
            catch (Exception e)
            {
                System.Console.WriteLine(e.ToString());
            }
        }
    }
}
```

getUserLockedFolders

Description:

Method	Return values	Description
getUserLockedFolders(int offset, int limit)	**DashboardResultSet**	Returns a list of the folders locked by the user.

The parameters "limit" and "offset" allow you to retrieve just a portion of the results of a query.

- The parameter "limit" is used to limit the number of results returned.
- The parameter "offset" tells the API to skip that many results before beginning to return results.

For example, if your query has 1000 results, but you only want to return the first 10, you should use these values:

- limit=10
- offset=0

Now suppose you want to show the results from 11-20, you should use these values:

- limit=10
- offset=10

Example:

```
using System;
using System.Collections.Generic;
using System.Linq;
using System.Text;
using com.openkm.sdk4csharp;
using com.openkm.sdk4csharp.bean;

namespace OKMRest
{
   public class Program
   {
      static void Main(string[] args)
      {
         String host = "http://localhost:8180/openkm";
         String username = "okmAdmin";
         String password = "admin";
         OKMWebservice ws = OKMWebservicesFactory.newInstance(host);

         try
         {
            ws.login(user, password);
            DashboardResultSet resultSet = ws.dashboard.getUserLockedFolders(0 ,5);
            foreach (DashboardResult dashboardResult in resultSet.results)
            {
                System.Console.WriteLine(dashboardResult.node.toString());
            }
         }
         catch (Exception e)
         {
            System.Console.WriteLine(e.ToString());
         }
      }
   }
}
```

getUserLockedMails

Description:

Method	Return values	Description
getUserLockedMails(int offset, int limit)	**DashboardResultSet**	Returns a list of the mails locked by the user.

The parameters "limit" and "offset" allow you to retrieve just a portion of the results of a query.

- The parameter "limit" is used to limit the number of results returned.
- The parameter "offset" tells the API to skip that many results before beginning to return results.

For example, if your query has 1000 results, but you only want to return the first 10, you should use these values:

- limit=10

- offset=0

Now suppose you want to show the results from 11-20, you should use these values:

- limit=10
- offset=10

Example:

```
using System;
using System.Collections.Generic;
using System.Linq;
using System.Text;
using com.openkm.sdk4csharp;
using com.openkm.sdk4csharp.bean;

namespace OKMRest
{
   public class Program
   {
      static void Main(string[] args)
      {
         String host = "http://localhost:8180/openkm";
         String username = "okmAdmin";
         String password = "admin";
         OKMWebservice ws = OKMWebservicesFactory.newInstance(host);

         try
         {
            ws.login(user, password);
            DashboardResultSet resultSet = ws.dashboard.getUserLockedMails(0 ,5);
            foreach (DashboardResult dashboardResult in resultSet.results)
            {
               System.Console.WriteLine(dashboardResult.node.toString());
            }
         }
         catch (Exception e)
         {
            System.Console.WriteLine(e.ToString());
         }
      }
   }
}
```

getUserSubscribedDocuments

Description:

Method	Return values	Description
getUserSubscribedDocuments(int offset, int limit)	**DashboardResultSet**	Returns a list of the documents subscribed by the user.

The parameters "limit" and "offset" allow you to retrieve just a portion of the results of a query.

- The parameter "limit" is used to limit the number of results returned.
- The parameter "offset" tells the API to skip that many results before beginning to return results.

For example, if your query has 1000 results, but you only want to return the first 10, you should use these values:

- limit=10
- offset=0

Now suppose you want to show the results from 11-20, you should use these values:

- limit=10
- offset=10

Example:

```
using System;
using System.Collections.Generic;
using System.Linq;
using System.Text;
using com.openkm.sdk4csharp;
using com.openkm.sdk4csharp.bean;

namespace OKMRest
{
   public class Program
   {
      static void Main(string[] args)
      {
         String host = "http://localhost:8180/openkm";
         String username = "okmAdmin";
         String password = "admin";
         OKMWebservice ws = OKMWebservicesFactory.newInstance(host);

         try
         {
            ws.login(user, password);
            DashboardResultSet resultSet = ws.dashboard.getUserSubscribedDocuments(0, 5);
            foreach (DashboardResult dashboardResult in resultSet.results)
            {
               System.Console.WriteLine(dashboardResult.node.toString());
            }
         }
         catch (Exception e)
         {
            System.Console.WriteLine(e.ToString());
         }
      }
   }
}
```

getUserSubscribedFolders

Description:

Method	Return values	Description
getUserSubscribedFolders(int offset, int limit)	**DashboardResultSet**	Returns a list of the folders subscribed by the user.

The parameters "limit" and "offset" allow you to retrieve just a portion of the results of a query.

- The parameter "limit" is used to limit the number of results returned.
- The parameter "offset" tells the API to skip that many results before beginning to return results.

For example, if your query has 1000 results, but you only want to return the first 10, you should use these values:

- limit=10
- offset=0

Now suppose you want to show the results from 11-20, you should use these values:

- limit=10
- offset=10

Example:

```
using System;
using System.Collections.Generic;
using System.Linq;
using System.Text;
using com.openkm.sdk4csharp;
using com.openkm.sdk4csharp.bean;

namespace OKMRest
{
   public class Program
   {
      static void Main(string[] args)
      {
         String host = "http://localhost:8180/openkm";
         String username = "okmAdmin";
         String password = "admin";
         OKMWebservice ws = OKMWebservicesFactory.newInstance(host);

         try
         {
            ws.login(user, password);
            DashboardResultSet resultSet = ws.dashboard.getUserSubscribedFolders(0, 5);
            foreach (DashboardResult dashboardResult in resultSet.results)
            {
```

```
                System.Console.WriteLine(dashboardResult.node.toString());
            }
        }
        catch (Exception e)
        {
            System.Console.WriteLine(e.ToString());
        }
    }
  }
}
```

getUserSubscribedRecords

Description:

Method	Return values	Description
getUserSubscribedRecords(int offset, int limit)	**DashboardResultSet**	Returns a list of the records subscribed by the user.

The parameters "limit" and "offset" allow you to retrieve just a portion of the results of a query.

- The parameter "limit" is used to limit the number of results returned.
- The parameter "offset" tells the API to skip that many results before beginning to return results.

For example, if your query has 1000 results, but you only want to return the first 10, you should use these values:

- limit=10
- offset=0

Now suppose you want to show the results from 11-20, you should use these values:

- limit=10
- offset=10

Example:

```
using System;
using System.Collections.Generic;
using System.Linq;
using System.Text;
using com.openkm.sdk4csharp;
using com.openkm.sdk4csharp.bean;

namespace OKMRest
{
   public class Program
```

```
    {
        static void Main(string[] args)
        {
            String host = "http://localhost:8180/openkm";
            String username = "okmAdmin";
            String password = "admin";
            OKMWebservice ws = OKMWebservicesFactory.newInstance(host);

            try
            {
                ws.login(user, password);
                DashboardResultSet resultSet = ws.dashboard.getUserSubscribedRecords(0, 5);
                foreach (DashboardResult dashboardResult in resultSet.results)
                {
                    System.Console.WriteLine(dashboardResult.node.toString());
                }
            }
            catch (Exception e)
            {
                System.Console.WriteLine(e.ToString());
            }
        }
    }
}
```

getUserLastCreatedDocuments

Description:

Method	Return values	Description
getUserLastCreatedDocuments(int offset, int limit)	**DashboardResultSet**	Returns a list of the last documents created by the user.

The parameters "limit" and "offset" allow you to retrieve just a portion of the results of a query.

- The parameter "limit" is used to limit the number of results returned.
- The parameter "offset" tells the API to skip that many results before beginning to return results.

For example, if your query has 1000 results, but you only want to return the first 10, you should use these values:

- limit=10
- offset=0

Now suppose you want to show the results from 11-20, you should use these values:

- limit=10
- offset=10

Example:

```
using System;
using System.Collections.Generic;
using System.Linq;
using System.Text;
using com.openkm.sdk4csharp;
using com.openkm.sdk4csharp.bean;

namespace OKMRest
{
   public class Program
   {
      static void Main(string[] args)
      {
         String host = "http://localhost:8180/openkm";
         String username = "okmAdmin";
         String password = "admin";
         OKMWebservice ws = OKMWebservicesFactory.newInstance(host);

         try
         {
            ws.login(user, password);
            DashboardResultSet resultSet = ws.dashboard.getUserLastCreatedDocuments(0, 5);
            foreach (DashboardResult dashboardResult in resultSet.results)
            {
                System.Console.WriteLine(dashboardResult.node.toString());
            }
         }
         catch (Exception e)
         {
            System.Console.WriteLine(e.ToString());
         }
      }
   }
}
```

getUserLastDocumentsNotesCreated

Description:

Method	Return values	Description
getUserLastDocumentsNotesCreated(int offset, int limit)	**DashboardResultSet**	Returns a list of the last documents notes created by the user.

The parameter "limit" and "offset" allows you to retrieve just a portion of the results of a query.

- The parameter "limit" is used to limit the number of results returned.
- The parameter "offset" says to skip that many results before the beginning to return results.

For example, if your query has 1000 results, but you only want to return the first 10, you should use these values:

- limit=10
- offset=0

Now suppose you want to show the results from 11-20, you should use these values:

- limit=10
- offset=10

Example:

```
using System;
using System.Collections.Generic;
using System.Linq;
using System.Text;
using com.openkm.sdk4csharp;
using com.openkm.sdk4csharp.bean;

namespace OKMRest
{
   public class Program
   {
      static void Main(string[] args)
      {
         String host = "http://localhost:8180/openkm";
         String username = "okmAdmin";
         String password = "admin";
         OKMWebservice ws = OKMWebservicesFactory.newInstance(host);

         try
         {
            ws.login(user, password);
            DashboardResultSet resultSet = ws.dashboard.getUserLastDocumentsNotesCreated(0, 5);
            foreach (DashboardResult dashboardResult in resultSet.results)
            {
                System.Console.WriteLine(dashboardResult.node.toString());
            }
         }
         catch (Exception e)
         {
            System.Console.WriteLine(e.ToString());
         }
      }
   }
}
```

getUserLastCreatedFolders

Description:

Method	Return values	Description
getUserLastCreatedFolders(int offset, int limit)	**DashboardResultSet**	Returns a list of the last folders created by the user.

The parameter "limit" and "offset" allows you to retrieve just a portion of the results of a query.

- The parameter "limit" is used to limit the number of results returned.
- The parameter "offset" says to skip that many results before the beginning to return results.

For example, if your query has 1000 results, but you only want to return the first 10, you should use these values:

- limit=10
- offset=0

Now suppose you want to show the results from 11-20, you should use these values:

- limit=10
- offset=10

Example:

```
using System;
using System.Collections.Generic;
using System.Linq;
using System.Text;
using com.openkm.sdk4csharp;
using com.openkm.sdk4csharp.bean;

namespace OKMRest
{
   public class Program
   {
      static void Main(string[] args)
      {
         String host = "http://localhost:8180/openkm";
         String username = "okmAdmin";
         String password = "admin";
         OKMWebservice ws = OKMWebservicesFactory.newInstance(host);

         try
         {
            ws.login(user, password);
            DashboardResultSet resultSet = ws.dashboard.getUserLastCreatedFolders(0, 5);
            foreach (DashboardResult dashboardResult in resultSet.results)
            {
               System.Console.WriteLine(dashboardResult.node.toString());
            }
         }
         catch (Exception e)
         {
            System.Console.WriteLine(e.ToString());
         }
      }
   }
}
```

getUserLastFoldersNotesCreated

Description:

Method	Return values	Description
getUserLastFoldersNotesCreated(int offset, int limit)	**DashboardResultSet**	Returns a list of the last folders notes created by the user.

The parameter "limit" and "offset" allows you to retrieve just a portion of the results of a query.

- The parameter "limit" is used to limit the number of results returned.
- The parameter "offset" says to skip that many results before the beginning to return results.

For example, if your query has 1000 results, but you only want to return the first 10, you should use these values:

- limit=10
- offset=0

Now suppose you want to show the results from 11-20, you should use these values:

- limit=10
- offset=10

Example:

```
using System;
using System.Collections.Generic;
using System.Linq;
using System.Text;
using com.openkm.sdk4csharp;
using com.openkm.sdk4csharp.bean;

namespace OKMRest
{
   public class Program
   {
      static void Main(string[] args)
      {
         String host = "http://localhost:8180/openkm";
         String username = "okmAdmin";
         String password = "admin";
         OKMWebservice ws = OKMWebservicesFactory.newInstance(host);

         try
         {
            ws.login(user, password);
            DashboardResultSet resultSet = ws.dashboard.getUserLastFoldersNotesCreated(0, 5);
```

```
            foreach (DashboardResult dashboardResult in resultSet.results)
            {
                System.Console.WriteLine(dashboardResult.node.toString());
            }
        }
        catch (Exception e)
        {
            System.Console.WriteLine(e.ToString());
        }
    }
  }
}
```

getUserLastCreatedRecords

Description:

Method	Return values	Description
getUserLastCreatedRecords(int offset, int limit)	**DashboardResultSet**	Returns a list of the last records created by the user.

The parameter "limit" and "offset" allows you to retrieve just a portion of the results of a query.

- The parameter "limit" is used to limit the number of results returned.
- The parameter "offset" says to skip that many results before the beginning to return results.

For example, if your query has 1000 results, but you only want to return the first 10, you should use these values:

- limit=10
- offset=0

Now suppose you want to show the results from 11-20, you should use these values:

- limit=10
- offset=10

Example:

```
using System;
using System.Collections.Generic;
using System.Linq;
using System.Text;
using com.openkm.sdk4csharp;
using com.openkm.sdk4csharp.bean;

namespace OKMRest
```

```
{
   public class Program
   {
      static void Main(string[] args)
      {
         String host = "http://localhost:8180/openkm";
         String username = "okmAdmin";
         String password = "admin";
         OKMWebservice ws = OKMWebservicesFactory.newInstance(host);

         try
         {
            ws.login(user, password);
            DashboardResultSet resultSet = ws.dashboard.getUserLastCreatedRecords(0, 5);
            foreach (DashboardResult dashboardResult in resultSet.results)
            {
                System.Console.WriteLine(dashboardResult.node.toString());
            }
         }
         catch (Exception e)
         {
            System.Console.WriteLine(e.ToString());
         }
      }
   }
}
```

getUserLastRecordsNotesCreated

Description:

Method	Return values	Description
getUserLastRecordsNotesCreated(int offset, int limit)	**DashboardResultSet**	Returns a list of the last records notes created by the user.

The parameters "limit" and "offset" allow you to retrieve just a portion of the results of a query.

- The parameter "limit" is used to limit the number of results returned.
- The parameter "offset" tells the API to skip that many results before beginning to return results.

For example, if your query has 1000 results, but you only want to return the first 10, you should use these values:

- limit=10
- offset=0

Now suppose you want to show the results from 11-20, you should use these values:

- limit=10
- offset=10

Example:

```
using System;
using System.Collections.Generic;
using System.Linq;
using System.Text;
using com.openkm.sdk4csharp;
using com.openkm.sdk4csharp.bean;

namespace OKMRest
{
   public class Program
   {
      static void Main(string[] args)
      {
         String host = "http://localhost:8180/openkm";
         String username = "okmAdmin";
         String password = "admin";
         OKMWebservice ws = OKMWebservicesFactory.newInstance(host);

         try
         {
            ws.login(user, password);
            DashboardResultSet resultSet = ws.dashboard.getUserLastRecordsNotesCreated(0, 5);
            foreach (DashboardResult dashboardResult in resultSet.results)
            {
               System.Console.WriteLine(dashboardResult.node.toString());
            }
         }
         catch (Exception e)
         {
            System.Console.WriteLine(e.ToString());
         }
      }
   }
}
```

getUserLastDownloadedDocuments

Description:

Method	Return values	Description
getUserLastDownloadedDocuments(int offset, int limit)	**DashboardResultSet**	Returns a list of the last documents downloaded by the user.

The parameters "limit" and "offset" allow you to retrieve just a portion of the results of a query.

- The parameter "limit" is used to limit the number of results returned.
- The parameter "offset" tells the API to skip that many results before beginning to return results.

For example if your query has 1000 results, but you only want to return the first 10, you should use these

values:

- limit=10
- offset=0

Now suppose you want to show the results from 11-20, you should use these values:

- limit=10
- offset=10

Example:

```
using System;
using System.Collections.Generic;
using System.Linq;
using System.Text;
using com.openkm.sdk4csharp;
using com.openkm.sdk4csharp.bean;

namespace OKMRest
{
   public class Program
   {
      static void Main(string[] args)
      {
         String host = "http://localhost:8180/openkm";
         String username = "okmAdmin";
         String password = "admin";
         OKMWebservice ws = OKMWebservicesFactory.newInstance(host);

         try
         {
            ws.login(user, password);
            DashboardResultSet resultSet = ws.dashboard.getUserLastDownloadedDocuments(0, 5);
            foreach (DashboardResult dashboardResult in resultSet.results)
            {
               System.Console.WriteLine(dashboardResult.node.toString());
            }
         }
         catch (Exception e)
         {
            System.Console.WriteLine(e.ToString());
         }
      }
   }
}
```

getUserLastImportedMails

Description:

Method	Return values	Description
getUserLastImportedMails(int offset, int	**DashboardResultSet**	Returns a list of the last mails imported by the

limit)		user.

The parameter "limit" and "offset" allows you to retrieve just a portion of the results of a query.

- The parameter "limit" is used to limit the number of results returned.
- The parameter "offset" says to skip that many results before the beginning to return results.

For example if your query has 1000 results, but you only want to return the first 10, you should use these values:

- limit=10
- offset=0

Now suppose you want to show the results from 11-20, you should use these values:

- limit=10
- offset=10

Example:

```
using System;
using System.Collections.Generic;
using System.Linq;
using System.Text;
using com.openkm.sdk4csharp;
using com.openkm.sdk4csharp.bean;

namespace OKMRest
{
   public class Program
   {
      static void Main(string[] args)
      {
         String host = "http://localhost:8180/openkm";
         String username = "okmAdmin";
         String password = "admin";
         OKMWebservice ws = OKMWebservicesFactory.newInstance(host);

         try
         {
            ws.login(user, password);
            DashboardResultSet resultSet = ws.dashboard.getUserLastImportedMails(0, 5);
            foreach (DashboardResult dashboardResult in resultSet.results)
            {
               System.Console.WriteLine(dashboardResult.node.toString());
            }
         }
         catch (Exception e)
         {
            System.Console.WriteLine(e.ToString());
         }
      }
```

```
    }
}
```

getUserLastMailsNotesCreated

Description:

Method	Return values	Description
getUserLastMailsNotesCreated(int offset, int limit)	**DashboardResultSet**	Returns a list of the last mails notes created by the user.

The parameter "limit" and "offset" allows you to retrieve just a portion of the results of a query.

- The parameter "limit" is used to limit the number of results returned.
- The parameter "offset" says to skip that many results before the beginning to return results.

For example, if your query has 1000 results, but you only want to return the first 10, you should use these values:

- limit=10
- offset=0

Now suppose you want to show the results from 11-20, you should use these values:

- limit=10
- offset=10

Example:

```
using System;
using System.Collections.Generic;
using System.Linq;
using System.Text;
using com.openkm.sdk4csharp;
using com.openkm.sdk4csharp.bean;

namespace OKMRest
{
   public class Program
   {
      static void Main(string[] args)
      {
         String host = "http://localhost:8180/openkm";
         String username = "okmAdmin";
         String password = "admin";
         OKMWebservice ws = OKMWebservicesFactory.newInstance(host);
```

```
            try
            {
                ws.login(user, password);
                DashboardResultSet resultSet = ws.dashboard.getUserLastMailsNotesCreated(0, 5);
                foreach (DashboardResult dashboardResult in resultSet.results)
                {
                    System.Console.WriteLine(dashboardResult.node.toString());
                }
            }
            catch (Exception e)
            {
                System.Console.WriteLine(e.ToString());
            }
        }
    }
}
```

getUserLastImportedMailAttachments

Description:

Method	Return values	Description
getUserLastImportedMailAttachments(int offset, int limit)	**DashboardResultSet**	Returns a list of the last emails imported with attachments by the user.

The parameters "limit" and "offset" allow you to retrieve only a portion of the results of a query.

- The parameter "limit" is used to limit the number of results returned.
- The parameter "offset" specifies how many results to skip before returning results.

For example, if your query has 1000 results but you only want to return the first 10, you should use these values:

- limit=10
- offset=0

Now suppose you want to show the results from 11 to 20; you should use these values:

- limit=10
- offset=10

Example:

```
using System;
using System.Collections.Generic;
using System.Linq;
using System.Text;
```

```
using com.openkm.sdk4csharp;
using com.openkm.sdk4csharp.bean;

namespace OKMRest
{
   public class Program
   {
      static void Main(string[] args)
      {
         String host = "http://localhost:8180/openkm";
         String username = "okmAdmin";
         String password = "admin";
         OKMWebservice ws = OKMWebservicesFactory.newInstance(host);

         try
         {
            ws.login(user, password);
            DashboardResultSet resultSet = ws.dashboard.getUserLastImportedMailAttachments(0, 5);
            foreach (DashboardResult dashboardResult in resultSet.results)
            {
               System.Console.WriteLine(dashboardResult.node.toString());
            }
         }
         catch (Exception e)
         {
            System.Console.WriteLine(e.ToString());
         }
      }
   }
}
```

getUserSearches

Description:

Method	Return values	Description
getUserSearches()	**List<QueryParams>**	Returns a list of the searches saved by the user as user news.

Example:

```
using System;
using System.Collections.Generic;
using System.Linq;
using System.Text;
using com.openkm.sdk4csharp;
using com.openkm.sdk4csharp.bean;

namespace OKMRest
{
   public class Program
   {
      static void Main(string[] args)
      {
         String host = "http://localhost:8180/openkm";
         String username = "okmAdmin";
         String password = "admin";
         OKMWebservice ws = OKMWebservicesFactory.newInstance(host);

         try
```

```
        {
            ws.login(user, password);
            List<QueryParams> results = ws.dashboard.getUserSearches();
            foreach (QueryParams userSearch in results)
            {
                System.Console.WriteLine(userSearch.toString());
            }
        }
        catch (Exception e)
        {
            System.Console.WriteLine(e.ToString());
        }
    }
  }
}
```

findUserSearches

Description:

Method	Return values	Description
findUserSearches(long qpId)	**List<DashboardNodeResult>**	Returns a list of nodes based on a search saved by the user (search of type user news).

Example:

```
using System;
using System.Collections.Generic;
using System.Linq;
using System.Text;
using com.openkm.sdk4csharp;
using com.openkm.sdk4csharp.bean;

namespace OKMRest
{
   public class Program
   {
      static void Main(string[] args)
      {
         String host = "http://localhost:8180/openkm";
         String username = "okmAdmin";
         String password = "admin";
         OKMWebservice ws = OKMWebservicesFactory.newInstance(host);

         try
         {
            ws.login(user, password);
            List<DashboardNodeResult> results = ws.dashboard.findUserSearches();
            foreach (DashboardNodeResult nodeResult in results)
            {
                System.Console.WriteLine(nodeResult.toString());
            }
         }
         catch (Exception e)
         {
            System.Console.WriteLine(e.ToString());
         }
      }
```

```
    }
}
```

Document samples

Basics

On most methods, you'll see the parameter named "**docId**" and "**fldId**". The values of these parameters can be valid document and folder **UUIDs** respectively.

Example of docId:

- Using UUID -> "**f123a950-0329-4d62-8328-0ff500fd42db**";

Suggested code sample

First, you must create the webservice object:

```
OKMWebservices ws = OKMWebservicesFactory.newInstance(host);
```

Then you should log in using the "**login**" method. You can access the "**login**" method on the webservice object "**ws**" as shown below:

```
ws.login(user, password);
```

Once you are logged in with the webservices, the session is kept in the webservice object. Then you can use the other API methods.

At this point you can use all the Document methods from " **document**" class as shown below:

```
ws.document.create("1be884f4-5758-4985-94d1-f18bfe004db8", "logo.png", fs);
```

Methods

create

Description:

Method	Return values	Description
create(String fldId, FileInfo fi)	**Document**	Creates a new document and returns an object of type Document.
Parameters:		

- **fldId** is the UUID of the folder where the document will be created.

Example:

```
using System;
using System.Collections.Generic;
using System.Linq;
using System.Text;
using com.openkm.sdk4csharp;
using com.openkm.sdk4csharp.bean;
using com.openkm.sdk4csharp.impl;
using System.IO;

namespace OKMRest
{
   public class Program
   {
      static void Main(string[] args)
      {
         String host = "http://localhost:8080/openkm";
         String username = "okmAdmin";
         String password = "admin";
         OKMWebservice ws = OKMWebservicesFactory.newInstance(host);

         try
         {
            ws.login(user, password);
            FileInfo fileInfo = new FileInfo("E:\\doc.docx");
            ws.document.create(fldId, fileInfo);
         } catch (Exception e) {
            System.Console.WriteLine(e.ToString());
         }
      }
   }
}
```

create

Description:

Method	Return values	Description
create(String uuid, String name, FileStream fs, long nodeClass)	**Document**	Creates a new document with nodeClass. Returns a Document object with the properties of the created document.
The values of the uuid parameter should be a folder or record node UUID. The nodeClass parameter should be a valid business type (series) value. A nodeClass value of 0 means there's no business type (series) selected.		

Example:

```
using System;
using System.Collections.Generic;
using System.Linq;
using System.Text;
using com.openkm.sdk4csharp;
using com.openkm.sdk4csharp.bean;
using com.openkm.sdk4csharp.impl;
using System.IO;

namespace OKMRest
{
   public class Program
   {
      static void Main(string[] args)
      {
         String host = "http://localhost:8080/openkm";
         String username = "okmAdmin";
         String password = "admin";
         OKMWebservice ws = OKMWebservicesFactory.newInstance(host);

         try
         {
            ws.login(user, password);
            FileStream fileStream = new FileStream("E:\\logo.png", FileMode.Open);
            long nodeClass = 0;
            ws.document.create("4b88cbe9-e73d-45fc-bac0-35e0d6e59e43", "logo.png", fileStream, nodeClass);
            fileStream.Dispose();
         } catch (Exception e) {
            System.Console.WriteLine(e.ToString());
         }
      }
   }
}
```

create

Description:

Method	Return values	Description
create(String fldId, String name, FileStream fs)	**Document**	Creates a new document and returns an object of type Document.
Parameters: • **fldId** is the UUID of the folder where the document will be created. • **name** is the name of the document including the extension.		

Example:

```
using System;
using System.Collections.Generic;
using System.Linq;
```

```
using System.Text;
using com.openkm.sdk4csharp;
using com.openkm.sdk4csharp.bean;
using com.openkm.sdk4csharp.impl;
using System.IO;

namespace OKMRest
{
   public class Program
   {
      static void Main(string[] args)
      {
         String host = "http://localhost:8080/openkm";
         String username = "okmAdmin";
         String password = "admin";
         OKMWebservice ws = OKMWebservicesFactory.newInstance(host);

         try
         {
            ws.login(user, password);
            FileStream fileStream = new FileStream("E:\\logo.png", FileMode.Open);
            ws.document.create(fldId, "logo.png", fileStream);
            fileStream.Dispose();
         } catch (Exception e) {
            System.Console.WriteLine(e.ToString());
         }
      }
   }
}
```

delete

Description:

Method	Return values	Description
delete(String docId)	**void**	Deletes a document.

When a document is deleted it is automatically moved to /okm:trash/userId folder.

Example:

```
using System;
using System.Collections.Generic;
using System.Linq;
using System.Text;
using com.openkm.sdk4csharp;
using com.openkm.sdk4csharp.impl;

namespace OKMRest
{
   public class Program
   {
      static void Main(string[] args)
      {
         String host = "http://localhost:8080/openkm";
```

```
            String username = "okmAdmin";
            String password = "admin";
            OKMWebservice ws = OKMWebservicesFactory.newInstance(host);

            try
            {
                ws.login(user, password);
                ws.document.delete("f123a950-0329-4d62-8328-0ff500fd42db");
            } catch (Exception e) {
                System.Console.WriteLine(e.ToString());
            }

            System.Console.ReadKey();
        }
    }
}
```

getProperties

Description:

Method	Return values	Description
getProperties(String docId)	**Document**	Returns the document properties.

Example:

```
using System;
using System.Collections.Generic;
using System.Linq;
using System.Text;
using com.openkm.sdk4csharp;
using com.openkm.sdk4csharp.impl;

namespace OKMRest
{
    public class Program
    {
        static void Main(string[] args)
        {
            String host = "http://localhost:8080/openkm";
            String username = "okmAdmin";
            String password = "admin";
            OKMWebservice ws = OKMWebservicesFactory.newInstance(host);

            try
            {
                ws.login(user, password);
                System.Console.WriteLine(ws.document.getProperties("f123a950-0329-4d62-8328-0ff500fd42db").toStri
            } catch (Exception e) {
                System.Console.WriteLine(e.ToString());
            }
        }
    }
}
```

getContent

Description:

Method	Return values	Description
getContent(String docId)	**Stream**	Retrieves a document's content (binary data) of the current document version.

If you send the file across a Servlet response, we suggest setting the content length with:

```
Document doc = ws.getDocumentProperties(docId);
response.setContentLength(new Long(doc.getActualVersion().getSize()).intValue());
```

We've found incorrect size problems while using:

```
response.setContentLength(is.available());
```

Example:

```
using System;
using System.Collections.Generic;
using System.Linq;
using System.Text;
using com.openkm.sdk4csharp;
using com.openkm.sdk4csharp.impl;
using System.IO;

namespace OKMRest
{
   public class Program
   {
      static void Main(string[] args)
      {
         String host = "http://localhost:8080/openkm";
         String username = "okmAdmin";
         String password = "admin";
         OKMWebservice ws = OKMWebservicesFactory.newInstance(host);

         try
         {
            ws.login(user, password);
            Stream tmpFile = ws.document.getContent("f123a950-0329-4d62-8328-0ff500fd42db");
            FileStream destFile = new FileStream("C:\\test.png", FileMode.OpenOrCreate);
            tmpFile.CopyTo(destFile);
            destFile.Close();
            tmpFile.Close();
         } catch (Exception e) {
            System.Console.WriteLine(e.ToString());
         }
      }
   }
```

```
}
```

getContentByVersion

Description:

Method	Return values	Description
getContentByVersion(String docId,String versionId)	**Stream**	Retrieves a document's content (binary data) of a specific document version.

If you send the file across a Servlet response, we suggest setting the content length with:

```
Document doc = ws.getDocumentProperties(docId);
response.setContentLength(new Long(doc.getActualVersion().getSize()).intValue());
```

We've found incorrect size problems while using:

```
response.setContentLength(is.available());
```

Example:

```
using System;
using System.Collections.Generic;
using System.Linq;
using System.Text;
using com.openkm.sdk4csharp;
using System.IO;

namespace OKMRest
{
   public class Program
   {
      static void Main(string[] args)
      {
         String host = "http://localhost:8080/openkm";
         String username = "okmAdmin";
         String password = "admin";
         OKMWebservice ws = OKMWebservicesFactory.newInstance(host);

         try
         {
            ws.login(user, password);
            Stream tmpFile = ws.document.getContentByVersion("f123a950-0329-4d62-8328-0ff500fd42db","1.1");
            FileStream destFile = new FileStream("C:\\test.png", FileMode.OpenOrCreate);
            tmpFIle.CopyTo(destFile);
            destFile.Close();
            tmpFile.Close();
         } catch (Exception e) {
```

```
            System.Console.WriteLine(e.ToString());
        }
    }
  }
}
```

getChildren

Description:

Method	Return values	Description
getChildren(String fldId)	**List<Document>**	Returns a list of all documents whose parent is fldId.
The parameter fldId can be a folder or a record node.		

Example:

```
using System;
using System.Collections.Generic;
using System.Linq;
using System.Text;
using com.openkm.sdk4csharp;
using com.openkm.sdk4csharp.bean;

namespace OKMRest
{
   public class Program
   {
      static void Main(string[] args)
      {
         String host = "http://localhost:8080/openkm";
         String username = "okmAdmin";
         String password = "admin";
         OKMWebservice ws = OKMWebservicesFactory.newInstance(host);

         try
         {
            ws.login(user, password);
            foreach (Document doc in ws.document.getChildren("f123a950-0329-4d62-8328-0ff500fd42db"))
            {
               System.Console.WriteLine(doc);
            }
         } catch (Exception e) {
            System.Console.WriteLine(e.ToString());
         }
      }
   }
}
```

rename

Description:

Method	Return values	Description

rename(String docId, String newName)	**Document**	Changes the name of a document.

Example:

```
using System;
using System.Collections.Generic;
using System.Linq;
using System.Text;
using com.openkm.sdk4csharp;
using com.openkm.sdk4csharp.bean;

namespace OKMRest
{
   public class Program
   {
      static void Main(string[] args)
      {
         String host = "http://localhost:8080/openkm";
         String username = "okmAdmin";
         String password = "admin";
         OKMWebservice ws = OKMWebservicesFactory.newInstance(host);

         try
         {
             ws.login(user, password);
             Document doc = ws.document.rename("f123a950-0329-4d62-8328-0ff500fd42db", "new_name.png");
         } catch (Exception e) {
            System.Console.WriteLine(e.ToString());
         }
      }
   }
}
```

setProperties

Description:

Method	Return values	Description
setProperties(String docId, String title, String description, String lang, List<String> keywords, List<String> categories)	**void**	Changes some document properties.

Variables allowed to be changed:

- Title
- Description
- Language
- Associated categories
- Associated keywords

Only non-null and non-empty variables will be taken into consideration.

Example:

```
using System;
using System.Collections.Generic;
using System.Linq;
using System.Text;
using com.openkm.sdk4csharp;
using com.openkm.sdk4csharp.bean;

namespace OKMRest
{
   public class Program
   {
      static void Main(string[] args)
      {
         String host = "http://localhost:8080/openkm";
         String username = "okmAdmin";
         String password = "admin";
         OKMWebservice ws = OKMWebservicesFactory.newInstance(host);

         try
         {
            ws.login(user, password);
            List<string> keywords = new List<string>();
            keywords.Add("testA");
            keywords.Add("testB");
            List<string> categories = new List<string>();
            categories.Add("/okm:categories");
            ws.document.setProperties("f123a950-0329-4d62-8328-0ff500fd42db", "anyTitle", "anyDescription", "es-E
         } catch (Exception e) {
            System.Console.WriteLine(e.ToString());
         }
      }
   }
}
```

setNodeClass

Description:

Method	Return values	Description
setNodeClass(String docId, String ncId)	**void**	Sets the document node class ID.

Example:

```
using System;
using System.Collections.Generic;
using System.Linq;
using System.Text;
using com.openkm.sdk4csharp;
```

```
namespace OKMRest
{
   public class Program
   {
      static void Main(string[] args)
      {
         String host = "http://localhost:8080/openkm";
         String username = "okmAdmin";
         String password = "admin";
         OKMWebservice ws = OKMWebservicesFactory.newInstance(host);

         try
         {
            ws.login(user, password);
            ws.document.setNodeClass("f123a950-0329-4d62-8328-0ff500fd42db",ncID);
         } catch (Exception e) {
            System.Console.WriteLine(e.ToString());
         }
      }
   }
}
```

checkout

Description:

Method	Return values	Description
checkout(String docId)	**void**	Marks the document for editing.

Only one user can modify a document at the same time.

Before starting editing, you must perform a check-out action that locks the editing process for other users and allows only the user who executed the action.

Example:

```
using System;
using System.Collections.Generic;
using System.Linq;
using System.Text;
using com.openkm.sdk4csharp;

namespace OKMRest
{
   public class Program
   {
      static void Main(string[] args)
      {
         String host = "http://localhost:8080/openkm";
         String username = "okmAdmin";
         String password = "admin";
         OKMWebservice ws = OKMWebservicesFactory.newInstance(host);

         try
         {
```

```
            ws.login(user, password);
            ws.document.checkout("f123a950-0329-4d62-8328-0ff500fd42db");
            // At this point the document is locked for other users except for the user who executed the action
        } catch (Exception e) {
            System.Console.WriteLine(e.ToString());
        }
    }
  }
}
```

cancelCheckout

Description:

Method	Return values	Description
cancelCheckout(String docId)	**void**	Cancels a document edition.

This action can only be done by the user who previously executed the checkout action.

Example:

```
using System;
using System.Collections.Generic;
using System.Linq;
using System.Text;
using com.openkm.sdk4csharp;

namespace OKMRest
{
  public class Program
  {
    static void Main(string[] args)
    {
      String host = "http://localhost:8080/openkm";
      String username = "okmAdmin";
      String password = "admin";
      OKMWebservice ws = OKMWebservicesFactory.newInstance(host);

      try
      {
        ws.login(user, password);
        // At this point the document is locked for other users except for the user who executed the action
        ws.document.cancelCheckout("f123a950-0329-4d62-8328-0ff500fd42db");
        // At this point other users are allowed to execute a checkout and modify the document
      } catch (Exception e) {
        System.Console.WriteLine(e.ToString());
      }
    }
  }
}
```

forceCancelCheckout

Description:

Method	Return values	Description
forceCancelCheckout(String docId)	**void**	Cancels a document edition.

This method allows canceling the edition of any document.

It is not mandatory for the same user who previously executed the checkout action to perform this action.

This action can only be done by a superuser (user with ROLE_ADMIN).

Example:

```
using System;
using System.Collections.Generic;
using System.Linq;
using System.Text;
using com.openkm.sdk4csharp;

namespace OKMRest
{
   public class Program
   {
      static void Main(string[] args)
      {
         String host = "http://localhost:8080/openkm";
         String username = "okmAdmin";
         String password = "admin";
         OKMWebservice ws = OKMWebservicesFactory.newInstance(host);

         try
         {
            ws.login(user, password);
            // At this point the document is locked for other users except for the user who executed the action
            ws.document.forceCancelCheckout("f123a950-0329-4d62-8328-0ff500fd42db");
            // At this point other users are allowed to execute a checkout and modify the document
         } catch (Exception e) {
            System.Console.WriteLine(e.ToString());
         }
      }
   }
}
```

isCheckedOut

Description:

Method	Return values	Description
isCheckedOut(String docId)	**Boolean**	Returns a boolean indicating whether the document is being edited.

Example:

```
using System;
using System.Collections.Generic;
using System.Linq;
using System.Text;
using com.openkm.sdk4csharp;

namespace OKMRest
{
   public class Program
   {
      static void Main(string[] args)
      {
         String host = "http://localhost:8080/openkm";
         String username = "okmAdmin";
         String password = "admin";
         OKMWebservice ws = OKMWebservicesFactory.newInstance(host);

         try
         {
            ws.login(user, password);
            System.Console.WriteLine("Is the document checkout:"+ ws.document.isCheckedOut("f123a950-0329-4d
         } catch (Exception e) {
            System.Console.WriteLine(e.ToString());
         }
      }
   }
}
```

checkin

Description:

Method	Return values	Description
checkin(String uuid, FileStream fs, String comment)	**Version**	Updates a document with a new version and returns an object with the new Version values.

Only the user who started the edition (checkout) is allowed to update the document.

Example:

```
using System;
using System.Collections.Generic;
using System.Linq;
using System.Text;
using System.IO;
using com.openkm.sdk4csharp;

namespace OKMRest
{
```

```
    public class Program
    {
        static void Main(string[] args)
        {
            String host = "http://localhost:8080/openkm";
            String username = "okmAdmin";
            String password = "admin";
            OKMWebservice ws = OKMWebservicesFactory.newInstance(host);

            try
            {
                ws.login(user, password);
                FileStream fs = new FileStream("E:\\logo.png", FileMode.Open);
                ws.document.checkin("f123a950-0329-4d62-8328-0ff500fd42db",fs,"optional some comment");
                fs.Dispose();
            } catch (Exception e) {
                System.Console.WriteLine(e.ToString());
            }
        }
    }
}
```

checkin

Description:

Method	Return values	Description
checkin(String uuid, FileStream fs, String comment, int increment)	**Version**	Updates a document with a new version and returns an object with new Version values.

The value of the increment variable must be 1 or greater.

The valid values of the increment variable depend on the VersionNumberAdapter you have enabled.

Only the user who started the edition - checkout - is allowed to update the document.

Example:

```
using System;
using System.Collections.Generic;
using System.Linq;
using System.Text;
using System.IO;
using com.openkm.sdk4csharp;

namespace OKMRest
{
    public class Program
    {
        static void Main(string[] args)
        {
```

```
            String host = "http://localhost:8080/openkm";
            String username = "okmAdmin";
            String password = "admin";
            OKMWebservice ws = OKMWebservicesFactory.newInstance(host);

            try
            {
                ws.login(user, password);
                FileStream fs = new FileStream(@"C:\Desktop\logo.png", FileMode.Open);
                ws.document.checkin("f123a950-0329-4d62-8328-0ff500fd42db", fs, "optional some comment", 1);
                fs.Dispose();
            } catch (Exception e) {
                System.Console.WriteLine(e.ToString());
            }
        }
    }
}
```

purge

Description:

Method	Return values	Description
purge(String docId)	**void**	The document is permanently removed from the repository.

Usually, you will purge documents into /okm:trash/userId - the user's personal trash location - but it is possible to directly purge any document from the whole repository.

When a document is purged it can only be restored from a previous repository backup. The purge action removes the document permanently from the repository.

Example:

```
using System;
using System.Collections.Generic;
using System.Linq;
using System.Text;
using com.openkm.sdk4csharp;

namespace OKMRest
{
    public class Program
    {
        static void Main(string[] args)
        {
            String host = "http://localhost:8080/openkm";
            String username = "okmAdmin";
            String password = "admin";
            OKMWebservice ws = OKMWebservicesFactory.newInstance(host);

            try
            {
                ws.login(user, password);
                ws.document.purge("f123a950-0329-4d62-8328-0ff500fd42db");
```

```
            } catch (Exception e) {
                System.Console.WriteLine(e.ToString());
            }
        }
    }
}
```

move

Description:

Method	Return values	Description
move(String docId, String dstId)	**void**	Moves a document into a folder or record.
The values of the dstId parameter should be a folder or record UUID or path.		

Example:

```
using System;
using System.Collections.Generic;
using System.Linq;
using System.Text;
using com.openkm.sdk4csharp;

namespace OKMRest
{
    public class Program
    {
        static void Main(string[] args)
        {
            String host = "http://localhost:8080/openkm";
            String username = "okmAdmin";
            String password = "admin";
            OKMWebservice ws = OKMWebservicesFactory.newInstance(host);

            try
            {
                ws.login(user, password);
                ws.document.move("f123a950-0329-4d62-8328-0ff500fd42db", fldId);
            } catch (Exception e) {
                System.Console.WriteLine(e.ToString());
            }
        }
    }
}
```

copy

Description:

Method	Return values	Description
copy(String uuid, String dstId, String newName)	**Document**	Copies a document into a folder or record.

The values of the fldId parameter should be a folder or record UUID.

When the newName parameter value is null, the document will preserve the same name.

Only the binary data and the security grants are copied to the destination; the metadata, keywords, etc., of the document are not copied.

See the "**extendedCopy**" method for this feature.

Example:

```
using System;
using System.Collections.Generic;
using System.Linq;
using System.Text;
using com.openkm.sdk4csharp;

namespace OKMRest
{
   public class Program
   {
      static void Main(string[] args)
      {
         String host = "http://localhost:8080/openkm";
         String username = "okmAdmin";
         String password = "admin";
         OKMWebservice ws = OKMWebservicesFactory.newInstance(host);

         try
         {
            ws.login(user, password);
            ws.document.copy("f123a950-0329-4d62-8328-0ff500fd42db", "0ff500fd42db-0329-4d62-8328-f123a950"
         } catch (Exception e) {
            System.Console.WriteLine(e.ToString());
         }
      }
   }
}
```

getVersionHistorySize

Description:

Method	Return values	Description
getVersionHistorySize(String docId)	**long**	Returns the total size in bytes of all documents in the document history.

Example:

```
using System;
```

```
using System.Collections.Generic;
using System.Linq;
using System.Text;
using com.openkm.sdk4csharp;

namespace OKMRest
{
   public class Program
   {
      static void Main(string[] args)
      {
         String host = "http://localhost:8080/openkm";
         String username = "okmAdmin";
         String password = "admin";
         OKMWebservice ws = OKMWebservicesFactory.newInstance(host);

         try
         {
            ws.login(user, password);
            long byteCount = ws.document.getVersionHistorySize(docUUid);
            string[] suf = { "B", "KB", "MB", "GB", "TB", "PB", "EB" }; //Longs run out around EB
            long bytes = Math.Abs(byteCount);
            int place = Convert.ToInt32(Math.Floor(Math.Log(bytes, 1024)));
            double num = Math.Round(bytes / Math.Pow(1024, place), 1);
            System.Console.WriteLine((Math.Sign(byteCount) * num).ToString() + suf[place]);
         } catch (Exception e) {
            System.Console.WriteLine(e.ToString());
         }
      }
   }
}
```

isValid

Description:

Method	Return values	Description
isValid(String docId)	**Boolean**	Returns a boolean indicating whether the node is a document.

Example:

```
using System;
using System.Collections.Generic;
using System.Linq;
using System.Text;
using com.openkm.sdk4csharp;

namespace OKMRest
{
   public class Program
   {
      static void Main(string[] args)
      {
         String host = "http://localhost:8080/openkm";
         String username = "okmAdmin";
         String password = "admin";
         OKMWebservice ws = OKMWebservicesFactory.newInstance(host);

         try
```

```
            {
                ws.login(user, password);
                // Return true
                ws.document.isValid("f123a950-0329-4d62-8328-0ff500fd42db");

                // Return false
                ws.document.isValidDocument("/okm:root");
            } catch (Exception e) {
                System.Console.WriteLine(e.ToString());
            }
        }
    }
}
```

getPath

Description:

Method	Return values	Description
getPath(String docId)	**String**	Converts a document UUID to a document path.

Example:

```
using System;
using System.Collections.Generic;
using System.Linq;
using System.Text;
using com.openkm.sdk4csharp;

namespace OKMRest
{
    public class Program
    {
        static void Main(string[] args)
        {
            String host = "http://localhost:8080/openkm";
            String username = "okmAdmin";
            String password = "admin";
            OKMWebservice ws = OKMWebservicesFactory.newInstance(host);

            try
            {
                ws.login(user, password);
                System.Console.WriteLine(ws.document.getPath("e339f14b-4d3a-489c-91d3-05e4575709d2"));
            } catch (Exception e) {
                System.Console.WriteLine(e.ToString());
            }
        }
    }
}
```

extendedCopy

Description:

	Return

Method	values	Description
extendedCopy(String nodeId, String dstId, String newName, boolean categories, boolean keywords, boolean propertyGroups, boolean notes, boolean security)	**void**	Copies a document with associated data into a folder or record.

The values of the nodeId parameter should be a Document UUID.

The values of the dstId parameter should be a folder or a record UUID.

When the newName parameter value is null, the document will preserve the same name.

By default, only the binary data and the security grants are copied; the metadata, keywords, etc., of the document are not copied.

Additional:

- When the categories parameter is true, the original values of the categories will be copied.
- When the keywords parameter is true, the original values of the keywords will be copied.
- When the property groups parameter is true, the original values of the metadata groups will be copied.
- When the notes parameter is true, the original values of the notes will be copied.
- When the wiki parameter is true, the original values of the wiki will be copied.
- When the security parameter is true, the original value of the security will be copied.

Example:

```
using System;
using System.Collections.Generic;
using System.Linq;
using System.Text;
using com.openkm.sdk4csharp;

namespace OKMRest
{
   public class Program
   {
      static void Main(string[] args)
      {
         String host = "http://localhost:8080/openkm";
         String username = "okmAdmin";
         String password = "admin";
         OKMWebservice ws = OKMWebservicesFactory.newInstance(host);

         try
         {
```

```
            ws.login(user, password);
            ws.document.extendedCopy("f123a950-0329-4d62-8328-0ff500fd42db", "d1cad1b0-3c4f-4ad3-8ee1-6ad7
        } catch (Exception e) {
            System.Console.WriteLine(e.ToString());
        }
    }
  }
}
```

getExtractedText

Description:

Method	Return values	Description
getExtractedText(String docId)	**String**	Returns a String with the text extracted by the text extraction process.

When a document is uploaded to OpenKM, it goes into the text extraction queue. There's a crontab that periodically processes this queue and extracts document contents.

Unfortunately, there is not a direct way to know if a document has been processed or not from the API, because this information is only stored at the database level.

Despite this restriction, database queries can be performed via the API by administrator users to retrieve this information. Check Repository samples for accessing database-level information.

More information at Statistics.

Example:

```
using System;
using System.Collections.Generic;
using System.Linq;
using System.Text;
using com.openkm.sdk4csharp;

namespace OKMRest
{
   public class Program
   {
      static void Main(string[] args)
      {
         String host = "http://localhost:8080/openkm";
         String username = "okmAdmin";
         String password = "admin";
         OKMWebservice ws = OKMWebservicesFactory.newInstance(host);

         try
         {
```

```
            ws.login(user, password);
            System.Console.WriteLine(ws.document.getExtractedText("f123a950-0329-4d62-8328-0ff500fd42db"));
        } catch (Exception e) {
            System.Console.WriteLine(e.ToString());
        }
    }
  }
}
```

setExtractedText

Description:

Method	Return values	Description
setExtractedText(String uuid, FileStream fileStream)	**void**	Sets the extracted text.

Example:

```
using System;
using System.Collections.Generic;
using System.Linq;
using System.Text;
using com.openkm.sdk4csharp;

namespace OKMRest
{
  public class Program
  {
    static void Main(string[] args)
    {
      String host = "http://localhost:8080/openkm";
      String username = "okmAdmin";
      String password = "admin";
      OKMWebservice ws = OKMWebservicesFactory.newInstance(host);

      try
      {
        ws.login(user, password);
        FileStream fs = new FileStream(@"C:\test.pdf", FileMode.Open, FileAccess.Read);
        ws.document.setExtractedText("f123a950-0329-4d62-8328-0ff500fd42db", fs);
        fs.Close();
      } catch (Exception e) {
        System.Console.WriteLine(e.ToString());
      }
    }
  }
}
```

getThumbnail

Description:

Method	Return values	Description
getThumbnail(String docId, ThumbnailType type)	**Stream**	Returns a thumbnail image data.

Available types:

- ThumbnailType.THUMBNAIL_PROPERTIES (shown in properties view)
- ThumbnailType.THUMBNAIL_LIGHTBOX (shown in light box)
- ThumbnailType.THUMBNAIL_SEARCH (shown in search view)

Each thumbnail type has its own image dimensions.

Example:

```
using System;
using System.Collections.Generic;
using System.Linq;
using System.Text;
using com.openkm.sdk4csharp;
using System.IO;

namespace OKMRest
{
   public class Program
   {
      static void Main(string[] args)
      {
         String host = "http://localhost:8080/openkm";
         String username = "okmAdmin";
         String password = "admin";
         OKMWebservice ws = OKMWebservicesFactory.newInstance(host);

         try
         {
            ws.login(user, password);
            Stream st = ws.document.getThumbnail("f123a950-0329-4d62-8328-0ff500fd42db", ThumbnailType.THUI
         } catch (Exception e) {
            System.Console.WriteLine(e.ToString());
         }
      }
   }
}
```

setLanguage

Description:

Method	Return values	Description
setLanguage(String docId, String lang)	**void**	Sets a document language.
The parameter lang must be ISO 639-1 compliant.		

More information at https://en.wikipedia.org/wiki/List_of_ISO_639-1_codes.

Example:

```
using System;
using System.Collections.Generic;
using System.Linq;
using System.Text;
using com.openkm.sdk4csharp;

namespace OKMRest
{
   public class Program
   {
      static void Main(string[] args)
      {
         String host = "http://localhost:8080/openkm";
         String username = "okmAdmin";
         String password = "admin";
         OKMWebservice ws = OKMWebservicesFactory.newInstance(host);

         try
         {
            ws.login(user, password);
            ws.document.setLanguage("f123a950-0329-4d62-8328-0ff500fd42db", "es-ES");
         } catch (Exception e) {
            System.Console.WriteLine(e.ToString());
         }
      }
   }
}
```

setTitle

Description:

Method	Return values	Description
setTitle(String docId, String title)	**void**	Sets a document title.

Example:

```
using System;
using System.Collections.Generic;
using System.Linq;
using System.Text;
using com.openkm.sdk4csharp;
using com.openkm.sdk4csharp.bean;

namespace OKMRest
{
   public class Program
   {
      static void Main(string[] args)
```

```
        {
            String host = "http://localhost:8080/openkm";
            String username = "okmAdmin";
            String password = "admin";
            OKMWebservice ws = OKMWebservicesFactory.newInstance(host);

            try
            {
                ws.login(user, password);
                ws.document.setTitle("f123a950-0329-4d62-8328-0ff500fd42db", "Some title here");
            }
            catch (Exception e)
            {
                System.Console.WriteLine(e.ToString());
            }
        }
    }
}
```

createFromTemplate

Description:

Method	Return values	Description
createFromTemplate(String uuid, String dstPath , Boolean categories, Boolean keywords, Boolean notes, Boolean security, Dictionary<String, String> properties)	**Document**	Creates a new document from a template and returns an object Document.

The **uuid** parameter is the UUID value of the template file.

The **dstPath** value is the document destination path.

When the template uses metadata groups to fill in fields, these values are mandatory and must be set in the properties parameter.

For more information about templates and metadata, take a look at Creating templates.

Additional:

- When the categories parameter is true, the original values of the categories will be copied.
- When the keywords parameter is true, the original values of the keywords will be copied.
- When the notes parameter is true, the original values of the notes will be copied.

Example:

The example below is based on Creating PDF template sample.

```
using System;
using System.Collections.Generic;
using System.Linq;
using System.Text;
using com.openkm.sdk4csharp;
using com.openkm.sdk4csharp.util;

namespace OKMRest
{
   public class Program
   {
      static void Main(string[] args)
      {
         String host = "http://localhost:8080/openkm";
         String username = "okmAdmin";
         String password = "admin";
         OKMWebservice ws = OKMWebservicesFactory.newInstance(host);

         try
         {
            ws.login(user, password);
            Dictionary<String, String> properties = new  Dictionary<String, String>();
            properties.Add("okp:tpl.name", "Some name");
            DateTime date = DateTime.Now;
            // Value must be converted to String ISO 8601 compliant
            properties.Add("okp:tpl.bird_date", ISO8601.formatBasic(date));
            properties.Add("okp:tpl.language", "java");
            ws.document.createFromTemplate("f123a950-0329-4d62-8328-0ff500fd42db", "/okm:root/test.pdf", false,
         }
         catch (Exception e)
         {
            System.Console.WriteLine(e.ToString());
         }
      }
   }
}
```

updateFromTemplate

Description:

Method	Return values	Description
updateFromTemplate(String uuid, String dstId, Map<String, String> properties)	**Document**	Updates a document previously created from a template and returns a Document object.
The uuid value is the UUID value of the template file. The dstId is the UUID of the document to be updated. This method only makes sense when the template uses metadata groups to fill fields.		

For more information about templates and metadata, take a look at Creating templates.

Example:

The example below is based on the Creating PDF template sample.

```
using System;
using System.Collections.Generic;
using System.Linq;
using System.Text;
using com.openkm.sdk4csharp;
using com.openkm.sdk4csharp.util;

namespace OKMRest
{
   public class Program
   {
      static void Main(string[] args)
      {
         String host = "http://localhost:8080/openkm";
         String username = "okmAdmin";
         String password = "admin";
         OKMWebservice ws = OKMWebservicesFactory.newInstance(host);

         try
         {
            ws.login(user, password);
            Dictionary<String, String> properties = new  Dictionary<String, String>();
            properties.Add("okp:tpl.name", "Some name");
            DateTime date = DateTime.Now;
            // Value must be converted to String ISO 8601 compliant
            properties.Add("okp:tpl.bird_date", ISO8601.formatBasic(date));
            properties.Add("okp:tpl.language", "java");

            ws.document.updateFromTemplate("9fa9787e-d8b0-4ff7-905a-a89f0b228ec8", "058b9379-b441-454d-85
         }
         catch (Exception e)
         {
            System.Console.WriteLine(e.ToString());
         }
      }
   }
}
```

getDetectedLanguages

Description:

Method	Return values	Description
getDetectedLanguages()	**List<String>**	Returns a list of available document languages that OpenKM can identify.

Example:

```
using System;
using System.Collections.Generic;
using System.Linq;
using System.Text;
using com.openkm.sdk4csharp;
using com.openkm.sdk4csharp.bean;

namespace OKMRest
{
   public class Program
   {
      static void Main(string[] args)
      {
         String host = "http://localhost:8080/openkm";
         String username = "okmAdmin";
         String password = "admin";
         OKMWebservice ws = OKMWebservicesFactory.newInstance(host);

         try
         {
            ws.login(user, password);
            foreach (String lang in ws.document.getDetectedLanguages())
            {
               System.Console.WriteLine(lang);
            }
         }
         catch (Exception e)
         {
            System.Console.WriteLine(e.ToString());
         }
      }
   }
}
```

getAnnotations

Description:

Method	Return values	Description
getAnnotations(String docId, String verName)	**String**	Returns the document annotations for a document version.

Example:

```
using System;
using System.Collections.Generic;
using System.Linq;
using System.Text;
using com.openkm.sdk4csharp;
using com.openkm.sdk4csharp.bean;

namespace OKMRest
{
```

```
    public class Program
    {
        static void Main(string[] args)
        {
            String host = "http://localhost:8080/openkm";
            String username = "okmAdmin";
            String password = "admin";
            OKMWebservice ws = OKMWebservicesFactory.newInstance(host);

            try
            {
                ws.login(user, password);
                System.Console.WriteLine(ws.document.getAnnotations("2b9721e7-f186-4eea-ad61-42c97353548f", "1.0
            }
            catch (Exception e)
            {
                System.Console.WriteLine(e.ToString());
            }
        }
    }
}
```

getDifferences

Description:

Method	Return values	Description
getDifferences(String docId, String v1, String v2)	**Stream**	Returns a PDF document with the differences between two document versions.

Example:

```
using System;
using System.Collections.Generic;
using System.Linq;
using System.Text;
using System.IO;
using com.openkm.sdk4csharp;
using com.openkm.sdk4csharp.bean;
using com.openkm.sdk4csharp.util;

namespace OKMRest
{
    public class Program
    {
        static void Main(string[] args)
        {
            String host = "http://localhost:8080/openkm";
            String username = "okmAdmin";
            String password = "admin";
            OKMWebservice ws = OKMWebservicesFactory.newInstance(host);

            try
            {
                ws.login(user, password);
                BeanHelper beanHelper = new BeanHelper();
                Stream stream = ws.document.getDifferences("22799885-973f-46dc-a82c-dd11d2c65c65", "1.0", "1.1");
```

```
            Byte[] data = beanHelper.ReadToEnd(stream);
            FileStream fileStream = new FileStream(@"C:\Desktop\out.pdf", FileMode.OpenOrCreate, FileAccess.Rea
            foreach (byte b in data)
            {
                fileStream.WriteByte(b);
            }
            fileStream.Close();
        }
        catch (Exception e)
        {
            System.Console.WriteLine(e.ToString());
        }
    }
  }
}
```

getCheckedOut

Description:

Method	Return values	Description
getCheckedOut()	**List<Document>**	Returns a list of documents checked out by the user.

Example:

```
using System;
using System.Collections.Generic;
using System.Linq;
using System.Text;
using com.openkm.sdk4csharp;
using com.openkm.sdk4csharp.bean;

namespace OKMRest
{
  public class Program
  {
    static void Main(string[] args)
    {
      String host = "http://localhost:8080/openkm";
      String username = "okmAdmin";
      String password = "admin";
      OKMWebservice ws = OKMWebservicesFactory.newInstance(host);

      try
      {
        ws.login(user, password);
        List<Document> docs =  ws.document.getCheckedOut();
        foreach (Document doc in docs)
        {
          System.Console.WriteLine(doc.toString());
        }
      }
      catch (Exception e)
      {
        System.Console.WriteLine(e.ToString());
      }
    }
  }
}
```

setDescription

Description:

Method	Return values	Description
setDescription(String docId, String description)	**void**	Sets a document description.

Example:

```
using System;
using System.Collections.Generic;
using System.Linq;
using System.Text;
using com.openkm.sdk4csharp;
using com.openkm.sdk4csharp.bean;

namespace OKMRest
{
   public class Program
   {
      static void Main(string[] args)
      {
         String host = "http://localhost:8080/openkm";
         String username = "okmAdmin";
         String password = "admin";
         OKMWebservice ws = OKMWebservicesFactory.newInstance(host);

         try
         {
            ws.login(user, password);
            ws.document.setDescription("f123a950-0329-4d62-8328-0ff500fd42db", "Some description here");
         }
         catch (Exception e)
         {
            System.Console.WriteLine(e.ToString());
         }
      }
   }
}
```

setDispositionStage

Description:

Method	Return values	Description
setDispositionStage(String docId, long stage)	**void**	Sets a document disposition stage.

Example:

```
using System;
using System.Collections.Generic;
```

```
using System.Linq;
using System.Text;
using com.openkm.sdk4csharp;
using com.openkm.sdk4csharp.bean;

namespace OKMRest
{
   public class Program
   {
      static void Main(string[] args)
      {
         String host = "http://localhost:8080/openkm";
         String username = "okmAdmin";
         String password = "admin";
         OKMWebservice ws = OKMWebservicesFactory.newInstance(host);

         try
         {
            ws.login(user, password);
            long stage = 1;
            ws.document.setDispositionStage("f123a950-0329-4d62-8328-0ff500fd42db", stage);
         }
         catch (Exception e)
         {
            System.Console.WriteLine(e.ToString());
         }
      }
   }
}
```

createWizard

Description:

Method	Return values	Description
createWizard(String docId, long stage)	**WizardNode**	Creates a document with a wizard.

Example:

```
using System;
using System.Collections.Generic;
using System.Linq;
using System.Text;
using com.openkm.sdk4csharp;
using com.openkm.sdk4csharp.bean;

namespace OKMRest
{
   public class Program
   {
      static void Main(string[] args)
      {
         String host = "http://localhost:8080/openkm";
         String username = "okmAdmin";
         String password = "admin";
         OKMWebservice ws = OKMWebservicesFactory.newInstance(host);

         try
         {
```

```
            ws.login(user, password);
            FileStream fs = new FileStream(LOCAL_DOC, FileMode.Open, FileAccess.Read);
            long nodeClass= 1;
            WizardNode wizardNode = ws.document.createWizard("f123a950-0329-4d62-8328-0ff500fd42db","test.do
            fs.Close();
         }
         catch (Exception e)
         {
            System.Console.WriteLine(e.ToString());
         }
      }
   }
}
```

isOCRDataCaptureSupported

Description:

Method	Return values	Description
isOCRDataCaptureSupported(String docId)	**boolean**	Checks if the node supports OCR data capture.

Example:

```
using System;
using System.Collections.Generic;
using System.Linq;
using System.Text;
using com.openkm.sdk4csharp;
using com.openkm.sdk4csharp.bean;

namespace OKMRest
{
   public class Program
   {
      static void Main(string[] args)
      {
         String host = "http://localhost:8080/openkm";
         String username = "okmAdmin";
         String password = "admin";
         OKMWebservice ws = OKMWebservicesFactory.newInstance(host);

         try
         {
            ws.login(user, password);
            if(ws.document.isOCRDataCaptureSupported("f123a950-0329-4d62-8328-0ff500fd42db"))
            {
               System.Console.WriteLine("Yes supported OCR Data capture");
            }
            else
            {
               System.Console.WriteLine("No supported OCR Data capture");
            }
         }
         catch (Exception e)
         {
            System.Console.WriteLine(e.ToString());
         }
      }
   }
```

```
}
```

recognize

Description:

Method	Return values	Description
recognize(String docId)	**OCRRecognise**	Returns an OCRRecognise object.

Example:

```
using System;
using System.Collections.Generic;
using System.Linq;
using System.Text;
using com.openkm.sdk4csharp;
using com.openkm.sdk4csharp.bean;

namespace OKMRest
{
    public class Program
    {
        static void Main(string[] args)
        {
            String host = "http://localhost:8080/openkm";
            String username = "okmAdmin";
            String password = "admin";
            OKMWebservice ws = OKMWebservicesFactory.newInstance(host);

            try
            {
                ws.login(user, password);
                OCRRecognise ocr = ws.document.recognize("f123a950-0329-4d62-8328-0ff500fd42db");
            }
            catch (Exception e)
            {
                System.Console.WriteLine(e.ToString());
            }
        }
    }
}
```

captureData

Description:

Method	Return values	Description
captureData(String docId, long templateId)	**void**	Proceeds with the OCR data capture using the OCR template identified by templateId.

Example:

```
using System;
using System.Collections.Generic;
using System.Linq;
using System.Text;
using com.openkm.sdk4csharp;
using com.openkm.sdk4csharp.bean;

namespace OKMRest
{
   public class Program
   {
      static void Main(string[] args)
      {
         String host = "http://localhost:8080/openkm";
         String username = "okmAdmin";
         String password = "admin";
         OKMWebservice ws = OKMWebservicesFactory.newInstance(host);

         try
         {
            ws.login(user, password);
            long templateId = 1;
            ws.document.captureData("f123a950-0329-4d62-8328-0ff500fd42db", templateId);
         }
         catch (Exception e)
         {
            System.Console.WriteLine(e.ToString());
         }
      }
   }
}
```

getNumberOfPages

Description:

Method	Return values	Description
getNumberOfPages(String docId)	**int**	Gets the number of pages of a document.

Example:

```
using System;
using System.Collections.Generic;
using System.Linq;
using System.Text;
using com.openkm.sdk4csharp;
using com.openkm.sdk4csharp.bean;

namespace OKMRest
{
   public class Program
   {
      static void Main(string[] args)
      {
         String host = "http://localhost:8080/openkm";
```

```
            String username = "okmAdmin";
            String password = "admin";
            OKMWebservice ws = OKMWebservicesFactory.newInstance(host);

            try
            {
                ws.login(user, password);
                System.Console.WriteLine("The number of pages is : " + ws.document.getNumberOfPages("f123a950-03
            }
            catch (Exception e)
            {
                System.Console.WriteLine(e.ToString());
            }
        }
    }
}
```

getPageAsImage

Description:

Method	Return values	Description
getPageAsImage(String uuid, int pageNumber, int maxWidth, int maxHeight)	**String**	Returns the specified page as an image encoded as a Base64 string.

Example:

```
using System;
using System.Collections.Generic;
using System.Linq;
using System.Text;
using com.openkm.sdk4csharp;
using com.openkm.sdk4csharp.bean;

namespace OKMRest
{
    public class Program
    {
        static void Main(string[] args)
        {
            String host = "http://localhost:8080/openkm";
            String username = "okmAdmin";
            String password = "admin";
            OKMWebservice ws = OKMWebservicesFactory.newInstance(host);

            try
            {
                ws.login(user, password);
                System.Console.WriteLine(ws.document.getPageAsImage("f123a950-0329-4d62-8328-0ff500fd42db", 1,
            }
            catch (Exception e)
            {
                System.Console.WriteLine(e.ToString());
            }
        }
    }
}
```

mergePdf

Description:

Method	Return values	Description
mergePdf(String destinationUuid, String docName, List<String> uuids)	**String**	Merges two or more PDF files.
The parameter **destinationUuid** should be a valid folder or record UUID.		

Example:

```
using System;
using System.Collections.Generic;
using System.Linq;
using System.Text;
using com.openkm.sdk4csharp;
using com.openkm.sdk4csharp.bean;

namespace OKMRest
{
   public class Program
   {
      static void Main(string[] args)
      {
         String host = "http://localhost:8080/openkm";
         String username = "okmAdmin";
         String password = "admin";
         OKMWebservice ws = OKMWebservicesFactory.newInstance(host);

         try
         {
            ws.login(user, password);
            List<string> uuids = new List<string>();
            uuids.Add("a978f8e6-aa87-4f0f-b7bc-6f44cb090fdf");
            uuids.Add("56a6d75f-563e-4ccd-ace6-d07d7860bae5");
            string folderUuid = "15e35aef-f1bb-451e-ac86-3b0f7c88ca9f";
            string uuid = ws.document.mergePdf(folderUuid, "MergePdf.pdf", uuids);
            Document mergePdf = ws.document.getDocumentProperties(uuid);
            Console.WriteLine(mergePdf.path);
         }
         catch (Exception e)
         {
            System.Console.WriteLine(e.ToString());
         }
      }
   }
}
```

getLiveEditRestrictedMimeTypes

Description:

Method	Return values	Description
getLiveEditRestrictedMimeTypes()	**List<String>**	Returns a list of MIME types that cannot be used with the live edit feature.

Example:

```
using System;
using System.Collections.Generic;
using System.Linq;
using System.Text;
using com.openkm.sdk4csharp;
using com.openkm.sdk4csharp.bean;

namespace OKMRest
{
    public class Program
    {
        static void Main(string[] args)
        {
            String host = "http://localhost:8080/openkm";
            String username = "okmAdmin";
            String password = "admin";
            OKMWebservice ws = OKMWebservicesFactory.newInstance(host);

            try
            {
                ws.login(user, password);
                List<String> mymeTypes = ws.document.getLiveEditRestrictedMimeTypes();
            }
            catch (Exception e)
            {
                System.Console.WriteLine(e.ToString());
            }
        }
    }
}
```

liveEditCheckin

Description:

Method	Return values	Description
liveEditCheckin(String uuid, String comment, int increment)	**void**	Performs a checkin.

This method should be executed only if the document has been edited with the live edit feature.

Example:

```
using System;
using System.Collections.Generic;
using System.Linq;
using System.Text;
using com.openkm.sdk4csharp;
using com.openkm.sdk4csharp.bean;

namespace OKMRest
{
    public class Program
    {
        static void Main(string[] args)
        {
            String host = "http://localhost:8080/openkm";
            String username = "okmAdmin";
            String password = "admin";
            OKMWebservice ws = OKMWebservicesFactory.newInstance(host);

            try
            {
                ws.login(user, password);
                ws.document.liveEditCheckin("8b9a32c8-db65-41c8-a2a0-af03761f60b6", "Any comment", 1);
            }
            catch (Exception e)
            {
                System.Console.WriteLine(e.ToString());
            }
        }
    }
}
```

liveEditCancelCheckout

Description:

Method	Return values	Description
liveEditCancelCheckout(String uuid)	**void**	Cancels a document edit.

This method should be executed only if the document has been edited with the live edit feature.

Example:

```
using System;
using System.Collections.Generic;
using System.Linq;
using System.Text;
using com.openkm.sdk4csharp;

namespace OKMRest
{
    public class Program
    {
        static void Main(string[] args)
        {
```

```
            String host = "http://localhost:8080/openkm";
            String username = "okmAdmin";
            String password = "admin";
            OKMWebservice ws = OKMWebservicesFactory.newInstance(host);

            try
            {
                ws.login(user, password);
                // At this point the document is locked for other users except for the user who executed the action
                ws.document.liveEditCancelCheckout("f123a950-0329-4d62-8328-0ff500fd42db");
                // At this point other users are allowed to execute a checkout and modify the document
            } catch (Exception e) {
                System.Console.WriteLine(e.ToString());
            }
        }
    }
}
```

liveEditForceCancelCheckout

Description:

Method	Return values	Description
liveEditForceCancelCheckout(String uuid)	**void**	Cancel a document edition.

This method should be executed only if the document has been edited with the live edit feature.

Example:

```
using System;
using System.Collections.Generic;
using System.Linq;
using System.Text;
using com.openkm.sdk4csharp;

namespace OKMRest
{
    public class Program
    {
        static void Main(string[] args)
        {
            String host = "http://localhost:8080/openkm";
            String username = "okmAdmin";
            String password = "admin";
            OKMWebservice ws = OKMWebservicesFactory.newInstance(host);

            try
            {
                ws.login(user, password);
                // At this point the document is locked for other users except for the user who executed the action
                ws.document.liveEditForceCancelCheckout("f123a950-0329-4d62-8328-0ff500fd42db");
                // At this point other users are allowed to execute a checkout and modify the document
            } catch (Exception e) {
                System.Console.WriteLine(e.ToString());
            }
```

```
        }
    }
}
```

liveEditSetContent

Description:

Method	Return values	Description
liveEditSetContent(String uuid, FileStream fs	**void**	Updates the content of the document edited with the live edit feature.

Example:

```
using System;
using System.Collections.Generic;
using System.Linq;
using System.Text;
using com.openkm.sdk4csharp;
using com.openkm.sdk4csharp.bean;

namespace OKMRest
{
    public class Program
    {
        static void Main(string[] args)
        {
            String host = "http://localhost:8080/openkm";
            String username = "okmAdmin";
            String password = "admin";
            OKMWebservice ws = OKMWebservicesFactory.newInstance(host);

            try
            {
                ws.login(user, password);
                FileStream fs = new FileStream(@"D:\Test.pdf", FileMode.Open, FileAccess.Read);
                ws.document.liveEditSetContent("1ec49da9-1746-4875-ae32-9281d7303a62", fs);
                fs.Close();
            }
            catch (Exception e)
            {
                System.Console.WriteLine(e.ToString());
            }
        }
    }
}
```

IsAttachment

Description:

Method	Return values	Description

isAttachment(String docId)	**Boolean**	Returns a boolean indicating whether the node is a mail attachment.

Example:

```
using System;
using System.Collections.Generic;
using System.Linq;
using System.Text;
using com.openkm.sdk4csharp;
using com.openkm.sdk4csharp.bean;

namespace OKMRest
{
    public class Program
    {
        static void Main(string[] args)
        {
            String host = "http://localhost:8080/openkm";
            String username = "okmAdmin";
            String password = "admin";
            OKMWebservice ws = OKMWebservicesFactory.newInstance(host);

            try
            {
                ws.login(user, password);
                System.Console.Writeline(ws.document.isAttachment("1ec49da9-1746-4875-ae32-9281d7303a62").ToSt
            }
            catch (Exception e)
            {
                System.Console.WriteLine(e.ToString());
            }
        }
    }
}
```

isConvertibleToPDF

Description:

Method	Return values	Description
isConvertibleToPDF(String docId)	**Boolean**	Returns a boolean indicating whether the node is convertible to PDF.

In the case of a node of type **PDF file**, a **false** value will be returned.

Example:

```
using System;
using System.Collections.Generic;
```

```
using System.Linq;
using System.Text;
using com.openkm.sdk4csharp;
using com.openkm.sdk4csharp.bean;

namespace OKMRest
{
    public class Program
    {
        static void Main(string[] args)
        {
            String host = "http://localhost:8080/openkm";
            String username = "okmAdmin";
            String password = "admin";
            OKMWebservice ws = OKMWebservicesFactory.newInstance(host);

            try
            {
                ws.login(user, password);
                System.Console.Writeline(ws.document.isConvertibleToPDF("1ec49da9-1746-4875-ae32-9281d7303a62
            }
            catch (Exception e)
            {
                System.Console.WriteLine(e.ToString());
            }
        }
    }
}
```

getPdf

Description:

Method	Return values	Description
getPdf(String uuid)	**Stream**	Returns a PDF of the document.

Example:

```
using System;
using System.Collections.Generic;
using System.Linq;
using System.Text;
using com.openkm.sdk4csharp;
using com.openkm.sdk4csharp.bean;
using com.openkm.sdk4csharp.impl;

namespace OKMRest
{
    public class Program
    {
        static void Main(string[] args)
        {
            String host = "http://localhost:8080/openkm";
            String username = "okmAdmin";
            String password = "admin";
            OKMWebservice ws = OKMWebservicesFactory.newInstance(host);

            try
            {
```

```
            ws.login(user, password);
            Document doc = ws.document.getDocumentProperties("4b88cbe9-e73d-45fc-bac0-35e0d6e59e43");
            Stream stream = ws.document.getPdf(doc.uuid);
            FileStream docFile = new FileStream("D:\\test.pdf", FileMode.OpenOrCreate, FileAccess.ReadWrite);
            stream.CopyTo(docFile);
            stream.Close();
            docFile.Close();
        }
        catch (Exception e)
        {
            System.Console.WriteLine(e.ToString());
        }
    }
  }
}
```

saveAsPdf

Description:

Method	Return values	Description
saveAsPdf(String uuid, String newName, bool propertyGroups, bool security)	**Document**	Saves the document as a PDF in the OpenKM repository.

The value of the **uuid** parameter should be a Document UUID.

When the value of the **newName** parameter is null, the document will preserve its name.

Additional:

- When the propertyGroups parameter is true, the metadata groups of the source are copied to the target.
- When the security parameter is true, the security of the source is copied to the target.

Example:

```
using System;
using System.Collections.Generic;
using System.Linq;
using System.Text;
using com.openkm.sdk4csharp;
using com.openkm.sdk4csharp.bean;
using com.openkm.sdk4csharp.impl;

namespace OKMRest
{
  public class Program
  {
    static void Main(string[] args)
    {
```

```
            String host = "http://localhost:8080/openkm";
            String username = "okmAdmin";
            String password = "admin";
            OKMWebservice ws = OKMWebservicesFactory.newInstance(host);

            try
            {
                ws.login(user, password);
                Document doc = ws.document.getDocumentProperties("4b88cbe9-e73d-45fc-bac0-35e0d6e59e43");
                Document docPdf = ws.document.saveAsPdf(doc.uuid, "test.pdf", true, true);
                System.Console.WriteLine("Document pdf: " + docPdf.path);
            }
            catch (Exception e)
            {
                System.Console.WriteLine(e.ToString());
            }
        }
    }
}
```

webPageImport

Description:

Method	Return values	Description
webPageImport(String uuid, String url)	**void**	Saves the content of a web page as a PDF document in the OpenKM repository.

The value of the **uuid** parameter should be a folder or record node UUID.

The value of the **url** parameter should be a valid web page URL.

Example:

```
using System;
using System.Collections.Generic;
using System.Linq;
using System.Text;
using com.openkm.sdk4csharp;
using com.openkm.sdk4csharp.bean;
using com.openkm.sdk4csharp.impl;

namespace OKMRest
{
    public class Program
    {
        static void Main(string[] args)
        {
            String host = "http://localhost:8080/openkm";
            String username = "okmAdmin";
            String password = "admin";
            OKMWebservice ws = OKMWebservicesFactory.newInstance(host);

            try
```

```
            {
                ws.login(user, password);
                ws.document.webPageImport("271cc3aa-218e-4574-8065-c34c704f4a20", "https://www.google.com/");
            }
            catch (Exception e)
            {
                System.Console.WriteLine(e.ToString());
            }
        }
    }
}
```

stamp

Description:

Method	Return values	Description
stamp(String uuid, int type, long stampId)	**void**	Stamps the document.
The value of the **uuid** parameter should be a folder or record node UUID.		

Example:

```
using System;
using System.Collections.Generic;
using System.Linq;
using System.Text;
using com.openkm.sdk4csharp;
using com.openkm.sdk4csharp.bean;
using com.openkm.sdk4csharp.impl;

namespace OKMRest
{
    public class Program
    {
        static void Main(string[] args)
        {
            String host = "http://localhost:8080/openkm";
            String username = "okmAdmin";
            String password = "admin";
            OKMWebservice ws = OKMWebservicesFactory.newInstance(host);

            try
            {
                ws.login(user, password);
                int type=1;
                stampId=1;
                ws.document.stamp("271cc3aa-218e-4574-8065-c34c704f4a20", type, stampId);
            }
            catch (Exception e)
            {
                System.Console.WriteLine(e.ToString());
            }
        }
    }
}
```

getXrefs

Description:

Method	Return values	Description
getXRefs(String uuid)	**List<XRef>**	Returns a list of document references for a document.

Example:

```
using System;
using System.Collections.Generic;
using System.Linq;
using System.Text;
using com.openkm.sdk4csharp;
using com.openkm.sdk4csharp.bean;
using com.openkm.sdk4csharp.impl;

namespace OKMRest
{
   public class Program
   {
      static void Main(string[] args)
      {
         String host = "http://localhost:8080/openkm";
         String username = "okmAdmin";
         String password = "admin";
         OKMWebservice ws = OKMWebservicesFactory.newInstance(host);

         try
         {
            ws.login(user, password);
            foreach (XRef xRef in ws.document.getXrefs("5ce6dd37-7472-404a-878e-274005a2d6db"))
            {
               Console.WriteLine(xRef.toString());
            }
         }
         catch (Exception e)
         {
            System.Console.WriteLine(e.ToString());
         }
      }
   }
}
```

refresh

Description:

Method	Return values	Description
refresh(String uuid)	**void**	Refreshes the references of a document.

Example:

```
using System;
using System.Collections.Generic;
using System.Linq;
using System.Text;
using com.openkm.sdk4csharp;
using com.openkm.sdk4csharp.bean;
using com.openkm.sdk4csharp.impl;

namespace OKMRest
{
   public class Program
   {
      static void Main(string[] args)
      {
         String host = "http://localhost:8080/openkm";
         String username = "okmAdmin";
         String password = "admin";
         OKMWebservice ws = OKMWebservicesFactory.newInstance(host);

         try
         {
            ws.login(user, password);
            ws.document.refresh("5ce6dd37-7472-404a-878e-274005a2d6db");
         }
         catch (Exception e)
         {
            System.Console.WriteLine(e.ToString());
         }
      }
   }
}
```

FilePlan samples

Basic

Suggested code sample

First, you must create the webservice object:

```
OKMWebservices ws = OKMWebservicesFactory.newInstance(host);
```

Then you should log in using the method "**login**". You can access the "**login**" method from the web service object "**ws**" as shown below:

```
ws.login(user, password);
```

Once you are logged in to the web services, the session is kept in the web service object. Then you can use the other API methods.

At this point you can use all the FilePlan methods from the "**filePlan**" class as shown below:

```
ws.filePlan.getRootSections();
```

Methods

getRootSections

Description:

Method	Return values	Description
getRootSections()	**List<NodeClassSectionDefinition>**	Returns a list of the NodeClassSectionDefinition.

Example:

```
using System;
using System.Collections.Generic;
using System.Linq;
using System.Text;
using com.openkm.sdk4csharp;
using com.openkm.sdk4csharp.bean;

namespace OKMRest
{
   public class Program
   {
      static void Main(string[] args)
```

```
        {
            String host = "http://localhost:8180/openkm";
            String username = "okmAdmin";
            String password = "admin";
            OKMWebservice ws = OKMWebservicesFactory.newInstance(host);

            try
            {
                ws.login(user, password);
                List<NodeClassSectionDefinition> results = ws.filePlan.getRootSections();
                foreach (NodeClassSectionDefinition ncsd in results)
                {
                    System.Console.WriteLine(ncsd.toString());
                }
            }
            catch (Exception e)
            {
                System.Console.WriteLine(e.ToString());
            }
        }
    }
}
```

getRootSectionsFilteredBySecurity

Description:

Method	Return values	Description
getRootSectionsFilteredBySecurity(int permissions)	**List<NodeClassSectionDefinition>**	Returns a list of the NodeClassSectionDefinition by permissions.

The class **com.openkm.sdk4csharp.bean.Permission** contains permission values (READ, WRITE, etc.). You should use it in combination with methods that change or get security grants.

Example:

```
using System;
using System.Collections.Generic;
using System.Linq;
using System.Text;
using com.openkm.sdk4csharp;
using com.openkm.sdk4csharp.bean;

namespace OKMRest
{
    public class Program
    {
        static void Main(string[] args)
        {
            String host = "http://localhost:8180/openkm";
            String username = "okmAdmin";
            String password = "admin";
            OKMWebservice ws = OKMWebservicesFactory.newInstance(host);
```

```
            try
            {
                ws.login(user, password);
                List<NodeClassSectionDefinition> results = ws.filePlan.getRootSectionsFilteredBySecurity(permissions);
                foreach (NodeClassSectionDefinition ncsd in results)
                {
                    System.Console.WriteLine(ncsd.toString());
                }
            }
            catch (Exception e)
            {
                System.Console.WriteLine(e.ToString());
            }
        }
    }
}
```

getChildrenSections

Description:

Method	Return values	Description
getChildrenSections(long parentId)	**List<NodeClassSectionDefinition>**	Returns a list of the NodeClassSectionDefinition by parent section.

Example:

```
using System;
using System.Collections.Generic;
using System.Linq;
using System.Text;
using com.openkm.sdk4csharp;
using com.openkm.sdk4csharp.bean;

namespace OKMRest
{
    public class Program
    {
        static void Main(string[] args)
        {
            String host = "http://localhost:8180/openkm";
            String username = "okmAdmin";
            String password = "admin";
            OKMWebservice ws = OKMWebservicesFactory.newInstance(host);

            try
            {
                ws.login(user, password);
                long parentId = 1;
                List<NodeClassSectionDefinition> results = ws.filePlan.getChildrenSections(parentId);
                foreach (NodeClassSectionDefinition ncsd in results)
                {
                    System.Console.WriteLine(ncsd.toString());
                }
            }
            catch (Exception e)
            {
```

```
            System.Console.WriteLine(e.ToString());
        }
    }
  }
}
```

getChildrenSectionsFilteredBySecurity

Description:

Method	Return values	Description
getChildrenSectionsFilteredBySecurity(long parentId, int permissions)	**List<NodeClassSectionDefinition>**	Returns a list of the NodeClassSectionDefinition by parent section and permissions.

The class **com.openkm.sdk4csharp.bean.Permission** contains permission values (READ, WRITE, etc.). You should use it in combination with methods that change or get security grants.

Example:

```
using System;
using System.Collections.Generic;
using System.Linq;
using System.Text;
using com.openkm.sdk4csharp;
using com.openkm.sdk4csharp.bean;

namespace OKMRest
{
   public class Program
   {
      static void Main(string[] args)
      {
         String host = "http://localhost:8180/openkm";
         String username = "okmAdmin";
         String password = "admin";
         OKMWebservice ws = OKMWebservicesFactory.newInstance(host);

         try
         {
            ws.login(user, password);
            long parentId = 1;
            int permissions = Permission.ALL_GRANTS;
            List<NodeClassSectionDefinition> results = ws.filePlan.getChildrenSectionsFilteredBySecurity(parentId, p
            foreach (NodeClassSectionDefinition ncsd in results)
            {
               System.Console.WriteLine(ncsd.toString());
            }
         }
         catch (Exception e)
         {
            System.Console.WriteLine(e.ToString());
```

```
        }
      }
   }
}
```

getChildrenClasses

Description:

Method	Return values	Description
getChildrenClasses(long sectionId)	**List<NodeClass>**	Returns a list of the NodeClass by section.

Example:

```
using System;
using System.Collections.Generic;
using System.Linq;
using System.Text;
using com.openkm.sdk4csharp;
using com.openkm.sdk4csharp.bean;

namespace OKMRest
{
   public class Program
   {
      static void Main(string[] args)
      {
         String host = "http://localhost:8180/openkm";
         String username = "okmAdmin";
         String password = "admin";
         OKMWebservice ws = OKMWebservicesFactory.newInstance(host);

         try
         {
            ws.login(user, password);
            long sectionId = 1;
            List<NodeClass> results = ws.filePlan.getChildrenClasses(sectionId);
            foreach (NodeClass nc in results)
            {
               System.Console.WriteLine(nc.toString());
            }
         }
         catch (Exception e)
         {
            System.Console.WriteLine(e.ToString());
         }
      }
   }
}
```

getChildrenClassesFilteredBySecurity

Description:

Method	Return values	Description

getChildrenClassesFilteredBySecurity(long sectionId, int permissions)	**List<NodeClass>**	Returns a list of the NodeClass by section and permissions.

The class **com.openkm.sdk4csharp.bean.Permission** contains permission values (READ, WRITE, etc.). You should use it in combination with methods that change or get security grants.

Example:

```
using System;
using System.Collections.Generic;
using System.Linq;
using System.Text;
using com.openkm.sdk4csharp;
using com.openkm.sdk4csharp.bean;

namespace OKMRest
{
   public class Program
   {
      static void Main(string[] args)
      {
         String host = "http://localhost:8180/openkm";
         String username = "okmAdmin";
         String password = "admin";
         OKMWebservice ws = OKMWebservicesFactory.newInstance(host);

         try
         {
            ws.login(user, password);
            long sectionId = 1;
            int permissions = Permission.ALL_GRANTS;
            List<NodeClass> results = ws.filePlan.getChildrenClassesFilteredBySecurity(sectionId, permissions);
            foreach (NodeClass nc in results)
            {
               System.Console.WriteLine(nc.toString());
            }
         }
         catch (Exception e)
         {
            System.Console.WriteLine(e.ToString());
         }
      }
   }
}
```

findNodeClassByPk

Description:

Method	Return values	Description
findNodeClassByPk(long id)	**NodeClass**	Returns a NodeClass.

Example:

```
using System;
using System.Collections.Generic;
using System.Linq;
using System.Text;
using com.openkm.sdk4csharp;
using com.openkm.sdk4csharp.bean;

namespace OKMRest
{
   public class Program
   {
      static void Main(string[] args)
      {
         String host = "http://localhost:8180/openkm";
         String username = "okmAdmin";
         String password = "admin";
         OKMWebservice ws = OKMWebservicesFactory.newInstance(host);

         try
         {
            ws.login(user, password);
            long id = 0;
            NodeClass nodeClass= ws.filePlan.findNodeClassByPk(id);
            System.Console.WriteLine(nodeClass.toString());
         }
         catch (Exception e)
         {
            System.Console.WriteLine(e.ToString());
         }
      }
   }
}
```

findElectronicRecordClasses

Description:

Method	Return values	Description
findElectronicRecordClasses()	**List<NodeClass>**	Returns a list of the NodeClass that are Electronic Records.

Example:

```
using System;
using System.Collections.Generic;
using System.Linq;
using System.Text;
using com.openkm.sdk4csharp;
using com.openkm.sdk4csharp.bean;

namespace OKMRest
{
   public class Program
   {
      static void Main(string[] args)
      {
```

```
            String host = "http://localhost:8180/openkm";
            String username = "okmAdmin";
            String password = "admin";
            OKMWebservice ws = OKMWebservicesFactory.newInstance(host);

            try
            {
                ws.login(user, password);
                List<NodeClass> results = ws.filePlan.findElectronicRecordClasses();
                foreach (NodeClass nc in results)
                {
                    System.Console.WriteLine(nc.toString());
                }
            }
            catch (Exception e)
            {
                System.Console.WriteLine(e.ToString());
            }
        }
    }
}
```

findElectronicRecordClassesFilteredBySecurity

Description:

Method	Return values	Description
findElectronicRecordClassesFilteredBySecurity(int permissions)	**List<NodeClass>**	Returns a list of the NodeClass by section and permissions that are Electronic Records.

The class **com.openkm.sdk4csharp.bean.Permission** contains permission values (READ, WRITE, etc.). You should use it in combination with methods that change or get security grants.

Example:

```
using System;
using System.Collections.Generic;
using System.Linq;
using System.Text;
using com.openkm.sdk4csharp;
using com.openkm.sdk4csharp.bean;

namespace OKMRest
{
    public class Program
    {
        static void Main(string[] args)
        {
            String host = "http://localhost:8180/openkm";
            String username = "okmAdmin";
            String password = "admin";
            OKMWebservice ws = OKMWebservicesFactory.newInstance(host);
```

```
            try
            {
                ws.login(user, password);
                int permissions = Permission.ALL_GRANTS;
                List<NodeClass> results = ws.filePlan.findElectronicRecordClassesFilteredBySecurity(permissions);
                foreach (NodeClass nc in results)
                {
                    System.Console.WriteLine(nc.toString());
                }
            }
            catch (Exception e)
            {
                System.Console.WriteLine(e.ToString());
            }
        }
    }
}
```

findFilteredByCodeOrNameFilteredBySecurity

Description:

Method	Return values	Description
findFilteredByCodeOrNameFilteredBySecurity(String code, String name, int permissions)	**List<NodeClass>**	Returns a list of the NodeClass by code, name and permissions.

The class **com.openkm.sdk4csharp.bean.Permission** contains permission values (READ, WRITE, etc.). You should use it in combination with methods that change or get security grants.

Example:

```
using System;
using System.Collections.Generic;
using System.Linq;
using System.Text;
using com.openkm.sdk4csharp;
using com.openkm.sdk4csharp.bean;

namespace OKMRest
{
    public class Program
    {
        static void Main(string[] args)
        {
            String host = "http://localhost:8180/openkm";
            String username = "okmAdmin";
            String password = "admin";
            OKMWebservice ws = OKMWebservicesFactory.newInstance(host);

            try
            {
                ws.login(user, password);
                String code = string.Empty;
                String name = "test";
```

```
            int permissions = Permission.ALL_GRANTS;
            List<NodeClass> results = ws.filePlan.findFilteredByCodeOrNameFilteredBySecurity(code, name, permiss
            foreach (NodeClass nc in results)
            {
                System.Console.WriteLine(nc.toString());
            }
        }
        catch (Exception e)
        {
            System.Console.WriteLine(e.ToString());
        }
    }
  }
}
```

findSectionFiltered

Description:

Method	Return values	Description
findSectionFiltered(String code, String name, int permissions)	**List<NodeClassSectionDefinition>**	Returns a list of the NodeClassSectionDefinition by code, name and permissions.

> The class **com.openkm.sdk4csharp.bean.Permission** contains permission values (READ, WRITE, etc.). You should use it in combination with methods that change or get security grants.

Example:

```
using System;
using System.Collections.Generic;
using System.Linq;
using System.Text;
using com.openkm.sdk4csharp;
using com.openkm.sdk4csharp.bean;

namespace OKMRest
{
  public class Program
  {
    static void Main(string[] args)
    {
      String host = "http://localhost:8180/openkm";
      String username = "okmAdmin";
      String password = "admin";
      OKMWebservice ws = OKMWebservicesFactory.newInstance(host);

      try
      {
        ws.login(user, password);
        String code = string.Empty;
        String name = "test";
        int permissions = Permission.ALL_GRANTS;
        List<NodeClassSectionDefinition> results = ws.filePlan.findSectionFiltered(code, name, permissions);
```

```
            foreach (NodeClassSectionDefinition ncsd in results)
            {
                System.Console.WriteLine(ncsd.toString());
            }
        }
        catch (Exception e)
        {
            System.Console.WriteLine(e.ToString());
        }
    }
}
```

getNodeClassBreadcrumb

Description:

Method	Return values	Description
getNodeClassBreadcrumb(long sectionId)	**List<NodeClassSectionDefinition>**	Returns a list of the NodeClassSectionDefinition that are Electronic Records.

Example:

```
using System;
using System.Collections.Generic;
using System.Linq;
using System.Text;
using com.openkm.sdk4csharp;
using com.openkm.sdk4csharp.bean;

namespace OKMRest
{
    public class Program
    {
        static void Main(string[] args)
        {
            String host = "http://localhost:8180/openkm";
            String username = "okmAdmin";
            String password = "admin";
            OKMWebservice ws = OKMWebservicesFactory.newInstance(host);

            try
            {
                ws.login(user, password);
                long sectionId = 1;
                List<NodeClassSectionDefinition> results = ws.filePlan.getNodeClassBreadcrumb(sectionId);
                foreach (NodeClassSectionDefinition ncsd in results)
                {
                    System.Console.WriteLine(ncsd.toString());
                }
            }
            catch (Exception e)
            {
                System.Console.WriteLine(e.ToString());
            }
        }
```

```
    }
}
```

findAllNodeClasses

Description:

Method	Return values	Description
findAllNodeClasses()	**List<NodeClass>**	Returns a list of the NodeClass.

Example:

```
using System;
using System.Collections.Generic;
using System.Linq;
using System.Text;
using com.openkm.sdk4csharp;
using com.openkm.sdk4csharp.bean;

namespace OKMRest
{
    public class Program
    {
        static void Main(string[] args)
        {
            String host = "http://localhost:8180/openkm";
            String username = "okmAdmin";
            String password = "admin";
            OKMWebservice ws = OKMWebservicesFactory.newInstance(host);

            try
            {
                ws.login(user, password);
                List<NodeClass> results = ws.filePlan.findAllNodeClasses();
                foreach (NodeClass nc in results)
                {
                    System.Console.WriteLine(nc.toString());
                }
            }
            catch (Exception e)
            {
                System.Console.WriteLine(e.ToString());
            }
        }
    }
}
```

getRootSectionsIdWithChildren

Description:

Method	Return values	Description
getRootSectionsIdWithChildren()	**List<long>**	Returns a list of the section ids that have children and whose

		parent is root.

Example:

```
using System;
using System.Collections.Generic;
using System.Linq;
using System.Text;
using com.openkm.sdk4csharp;
using com.openkm.sdk4csharp.bean;

namespace OKMRest
{
   public class Program
   {
      static void Main(string[] args)
      {
         String host = "http://localhost:8180/openkm";
         String username = "okmAdmin";
         String password = "admin";
         OKMWebservice ws = OKMWebservicesFactory.newInstance(host);

         try
         {
            ws.login(user, password);
            List<long> results = ws.filePlan.getRootSectionsIdWithChildren();
            foreach (var id in results)
            {
               System.Console.WriteLine(id.toString());
            }
         }
         catch (Exception e)
         {
            System.Console.WriteLine(e.ToString());
         }
      }
   }
}
```

getChildrenSectionsIdByTenantWithChildren

Description:

Method	Return values	Description
getChildrenSectionsIdByTenantWithChildren(long parentId)	**List<long>**	Returns a list of the section ids that have children with parent equal to parentId and are filtered by tenant.

Example:

```
using System;
using System.Collections.Generic;
using System.Linq;
```

```
using System.Text;
using com.openkm.sdk4csharp;
using com.openkm.sdk4csharp.bean;

namespace OKMRest
{
   public class Program
   {
      static void Main(string[] args)
      {
         String host = "http://localhost:8180/openkm";
         String username = "okmAdmin";
         String password = "admin";
         OKMWebservice ws = OKMWebservicesFactory.newInstance(host);

         try
         {
            ws.login(user, password);
            long parentId = 1;
            List<long> result = ws.filePlan.getChildrenSectionsIdByTenantWithChildren(parentId);
            foreach (var id in result)
            {
               System.Console.WriteLine(id.toString());
            }
         }
         catch (Exception e)
         {
            System.Console.WriteLine(e.ToString());
         }
      }
   }
}
```

Folder samples

Basics

On most methods, you'll see the parameter named "**fldId**". The value of this parameter can be a valid folder **UUID**.

Example of fldId:

- Using UUID -> "**f123a950-0329-4d62-8328-0ff500fd42db**"

Suggested code sample

First, you must create the webservice object:

```
OKMWebservices ws = OKMWebservicesFactory.newInstance(host);
```

Then you should log in using the method "**login**". You can access the "**login**" method from the web service object "**ws**" as shown below:

```
ws.login(user, password);
```

Once you are logged in with the web service, the session is kept in the web service object. Then you can use the other API methods.

At this point you can use all the Folder methods of "**folder**" class as shown below:

```
ws.folder.create("1be884f4-5758-4985-94d1-f18bfe004db8", "test");
```

Methods

create

Description:

Method	Return values	Description
create(String fldId, String name)	**Folder**	Creates a new folder and returns a Folder object.

Example:

```
using System;
using System.Collections.Generic;
```

```
using System.Linq;
using System.Text;
using com.openkm.sdk4csharp;
using com.openkm.sdk4csharp.bean;

namespace OKMRest
{
   public class Program
   {
      static void Main(string[] args)
      {
         String host = "http://localhost:8080/openkm";
         String username = "okmAdmin";
         String password = "admin";
         OKMWebservice ws = OKMWebservicesFactory.newInstance(host);

         try
         {
            ws.login(user, password);
            ws.folder.create("f123a950-0329-4d62-8328-0ff500fd42db", "test");
         } catch (Exception e) {
            System.Console.WriteLine(e.ToString());
         }
      }
   }
}
```

create

Description:

Method	Return values	Description
create(String uuid, String name, long nodeClass)	**Folder**	Creates a new folder and returns a Folder object.

Example:

```
using System;
using System.Collections.Generic;
using System.Linq;
using System.Text;
using com.openkm.sdk4csharp;
using com.openkm.sdk4csharp.bean;

namespace OKMRest
{
   public class Program
   {
      static void Main(string[] args)
      {
         String host = "http://localhost:8080/openkm";
         String username = "okmAdmin";
         String password = "admin";
         OKMWebservice ws = OKMWebservicesFactory.newInstance(host);

         try
         {
```

```
            ws.login(user, password);
            long nodeClass = 0;
            ws.folder.create("f123a950-0329-4d62-8328-0ff500fd42db", "test", nodeClass);
        } catch (Exception e) {
            System.Console.WriteLine(e.ToString());
        }
    }
  }
}
```

getProperties

Description:

Method	Return values	Description
getProperties(String fldId)	**Folder**	Returns the folder properties.

Example:

```
using System;
using System.Collections.Generic;
using System.Linq;
using System.Text;
using com.openkm.sdk4csharp;
using com.openkm.sdk4csharp.bean;

namespace OKMRest
{
   public class Program
   {
      static void Main(string[] args)
      {
         String host = "http://localhost:8080/openkm";
         String username = "okmAdmin";
         String password = "admin";
         OKMWebservice ws = OKMWebservicesFactory.newInstance(host);

         try
         {
            ws.login(user, password);
            System.Console.WriteLine(ws.folder.getProperties("f123a950-0329-4d62-8328-0ff500fd42db").toString());
         } catch (Exception e) {
            System.Console.WriteLine(e.ToString());
         }
      }
   }
}
```

delete

Description:

Method	Return values	Description
delete(String fldId)	**void**	Deletes a folder.

Example:

```
using System;
using System.Collections.Generic;
using System.Linq;
using System.Text;
using com.openkm.sdk4csharp;

namespace OKMRest
{
   public class Program
   {
      static void Main(string[] args)
      {
         String host = "http://localhost:8080/openkm";
         String username = "okmAdmin";
         String password = "admin";
         OKMWebservice ws = OKMWebservicesFactory.newInstance(host);

         try
         {
            ws.login(user, password);
            ws.folder.delete("f123a950-0329-4d62-8328-0ff500fd42db");
         } catch (Exception e) {
            System.Console.WriteLine(e.ToString());
         }
      }
   }
}
```

rename

Description:

Method	Return values	Description
rename(String fldId, String newName)	**Folder**	Renames a folder.

Example:

```
using System;
using System.Collections.Generic;
using System.Linq;
using System.Text;
using com.openkm.sdk4csharp;
using com.openkm.sdk4csharp.bean;

namespace OKMRest
{
   public class Program
   {
      static void Main(string[] args)
      {
         String host = "http://localhost:8080/openkm";
         String username = "okmAdmin";
         String password = "admin";
         OKMWebservice ws = OKMWebservicesFactory.newInstance(host);
```

```
            try
            {
                ws.login(user, password);
                // Exists folder /okm:root/test
                ws.folder.rename("f123a950-0329-4d62-8328-0ff500fd42db", "renamedFolder");
                // Folder has renamed to /okm:root/renamedFolder
            } catch (Exception e) {
                System.Console.WriteLine(e.ToString());
            }
        }
    }
}
```

move

Description:

Method	Return values	Description
move(String fldId, String dstId)	**void**	Moves a folder into another folder or record.
The values of the dstId parameter should be a folder or record UUID or a path.		

Example:

```
using System;
using System.Collections.Generic;
using System.Linq;
using System.Text;
using com.openkm.sdk4csharp;

namespace OKMRest
{
    public class Program
    {
        static void Main(string[] args)
        {
            String host = "http://localhost:8080/openkm";
            String username = "okmAdmin";
            String password = "admin";
            OKMWebservice ws = OKMWebservicesFactory.newInstance(host);

            try
            {
                ws.login(user, password);
                // Exists folder /okm:root/test
                ws.folder.move("f123a950-0329-4d62-8328-0ff500fd42db", "ac165cab-a62a-4b17-89fc-2480a1d784db");
                // Folder has moved to /okm:root/tmp/test
            } catch (Exception e) {
                System.Console.WriteLine(e.ToString());
            }
        }
    }
}
```

getChildren

Description:

Method	Return values	Description
getChildren(String fldId)	**List<Folder>**	Returns a list of all folders whose parent is fldId.
The parameter fldId can be a folder or a record node.		

Example:

```
using System;
using System.Collections.Generic;
using System.Linq;
using System.Text;
using com.openkm.sdk4csharp;
using com.openkm.sdk4csharp.bean;

namespace OKMRest
{
   public class Program
   {
      static void Main(string[] args)
      {
         String host = "http://localhost:8080/openkm";
         String username = "okmAdmin";
         String password = "admin";
         OKMWebservice ws = OKMWebservicesFactory.newInstance(host);

         try
         {
            ws.login(user, password);
            foreach (Folder fld in ws.folder.getChildren("f123a950-0329-4d62-8328-0ff500fd42db"))
            {
               System.Console.WriteLine(fld.toString());
            }
         }
         catch (Exception e)
         {
            System.Console.WriteLine(e.ToString());
         }
      }
   }
}
```

isValid

Description:

Method	Return values	Description
isValid(String fldId)	**Boolean**	Returns a boolean that indicates whether the node is a folder.

Example:

```
using System;
using System.Collections.Generic;
using System.Linq;
using System.Text;
using com.openkm.sdk4csharp;

namespace OKMRest
{
   public class Program
   {
      static void Main(string[] args)
      {
         String host = "http://localhost:8080/openkm";
         String username = "okmAdmin";
         String password = "admin";
         OKMWebservice ws = OKMWebservicesFactory.newInstance(host);

         try
         {
            ws.login(user, password);
            // Return true
            ws.folder.isValid("f123a950-0329-4d62-8328-0ff500fd42db");
         } catch (Exception e) {
            System.Console.WriteLine(e.ToString());
         }
      }
   }
}
```

getPath

Description:

Method	Return values	Description
getPath(String uuid)	**String**	Converts a folder UUID to a folder path.

Example:

```
using System;
using System.Collections.Generic;
using System.Linq;
using System.Text;
using com.openkm.sdk4csharp;

namespace OKMRest
{
   public class Program
   {
      static void Main(string[] args)
      {
         String host = "http://localhost:8080/openkm";
         String username = "okmAdmin";
         String password = "admin";
         OKMWebservice ws = OKMWebservicesFactory.newInstance(host);

         try
         {
            ws.login(user, password);
```

```
            System.Console.WriteLine(ws.folder.getPath("f123a950-0329-4d62-8328-0ff500fd42db"));
        } catch (Exception e) {
            System.Console.WriteLine(e.ToString());
        }
    }
  }
}
```

copy

Description:

Method	Return values	Description
copy(String fldId, String dstId, String newName)	**Folder**	Copies a folder into a folder or record.

The values of the dstId parameter should be a folder or record UUID or a path.

When the newName parameter value is null, the folder will preserve the same name.

Only the security grants are copied to the destination. The folder's metadata, keywords, etc. are not copied.

See the "**extendedFolderCopy**" method for this feature.

Example:

```
using System;
using System.Collections.Generic;
using System.Linq;
using System.Text;
using com.openkm.sdk4csharp;

namespace OKMRest
{
  public class Program
  {
    static void Main(string[] args)
    {
      String host = "http://localhost:8080/openkm";
      String username = "okmAdmin";
      String password = "admin";
      OKMWebservice ws = OKMWebservicesFactory.newInstance(host);

      try
      {
        ws.login(user, password);
        ws.folder.copy("f123a950-0329-4d62-8328-0ff500fd42db", "a321a950-0329-4d62-8328-0ff500fd42db", "ne
      } catch (Exception e) {
        System.Console.WriteLine(e.ToString());
      }
    }
  }
}
```

extendedCopy

Description:

Method	Return values	Description
extendedCopy(String fldId, String dstId, String newName, bool categories, bool keywords, bool propertyGroups, bool notes, bool wiki, bool security)	**Folder**	Copies a folder with associated data into another folder or record.

The values of the dstId parameter should be a folder or record UUID.

When the newName parameter value is null, the folder will preserve the same name.

By default, only the binary data and the security grants are copied; the folder's metadata, keywords, etc. are not copied.

Additional:

- When the category parameter is true, the original values of the categories will be copied.
- When the keywords parameter is true, the original values of the keywords will be copied.
- When the property groups parameter is true, the original values of the metadata groups will be copied.
- When the notes parameter is true, the original values of the notes will be copied.
- When the wiki parameter is true, the original values of the wiki will be copied.
- When the security parameter is true, the original security settings will be copied.

Example:

```
using System;
using System.Collections.Generic;
using System.Linq;
using System.Text;
using com.openkm.sdk4csharp;

namespace OKMRest
{
   public class Program
   {
      static void Main(string[] args)
      {
         String host = "http://localhost:8080/openkm";
         String username = "okmAdmin";
         String password = "admin";
         OKMWebservice ws = OKMWebservicesFactory.newInstance(host);
```

```
            try
            {
                ws.login(user, password);
                ws.folder.extendedCopy("f123a950-0329-4d62-8328-0ff500fd42db", "055e4384-7c70-4456-b32b-f5a55a7
            } catch (Exception e) {
                System.Console.WriteLine(e.ToString());
            }
        }
    }
}
```

getContentInfo

Description:

Method	Return values	Description
getContentInfo(String fldId)	**ContentInfo**	Returns a ContentInfo object with information about the folder.

The ContentInfo object retrieves information about:

- The number of folders.
- The number of documents.
- The number of records.
- The number of emails.
- The size in bytes of all objects in the folder.

Example:

```
using System;
using System.Collections.Generic;
using System.Linq;
using System.Text;
using com.openkm.sdk4csharp;
using com.openkm.sdk4csharp.bean;

namespace OKMRest
{
    public class Program
    {
        static void Main(string[] args)
        {
            String host = "http://localhost:8080/openkm";
            String username = "okmAdmin";
            String password = "admin";
            OKMWebservice ws = OKMWebservicesFactory.newInstance(host);

            try
            {
                ws.login(user, password);
                System.Console.WriteLine(ws.folder.getContentInfo(fldUUid).toString());
            } catch (Exception e) {
                System.Console.WriteLine(e.ToString());
```

```
        }
      }
   }
}
```

purge

Description:

Method	Return values	Description
purge(String fldId)	**void**	The folder is permanently removed from the repository.

Usually, you will purge folders into /okm:trash/userId - the personal trash user location - but it is possible to directly purge any folder from the repository.

When a folder is purged, it can only be restored from a previous repository backup. The purge action removes the folder permanently from the repository.

Example:

```
using System;
using System.Collections.Generic;
using System.Linq;
using System.Text;
using com.openkm.sdk4csharp;

namespace OKMRest
{
   public class Program
   {
      static void Main(string[] args)
      {
         String host = "http://localhost:8080/openkm";
         String username = "okmAdmin";
         String password = "admin";
         OKMWebservice ws = OKMWebservicesFactory.newInstance(host);

         try
         {
            ws.login(user, password);
            ws.folder.purge("f123a950-0329-4d62-8328-0ff500fd42db");
         } catch (Exception e) {
            System.Console.WriteLine(e.ToString());
         }
      }
   }
}
```

setStyle

Description:

Method	Return values	Description
setStyle(String fldId, long styleId)	**void**	Sets the folder style.

More information at Folder style.

Example:

```
using System;
using System.Collections.Generic;
using System.Linq;
using System.Text;
using com.openkm.sdk4csharp;

namespace OKMRest
{
   public class Program
   {
      static void Main(string[] args)
      {
         String host = "http://localhost:8080/openkm";
         String username = "okmAdmin";
         String password = "admin";
         OKMWebservice ws = OKMWebservicesFactory.newInstance(host);

         try
         {
            ws.login(user, password);
            ws.folder.setStyle("f123a950-0329-4d62-8328-0ff500fd42db", 1);
         } catch (Exception e) {
            System.Console.WriteLine(e.ToString());
         }
      }
   }
}
```

createMissingFolders

Description:

Method	Return values	Description
createMissingFolders(String fldPath)	void	Creates missing folders.

Example:

```
using System;
using System.Collections.Generic;
using System.Linq;
using System.Text;
using com.openkm.sdk4csharp;
```

```
namespace OKMRest
{
   public class Program
   {
      static void Main(string[] args)
      {
         String host = "http://localhost:8080/openkm";
         String username = "okmAdmin";
         String password = "admin";
         OKMWebservice ws = OKMWebservicesFactory.newInstance(host);

         try
         {
            ws.login(user, password);
            ws.folder.createMissingFolders("/okm:root/missingfld1/missingfld2/missingfld3");
         } catch (Exception e) {
            System.Console.WriteLine(e.ToString());
         }
      }
   }
}
```

setDescription

Description:

Method	Return values	Description
setDescription(string fldId, String description)	**void**	Sets the folder description.

Example:

```
using System;
using System.Collections.Generic;
using System.Linq;
using System.Text;
using com.openkm.sdk4csharp;
using com.openkm.sdk4csharp.bean;

namespace OKMRest
{
   public class Program
   {
      static void Main(string[] args)
      {
         String host = "http://localhost:8080/openkm";
         String username = "okmAdmin";
         String password = "admin";
         OKMWebservice ws = OKMWebservicesFactory.newInstance(host);

         try
         {
            ws.login(user, password);
            ws.folder.setDescription("f123a950-0329-4d62-8328-0ff500fd42db","Any description");
         } catch (Exception e) {
            System.Console.WriteLine(e.ToString());
         }
      }
   }
```

```
}
```

createFromTemplate

Description:

Method	Return values	Description
createFromTemplate(String uuid, String dstPath, bool categories, bool keywords, bool notes, bool propertyGroups, bool security Dictionary<String, String> properties)	**Folder**	Creates a new folder from the template and returns a Folder object.

The **uuid** parameter is the template file.

The **dstPath** can be a folder or a record path.

When the template uses metadata groups to fill in fields, these values are mandatory and must be set in the properties parameter.

For more information about Templates and metadata check: Creating templates.

Additional:

- When the category parameter is true, the original values of the categories will be copied.
- When the keywords parameter is true, the original values of the keywords will be copied.
- When the notes parameter is true, the original values of the notes will be copied.

Example:

The example below is based on the Creating PDF template sample.

```
using System;
using System.Collections.Generic;
using System.Linq;
using System.Text;
using com.openkm.sdk4csharp;
using com.openkm.sdk4csharp.bean;

namespace OKMRest
{
    public class Program
    {
        static void Main(string[] args)
```

```
        {
            String host = "http://localhost:8080/openkm";
            String username = "okmAdmin";
            String password = "admin";
            OKMWebservice ws = OKMWebservicesFactory.newInstance(host);

            try
            {
               ws.login(user, password);
               Dictionary<String, String> properties = new Dictionary<String, String>();
               properties.Add("okp:tpl.name", "Some name");
               DateTime date = DateTime.Now;
               // Value must be converted to String ISO 8601 compliant
               properties.Add("okp:tpl.bird_date", ISO8601.formatBasic(date));
               properties.Add("okp:tpl.language", "[ \"java\" ]");
               Folder foder = ws.folder.createFromTemplate("9fa9787e-d8b0-4ff7-905a-a89f0b228ec8", "/okm:root/tes
            }
            catch (Exception e)
            {
               System.Console.WriteLine(e.ToString());
            }
        }
    }
}
```

Import samples

Basic

We suggest executing the methods below for large imports or for simple creation cases.

These methods execute fewer steps in the background than what is described in Document samples and Folder samples. That means you will get better performance because less logic is executed on the server side.

Example of UUID:

- Using UUID -> "**f123a950-0329-4d62-8328-0ff500fd42db**";

Suggested code sample

First, you must create the webservice object:

```
OKMWebservices ws = OKMWebservicesFactory.newInstance(host);
```

Then you should log in using the method "**login**". You can access the "**login**" method from the webservice object "**ws**" as shown below:

```
ws.login(user, password);
```

Once you are logged in with the webservice the session is kept in the webservice object. Then you can use the other API methods.

At this point you can use all the import methods from the "**quickImport**" class as shown below:

```
ws.quickImport.importDocument("1be884f4-5758-4985-94d1-f18bfe004db8", fileInfo);
```

Methods

importDocument

Description:

Method	Return values	Description
importDocument(String uuid, FileInfo fi)	**String**	Creates a new document and returns the UUID of the document.

The value of the uuid parameter should be a folder or record node UUID.

Example:

```
using System; using System.Collections.Generic;
using System.Text;
using com.openkm.sdk4csharp;
using com.openkm.sdk4csharp.bean;

namespace OKMRest
{
   public class Program
   {
      static void Main(string[] args)
      {
          String host = "http://localhost:8080/openkm";
          String username = "okmAdmin";
          String password = "admin";
          OKMWebservice ws = OKMWebservicesFactory.newInstance(host);

          try
          {
              ws.login(user, password);
              FileInfo fileInfo = new FileInfo("E:\\doc.docx");
              String uuid = ws.quickImport.importDocument("22c1d190-f798-489d-b420-2008cb38705b", fileInfo);
              System.Console.WriteLine("UUID ="+ uuid);
          }
          catch (Exception e)
          {
              System.Console.WriteLine(e.ToString());

          }
      }
  }
}
```

importDocument

Description:

Method	Return values	Description
importDocument(String uuid, DateTime? date, String author, FileInfo file)	**String**	Creates a new document and returns the UUID of the document.

The value of the uuid parameter should be a folder or record node UUID.

Example:

```
using System; using System.Collections.Generic;
using System.Text;
```

```
using com.openkm.sdk4csharp;
using com.openkm.sdk4csharp.bean;

namespace OKMRest
{
   public class Program
   {
      static void Main(string[] args)
      {
          String host = "http://localhost:8080/openkm";
          String username = "okmAdmin";
          String password = "admin";
          OKMWebservice ws = OKMWebservicesFactory.newInstance(host);

          try
          {
              ws.login(user, password);
              FileInfo fileInfo = new FileInfo("E:\\doc.docx");
              String uuid = ws.quickImport.importDocument("22c1d190-f798-489d-b420-2008cb38705b", new DateTime
              System.Console.WriteLine("UUID ="+ uuid);
          }
          catch (Exception e)
          {
              System.Console.WriteLine(e.ToString());

          }
      }
   }
}
```

importFolder

Description:

Method	Return values	Description
importFolder(String uuid, String name)	**String**	Creates a new folder and returns the UUID of the folder.
The value of the uuid parameter should be a folder or record node UUID.		

Example:

```
using System; using System.Collections.Generic;
using System.Text;
using com.openkm.sdk4csharp;
using com.openkm.sdk4csharp.bean;

namespace OKMRest
{
   public class Program
   {
      static void Main(string[] args)
      {
          String host = "http://localhost:8080/openkm";
          String username = "okmAdmin";
          String password = "admin";
          OKMWebservice ws = OKMWebservicesFactory.newInstance(host);
```

```
            try
            {
                ws.login(user, password);
                String uuid = ws.quickImport.importFolder("22c1d190-f798-489d-b420-2008cb38705b", "Folder-Name");
                System.Console.WriteLine("UUID ="+ uuid);
            }
            catch (Exception e)
            {
                System.Console.WriteLine(e.ToString());

            }
        }
    }
}
```

importFolder

Description:

Method	Return values	Description
importFolder(String uuid, String name, DateTime? date, String author)	**String**	Creates a new folder and returns the UUID of the folder.
The value of the uuid parameter should be a folder or record node UUID.		

Example:

```
using System; using System.Collections.Generic;
using System.Text;
using com.openkm.sdk4csharp;
using com.openkm.sdk4csharp.bean;

namespace OKMRest
{
    public class Program
    {
        static void Main(string[] args)
        {
            String host = "http://localhost:8080/openkm";
            String username = "okmAdmin";
            String password = "admin";
            OKMWebservice ws = OKMWebservicesFactory.newInstance(host);

            try
            {
                ws.login(user, password);
                String uuid = ws.quickImport.importFolder("22c1d190-f798-489d-b420-2008cb38705b", "Folder-Name", ne
                System.Console.WriteLine("UUID ="+ uuid);
            }
            catch (Exception e)
            {
                System.Console.WriteLine(e.ToString());

            }
        }
```

```
    }
}
```

importMail

Description:

Method	Return values	Description
importMail(String uuid, FileInfo fi)	**String**	Creates a new mail and returns the UUID of the mail.
The value of the uuid parameter should be a folder or record node UUID.		

Example:

```
using System; using System.Collections.Generic;
using System.Text;
using com.openkm.sdk4csharp;
using com.openkm.sdk4csharp.bean;

namespace OKMRest
{
    public class Program
    {
        static void Main(string[] args)
        {
            String host = "http://localhost:8080/openkm";
            String username = "okmAdmin";
            String password = "admin";
            OKMWebservice ws = OKMWebservicesFactory.newInstance(host);

            try
            {
                ws.login(user, password);
                FileInfo fileInfo = new FileInfo("E:\\test.eml");
                String uuid = ws.quickImport.importMail("22c1d190-f798-489d-b420-2008cb38705b", fileInfo);
                System.Console.WriteLine("UUID ="+ uuid);
            }
            catch (Exception e)
            {
                System.Console.WriteLine(e.ToString());

            }
        }
    }
}
```

importRecord

Description:

Method	Return values	Description

importRecord(String uuid, String name)	**String**	Creates a new record and returns the UUID of the record.
The value of the uuid parameter should be a folder or record node UUID.		

Example:

```
using System; using System.Collections.Generic;
using System.Text;
using com.openkm.sdk4csharp;
using com.openkm.sdk4csharp.bean;

namespace OKMRest
{
   public class Program
   {
      static void Main(string[] args)
      {
          String host = "http://localhost:8080/openkm";
          String username = "okmAdmin";
          String password = "admin";
          OKMWebservice ws = OKMWebservicesFactory.newInstance(host);

          try
          {
              ws.login(user, password);
              String uuid = ws.quickImport.importRecord("22c1d190-f798-489d-b420-2008cb38705b", "Record-Name");
              System.Console.WriteLine("UUID ="+ uuid);
          }
          catch (Exception e)
          {
              System.Console.WriteLine(e.ToString());

          }
      }
  }
}
```

importRecord

Description:

Method	Return values	Description
importRecord(String uuid, String name, DateTime? date, String author)	**String**	Creates a new record and returns the UUID of the record.
The value of the uuid parameter should be a folder or record node UUID.		

Example:

```
using System; using System.Collections.Generic;
using System.Text;
using com.openkm.sdk4csharp;
using com.openkm.sdk4csharp.bean;

namespace OKMRest
{
    public class Program
    {
        static void Main(string[] args)
        {
            String host = "http://localhost:8080/openkm";
            String username = "okmAdmin";
            String password = "admin";
            OKMWebservice ws = OKMWebservicesFactory.newInstance(host);

            try
            {
                ws.login(user, password);
                String uuid = ws.quickImport.importRecord("22c1d190-f798-489d-b420-2008cb38705b", "Record-Name",
                System.Console.WriteLine("UUID ="+ uuid);
            }
            catch (Exception e)
            {
                System.Console.WriteLine(e.ToString());

            }
        }
    }
}
```

Mail samples

Basics

On most methods, you'll see the parameter named "**mailId**". The value of this parameter can be a valid mail **UUID**.

Example of fldId:

- Using UUID -> "**50b7a5b9-89d2-430e-bbc9-6a6e01662a71**"

Suggested code sample

First, you must create the webservice object:

```
OKMWebservices ws = OKMWebservicesFactory.newInstance(host);
```

Then you should log in using the "**login**" method. You can access the "**login**" method from the webservice object "**ws**" as shown below:

```
ws.login(user, password);
```

Once you are logged in with the webservices, the session is kept in the webservice object. Then you can use the other API methods.

At this point you can use all the Mail methods from the "**mail**" class as shown below:

```
ws.mail.getProperties("05d9b8e3-f9c1-4ace-9007-afd775dbbced")
```

Methods

getProperties

Description:

Method	Return values	Description
getProperties(String uuid)	**Mail**	Returns the mail properties.

Example:

```
using System;
using System.Collections.Generic;
```

```
using System.Linq;
using System.Text;
using com.openkm.sdk4csharp;

namespace OKMRest
{
   public class Program
   {
      static void Main(string[] args)
      {
         String host = "http://localhost:8080/openkm";
         String username = "okmAdmin";
         String password = "admin";
         OKMWebservice ws = OKMWebservicesFactory.newInstance(host);

         try
         {
            ws.login(user, password);
            System.Console.WriteLine(ws.mail.getProperties("f0064cf3-4776-44c2-868a-f08697a6957e").toString());
         }
         catch (Exception e)
         {
            System.Console.WriteLine(e.ToString());
         }
      }
   }
}
```

delete

Description:

Method	Return values	Description
delete(String uuid)	**void**	Deletes a mail.

Example:

```
using System;
using System.Collections.Generic;
using System.Linq;
using System.Text;
using com.openkm.sdk4csharp;

namespace OKMRest
{
   public class Program
   {
      static void Main(string[] args)
      {
         String host = "http://localhost:8080/openkm";
         String username = "okmAdmin";
         String password = "admin";
         OKMWebservice ws = OKMWebservicesFactory.newInstance(host);

         try
         {
            ws.login(user, password);
            ws.mail.delete("50b7a5b9-89d2-430e-bbc9-6a6e01662a71");
         }
```

```
            catch (Exception e)
            {
                System.Console.WriteLine(e.ToString());
            }
        }
    }
}
```

purge

Description:

Method	Return values	Description
purge(String uuid)	**void**	Folder is permanently removed from the repository.

Usually, you will purge mails into /okm:trash/userId - the personal trash user location - but it is possible to directly purge any mail from the repository.

When a mail is purged, it can only be restored from a previous repository backup. The purge action removes the mail permanently from the repository.

Example:

```
using System;
using System.Collections.Generic;
using System.Linq;
using System.Text;
using com.openkm.sdk4csharp;

namespace OKMRest
{
    public class Program
    {
        static void Main(string[] args)
        {
            String host = "http://localhost:8080/openkm";
            String username = "okmAdmin";
            String password = "admin";
            OKMWebservice ws = OKMWebservicesFactory.newInstance(host);

            try
            {
                ws.login(user, password);
                ws.mail.purge("50b7a5b9-89d2-430e-bbc9-6a6e01662a71");
            }
            catch (Exception e)
            {
                System.Console.WriteLine(e.ToString());
            }
        }
    }
}
```

rename

Description:

Method	Return values	Description
rename(String uuid, String newName)	void	Renames a mail.

From the OpenKM frontend UI, the subject is used to show the mail name in the file browser table. That means the change will take effect internally on the mail path, but will not be visible in the default UI.

Example:

```
using System;
using System.Collections.Generic;
using System.Linq;
using System.Text;
using com.openkm.sdk4csharp;

namespace OKMRest
{
   public class Program
   {
      static void Main(string[] args)
      {
         String host = "http://localhost:8080/openkm";
         String username = "okmAdmin";
         String password = "admin";
         OKMWebservice ws = OKMWebservicesFactory.newInstance(host);

         try
         {
            ws.login(user, password);
            ws.mail.rename("50b7a5b9-89d2-430e-bbc9-6a6e01662a71", "new name");
         }
         catch (Exception e)
         {
            System.Console.WriteLine(e.ToString());
         }
      }
   }
}
```

move

Description:

Method	Return values	Description
move(String uuid, String dstId)	**void**	Moves a mail into a folder or record.
The values of the dstId parameter should be a folder or record UUID.		

Example:

```
using System;
using System.Collections.Generic;
using System.Linq;
using System.Text;
using com.openkm.sdk4csharp;

namespace OKMRest
{
   public class Program
   {
      static void Main(string[] args)
      {
         String host = "http://localhost:8080/openkm";
         String username = "okmAdmin";
         String password = "admin";
         OKMWebservice ws = OKMWebservicesFactory.newInstance(host);

         try
         {
            ws.login(user, password);
            ws.mail.move("50b7a5b9-89d2-430e-bbc9-6a6e01662a71", "055e4384-7c70-4456-b32b-f5a55a79861f");
         }
         catch (Exception e)
         {
            System.Console.WriteLine(e.ToString());
         }
      }
   }
}
```

copy

Description:

Method	Return values	Description
public void copy(String mailId, String dstId, String newName)	**Mail**	Copies mail into a folder or record.

The values of the dstId parameter should be a folder or record UUID.

When the newName parameter value is null, the mail will preserve the same name.

Only the security grants are copied to the destination, the metadata, keywords, etc. of the folder are not copied.

See "**extendedCopy**" method for this feature.

Example:

```
using System;
using System.Collections.Generic;
using System.Linq;
using System.Text;
using com.openkm.sdk4csharp;

namespace OKMRest
{
   public class Program
   {
      static void Main(string[] args)
      {
         String host = "http://localhost:8080/openkm";
         String username = "okmAdmin";
         String password = "admin";
         OKMWebservice ws = OKMWebservicesFactory.newInstance(host);

         try
         {
            ws.login(user, password);
            ws.mail.copy("50b7a5b9-89d2-430e-bbc9-6a6e01662a71", "055e4384-7c70-4456-b32b-f5a55a79861f", "I
         }
         catch (Exception e)
         {
            System.Console.WriteLine(e.ToString());
         }
      }
   }
}
```

extendedCopy

Description:

Method	Return values	Description
extendedCopy(String mailId, String dstId, bool categories, bool keywords, bool propertyGroups, bool notes, bool security, String newName)	**Mail**	Copies mail with associated data into a folder or record.

The values of the dstId parameter should be a folder or record UUID.

By default, only the binary data and the security grants are copied; the metadata, keywords, etc. of the folder are not copied.

Additional:

- When the category parameter is true the original values of the categories will be copied.
- When the keywords parameter is true the original values of the keywords will be copied.
- When the property groups parameter is true the original values of the metadata groups will be copied.

- When the notes parameter is true the original values of the notes will be copied.
- When the wiki parameter is true the original values of the wiki will be copied.
- When newName is set the mail name is renamed.
- When the security parameter is true the original value of the security will be copied.

Example:

```
using System;
using System.Collections.Generic;
using System.Linq;
using System.Text;
using com.openkm.sdk4csharp;

namespace OKMRest
{
   public class Program
   {
      static void Main(string[] args)
      {
         String host = "http://localhost:8080/openkm";
         String username = "okmAdmin";
         String password = "admin";
         OKMWebservice ws = OKMWebservicesFactory.newInstance(host);

         try
         {
            ws.login(user, password);
            ws.mail.extendedCopy("fe51797c-be0b-4076-8f4b-b4fffe8fd2bc", "055e4384-7c70-4456-b32b-f5a55a798
         }
         catch (Exception e)
         {
            System.Console.WriteLine(e.ToString());
         }
      }
   }
}
```

getChildren

Description:

Method	Return values	Description
getChildren(String fldId)	**List<Mail>**	Returns a list of all mails whose parent is fldId.

Example:

```
using System;
using System.Collections.Generic;
using System.Linq;
using System.Text;
using com.openkm.sdk4csharp;
```

```
using com.openkm.sdk4csharp.bean;

namespace OKMRest
{
   public class Program
   {
      static void Main(string[] args)
      {
         String host = "http://localhost:8080/openkm";
         String username = "okmAdmin";
         String password = "admin";
         OKMWebservice ws = OKMWebservicesFactory.newInstance(host);

         try
         {
            ws.login(user, password);
            foreach (Mail mail in ws.mail.getChildren("055e4384-7c70-4456-b32b-f5a55a79861f"))
            {
               System.Console.WriteLine(mail);
            }
         }
         catch (Exception e)
         {
            System.Console.WriteLine(e.ToString());
         }
      }
   }
}
```

isValid

Description:

Method	Return values	Description
isValid(String mailId)	**Boolean**	Returns a boolean that indicates whether the node is a mail.

Example:

```
using System;
using System.Collections.Generic;
using System.Linq;
using System.Text;
using com.openkm.sdk4csharp;
using com.openkm.sdk4csharp.bean;

namespace OKMRest
{
   public class Program
   {
      static void Main(string[] args)
      {
         String host = "http://localhost:8080/openkm";
         String username = "okmAdmin";
         String password = "admin";
         OKMWebservice ws = OKMWebservicesFactory.newInstance(host);

         try
         {
            ws.login(user, password);
```

```
            // Return true
            ws.mail.isValid("50b7a5b9-89d2-430e-bbc9-6a6e01662a71");
        }
        catch (Exception e)
        {
            System.Console.WriteLine(e.ToString());
        }
    }
  }
}
```

getPath

Description:

Method	Return values	Description
getPath(String mailId)	**String**	Converts a mail UUID to a folder path.

Example:

```
using System;
using System.Collections.Generic;
using System.Linq;
using System.Text;
using com.openkm.sdk4csharp;

namespace OKMRest
{
  public class Program
  {
    static void Main(string[] args)
    {
      String host = "http://localhost:8080/openkm";
      String username = "okmAdmin";
      String password = "admin";
      OKMWebservice ws = OKMWebservicesFactory.newInstance(host);

      try
      {
        ws.login(user, password);
        System.Console.WriteLine(ws.mail.getPath("50b7a5b9-89d2-430e-bbc9-6a6e01662a71"));
      }
      catch (Exception e)
      {
        System.Console.WriteLine(e.ToString());
      }
    }
  }
}
```

createAttachment

Description:

Method	Return values	Description

createAttachment(String mailId, String docName, InputStream is)	**Document**	Stores an attachment in the mail.

Example:

```
using System;
using System.Collections.Generic;
using System.Linq;
using System.Text;
using com.openkm.sdk4csharp;
using com.openkm.sdk4csharp.bean;
using System.IO;

namespace OKMRest
{
   public class Program
   {
      static void Main(string[] args)
      {
         String host = "http://localhost:8080/openkm";
         String username = "okmAdmin";
         String password = "admin";
         OKMWebservice ws = OKMWebservicesFactory.newInstance(host);

         try
         {
            ws.login(user, password);
            FileStream fs = new FileStream("E:\\logo.png", FileMode.Open);
            ws.mail.createAttachment("50b7a5b9-89d2-430e-bbc9-6a6e01662a71", "log.png", fs);
            fs.Dispose();
         }
         catch (Exception e)
         {
            System.Console.WriteLine(e.ToString());
         }
      }
   }
}
```

deleteAttachment

Description:

Method	Return values	Description
deleteAttachment(String mailId, String docId)	**void**	Deletes a mail attachment.
The **docId** parameter value can be a valid document **UUID** or **path**.		

Example:

```
using System;
using System.Collections.Generic;
using System.Linq;
```

```
using System.Text;
using com.openkm.sdk4csharp;

namespace OKMRest
{
   public class Program
   {
      static void Main(string[] args)
      {
         String host = "http://localhost:8080/openkm";
         String username = "okmAdmin";
         String password = "admin";
         OKMWebservice ws = OKMWebservicesFactory.newInstance(host);

         try
         {
            ws.login(user, password);
            ws.mail.deleteAttachment("50b7a5b9-89d2-430e-bbc9-6a6e01662a71", "e339f14b-4d3a-489c-91d3-05e4
         }
         catch (Exception e)
         {
            System.Console.WriteLine(e.ToString());
         }
      }
   }
}
```

getAttachments

Description:

Method	Return values	Description
getAttachments(String mailId)	**List<Document>**	Retrieves a list of all document attachments of a mail.

Example:

```
using System;
using System.Collections.Generic;
using System.Linq;
using System.Text;
using com.openkm.sdk4csharp;
using com.openkm.sdk4csharp.bean;

namespace OKMRest
{
   public class Program
   {
      static void Main(string[] args)
      {
         String host = "http://localhost:8080/openkm";
         String username = "okmAdmin";
         String password = "admin";
         OKMWebservice ws = OKMWebservicesFactory.newInstance(host);

         try
         {
            ws.login(user, password);
            foreach (Document doc in ws.mail.getAttachments("50b7a5b9-89d2-430e-bbc9-6a6e01662a71"))
            {
```

```
                System.Console.WriteLine(doc);
            }
        }
        catch (Exception e)
        {
            System.Console.WriteLine(e.ToString());
        }
    }
  }
}
```

sendMailWithAttachments

Description:

Method	Return values	Description
sendMailWithAttachments(String from, List<String> to, List<String> cc, List<String> bcc, List<String> replyTo, String subject, String body, List<String> docsId, String uuid)	**Mail**	Sends a mail message with an attachment.

The values of the dstId parameter should be a folder or record UUID or path. The dstId parameter indicates where the mail will be stored in the repository after being sent.

Other parameters:

- to is a list of destination email addresses.
- subject is the mail subject.
- cc and bcc are lists of destination email addresses (optional)
- docsId is a list of valid document UUIDs already in OpenKM that will be sent as attachments in the mail (optional).

Example:

```
using System;
using System.Collections.Generic;
using System.Linq;
using System.Text;
using com.openkm.sdk4csharp;

namespace OKMRest
{
   public class Program
   {
      static void Main(string[] args)
      {
         String host = "http://localhost:8080/openkm";
         String username = "okmAdmin";
```

```
            String password = "admin";
            OKMWebservice ws = OKMWebservicesFactory.newInstance(host);

            try
            {
               ws.login(user, password);
               string from = "test@none.com";
               List<String> to = new List<String>();
               to.Add("destination@mail.com");
               List<String> cc = new List<String>();
               List<String> bcc = new List<String>();
               List<String> docsId = new List<String>();
               List<String> replyTo= new List<String>();
               docsId.Add("7aa523e0-06cf-4733-b8c8-cc74d8b2716d");
               docsId.Add("f123a950-0329-4d62-8328-0ff500fd42db");
               ws.mail.sendMailWithAttachments(from, to, cc, bcc, replyTo, "some subject", "This mail its a test.", docsId
            }
            catch (Exception e)
            {
               System.Console.WriteLine(e.ToString());
            }
         }
      }
   }
```

importEml

Description:

Method	Return values	Description
importEml(String dstId, String title, FileStream fs)	**Mail**	Imports a mail in EML format.
The values of the dstId parameter should be a folder or record UUID or path. The dstId parameter indicates where the mail will be stored in the repository after being sent.		

Example:

```
using System;
using System.Collections.Generic;
using System.Linq;
using System.Text;
using com.openkm.sdk4csharp;
using com.openkm.sdk4csharp.bean;
using System.IO;

namespace OKMRest
{
   public class Program
   {
      static void Main(string[] args)
      {
         String host = "http://localhost:8080/openkm";
         String username = "okmAdmin";
         String password = "admin";
         OKMWebservice ws = OKMWebservicesFactory.newInstance(host);
```

```
            try
            {
                ws.login(user, password);
                FileStream filestream = new FileStream("C:\\Documents\\test.eml", FileMode.Open);
                Mail mail = ws.mail.importEml("f123a950-0329-4d62-8328-0ff500fd42db", "Test", filestream);
                System.Console.WriteLine(mail);
                filestream.Close();
            }
            catch (Exception e)
            {
                System.Console.WriteLine(e.ToString());
            }
        }
    }
}
```

importMsg

Description:

Method	Return values	Description
importMsg(String dstId, String title, FileStream fs)	**Mail**	Imports a mail in MSG format.
The values of the dstId parameter should be a folder or record UUID or path. The dstId parameter indicates where the mail will be stored in the repository after being sent.		

Example:

```
using System;
using System.Collections.Generic;
using System.Linq;
using System.Text;
using com.openkm.sdk4csharp;
using com.openkm.sdk4csharp.bean;
using System.IO;

namespace OKMRest
{
    public class Program
    {
        static void Main(string[] args)
        {
            String host = "http://localhost:8080/openkm";
            String username = "okmAdmin";
            String password = "admin";
            OKMWebservice ws = OKMWebservicesFactory.newInstance(host);

            try
            {
                ws.login(user, password);
                FileStream filestream = new FileStream("C:\\Documents\\test.msg", FileMode.Open);
                Mail mail = ws.mail.importMsg("f123a950-0329-4d62-8328-0ff500fd42db", "Test", filestream);
                System.Console.WriteLine(mail);
                filestream.Close();
            }
            catch (Exception e)
```

```
            {
                System.Console.WriteLine(e.ToString());
            }
        }
    }
}
```

setTitle

Description:

Method	Return values	Description
setTitle(String mailId, String title)	**Mail**	Sets the mail title.

Example:

```
using System;
using System.Collections.Generic;
using System.Linq;
using System.Text;
using com.openkm.sdk4csharp;

namespace OKMRest
{
    public class Program
    {
        static void Main(string[] args)
        {
            String host = "http://localhost:8080/openkm";
            String username = "okmAdmin";
            String password = "admin";
            OKMWebservice ws = OKMWebservicesFactory.newInstance(host);

            try
            {
                ws.login(user, password);
                ws.mail.setTitle("68ed7a93-005c-4ec6-ac01-bb151573c775", "new title");
            }
            catch (Exception e)
            {
                System.Console.WriteLine(e.ToString());
            }
        }
    }
}
```

sendMail

Description:

Method	Return values	Description
sendMail(String to, String subject, String body)	**Void**	Sends a mail.

Example:

```
using System;
using System.Collections.Generic;
using System.Linq;
using System.Text;
using com.openkm.sdk4csharp;

namespace OKMRest
{
   public class Program
   {
      static void Main(string[] args)
      {
         String host = "http://localhost:8080/openkm";
         String username = "okmAdmin";
         String password = "admin";
         OKMWebservice ws = OKMWebservicesFactory.newInstance(host);

         try
         {
            ws.login(user, password);
            ws.mail.sendMail("some@none.com", "Testing sending mail", "Test message body.");
         }
         catch (Exception e)
         {
            System.Console.WriteLine(e.ToString());
         }
      }
   }
}
```

sendMail

Description:

Method	Return values	Description
sendMail(List<String> to, String subject, String body)	**Void**	Sends a mail.

Example:

```
using System;
using System.Collections.Generic;
using System.Linq;
using System.Text;
using com.openkm.sdk4csharp;

namespace OKMRest
{
   public class Program
   {
      static void Main(string[] args)
      {
         String host = "http://localhost:8080/openkm";
         String username = "okmAdmin";
         String password = "admin";
         OKMWebservice ws = OKMWebservicesFactory.newInstance(host);
```

```
            try
            {
                ws.login(user, password);
                List<String> to = new List<string>();
                to.Add("some@mail.com");
                ws.mail.sendMail(to, "Testing sending mail from OpenKM", "Test message body.");
            }
            catch (Exception e)
            {
                System.Console.WriteLine(e.ToString());
            }
        }
    }
}
```

sendMail

Description:

Method	Return values	Description
sendMail(String from, List<String> to, String subject, String body)	**Void**	Sends a mail.

Example:

```
using System;
using System.Collections.Generic;
using System.Linq;
using System.Text;
using com.openkm.sdk4csharp;

namespace OKMRest
{
    public class Program
    {
        static void Main(string[] args)
        {
            String host = "http://localhost:8080/openkm";
            String username = "okmAdmin";
            String password = "admin";
            OKMWebservice ws = OKMWebservicesFactory.newInstance(host);

            try
            {
                ws.login(user, password);
                string from = "test@mome.com"
                List<String> to = new List<string>();
                to.Add("some@mail.com");
                ws.mail.sendMail(from, to, "Testing sending mail from OpenKM", "Test message body.");
            }
            catch (Exception e)
            {
                System.Console.WriteLine(e.ToString());
            }
        }
    }
}
```

setNodeClass

Description:

Method	Return values	Description
setNodeClass(String mailId, long ncId)	**void**	Sets the mail node class.

Example:

```
using System;
using System.Collections.Generic;
using System.Linq;
using System.Text;
using com.openkm.sdk4csharp;

namespace OKMRest
{
   public class Program
   {
      static void Main(string[] args)
      {
         String host = "http://localhost:8080/openkm";
         String username = "okmAdmin";
         String password = "admin";
         OKMWebservice ws = OKMWebservicesFactory.newInstance(host);

         try
         {
            ws.login(user, password);
            ws.mail.setNodeClass("68ed7a93-005c-4ec6-ac01-bb151573c775", ncId);
         }
         catch (Exception e)
         {
            System.Console.WriteLine(e.ToString());
         }
      }
   }
}
```

setDescription

Description:

Method	Return values	Description
setDescription(String mailId, String description)	**void**	Sets the mail title.

Example:

```
using System;
using System.Collections.Generic;
using System.Linq;
using System.Text;
using com.openkm.sdk4csharp;

namespace OKMRest
```

```
{
   public class Program
   {
      static void Main(string[] args)
      {
         String host = "http://localhost:8080/openkm";
         String username = "okmAdmin";
         String password = "admin";
         OKMWebservice ws = OKMWebservicesFactory.newInstance(host);

         try
         {
            ws.login(user, password);
            ws.mail.setDescription("68ed7a93-005c-4ec6-ac01-bb151573c775", "Any description");
         }
         catch (Exception e)
         {
            System.Console.WriteLine(e.ToString());
         }
      }
   }
}
```

getContent

Description:

Method	Return values	Description
getContent(String mailId)	**Stream**	Sets the mail title.

Example:

```
using System;
using System.Collections.Generic;
using System.Linq;
using System.Text;
using com.openkm.sdk4csharp;

namespace OKMRest
{
   public class Program
   {
      static void Main(string[] args)
      {
         String host = "http://localhost:8080/openkm";
         String username = "okmAdmin";
         String password = "admin";
         OKMWebservice ws = OKMWebservicesFactory.newInstance(host);

         try
         {
            ws.login(user, password);
            Stream s = ws.mail.getContent("68ed7a93-005c-4ec6-ac01-bb151573c775");
            FileStream mailFile = new FileStream("C:\\mailtest.msg", FileMode.OpenOrCreate);
            s.CopyTo(mailFile);
            s.Close();
            mailFile.Close();
         }
         catch (Exception e)
```

```
        {
            System.Console.WriteLine(e.ToString());
        }
    }
  }
}
```

getThumbnail

Description:

Method	Return values	Description
getThumbnail(String mailId, ThumbnailType type)	**Stream**	Returns thumbnail image data.

Available types:

- ThumbnailType.THUMBNAIL_PROPERTIES (shown in properties view)
- ThumbnailType.THUMBNAIL_LIGHTBOX (shown in light box)
- ThumbnailType.THUMBNAIL_SEARCH (shown in search view)

Each thumbnail type has its own image dimensions.

Example:

```
using System;
using System.Collections.Generic;
using System.Linq;
using System.Text;
using com.openkm.sdk4csharp;

namespace OKMRest
{
   public class Program
   {
      static void Main(string[] args)
      {
         String host = "http://localhost:8080/openkm";
         String username = "okmAdmin";
         String password = "admin";
         OKMWebservice ws = OKMWebservicesFactory.newInstance(host);

         try
         {
            ws.login(user, password);
            Stream s = ws.mail.getThumbnail("68ed7a93-005c-4ec6-ac01-bb151573c775", ThumbnailType.THUMBN
         }
         catch (Exception e)
         {
            System.Console.WriteLine(e.ToString());
         }
      }
```

```
    }
}
```

setDispositionStage

Description:

Method	Return values	Description
setDispositionStage(String uuid, long stage)	**void**	Sets the mail disposition stage.

Example:

```
using System;
using System.Collections.Generic;
using System.Linq;
using System.Text;
using com.openkm.sdk4csharp;

namespace OKMRest
{
    public class Program
    {
        static void Main(string[] args)
        {
            String host = "http://localhost:8080/openkm";
            String username = "okmAdmin";
            String password = "admin";
            OKMWebservice ws = OKMWebservicesFactory.newInstance(host);

            try
            {
                ws.login(user, password);
                long stage = 1;
                ws.mail.setDispositionStage("f0064cf3-4776-44c2-868a-f08697a6957e", stage);
            }
            catch (Exception e)
            {
                System.Console.WriteLine(e.ToString());
            }
        }
    }
}
```

createWizard

Description:

Method	Return values	Description
createWizard(String uuid, String title, FileStream fileStream, String type)	**WizardNode**	Creates a mail with a wizard.

The Wizard node contains the steps that might be followed by the wizard:

- Metadata groups
- Keywords
- Categories

Example:

```
using System;
using System.Collections.Generic;
using System.Linq;
using System.Text;
using com.openkm.sdk4csharp;
using com.openkm.sdk4csharp.bean;

namespace OKMRest
{
   public class Program
   {
      static void Main(string[] args)
      {
         String host = "http://localhost:8080/openkm";
         String username = "okmAdmin";
         String password = "admin";
         OKMWebservice ws = OKMWebservicesFactory.newInstance(host);

         try
         {
            ws.login(user, password);
            Folder fld = ws.createFolder("f123a950-0329-4d62-8328-0ff500fd42db", "Test");
            FileStream filestream = new FileStream("C:\\testing.msg", FileMode.Open, FileAccess.Read);
            WizardNode wn = ws.mail.createWizard(fld.uuid, "Any title", filestream, Mail.ORIGIN_MSG);
            filestream.Close();
            System.Console.WriteLine(wn.toString());
         }
         catch (Exception e)
         {
            System.Console.WriteLine(e.ToString());
         }
      }
   }
}
```

getMailsPaginated

Description:

Method	Return values	Description
getMailsPaginated(String context, int offset, int limit, MailFilterQuery filter, String orderColumn, bool orderAsc)	**SimpleNodeBaseResultSet**	Returns a paginated list of email results filtered by the values of the

		MailFilterQuery parameter.

The parameters "limit" and "offset" allow you to retrieve just a portion of the results of a query.

- The parameter "limit" is used to limit the number of results returned.
- The parameter "offset" specifies how many results to skip before returning results.
- The parameter "filter" must be the canonical class name of the class which implements the NodeProperties interface.
- The parameter "orderColumn" can have the following values: uuid, subject, from, sentDate and hasAttachments.
- The parameter "orderAsc" can be *"true"* in case of ascending order and *"false"* otherwise.

For example, if your query has 1000 results, but you only want to return the first 10, you should use these values:

- limit=10
- offset=0

Now suppose you want to show the results from 11-20, you should use these values:

- limit=10
- offset=10

Example:

```
using System;
using System.Collections.Generic;
using System.Linq;
using System.Text;
using com.openkm.sdk4csharp;
using com.openkm.sdk4csharp.bean;

namespace OKMRest
{
   public class Program
   {
      static void Main(string[] args)
      {
         String host = "http://localhost:8080/openkm";
         String username = "okmAdmin";
         String password = "admin";
         OKMWebservice ws = OKMWebservicesFactory.newInstance(host);

         try
         {
            ws.login(user, password);
            MailFilterQuery filter = new MailFilterQuery();
            filter.subject = "";
```

```
            filter.attachments = AttachmentEnum.ALL;
            String orderColumn = "subject";
            SimpleNodeBaseResultSet simpleNodeBaseResultSet = ws.mail.getMailsPaginated(0, 10, filter, orderCol

            foreach (SimpleNodeBase simpleNodeBase in simpleNodeBaseResultSet)
            {
               System.Console.WriteLine(simpleNodeBase.toString());
            }
         }
         catch (Exception e)
         {
            System.Console.WriteLine(e.ToString());
         }
      }
   }
}
```

getAccounts

Description:

Method	Return values	Description
getAccounts()	**List<MailAccount>**	Retrieves a list of user email accounts.

Example:

```
using System;
using System.Collections.Generic;
using System.Linq;
using System.Text;
using com.openkm.sdk4csharp;
using com.openkm.sdk4csharp.bean;

namespace OKMRest
{
   public class Program
   {
      static void Main(string[] args)
      {
         String host = "http://localhost:8080/openkm";
         String username = "okmAdmin";
         String password = "admin";
         OKMWebservice ws = OKMWebservicesFactory.newInstance(host);

         try
         {
            ws.login(user, password);
            foreach (MailAccount mail in ws.mail.getAccounts())
            {
               System.Console.WriteLine(mail.toString());
            }
         }
         catch (Exception e)
         {
            System.Console.WriteLine(e.ToString());
         }
      }
   }
}
```

getMailMessages

Description:

Method	Return values	Description
getMailMessages(long accountId, long start)	**MailServerMessages**	Retrieves a list of messages in the email server for an email account.

Example:

```
using System;
using System.Collections.Generic;
using System.Linq;
using System.Text;
using com.openkm.sdk4csharp;
using com.openkm.sdk4csharp.bean;

namespace OKMRest
{
   public class Program
   {
      static void Main(string[] args)
      {
         String host = "http://localhost:8080/openkm";
         String username = "okmAdmin";
         String password = "admin";
         OKMWebservice ws = OKMWebservicesFactory.newInstance(host);

         try
         {
            ws.login(user, password);
            long accoundId = 1;
            long start = 1;
            MailServerMessages msm = ws.mail.getMailMessages(accoundId, start);
            System.Console.WriteLine(msm.toString());
         }
         catch (Exception e)
         {
            System.Console.WriteLine(e.ToString());
         }
      }
   }
}
```

addAccount

Description:

Method	Return values	Description
addAccount(MailAccount mailAccount)	**void**	Add an email account.

It is good practice to create an account and verify the mail configuration with testMailAccount(MailAccount mail).

When you do **not set the user**, the account will be **added by default to the currently logged-in user**.

Example:

```
using System;
using System.Collections.Generic;
using System.Linq;
using System.Text;
using com.openkm.sdk4csharp;
using com.openkm.sdk4csharp.bean;

namespace OKMRest
{
   public class Program
   {
      static void Main(string[] args)
      {
         String host = "http://localhost:8080/openkm";
         String username = "okmAdmin";
         String password = "admin";
         OKMWebservice ws = OKMWebservicesFactory.newInstance(host);

         try
         {
            ws.login(user, password);
            MailAccount mailAcount = new MailAccount();
            mailAcount.mailProtocol = MailAccount.PROTOCOL_IMAPS;
            mailAcount.mailUser = "test@none.com";
            mailAcount.mailPassword = "123456";
            mailAcount.mailHost = "imap.gmail.com";
            mailAcount.mailFolder = "OpenKM";
            mailAcount.active = true;
            mailAcount.recursive = true;
            ws.mail.addAccount(mailAcount);
         }
         catch (Exception e)
         {
            System.Console.WriteLine(e.ToString());
         }
      }
   }
}
```

updateAccount

Description:

Method	Return values	Description
updateAccount(MailAccount mailAccount)	**void**	Updates the main configuration data of an email account.

Example:

```
using System;
using System.Collections.Generic;
using System.Linq;
using System.Text;
using com.openkm.sdk4csharp;
using com.openkm.sdk4csharp.bean;

namespace OKMRest
{
   public class Program
   {
      static void Main(string[] args)
      {
         String host = "http://localhost:8080/openkm";
         String username = "okmAdmin";
         String password = "admin";
         OKMWebservice ws = OKMWebservicesFactory.newInstance(host);

         try
         {
            ws.login(user, password);
            MailAccount mailAcount = new MailAccount();
            mailAcount.id = 1;// Valid mail account id;
            mailAcount.mailProtocol = MailAccount.PROTOCOL_IMAPS;
            mailAcount.mailUser = "test@none.com";
            mailAcount.mailPassword = "123456";
            mailAcount.mailHost = "imap.gmail.com";
            mailAcount.mailFolder = "OpenKM";
            mailAcount.active = false;
            mailAcount.mailMarkDeleted = false;
            mailAcount.recursive = false;
            ws.mail.updateAccount(mailAcount);
         }
         catch (Exception e)
         {
            System.Console.WriteLine(e.ToString());
         }
      }
   }
}
```

testAccount

Description:

Method	Return values	Description
testAccount(MailAccount mailAccount)	**void**	Verify the connectivity of an email account.

Example:

```
using System;
using System.Collections.Generic;
using System.Linq;
using System.Text;
using com.openkm.sdk4csharp;
```

```
using com.openkm.sdk4csharp.bean;

namespace OKMRest
{
   public class Program
   {
      static void Main(string[] args)
      {
         String host = "http://localhost:8080/openkm";
         String username = "okmAdmin";
         String password = "admin";
         OKMWebservice ws = OKMWebservicesFactory.newInstance(host);

         try
         {
            ws.login(user, password);
            MailAccount mailAcount = new MailAccount();
            mailAcount.mailProtocol = MailAccount.PROTOCOL_IMAPS;
            mailAcount.mailUser = "test@none.com";
            mailAcount.mailPassword = "123456";
            mailAcount.mailHost = "imap.gmail.com";
            mailAcount.mailFolder = "OpenKM";
            mailAcount.active = true;
            mailAcount.recursive = true;

            // Test mail account
            ws.mail.testAccount(mailAcount);
         }
         catch (Exception e)
         {
            System.Console.WriteLine(e.ToString());
         }
      }
   }
}
```

deleteAccount

Description:

Method	Return values	Description
deleteAccount(long mailAccountId)	**void**	Delete an email account.

Example:

```
using System;
using System.Collections.Generic;
using System.Linq;
using System.Text;
using com.openkm.sdk4csharp;
using com.openkm.sdk4csharp.bean;

namespace OKMRest
{
   public class Program
   {
      static void Main(string[] args)
      {
         String host = "http://localhost:8080/openkm";
```

```
            String username = "okmAdmin";
            String password = "admin";
            OKMWebservice ws = OKMWebservicesFactory.newInstance(host);

            try
            {
                ws.login(user, password);
                long mailId = 1; //Valid mail id
                ws.mail.deleteAccount(mailId);
            }
            catch (Exception e)
            {
                System.Console.WriteLine(e.ToString());
            }
        }
    }
}
```

importMessages

Description:

Method	Return values	Description
importMessages(long mailAccountId, List<long> messageIds)	**void**	Import messages from a specific email account.

Example:

```
using System;
using System.Collections.Generic;
using System.Linq;
using System.Text;
using com.openkm.sdk4csharp;
using com.openkm.sdk4csharp.bean;

namespace OKMRest
{
    public class Program
    {
        static void Main(string[] args)
        {
            String host = "http://localhost:8080/openkm";
            String username = "okmAdmin";
            String password = "admin";
            OKMWebservice ws = OKMWebservicesFactory.newInstance(host);

            try
            {
                ws.login(user, password);
                List<long> messageIds = new List<long>();
                messageIds.Add(1);
                long mailAccountId = 1; // Valid mail id
                ws.mail.importMessages(mailAccountId, messageIds);
            }
            catch (Exception e)
            {
                System.Console.WriteLine(e.ToString());
```

```
        }
      }
   }
}
```

createFilter

Description:

Method	Return values	Description
createFilter(long mailAccountId, MailFilter mailFilter)	**void**	Add a filter to an email account.

Example:

```
using System;
using System.Collections.Generic;
using System.Linq;
using System.Text;
using com.openkm.sdk4csharp;
using com.openkm.sdk4csharp.bean;

namespace OKMRest
{
   public class Program
   {
      static void Main(string[] args)
      {
         String host = "http://localhost:8080/openkm";
         String username = "okmAdmin";
         String password = "admin";
         OKMWebservice ws = OKMWebservicesFactory.newInstance(host);

         try
         {
            ws.login(user, password);
            Folder fld = ws.createFolder("f123a950-0329-4d62-8328-0ff500fd42db", "FilterFolder");
            // Valid mail account id
            long mailAccountId = 1;
            MailFilter filter = new MailFilter();
            filter.order = 0;
            filter.grouping = false;
            filter.exclusive = true;
            filter.active = false;
            filter.node = fld.uuid;
            ws.mail.createFilter(mailAccountId, filter);
         }
         catch (Exception e)
         {
            System.Console.WriteLine(e.ToString());
         }
      }
   }
}
```

updateFilter

Description:

Method	Return values	Description
updateFilter(MailFilter mailFilter)	**void**	Update the filter of an email account.

Example:

```
using System;
using System.Collections.Generic;
using System.Linq;
using System.Text;
using com.openkm.sdk4csharp;
using com.openkm.sdk4csharp.bean;

namespace OKMRest
{
   public class Program
   {
      static void Main(string[] args)
      {
         String host = "http://localhost:8080/openkm";
         String username = "okmAdmin";
         String password = "admin";
         OKMWebservice ws = OKMWebservicesFactory.newInstance(host);

         try
         {
            ws.login(user, password);
            MailFilter filter = new MailFilter();
            filter.id = 1; // Valid filter id
            filter.grouping = true;
            filter.exclusive = false;
            filter.active = true;
            ws.mail.updateFilter(filter);
         }
         catch (Exception e)
         {
            System.Console.WriteLine(e.ToString());
         }
      }
   }
}
```

deleteFilter

Description:

Method	Return values	Description
deleteFilter(long mailFilterId)	**void**	Delete a filter from an email account.

Example:

```
using System;
using System.Collections.Generic;
using System.Linq;
```

```
using System.Text;
using com.openkm.sdk4csharp;
using com.openkm.sdk4csharp.bean;

namespace OKMRest
{
   public class Program
   {
      static void Main(string[] args)
      {
         String host = "http://localhost:8080/openkm";
         String username = "okmAdmin";
         String password = "admin";
         OKMWebservice ws = OKMWebservicesFactory.newInstance(host);

         try
         {
            ws.login(user, password);
            long filterId = 1; // Valid filter id
            ws.mail.deleteFilter(filterId);
         }
         catch (Exception e)
         {
            System.Console.WriteLine(e.ToString());
         }
      }
   }
}
```

createRule

Description:

Method	Return values	Description
createRule(long filterId, MailFilterRule rule)	**void**	Create a rule for an email filter.

Mail account filter parameters:

- **Field**: Sets the mail field that will be evaluated by the rule.

  Available options are: *From, To, Subject and Content*

  - MailFilterRule.FIELD_FROM
  - MailFilterRule.FIELD_TO
  - MailFilterRule.FIELD_SUBJECT
  - MailFilterRule.FIELD_CONTENT
  - MailFilterRule.FIELD_ATTACHMENT

- **Operation:** Set the operation that will be used for the evaluation process.

  Available options are: *Contains* and *Equal*

  - MailFilterRule.OPERATION_EQUALS
  - MailFilterRule.OPERATION_NOT_EQUALS

- MailFilterRule.OPERATION_CONTAINS
- MailFilterRule.OPERATION_ENDS_WITH
- MailFilterRule.OPERATION_STARTS_WITH

- ***Value**:* *Sets the value that will be used for the evaluation process.*
- ***Active:*** *Sets whether the rule is enabled or not.*

Example:

```
using System;
using System.Collections.Generic;
using System.Linq;
using System.Text;
using com.openkm.sdk4csharp;
using com.openkm.sdk4csharp.bean;

namespace OKMRest
{
   public class Program
   {
      static void Main(string[] args)
      {
         String host = "http://localhost:8080/openkm";
         String username = "okmAdmin";
         String password = "admin";
         OKMWebservice ws = OKMWebservicesFactory.newInstance(host);

         try
         {
            ws.login(user, password);
            MailFilterRule rule = new MailFilterRule();
            rule.operation = MailFilterRule.OPERATION_CONTAINS;
            rule.value = "test";
            rule.field = MailFilterRule.FIELD_FROM;
            rule.active = false;
            long filterId = 1;// Valid filter id
            ws.mail.createRule(filterId, rule);
         }
         catch (Exception e)
         {
            System.Console.WriteLine(e.ToString());
         }
      }
   }
}
```

updateRule

Description:

Method	Return values	Description
updateRule(MailFilterRule rule)	**void**	Update a rule of an email account.

Mail account filter parameters:

- **Field**: Sets the mail field that will be evaluated by the rule.

Available options are:

- MailFilterRule.FIELD_FROM
- MailFilterRule.FIELD_TO
- MailFilterRule.FIELD_SUBJECT
- MailFilterRule.FIELD_CONTENT
- MailFilterRule.FIELD_ATTACHMENT

- **Operation:** Set the operation that will be used for the evaluation process.

Available options are:

- MailFilterRule.OPERATION_EQUALS
- MailFilterRule.OPERATION_NOT_EQUALS
- MailFilterRule.OPERATION_CONTAINS
- MailFilterRule.OPERATION_ENDS_WITH
- MailFilterRule.OPERATION_STARTS_WITH

- ***Value**: Sets the value that will be used for the evaluation process.*
- ***Active:** Sets whether the rule is enabled or not.*

Example:

```
using System;
using System.Collections.Generic;
using System.Linq;
using System.Text;
using com.openkm.sdk4csharp;
using com.openkm.sdk4csharp.bean;

namespace OKMRest
{
   public class Program
   {
      static void Main(string[] args)
      {
         String host = "http://localhost:8080/openkm";
         String username = "okmAdmin";
         String password = "admin";
         OKMWebservice ws = OKMWebservicesFactory.newInstance(host);

         try
```

```
            {
                ws.login(user, password);
                List<MailFilterRule> rules = ws.getMailFilterRules(filter.id);
                if (rules != null && rules.Count > 0)
                {
                    // Update rule
                    MailFilterRule rule = new MailFilterRule();
                    rule.id = rules[0].id;
                    rule.operation = MailFilterRule.OPERATION_EQUALS;
                    rule.value = "Any";
                    rule.field = MailFilterRule.FIELD_SUBJECT;
                    rule.active = true;
                    ws.mail.updateRule(rule);
                }
            }
            catch (Exception e)
            {
                System.Console.WriteLine(e.ToString());
            }
        }
    }
}
```

deleteRule

Description:

Method	Return values	Description
deleteRule(long ruleId)	**void**	Delete a rule of an email account.

Example:

```
using System;
using System.Collections.Generic;
using System.Linq;
using System.Text;
using com.openkm.sdk4csharp;
using com.openkm.sdk4csharp.bean;

namespace OKMRest
{
    public class Program
    {
        static void Main(string[] args)
        {
            String host = "http://localhost:8080/openkm";
            String username = "okmAdmin";
            String password = "admin";
            OKMWebservice ws = OKMWebservicesFactory.newInstance(host);

            try
            {
                ws.login(user, password);
                long ruleId = 1; // Valid rule id
                ws.mail.deleteRule(ruleId);
            }
            catch (Exception e)
            {
                System.Console.WriteLine(e.ToString());
```

```
        }
      }
   }
}
```

getFilterRules

Description:

Method	Return values	Description
getFilterRules(long filterId)	**List<MailFilterRule>**	Retrieve a list of all associated filter rules.

Example:

```
using System;
using System.Collections.Generic;
using System.Linq;
using System.Text;
using com.openkm.sdk4csharp;
using com.openkm.sdk4csharp.bean;

namespace OKMRest
{
   public class Program
   {
      static void Main(string[] args)
      {
         String host = "http://localhost:8080/openkm";
         String username = "okmAdmin";
         String password = "admin";
         OKMWebservice ws = OKMWebservicesFactory.newInstance(host);

         try
         {
            ws.login(user, password);
            long filterId = 1; // Valid filter id
            foreach (MailFilterRule mfrule in ws.mail.getFilterRules(filterId))
            {
               System.Console.WriteLine(mfrule.toString());
            }
         }
         catch (Exception e)
         {
            System.Console.WriteLine(e.ToString());
         }
      }
   }
}
```

forwardEmail

Description:

Method	Return values	Description

forwardEmail(String uuid, List<String> users, List<String> roles, List<String> mails, String message)	**void**	Forward an email to a list of users, roles, or external email addresses.

Example:

```
using System;
using System.Collections.Generic;
using System.Linq;
using System.Text;
using com.openkm.sdk4csharp;
using com.openkm.sdk4csharp.bean;

namespace OKMRest
{
   public class Program
   {
      static void Main(string[] args)
      {
         String host = "http://localhost:8080/openkm";
         String username = "okmAdmin";
         String password = "admin";
         OKMWebservice ws = OKMWebservicesFactory.newInstance(host);

         try
         {
            ws.login(user, password);
            string mailUuid = "f123a950-0329-4d62-8328-0ff500fd42db";
            List<string> users = new List<string>();
            users.Add("userTest");
            List<string> roles = new List<string>();
            roles.Add("ROLE_USER");
            List<string> mails = new List<string>();
            mails.Add("test@none.com");
            ws.mail.forwardEmail(mailUuid, users, roles, mails, "Any message");
         }
         catch (Exception e)
         {
            System.Console.WriteLine(e.ToString());
         }
      }
   }
}
```

getPdf

Description:

Method	Return values	Description
getPdf(String uuid)	**Stream**	Returns a PDF of the email.

Example:

```
using System;
using System.Collections.Generic;
using System.Linq;
```

```
using System.Text;
using com.openkm.sdk4csharp;
using com.openkm.sdk4csharp.bean;
using com.openkm.sdk4csharp.impl;

namespace OKMRest
{
   public class Program
   {
      static void Main(string[] args)
      {
         String host = "http://localhost:8080/openkm";
         String username = "okmAdmin";
         String password = "admin";
         OKMWebservice ws = OKMWebservicesFactory.newInstance(host);

         try
         {
            ws.login(user, password);
            Mail mail = ws.mail.getMailProperties("4b88cbe9-e73d-45fc-bac0-35e0d6e59e43");
            Stream stream = ws.mail.getPdf(mail.uuid);
            FileStream mailFile = new FileStream("D:\\" + mail.subject + ".pdf", FileMode.OpenOrCreate, FileAccess.F
            stream.CopyTo(mailFile);
            stream.Close();
            mailFile.Close();
         }
         catch (Exception e)
         {
            System.Console.WriteLine(e.ToString());
         }
      }
   }
}
```

saveAsPdf

Description:

Method	Return values	Description
saveAsPdf(String uuid, String newName, bool propertyGroups, bool security)	**Document**	Save the email as a PDF in the OpenKM repository.

The value of the **uuid** parameter should be a Mail UUID.

When the newName parameter value is null, the document will preserve the same name.

Additional:

- When the propertyGroups parameter is true, the metadata groups of the source are copied to the target.
- When the security parameter is true, the security of the source is copied to the target.

Example:

```
using System;
using System.Collections.Generic;
using System.Linq;
using System.Text;
using com.openkm.sdk4csharp;
using com.openkm.sdk4csharp.bean;
using com.openkm.sdk4csharp.impl;

namespace OKMRest
{
   public class Program
   {
      static void Main(string[] args)
      {
         String host = "http://localhost:8080/openkm";
         String username = "okmAdmin";
         String password = "admin";
         OKMWebservice ws = OKMWebservicesFactory.newInstance(host);

         try
         {
            ws.login(user, password);
            Mail mail = ws.mail.getMailProperties("4b88cbe9-e73d-45fc-bac0-35e0d6e59e43");
            Document docPdf = ws.mail.saveAsPdf(mail.uuid, mail.subject + ".pdf", true, true);
            System.Console.WriteLine("Document pdf: " + docPdf.path);
         }
         catch (Exception e)
         {
            System.Console.WriteLine(e.ToString());
         }
      }
   }
}
```

getExtractedText

Description:

Method	Return values	Description
getExtractedText(String uuid)	**String**	Get the extracted text.

Example:

```
using System;
using System.Collections.Generic;
using System.Linq;
using System.Text;
using com.openkm.sdk4csharp;

namespace OKMRest
{
   public class Program
   {
      static void Main(string[] args)
      {
```

```
            String host = "http://localhost:8080/openkm";
            String username = "okmAdmin";
            String password = "admin";
            OKMWebservice ws = OKMWebservicesFactory.newInstance(host);

            try
            {
                ws.login(user, password);
                System.Console.WriteLine(ws.mail.getExtractedText("50b7a5b9-89d2-430e-bbc9-6a6e01662a71"));
            }
            catch (Exception e)
            {
                System.Console.WriteLine(e.ToString());
            }
        }
    }
}
```

Node samples

Basics

Example of UUID:

- Using UUID -> "**373bcdd0-c082-4e7b-addd-e10ef813946e**";

Suggested code sample

First, you must create the webservice object:

```
OKMWebservices ws = OKMWebservicesFactory.newInstance(host);
```

Then you should log in using the method "**login**". You can access the "**login**" method from the webservice object "**ws**" as shown below:

```
ws.login(user, password);
```

Once you are logged in with the webservices, the session is kept in the webservice object. Then you can use the other API methods.

At this point you can use all the Node methods from the "**node**" class as shown below:

```
ws.node.getNodeByUuid("29a22996-0e3b-421e-8759-c24ea41c1ebb")
```

Methods

getVersionHistory

Description:

Method	Return values	Description
getVersionHistory(String uuid)	**List<Version>**	Returns a list of the version history of a document.

Example:

```
using System;
using System.Collections.Generic;
using System.Linq;
using System.Text;
using com.openkm.sdk4csharp;
```

```
using com.openkm.sdk4csharp.bean;
using com.openkm.sdk4csharp.impl;

namespace OKMRest
{
   public class Program
   {
      static void Main(string[] args)
      {
         String host = "http://localhost:8080/openkm";
         String username = "okmAdmin";
         String password = "admin";
         OKMWebservice ws = OKMWebservicesFactory.newInstance(host);

         try
         {
            ws.login(user, password);
            List<Version> versions = ws.node.getVersionHistory("70ec54af-76ad-4d02-b9c8-8c94c3b6ffc7");
         }
         catch (Exception e)
         {
            System.Console.WriteLine(e.ToString());
         }
      }
   }
}
```

restoreVersion

Description:

Method	Return values	Description
restoreVersion(String uuid, String versionName)	**void**	Restore a document to a specific version.

Example:

```
using System;
using System.Collections.Generic;
using System.Linq;
using System.Text;
using com.openkm.sdk4csharp;
using com.openkm.sdk4csharp.bean;
using com.openkm.sdk4csharp.impl;

namespace OKMRest
{
   public class Program
   {
      static void Main(string[] args)
      {
         String host = "http://localhost:8080/openkm";
         String username = "okmAdmin";
         String password = "admin";
         OKMWebservice ws = OKMWebservicesFactory.newInstance(host);

         try
         {
            ws.login(user, password);
            ws.node.restoreVersion("70ec54af-76ad-4d02-b9c8-8c94c3b6ffc7","1.0");
```

```
            }
            catch (Exception e)
            {
                System.Console.WriteLine(e.ToString());
            }
        }
    }
}
```

deleteVersion

Description:

Method	Return values	Description
deleteVersion(String uuid, String versionName)	**void**	Delete a specific version.

Example:

```
using System;
using System.Collections.Generic;
using System.Linq;
using System.Text;
using com.openkm.sdk4csharp;
using com.openkm.sdk4csharp.bean;
using com.openkm.sdk4csharp.impl;

namespace OKMRest
{
    public class Program
    {
        static void Main(string[] args)
        {
            String host = "http://localhost:8080/openkm";
            String username = "okmAdmin";
            String password = "admin";
            OKMWebservice ws = OKMWebservicesFactory.newInstance(host);

            try
            {
                ws.login(user, password);
                ws.node.deleteVersion("70ec54af-76ad-4d02-b9c8-8c94c3b6ffc7","1.0");
            }
            catch (Exception e)
            {
                System.Console.WriteLine(e.ToString());
            }
        }
    }
}
```

purgeVersionHistory

Description:

Method	Return values	Description

purgeVersionHistory(String uuid)	**void**	Purge the version history of a document.

Example:

```
using System;
using System.Collections.Generic;
using System.Linq;
using System.Text;
using com.openkm.sdk4csharp;
using com.openkm.sdk4csharp.bean;

namespace OKMRest
{
   public class Program
   {
      static void Main(string[] args)
      {
         String host = "http://localhost:8080/openkm";
         String username = "okmAdmin";
         String password = "admin";
         OKMWebservice ws = OKMWebservicesFactory.newInstance(host);

         try
         {
            ws.login(user, password);
            ws.node.purgeVersionHistory("70ec54af-76ad-4d02-b9c8-8c94c3b6ffc7");
         }
         catch (Exception e)
         {
            System.Console.WriteLine(e.ToString());
         }
      }
   }
}
```

mayBePromotedAsRecord

Description:

Method	Return values	Description
mayBePromotedAsRecord(String uuid, bool fullEvaluation)	**PromoteAsRecordEvaluation**	Returns a PromoteAsRecordEvaluation object.

Example:

```
using System;
using System.Collections.Generic;
using System.Linq;
using System.Text;
using com.openkm.sdk4csharp;
using com.openkm.sdk4csharp.bean;

namespace OKMRest
```

```
{
    public class Program
    {
        static void Main(string[] args)
        {
            String host = "http://localhost:8080/openkm";
            String username = "okmAdmin";
            String password = "admin";
            OKMWebservice ws = OKMWebservicesFactory.newInstance(host);

            try
            {
                ws.login(user, password);
                ws.node.mayBePromotedAsRecordNode("70ec54af-76ad-4d02-b9c8-8c94c3b6ffc7", false);
            }
            catch (Exception e)
            {
                System.Console.WriteLine(e.ToString());
            }
        }
    }
}
```

promoteAsRecord

Description:

Method	Return values	Description
promoteAsRecord(String uuid)	**void**	Promote as a record.

Example:

```
using System;
using System.Collections.Generic;
using System.Linq;
using System.Text;
using com.openkm.sdk4csharp;
using com.openkm.sdk4csharp.bean;

namespace OKMRest
{
    public class Program
    {
        static void Main(string[] args)
        {
            String host = "http://localhost:8080/openkm";
            String username = "okmAdmin";
            String password = "admin";
            OKMWebservice ws = OKMWebservicesFactory.newInstance(host);

            try
            {
                ws.login(user, password);
                ws.node.promoteAsRecord("70ec54af-76ad-4d02-b9c8-8c94c3b6ffc7");
            }
            catch (Exception e)
            {
                System.Console.WriteLine(e.ToString());
            }
```

```
        }
    }
}
```

isElectronicRecordPath

Description:

Method	Return values	Description
isElectronicRecordPath(String uuid)	**Boolean**	Returns true if the node is an electronic record.

Example:

```
using System;
using System.Collections.Generic;
using System.Linq;
using System.Text;
using com.openkm.sdk4csharp;
using com.openkm.sdk4csharp.bean;

namespace OKMRest
{
    public class Program
    {
        static void Main(string[] args)
        {
            String host = "http://localhost:8080/openkm";
            String username = "okmAdmin";
            String password = "admin";
            OKMWebservice ws = OKMWebservicesFactory.newInstance(host);

            try
            {
                ws.login(user, password);
                bool isERP = ws.node.isElectronicRecordPath("70ec54af-76ad-4d02-b9c8-8c94c3b6ffc7");
            }
            catch (Exception e)
            {
                System.Console.WriteLine(e.ToString());
            }
        }
    }
}
```

degradeRecord

Description:

Method	Return values	Description
degradeRecord(String uuid)	**void**	Degrade a record.

Example:

```
using System;
using System.Collections.Generic;
using System.Linq;
using System.Text;
using com.openkm.sdk4csharp;
using com.openkm.sdk4csharp.bean;

namespace OKMRest
{
   public class Program
   {
      static void Main(string[] args)
      {
         String host = "http://localhost:8080/openkm";
         String username = "okmAdmin";
         String password = "admin";
         OKMWebservice ws = OKMWebservicesFactory.newInstance(host);

         try
         {
            ws.login(user, password);
            ws.node.degradeRecord("70ec54af-76ad-4d02-b9c8-8c94c3b6ffc7");
         }
         catch (Exception e)
         {
            System.Console.WriteLine(e.ToString());
         }
      }
   }
}
```

getElectronicRecordInPath

Description:

Method	Return values	Description
getElectronicRecordInPath(String uuid)	**Record**	Get the electronic record in the path.

Example:

```
using System;
using System.Collections.Generic;
using System.Linq;
using System.Text;
using com.openkm.sdk4csharp;
using com.openkm.sdk4csharp.bean;

namespace OKMRest
{
   public class Program
   {
      static void Main(string[] args)
      {
         String host = "http://localhost:8080/openkm";
         String username = "okmAdmin";
         String password = "admin";
         OKMWebservice ws = OKMWebservicesFactory.newInstance(host);
```

```
            try
            {
                ws.login(user, password);
                Record record = ws.node.getElectronicRecordInPath("70ec54af-76ad-4d02-b9c8-8c94c3b6ffc7");
            }
            catch (Exception e)
            {
                System.Console.WriteLine(e.ToString());
            }
        }
    }
}
```

subscribe

Description:

Method	Return values	Description
subscribe(String uuid)	**void**	Adds a subscription to a node.

Example:

```
using System;
using System.Collections.Generic;
using System.Linq;
using System.Text;
using com.openkm.sdk4csharp;
using com.openkm.sdk4csharp.bean;

namespace OKMRest
{
    public class Program
    {
        static void Main(string[] args)
        {
            String host = "http://localhost:8080/openkm";
            String username = "okmAdmin";
            String password = "admin";
            OKMWebservice ws = OKMWebservicesFactory.newInstance(host);

            try
            {
                ws.login(user, password);
                ws.node.subscribe("70ec54af-76ad-4d02-b9c8-8c94c3b6ffc7");
            }
            catch (Exception e)
            {
                System.Console.WriteLine(e.ToString());
            }
        }
    }
}
```

unsubscribe

Description:

Method	Return values	Description
unsubscribe(String uuid)	**void**	Deletes a subscription from a node.

Example:

```
using System;
using System.Collections.Generic;
using System.Linq;
using System.Text;
using com.openkm.sdk4csharp;
using com.openkm.sdk4csharp.bean;

namespace OKMRest
{
   public class Program
   {
      static void Main(string[] args)
      {
         String host = "http://localhost:8080/openkm";
         String username = "okmAdmin";
         String password = "admin";
         OKMWebservice ws = OKMWebservicesFactory.newInstance(host);

         try
         {
            ws.login(user, password);
            ws.node.unsubscribe("70ec54af-76ad-4d02-b9c8-8c94c3b6ffc7");
         }
         catch (Exception e)
         {
            System.Console.WriteLine(e.ToString());
         }
      }
   }
}
```

importZip

Description:

Method	Return values	Description
importZip(String uuid, FileStream content)	**void**	Import a zip file.

Example:

```
using System;
using System.Collections.Generic;
using System.Linq;
using System.Text;
using com.openkm.sdk4csharp;
using com.openkm.sdk4csharp.bean;

namespace OKMRest
{
```

```
    public class Program
    {
        static void Main(string[] args)
        {
            String host = "http://localhost:8080/openkm";
            String username = "okmAdmin";
            String password = "admin";
            OKMWebservice ws = OKMWebservicesFactory.newInstance(host);

            try
            {
                ws.login(user, password);
                String folderId = "70ec54af-76ad-4d02-b9c8-8c94c3b6ffc7";
                FileStream zipFile = new FileStream("D:\\Test.zip", FileMode.Open, FileAccess.Read);
                ws.node.importZip(folderId, zipFile);
                zipFile.Close();
            }
            catch (Exception e)
            {
                System.Console.WriteLine(e.ToString());
            }
        }
    }
}
```

exportZip

Description:

Method	Return values	Description
exportZip(List<String> uuids, bool withPath, bool background)	**Stream**	Export as a zip file.

Example:

```
using System;
using System.Collections.Generic;
using System.Linq;
using System.Text;
using com.openkm.sdk4csharp;
using com.openkm.sdk4csharp.bean;

namespace OKMRest
{
    public class Program
    {
        static void Main(string[] args)
        {
            String host = "http://localhost:8080/openkm";
            String username = "okmAdmin";
            String password = "admin";
            OKMWebservice ws = OKMWebservicesFactory.newInstance(host);

            try
            {
                ws.login(user, password);
                List<string> uuids = new List<string>();
                uuids.Add("70ec54af-76ad-4d02-b9c8-8c94c3b6ffc7");
                uuids.Add("82555dd1-bcc2-4e64-81cb-5f7c2b0d7801");
                // Get strem exportZip
```

```
            Stream s = ws.node.exportZip(uuids, true, true);
            // Save as zip file
            FileStream zipFile = new FileStream("D:\\Testing\\Test.zip", FileMode.OpenOrCreate, FileAccess.ReadWr
            s.CopyTo(zipFile);
            zipFile.Close();
            s.Close();
        }
        catch (Exception e)
        {
            System.Console.WriteLine(e.ToString());
        }
    }
  }
}
```

unZip

Description:

Method	Return values	Description
unZip(String uuid, String dstId)	**void**	Unzip a file.

Example:

```
using System;
using System.Collections.Generic;
using System.Linq;
using System.Text;
using com.openkm.sdk4csharp;
using com.openkm.sdk4csharp.bean;

namespace OKMRest
{
   public class Program
   {
      static void Main(string[] args)
      {
         String host = "http://localhost:8080/openkm";
         String username = "okmAdmin";
         String password = "admin";
         OKMWebservice ws = OKMWebservicesFactory.newInstance(host);

         try
         {
            ws.login(user, password);
            String zipFileId = "82555dd1-bcc2-4e64-81cb-5f7c2b0d7801";
            String folderId = "70ec54af-76ad-4d02-b9c8-8c94c3b6ffc7";
            ws.node.unZip(zipFileId, folderId);
         }
         catch (Exception e)
         {
            System.Console.WriteLine(e.ToString());
         }
      }
   }
}
```

getNodeByUuid

Description:

Method	Return values	Description
getNodeByUuid(String uuid)	**Node**	Get a node by UUID.

Example:

```
using System;
using System.Collections.Generic;
using System.Linq;
using System.Text;
using com.openkm.sdk4csharp;
using com.openkm.sdk4csharp.bean;

namespace OKMRest
{
   public class Program
   {
      static void Main(string[] args)
      {
         String host = "http://localhost:8080/openkm";
         String username = "okmAdmin";
         String password = "admin";
         OKMWebservice ws = OKMWebservicesFactory.newInstance(host);

         try
         {
            ws.login(user, password);
            Node node = ws.node.getNodeByUuid("82555dd1-bcc2-4e64-81cb-5f7c2b0d7801");
            System.Console.WriteLine(node.toString());
         }
         catch (Exception e)
         {
            System.Console.WriteLine(e.ToString());
         }
      }
   }
}
```

getChildrenNodesPaginated

Description:

Method	Return values	Description
getChildrenNodesPaginated(String uuid, int offset, int limit, String filter, String orderByField, bool orderAsc, List<int> filteredTypes)	**SimpleNodeBaseList**	Get paginated child nodes.

The parameters "limit" and "offset" allow you to retrieve only a portion of the results of a query.

- The parameter "limit" is used to limit the number of results returned.

- The parameter "offset" skips that many results before beginning to return results.

For example, if your query has 1000 results, but you only want to return the first 10, you should use these values:

- limit=10
- offset=0

Now suppose you want to show the results from 11-20, you should use these values:

- limit=10
- offset=10

Example:

```
using System;
using System.Collections.Generic;
using System.Linq;
using System.Text;
using com.openkm.sdk4csharp;
using com.openkm.sdk4csharp.bean;

namespace OKMRest
{
   public class Program
   {
      static void Main(string[] args)
      {
         String host = "http://localhost:8080/openkm";
         String username = "okmAdmin";
         String password = "admin";
         OKMWebservice ws = OKMWebservicesFactory.newInstance(host);

         try
         {
            ws.login(user, password);
            List<int> filteredTypes = new List<int>();
            filteredTypes.Add(1);
            String folderId = "82555dd1-bcc2-4e64-81cb-5f7c2b0d7801";
            ChildNodeList nodeList = ws.node.getChildrenNodesPaginated(folderId, 0, 10, "", NodesPaginationInfo.O

         }
         catch (Exception e)
         {
            System.Console.WriteLine(e.ToString());
         }
      }
   }
}
```

getChildrenNodesPaginated

Description:

Method	Return values	Description
getChildrenNodesPaginated(String uuid, int offset, int limit, String filter, String orderByField, bool orderAsc, List<int> filteredTypes, String pluginName)	**SimpleNodeBaseList**	Get children nodes paginated.

The parameters "limit" and "offset" allow you to retrieve only a portion of the results of a query.

- The parameter "limit" is used to limit the number of results returned.
- The parameter "offset" skips that many results before beginning to return results.

For example, if your query has 1000 results, but you only want to return the first 10, you should use these values:

- limit=10
- offset=0

Now suppose you want to show the results from 11-20, you should use these values:

- limit=10
- offset=10

Example:

```
using System;
using System.Collections.Generic;
using System.Linq;
using System.Text;
using com.openkm.sdk4csharp;
using com.openkm.sdk4csharp.bean;

namespace OKMRest
{
   public class Program
   {
      static void Main(string[] args)
      {
         String host = "http://localhost:8080/openkm";
         String username = "okmAdmin";
         String password = "admin";
         OKMWebservice ws = OKMWebservicesFactory.newInstance(host);

         try
         {
            ws.login(user, password);
            List<int> filteredTypes = new List<int>();
            filteredTypes.Add(1);
```

```
            String folderId = "82555dd1-bcc2-4e64-81cb-5f7c2b0d7801";
            ChildNodeList nodeList = ws.node.getChildrenNodesPaginated(folderId, 0, 10, "", NodesPaginationInfo.O

        }
        catch (Exception e)
        {
            System.Console.WriteLine(e.ToString());
        }
    }
  }
}
```

getChildrenNodesByCategoryPaginated

Description:

Method	Return values	Description
getChildrenNodesByCategoryPaginated(String uuid, int offset, int limit, String filter, String orderByField, bool orderAsc, List<int> filteredTypes)	**SimpleNodeBaseList**	Get children nodes by category paginated.

The parameters "limit" and "offset" allow you to retrieve only a portion of the results of a query.

- The parameter "limit" is used to limit the number of results returned.
- The parameter "offset" skips that many results before beginning to return results.

For example, if your query has 1000 results, but you only want to return the first 10, you should use these values:

- limit=10
- offset=0

Now suppose you want to show the results from 11-20, you should use these values:

- limit=10
- offset=10

Example:

```
using System;
using System.Collections.Generic;
using System.Linq;
using System.Text;
using com.openkm.sdk4csharp;
using com.openkm.sdk4csharp.bean;

namespace OKMRest
{
   public class Program
   {
      static void Main(string[] args)
      {
         String host = "http://localhost:8080/openkm";
         String username = "okmAdmin";
         String password = "admin";
         OKMWebservice ws = OKMWebservicesFactory.newInstance(host);

         try
         {
            ws.login(user, password);
            List<int> filteredTypes = new List<int>();
            filteredTypes.Add(1);
            String folderId = "82555dd1-bcc2-4e64-81cb-5f7c2b0d7801";
            ChildNodeList nodeList = ws.node.getChildrenNodesByCategoryPaginated(folderId, 0, 10, "", NodesPagir

         }
         catch (Exception e)
         {
            System.Console.WriteLine(e.ToString());
         }
      }
   }
}
```

getChildrenNodesByCategoryPaginated

Description:

Method	Return values	Description
getChildrenNodesByCategoryPaginated(String uuid, int offset, int limit, String filter, String orderByField, bool orderAsc, List<int> filteredTypes, String pluginName)	**SimpleNodeBaseList**	Get children nodes by category paginated.
The parameters "limit" and "offset" allow you to retrieve only a portion of the results of a query. • The parameter "limit" is used to limit the number of		

results returned.

- The parameter "offset" skips that many results before beginning to return results.

For example, if your query has 1000 results, but you only want to return the first 10, you should use these values:

- limit=10
- offset=0

Now suppose you want to show the results from 11-20, you should use these values:

- limit=10
- offset=10

Example:

```
using System;
using System.Collections.Generic;
using System.Linq;
using System.Text;
using com.openkm.sdk4csharp;
using com.openkm.sdk4csharp.bean;

namespace OKMRest
{
   public class Program
   {
      static void Main(string[] args)
      {
         String host = "http://localhost:8080/openkm";
         String username = "okmAdmin";
         String password = "admin";
         OKMWebservice ws = OKMWebservicesFactory.newInstance(host);

         try
         {
            ws.login(user, password);
            List<int> filteredTypes = new List<int>();
            filteredTypes.Add(1);
            String folderId = "82555dd1-bcc2-4e64-81cb-5f7c2b0d7801";
            ChildNodeList nodeList = ws.node.getChildrenNodesByCategoryPaginated(folderId, 0, 10, "", NodesPagir

         }
         catch (Exception e)
         {
            System.Console.WriteLine(e.ToString());
         }
      }
   }
}
```

getBreadcrumb

Description:

Method	Return values	Description
getBreadcrumb(String uuid)	**List<BreadCrumbItem>**	Get the breadcrumb.

Example:

```
using System;
using System.Collections.Generic;
using System.Linq;
using System.Text;
using com.openkm.sdk4csharp;
using com.openkm.sdk4csharp.bean;

namespace OKMRest
{
   public class Program
   {
      static void Main(string[] args)
      {
         String host = "http://localhost:8080/openkm";
         String username = "okmAdmin";
         String password = "admin";
         OKMWebservice ws = OKMWebservicesFactory.newInstance(host);

         try
         {
            ws.login(user, password);
            String folderId = "82555dd1-bcc2-4e64-81cb-5f7c2b0d7801";
            List<BreadCrumbItem> list = ws.node.getBreadcrumb(folderId);

         }
         catch (Exception e)
         {
            System.Console.WriteLine(e.ToString());
         }
      }
   }
}
```

getNodesFiltered

Description:

Method	Return values	Description
getNodesFiltered(List<String> uuids)	**List<Node>**	Returns a node list.

Example:

```
using System;
```

```
using System.Collections.Generic;
using System.Linq;
using System.Text;
using com.openkm.sdk4csharp;
using com.openkm.sdk4csharp.bean;

namespace OKMRest
{
   public class Program
   {
      static void Main(string[] args)
      {
         String host = "http://localhost:8080/openkm";
         String username = "okmAdmin";
         String password = "admin";
         OKMWebservice ws = OKMWebservicesFactory.newInstance(host);

         try
         {
            ws.login(user, password);
            List<string> uuids = new List<string>();
            uuids.Add("82555dd1-bcc2-4e64-81cb-5f7c2b0d7801");
            List<Node> nodes = ws.node.getNodesFiltered(uuids);
         }
         catch (Exception e)
         {
            System.Console.WriteLine(e.ToString());
         }
      }
   }
}
```

evaluateDownloadZip

Description:

Method	Return values	Description
evaluateDownloadZip(List<String> uuids)	**ZipDownloadEvaluationResult**	Returns a ZipDownloadEvaluationResult object.

Example:

```
using System;
using System.Collections.Generic;
using System.Linq;
using System.Text;
using com.openkm.sdk4csharp;
using com.openkm.sdk4csharp.bean;

namespace OKMRest
{
   public class Program
   {
      static void Main(string[] args)
      {
         String host = "http://localhost:8080/openkm";
         String username = "okmAdmin";
         String password = "admin";
```

```
            OKMWebservice ws = OKMWebservicesFactory.newInstance(host);

            try
            {
                ws.login(user, password);
                List<string> uuids = new List<string>();
                uuids.Add("82555dd1-bcc2-4e64-81cb-5f7c2b0d7801");
                ZipDownloadEvaluationResult zdeResult = ws.node.evaluateDownloadZip(uuids);
            }
            catch (Exception e)
            {
                System.Console.WriteLine(e.ToString());
            }
        }
    }
}
```

generateDownloadToken

Description:

Method	Return values	Description
generateDownloadToken(String uuid, bool preview, bool oneTimeUse, DateTime? validUntil)	**String**	Generates a node download link.

When the parameter preview is set to true, the token will be generated for preview purposes.

The preview token expires by default after one minute.

The user must build the download URL with the returned token:

- Download: http://localhost:8080/openkm/Download?DTK=token
- Preview: http://localhost:8080/openkm/Download?PTK=token

Example:

```
using System;
using System.Collections.Generic;
using System.Linq;
using System.Text;
using com.openkm.sdk4csharp;

namespace OKMRest
{
    public class Program
    {
        static void Main(string[] args)
        {
            String host = "http://localhost:8080/openkm";
            String username = "okmAdmin";
            String password = "admin";
```

```
            OKMWebservice ws = OKMWebservicesFactory.newInstance(host);

            try
            {
                ws.login(user, password);
                DateTime? validUntil = new DateTime(2023, 2, 10);
                System.Console.WriteLine(ws.node.generateDownloadToken("70ec54af-76ad-4d02-b9c8-8c94c3b6ffc7",
            } catch (Exception e) {
                System.Console.WriteLine(e.ToString());
            }
        }
    }
}
```

restore

Description:

Method	Return values	Description
restore(String uuid)	**Node**	Restore a node.

Example:

```
using System;
using System.Collections.Generic;
using System.Linq;
using System.Text;
using com.openkm.sdk4csharp;
using com.openkm.sdk4csharp.bean;

namespace OKMRest
{
    public class Program
    {
        static void Main(string[] args)
        {
            String host = "http://localhost:8080/openkm";
            String username = "okmAdmin";
            String password = "admin";
            OKMWebservice ws = OKMWebservicesFactory.newInstance(host);

            try
            {
                ws.login(user, password);
                Node node = ws.node.restore("0f6463f3-4d36-4091-b518-4fe7c353ee70");
                System.Console.WriteLine(node.toString());

            }
            catch (Exception e)
            {
                System.Console.WriteLine(e.ToString());
            }
        }
    }
}
```

hasNodesLockedByOtherUser

Description:

Method	Return values	Description
hasNodesLockedByOtherUser(String uuid)	**bool**	Indicates if the node is blocked by other users.

Example:

```
using System;
using System.Collections.Generic;
using System.Linq;
using System.Text;
using com.openkm.sdk4csharp;
using com.openkm.sdk4csharp.bean;

namespace OKMRest
{
    public class Program
    {
        static void Main(string[] args)
        {
            String host = "http://localhost:8080/openkm";
            String username = "okmAdmin";
            String password = "admin";
            OKMWebservice ws = OKMWebservicesFactory.newInstance(host);

            try
            {
                ws.login(user, password);
                if(ws.node.hasNodesLockedByOtherUser("1ec49da9-1746-4875-ae32-9281d7303a62"))
                {
                    System.Console.Writeline("Is blocked");
                }
            }
            catch (Exception e)
            {
                System.Console.WriteLine(e.ToString());
            }
        }
    }
}
```

setComment

Description:

Method	Return values	Description
setComment(String uuid, String versionName, String comment)	**void**	Sets the comment for a specific node version.

Example:

```
using System;
using System.Collections.Generic;
using System.Linq;
using System.Text;
using com.openkm.sdk4csharp;
using com.openkm.sdk4csharp.bean;
using com.openkm.sdk4csharp.impl;

namespace OKMRest
{
    public class Program
    {
        static void Main(string[] args)
        {
            String host = "http://localhost:8080/openkm";
            String username = "okmAdmin";
            String password = "admin";
            OKMWebservice ws = OKMWebservicesFactory.newInstance(host);

            try
            {
                ws.login(user, password);
                ws.node.setComment("4b88cbe9-e73d-45fc-bac0-35e0d6e59e43", "1.5", "Update comment");
            }
            catch (Exception e)
            {
                System.Console.WriteLine(e.ToString());
            }
        }
    }
}
```

getPaginatorConfig

Description:

Method	Return values	Description
getPaginatorConfig(String pluginName)	**NodePaginatorConfig**	Returns a NodePaginatorConfig object.

Example:

```
using System;
using System.Collections.Generic;
using System.Linq;
using System.Text;
using com.openkm.sdk4csharp;
using com.openkm.sdk4csharp.bean;
using com.openkm.sdk4csharp.impl;

namespace OKMRest
{
    public class Program
    {
        static void Main(string[] args)
        {
            String host = "http://localhost:8080/openkm";
            String username = "okmAdmin";
            String password = "admin";
```

```
            OKMWebservice ws = OKMWebservicesFactory.newInstance(host);

            try
            {
                ws.login(user, password);
                NodePaginatorConfig nodePaginatorConfig = ws.node.getPaginatorConfig("com.openkm.plugin.paginate
                Console.WriteLine(nodePaginatorConfig.toString());
            }
            catch (Exception e)
            {
                System.Console.WriteLine(e.ToString());
            }
        }
    }
}
```

getPaginatorPlugins

Description:

Method	Return values	Description
getPaginatorPlugins()	**PaginatorPluginList**	Returns a PaginatorPluginList object.

Example:

```
using System;
using System.Collections.Generic;
using System.Linq;
using System.Text;
using com.openkm.sdk4csharp;
using com.openkm.sdk4csharp.bean;
using com.openkm.sdk4csharp.impl;

namespace OKMRest
{
    public class Program
    {
        static void Main(string[] args)
        {
            String host = "http://localhost:8080/openkm";
            String username = "okmAdmin";
            String password = "admin";
            OKMWebservice ws = OKMWebservicesFactory.newInstance(host);

            try
            {
                ws.login(user, password);
                PaginatorPluginList list = ws.node.getPaginatorPlugins();
                foreach(PaginatorPlugin paginatorPlugin in list.paginatorPlugins)
                {
                    Console.WriteLine("Name: " + paginatorPlugin.name);
                    Console.WriteLine("ObjClass: " + paginatorPlugin.objClass);
                }
            }
            catch (Exception e)
            {
                System.Console.WriteLine(e.ToString());
            }
        }
```

```
    }
}
```

lock

Description:

Method	Return values	Description
lock(String uuid)	**LockInfo**	Locks a node and returns an object with the Lock information.

Only the user who locked the document is allowed to unlock.

A locked document cannot be modified by other users.

Example:

```
using System;
using System.Collections.Generic;
using System.Linq;
using System.Text;
using com.openkm.sdk4csharp;
using com.openkm.sdk4csharp.bean;

namespace OKMRest
{
    public class Program
    {
        static void Main(string[] args)
        {
            String host = "http://localhost:8080/openkm";
            String username = "okmAdmin";
            String password = "admin";
            OKMWebservice ws = OKMWebservicesFactory.newInstance(host);

            try
            {
                ws.login(user, password);
                ws.node.lock("f123a950-0329-4d62-8328-0ff500fd42db");
            } catch (Exception e) {
                System.Console.WriteLine(e.ToString());
            }
        }
    }
}
```

forceLock

Description:

Method	Return values	Description
forceLock(String uuid)	**LockInfo**	Force-locks a node and returns an object with the lock information.

Only the user who locked the document is allowed to unlock.

A locked document cannot be modified by other users.

Example:

```
using System;
using System.Collections.Generic;
using System.Linq;
using System.Text;
using com.openkm.sdk4csharp;
using com.openkm.sdk4csharp.bean;

namespace OKMRest
{
   public class Program
   {
      static void Main(string[] args)
      {
         String host = "http://localhost:8080/openkm";
         String username = "okmAdmin";
         String password = "admin";
         OKMWebservice ws = OKMWebservicesFactory.newInstance(host);

         try
         {
            ws.login(user, password);
            ws.node.forceLock("f123a950-0329-4d62-8328-0ff500fd42db");
         } catch (Exception e) {
            System.Console.WriteLine(e.ToString());
         }
      }
   }
}
```

unlock

Description:

Method	Return values	Description
unlock(String uuid)	**LockInfo**	Force-unlocks a locked node.

Only the user who locked the document is allowed to unlock.

A locked document cannot be modified by other users.

Example:

```
using System;
using System.Collections.Generic;
using System.Linq;
using System.Text;
using com.openkm.sdk4csharp;
using com.openkm.sdk4csharp.bean;

namespace OKMRest
{
   public class Program
   {
      static void Main(string[] args)
      {
         String host = "http://localhost:8080/openkm";
         String username = "okmAdmin";
         String password = "admin";
         OKMWebservice ws = OKMWebservicesFactory.newInstance(host);

         try
         {
            ws.login(user, password);
            ws.node.unlock("f123a950-0329-4d62-8328-0ff500fd42db");
         } catch (Exception e) {
            System.Console.WriteLine(e.ToString());
         }
      }
   }
}
```

forceUnlock

Description:

Method	Return values	Description
forceUnlock(String uuid)	**void**	Unlocks a locked node.

This method allows unlocking any locked document.

It is not necessary that this action be executed by the same user who previously performed the checkout lock action.

This action can only be done by a superuser (user with ROLE_ADMIN).

Example:

```
using System;
using System.Collections.Generic;
using System.Linq;
using System.Text;
using com.openkm.sdk4csharp;

namespace OKMRest
{
```

```
    public class Program
    {
        static void Main(string[] args)
        {
            String host = "http://localhost:8080/openkm";
            String username = "okmAdmin";
            String password = "admin";
            OKMWebservice ws = OKMWebservicesFactory.newInstance(host);

            try
            {
                ws.login(user, password);
                ws.node.forceUnlock("f123a950-0329-4d62-8328-0ff500fd42db");
            } catch (Exception e) {
                System.Console.WriteLine(e.ToString());
            }
        }
    }
}
```

Note samples

Basics

In most methods, you'll see the parameter named "**nodeId**". The value of this parameter can be a valid document, folder, mail or record **UUID**.

Example of nodeId:

- Using UUID -> "**f123a950-0329-4d62-8328-0ff500fd42db**"

Suggested code sample

First, you must create the webservice object:

```
OKMWebservices ws = OKMWebservicesFactory.newInstance(host);
```

Then you should log in using the method "**login**". You can access the "**login**" method from webservice object "**ws**" as shown below:

```
ws.login(user, password);
```

Once you are logged in with the web services, the session is kept in the webservice object. Then you can use the other API methods.

At this point you can use all the Note methods from "**note**" class as shown below:

```
ws.note.add("373bcdd0-c082-4e7b-addd-e10ef813946e", "the note text");
```

Methods

add

Description:

Method	Return values	Description
add(String nodeId, String text)	**Note**	Adds a note to a node and returns a Note object.

Example:

```
using System;
using System.Collections.Generic;
using System.Linq;
using System.Text;
using com.openkm.sdk4csharp;

namespace OKMRest
{
   public class Program
   {
      static void Main(string[] args)
      {
         String host = "http://localhost:8080/openkm";
         String username = "okmAdmin";
         String password = "admin";
         OKMWebservice ws = OKMWebservicesFactory.newInstance(host);

         try
         {
            ws.login(user, password);
            ws.note.add("f123a950-0329-4d62-8328-0ff500fd42db", "the note text");
         }
         catch (Exception e)
         {
            System.Console.WriteLine(e.ToString());
         }
      }
   }
}
```

get

Description:

Method	Return values	Description
get(String noteId)	**Note**	Retrieves the note.

The noteId is a UUID.

The Node object has a variable named path; in that case, the path contains a UUID.

Example:

```
using System;
using System.Collections.Generic;
using System.Linq;
using System.Text;
using com.openkm.sdk4csharp;
using com.openkm.sdk4csharp.bean;

namespace OKMRest
{
   public class Program
   {
      static void Main(string[] args)
```

```
        {
            String host = "http://localhost:8080/openkm";
            String username = "okmAdmin";
            String password = "admin";
            OKMWebservice ws = OKMWebservicesFactory.newInstance(host);

            try
            {
                ws.login(user, password);
                List<Note> notes = ws.note.list("f123a950-0329-4d62-8328-0ff500fd42db");
                if (notes.Count > 0)
                {
                    System.Console.WriteLine(ws.note.get(notes[0].path));
                }
            }
            catch (Exception e)
            {
                System.Console.WriteLine(e.ToString());
            }
        }
    }
}
```

delete

Description:

Method	Return values	Description
delete(String noteId)	**Note**	Deletes a note.

> The noteId is a UUID.
>
> The Node object has a variable named path; in that case, the path contains a UUID.

Example:

```
using System;
using System.Collections.Generic;
using System.Linq;
using System.Text;
using com.openkm.sdk4csharp;
using com.openkm.sdk4csharp.bean;

namespace OKMRest
{
    public class Program
    {
        static void Main(string[] args)
        {
            String host = "http://localhost:8080/openkm";
            String username = "okmAdmin";
            String password = "admin";
            OKMWebservice ws = OKMWebservicesFactory.newInstance(host);

            try
            {
```

```
            ws.login(user, password);
            List<Note> notes = ws.note.list("f123a950-0329-4d62-8328-0ff500fd42db");
            if (notes.Count > 0)
            {
                ws.note.delete(notes[0].path);
            }
        }
        catch (Exception e)
        {
            System.Console.WriteLine(e.ToString());
        }
    }
  }
}
```

set

Description:

Method	Return values	Description
set(String noteId, String text)	**void**	Changes the note text.

The noteId is a UUID.

The Node object has a variable named path; in that case, the path contains a UUID.

Example:

```
using System;
using System.Collections.Generic;
using System.Linq;
using System.Text;
using com.openkm.sdk4csharp;
using com.openkm.sdk4csharp.bean;

namespace OKMRest
{
   public class Program
   {
      static void Main(string[] args)
      {
         String host = "http://localhost:8080/openkm";
         String username = "okmAdmin";
         String password = "admin";
         OKMWebservice ws = OKMWebservicesFactory.newInstance(host);

         try
         {
            ws.login(user, password);
            List<Note> notes = ws.note.list("f123a950-0329-4d62-8328-0ff500fd42db");
            if (notes.Count > 0)
            {
               ws.note.set(notes[0].path, "text modified");
            }
         }
         catch (Exception e)
```

```
            {
                System.Console.WriteLine(e.ToString());
            }
        }
    }
}
```

list

Description:

Method	Return values	Description
list(String nodeId)	**List<Note>**	Retrieves a list of all notes for a node.

Example:

```
using System;
using System.Collections.Generic;
using System.Linq;
using System.Text;
using com.openkm.sdk4csharp;
using com.openkm.sdk4csharp.bean;

namespace OKMRest
{
    public class Program
    {
        static void Main(string[] args)
        {
            String host = "http://localhost:8080/openkm";
            String username = "okmAdmin";
            String password = "admin";
            OKMWebservice ws = OKMWebservicesFactory.newInstance(host);

            try
            {
                ws.login(user, password);
                List<Note> notes = ws.note.list("f123a950-0329-4d62-8328-0ff500fd42db");
                foreach (Note note in notes)
                {
                    System.Console.WriteLine(note);
                }
            }
            catch (Exception e)
            {
                System.Console.WriteLine(e.ToString());
            }
        }
    }
}
```

getNotesHistories

Description:

Method	Return values	Description

getNotesHistories(String nodeId)	**List<NoteHistory>**	Retrieves a list of all note histories of a node.

Example:

```
using System;
using System.Collections.Generic;
using System.Linq;
using System.Text;
using com.openkm.sdk4csharp;
using com.openkm.sdk4csharp.bean;

namespace OKMRest
{
   public class Program
   {
      static void Main(string[] args)
      {
         String host = "http://localhost:8080/openkm";
         String username = "okmAdmin";
         String password = "admin";
         OKMWebservice ws = OKMWebservicesFactory.newInstance(host);

         try
         {
            ws.login(user, password);
            List<NoteHistory> notes = ws.note.getNotesHistory("f123a950-0329-4d62-8328-0ff500fd42db");
            foreach (NoteHistory note in notes)
            {
               System.Console.WriteLine(note);
            }
         }
         catch (Exception e)
         {
            System.Console.WriteLine(e.ToString());
         }
      }
   }
}
```

Notification samples

Basics

Suggested code sample

First, you must create the web service object:

```
OKMWebservices ws = OKMWebservicesFactory.newInstance(host);
```

Then, you should log in using the method "**login**". You can access the "**login**" method from the web service object "**ws**" as shown below:

```
ws.login(user, password);
```

Once you are logged in with the web service, the session is kept in the web service object. Then you can use the other API methods.

At this point you can use all the Notification methods from the "**notification**" class as shown below:

```
ws.notification.notify(uuids, users, roles, mails, message, false);
```

Methods

notify

Description:

Method	Return values	Description
notify(List<String> uuids, List<String> users, List<String> roles, List<String> mails, String message, bool attachment)	**void**	Sends a mail notification.

The parameter uuids contains the UUIDs of the nodes (document, folder, mail, or record).

The parameter users contains a set of OpenKM users to be notified.

The parameter roles contains a set of OpenKM roles to be notified.

The parameter mails contains a set of email addresses - usually external email addresses - to be notified.

The parameter message is the body of the email.

When the attachment value is true, the node is attached to the email.

Example:

```
using System;
using System.Collections.Generic;
using System.Linq;
using System.Text;
using com.openkm.sdk4csharp;
using com.openkm.sdk4csharp.bean;

namespace OKMRest
{
   public class Program
   {
      static void Main(string[] args)
      {
         String host = "http://localhost:8180/openkm";
         String username = "okmAdmin";
         String password = "admin";
         OKMWebservice ws = OKMWebservicesFactory.newInstance(host);

         try
         {
            ws.login(user, password);
            List<String> uuids = new List<string>();
            uuids.Add(doc.uuid);
            List<String> users = new List<string>();
            users.Add("jperez");
            List<String> roles = new List<string>();
            roles.Add("ROLE_USER");
            List<String> mails = new List<string>();
            mails.Add("test@none.com");
            String message = "Any message"
            ws.notification.notify(uuids, users, roles, mails, message, false);
         }
         catch (Exception e)
         {
            System.Console.WriteLine(e.ToString());
         }
      }
   }
}
```

PDF samples

Basics

Suggested code sample

First, you must create the web service object:

```
OKMWebservices ws = OKMWebservicesFactory.newInstance(host);
```

Then you should log in using the "**login**" method. You can access the "**login**" method from the web service object "**ws**" as shown below:

```
ws.login(user, password);
```

Once you are logged in to the web service, the session is kept in the web service object. Then you can use the other API methods.

At this point you can use all the PDF methods from the "**pdf**" class as shown below:

```
Stream stream = ws.pdf.getImage("e7d6860a-7e0b-4823-bd3d-75f88be1eedf", 1);
```

Methods

getImage

Description:

Method	Return values	Description
getImage(String uuid, int page, String size)	**Stream**	Returns the image of a page.

The document must be a PDF or convertible to PDF.

The value of the **uuid** is the UUID of the document.

The **page** is the number of the page in the document, starting at 1.

The **size** value is optional. When set, it is used to resize the image of the page; otherwise, the default value is used.

Example:

```
using System;
using System.Collections.Generic;
using System.Linq;
using System.Text;
using com.openkm.sdk4csharp;
using com.openkm.sdk4csharp.bean;

namespace OKMRest
{
    public class Program
    {
        static void Main(string[] args)
        {
            String host = "http://localhost:8080/openkm";
            String username = "okmAdmin";
            String password = "admin";
            OKMWebservice ws = OKMWebservicesFactory.newInstance(host);

            try
            {
                ws.login(user, password);
                Stream stream = ws.pdf.getImage("1ec49da9-1746-4875-ae32-9281d7303a62", 1, null);
                FileStream destFile = new FileStream("D:\\test.png", FileMode.OpenOrCreate, FileAccess.ReadWrite);
                stream.CopyTo(destFile);
                destFile.Close();
                stream.Close();
            }
            catch (Exception e)
            {
                System.Console.WriteLine(e.ToString());
            }
        }
    }
}
```

split

Description:

Method	Return values	Description
split(String uuid, String dstId, String baseName, List<int> pages)	List<Document>	Returns true when the pages of the document have been split.

The document must be a PDF or convertible to PDF.

The value of the **uuid** is the UUID of the document.

The value of **baseName** is the base name used to create split documents. For example, if the baseName value is "test" and the pages value is "1,3", the files created will be "test-001.pdf" and "test-003.pdf".

The value of **pages** is the number of pages to be split.

Example:

```
using System;
using System.Collections.Generic;
using System.Linq;
using System.Text;
using com.openkm.sdk4csharp;
using com.openkm.sdk4csharp.bean;

namespace OKMRest
{
    public class Program
    {
        static void Main(string[] args)
        {
            String host = "http://localhost:8080/openkm";
            String username = "okmAdmin";
            String password = "admin";
            OKMWebservice ws = OKMWebservicesFactory.newInstance(host);

            try
            {
                ws.login(user, password);
                List<int> pages = new List<int>();
                pages.Add(5);
                pages.Add(10);
                List<Document> docs = ws.pdf.split("e7d6860a-7e0b-4823-bd3d-75f88be1eedf", "1ec49da9-1746-4875-a
                foreach(Document doc in docs)
                {
                  System.Console.Writeline(doc.toString());
                }
            }
            catch (Exception e)
            {
                System.Console.WriteLine(e.ToString());
            }
        }
    }
}
```

extract

Description:

Method	Return values	Description
extract(String uuid, String dstId, String name, List<int> pages)	**Document**	Returns a new document with the extracted pages.

The document must be a PDF or convertible to PDF.

The value of the **uuid** is the UUID of the document.

The value of the **dstId** is the UUID of the destination (folder or record).

The value of **name** is the name of the new document with extracted pages.

The value of **pages** is the number of pages to be extracted.

Example:

```
using System;
using System.Collections.Generic;
using System.Linq;
using System.Text;
using com.openkm.sdk4csharp;
using com.openkm.sdk4csharp.bean;

namespace OKMRest
{
    public class Program
    {
        static void Main(string[] args)
        {
            String host = "http://localhost:8080/openkm";
            String username = "okmAdmin";
            String password = "admin";
            OKMWebservice ws = OKMWebservicesFactory.newInstance(host);

            try
            {
                ws.login(user, password);
                List<int> pages = new List<int>();
                pages.Add(5);
                pages.Add(10);
                Documentresult = ws.pdf.extract("e7d6860a-7e0b-4823-bd3d-75f88be1eedf", "1ec49da9-1746-4875-ae3
            }
            catch (Exception e)
            {
                System.Console.WriteLine(e.ToString());
            }
        }
    }
}
```

remove

Description:

Method	Return values	Description
remove(String uuid, String dstId, String name, List<int> pages)	**Document**	Returns true when the pages of the document have been removed.

The document must be a PDF or convertible to PDF.

The value of the **uuid** is the UUID of the document.

The value of the **dstId** is the UUID of the destination (folder or record).

The value of **name** is the name of the new document with extracted pages.

The value of **pages** is the number of pages to be removed.

Example:

```
using System;
using System.Collections.Generic;
using System.Linq;
using System.Text;
using com.openkm.sdk4csharp;
using com.openkm.sdk4csharp.bean;

namespace OKMRest
{
    public class Program
    {
        static void Main(string[] args)
        {
            String host = "http://localhost:8080/openkm";
            String username = "okmAdmin";
            String password = "admin";
            OKMWebservice ws = OKMWebservicesFactory.newInstance(host);

            try
            {
                ws.login(user, password);
                List<int> pages = new List<int>();
                pages.Add(5);
                pages.Add(10);
                Document doc = ws.pdf.remove("e7d6860a-7e0b-4823-bd3d-75f88be1eedf", "1ec49da9-1746-4875-ae32
            }
            catch (Exception e)
            {
                System.Console.WriteLine(e.ToString());
            }
        }
    }
}
```

rotate

Description:

Method	Return values	Description
rotate(String uuid, String dstId, String name, int angle, List<int> pages)	**Document**	Returns true when the pages of the document have been rotated.

The document must be a PDF or convertible to PDF.

The value of the **uuid** is the UUID of the document.

The value of the **dstId** is the UUID of the destination (folder or record).

The value of **name** is the name of the new document with extracted pages.

The value of **angle** is the rotation applied to the chosen pages.

The value of **pages** is the number of pages to be rotated.

Example:

```
using System;
using System.Collections.Generic;
using System.Linq;
using System.Text;
using com.openkm.sdk4csharp;
using com.openkm.sdk4csharp.bean;

namespace OKMRest
{
    public class Program
    {
        static void Main(string[] args)
        {
            String host = "http://localhost:8080/openkm";
            String username = "okmAdmin";
            String password = "admin";
            OKMWebservice ws = OKMWebservicesFactory.newInstance(host);

            try
            {
                ws.login(user, password);
                List<int> pages = new List<int>();
                pages.Add(5);
                pages.Add(10);
                Document doc = ws.pdf.rotate("e7d6860a-7e0b-4823-bd3d-75f88be1eedf", "1ec49da9-1746-4875-ae32-9
            }
            catch (Exception e)
            {
                System.Console.WriteLine(e.ToString());
            }
        }
    }
}
```

insertPages

Description:

Method	Return values	Description
insertPages(String uuid, InsertPagesRequest request)	**Document**	Returns the new document created with the inserted pages.

The document must be a PDF or convertible to PDF.

The value of the **uuid** is the UUID of the target document where the pages will be inserted.

The value of the **InsertPagesRequest** is an object that has a List of **PageInsertOperation** named **insertOperations**, a String **dstId,** that contains the UUID of the destination folder, and a String **name** for the newly generated document.

PageInsertOperation object has a String **srcId,** the UUID of the source file of the pages**,** a List of **Integer** named **pages** that stores the positions of the pages in the source PDF, and an int **insertFromPage,** the position where the pages are to be located in the target PDF.

Example:

```
using System;
using System.Collections.Generic;
using System.Linq;
using System.Text;
using com.openkm.sdk4csharp;
using com.openkm.sdk4csharp.bean;

namespace OKMRest
{
    public class Program
    {
        static void Main(string[] args)
        {
            String host = "http://localhost:8080/openkm";
            String username = "okmAdmin";
            String password = "admin";
            OKMWebservice ws = OKMWebservicesFactory.newInstance(host);

            try
            {
                ws.login(user, password);

                // Create the insert pages request
                InsertPagesRequest request = new InsertPagesRequest();
                request.name = "merged_document.pdf"; // Name for the new document
                request.dstId = fld.uuid;

                // Create a page insertion operation
                PageInsertOperation operation = new PageInsertOperation();
                operation.srcId = srcDoc.uuid; // Source document UUID
                operation.pages = new List<int> { 1, 2, 3 }; // Pages to insert from source
                operation.insertFromPage = 1; // Insert at position 1 in target document

                request.insertOperations.Add(operation);

                // Call insertPages with target document UUID and request
                Document result = ws.pdf.insertPages(srcDoc.uuid, request);

                System.Console.Writeline("New document created: " + result.uuid);
            }
            catch (Exception e)
            {
```

```
            System.Console.WriteLine(e.ToString());
        }
    }
  }
}
```

optimize

Description:

Method	Return values	Description
optimize(String uuid)	**bool**	Returns true when optimized successfully.

The UUID of the node must be a PDF document.

Example:

```
using System;
using System.Collections.Generic;
using System.Linq;
using System.Text;
using com.openkm.sdk4csharp;
using com.openkm.sdk4csharp.bean;

namespace OKMRest
{
    public class Program
    {
        static void Main(string[] args)
        {
            String host = "http://localhost:8080/openkm";
            String username = "okmAdmin";
            String password = "admin";
            OKMWebservice ws = OKMWebservicesFactory.newInstance(host);

            try
            {
                ws.login(user, password);  ;
                bool result = ws.pdf.optimize("e7d6860a-7e0b-4823-bd3d-75f88be1eedf");
                System.Console.Writeline("Optimize success: "+ result);
            }
            catch (Exception e)
            {
                System.Console.WriteLine(e.ToString());
            }
        }
    }
}
```

Plugin samples

Basics

Suggested code sample

First, you must create the webservice object:

```
OKMWebservices ws = OKMWebservicesFactory.newInstance(host);
```

Then you should log in using the method "**login**". You can access the "**login**" method from the web service object "**ws**" as shown below:

```
ws.login(user, password);
```

Once you are logged in with the web services, the session is kept in the web service object. Then you can use the other API methods.

At this point you can use all the plugin methods from the "**plugin**" class as shown below:

```
ws.plugin.executePluginPostReturnFile("com.openkm.plugin.rest.TestGetDocumentRestPlugin", parameters, null);
```

Methods

executePluginPost

Description:

Method	Return values	Description
executePluginPost(String className, Dictionary<String, String> parameters, Type clazz, FileStream fs)	**Object**	Returns the object value resulting from execution of a class that implements RestPlugin.

- The "className" value must be the canonical class name of a class that implements the RestPlugin interface.
- The "parameters" map contains values that will be used by the class specified in className.
- The "clazz" value should be the Class of the returned object. It's used by REST to unmarshal the result of the query.

- The "fs" file stream allows uploading a document.

This method executes a REST call using POST.

Example:

```
using System;
using System.Collections.Generic;
using System.Linq;
using System.Text;
using com.openkm.sdk4csharp;
using com.openkm.sdk4csharp.bean;

namespace OKMRest
{
   public class Program
   {
      static void Main(string[] args)
      {
         String host = "http://localhost:8180/openkm";
         String username = "okmAdmin";
         String password = "admin";
         OKMWebservice ws = OKMWebservicesFactory.newInstance(host);

         try
         {
            ws.login(user, password);
            FileStream fs = new FileStream(@"D:\Testing\pluging.docx", FileMode.Open, FileAccess.Read);
            Dictionary<String, String> parameters = new Dictionary<String, String>();
            parameters.Add("param1", "value1");
            parameters.Add("param2", "value2");
            String res = (String) ws.plugin.executePluginPost("com.openkm.plugin.rest.TestRestPlugin", parameters,
            fs.Close();
            System.Console.WriteLine(res);
         }
         catch (Exception e)
         {
            System.Console.WriteLine(e.ToString());
         }
      }
   }
}
```

executePluginPostReturnFile

Description:

Method	Return values	Description
executePluginPostReturnFile(String className, Dictionary<String, String> parameters, FileStream fs)	**Stream**	Returns an InputStream resulting from executio of a class that implements RestPlugin.

- The "className" value must be the canonical class name of a class that implements the RestPlugin interface.
- The "parameters" map contains values that will be used by the class specified in className.
- The "is" stream allows uploading a document.

This method executes a REST call using POST.

The RestPlugin must return a Response object. Take a look at the following sample implementation of the RestPlugin:

```
package com.openkm.plugin.rest;

import net.xeoh.plugins.base.annotations.PluginImplementation;

import java.io.InputStream;
import java.util.Map;

import org.slf4j.Logger;
import org.slf4j.LoggerFactory;
import org.springframework.beans.factory.annotation.Autowired;
import org.springframework.core.io.InputStreamResource;
import org.springframework.http.HttpHeaders;
import org.springframework.http.HttpStatus;
import org.springframework.http.ResponseEntity;

import com.openkm.bean.Document;
import com.openkm.module.db.DbDocumentModule;
import com.openkm.plugin.BasePlugin;
import com.openkm.util.PathUtils;

/**
 * Sample rest plugin
 *
 * @author jllort
 */
@PluginImplementation
public class TestGetDocumentRestPlugin extends BasePlugin implements RestPlugin {

    private static Logger log = LoggerFactory.getLogger(TestGetDocumentRestPlugin.class);

    @Autowired
    private DbDocumentModule dbDocumentModule;

    @Autowired
    private PathUtils pathUtils;

    @Override
    public Object executePlugin(Map<String, String> parameters, InputStream is) throws Exception {
        log.debug("executePlugin({})", parameters);
        String docId = parameters.get("docId");
        boolean inline = parameters.containsKey("inline");
        Document doc = dbDocumentModule.getProperties(null, docId);
        String mimeType = doc.getMimeType();
        String fileName = pathUtils.getName(doc.getPath());
        InputStream isContent = dbDocumentModule.getContent(null, docId, false);

        HttpHeaders responseHeaders = new HttpHeaders();
        responseHeaders.add("Content-Type", mimeType);

        // inline true when you want to embedded the content into
```

```
            if (inline) {
                responseHeaders.add("Content-disposition", "inline; filename=\"" + fileName + "\"");
            } else {
                responseHeaders.add("Content-Disposition", "attachment; filename=\"" + fileName + "\"");
            }

            responseHeaders.setContentLength(doc.getActualVersion().getSize());
            InputStreamResource inputStreamResource = new InputStreamResource(isContent);
            log.debug("TestGetDocumentRestPlugin: [BINARY]");
            return new ResponseEntity<>(inputStreamResource, responseHeaders, HttpStatus.OK);
        }
    }
```

Example:

```
using System;
using System.Collections.Generic;
using System.Linq;
using System.Text;
using com.openkm.sdk4csharp;
using com.openkm.sdk4csharp.bean;

namespace OKMRest
{
    public class Program
    {
        static void Main(string[] args)
        {
            String host = "http://localhost:8180/openkm";
            String username = "okmAdmin";
            String password = "admin";
            OKMWebservice ws = OKMWebservicesFactory.newInstance(host);

            try
            {
                ws.login(user, password);
                FileStream fs = new FileStream(@"D:\Testing\pluging.docx", FileMode.Open, FileAccess.Read);
                Dictionary<String, String> parameters = new Dictionary<String, String>();
                parameters.Add("docId", "/okm:root/test.pdf");
                Stream tmpFIle = ws.plugin.executePluginPostReturnFile("com.openkm.plugin.rest.TestGetDocumentRes
                FileStream destFile = new FileStream(@"D:\Testing\pluging.pdf", FileMode.OpenOrCreate);
                tmpFIle.CopyTo(destFile);
                destFile.Close();
                tmpFIle.Close();
                fs.Close();
            }
            catch (Exception e)
            {
                System.Console.WriteLine(e.ToString());
            }
        }
    }
}
```

executePluginGet

Description:

Method	R

executePluginGet(String className, Dictionary<String, String> parameters, Type clazz) **Obj**

- The "className" value must be the canonical class name of a class that implements the RestPlugin interfac
- The "parameters" map contains values that will be used by the class specified in className.
- The "clazz" value should be the Class of the returned object. It's used by REST to unmarshal the result of th

This method executes a REST call using GET.

You can also execute it directly from the browser; take the following URL as a sample:

http://localhost:8080/OpenKM/services/rest/plugin/executeGetPlugin?className=com.openkm.plugin.

Example:

```
using System;
using System.Collections.Generic;
using System.Linq;
using System.Text;
using com.openkm.sdk4csharp;
using com.openkm.sdk4csharp.bean;

namespace OKMRest
{
   public class Program
   {
      static void Main(string[] args)
      {
         String host = "http://localhost:8180/openkm";
         String username = "okmAdmin";
         String password = "admin";
         OKMWebservice ws = OKMWebservicesFactory.newInstance(host);

         try
         {
            ws.login(user, password);
            Dictionary<String, String> parameters = new Dictionary<String, String>();
            parameters.Add("docId", "/okm:root/invoices/00000001_001_of_001.pdf");
            String res = (String) ws.plugin.executePluginGet("com.openkm.plugin.rest.TestRestPlugin", parameters, ty
            System.Console.WriteLine(res);
         }
         catch (Exception e)
         {
            System.Console.WriteLine(e.ToString());
         }
      }
   }
}
```

executePluginGetReturnFile

Description:

Method
executePluginGetReturnFile(String className, Dictionary<String, String> parameters)

- The "className" value must be the canonical class name of a class that implements the RestPlugin interfac
- The "parameters" map contains values that will be used by the class specified in className.

This method executes a REST call using GET.

The RestPlugin must return a Response object. Take a look at the following sample implementation of the RestPlug

```
package com.openkm.plugin.rest;

import net.xeoh.plugins.base.annotations.PluginImplementation;

import java.io.InputStream;
import java.util.Map;

import org.slf4j.Logger;
import org.slf4j.LoggerFactory;
import org.springframework.beans.factory.annotation.Autowired;
import org.springframework.core.io.InputStreamResource;
import org.springframework.http.HttpHeaders;
import org.springframework.http.HttpStatus;
import org.springframework.http.ResponseEntity;

import com.openkm.bean.Document;
import com.openkm.module.db.DbDocumentModule;
import com.openkm.plugin.BasePlugin;
import com.openkm.util.PathUtils;

/**
 * Sample rest plugin
 *
 * @author jllort
 */
@PluginImplementation
public class TestGetDocumentRestPlugin extends BasePlugin implements RestPlugin {

    private static Logger log = LoggerFactory.getLogger(TestGetDocumentRestPlugin.class);

    @Autowired
    private DbDocumentModule dbDocumentModule;

    @Autowired
    private PathUtils pathUtils;

    @Override
    public Object executePlugin(Map<String, String> parameters, InputStream is) throws Exception {
        log.debug("executePlugin({})", parameters);
        String docId = parameters.get("docId");
        boolean inline = parameters.containsKey("inline");
        Document doc = dbDocumentModule.getProperties(null, docId);
        String mimeType = doc.getMimeType();
        String fileName = pathUtils.getName(doc.getPath());
```

```
            InputStream isContent = dbDocumentModule.getContent(null, docId, false);

            HttpHeaders responseHeaders = new HttpHeaders();
            responseHeaders.add("Content-Type", mimeType);

            // inline true when you want to embedded the content into
            if (inline) {
                responseHeaders.add("Content-disposition", "inline; filename=\"" + fileName + "\"");
            } else {
                responseHeaders.add("Content-Disposition", "attachment; filename=\"" + fileName + "\"");
            }

            responseHeaders.setContentLength(doc.getActualVersion().getSize());
            InputStreamResource inputStreamResource = new InputStreamResource(isContent);
            log.debug("TestGetDocumentRestPlugin: [BINARY]");
            return new ResponseEntity<>(inputStreamResource, responseHeaders, HttpStatus.OK);
        }
    }
```

You can also execute it directly from the browser; use the following URL as a sample:

```
http://localhost:8080/openkm/services/rest/plugin/executeGetPluginReturnFile?className=com.openk
```

Example:

```
using System;
using System.Collections.Generic;
using System.Linq;
using System.Text;
using com.openkm.sdk4csharp;
using com.openkm.sdk4csharp.bean;

namespace OKMRest
{
    public class Program
    {
        static void Main(string[] args)
        {
            String host = "http://localhost:8180/openkm";
            String username = "okmAdmin";
            String password = "admin";
            OKMWebservice ws = OKMWebservicesFactory.newInstance(host);

            try
            {
                ws.login(user, password);
                Dictionary<String, String> parameters = new Dictionary<String, String>();
                parameters.Add("docId", "/okm:root/test.pdf");
                Stream tmpFIle = ws.plugin.executePluginGetReturnFile("com.openkm.plugin.rest.TestGetDocumentRest
                FileStream destFile = new FileStream(@"D:\Testing\pluging.pdf", FileMode.OpenOrCreate);
                tmpFIle.CopyTo(destFile);
                destFile.Close();
                tmpFIle.Close();
            }
            catch (Exception e)
            {
                System.Console.WriteLine(e.ToString());
            }
        }
    }
```

```
}
```

Property samples

Basics

In almost all methods, you'll see the parameter named "**nodeId**". The value of this parameter can be a valid document, folder, mail, or record **UUID**.

Example of nodeId:

- Using UUID -> "**f123a950-0329-4d62-8328-0ff500fd42db**"

Suggested code sample

First, you must create the webservice object:

```
OKMWebservices ws = OKMWebservicesFactory.newInstance(host);
```

Then you should log in using the method "**login**". You can access the "**login**" method from the webservice object "**ws**" as shown below:

```
ws.login(user, password);
```

Once you are logged in to the webservice, the session is kept in the webservice object. Then you can use the other API methods.

At this point you can use all the Repository methods from the "**repository**" class as shown below:

```
ws.property.addCategory("eee9d70f-6af9-4783-82a7-b8ac94c234b6", "58c9b25f-d83e-4006-bd78-e26d7c6fb648");
```

Methods

addCategory

Description:

Method	Return values	Description
addCategory(String nodeId, String catId)	**void**	Sets a relation between a category and a node.
The value of the catId parameter should be a category folder UUID or path.		

Example:

```
using System;
using System.Collections.Generic;
using System.Linq;
using System.Text;
using com.openkm.sdk4csharp;

namespace OKMRest
{
   public class Program
   {
      static void Main(string[] args)
      {
         String host = "http://localhost:8080/openkm";
         String username = "okmAdmin";
         String password = "admin";
         OKMWebservice ws = OKMWebservicesFactory.newInstance(host);

         try
         {
            ws.login(user, password);
            ws.property.addCategory("f123a950-0329-4d62-8328-0ff500fd42db", "055e4384-7c70-4456-b32b-f5a55a
         }
         catch (Exception e)
         {
            System.Console.WriteLine(e.ToString());
         }
      }
   }
}
```

removeCategory

Description:

Method	Return values	Description
removeCategory(String nodeId, String catId)	**void**	Removes a relation between a category and a node.
The value of the catId parameter should be a category folder UUID or path.		

Example:

```
using System;
using System.Collections.Generic;
using System.Linq;
using System.Text;
using com.openkm.sdk4csharp;

namespace OKMRest
{
   public class Program
   {
      static void Main(string[] args)
      {
         String host = "http://localhost:8080/openkm";
         String username = "okmAdmin";
         String password = "admin";
```

```
            OKMWebservice ws = OKMWebservicesFactory.newInstance(host);

            try
            {
                ws.login(user, password);
                ws.property.removeCategory("f123a950-0329-4d62-8328-0ff500fd42db", "ac165cab-a62a-4b17-89fc-248(
            }
            catch (Exception e)
            {
                System.Console.WriteLine(e.ToString());
            }
        }
    }
}
```

addKeyword

Description:

Method	Return values	Description
addKeyword(String nodeId, String keyword)	**void**	Adds a keyword to a node.

The keyword should be a single word without spaces, formats allowed:

- "test"
- "two_words" (the character "_" is used as the separator).

Also, we suggest you add a keyword in lowercase because OpenKM is case sensitive.

Example:

```
using System;
using System.Collections.Generic;
using System.Linq;
using System.Text;
using com.openkm.sdk4csharp;

namespace OKMRest
{
    public class Program
    {
        static void Main(string[] args)
        {
            String host = "http://localhost:8080/openkm";
            String username = "okmAdmin";
            String password = "admin";
            OKMWebservice ws = OKMWebservicesFactory.newInstance(host);

            try
            {
                ws.login(user, password);
                ws.property.addKeyword("f123a950-0329-4d62-8328-0ff500fd42db", "test");
```

```
            }
            catch (Exception e)
            {
                System.Console.WriteLine(e.ToString());
            }
        }
    }
}
```

removeKeyword

Description:

Method	Return values	Description
removeKeyword(String nodeId, String keyword)	**void**	Removes a keyword from a node.

Example:

```
using System;
using System.Collections.Generic;
using System.Linq;
using System.Text;
using com.openkm.sdk4csharp;

namespace OKMRest
{
    public class Program
    {
        static void Main(string[] args)
        {
            String host = "http://localhost:8080/openkm";
            String username = "okmAdmin";
            String password = "admin";
            OKMWebservice ws = OKMWebservicesFactory.newInstance(host);

            try
            {
                ws.login(user, password);
                ws.property.removeKeyword("f123a950-0329-4d62-8328-0ff500fd42db", "test");
            }
            catch (Exception e)
            {
                System.Console.WriteLine(e.ToString());
            }
        }
    }
}
```

setEncryption

Description:

Method	Return values	Description

setEncryption(String nodeId, String cipherName)	**void**	Marks a document as encrypted binary data in the repository.

The parameter nodeId should be a document node.

The parameter cipherName stores information about the encryption mechanism.

This method does not perform any kind of encryption; it simply marks in the database that a document is encrypted.

Example:

```
using System;
using System.Collections.Generic;
using System.Linq;
using System.Text;
using com.openkm.sdk4csharp;

namespace OKMRest
{
   public class Program
   {
      static void Main(string[] args)
      {
         String host = "http://localhost:8080/openkm";
         String username = "okmAdmin";
         String password = "admin";
         OKMWebservice ws = OKMWebservicesFactory.newInstance(host);

         try
         {
            ws.login(user, password);
            ws.property.setEncryption("f123a950-0329-4d62-8328-0ff500fd42db", "phrase");
         }
         catch (Exception e)
         {
            System.Console.WriteLine(e.ToString());
         }
      }
   }
}
```

unsetEncryption

Description:

Method	Return values	Description
unsetEncryption(String nodeId)	**void**	Marks a document as normal binary data in the repository.

The parameter nodeId should be a document node.

This method does not perform any kind of decryption; it simply marks in the database that a document has been decrypted.

Example:

```
using System;
using System.Collections.Generic;
using System.Linq;
using System.Text;
using com.openkm.sdk4csharp;

namespace OKMRest
{
   public class Program
   {
      static void Main(string[] args)
      {
         String host = "http://localhost:8080/openkm";
         String username = "okmAdmin";
         String password = "admin";
         OKMWebservice ws = OKMWebservicesFactory.newInstance(host);

         try
         {
            ws.login(user, password);
            ws.property.unsetEncryption("f123a950-0329-4d62-8328-0ff500fd42db");
         }
         catch (Exception e)
         {
            System.Console.WriteLine(e.ToString());
         }
      }
   }
}
```

setSigned

Description:

Method	Return values	Description
setSigned(String nodeId, boolean signed)	**void**	Marks a document as signed or unsigned in the repository.

The parameter nodeId should be a document node.

This method does not perform any kind of digital signature process; it simply marks in the database that a document is signed.

Example:

```
using System;
using System.Collections.Generic;
using System.Linq;
using System.Text;
using com.openkm.sdk4csharp;

namespace OKMRest
{
   public class Program
   {
      static void Main(string[] args)
      {
         String host = "http://localhost:8080/openkm";
         String username = "okmAdmin";
         String password = "admin";
         OKMWebservice ws = OKMWebservicesFactory.newInstance(host);

         try
         {
            ws.login(user, password);
            ws.property.setSigned("f123a950-0329-4d62-8328-0ff500fd42db", true);
         }
         catch (Exception e)
         {
            System.Console.WriteLine(e.ToString());
         }
      }
   }
}
```

isSigned

Description:

Method	Return values	Description
isSigned(String uuid)	**bool**	Returns a boolean indicating whether the document is signed.
The parameter **uuid** should be a document node.		

Example:

```
using System;
using System.Collections.Generic;
using System.Linq;
using System.Text;
using com.openkm.sdk4csharp;

namespace OKMRest
{
   public class Program
   {
      static void Main(string[] args)
      {
         String host = "http://localhost:8080/openkm";
         String username = "okmAdmin";
         String password = "admin";
```

```
            OKMWebservice ws = OKMWebservicesFactory.newInstance(host);

            try
            {
                ws.login(user, password);
                System.Console.WriteLine("Is the document signed: " + ws.property.isSigned("6330d2a0-529f-4c14-baa1
            }
            catch (Exception e)
            {
                System.Console.WriteLine(e.ToString());
            }
        }
    }
}
```

PropertyGroup samples

Basics

In an older OpenKM version, we called "**Metadata Groups**" "**Property Groups**".

Although we understand this name does not help much in identifying these methods as metadata ones, for historical reasons we continue to maintain the nomenclature.

For more information about Metadata.

In almost all methods, you'll see the parameter named "**nodeId**". The value of this parameter can be the UUID of a valid document, folder, mail, or record.

Example of a nodeId:

- Using UUID -> "**f123a950-0329-4d62-8328-0ff500fd42db**"

The class com.openkm.sdk4j.util.ISO8601 should be used to set and parse metadata date fields. The values of metadata fields of type date are stored in the application in ISO-8601 basic format.

To convert a retrieved metadata field of type date to a valid date, use:

```
DateTime date = ISO8601.parseBasic(metadataFieldValue);
```

To save a date value into a metadata field of type date, use:

```
DateTime date = DateTime.now; // Present date
String metadataFieldValue = ISO8601.formatBasic(date);
// metadataFieldValue can be saved into repository metadata field of type date
```

Suggested code sample

First, you must create the webservice object:

```
OKMWebservices ws = OKMWebservicesFactory.newInstance(host);
```

Then you should log in using the "**login**" method. You can access the "**login**" method from the webservice object "**ws**" as shown below:

```
ws.login(user, password);
```

Once you are logged in to the web service, the session is kept in the webservice object. You can then use the

other API methods.

At this point you can use all the Property Group methods from the " **propertyGroup**" class as shown below:

```
ws.propertyGroup.addGroup("8cd1e072-8595-4dd3-b121-41d622c43f08", "okg:consulting", propertiesMap);
```

Methods

addGroup

Description:

Method	Return values	Description
addGroup(String nodeId, String grpName, Dictionary<String, String> propertiesMap)	**void**	Adds a metadata group to a node.

The grpName should be a valid Metadata group name.

It is not mandatory to set all field values in the propertiesMap parameter; it is enough to include the fields whose values you wish to change.

The sample below is based on this Metadata group definition:

```
<?xml version="1.0" encoding="UTF-8"?>
<!DOCTYPE property-groups PUBLIC "-//OpenKM//DTD Property Groups 2.0//EN"
                                 "http://www.openkm.com/dtd/property-groups-2.0.dtd">
<property-groups>
  <property-group label="Consulting" name="okg:consulting">
    <input label="Name" type="text" name="okp:consulting.name"/>
    <input label="Date" type="date" name="okp:consulting.date" />
    <checkbox label="Important" name="okp:consulting.important"/>
    <textarea label="Comment" name="okp:consulting.comment"/>
  </property-group>
</property-groups
```

To add several values to a metadata field of type **multiple** and to add a value to a metadata field of type **simple**, like this:

```
<select label="Multiple" name="okp:consulting.multiple" type="multiple">
  <option label="One" value="one"/>
  <option label="Two" value="two"/>
  <option label="Three" value="three" />
</select>

<select label="Simple" name="okp:consulting.simple" type="simple">
 <option label="One" value="one"/>
 <option label="Two" value="two"/>
```

```
 <option label="Three" value="three" />
</select>
```

You should do:

```
properties.Add("okp:consulting.multiple", "[one,two]");
properties.Add("okp:consulting.simple", "[one]");
```

Where "**one**" and "**two**" are valid values, the character "**,**" is used as a separator, and the options should go between "**[**" and "**]**".

Example:

```
using System;
using System.Collections.Generic;
using System.Linq;
using System.Text;
using com.openkm.sdk4csharp;
using com.openkm.sdk4csharp.util;

namespace OKMRest
{
   public class Program
   {
      static void Main(string[] args)
      {
         String host = "http://localhost:8080/openkm";
         String username = "okmAdmin";
         String password = "admin";
         OKMWebservice ws = OKMWebservicesFactory.newInstance(host);

         try
         {
            ws.login(user, password);
            Dictionary<string, string> props = new Dictionary<string, string>();
            DateTime date = DateTime.Now;
            props.Add("okp:consulting.name", "test");
            props.Add("okp:consulting.date", ISO8601.formatBasic(date));
            props.Add("okp:consulting.important", "true");
            props.Add("okp:consulting.comment", "test");
            ws.propertyGroup.addGroup("f0064cf3-4776-44c2-868a-f08697a6957e", "okg:consulting", props);
         }
         catch (Exception e)
         {
            System.Console.WriteLine(e.ToString());
         }
      }
   }
}
```

removeGroup

Description:

Method	Return values	Description

removeGroup(String nodeId, String grpName)	**void**	Removes a metadata group from a node.
The grpName should be a valid Metadata group name.		

Example:

```
using System;
using System.Collections.Generic;
using System.Linq;
using System.Text;
using com.openkm.sdk4csharp;

namespace OKMRest
{
   public class Program
   {
      static void Main(string[] args)
      {
         String host = "http://localhost:8080/openkm";
         String username = "okmAdmin";
         String password = "admin";
         OKMWebservice ws = OKMWebservicesFactory.newInstance(host);

         try
         {
            ws.login(user, password);
            ws.propertyGroup.removeGroup("f123a950-0329-4d62-8328-0ff500fd42db", "okg:consulting");
         }
         catch (Exception e)
         {
            System.Console.WriteLine(e.ToString());
         }
      }
   }
}
```

getGroups

Description:

Method	Return values	Description
getGroups(String nodeId)	**List<PropertyGroup>**	Retrieves a list of metadata groups assigned to a node.

Example:

```
using System;
using System.Collections.Generic;
using System.Linq;
using System.Text;
using com.openkm.sdk4csharp;
using com.openkm.sdk4csharp.bean;

namespace OKMRest
```

```
{
   public class Program
   {
      static void Main(string[] args)
      {
         String host = "http://localhost:8080/openkm";
         String username = "okmAdmin";
         String password = "admin";
         OKMWebservice ws = OKMWebservicesFactory.newInstance(host);

         try
         {
            ws.login(user, password);
            foreach (PropertyGroup pGroup in ws.propertyGroup.getGroups("f123a950-0329-4d62-8328-0ff500fd42dl
            {
          System.Console.WriteLine(pGroup.name);
       }
         }
         catch (Exception e)
         {
            System.Console.WriteLine(e.ToString());
         }
      }
   }
}
```

getAllGroups

Description:

Method	Return values	Description
getAllGroups()	**List<PropertyGroup>**	Retrieves a list of all metadata groups configured in the application.

Example:

```
using System;
using System.Collections.Generic;
using System.Linq;
using System.Text;
using com.openkm.sdk4csharp;
using com.openkm.sdk4csharp.bean;

namespace OKMRest
{
   public class Program
   {
      static void Main(string[] args)
      {
         String host = "http://localhost:8080/openkm";
         String username = "okmAdmin";
         String password = "admin";
         OKMWebservice ws = OKMWebservicesFactory.newInstance(host);

         try
         {
            ws.login(user, password);
            foreach (PropertyGroup pGroup in ws.propertyGroup.getAllGroups())
            {
               System.Console.WriteLine(pGroup.name);
```

```
        }
          }
          catch (Exception e)
          {
             System.Console.WriteLine(e.ToString());
          }
       }
    }
}
```

getAllGroups

Description:

Method	Return values	Description
getAllGroups(String uuid)	**List<PropertyGroup>**	Retrieves a list of all metadata groups defined in the application.

This method allows, through the "Get all metadata groups" automation task event, filtering the list of groups allowed in a specific node.

Example:

```
using System;
using System.Collections.Generic;
using System.Linq;
using System.Text;
using com.openkm.sdk4csharp;
using com.openkm.sdk4csharp.bean;

namespace OKMRest
{
   public class Program
   {
      static void Main(string[] args)
      {
         String host = "http://localhost:8080/openkm";
         String username = "okmAdmin";
         String password = "admin";
         OKMWebservice ws = OKMWebservicesFactory.newInstance(host);

         try
         {
            ws.login(user, password);
            foreach (PropertyGroup pGroup in ws.propertyGroup.getAllGroups("8cd1e072-8595-4dd3-b121-41d622c4
            {
               System.Console.WriteLine(pGroup.name);
       }
         }
         catch (Exception e)
         {
            System.Console.WriteLine(e.ToString());
         }
      }
```

```
    }
}
```

getPropertyGroupForm

Description:

Method	Return values	Description
getPropertyGroupForm(String uuid, String grpName)	**List<FormElement>**	Retrieves a list of all metadata group element definitions.

The grpName should be a valid Metadata group name.

The method is usually used to display empty form elements for creating new metadata values.

Example:

```
using System;
using System.Collections.Generic;
using System.Linq;
using System.Text;
using com.openkm.sdk4csharp;
using com.openkm.sdk4csharp.bean;
using com.openkm.sdk4csharp.bean.form;

namespace OKMRest
{
    public class Program
    {
        static void Main(string[] args)
        {
            String host = "http://localhost:8080/openkm";
            String username = "okmAdmin";
            String password = "admin";
            OKMWebservice ws = OKMWebservicesFactory.newInstance(host);

            try
            {
                ws.login(user, password);
                foreach (FormElement fElement in ws.propertyGroup.getPropertyGroupForm("f123a950-0329-4d62-8328-
                {
                    System.Console.WriteLine(fElement);
                }
            }
            catch (Exception e)
            {
                System.Console.WriteLine(e.ToString());
            }
        }
    }
}
```

getPropertyGroupFormDefinition

Description:

Method	Return values	Description
getPropertyGroupFormDefinition(String grpName)	**List<FormElement>**	Retrieves a list of all metadata group element definitions.

The grpName should be a valid Metadata group name.

The method is usually used to display empty form elements for creating new metadata values.

Example:

```
using System;
using System.Collections.Generic;
using System.Linq;
using System.Text;
using com.openkm.sdk4csharp;
using com.openkm.sdk4csharp.bean;
using com.openkm.sdk4csharp.bean.form;

namespace OKMRest
{
   public class Program
   {
      static void Main(string[] args)
      {
         String host = "http://localhost:8080/openkm";
         String username = "okmAdmin";
         String password = "admin";
         OKMWebservice ws = OKMWebservicesFactory.newInstance(host);

         try
         {
            ws.login(user, password);
            foreach (FormElement fElement in ws.propertyGroup.getPropertyGroupFormDefinition("okg:consulting"))
            {
               System.Console.WriteLine(fElement);
            }
         }
         catch (Exception e)
         {
            System.Console.WriteLine(e.ToString());
         }
      }
   }
}
```

getPropertyGroupFormDefinition

Description:

Method	Return values	Description
getPropertyGroupFormDefinition(String uuid, String grpName)	**List<FormElement>**	Retrieves a list of all metadata group element definitions.

The grpName should be a valid Metadata group name.

The method is usually used to display empty form elements for creating new metadata values.

Example:

```
using System;
using System.Collections.Generic;
using System.Linq;
using System.Text;
using com.openkm.sdk4csharp;
using com.openkm.sdk4csharp.bean;
using com.openkm.sdk4csharp.bean.form;

namespace OKMRest
{
    public class Program
    {
        static void Main(string[] args)
        {
            String host = "http://localhost:8080/openkm";
            String username = "okmAdmin";
            String password = "admin";
            OKMWebservice ws = OKMWebservicesFactory.newInstance(host);

            try
            {
                ws.login(user, password);
                foreach (FormElement fElement in ws.propertyGroup.getPropertyGroupFormDefinition("afe29d6e-7769-4
                {
                    System.Console.WriteLine(fElement);
                }
            }
            catch (Exception e)
            {
                System.Console.WriteLine(e.ToString());
            }
        }
    }
}
```

setProperties

Description:

Method

setProperties(String nodeId, String grpName, Dictionary<String, String> properties)

The grpName should be a valid Metadata group name.

Before changing metadata, you **should have the group added to the node** (see addGroup method); otherwise an e

It is not mandatory to set all field values in the properties parameter; it is enough to include the fields whose values

The sample below is based on this Metadata group definition:

```
<?xml version="1.0" encoding="UTF-8"?>
<!DOCTYPE property-groups PUBLIC "-//openkm//DTD Property Groups 2.0//EN"
                                 "http://www.openkm.com/dtd/property-groups-2.0.dtd">
<property-groups>
  <property-group label="Consulting" name="okg:consulting">
    <input label="Name" type="text" name="okp:consulting.name"/>
    <input label="Date" type="date" name="okp:consulting.date" />
    <checkbox label="Important" name="okp:consulting.important"/>
    <textarea label="Comment" name="okp:consulting.comment"/>
  </property-group>
</property-groups>
```

To add several values to a metadata field of type **multiple** and to add a value to a metadata field of type **simple** lik

```
<select label="Multiple" name="okp:consulting.multiple" type="multiple">
  <option label="One" value="one"/>
  <option label="Two" value="two"/>
  <option label="Three" value="three" />
</select>

<select label="Simple" name="okp:consulting.simple" type="simple">
 <option label="One" value="one"/>
 <option label="Two" value="two"/>
 <option label="Three" value="three" />
</select>
```

You should do:

```
properties.Add("okp:consulting.multiple", "[one,two]");
properties.Add("okp:consulting.simple", "[one]");
```

Where "**one**" and "**two**" are valid values, the character "**,**" is used as a separator, and the options should go betwee

Example:

```
using System;
using System.Collections.Generic;
```

```
using System.Linq;
using System.Text;
using com.openkm.sdk4csharp;
using com.openkm.sdk4csharp.bean;
using com.openkm.sdk4csharp.util;

namespace OKMRest
{
   public class Program
   {
      static void Main(string[] args)
      {
         String host = "http://localhost:8180/openkm";
         String username = "okmAdmin";
         String password = "admin";
         OKMWebservice ws = OKMWebservicesFactory.newInstance(host);

         try
         {
            ws.login(user, password);
            Dictionary<String, String> properties = new  Dictionary<String, String>();
            properties.Add("okp:consulting.name", "new name");

       //The date fields must be saved with basic ISO 8601 format
  properties.Add("okp:consulting.date", ISO8601.formatBasic(DateTime.Now));
       ws.propertyGroup.setProperties("f123a950-0329-4d62-8328-0ff500fd42db","okg:consulting", properties);
         }
         catch (Exception e)
         {
            System.Console.WriteLine(e.ToString());
         }
      }
   }
}
```

hasGroup

Description:

Method	Return values	Description
hasGroup(String nodeId, String grpName)	**Boolean**	Returns a boolean that indicates whether the node has a metadata group.

Example:

```
using System;
using System.Collections.Generic;
using System.Linq;
using System.Text;
using com.openkm.sdk4csharp;

namespace OKMRest
{
   public class Program
   {
      static void Main(string[] args)
      {
```

```
            String host = "http://localhost:8080/openkm";
            String username = "okmAdmin";
            String password = "admin";
            OKMWebservice ws = OKMWebservicesFactory.newInstance(host);

            try
            {
                ws.login(user, password);
                System.Console.WriteLine("Have metadata group:"+ ws.propertyGroup.hasGroup("f123a950-0329-4d62-8
            }
            catch (Exception e)
            {
                System.Console.WriteLine(e.ToString());
            }
        }
    }
}
```

getRegisteredDefinition

Description:

Method	Return values	Description
getRegisteredDefinition()	**String**	Returns the XML metadata groups definition.

The method can only be executed by a superuser (ROLE_ADMIN user).

Example:

```
using System;
using System.Collections.Generic;
using System.Linq;
using System.Text;
using com.openkm.sdk4csharp;

namespace OKMRest
{
    public class Program
    {
        static void Main(string[] args)
        {
            String host = "http://localhost:8080/openkm";
            String username = "okmAdmin";
            String password = "admin";
            OKMWebservice ws = OKMWebservicesFactory.newInstance(host);

            try
            {
                ws.login(user, password);
                System.Console.WriteLine(ws.propertyGroup.getRegisteredDefinition());
            }
            catch (Exception e)
            {
                System.Console.WriteLine(e.ToString());
```

```
        }
      }
   }
}
```

registerDefinition

Description:

Method	Return values	Description
registerDefinition(InputStream is, String pgName)	**void**	Sets the XML metadata groups definition into the repository.

The method can only be executed by a superuser (ROLE_ADMIN user).

Example:

```
using System;
using System.Collections.Generic;
using System.Linq;
using System.Text;
using com.openkm.sdk4csharp;
using System.IO;

namespace OKMRest
{
   public class Program
   {
      static void Main(string[] args)
      {
         String host = "http://localhost:8180/openkm";
         String username = "okmAdmin";
         String password = "admin";
         OKMWebservice ws = OKMWebservicesFactory.newInstance(host);

         try
         {
            ws.login(user, password);
            FileStream fs = new FileStream("E:\\PropertyGroups.xml",FileMode.Open);
            ws.propertyGroup.registerDefinition(fs,"okg:testing");
            fs.Dispose();
         }
         catch (Exception e)
         {
            System.Console.WriteLine(e.ToString());
         }
      }
   }
}
```

getSuggestions

Description:

Method	Return values	Description
getSuggestions(String nodeId, String grpName, String propName)	**List<String>**	Retrieves a list of suggested metadata field values.

The propName parameter should be a Metadata Select field type.

More information at Creating your own Suggestion Analyzer and Metadata Select field.

The sample below is based on this Metadata group definition:

```
<?xml version="1.0" encoding="UTF-8"?>
<!DOCTYPE property-groups PUBLIC "-//openkm//DTD Property Groups 2.0//EN"
                                 "http://www.openkm.com/dtd/property-groups-2.0.dtd">
<property-groups>
  <property-group label="Technology" name="okg:technology">
    <select label="Type" name="okp:technology.type" type="multiple">
      <option label="Alfa" value="t1"/>
      <option label="Beta" value="t2" />
      <option label="Omega" value="t3" />
    </select>
    <select label="Language" name="okp:technology.language" type="simple">
      <option label="Java" value="java"/>
      <option label="Python" value="python"/>
      <option label="PHP" value="php" />
    </select>
    <input label="Comment" name="okp:technology.comment"/>
    <textarea label="Description" name="okp:technology.description"/>
    <input label="Link" type="link" name="okp:technology.link"/>
  </property-group>
</property-groups>
```

Example:

```
using System;
using System.Collections.Generic;
using System.Linq;
using System.Text;
using com.openkm.sdk4csharp;

namespace OKMRest
{
   public class Program
   {
      static void Main(string[] args)
      {
         String host = "http://localhost:8080/openkm";
```

```
            String username = "okmAdmin";
            String password = "admin";
            OKMWebservice ws = OKMWebservicesFactory.newInstance(host);

            try
            {
                ws.login(user, password);
                foreach(String value in ws.propertyGroup.getSuggestions("f123a950-0329-4d62-8328-0ff500fd42db","okg
                {
                    System.Console.WriteLine(value);
                }
            }
            catch (Exception e)
            {
                System.Console.WriteLine(e.ToString());
            }
        }
    }
}
```

getProperties

Description:

Method	Return values	Description
getProperties(String nodeId, String grpName)	**Dictionary<String, String>**	Retrieves a dictionary of (key, value) pairs with metadata group values for a node.

Example:

```
using System;
using System.Collections.Generic;
using System.Linq;
using System.Text;
using com.openkm.sdk4csharp;
using com.openkm.sdk4csharp.bean;

namespace OKMRest
{
    public class Program
    {
        static void Main(string[] args)
        {
            String host = "http://localhost:8080/openkm";
            String username = "okmAdmin";
            String password = "admin";
            OKMWebservice ws = OKMWebservicesFactory.newInstance(host);

            try
            {
                ws.login(user, password);
                Dictionary<String, String> properties = new  Dictionary<String, String>();
                properties = ws.propertyGroup.getProperties("f123a950-0329-4d62-8328-0ff500fd42db","okg:technology")

                foreach (KeyValuePair<String, String> pair in properties)
                {
                    System.Console.WriteLine(pair.Key + "-> " + pair.Value);
                }
```

```
            }
            catch (Exception e)
            {
                System.Console.WriteLine(e.ToString());
            }
        }
    }
}
```

getPropertiesByVersion

Description:

Method	Return values	Description
getPropertiesByVersion(String nodeId, String grpName,String versionName)	**Dictionary<String, String>**	Retrieves a dictionary of (key, value) pairs with metadata group values for a node.

Example:

```
using System;
using System.Collections.Generic;
using System.Linq;
using System.Text;
using com.openkm.sdk4csharp;
using com.openkm.sdk4csharp.bean;

namespace OKMRest
{
    public class Program
    {
        static void Main(string[] args)
        {
            String host = "http://localhost:8080/openkm";
            String username = "okmAdmin";
            String password = "admin";
            OKMWebservice ws = OKMWebservicesFactory.newInstance(host);

            try
            {
                ws.login(user, password);
                Dictionary<String, String> properties = new  Dictionary<String, String>();
                properties = ws.propertyGroup.getPropertiesByVersion("f123a950-0329-4d62-8328-0ff500fd42db","okg:te

                foreach (KeyValuePair<String, String> pair in properties)
                {
                    System.Console.WriteLine(pair.Key + "-> " + pair.Value);
                }
            }
            catch (Exception e)
            {
                System.Console.WriteLine(e.ToString());
            }
        }
    }
}
```

getGroupsByVersion

Description:

Method	Return values	Description
getGroupsByVersion(String nodeId, String versionName)	**List<PropertyGroup>**	Retrieves a list of metadata groups assigned to a node.

Example:

```
using System;
using System.Collections.Generic;
using System.Linq;
using System.Text;
using com.openkm.sdk4csharp;
using com.openkm.sdk4csharp.bean;

namespace OKMRest
{
   public class Program
   {
      static void Main(string[] args)
      {
         String host = "http://localhost:8080/openkm";
         String username = "okmAdmin";
         String password = "admin";
         OKMWebservice ws = OKMWebservicesFactory.newInstance(host);

         try
         {
            ws.login(user, password);
            foreach (PropertyGroup pGroup in ws.propertyGroup.getGroupsByVersion("f123a950-0329-4d62-8328-0f
            {
          System.Console.WriteLine(pGroup.name, "1.1");
       }
         }
         catch (Exception e)
         {
            System.Console.WriteLine(e.ToString());
         }
      }
   }
}
```

getGroup

Description:

Method	Return values	Description
getGroup(String grpName)	**PropertyGroup**	Gets the property group definition.

Example:

```
using System;
```

```
using System.Collections.Generic;
using System.Linq;
using System.Text;
using com.openkm.sdk4csharp;
using com.openkm.sdk4csharp.bean;

namespace OKMRest
{
   public class Program
   {
      static void Main(string[] args)
      {
         String host = "http://localhost:8080/openkm";
         String username = "okmAdmin";
         String password = "admin";
         OKMWebservice ws = OKMWebservicesFactory.newInstance(host);

         try
         {
            ws.login(user, password);
            PropertyGroup pg =  ws.propertyGroup.getGroup("okg:consulting");
         }
         catch (Exception e)
         {
            System.Console.WriteLine(e.ToString());
         }
      }
   }
}
```

getSuggestBoxKeyValue

Description:

Method	Return values	Description
getSuggestBoxKeyValue(String grpName, String propertyName, String key)	**String**	Returns the suggestBox value for key.

The propertyName parameter should be a Metadata Suggestbox field type.

More information at Metadata Suggestbox field

The sample below is based on this Metadata group definition:

```
<?xml version="1.0" encoding="UTF-8"?>
<!DOCTYPE property-groups PUBLIC "-//OpenKM//DTD Property Groups 3.7//EN"
                                 "http://www.openkm.com/dtd/property-groups-3.7.dtd">
<property-groups>
  <property-group label="Consulting" name="okg:consulting">
     <suggestbox label="country" name="okp:consulting.suggestbox"
     width="200px" dialogTitle="Choose country" filterMinLen="3"
       filterQuery="select ct_id, ct_name from country where ct_name like '%{0}%' order by ct_name"
```

```
        valueQuery="select ct_id, ct_name from country where ct_id='{0}'" />
    </property-group>
  </property-groups>
```

Example:

```
using System;
using System.Collections.Generic;
using System.Linq;
using System.Text;
using com.openkm.sdk4csharp;
using com.openkm.sdk4csharp.bean;
using com.openkm.sdk4csharp.impl;

namespace OKMRest
{
   public class Program
   {
      static void Main(string[] args)
      {
         String host = "http://localhost:8080/openkm";
         String username = "okmAdmin";
         String password = "admin";
         OKMWebservice ws = OKMWebservicesFactory.newInstance(host);

         try
         {
            ws.login(user, password);
            String grpName = "okg:consulting";
            String propertyName = "okp:consulting.suggestbox";
            String key = "es";
            String result = ws.propertyGroup.getSuggestBoxKeyValue(grpName, propertyName, key);
            Console.WriteLine("Value: " + result);
         }
         catch (Exception e)
         {
            System.Console.WriteLine(e.ToString());
         }
      }
   }
}
```

getSuggestBoxKeyValuesFiltered

Description:

Method	Return values	Description
getSuggestBoxKeyValuesFiltered(String grpName, String propertyName, String filter)	**Dictionary<String, String>**	Retrieves a dictionary (key, value) pai with suggestBox values.

The propertyName parameter should be a Metadata Suggestbox field type.

More information at Metadata Suggestbox field

The sample below is based on this Metadata group definition:

```
<?xml version="1.0" encoding="UTF-8"?>
<!DOCTYPE property-groups PUBLIC "-//OpenKM//DTD Property Groups 3.7//EN"
                                 "http://www.openkm.com/dtd/property-groups-3.7.dtd">
<property-groups>
  <property-group label="Consulting" name="okg:consulting">
     <suggestbox label="country" name="okp:consulting.suggestbox"
     width="200px" dialogTitle="Choose country" filterMinLen="3"
       filterQuery="select ct_id, ct_name from country where ct_name like '%{0}%' order by ct_name"
       valueQuery="select ct_id, ct_name from country where ct_id='{0}'" />
  </property-group>
</property-groups>
```

Example:

```
using System;
using System.Collections.Generic;
using System.Linq;
using System.Text;
using com.openkm.sdk4csharp;
using com.openkm.sdk4csharp.bean;
using com.openkm.sdk4csharp.impl;

namespace OKMRest
{
   public class Program
   {
      static void Main(string[] args)
      {
         String host = "http://localhost:8080/openkm";
         String username = "okmAdmin";
         String password = "admin";
         OKMWebservice ws = OKMWebservicesFactory.newInstance(host);

         try
         {
            ws.login(user, password);
            String grpName = "okg:consulting";
            String propertyName = "okp:consulting.suggestbox";
            String filter = "Port";
            Dictionary<String, String> result = ws.propertyGroup.getSuggestBoxKeyValuesFiltered(grpName, property
            foreach(var item in result)
            {
               Console.WriteLine(item.key + ":" + item.value);
            }
         }
         catch (Exception e)
         {
            System.Console.WriteLine(e.ToString());
         }
      }
   }
}
```

validateField

Method	Return values	
validateField(String value, String className, List<String> uuids)	**String**	Retu

- The "className" value must be the canonical class name of a class that implements the FieldValidator inte

Example of the Form validator implementation.

More information at Creating your own Form Validator plugin.

In this example, two identical comments will not be allowed in the metadata field named okp:technology.comment.

```
package com.openkm.plugin.form.validator;

import java.util.ArrayList;
import java.util.List;

import com.openkm.module.db.stuff.DbSessionManager;
import com.openkm.plugin.form.FieldValidator;
import org.springframework.beans.factory.annotation.Autowired;

import com.openkm.api.OKMRelation;
import com.openkm.bean.Relation;
import com.openkm.db.service.LegacySrv;
import com.openkm.plugin.BasePlugin;

import net.xeoh.plugins.base.annotations.PluginImplementation;

@PluginImplementation
public class DuplicateDocumentNumberValidator extends BasePlugin implements FieldValidator {

    @Autowired
    private LegacySrv legacySrv;

    @Autowired
    private OKMRelation okmRelation;

    @Override
    public String getName() {
        return "Duplicated document number";
    }

    @Override
    public String validate(String value, List<String> uuids) {
        String validate = "";

        String token = DbSessionManager.getInstance().getSystemToken();
        String sql = "SELECT RGT_UUID FROM OKM_PGRP_CUR_TECHNOLOGY WHERE RGT_PR
        try {
            List<List<String>> result = legacySrv.executeSQL(sql);
            if (result.size() > 0) {
                if (uuids.isEmpty()) {
                    validate = "Duplicated document number";
                } else {
                    List<String> allowedUuids = new ArrayList<>();
                    for (String uuid : uuids) {
```

```
                    allowedUuids.add(uuid);
                    List<Relation> relations = okmRelation.getRelations(token, uuid);
                    for (Relation relation : relations) {
                        allowedUuids.add(relation.getNode());
                    }
                }

                for (List<String> resultList : result) {
                    if (!allowedUuids.contains(resultList.get(0))) {
                        validate = "Duplicated document number";
                    }
                }
            }
        }
    } catch (Exception e) {
        validate = e.getMessage();
    }

    return validate;
  }
}
```

Example:

```
using System;
using System.Collections.Generic;
using System.Linq;
using System.Text;
using com.openkm.sdk4csharp;
using com.openkm.sdk4csharp.bean;
using com.openkm.sdk4csharp.impl;

namespace OKMRest
{
   public class Program
   {
      static void Main(string[] args)
      {
         String host = "http://localhost:8080/openkm";
         String username = "okmAdmin";
         String password = "admin";
         OKMWebservice ws = OKMWebservicesFactory.newInstance(host);

         try
         {
            ws.login(user, password);
            List<String> uuids = new List<string>();
            uuids.Add("28ece92f-9708-4d3f-8033-18dc98b9e7f5");
            uuids.Add("5484b622-7c5f-425a-9451-7611c0caf227");

            String value = "test";
            String className = "com.openkm.plugin.form.validator.DuplicateDocumentNumberValidator";
            String message = ws.propertyGroup.validateField(value, className, uuids);
            Console.WriteLine("Validate: " + message);
         }
         catch (Exception e)
         {
            System.Console.WriteLine(e.ToString());
         }
      }
   }
}
```

Record samples

On most methods, you'll see the parameter named "**recId**" and "**fldId**". The value of these parameters can be a valid record and folder **UUID**.

Example of recId:

- Using UUID -> "**28bb0c8b-3701-4457-a81a-fef7bc56ff33**"

Suggested code sample

First, you must create the webservice object:

```
OKMWebservices ws = OKMWebservicesFactory.newInstance(host);
```

Then you should log in using the "**login**" method. You can access the "**login**" method from the webservice object "**ws**" as shown below:

```
ws.login(user, password);
```

Once you are logged in with the webservice, the session is kept in the webservice object. Then you can use the other API methods

At this point you can use all the Record methods from the "**record**" class as shown below:

```
ws.record.create("ada67d44-b081-4b23-bdc1-74181cafbc5d", "PKI-100200", "new title", 0)
```

Methods

create

Description:

Method	Return values	Description
create(String fldId, String name, String title, long nodeClass)	**Record**	Creates a new record and returns a Record object.

Optionally, a title can be set; the other variables of the Record (record) will not have any effect on record creation.

Example:

```
using System;
using System.Collections.Generic;
using System.Linq;
using System.Text;
using com.openkm.sdk4csharp;
using com.openkm.sdk4csharp.bean;

namespace OKMRest
{
   public class Program
   {
      static void Main(string[] args)
      {
         String host = "http://localhost:8080/openkm";
         String username = "okmAdmin";
         String password = "admin";
         OKMWebservice ws = OKMWebservicesFactory.newInstance(host);

         try
         {
            ws.login(user, password);
            ws.record.create(fldId, "PKI-100200", "some title", 0);
         }
         catch (Exception e)
         {
            System.Console.WriteLine(e.ToString());
         }
      }
   }
}
```

getProperties

Description:

Method	Return values	Description
getProperties(String uuid)	**Record**	Returns the record properties.

Example:

```
using System;
using System.Collections.Generic;
using System.Linq;
using System.Text;
using com.openkm.sdk4csharp;

namespace OKMRest
{
   public class Program
   {
      static void Main(string[] args)
      {
         String host = "http://localhost:8080/openkm";
```

```
            String username = "okmAdmin";
            String password = "admin";
            OKMWebservice ws = OKMWebservicesFactory.newInstance(host);

            try
            {
               ws.login(user, password);
               System.Console.WriteLine(ws.record.getProperties("50b7a5b9-89d2-430e-bbc9-6a6e01662a71").path);
            }
            catch (Exception e)
            {
               System.Console.WriteLine(e.ToString());
            }
         }
      }
   }
```

delete

Description:

Method	Return values	Description
delete(String recId)	**void**	Deletes a record.

Example:

```
using System;
using System.Collections.Generic;
using System.Linq;
using System.Text;
using com.openkm.sdk4csharp;

namespace OKMRest
{
   public class Program
   {
      static void Main(string[] args)
      {
         String host = "http://localhost:8080/openkm";
         String username = "okmAdmin";
         String password = "admin";
         OKMWebservice ws = OKMWebservicesFactory.newInstance(host);

         try
         {
            ws.login(user, password);
            ws.record.delete("50b7a5b9-89d2-430e-bbc9-6a6e01662a71");
         }
         catch (Exception e)
         {
            System.Console.WriteLine(e.ToString());
         }
      }
   }
}
```

purge

Description:

Method	Return values	Description
purge(String recId)	**void**	Records are permanently removed from the repository.

Usually, you will purge records into /okm:trash/userId - the personal user trash locations - but it is possible to directly purge any record from the entire repository.

When a record is purged, it can only be restored from a previous repository backup. The purge action permanently removes the record from the repository.

Example:

```
using System;
using System.Collections.Generic;
using System.Linq;
using System.Text;
using com.openkm.sdk4csharp;

namespace OKMRest
{
   public class Program
   {
      static void Main(string[] args)
      {
         String host = "http://localhost:8080/openkm";
         String username = "okmAdmin";
         String password = "admin";
         OKMWebservice ws = OKMWebservicesFactory.newInstance(host);

         try
         {
            ws.login(user, password);
            ws.record.purge("50b7a5b9-89d2-430e-bbc9-6a6e01662a71");
         }
         catch (Exception e)
         {
            System.Console.WriteLine(e.ToString());
         }
      }
   }
}
```

rename

Description:

Method	Return values	Description
rename(String uuid, String newName)	**void**	Renames a record.

Example:

```
using System;
using System.Collections.Generic;
using System.Linq;
using System.Text;
using com.openkm.sdk4csharp;

namespace OKMRest
{
   public class Program
   {
      static void Main(string[] args)
      {
         String host = "http://localhost:8080/openkm";
         String username = "okmAdmin";
         String password = "admin";
         OKMWebservice ws = OKMWebservicesFactory.newInstance(host);

         try
         {
            ws.login(user, password);
            ws.record.rename("50b7a5b9-89d2-430e-bbc9-6a6e01662a71", "PKI-100201");
         }
         catch (Exception e)
         {
            System.Console.WriteLine(e.ToString());
         }
      }
   }
}
```

move

Description:

Method	Return values	Description
move(String recId, String dstId)	**void**	Moves a record into a folder or another record.
The values of the dstId parameter should be a folder or record UUID or path.		

Example:

```
using System;
using System.Collections.Generic;
using System.Linq;
using System.Text;
using com.openkm.sdk4csharp;

namespace OKMRest
{
   public class Program
   {
      static void Main(string[] args)
      {
         String host = "http://localhost:8080/openkm";
```

```
            String username = "okmAdmin";
            String password = "admin";
            OKMWebservice ws = OKMWebservicesFactory.newInstance(host);

            try
            {
                ws.login(user, password);
                ws.record.move("50b7a5b9-89d2-430e-bbc9-6a6e01662a71", "055e4384-7c70-4456-b32b-f5a55a79861f
            }
            catch (Exception e)
            {
                System.Console.WriteLine(e.ToString());
            }
        }
    }
}
```

copy

Description:

Method	Return values	Description
copy(String recId, String dstId, String newName)	**Record**	Copies a record into a folder or another record.

The values of the dstId parameter should be a folder or record UUID or path.

If the newName parameter value is null, the record will preserve the same name.

Only the security grants are copied to the destination; the metadata, keywords, etc. of the record are not copied.

Example:

```
using System;
using System.Collections.Generic;
using System.Linq;
using System.Text;
using com.openkm.sdk4csharp;

namespace OKMRest
{
    public class Program
    {
        static void Main(string[] args)
        {
            String host = "http://localhost:8080/openkm";
            String username = "okmAdmin";
            String password = "admin";
            OKMWebservice ws = OKMWebservicesFactory.newInstance(host);

            try
            {
                ws.login(user, password);
                ws.record.copy("50b7a5b9-89d2-430e-bbc9-6a6e01662a71", "055e4384-7c70-4456-b32b-f5a55a79861f"
```

```
            }
            catch (Exception e)
            {
                System.Console.WriteLine(e.ToString());
            }
        }
    }
}
```

isValid

Description:

Method	Return values	Description
isValid(String uuid)	**Boolean**	Returns a boolean that indicates whether the node is a record.

Example:

```
using System;
using System.Collections.Generic;
using System.Linq;
using System.Text;
using com.openkm.sdk4csharp;

namespace OKMRest
{
    public class Program
    {
        static void Main(string[] args)
        {
            String host = "http://localhost:8080/openkm";
            String username = "okmAdmin";
            String password = "admin";
            OKMWebservice ws = OKMWebservicesFactory.newInstance(host);

            try
            {
                ws.login(user, password);
                System.Console.WriteLine("Is a record:"+ ws.record.isValid("50b7a5b9-89d2-430e-bbc9-6a6e01662a71")
            }
            catch (Exception e)
            {
                System.Console.WriteLine(e.ToString());
            }
        }
    }
}
```

getChildren

Description:

Method	Return values	Description
getChildren(String uuid)	**List<Record>**	Returns a list of all records whose parent is fldId.

The parameter **uuid** can be a folder or a record node.

Example:

```
using System;
using System.Collections.Generic;
using System.Linq;
using System.Text;
using com.openkm.sdk4csharp;
using com.openkm.sdk4csharp.bean;

namespace OKMRest
{
   public class Program
   {
      static void Main(string[] args)
      {
         String host = "http://localhost:8080/openkm";
         String username = "okmAdmin";
         String password = "admin";
         OKMWebservice ws = OKMWebservicesFactory.newInstance(host);

         try
         {
            ws.login(user, password);
            foreach (Record rec in ws.record.getChildren("055e4384-7c70-4456-b32b-f5a55a79861f"))
            {
               System.Console.WriteLine(rec);
            }
         }
         catch (Exception e)
         {
            System.Console.WriteLine(e.ToString());
         }
      }
   }
}
```

setTitle

Description:

Method	Return values	Description
setTitle(String uuid, String title)	**void**	Sets a record title.

Example:

```
using System;
using System.Collections.Generic;
using System.Linq;
using System.Text;
using com.openkm.sdk4csharp;

namespace OKMRest
{
```

```
    public class Program
    {
        static void Main(string[] args)
        {
            String host = "http://localhost:8080/openkm";
            String username = "okmAdmin";
            String password = "admin";
            OKMWebservice ws = OKMWebservicesFactory.newInstance(host);

            try
            {
                ws.login(user, password);
                ws.record.setTitle("50b7a5b9-89d2-430e-bbc9-6a6e01662a71", "some title");
            }
            catch (Exception e)
            {
                System.Console.WriteLine(e.ToString());
            }
        }
    }
}
```

getPath

Description:

Method	Return values	Description
getPath(String uuid)	**String**	Converts a record UUID to a record path.

Example:

```
using System;
using System.Collections.Generic;
using System.Linq;
using System.Text;
using com.openkm.sdk4csharp;

namespace OKMRest
{
    public class Program
    {
        static void Main(string[] args)
        {
            String host = "http://localhost:8080/openkm";
            String username = "okmAdmin";
            String password = "admin";
            OKMWebservice ws = OKMWebservicesFactory.newInstance(host);

            try
            {
                ws.login(user, password);
                System.Console.WriteLine(ws.record.getPath("50b7a5b9-89d2-430e-bbc9-6a6e01662a71"));
            }
            catch (Exception e)
            {
                System.Console.WriteLine(e.ToString());
            }
        }
    }
```

```
}
```

setNodeClass

Description:

Method	Return values	Description
setNodeClass(String uuid, long ncId)	**void**	Sets a record node class.

Example:

```
using System;
using System.Collections.Generic;
using System.Linq;
using System.Text;
using com.openkm.sdk4csharp;

namespace OKMRest
{
   public class Program
   {
      static void Main(string[] args)
      {
         String host = "http://localhost:8080/openkm";
         String username = "okmAdmin";
         String password = "admin";
         OKMWebservice ws = OKMWebservicesFactory.newInstance(host);

         try
         {
            ws.login(user, password);
            ws.record.setNodeClass("50b7a5b9-89d2-430e-bbc9-6a6e01662a71", 0);
         }
         catch (Exception e)
         {
            System.Console.WriteLine(e.ToString());
         }
      }
   }
}
```

setDispositionStage

Description:

Method	Return values	Description
setDispositionStage(String uuid, long stage)	**void**	Sets the disposition stage.

Example:

```
using System;
```

```
using System.Collections.Generic;
using System.Linq;
using System.Text;
using com.openkm.sdk4csharp;

namespace OKMRest
{
   public class Program
   {
      static void Main(string[] args)
      {
         String host = "http://localhost:8080/openkm";
         String username = "okmAdmin";
         String password = "admin";
         OKMWebservice ws = OKMWebservicesFactory.newInstance(host);

         try
         {
            ws.login(user, password);
            ws.record.setDispositionStage("50b7a5b9-89d2-430e-bbc9-6a6e01662a71", 1);
         }
         catch (Exception e)
         {
            System.Console.WriteLine(e.ToString());
         }
      }
   }
}
```

setDescription

Description:

Method	Return values	Description
setDescription(String uuid, String description)	**void**	Sets the title.

Example:

```
using System;
using System.Collections.Generic;
using System.Linq;
using System.Text;
using com.openkm.sdk4csharp;

namespace OKMRest
{
   public class Program
   {
      static void Main(string[] args)
      {
         String host = "http://localhost:8080/openkm";
         String username = "okmAdmin";
         String password = "admin";
         OKMWebservice ws = OKMWebservicesFactory.newInstance(host);

         try
         {
            ws.login(user, password);
            ws.record.setDescription("50b7a5b9-89d2-430e-bbc9-6a6e01662a71", "some description");
```

```
        }
        catch (Exception e)
        {
            System.Console.WriteLine(e.ToString());
        }
    }
  }
}
```

createWizard

Description:

Method	Return values	Description
createWizard(String uuid, String name, String title, long nodeClass)	**WizardNode**	Creates a record using a wizard.

> The WizardNode contains a list of pending actions that should be done to complete the process of record creation. These might be:
>
> - Add keyword
> - Add Categories
> - Add Metadata

Example:

```
using System;
using System.Collections.Generic;
using System.Linq;
using System.Text;
using com.openkm.sdk4csharp;
using com.openkm.sdk4csharp.bean;

namespace OKMRest
{
   public class Program
   {
      static void Main(string[] args)
      {
         String host = "http://localhost:8080/openkm";
         String username = "okmAdmin";
         String password = "admin";
         OKMWebservice ws = OKMWebservicesFactory.newInstance(host);

         try
         {
            ws.login(user, password);
            WizardNode wnode = ws.record.createWizard("f123a950-0329-4d62-8328-0ff500fd42db", "REC-001", "Ar
            System.Console.WriteLine(wnode.toString());
         }
```

```
            catch (Exception e)
            {
               System.Console.WriteLine(e.ToString());
            }
         }
      }
   }
```

createFromTemplate

Description:

Method	Return values	Description
createFromTemplate(String uuid, String dstPath, bool categories, bool keywords, bool notes, bool propertyGroups, bool security Dictionary<String, String> properties)	**Record**	Creates a new record from the template and returns a Record object.

The **uuid** parameter is the template UUID of the record.

The **dstPath** can be a folder or a record path.

When the template uses metadata groups to fill in fields, these values are mandatory and must be set in the properties parameter.

For more information about Templates and metadata check: Creating templates.

Additional:

- When the category parameter is true, the original values of the categories will be copied.
- When the keywords parameter is true, the original values of the keywords will be copied.
- When the notes parameter is true, the original values of the notes will be copied.

Example:

```
using System; using System.Collections.Generic;
using System.Linq; using System.Text;
using com.openkm.sdk4csharp;
using com.openkm.sdk4csharp.bean;

namespace OKMRest
{
      public class Program
      {
         static void Main(string[] args)
```

```
        {
            String host = "http://localhost:8080/openkm";
            String username = "okmAdmin";
            String password = "admin";
            OKMWebservice ws = OKMWebservicesFactory.newInstance(host);
            try
            {
                ws.login(user, password);
                Dictionary<String, String> properties = new Dictionary<String, String>();
                properties.Add("okp:tpl.name", "Some name");
                DateTime date = DateTime.Now;
                // Value must be converted to String ISO 8601 compliant
                properties.Add("okp:tpl.bird_date", ISO8601.formatBasic(date));
                properties.Add("okp:tpl.language", "[ \"java\" ]");
                Record record = ws.record.createFromTemplate("9fa9787e-d8b0-4ff7-905a-a89f0b228ec8", "/okm:root/
            }
            catch (Exception e)
            {
                System.Console.WriteLine(e.ToString());
            }
        }
    }
}
```

extendedCopy

Description:

Method	Return values	Description
extendedCopy(String uuid, String dstId, String newName, bool categories, bool keywords, bool propertyGroups, bool notes, bool security)	**Record**	Copies a record with the associated data into some folder or record.

The values of the dstId parameter should be a folder or record UUID.

When parameter newName value is null, the record will preserve the same name.

By default, only the binary data and the security grants are copied; the metadata, keywords, etc. of the folder are not copied.

Additional:

- When the category parameter is true, the original values of the categories will be copied.
- When the keywords parameter is true, the original values of the keywords will be copied.
- When the propertyGroups parameter is true, the original values of the metadata groups will be copied.
- When the notes parameter is true, the original values of the notes will be copied.
- When the security parameter is true, the original value of the security will be copied.

Example:

```
using System; using System.Collections.Generic;
using System.Linq; using System.Text;
using com.openkm.sdk4csharp;
using com.openkm.sdk4csharp.bean;

namespace OKMRest
{
      public class Program
      {
         static void Main(string[] args)
         {
             String host = "http://localhost:8080/openkm";
             String username = "okmAdmin";
             String password = "admin";
             OKMWebservice ws = OKMWebservicesFactory.newInstance(host);
             try
             {
                ws.login(user, password);
                ws.record.extendedCopy("ada67d44-b081-4b23-bdc1-74181cafbc5d", "8599eab7-ae61-4628-8010-110
                  "new name record", true, true, true, true, true, true);
             }
             catch (Exception e)
             {
                System.Console.WriteLine(e.ToString());
             }
         }
     }
}
```

createMissingRecords

Description:

Method	Return values	Description
createMissingRecords(String recPath)	**String**	Create missing records.

Example:

```
using System;
using System.Collections.Generic;
using System.Linq;
using System.Text;
using com.openkm.sdk4csharp;
using com.openkm.sdk4csharp.bean;

namespace OKMRest
{
    public class Program
    {
       static void Main(string[] args)
       {
          String host = "http://localhost:8080/openkm";
          String username = "okmAdmin";
          String password = "admin";
```

```
            OKMWebservice ws = OKMWebservicesFactory.newInstance(host);

            try
            {
                ws.login(user, password);
                ws.record.createMissingRecords("/okm:root/rec001/rec0011/rec00111");
            }
            catch (Exception e)
            {
                System.Console.WriteLine(e.ToString());
            }
        }
    }
}
```

Relation samples

Basics

On most methods, you'll see the parameter named "**nodeId**". The value of this parameter can be a valid document, folder, mail or record **UUID** or **path**.

Example of nodeId:

- Using UUID -> "**f123a950-0329-4d62-8328-0ff500fd42db**"

Suggested code sample

First, you must create the webservice object:

```
OKMWebservices ws = OKMWebservicesFactory.newInstance(host);
```

Then you should log in using the method "**login**". You can access the "**login**" method from the webservice object "**ws**" as shown below:

```
ws.login(user, password);
```

Once logged in to the webservice, the session is kept in the webservice object. Then you can use the other API methods.

At this point, you can use all the Relation methods from the " **relation**" class as shown below:

```
ws.relation.getRelationTypes(RelationType.BIDIRECTIONAL);
```

Methods

getRelationTypes

Description:

Method	Return values	Description
getRelationTypes(String type)	**List<RelationType>**	Retrieves a list of all relations defined for a type.
Available types:		

- RelationType.BIDIRECTIONAL
- RelationType.PARENT_CHILD
- RelationType.MANY_TO_MANY

More information on Relation types.

Example:

```
using System;
using System.Collections.Generic;
using System.Linq;
using System.Text;
using com.openkm.sdk4csharp;
using com.openkm.sdk4csharp.bean;

namespace OKMRest
{
   public class Program
   {
      static void Main(string[] args)
      {
         String host = "http://localhost:8080/openkm";
         String username = "okmAdmin";
         String password = "admin";
         OKMWebservice ws = OKMWebservicesFactory.newInstance(host);

         try
         {
            ws.login(user, password);
            foreach (RelationType type in ws.relation.getRelationTypes(RelationType.PARENT_CHILD))
            {
               System.Console.WriteLine(type);
            }
         }
         catch (Exception e)
         {
            System.Console.WriteLine(e.ToString());
         }
      }
   }
}
```

add

Description:

Method	Return values	Description
add(String nodeAId, String nodeBId, long relTypeId)	**void**	Sets a relation between two nodes.
The parameters **nodeAId** and **nodeBId** should be any valid document, folder, mail, or record **UUID**.		

Example:

```
using System;
using System.Collections.Generic;
using System.Linq;
using System.Text;
using com.openkm.sdk4csharp;
using com.openkm.sdk4csharp.bean;

namespace OKMRest
{
   public class Program
   {
      static void Main(string[] args)
      {
         String host = "http://localhost:8080/openkm";
         String username = "okmAdmin";
         String password = "admin";
         OKMWebservice ws = OKMWebservicesFactory.newInstance(host);

         try
         {
            ws.login(user, password);
            foreach (RelationType type in ws.relation.getRelationTypes(RelationType.BIDIRECTIONAL))
            {
               // looking for a relation named invoice
               if (type.title.Equals("invoice"))
               {
                  ws.relation.add("50b7a5b9-89d2-430e-bbc9-6a6e01662a71", "055e4384-7c70-4456-b32b-f5a55a79
               }
            }
         }
         catch (Exception e)
         {
            System.Console.WriteLine(e.ToString());
         }
      }
   }
}
```

delete

Description:

Method	Return values	Description
delete(long relationId)	**void**	Deletes a relationship.

A relation can be deleted only when no node uses it. Otherwise, you'll get an error.

Example:

```
using System;
using System.Collections.Generic;
```

```
using System.Linq;
using System.Text;
using com.openkm.sdk4csharp;
using com.openkm.sdk4csharp.bean;

namespace OKMRest
{
   public class Program
   {
      static void Main(string[] args)
      {
         String host = "http://localhost:8080/openkm";
         String username = "okmAdmin";
         String password = "admin";
         OKMWebservice ws = OKMWebservicesFactory.newInstance(host);

         try
         {
            ws.login(user, password);
            foreach (RelationType type in ws.relation.getRelationTypes(RelationType.BIDIRECTIONAL))
            {
               // looking for a relation named invoice
               if (type.title.Equals("invoice"))
               {
                  ws.relation.delete(type.id);
               }
            }
         }
         catch (Exception e)
         {
            System.Console.WriteLine(e.ToString());
         }
      }
   }
}
```

getRelations

Description:

Method	Return values	Description
getRelations(String uuid)	**List<Relation>**	Retrieves a list of all relations of a node.

Example:

```
using System;
using System.Collections.Generic;
using System.Linq;
using System.Text;
using com.openkm.sdk4csharp;
using com.openkm.sdk4csharp.bean;

namespace OKMRest
{
   public class Program
   {
      static void Main(string[] args)
      {
         String host = "http://localhost:8080/openkm";
```

```
            String username = "okmAdmin";
            String password = "admin";
            OKMWebservice ws = OKMWebservicesFactory.newInstance(host);

            try
            {
                ws.login(user, password);
                foreach (Relation relation in ws.relation.getRelations("055e4384-7c70-4456-b32b-f5a55a79861f"))
                {
                    System.Console.WriteLine(relation);
                }
            }
            catch (Exception e)
            {
                System.Console.WriteLine(e.ToString());
            }
        }
    }
}
```

getRelationGroups

Description:

Method	Return values	Description
getRelationGroups(String uuid)	**List<RelationGroup>**	Retrieves a list of all relation groups for a node.

Example:

```
using System;
using System.Collections.Generic;
using System.Linq;
using System.Text;
using com.openkm.sdk4csharp;
using com.openkm.sdk4csharp.bean;

namespace OKMRest
{
    public class Program
    {
        static void Main(string[] args)
        {
            String host = "http://localhost:8080/openkm";
            String username = "okmAdmin";
            String password = "admin";
            OKMWebservice ws = OKMWebservicesFactory.newInstance(host);

            try
            {
                ws.login(user, password);
                foreach (RelationGroup rGroup in ws.relation.getRelationGroups("055e4384-7c70-4456-b32b-f5a55a7986
                {
                    System.Console.WriteLine(rGroup.toString());
                }
            }
            catch (Exception e)
            {
                System.Console.WriteLine(e.ToString());
            }
```

```
        }
    }
}
```

addGroup

Description:

Method	Return values	Description
addGroup(String nodeId, String groupName, long type)	**void**	Adds a relation group to a node.

For a relation group, it only makes sense to apply the relation type RelationType.MANY_TO_MANY.

More information on Relation types.

Example:

```
using System;
using System.Collections.Generic;
using System.Linq;
using System.Text;
using com.openkm.sdk4csharp;
using com.openkm.sdk4csharp.bean;

namespace OKMRest
{
    public class Program
    {
        static void Main(string[] args)
        {
            String host = "http://localhost:8080/openkm";
            String username = "okmAdmin";
            String password = "admin";
            OKMWebservice ws = OKMWebservicesFactory.newInstance(host);

            try
            {
                ws.login(user, password);
                foreach (RelationType type in ws.relation.getRelationTypes(RelationType.MANY_TO_MANY))
                {
                    if (type.title.Equals("staple"))
                    {
                        ws.relation.addGroup("055e4384-7c70-4456-b32b-f5a55a79861f", "staple group", type.id);
                    }
                }
            }
            catch (Exception e)
            {
                System.Console.WriteLine(e.ToString());
            }
        }
    }
}
```

addNodeToGroup

Description:

Method	Return values	Description
addNodeToGroup(String nodeId, long groupId)	**void**	Adds a node to an existing relation group.

A relation group only makes sense with the relation type RelationType.MANY_TO_MANY.

More information on Relation types.

Example:

```
using System;
using System.Collections.Generic;
using System.Linq;
using System.Text;
using com.openkm.sdk4csharp;
using com.openkm.sdk4csharp.bean;

namespace OKMRest
{
    public class Program
    {
        static void Main(string[] args)
        {
            String host = "http://localhost:8080/openkm";
            String username = "okmAdmin";
            String password = "admin";
            OKMWebservice ws = OKMWebservicesFactory.newInstance(host);

            try
            {
                ws.login(user, password);
                foreach (RelationGroup rGroup in ws.relation.getRelationGroups("055e4384-7c70-4456-b32b-f5a55a7986
                {
                    if (rGroup.name.Equals("staple group"))
                    {
                        ws.relation.addNodeToGroup("50b7a5b9-89d2-430e-bbc9-6a6e01662a71", rGroup.id);
                    }
                }
            }
            catch (Exception e)
            {
                System.Console.WriteLine(e.ToString());
            }
        }
    }
}
```

deleteGroup

Description:

Method	Return values	Description
deleteGroup(long groupId)	**void**	Removes a node from a relation group.

Example:

```
using System;
using System.Collections.Generic;
using System.Linq;
using System.Text;
using com.openkm.sdk4csharp;
using com.openkm.sdk4csharp.bean;

namespace OKMRest
{
   public class Program
   {
      static void Main(string[] args)
      {
         String host = "http://localhost:8080/openkm";
         String username = "okmAdmin";
         String password = "admin";
         OKMWebservice ws = OKMWebservicesFactory.newInstance(host);

         try
         {
            ws.login(user, password);
            foreach (RelationGroup rGroup in ws.relation.getRelationGroups("50b7a5b9-89d2-430e-bbc9-6a6e01662
            {
               if (rGroup.name.Equals("staple group"))
               {
                  ws.relation.deleteGroup(rGroup.id);
               }
            }
         }
         catch (Exception e)
         {
            System.Console.WriteLine(e.ToString());
         }
      }
   }
}
```

getGroup

Description:

Method	Return values	Description
getGroup(long groupId)	**RelationGroup**	Finds a relation group by ID.

Example:

```
using System;
using System.Collections.Generic;
```

```
using System.Linq;
using System.Text;
using com.openkm.sdk4csharp;
using com.openkm.sdk4csharp.bean;

namespace OKMRest
{
   public class Program
   {
      static void Main(string[] args)
      {
         String host = "http://localhost:8080/openkm";
         String username = "okmAdmin";
         String password = "admin";
         OKMWebservice ws = OKMWebservicesFactory.newInstance(host);

         try
         {
            ws.login(user, password);
            RelationGroup rg = new RelationGroup();
            foreach (RelationGroup rGroup in ws.getRelationGroups("50b7a5b9-89d2-430e-bbc9-6a6e01662a71"))
            {
               if (rGroup.name.Equals("staple group3"))
               {
                  rg = ws.relation.getGroup(rGroup.id);
                  break;
               }
            }
         }
         catch (Exception e)
         {
            System.Console.WriteLine(e.ToString());
         }
      }
   }
}
```

setGroupName

Description:

Method	Return values	Description
setGroupName(long groupId, String groupName)	**void**	Changes the relation group name.

Example:

```
using System;
using System.Collections.Generic;
using System.Linq;
using System.Text;
using com.openkm.sdk4csharp;
using com.openkm.sdk4csharp.bean;

namespace OKMRest
{
   public class Program
   {
      static void Main(string[] args)
      {
```

```
            String host = "http://localhost:8080/openkm";
            String username = "okmAdmin";
            String password = "admin";
            OKMWebservice ws = OKMWebservicesFactory.newInstance(host);

            try
            {
                ws.login(user, password);
                RelationGroup rg = new RelationGroup();
                foreach (RelationGroup rGroup in ws.relation.getRelationGroups("50b7a5b9-89d2-430e-bbc9-6a6e01662
                {
                    if (rGroup.name.Equals("staple group3"))
                    {
                        ws.relation.setGroupName(rGroup.id, "newGroup");
                        rg = ws.relation.getGroup(rGroup.id);
                        break;
                    }
                }
            }
            catch (Exception e)
            {
                System.Console.WriteLine(e.ToString());
            }
        }
    }
}
```

getAllRelationGroups

Description:

Method	Return values	Description
getAllRelationGroups(int relationTypeId, String filter, int offset, int limit)	**RelationGroupResultSet**	Retrieves a list of all relation groups.

The parameters "limit" and "offset" allow you to retrieve just a portion of the results of a query.

- The parameter "limit" limits the number of results returned.
- The parameter "offset" specifies how many results to skip before beginning to return results.

For example, if your query has 1000 results, but you only want to return the first 10, you should use these values:

- limit=10
- offset=0

Now suppose you want to show the results from 11-20; you should use these values:

- limit=10
- offset=10

Example:

```
using System;
using System.Collections.Generic;
using System.Linq;
using System.Text;
using com.openkm.sdk4csharp;
using com.openkm.sdk4csharp.bean;

namespace OKMRest
{
   public class Program
   {
      static void Main(string[] args)
      {
         String host = "http://localhost:8080/openkm";
         String username = "okmAdmin";
         String password = "admin";
         OKMWebservice ws = OKMWebservicesFactory.newInstance(host);

         try
         {
            ws.login(user, password);
            int relationTypeId = 1;
            String filter = "";
            RelationGroupResultSet resultSet = ws.relation.getAllRelationGroups(relationTypeId, filter, 0, 10);
            foreach (RelationGroup relationGroup in resultSet.results)
            {
               Console.WriteLine(relationGroup.toString());
            }
         }
         catch (Exception e)
         {
            System.Console.WriteLine(e.ToString());
         }
      }
   }
}
```

deleteItemFromGroup

Description:

Method	Return values	Description
deleteItemFromGroup(String nodeId, long groupId)	**void**	Removes a node from a relation group.

Example:

```
using System;
using System.Collections.Generic;
using System.Linq;
using System.Text;
using com.openkm.sdk4csharp;
using com.openkm.sdk4csharp.bean;
```

```
namespace OKMRest
{
    public class Program
    {
        static void Main(string[] args)
        {
            String host = "http://localhost:8080/openkm";
            String username = "okmAdmin";
            String password = "admin";
            OKMWebservice ws = OKMWebservicesFactory.newInstance(host);

            try
            {
                ws.login(user, password);
                foreach (RelationGroup rGroup in ws.relation.getRelationGroups("50b7a5b9-89d2-430e-bbc9-6a6e01662
                {
                    if (rGroup.name.Equals("staple group3"))
                    {
                        ws.relation.deleteItemFromGroup("50b7a5b9-89d2-430e-bbc9-6a6e01662a71", rGroup.id);
                    }
                }
            }
            catch (Exception e)
            {
                System.Console.WriteLine(e.ToString());
            }
        }
    }
}
```

Repository samples

Basics

Suggested code sample

First, you must create the webservice object:

```
OKMWebservices ws = OKMWebservicesFactory.newInstance(host);
```

Then you should log in using the method "**login**". You can access the "**login**" method from the webservice object "**ws**" as shown below:

```
ws.login(user, password);
```

Once you are logged in with the webservice, the session is kept in the webservice object. Then you can use the other API methods

At this point you can use all the Repository methods from "**repository**" class as shown below:

```
ws.repository.getAppVersion();
```

Methods

getRootFolder

Description:

Method	Return values	Description
getRootFolder()	**Folder**	Returns the Folder object of the node "/okm:root"

Example:

```
using System;
using System.Collections.Generic;
using System.Linq;
using System.Text;
using com.openkm.sdk4csharp;
using com.openkm.sdk4csharp.bean;
using com.openkm.sdk4csharp.impl;

namespace OKMRest
{
    public class Program
    {
```

```
        static void Main(string[] args)
        {
            String host = "http://localhost:8080/openkm";
            String username = "okmAdmin";
            String password = "admin";
            OKMWebservice ws = OKMWebservicesFactory.newInstance(host);

            try
            {
                ws.login(user, password);
                System.Console.WriteLine(ws.repository.getRootFolder());
            }
            catch (Exception e)
            {
                System.Console.WriteLine(e.ToString());
            }
        }
    }
}
```

getTrashFolder

Description:

Method	Return values	Description
getTrashFolder()	**Folder**	Returns the Folder object of the node "/okm:trash/{userId}"

The returned folder will be the user's trash folder.

For example, if the method is executed by the "okmAdmin" user, then the returned folder will be "/okm:trash/okmAdmin".

Example:

```
using System;
using System.Collections.Generic;
using System.Linq;
using System.Text;
using com.openkm.sdk4csharp;
using com.openkm.sdk4csharp.impl;

namespace OKMRest
{
    public class Program
    {
        static void Main(string[] args)
        {
            String host = "http://localhost:8080/openkm";
            String username = "okmAdmin";
            String password = "admin";
            OKMWebservice ws = OKMWebservicesFactory.newInstance(host);

            try
            {
                ws.login(user, password);
```

```
            System.Console.WriteLine(ws.repository.getTrashFolder());
        }
        catch (Exception e)
        {
            System.Console.WriteLine(e.ToString());
        }
    }
  }
}
```

getTrashFolderBase

Description:

Method	Return values	Description
getTrashFolderBase()	**Folder**	Returns the Folder object of the node "/okm:trash"

Example:

```
using System;
using System.Collections.Generic;
using System.Linq;
using System.Text;
using com.openkm.sdk4csharp;
using com.openkm.sdk4csharp.impl;

namespace OKMRest
{
   public class Program
   {
      static void Main(string[] args)
      {
         String host = "http://localhost:8080/openkm";
         String username = "okmAdmin";
         String password = "admin";
         OKMWebservice ws = OKMWebservicesFactory.newInstance(host);

         try
         {
            ws.login(user, password);
            System.Console.WriteLine(ws.repository.getTrashFolderBase());
         }
         catch (Exception e)
         {
            System.Console.WriteLine(e.ToString());
         }
      }
   }
}
```

getTemplatesFolder

Description:

Method	Return values	Description

getTemplatesFolder()	**Folder**	Returns the Folder object of the node "/okm:templates"

Example:

```
using System;
using System.Collections.Generic;
using System.Linq;
using System.Text;
using com.openkm.sdk4csharp;

namespace OKMRest
{
   public class Program
   {
      static void Main(string[] args)
      {
         String host = "http://localhost:8080/openkm";
         String username = "okmAdmin";
         String password = "admin";
         OKMWebservice ws = OKMWebservicesFactory.newInstance(host);

         try
         {
            ws.login(user, password);
            System.Console.WriteLine(ws.repository.getTemplatesFolder());
         }
         catch (Exception e)
         {
            System.Console.WriteLine(e.ToString());
         }
      }
   }
}
```

getPersonalFolder

Description:

Method	Return values	Description
getPersonalFolder()	**Folder**	Returns the Folder object of the node "/okm:personal/{userId}"

The returned folder will be the user's personal folder.

For example, if the method is executed by the "okmAdmin" user, then the returned folder will be "/okm:personal/okmAdmin".

Example:

```
using System;
using System.Collections.Generic;
using System.Linq;
```

```
using System.Text;
using com.openkm.sdk4csharp;

namespace OKMRest
{
   public class Program
   {
      static void Main(string[] args)
      {
         String host = "http://localhost:8080/openkm";
         String username = "okmAdmin";
         String password = "admin";
         OKMWebservice ws = OKMWebservicesFactory.newInstance(host);

         try
         {
            ws.login(user, password);
            System.Console.WriteLine(ws.repository.getPersonalFolder());
         }
         catch (Exception e)
         {
            System.Console.WriteLine(e.ToString());
         }
      }
   }
}
```

getPersonalFolderBase

Description:

Method	Return values	Description
getPersonalFolderBase()	**Folder**	Returns the Folder object of the node "/okm:personal"

Example:

```
using System;
using System.Collections.Generic;
using System.Linq;
using System.Text;
using com.openkm.sdk4csharp;

namespace OKMRest
{
   public class Program
   {
      static void Main(string[] args)
      {
         String host = "http://localhost:8080/openkm";
         String username = "okmAdmin";
         String password = "admin";
         OKMWebservice ws = OKMWebservicesFactory.newInstance(host);

         try
         {
            ws.login(user, password);
            System.Console.WriteLine(ws.repository.getPersonalFolderBase());
         }
         catch (Exception e)
```

```
            {
                System.Console.WriteLine(e.ToString());
            }
        }
    }
}
```

getMailFolder

Description:

Method	Return values	Description
getMailFolder()	**Folder**	Returns the Folder object of the node "/okm:mail/{userId}"

The returned folder will be the user's mail folder.

For example, if the method is executed by the "okmAdmin" user, then the returned folder will be "/okm:mail/okmAdmin".

Example:

```
using System;
using System.Collections.Generic;
using System.Linq;
using System.Text;
using com.openkm.sdk4csharp;

namespace OKMRest
{
    public class Program
    {
        static void Main(string[] args)
        {
            String host = "http://localhost:8080/openkm";
            String username = "okmAdmin";
            String password = "admin";
            OKMWebservice ws = OKMWebservicesFactory.newInstance(host);

            try
            {
                ws.login(user, password);
                System.Console.WriteLine(ws.repository.getMailFolder());
            }
            catch (Exception e)
            {
                System.Console.WriteLine(e.ToString());
            }
        }
    }
}
```

getMailFolderBase

Description:

Method	Return values	Description
getMailFolderBase()	**Folder**	Returns the Folder object of the node "/okm:mail"

Example:

```
using System;
using System.Collections.Generic;
using System.Linq;
using System.Text;
using com.openkm.sdk4csharp;

namespace OKMRest
{
   public class Program
   {
      static void Main(string[] args)
      {
         String host = "http://localhost:8080/openkm";
         String username = "okmAdmin";
         String password = "admin";
         OKMWebservice ws = OKMWebservicesFactory.newInstance(host);

         try
         {
            ws.login(user, password);
            System.Console.WriteLine(ws.repository.getMailFolderBase());
         }
         catch (Exception e)
         {
            System.Console.WriteLine(e.ToString());
         }
      }
   }
}
```

getCategoriesFolder

Description:

Method	Return values	Description
getCategoriesFolder()	**Folder**	Returns the Folder object of the node "/okm:categories"

Example:

```
using System;
using System.Collections.Generic;
using System.Linq;
using System.Text;
using com.openkm.sdk4csharp;

namespace OKMRest
```

```
{
   public class Program
   {
      static void Main(string[] args)
      {
         String host = "http://localhost:8080/openkm";
         String username = "okmAdmin";
         String password = "admin";
         OKMWebservice ws = OKMWebservicesFactory.newInstance(host);

         try
         {
            ws.login(user, password);
            System.Console.WriteLine(ws.repository.getCategoriesFolder());
         }
         catch (Exception e)
         {
            System.Console.WriteLine(e.ToString());
         }
      }
   }
}
```

purgeTrash

Description:

Method	Return values	Description
purgeTrash()	**void**	Permanently removes from the repository all nodes in "/okm:trash/{userId}"

For example, if the method is executed by the "okmAdmin" user, then the purged trash will be "/okm:trash/okmAdmin".

When a node is purged, it can only be restored from a previous repository backup. The purge action permanently removes the node from the repository.

Example:

```
using System;
using System.Collections.Generic;
using System.Linq;
using System.Text;
using com.openkm.sdk4csharp;

namespace OKMRest
{
   public class Program
   {
      static void Main(string[] args)
      {
         String host = "http://localhost:8080/openkm";
         String username = "okmAdmin";
         String password = "admin";
         OKMWebservice ws = OKMWebservicesFactory.newInstance(host);
```

```
            try
            {
                ws.login(user, password);
                ws.repository.purgeTrash();
            }
            catch (Exception e)
            {
                System.Console.WriteLine(e.ToString());
            }
        }
    }
}
```

getUpdateMessage

Description:

Method	Return values	Description
getUpdateMessage()	**String**	Retrieves a message when a new OpenKM release is available.

There is an official OpenKM update message service available that is based on your local OpenKM version.

The most common message is that a new OpenKM version has been released.

Example:

```
using System;
using System.Collections.Generic;
using System.Linq;
using System.Text;
using com.openkm.sdk4csharp;

namespace OKMRest
{
    public class Program
    {
        static void Main(string[] args)
        {
            String host = "http://localhost:8180/openkm";
            String username = "okmAdmin";
            String password = "admin";
            OKMWebservice ws = OKMWebservicesFactory.newInstance(host);

            try
            {
                ws.login(user, password);
                System.Console.WriteLine(ws.repository.getUpdateMessage());
            }
            catch (Exception e)
            {
                System.Console.WriteLine(e.ToString());
            }
        }
```

```
    }
}
```

getRepositoryUuid

Description:

Method	Return values	Description
getRepositoryUuid()	**String**	Retrieves the installation's unique identifier.

Example:

```
using System;
using System.Collections.Generic;
using System.Linq;
using System.Text;
using com.openkm.sdk4csharp;

namespace OKMRest
{
    public class Program
    {
        static void Main(string[] args)
        {
            String host = "http://localhost:8080/openkm";
            String username = "okmAdmin";
            String password = "admin";
            OKMWebservice ws = OKMWebservicesFactory.newInstance(host);

            try
            {
                ws.login(user, password);
                System.Console.WriteLine(ws.repository.getRepositoryUuid());
            }
            catch (Exception e)
            {
                System.Console.WriteLine(e.ToString());
            }
        }
    }
}
```

hasNode

Description:

Method	Return values	Description
hasNode(String nodeId)	**Boolean**	Returns a boolean indicating whether a node exists.
The value of the parameter nodeId can be a valid **UUID** or **path**.		

Example:

```
using System;
using System.Collections.Generic;
using System.Linq;
using System.Text;
using com.openkm.sdk4csharp;

namespace OKMRest
{
   public class Program
   {
      static void Main(string[] args)
      {
         String host = "http://localhost:8080/openkm";
         String username = "okmAdmin";
         String password = "admin";
         OKMWebservice ws = OKMWebservicesFactory.newInstance(host);

         try
         {
            ws.login(user, password);
            System.Console.WriteLine("Exists node:" + ws.repository.hasNode("064ff51a-b815-4f48-a096-b4946876
         }
         catch (Exception e)
         {
            System.Console.WriteLine(e.ToString());
         }
      }
   }
}
```

getNodePath

Description:

Method	Return values	Description
getNodePath(String uuid)	**String**	Converts a node UUID to its path.

Example:

```
using System;
using System.Collections.Generic;
using System.Linq;
using System.Text;
using com.openkm.sdk4csharp;
using com.openkm.sdk4csharp.impl;

namespace OKMRest
{
   public class Program
   {
      static void Main(string[] args)
      {
         String host = "http://localhost:8080/openkm";
         String username = "okmAdmin";
         String password = "admin";
```

```
            OKMWebservice ws = OKMWebservicesFactory.newInstance(host);

            try
            {
                ws.login(user, password);
                System.Console.WriteLine(ws.repository.getNodePath("e339f14b-4d3a-489c-91d3-05e4575709d2"));
            }
            catch (Exception e)
            {
                System.Console.WriteLine(e.ToString());
            }
        }
    }
}
```

getNodeUuid

Description:

Method	Return values	Description
getNodeUuid(String path)	**String**	Converts a node path to a UUID.

Example:

```
using System;
using System.Collections.Generic;
using System.Linq;
using System.Text;
using com.openkm.sdk4csharp;

namespace OKMRest
{
    public class Program
    {
        static void Main(string[] args)
        {
            String host = "http://localhost:8080/openkm";
            String username = "okmAdmin";
            String password = "admin";
            OKMWebservice ws = OKMWebservicesFactory.newInstance(host);

            try
            {
                ws.login(user, password);
                System.Console.WriteLine(ws.repository.getNodeUuid("/okm:root/tmp"));
            }
            catch (Exception e)
            {
                System.Console.WriteLine(e.ToString());
            }
        }
    }
}
```

getAppVersion

Description:

Method	Return values	Description
getAppVersion()	**AppVersion**	Returns information about the OpenKM version.

Example:

```
using System;
using System.Collections.Generic;
using System.Linq;
using System.Text;
using com.openkm.sdk4csharp;

namespace OKMRest
{
   public class Program
   {
      static void Main(string[] args)
      {
         String host = "http://localhost:8080/openkm";
         String username = "okmAdmin";
         String password = "admin";
         OKMWebservice ws = OKMWebservicesFactory.newInstance(host);

         try
         {
            ws.login(user, password);
            System.Console.WriteLine(ws.repository.getAppVersion().toString());
         }
         catch (Exception e)
         {
            System.Console.WriteLine(e.ToString());
         }
      }
   }
}
```

copyAttributes

Description:

Method	Return values	Description
copyAttributes(String uuid, String dstId, boolean categories, boolean keywords, boolean propertyGroups, boolean notes)	**void**	Copies attributes from one node to another.

The values of the dstId parameter should be a node UUID or path.

- When the categories parameter is true, the original values of the categories will be copied.
- When the keywords parameter is true, the original values of the keywords will be copied.
- When the propertyGroups parameter is true, the original values of the metadata groups will be

copied.

- When the notes parameter is true, the original values of the notes will be copied.

Example:

```
using System;
using System.Collections.Generic;
using System.Linq;
using System.Text;
using com.openkm.sdk4csharp;
using com.openkm.sdk4csharp.impl;

namespace OKMRest
{
    public class Program
    {
        static void Main(string[] args)
        {
            String host = "http://localhost:8080/openkm";
            String username = "okmAdmin";
            String password = "admin";
            OKMWebservice ws = OKMWebservicesFactory.newInstance(host);

            try
            {
                ws.login(user, password);
                ws.repository.copyAttributes("50b7a5b9-89d2-430e-bbc9-6a6e01662a71", "055e4384-7c70-4456-b32b-f5
            }
            catch (Exception e)
            {
                System.Console.WriteLine(e.ToString());
            }
        }
    }
}
```

executeScript

Description:

Method	Return values	Description
executeScript(FileStream fs)	**ScriptExecutionResult**	Executes a script.

The local script - test.bsh - used in the sample below:

```
import com.openkm.api.OKMFolder;
import com.openkm.bean.Folder;
import com.openkm.util.ContextWrapper;

try {
    OKMFolder okmFolder = ContextWrapper.getContext().getBean(OKMFolder.class);
    for (Folder fld : okmFolder.getChildren(null, "/okm:root")) {
      print(fld.getPath() + "\n");
```

```
        }
    } catch (Exception e) {
     e.printStackTrace();
    }

    // Some value can also be returned as string
    return "test result";
```

This action can only be done by a superuser (user with ROLE_ADMIN).

Example:

```
using System;
using System.Collections.Generic;
using System.Linq;
using System.Text;
using com.openkm.sdk4csharp;
using System.IO;
using com.openkm.sdk4csharp.bean;
using com.openkm.sdk4csharp.impl;

namespace OKMRest
{
    public class Program
    {
        static void Main(string[] args)
        {
            String host = "http://localhost:8080/openkm";
            String username = "okmAdmin";
            String password = "admin";
            OKMWebservice ws = OKMWebservicesFactory.newInstance(host);

            try
            {
                ws.login(user, password);
                FileStream fs = new FileStream("E:\\test.bsh", FileMode.Open);
                ScriptExecutionResult result = ws.repository.executeScript(fs);
                System.Console.WriteLine(result.result);
                System.Console.WriteLine(result.stdout);

                if (!result.stderr.Equals(""))
                {
                    System.Console.WriteLine("Error happened");
                    System.Console.WriteLine(result.stderr);
                }

                fs.Dispose();
            }
            catch (Exception e)
            {
                System.Console.WriteLine(e.ToString());
            }
        }
    }
}
```

executeScript

Description:

Method	Return values	Description
executeScript(String script)	**ScriptExecutionResult**	Executes a script.

This action can only be done by a superuser (user with ROLE_ADMIN).

Example:

```
using System;
using System.Collections.Generic;
using System.Linq;
using System.Text;
using com.openkm.sdk4csharp;
using System.IO;
using com.openkm.sdk4csharp.bean;
using com.openkm.sdk4csharp.impl;

namespace OKMRest
{
   public class Program
   {
      static void Main(string[] args)
      {
         String host = "http://localhost:8080/openkm";
         String username = "okmAdmin";
         String password = "admin";
         OKMWebservice ws = OKMWebservicesFactory.newInstance(host);

         try
         {
            ws.login(user, password);
            String script = "import com.openkm.util.ContextWrapper;"
                  + " import org.springframework.web.context.WebApplicationContext;"
                  + " import com.openkm.api.OKMFolder;"
                  + " import com.openkm.bean.Folder;"
                  + " WebApplicationContext cc = (WebApplicationContext) ContextWrapper.getContext();"
                  + " OKMFolder okmFolder = cc.getBean(OKMFolder.class);"
                  + " for (Folder fld : okmFolder.getChildren(null,\"/okm:root\")) {"
                  + " print(fld.getPath());"
                  + "}";
            ScriptExecutionResult result = ws.repository.executeScript(script);
            Console.WriteLine(result.result);
            Console.WriteLine(result.stdout);
         }
         catch (Exception e)
         {
            System.Console.WriteLine(e.ToString());
         }
      }
   }
}
```

executeSqlQuery

Description:

Method	Return values	Description
executeSqlQuery(FileStream fs)	**SqlQueryResults**	Executes SQL statements.

The test.sql script used in the sample below:

```
SELECT NBS_UUID, NBS_NAME FROM OKM_NODE_BASE LIMIT 10;
```

The SQL script can only contain a single SQL statement.

This action can only be done by a superuser (user with ROLE_ADMIN).

Example:

```
using System;
using System.Collections.Generic;
using System.Linq;
using System.Text;
using com.openkm.sdk4csharp;
using System.IO;
using com.openkm.sdk4csharp.bean;
using com.openkm.sdk4csharp.impl;

namespace OKMRest
{
   public class Program
   {
      static void Main(string[] args)
      {
         String host = "http://localhost:8080/openkm";
         String username = "okmAdmin";
         String password = "admin";
         OKMWebservice ws = OKMWebservicesFactory.newInstance(host);

         try
         {
            ws.login(user, password);
            FileStream fs = new FileStream("E:\\test.sql", FileMode.Open);
            SqlQueryResults result = ws.repository.executeSqlQuery(fs);
            fs.Dispose();
         }
         catch (Exception e)
         {
            System.Console.WriteLine(e.ToString());
         }
      }
   }
}
```

executeSqlQuery

Description:

Method	Return values	Description
executeSqlQuery(String sql)	**SqlQueryResults**	Executes SQL statements.

The SQL script can only contain a single SQL statement.

This action can only be done by a superuser (user with ROLE_ADMIN).

Example:

```
using System;
using System.Collections.Generic;
using System.Linq;
using System.Text;
using com.openkm.sdk4csharp;
using System.IO;
using com.openkm.sdk4csharp.bean;
using com.openkm.sdk4csharp.impl;

namespace OKMRest
{
   public class Program
   {
      static void Main(string[] args)
      {
         String host = "http://localhost:8080/openkm";
         String username = "okmAdmin";
         String password = "admin";
         OKMWebservice ws = OKMWebservicesFactory.newInstance(host);

         try
         {
            ws.login(user, password);
            SqlQueryResults result = ws.repository.executeSqlQuery("SELECT NBS_UUID, NBS_CONTEXT, NBS_N
            foreach (SqlQueryResultColumns columns in result.sqlQueryResults)
            {
               Console.WriteLine("UUID:" + columns.sqlQueryResultColumns[0]);
               Console.WriteLine("Context:" + columns.sqlQueryResultColumns[1]);
               Console.WriteLine("Name:" + columns.sqlQueryResultColumns[2]);
            }
         }
         catch (Exception e)
         {
            System.Console.WriteLine(e.ToString());
         }
      }
   }
}
```

executeHqlQuery

Description:

Method	Return values	Description

executeHqlQuery(FileStream fs)	**HqlQueryResults**	Executes HQL statements.

The test.sql script used in the sample below:

```
SELECT uuid, name from NodeBase where name = 'okm:root';
```

The HQL script can only contain a single HQL statement.

This action can only be done by a superuser (user with ROLE_ADMIN).

Example:

```
using System;
using System.Collections.Generic;
using System.Linq;
using System.Text;
using com.openkm.sdk4csharp;
using com.openkm.sdk4csharp.impl;
using System.IO;

namespace OKMRest
{
   public class Program
   {
      static void Main(string[] args)
      {
         String host = "http://localhost:8080/openkm";
         String username = "okmAdmin";
         String password = "admin";
         OKMWebservice ws = OKMWebservicesFactory.newInstance(host);

         try
         {
            ws.login(user, password);
            FileStream fs = new FileStream(@"C:\Desktop\test.sql", FileMode.Open);
            HqlQueryResults result = ws.repository.executeHqlQuery(fs);
            fs.Dispose();
         }
         catch (Exception e)
         {
            System.Console.WriteLine(e.ToString());
         }
      }
   }
}
```

executeHqlQuery

Description:

Method	Return values	Description

executeHqlQuery(String hql)	**HqlQueryResults**	Executes HQL statements.

The HQL script can only contain a single HQL statement.

This action can only be done by a superuser (user with ROLE_ADMIN).

Example:

```
using System;
using System.Collections.Generic;
using System.Linq;
using System.Text;
using com.openkm.sdk4csharp;
using com.openkm.sdk4csharp.impl;
using System.IO;

namespace OKMRest
{
   public class Program
   {
      static void Main(string[] args)
      {
         String host = "http://localhost:8080/openkm";
         String username = "okmAdmin";
         String password = "admin";
         OKMWebservice ws = OKMWebservicesFactory.newInstance(host);

         try
         {
            ws.login(user, password);
            HqlQueryResults result = ws.repository.executeHqlQuery("SELECT uuid, name from NodeBase where na
            foreach (HqlQueryResultColumns row in result.hqlQueryResults)
            {
               Console.WriteLine("uuid: " + row.hqlQueryResultColumns[0] + ", name: " + row.hqlQueryResultColumn
            }
         }
         catch (Exception e)
         {
            System.Console.WriteLine(e.ToString());
         }
      }
   }
}
```

getTranslations

Description:

Method	Return values	
getTranslations(String lang, String module)	**Dictionary<String, String>**	Retriev

The OpenKM translations tables can be used to retrieve the current OpenKM translations or to create your own tran

By default, module values are:

- frontend (used by the default OpenKM UI).
- extension (used by the OpenKM extension UI).
- mobile (used by the OpenKM mobile UI).

Example to add a new translation module:

SQL statements to be executed from Database query view:

```
DELETE FROM OKM_TRANSLATION WHERE TR_LANGUAGE='en-GB' and TR_MODULE='doc';
INSERT INTO OKM_TRANSLATION (TR_MODULE, TR_KEY, TR_TEXT, TR_LANGUAGE) VALUES
INSERT INTO OKM_TRANSLATION (TR_MODULE, TR_KEY, TR_TEXT, TR_LANGUAGE) VALUES
```

The code should then be:

```
Dictionary<String, String> translations = ws.repository.getTranslations("en-GB", "doc");
```

Example:

```
using System;
using System.Collections.Generic;
using System.Linq;
using System.Text;
using com.openkm.sdk4csharp;
using com.openkm.sdk4csharp.impl;

namespace OKMRest
{
   public class Program
   {
      static void Main(string[] args)
      {
         String host = "http://localhost:8080/openkm";
         String username = "okmAdmin";
         String password = "admin";
         OKMWebservice ws = OKMWebservicesFactory.newInstance(host);

         try
         {
            ws.login(user, password);
            Dictionary<string,string>translations = ws.repository.getTranslations("en-GB", "frontend");
            foreach (KeyValuePair<string, string> kvp in translations)
            {
               Console.WriteLine("key:{0},with translation:{1}", kvp.Key, kvp.Value);
            }
         }
         catch (Exception e)
         {
            System.Console.WriteLine(e.ToString());
         }
      }
   }
}
```

getConfiguration

Description:

Method	Return values	Description
getConfiguration(String key)	**Configuration**	Retrieves the value of a configuration parameter.

If your OpenKM version has the configuration parameter named "**webservices.visible.properties**", access to configuration parameters will be restricted for non-administrator users. That means any non-administrator user who tries to access, via the webservices, configuration parameters not included in the list of values of "**webservices.visible.properties**" will receive an access denied exception.

Example:

```
using System;
using System.Collections.Generic;
using System.Linq;
using System.Text;
using com.openkm.sdk4csharp;
using com.openkm.sdk4csharp.bean;
using com.openkm.sdk4csharp.impl;

namespace OKMRest
{
   public class Program
   {
      static void Main(string[] args)
      {
         String host = "http://localhost:8080/openkm";
         String username = "okmAdmin";
         String password = "admin";
         OKMWebservice ws = OKMWebservicesFactory.newInstance(host);

         try
         {
            ws.login(user, password);
            Configuration configuration = ws.repository.getConfiguration("system.ocr");
            System.Console.WriteLine(configuration.toString());
         }
         catch (Exception e)
         {
            System.Console.WriteLine(e.ToString());
         }
      }
   }
}
```

getChangeLog

Description:

Method	Return values	Description

getChangeLog(String nodePath, DateTime modificationsFrom)	**List<ChangeLogged>**	Return the list of changes in some path and subfolders.

- The method is used by the desktop synchronization application to retrieve changes.

Example:

```
using System;
using System.Collections.Generic;
using System.Linq;
using System.Text;
using com.openkm.sdk4csharp;
using com.openkm.sdk4csharp.bean;
using com.openkm.sdk4csharp.impl;

namespace OKMRest
{
   public class Program
   {
      static void Main(string[] args)
      {
         String host = "http://localhost:8080/openkm";
         String username = "okmAdmin";
         String password = "admin";
         OKMWebservice ws = OKMWebservicesFactory.newInstance(host);

         try
         {
            ws.login(user, password);
            List<ChangeLogged> changeLoggedList = ws.repository.getChangeLog("/okm:root/test", DateTime.Now);
            foreach (var cl in changeLoggedList)
            {
               System.Console.WriteLine(cl.toString());
            }
         }
         catch (Exception e)
         {
            System.Console.WriteLine(e.ToString());
         }
      }
   }
}
```

getServerTime()

Description:

Method	Return values	Description
getServerTime()	**String**	Returns the current server time.

The server time returned is in ISO 8601 format.

The method is used by the desktop synchronization application to retrieve changes.

Example:

```
using System;
using System.Collections.Generic;
using System.Linq;
using System.Text;
using com.openkm.sdk4csharp;
using com.openkm.sdk4csharp.impl;

namespace OKMRest
{
   public class Program
   {
      static void Main(string[] args)
      {
         String host = "http://localhost:8080/openkm";
         String username = "okmAdmin";
         String password = "admin";
         OKMWebservice ws = OKMWebservicesFactory.newInstance(host);

         try
         {
            ws.login(user, password);
            System.Console.WriteLine(ws.repository.getServerTime());
         }
         catch (Exception e)
         {
            System.Console.WriteLine(e.ToString());
         }
      }
   }
}
```

getAvailableLocales

Description:

Method	Return values	Description
getAvailableLocales(String locale)	**Dictionary<String, String>**	Return the available languages.

Example:

```
using System;
using System.Collections.Generic;
using System.Linq;
```

```
using System.Text;
using com.openkm.sdk4csharp;
using com.openkm.sdk4csharp.impl;

namespace OKMRest
{
   public class Program
   {
      static void Main(string[] args)
      {
         String host = "http://localhost:8080/openkm";
         String username = "okmAdmin";
         String password = "admin";
         OKMWebservice ws = OKMWebservicesFactory.newInstance(host);

         try
         {
            ws.login(user, password);
            Dictionary<String, String> locales = ws.repository.getAvailableLocales("en-GB");
            foreach(KeyValuePair<String, String> local in locales)
            {
               Console.WriteLine("Language:" + local.Key + "," + local.Value);
            }
         }
         catch (Exception e)
         {
            System.Console.WriteLine(e.ToString());
         }
      }
   }
}
```

getLicenseInfo

Description:

Method	Return values	Description
getLicenseInfo()	**LicenseInfo**	Return license information.

Example:

```
using System;
using System.Collections.Generic;
using System.Linq;
using System.Text;
using com.openkm.sdk4csharp;

namespace OKMRest
{
   public class Program
   {
      static void Main(string[] args)
      {
         String host = "http://localhost:8080/openkm";
         String username = "okmAdmin";
         String password = "admin";
         OKMWebservice ws = OKMWebservicesFactory.newInstance(host);

         try
```

```
            {
                ws.login(user, password);
                Console.WriteLine(ws.repository.getLicenseInfo().toString());
            }
            catch (Exception e)
            {
                System.Console.WriteLine(e.ToString());
            }
        }
    }
}
```

getClusterUuid

Description:

Method	Return values	Description
getClusterUuid()	**String**	Return cluster UUID.

Example:

```
using System;
using System.Collections.Generic;
using System.Linq;
using System.Text;
using com.openkm.sdk4csharp;
using com.openkm.sdk4csharp.impl;

namespace OKMRest
{
    public class Program
    {
        static void Main(string[] args)
        {
            String host = "http://localhost:8080/openkm";
            String username = "okmAdmin";
            String password = "admin";
            OKMWebservice ws = OKMWebservicesFactory.newInstance(host);

            try
            {
                ws.login(user, password);
                Console.WriteLine("Cluster UUID =" + ws.repository.getClusterUuid());
            }
            catch (Exception e)
            {
                System.Console.WriteLine(e.ToString());
            }
        }
    }
}
```

getIsFilePlan

Description:

Method	Return values	Description
getIsFilePlan()	**bool**	True when the filePlan mode is active.

Example:

```
using System;
using System.Collections.Generic;
using System.Linq;
using System.Text;
using com.openkm.sdk4csharp;
using com.openkm.sdk4csharp.impl;

namespace OKMRest
{
   public class Program
   {
      static void Main(string[] args)
      {
         String host = "http://localhost:8080/openkm";
         String username = "okmAdmin";
         String password = "admin";
         OKMWebservice ws = OKMWebservicesFactory.newInstance(host);

         try
         {
            ws.login(user, password);
            Console.WriteLine("FilePlan= " + ws.repository.getIsFilePlan().ToString());
         }
         catch (Exception e)
         {
            System.Console.WriteLine(e.ToString());
         }
      }
   }
}
```

createShortenUrl

Description:

Method	Return values	Description
createShortenUrl(String name, String url)	String	Creates a shortened URL. The **name** parameter is optional (auto-generated if null). Returns the shortened URL.

Example:

```
using System;
using System.Collections.Generic;
using System.Linq;
using System.Text;
using com.openkm.sdk4csharp;
using com.openkm.sdk4csharp.impl;
```

```
namespace OKMRest
{
    public class Program
    {
        static void Main(string[] args)
        {
            String host = "http://localhost:8080/openkm";
            String username = "okmAdmin";
            String password = "admin";
            OKMWebservice ws = OKMWebservicesFactory.newInstance(host);

            try
            {
                ws.login(user, password);
                String shortenUrl = ws.repository.createShortenUrl(null, "https://www.example.com/very/long/url");
                Console.WriteLine("shortenUrl");
            }
            catch (Exception e)
            {
                System.Console.WriteLine(e.ToString());
            }
        }
    }
}
```

Report samples

Basics

The table below shows how variables should be passed based on field type:

Field type	Type	Description
Date	**String**	Use the pattern yyyy-MM-dd (year - month - day) 2018-10-04
Select multiple	**String**	Use "," to split each value. "value1,value2,value3"

Suggested code sample

First, you must create the webservice object:

```
OKMWebservices ws = OKMWebservicesFactory.newInstance(host);
```

Then you should log in using the method "**login**". You can access the "**login**" method from the webservice object "**ws**" as shown below:

```
ws.login(user, password);
```

Once you are logged in to the webservice, the session is kept in the webservice object. Then you can use the other API methods.

At this point you can use all the Report methods from the "**report**" class as shown below:

```
ws.report.getReports(true)
```

Methods

getReports

Description:

Method	Return values	Description
getReports(boolean active)	**List<Report>**	Returns a list of reports.

Example:

```
using System;
using System.Collections.Generic;
using System.Linq;
using System.Text;
using com.openkm.sdk4csharp;
using com.openkm.sdk4csharp.bean;

namespace OKMRest
{
   public class Program
   {
      static void Main(string[] args)
      {
         String host = "http://localhost:8080/openkm";
         String username = "okmAdmin";
         String password = "admin";
         OKMWebservice ws = OKMWebservicesFactory.newInstance(host);

         try
         {
            ws.login(user, password);
            List<Report> reports = ws.report.getReports(true);
            foreach (Report rep in reports)
            {
               System.Console.WriteLine(rep.toString());
            }
         }
         catch (Exception e)
         {
            System.Console.WriteLine(e.ToString());
         }
      }
   }
}
```

getReport

Description:

Method	Return values	Description
getReport(long rpId)	**Report**	Returns a report.

Example:

```
using System;
using System.Collections.Generic;
using System.Linq;
using System.Text;
using com.openkm.sdk4csharp;
using com.openkm.sdk4csharp.bean;

namespace OKMRest
```

```
{
   public class Program
   {
      static void Main(string[] args)
      {
         String host = "http://localhost:8080/openkm";
         String username = "okmAdmin";
         String password = "admin";
         OKMWebservice ws = OKMWebservicesFactory.newInstance(host);

         try
         {
              ws.login(user, password);
              List<Report> reports = ws.report.getReports(true);
              Report report = new Report();
              foreach (var rep in reports)
              {
                 if (rep.fileName.Equals("DocumentCheckout.rep"))
                 {
                   // Get report
                   report = ws.report.getReport(rep.id);
                   break;
                 }
              }
              System.Console.WriteLine(report.toString());
         }
         catch (Exception e)
         {
            System.Console.WriteLine(e.ToString());
         }
      }
   }
}
```

execute

Description:

Method	Return values	Description
execute(long rpId, Dictionary<String, String> params, String format, String uuid)	**Stream**	Returns a document resulting from executing a report.

Available formats:

- Report.FORMAT_CSV
- Report.FORMAT_DOCX
- Report.FORMAT_HTML
- Report.FORMAT_ODT
- Report.FORMAT_PDF
- Report.FORMAT_RTF

- Report.FORMAT_TEXT

The parameter **uuid** is the UUID of a node (this parameter is optional; it is usually useful for reports executed from the user interface where the results depend on the selected node).

Example:

```
using System;
using System.Collections.Generic;
using System.Linq;
using System.Text;
using System.IO;
using com.openkm.sdk4csharp;
using com.openkm.sdk4csharp.util;

namespace OKMRest
{
   public class Program
   {
      static void Main(string[] args)
      {
         String host = "http://localhost:8080/openkm";
         String username = "okmAdmin";
         String password = "admin";
         OKMWebservice ws = OKMWebservicesFactory.newInstance(host);

         try
         {
               ws.login(user, password);
               List<Report> reports = ws.report.getReports(true);
               Report report = new Report();
               foreach (var rep in reports)
               {
                  if (rep.fileName.Equals("DocumentCheckout.rep"))
                  {
                     // Get report
                     report = ws.report.getReport(rep.id);
                     break;
                  }
               }

               Dictionary<String, String> param = new   Dictionary<String, String>();
               param.Add("from_date", "2016-01-01");
               param.Add("to_date", "2016-12-23");
               String uuid = "";
               Stream stream = ws.report.execute(report.id, Report.FORMAT_PDF, param, uuid);

               BeanHelper beanHelper = new BeanHelper();
               Byte[] data = beanHelper.ReadToEnd(stream);
               FileStream fileStream = new FileStream(@"C:\Desktop\out.pdf", FileMode.OpenOrCreate, FileAccess.F
               foreach (byte b in data)
               {
                  fileStream.WriteByte(b);
               }
               fileStream.Close();
         } catch (Exception e) {
            System.Console.WriteLine(e.ToString());
         }
      }
   }
}
```

executeSql

Description:

Method	Return values	Description
executeSql(long rpId)	Stream	Returns a document resulting from executing a report SQL.

Example:

```
using System;
using System.Collections.Generic;
using System.Linq;
using System.Text;
using com.openkm.sdk4csharp;
using com.openkm.sdk4csharp.bean;

namespace OKMRest
{
   public class Program
   {
      static void Main(string[] args)
      {
         String host = "http://localhost:8080/openkm";
         String username = "okmAdmin";
         String password = "admin";
         OKMWebservice ws = OKMWebservicesFactory.newInstance(host);

         try
         {
               ws.login(user, password);
               long rpdId = 1;
               Stream stream = ws.report.executeSql(rpdId);
               FileStream file = new FileStream("C:\\activity.csv", FileMode.OpenOrCreate, FileAccess.ReadWrite);
               stream.CopyTo(file);
               file.Close();
               stream.Close();
         }
         catch (Exception e)
         {
            System.Console.WriteLine(e.ToString());
         }
      }
   }
}
```

getSqlReports

Description:

Method	Return values	Description
getSqlReports(boolean active)	**List<Report>**	Returns a list of SQL reports.

Example:

```
using System;
using System.Collections.Generic;
using System.Linq;
using System.Text;
using com.openkm.sdk4csharp;
using com.openkm.sdk4csharp.bean;

namespace OKMRest
{
   public class Program
   {
      static void Main(string[] args)
      {
         String host = "http://localhost:8080/openkm";
         String username = "okmAdmin";
         String password = "admin";
         OKMWebservice ws = OKMWebservicesFactory.newInstance(host);

         try
         {
            ws.login(user, password);
            List<SqlReport> sqlReports = ws.report.getSqlReports(true);
            foreach(SqlReport sqlr in sqlReports)
            {
              System.Console.WriteLine(sqlr.toString());
            }
         }
         catch (Exception e)
         {
            System.Console.WriteLine(e.ToString());
         }
      }
   }
}
```

save

Description:

Method
save(long rpId, Dictionary<String, String> _params, String format, String dstId, String docName, String uuid)

Available formats:

- Report.FORMAT_CSV
- Report.FORMAT_DOCX
- Report.FORMAT_HTML
- Report.FORMAT_ODT
- Report.FORMAT_PDF
- Report.FORMAT_RTF
- Report.FORMAT_TEXT

The values of the **dstId** parameter should be a folder or record UUID.

The parameter **docName** is used to specify the name of the saved document.

The parameter **uuid** is the UUID of a node (this parameter is optional; it is usually useful for reports executed from

Example:

```
using System;
using System.Collections.Generic;
using System.Linq;
using System.Text;
using com.openkm.sdk4csharp;
using com.openkm.sdk4csharp.bean;

namespace OKMRest
{
   public class Program
   {
      static void Main(string[] args)
      {
         String host = "http://localhost:8080/openkm";
         String username = "okmAdmin";
         String password = "admin";
         OKMWebservice ws = OKMWebservicesFactory.newInstance(host);

         try
         {
            ws.login(user, password);
            long repId = 1;
            Dictionary<String, String> param = new Dictionary<String, String>();
            param.Add("from_date", "2018-01-01");
            param.Add("to_date", "2019-12-30");
            String uuid = "";
            Document doc = ws.report.save(repId, param, Report.FORMAT_PDF, "8599eab7-ae61-4628-8010-1103
            System.Console.WriteLine(doc.toString());
         }
         catch (Exception e)
         {
            System.Console.WriteLine(e.ToString());
         }
      }
   }
}
```

saveSql

Description:

Method	Return values	Description
saveSql(long rpId, Dictionary<String, String> _params, String dstId, String docName)	Document	Executes the report SQL and saves the resulting CSV document.

The values of the **dstId** parameter should be a folder or record UUID.

The parameter **docName** is the file name of the report.

Example:

```
using System;
using System.Collections.Generic;
using System.Linq;
using System.Text;
using com.openkm.sdk4csharp;
using com.openkm.sdk4csharp.bean;

namespace OKMRest
{
   public class Program
   {
      static void Main(string[] args)
      {
         String host = "http://localhost:8080/openkm";
         String username = "okmAdmin";
         String password = "admin";
         OKMWebservice ws = OKMWebservicesFactory.newInstance(host);

         try
         {
            ws.login(user, password);
            long rpId = 1;
            String dstId = 7f64d889-1600-4cbc-8134-ef6fb62287ec;
            String docName = "activity.csv";
            Document document = ws.report.saveSql(rpId, new Dictionary<string, string>(), dstId, docName);
            System.Console.WriteLine(document.ToString());
         }
         catch (Exception e)
         {
            System.Console.WriteLine(e.ToString());
         }
      }
   }
}
```

generateDownloadReportToken

Description:

Method	Return values	Description
generateDownloadReportToken(long rpId)	**String**	Return the token for downloading the report.

Example:

```
using System;
using System.Collections.Generic;
using System.Linq;
using System.Text;
using com.openkm.sdk4csharp;
using com.openkm.sdk4csharp.bean;
```

```
namespace OKMRest
{
   public class Program
   {
      static void Main(string[] args)
      {
         String host = "http://localhost:8080/openkm";
         String username = "okmAdmin";
         String password = "admin";
         OKMWebservice ws = OKMWebservicesFactory.newInstance(host);

         try
         {
              ws.login(user, password);
              long repId = 1;
              String dwt = ws.report.generateDownloadReportToken(repId);
         }
         catch (Exception e)
         {
            System.Console.WriteLine(e.ToString());
         }
      }
   }
}
```

Stamp samples

Basics

Suggested code sample

First, you must create the webservice object:

```
OKMWebservices ws = OKMWebservicesFactory.newInstance(host);
```

Then you should log in using the method "**login**". You can access the "**login**" method from the webservice object "**ws**" as shown below:

```
ws.login(user, password);
```

Once you are logged in with the webservices, the session is kept in the webservice object. Then you can use the other API methods.

At this point you can use all the Stamp methods from the "**stamp** class" as shown below:

```
ws.stamp.getAllStamps();
```

Methods

getAllStamps

Description:

Method	Return values	Description
getAllStamps()	**List<StampItem>**	Returns a list of stamp items.

Example:

```
using System; using System.Collections.Generic;
using System.Text;
using com.openkm.sdk4csharp;
using com.openkm.sdk4csharp.bean;

namespace OKMRest
{
   public class Program
   {
      static void Main(string[] args)
      {
          String host = "http://localhost:8080/openkm";
```

```
            String username = "okmAdmin";
            String password = "admin";
            OKMWebservice ws = OKMWebservicesFactory.newInstance(host);

            try
            {
                ws.login(user, password);
                List<StampItem> stamps = ws.stamp.getAllStamps();
                foreach(StampItem stamItem in stamps)
                {
                    System.Console.WriteLine(stamItem.name);
                }
            }
            catch (Exception e)
            {
                System.Console.WriteLine(e.ToString());

            }
        }
    }
}
```

testGetStampTextByPk

Description:

Method	Return values	Description
getStampTextByPk(long id, String uuid)	**StampText**	Returns the stamp of type Text by ID.

Example:

```
using System; using System.Collections.Generic;
using System.Text;
using com.openkm.sdk4csharp;
using com.openkm.sdk4csharp.bean;

namespace OKMRest
{
    public class Program
    {
        static void Main(string[] args)
        {
            String host = "http://localhost:8080/openkm";
            String username = "okmAdmin";
            String password = "admin";
            OKMWebservice ws = OKMWebservicesFactory.newInstance(host);

            try
            {
                ws.login(user, password);
                long id = 1;
                List<StampItem> stamps = ws.stamp.getStampTextByPk(id, document.uuid);
                System.Console.WriteLine(stamp.name);
                System.Console.WriteLine(stamp.description);
            }
            catch (Exception e)
            {
                System.Console.WriteLine(e.ToString());
```

```
        }
      }
    }
}
```

getStampImageByPk

Description:

Method	Return values	Description
getStampImageByPk(long id, String uuid)	**StampImage**	Returns the stamp of type Image by ID.

Example:

```
using System;
using System.Collections.Generic;
using System.Text;
using com.openkm.sdk4csharp;
using com.openkm.sdk4csharp.bean;

namespace OKMRest
{
    public class Program
    {
      static void Main(string[] args)
      {
          String host = "http://localhost:8080/openkm";
          String username = "okmAdmin";
          String password = "admin";
          OKMWebservice ws = OKMWebservicesFactory.newInstance(host);

          try
          {
              ws.login(user, password);
              long id = 1;
              List<StampItem> stamps = ws.stamp.getStampImageByPk(id, document.uuid);
              System.Console.WriteLine(stampImage.name);
              System.Console.WriteLine(stampImage.description);
          }
          catch (Exception e)
          {
              System.Console.WriteLine(e.ToString());

          }
      }
    }
}
```

getStampBarcodeByPk

Description:

Method	Return values	Description
getStampBarcodeByPk(long id, String uuid)	**StampBarcode**	Returns the stamp of type Barcode by ID.

Example:

```
using System;
using System.Collections.Generic;
using System.Text;
using com.openkm.sdk4csharp;
using com.openkm.sdk4csharp.bean;

namespace OKMRest
{
   public class Program
   {
      static void Main(string[] args)
      {
         String host = "http://localhost:8080/openkm";
         String username = "okmAdmin";
         String password = "admin";
         OKMWebservice ws = OKMWebservicesFactory.newInstance(host);

         try
         {
            ws.login(user, password);
            long id = 1;
            StampBarcode stampBarcode = ws.stamp.getStampBarcodeByPk(id, "6330d2a0-529f-4c14-baa1-ce6a92
            System.Console.WriteLine(stampBarcode.name);
            System.Console.WriteLine(stampBarcode.description);
         }
         catch (Exception e)
         {
            System.Console.WriteLine(e.ToString());

         }
      }
   }
}
```

calculateStampCoordinates

Description:

Method	Return values	Description
calculateStampCoordinates(long imgToStampWidth, long imgToStampHeight, long floatingDivWidth, long floatingDivHeight, String exprX, String exprY, String stampType, String stampAlign)	**StampCoordinates**	Returns the calculated stamp coordinates.

In the Expr. X and Expr. Y input fields, you can enter more than a simple number. Currently, the following macros are defined:

- IMAGE_WIDTH
- IMAGE_HEIGHT

- PAGE_WIDTH
- PAGE_HEIGHT
- PAGE_CENTER
- PAGE_MIDDLE

To center a stamp on the page, you can use:

Expr. X	PAGE_CENTER
Expr. Y	PAGE_MIDDLE

The parameter **stampAlign**.

Available values:

- text
- image

The parameter **stampAlign** is the text alignment.

Available values:

- left
- center
- right

Example:

```
using System; using System.Collections.Generic;
using System.Text;
using com.openkm.sdk4csharp;
using com.openkm.sdk4csharp.bean;

namespace OKMRest
{
   public class Program
   {
      static void Main(string[] args)
      {
          String host = "http://localhost:8080/openkm";
          String username = "okmAdmin";
          String password = "admin";
          OKMWebservice ws = OKMWebservicesFactory.newInstance(host);

          try
          {
              ws.login(user, password);
              // Parameters
```

```
            long imgToStampWidth = 100;
            long imgToStampHeight = 100;
            long floatingDivWidth = 250;
            long floatingDivHeight = 300;
            string exprX = "PAGE_CENTER - IMAGE_WIDTH / 2";
            string exprY = "PAGE_MIDDLE - IMAGE_HEIGHT / 2";
            string stampType = "text";
            string stampAlign = "center";
            StampCoordinates stampCoordinates = ws.stamp.calculateStampCoordinates(imgToStampWidth, imgToS
            floatingDivWidth, floatingDivHeight, exprX, exprY, stampType, stampAlign);
            System.Console.WriteLine("X = " + stampCoordinates.x + ", Y = " + stampCoordinates.y);
        }
        catch (Exception e)
        {
            System.Console.WriteLine(e.ToString());

        }
    }
  }
}
```

calculateStampExpressions

Description:

Method	Return values	Description
calculateStampExpressions(long imgToStampWidth, long imgToStampHeight, long posX, long posY)	**StampExpressions**	Returns the calculated stamp expressions for X and Y.

Example:

```
using System; using System.Collections.Generic;
using System.Text;
using com.openkm.sdk4csharp;
using com.openkm.sdk4csharp.bean;

namespace OKMRest
{
   public class Program
   {
      static void Main(string[] args)
      {
          String host = "http://localhost:8080/openkm";
          String username = "okmAdmin";
          String password = "admin";
          OKMWebservice ws = OKMWebservicesFactory.newInstance(host);

          try
          {
              ws.login(user, password);
              // Parameters
              long imgToStampWidth = 100;
              long imgToStampHeight = 100;
              long posX = 10;
              long posY = 50;
              StampExpressions stampExpressions = ws.stamp.calculateStampExpressions(imgToStampWidth, imgTo
```

```
            System.Console.WriteLine("X = " + stampExpressions.exprX + ", Y = " + stampExpressions.exprY);
        }
        catch (Exception e)
        {
            System.Console.WriteLine(e.ToString());

        }
    }
  }
}
```

stampText

Description:

Method	Return values	Description
stampText(String uuid, long id)	**void**	Stamps text in a document.

Example:

```
using System; using System.Collections.Generic;
using System.Text;
using com.openkm.sdk4csharp;
using com.openkm.sdk4csharp.bean;

namespace OKMRest
{
   public class Program
   {
      static void Main(string[] args)
      {
          String host = "http://localhost:8080/openkm";
          String username = "okmAdmin";
          String password = "admin";
          OKMWebservice ws = OKMWebservicesFactory.newInstance(host);

          try
          {
              ws.login(user, password);
              long id = "1";
              ws.stamp.stampText("babe24df-c443-49a5-9453-39dfc9b27924", id);
          }
          catch (Exception e)
          {
              System.Console.WriteLine(e.ToString());

          }
      }
  }
}
```

stampImage

Description:

Method	Return values	Description

stampImage(String uuid, long id)	**void**	Stamps an image in a document.

Example:

```
using System; using System.Collections.Generic;
using System.Text;
using com.openkm.sdk4csharp;
using com.openkm.sdk4csharp.bean;

namespace OKMRest
{
   public class Program
   {
      static void Main(string[] args)
      {
          String host = "http://localhost:8080/openkm";
          String username = "okmAdmin";
          String password = "admin";
          OKMWebservice ws = OKMWebservicesFactory.newInstance(host);

          try
          {
              ws.login(user, password);
              long id = "3";
              ws.stamp.stampImage("babe24df-c443-49a5-9453-39dfc9b27924", id);
          }
          catch (Exception e)
          {
              System.Console.WriteLine(e.ToString());

          }
      }
  }
}
```

stampBarcode

Description:

Method	Return values	Description
stampBarcode(String uuid, long id)	**void**	Stamps a barcode in a document.

Example:

```
using System; using System.Collections.Generic;
using System.Text;
using com.openkm.sdk4csharp;
using com.openkm.sdk4csharp.bean;

namespace OKMRest
{
   public class Program
   {
      static void Main(string[] args)
      {
```

```
            String host = "http://localhost:8080/openkm";
            String username = "okmAdmin";
            String password = "admin";
            OKMWebservice ws = OKMWebservicesFactory.newInstance(host);

            try
            {
               ws.login(user, password);
               long id = 1;
               ws.stamp.stampBarcode("6330d2a0-529f-4c14-baa1-ce6a92004e01", id);
            }
            catch (Exception e)
            {
               System.Console.WriteLine(e.ToString());

            }
        }
    }
}
```

stampImageManually

Description:

Method	Return values	Description
stampImageCustom(String uuid, long id, String exprX, String exprY, String range, String personalStampUuid)	**void**	Stamps a document with a custom image.

The **id** is the ID of an image stamp which is created by the administrator.

The **exprX** is the expression to set the position in X coordinates.

The **exprY** is the expression to set the position in Y coordinates.

The **personalStampUuid** must be a valid document **UUID**. The document must be an image (jpg or png).

In Expr. X and Expr. Y input fields you can put more than a simple number. Currently, the following macros are defined:

- IMAGE_WIDTH
- IMAGE_HEIGHT
- PAGE_WIDTH
- PAGE_HEIGHT
- PAGE_CENTER
- PAGE_MIDDLE

So to center a stamp in the page you can use:

Expr. X	PAGE_CENTER

Expr. Y	PAGE_MIDDLE	

Example:

```
using System; using System.Collections.Generic;
using System.Text;
using com.openkm.sdk4csharp;
using com.openkm.sdk4csharp.bean;

namespace OKMRest
{
   public class Program
   {
      static void Main(string[] args)
      {
         String host = "http://localhost:8080/openkm";
         String username = "okmAdmin";
         String password = "admin";
         OKMWebservice ws = OKMWebservicesFactory.newInstance(host);

         try
         {
            ws.login(user, password);
            long stampId = "1";
            string exprX = "PAGE_CENTER - IMAGE_WIDTH / 2";
            string exprY = "PAGE_MIDDLE - IMAGE_HEIGHT / 2";
            ws.stamp.stampImageCustom("babe24df-c443-49a5-9453-39dfc9b27924", stampId, exprX, exprY, "", "92
         }
         catch (Exception e)
         {
            System.Console.WriteLine(e.ToString());

         }
      }
   }
}
```

stampTextCustom

Description:

Method	Return values	Description
stampTextCustom(String uuid, long id, String text, String exprX, String exprY, String range)	**void**	Stamp in a document with a custom text.

The **id** is the ID of a text stamp which is created by the administrator.

The **exprX** is the expression to set the position in X coordinates.

The **exprY** is the expression to set the position in Y coordinates.

In Expr. X and Expr. Y input fields you can put more than a simple number. Currently, the following macros are defined:

- IMAGE_WIDTH
- IMAGE_HEIGHT
- PAGE_WIDTH
- PAGE_HEIGHT
- PAGE_CENTER
- PAGE_MIDDLE

So to center a stamp in the page you can use:

Expr. X	PAGE_CENTER
Expr. Y	PAGE_MIDDLE

Example:

```
using System; using System.Collections.Generic;
using System.Text;
using com.openkm.sdk4csharp;
using com.openkm.sdk4csharp.bean;

namespace OKMRest
{
   public class Program
   {
      static void Main(string[] args)
      {
         String host = "http://localhost:8080/openkm";
         String username = "okmAdmin";
         String password = "admin";
         OKMWebservice ws = OKMWebservicesFactory.newInstance(host);

         try
         {
            ws.login(user, password);
            long stampId = "1";
            string text = "Any text";
            string exprX = "PAGE_CENTER";
            string exprY = "PAGE_MIDDLE";
            ws.stamp.stampTextCustom("babe24df-c443-49a5-9453-39dfc9b27924", stampId, text, exprX, exprY, "");
         }
         catch (Exception e)
         {
            System.Console.WriteLine(e.ToString());

         }
      }
   }
}
```

stampImageCustom

Description:

Method	Return values	Description
stampImageCustom(String uuid, long id, String exprX, String exprY, String range, double ratio, FileStream fs)	**void**	Stamp in a document with a custom image.

The **id** is the ID of an image stamp which is created by the administrator.

The **exprX** is the expression to set the position in X coordinates.

The **exprY** is the expression to set the position in Y coordinates.

In Expr. X and Expr. Y input fields you can put more than a simple number. Currently, the following macros are defined:

- IMAGE_WIDTH
- IMAGE_HEIGHT
- PAGE_WIDTH
- PAGE_HEIGHT
- PAGE_CENTER
- PAGE_MIDDLE

So to center a stamp in the page you can use:

Expr. X	PAGE_CENTER
Expr. Y	PAGE_MIDDLE

Example:

```
using System; using System.Collections.Generic;
using System.Text;
using com.openkm.sdk4csharp;
using com.openkm.sdk4csharp.bean;

namespace OKMRest
{
   public class Program
   {
      static void Main(string[] args)
      {
         String host = "http://localhost:8080/openkm";
         String username = "okmAdmin";
         String password = "admin";
         OKMWebservice ws = OKMWebservicesFactory.newInstance(host);
```

```
        try
        {
            ws.login(user, password);
            long stampId = "1";
            string exprX = "PAGE_CENTER - IMAGE_WIDTH / 2";
            string exprY = "PAGE_MIDDLE - IMAGE_HEIGHT / 2";
            FileStream fsimg = new FileStream(@"C:\test.jpg", FileMode.Open, FileAccess.Read);
            ws.stamp.stampImageCustom("babe24df-c443-49a5-9453-39dfc9b27924", stampId, exprX, exprY, "", 0, fsi
            fsimg.Close();
        }
        catch (Exception e)
        {
            System.Console.WriteLine(e.ToString());
        }
    }
  }
}
```

calculateFlyImageDimensions

Description:

Method	Return values	Description
calculateFlyImageDimensions(String uuid, long imgToStampWidth, long imgToStampHeight, long floatingImageWidth, long floatingImageHeight, int pageNumber)	**StampImageSize**	Return the calculated image to stamp height and width size.

Example:

```
using System; using System.Collections.Generic;
using System.Text;
using com.openkm.sdk4csharp;
using com.openkm.sdk4csharp.bean;

namespace OKMRest
{
   public class Program
   {
      static void Main(string[] args)
      {
          String host = "http://localhost:8080/openkm";
          String username = "okmAdmin";
          String password = "admin";
          OKMWebservice ws = OKMWebservicesFactory.newInstance(host);

          try
          {
              ws.login(user, password);
              // Parameters
              long imgToStampWidth = 100;
              long imgToStampHeight = 100;
              long floatingImageWidth = 300;
              long floatingImageHeight = 300;
              int pageNumber = 2;
```

```
            StampImageSize stampImageSize = ws.stamp.calculateFlyImageDimensions("babe24df-c443-49a5-9453
                floatingImageWidth, floatingImageHeight, pageNumber);
            System.Console.WriteLine(stampImageSize);
        }
        catch (Exception e)
        {
            System.Console.WriteLine(e.ToString());

        }
    }
  }
}
```

getPersonalStamps

Description:

Method	Return values	Description
getPersonalStamps()	**List<Document>**	Returns a list of personal seals.

Returns a list of documents of type image (jpg or png) from /okm:templates/userId/stamps.

Example:

```
using System; using System.Collections.Generic;
using System.Text;
using com.openkm.sdk4csharp;
using com.openkm.sdk4csharp.bean;

namespace OKMRest
{
   public class Program
   {
      static void Main(string[] args)
      {
          String host = "http://localhost:8080/openkm";
          String username = "okmAdmin";
          String password = "admin";
          OKMWebservice ws = OKMWebservicesFactory.newInstance(host);

          try
          {
              ws.login(user, password);
              List<Document> docs = ws.stamp.getPersonalStamps();
              foreach (Document doc in docs)
              {
                  System.Console.WriteLine(doc.toString());
              }
          }
          catch (Exception e)
          {
              System.Console.WriteLine(e.ToString());

          }
```

```
    }
  }
}
```

getPersonalStampImage

Description:

Method	Return values	Description
getPersonalStampImage(String uuid, long id)	**StampPersonalImage**	Returns the processed personal seal.

When stamping a document with an image, the image can also have a text layer.

This method processes the image and returns an image with the text layer.

The **uuid** must be a **UUID** returned by the method getPersonalStamps.

Example:

```
using System; using System.Collections.Generic;
using System.Text;
using com.openkm.sdk4csharp;
using com.openkm.sdk4csharp.bean;

namespace OKMRest
{
   public class Program
   {
      static void Main(string[] args)
      {
          String host = "http://localhost:8080/openkm";
          String username = "okmAdmin";
          String password = "admin";
          OKMWebservice ws = OKMWebservicesFactory.newInstance(host);

          try
          {
              ws.login(user, password);
              long stampId = 1;
              StampPersonalImage stampPersonalImage = ws.stamp.getPersonalStampImage("928de61e-6ceb-4f94-b
              System.Console.WriteLine(stampPersonalImage.ToString());
          }
          catch (Exception e)
          {
              System.Console.WriteLine(e.ToString());

          }
      }
  }
}
```

Search samples

Basics

Most methods use QueryParams. Here are some tips about how to use them.

Variables	Type	Allow wildcards	R
domain	**long**	No.	Available values: • QueryParams.DOCUMENT • QueryParams.FOLDER • QueryParams.MAIL • QueryParams.RECORD By default, the value is set to QueryParams.DOCUMENT. For searching documents and folders, use the value: (QueryParams.DOCUMENT | QueryParams.FOLDER)
author	**String**	No.	The value must be a valid userId.
name	**String**	Yes.	
title	**String**	Yes.	
keywords	**List<String>**	Yes.	
categories	**List<String>**	No.	Values should be category UUIDs; do not use path values.
content		Yes.	

mimeType		No.	The value should be a valid and registered MIME type. Only applies to document nodes.
language		No.	The value should be a valid language. Only applies to document nodes.
folder		No.	When empty, the "/okm:root" node is used by default. The value should be a valid UUID; do not use a path value.
folderRecursive	**Boolean**	No.	It only makes sense to set this variable to true when the folder var
lastModifiedFrom	**Calendar**	No.	
lastModifiedTo	**Calendar**	No.	
mailSubject	**String**	Yes.	Only applies to mail nodes.

mailFrom	**String**	Yes.	Only applies to mail nodes.
mailTo		Yes.	Only applies to mail nodes.
notes		Yes.	

properties	**Dictionary<String, String>**	Yes, on almost all.	Wildcards cannot be applied to metadata field values like "date".
			
			The dictionary of the properties is composed of pairs:
			
			('metadata_field_name','metadata_field_value')
			
			For example:
			
			`Dictionary<String, String> properties = new Dictionary<S`
			`properties.Add("okp:consulting.name", "name value")`
			
			Filtering by a range of dates:
			
			`DateTime date = DateTime.Now;// today`
			`DateTime to = new DateTime(date.Year, date.Month, da`
			`DateTime from = to.AddDays(-3);// three days before`
			`Dictionary<String,String> properties = new Dictionary<S`
			`properties.Add("okp:consulting.date", ISO8601.formatBa`
			
			⚠ When filtering by a range of dates, you m will be ignored by OpenKM.
			
			To filter by a metadata field of type multiple like
			
			`<select label="Multiple" name="okp:consulting.multiple" t`
			`<option label="One" value="one"/>`
			`<option label="Two" value="two"/>`
			`<option label="Three" value="three" />`
			`</select>`
			
			You should do:

properties.Add("okp:consulting.multiple", "one;two");

Where "**one**" and "**two**" are valid values and the ch

The search operation is performed using only AND logic.

Wildcard examples:

Variable	Example	Description
name	**test*.html**	Any document that starts with the characters "test" and ends with the characters ".html"
name	**test?.html**	Any document that starts with the characters "test" followed by a single character and ends with the characters ".html"
name	**?test***	Any document where the first character doesn't matter but is followed by the characters "test".

Suggested code sample

First, you must create the webservice object:

```
OKMWebservices ws = OKMWebservicesFactory.newInstance(host);
```

Then you should log in using the "**login**" method. You can access the "**login**" method from the webservice object "**ws**" as shown below:

```
ws.login(user, password);
```

Once you are logged in with the webservices, the session is kept in the webservice object. Then you can use the other API methods.

At this point you can use all the search methods from the "**search**" class as shown below:

```
ws.search.find(qParams, null)
```

Methods

find

Description:

Method	Return values	Description
find(QueryParams queryParams, String propertiesPlugin)	**List<QueryResult>**	Returns a list of results filtered by the values of the queryParams parameter.

The parameter "propertiesPlugin" must be a canonical class name of the class which implements the NodeProperties interface.

Retrieving entire objects (Document, Folder, Record, Mail) from REST can take a lot of time - the marshalling and unmarshalling process - while you are only interested in using a few object variables. If that's your case, you can use NodeProperties classes to retrieve only the object variables that you really need.

Example:

```
using System;
using System.Collections.Generic;
using System.Linq;
using System.Text;
using com.openkm.sdk4csharp;
using com.openkm.sdk4csharp.bean;

namespace OKMRest
{
   public class Program
   {
      static void Main(string[] args)
      {
         String host = "http://localhost:8080/openkm";
         String username = "okmAdmin";
         String password = "admin";
         OKMWebservice ws = OKMWebservicesFactory.newInstance(host);

         try
         {
            ws.login(user, password);
            QueryParams qParams = new QueryParams();
            qParams.domain = QueryParams.DOCUMENT;
            qParams.name = "test*.html";
            foreach (QueryResult qr in ws.search.find(qParams, null))
            {
               System.Console.WriteLine(qr);
            }
         }
         catch (Exception e)
         {
            System.Console.WriteLine(e.ToString());
         }
      }
   }
}
```

find

Description:

Method	Return values	Description
find(QueryParams queryParams, String sortField, bool sortReverse, String propertiesPlugin)	**List<QueryResult>**	Returns a list of results filtered by the values of the queryParams parameter.

The parameter "propertiesPlugin" must be a canonical class name of the class which implements the NodeProperties interface.

Available **sortField** values:

```
SearchSortField.NAME
SearchSortField.AUTHOR
SearchSortField.LAST_MODIFIED
```

Retrieving entire objects (Document, Folder, Record, Mail) from REST can take a lot of time - the marshalling and unmarshalling process - while you are only interested in using a few object variables. If it's your case, you can use NodeProperties classes to retrieve only the object variables that you really need.

Example:

```
using System;
using System.Collections.Generic;
using System.Linq;
using System.Text;
using com.openkm.sdk4csharp;
using com.openkm.sdk4csharp.bean;

namespace OKMRest
{
   public class Program
   {
      static void Main(string[] args)
      {
         String host = "http://localhost:8080/openkm";
         String username = "okmAdmin";
         String password = "admin";
         OKMWebservice ws = OKMWebservicesFactory.newInstance(host);

         try
         {
            ws.login(user, password);
            QueryParams _params = new QueryParams();
            _params.domain = QueryParams.DOCUMENT + QueryParams.FOLDER;
            _params.name = "test*";
            foreach (QueryResult qr in ws.search.find(_params, SearchSortField.LAST_MODIFIED, true, null))
```

```
            {
                Console.WriteLine(qr.toString());
            }
        }
        catch (Exception e)
        {
            System.Console.WriteLine(e.ToString());
        }
    }
  }
}
```

findSimpleNodeBasePaginated

Description:

Method	Return values	Description
findSimpleNodeBasePaginated(QueryParams queryParams, int offset, int limit)	**SimpleNodeBaseResultSet**	Returns a list of SimpleNodeBase paginated results filtered by the values of the queryParams parameter.

Because the results of the findSimpleNodeBasePaginated method are objects of type SimpleNodeBase, this method is about 60-70% faster than the other search methods (these metrics should be taken as approximate values because they depend on hardware and the specific scenario where the application is running). The other search methods return objects of type Node, which include full node data; the SimpleNodeBase object provides less data but in most cases should be enough. Especially when the limit is a higher value, you will appreciate the difference in performance.

The parameters "limit" and "offset" allow you to retrieve just a portion of the results of a query.

- The parameter "limit" is used to limit the number of results returned.
- The parameter "offset" skips that many results before returning results.

For example if your query has 1000 results, but you only want to return the first 10, you should use these values:

- limit=10
- offset=0

Now suppose you want to show the results from 11-20, you should use these values:

- limit=10
- offset=10

Example:

```
using System;
using System.Collections.Generic;
using System.Linq;
using System.Text;
using com.openkm.sdk4csharp;
using com.openkm.sdk4csharp.bean;
using com.openkm.sdk4csharp.impl;

namespace OKMRest
{
   public class Program
   {
      static void Main(string[] args)
      {
         String host = "http://localhost:8080/openkm";
         String username = "okmAdmin";
         String password = "admin";
         OKMWebservice ws = OKMWebservicesFactory.newInstance(host);

         try
         {
            ws.login(user, password);
            QueryParams qParams = new QueryParams();
            qParams.domain = QueryParams.DOCUMENT;
            qParams.name = "test*";
            SimpleNodeBaseResultSet snbrs = ws.search.findSimpleNodeBasePaginated(qp, 0, 10);
            System.Console.WriteLine("Total results:" + snbrs.total);

            foreach (SimpleNodeBase snb in snbrs.results)
            {
               System.Console.WriteLine(snb.toString());
            }
         }
         catch (Exception e)
         {
            System.Console.WriteLine(e.ToString());
         }
      }
   }
}
```

findSimpleNodeBasePaginated

Description:

Method	Return values	Description
findSimpleNodeBasePaginated(QueryParams queryParams, String sortField, boolean sortReverse, int offset, int limit)	**SimpleNodeBaseResultSet**	Returns a list of SimpleNodeBase paginated results filtered by the values of the queryParams parameter.

Because the results of the findSimpleNodeBasePaginated method are objects of type SimpleNodeBase, this method is about 60-70% faster than the other search methods (these metrics should be taken as approximate values because they depend on hardware and the specific scenario where the application is running). The other search methods return objects of type Node, which include full node data; the SimpleNodeBase object provides less data but in most cases should be enough. Especially when the limit is a higher value, you will appreciate the difference in performance.

The parameters "limit" and "offset" allow you to retrieve just a portion of the results of a query.

- The parameter "limit" is used to limit the number of results returned.
- The parameter "offset" skips that many results before returning results.

Available **sortField** values:

```
SearchSortField.NAME
SearchSortField.AUTHOR
SearchSortField.LAST_MODIFIED
```

For example if your query has 1000 results, but you only want to return the first 10, you should use these values:

- limit=10
- offset=0

Now suppose you want to show the results from 11-20, you should use these values:

- limit=10
- offset=10

Example:

```
using System;
using System.Collections.Generic;
using System.Linq;
using System.Text;
using com.openkm.sdk4csharp;
using com.openkm.sdk4csharp.bean;
using com.openkm.sdk4csharp.impl;

namespace OKMRest
{
   public class Program
   {
      static void Main(string[] args)
      {
         String host = "http://localhost:8080/openkm";
         String username = "okmAdmin";
```

```
            String password = "admin";
            OKMWebservice ws = OKMWebservicesFactory.newInstance(host);

            try
            {
               ws.login(user, password);
               QueryParams qParams = new QueryParams();
               qParams.domain = QueryParams.DOCUMENT;
               qParams.name = "test*";
               SimpleNodeBaseResultSet snbrs = ws.search.findSimpleNodeBasePaginated(params, SearchSortField.A
               System.Console.WriteLine("Total results:" + snbrs.total);

               foreach (SimpleNodeBase snb in snbrs.results)
               {
                  System.Console.WriteLine(snb.toString());
               }
            }
            catch (Exception e)
            {
               System.Console.WriteLine(e.ToString());
            }
         }
      }
   }
```

findSimpleNodeBasePaginated

Description:

Method	Return values	Description
findSimpleNodeBasePaginated(QueryParams queryParams, String sortField, bool sortReverse, int offset, int limit, String pluginName)	**SimpleNodeBaseResultSet**	Returns a list of SimpleNodeBase paginated results filtered by the values of the queryParams parameter.

Because the results of the findSimpleNodeBasePaginated method are objects of type SimpleNodeBase, this method is about 60-70% faster than the other search methods (these metrics should be taken as approximate values because they depend on hardware and the specific scenario where the application is running). The other search methods return objects of type Node, which include full node data; the SimpleNodeBase object provides less data but in most cases should be enough. Especially when the limit is a higher value, you will appreciate the difference in performance.

The parameter "limit" and "offset" allows you to retrieve just a portion of the results of a query.

- The parameter "limit" is used to limit the number of results returned.
- The parameter "offset" says to skip that many results before the beginning to return results.

Available **sortField** values:

SearchSortField.NAME
SearchSortField.AUTHOR
SearchSortField.LAST_MODIFIED

For example, if your query has 1000 results, but you only want to return the first 10, you should use these values:

- limit=10
- offset=0

Now suppose you want to show the results from 11-20, you should use these values:

- limit=10
- offset=10

Example:

```
using System;
using System.Collections.Generic;
using System.Linq;
using System.Text;
using com.openkm.sdk4csharp;
using com.openkm.sdk4csharp.bean;
using com.openkm.sdk4csharp.impl;

namespace OKMRest
{
   public class Program
   {
      static void Main(string[] args)
      {
         String host = "http://localhost:8080/openkm";
         String username = "okmAdmin";
         String password = "admin";
         OKMWebservice ws = OKMWebservicesFactory.newInstance(host);

         try
         {
            ws.login(user, password);
            QueryParams qp = new QueryParams();
            qp.name = FOLDER_NAME1 + "*";
            qp.domain = QueryParams.FOLDER;
            SimpleNodeBaseResultSet result = ws.search.findSimpleNodeBasePaginated (qp, SearchSortField.AUTH
            Console.WriteLine("Total: " + result.total);
            foreach (SimpleNodeBase nodeBase in result.results)
            {
               if (nodeBase != null)
               {
                  Console.WriteLine(nodeBase.toString());
               }
            }
         }
         catch (Exception e)
         {
            System.Console.WriteLine(e.ToString());
```

```
        }
      }
   }
}
```

getCategorizedDocuments

Description:

Method	Return values	Description
getCategorizedDocuments(String categoryId)	**List<Document>**	Retrieves a list of all documents related to a category.
The values of the categoryId parameter should be a category folder UUID or a path.		

Example:

```
using System;
using System.Collections.Generic;
using System.Linq;
using System.Text;
using com.openkm.sdk4csharp;
using com.openkm.sdk4csharp.bean;

namespace OKMRest
{
   public class Program
   {
      static void Main(string[] args)
      {
         String host = "http://localhost:8180/openkm";
         String username = "okmAdmin";
         String password = "admin";
         OKMWebservice ws = OKMWebservicesFactory.newInstance(host);

         try
         {
            ws.login(user, password);
            foreach (Document doc in ws.search.getCategorizedDocuments("50b7a5b9-89d2-430e-bbc9-6a6e01662a
            {
               System.Console.WriteLine(doc);
            }
         }
         catch (Exception e)
         {
            System.Console.WriteLine(e.ToString());
         }
      }
   }
}
```

saveSearch

Description:

Method	Return values	Description
saveSearch(QueryParams params)	**Long**	Saves search parameters.
The queryName variable of the params parameter must be initialized.		

Example:

```
using System;
using System.Collections.Generic;
using System.Linq;
using System.Text;
using com.openkm.sdk4csharp;
using com.openkm.sdk4csharp.bean;

namespace OKMRest
{
   public class Program
   {
      static void Main(string[] args)
      {
         String host = "http://localhost:8080/openkm";
         String username = "okmAdmin";
         String password = "admin";
         OKMWebservice ws = OKMWebservicesFactory.newInstance(host);

         try
         {
            ws.login(user, password);
            QueryParams qParams = new QueryParams();
            qParams.domain = QueryParams.DOCUMENT;
            qParams.name = "test*.html";

            foreach (QueryResult qr in ws.search.find(qParams))
            {
               System.Console.WriteLine(qr);
            }

            // Save the search to be used later
            qParams.queryName = "sample search";
            ws.search.saveSearch(qParams);
         }
         catch (Exception e)
         {
            System.Console.WriteLine(e.ToString());
         }
      }
   }
}
```

updateSearch

Description:

Method	Return values	Description
updateSearch(QueryParams params)	**void**	Updates previously saved search parameters.

It can only be updated if it was created by the same user who is executing the method.

Example:

```
using System;
using System.Collections.Generic;
using System.Linq;
using System.Text;
using com.openkm.sdk4csharp;
using com.openkm.sdk4csharp.bean;

namespace OKMRest
{
   public class Program
   {
      static void Main(string[] args)
      {
         String host = "http://localhost:8080/openkm";
         String username = "okmAdmin";
         String password = "admin";
         OKMWebservice ws = OKMWebservicesFactory.newInstance(host);

         try
         {
            ws.login(user, password);
            foreach (QueryParams qParams in ws.search.getAllSearchs())
            {
               if (qParams.queryName.Equals("sample search"))
               {
                  // Change some value.
                  qParams.name = "admin*.html";
                  ws.search.updateSearch(qParams);
               }
            }
         }
         catch (Exception e)
         {
            System.Console.WriteLine(e.ToString());
         }
      }
   }
}
```

getSearch

Description:

Method	Return values	Description
getSearch(int qpId)	**QueryParams**	Gets saved search parameters.

It can only be retrieved if it was created by the same user who is executing the method.

Example:

```
using System;
using System.Collections.Generic;
using System.Linq;
using System.Text;
using com.openkm.sdk4csharp;
using com.openkm.sdk4csharp.bean;

namespace OKMRest
{
   public class Program
   {
      static void Main(string[] args)
      {
         String host = "http://localhost:8080/openkm";
         String username = "okmAdmin";
         String password = "admin";
         OKMWebservice ws = OKMWebservicesFactory.newInstance(host);

         try
         {
            ws.login(user, password);
            int qpId = 1; // Some valid search id
            QueryParams qParams = ws.search.getSearch(qpId);
            System.Console.WriteLine(qParams);
         }
         catch (Exception e)
         {
            System.Console.WriteLine(e.ToString());
         }
      }
   }
}
```

getAllSearches

Description:

Method	Return values	Description
getAllSearches()	**List<QueryParams>**	Retrieves a list of all saved search parameters.

It can only retrieve the list of saved searches created by the same user who is executing the method.

Example:

```
using System;
using System.Collections.Generic;
using System.Linq;
using System.Text;
using com.openkm.sdk4csharp;
```

```
using com.openkm.sdk4csharp.bean;

namespace OKMRest
{
   public class Program
   {
      static void Main(string[] args)
      {
         String host = "http://localhost:8080/openkm";
         String username = "okmAdmin";
         String password = "admin";
         OKMWebservice ws = OKMWebservicesFactory.newInstance(host);

         try
         {
            ws.login(user, password);
            foreach (QueryParams qParams in ws.search.getAllSearches())
            {
               System.Console.WriteLine(qParams.queryName);
            }
         }
         catch (Exception e)
         {
            System.Console.WriteLine(e.ToString());
         }
      }
   }
}
```

deleteSearch

Description:

Method	Return values	Description
deleteSearch(int qpId)	**void**	Deletes saved search parameters.

It can only be deleted if it was created by the same user who is executing the method.

Example:

```
using System;
using System.Collections.Generic;
using System.Linq;
using System.Text;
using com.openkm.sdk4csharp;

namespace OKMRest
{
   public class Program
   {
      static void Main(string[] args)
      {
         String host = "http://localhost:8080/openkm";
         String username = "okmAdmin";
         String password = "admin";
```

```
            OKMWebservice ws = OKMWebservicesFactory.newInstance(host);

            try
            {
                ws.login(user, password);
                int qpId = 1; // Some valid search id
                ws.search.deleteSearch(qpId);
            }
            catch (Exception e)
            {
                System.Console.WriteLine(e.ToString());
            }
        }
    }
}
```

getSearchConfig

Description:

Method	Return values	Description
getSearchConfig(String pluginName)	**NodeSearchConfig**	Returns a NodeSearchConfig object.

Example:

```
using System;
using System.Collections.Generic;
using System.Linq;
using System.Text;
using com.openkm.sdk4csharp;

namespace OKMRest
{
    public class Program
    {
        static void Main(string[] args)
        {
            String host = "http://localhost:8080/openkm";
            String username = "okmAdmin";
            String password = "admin";
            OKMWebservice ws = OKMWebservicesFactory.newInstance(host);

            try
            {
                ws.login(user, password);
                NodeSearchConfig nodeSearchConfig = ws.search.getSearchConfig("com.openkm.plugin.search.TestNo
                Console.WriteLine(nodeSearchConfig.toString());
            }
            catch (Exception e)
            {
                System.Console.WriteLine(e.ToString());
            }
        }
    }
}
```

getSearchPlugins

Description:

Method	Return values	Description
getSearchPlugins()	**SearchPluginList**	Returns a SearchPluginList object.

Example:

```
using System;
using System.Collections.Generic;
using System.Linq;
using System.Text;
using com.openkm.sdk4csharp;

namespace OKMRest
{
   public class Program
   {
      static void Main(string[] args)
      {
         String host = "http://localhost:8080/openkm";
         String username = "okmAdmin";
         String password = "admin";
         OKMWebservice ws = OKMWebservicesFactory.newInstance(host);

         try
         {
            ws.login(user, password);
            SearchPluginList pluginList = ws.search.getSearchPlugins();
            foreach (SearchPlugin searchPlugin in pluginList.searchPlugins)
            {
               Console.WriteLine(searchPlugin.toString());
            }
         }
         catch (Exception e)
         {
            System.Console.WriteLine(e.ToString());
         }
      }
   }
}
```

findSimpleNodeBaseByQueryPaginated

Description:

Method	Return values	Description
findSimpleNodeBaseByQueryPaginated(String query, int offset, int limit)	**SimpleNodeBaseResultSet**	Returns a list of paginated results filtered by the values of the query parameter.

The **syntax** to use in the statement parameter is the pair **'field:value'**. For example:

- "name:grial" filters the name field by the word "grial".

More information about Lucene syntax at Lucene query syntax.

The parameter "limit" and "offset" allows you to retrieve just a portion of the results of a query.

- The parameter "limit" is used to limit the number of results returned.
- The parameter "offset" says to skip that many results before the beginning to return results.

For example if your query has 1000 results, but you only want to return the first 10, you should use these values:

- limit=10
- offset=0

Now suppose you want to show the results from 11-20, you should use these values:

- limit=10
- offset=10

Example:

```
using System;
using System.Collections.Generic;
using System.Linq;
using System.Text;
using com.openkm.sdk4csharp;
using com.openkm.sdk4csharp.bean;

namespace OKMRest
{
   public class Program
   {
      static void Main(string[] args)
      {
         String host = "http://localhost:8080/openkm";
         String username = "okmAdmin";
         String password = "admin";
         OKMWebservice ws = OKMWebservicesFactory.newInstance(host);

         try
         {
            ws.login(user, password);
            SimpleNodeBaseResultSet snbr = ws.search.findSimpleNodeBaseByQueryPaginated("text:grial AND nar

            foreach (SimpleNodeBase nodeBase in snbr.results)
            {
               if(nodeBase != null)
               {
                  System.Console.WriteLine(nodeBase.toString());
               }
            }
```

```
            }
            catch (Exception e)
            {
               System.Console.WriteLine(e.ToString());
            }
         }
      }
   }
```

findSimpleNodeBaseByQueryPaginated

Description:

Method	Return values	Description
findSimpleNodeBaseByQueryPaginated(String query, String sortField, bool sortReverse, int offset, int limit)	**SimpleNodeBaseResultSet**	Returns a list of paginated results filtered by the values of the query parameter.

The **syntax** to use in the statement parameter is the pair **'field:value'**. For example:

- "name:grial" is filtering field name by word grial.

More information about lucene sintaxis at Lucene query syntax.

Available sortField values:

```
SearchSortField.NAME
SearchSortField.AUTHOR
SearchSortField.LAST_MODIFIED
```

The parameter "limit" and "offset" allows you to retrieve just a portion of the results of a query.

- The parameter "limit" is used to limit the number of results returned.
- The parameter "offset" says to skip that many results before the beginning to return results.

For example if your query has 1000 results, but you only want to return the first 10, you should use these values:

- limit=10
- offset=0

Now suppose you want to show the results from 11-20, you should use these values:

- limit=10
- offset=10

Example:

```
using System;
using System.Collections.Generic;
using System.Linq;
using System.Text;
using com.openkm.sdk4csharp;
using com.openkm.sdk4csharp.bean;

namespace OKMRest
{
   public class Program
   {
      static void Main(string[] args)
      {
         String host = "http://localhost:8080/openkm";
         String username = "okmAdmin";
         String password = "admin";
         OKMWebservice ws = OKMWebservicesFactory.newInstance(host);

         try
         {
            ws.login(user, password);
            SimpleNodeBaseResultSet snbr= ws.search.findSimpleNodeBaseByQueryPaginated("text:grial AND nan

            foreach (SimpleNodeBase nodeBase in snbr.results)
            {
               if(nodeBase != null)
               {
                  System.Console.WriteLine(nodeBase.toString());
               }
            }
         }
         catch (Exception e)
         {
            System.Console.WriteLine(e.ToString());
         }
      }
   }
}
```

findByQuery

Description:

Method	Return values	Description
findByQuery(String query, String propertiesPlugin)	**List<QueryResult>**	Returns a list of results filtered by the values of the queryParams parameter.

The parameter "propertiesPlugin" must be a canonical class name of the class which implements

the NodeProperties interface.

Retrieving entire Objects (Document, Folder, Record, Mail) from REST can take a lot of time - marshaling and unmarshalling process - while you are only interesting on using only a few Objects variables. If it's your case you can use NodeProperties classes for retrieving the Object variables what you really need.

The **syntax** to use in the statement parameter is the pair **'field:value'**. For example:

- "name:grial" is filtering field name by word grial.

More information about lucene sintaxis at Lucene query syntax.

Example:

```
using System;
using System.Collections.Generic;
using System.Linq;
using System.Text;
using com.openkm.sdk4csharp;
using com.openkm.sdk4csharp.bean;

namespace OKMRest
{
   public class Program
   {
      static void Main(string[] args)
      {
         String host = "http://localhost:8080/openkm";
         String username = "okmAdmin";
         String password = "admin";
         OKMWebservice ws = OKMWebservicesFactory.newInstance(host);

         try
         {
            ws.login(user, password);
            foreach (QueryResult qr in ws.search.findByQuery("keyword:test AND name:t*.pdf", null))
            {
               System.Console.WriteLine(qr);
            }
         }
         catch (Exception e)
         {
            System.Console.WriteLine(e.ToString());
         }
      }
   }
}
```

findByQuery

Description:

Method	Return values	Description
findByQuery(String query, String sortField, bool		Returns a list of results

sortReverse, String propertiesPlugin)	**List<QueryResult>**	filtered by the query parameter.

The **syntax** to use in the statement parameter is the pair **'field:value'**. For example:

- "name:grial" filters the name field by the word "grial".

More information about Lucene syntax is available at Lucene query syntax.

Available **sortField** values:

```
SearchSortField.NAME
SearchSortField.AUTHOR
SearchSortField.LAST_MODIFIED
```

The parameter "propertiesPlugin" must be the canonical class name of the class which implements the NodeProperties interface.

Example:

```
using System;
using System.Collections.Generic;
using System.Linq;
using System.Text;
using com.openkm.sdk4csharp;
using com.openkm.sdk4csharp.bean;

namespace OKMRest
{
   public class Program
   {
      static void Main(string[] args)
      {
         String host = "http://localhost:8080/openkm";
         String username = "okmAdmin";
         String password = "admin";
         OKMWebservice ws = OKMWebservicesFactory.newInstance(host);

         try
         {
            ws.login(user, password);
            foreach (QueryResult qr in ws.search.findByQuery("keyword: test", SearchSortField.NAME, true, null))
            {
               System.Console.WriteLine(qr);
            }
         }
         catch (Exception e)
         {
            System.Console.WriteLine(e.ToString());
         }
      }
   }
}
```

findAllDefaultByNodeClass

Description:

Method	Return values	Description
findAllDefaultByNodeClass(long ncId)	**List<QueryParams>**	Retrieves a list of saved searches for a NodeClass.

Example:

```
using System;
using System.Collections.Generic;
using System.Linq;
using System.Text;
using com.openkm.sdk4csharp;
using com.openkm.sdk4csharp.bean;

namespace OKMRest
{
   public class Program
   {
      static void Main(string[] args)
      {
         String host = "http://localhost:8080/openkm";
         String username = "okmAdmin";
         String password = "admin";
         OKMWebservice ws = OKMWebservicesFactory.newInstance(host);

         try
         {
            ws.login(user, password);
            long ncId = 1;
            List<QueryParams> queryParams = ws.search.findAllDefaultByNodeClass(ncId);
            foreach (QueryParams qParams in queryParams)
            {
               System.Console.WriteLine(qParams.queryName);
            }
         }
         catch (Exception e)
         {
            System.Console.WriteLine(e.ToString());
         }
      }
   }
}
```

findWithMetadata

Description:

Method	Return values	Description
findWithMetadata(QueryParams _params, String propertiesPlugin, List<String> groups)	**List<QueryResult>**	Returns a list of results with metadata values filtered by the queryParams

		parameter.

- The parameter "propertiesPlugin" must be the canonical class name of the class which implements the NodeProperties interface.
- The parameter "groups" must be valid metadata group names.

Retrieving entire objects (Document, Folder, Record, Mail) from REST can take a lot of time — the marshalling and unmarshalling process — while you are only interested in using a few object variables. If that's your case, you can use NodeProperties classes to retrieve the object variables that you really need.

Example:

```
using System;
using System.Collections.Generic;
using System.Linq;
using System.Text;
using com.openkm.sdk4csharp;
using com.openkm.sdk4csharp.bean;

namespace OKMRest
{
   public class Program
   {
      static void Main(string[] args)
      {
         String host = "http://localhost:8080/openkm";
         String username = "okmAdmin";
         String password = "admin";
         OKMWebservice ws = OKMWebservicesFactory.newInstance(host);

         try
         {
            ws.login(user, password);
            // QueryParams
            QueryParams qp = new QueryParams();
            qp.folderRecursive = true;
            qp.domain = QueryParams.DOCUMENT | QueryParams.FOLDER | QueryParams.RECORD | QueryPara
            qp.name = "test*";

            // Properties
            Dictionary<string, string> properties = new Dictionary<string, string>();
            properties.Add("okp:consulting.name", "test");
            qp.properties = properties;

            // Groups
            List<string> groups = new List<string>();
            groups.Add("okg:consulting");

            List<QueryResult> queryResults = ws.search.findWithMetadata(qp, null, groups);
            foreach (QueryResult qResult in queryResults)
            {
               System.Console.WriteLine(qResult.toString());
            }
         }
         catch (Exception e)
```

```
        {
            System.Console.WriteLine(e.ToString());
        }
    }
  }
}
```

findWithMetadata

Description:

Method	Return values	Description
findWithMetadata(QueryParams queryParams, String sortField, bool sortReverse, String propertiesPlugin, List<String> groups)	**List<QueryResult>**	Returns a list of results with metadata values filtered by the queryParams parameter.

- The parameter "propertiesPlugin" must be the canonical class name of the class which implements the NodeProperties interface.
- The parameter "groups" must be valid metadata group names.

Available sortField values:

```
SearchSortField.NAME
SearchSortField.AUTHOR
SearchSortField.LAST_MODIFIED
```

Retrieving entire objects (Document, Folder, Record, Mail) from REST can take a lot of time — the marshalling and unmarshalling process — while you are only interested in using a few object variables. If that's your case, you can use NodeProperties classes to retrieve the object variables that you really need.

Example:

```
using System;
using System.Collections.Generic;
using System.Linq;
using System.Text;
using com.openkm.sdk4csharp;
using com.openkm.sdk4csharp.bean;

namespace OKMRest
{
   public class Program
   {
```

```
        static void Main(string[] args)
        {
            String host = "http://localhost:8080/openkm";
            String username = "okmAdmin";
            String password = "admin";
            OKMWebservice ws = OKMWebservicesFactory.newInstance(host);

            try
            {
                ws.login(user, password);
                // QueryParams
                QueryParams qp = new QueryParams();
                qp.folderRecursive = true;
                qp.domain = QueryParams.DOCUMENT | QueryParams.FOLDER | QueryParams.RECORD | QueryPara
                qp.name = "test*";

                // Properties
                Dictionary<string, string> properties = new Dictionary<string, string>();
                properties.Add("okp:consulting.name", "test");
                qp.properties = properties;

                // Groups
                List<string> groups = new List<string>();
                groups.Add("okg:consulting");

                List<QueryResult> queryResults = ws.search.findWithMetadata(qp, SearchSortField.NAME, true, null, gro
                foreach (QueryResult qr in queryResults)
                {
                    Console.WriteLine(qr.toString());
                }
            }
            catch (Exception e)
            {
                System.Console.WriteLine(e.ToString());
            }
        }
    }
}
```

findWithMetadataPaginated

Description:

Method	Return values	Description
findWithMetadataPaginated(QueryParams queryParams, int offset, int limit, String propertiesPlugin, List<String> groups)	**ResultSet**	Returns a list of paginated results with metadata values filtered by the queryParams parameter.

The parameters "limit" and "offset" allow you to retrieve just a portion of the results of a query.

- The parameter "limit" is used to limit the number of results returned.
- The parameter "offset" specifies how many results to skip before starting to return results.
- The parameter "propertiesPlugin" must be the canonical class name of the class which implements

the NodeProperties interface.

- The parameter "groups" must be valid metadata group names.

For example, if your query has 1000 results, but you only want to return the first 10, you should use these values:

- limit=10
- offset=0

Now suppose you want to show the results from 11 to 20, you should use these values:

- limit=10
- offset=10

Retrieving entire objects (Document, Folder, Record, Mail) from REST can take a lot of time — the marshalling and unmarshalling process — while you are only interested in using a few object variables. If that's your case, you can use NodeProperties classes to retrieve the object variables that you really need.

Example:

```
using System;
using System.Collections.Generic;
using System.Linq;
using System.Text;
using com.openkm.sdk4csharp;
using com.openkm.sdk4csharp.bean;

namespace OKMRest
{
   public class Program
   {
      static void Main(string[] args)
      {
         String host = "http://localhost:8080/openkm";
         String username = "okmAdmin";
         String password = "admin";
         OKMWebservice ws = OKMWebservicesFactory.newInstance(host);

         try
         {
            ws.login(user, password);
            // QueryParams
            QueryParams qp = new QueryParams();
            qp.domain = QueryParams.DOCUMENT | QueryParams.FOLDER | QueryParams.RECORD | QueryPara
            qp.name = "test*";

            // Properties
            Dictionary<string, string> properties = new Dictionary<string, string>();
            properties.Add("okp:consulting.name", "test");
            qp.properties = properties;

            // Groups
            List<string> groups = new List<string>();
            groups.Add("okg:consulting");
```

```
            ResultSet resulSet = ws.search.findWithMetadataPaginated(qp, 0, 10, null, groups);
            System.Console.WriteLine("Total results: " + rs.total.ToString());
        }
        catch (Exception e)
        {
            System.Console.WriteLine(e.ToString());
        }
    }
  }
}
```

findWithMetadataPaginated

Description:

Method	Return values	Description
findWithMetadataPaginated(QueryParams queryParams, String sortField, bool sortReverse, int offset, int limit, String propertiesPlugin, List<String> groups)	**ResultSet**	Returns a list of paginated results with metadata values filtered by the queryParams parameter.

The parameters "limit" and "offset" allow you to retrieve just a portion of the results of a query.

- The parameter "limit" is used to limit the number of results returned.
- The parameter "offset" says to skip that many results before the beginning to return results.

The parameter "propertiesPlugin" must be the canonical class name of the class which implements the NodeProperties interface.

The parameter "groups" must be valid metadata group names.

Available **sortField** values:

```
SearchSortField.NAME
SearchSortField.AUTHOR
SearchSortField.LAST_MODIFIED
```

For example, if your query has 1000 results, but you only want to return the first 10, you should use these values:

- limit=10
- offset=0

Now suppose you want to show the results from 11 to 20, you should use these values:

- limit=10
- offset=10

Retrieving entire objects (Document, Folder, Record, Mail) from REST can take a lot of time — the marshalling and unmarshalling process — while you are only interested in using a few object variables. If that's your case, you can use NodeProperties classes to retrieve the object variables that you really need.

Example:

```
using System;
using System.Collections.Generic;
using System.Linq;
using System.Text;
using com.openkm.sdk4csharp;
using com.openkm.sdk4csharp.bean;

namespace OKMRest
{
   public class Program
   {
      static void Main(string[] args)
      {
         String host = "http://localhost:8080/openkm";
         String username = "okmAdmin";
         String password = "admin";
         OKMWebservice ws = OKMWebservicesFactory.newInstance(host);

         try
         {
            ws.login(user, password);
            // QueryParams
            QueryParams qp = new QueryParams();
            qp.domain = QueryParams.DOCUMENT | QueryParams.FOLDER | QueryParams.RECORD | QueryPara
            qp.name = "test*";

            // Properties
            Dictionary<string, string> properties = new Dictionary<string, string>();
            properties.Add("okp:consulting.name", "test");
            qp.properties = properties;

            // Groups
            List<string> groups = new List<string>();
            groups.Add("okg:consulting");

            ResultSet rs = ws.search.findWithMetadataPaginated(qp, SearchSortField.AUTHOR, true, 0, 10, null, grou
            Console.WriteLine("Total results: " + rs.total.ToString());
            foreach (QueryResult qr in rs.results)
            {
               Console.WriteLine(qr.toString());
            }
         }
         catch (Exception e)
         {
            System.Console.WriteLine(e.ToString());
         }
      }
   }
}
```

getMimeTypes

Description:

Method	Return values	Description
getMimeTypes()	**List<MimeType>**	Retrieves a list of MIME types.

Only the list of MIME types that may be used in the search will be retrieved.

Example:

```
using System;
using System.Collections.Generic;
using System.Linq;
using System.Text;
using com.openkm.sdk4csharp;
using com.openkm.sdk4csharp.bean;

namespace OKMRest
{
   public class Program
   {
      static void Main(string[] args)
      {
         String host = "http://localhost:8080/openkm";
         String username = "okmAdmin";
         String password = "admin";
         OKMWebservice ws = OKMWebservicesFactory.newInstance(host);

         try
         {
            ws.login(user, password);
            foreach (MimeType mimeType in ws.search.getMimeTypes())
            {
               System.Console.WriteLine(mimeType.toString());
            }
         }
         catch (Exception e)
         {
            System.Console.WriteLine(e.ToString());
         }
      }
   }
}
```

csvExport

Description:

Method	Return values	Description

csvExport(String lang, QueryParams queryParams, List<String> propertyGroups, bool compact)	**InputStream**	Export as a csv a list of results filtered by the values of the queryParams parameter.

The parameter **lang** must be ISO 639-1 compliant.

More information at: https://en.wikipedia.org/wiki/List_of_ISO_639-1_codes.

Example:

```
using System;
using System.Collections.Generic;
using System.Linq;
using System.Text;
using com.openkm.sdk4csharp;
using com.openkm.sdk4csharp.bean;

namespace OKMRest
{
   public class Program
   {
      static void Main(string[] args)
      {
         String host = "http://localhost:8080/openkm";
         String username = "okmAdmin";
         String password = "admin";
         OKMWebservice ws = OKMWebservicesFactory.newInstance(host);

         try
         {
            ws.login(user, password);
            QueryParams _params = new QueryParams();
            _params.domain = QueryParams.DOCUMENT + QueryParams.FOLDER;
            _params.name = "test*";

            List <string > propertyGroups = new List<string>();
            propertyGroups.Add("okg:consulting");
            propertyGroups.Add("okg:technology");

            Stream stream = ws.search.csvExport("es-ES", _params, propertyGroups, false);
            FileStream destFile = new FileStream("C:\\Testing\\export.csv", FileMode.OpenOrCreate);
            stream.CopyTo(destFile);
            destFile.Dispose();
            stream.Dispose();
         }
         catch (Exception e)
         {
            System.Console.WriteLine(e.ToString());
         }
      }
   }
}
```

Shard samples

Basics

Example of UUID:

- Using UUID -> "**f123a950-0329-4d62-8328-0ff500fd42db**";

Suggested code sample

First, you must create the webservice object:

```
OKMWebservices ws = OKMWebservicesFactory.newInstance(host);
```

Then you should log in using the method "**login**". You can access the "**login**" method from the webservice object "**ws**" as shown below:

```
ws.login(user, password);
```

Once you are logged in to the web service, the session is kept in the web service object. Then you can use the other API methods.

At this point you can use all the Shard methods from the " **shard**" class as shown below:

```
ws.shard.getShards()
```

Methods

getShards

Description:

Method	Return values	Description
getShards()	**List<Shard>**	Returns a list of all shards.

Example:

```
using System; using System.Collections.Generic;
using System.Text;
using com.openkm.sdk4csharp;
using com.openkm.sdk4csharp.bean;
```

```
namespace OKMRest
{
   public class Program
   {
      static void Main(string[] args)
      {
          String host = "http://localhost:8080/openkm";
          String username = "okmAdmin";
          String password = "admin";
          OKMWebservice ws = OKMWebservicesFactory.newInstance(host);

          try
          {
              ws.login(user, password);
              foreach(bean.Shard shard in ws.shard.getShards())
              {
                  Console.WriteLine(shard.ToString());
              }
          }
          catch (Exception e)
          {
              System.Console.WriteLine(e.ToString());

          }
      }
   }
}
```

setCurrentShard

Description:

Method	Return values	Description
setCurrentShard(long shardId)	**void**	Changes the current shard.

Example:

```
using System; using System.Collections.Generic;
using System.Text;
using com.openkm.sdk4csharp;
using com.openkm.sdk4csharp.bean;

namespace OKMRest
{
   public class Program
   {
      static void Main(string[] args)
      {
          String host = "http://localhost:8080/openkm";
          String username = "okmAdmin";
          String password = "admin";
          OKMWebservice ws = OKMWebservicesFactory.newInstance(host);

          try
          {
              ws.login(user, password);
              long shardId = 1;
              ws.shard.setCurrentShard(shardId);
          }
```

```
            catch (Exception e)
            {
                System.Console.WriteLine(e.ToString());

            }
        }
    }
}
```

changeShard

Description:

Method	Return values	Description
changeShard(String uuid, long shardId)	**void**	Changes the shardId of the UUID.

Example:

```
using System; using System.Collections.Generic;
using System.Text;
using com.openkm.sdk4csharp;
using com.openkm.sdk4csharp.bean;

namespace OKMRest
{
    public class Program
    {
        static void Main(string[] args)
        {
            String host = "http://localhost:8080/openkm";
            String username = "okmAdmin";
            String password = "admin";
            OKMWebservice ws = OKMWebservicesFactory.newInstance(host);

            try
            {
                ws.login(user, password);
                long shardId = 1;
                ws.shard.changeShard("e2391b01-ce10-42c7-94a9-b0d6b394048e", shardId);
            }
            catch (Exception e)
            {
                System.Console.WriteLine(e.ToString());

            }
        }
    }
}
```

Task samples

Basics

Task fields description:

Field	Type	Description	Mandatory
Id	**long**	Internal task ID. It is automatically set by the application.	Not applicable.
Owner	**String**	It contains the OpenKM user ID. It is automatically set by the application.	Not applicable.
Subject	**String**	The topic of the task.	Yes.
Description	**String**	The description of the task.	No.
Start	**DateTime**	When the task might start.	Yes.
End	**DateTime**	When the task might end.	No.
Status	**TaskStatus**	The task status. You administer the list of status values.	Yes.
Project	**TaskProject**	The project related to the task. You administer the list of project values.	Yes.

Type	**TaskType**	The task type. You administer the list of task type values.	Yes.
Progress	**int**	The numeric progress status. The range of allowed values is from 0 to 100, where 100% indicates a completed task.	Yes.
RepeatGroup	**long**	When a task is repeated over time it is a member of a group. The group is identified by a unique repeat group ID.	No.
ReminderStartValue	**int**	How many days before the task starts the system might send an email notification to the user.	No.
ReminderEndValue	**int**	How many days before the task ends the system might send an email notification to the user.	No.
ReminderStartUnit	**String**	Reminder start units. Allowed values: • "m" for minutes. • "h" for hours. • "d" for days.	Mandatory when **ReminderStartValue** is greater than 0.
ReminderEndUnit	**String**	Reminder end units. Allowed values: • "m" for minutes.	Mandatory when **ReminderEndValue** is greater than 0.

		• "h" for hours. • "d" for days.	
Users	**List<String>**	Collection of users assigned to the task.	No. But at least one user or role should be assigned.
Roles	**List<String>**	Collection of assigned roles to the task.	No. But at least one user or role should be assigned.
Documents	**List<String>**	List of UUIDs of the related documents.	No.
Folders	**List<String>**	List of UUIDs of the related folders.	No.
Mails	**List<String>**	List of UUIDs of the related mails.	No.
Records	**List<String>**	List of UUIDs of the related records.	No.

On all methods, you'll see a parameter named "**token**". When accessing the application via SOAP, the login process returns a token, which is used to identify the user on all exposed methods. From the default application execution context you must use the "**null**" value, which indicates the application must use the "**user session**".

In special cases, you might be "**promoted as Administrator**" using the "**administrator token**".

```
String systemToken = DbSessionManager.getInstance().getSystemToken();
```

Suggested code sample

First, you must create the webservice object:

```
OKMWebservices ws = OKMWebservicesFactory.newInstance(host);
```

Then you should log in using the method "**login**". You can access the "**login**" method from the webservice object "**ws**" as shown below:

```
ws.login(user, password);
```

Once you are logged in with the webservices, the session is kept in the webservice object. Then you can use the other API methods.

At this point you can use all the Task methods from the "**task**" class as shown below:

```
ws.task.getAssigned(projectId, typeId, statusId, orderColumn, true, 0, 10, subject);
```

Methods

getAssigned

Description:

Method
getAssigned(long projectId, long typeId, long statusId, String orderColumn, bool orderAsc, int offset, int limit, DateTim

Filter parameters description:

- The projectId parameter must be a valid project id.
- The typeId parameter must be a valid type id.
- The statusId parameter must be a valid status id.
- The orderColumn parameter must be a valid parameter of the TaskManagerTask class. Commonly used par
- The orderAsc parameter orders ascending or descending.
- The from date to filter (this parameter is optional).
- The to date to filter (this parameter is optional).
- The subject parameter is the topic of the task.

The parameters "limit" and "offset" allow you to retrieve just a portion of the results of a query.

- The parameter "limit" is used to limit the number of results returned.
- The parameter "offset" specifies how many results to skip before returning results.

For example, if your query has 1000 results, but you only want to return the first 10, you should use these values:

- limit=10
- offset=0

Now suppose you want to show the results from 11-20, you should use these values:

- limit=10
- offset=10

The parameters "from" and "to" are optional and allow you to retrieve just a portion of the results of a query.

Example:

```
using System;
using System.Collections.Generic;
using System.Linq;
using System.Text;
using com.openkm.sdk4csharp;
using com.openkm.sdk4csharp.bean;

namespace OKMRest
{
   public class Program
   {
      static void Main(string[] args)
      {
         String host = "http://localhost:8180/openkm";
         String username = "okmAdmin";
         String password = "admin";
         OKMWebservice ws = OKMWebservicesFactory.newInstance(host);

         try
         {
            ws.login(user, password);
            long projectId = 1; // A valid project id
            long typeId = 1; // A valid type id
            long statusId = 1; // A valid status id
            String orderColumn = "subject"; // A valid TaskManagerTask class parameter name used in HQL query
            DateTime? from = new DateTime(DateTime.Now.Year, DateTime.Now.Month, 1);
            DateTime? to = new DateTime(DateTime.Now.Year, DateTime.Now.Month, 30);
            String subject = "test";

            TaskList assignedTasks = ws.task.getAssigned(projectId, typeId, statusId, orderColumn, true, 0, 10, from,
            foreach (Task task in assignedTasks.tasks)
            {
               System.Console.WriteLine(task.toString());
            }
         }
         catch (Exception e)
         {
            System.Console.WriteLine(e.ToString());
         }
      }
   }
}
```

getActive

Description:

Method	Return values	Description

getActive(long projectId, long typeId, long statusId, String orderColumn, bool orderAsc, int offset, int limit, DateTime? from, DateTime? to, String subject)	**TaskList**	Retrieve a list of active tasks assigned to a user, filtered and paginated.

Filter parameters description:

- The projectId parameter must be a valid project id.
- The typeId parameter must be a valid type id.
- The statusId parameter must be a valid status id.
- The orderColumn parameter must be a valid parameter of the TaskManagerTask class. Commonly used parameters are "subject", "start", "end", "progress", "owner". More information at javadoc documentation.
- The orderAsc parameter orders ascending or descending.
- The from date to filter (this parameter is optional).
- The to date to filter (this parameter is optional).
- The subject parameter is the topic of the task.

The parameters "limit" and "offset" allow you to retrieve just a portion of the results of a query.

- The parameter "limit" is used to limit the number of results returned.
- The parameter "offset" specifies how many results to skip before returning results.

For example, if your query has 1000 results, but you only want to return the first 10, you should use these values:

- limit=10
- offset=0

Now suppose you want to show the results from 11-20, you should use these values:

- limit=10
- offset=10

The parameters "from" and "to" are optional and allow you to retrieve just a portion of the results of a query.

Example:

```
using System;
using System.Collections.Generic;
using System.Linq;
using System.Text;
using com.openkm.sdk4csharp;
using com.openkm.sdk4csharp.bean;

namespace OKMRest
{
   public class Program
   {
      static void Main(string[] args)
      {
         String host = "http://localhost:8180/openkm";
         String username = "okmAdmin";
         String password = "admin";
         OKMWebservice ws = OKMWebservicesFactory.newInstance(host);

         try
         {
            ws.login(user, password);
            long projectId = 1; // A valid project id
            long typeId = 1; // A valid type id
            long statusId = 1; // A valid status id
            String orderColumn = "subject"; // A valid TaskManagerTask class parameter name used in HQL query
            DateTime? from = new DateTime(DateTime.Now.Year, DateTime.Now.Month, 1);
            DateTime? to = new DateTime(DateTime.Now.Year, DateTime.Now.Month, 30);
            String subject = "test";

            TaskList activeTasks = ws.task.getActive(projectId, typeId, statusId, "description", false, 0, 10, from, to, su
            foreach (Task task in activeTasks.tasks)
            {
               System.Console.WriteLine(task.toString());
            }
         }
         catch (Exception e)
         {
            System.Console.WriteLine(e.ToString());
         }
      }
   }
}
```

getFinished

Description:

Method	Return values	Description
getFinished(long projectId, long typeId, long statusId, String orderColumn, bool orderAsc, int offset, int limit, DateTime? from, DateTime? to, String subject)	**TaskList**	Retrieve a list of finished tasks assigned to a user, filtered and paginated.

Filter parameters description:

- The projectId parameter must be a valid project id.

- The typeId parameter must be a valid type id.
- The statusId parameter must be a valid status id.
- The orderColumn parameter must be a valid parameter of the TaskManagerTask class. Commonly used parameters are "subject", "start", "end", "progress", "owner". More information at javadoc documentation.
- The orderAsc parameter orders ascending or descending.
- The from date to filter (this parameter is optional).
- The to date to filter (this parameter is optional).
- The subject parameter is the topic of the task.

The parameters "limit" and "offset" allow you to retrieve just a portion of the results of a query.

- The parameter "limit" is used to limit the number of results returned.
- The parameter "offset" specifies how many results to skip before returning results.

For example, if your query has 1000 results, but you only want to return the first 10, you should use these values:

- limit=10
- offset=0

Now suppose you want to show the results from 11-20, you should use these values:

- limit=10
- offset=10

The parameters "from" and "to" are optional and allow you to retrieve just a portion of the results of a query.

Example:

```
using System;
using System.Collections.Generic;
using System.Linq;
using System.Text;
using com.openkm.sdk4csharp;
using com.openkm.sdk4csharp.bean;

namespace OKMRest
{
   public class Program
   {
      static void Main(string[] args)
      {
```

```
            String host = "http://localhost:8180/openkm";
            String username = "okmAdmin";
            String password = "admin";
            OKMWebservice ws = OKMWebservicesFactory.newInstance(host);

            try
            {
                ws.login(user, password);
                long projectId = 1; // A valid project id
                long typeId = 1; // A valid type id
                long statusId = 1; // A valid status id
                String orderColumn = "start"; // A valid TaskManagerTask class parameter name used in HQL query
                DateTime? from = new DateTime(DateTime.Now.Year, DateTime.Now.Month, 1);
                DateTime? to = new DateTime(DateTime.Now.Year, DateTime.Now.Month, 30);
                String subject = "test";

                TaskList finishedTasks = ws.task.getFinished(projectId, typeId, statusId, "description", false, 0, 10, from, to
                foreach (Task task in finishedTasks.tasks)
                {
                    System.Console.WriteLine(task.toString());
                }
            }
            catch (Exception e)
            {
                System.Console.WriteLine(e.ToString());
            }
        }
    }
}
```

getNotified

Description:

Method	Return values	Description
getNotified(long projectId, long typeId, long statusId, String orderColumn, bool orderAsc, int offset, int limit, DateTime? from, DateTime? to, String subject)	**List<Task>**	Retrieve a list of notified tasks assigned to a user, filtered and paginated.

Filter parameters description:

- The projectId parameter must be a valid project id.
- The typeId parameter must be a valid type id.
- The statusId parameter must be a valid status id.
- The orderColumn parameter must be a valid parameters of the TaskManagerTask class. Common used parameters are "subject", "start", "end", "progress", "owner". More information at javadoc documentation.
- The orderAsc parameter orders ascending or descending.
- The from date to filter (this parameter is optional).

- The to date to filter (this parameter is optional).
- The subject parameter is the topic of the task.

The parameters "limit" and "offset" allow you to retrieve just a portion of the results of a query.

- The parameter "limit" is used to limit the number of results returned.
- The parameter "offset" specifies how many results to skip before returning results.

For example, if your query has 1000 results, but you only want to return the first 10, you should use these values:

- limit=10
- offset=0

Now suppose you want to show the results from 11-20, you should use these values:

- limit=10
- offset=10

The parameters "from" and "to" are optional and allow you to retrieve just a portion of the results of a query.

Example:

```
using System;
using System.Collections.Generic;
using System.Linq;
using System.Text;
using com.openkm.sdk4csharp;
using com.openkm.sdk4csharp.bean;

namespace OKMRest
{
   public class Program
   {
      static void Main(string[] args)
      {
         String host = "http://localhost:8180/openkm";
         String username = "okmAdmin";
         String password = "admin";
         OKMWebservice ws = OKMWebservicesFactory.newInstance(host);

         try
         {
            ws.login(user, password);
            long projectId = 1; // A valid project id
            long typeId = 1; // A valid type id
            long statusId = 1; // A valid status id
            String orderColumn = "start"; // A valid TaskManagerTask class parameter name used in HQL query
            DateTime? from = new DateTime(DateTime.Now.Year, DateTime.Now.Month, 1);
```

```
            DateTime? to = new DateTime(DateTime.Now.Year, DateTime.Now.Month, 30);
            String subject = "test";

            TaskList taskList = ws.task.getNotified(projectId, typeId, statusId, orderColumn, true, 0, 10, from, to, subje
            foreach (Task task in taskList.tasks)
            {
               Console.WriteLine(task.toString());
            }
         }
         catch (Exception e)
         {
            System.Console.WriteLine(e.ToString());
         }
      }
   }
}
```

getStatus

Description:

Method	Return values	Description
getStatus()	**List<TaskStatus>**	Retrieve a list of all task statuses.

Example:

```
using System;
using System.Collections.Generic;
using System.Linq;
using System.Text;
using com.openkm.sdk4csharp;
using com.openkm.sdk4csharp.bean;

namespace OKMRest
{
   public class Program
   {
      static void Main(string[] args)
      {
         String host = "http://localhost:8180/openkm";
         String username = "okmAdmin";
         String password = "admin";
         OKMWebservice ws = OKMWebservicesFactory.newInstance(host);

         try
         {
            ws.login(user, password);
            List<TaskStatus> list = ws.task.getStatus();
            foreach (TaskStatus taskStatus in list)
            {
               System.Console.WriteLine(taskStatus.name);
            }
         }
         catch (Exception e)
         {
            System.Console.WriteLine(e.ToString());
         }
      }
   }
```

```
}
```

getProjects

Description:

Method	Return values	Description
getProjects(bool filterActive)	**List<TaskProject>**	Retrieve a list of all the task projects.

Example:

```
using System;
using System.Collections.Generic;
using System.Linq;
using System.Text;
using com.openkm.sdk4csharp;
using com.openkm.sdk4csharp.bean;

namespace OKMRest
{
   public class Program
   {
      static void Main(string[] args)
      {
         String host = "http://localhost:8180/openkm";
         String username = "okmAdmin";
         String password = "admin";
         OKMWebservice ws = OKMWebservicesFactory.newInstance(host);

         try
         {
            ws.login(user, password);
            List<TaskProject> taskProjects = ws.task.geProjects(true);
            foreach (TaskProject tpj in taskProjects)
            {
               System.Console.WriteLine(tpj.name);
            }
         }
         catch (Exception e)
         {
            System.Console.WriteLine(e.ToString());
         }
      }
   }
}
```

getTypes

Description:

Method	Return values	Description
getTypes(bool filterActive)	**List<TaskType>**	Retrieve a list of all the task types.

Example:

```
using System;
using System.Collections.Generic;
using System.Linq;
using System.Text;
using com.openkm.sdk4csharp;
using com.openkm.sdk4csharp.bean;

namespace OKMRest
{
   public class Program
   {
      static void Main(string[] args)
      {
         String host = "http://localhost:8180/openkm";
         String username = "okmAdmin";
         String password = "admin";
         OKMWebservice ws = OKMWebservicesFactory.newInstance(host);

         try
         {
            ws.login(user, password);
            List<TaskType> taskTypes = ws.task.getTypes(false);
            foreach (TaskType tp in taskTypes)
            {
               System.Console.WriteLine(tp.name);
            }
         }
         catch (Exception e)
         {
            System.Console.WriteLine(e.ToString());
         }
      }
   }
}
```

getAssignedCount

Description:

Method	Return values	Description
getAssignedCount(long statusId, long projectId, long typeId)	**long**	Returns the number of tasks assigned to a user.

Filter parameters description:

- The statusId parameter must be a valid status id.
- The projectId parameter must be a valid project id.
- The typeId parameter must be a valid type id.

Example:

```
using System;
using System.Collections.Generic;
using System.Linq;
using System.Text;
using com.openkm.sdk4csharp;
using com.openkm.sdk4csharp.bean;

namespace OKMRest
{
   public class Program
   {
      static void Main(string[] args)
      {
         String host = "http://localhost:8180/openkm";
         String username = "okmAdmin";
         String password = "admin";
         OKMWebservice ws = OKMWebservicesFactory.newInstance(host);

         try
         {
            ws.login(user, password);
            long statusId = 1; // A valid status id
            long projectId = 1; // A valid project id
            long typeId = 1; // A valid type id
            long assigned = ws.task.getAssignedCount(statusId, projectId, typeId);
            System.Console.WriteLine("Assigned tasks count: "+ assigned.ToString());
         }
         catch (Exception e)
         {
            System.Console.WriteLine(e.ToString());
         }
      }
   }
}
```

getActiveCount

Description:

Method	Return values	Description
getActiveCount(long statusId, long projectId, long typeId)	**long**	Returns the number of active tasks for a user.

Filter parameters description:

- The statusId parameter must be a valid status id.
- The projectId parameter must be a valid project id.
- The typeId parameter must be a valid type id.

Example:

```
using System;
using System.Collections.Generic;
using System.Linq;
using System.Text;
using com.openkm.sdk4csharp;
using com.openkm.sdk4csharp.bean;

namespace OKMRest
{
   public class Program
   {
      static void Main(string[] args)
      {
         String host = "http://localhost:8180/openkm";
         String username = "okmAdmin";
         String password = "admin";
         OKMWebservice ws = OKMWebservicesFactory.newInstance(host);

         try
         {
            ws.login(user, password);
            long statusId = 1; // A valid status id
            long projectId = 1; // A valid project id
            long typeId = 1; // A valid type id
            long active = ws.task.getActiveCount(statusId, projectId, typeId);
            System.Console.WriteLine("Active tasks count: " + active.ToString());
         }
         catch (Exception e)
         {
            System.Console.WriteLine(e.ToString());
         }
      }
   }
}
```

getFinishedCount

Description:

Method	Return values	Description
getFinishedCount(long statusId, long projectId, long typeId)	**long**	Returns the number of finished tasks for a user.

Filter parameters description:

- The statusId parameter must be a valid status id.
- The projectId parameter must be a valid project id.
- The typeId parameter must be a valid type id.

Example:

```
using System;
using System.Collections.Generic;
using System.Linq;
using System.Text;
using com.openkm.sdk4csharp;
using com.openkm.sdk4csharp.bean;

namespace OKMRest
{
   public class Program
   {
      static void Main(string[] args)
      {
         String host = "http://localhost:8180/openkm";
         String username = "okmAdmin";
         String password = "admin";
         OKMWebservice ws = OKMWebservicesFactory.newInstance(host);

         try
         {
            ws.login(user, password);
            long statusId = 1; // A valid status id
            long projectId = 1; // A valid project id
            long typeId = 1; // A valid type id
            long finished = ws.task.getFinishedCount(statusId, projectId, typeId);
            System.Console.WriteLine("Finished tasks count: " + finished.ToString());
         }
         catch (Exception e)
         {
            System.Console.WriteLine(e.ToString());
         }
      }
   }
}
```

getNotifiedCount

Description:

Method	Return values	Description
getNotifiedCount(long statusId, long projectId, long typeId)	**Long**	Returns the number of notified tasks assigned to a user.

Filter parameters description:

- The statusId parameter must be a valid status id.
- The projectId parameter must be a valid project id.
- The typeId parameter must be a valid type id.

Example:

```
using System;
using System.Collections.Generic;
using System.Linq;
using System.Text;
using com.openkm.sdk4csharp;
using com.openkm.sdk4csharp.bean;

namespace OKMRest
{
   public class Program
   {
      static void Main(string[] args)
      {
         String host = "http://localhost:8180/openkm";
         String username = "okmAdmin";
         String password = "admin";
         OKMWebservice ws = OKMWebservicesFactory.newInstance(host);

         try
         {
            ws.login(user, password);
            long projectId = 1; // A valid project id
            long typeId = 1; // A valid type id
            long statusId = 1; // A valid status id
            long total = ws.task.getNotifiedCount(statusId, projectId, typeId);
            Console.WriteLine("Total: " + total.ToString());
         }
         catch (Exception e)
         {
            System.Console.WriteLine(e.ToString());
         }
      }
   }
}
```

create

Description:

Method
create(String subject, String start, String end, String description, long statusId, long projectId, long typeId, String user, List<String> notificationUsers, List<String> externalUsers, List<String> relatedDocume List<String> relatedFolders, List<String> relatedRecords, List<String> relatedMails, String repeatExpression, String repeatExpression, String formatDate, int repeatTimes, String reminderStartUnit, int reminderStartValue, String reminderEndUnit, int reminderEndValue)

The **repeatExpression** parameter description:

The commands are executed by cron when the minute, hour, and month fields match the current time, and when at l the two day fields (day of month, or day of week) matches the current time. The scheduler examines crontab entries

minute. The time and date fields are:

```
* * * * * command to execute
? ? ? ? ?
? ? ? ? ?
? ? ? ? ????? day of week (0 - 6) (0 to 6 are Sunday to Saturday, or use names; 7 is Sunday, the sam
? ? ? ?????????? month (1 - 12)
? ? ???????????????? day of month (1 - 31)
? ??????????????????? hour (0 - 23)
????????????????????????? min (0 - 59)
```

Example:

```
using System;
using System.Collections.Generic;
using System.Linq;
using System.Text;
using com.openkm.sdk4csharp;
using com.openkm.sdk4csharp.bean;
using com.openkm.sdk4csharp.util;

namespace OKMRest
{
   public class Program
   {
      static void Main(string[] args)
      {
         String host = "http://localhost:8180/openkm";
         String username = "okmAdmin";
         String password = "admin";
         OKMWebservice ws = OKMWebservicesFactory.newInstance(host);

         try
         {
            ws.login(user, password);
            String subject = "task subject";

            DateTime date = DateTime.Now;
            String start = ISO8601.formatBasic(date);
            date = new DateTime(2019, 1, 1);
            String end = ISO8601.formatBasic(date);

            String description = "description test";
            long statusId = 1; // A valid task status id
            long projectId = 1; // A valid project id
            long typeId = 1; // A valid type id

            List<String> notificationUsers = new List<string>();
            notificationUsers.Add("pherrera");
            notificationUsers.Add("sochoa");

            List<String> externalUsers = new List<String>();
            externalUsers.Add("test@openkm.com");

            List<String> relatedDocuments = new List<String>();
            relatedDocuments.Add("82555dd1-bcc2-4e64-81cb-5f7c2b0d7801");

            List<String> relatedFolders = new List<String>();
            relatedFolders.Add("70ec54af-76ad-4d02-b9c8-8c94c3b6ffc7");

            List<String> relatedMails = new List<String>();
```

```
            List<String> relatedRecords = new List<String>();

            Task task = ws.task.create(subject, start, end, description, statusId, projectId, typeId, "okmAdmin", notifica
              relatedDocuments, relatedFolders, relatedRecords, relatedMails, "0 0 1 * *", "", "", 10, "m", 5, "m", 10);
         }
         catch (Exception e)
         {
            System.Console.WriteLine(e.ToString());
         }
      }
   }
}
```

update

Description:

Method	Return values
update(long taskId, String subject, String start, String end, String description, long statusId, long projectId, long typeId, String user, List<String> notificationUsers, List<String> externalUsers, List<String> relatedDocuments, List<String> relatedFolders, List<String> relatedRecords, List<String> relatedMails, String owner, String repeatExpression, String repeatUntil, String formatDate, int repeatTimes, int progress, String reminderStartUnit, int reminderStartValue, String reminderEndUnit, int reminderEndValue)	**Task**

The **repeatExpression** parameters description:

The commands are executed by cron when the minute, hour, and month fields match the current time, and when at l
the two day fields (day of the month, or day of the week) matches the current time. The scheduler examines crontab
once every minute. The time and date fields are:

```
* * * * * command to execute
? ? ? ? ?
? ? ? ? ?
? ? ? ? ????? day of week (0 - 6) (0 to 6 are Sunday to Saturday, or use names; 7 is Sunday, the sam
? ? ? ?????????? month (1 - 12)
? ? ???????????????? day of month (1 - 31)
? ??????????????????????? hour (0 - 23)
????????????????????????????? min (0 - 59)
```

Example:

```
using System;
using System.Collections.Generic;
using System.Linq;
using System.Text;
using com.openkm.sdk4csharp;
using com.openkm.sdk4csharp.bean;
using com.openkm.sdk4csharp.util;

namespace OKMRest
{
   public class Program
   {
      static void Main(string[] args)
      {
         String host = "http://localhost:8180/openkm";
         String username = "okmAdmin";
         String password = "admin";
         OKMWebservice ws = OKMWebservicesFactory.newInstance(host);

         try
         {
            ws.login(user, password);
            String taskId = "2";
            String subject = "task update";

            DateTime date = DateTime.Now;
            String start = ISO8601.formatBasic(date);

            date = new DateTime(2019, 12, 1);
            String end = ISO8601.formatBasic(date);

            String description = "test update";
            long statusId = 1; // A valid task status id
            long projectId = 1; // A valid project id
            long typeId = 1; // A valid type id


            List<String> notificationUsers = new List<String>();
            roles.Add("pherrera");
            roles.Add("sochoa");

            List<String> externalUsers = new List<String>();
            externalUsers.Add("test@openkm.com");

            List<String> relatedDocuments = new List<String>();
            relatedDocuments.Add("82555dd1-bcc2-4e64-81cb-5f7c2b0d7801");

            List<String> relatedFolders = new List<String>();
            relatedFolders.Add("70ec54af-76ad-4d02-b9c8-8c94c3b6ffc7");

            List<String> relatedMails = new List<String>();
            List<String> relatedRecords = new List<String>();

            String owner = "okmAdmin";
            int progress = 20; // Progress task

            String repeatExpression = "0 0 1 * *";
            long taskId = 1;
            Task task = ws.task.update(taskId, subject, start, end, description, statusId, projectId, typeId, "okmAdmin"
               relatedDocuments, relatedFolders, relatedRecords, relatedMails, owner, repeatExpression, "", "", progre
            System.Console.WriteLine(task.toString());
         }
         catch (Exception e)
         {
            System.Console.WriteLine(e.ToString());
         }
```

```
        }
    }
}
```

getTask

Description:

Method	Return values	Description
getTask(long taskId)	**Task**	Retrieve a task.

Example:

```
using System;
using System.Collections.Generic;
using System.Linq;
using System.Text;
using com.openkm.sdk4csharp;
using com.openkm.sdk4csharp.bean;

namespace OKMRest
{
    public class Program
    {
        static void Main(string[] args)
        {
            String host = "http://localhost:8180/openkm";
            String username = "okmAdmin";
            String password = "admin";
            OKMWebservice ws = OKMWebservicesFactory.newInstance(host);

            try
            {
                ws.login(user, password);
                long taskId = "2";
                Task task = ws.task.getTask(task.id);
                System.Console.WriteLine(task.toString());
            }
            catch (Exception e)
            {
                System.Console.WriteLine(e.ToString());
            }
        }
    }
}
```

delete

Description:

Method	Return values	Description
delete(long taskId)	**void**	Delete a task.

Example:

```
using System;
using System.Collections.Generic;
using System.Linq;
using System.Text;
using com.openkm.sdk4csharp;
using com.openkm.sdk4csharp.bean;

namespace OKMRest
{
   public class Program
   {
      static void Main(string[] args)
      {
         String host = "http://localhost:8180/openkm";
         String username = "okmAdmin";
         String password = "admin";
         OKMWebservice ws = OKMWebservicesFactory.newInstance(host);

         try
         {
            ws.login(user, password);
            long taskId = "2";
            ws.task.delete(task.id);
         }
         catch (Exception e)
         {
            System.Console.WriteLine(e.ToString());
         }
      }
   }
}
```

createProject

Description:

Method	Return values	Description
createProject(String name, bool active, String description)	**TaskProject**	Create a task project.

Example:

```
using System;
using System.Collections.Generic;
using System.Linq;
using System.Text;
using com.openkm.sdk4csharp;
using com.openkm.sdk4csharp.bean;

namespace OKMRest
{
   public class Program
   {
      static void Main(string[] args)
      {
         String host = "http://localhost:8180/openkm";
         String username = "okmAdmin";
```

```
            String password = "admin";
            OKMWebservice ws = OKMWebservicesFactory.newInstance(host);

            try
            {
                ws.login(user, password);
                TaskProject taskProject = ws.task.createProject("Task project 001", true, "Any description");
                System.Console.WriteLine(taskProject.toString());
            }
            catch (Exception e)
            {
                System.Console.WriteLine(e.ToString());
            }
        }
    }
}
```

updateProject

Description:

Method	Return values	Description
updateProject(long projectId, bool active, String name, String description)	**TaskProject**	Update a task project.

Example:

```
using System;
using System.Collections.Generic;
using System.Linq;
using System.Text;
using com.openkm.sdk4csharp;
using com.openkm.sdk4csharp.bean;

namespace OKMRest
{
    public class Program
    {
        static void Main(string[] args)
        {
            String host = "http://localhost:8180/openkm";
            String username = "okmAdmin";
            String password = "admin";
            OKMWebservice ws = OKMWebservicesFactory.newInstance(host);

            try
            {
                ws.login(user, password);
                long taskProjectId = 1; // Valid task project id
                TaskProject taskProject = ws.task.updateProject(taskProjectId, true, "Task project 002", "Any description");
                System.Console.WriteLine(taskProject1.toString());
            }
            catch (Exception e)
            {
                System.Console.WriteLine(e.ToString());
            }
        }
```

```
    }
}
```

deleteProject

Description:

Method	Return values	Description
deleteProject(long projectId)	**void**	Delete a task project.

Example:

```
using System;
using System.Collections.Generic;
using System.Linq;
using System.Text;
using com.openkm.sdk4csharp;
using com.openkm.sdk4csharp.bean;

namespace OKMRest
{
    public class Program
    {
        static void Main(string[] args)
        {
            String host = "http://localhost:8180/openkm";
            String username = "okmAdmin";
            String password = "admin";
            OKMWebservice ws = OKMWebservicesFactory.newInstance(host);

            try
            {
                ws.login(user, password);
                long taskProjectId = 1; // Valid task project id
                ws.task.deleteProject(taskProjectId);
            }
            catch (Exception e)
            {
                System.Console.WriteLine(e.ToString());
            }
        }
    }
}
```

getProject

Description:

Method	Return values	Description
getProject(long projectId)	**TaskProject**	Get a task project.

Example:

```
using System;
using System.Collections.Generic;
using System.Linq;
using System.Text;
using com.openkm.sdk4csharp;
using com.openkm.sdk4csharp.bean;

namespace OKMRest
{
   public class Program
   {
      static void Main(string[] args)
      {
         String host = "http://localhost:8180/openkm";
         String username = "okmAdmin";
         String password = "admin";
         OKMWebservice ws = OKMWebservicesFactory.newInstance(host);

         try
         {
            ws.login(user, password);
            long taskProjectId = 1; // Valid task project id
            TaskProject tp = ws.task.getProject(taskProjectId);
            System.Console.WriteLine(tp.toString());
         }
         catch (Exception e)
         {
            System.Console.WriteLine(e.ToString());
         }
      }
   }
}
```

createType

Description:

Method	Return values	Description
createType(String name, bool active, String description)	**TaskType**	Create a task type.

Example:

```
using System;
using System.Collections.Generic;
using System.Linq;
using System.Text;
using com.openkm.sdk4csharp;
using com.openkm.sdk4csharp.bean;

namespace OKMRest
{
   public class Program
   {
      static void Main(string[] args)
      {
         String host = "http://localhost:8180/openkm";
         String username = "okmAdmin";
         String password = "admin";
```

```
            OKMWebservice ws = OKMWebservicesFactory.newInstance(host);

            try
            {
                ws.login(user, password);
                TaskType taskType = ws.task.createType("Test", false, "Any description");
                System.Console.WriteLine(taskType.toString());
            }
            catch (Exception e)
            {
                System.Console.WriteLine(e.ToString());
            }
        }
    }
}
```

updateType

Description:

Method	Return values	Description
updateType(long typeId, bool active, String name, String description)	**TaskType**	Update a task type.

Example:

```
using System;
using System.Collections.Generic;
using System.Linq;
using System.Text;
using com.openkm.sdk4csharp;
using com.openkm.sdk4csharp.bean;

namespace OKMRest
{
    public class Program
    {
        static void Main(string[] args)
        {
            String host = "http://localhost:8180/openkm";
            String username = "okmAdmin";
            String password = "admin";
            OKMWebservice ws = OKMWebservicesFactory.newInstance(host);

            try
            {
                ws.login(user, password);
                long taskTypeId = 1; // Valid task type id
                TaskType taskType = ws.task.updateType(taskTypeId, true, "New Test", "New description");
                System.Console.WriteLine(taskType.toString());
            }
            catch (Exception e)
            {
                System.Console.WriteLine(e.ToString());
            }
        }
    }
}
```

deleteType

Description:

Method	Return values	Description
deleteType(long typeId)	**void**	Delete a task type.

Example:

```
using System;
using System.Collections.Generic;
using System.Linq;
using System.Text;
using com.openkm.sdk4csharp;
using com.openkm.sdk4csharp.bean;

namespace OKMRest
{
   public class Program
   {
      static void Main(string[] args)
      {
         String host = "http://localhost:8180/openkm";
         String username = "okmAdmin";
         String password = "admin";
         OKMWebservice ws = OKMWebservicesFactory.newInstance(host);

         try
         {
            ws.login(user, password);
            long taskTypeId = 1; //Valid task type id
            ws.task.deleteType(taskTypeId);
         }
         catch (Exception e)
         {
            System.Console.WriteLine(e.ToString());
         }
      }
   }
}
```

getType

Description:

Method	Return values	Description
getType(long typeId)	**TaskType**	Get a task type object by id.

Example:

```
using System;
using System.Collections.Generic;
```

```
using System.Linq;
using System.Text;
using com.openkm.sdk4csharp;
using com.openkm.sdk4csharp.bean;

namespace OKMRest
{
   public class Program
   {
      static void Main(string[] args)
      {
         String host = "http://localhost:8180/openkm";
         String username = "okmAdmin";
         String password = "admin";
         OKMWebservice ws = OKMWebservicesFactory.newInstance(host);

         try
         {
            ws.login(user, password);
            long taskTypeId = 1; //Valid task type id
            TaskType taskType = ws.task.getType(taskTypeId);
            System.Console.WriteLine(taskType.toString());

         }
         catch (Exception e)
         {
            System.Console.WriteLine(e.ToString());
         }
      }
   }
}
```

createStatus

Description:

Method	Return values	Description
createStatus(String name, bool finish)	**TaskStatus**	Create a task status.

Example:

```
using System;
using System.Collections.Generic;
using System.Linq;
using System.Text;
using com.openkm.sdk4csharp;
using com.openkm.sdk4csharp.bean;

namespace OKMRest
{
   public class Program
   {
      static void Main(string[] args)
      {
         String host = "http://localhost:8180/openkm";
         String username = "okmAdmin";
         String password = "admin";
         OKMWebservice ws = OKMWebservicesFactory.newInstance(host);
```

```
            try
            {
                ws.login(user, password);
                TaskStatus taskStatus = ws.task.createStatus("Test", false);
                System.Console.WriteLine(taskStatus.toString());
            }
            catch (Exception e)
            {
                System.Console.WriteLine(e.ToString());
            }
        }
    }
}
```

updateStatus

Description:

Method	Return values	Description
updateStatus(long statusId, String name, bool finish)	**TaskStatus**	Update a task status.

Example:

```
using System;
using System.Collections.Generic;
using System.Linq;
using System.Text;
using com.openkm.sdk4csharp;
using com.openkm.sdk4csharp.bean;

namespace OKMRest
{
    public class Program
    {
        static void Main(string[] args)
        {
            String host = "http://localhost:8180/openkm";
            String username = "okmAdmin";
            String password = "admin";
            OKMWebservice ws = OKMWebservicesFactory.newInstance(host);

            try
            {
                ws.login(user, password);
                long taskStatusId = 1; // Valid task status id
                TaskStatus taskStatus = ws.task.updateStatus(taskStatusId , "Test", true);
                System.Console.WriteLine(taskStatus.toString());
            }
            catch (Exception e)
            {
                System.Console.WriteLine(e.ToString());
            }
        }
    }
}
```

deleteStatus

Description:

Method	Return values	Description
deleteStatus(long statusId)	**void**	Delete a task status.

Example:

```
using System;
using System.Collections.Generic;
using System.Linq;
using System.Text;
using com.openkm.sdk4csharp;
using com.openkm.sdk4csharp.bean;

namespace OKMRest
{
   public class Program
   {
      static void Main(string[] args)
      {
         String host = "http://localhost:8180/openkm";
         String username = "okmAdmin";
         String password = "admin";
         OKMWebservice ws = OKMWebservicesFactory.newInstance(host);

         try
         {
            ws.login(user, password);
            long taskStatusId = 1; // Valid task status id
            ws.task.deleteStatus(taskStatusId);
         }
         catch (Exception e)
         {
            System.Console.WriteLine(e.ToString());
         }
      }
   }
}
```

getStatus

Description:

Method	Return values	Description
getStatus(long statusId)	**TaskStatus**	Get a task status by id.

Example:

```
using System;
using System.Collections.Generic;
using System.Linq;
using System.Text;
using com.openkm.sdk4csharp;
```

```
using com.openkm.sdk4csharp.bean;

namespace OKMRest
{
   public class Program
   {
      static void Main(string[] args)
      {
         String host = "http://localhost:8180/openkm";
         String username = "okmAdmin";
         String password = "admin";
         OKMWebservice ws = OKMWebservicesFactory.newInstance(host);

         try
         {
            ws.login(user, password);
            long taskStatusId = 1; // Valid task status id
            TaskStatus taskStatus= ws.task.getStatus(taskStatusId);
            System.Console.WriteLine(taskStatus.toString());
         }
         catch (Exception e)
         {
            System.Console.WriteLine(e.ToString());
         }
      }
   }
}
```

getNotes

Description:

Method	Return values	Description
getNotes(long taskId)	**List<TaskNote>**	Returns a list of notes for a task.

Example:

```
using System;
using System.Collections.Generic;
using System.Linq;
using System.Text;
using com.openkm.sdk4csharp;
using com.openkm.sdk4csharp.bean;

namespace OKMRest
{
   public class Program
   {
      static void Main(string[] args)
      {
         String host = "http://localhost:8180/openkm";
         String username = "okmAdmin";
         String password = "admin";
         OKMWebservice ws = OKMWebservicesFactory.newInstance(host);

         try
         {
            ws.login(user, password);
            long taskId = 1; // Valid task id
```

```
            foreach (TaskNote tn in ws.task.getNotes(taskId))
            {
               System.Console.WriteLine(tn.toString());
            }
         }
         catch (Exception e)
         {
            System.Console.WriteLine(e.ToString());
         }
      }
   }
}
```

createNote

Description:

Method	Return values	Description
createNote(long taskId, String text)	**TaskNote**	Create a note for a certain task.

Example:

```
using System;
using System.Collections.Generic;
using System.Linq;
using System.Text;
using com.openkm.sdk4csharp;
using com.openkm.sdk4csharp.bean;

namespace OKMRest
{
   public class Program
   {
      static void Main(string[] args)
      {
         String host = "http://localhost:8180/openkm";
         String username = "okmAdmin";
         String password = "admin";
         OKMWebservice ws = OKMWebservicesFactory.newInstance(host);

         try
         {
            ws.login(user, password);
            long taskId = 1; // Valid task id
            TaskNote taskNote = ws.task.createNote(taskId, "Any note");
            System.Console.WriteLine(taskNote.toString());
         }
         catch (Exception e)
         {
            System.Console.WriteLine(e.ToString());
         }
      }
   }
}
```

updateNote

Description:

Method	Return values	Description
updateNote(long noteId, String text)	**TaskNote**	Update a task note.

Example:

```
using System;
using System.Collections.Generic;
using System.Linq;
using System.Text;
using com.openkm.sdk4csharp;
using com.openkm.sdk4csharp.bean;

namespace OKMRest
{
   public class Program
   {
      static void Main(string[] args)
      {
         String host = "http://localhost:8180/openkm";
         String username = "okmAdmin";
         String password = "admin";
         OKMWebservice ws = OKMWebservicesFactory.newInstance(host);

         try
         {
            ws.login(user, password);
            long taskNoteId = 1; // Valid task note id
            TaskNote taskNote = ws.task.updateNote(taskNoteId, "Any text");
            System.Console.WriteLine(taskNote.toString());
         }
         catch (Exception e)
         {
            System.Console.WriteLine(e.ToString());
         }
      }
   }
}
```

deleteNote

Description:

Method	Return values	Description
deleteNote(long noteId)	**void**	Delete a task note.

Example:

```
using System;
using System.Collections.Generic;
using System.Linq;
using System.Text;
```

```
using com.openkm.sdk4csharp;
using com.openkm.sdk4csharp.bean;

namespace OKMRest
{
   public class Program
   {
      static void Main(string[] args)
      {
         String host = "http://localhost:8180/openkm";
         String username = "okmAdmin";
         String password = "admin";
         OKMWebservice ws = OKMWebservicesFactory.newInstance(host);

         try
         {
            ws.login(user, password);
            long taskNoteId = 1; // Valid task note id
            ws.task.deleteNote(taskNoteId);
         }
         catch (Exception e)
         {
            System.Console.WriteLine(e.ToString());
         }
      }
   }
}
```

getHistory

Description:

Method	Return values	Description
getHistory(long taskId)	**List<TaskHistory>**	Returns a list for a task.

Example:

```
using System;
using System.Collections.Generic;
using System.Linq;
using System.Text;
using com.openkm.sdk4csharp;
using com.openkm.sdk4csharp.bean;

namespace OKMRest
{
   public class Program
   {
      static void Main(string[] args)
      {
         String host = "http://localhost:8180/openkm";
         String username = "okmAdmin";
         String password = "admin";
         OKMWebservice ws = OKMWebservicesFactory.newInstance(host);

         try
         {
            ws.login(user, password);
            long taskId = 1; // Valid task id
```

```
            foreach (TaskHistory th in ws.task.getHistory(taskId))
            {
               System.Console.WriteLine(th.toString());
            }
         }
         catch (Exception e)
         {
            System.Console.WriteLine(e.ToString());
         }
      }
   }
}
```

getRelatedTasks

Description:

Method	Return values	Description
getRelatedTasks(string uuid)	**TaskList**	Returns a list of tasks.

Example:

```
using System;
using System.Collections.Generic;
using System.Linq;
using System.Text;
using com.openkm.sdk4csharp;
using com.openkm.sdk4csharp.bean;

namespace OKMRest
{
   public class Program
   {
      static void Main(string[] args)
      {
         String host = "http://localhost:8180/openkm";
         String username = "okmAdmin";
         String password = "admin";
         OKMWebservice ws = OKMWebservicesFactory.newInstance(host);

         try
         {
            ws.login(user, password);
            foreach (TaskList tl in ws.task.getRelatedTasks("l8fce7e5-f667-44bd-be2f-f3b3e584d574").tasks)
            {
               System.Console.WriteLine(tl.toString());
            }
         }
         catch (Exception e)
         {
            System.Console.WriteLine(e.ToString());
         }
      }
   }
}
```

UserConfig samples

Basics

Suggested code sample

First, you must create the web service object:

```
OKMWebservices ws = OKMWebservicesFactory.newInstance(host);
```

Then you should log in using the method "**login**". You can access the "**login**" method from the web service object "**ws**" as shown below:

```
ws.login(user, password);
```

Once you are logged in to the web services, the session is kept in the web service object. Then you can use the other API methods.

At this point, you can use all the Activity methods from the "**userConfig**" class as shown below:

```
ws.userConfig.getConfig();
```

Methods

getConfig

Description:

Method	Return values	Description
getConfig()	**UserConfig**	Returns the user settings.

Example:

```
using System;
using System.Collections.Generic;
using System.Linq;
using System.Text;
using com.openkm.sdk4csharp;
using com.openkm.sdk4csharp.bean;
using com.openkm.sdk4csharp.impl;

namespace OKMRest
{
    public class Program
    {
```

```
        static void Main(string[] args)
        {
            String host = "http://localhost:8180/openkm";
            String username = "okmAdmin";
            String password = "admin";
            OKMWebservice ws = OKMWebservicesFactory.newInstance(host);

            try
            {
                ws.login(user, password);
                UserConfig userCfg = ws.userConfig.getConfig();
                Console.WriteLine("User: " + userCfg.user);
            }
            catch (Exception e)
            {
                System.Console.WriteLine(e.ToString());
            }
        }
    }
}
```

setHome

Description:

Method	Return values	Description
setHome(String uuid)	**void**	Sets the user's home node.

Example:

```
using System;
using System.Collections.Generic;
using System.Linq;
using System.Text;
using com.openkm.sdk4csharp;
using com.openkm.sdk4csharp.bean;
using com.openkm.sdk4csharp.impl;

namespace OKMRest
{
    public class Program
    {
        static void Main(string[] args)
        {
            String host = "http://localhost:8180/openkm";
            String username = "okmAdmin";
            String password = "admin";
            OKMWebservice ws = OKMWebservicesFactory.newInstance(host);

            try
            {
                ws.login(user, password);
                ws.userConfig.setHome("53751cb7-c462-4320-ba46-4cc33e4667ae");
            }
            catch (Exception e)
            {
                System.Console.WriteLine(e.ToString());
            }
        }
```

```
    }
}
```

Wizard samples

Basics

Example of UUID:

- Using UUID -> "**373bcdd0-c082-4e7b-addd-e10ef813946e**";

Suggested code sample

First, you must create the webservice object:

```
OKMWebservices ws = OKMWebservicesFactory.newInstance(host);
```

Then you should log in using the method "**login**". You can access the "**login**" method from the web service object "**ws**" as shown below:

```
ws.login(user, password);
```

Once you are logged in with the web services, the session is kept in the web service object. Then you can use the other API methods.

At this point you can use all the Wizard methods from "**wizard**" class as shown below:

```
ws.wizard.findByUser();
```

Methods

findByUser

Description:

Method	Return values	Description
findByUser()	**List<WizardNode>**	Returns a list of nodes with a wizard.

Example:

```
using System;
using System.Collections.Generic;
using System.Linq;
using System.Text;
using com.openkm.sdk4csharp;
```

```
using com.openkm.sdk4csharp.util;
using com.openkm.sdk4csharp.bean;
using com.openkm.sdk4csharp.impl;
using System.IO;

namespace OKMRest
{
   public class Program
   {
      static void Main(string[] args)
      {
         String host = "http://localhost:8080/openkm";
         String username = "okmAdmin";
         String password = "admin";
         OKMWebservice ws = OKMWebservicesFactory.newInstance(host);

         try
         {
            ws.login(user, password);
            List<WizardNode> list = ws.wizard.findByUser();
            foreach (WizardNode wizardNode in list)
            {
               Console.WriteLine(wizardNode.toString());
            }
         }
         catch (Exception e)
         {
            System.Console.WriteLine(e.ToString());
         }
      }
   }
}
```

findAllByUser

Description:

Method	Return values	Description
findAllByUser()	**List<WizardNode>**	Returns a list of nodes with a wizard for the user.

Example:

```
using System;
using System.Collections.Generic;
using System.Linq;
using System.Text;
using com.openkm.sdk4csharp;
using com.openkm.sdk4csharp.util;
using com.openkm.sdk4csharp.bean;
using com.openkm.sdk4csharp.impl;
using System.IO;

namespace OKMRest
{
   public class Program
   {
      static void Main(string[] args)
      {
         String host = "http://localhost:8080/openkm";
```

```
            String username = "okmAdmin";
            String password = "admin";
            OKMWebservice ws = OKMWebservicesFactory.newInstance(host);

            try
            {
               ws.login(user, password);
               List<WizardNode> list = ws.wizard.findAllByUser();
               foreach (WizardNode wizardNode in list)
               {
                  Console.WriteLine(wizardNode.toString());
               }
            }
            catch (Exception e)
            {
               System.Console.WriteLine(e.ToString());
            }
         }
      }
   }
```

findByUserAndUuid

Description:

Method	Return values	Description
findByUserAndUuid(String uuid)	**WizardNode**	Get the wizard of a node.

Example:

```
using System;
using System.Collections.Generic;
using System.Linq;
using System.Text;
using com.openkm.sdk4csharp;
using com.openkm.sdk4csharp.util;
using com.openkm.sdk4csharp.bean;
using com.openkm.sdk4csharp.impl;
using System.IO;

namespace OKMRest
{
   public class Program
   {
      static void Main(string[] args)
      {
         String host = "http://localhost:8080/openkm";
         String username = "okmAdmin";
         String password = "admin";
         OKMWebservice ws = OKMWebservicesFactory.newInstance(host);

         try
         {
            ws.login(user, password);
            WizardNode wn= ws.wizard.findByUserAndUuid("5458e52a-58a5-4b5d-ac89-e4e5837924a9");
            Console.WriteLine(wn.toString());
         }
         catch (Exception e)
         {
```

```
            System.Console.WriteLine(e.ToString());
        }
    }
  }
}
```

hasWizardByUserAndNode

Description:

Method	Return values	Description
hasWizardByUserAndNode(String uuid)	**bool**	Returns whether a node has a wizard.

Example:

```
using System;
using System.Collections.Generic;
using System.Linq;
using System.Text;
using com.openkm.sdk4csharp;
using com.openkm.sdk4csharp.util;
using com.openkm.sdk4csharp.bean;
using com.openkm.sdk4csharp.impl;
using System.IO;

namespace OKMRest
{
   public class Program
   {
      static void Main(string[] args)
      {
         String host = "http://localhost:8080/openkm";
         String username = "okmAdmin";
         String password = "admin";
         OKMWebservice ws = OKMWebservicesFactory.newInstance(host);

         try
         {
            ws.login(user, password);
            Console.WriteLine("Has a wizard active: " + ws.wizard.hasWizardByUserAndNode("5458e52a-58a5-4b5d
         }
         catch (Exception e)
         {
            System.Console.WriteLine(e.ToString());
         }
      }
   }
}
```

deleteAll

Description:

Method	Return values	Description

deleteAll()	**void**	Removes all wizards for the user.

Only wizards assigned to the user session will be removed.

Example:

```
using System;
using System.Collections.Generic;
using System.Linq;
using System.Text;
using com.openkm.sdk4csharp;
using com.openkm.sdk4csharp.util;
using com.openkm.sdk4csharp.bean;
using com.openkm.sdk4csharp.impl;
using System.IO;

namespace OKMRest
{
   public class Program
   {
      static void Main(string[] args)
      {
         String host = "http://localhost:8080/openkm";
         String username = "okmAdmin";
         String password = "admin";
         OKMWebservice ws = OKMWebservicesFactory.newInstance(host);

         try
         {
            ws.login(user, password);
            ws.wizard.deleteAll();
            Console.WriteLine("Delete all");
         }
         catch (Exception e)
         {
            System.Console.WriteLine(e.ToString());
         }
      }
   }
}
```

postponeNode

Description:

Method	Return values	Description
postponeNode(String uuid, DateTime date)	**void**	Postpone a node.

Example:

```
using System;
```

```
using System.Collections.Generic;
using System.Linq;
using System.Text;
using com.openkm.sdk4csharp;
using com.openkm.sdk4csharp.util;
using com.openkm.sdk4csharp.bean;
using com.openkm.sdk4csharp.impl;
using System.IO;

namespace OKMRest
{
   public class Program
   {
      static void Main(string[] args)
      {
         String host = "http://localhost:8080/openkm";
         String username = "okmAdmin";
         String password = "admin";
         OKMWebservice ws = OKMWebservicesFactory.newInstance(host);

         try
         {
            ws.login(user, password);
            DateTime date = DateTime.Now;
            ws.wizard.postponeNode("5458e52a-58a5-4b5d-ac89-e4e5837924a9", date);
         }
         catch (Exception e)
         {
            System.Console.WriteLine(e.ToString());
         }
      }
   }
}
```

cancelPostponedNode

Description:

Method	Return values	Description
cancelPostponedNode(String uuid)	**void**	Cancel the postponed node.

Example:

```
using System;
using System.Collections.Generic;
using System.Linq;
using System.Text;
using com.openkm.sdk4csharp;
using com.openkm.sdk4csharp.util;
using com.openkm.sdk4csharp.bean;
using com.openkm.sdk4csharp.impl;
using System.IO;

namespace OKMRest
{
   public class Program
   {
      static void Main(string[] args)
      {
```

```
            String host = "http://localhost:8080/openkm";
            String username = "okmAdmin";
            String password = "admin";
            OKMWebservice ws = OKMWebservicesFactory.newInstance(host);

            try
            {
                ws.login(user, password);
                ws.wizard.cancelPostponedNode("5458e52a-58a5-4b5d-ac89-e4e5837924a9");
            }
            catch (Exception e)
            {
                System.Console.WriteLine(e.ToString());
            }
        }
    }
}
```

addDigitalSignature

Description:

Method	Return values	Description
addDigitalSignature(String uuid, int order)	**void**	Add a digital signature in the wizard of a node.

Example:

```
using System;
using System.Collections.Generic;
using System.Linq;
using System.Text;
using com.openkm.sdk4csharp;
using com.openkm.sdk4csharp.util;
using com.openkm.sdk4csharp.bean;
using com.openkm.sdk4csharp.impl;
using System.IO;

namespace OKMRest
{
    public class Program
    {
        static void Main(string[] args)
        {
            String host = "http://localhost:8080/openkm";
            String username = "okmAdmin";
            String password = "admin";
            OKMWebservice ws = OKMWebservicesFactory.newInstance(host);

            try
            {
                ws.login(user, password);
                int order = 0;
                ws.wizard.addDigitalSignature("055b5206-35d0-4351-ba92-c304bbba7ddf",order);
                Console.WriteLine("Add digital signature");
            }
            catch (Exception e)
            {
                System.Console.WriteLine(e.ToString());
            }
```

```
        }
    }
}
```

removeDigitalSignature

Description:

Method	Return values	Description
removeDigitalSignature(String uuid)	**void**	Remove a digital signature in the wizard of a node.

Example:

```
using System;
using System.Collections.Generic;
using System.Linq;
using System.Text;
using com.openkm.sdk4csharp;
using com.openkm.sdk4csharp.util;
using com.openkm.sdk4csharp.bean;
using com.openkm.sdk4csharp.impl;
using System.IO;

namespace OKMRest
{
    public class Program
    {
        static void Main(string[] args)
        {
            String host = "http://localhost:8080/openkm";
            String username = "okmAdmin";
            String password = "admin";
            OKMWebservice ws = OKMWebservicesFactory.newInstance(host);

            try
            {
                ws.login(user, password);
                ws.wizard.removeDigitalSignature("055b5206-35d0-4351-ba92-c304bbba7ddf");
                Console.WriteLine("Remove digital signature");
            }
            catch (Exception e)
            {
                System.Console.WriteLine(e.ToString());
            }
        }
    }
}
```

addShowWizardCategories

Description:

Method	Return values	Description

addShowWizardCategories(String uuid, int order)	**void**	Add show wizard categories to the wizard of a node.

Example:

```
using System;
using System.Collections.Generic;
using System.Linq;
using System.Text;
using com.openkm.sdk4csharp;
using com.openkm.sdk4csharp.util;
using com.openkm.sdk4csharp.bean;
using com.openkm.sdk4csharp.impl;
using System.IO;

namespace OKMRest
{
   public class Program
   {
      static void Main(string[] args)
      {
         String host = "http://localhost:8080/openkm";
         String username = "okmAdmin";
         String password = "admin";
         OKMWebservice ws = OKMWebservicesFactory.newInstance(host);

         try
         {
            ws.login(user, password);
            int order = 0;
            ws.wizard.addShowWizardCategories("055b5206-35d0-4351-ba92-c304bbba7ddf", order);
            Console.WriteLine("addShowWizardCategories");
         }
         catch (Exception e)
         {
            System.Console.WriteLine(e.ToString());
         }
      }
   }
}
```

removeShowWizardCategories

Description:

Method	Return values	Description
removeShowWizardCategories(String uuid)	**void**	Remove show wizard categories from the wizard of a node.

Example:

```
using System;
using System.Collections.Generic;
```

```
using System.Linq;
using System.Text;
using com.openkm.sdk4csharp;
using com.openkm.sdk4csharp.util;
using com.openkm.sdk4csharp.bean;
using com.openkm.sdk4csharp.impl;
using System.IO;

namespace OKMRest
{
   public class Program
   {
      static void Main(string[] args)
      {
         String host = "http://localhost:8080/openkm";
         String username = "okmAdmin";
         String password = "admin";
         OKMWebservice ws = OKMWebservicesFactory.newInstance(host);

         try
         {
            ws.login(user, password);
            ws.wizard.removeShowWizardCategories("055b5206-35d0-4351-ba92-c304bbba7ddf");
            Console.WriteLine("removeShowWizardCategories");
         }
         catch (Exception e)
         {
            System.Console.WriteLine(e.ToString());
         }
      }
   }
}
```

addShowWizardKeywords

Description:

Method	Return values	Description
addShowWizardKeywords(String uuid, int order)	**void**	Add show wizard keywords to the wizard of a node.

Example:

```
using System;
using System.Collections.Generic;
using System.Linq;
using System.Text;
using com.openkm.sdk4csharp;
using com.openkm.sdk4csharp.util;
using com.openkm.sdk4csharp.bean;
using com.openkm.sdk4csharp.impl;
using System.IO;

namespace OKMRest
{
   public class Program
   {
```

```
        static void Main(string[] args)
        {
            String host = "http://localhost:8080/openkm";
            String username = "okmAdmin";
            String password = "admin";
            OKMWebservice ws = OKMWebservicesFactory.newInstance(host);

            try
            {
                ws.login(user, password);
                int order = 0;
                ws.wizard.addShowWizardKeywords("055b5206-35d0-4351-ba92-c304bbba7ddf", order);
                Console.WriteLine("addShowWizardKeywords");
            }
            catch (Exception e)
            {
                System.Console.WriteLine(e.ToString());
            }
        }
    }
}
```

removeShowWizardKeywords

Description:

Method	Return values	Description
removeShowWizardKeywords(String uuid)	**void**	Remove show wizard keywords from the wizard of a node.

Example:

```
using System;
using System.Collections.Generic;
using System.Linq;
using System.Text;
using com.openkm.sdk4csharp;
using com.openkm.sdk4csharp.util;
using com.openkm.sdk4csharp.bean;
using com.openkm.sdk4csharp.impl;
using System.IO;

namespace OKMRest
{
    public class Program
    {
        static void Main(string[] args)
        {
            String host = "http://localhost:8080/openkm";
            String username = "okmAdmin";
            String password = "admin";
            OKMWebservice ws = OKMWebservicesFactory.newInstance(host);

            try
            {
                ws.login(user, password);
                ws.wizard.removeShowWizardKeywords("055b5206-35d0-4351-ba92-c304bbba7ddf");
```

```
            Console.WriteLine("removeShowWizardKeywords");
        }
        catch (Exception e)
        {
            System.Console.WriteLine(e.ToString());
        }
    }
  }
}
```

addShowWizardOCRDataCapture

Description:

Method	Return values	Description
addShowWizardOCRDataCapture(String uuid, int order)	**void**	Add show wizard OCR data capture to the wizard of a node.

Example:

```
using System;
using System.Collections.Generic;
using System.Linq;
using System.Text;
using com.openkm.sdk4csharp;
using com.openkm.sdk4csharp.util;
using com.openkm.sdk4csharp.bean;
using com.openkm.sdk4csharp.impl;
using System.IO;

namespace OKMRest
{
  public class Program
  {
    static void Main(string[] args)
    {
      String host = "http://localhost:8080/openkm";
      String username = "okmAdmin";
      String password = "admin";
      OKMWebservice ws = OKMWebservicesFactory.newInstance(host);

      try
      {
        ws.login(user, password);
        int order = 0;
        ws.wizard.addShowWizardOCRDataCapture("055b5206-35d0-4351-ba92-c304bbba7ddf", order);
        Console.WriteLine("addShowWizardOCRDataCapture");
      }
      catch (Exception e)
      {
        System.Console.WriteLine(e.ToString());
      }
    }
  }
}
```

removeShowWizardOCRDataCapture

Description:

Method	Return values	Description
removeShowWizardOCRDataCapture(String uuid)	**void**	Remove show wizard OCR data capture from the wizard of a node.

Example:

```
using System;
using System.Collections.Generic;
using System.Linq;
using System.Text;
using com.openkm.sdk4csharp;
using com.openkm.sdk4csharp.util;
using com.openkm.sdk4csharp.bean;
using com.openkm.sdk4csharp.impl;
using System.IO;

namespace OKMRest
{
   public class Program
   {
      static void Main(string[] args)
      {
         String host = "http://localhost:8080/openkm";
         String username = "okmAdmin";
         String password = "admin";
         OKMWebservice ws = OKMWebservicesFactory.newInstance(host);

         try
         {
            ws.login(user, password);
            ws.wizard.removeShowWizardOCRDataCapture("055b5206-35d0-4351-ba92-c304bbba7ddf");
            Console.WriteLine("removeShowWizardOCRDataCapture");
         }
         catch (Exception e)
         {
            System.Console.WriteLine(e.ToString());
         }
      }
   }
}
```

addGroup

Description:

Method	Return values	Description
addGroup(String uuid, String group, int order)	**void**	Add a metadata group to the wizard.

The parameter **uuid** is the unique node identifier.

The parameter **group** is the group name.

Example:

```
using System;
using System.Collections.Generic;
using System.Linq;
using System.Text;
using com.openkm.sdk4csharp;
using com.openkm.sdk4csharp.util;
using com.openkm.sdk4csharp.bean;
using com.openkm.sdk4csharp.impl;
using System.IO;

namespace OKMRest
{
   public class Program
   {
      static void Main(string[] args)
      {
         String host = "http://localhost:8080/openkm";
         String username = "okmAdmin";
         String password = "admin";
         OKMWebservice ws = OKMWebservicesFactory.newInstance(host);

         try
         {
            ws.login(user, password);
            int order = 0;
            ws.wizard.addGroup("055b5206-35d0-4351-ba92-c304bbba7ddf", "okg:testing", order);
            Console.WriteLine("addGroup");
         }
         catch (Exception e)
         {
            System.Console.WriteLine(e.ToString());
         }
      }
   }
}
```

removeGroup

Description:

Method	Return values	Description
removeGroup(String uuid, String group)	**void**	Remove a metadata group from the wizard.

The parameter **uuid** is the unique node identifier.

The parameter **group** is the group name.

Example:

```
using System;
using System.Collections.Generic;
using System.Linq;
using System.Text;
using com.openkm.sdk4csharp;
using com.openkm.sdk4csharp.util;
using com.openkm.sdk4csharp.bean;
using com.openkm.sdk4csharp.impl;
using System.IO;

namespace OKMRest
{
   public class Program
   {
      static void Main(string[] args)
      {
         String host = "http://localhost:8080/openkm";
         String username = "okmAdmin";
         String password = "admin";
         OKMWebservice ws = OKMWebservicesFactory.newInstance(host);

         try
         {
            ws.login(user, password);
            ws.wizard.removeGroup("055b5206-35d0-4351-ba92-c304bbba7ddf", "okg:testing");
            Console.WriteLine("removeGroup");
         }
         catch (Exception e)
         {
            System.Console.WriteLine(e.ToString());
         }
      }
   }
}
```

addWorkflow

Description:

Method	Return values	Description
addWorkflow(String uuid, String workflow, int order)	**void**	Add a workflow to the wizard.

The parameter **uuid** is the unique node identifier.

The parameter **workflow** is the workflow name.

Example:

```
using System;
using System.Collections.Generic;
using System.Linq;
using System.Text;
```

```
using com.openkm.sdk4csharp;
using com.openkm.sdk4csharp.util;
using com.openkm.sdk4csharp.bean;
using com.openkm.sdk4csharp.impl;
using System.IO;

namespace OKMRest
{
   public class Program
   {
      static void Main(string[] args)
      {
         String host = "http://localhost:8080/openkm";
         String username = "okmAdmin";
         String password = "admin";
         OKMWebservice ws = OKMWebservicesFactory.newInstance(host);

         try
         {
            ws.login(user, password);
            int order = 0;
            ws.wizard.addWorkflow("055b5206-35d0-4351-ba92-c304bbba7ddf", "purchase", order);
            Console.WriteLine("addWorkflow");
         }
         catch (Exception e)
         {
            System.Console.WriteLine(e.ToString());
         }
      }
   }
}
```

removeWorkflow

Description:

Method	Return values	Description
removeWorkflow(String uuid, String workflow)	**void**	Remove a workflow from the wizard.

The parameter **uuid** is the unique node identifier.

The parameter **workflow** is the workflow name.

Example:

```
using System;
using System.Collections.Generic;
using System.Linq;
using System.Text;
using com.openkm.sdk4csharp;
using com.openkm.sdk4csharp.util;
using com.openkm.sdk4csharp.bean;
using com.openkm.sdk4csharp.impl;
using System.IO;

namespace OKMRest
```

```
{
   public class Program
   {
      static void Main(string[] args)
      {
         String host = "http://localhost:8080/openkm";
         String username = "okmAdmin";
         String password = "admin";
         OKMWebservice ws = OKMWebservicesFactory.newInstance(host);

         try
         {
            ws.login(user, password);
            ws.wizard.removeWorkflow("055b5206-35d0-4351-ba92-c304bbba7ddf", "purchase");
            Console.WriteLine("removeWorkflow");
         }
         catch (Exception e)
         {
            System.Console.WriteLine(e.ToString());
         }
      }
   }
}
```

setAutostart

Description:

Method	Return values	Description
setAutostart(String uuid)	**void**	Set auto-start for the wizard.

Autostart should always be **set as the last wizard option**.

Example:

```
using System;
using System.Collections.Generic;
using System.Linq;
using System.Text;
using com.openkm.sdk4csharp;
using com.openkm.sdk4csharp.util;
using com.openkm.sdk4csharp.bean;
using com.openkm.sdk4csharp.impl;
using System.IO;

namespace OKMRest
{
   public class Program
   {
      static void Main(string[] args)
      {
         String host = "http://localhost:8080/openkm";
         String username = "okmAdmin";
         String password = "admin";
         OKMWebservice ws = OKMWebservicesFactory.newInstance(host);
```

```
            try
            {
                ws.login(user, password);
                ws.wizard.setAutostart("055b5206-35d0-4351-ba92-c304bbba7ddf");
                Console.WriteLine("setAutostart");
            }
            catch (Exception e)
            {
                System.Console.WriteLine(e.ToString());
            }
        }
    }
}
```

deleteByNode

Description:

Method	Return values	Description
deleteByNode(String uuid)	**void**	Delete a node in the wizard.

The parameter **uuid** is the unique node identifier.

Example:

```
using System;
using System.Collections.Generic;
using System.Linq;
using System.Text;
using com.openkm.sdk4csharp;
using com.openkm.sdk4csharp.util;
using com.openkm.sdk4csharp.bean;
using com.openkm.sdk4csharp.impl;
using System.IO;

namespace OKMRest
{
    public class Program
    {
        static void Main(string[] args)
        {
            String host = "http://localhost:8080/openkm";
            String username = "okmAdmin";
            String password = "admin";
            OKMWebservice ws = OKMWebservicesFactory.newInstance(host);

            try
            {
                ws.login(user, password);
                ws.wizard.deleteByNode("055b5206-35d0-4351-ba92-c304bbba7ddf");
            }
            catch (Exception e)
            {
                System.Console.WriteLine(e.ToString());
```

```
            }
        }
    }
}
```

Workflow samples

Basics

Suggested code sample

First, you must create the webservice object:

```
OKMWebservices ws = OKMWebservicesFactory.newInstance(host);
```

Then you should log in using the method "**login**". You can access the "**login**" method from the webservice object "**ws**" as shown below:

```
ws.login(user, password);
```

Once you are logged in with the web services, the session is kept in the web service object. Then you can use the other API methods.

At this point you can use all the workflow methods from "**workflow**" class as shown below:

```
ws.workflow.registerProcessDefinition(is);
```

For most examples, the Purchase workflow sample has been used.

Methods

registerProcessDefinition

Description:

Method	Return values	Description
registerProcessDefinition(FileStream fs)	**void**	Registers a new workflow.

Example:

```
using System;
using System.Collections.Generic;
using System.Linq;
using System.Text;
using com.openkm.sdk4csharp;
using System.IO;

namespace OKMRest
{
```

```
    public class Program
    {
        static void Main(string[] args)
        {
            String host = "http://localhost:8080/openkm";
            String username = "okmAdmin";
            String password = "admin";
            OKMWebservice ws = OKMWebservicesFactory.newInstance(host);

            try
            {
                ws.login(user, password);
                FileStream fs = new FileStream("E:\\Purchase.par",FileMode.Open);
                ws.workflow.registerProcessDefinition(fs);
                fs.Dispose();
            }
            catch (Exception e)
            {
                System.Console.WriteLine(e.ToString());
            }
        }
    }
}
```

deleteProcessDefinition

Description:

Method	Return values	Description
deleteProcessDefinition(long pdId)	**void**	Deletes a workflow.
The parameter pdId value is a valid workflow process definition ID.		

Example:

```
using System;
using System.Collections.Generic;
using System.Linq;
using System.Text;
using com.openkm.sdk4csharp;
using System.IO;

namespace OKMRest
{
    public class Program
    {
        static void Main(string[] args)
        {
            String host = "http://localhost:8080/openkm";
            String username = "okmAdmin";
            String password = "admin";
            OKMWebservice ws = OKMWebservicesFactory.newInstance(host);

            try
            {
                ws.login(user, password);
                long pdId = 5; // Valid workflow process definition
                ws.workflow.deleteProcessDefinition(pdId);
```

```
            }
            catch (Exception e)
            {
                System.Console.WriteLine(e.ToString());
            }
        }
    }
}
```

getProcessDefinition

Description:

Method	Return values	Description
getProcessDefinition(long pdId)	**void**	Returns a workflow process definition.
The parameter pdId value is a valid workflow process definition ID.		

Example:

```
using System;
using System.Collections.Generic;
using System.Linq;
using System.Text;
using com.openkm.sdk4csharp;
using com.openkm.sdk4csharp.bean;

namespace OKMRest
{
    public class Program
    {
        static void Main(string[] args)
        {
            String host = "http://localhost:8080/openkm";
            String username = "okmAdmin";
            String password = "admin";
            OKMWebservice ws = OKMWebservicesFactory.newInstance(host);

            try
            {
                ws.login(user, password);
                long pdId = 1; // Valid workflow process definition
                ProcessDefinition pd = ws.workflow.getProcessDefinition(pdId);
                System.Console.WriteLine(pd);
            }
            catch (Exception e)
            {
                System.Console.WriteLine(e.ToString());
            }
        }
    }
}
```

runProcessDefinition

Description:

Method	Return values	Description
runProcessDefinition(long pdId, String uuid, List<FormElement> values)	**ProcessInstance**	Executes a workflow on some node.
The parameter pdId value is a valid workflow process definition ID. The parameter uuid can be any document, mail, folder or record UUID. The parameter values are form element values needed to start the workflow (not all workflows require form values to start).		

Example:

```
using System;
using System.Collections.Generic;
using System.Linq;
using System.Text;
using com.openkm.sdk4csharp;
using com.openkm.sdk4csharp.bean;
using com.openkm.sdk4csharp.bean.form;

namespace OKMRest
{
   public class Program
   {
      static void Main(string[] args)
      {
         String host = "http://localhost:8080/openkm";
         String username = "okmAdmin";
         String password = "admin";
         OKMWebservice ws = OKMWebservicesFactory.newInstance(host);

         try
         {
            ws.login(user, password);
            long pdId = 8041; // Some valid workflow process definition id
            List<FormElement> feList = new List<FormElement>();
            Input price = new Input();
            price.name = "price";
            price.value = "1000";
            feList.Add(price);
            TextArea textArea = new TextArea();
            textArea.name = "description";
            textArea.value = "some description here";
            feList.Add(textArea);
            ws.workflow.runProcessDefinition(pdId, "7aa523e0-06cf-4733-b8c8-cc74d8b2716d", feList);
         }
         catch (Exception e)
         {
            System.Console.WriteLine(e.ToString());
         }
      }
   }
}
```

runProcessDefinition

Description:

Method	Return values	Description
runProcessDefinition(long pdId, Dictionary<String, String> properties)	**ProcessInstance**	Executes a workflow on some node.
The parameter pdId value is a valid workflow process definition ID. The parameter values are form element values needed to start the workflow (not all workflows require form values to start).		

Example:

```
using System;
using System.Collections.Generic;
using System.Linq;
using System.Text;
using com.openkm.sdk4csharp;
using com.openkm.sdk4csharp.bean;
using com.openkm.sdk4csharp.bean.form;

namespace OKMRest
{
   public class Program
   {
      static void Main(string[] args)
      {
         String host = "http://localhost:8080/openkm";
         String username = "okmAdmin";
         String password = "admin";
         OKMWebservice ws = OKMWebservicesFactory.newInstance(host);

         try
         {
            ws.login(user, password);
            long pdId = 8041; // Some valid workflow process definition id
            Dictionary<String, String> properties = new Dictionary<String, String>();
            properties.Add("price", "1000");
            properties.Add("description", "some description here");
            ws.workflow.runProcessDefinition(pdId, properties);
         }
         catch (Exception e)
         {
            System.Console.WriteLine(e.ToString());
         }
      }
   }
}
```

findAllProcessDefinitions

Description:

Method	Return values	Description

findAllProcessDefinitions()	**List<ProcessDefinition>**	Retrieves a list of all registered workflow definitions.

Example:

```
using System;
using System.Collections.Generic;
using System.Linq;
using System.Text;
using com.openkm.sdk4csharp;
using com.openkm.sdk4csharp.bean;

namespace OKMRest
{
   public class Program
   {
      static void Main(string[] args)
      {
         String host = "http://localhost:8080/openkm";
         String username = "okmAdmin";
         String password = "admin";
         OKMWebservice ws = OKMWebservicesFactory.newInstance(host);

         try
         {
            ws.login(user, password);
            foreach (ProcessDefinition pd in ws.workflow.findAllProcessDefinitions())
            {
                System.Console.WriteLine(pd);
            }
         }
         catch (Exception e)
         {
            System.Console.WriteLine(e.ToString());
         }
      }
   }
}
```

findProcessInstances

Description:

Method	Return values	Description
findProcessInstances(long pdId)	**List<ProcessInstance>**	Retrieves a list of all process instances of some registered workflow definition.
The parameter pdId value is a valid workflow process definition.		

Example:

```
using System;
using System.Collections.Generic;
using System.Linq;
using System.Text;
```

```
using com.openkm.sdk4csharp;
using com.openkm.sdk4csharp.bean;

namespace OKMRest
{
   public class Program
   {
      static void Main(string[] args)
      {
         String host = "http://localhost:8080/openkm";
         String username = "okmAdmin";
         String password = "admin";
         OKMWebservice ws = OKMWebservicesFactory.newInstance(host);

         try
         {
            ws.login(user, password);
            // Get all workflow definitions
            foreach (ProcessDefinition pd in ws.findAllProcessDefinitions())
            {
               System.Console.WriteLine("WF definition: "+pd);
               // Get all process of some workflow definition
               foreach (ProcessInstance pi in ws.workflow.findProcessInstances(pd.id))
               {
                  System.Console.WriteLine("PI: "+pi);
               }
            }
         }
         catch (Exception e)
         {
            System.Console.WriteLine(e.ToString());
         }
      }
   }
}
```

findLatestProcessDefinitions

Description:

Method	Return values	Description
findLatestProcessDefinitions()	**List<ProcessDefinition>**	Retrieves a list of the latest workflow definitions.

There can be several versions of the same workflow registered.

Example:

```
using System;
using System.Collections.Generic;
using System.Linq;
using System.Text;
using com.openkm.sdk4csharp;
using com.openkm.sdk4csharp.bean;

namespace OKMRest
```

```
{
   public class Program
   {
      static void Main(string[] args)
      {
         String host = "http://localhost:8080/openkm";
         String username = "okmAdmin";
         String password = "admin";
         OKMWebservice ws = OKMWebservicesFactory.newInstance(host);

         try
         {
               ws.login(user, password);
               // Get all latest workflow definitions
          foreach (ProcessDefinition pd in ws.workflow.findLatestProcessDefinitions())
               {
                  System.Console.WriteLine("WF definition: " + pd);
          }
         }
         catch (Exception e)
         {
            System.Console.WriteLine(e.ToString());
         }
      }
   }
}
```

findLastProcessDefinition

Description:

Method	Return values	Description
findLastProcessDefinition(String name)	**ProcessDefinition**	Retrieves the latest workflow definition of a specific workflow.

The parameter name identifies a specific group of workflow definitions.

Several workflow definition versions can have the same name.

Example:

```
using System;
using System.Collections.Generic;
using System.Linq;
using System.Text;
using com.openkm.sdk4csharp;
using com.openkm.sdk4csharp.bean;

namespace OKMRest
{
   public class Program
   {
      static void Main(string[] args)
```

```
        {
            String host = "http://localhost:8080/openkm";
            String username = "okmAdmin";
            String password = "admin";
            OKMWebservice ws = OKMWebservicesFactory.newInstance(host);

            try
            {
                ws.login(user, password);
                ProcessDefinition pd = ws.workflow.findLastProcessDefinition("purchase");
                System.Console.WriteLine("WF definition: " + pd);
            }
            catch (Exception e)
            {
                System.Console.WriteLine(e.ToString());
            }
        }
    }
}
```

getProcessInstance

Description:

Method	Return values	Description
getProcessInstance(long piId)	**ProcessInstance**	Returns the process instance.
The parameter piId is a valid process instance ID.		

Example:

```
using System;
using System.Collections.Generic;
using System.Linq;
using System.Text;
using com.openkm.sdk4csharp;
using com.openkm.sdk4csharp.bean;

namespace OKMRest
{
    public class Program
    {
        static void Main(string[] args)
        {
            String host = "http://localhost:8080/openkm";
            String username = "okmAdmin";
            String password = "admin";
            OKMWebservice ws = OKMWebservicesFactory.newInstance(host);

            try
            {
                ws.login(user, password);
                long piId = 5868; // Some valid process instance id
          ProcessInstance pi = ws.workflow.getProcessInstance(piId);
                System.Console.WriteLine("PI: " + pi);
            }
            catch (Exception e)
```

```
            {
                System.Console.WriteLine(e.ToString());
            }
        }
    }
}
```

findUserTaskInstances

Description:

Method	Return values	Description
findUserTaskInstances(int offset, int limit)	**TaskInstanceResultSet**	Returns a TaskInstanceResultSet object.

Example:

```
using System;
using System.Collections.Generic;
using System.Linq;
using System.Text;
using com.openkm.sdk4csharp;
using com.openkm.sdk4csharp.bean;

namespace OKMRest
{
    public class Program
    {
        static void Main(string[] args)
        {
            String host = "http://localhost:8080/openkm";
            String username = "okmAdmin";
            String password = "admin";
            OKMWebservice ws = OKMWebservicesFactory.newInstance(host);

            try
            {
                ws.login(user, password);
                // Get all user task intances
                TaskInstanceResultSet tasks = ws.workflow.findUserTaskInstances(0, 5);
                foreach (TaskInstance ti in tasks.results)
                {
                    System.Console.WriteLine(ti.toString());
                }
            }
            catch (Exception e)
            {
                System.Console.WriteLine(e.ToString());
            }
        }
    }
}
```

findTaskInstances

Description:

Method	Return values	Description
findTaskInstances(long piId)	**List<TaskInstance>**	Retrieves a list of task instances for a given process instance ID.
The parameter piId is a valid process instance id.		

Example:

```
using System;
using System.Collections.Generic;
using System.Linq;
using System.Text;
using com.openkm.sdk4csharp;
using com.openkm.sdk4csharp.bean;

namespace OKMRest
{
   public class Program
   {
      static void Main(string[] args)
      {
         String host = "http://localhost:8080/openkm";
         String username = "okmAdmin";
         String password = "admin";
         OKMWebservice ws = OKMWebservicesFactory.newInstance(host);

         try
         {
            ws.login(user, password);
            // Get all task instances of some process instance
            long piId = 8108; // Some valid process instance id
            foreach (TaskInstance ti in ws.workflow.findTaskInstances(piId))
            {
               System.Console.WriteLine(ti);
            }
         }
         catch (Exception e)
         {
            System.Console.WriteLine(e.ToString());
         }
      }
   }
}
```

setTaskInstanceValues

Description:

Method	Return values	Description
setTaskInstanceValues(long tiId, String transName, List<FormElement> values)	**void**	Retrieves a list of task instances of some process instance ID.

The parameter tiId is a valid task instance id.

The parameter transName is the chosen transaction.

The parameter values are form element values needed for starting the workflow (not all workflow tasks require form values).

Example:

```
using System;
using System.Collections.Generic;
using System.Linq;
using System.Text;
using com.openkm.sdk4csharp;
using com.openkm.sdk4csharp.bean;
using com.openkm.sdk4csharp.bean.form;

namespace OKMRest
{
   public class Program
   {
      static void Main(string[] args)
      {
         String host = "http://localhost:8080/openkm";
         String username = "okmAdmin";
         String password = "admin";
         OKMWebservice ws = OKMWebservicesFactory.newInstance(host);

         try
         {
            ws.login(user, password);
            long tiId = 8110; // Some valid task instance id
            List<FormElement> feList = new List<FormElement>();
            ws.workflow.setTaskInstanceValues(tiId, "approve", feList);
         }
         catch (Exception e)
         {
            System.Console.WriteLine(e.ToString());
         }
      }
   }
}
```

getTaskInstance

Description:

Method	Return values	Description
getTaskInstance(long tiId)	**TaskInstance**	Returns a task instance.
The parameter tiId is a valid task instance id.		

Example:

```
using System;
using System.Collections.Generic;
using System.Linq;
using System.Text;
using com.openkm.sdk4csharp;
using com.openkm.sdk4csharp.bean;

namespace OKMRest
{
   public class Program
   {
      static void Main(string[] args)
      {
         String host = "http://localhost:8080/openkm";
         String username = "okmAdmin";
         String password = "admin";
         OKMWebservice ws = OKMWebservicesFactory.newInstance(host);

         try
         {
            ws.login(user, password);
            long tiId = 8110; // Some valid task instance id
            TaskInstance ti = ws.workflow.getTaskInstance(tiId);
            System.Console.WriteLine(ti);
         }
         catch (Exception e)
         {
            System.Console.WriteLine(e.ToString());
         }
      }
   }
}
```

startTaskInstance

Description:

Method	Return values	Description
startTaskInstance(long tiId)	**void**	Starts a task instance.
The parameter tiId is a valid task instance id.		

Example:

```
using System;
using System.Collections.Generic;
using System.Linq;
using System.Text;
using com.openkm.sdk4csharp;

namespace OKMRest
{
   public class Program
```

```
    {
        static void Main(string[] args)
        {
            String host = "http://localhost:8080/openkm";
            String username = "okmAdmin";
            String password = "admin";
            OKMWebservice ws = OKMWebservicesFactory.newInstance(host);

            try
            {
                ws.login(user, password);
                long tiId = 8110; // Some valid task instance id
                ws.workflow.startTaskInstance(tiId);
            }
            catch (Exception e)
            {
                System.Console.WriteLine(e.ToString());
            }
        }
    }
}
```

setTaskInstanceActorId

Description:

Method	Return values	Description
setTaskInstanceActorId(long tiId, String actorId)	**void**	Starts a task instance.
The parameter tiId is a valid task instance id. The parameter actorId must be a valid OpenKM userId.		

Example:

```
using System;
using System.Collections.Generic;
using System.Linq;
using System.Text;
using com.openkm.sdk4csharp;

namespace OKMRest
{
    public class Program
    {
        static void Main(string[] args)
        {
            String host = "http://localhost:8080/openkm";
            String username = "okmAdmin";
            String password = "admin";
            OKMWebservice ws = OKMWebservicesFactory.newInstance(host);

            try
            {
                ws.login(user, password);
                long tiId = 8110; // Some valid task instance id
```

```
            ws.workflow.setTaskInstanceActorId(tiId, "okmAdmin");
        }
        catch (Exception e)
        {
            System.Console.WriteLine(e.ToString());
        }
    }
  }
}
```

endTaskInstance

Description:

Method	Return values	Description
endTaskInstance(long tiId, String transName)	**void**	Starts a task instance.
The parameter tiId is a valid task instance id. The parameter transName is a transaction name.		

Example:

```
using System;
using System.Collections.Generic;
using System.Linq;
using System.Text;
using com.openkm.sdk4csharp;

namespace OKMRest
{
   public class Program
   {
      static void Main(string[] args)
      {
         String host = "http://localhost:8080/openkm";
         String username = "okmAdmin";
         String password = "admin";
         OKMWebservice ws = OKMWebservicesFactory.newInstance(host);

         try
         {
            ws.login(user, password);
            long tiId = 8110; // Some valid task instance id
            ws.workflow.endTaskInstance(tiId, "end");
         }
         catch (Exception e)
         {
            System.Console.WriteLine(e.ToString());
         }
      }
   }
}
```

getProcessDefinitionForms

Description:

Method	Return values	Description
getProcessDefinitionForms(long pdId)	**Dictionary<String, List<FormElement>>**	Returns a map with all the process definition forms.
The parameter pdId value is a valid workflow process definition ID.		

Example:

```
using System;
using System.Collections.Generic;
using System.Linq;
using System.Text;
using com.openkm.sdk4csharp;
using com.openkm.sdk4csharp.bean.form;

namespace OKMRest
{
   public class Program
   {
      static void Main(string[] args)
      {
         String host = "http://localhost:8080/openkm";
         String username = "okmAdmin";
         String password = "admin";
         OKMWebservice ws = OKMWebservicesFactory.newInstance(host);

         try
         {
            ws.login(user, password);
            Dictionary<String, List<FormElement>> forms = ws.workflow.getProcessDefinitionForms(1);
            foreach (KeyValuePair<String, List<FormElement>> pair in forms)
            {
               System.Console.WriteLine("Key:"+ pair.Key);
                  foreach (FormElement fe in pair.Value)
                  {
                     System.Console.WriteLine("Fe:"+ fe);
                  }
            }
         }
         catch (Exception e)
         {
            System.Console.WriteLine(e.ToString());
         }
      }
   }
}
```

getProcessDefinitionImage

Description:

Method	Return values	Description

getProcessDefinitionImage(string pdId, string uuid)	**string**	Returns an image as a string.
The parameter pdId value is a valid workflow process definition ID.		

Example:

```
using System;
using System.Collections.Generic;
using System.Linq;
using System.Text;
using com.openkm.sdk4csharp;
using com.openkm.sdk4csharp.bean.form;

namespace OKMRest
{
   public class Program
   {
      static void Main(string[] args)
      {
         String host = "http://localhost:8080/openkm";
         String username = "okmAdmin";
         String password = "admin";
         OKMWebservice ws = OKMWebservicesFactory.newInstance(host);

         try
         {
            ws.login(user, password);
            string tiId = "1";
            string res = ws.workflow.getProcessDefinitionImage(tiId, "a978f8e6-aa87-4f0f-b7bc-6f44cb090fdf");
            System.Console.WriteLine(res);
         }
         catch (Exception e)
         {
            System.Console.WriteLine(e.ToString());
         }
      }
   }
}
```

findPooledTaskInstances

Description:

Method	Return values	Description
findPooledTaskInstances()	**TaskInstanceResultSet**	Returns a TaskInstanceResultSet object.

Example:

```
using System;
using System.Collections.Generic;
using System.Linq;
using System.Text;
using com.openkm.sdk4csharp;
using com.openkm.sdk4csharp.bean;
```

```
namespace OKMRest
{
   public class Program
   {
      static void Main(string[] args)
      {
         String host = "http://localhost:8080/openkm";
         String username = "okmAdmin";
         String password = "admin";
         OKMWebservice ws = OKMWebservicesFactory.newInstance(host);

         try
         {
            ws.login(user, password);
            TaskInstanceResultSet tasks = ws.workflow.findPooledTaskInstances();
            foreach (TaskInstance ti in tasks.results)
            {
              System.Console.WriteLine(ti.toString());
            }
         }
         catch (Exception e)
         {
            System.Console.WriteLine(e.ToString());
         }
      }
   }
}
```

findProcessInstancesByNode

Description:

Method	Return values	Description
findProcessInstancesByNode(String uuid)	**List<ProcessInstance>**	Retrieves a list of all process instances by node for some registered workflow definition.
The parameter uuid can be any document, mail, folder or record UUID.		

Example:

```
using System;
using System.Collections.Generic;
using System.Linq;
using System.Text;
using com.openkm.sdk4csharp;
using com.openkm.sdk4csharp.bean;

namespace OKMRest
{
   public class Program
   {
      static void Main(string[] args)
      {
         String host = "http://localhost:8080/openkm";
         String username = "okmAdmin";
```

```
            String password = "admin";
            OKMWebservice ws = OKMWebservicesFactory.newInstance(host);

            try
            {
                ws.login(user, password);
                string uuid = "926ee2b3-44d8-4f8a-8b0a-864a0d829971";
                foreach (ProcessInstance pi in ws.workflow.findProcessInstancesByNode(uuid))
                {
                    System.Console.WriteLine("PI: " + pi.toString());
                }
            }
            catch (Exception e)
            {
                System.Console.WriteLine(e.ToString());
            }
        }
    }
}
```

getSuggestBoxKeyValue

Description:

Method	Return values	Description
getSuggestBoxKeyValue(long pdId, String uuid, String taskName, String propertyName, String key)	**String**	Returns the suggestBox value for a key.

Example:

```
using System;
using System.Collections.Generic;
using System.Linq;
using System.Text;
using com.openkm.sdk4csharp;
using com.openkm.sdk4csharp.bean;

namespace OKMRest
{
    public class Program
    {
        static void Main(string[] args)
        {
            String host = "http://localhost:8080/openkm";
            String username = "okmAdmin";
            String password = "admin";
            OKMWebservice ws = OKMWebservicesFactory.newInstance(host);

            try
            {
                ws.login(user, password);
                long pdId = 2;
                String taskName = "task-elaboration";
                Console.WriteLine(ws.workflow.getSuggestBoxKeyValue(pdId, "9c069bdc-4654-4066-b4b2-d203b23e58f
            }
            catch (Exception e)
            {
```

```
            System.Console.WriteLine(e.ToString());
        }
    }
  }
}
```

getSuggestBoxKeyValuesFiltered

Description:

Method	Return values	Description
getSuggestBoxKeyValuesFiltered(long pdId, String uuid, String taskName, String propertyName, String filter)	**Dictionary<String, String>**	Retrieves a map of (key, value) pairs with suggestBox values.

Example:

```
using System;
using System.Collections.Generic;
using System.Linq;
using System.Text;
using com.openkm.sdk4csharp;
using com.openkm.sdk4csharp.bean;

namespace OKMRest
{
   public class Program
   {
      static void Main(string[] args)
      {
         String host = "http://localhost:8080/openkm";
         String username = "okmAdmin";
         String password = "admin";
         OKMWebservice ws = OKMWebservicesFactory.newInstance(host);

         try
         {
            ws.login(user, password);
            long pdId = 2;
            Dictionary<String, String> values = ws.workflow.getSuggestBoxKeyValuesFiltered(pdId, "9c069bdc-4654-
            foreach (KeyValuePair<string, string> value in values)
            {
               Console.WriteLine(value.Key + ":" + value.Value);
            }
         }
         catch (Exception e)
         {
            System.Console.WriteLine(e.ToString());
         }
      }
   }
}
```

searchAssignedTasks

Description:

Method	Return values	Description
searchAssignedTasks(DateTime? start, DateTime? end, String status, long procDefId, int offset, int limit)	**ProcessInstanceResultSet**	Return workflow tasks assigned to the logged user with date range, status, process definition, and pagination parameter.

Example:

```
using System;
using System.Collections.Generic;
using System.Linq;
using System.Text;
using com.openkm.sdk4csharp;
using com.openkm.sdk4csharp.bean;

namespace OKMRest
{
   public class Program
   {
      static void Main(string[] args)
      {
         String host = "http://localhost:8080/openkm";
         String username = "okmAdmin";
         String password = "admin";
         OKMWebservice ws = OKMWebservicesFactory.newInstance(host);

         try
         {
            ws.login(user, password);
            long pdId = 2;
            DateTime startDate = DateTime.Now.AddMonths(-2);
            DateTime endDate = DateTime.Now;
            ProcessInstanceResultSet assignedTask = ws.workflow.searchAssignedTasks(startDate, endDate, "runni
            foreach(var result in assignedTask.results)
            {
              Console.WriteLine(restult.toString());
            }
         }
         catch (Exception e)
         {
            System.Console.WriteLine(e.ToString());
         }
      }
   }
}
```

searchStartedByMe

Description:

Method	Return values	Description

searchStartedByMe(DateTime? start, DateTime? end, String status, long procDefId, int offset, int limit)	**ProcessInstanceResultSet**	Return workflow tasks started by the logged user with date range, status, process definition, and pagination parameter.

Example:

```
using System;
using System.Collections.Generic;
using System.Linq;
using System.Text;
using com.openkm.sdk4csharp;
using com.openkm.sdk4csharp.bean;

namespace OKMRest
{
   public class Program
   {
      static void Main(string[] args)
      {
         String host = "http://localhost:8080/openkm";
         String username = "okmAdmin";
         String password = "admin";
         OKMWebservice ws = OKMWebservicesFactory.newInstance(host);

         try
         {
            ws.login(user, password);
            long pdId = 2;
            DateTime startDate = DateTime.Now.AddMonths(-2);
            DateTime endDate = DateTime.Now;
            ProcessInstanceResultSet startedByMe= ws.workflow.searchStartedByMe(startDate, endDate, "running",
            foreach(var result in startedByMe.results)
            {
               Console.WriteLine(result.toString());
            }
         }
         catch (Exception e)
         {
            System.Console.WriteLine(e.ToString());
         }
      }
   }
}
```

searchOverview

Description:

Method	Return values	Description
searchOverview(DateTime? start, DateTime? end, String status, long procDefId, String initiator,	**ProcessInstanceResultSet**	Return a general overview of all users' workflow tasks with date range, status, process definition, initiator, task user, and

String taskUser, int offset, int limit)		pagination parameters.

Example:

```
using System;
using System.Collections.Generic;
using System.Linq;
using System.Text;
using com.openkm.sdk4csharp;
using com.openkm.sdk4csharp.bean;

namespace OKMRest
{
   public class Program
   {
      static void Main(string[] args)
      {
         String host = "http://localhost:8080/openkm";
         String username = "okmAdmin";
         String password = "admin";
         OKMWebservice ws = OKMWebservicesFactory.newInstance(host);

         try
         {
            ws.login(user, password);
            long pdId = 2;
            DateTime startDate = DateTime.Now.AddMonths(-2);
            DateTime endDate = DateTime.Now;
            String initiator ="requets_user";
            String taskUser ="approver_user";
            ProcessInstanceResultSet overview = ws.workflow.searchOverview(startDate, endDate, "running", pdDefI
            foreach(var result in overview.results)
            {
               Console.WriteLine(result.toString());
            }
         }
         catch (Exception e)
         {
            System.Console.WriteLine(e.ToString());
         }
      }
   }
}
```

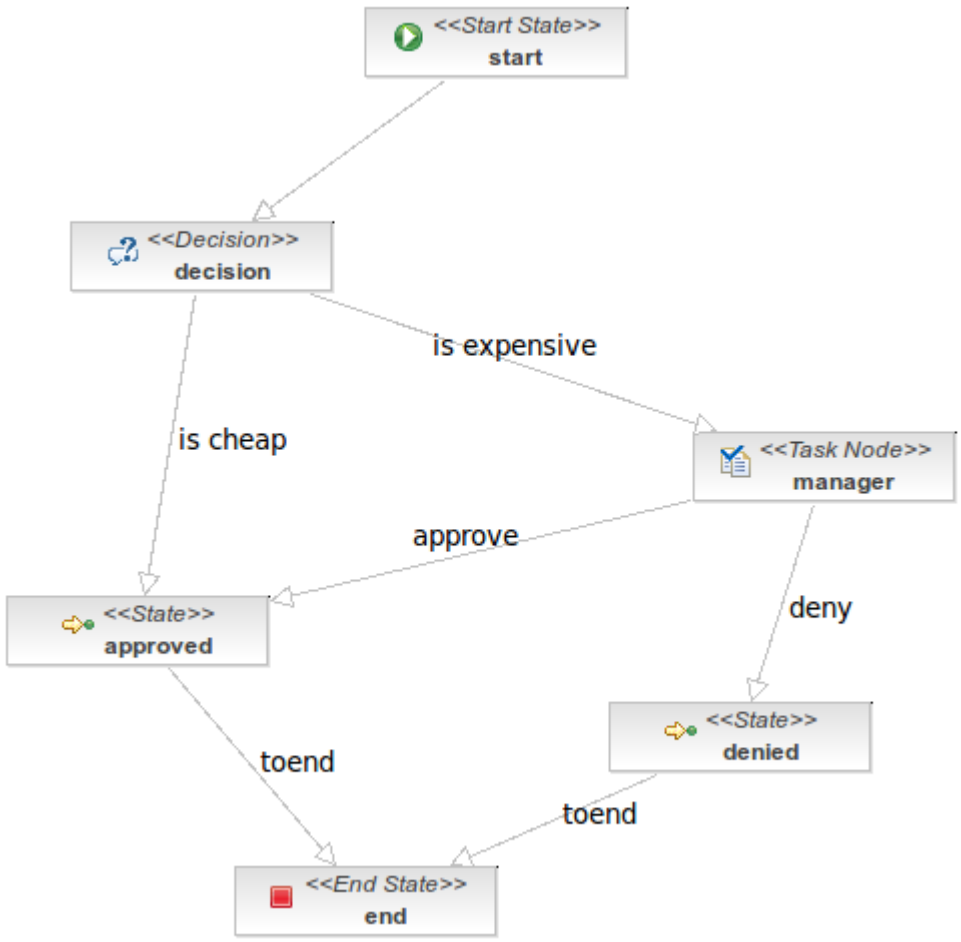
Purchase workflow sample

The task will be assigned to a user called "manager", so you need to create this user and log in as him to see the task assignment.

Also, you can assign this task to another user from the process instance workflow administration.

Download the Purchase.par file.

Process image



Process definition

```
<?xml version="1.0" encoding="UTF-8"?>
<process-definition xmlns="urn:jbpm.org:jpdl-3.2" name="purchase">
  <start-state name="start">
    <transition to="decision"></transition>
  </start-state>

  <decision name="decision">
    <transition to="approved" name="is cheap">
      <condition expression="#{price.value &lt;= 500}"></condition>
```

```
    </transition>
    <transition to="manager" name="is expensive">
      <condition expression="#{price.value &gt; 500}"></condition>
    </transition>
  </decision>

  <task-node name="manager">
    <task name="evaluate price">
      <description>The manager may deny purchase or go ahead.</description>
      <assignment actor-id="manager"></assignment>
    </task>
    <transition to="denied" name="deny"></transition>
    <transition to="approved" name="approve"></transition>
  </task-node>

  <state name="approved">
    <description>The purchase has been approved.</description>
    <timer duedate="15 seconds" name="approved timer" transition="toend">
      <script>print(&amp;quot;From APPROVED Go to END&amp;quot;);</script>
    </timer>
    <transition to="end" name="toend"></transition>
  </state>

  <state name="denied">
    <description>The purchase has been denied.</description>
    <timer duedate="15 seconds" name="denied timer" transition="toend">
      <script>print(&amp;quot;From DENIED Go to END&amp;quot;);</script>
    </timer>
    <transition to="end" name="toend"></transition>
  </state>

  <end-state name="end"></end-state>
</process-definition>
```

Process handlers

None.

Form definition

```
<?xml version="1.0" encoding="UTF-8"?>
<!DOCTYPE workflow-forms PUBLIC "-//OpenKM//DTD Workflow Forms 2.0//EN"
                               "http://www.openkm.com/dtd/workflow-forms-2.0.dtd">
<workflow-forms>
  <workflow-form task="run_config">
    <input label="Purchase price" name="price" />
    <textarea label="Purchase description" name="description" />
    <button name="submit" label="Submit" />
  </workflow-form>
  <workflow-form task="evaluate price">
    <input label="Purchase price" name="price" data="price" readonly="true" />
    <textarea label="Purchase description" name="description" data="description" readonly="true" />
    <button name="approve" label="Approve" transition="approve"/>
    <button name="deny" label="Deny" transition="deny"/>
  </workflow-form>
</workflow-forms>
```