



Documentation for SDK for Java 1.3

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## SDK for Java 1.3

OpenKM SDK for Java is a set of software development tools that allows for the creation of applications for OpenKM. The OpenKM SDK for Java include a Webservices library.

This Webservices library is a complete API layer to access OpenKM through REST Webservices and provides complete compatibility between OpenKM REST Webservices versions minimizing the changes in your code.

## License



**SDK for Java is licensed under the terms of the [EULA - OpenKM SDK End User License Agreement](#) as published by OpenKM Knowledge Management System S.L.**

This program is distributed WITHOUT ANY WARRANTY; without even the implied warranty of MERCHANTABILITY or FITNESS FOR A PARTICULAR PURPOSE. See the [EULA - OpenKM SDK End User License Agreement](#) for more details.

## Compatibility



**SDK for Java version 1.3 should be used:**

- **From OpenKM Community version 6.3.10 and upper.**

## Sample client

You can make use of the OpenKM Maven Repository and the right SDK version. This is a sample pom.xml configuration:

```
<?xml version="1.0" encoding="UTF-8"?>
<project xmlns="http://maven.apache.org/POM/4.0.0"
  xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance"
  xsi:schemaLocation="http://maven.apache.org/POM/4.0.0 http://maven.apache.org
  <modelVersion>4.0.0</modelVersion>

  <groupId>com.openkm.sample</groupId>
  <artifactId>sample</artifactId>
  <version>1.0-SNAPSHOT</version>

  <repositories>
    <repository>
      <id>openkm.com</id>
      <name>OpenKM Maven Repository</name>
      <url>https://maven.openkm.com</url>
    </repository>
  </repositories>

  <dependencies>
    <dependency>
      <groupId>com.openkm</groupId>
      <artifactId>sdk4j</artifactId>
      <version>1.2</version>
    </dependency>
  </dependencies>
</project>
```

Your first class:

```
import com.openkm.sdk4j.OKMWebservices;
import com.openkm.sdk4j.OKMWebservicesFactory;
import com.openkm.sdk4j.bean.Folder;
import com.openkm.sdk4j.exception.*;

/**
 * Sample OpenKM SDK client
 */
public class Main {
    public static void main(String var[]) throws Exception {
        String url = "http://demo.openkm.com/OpenKM";
        String user = "user5";
        String pass = "pass5";
        OKMWebservices okm = OKMWebservicesFactory.newInstance(url, user, pass);

        for (Folder fld : okm.getFolderChildren("/okm:root")) {
            System.out.println("Folder -> " + fld.getPath());
        }
    }
}
```

## Jar sample



If you use "maven-assembly-plugin" rather "maven-shade-plugin" you will get an error "missing

**"MessageBodyWriter" while uploading a new file across the SDK.**

```

<?xml version="1.0" encoding="UTF-8"?>
<project xmlns="http://maven.apache.org/POM/4.0.0"
  xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance"
  xsi:schemaLocation="http://maven.apache.org/POM/4.0.0 http://maven.apache.org/POM/4.0.0"
  <modelVersion>4.0.0</modelVersion>

  <groupId>com.openkm.sample</groupId>
  <artifactId>sample</artifactId>
  <version>1.0-SNAPSHOT</version>

  <properties>
    <java.compiler>1.8</java.compiler>
    <sdk4j.version>1.2</sdk4j.version>
    <maven-compiler-plugin.version>3.1</maven-compiler-plugin.version>
    <maven-shade-plugin.version>2.4.3</maven-shade-plugin.version>
    <project.build.sourceEncoding>UTF-8</project.build.sourceEncoding>
  </properties>

  <repositories>
  <repository>
    <id>openkm.com</id>
    <name>OpenKM Maven Repository</name>
    <url>https://maven.openkm.com</url>
  </repository>
  </repositories>

  <dependencies>
  <dependency>
    <groupId>com.openkm</groupId>
    <artifactId>sdk4j</artifactId>
    <version>${sdk4j.version}</version>
  </dependency>
  </dependencies>

  <build>
    <plugins>
      <plugin>
        <groupId>org.apache.maven.plugins</groupId>
        <artifactId>maven-compiler-plugin</artifactId>
        <version>${maven-compiler-plugin.version}</version>
        <configuration>
          <source>${java.compiler}</source>
          <target>${java.compiler}</target>
          <encoding>${project.build.sourceEncoding}</encoding>
        </configuration>
      </plugin>
      <plugin>
        <groupId>org.apache.maven.plugins</groupId>
        <artifactId>maven-shade-plugin</artifactId>
        <version>${maven-shade-plugin.version}</version>
        <executions>
          <execution>
            <phase>package</phase>
            <goals>
              <goal>shade</goal>
            </goals>
            <configuration>
              <transformers>
                <transformer implementation="org.apache.maven.plugins"
                  <mainClass>com.openkm.Main</mainClass>
                </transformer>
                <transformer implementation="org.apache.maven.plugins"
                  <resource>META-INF/services/javax.ws.rs.ext.MessageBodyWriter</resource>

```

```
                </transformer>
            </transformers>
        </configuration>
    </execution>
</executions>
</plugin>
</plugins>
</build>
</project>
```

## Basic concepts

### Authentication

The first lines in your Java code should be used to create the Webservices object.

We suggest using this method:

```
OKMWebservices ws = OKMWebservicesFactory.newInstance(host, username, password);
```

```
package com.openkm;

import com.openkm.sdk4j.OKMWebservices;
import com.openkm.sdk4j.OKMWebservicesFactory;
import com.openkm.sdk4j.exception.AccessDeniedException;
import com.openkm.sdk4j.exception.DatabaseException;
import com.openkm.sdk4j.exception.RepositoryException;
import com.openkm.sdk4j.exception.UnknowException;
import com.openkm.sdk4j.exception.WebserviceException;

public class Test {
    public static void main(String[] args) {
        String host = "http://localhost:8080/OpenKM";
        String username = "okmAdmin";
        String password = "admin";
        OKMWebservices ws = OKMWebservicesFactory.newInstance(host, username, password);

        try {
            System.out.println(ws.getAppVersion());
        } catch (RepositoryException e) {
            e.printStackTrace();
        } catch (DatabaseException e) {
            e.printStackTrace();
        } catch (UnknowException e) {
            e.printStackTrace();
        } catch (WebserviceException e) {
            e.printStackTrace();
        }
    }
}
```

Also is possible doing the same from each API class implementation.



We do not suggest this way.

For example with this method:

```
RepositoryImpl repositoryImpl = new RepositoryImpl(host, username, password, new
BeanHelper());
```

```
package com.openkm;

import com.openkm.sdk4j.OKMWebservices;
import com.openkm.sdk4j.OKMWebservicesFactory;
```

```
import com.openkm.sdk4j.exception.AccessDeniedException;
import com.openkm.sdk4j.exception.DatabaseException;
import com.openkm.sdk4j.exception.RepositoryException;
import com.openkm.sdk4j.exception.UnknowException;
import com.openkm.sdk4j.exception.WebserviceException;
import com.openkm.sdk4j.impl.RepositoryImpl;
import com.openkm.sdk4j.util.BeanHelper;

public class Test {
    public static void main(String[] args) {
        String host = "http://localhost:8080/OpenKM";
        String username = "okmAdmin";
        String password = "admin";
        RepositoryImpl repositoryImpl = new RepositoryImpl(host, username, password, new Be

        try {
            System.out.println(repositoryImpl.getAppVersion());
        } catch (RepositoryException e) {
            e.printStackTrace();
        } catch (DatabaseException e) {
            e.printStackTrace();
        } catch (UnknowException e) {
            e.printStackTrace();
        } catch (WebserviceException e) {
            e.printStackTrace();
        }
    }
}
```

### Accessing API

OpenKM API classes are under com.openkm package, as can shown at this [Javadoc API summary](#).

 At main url <http://docs.openkm.com/javadoc/> you'll see all available Javadoc documentation.  
At the moment of writing this page the actual OpenKM version was 6.3.0 what can change on time.

 There is a direct correspondence between the classes and methods into, implemented at com.openkm.api packages and available from SDK for Java.

OpenKM API classes:

OpenKM API class	Description	Supported	Implementation	Interface
<b>OKMAuth</b>	Manage security and users. For example add or remove grants on a node, create or modify users or getting the profiles.	Yes	AuthImpl.java	BaseAuth.java
<b>OKMBookmark</b>	Manage the user	No		

	bookmarks.			
<b>OKMDashboard</b>	Manage all data shown at dashboard.	No		
<b>OKMDocument</b>	Manage documents. For example create, move or delete a document.	Yes	DocumentImpl.java	BaseDocument.java
<b>OKMFolder</b>	Manage folders. For example create, move or delete a folder.	Yes	FolderImpl.java	BaseFolder.java
<b>OKMMail</b>	Manage mails. For example create, move or delete a mails.	No		
<b>OKMNote</b>	Manage notes on any node type. For example create, edit or delete a note on a document, folder, mail or record.	Yes	NoteImpl.java	BaseNote.java
<b>OKMNotification</b>	Manage notifications. For example add or remove subscriptions on a document or a folder.	No		
<b>OKMProperty</b>	Manage categories and keywords. For example add or remove keywords on a	Yes	PropertyImpl.java	BaseProperty.java

	document, folder, mail or record.			
<b>OKMPropertyGroup</b>	Manage metadata. For example add metadata group, set metadata fields.	Yes	PropertyGroupImpl.java	BasePropertyGroup.java
<b>OKMRepository</b>	A lot of stuff related with repository. For example get the properties of main root node ( /okm:root ).	Yes	RepositoryImpl.java	BaseRepository.java
<b>OKMSearch</b>	Manage search feature. For example manage saved queries or perform a new query to the repository.	Yes	SearchImpl.java	BaseSearch.java
<b>OKMStats</b>	General stats of the repository.	No		
<b>OKMUserConfig</b>	Manage user home configuration.	No		

## Class Hierarchy

Packages detail:

Name	Description
<b>com.openkm</b>	<p>The <b>com.openkm.OKMWebservicesFactory</b> that returns an <b>com.openkm.OKMWebservices</b> object which implements all interfaces.</p> <pre data-bbox="539 1906 1401 2002"> OKMWebservices ws = OKMWebservicesFactory.newInstance(host, username,</pre>

	password) ;
<b>com.openkm.sdk4j.bean</b>	Contains all classes result of unmarshalling REST objects.
<b>com.openkm.sdk4j.definition</b>	<p>All interface classes:</p> <ul style="list-style-type: none"> <li>• com.openkm.sdk4j.definition.BaseAuth</li> <li>• com.openkm.sdk4j.definition.BaseDocument</li> <li>• com.openkm.sdk4j.definition.BaseFolder</li> <li>• com.openkm.sdk4j.definition.BaseNote</li> <li>• com.openkm.sdk4j.definition.BaseProperty</li> <li>• com.openkm.sdk4j.definition.BasePropertyGroup</li> <li>• com.openkm.sdk4j.definition.BaseRepository</li> <li>• com.openkm.sdk4j.definition.BaseSearch</li> </ul>
<b>com.openkm.sdk4j.impl</b>	<p>All interface implementation classes:</p> <ul style="list-style-type: none"> <li>• com.openkm.sdk4j.impl.AuthImpl</li> <li>• com.openkm.sdk4j.impl.DocumentImpl</li> <li>• com.openkm.sdk4j.impl.FolderImpl</li> <li>• com.openkm.sdk4j.impl.NoteImpl</li> <li>• com.openkm.sdk4j.impl.PropertyGroupImpl</li> <li>• com.openkm.sdk4j.impl.PropertyImpl</li> <li>• com.openkm.sdk4j.impl.RepositoryImpl</li> <li>• com.openkm.sdk4j.impl.SearchImpl</li> </ul>
<b>com.openkm.sdk4j.util</b>	<p>A couple of utilities.</p> <div style="border: 1px dashed #add8e6; padding: 5px; margin-top: 10px;">  The class <code>com.openkm.sdk4j.util.ISO8601</code> should be used to set and parse metadata date fields.         </div>
<b>com.openkm.sdk4j.exception</b>	All exception classes.

## Auth samples

### Basics

The class `com.openkm.sdk4j.bean.Permission` contains permission values ( `READ`, `WRITE`, etc. ). You should use it in combination with methods that are changing or getting security grants.



To set `READ` and `WRITE` access you should do:

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

To check if you have permission access you should do:

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

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



Example of `nodeId`:

- Using UUID -> "`c41f9ea0-0d6c-45da-bae4-d72b66f42d0f`";
- Using path -> "`/okm:root/sample.pdf`"

### Methods

#### `getGrantedRoles`

Description:

Method	Return values	Description
<code>getGrantedRoles(String nodeId)</code>	<code>Map&lt;String, Integer&gt;</code>	Returns the granted roles of a node.

Example:

```
package com.openkm;
import java.util.Map;
```

```

import com.openkm.sdk4j.OKMWebservices;
import com.openkm.sdk4j.OKMWebservicesFactory;

public class Test {
    public static void main(String[] args) {
        String host = "http://localhost:8080/OpenKM";
        String username = "okmAdmin";
        String password = "admin";
        OKMWebservices ws = OKMWebservicesFactory.newInstance(host, username, password);

        try {
            Map<String, Integer> grants = ws.getGrantedRoles("/okm:root");
            for (String role : grants.keySet()) {
                System.out.println(role + "->" + grants.get(role));
            }
        } catch (Exception e) {
            e.printStackTrace();
        }
    }
}

```

### getGrantedUsers

Description:

Method	Return values	Description
<b>getGrantedUsers(String nodeId)</b>	<b>Map&lt;String, Integer&gt;</b>	Returns the granted users of a node.

Example:

```

package com.openkm;

import java.util.Map;

import com.openkm.sdk4j.OKMWebservices;
import com.openkm.sdk4j.OKMWebservicesFactory;

public class Test {
    public static void main(String[] args) {
        String host = "http://localhost:8080/OpenKM";
        String username = "okmAdmin";
        String password = "admin";
        OKMWebservices ws = OKMWebservicesFactory.newInstance(host, username, password);

        try {
            Map<String, Integer> grants = ws.getGrantedUsers("/okm:root");
            for (String role : grants.keySet()) {
                System.out.println(role + "->" + grants.get(role));
            }
        } catch (Exception e) {
            e.printStackTrace();
        }
    }
}

```

### getMail

Description:

Method	Return values	Description
<b>getMail(String user)</b>	<b>String</b>	Returns the mail of a valid user.

Example:

```
package com.openkm;

import com.openkm.sdk4j.OKMWebservices;
import com.openkm.sdk4j.OKMWebservicesFactory;

public class Test {
    public static void main(String[] args) {
        String host = "http://localhost:8080/OpenKM";
        String username = "okmAdmin";
        String password = "admin";
        OKMWebservices ws = OKMWebservicesFactory.newInstance(host, username, password);

        try {
            System.out.println(ws.getMail("okmAdmin"));
        } catch (Exception e) {
            e.printStackTrace();
        }
    }
}
```

### getName

Description:

Method	Return values	Description
<b>getName(String user)</b>	<b>String</b>	Returns the name of a valid user.

Example:

```
package com.openkm;

import com.openkm.sdk4j.OKMWebservices;
import com.openkm.sdk4j.OKMWebservicesFactory;

public class Test {
    public static void main(String[] args) {
        String host = "http://localhost:8080/OpenKM";
        String username = "okmAdmin";
        String password = "admin";
        OKMWebservices ws = OKMWebservicesFactory.newInstance(host, username, password);

        try {
            System.out.println(ws.getName("okmAdmin"));
        } catch (Exception e) {
            e.printStackTrace();
        }
    }
}
```

```

    }
}

```

## getRoles

Description:

Method	Return values	Description
<b>getRoles()</b>	<b>List&lt;String&gt;</b>	Returns the list of all the roles.

Example:

```

package com.openkm;

import com.openkm.sdk4j.OKMWebservices;
import com.openkm.sdk4j.OKMWebservicesFactory;

public class Test {
    public static void main(String[] args) {
        String host = "http://localhost:8080/OpenKM";
        String username = "okmAdmin";
        String password = "admin";
        OKMWebservices ws = OKMWebservicesFactory.newInstance(host, username, password);

        try {
            for (String role : ws.getRoles()) {
                System.out.println(role);
            }
        } catch (Exception e) {
            e.printStackTrace();
        }
    }
}

```

## getRolesByUser

Description:

Method	Return values	Description
<b>getRolesByUser(String user)</b>	<b>List&lt;String&gt;</b>	Returns the list of all the roles assigned to a user.

Example:

```

package com.openkm;

import com.openkm.sdk4j.OKMWebservices;
import com.openkm.sdk4j.OKMWebservicesFactory;

public class Test {
    public static void main(String[] args) {
        String host = "http://localhost:8080/OpenKM";

```

```

String username = "okmAdmin";
String password = "admin";
OKMWebservices ws = OKMWebservicesFactory.newInstance(host, username, password);

try {
    for (String role : ws.getRolesByUser("okmAdmin")) {
        System.out.println(role);
    }
} catch (Exception e) {
    e.printStackTrace();
}
}
}

```

### getUsers

Description:

Method	Return values	Description
<b>getUsers()</b>	<b>List&lt;String&gt;</b>	Returns the list of all the users.

Example:

```

package com.openkm;

import com.openkm.sdk4j.OKMWebservices;
import com.openkm.sdk4j.OKMWebservicesFactory;

public class Test {
    public static void main(String[] args) {
        String host = "http://localhost:8080/OpenKM";
        String username = "okmAdmin";
        String password = "admin";
        OKMWebservices ws = OKMWebservicesFactory.newInstance(host, username, password);

        try {
            for (String user : ws.getUsers()) {
                System.out.println(user);
            }
        } catch (Exception e) {
            e.printStackTrace();
        }
    }
}

```

### getUsersByRole

Description:

Method	Return values	Description
<b>getUsersByRole(String role)</b>	<b>List&lt;String&gt;</b>	Returns the list of all the users who have assigned a role.

Example:

```

package com.openkm;

import com.openkm.sdk4j.OKMWebservices;
import com.openkm.sdk4j.OKMWebservicesFactory;

public class Test {
    public static void main(String[] args) {
        String host = "http://localhost:8080/OpenKM";
        String username = "okmAdmin";
        String password = "admin";
        OKMWebservices ws = OKMWebservicesFactory.newInstance(host, username, password);

        try {
            for (String user : ws.getUsersByRole("ROLE_ADMIN")) {
                System.out.println(user);
            }
        } catch (Exception e) {
            e.printStackTrace();
        }
    }
}

```

## revokeRole

Description:

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

Example:

```

package com.openkm;

import com.openkm.sdk4j.OKMWebservices;
import com.openkm.sdk4j.OKMWebservicesFactory;
import com.openkm.sdk4j.bean.Permission;

public class Test {
    public static void main(String[] args) {
        String host = "http://localhost:8080/OpenKM";
        String username = "okmAdmin";
        String password = "admin";
        OKMWebservices ws = OKMWebservicesFactory.newInstance(host, username, password);

        try {
            // Remove ROLE_USER write grants at the node but not descendants
            ws.revokeRole("/okm:root", "ROLE_USER", Permission.ALL_GRANTS, false);
        }
    }
}

```

```

        // Remove all ROLE_ADMIN grants to the node and descendants
        ws.revokeRole("/okm:root", "ROLE_ADMIN", Permission.ALL_GRANTS, true);
    } catch (Exception e) {
        e.printStackTrace();
    }
}
}

```

**revokeUser**

Description:

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

Example:

```

package com.openkm;

import com.openkm.sdk4j.OKMWebservices;
import com.openkm.sdk4j.OKMWebservicesFactory;
import com.openkm.sdk4j.bean.Permission;

public class Test {
    public static void main(String[] args) {
        String host = "http://localhost:8080/OpenKM";
        String username = "okmAdmin";
        String password = "admin";
        OKMWebservices ws = OKMWebservicesFactory.newInstance(host, username, password);

        try {
            // Remove john write grants at the node but not descendants
            ws.revokeUser("/okm:root", "john", Permission.ALL_GRANTS, false);

            // Remove all okmAdmin grants at the node and descendants
            ws.revokeUser("/okm:root", "okmAdmin", Permission.ALL_GRANTS, true);
        } catch (Exception e) {
            e.printStackTrace();
        }
    }
}

```

**grantRole**

Description:



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

Example:

```

package com.openkm;

import com.openkm.sdk4j.OKMWebservices;
import com.openkm.sdk4j.OKMWebservicesFactory;
import com.openkm.sdk4j.bean.Permission;

public class Test {
    public static void main(String[] args) {
        String host = "http://localhost:8080/OpenKM";
        String username = "okmAdmin";
        String password = "admin";
        OKMWebservices ws = OKMWebservicesFactory.newInstance(host, username, password);

        try {
            // Add ROLE_USER write grants at the node but not descendants
            ws.grantRole("/okm:root", "ROLE_USER", Permission.ALL_GRANTS, false);

            // Add all ROLE_ADMIN grants to the node and descendants
            ws.grantRole("/okm:root", "ROLE_ADMIN", Permission.ALL_GRANTS, true);
        } catch (Exception e) {
            e.printStackTrace();
        }
    }
}

```

**grantUser**

Description:

Method	Return values	Description
<b>grantUser(String nodeId, String user, int permissions, boolean recursive)</b>	<b>void</b>	Adds user grant on a node.
<p>The parameter recursive only has sense when the nodeId is a folder or record node.</p> <p>When parameter recursive is true, the change will be applied to the node and descendants.</p>		

**Example:**

```

package com.openkm;

import com.openkm.sdk4j.OKMWebservices;
import com.openkm.sdk4j.OKMWebservicesFactory;
import com.openkm.sdk4j.bean.Permission;

public class Test {
    public static void main(String[] args) {
        String host = "http://localhost:8080/OpenKM";
        String username = "okmAdmin";
        String password = "admin";
        OKMWebservices ws = OKMWebservicesFactory.newInstance(host, username, password);

        try {
            // Add john write grants at the node but not descendants
            ws.grantUser("/okm:root", "john", Permission.ALL_GRANTS, false);

            // Add all okmAdmin grants at the node and descendants
            ws.grantUser("/okm:root", "okmAdmin", Permission.ALL_GRANTS, true);
        } catch (Exception e) {
            e.printStackTrace();
        }
    }
}

```

**createUser**

## Description:

Method	Return values	Description
<b>createUser(String user, String password, String email, String name, boolean active)</b>	<b>void</b>	Create a new user.

**Example:**

```

package com.openkm;

import com.openkm.sdk4j.OKMWebservices;
import com.openkm.sdk4j.OKMWebservicesFactory;

public class Test {
    public static void main(String[] args) {
        String host = "http://localhost:8080/OpenKM";
        String username = "okmAdmin";
        String password = "admin";
        OKMWebservices ws = OKMWebservicesFactory.newInstance(host, username, password);
        try {
            ws.createUser("test", "password.2016", "some@mail.com", "User Name", true);
        } catch (Exception e) {
            e.printStackTrace();
        }
    }
}

```

**deleteUser**

Description:

Method	Return values	Description
<b>deleteUser(String user)</b>	<b>void</b>	Delete a user.

Example:

```

package com.openkm;

import com.openkm.sdk4j.OKMWebservices;
import com.openkm.sdk4j.OKMWebservicesFactory;

public class Test {
    public static void main(String[] args) {
        String host = "http://localhost:8080/OpenKM";
        String username = "okmAdmin";
        String password = "admin";
        OKMWebservices ws = OKMWebservicesFactory.newInstance(host, username, password);
        try {
            ws.deleteUser("test");
        } catch (Exception e) {
            e.printStackTrace();
        }
    }
}

```

**updateUser**

Description:

Method	Return values	Description
<b>updateUser(String user, String password, String email, String name, boolean active)</b>	<b>void</b>	Update a user.

Example:

```

package com.openkm;

import com.openkm.sdk4j.OKMWebservices;
import com.openkm.sdk4j.OKMWebservicesFactory;

public class Test {
    public static void main(String[] args) {
        String host = "http://localhost:8080/OpenKM";
        String username = "okmAdmin";
        String password = "admin";
        OKMWebservices ws = OKMWebservicesFactory.newInstance(host, username, password);
    }
}

```

```

        try {
            ws.updateUser("test", "newpassword", "some@mail.com", "Test", false);
        } catch (Exception e) {
            e.printStackTrace();
        }
    }
}

```

### createRole

Description:

Method	Return values	Description
<b>createRole(String role, boolean active)</b>	<b>void</b>	Create a new role.

Example:

```

package com.openkm;

import com.openkm.sdk4j.OKMWebservices;
import com.openkm.sdk4j.OKMWebservicesFactory;

public class Test {
    public static void main(String[] args) {
        String host = "http://localhost:8080/OpenKM";
        String username = "okmAdmin";
        String password = "admin";
        OKMWebservices ws = OKMWebservicesFactory.newInstance(host, username, password);
        try {
            ws.createRole("ROLE_TEST", true);
        } catch (Exception e) {
            e.printStackTrace();
        }
    }
}

```

### deleteRole

Description:

Method	Return values	Description
<b>deleteRole(String role)</b>	<b>void</b>	Delete a role.

Example:

```

package com.openkm;

import com.openkm.sdk4j.OKMWebservices;
import com.openkm.sdk4j.OKMWebservicesFactory;

```

```

public class Test {
    public static void main(String[] args) {
        String host = "http://localhost:8080/OpenKM";
        String username = "okmAdmin";
        String password = "admin";
        OKMWebservices ws = OKMWebservicesFactory.newInstance(host, username, password);
        try {
            ws.deleteRole("ROLE_TEST");
        } catch (Exception e) {
            e.printStackTrace();
        }
    }
}

```

### updateRole

Description:

Method	Return values	Description
<b>updateRole(String role, boolean active)</b>	<b>void</b>	Update a role.

Example:

```

package com.openkm;

import com.openkm.sdk4j.OKMWebservices;
import com.openkm.sdk4j.OKMWebservicesFactory;

public class Test {
    public static void main(String[] args) {
        String host = "http://localhost:8080/OpenKM";
        String username = "okmAdmin";
        String password = "admin";
        OKMWebservices ws = OKMWebservicesFactory.newInstance(host, username, password);
        try {
            ws.updateRole("ROLE_TEST", true);
        } catch (Exception e) {
            e.printStackTrace();
        }
    }
}

```

### assignRole

Description:

Method	Return values	Description
<b>assignRole(String user, String role)</b>	<b>void</b>	Assign role to a user.

Example:

```

package com.openkm;

import com.openkm.sdk4j.OKMWebservices;
import com.openkm.sdk4j.OKMWebservicesFactory;

public class Test {
    public static void main(String[] args) {
        String host = "http://localhost:8080/OpenKM";
        String username = "okmAdmin";
        String password = "admin";
        OKMWebservices ws = OKMWebservicesFactory.newInstance(host, username, password);
        try {
            ws.assignRole("test", "ROLE_USER");
        } catch (Exception e) {
            e.printStackTrace();
        }
    }
}

```

**removeRole**

Description:

Method	Return values	Description
<b>removeRole(String user, String role)</b>	<b>void</b>	Remove a role from a user.

Example:

```

package com.openkm;

import com.openkm.sdk4j.OKMWebservices;
import com.openkm.sdk4j.OKMWebservicesFactory;

public class Test {
    public static void main(String[] args) {
        String host = "http://localhost:8080/OpenKM";
        String username = "okmAdmin";
        String password = "admin";
        OKMWebservices ws = OKMWebservicesFactory.newInstance(host, username, password);
        try {
            ws.removeRole("test", "ROLE_USER");
        } catch (Exception e) {
            e.printStackTrace();
        }
    }
}

```

**changeSecurity**

Description:

Method	Return values	Description
<b>changeSecurity(ChangeSecurity changeSecurity)</b>	<b>void</b>	Change the security of a node.

Example:

```

package com.openkm;

import com.openkm.sdk4j.OKMWebservices;
import com.openkm.sdk4j.OKMWebservicesFactory;
import com.openkm.sdk4j.bean.ChangeSecurity;
import com.openkm.sdk4j.bean.GrantedRole;
import com.openkm.sdk4j.bean.GrantedRoleList;
import com.openkm.sdk4j.bean.Permission;

public class Test {
    public static void main(String[] args) {
        String host = "http://localhost:8080/OpenKM";
        String username = "okmAdmin";
        String password = "admin";
        OKMWebservices ws = OKMWebservicesFactory.newInstance(host, username, password);
        try {
            ChangeSecurity cs = new ChangeSecurity();
            cs.setNodeId("b9736924-bb97-4e2c-8450-138c21e0c9d5");
            GrantedRoleList grList = new GrantedRoleList();
            GrantedRole gr = new GrantedRole();
            gr.setRole("ROLE_TEST");
            gr.setPermissions(Permission.READ | Permission.WRITE);
            grList.getList().add(gr);
            cs.setGrantedRolesList(grList);
            ws.changeSecurity(cs);
        } catch (Exception e) {
            e.printStackTrace();
        }
    }
}

```

**login**

Description:

Method	Return values	Description
<b>login()</b>	<b>void</b>	Simulate first login process



When user login into the application the first time, is called internally a method what creates user specific folders, like /okm:trash/userId etc.

From API point of view, this method should be only executed first time user accessing from API, for creating specific user folder structure.

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

Example:

```
package com.openkm;

import com.openkm.sdk4j.OKMWebservices;
import com.openkm.sdk4j.OKMWebservicesFactory;

public class Test2 {
    public static void main(String[] args) {
        String host = "http://localhost:8080/OpenKM";
        String username = "okmAdmin";
        String password = "admin";
        OKMWebservices ws = OKMWebservicesFactory.newInstance(host, username, password);
        try {
            ws.login();
        } catch (Exception e) {
            e.printStackTrace();
        }
    }
}
```

## Bookmark samples

### Basics

On most methods you'll see 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**";
- Using path -> "**/okm:root/logo.png**"

### Methods

#### getUserBookmarks

Description:

Method	Return values	Description
<b>getUserBookmarks()</b>	<b>List&lt;Bookmark&gt;</b>	Returns a list of all the bookmarks of a user.

Example:

```
package com.openkm;

import com.openkm.sdk4j.OKMWebservices;
import com.openkm.sdk4j.OKMWebservicesFactory;
import com.openkm.sdk4j.bean.Bookmark;

public class Test {

    public static void main(String[] args) {
        String host = "http://localhost:8080/OpenKM";
        String username = "okmAdmin";
        String password = "admin";
        OKMWebservices ws = OKMWebservicesFactory.newInstance(host, username, password);

        try {
            for (Bookmark bookmark : ws.getUserBookmarks()) {
                System.out.println(bookmark);
            }
        } catch (Exception e) {
            e.printStackTrace();
        }
    }
}
```

#### createBookmark

Description:

Method	Return values	Description
<b>createBookmark(String nodeId, String name)</b>	<b>void</b>	Create a new bookmark.
The value of the <b>nodeId</b> is the UUID or PATH of the node ( document, folder, mail or record ).		

Example:

```
package com.openkm;

import com.openkm.sdk4j.OKMWebservices;
import com.openkm.sdk4j.OKMWebservicesFactory;
import com.openkm.sdk4j.bean.Bookmark;

public class Test {

    public static void main(String[] args) {
        String host = "http://localhost:8080/OpenKM";
        String username = "okmAdmin";
        String password = "admin";
        OKMWebservices ws = OKMWebservicesFactory.newInstance(host, username, password);

        try {
            Bookmark bookmark = ws.createBookmark("/okm:root/openkm.png", "test bookmark");
            System.out.println(bookmark);
        } catch (Exception e) {
            e.printStackTrace();
        }
    }
}
```

## renameBookmark

Description:

Method	Return values	Description
<b>renameBookmark(int bookmarkId, String name)</b>	Bookmark	Rename a bookmark

Example:

```
package com.openkm;

import com.openkm.sdk4j.OKMWebservices;
import com.openkm.sdk4j.OKMWebservicesFactory;
import com.openkm.sdk4j.bean.Bookmark;

public class Test {

    public static void main(String[] args) {
        String host = "http://localhost:8080/OpenKM";
```

```

String username = "okmAdmin";
String password = "admin";
OKMWebservices ws = OKMWebservicesFactory.newInstance(host, username, password);

try {
    int bookmarkId = 1;
    Bookmark bookmark = ws.renameBookmark(bookmarkId, "set bookmark");
    System.out.println(bookmark);
} catch (Exception e) {
    e.printStackTrace();
}
}
}

```

### deleteBookmark

Description:

Method	Return values	Description
<b>deleteBookmark(int bookmarkId)</b>	void	Delete a bookmark.

Example:

```

package com.openkm;

import com.openkm.sdk4j.OKMWebservices;
import com.openkm.sdk4j.OKMWebservicesFactory;

public class Test {

    public static void main(String[] args) {
        String host = "http://localhost:8080/OpenKM";
        String username = "okmAdmin";
        String password = "admin";
        OKMWebservices ws = OKMWebservicesFactory.newInstance(host, username, password);

        try {
            int bookmarkId = 1;
            ws.deleteBookmark(bookmarkId);
        } catch (Exception e) {
            e.printStackTrace();
        }
    }
}

```

### getBookmark

Description:

Method	Return values	Description
<b>getBookmark(int bookmarkId)</b>	Bookmark	get a bookmark

Example:

```
package com.openkm;

import com.openkm.sdk4j.OKMWebservices;
import com.openkm.sdk4j.OKMWebservicesFactory;
import com.openkm.sdk4j.bean.Bookmark;

public class Test {

    public static void main(String[] args) {
        String host = "http://localhost:8080/OpenKM";
        String username = "okmAdmin";
        String password = "admin";
        OKMWebservices ws = OKMWebservicesFactory.newInstance(host, username, password);

        try {
            int bookmarkId = 1;
            Bookmark bookmark = ws.getBookmark(bookmarkId);
            System.out.println(bookmark);
        } catch (Exception e) {
            e.printStackTrace();
        }
    }
}
```

## Conversion samples

### Methods

#### doc2pdf

Description:

Method	Return values	Description
<b>doc2pdf(InputStream is, String fileName)</b>	<b>InputStream</b>	Retrieve the uploaded document converted to PDF format.
<p>The parameter fileName is the document file name. Application uses this parameter to identify by document extension the document MIME TYPE.</p>		
<div style="border: 1px dashed orange; padding: 5px; background-color: #fff9c4;">  The openoffice service must be enabled in OpenKM server to get it running.         </div>		

Example:

```
package com.openkm;

import java.io.FileInputStream;
import java.io.FileOutputStream;
import java.io.InputStream;

import org.apache.commons.io.IOUtils;

import com.openkm.sdk4j.OKMWebservices;
import com.openkm.sdk4j.OKMWebservicesFactory;

public class Test {
    public static void main(String[] args) {
        String host = "http://localhost:8080/OpenKM";
        String username = "okmAdmin";
        String password = "admin";
        OKMWebservices ws = OKMWebservicesFactory.newInstance(host, username, password);
        try {
            InputStream is = new FileInputStream("/home/files/test.docx");
            FileOutputStream fos = new FileOutputStream("/home/files/out.pdf");
            InputStream convertedStream = ws.doc2pdf(is, "test.docx");
            IOUtils.copy(convertedStream, fos);
            is.close();
            convertedStream.close();
            fos.close();
        } catch (Exception e) {
            e.printStackTrace();
        }
    }
}
```

```
}

```

## imageConvert

Description:

Method	Return values	Description
<b>imageConvert(InputStream is, String fileName, String params, String dstMimeType)</b>	<b>InputStream</b>	Retrieve the uploaded image with transformation.

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

The parameter dstMimeType is the expected document MIME TYPE result.

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

You can set a lot of parameters - transformations - in **params** variable. Take a look at [ImageMagick convert tool](#) to get a complete list of them.

 The image convert tool must be enabled in OpenKM server to get it running.

When params value is not empty always must contains ends with the chain "\${fileIn} \${fileOut}".

Ensure there is only a white space as separator between two parameters.

When building your integrations, we suggest installing [ImageMagic](#) software locally, and check your image transformations first from your command line.

## Example

```
package com.openkm;

import java.io.FileInputStream;
import java.io.FileOutputStream;
import java.io.InputStream;

import org.apache.commons.io.IOUtils;

import com.openkm.sdk4j.OKMWebservices;
import com.openkm.sdk4j.OKMWebservicesFactory;

public class Test {
    public static void main(String[] args) {
        String host = "http://localhost:8080/OpenKM";
        String username = "okmAdmin";
        String password = "admin";
        OKMWebservices ws = OKMWebservicesFactory.newInstance(host, username, password);
        try {
```

```
        InputStream is = new FileInputStream("/home/files/test.png");
        FileOutputStream fos = new FileOutputStream("/home/files/out.jpg");
        InputStream convertedStream = ws.imageConvert(is, "test.png", "-resize 500");
        IOUtils.copy(convertedStream, fos);
        is.close();
        convertedStream.close();
        fos.close();
    } catch (Exception e) {
        e.printStackTrace();
    }
}
```

## Document samples

### Basics

On most methods you'll see parameter named "**docId**". The value of this parameter can be some valid document **UUID** or **path**.



Example of docId:

- Using UUID -> "f123a950-0329-4d62-8328-0ff500fd42db";
- Using path -> "/okm:root/logo.png"

### Methods

#### createDocument

Description:

Method	Return values	Description
<b>createDocument(Document doc, InputStream is)</b>	<b>Document</b>	Creates a new document and returns as a result an object Document with the properties of the created document.
<p>The variable <b>path</b> into the parameter <b>doc</b>, must be initialized. It indicates where the document must be stored into OpenKM.</p> <pre>Document doc = new Document(); doc.setPath("/okm:root/logo.png");</pre>		
<p> The other variables of Document ( doc ) will not take any effect on document creation.</p> <p>We suggest use the method below createDocumentSimple rather this one.</p>		

Example:

```
package com.openkm;

import java.io.FileInputStream;
import java.io.InputStream;

import org.apache.commons.io.IOUtils;

import com.openkm.sdk4j.OKMWebservices;
import com.openkm.sdk4j.OKMWebservicesFactory;
import com.openkm.sdk4j.bean.Document;
```

```

public class Test {
    public static void main(String[] args) {
        String host = "http://localhost:8080/OpenKM";
        String username = "okmAdmin";
        String password = "admin";
        OKMWebservices ws = OKMWebservicesFactory.newInstance(host, username, password);

        try {
            InputStream is = new FileInputStream("/home/files/logo.png");
            Document doc = new Document();
            doc.setPath("/okm:root/logo.png");
            ws.createDocument(doc, is);
            IOUtils.closeQuietly(is);
        } catch (Exception e) {
            e.printStackTrace();
        }
    }
}

```

### createDocumentSimple

Description:

Method	Return values	Description
<b>createDocumentSimple(String docPath, InputStream is)</b>	<b>Document</b>	Creates a new document and return as a result an object Document with the properties of the created document.

Example:

```

package com.openkm;

import java.io.FileInputStream;
import java.io.InputStream;

import com.openkm.sdk4j.OKMWebservices;
import com.openkm.sdk4j.OKMWebservicesFactory;

public class Test {
    public static void main(String[] args) {
        String host = "http://localhost:8080/OpenKM";
        String username = "okmAdmin";
        String password = "admin";
        OKMWebservices ws = OKMWebservicesFactory.newInstance(host, username, password);

        try {
            InputStream is = new FileInputStream("/home/files/logo.png");
            ws.createDocumentSimple("/okm:root/logo.png", is);
            IOUtils.closeQuietly(is);
        } catch (Exception e) {
            e.printStackTrace();
        }
    }
}

```

**deleteDocument**

Description:

Method	Return values	Description
<b>deleteDocument(String docId)</b>	<b>void</b>	Delete a document.

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

Example:

```

package com.openkm;

import com.openkm.sdk4j.OKMWebservices;
import com.openkm.sdk4j.OKMWebservicesFactory;

public class Test {
    public static void main(String[] args) {
        String host = "http://localhost:8080/OpenKM";
        String username = "okmAdmin";
        String password = "admin";
        OKMWebservices ws = OKMWebservicesFactory.newInstance(host, username, password);

        try {
            ws.deleteDocument("/okm:root/logo.png");
        } catch (Exception e) {
            e.printStackTrace();
        }
    }
}

```

**getDocumentProperties**

Description:

Method	Return values	Description
<b>getDocumentProperties(String docId)</b>	<b>Document</b>	Returns the document properties.

Example:

```

package com.openkm;

import com.openkm.sdk4j.OKMWebservices;
import com.openkm.sdk4j.OKMWebservicesFactory;

public class Test {
    public static void main(String[] args) {
        String host = "http://localhost:8080/OpenKM";

```

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

try {
    System.out.println(ws.getDocumentProperties("/okm:root/logo.png"));
} catch (Exception e) {
    e.printStackTrace();
}
}
```

**getContent**

Description:

Method	Return values	Description
<b>getContent(String docId)</b>	<b>InputStream</b>	Retrieves the document content - binary data - of the actual document version



In case you sent the file across a Servlet response we suggest set the content length with:

```
Document doc = ws.getDocumentProperties("/okm:root/logo.png");
response.setContentLength(new Long(doc.getActualVersion().getSize()).intValue());
```



We've found wrong size problems while using:

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

Example:

```
package com.openkm;

import java.io.FileOutputStream;
import java.io.InputStream;
import java.io.OutputStream;

import org.apache.commons.io.IOUtils;

import com.openkm.sdk4j.OKMWebservices;
import com.openkm.sdk4j.OKMWebservicesFactory;

public class Test {
    public static void main(String[] args) {
        String host = "http://localhost:8080/OpenKM";
        String username = "okmAdmin";
        String password = "admin";
        OKMWebservices ws = OKMWebservicesFactory.newInstance(host, username, password);

        try {
            OutputStream fos = new FileOutputStream("/home/files/logo.png");
```

```

        InputStream is = ws.getContent("/okm:root/logo.png");
        IOUtils.copy(is, fos);
        IOUtils.closeQuietly(is);
        IOUtils.closeQuietly(fos);
    } catch (Exception e) {
        e.printStackTrace();
    }
}
}

```

**getContentByVersion**

Description:

Method	Return values	Description
<b>getContentByVersion(String docId, String versionId)</b>	<b>InputStream</b>	Retrieves document content ( binary data ) of some specific document version.


In case you sent the file across a Servlet response we suggest set the content length with:

```
Document doc = ws.getDocumentProperties("/okm:root/logo.png");
response.setContentLength(new Long(doc.getActualVersion().getSize()).intValue());
```


We've found wrong size problems while using:

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

Example:

```

package com.openkm;

import java.io.FileOutputStream;
import java.io.InputStream;
import java.io.OutputStream;

import org.apache.commons.io.IOUtils;

import com.openkm.sdk4j.OKMWebservices;
import com.openkm.sdk4j.OKMWebservicesFactory;

public class Test {
    public static void main(String[] args) {
        String host = "http://localhost:8080/OpenKM";
        String username = "okmAdmin";
        String password = "admin";
        OKMWebservices ws = OKMWebservicesFactory.newInstance(host, username, password);

        try {

```

```

        OutputStream fos = new FileOutputStream("/home/files/logo.png");
        InputStream is = ws.getContentByVersion("/okm:root/logo.png", "1.1");
        IOUtils.copy(is, fos);
        IOUtils.closeQuietly(is);
        IOUtils.closeQuietly(fos);
    } catch (Exception e) {
        e.printStackTrace();
    }
}
}
}

```

### getDocumentChildren

Description:

Method	Return values	Description
<b>getDocumentChildren(String fldId)</b>	<b>List&lt;Document&gt;</b>	Returns a list of all documents which their parent is fldId.
The parameter fldId can be a folder or a record node.		

Example:

```

package com.openkm;

import com.openkm.sdk4j.OKMWebservices;
import com.openkm.sdk4j.OKMWebservicesFactory;
import com.openkm.sdk4j.bean.Document;

public class Test {
    public static void main(String[] args) {
        String host = "http://localhost:8080/OpenKM";
        String username = "okmAdmin";
        String password = "admin";
        OKMWebservices ws = OKMWebservicesFactory.newInstance(host, username, password);

        try {
            for (Document doc : ws.getDocumentChildren("/okm:root")) {
                System.out.println(doc);
            }
        } catch (Exception e) {
            e.printStackTrace();
        }
    }
}

```

### renameDocument

Description:

Method	Return values	Description
<b>renameDocument(String docId, String newName)</b>	<b>void</b>	Change the name of a document.

Example:

```

package com.openkm;

import com.openkm.sdk4j.OKMWebservices;
import com.openkm.sdk4j.OKMWebservicesFactory;

public class Test {
    public static void main(String[] args) {
        String host = "http://localhost:8080/OpenKM";
        String username = "okmAdmin";
        String password = "admin";
        OKMWebservices ws = OKMWebservicesFactory.newInstance(host, username, password);

        try {
            ws.renameDocument("f123a950-0329-4d62-8328-0ff500fd42db", "logo_rename.png");
        } catch (Exception e) {
            e.printStackTrace();
        }
    }
}

```

### setProperties

Description:

Method	Return values	Description
<b>setProperties(Document doc)</b>	<b>void</b>	Change some document properties.

Variables allowed to be changed:

- Title
- Associated keywords

 Only not null and not empty variables will be take on consideration.

Example:

```

package com.openkm;

import com.openkm.sdk4j.OKMWebservices;
import com.openkm.sdk4j.OKMWebservicesFactory;
import com.openkm.sdk4j.bean.Document;

public class Test {
    public static void main(String[] args) {
        String host = "http://localhost:8080/OpenKM";
        String username = "okmAdmin";
        String password = "admin";
        OKMWebservices ws = OKMWebservicesFactory.newInstance(host, username, password);
    }
}

```

```

        try {
            Document doc = ws.getDocumentProperties("f123a950-0329-4d62-8328-0ff500fd
            doc.setDescription("some description");
            doc.getKeywords().add("test");
            ws.setProperties(doc);
        } catch (Exception e) {
            e.printStackTrace();
        }
    }
}

```

**checkout**

Description:

Method	Return values	Description
<b>checkout(String docId)</b>	<b>void</b>	Marks the document for edition.

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

Before starting edition must do a checkout action that lock the edition process for other users and allows only to the user who has executed the action.

Example:

```

package com.openkm;

import com.openkm.sdk4j.OKMWebservices;
import com.openkm.sdk4j.OKMWebservicesFactory;

public class Test {
    public static void main(String[] args) {
        String host = "http://localhost:8080/OpenKM";
        String username = "okmAdmin";
        String password = "admin";
        OKMWebservices ws = OKMWebservicesFactory.newInstance(host, username, password);

        try {
            ws.checkout("/okm:root/logo.png");
            // At this point the document is locked for other users except for the user
        } catch (Exception e) {
            e.printStackTrace();
        }
    }
}

```

**cancelCheckout**

Description:

Method	Return values	Description

<b>cancelCheckout(String docId)</b>	<b>void</b>	Cancel a document edition.
-------------------------------------	-------------	----------------------------



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

Example:

```

package com.openkm;

import com.openkm.sdk4j.OKMWebservices;
import com.openkm.sdk4j.OKMWebservicesFactory;

public class Test {
    public static void main(String[] args) {
        String host = "http://localhost:8080/OpenKM";
        String username = "okmAdmin";
        String password = "admin";
        OKMWebservices ws = OKMWebservicesFactory.newInstance(host, username, password);

        try {
            // At this point the document is locked for other users except for the user
            ws.cancelCheckout("/okm:root/logo.png");
            // At this point other users are allowed to execute a checkout and modify
        } catch (Exception e) {
            e.printStackTrace();
        }
    }
}
    
```

**forceCancelCheckout**

Description:

Method	Return values	Description
<b>forceCancelCheckout(String docId)</b>	<b>void</b>	Cancel a document edition.

This method allows to cancel edition of any document.

It is not mandatory to execute this action by the same user who previously executed the checkout action.



This action can only be done by a super user ( user with ROLE\_ADMIN ).

Example:

```

package com.openkm;

import com.openkm.sdk4j.OKMWebservices;
    
```

```
import com.openkm.sdk4j.OKMWebservicesFactory;

public class Test {
    public static void main(String[] args) {
        String host = "http://localhost:8080/OpenKM";
        String username = "okmAdmin";
        String password = "admin";
        OKMWebservices ws = OKMWebservicesFactory.newInstance(host, username, password);

        try {
            // At this point the document is locked for other users except for the user
            ws.forceCancelCheckout("/okm:root/logo.png");
            // At this point other users are allowed to execute a checkout and modify
        } catch (Exception e) {
            e.printStackTrace();
        }
    }
}
```

**isCheckedOut**

Description:

Method	Return values	Description
<b>isCheckedOut(String docId)</b>	<b>Boolean</b>	Returns a boolean that indicate if the document is on edition or not.

Example:

```
package com.openkm;

import com.openkm.sdk4j.OKMWebservices;
import com.openkm.sdk4j.OKMWebservicesFactory;

public class Test {
    public static void main(String[] args) {
        String host = "http://localhost:8080/OpenKM";
        String username = "okmAdmin";
        String password = "admin";
        OKMWebservices ws = OKMWebservicesFactory.newInstance(host, username, password);

        try {
            System.out.println("Is the document checkout:"+ws.isCheckedOut("/okm:root/logo.png"));
        } catch (Exception e) {
            e.printStackTrace();
        }
    }
}
```

**checkin**

Description:

Method	Return values	Description

<b>checkin(String docId, InputStream is, String comment)</b>	<b>Version</b>	Updates a document with new version and return an object with new Version values.
--	----------------	---

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

Example:

```
package com.openkm;

import java.io.FileInputStream;
import java.io.InputStream;

import org.apache.commons.io.IOUtils;

import com.openkm.sdk4j.OKMWebservices;
import com.openkm.sdk4j.OKMWebservicesFactory;

public class Test {
    public static void main(String[] args) {
        String host = "http://localhost:8080/OpenKM";
        String username = "okmAdmin";
        String password = "admin";
        OKMWebservices ws = OKMWebservicesFactory.newInstance(host, username, password);

        try {
            InputStream is = new FileInputStream("/home/files/logo.png");
            ws.checkin("/okm:root/logo.png", is, "optional some comment");
            IOUtils.closeQuietly(is);
        } catch (Exception e) {
            e.printStackTrace();
        }
    }
}
```

**getVersionHistory**

Description:

Method	Return values	Description
<b>getVersionHistory(String docId)</b>	<b>List&lt;Version&gt;</b>	Returns a list of all document versions.

Example:

```
package com.openkm;

import com.openkm.sdk4j.OKMWebservices;
import com.openkm.sdk4j.OKMWebservicesFactory;
import com.openkm.sdk4j.bean.Version;

public class Test {
```

```

public static void main(String[] args) {
    String host = "http://localhost:8080/OpenKM";
    String username = "okmAdmin";
    String password = "admin";
    OKMWebservices ws = OKMWebservicesFactory.newInstance(host, username, password);

    try {
        for (Version version : ws.getVersionHistory("/okm:root/logo.png")) {
            System.out.println(version);
        }
    } catch (Exception e) {
        e.printStackTrace();
    }
}
}

```

**lock**

Description:

Method	Return values	Description
<b>lock(String docId)</b>	<b>LockInfo</b>	Locks a document and return an object with the Lock information.



Only the user who locked the document is allowed to unlock.  
 A locked document can not be modified by other users.

Example:

```

package com.openkm;

import com.openkm.sdk4j.OKMWebservices;
import com.openkm.sdk4j.OKMWebservicesFactory;

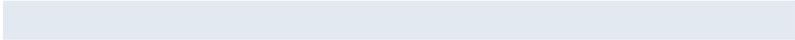
public class Test {
    public static void main(String[] args) {
        String host = "http://localhost:8080/OpenKM";
        String username = "okmAdmin";
        String password = "admin";
        OKMWebservices ws = OKMWebservicesFactory.newInstance(host, username, password);

        try {
            ws.lock("/okm:root/logo.png");
        } catch (Exception e) {
            e.printStackTrace();
        }
    }
}

```

**unlock**

Description:



Method	Return values	Description
<b>unlock(String docId)</b>	<b>void</b>	Unlocks a locked document.

 Only the user who locked the document is allowed to unlock.

Example:

```

package com.openkm;

import com.openkm.sdk4j.OKMWebservices;
import com.openkm.sdk4j.OKMWebservicesFactory;

public class Test {
    public static void main(String[] args) {
        String host = "http://localhost:8080/OpenKM";
        String username = "okmAdmin";
        String password = "admin";
        OKMWebservices ws = OKMWebservicesFactory.newInstance(host, username, password);

        try {
            ws.unlock("/okm:root/logo.png");
        } catch (Exception e) {
            e.printStackTrace();
        }
    }
}
    
```

**forceUnlock**

Description:

Method	Return values	Description
<b>forceUnlock(String docId)</b>	<b>void</b>	Unlocks a locked document.

This method allows to unlock any locked document.

It is not mandatory execute this action by the same user who previously executed the checkout lock action.

 This action can only be done by a super user ( user with ROLE\_ADMIN ).

Example:

```

package com.openkm;
    
```

```

import com.openkm.sdk4j.OKMWebservices;
import com.openkm.sdk4j.OKMWebservicesFactory;

public class Test {
    public static void main(String[] args) {
        String host = "http://localhost:8080/OpenKM";
        String username = "okmAdmin";
        String password = "admin";
        OKMWebservices ws = OKMWebservicesFactory.newInstance(host, username, password);

        try {
            ws.forceUnlock("/okm:root/logo.png");
        } catch (Exception e) {
            e.printStackTrace();
        }
    }
}

```

### isLocked

Description:

Method	Return values	Description
<b>isLocked(String docId)</b>	<b>Boolean</b>	Returns a boolean that indicate if the document is locked or not.

Example:

```

package com.openkm;

import com.openkm.sdk4j.OKMWebservices;
import com.openkm.sdk4j.OKMWebservicesFactory;

public class Test {
    public static void main(String[] args) {
        String host = "http://localhost:8080/OpenKM";
        String username = "okmAdmin";
        String password = "admin";
        OKMWebservices ws = OKMWebservicesFactory.newInstance(host, username, password);

        try {
            System.out.println("Is document locked:"+ws.isLocked("/okm:root/logo.png"));
        } catch (Exception e) {
            e.printStackTrace();
        }
    }
}

```

### getLockInfo

Description:

Method	Return values	Description
<b>getLockInfo(String docId)</b>	<b>LockInfo</b>	Returns an object with the Lock information

**Example:**

```

package com.openkm;

import com.openkm.sdk4j.OKMWebservices;
import com.openkm.sdk4j.OKMWebservicesFactory;

public class Test {
    public static void main(String[] args) {
        String host = "http://localhost:8080/OpenKM";
        String username = "okmAdmin";
        String password = "admin";
        OKMWebservices ws = OKMWebservicesFactory.newInstance(host, username, password);

        try {
            System.out.println(ws.getLockInfo("/okm:root/logo.png"));
        } catch (Exception e) {
            e.printStackTrace();
        }
    }
}

```

**purgeDocument**

## Description:

Method	Return values	Description
<b>purgeDocument(String docId)</b>	<b>void</b>	Document is definitely removed from repository.

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



When a document is purged only will be able to be restored from a previously repository backup. The purge action remove the document definitely from the repository.

**Example:**

```

package com.openkm;

import com.openkm.sdk4j.OKMWebservices;
import com.openkm.sdk4j.OKMWebservicesFactory;

public class Test {
    public static void main(String[] args) {
        String host = "http://localhost:8080/OpenKM";
        String username = "okmAdmin";
        String password = "admin";
        OKMWebservices ws = OKMWebservicesFactory.newInstance(host, username, password);

        try {
            ws.purgeDocument("/okm:trash/okmAdmin/logo.png");
        } catch (Exception e) {

```

```

        e.printStackTrace();
    }
}

```

### moveDocument

Description:

Method	Return values	Description
<b>moveDocument(String docId, String dstId)</b>	<b>void</b>	Moves a document into some folder or record.
The values of the dstId parameter should be a folder or record UUID or path.		

Example:

```

package com.openkm;

import com.openkm.sdk4j.OKMWebservices;
import com.openkm.sdk4j.OKMWebservicesFactory;

public class Test {
    public static void main(String[] args) {
        String host = "http://localhost:8080/OpenKM";
        String username = "okmAdmin";
        String password = "admin";
        OKMWebservices ws = OKMWebservicesFactory.newInstance(host, username, password);

        try {
            ws.moveDocument("/okm:root/logo.png", "/okm:root/temp");
        } catch (Exception e) {
            e.printStackTrace();
        }
    }
}

```

### copyDocument

Description:

Method	Return values	Description
<b>copyDocument(String docId, String dstId)</b>	<b>void</b>	Copies a document into some folder or record.
The values of the dstId parameter should be a folder or record UUID or path.		
<div style="border: 1px dashed orange; padding: 5px; background-color: #fff9c4;">  Only the binary data and the security grants are copied to destination, the metadata, keywords, etc. of the document are not copied.                 </div>		

Example:

```

package com.openkm;

import com.openkm.sdk4j.OKMWebservices;
import com.openkm.sdk4j.OKMWebservicesFactory;

public class Test {
    public static void main(String[] args) {
        String host = "http://localhost:8080/OpenKM";
        String username = "okmAdmin";
        String password = "admin";
        OKMWebservices ws = OKMWebservicesFactory.newInstance(host, username, password);

        try {
            ws.copyDocument("/okm:root/logo.png", "/okm:root/temp");
        } catch (Exception e) {
            e.printStackTrace();
        }
    }
}

```

### restoreVersion

Description:

Method	Return values	Description
<b>restoreVersion(String docId, String versionId)</b>	<b>void</b>	Promotes a previous document version to actual version.

Example:

```

package com.openkm;

import com.openkm.sdk4j.OKMWebservices;
import com.openkm.sdk4j.OKMWebservicesFactory;

public class Test {
    public static void main(String[] args) {
        String host = "http://localhost:8080/OpenKM";
        String username = "okmAdmin";
        String password = "admin";
        OKMWebservices ws = OKMWebservicesFactory.newInstance(host, username, password);

        try {
            // Actual version is 1.2
            ws.restoreVersion("/okm:root/logo.png", "1.1");
            // Actual version is 1.1
        } catch (Exception e) {
            e.printStackTrace();
        }
    }
}

```

### purgeVersionHistory

Description:

Method	Return values	Description
<b>purgeVersionHistory(String docId)</b>	<b>void</b>	Purges all documents version except the actual version.

This action compact the version history of a document.

 This action can not be reverted.

Example:

```

package com.openkm;

import com.openkm.sdk4j.OKMWebservices;
import com.openkm.sdk4j.OKMWebservicesFactory;

public class Test {
    public static void main(String[] args) {
        String host = "http://localhost:8080/OpenKM";
        String username = "okmAdmin";
        String password = "admin";
        OKMWebservices ws = OKMWebservicesFactory.newInstance(host, username, password);

        try {
            // Version history has version 1.3,1.2,1.1 and 1.0
            ws.purgeVersionHistory("/okm:root/logo.png");
            // Version history has only version 1.3
        } catch (Exception e) {
            e.printStackTrace();
        }
    }
}
    
```

### getVersionHistorySize

Description:

Method	Return values	Description
<b>getVersionHistorySize(String docId)</b>	<b>long</b>	Returns the sum in bytes of all documents into documents history.

Example:

```

package com.openkm;
    
```

```

import java.util.Locale;

import com.openkm.sdk4j.OKMWebservices;
import com.openkm.sdk4j.OKMWebservicesFactory;

public class Test {
    public static void main(String[] args) {
        String host = "http://localhost:8080/OpenKM";
        String username = "okmAdmin";
        String password = "admin";
        OKMWebservices ws = OKMWebservicesFactory.newInstance(host, username, password);

        try {
            String[] UNITS = new String[] { "B", "KB", "MB", "GB", "TB", "PB", "EB" };
            long bytes = ws.getVersionHistorySize("/okm:root/logo.png");
            String value = "";

            for (int i = 6; i > 0; i--) {
                double step = Math.pow(1024, i);
                if (bytes > step)
                    value = String.format(Locale.ROOT, "%3.1f %s", bytes / step, UNITS[i]);
            }

            if (value.isEmpty()) {
                value = Long.toString(bytes) + " " + UNITS[0];
            }

            System.out.println(value);
        } catch (Exception e) {
            e.printStackTrace();
        }
    }
}

```

## isValidDocument

Description:

Method	Return values	Description
<b>isValidDocument(String docId)</b>	<b>Boolean</b>	Returns a boolean that indicate if the node is a document or not.

Example:

```

package com.openkm;

import com.openkm.sdk4j.OKMWebservices;
import com.openkm.sdk4j.OKMWebservicesFactory;

public class Test {
    public static void main(String[] args) {
        String host = "http://localhost:8080/OpenKM";
        String username = "okmAdmin";
        String password = "admin";
        OKMWebservices ws = OKMWebservicesFactory.newInstance(host, username, password);

        try {
            // Return true
            ws.isValidDocument("/okm:root/logo.png");
        }
    }
}

```

```

        // Return false
        ws.isValidDocument("/okm:root");
    } catch (Exception e) {
        e.printStackTrace();
    }
}
}

```

**getDocumentPath**

Description:

Method	Return values	Description
<b>getDocumentPath(String uuid)</b>	<b>String</b>	Converts a document UUID to document path.

Example:

```

package com.openkm;

import com.openkm.sdk4j.OKMWebservices;
import com.openkm.sdk4j.OKMWebservicesFactory;

public class Test {
    public static void main(String[] args) {
        String host = "http://localhost:8080/OpenKM";
        String username = "okmAdmin";
        String password = "admin";
        OKMWebservices ws = OKMWebservicesFactory.newInstance(host, username, password);

        try {
            System.out.println(ws.getDocumentPath("f123a950-0329-4d62-8328-0ff500fd42"));
        } catch (Exception e) {
            e.printStackTrace();
        }
    }
}

```

**extendedDocumentCopy**

Description:

Method	Return values	Description
<b>extendedDocumentCopy(String docId, String dstId, String name, boolean categories, boolean keywords, boolean propertyGroups, boolean notes, boolean wiki)</b>	<b>void</b>	Copies a document with associated data into some folder or record.
The values of the dstId parameter should be a folder or a record UUID or path.		

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



By default only the binary data and the security grants, the metadata, keywords, etc. of the document 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 value of the notes will be copied.
- When `wiki` parameter is true the original value of the wiki will be copied.

Example:

```
package com.openkm;

import com.openkm.sdk4j.OKMWebservices;
import com.openkm.sdk4j.OKMWebservicesFactory;

public class Test {
    public static void main(String[] args) {
        String host = "http://localhost:8080/OpenKM";
        String username = "okmAdmin";
        String password = "admin";
        OKMWebservices ws = OKMWebservicesFactory.newInstance(host, username, password);

        try {
            ws.extendedDocumentCopy("/okm:root/logo.png", "/okm:root/tmp", null, true);
        } catch (Exception e) {
            e.printStackTrace();
        }
    }
}
```

# Folder samples

## Basics

On most methods you'll see parameter named "**fldId**". The value of this parameter can be some valid folder **UUID** or **path**.

 Example of fldId:

- Using UUID -> "f123a950-0329-4d62-8328-0ff500fd42db";
- Using path -> "/okm:root/test"

## Methods

### createFolder

Description:

Method	Return values	Description
<b>createFolder(Folder fld)</b>	<b>Folder</b>	Creates a new folder and returns as a result an object Folder.

The variable **path** into the parameter **fld**, must be initialized. It indicates the folder path into OpenKM.

```
Folder fld = new Folder();
fld.setPath("/okm:root/test");
```

 The other variables of Folder ( fld ) will not take any effect on folder creation.

We suggest using the method below to create FolderSimple rather this one.

Example:

```
package com.openkm;

import com.openkm.sdk4j.OKMWebservices;
import com.openkm.sdk4j.OKMWebservicesFactory;
import com.openkm.sdk4j.bean.Folder;

public class Test {
    public static void main(String[] args) {
        String host = "http://localhost:8080/OpenKM";
        String username = "okmAdmin";
        String password = "admin";
        OKMWebservices ws = OKMWebservicesFactory.newInstance(host, username, password);

        try {
            Folder fld = new Folder();
```

```

        fld.setPath("/okm:root/test");
        ws.createFolder(fld);
    } catch (Exception e) {
        e.printStackTrace();
    }
}
}

```

**createFolderSimple**

Description:

Method	Return values	Description
<b>createFolderSimple(String fldPath)</b>	<b>Folder</b>	Creates a new folder and returns as a result an object Folder.

Example:

```

package com.openkm;

import com.openkm.sdk4j.OKMWebservices;
import com.openkm.sdk4j.OKMWebservicesFactory;
import com.openkm.sdk4j.bean.Folder;

public class Test {
    public static void main(String[] args) {
        String host = "http://localhost:8080/OpenKM";
        String username = "okmAdmin";
        String password = "admin";
        OKMWebservices ws = OKMWebservicesFactory.newInstance(host, username, password);

        try {
            ws.createFolderSimple("/okm:root/test");
        } catch (Exception e) {
            e.printStackTrace();
        }
    }
}

```

**getFolderProperties**

Description:

Method	Return values	Description
<b>getFolderProperties(String fldId)</b>	<b>Folder</b>	Returns the folder properties.

Example:

```

package com.openkm;

import com.openkm.sdk4j.OKMWebservices;
import com.openkm.sdk4j.OKMWebservicesFactory;

```

```

public class Test {
    public static void main(String[] args) {
        String host = "http://localhost:8080/OpenKM";
        String username = "okmAdmin";
        String password = "admin";
        OKMWebservices ws = OKMWebservicesFactory.newInstance(host, username, password);

        try {
            System.out.println(ws.getFolderProperties("/okm:root/test"));
        } catch (Exception e) {
            e.printStackTrace();
        }
    }
}

```

### deleteFolder

Description:

Method	Return values	Description
<b>deleteFolder(String fldId)</b>	<b>void</b>	Deletes a folder.

Example:

```

package com.openkm;

import com.openkm.sdk4j.OKMWebservices;
import com.openkm.sdk4j.OKMWebservicesFactory;

public class Test {
    public static void main(String[] args) {
        String host = "http://localhost:8080/OpenKM";
        String username = "okmAdmin";
        String password = "admin";
        OKMWebservices ws = OKMWebservicesFactory.newInstance(host, username, password);

        try {
            ws.deleteFolder("/okm:root/test");
        } catch (Exception e) {
            e.printStackTrace();
        }
    }
}

```

### renameFolder

Description:

Method	Return values	Description
<b>renameFolder(String fldId, String newName)</b>	<b>void</b>	Renames a folder.

Example:

```

package com.openkm;

import com.openkm.sdk4j.OKMWebservices;
import com.openkm.sdk4j.OKMWebservicesFactory;

public class Test {
    public static void main(String[] args) {
        String host = "http://localhost:8080/OpenKM";
        String username = "okmAdmin";
        String password = "admin";
        OKMWebservices ws = OKMWebservicesFactory.newInstance(host, username, password);

        try {
            // Exists folder /okm:root/test
            ws.renameFolder("/okm:root/test","renamedFolder");
            // Folder has renamed to /okm:root/renamedFolder
        } catch (Exception e) {
            e.printStackTrace();
        }
    }
}

```

### moveFolder

Description:

Method	Return values	Description
<b>moveFolder(String fldId, String dstId)</b>	<b>void</b>	Moves folder into some folder or record.
The values of the dstId parameter should be a folder or record UUID or path.		

Example:

```

package com.openkm;

import com.openkm.sdk4j.OKMWebservices;
import com.openkm.sdk4j.OKMWebservicesFactory;

public class Test {
    public static void main(String[] args) {
        String host = "http://localhost:8080/OpenKM";
        String username = "okmAdmin";
        String password = "admin";
        OKMWebservices ws = OKMWebservicesFactory.newInstance(host, username, password);

        try {
            // Exists folder /okm:root/test
            ws.moveFolder("/okm:root/test","/okm:root/tmp");
            // Folder has moved to /okm:root/tmp/test
        } catch (Exception e) {
            e.printStackTrace();
        }
    }
}

```

**getFolderChildren**

Description:

Method	Return values	Description
<b>getFolderChildren(String fldId)</b>	<b>List&lt;Folder&gt;</b>	Returns a list of all folder which their parent is fldId.
The parameter fldId can be a folder or a record node.		

Example:

```

package com.openkm;

import com.openkm.sdk4j.OKMWebservices;
import com.openkm.sdk4j.OKMWebservicesFactory;
import com.openkm.sdk4j.bean.Folder;

public class Test {
    public static void main(String[] args) {
        String host = "http://localhost:8080/OpenKM";
        String username = "okmAdmin";
        String password = "admin";
        OKMWebservices ws = OKMWebservicesFactory.newInstance(host, username, password);

        try {
            for (Folder fld : ws.getFolderChildren("/okm:root")) {
                System.out.println(fld);
            }
        } catch (Exception e) {
            e.printStackTrace();
        }
    }
}

```

**isValidFolder**

Description:

Method	Return values	Description
<b>isValidFolder(String fldId)</b>	<b>Boolean</b>	Returns a boolean that indicates if the node is a folder or not.

Example:

```

package com.openkm;

import com.openkm.sdk4j.OKMWebservices;
import com.openkm.sdk4j.OKMWebservicesFactory;

public class Test {
    public static void main(String[] args) {
        String host = "http://localhost:8080/OpenKM";

```

```

String username = "okmAdmin";
String password = "admin";
OKMWebservices ws = OKMWebservicesFactory.newInstance(host, username, password);

try {
    // Return false
    ws.isValidFolder("/okm:root/logo.png");

    // Return true
    ws.isValidFolder("/okm:root");
} catch (Exception e) {
    e.printStackTrace();
}
}
}

```

### getFolderPath

Description:

Method	Return values	Description
<b>getFolderPath(String uuid)</b>	<b>String</b>	Converts folder UUID to folder path.

Example:

```

package com.openkm;

import com.openkm.sdk4j.OKMWebservices;
import com.openkm.sdk4j.OKMWebservicesFactory;

public class Test {
    public static void main(String[] args) {
        String host = "http://localhost:8080/OpenKM";
        String username = "okmAdmin";
        String password = "admin";
        OKMWebservices ws = OKMWebservicesFactory.newInstance(host, username, password);

        try {
            System.out.println(ws.getFolderPath("f123a950-0329-4d62-8328-0ff500fd42db"));
        } catch (Exception e) {
            e.printStackTrace();
        }
    }
}

```

### copyFolder

Description:

Method	Return values	Description
<b>copyFolder(String fldId, String dstId)</b>	<b>void</b>	Copies a folder into a folder or record.

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



Only the security grants are copied to the destination, the metadata, keywords, etc. of the folder are not copied.

See "**extendedFolderCopy**" method for this feature.

Example:

```
package com.openkm;

import com.openkm.sdk4j.OKMWebservices;
import com.openkm.sdk4j.OKMWebservicesFactory;

public class Test {
    public static void main(String[] args) {
        String host = "http://localhost:8080/OpenKM";
        String username = "okmAdmin";
        String password = "admin";
        OKMWebservices ws = OKMWebservicesFactory.newInstance(host, username, password);

        try {
            ws.copyFolder("/okm:root/test", "/okm:root/temp", "new_name");
        } catch (Exception e) {
            e.printStackTrace();
        }
    }
}
```

### extendedFolderCopy

Description:

Method	Return values	Description
<b>extendedFolderCopy(String fldId, String dstId, boolean categories, boolean keywords, boolean propertyGroups, boolean notes, boolean wiki)</b>	<b>void</b>	Copies a folder with the associated data into a folder or record.

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



By default, only the binary data and the security grants, 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 wiki parameter is true the original values of the wiki will be copied.

Example:

```

package com.openkm;

import com.openkm.sdk4j.OKMWebservices;
import com.openkm.sdk4j.OKMWebservicesFactory;

public class Test {
    public static void main(String[] args) {
        String host = "http://localhost:8080/OpenKM";
        String username = "okmAdmin";
        String password = "admin";
        OKMWebservices ws = OKMWebservicesFactory.newInstance(host, username, password);

        try {
            ws.extendedFolderCopy("/okm:root/test", "/okm:root/tmp", true, true, true);
        } catch (Exception e) {
            e.printStackTrace();
        }
    }
}
    
```

**getContentInfo**

Description:

Method	Return values	Description
<b>getContentInfo(String fldId)</b>	<b>ContentInfo</b>	Return and object ContentInfo with information about folder.

The ContentInfo object retrieves information about:

- The number of folders into.
- The number of documents into.
- The number of mails into.
- The size in bytes of all objects into the folder.

Example:

```

package com.openkm;
    
```

```

import com.openkm.sdk4j.OKMWebservices;
import com.openkm.sdk4j.OKMWebservicesFactory;

public class Test {
    public static void main(String[] args) {
        String host = "http://localhost:8080/OpenKM";
        String username = "okmAdmin";
        String password = "admin";
        OKMWebservices ws = OKMWebservicesFactory.newInstance(host, username, password);

        try {
            System.out.println(ws.getContentInfo("/okm:root/test"));
        } catch (Exception e) {
            e.printStackTrace();
        }
    }
}

```

## purgeFolder

Description:

Method	Return values	Description
<b>purgeFolder(String fldId)</b>	<b>void</b>	The folder is definitely removed from the repository.

Usually, you will purge folders into /okm:trash/userId - the personal trash user locations - but it is possible to directly purge any folder from the whole repository.



When a folder is purged, it will only be able to be restored from a previously repository backup. The purge action removes the folder definitely from the repository.

Example:

```

package com.openkm;

import com.openkm.sdk4j.OKMWebservices;
import com.openkm.sdk4j.OKMWebservicesFactory;

public class Test {
    public static void main(String[] args) {
        String host = "http://localhost:8080/OpenKM";
        String username = "okmAdmin";
        String password = "admin";
        OKMWebservices ws = OKMWebservicesFactory.newInstance(host, username, password);

        try {
            ws.purgeFolder("/okm:trash/okmAdmin/test");
        } catch (Exception e) {
            e.printStackTrace();
        }
    }
}

```

## createMissingFolders

Description:

Method	Return values	Description
<b>createMissingFolders(String fldPath)</b>	<b>void</b>	Create missing folders.

Example:

```
package com.openkm;

import com.openkm.sdk4j.OKMWebservices;
import com.openkm.sdk4j.OKMWebservicesFactory;

public class Test {
    public static void main(String[] args) {
        String host = "http://localhost:8080/OpenKM";
        String username = "okmAdmin";
        String password = "admin";
        OKMWebservices ws = OKMWebservicesFactory.newInstance(host, username, password);
        try {
            ws.createMissingFolders("/okm:root/missingfld1/missingfld2/missingfld3");
        } catch (Exception e) {
            e.printStackTrace();
        }
    }
}
```

# Mail samples

## Basics

On almost methods you'll see parameter named "**mailId**". The value of this parameter can be a valid mail **UUID** or **path**.

 Example of fldId:

- Using UUID -> "**064ff51a-b815-4f48-a096-b4946876784f**";
- Using path -> "**/okm:root/2937b81d-0b10-4dd0-a426-9acbd80be1c9-some subject**"

## Methods

### createMail

Description:

Method	Return values	Description
<b>createMail(Mail mail)</b>	<b>Mail</b>	Creates a new mail and returns as a result an object Mail.

The variable **path** into the parameter **mail** must be initialized. It indicates the folder path into OpenKM.

Other mandatory variables:

- size ( mail size in bytes ).
- from ( mail from account ).
- reply, to, cc, bcc ( mail accounts are optional ).
- sendDate ( date when mail was sent ).
- receivedDate ( date when was received ).
- subject ( mail subject ).
- content ( the mail content ).
- mimeType ( HTML or text mime type ).
- headers ( the mail headers are optional).
- raw ( the mail raw are optional).
- origin ( msg, eml, api, pop3, imap origin )
- title ( mail title )

 Mai accounts allowed formats:

- "\"John King\" <jking@mail.com>"
- "<jking@mail.com>"



Mail path allowed is:

MSGID + "-" + sanitized(subject).



MIME types values:

- Mail.MIME\_TEXT for text mail format.
- Mail.MIME\_HTML for html mail format.



The other variables of Mail ( mail ) will not take any effect on mail creation.

#### Example:

```
package com.openkm;

import java.util.Arrays;
import java.util.Calendar;

import org.owasp.encoder.Encode;

import com.openkm.sdk4j.OKMWebservices;
import com.openkm.sdk4j.OKMWebservicesFactory;
import com.openkm.sdk4j.bean.Mail;

public class Test {
    public static void main(String[] args) {
        String host = "http://localhost:8080/OpenKM";
        String username = "okmAdmin";
        String password = "admin";
        OKMWebservices ws = OKMWebservicesFactory.newInstance(host, username, password);

        try {
            Mail mail = new Mail();

            // Mail path = msgId + escaped(subject)
            String msgId = "2937b81d-0b10-4dd0-a426-9acbd80be1c9";
            String subject = "some subject";
            String mailPath = "/okm:root/"+ msgId + "-" + escape(subject);
            mail.setPath(mailPath);

            // Other format for mail "some name <no_reply@openkm.com>"
            mail.setFrom("<no_reply@openkm.com>");
            mail.setTo((String[])Arrays.asList("anonymous@gmail.com").toArray());

            // You should set real dates
            mail.setSentDate(Calendar.getInstance());
            mail.setReceivedDate(Calendar.getInstance());
            mail.setContent("some content");
            mail.setMimeType(Mail.MIME_TEXT);
            mail.setSubject(subject);
        }
    }
}
```

```

        // Get only as an approximation of real size for these sample
        mail.setSize(mail.toString().getBytes("UTF-8").length);
        ws.createMail(mail);
    } catch (Exception e) {
        e.printStackTrace();
    }
}

private static String escape(String name) {
    String ret = cleanup(name);

    // Fix XSS issues
    ret = Encode.forHtml(ret);

    return ret;
}

private static String cleanup(String name) {
    String ret = name.replace("/", "");
    ret = ret.replace("*", "");
    ret = ret.replaceAll("\\s+", " ").trim();
    return ret;
}
}

```

### getMailProperties

Description:

Method	Return values	Description
<b>getMailProperties(String mailId)</b>	<b>Mail</b>	Returns the mail properties.

Example:

```

package com.openkm;

import com.openkm.sdk4j.OKMWebservices;
import com.openkm.sdk4j.OKMWebservicesFactory;

public class Test {
    public static void main(String[] args) {
        String host = "http://localhost:8080/OpenKM";
        String username = "okmAdmin";
        String password = "admin";
        OKMWebservices ws = OKMWebservicesFactory.newInstance(host, username, password);

        try {
            System.out.println(ws.getMailProperties("064ff51a-b815-4f48-a096-b4946876"));
        } catch (Exception e) {
            e.printStackTrace();
        }
    }
}

```

### deleteMail

Description:

Method	Return values	Description
<b>deleteMail(String mailId)</b>	<b>void</b>	Deletes a mail.

Example:

```

package com.openkm;

import com.openkm.sdk4j.OKMWebservices;
import com.openkm.sdk4j.OKMWebservicesFactory;

public class Test {
    public static void main(String[] args) {
        String host = "http://localhost:8080/OpenKM";
        String username = "okmAdmin";
        String password = "admin";
        OKMWebservices ws = OKMWebservicesFactory.newInstance(host, username, password);

        try {
            ws.deleteMail("064ff51a-b815-4f48-a096-b4946876784f");
        } catch (Exception e) {
            e.printStackTrace();
        }
    }
}
    
```

### purgeMail

Description:

Method	Return values	Description
<b>purgeMail(String mailId)</b>	<b>void</b>	Mail is definitely removed from the repository.

Usually, you will purge mails into /okm:trash/userId - the personal trash user locations - but it is possible to directly purge any mail from the whole repository.



When a mail is purged it will only be able to be restored from a previously repository backup. The purge action removes the mail definitely from the repository.

Example:

```

package com.openkm;

import com.openkm.sdk4j.OKMWebservices;
import com.openkm.sdk4j.OKMWebservicesFactory;

public class Test {
    public static void main(String[] args) {
        String host = "http://localhost:8080/OpenKM";
    }
}
    
```

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

try {
    ws.purgeMail("064ff51a-b815-4f48-a096-b4946876784f");
} catch (Exception e) {
    e.printStackTrace();
}
}
```

**renameMail**

Description:

Method	Return values	Description
<b>renameMail(String mailId, String newName)</b>	<b>void</b>	Rename a mail.

 From OpenKM frontend UI the subject is used to show the mail name at file browser table. That means this change will take effect internally on mail path, but will not be appreciated from default UI.

Example:

```
package com.openkm;

import com.openkm.sdk4j.OKMWebservices;
import com.openkm.sdk4j.OKMWebservicesFactory;

public class Test {
    public static void main(String[] args) {
        String host = "http://localhost:8080/OpenKM";
        String username = "okmAdmin";
        String password = "admin";
        OKMWebservices ws = OKMWebservicesFactory.newInstance(host, username, password);

        try {
            ws.renameMail("064ff51a-b815-4f48-a096-b4946876784f", "new name");
        } catch (Exception e) {
            e.printStackTrace();
        }
    }
}
```

**moveMail**

Description:

Method	Return values	Description
<b>moveMail(String mailId, String dstId)</b>	<b>void</b>	Move mail into a folder.

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

Example:

```
package com.openkm;

import com.openkm.sdk4j.OKMWebservices;
import com.openkm.sdk4j.OKMWebservicesFactory;

public class Test {
    public static void main(String[] args) {
        String host = "http://localhost:8080/OpenKM";
        String username = "okmAdmin";
        String password = "admin";
        OKMWebservices ws = OKMWebservicesFactory.newInstance(host, username, password);

        try {
            ws.moveMail("064ff51a-b815-4f48-a096-b4946876784f", "/okm:root/tmp");
        } catch (Exception e) {
            e.printStackTrace();
        }
    }
}
```

### copyMail

Description:

Method	Return values	Description
<b>public void copyMail(String mailId, String dstId, String newName)</b>	<b>void</b>	Copies mail into a folder.

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

When parameter newName value is null, 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 "**extendedMailCopy**" method for this feature.

Example:

```
package com.openkm;

import com.openkm.sdk4j.OKMWebservices;
import com.openkm.sdk4j.OKMWebservicesFactory;

public class Test {
    public static void main(String[] args) {
        String host = "http://localhost:8080/OpenKM";
```

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

try {
    ws.copyMail("064ff51a-b815-4f48-a096-b4946876784f", "/okm:root/temp", "new");
} catch (Exception e) {
    e.printStackTrace();
}
}
```

**extendedMailCopy**

Description:

Method	Return values	Description
<b>extendedMailCopy(String mailId, String dstId, boolean categories, boolean keywords, boolean propertyGroups, boolean notes, boolean wiki)</b>	<b>void</b>	Copy mail width with associated data into a folder.

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

**i** By default, only the binary data and the security grants, 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 wiki parameter is true the original values of the wiki will be copied.

Example:

```
package com.openkm;

import com.openkm.sdk4j.OKMWebservices;
import com.openkm.sdk4j.OKMWebservicesFactory;

public class Test {
    public static void main(String[] args) {
        String host = "http://localhost:8080/OpenKM";
        String username = "okmAdmin";
    }
}
```

```

String password = "admin";
OKMWebservices ws = OKMWebservicesFactory.newInstance(host, username, password);

try {
    ws.extendedMailCopy("064ff51a-b815-4f48-a096-b4946876784f", "/okm:root/tm
} catch (Exception e) {
    e.printStackTrace();
}
}
}

```

### getMailChildren

Description:

Method	Return values	Description
<b>getMailChildren(String fldId)</b>	<b>List&lt;Mail&gt;</b>	Returns a list of all mails which their parent is fldId.

Example:

```

package com.openkm;

import com.openkm.sdk4j.OKMWebservices;
import com.openkm.sdk4j.OKMWebservicesFactory;
import com.openkm.sdk4j.bean.Mail;

public class Test {
    public static void main(String[] args) {
        String host = "http://localhost:8080/OpenKM";
        String username = "okmAdmin";
        String password = "admin";
        OKMWebservices ws = OKMWebservicesFactory.newInstance(host, username, password);

        try {
            for (Mail mail : ws.getMailChildren("/okm:root")) {
                System.out.println(mail);
            }
        } catch (Exception e) {
            e.printStackTrace();
        }
    }
}

```

### isValidMail

Description:

Method	Return values	Description
<b>isValidMail(String mailId)</b>	<b>Boolean</b>	Returns a boolean that indicates if the node is a mail or not.

Example:

---

```

package com.openkm;

import com.openkm.sdk4j.OKMWebservices;
import com.openkm.sdk4j.OKMWebservicesFactory;

public class Test {
    public static void main(String[] args) {
        String host = "http://localhost:8080/OpenKM";
        String username = "okmAdmin";
        String password = "admin";
        OKMWebservices ws = OKMWebservicesFactory.newInstance(host, username, password);

        try {
            // Return false
            ws.isValidMail("/okm:root/logo.png");

            // Return true
            ws.isValidMail("064ff51a-b815-4f48-a096-b4946876784f");
        } catch (Exception e) {
            e.printStackTrace();
        }
    }
}

```

### getMailPath

Description:

Method	Return values	Description
<b>getMailPath(String uuid)</b>	<b>String</b>	Converts mail UUID to mail path.

Example:

```

package com.openkm;

import com.openkm.sdk4j.OKMWebservices;
import com.openkm.sdk4j.OKMWebservicesFactory;

public class Test {
    public static void main(String[] args) {
        String host = "http://localhost:8080/OpenKM";
        String username = "okmAdmin";
        String password = "admin";
        OKMWebservices ws = OKMWebservicesFactory.newInstance(host, username, password);

        try {
            System.out.println(ws.getMailPath("064ff51a-b815-4f48-a096-b4946876784f"));
        } catch (Exception e) {
            e.printStackTrace();
        }
    }
}

```

### importEml

Description:

Method	Return values	Description
<b>importEml(String dstId, String title, InputStream is)</b>	<b>Mail</b>	Import a mail in EML format.
<p>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 is imported.</p>		

Example:

```

package com.openkm;

import java.io.FileInputStream;
import java.io.InputStream;

import org.apache.commons.io.IOUtils;

import com.openkm.sdk4j.OKMWebservices;
import com.openkm.sdk4j.OKMWebservicesFactory;
import com.openkm.sdk4j.bean.Mail;

public class Test {
    public static void main(String[] args) {
        String host = "http://localhost:8080/OpenKM";
        String username = "okmAdmin";
        String password = "admin";
        OKMWebservices ws = OKMWebservicesFactory.newInstance(host, username, password);

        try {
            InputStream is = new FileInputStream("/home/files/test.eml");
            Mail mail = ws.importEml("d88cff0d-903a-4c5a-82ea-8e6dbd100d65", "some title");
            System.out.println(mail);
            IOUtils.closeQuietly(is);
        } catch (Exception e) {
            e.printStackTrace();
        }
    }
}

```

### importMsg

Description:

Method	Return values	Description
<b>importMsg(String dstId, String title, InputStream is)</b>	<b>Mail</b>	Import a mail in MSG format.
<p>The values of the dstId parameter should be a folder or record UUID or path. The dstId parameter indicate where the mail will be stored in the repository after is sent.</p>		

Example:

```
package com.openkm;

import java.io.FileInputStream;
import java.io.InputStream;

import org.apache.commons.io.IOUtils;

import com.openkm.sdk4j.OKMWebservices;
import com.openkm.sdk4j.OKMWebservicesFactory;
import com.openkm.sdk4j.bean.Mail;

public class Test {
    public static void main(String[] args) {
        String host = "http://localhost:8080/OpenKM";
        String username = "okmAdmin";
        String password = "admin";
        OKMWebservices ws = OKMWebservicesFactory.newInstance(host, username, password);

        try {
            InputStream is = new FileInputStream("/home/files/test.msg");
            Mail mail = ws.importMsg("d88cff0d-903a-4c5a-82ea-8e6dbd100d65", "some title");
            System.out.println(mail);
            IOUtils.closeQuietly(is);
        } catch (Exception e) {
            e.printStackTrace();
        }
    }
}
```

## Note samples

### Basics

On most methods you'll see 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**";
- Using path -> "**/okm:root/logo.png**"

### Methods

#### addNote

Description:

Method	Return values	Description
<b>addNote(String nodeId, String text)</b>	<b>Note</b>	Adds a note to a node and returns an object Note.

Example:

```
package com.openkm;

import com.openkm.sdk4j.OKMWebservices;
import com.openkm.sdk4j.OKMWebservicesFactory;

public class Test {
    public static void main(String[] args) {
        String host = "http://localhost:8080/OpenKM";
        String username = "okmAdmin";
        String password = "admin";
        OKMWebservices ws = OKMWebservicesFactory.newInstance(host, username, password);

        try {
            ws.addNote("/okm:root/logo.png", "the note text");
        } catch (Exception e) {
            e.printStackTrace();
        }
    }
}
```

#### getNode

Description:

Method	Return values	Description
--------	---------------	-------------

<b>getNote(String noteId)</b>	<b>Note</b>	Retrieves the note.
-------------------------------	-------------	---------------------

**i** The noteId is an UUID.  
The object Node has a variable named path, in that case the path contains an UUID.

Example:

```

package com.openkm;

import java.util.List;

import com.openkm.sdk4j.OKMWebservices;
import com.openkm.sdk4j.OKMWebservicesFactory;
import com.openkm.sdk4j.bean.Note;

public class Test {
    public static void main(String[] args) {
        String host = "http://localhost:8080/OpenKM";
        String username = "okmAdmin";
        String password = "admin";
        OKMWebservices ws = OKMWebservicesFactory.newInstance(host, username, password);

        try {
            List<Note> notes = ws.listNotes("/okm:root/logo.png");
            if (notes.size() > 0) {
                System.out.println(ws.getNote(notes.get(0).getPath()));
            }
        } catch (Exception e) {
            e.printStackTrace();
        }
    }
}
    
```

**deleteNote**

Description:

Method	Return values	Description
<b>deleteNote(String noteId)</b>	<b>Note</b>	Deletes a note.

**i** The noteId is an UUID.  
The object Node has a variable named path, in that case the path contains an UUID.

Example:

```

package com.openkm;
    
```

```

import java.util.List;

import com.openkm.sdk4j.OKMWebservices;
import com.openkm.sdk4j.OKMWebservicesFactory;
import com.openkm.sdk4j.bean.Note;

public class Test {
    public static void main(String[] args) {
        String host = "http://localhost:8080/OpenKM";
        String username = "okmAdmin";
        String password = "admin";
        OKMWebservices ws = OKMWebservicesFactory.newInstance(host, username, password);

        try {
            List<Note> notes = ws.listNotes("/okm:root/logo.png");
            if (notes.size() > 0) {
                ws.deleteNote(notes.get(0).getPath());
            }
        } catch (Exception e) {
            e.printStackTrace();
        }
    }
}

```

### setNote

Description:

Method	Return values	Description
<b>setNote(String noteId, String text)</b>	<b>void</b>	Change the note text.

 The noteId is an UUID.

The object Node has a variable named path, in that case the path contains an UUID.

Example:

```

package com.openkm;

import java.util.List;

import com.openkm.sdk4j.OKMWebservices;
import com.openkm.sdk4j.OKMWebservicesFactory;
import com.openkm.sdk4j.bean.Note;

public class Test {
    public static void main(String[] args) {
        String host = "http://localhost:8080/OpenKM";
        String username = "okmAdmin";
        String password = "admin";
        OKMWebservices ws = OKMWebservicesFactory.newInstance(host, username, password);

        try {
            List<Note> notes = ws.listNotes("/okm:root/logo.png");
            if (notes.size() > 0) {

```

```

        ws.setNote(notes.get(0).getPath(), "text modified");
    }
} catch (Exception e) {
    e.printStackTrace();
}
}
}

```

## listNotes

Description:

Method	Return values	Description
<b>listNotes(String nodeId)</b>	<b>List&lt;Note&gt;</b>	Retrieves a list of all notes of a node.

Example:

```

package com.openkm;

import java.util.List;

import com.openkm.sdk4j.OKMWebservices;
import com.openkm.sdk4j.OKMWebservicesFactory;
import com.openkm.sdk4j.bean.Note;

public class Test {
    public static void main(String[] args) {
        String host = "http://localhost:8080/OpenKM";
        String username = "okmAdmin";
        String password = "admin";
        OKMWebservices ws = OKMWebservicesFactory.newInstance(host, username, password);

        try {
            List<Note> notes = ws.listNotes("/okm:root/logo.png");
            for (Note note : notes) {
                System.out.println(note);
            }
        } catch (Exception e) {
            e.printStackTrace();
        }
    }
}

```

## Property samples

### Basics

On most methods you'll see 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**";
- Using path -> "**/okm:root/logo.png**"

### Methods

#### addCategory

Description:

Method	Return values	Description
<b>addCategory(String nodeId, String catId)</b>	<b>void</b>	Sets a relation between a category and a node.
The value of the catId parameter should be a category folder UUID or path.		

Example:

```
package com.openkm;

import com.openkm.sdk4j.OKMWebservices;
import com.openkm.sdk4j.OKMWebservicesFactory;

public class Test {
    public static void main(String[] args) {
        String host = "http://localhost:8080/OpenKM";
        String username = "okmAdmin";
        String password = "admin";
        OKMWebservices ws = OKMWebservicesFactory.newInstance(host, username, password);

        try {
            ws.addCategory("/okm:root/logo.png", "/okm:categories/test");
        } catch (Exception e) {
            e.printStackTrace();
        }
    }
}
```

#### removeCategory

Description:

Method	Return values	Description
<b>removeCategory(String nodeId, String catId)</b>	<b>void</b>	Removes a relation between a category and a node.
The value of the catId parameter should be a category folder UUID or path.		

Example:

```

package com.openkm;

import com.openkm.sdk4j.OKMWebservices;
import com.openkm.sdk4j.OKMWebservicesFactory;

public class Test {
    public static void main(String[] args) {
        String host = "http://localhost:8080/OpenKM";
        String username = "okmAdmin";
        String password = "admin";
        OKMWebservices ws = OKMWebservicesFactory.newInstance(host, username, password);

        try {
            ws.removeCategory("/okm:root/logo.png", "/okm:categories/test");
        } catch (Exception e) {
            e.printStackTrace();
        }
    }
}
    
```

### addKeyword

Description:

Method	Return values	Description
<b>addKeyword(String nodeId, String keyword)</b>	<b>void</b>	Adds a keyword and a node.

The keyword should be a single word without spaces, formats allowed:

- "test"
- "two\_words" ( the character "\_" is used for the junction ).


Also we suggest you to add keyword in lower case format, because OpenKM is case sensitive.

Example:

```

package com.openkm;
    
```

```

import com.openkm.sdk4j.OKMWebservices;
import com.openkm.sdk4j.OKMWebservicesFactory;

public class Test {
    public static void main(String[] args) {
        String host = "http://localhost:8080/OpenKM";
        String username = "okmAdmin";
        String password = "admin";
        OKMWebservices ws = OKMWebservicesFactory.newInstance(host, username, password);

        try {
            ws.addKeyword("/okm:root/logo.png", "test");
        } catch (Exception e) {
            e.printStackTrace();
        }
    }
}

```

### removeKeyword

Description:

Method	Return values	Description
<b>removeKeyword(String nodeId, String keyword)</b>	<b>void</b>	Removes a keyword from a node.

Example:

```

package com.openkm;

import com.openkm.sdk4j.OKMWebservices;
import com.openkm.sdk4j.OKMWebservicesFactory;

public class Test {
    public static void main(String[] args) {
        String host = "http://localhost:8080/OpenKM";
        String username = "okmAdmin";
        String password = "admin";
        OKMWebservices ws = OKMWebservicesFactory.newInstance(host, username, password);

        try {
            ws.removeKeyword("/okm:root/logo.png", "test");
        } catch (Exception e) {
            e.printStackTrace();
        }
    }
}

```

### setEncryption

Description:

Method	Return values	Description
<b>setEncryption(String nodeId, String</b>	<b>void</b>	Marks a document as an encrypted binary data into the

<b>cipherName)</b>		repository
--------------------	--	------------

The parameter nodeId should be a document node.

The parameter cipherName saves information about the encryption mechanism.



This method does not perform any kind of encryption, simply marks the database that a document is encrypted.

Example:

```

package com.openkm;

import com.openkm.sdk4j.OKMWebservices;
import com.openkm.sdk4j.OKMWebservicesFactory;

public class Test {
    public static void main(String[] args) {
        String host = "http://localhost:8080/OpenKM";
        String username = "okmAdmin";
        String password = "admin";
        OKMWebservices ws = OKMWebservicesFactory.newInstance(host, username, password);

        try {
            ws.setEncryption("/okm:root/logo.png", "phrase");
        } catch (Exception e) {
            e.printStackTrace();
        }
    }
}
    
```

### unsetEncryption

Description:

Method	Return values	Description
<b>unsetEncryption(String nodeId)</b>	<b>void</b>	Marks a document as a normal binary data into repository.

The parameter nodeId should be a document node.



This method does not perform any kind of unryption, simply mark the database that a document has been unrypted.

Example:

```

package com.openkm;
    
```

```
import com.openkm.sdk4j.OKMWebservices;
import com.openkm.sdk4j.OKMWebservicesFactory;

public class Test {
    public static void main(String[] args) {
        String host = "http://localhost:8080/OpenKM";
        String username = "okmAdmin";
        String password = "admin";
        OKMWebservices ws = OKMWebservicesFactory.newInstance(host, username, password);

        try {
            ws.unsetEncryption("/okm:root/logo.png");
        } catch (Exception e) {
            e.printStackTrace();
        }
    }
}
```

**setSigned**

Description:

Method	Return values	Description
<b>setSigned(String nodeId, boolean signed)</b>	<b>void</b>	Marks a document as signed or unsigned binary data into the repository
<p>The parameter nodeId should be a document node.</p> <div style="border: 1px dashed orange; padding: 5px; background-color: #fff9c4;">  <p>This method does not perform any kind of digital signature process, simply marks the database that a document is signed.</p> </div>		

Example:

```
package com.openkm;

import com.openkm.sdk4j.OKMWebservices;
import com.openkm.sdk4j.OKMWebservicesFactory;

public class Test {
    public static void main(String[] args) {
        String host = "http://localhost:8080/OpenKM";
        String username = "okmAdmin";
        String password = "admin";
        OKMWebservices ws = OKMWebservicesFactory.newInstance(host, username, password);

        try {
            ws.setSigned("/okm:root/logo.pdf", true);
        } catch (Exception e) {
            e.printStackTrace();
        }
    }
}
```

# PropertyGroup samples

## Basics

**i** From older OpenKM version we named "**Metadata Groups**" as "**Property Groups**".

Although we understand this name not helps a lot to identifying these methods with metadata ones, for historical reason, we continue mantaining the nomenclature.

For more information about [Metadata](#).

On almost methods you'll see 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**";
- Using path -> "**/okm:root/logo.png**"

**⚠** The class `com.openkm.sdk4j.util.ISO8601` should be used to set and parse metadata date fields. The metadata field of type date values are stored into application in ISO-8601 basic format.

To convert retrieved metadata field of type date to a valid date use:

```
Calendar cal = ISO8601.parseBasic(metadataFieldValue);
```

To save date value into metadata field of type date use:

```
Calendar cal = Calendar.getInstance(); // Present date
String metadataFieldValue = ISO8601.formatBasic(cal);
// metadataFieldValue can be saved into repository metadata field of type date
```

## Methods

### addGroup

Description:

Method	Return values	Description
<b>addGroup(String nodeId, String grpName)</b>	<b>void</b>	Adds an empty metadata group to a node.
The grpName should be a valid Metadata group name.		

Example:

```

package com.openkm;

import com.openkm.sdk4j.OKMWebservices;
import com.openkm.sdk4j.OKMWebservicesFactory;

public class Test {
    public static void main(String[] args) {
        String host = "http://localhost:8080/OpenKM";
        String username = "okmAdmin";
        String password = "admin";
        OKMWebservices ws = OKMWebservicesFactory.newInstance(host, username, password);

        try {
            ws.addGroup("/okm:root/logo.pdf", "okg:consulting");
        } catch (Exception e) {
            e.printStackTrace();
        }
    }
}

```

### removeGroup

Description:

Method	Return values	Description
<b>removeGroup(String nodeId, String grpName)</b>	<b>void</b>	Removes a metadata group of a node.
The grpName should be a valid Metadata group name.		

Example:

```

package com.openkm;

import com.openkm.sdk4j.OKMWebservices;
import com.openkm.sdk4j.OKMWebservicesFactory;

public class Test {
    public static void main(String[] args) {
        String host = "http://localhost:8080/OpenKM";
        String username = "okmAdmin";
        String password = "admin";
        OKMWebservices ws = OKMWebservicesFactory.newInstance(host, username, password);

        try {
            ws.removeGroup("/okm:root/logo.pdf", "okg:consulting");
        } catch (Exception e) {
            e.printStackTrace();
        }
    }
}

```

### getGroups

Description:

Method	Return values	Description
<b>getGroups(String nodeId)</b>	<b>List&lt;PropertyGroup&gt;</b>	Retrieves a list of metadata groups assigned to a node.

Example:

```
package com.openkm;

import com.openkm.sdk4j.OKMWebservices;
import com.openkm.sdk4j.OKMWebservicesFactory;
import com.openkm.sdk4j.bean.PropertyGroup;

public class Test {
    public static void main(String[] args) {
        String host = "http://localhost:8080/OpenKM";
        String username = "okmAdmin";
        String password = "admin";
        OKMWebservices ws = OKMWebservicesFactory.newInstance(host, username, password);

        try {
            for (PropertyGroup pGroup : ws.getGroups("/okm:root/logo.pdf")) {
                System.out.println(pGroup);
            }
        } catch (Exception e) {
            e.printStackTrace();
        }
    }
}
```

### getAllGroups

Description:

Method	Return values	Description
<b>getAllGroups()</b>	<b>List&lt;PropertyGroup&gt;</b>	Retrieves a list of all metadata groups set into the application.

Example:

```
package com.openkm;

import com.openkm.sdk4j.OKMWebservices;
import com.openkm.sdk4j.OKMWebservicesFactory;
import com.openkm.sdk4j.bean.PropertyGroup;

public class Test {
    public static void main(String[] args) {
        String host = "http://localhost:8080/OpenKM";
        String username = "okmAdmin";
        String password = "admin";
        OKMWebservices ws = OKMWebservicesFactory.newInstance(host, username, password);

        try {
```

```

        for (PropertyGroup pGroup : ws.getAllGroups()) {
            System.out.println(pGroup);
        }
    } catch (Exception e) {
        e.printStackTrace();
    }
}

```

**getPropertyGroupProperties**

Description:

Method	Return values	Description
<b>getPropertyGroupProperties(String nodeId, String grpName)</b>	<b>List&lt;FormElement&gt;</b>	Retrieves a list of all metadata group elements and its values of a node.
<p>The grpName should be a valid Metadata group name.</p> <div style="border: 1px dashed blue; padding: 5px; background-color: #e0f0ff;"> <p> The method is usually used to display form elements with its values to be shown or changed by used.</p> </div>		

Example:

```

package com.openkm;

import com.openkm.sdk4j.OKMWebservices;
import com.openkm.sdk4j.OKMWebservicesFactory;
import com.openkm.sdk4j.bean.form.FormElement;

public class Test {
    public static void main(String[] args) {
        String host = "http://localhost:8080/OpenKM";
        String username = "okmAdmin";
        String password = "admin";
        OKMWebservices ws = OKMWebservicesFactory.newInstance(host, username, password);

        try {
            for (FormElement fElement : ws.getPropertyGroupProperties("/okm:root/logo")) {
                System.out.println(fElement);
            }
        } catch (Exception e) {
            e.printStackTrace();
        }
    }
}

```

**getPropertyGroupForm**

Description:

Method	Return values	Description
--------	---------------	-------------

<b>getPropertyGroupForm(String grpName)</b>	<b>List&lt;FormElement&gt;</b>	Retrieves a list of all metadata group elements definition.
---	--------------------------------	---

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:

```

package com.openkm;

import com.openkm.sdk4j.OKMWebservices;
import com.openkm.sdk4j.OKMWebservicesFactory;
import com.openkm.sdk4j.bean.form.FormElement;

public class Test {
    public static void main(String[] args) {
        String host = "http://localhost:8080/OpenKM";
        String username = "okmAdmin";
        String password = "admin";
        OKMWebservices ws = OKMWebservicesFactory.newInstance(host, username, password);

        try {
            for (FormElement fElement : ws.getPropertyGroupForm("okg:consulting")) {
                System.out.println(fElement);
            }
        } catch (Exception e) {
            e.printStackTrace();
        }
    }
}
    
```

### setPropertyGroupProperties

Description:

Method	Return values	Descri
<b>setPropertyGroupProperties(String nodeId, String grpName, List&lt;FormElement&gt; ofeList)</b>	<b>void</b>	Changes the metadata node.

The grpName should be a valid Metadata group name.

 Is not mandatory set into parameter ofeList all FormElement, is enough with the form Elements 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"
</!DOCTYPE>
<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>
```

Example:

```
package com.openkm;

import java.util.ArrayList;
import java.util.List;

import com.openkm.sdk4j.OKMWebservices;
import com.openkm.sdk4j.OKMWebservicesFactory;
import com.openkm.sdk4j.bean.form.FormElement;
import com.openkm.sdk4j.bean.form.Input;

public class Test {
    public static void main(String[] args) {
        String host = "http://localhost:8080/OpenKM";
        String username = "okmAdmin";
        String password = "admin";
        OKMWebservices ws = OKMWebservicesFactory.newInstance(host, username, password);

        try {
            // Modify with a full FormElement list
            List<FormElement> fElements = ws.getPropertyGroupProperties("/okm:root/logo.pdf");
            for (FormElement fElement : fElements) {
                if (fElement.getName().equals("okp:consulting.name")) {
                    Input name = (Input) fElement;
                    name.setValue("new value");
                }
            }

            ws.setPropertyGroupProperties("/okm:root/logo.pdf", "okg:consulting", fElements);

            // Same modification with only affected FormElement
            fElements = new ArrayList<>();
            Input name = new Input();
            name.setName("okp:consulting.name");
            name.setValue("new value");
            fElements.add(name);
            ws.setPropertyGroupProperties("/okm:root/logo.pdf", "okg:consulting", fElements);
        } catch (Exception e) {
            e.printStackTrace();
        }
    }
}
```

### setPropertyGroupPropertiesSimple

## Description:

Method	Return values	Description
<b>setPropertyGroupPropertiesSimple(String nodeId, String grpName, Map&lt;String, String&gt; properties)</b>	<b>void</b>	Changes the metadata of a node.

The grpName should be a valid Metadata group name.



Is not mandatory set into properties parameter all fields values, is enough with the fields you wish to change its value.



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.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 on a metadata field of type multiple 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>
```

You should do:

```
properties.put("okp:consulting.multiple", "one;two");
```

Where **"one"** and **"two"** are valid values and character ";" is used as separator.

## Example:

```
package com.openkm;

import java.util.Calendar;
import java.util.HashMap;
```

```

import java.util.Map;

import com.openkm.sdk4j.OKMWebservices;
import com.openkm.sdk4j.OKMWebservicesFactory;
import com.openkm.sdk4j.util.ISO8601;

public class Test {
    public static void main(String[] args) {
        String host = "http://localhost:8080/OpenKM";
        String username = "okmAdmin";
        String password = "admin";
        OKMWebservices ws = OKMWebservicesFactory.newInstance(host, username, password);

        try {
            Map<String, String> properties = new HashMap<>();
            properties.put("okp:consulting.name", "new name");

            // Date fields must be saved with basic ISO 8601 format
            properties.put("okp:consulting.date", ISO8601.formatBasic(Calendar.getInstance().getTime()));
            ws.setPropertyGroupPropertiesSimple("/okm:root/logo.pdf", "okg:consulting", properties);
        } catch (Exception e) {
            e.printStackTrace();
        }
    }
}

```

## hasGroup

Description:

Method	Return values	Description
<b>hasGroup(String nodeId, String grpName)</b>	<b>Boolean</b>	Returns a boolean that indicate if the node has or not a metadata group.

Example:

```

package com.openkm;

import com.openkm.sdk4j.OKMWebservices;
import com.openkm.sdk4j.OKMWebservicesFactory;

public class Test {
    public static void main(String[] args) {
        String host = "http://localhost:8080/OpenKM";
        String username = "okmAdmin";
        String password = "admin";
        OKMWebservices ws = OKMWebservicesFactory.newInstance(host, username, password);

        try {
            System.out.println("Have metadata group:" + ws.hasGroup("/okm:root/logo.pdf", "okg:consulting"));
        } catch (Exception e) {
            e.printStackTrace();
        }
    }
}

```

### getPropertyGroupPropertiesSimple

Description:

Method	Return values	Description
<b>getPropertyGroupPropertiesSimple(String nodeId, String grpName)</b>	<b>Map&lt;String, String&gt;</b>	Retrieves a map - (key, value) pairs - with Metada group values of a node.

Example:

```

package com.openkm;

import java.util.HashMap;
import java.util.Map;

import com.openkm.sdk4j.OKMWebservices;
import com.openkm.sdk4j.OKMWebservicesFactory;

public class Test {
    public static void main(String[] args) {
        String host = "http://localhost:8080/OpenKM";
        String username = "okmAdmin";
        String password = "admin";
        OKMWebservices ws = OKMWebservicesFactory.newInstance(host, username, password);

        try {
            Map<String, String> properties = new HashMap<>();
            properties = ws.getPropertyGroupPropertiesSimple("/okm:root/logo.pdf", "okm:root/logo.pdf");

            for (String key : properties.keySet()) {
                System.out.println(key + "> " + properties.get(key));
            }
        } catch (Exception e) {
            e.printStackTrace();
        }
    }
}

```

### getSuggestions

Description:

Method	Return values	Description
<b>getSuggestions(String nodeId, String grpName, String propName)</b>	<b>List&lt;String&gt;</b>	Retrieves a list of a suggested me

 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"
</!DOCTYPE>
<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:

```
package com.openkm;

import com.openkm.sdk4j.OKMWebservices;
import com.openkm.sdk4j.OKMWebservicesFactory;

public class Test {
  public static void main(String[] args) {
    String host = "http://localhost:8080/OpenKM";
    String username = "okmAdmin";
    String password = "admin";
    OKMWebservices ws = OKMWebservicesFactory.newInstance(host, username, password);

    try {
      for (String value : ws.getSuggestions("/okm:root/logo.pdf", "okg:technology")) {
        System.out.println(value);
      }
    } catch (Exception e) {
      e.printStackTrace();
    }
  }
}
```

**registerDefinition**

Description:

Method	Return values	Description
<b>registerDefinition(InputStream is)</b>	<b>void</b>	Set the XML Metada groups definition into the repository.



The method only can be executed by administrator users ( user member of ROLE\_ADMIN ).

**Example:**

```
package com.openkm;

import java.io.FileInputStream;
import java.io.InputStream;

import org.apache.commons.io.IOUtils;

import com.openkm.sdk4j.OKMWebservices;
import com.openkm.sdk4j.OKMWebservicesFactory;

public class Test {
    public static void main(String[] args) {
        String host = "http://localhost:8080/OpenKM";
        String username = "okmAdmin";
        String password = "admin";
        OKMWebservices ws = OKMWebservicesFactory.newInstance(host, username, password);

        try {
            InputStream is = new FileInputStream("/home/files/PropertyGroups.xml");
            ws.registerDefinition(is);
            IOUtils.closeQuietly(is);
        } catch (Exception e) {
            e.printStackTrace();
        }
    }
}
```

## Repository samples

### Methods

#### getRootFolder

Description:

Method	Return values	Description
<b>getRootFolder()</b>	<b>Folder</b>	Returns the object Folder of node "/okm:root"

Example:

```
package com.openkm;

import com.openkm.sdk4j.OKMWebservices;
import com.openkm.sdk4j.OKMWebservicesFactory;

public class Test {
    public static void main(String[] args) {
        String host = "http://localhost:8080/OpenKM";
        String username = "okmAdmin";
        String password = "admin";
        OKMWebservices ws = OKMWebservicesFactory.newInstance(host, username, password);

        try {
            System.out.println(ws.getRootFolder());
        } catch (Exception e) {
            e.printStackTrace();
        }
    }
}
```

#### getTrashFolder

Description:

Method	Return values	Description
<b>getTrashFolder()</b>	<b>Folder</b>	Returns the object Folder of node "/okm:trash/{userId}"

The returned folder will be the user trash folder.



For example, if the method is executed by the user "okmAdmin", then the folder returned will be "/okm:trash/okmAdmin".

Example:

```

package com.openkm;

import com.openkm.sdk4j.OKMWebservices;
import com.openkm.sdk4j.OKMWebservicesFactory;

public class Test {
    public static void main(String[] args) {
        String host = "http://localhost:8080/OpenKM";
        String username = "okmAdmin";
        String password = "admin";
        OKMWebservices ws = OKMWebservicesFactory.newInstance(host, username, password);

        try {
            System.out.println(ws.getTrashFolder());
        } catch (Exception e) {
            e.printStackTrace();
        }
    }
}

```

### getTemplatesFolder

Description:

Method	Return values	Description
<b>getTemplatesFolder()</b>	<b>Folder</b>	Returns the object Folder of node "/okm:templates"

Example:

```

package com.openkm;

import com.openkm.sdk4j.OKMWebservices;
import com.openkm.sdk4j.OKMWebservicesFactory;

public class Test {
    public static void main(String[] args) {
        String host = "http://localhost:8080/OpenKM";
        String username = "okmAdmin";
        String password = "admin";
        OKMWebservices ws = OKMWebservicesFactory.newInstance(host, username, password);

        try {
            System.out.println(ws.getTemplatesFolder());
        } catch (Exception e) {
            e.printStackTrace();
        }
    }
}

```

### getPersonalFolder

Description:

Method	Return values	Description

<b>getPersonalFolder()</b>	<b>Folder</b>	Returns the object Folder of node "/okm:personal/{userId}"
----------------------------	---------------	--

The returned folder will be the user personal folder.

**i** For example, if the method is executed by the user "okmAdmin", then the folder returned will be "/okm:personal/okmAdmin".

Example:

```

package com.openkm;

import com.openkm.sdk4j.OKMWebservices;
import com.openkm.sdk4j.OKMWebservicesFactory;

public class Test {
    public static void main(String[] args) {
        String host = "http://localhost:8080/OpenKM";
        String username = "okmAdmin";
        String password = "admin";
        OKMWebservices ws = OKMWebservicesFactory.newInstance(host, username, password);

        try {
            System.out.println(ws.getPersonalFolder());
        } catch (Exception e) {
            e.printStackTrace();
        }
    }
}
    
```

**getMailFolder**

Description:

Method	Return values	Description
<b>getMailFolder()</b>	<b>Folder</b>	Returns the object Folder of node "/okm:mail/{userId}"

The returned folder will be the user mail folder.

**i** For example, if the method is executed by the user "okmAdmin", then the folder returned will be "/okm:mail/okmAdmin".

Example:

```

package com.openkm;

import com.openkm.sdk4j.OKMWebservices;
import com.openkm.sdk4j.OKMWebservicesFactory;
    
```

```

public class Test {
    public static void main(String[] args) {
        String host = "http://localhost:8080/OpenKM";
        String username = "okmAdmin";
        String password = "admin";
        OKMWebservices ws = OKMWebservicesFactory.newInstance(host, username, password);

        try {
            System.out.println(ws.getMailFolder());
        } catch (Exception e) {
            e.printStackTrace();
        }
    }
}

```

**getThesaurusFolder**

Description:

Method	Return values	Description
<b>getThesaurusFolder()</b>	<b>Folder</b>	Returns the object Folder of node "/okm:thesaurus"

Example:

```

package com.openkm;

import com.openkm.sdk4j.OKMWebservices;
import com.openkm.sdk4j.OKMWebservicesFactory;

public class Test {
    public static void main(String[] args) {
        String host = "http://localhost:8080/OpenKM";
        String username = "okmAdmin";
        String password = "admin";
        OKMWebservices ws = OKMWebservicesFactory.newInstance(host, username, password);

        try {
            System.out.println(ws.getThesaurusFolder());
        } catch (Exception e) {
            e.printStackTrace();
        }
    }
}

```

**getCategoriesFolder**

Description:

Method	Return values	Description
<b>getCategoriesFolder()</b>	<b>Folder</b>	Returns the object Folder of node "/okm:categories"

Example:

```

package com.openkm;

import com.openkm.sdk4j.OKMWebservices;
import com.openkm.sdk4j.OKMWebservicesFactory;

public class Test {
    public static void main(String[] args) {
        String host = "http://localhost:8080/OpenKM";
        String username = "okmAdmin";
        String password = "admin";
        OKMWebservices ws = OKMWebservicesFactory.newInstance(host, username, password);

        try {
            System.out.println(ws.getCategoriesFolder());
        } catch (Exception e) {
            e.printStackTrace();
        }
    }
}

```

## purgeTrash

Description:

Method	Return values	Description
<b>purgeTrash()</b>	<b>void</b>	Definitively purge all nodes into <code>"/okm:trash/{userId}"</code>

 For example, if the method is executed by the user "okmAdmin", then the purged trash will be `"/okm:trash/okmAdmin"`.

 When a node is purged, it only will be able to be restored from a previously repository backup. The purge action removes the node definitively from the repository.

Example:

```

package com.openkm;

import com.openkm.sdk4j.OKMWebservices;
import com.openkm.sdk4j.OKMWebservicesFactory;

public class Test {
    public static void main(String[] args) {
        String host = "http://localhost:8080/OpenKM";
        String username = "okmAdmin";
        String password = "admin";
        OKMWebservices ws = OKMWebservicesFactory.newInstance(host, username, password);

        try {
            ws.purgeTrash();
        } catch (Exception e) {
            e.printStackTrace();
        }
    }
}

```

```

    }
}
}

```

### getUpdateMessage

Description:

Method	Return values	Description
<b>getUpdateMessage()</b>	<b>String</b>	Retrieves a message in case there is a newer OpenKM release.

There's an official OpenKM update message service available which is based on your local OpenKM version.

 The most common message is that a new OpenKM version has been released.

Example:

```

package com.openkm;

import com.openkm.sdk4j.OKMWebservices;
import com.openkm.sdk4j.OKMWebservicesFactory;

public class Test {
    public static void main(String[] args) {
        String host = "http://localhost:8080/OpenKM";
        String username = "okmAdmin";
        String password = "admin";
        OKMWebservices ws = OKMWebservicesFactory.newInstance(host, username, password);

        try {
            System.out.println(ws.getUpdateMessage());
        } catch (Exception e) {
            e.printStackTrace();
        }
    }
}

```

### getRepositoryUuid

Description:

Method	Return values	Description
<b>getRepositoryUuid()</b>	<b>String</b>	Retrieves installation unique identifier.

Example:

```

package com.openkm;

import com.openkm.sdk4j.OKMWebservices;
import com.openkm.sdk4j.OKMWebservicesFactory;

public class Test {
    public static void main(String[] args) {
        String host = "http://localhost:8080/OpenKM";
        String username = "okmAdmin";
        String password = "admin";
        OKMWebservices ws = OKMWebservicesFactory.newInstance(host, username, password);

        try {
            System.out.println(ws.getRepositoryUuid());
        } catch (Exception e) {
            e.printStackTrace();
        }
    }
}

```

**hasNode**

Description:

Method	Return values	Description
<b>hasNode(String nodeId)</b>	<b>Boolean</b>	Check node exists. Returns true when the node exists.
The value of the parameter nodeId can be a valid <b>UUID</b> or <b>path</b> .		

Example:

```

package com.openkm;

import com.openkm.sdk4j.OKMWebservices;
import com.openkm.sdk4j.OKMWebservicesFactory;

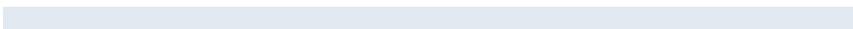
public class Test {
    public static void main(String[] args) {
        String host = "http://localhost:8080/OpenKM";
        String username = "okmAdmin";
        String password = "admin";
        OKMWebservices ws = OKMWebservicesFactory.newInstance(host, username, password);

        try {
            System.out.println("Exists node:"+ws.hasNode("064ff51a-b815-4f48-a096-b49..."));
        } catch (Exception e) {
            e.printStackTrace();
        }
    }
}

```

**getNodePath**

Description:



Method	Return values	Description
<b>getNodePath(String uuid)</b>	String	Converts node UUID to a path.

Example:

```

package com.openkm;

import com.openkm.sdk4j.OKMWebservices;
import com.openkm.sdk4j.OKMWebservicesFactory;

public class Test {
    public static void main(String[] args) {
        String host = "http://localhost:8080/OpenKM";
        String username = "okmAdmin";
        String password = "admin";
        OKMWebservices ws = OKMWebservicesFactory.newInstance(host, username, password);

        try {
            System.out.println(ws.getNodePath("064ff51a-b815-4f48-a096-b4946876784f"));
        } catch (Exception e) {
            e.printStackTrace();
        }
    }
}

```

**getNodeUuid**

Description:

Method	Return values	Description
<b>getNodeUuid(String path)</b>	String	Converts node path to UUID.

Example:

```

package com.openkm;

import com.openkm.sdk4j.OKMWebservices;
import com.openkm.sdk4j.OKMWebservicesFactory;

public class Test {
    public static void main(String[] args) {
        String host = "http://localhost:8080/OpenKM";
        String username = "okmAdmin";
        String password = "admin";
        OKMWebservices ws = OKMWebservicesFactory.newInstance(host, username, password);

        try {
            System.out.println(ws.getNodeUuid("/okm:root/tmp"));
        } catch (Exception e) {
            e.printStackTrace();
        }
    }
}

```

### getAppVersion

Description:

Method	Return values	Description
<b>getAppVersion()</b>	<b>AppVersion</b>	Returns information about OpenKM version.

Example:

```

package com.openkm;

import com.openkm.sdk4j.OKMWebservices;
import com.openkm.sdk4j.OKMWebservicesFactory;

public class Test {
    public static void main(String[] args) {
        String host = "http://localhost:8080/OpenKM";
        String username = "okmAdmin";
        String password = "admin";
        OKMWebservices ws = OKMWebservicesFactory.newInstance(host, username, password);
        try {
            System.out.println(ws.getAppVersion());
        } catch (Exception e) {
            e.printStackTrace();
        }
    }
}
    
```

### getTrashFolderBase

Description:

Method	Return values	Description
<b>getTrashFolderBase()</b>	<b>Folder</b>	Returns the object Folder of node "/okm:trash"

Example:

```

package com.openkm;

import com.openkm.sdk4j.OKMWebservices;
import com.openkm.sdk4j.OKMWebservicesFactory;

public class Test {
    public static void main(String[] args) {
        String host = "http://localhost:8080/OpenKM";
        String username = "okmAdmin";
        String password = "admin";
        OKMWebservices ws = OKMWebservicesFactory.newInstance(host, username, password);
    }
}
    
```

```

        try {
            System.out.println(ws.getTrashFolderBase());
        } catch (Exception e) {
            e.printStackTrace();
        }
    }
}

```

## getPersonalFolderBase

Description:

Method	Return values	Description
<b>getPersonalFolderBase()</b>	<b>Folder</b>	Returns the object Folder of node "/okm:personal"

 For example, if the method is executed by the user "okmAdmin", then the purged trash will be "/okm:personal/okmAdmin".

Example:

```

package com.openkm;

import com.openkm.sdk4j.OKMWebservices;
import com.openkm.sdk4j.OKMWebservicesFactory;

public class Test {
    public static void main(String[] args) {
        String host = "http://localhost:8080/OpenKM";
        String username = "okmAdmin";
        String password = "admin";
        OKMWebservices ws = OKMWebservicesFactory.newInstance(host, username, password);

        try {
            System.out.println(ws.getPersonalFolderBase());
        } catch (Exception e) {
            e.printStackTrace();
        }
    }
}

```

## getMailFolderBase

Description:

Method	Return values	Description
<b>getMailFolderBase()</b>	<b>Folder</b>	Returns the object Folder of node "/okm:mail"

Example:

```

package com.openkm;

import com.openkm.sdk4j.OKMWebservices;
import com.openkm.sdk4j.OKMWebservicesFactory;

public class Test {
    public static void main(String[] args) {
        String host = "http://localhost:8080/OpenKM";
        String username = "okmAdmin";
        String password = "admin";
        OKMWebservices ws = OKMWebservicesFactory.newInstance(host, username, password);

        try {
            System.out.println(ws.getMailFolderBase());
        } catch (Exception e) {
            e.printStackTrace();
        }
    }
}
    
```

## copyAttributes

Description:

Method	Return values	Description
<b>copyAttributes(String nodeId, String dstId, boolean categories, boolean keywords, boolean propertyGroups, boolean notes, boolean wiki)</b>	<b>void</b>	Copy attributes from a node to another.

The values of the dstId parameter should be a node UUID or path.

**i**

- 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.

**Example:**

```

package com.openkm;

import com.openkm.sdk4j.OKMWebservices;
import com.openkm.sdk4j.OKMWebservicesFactory;

public class Test {
    public static void main(String[] args) {
        String host = "http://localhost:8080/OpenKM";
        String username = "okmAdmin";
        String password = "admin";
        OKMWebservices ws = OKMWebservicesFactory.newInstance(host, username, password);

        try {
            ws.copyAttributes("/okm:root/invoice.pdf", "/okm:root/cloned");
        } catch (Exception e) {
            e.printStackTrace();
        }
    }
}
    
```

**executeScript**

**Description:**

Method	Return values	Description
<b>executeScript(InputStream is)</b>	<b>ScriptExecutionResult</b>	Executes a script.

The local script - test.bsh - used in the sample below:

```

import com.openkm.bean.*;
import com.openkm.api.*;

for (Folder fld : OKMFolder.getInstance().getChildren(null, "/okm:root")) {
    print(fld + "\n");
}

// Some value can also be returned as string
return "some result";
    
```

 This action can only be done by a super user ( user with ROLE\_ADMIN ).

**Example:**

```

package com.openkm;

import java.io.FileInputStream;
import java.io.InputStream;

import org.apache.commons.io.IOUtils;

import com.openkm.sdk4j.OKMWebservices;
import com.openkm.sdk4j.OKMWebservicesFactory;
import com.openkm.sdk4j.bean.ScriptExecutionResult;

public class Test {
    public static void main(String[] args) {
        String host = "http://localhost:8080/OpenKM";
        String username = "okmAdmin";
        String password = "admin";
        OKMWebservices ws = OKMWebservicesFactory.newInstance(host, username, password);

        try {
            InputStream is = new FileInputStream("/opt/files/test.bsh");
            ScriptExecutionResult result = ws.executeScript(is);
            System.out.println(result.getResult());
            System.out.println(result.getStdout());

            if (!result.getStderr().isEmpty()) {
                System.out.println("Error happened");
                System.out.println(result.getStderr());
            }

            IOUtils.closeQuietly(is);
        } catch (Exception e) {
            e.printStackTrace();
        }
    }
}

```

**executeSqlQuery**

## Description:

Method	Return values	Description
<code>executeSqlQuery(InputStream is)</code>	<code>SqlQueryResults</code>	Executes SQL sentences.
The test.sql script used in the sample below:		
<pre>SELECT NBS_UUID, NBS_NAME FROM OKM_NODE_BASE LIMIT 10;</pre>		



The SQL script can only contains a single SQL sentence.

This action can only be done by a super user ( user with ROLE\_ADMIN ).

Example:

```
package com.openkm;

import java.io.FileInputStream;
import java.io.InputStream;

import org.apache.commons.io.IOUtils;

import com.openkm.sdk4j.OKMWebservices;
import com.openkm.sdk4j.OKMWebservicesFactory;
import com.openkm.sdk4j.bean.SqlQueryResultColumns;
import com.openkm.sdk4j.bean.SqlQueryResults;

public class Test {
    public static void main(String[] args) {
        String host = "http://localhost:8080/OpenKM";
        String username = "okmAdmin";
        String password = "admin";
        OKMWebservices ws = OKMWebservicesFactory.newInstance(host, username, password);

        try {
            InputStream is = new FileInputStream("/opt/files/test.sql");
            SqlQueryResults result = ws.executeSqlQuery(is);

            for (SqlQueryResultColumns row : result.getResults()) {
                System.out.println("uuid" + row.getColumns().get(0) + ",");
            }

            IOUtils.closeQuietly(is);
        } catch (Exception e) {
            e.printStackTrace();
        }
    }
}
```

Also the InputStream can be set as:

```
String sql = "SELECT NBS_UUID, NBS_NAME FROM OKM_NODE_BASE LIMIT 10;";
InputStream is = new ByteArrayInputStream(sql.getBytes("UTF-8"));
```

## executeHqlQuery

Description:

Method	Return values	Description
<b>executeHqlQuery(InputStream is)</b>	<b>HqlQueryResults</b>	Executes HQL sentences.

The test.sql script used in the sample below:

```
SELECT uuid, name from NodeBase where name = 'okm:root';
```

 The HQL script can only contains a single HQL sentence.  
 This action can only be done by a super user ( user with ROLE\_ADMIN ).

### Example:

```
package com.openkm;

import java.io.FileInputStream;
import java.io.InputStream;

import org.apache.commons.io.IOUtils;

import com.openkm.sdk4j.OKMWebservices;
import com.openkm.sdk4j.OKMWebservicesFactory;
import com.openkm.sdk4j.bean.HqlQueryResults;

public class Test {
    public static void main(String[] args) {
        String host = "http://localhost:8080/OpenKM";
        String username = "okmAdmin";
        String password = "admin";
        OKMWebservices ws = OKMWebservicesFactory.newInstance(host, username, password);

        try {
            InputStream is = new FileInputStream("/opt/files/test.sql");
            HqlQueryResults result = ws.executeHqlQuery(is);

            for (String column : result.getResults()) {
                System.out.println(column);
            }

            IOUtils.closeQuietly(is);
        } catch (Exception e) {
            e.printStackTrace();
        }
    }
}
```

Also the InputStream can be set as:

```
String sql = "SELECT uuid, name from NodeBase where name = 'okm:root'";
InputStream is = new ByteArrayInputStream(sql.getBytes("UTF-8"));
```

## getConfiguration

Description:

Method	Return values	Description
<code>getConfiguration(String key)</code>	<b>Configuration</b>	Retrieve the value of a configuration parameter.



If your OpenKM version have the configuration parameter named "**webservices.visible.properties**", will be restricted for non Administrator users what parameters are accessible. That means any non Administrator use who will try accessing across the webservices to configuration parameters not set into the list of values of "**webservices.visible.properties**" will get an access denied exception.

Example:

```
package com.openkm;

import com.openkm.sdk4j.OKMWebservices;
import com.openkm.sdk4j.OKMWebservicesFactory;
import com.openkm.sdk4j.bean.Configuration;

public class Test {
    public static void main(String[] args) {
        String host = "http://localhost:8080/OpenKM";
        String username = "okmAdmin";
        String password = "admin";
        OKMWebservices ws = OKMWebservicesFactory.newInstance(host, username, password);

        try {
            Configuration configuration = ws.getConfiguration("system.ocr");
            System.out.println(configuration);
        } catch (Exception e) {
            e.printStackTrace();
        }
    }
}
```

## Search samples

### Basics

Mosts methods use QueryParams. Here there're some tips about using them.

Variables	Type	Allow wildcards	Restr
<b>domain</b>	<b>long</b>	No.	<p>Available values:</p> <ul style="list-style-type: none"> <li>• QueryParams.DOCUMENT</li> <li>• QueryParams.FOLDER</li> <li>• QueryParams.MAIL</li> </ul> <p>By default the value is set to QueryParams.DOCUMENT.</p> <p>For searching documents and folders use value:</p> <div style="border: 1px dashed gray; padding: 5px; width: fit-content; margin: 10px auto;"> <code>(QueryParams.DOCUMENT   QueryParams.FOLDER)</code> </div>
<b>author</b>	<b>String</b>	No.	Value must be a valid userId.
<b>name</b>	<b>String</b>	Yes.	
<b>keywords</b>	<b>Set&lt;String&gt;</b>	Yes.	
<b>categories</b>	<b>Set&lt;String&gt;</b>	No.	Values should be categories UUID, not use path value.
<b>content</b>		Yes.	

<b>mimeType</b>		No.	Value should be a valid and registered MIME type.  Only can be applied to documents node.
<b>path</b>		No.	When empty is used by default "/okm:root" node.
<b>lastModifiedFrom</b>	<b>Calendar</b>	No.	
<b>lastModifiedTo</b>	<b>Calendar</b>	No.	
<b>mailSubject</b>	<b>String</b>	Yes.	Only apply to mail nodes.
<b>mailFrom</b>	<b>String</b>	Yes.	Only apply to mail nodes.
<b>mailTo</b>		Yes.	Only apply to mail nodes.
<b>properties</b>	<b>Map&lt;String, String&gt;</b>	Yes on almost.	On metadata field values like "date" can not be applied wilcards.  The map of the properties is composed of pairs:  ('metadata_field_name','metada_field_value')

For example:

```
Map<String, String> properties = new HashMap()
properties.put("okp:consulting.name", "name va
```

**Filtering by range of dates:**

```
Calendar to = Calendar.getInstance(); // today
to.set(0, Calendar.HOUR);
to.set(0, Calendar.MINUTE);
to.set(0, Calendar.SECOND);
to.set(0, Calendar.MILLISECOND);
Calendar from = (Calendar) to.clone();
from.add(-3, Calendar.DATE); // three days bef
Map<String,String> properties = new HashMap<>()
properties.put("okp:consulting.date", ISO8601.
```

 When filtering by range of dates you must set both values (

**To filtering by a metadata field of type multiple like this:**

```
<select label="Multiple" name="okp:consulting.
  <option label="One" value="one"/>
  <option label="Two" value="two"/>
  <option label="Three" value="three" />
</select>
```

You should do:

```
properties.put("okp:consulting.multiple", "one
```

Where "one" and "two" are valid values and character ";" is used as sep

 The search operation is done only by AND logic.

Wildcard examples:

Variable	Example	Description
name	test*.html	Any document that start with characters "test" and ends with characters ".html"
name	test?.html	Any document that start with characters "test" followed by a single character and ends with characters ".html"

<b>name</b>	<b>?test*</b>	Any the documents where the first character doesn't matter, but is followed by the characters, "test".
-------------	---------------	--

## Methods

### findByContent

Description:

Method	Return values	Description
<b>findByContent(String content)</b>	<b>List&lt;QueryResult&gt;</b>	Returns a list of results filtered by the value of the content parameter.



The method only search among all documents, it not takes in consideration any other kind of nodes.

Example:

```

package com.openkm;

import com.openkm.sdk4j.OKMWebservices;
import com.openkm.sdk4j.OKMWebservicesFactory;
import com.openkm.sdk4j.bean.QueryResult;

public class Test {
    public static void main(String[] args) {
        String host = "http://localhost:8180/OpenKM";
        String username = "okmAdmin";
        String password = "admin";
        OKMWebservices ws = OKMWebservicesFactory.newInstance(host, username, password);

        try {
            for (QueryResult qr : ws.findByContent("test")) {
                System.out.println(qr);
            }
        } catch (Exception e) {
            e.printStackTrace();
        }
    }
}
    
```

### findByName

Description:

Method	Return values	Description

<b>findByName(String name)</b>	<b>List&lt;QueryResult&gt;</b>	Returns a list of results filtered by the value of the name parameter.
 The method only searches among all documents, it does not takes in consideration any other kind of nodes.		

Example:

```

package com.openkm;

import com.openkm.sdk4j.OKMWebservices;
import com.openkm.sdk4j.OKMWebservicesFactory;
import com.openkm.sdk4j.bean.QueryResult;

public class Test {
    public static void main(String[] args) {
        String host = "http://localhost:8180/OpenKM";
        String username = "okmAdmin";
        String password = "admin";
        OKMWebservices ws = OKMWebservicesFactory.newInstance(host, username, password);

        try {
            for (QueryResult qr : ws.findByName("test*.html")) {
                System.out.println(qr);
            }
        } catch (Exception e) {
            e.printStackTrace();
        }
    }
}
    
```

**findByKeywords**

Description:

Method	Return values	Description
<b>findByKeywords(List&lt;String&gt; keywords)</b>	<b>List&lt;QueryResult&gt;</b>	Returns a list of results filtered by the values of the keywords parameter.
 The method only searches among all documents, it does not takes in consideration any other kind of nodes.		

Example:

```

package com.openkm;

import java.util.Arrays;
    
```

```

import com.openkm.sdk4j.OKMWebservices;
import com.openkm.sdk4j.OKMWebservicesFactory;
import com.openkm.sdk4j.bean.QueryResult;

public class Test {
    public static void main(String[] args) {
        String host = "http://localhost:8080/OpenKM";
        String username = "okmAdmin";
        String password = "admin";
        OKMWebservices ws = OKMWebservicesFactory.newInstance(host, username, password);

        try {
            for (QueryResult qr : ws.findByKeywords(Arrays.asList("test"))) {
                System.out.println(qr);
            }
        } catch (Exception e) {
            e.printStackTrace();
        }
    }
}

```

## find

Description:

Method	Return values	Description
<b>find(QueryParams queryParams)</b>	<b>List&lt;QueryResult&gt;</b>	Returns a list of results filtered by the values of the queryParams parameter.

Example:

```

package com.openkm;

import com.openkm.sdk4j.OKMWebservices;
import com.openkm.sdk4j.OKMWebservicesFactory;
import com.openkm.sdk4j.bean.QueryParams;
import com.openkm.sdk4j.bean.QueryResult;

public class Test {
    public static void main(String[] args) {
        String host = "http://localhost:8080/OpenKM";
        String username = "okmAdmin";
        String password = "admin";
        OKMWebservices ws = OKMWebservicesFactory.newInstance(host, username, password);

        try {
            QueryParams qParams = new QueryParams();
            qParams.setDomain(QueryParams.DOCUMENT);
            qParams.setName("test*.html");

            for (QueryResult qr : ws.find(qParams)) {
                System.out.println(qr);
            }
        } catch (Exception e) {
            e.printStackTrace();
        }
    }
}

```

**findPaginated**

Description:

Method	Return values	Description
<b>findPaginated(QueryParams queryParams, int offset, int limit)</b>	<b>ResultSet</b>	Returns a list of paginated results filtered by the values of the queryParams parameter.

 The parameter "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.

 For example if your query have 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:

```

package com.openkm;

import com.openkm.sdk4j.OKMWebservices;
import com.openkm.sdk4j.OKMWebservicesFactory;
import com.openkm.sdk4j.bean.QueryParams;
import com.openkm.sdk4j.bean.QueryResult;
import com.openkm.sdk4j.bean.ResultSet;

public class Test {
    public static void main(String[] args) {
        String host = "http://localhost:8080/OpenKM";
        String username = "okmAdmin";
        String password = "admin";
        OKMWebservices ws = OKMWebservicesFactory.newInstance(host, username, password);

        try {
            QueryParams qParams = new QueryParams();
            qParams.setDomain(QueryParams.DOCUMENT);
            qParams.setName("test*.html");

```

```

        ResultSet rs = ws.findPaginated(qParams, 20, 10);
        System.out.println("Total results:"+rs.getTotal());

        for (QueryResult qr : rs.getResults()) {
            System.out.println(qr);
        }
    } catch (Exception e) {
        e.printStackTrace();
    }
}
}

```

### findSimpleQueryPaginated

Description:

Method	Return values	Description
<b>findSimpleQueryPaginated(String statement, int offset, int limit)</b>	<b>ResultSet</b>	Returns a list of paginated results filtered by the values of the statement parameter.

**i** 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](#).

**✓** The parameter "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.

**i** For example if your query have 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:

```

package com.openkm;

import com.openkm.sdk4j.OKMWebservices;
import com.openkm.sdk4j.OKMWebservicesFactory;
import com.openkm.sdk4j.bean.QueryResult;
import com.openkm.sdk4j.bean.ResultSet;

public class Test {
    public static void main(String[] args) {
        String host = "http://localhost:8080/OpenKM";
        String username = "okmAdmin";
        String password = "admin";
        OKMWebservices ws = OKMWebservicesFactory.newInstance(host, username, password);

        try {
            ResultSet rs = ws.findSimpleQueryPaginated("name:grial", 20, 10);
            System.out.println("Total results:"+rs.getTotal());

            for (QueryResult qr : rs.getResults()) {
                System.out.println(qr);
            }
        } catch (Exception e) {
            e.printStackTrace();
        }
    }
}

```

### findMoreLikeThis

Description:

Method	Return values	Description
<b>findMoreLikeThis(String uuid, int max)</b>	<b>ResultSet</b>	Returns a list of documents that are considered similar by the search engine.
<p>The uuid is a document UUID.</p> <p>The max value is used to limit the number of results returned.</p> <div style="border: 1px dashed orange; padding: 5px; background-color: #fff9c4; margin-top: 10px;">  The method can only be used with documents. </div>		

Example:

```

package com.openkm;

import com.openkm.sdk4j.OKMWebservices;
import com.openkm.sdk4j.OKMWebservicesFactory;
import com.openkm.sdk4j.bean.QueryResult;
import com.openkm.sdk4j.bean.ResultSet;

public class Test {

```

```

public static void main(String[] args) {
    String host = "http://localhost:8080/OpenKM";
    String username = "okmAdmin";
    String password = "admin";
    OKMWebservices ws = OKMWebservicesFactory.newInstance(host, username, password);

    try {
        ResultSet rs = ws.findMoreLikeThis("f123a950-0329-4d62-8328-0ff500fd42db");
        System.out.println("Total results:"+rs.getTotal());

        for (QueryResult qr : rs.getResults()) {
            System.out.println(qr);
        }
    } catch (Exception e) {
        e.printStackTrace();
    }
}
}

```

### getKeywordMap

Description:

Method	Return values	Description
<b>getKeywordMap(List&lt;String&gt; filter)</b>	<b>Map&lt;String, Integer&gt;</b>	Returns a map of keywords with its count value filtered by other keywords.

**i** Example:

- Doc1.txt has keywords "test", "one", "two".
- Doc2.txt has keywords "test", "one"
- Doc3.txt has keywords "test", "three".

The results filtering by "test" -> "one", "two", "three".

The results filtering by "one" -> "test", "two".

The results filtering by "two" -> "test", "one".

The results filtering by "three" -> "test".

The results filtering by "one" and "two" -> "test".

Example:

```

package com.openkm;

import java.util.ArrayList;
import java.util.Arrays;
import java.util.Map;

```

```

import com.openkm.sdk4j.OKMWebservices;
import com.openkm.sdk4j.OKMWebservicesFactory;

public class Test {
    public static void main(String[] args) {
        String host = "http://localhost:8180/OpenKM";
        String username = "okmAdmin";
        String password = "admin";
        OKMWebservices ws = OKMWebservicesFactory.newInstance(host, username, password);

        try {
            // All keywords without filtering
            System.out.println("Without filtering");
            Map<String, Integer> keywords = ws.getKeywordMap(new ArrayList<String>());

            for (String key : keywords.keySet()) {
                System.out.println(key + " is used :" + keywords.get(key) );
            }

            // Keywords filtered
            System.out.println("Filtering");
            keywords = ws.getKeywordMap(Arrays.asList("test"));

            for (String key : keywords.keySet()) {
                System.out.println(key + " is used :" + keywords.get(key) );
            }
        } catch (Exception e) {
            e.printStackTrace();
        }
    }
}

```

## getCategorizedDocuments

Description:

Method	Return values	Description
<b>getCategorizedDocuments(String categoryId)</b>	<b>List&lt;Document&gt;</b>	Retrieves a list of all documents related with a category.
The values of the categoryId parameter should be a category folder UUID or path.		

Example:

```

package com.openkm;

import com.openkm.sdk4j.OKMWebservices;
import com.openkm.sdk4j.OKMWebservicesFactory;
import com.openkm.sdk4j.bean.Document;

public class Test {
    public static void main(String[] args) {
        String host = "http://localhost:8180/OpenKM";
        String username = "okmAdmin";
        String password = "admin";
        OKMWebservices ws = OKMWebservicesFactory.newInstance(host, username, password);
    }
}

```

```

    try {
        for (Document doc : ws.getCategorizedDocuments("/okm:categories/invoices")
            System.out.println(doc);
        }
    } catch (Exception e) {
        e.printStackTrace();
    }
}
}

```

## findByQuery

Description:

Method	Return values	Description
<b>findByQuery(String query)</b>	<b>List&lt;QueryResult&gt;</b>	Returns a list of results filtered by the query parameter.

**i** 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:

```

package com.openkm;

import java.util.List;

import com.openkm.sdk4j.OKMWebservices;
import com.openkm.sdk4j.OKMWebservicesFactory;
import com.openkm.sdk4j.bean.QueryResult;

public class Test {

    public static void main(String[] args) {
        String host = "http://localhost:8080/openkm";
        String user = "okmAdmin";
        String password = "admin";
        OKMWebservices ws = OKMWebservicesFactory.getInstance(host);

        try {
            List<QueryResult> results = ws.findByQuery("keyword:test AND name:t*.pdf");

            for (QueryResult qr : results) {
                System.out.println(qr);
            }
        } catch (Exception e) {
            e.printStackTrace();
        }
    }
}

```

## findByQueryPaginated

Description:

Method	Return values	Description
<b>findByQueryPaginated(String query, int offset, int limit)</b>	<b>ResultSet</b>	Returns a list of paginated results filtered by the values of the query parameter.

**i** 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](#).

**✓** 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.

**i** 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:

```
package com.openkm;

import com.openkm.sdk4j.OKMWebservices;
import com.openkm.sdk4j.OKMWebservicesFactory;
import com.openkm.sdk4j.bean.QueryResult;
import com.openkm.sdk4j.bean.ResultSet;

public class Test {

    public static void main(String[] args) {
        String host = "http://localhost:8080/openkm";
        String user = "okmAdmin";
        String password = "admin";
```

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

try {
    ResultSet rs = ws.findByQueryPaginated("text:grial AND name:t*.pdf", 0, 10);
    System.out.println("Total results:" + rs.getTotal());

    for (QueryResult qr : rs.getResults()) {
        System.out.println(qr);
    }
} catch (Exception e) {
    e.printStackTrace();
}
}
```

## Workflow samples

For most examples it has been used the [Purchase workflow sample](#).

### Methods

#### registerProcessDefinition

Description:

Method	Return values	Description
<b>registerProcessDefinition(InputStream is)</b>	<b>void</b>	Registers a new workflow.

Example:

```
package com.openkm;

import java.io.FileInputStream;
import java.io.InputStream;

import org.apache.commons.io.IOUtils;

import com.openkm.sdk4j.OKMWebservices;
import com.openkm.sdk4j.OKMWebservicesFactory;

public class Test {
    public static void main(String[] args) {
        String host = "http://localhost:8080/OpenKM";
        String username = "okmAdmin";
        String password = "admin";
        OKMWebservices ws = OKMWebservicesFactory.newInstance(host, username, password);

        try {
            InputStream is = new FileInputStream("/opt/files/Purchase.par");
            ws.registerProcessDefinition(is);
            IOUtils.closeQuietly(is);
        } catch (Exception e) {
            e.printStackTrace();
        }
    }
}
```

#### deleteProcessDefinition

Description:

Method	Return values	Description
<b>deleteProcessDefinition(long pdId)</b>	<b>void</b>	Deletes a workflow.
The parameter pdId value is a valid workflow process definition.		

Example:

```

package com.openkm;

import com.openkm.sdk4j.OKMWebservices;
import com.openkm.sdk4j.OKMWebservicesFactory;

public class Test {
    public static void main(String[] args) {
        String host = "http://localhost:8080/OpenKM";
        String username = "okmAdmin";
        String password = "admin";
        OKMWebservices ws = OKMWebservicesFactory.newInstance(host, username, password);

        try {
            long pdId = 5; // Valid workflow process definition
            ws.deleteProcessDefinition(pdId);
        } catch (Exception e) {
            e.printStackTrace();
        }
    }
}

```

### getProcessDefinition

Description:

Method	Return values	Description
<b>getProcessDefinition(long pdId)</b>	<b>void</b>	Returns a workflow process definition.
The parameter pdId value is a valid workflow process definition.		

Example:

```

package com.openkm;

import com.openkm.sdk4j.OKMWebservices;
import com.openkm.sdk4j.OKMWebservicesFactory;
import com.openkm.sdk4j.bean.workflow.ProcessDefinition;

public class Test {
    public static void main(String[] args) {
        String host = "http://localhost:8080/OpenKM";
        String username = "okmAdmin";
        String password = "admin";
        OKMWebservices ws = OKMWebservicesFactory.newInstance(host, username, password);

        try {
            long pdId = 5; // Valid workflow process definition
            ProcessDefinition pd = ws.getProcessDefinition(pdId);
            System.out.println(pd);
        } catch (Exception e) {
            e.printStackTrace();
        }
    }
}

```

```
}

```

## runProcessDefinition

Description:

Method	Return values	Description
<b>runProcessDefinition(long pdId, String uuid, List&lt;FormElement&gt; values)</b>	<b>ProcessInstance</b>	Executes a workflow on a node.

The parameter pdId value is a valid workflow process definition.

The parameter uuid can be any document, mail, folder or record UUID.

The parameter values are form element values needed for starting the workflow ( not all workflows need form values for starting ).

Example:

```
package com.openkm;

import com.openkm.sdk4j.OKMWebservices;
import com.openkm.sdk4j.OKMWebservicesFactory;
import com.openkm.sdk4j.bean.FormElement;
import com.openkm.sdk4j.bean.form.Input;
import com.openkm.sdk4j.bean.form.TextArea;
import java.util.*;

public class Test {
    public static void main(String[] args) {
        String host = "http://localhost:8080/OpenKM";
        String username = "okmAdmin";
        String password = "admin";
        OKMWebservices ws = OKMWebservicesFactory.newInstance(host, username, password);
        try {
            long pdId = 8041; // Some valid workflow process definition id
            List<FormElement> feList = new ArrayList<>(); // Case as part of starting
            Input price = new Input();
            price.setName("price");
            price.setValue("1000");
            feList.add(price);
            TextArea textArea = new TextArea();
            textArea.setName("description");
            textArea.setValue("some description here");
            feList.add(textArea);
            ws.runProcessDefinition(pdId, "f86cc22d-9b50-434f-a940-b04cea9c0048", feList);
        } catch (Exception e) {
            e.printStackTrace();
        }
    }
}
```

## findProcessInstances

Description:

Method	Return values	Description
<b>findProcessInstances(long pdId)</b>	<b>List&lt;ProcessInstance&gt;</b>	Retrieves a list of all process instances of some registered workflows definition.
The parameter pdId value is a valid workflow process definition.		

Example:

```
package com.openkm;

import com.openkm.sdk4j.OKMWebservices;
import com.openkm.sdk4j.OKMWebservicesFactory;
import com.openkm.sdk4j.bean.workflow.ProcessDefinition;
import com.openkm.sdk4j.bean.workflow.ProcessInstance;

public class Test {
    public static void main(String[] args) {
        String host = "http://localhost:8080/OpenKM";
        String username = "okmAdmin";
        String password = "admin";
        OKMWebservices ws = OKMWebservicesFactory.newInstance(host, username, password);

        try {
            // Get all workflow definitions
            for (ProcessDefinition pd : ws.findAllProcessDefinitions()) {
                System.out.println("WF definition: "+pd);

                // Get all process of some workflow definition
                for (ProcessInstance pi : ws.findProcessInstances(pd.getId())) {
                    System.out.println("PI: "+pi);
                }
            }
        } catch (Exception e) {
            e.printStackTrace();
        }
    }
}
```

### findAllProcessDefinitions

Description:

Method	Return values	Description
<b>findAllProcessDefinitions()</b>	<b>List&lt;ProcessDefinition&gt;</b>	Retrieves a list of all registered workflows definitions.

Example:

```
package com.openkm;
```

```

import com.openkm.sdk4j.OKMWebservices;
import com.openkm.sdk4j.OKMWebservicesFactory;
import com.openkm.sdk4j.bean.workflow.ProcessDefinition;

public class Test {
    public static void main(String[] args) {
        String host = "http://localhost:8080/OpenKM";
        String username = "okmAdmin";
        String password = "admin";
        OKMWebservices ws = OKMWebservicesFactory.newInstance(host, username, password);

        try {
            for (ProcessDefinition pd : ws.findAllProcessDefinitions()) {
                System.out.println(pd);
            }
        } catch (Exception e) {
            e.printStackTrace();
        }
    }
}

```

### findLatestProcessDefinitions

Description:

Method	Return values	Description
<b>findLatestProcessDefinitions()</b>	<b>List&lt;ProcessDefinition&gt;</b>	Retrieves a list of the last workflows definitions.

 Several versions of the same workflow can be registered.

Example:

```

package com.openkm;

import com.openkm.sdk4j.OKMWebservices;
import com.openkm.sdk4j.OKMWebservicesFactory;
import com.openkm.sdk4j.bean.workflow.ProcessDefinition;

public class Test {
    public static void main(String[] args) {
        String host = "http://localhost:8080/OpenKM";
        String username = "okmAdmin";
        String password = "admin";
        OKMWebservices ws = OKMWebservicesFactory.newInstance(host, username, password);

        try {
            // Get all latest workflow definitions
            for (ProcessDefinition pd : ws.findLatestProcessDefinitions()) {
                System.out.println("WF definition: " + pd);
            }
        } catch (Exception e) {
            e.printStackTrace();
        }
    }
}

```

### findLastProcessDefinition

Description:

Method	Return values	Description
<b>findLastProcessDefinition(String name)</b>	<b>ProcessDefinition</b>	Retrieves last workflow definition of some specific workflow.
<p>The parameter name identifies an specific workflow definitions group.</p> <div style="border: 1px solid #ccc; padding: 5px; background-color: #e6f2ff;"> <p><b>i</b> Several workflow definition versions that have the same name.</p> </div>		

Example:

```

package com.openkm;

import com.openkm.sdk4j.OKMWebservices;
import com.openkm.sdk4j.OKMWebservicesFactory;
import com.openkm.sdk4j.bean.workflow.ProcessDefinition;

public class Test {
    public static void main(String[] args) {
        String host = "http://localhost:8080/OpenKM";
        String username = "okmAdmin";
        String password = "admin";
        OKMWebservices ws = OKMWebservicesFactory.newInstance(host, username, password);

        try {
            ProcessDefinition pd = ws.findLastProcessDefinition("purchase");
            System.out.println("WF definition: " + pd);
        } catch (Exception e) {
            e.printStackTrace();
        }
    }
}
    
```

### getProcessInstance

Description:

Method	Return values	Description
<b>getProcessInstance(long pId)</b>	<b>ProcessInstance</b>	Returns the process instance.
<p>The parameter pId is a valid process instance id.</p>		

**Example:**

```

package com.openkm;

import com.openkm.sdk4j.OKMWebservices;
import com.openkm.sdk4j.OKMWebservicesFactory;
import com.openkm.sdk4j.bean.workflow.ProcessInstance;

public class Test {
    public static void main(String[] args) {
        String host = "http://localhost:8080/OpenKM";
        String username = "okmAdmin";
        String password = "admin";
        OKMWebservices ws = OKMWebservicesFactory.newInstance(host, username, password);

        try {
            long piId = 8108; // Some valid process instance id
            ProcessInstance pi = ws.getProcessInstance(piId);
            System.out.println("PI: " + pi);
        } catch (Exception e) {
            e.printStackTrace();
        }
    }
}

```

**findUserTaskInstances**

## Description:

Method	Return values	Description
<b>findUserTaskInstances()</b>	<b>List&lt;TaskInstance&gt;</b>	Retrieves a list of task instances assigned to the user.

**Example:**

```

package com.openkm;

import com.openkm.sdk4j.OKMWebservices;
import com.openkm.sdk4j.OKMWebservicesFactory;
import com.openkm.sdk4j.bean.workflow.TaskInstance;

public class Test {
    public static void main(String[] args) {
        String host = "http://localhost:8080/OpenKM";
        String username = "okmAdmin";
        String password = "admin";
        OKMWebservices ws = OKMWebservicesFactory.newInstance(host, username, password);

        try {
            // Get all user task instances
            for (TaskInstance ti : ws.findUserTaskInstances()) {
                System.out.println(ti);
            }
        } catch (Exception e) {
            e.printStackTrace();
        }
    }
}

```

**findTaskInstances**

Description:

Method	Return values	Description
<b>findTaskInstances(long piId)</b>	<b>List&lt;TaskInstance&gt;</b>	Retrieves a list of task instances from a process instance id.
The parameter piId is a valid process instance id.		

Example:

```

package com.openkm;

import com.openkm.sdk4j.OKMWebservices;
import com.openkm.sdk4j.OKMWebservicesFactory;
import com.openkm.sdk4j.bean.workflow.TaskInstance;

public class Test {
    public static void main(String[] args) {
        String host = "http://localhost:8080/OpenKM";
        String username = "okmAdmin";
        String password = "admin";
        OKMWebservices ws = OKMWebservicesFactory.newInstance(host, username, password);

        try {
            // Get all task instances of some process instance
            long piId = 8108; // Some valid process instance id
            for (TaskInstance ti : ws.findTaskInstances(piId)) {
                System.out.println(ti);
            }
        } catch (Exception e) {
            e.printStackTrace();
        }
    }
}

```

**setTaskInstanceValues**

Description:

Method	Return values	Description
<b>setTaskInstanceValues(long tiId, String transName, List&lt;FormElement&gt; values)</b>	<b>void</b>	Set a task instance values.
The parameter tiId is a valid task instance id.		
The parameter transName is the choosen transaction.		

The parameter values are form element values needed for starting the workflow ( not all workflow tasks need form values ).

Example:

```
package com.openkm;

import com.openkm.sdk4j.OKMWebservices;
import com.openkm.sdk4j.OKMWebservicesFactory;
import com.openkm.sdk4j.bean.workflow.TaskInstance;
import java.util.*;

public class Test {
    public static void main(String[] args) {
        String host = "http://localhost:8080/OpenKM";
        String username = "okmAdmin";
        String password = "admin";
        OKMWebservices ws = OKMWebservicesFactory.newInstance(host, username, password);
        try {
            long tiId = 8110; // Some valid task instance id
            List<FormElement> feList = new ArrayList<>();
            ws.setTaskInstanceValues(tiId, "approve", feList);
        } catch (Exception e) {
            e.printStackTrace();
        }
    }
}
```

**getTaskInstance**

Description:

Method	Return values	Description
<b>getTaskInstance(long tiId)</b>	<b>TaskInstance</b>	Returns a task instance.
The parameter tiId is a valid task instance id.		

Example:

```
package com.openkm;

import com.openkm.sdk4j.OKMWebservices;
import com.openkm.sdk4j.OKMWebservicesFactory;
import com.openkm.sdk4j.bean.workflow.TaskInstance;

public class Test {
    public static void main(String[] args) {
        String host = "http://localhost:8080/OpenKM";
        String username = "okmAdmin";
        String password = "admin";
        OKMWebservices ws = OKMWebservicesFactory.newInstance(host, username, password);

        try {
            long tiId = 8110; // Some valid task instance id
```

```

        TaskInstance ti = ws.getTaskInstance(tiId);
        System.out.println(ti);
    } catch (Exception e) {
        e.printStackTrace();
    }
}

```

**startTaskInstance**

Description:

Method	Return values	Description
<b>startTaskInstance(long tiId)</b>	<b>void</b>	Starts a task instance.
The parameter tiId is a valid task instance id.		

Example:

```

package com.openkm;

import com.openkm.sdk4j.OKMWebservices;
import com.openkm.sdk4j.OKMWebservicesFactory;

public class Test {
    public static void main(String[] args) {
        String host = "http://localhost:8080/OpenKM";
        String username = "okmAdmin";
        String password = "admin";
        OKMWebservices ws = OKMWebservicesFactory.newInstance(host, username, password);

        try {
            long tiId = 8110; // Some valid task instance id
            ws.startTaskInstance(tiId);
        } catch (Exception e) {
            e.printStackTrace();
        }
    }
}

```

**setTaskInstanceActorId**

Description:

Method	Return values	Description
<b>setTaskInstanceActorId(long tiId, String actorId)</b>	<b>void</b>	Set the actor to a task instance.
The parameter tiId is a valid task instance id.		

The parameter actorId must be some valid OpenKM userId.

Example:

```
package com.openkm;

import com.openkm.sdk4j.OKMWebservices;
import com.openkm.sdk4j.OKMWebservicesFactory;

public class Test {
    public static void main(String[] args) {
        String host = "http://localhost:8080/OpenKM";
        String username = "okmAdmin";
        String password = "admin";
        OKMWebservices ws = OKMWebservicesFactory.newInstance(host, username, password);

        try {
            long tiId = 8110; // Some valid task instance id
            ws.setTaskInstanceActorId(tiId, "okmAdmin");
        } catch (Exception e) {
            e.printStackTrace();
        }
    }
}
```

**endTaskInstance**

Description:

Method	Return values	Description
<b>endTaskInstance(long tiId, String transName)</b>	<b>void</b>	Ends a task instance.
<p>The parameter tiId is a valid task instance id.</p> <p>The parameter transName is a transaction name.</p>		

Example:

```
package com.openkm;

import com.openkm.sdk4j.OKMWebservices;
import com.openkm.sdk4j.OKMWebservicesFactory;

public class Test {
    public static void main(String[] args) {
        String host = "http://localhost:8080/OpenKM";
        String username = "okmAdmin";
        String password = "admin";
        OKMWebservices ws = OKMWebservicesFactory.newInstance(host, username, password);

        try {
            long tiId = 8110; // Some valid task instance id
            ws.endTaskInstance(tiId, "end");
        }
    }
}
```

```

    } catch (Exception e) {
        e.printStackTrace();
    }
}
}

```

### getProcessDefinitionForms

Description:

Method	Return values	Description
<b>getProcessDefinitionForms(long pdId)</b>	<b>Map&lt;String, List&lt;FormElement&gt;&gt;</b>	Return a map with all the process definition forms.
The parameter pdId value is a valid workflow process definition.		

Example:

```

package com.openkm;

import java.util.List;
import java.util.Map;

import com.openkm.sdk4j.OKMWebservices;
import com.openkm.sdk4j.OKMWebservicesFactory;
import com.openkm.sdk4j.bean.form.FormElement;

public class Test2 {
    public static void main(String[] args) {
        String host = "http://localhost:8080/OpenKM";
        String username = "okmAdmin";
        String password = "admin";
        OKMWebservices ws = OKMWebservicesFactory.newInstance(host, username, password);
        try {
            Map<String, List<FormElement>> forms = ws.getProcessDefinitionForms(12);
            for (String key : forms.keySet()) {
                System.out.println("Key:"+key);
                for (FormElement fe : forms.get(key)) {
                    System.out.println("Fe:"+fe);
                }
            }
        } catch (Exception e) {
            e.printStackTrace();
        }
    }
}

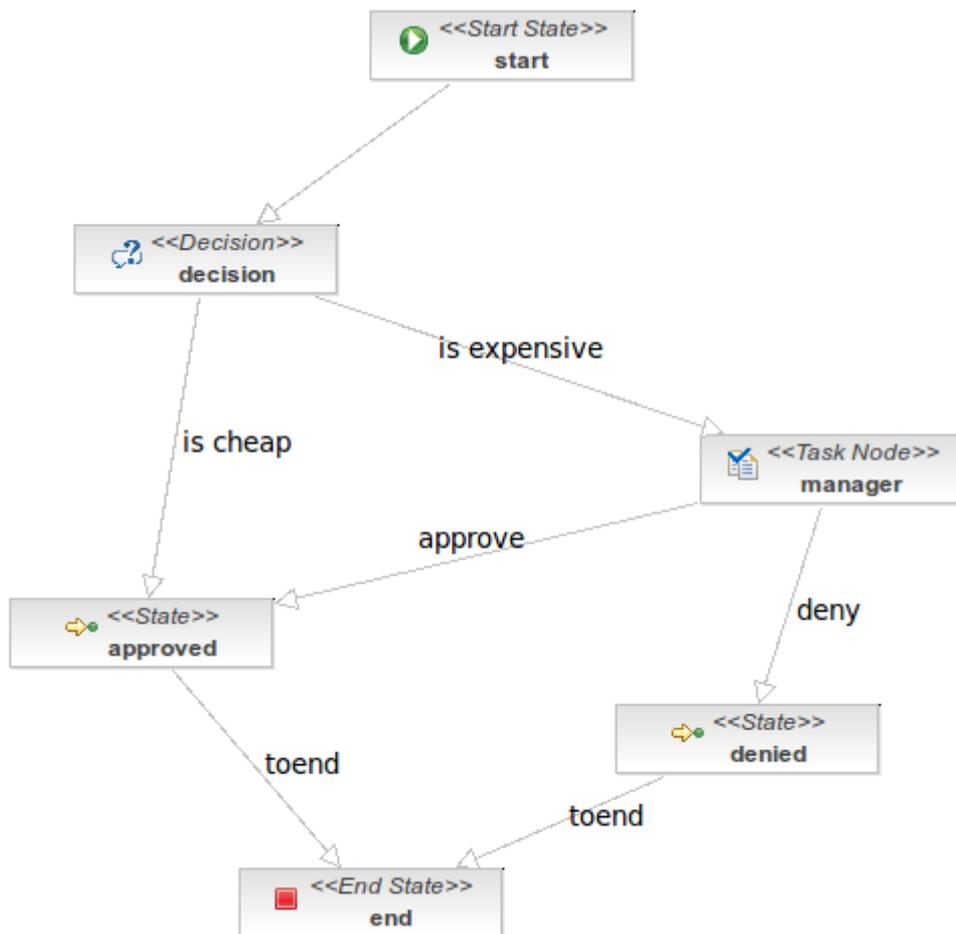
```

## Purchase workflow sample

The tasks will be assigned to an user called "manager" so you need to create this user and log as such 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:jbpn.org:jpd1-3.2" 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 <= 500}"></condition>
    </transition>
  </decision>

  <task name="manager">
    <assignee user="manager"></assignee>
  </task>

  <state name="approved">
    <toend to="end"></toend>
  </state>

  <state name="denied">
    <toend to="end"></toend>
  </state>

  <end-state name="end"></end-state>
</process-definition>
  
```

```

    </transition>
    <transition to="manager" name="is expensive">
      <condition expression="#{price.value > 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 due-date="15 seconds" name="approved timer" transition="toend">
      <script>print(&quot;From APPROVED Go to END&quot;);</script>
    </timer>
    <transition to="end" name="toend"></transition>
  </state>

  <state name="denied">
    <description>The purchase has been denied.</description>
    <timer due-date="15 seconds" name="denied timer" transition="toend">
      <script>print(&quot;From DENIED Go to END&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" read
    <button name="approve" label="Approve" transition="approve"/>
    <button name="deny" label="Deny" transition="deny"/>
  </workflow-form>
</workflow-forms>

```