

eXo Platform 3.0 - CMIS Administrator Guide

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Chapter 1. Introduction

It is to introduce about basic knowledge of eXo CMIS, working principles and how to configure it.

1.1. CMIS Specification



Note

Content Management Interoperability Services (CMIS) Version 1.0 OASIS Standard 1 May 2010

[\[http://en.wikipedia.org/wiki/Content_Management_Interoperability_Services\]](http://en.wikipedia.org/wiki/Content_Management_Interoperability_Services)

The Content Management Interoperability Services (CMIS) standard defines a domain model and Web Services and Restful AtomPub bindings that can be used by applications to work with one or more Content Management repositories/systems. The CMIS interface is designed to be layered on top of existing Content Management systems and their existing programmatic interfaces. It is not intended to prescribe how specific features should be implemented within those CM systems, nor to exhaustively expose all of the CM systems capabilities through the CMIS interfaces. Rather, it is intended to define a generic/universal set of capabilities provided by a CM system and a set of services for working with those capabilities.

The CMIS specification provides a Web services interface that:

- Is designed to work over existing repositories, enabling customers to build and leverage applications against multiple repositories.
- Decouples Web services and content from the content management repository, enabling customers to manage content independently.
- Provides common Web services and Web 2.0 interfaces to dramatically simplify application development.
- Is development platform and language agnostic.
- Supports the composite application development and mash-up by the business or IT analysts.

1.2. xCMIS project

The xCMIS project <http://xcmis.org/>, initially contributed to the Open Source community by <http://www.exoplatform.com>, is an implementation of the full stack of Java-based CMIS services. xCMIS also includes the client side frameworks for integrating content from different enterprise repositories, according to the http://www.oasis-open.org/committees/tc_home.php?wg_abbrev=cmis.

The project is distributed under the LGPL license. You can download sources at <http://code.google.com/p/xcmis/source/checkout>, or visit <http://code.google.com/p/xcmis/w/list> for more information.

1.3. eXo CMIS

eXo CMIS is one eXo Platform service exposing eXo Content via CMIS. eXo CMIS offers the way to access

the eXo ECMS content from the CMIS 1.0 compatible Web client using the REST Atom protocol.



Note

WS-SOAP/WSDL binding is also supported, but it is not delivered in the standard eXo Platform 3.0 bundle.

eXo CMIS is built on the top of xCMIS embedded in Platform to expose the WCM drives as the CMIS repositories. The CMIS features are implemented as a set of components deployed on the eXo Container using XML files to describe the service configuration.

Chapter 2. Configuration

2.1. CMIS Configuration

To expose WCM drives to the CMIS repositories, you must make a special extension of CmisRegistry.

To make a typical component `org.exoplatform.ecms.xcmis.sp.jcr.exo.DriveCmisRegistry`, do as follows:

```
<component>
  <type>org.exoplatform.ecms.xcmis.sp.jcr.exo.DriveCmisRegistry</type>
  <init-params>
    <!-- Disabled by default. Uncomment if you need query support in CMIS. -->
    <!-- value-param>
      <name>indexDir</name>
      <value>${gatein.jcr.index.data.dir}/cmis-index${container.name.suffix}</value>
    </value-param-->
    <value-param>
      <name>exo.cmis.renditions.persistent</name>
      <value>true</value>
    </value-param>
    <values-param>
      <name>renditionProviders</name>
      <description>Redition providers classes.</description>
      <!-- <value>org.xcmis.renditions.impl.PDFDocumentRenditionProvider</value> -->
      <value>org.xcmis.renditions.impl.ImageRenditionProvider</value>
    </values-param>
  </init-params>
</component>
```

Where configuration parameters include:

- `indexDir` - directory where the lucene index will be placed. It is disabled by default.
- `exo.cmis.renditions.persistent` - should be document's rendition. (thumbnail) persisted in JCR. The allowed value is *true* or *false*.
- `renditionProviders` - set of FQN of classes which can be used as Rendition Providers. Classes which implement the `org.xcmis.spi.RenditionProvider` interface are used to preview the CMIS objects (thumbnails).



Note

In most cases, it is not required to change anything in the xCIMIS configuration. In case of any change of the indexer storage location, donot comment the `indexDir` value parameter and point it to the actual location.

2.2. Required nodetypes and namespaces in JCR

The following configuration is mandatory for JCR to work correctly.

```
<external-component-plugins>
  <target-component>org.exoplatform.services.jcr.RepositoryService</target-component>
  <component-plugin>
    <name>add.namespaces</name>
    <set-method>addPlugin</set-method>
    <type>org.exoplatform.services.jcr.impl.AddNamespacesPlugin</type>
    <init-params>
```

```

    <properties-param>
      <name>namespaces</name>
      <property name="cmis" value="http://www.exoplatform.com/jcr/cmis/1.0"/>
      <property name="xcmis" value="http://www.exoplatform.com/jcr/xcmis/1.0"/>
    </properties-param>
  </init-params>
</component-plugin>
<component-plugin>
  <name>add.nodeType</name>
  <set-method>addPlugin</set-method>
  <type>org.exoplatform.services.jcr.impl.AddNodeTypePlugin</type>
  <init-params>
    <values-param>
      <name>autoCreatedInNewRepository</name>
      <description>Node types configuration file</description>
      <value>jar:/conf/cmis-nodetypes-config.xml</value>
    </values-param>
  </init-params>
</component-plugin>
</external-component-plugins>

```

2.3. Authenticator and organization service configuration

An Authenticator is responsible for creating Identity [Security Service Authenticator](#)

The eXo CMIS service is based on:

- The authentication mechanism provided by the eXo organization service.
- The JAAS configuration of eXo Platform. For example,

```

gatein-domain {
  org.exoplatform.web.security.PortalLoginModule required;
  org.exoplatform.services.security.jaas.SharedStateLoginModule required;
  org.exoplatform.services.security.j2ee.TomcatLoginModule required;
};

```

Chapter 3. Service JARs

The list of required JAR files for eXo CMIS to work correctly:

xCMIS project jars (actual for the xCMIS 1.1.x versions):

- xcmis-renditions-X.X.X.jar
- xcmis-restatom-X.X.X.jar
- xcmis-search-model-X.X.X.jar
- xcmis-search-parser-cmis-X.X.X.jar
- xcmis-search-service-X.X.X.jar
- xcmis-spi-X.X.X.jar

WCM Storage provider for xCMIS (uses the same version as WCM/ECMS system):

- exo-ecms-ext-xcmis-sp-Y.Y.Y.jar

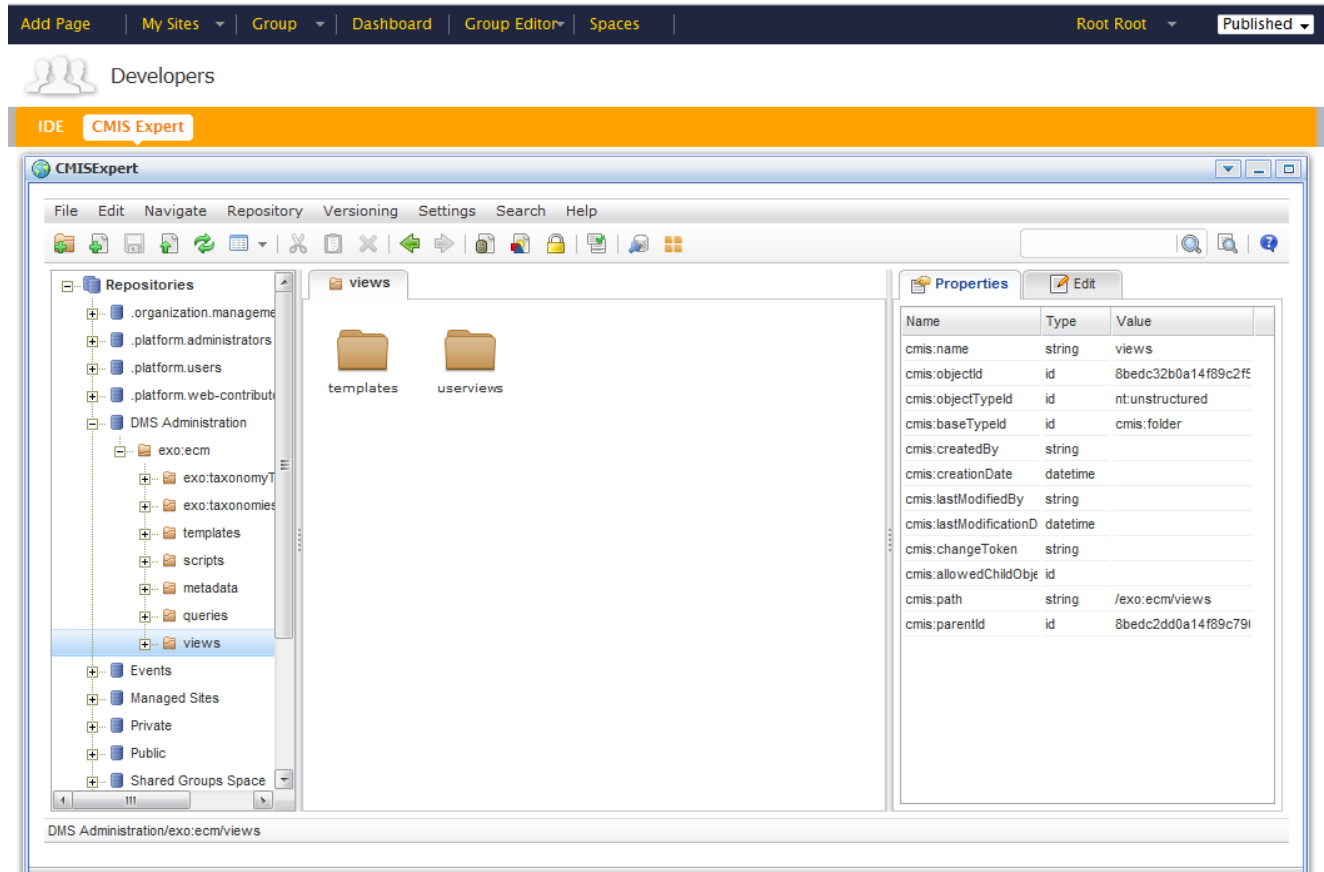
xCMIS dependencies (for 1.1.x):

- *abdera-client-0.4.0-incubating.jar*
- *abdera-core-0.4.0-incubating.jar*
- *abdera-i18n-0.4.0-incubating.jar*
- *abdera-parser-0.4.0-incubating.jar*
- *abdera-server-0.4.0-incubating.jar*
- *antlr-runtime-3.1.3.jar*
- *axiom-api-1.2.5.jar*
- *axiom-impl-1.2.5.jar*
- *jaxen-1.1.1.jar*
- *lucene-regexp-2.4.1.jar*

Chapter 4. Miscellaneous and Tips

Clients can be useful for CMIS repositories access:

- CMIS Expert, available at <http://www.xcmis.org> as a Google gadget.

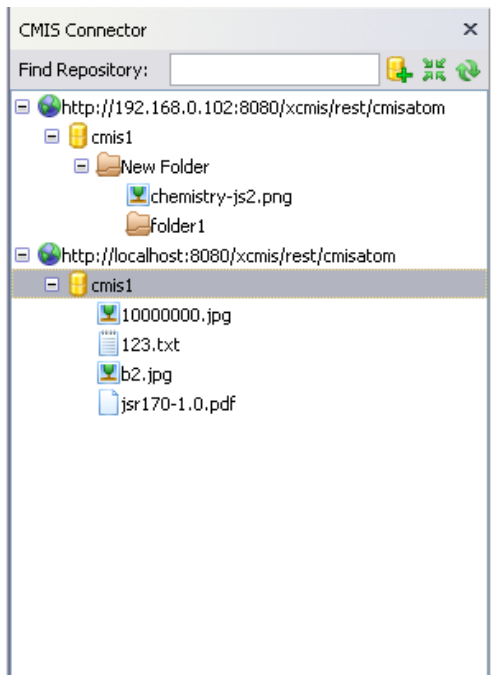


- IBM [CMIS Firefox Connector](#)

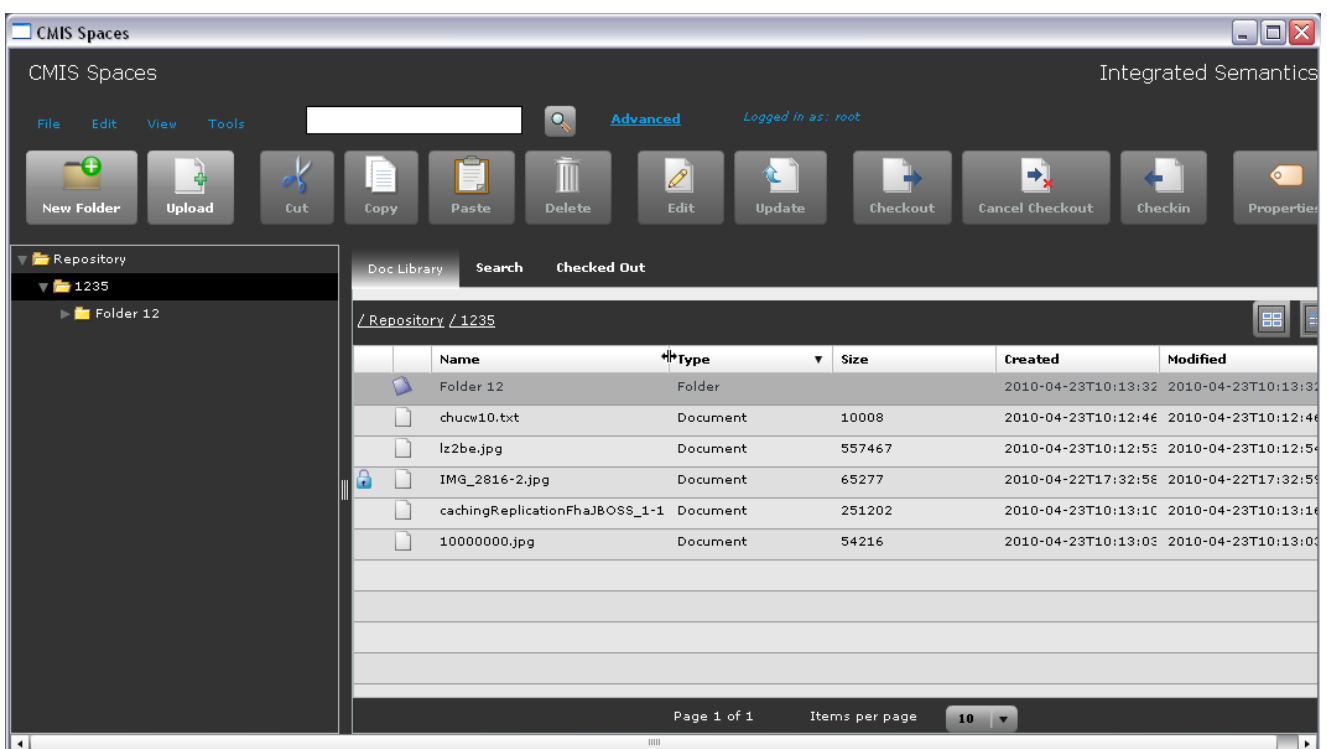


Warning

The IBM CMIS Firefox plugin is not compatible with Firefox 3.6.



- Flex+AIR and Flex+Browser CMIS clients, based on FlexSpaces framework.
<http://code.google.com/p/cmispaces>



Chapter 5. Links

eXo CMIS links

xCMIS project links:

- Community site <http://xcmis.org/> with CMIS Expert demo
- Forum <http://groups.google.com/group/xcmis>
- xCMIS latest news <http://gazarenkov.blogspot.com/>
- eXo Platform blog <http://blog.exoplatform.org/>

CMIS related links:

- http://www.oasis-open.org/committees/tc_home.php?wg_abbrev=cmis
- TODO CMIS working group (list, mail, feeds etc)
- TODO CMIS external tutorials, guides, videos, blogs, news
- CMIS clients
 - [CMIS Firefox Connector](#)
 - Flex+AIR and Flex+Browser CMIS clients <http://code.google.com/p/cmispaces>