# CMIS Client Sample for Business Automation Content Services on Cloud or Cloud Pak for Business Automation as a Service

This document describes the steps involved to develop and run a CMIS Client application to connect to the IBM CMIS service deployed in Business Automation Content Services on Cloud or Cloud Pak for Business Automation as a Service.

The primary requirement for any client application to connect to the CMIS service hosted in Business Automation Content Services on Cloud or Cloud Pak for Business Automation as a Service is to transparently authenticate with the cloud infrastructure before accessing the service. This is achieved by passing the Service Credential and its password. You can create the Service Credential from the Business Automation Content Services on Cloud or Cloud Pak for Business Automation as a Service User Portal. A Cloud Admin role is required to create this Service Credential. Contact the Cloud Admin for your Cloud instance to create the Service Credential.

## Resource URLs

To access the CMIS server using the AtomPub binding URL for your Business Automation Content Services on Cloud or Cloud Pak for Business Automation as a Service environments, use either of the following URL format:

* Business Automation Content Services on Cloud:

[https://*hostname*.automationcloud.ibm.com/dba/*<environment>*/openfncmis\_wlp/atom](https://hostname.automationcloud.ibm.com/dba/%3cenvironment%3e/openfncmis_wlp/atom)

* Cloud Pak for Business Automation as a Service

https://fncm-*<environment>*-*hostname*.automationcloud.ibm.com/ openfncmis\_wlp/atom

where *<environment>* is **dev** for the development environment, **test** for the test environment, or **run** for the production environment in the Cloud instance.

## CMIS Client Development

CMIS client leverages Apache Chemistry OpenCMIS libraries.

You need to develop your own CMIS client application with the appropriate CMIS atom binding URL and Service Credential / password as well as the Repository ID for the client program to connect. You will see this in the CMIS client sample:

Text

Description automatically generated

As the change is persisted in the session object, all CMIS API calls will work successfully, exposing full CMIS functionality.

You can obtain the Apache OpenCMIS libraries from the link below:

<https://www.apache.org/dyn/closer.lua/chemistry/opencmis/1.1.0/chemistry-opencmis-client-impl-1.1.0-with-dependencies.zip>

You can then click the first link to download all the jar files:



Once you have all the jar files, make sure you set the CLASSPATH variable to point to all the jar files. Then compile and run your own CMIS client application.

# CMIS Sample Client Properties File

The CMIS sample ZIP includes a cmis\_sample.properties file. It contains all the key parameters needed by the CMIS sample program to run successfully. The CMIS sample Java program reads from this properties file and sets the CMIS session parameters accordingly. It then creates a folder in the Content Platform Engine repository in the Business Automation Content Services on Cloud or Cloud Pak for Business Automation as a Service tenant. It then creates a document based on the content specified in the source file.

The following list shows the properties you can customize in the cmis\_sample.properties file:

* **ATOMPUB\_BINDING\_URL** – URL for the CMIS server ATOMPUB\_BINDING. Customize the host name to be that of your Business Automation Content Services on Cloud or Cloud Pak for Business Automation instance and also make sure you use the right environment value.
* **REPOSITORY\_ID** – Content Platform Engine repository id – i.e, the id for the object store.
* **USERNAME** – Name of the Service Credential for the Business Automation Content Services on Cloud or Cloud Pak for Business Automation as a Service instance.
* **PASSWORD** – Password for the Service Credential.
* **ROOT\_FOLDER** – Name of the root folder where the document should be created.
* **SOURCE\_FILE\_NAME** – Name of the source file to read the content from to create the document in Business Automation Content Services on Cloud or Cloud Pak for Business Automation as a Service instance.
* **TARGET\_FILE\_NAME** – Name of the target document to create in the Business Automation Content Services on Cloud or Cloud Pak for Business Automation as a Service instance.
* **MIME\_TYPE** – MIME type of the target document.

# Running the CMIS Sample Client

The sample CMIS client program will:

* Leverage OpenCMIS APIs to create the Root Folder if it does not already exist.
* Upload a document into the repository under the root folder and then retrieve its size and name.

Before you run the CMIS sample client, you must customize the list of properties in the cmis\_sample.properties file based on the definition of each property described in the previous section. Make sure the properties file is in a directory that is specified in the CLASSPATH variable so it is accessible by the CMIS sample client.

Also make sure the CLASSPATH variable references all the JAR files in the OpenCMIS client library. Refer to instructions in a previous section on where to download the OpenCMIS client library.

Finally make sure the source file you specify in the cmis\_sample.properties file is in the same directory where you run the CMIS sample client.

Once all the previous settings are in place, you can run the CMIS sample client in a standalone mode by executing the following command:

java com.ibm.ecm.cmis.client.CmisClientSample