Watson Knowledge Catalog (WKC)  
 JSON Swagger Metadata Application

RUSSELL ANDERSON

Table of Contents

[Introduction 2](#_Toc42495876)

[Use Case 2](#_Toc42495877)

[Using GitHub to fetch the WKC JSON Swagger artifacts 3](#_Toc42495878)

[Step-by-Step WKC JSON Swagger Application setup 4](#_Toc42495879)

[Example Execution Run Output 6](#_Toc42495880)

# Introduction

This application allows a user to connect to a Cloud Pak for Data (CP4D) then consume JSON Swagger files and populate the JSON Swagger Metadata bundle.

There are multiple files to the application:

* WKCJsonLoad.sh – read the JSON Swagger files with the script file utilizing the Open IGC API, automatically generate the Open IGC XML, and automatically populate the WKC Information Assets catalogue.
* WKCJsonLoad.ini – file used for identifying the location of Swagger JSON files to load
* WKCJsonLoad.jar – package file that aggregates many Java class files and associated metadata and resources for distribution. JAR files are archive files that include a Java-specific manifest file.
* extrajars.tar – other required JAR files

# Use Case

The Cloud Pak for Data (CP4D) has an Open IGC bundle created to contain the metadata information from the JSON Swagger files. The application will read the JSON Swagger files and generate the Open IGC XML required for population the WKC Information Assets. It then loads the XML to the WKC Information Assets for JSON Swagger.

# Using GitHub to fetch the WKC JSON Swagger artifacts

1. export GIT\_ACCOUNT=**rgahockey**
2. export GIT\_REPOSITORY=**JsonIngestion**
3. export GIT\_ACCOUNT\_DIR**=~/${GIT\_ACCOUNT}.git**
4. export GIT\_REPOSITORY\_DIR**="${GIT\_ACCOUNT\_DIR}/${GIT\_REPOSITORY}"**
5. export GIT\_REPOSITORY\_URL**="https://github.com/${GIT\_ACCOUNT}/${GIT\_REPOSITORY}.git"**
6. Linux example: mkdir --parents ${GIT\_ACCOUNT\_DIR}
7. macOS example: mkdir -p ${GIT\_ACCOUNT\_DIR}
8. cd ${GIT\_ACCOUNT\_DIR}
9. git clone --recurse-submodules ${GIT\_REPOSITORY\_URL}

Cloning into 'JsonIngestion'...

remote: Enumerating objects: 17, done.

remote: Counting objects: 100% (17/17), done.

remote: Compressing objects: 100% (16/16), done.

remote: Total 17 (delta 3), reused 0 (delta 0), pack-reused 0

Unpacking objects: 100% (17/17), done.

# Step-by-Step WKC JSON Swagger Application setup

1. After fetching artifacts from GitHub you can utilize the files in the same directory or copy files **WKCJsonLoad.sh**, **WKCJsonLoad.ini**, **WKCJsonLoad.jar**, and **extrajars.tar** to a local directory on your computer (e.g. **wkc\_json**)
2. In this example, the files were left in the same directory extracted form GitHub: **/root/rgahockey.git/JsonIngestion**
3. Created a new directory for the extrajars as follows: **mkdir extrajars**
4. Copy or Move the extrajars.tar file into the extrajars directory
5. Uncompress the **extrajars.tar** file (e.g. **tar -xvf** **extrajars.tar**)

Edit the **WKCJsonLoad.ini** file with the following appropriate values. This example is for a CP4D cluster using routes.

[MetadataServer]

ServerName = cpd-cpd-cpd.apps.cpd-statefarm3.demo.ibmcloudpack.com

Port = 443

# Administration

UserName = **russanderson**

Password = 58Q7Sg9XsPMXRw2jpfxh0Q==

PasswordEncrypted = true

EncryptPasswordOnly = false

[API]

# Route

**BaseUrl =** [**https://cpd-cpd-cpd.apps.cpd.statefarm3.demo.ibmcloudpack.com:443/ibm/iis/igc-rest/v1**](https://cpd-cpd-cpd.apps.cpd.statefarm3.demo.ibmcloudpack.com:443/ibm/iis/igc-rest/v1)

[Reporting]

Verbose = true

LineTerminator = LF

[Copybook]

UsageType = jsonswagger

XMLOutputDirectory = /root/SFjson

1. Edit **WKCJsonLoad.sh** file with the following appropriate values. This example is using the full path to the directories used. **Note:** Values below are examples -- use your valid values.

# This needs to be changed for the customer environment

extraLibrary=/root/extrajars

# This needs to be changed for the customer environment

primaryartifcatloc=/root/rgahockey.git/JsonIngestion

echo $extraLibrary

/usr/bin/java -Dfile.encoding=UTF-8 -classpath $extraLibrary/jersey-client-1.19.jar:$extraLibrary/jersey-core-1.19.jar:$extraLibrary/jsr311-api-1.1.1.jar:$extraLibrary/json-simple-1.1.1.jar:$extraLibrary/commons-codec-1.10.jar:$extraLibrary/commons-logging-1.2.jar:$extraLibrary/httpclient-4.5.2.jar:$extraLibrary/httpcore-4.4.4.jar:$extraLibrary/IShive.jar:$extraLibrary/isf-common.jar:$extraLibrary/isf-core.jar:$extraLibrary/ia-client-cli.jar:$primaryartifcatloc/WKCJsonLoad.jar Tester $primaryartifcatloc/WKCJsonLoad.ini

1. Change permissions on **WKCJsonLoad.sh** to be executable with the following command: ‘**chmod 744 WKCJsonLoad.sh**’
2. Type the following command at the prompt in the directory where you placed the files listed above: ‘**./WKCJsonLoad.sh**’. **Note:** This code will prompt you for the **admin** password at runtime. This is to never maintain passwords as clear text. You can change the username to whatever username was configured for the CP4D system.

# Example Execution Run Output

A screenshot of a cell phone

Description automatically generated