Oracle HCM Cloud Connector

Oracle HCM Cloud connector in Mule is an out-of-the-box solution to connect Oracle HCM Cloud applications. Connector supports seamless integration with Oracle HCM Cloud Application 20A (11.13.20.01.0) and future releases of HCM Cloud business objects.

Prerequisites

This document assumes user is prior knowledge on SOAP, Maven, Mule runtime engine (Mule), Anypoint Connectors, Anypoint Studio (Studio), Mule concepts, elements in a Mule flow, and Global Elements.

Oracle HCM Cloud Connector Requirements:

- Oracle HCM Cloud SaaS hostname and user credentials.
- Anypoint Studio 7.4.2
- Mule Runtime 4.2.2
- Java 8

Maven Support

To use this connector with Maven, view the pom.xml dependency information in the Dependency Snippets in Anypoint Exchange.

For Maven dependency management, include following XML snippet into the projects pom.xml file.

```xml
<dependency>
    <groupId>org.mule.connectors</groupId>
    <artifactId>mule-oraclehcmcloud-connector</artifactId>
    <version>1.0.0</version>
    <classifier>mule-plugin</classifier>
</dependency>
```

Anypoint studio configuration for the Connector

1. Open the Anypoint Studio and click the Exchange icon in the Studio task bar.
2. Click Add Account and provide Anypoint Platform username and password.
3. Search for the "Oracle HCM Cloud connector" for Mule 4
4. Add the connector to the selected modules section and click Finish.
5. Follow the prompts to install the connector.

After installing the connector to Studio, Oracle HCM Cloud connector and its operations will appear in the Mule Palette.

Create a Global Element in Studio

As needed, create a global config element if more than one HCM connector instance is required in the Mule project.

The connector object holds the configuration properties that allow user to connect to the Oracle HCM Cloud server.

To create a configuration for an Oracle HCM Cloud connector, complete the following steps:

1. Go to Global Elements section and click Create.
2. Search for Oracle HCM Cloud Connector Configuration
3. In the Connection tab pane, enter the required parameters for defining connection.

The minimum required attributes to define are:

Field	Description
Host Address	Oracle HCM Cloud Hostname
Username	Username of an authorized Cloud HCM user.
Password	Password credential of an authorized Cloud HCM user.

As a best practice, use property placeholder syntax to load the credentials in a more simple and reusable way.

Use Case: Location Service - Return Location By ID from Oracle Cloud HCM

Create a Mule application that receives a function using the Oracle Cloud HCM connector's **InvokeHCMCloudService** operation.
The **InvokeHCMCloudService** operation makes SOAP request to Oracle HCM Cloud and provides SOAP response.
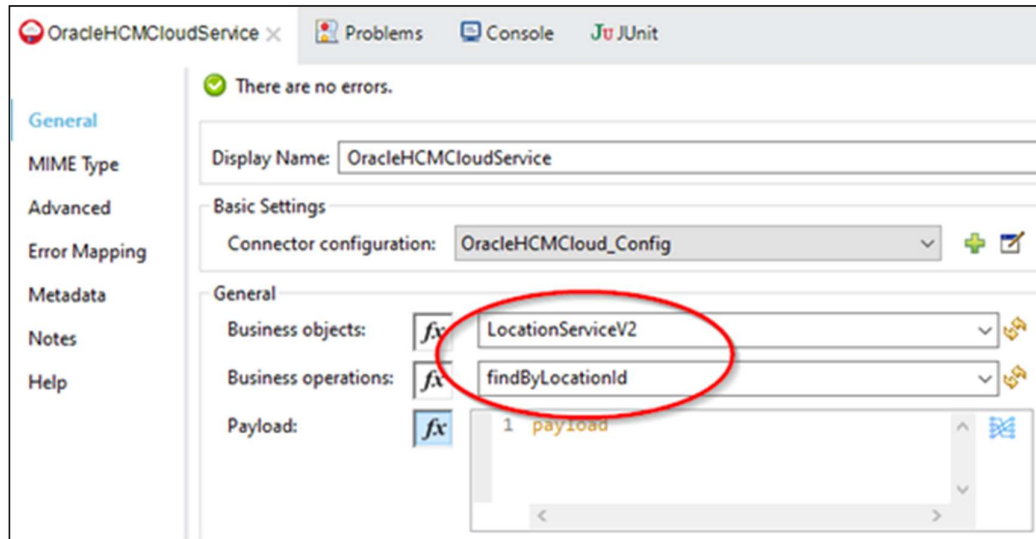
1. Create a new **Mule Project** in Anypoint Studio.
2. Add the Oracle HCM Cloud connector to Mule project from Exchange.
3. Drag the Oracle HCM Cloud connector's **InvokeHCMCloudService** operation to the flow.

4. Provide the configuration parameters

5. Select the Business Object as Location Service and Operation as findByLocationId.

6. Create a XML payload and provide reference in the Parse Template component

```xml
<soapenv:Envelope
xmlns:soapenv="http://schemas.xmlsoap.org/soap/envelope/" xmlns:typ="http://xmlns.oracle.com/apps/hcm/locations/locationServiceV2/types/">
   <soapenv:Header/>
   <soapenv:Body>
     <typ:findByLocationId>
        <typ:locationId>300000047013280</typ:locationId>
     </typ:findByLocationId>
   </soapenv:Body>
</soapenv:Envelope>
```

7. Final application flow is shown below:
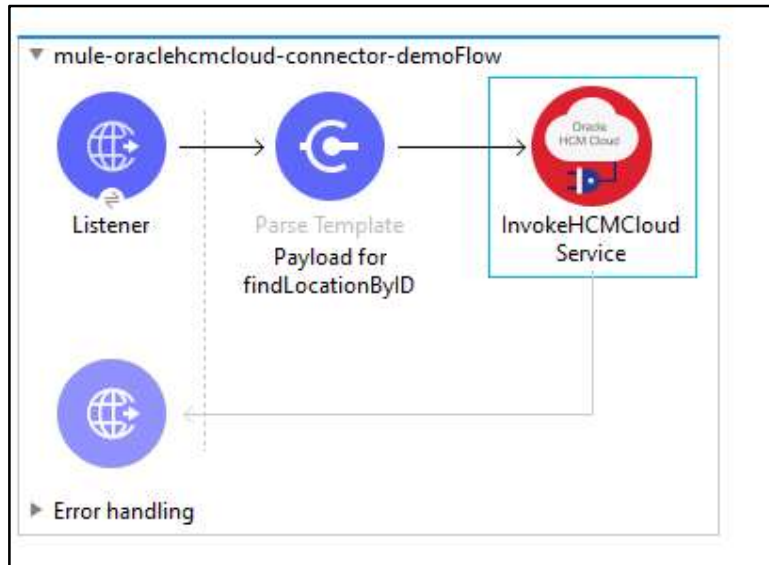
8. Invoke the endpoint by running the mule application which in turn invokes the Oracle HCM cloud service via HCM connector by taking the sample xml payload.
9. Oracle HCM Cloud connector provides the response payload returned by the findByLocationId operation
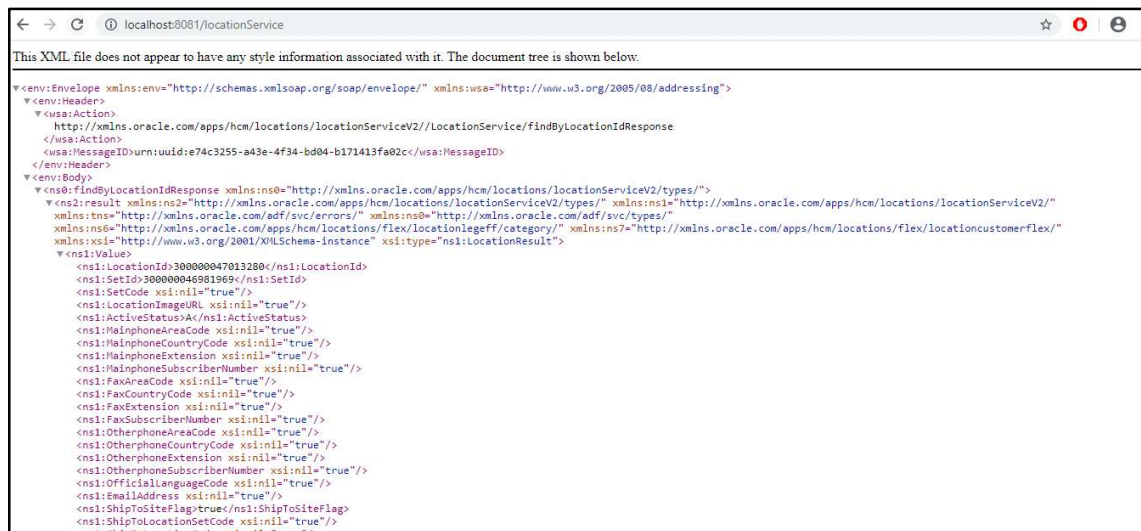
Use Case: Run Report Service - Return Report from Oracle Cloud HCM

Create a Mule application that receives a function using the Oracle Cloud HCM connector's **InvokeReportService** operation. The **InvokeReportService** operation makes SOAP request to Oracle HCM Cloud and provides SOAP response.

1. Create a new **Mule Project** in Anypoint Studio.

2. Add the Oracle HCM Cloud connector to Mule project from Exchange.
3. Drag the Oracle HCM Cloud connector's **InvokeReportService** operation to the flow.
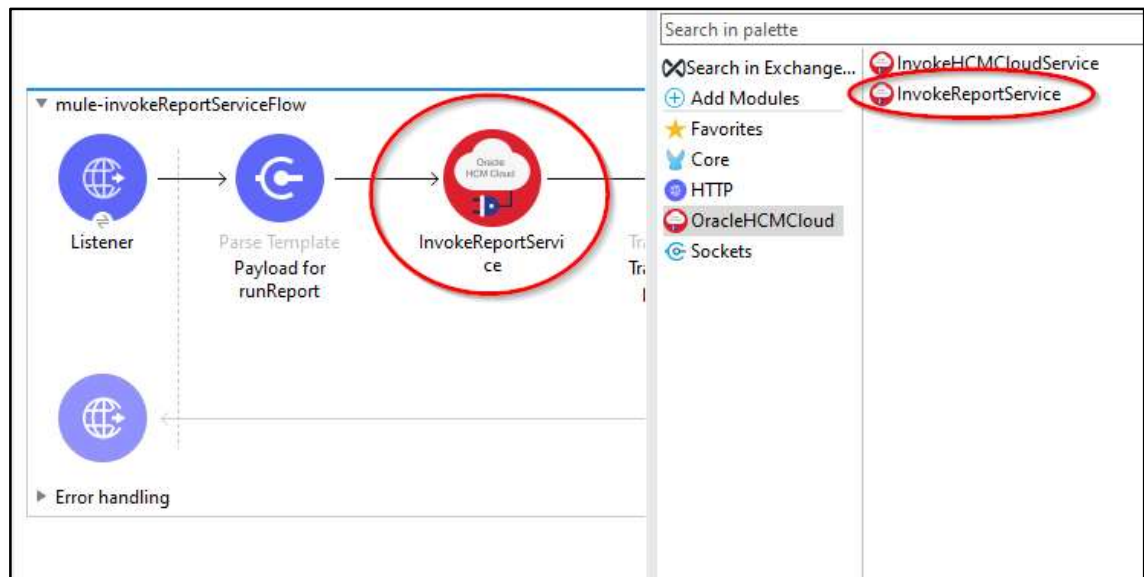
4. Provide the configuration parameters if not created global configuration.

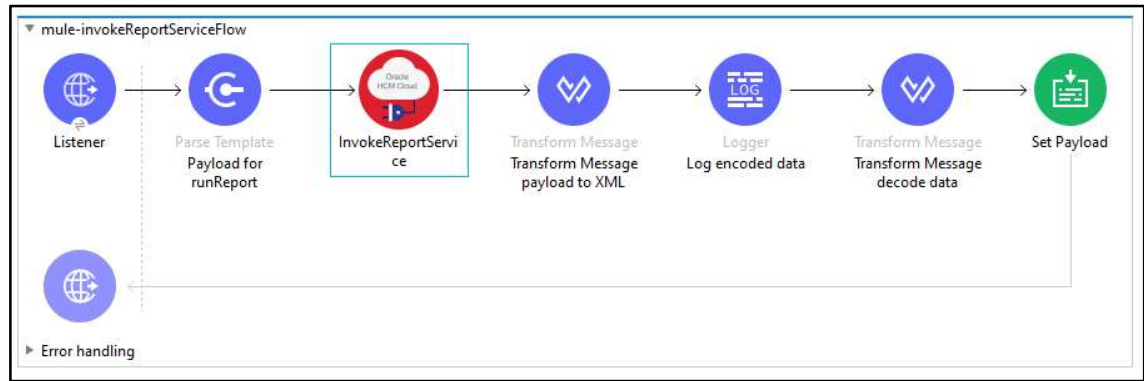5. Select the Report Service as runReport.
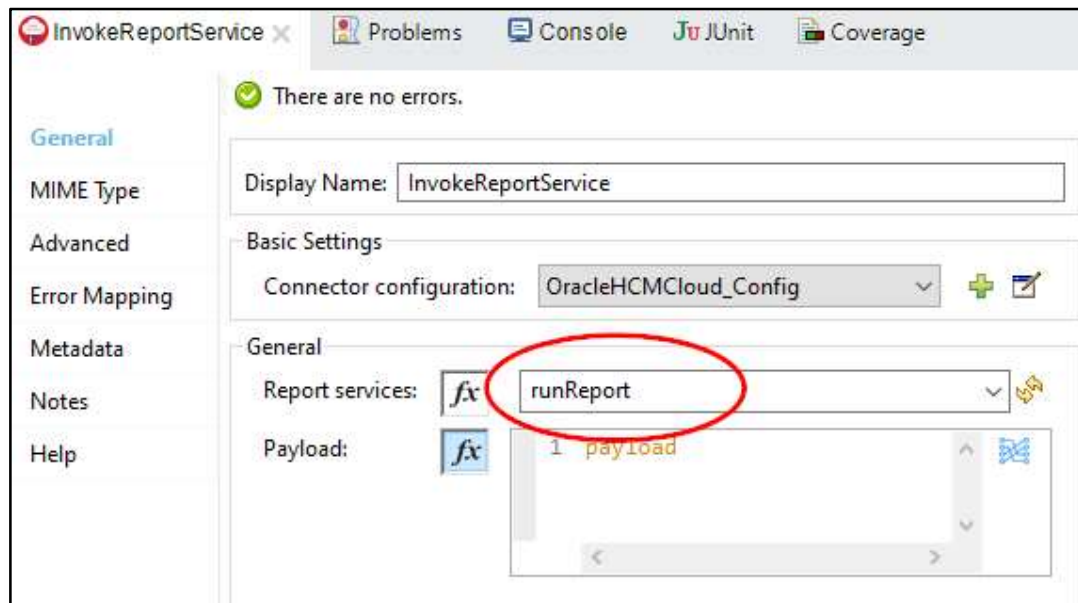
6. Create a XML payload and provide reference in the Parse Template component

```xml
<soap:Envelope
xmlns:pub="http://xmlns.oracle.com/oxp/service/PublicReportService"
xmlns:soap="http://www.w3.org/2003/05/soap-envelope">
    <soap:Header>

    </soap:Header>
    <soap:Body>
        <pub:runReport>
            <pub:reportRequest>
                <pub:attributeFormat>xml</pub:attributeFormat>
                <pub:flattenXML>true</pub:flattenXML>

    <pub:reportAbsolutePath>~/LocationDetailsReport.xdo</pub:reportAbsolutePath>
                <pub:sizeOfDataChunkDownload>-1</pub:sizeOfDataChunkDownload>
            </pub:reportRequest>
        </pub:runReport>
    </soap:Body>
</soap:Envelope>
```

7. Final application flow is shown below:

8. Invoke the endpoint by running the mule application which in turn invokes the Invoke Report service via HCM connector by taking the sample xml payload.
9. Oracle HCM Cloud connector provides the response payload returned by the runReport Service.