Informatica® Cloud Data Integration

Oracle HCM Cloud V1 Connector

Informatica Cloud Data Integration Oracle HCM Cloud V1 Connector
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Preface

Use *Oracle HCM Cloud V1 Connector* to learn how to read from or write to Oracle HCM Cloud application by using Cloud Data Integration. Learn to create an Oracle HCM Cloud V1 connection, develop and run mappings and mapping tasks in Cloud Data Integration.

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CHAPTER 1

Introduction to Oracle HCM Cloud V1 Connector

This chapter includes the following topics:

Oracle HCM Cloud V1 Connector Overview

You can use Oracle HCM Cloud V1 Connector to connect to Oracle HCM Cloud application from Data Integration. Use Oracle HCM Cloud V1 Connector to read data from or write data to an Oracle HCM Cloud application.

To read data from an Oracle HCM Cloud V1 source, you can use the XML schema data of the HCM extract definitions as sources in mappings and mapping tasks. When you run a mapping or mapping task, the Secure Agent downloads the HCM extract definitions instance from the WebCenter Content Server, decrypts the data if encrypted, and writes the data to the target.

To write data to an Oracle HCM Cloud V1 target, you can use the XLSX schema files as targets in mappings and mapping tasks. When you run a mapping or mapping task, the Secure Agent encrypts the data based on the encryption mode you specify in the connection property. Then, the Secure Agent uploads the data in the WebCenter Content Server from where the Secure Agent loads the data in the HCM Application Server. The Secure Agent creates new data in the HCM Application Server.

You can use the Oracle HCM Cloud V1 Connector in a Source transformation, Target transformation, and midstream transformation in a mapping task.

Note: Oracle HCM Cloud V1 Connector does not support lookup and partition.

Oracle HCM Cloud V1 Supported Task Types and Object Types

The following table lists the Oracle HCM Cloud V1 task and object types that you can include in Data Integration tasks:

Task Type	Source	Target	Midstream
Mapping	Yes	Yes	Yes

Oracle HCM Cloud V1 Connector Example

You are a human resources administrator and you want to synchronize data between the core human resources application and other applications such as payroll, learning, and time management. As an human resources administrator, you also want to integrate with other ERP applications such as Workday, PeopleSoft, SAP, or Enterprise Data Warehouses.

You can use Oracle HCM Cloud V1 Connector to read data from an Oracle HCM Cloud application and write or integrate data with the target applications. You can also use Oracle HCM Cloud V1 Connector to read data from any source application and write to an Oracle HCM Cloud application.

Administration of Oracle HCM Cloud V1 Connector

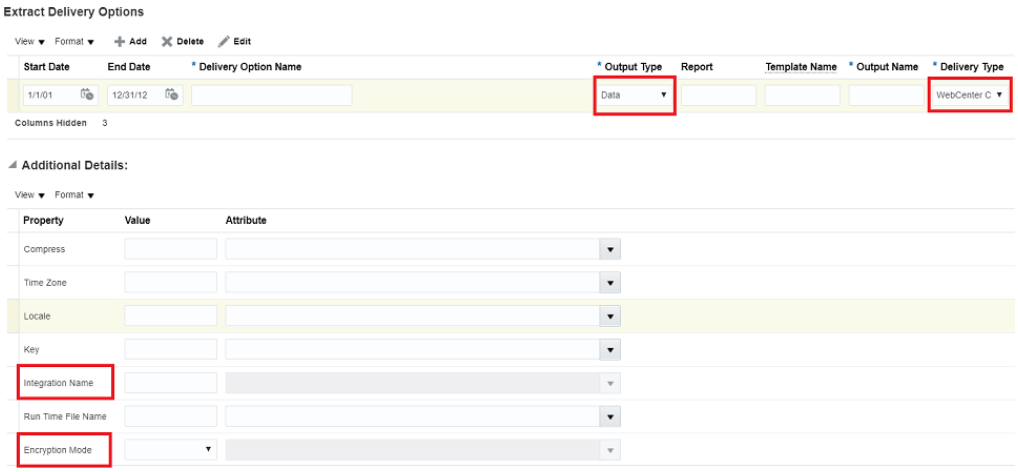
Before you use an Oracle HCM Cloud V1 Connector to read or write data to Oracle HCM Cloud, you must perform certain prerequisite tasks.

Prerequisite Tasks for Read Operation

Before you use an Oracle HCM Cloud V1 Connector to read data from an Oracle HCM Cloud V1 source, perform the following prerequisite tasks:

1. Create an HCM extract definitions for the data that you want to extract from the Oracle HCM Cloud application.
2. On the Oracle HCM Cloud application, configure the following properties when you create the HCM extract definitions:
   a. In the **Extract Deliver Options** page under the **Manage Extract Definitions** tab, set the value of the **Output Type** field as **Data** and **Delivery Type** field as **WebCenter Content**.
   b. Specify the values of the **Integration Name** and **Encryption Mode** fields

The following image shows the **Extract Deliver Options** page where you can set the value of the **Output Type**, **Delivery Type**, **Integration Name**, and **Encryption Mode** fields:



3. Ensure that you submit the HCM extract definitions to the Oracle WebCenter Content Server from the Oracle HCM Cloud application. You can also use the **Submit Extract** connection property to submit the HCM extract definitions to the Oracle WebCenter Content Server.
4. Generate the XML schema in the XSD file format for all the HCM extract definitions and store the XSD files on the machine where the Secure Agent is installed.
   You must store all the XSD files in the following directory that you specify in the **Schema Directory** connection property: `Schema Directory\Reader`

   Oracle HCM Cloud V1 Connector supports the XSD files with a `DATA_DS` single root element.

   Note: You must use a third party tool to generate the XML schema from the output XML data. Provide the XSD files that are compatible with the output XML data. Informatica recommends that you name the XSD file in the `<TemplateName>.xsd` format.

Obtain the WebCenter Content URL

Before you create an Oracle HCM Cloud V1 connection to read data from an Oracle HCM Cloud V1 source, you must obtain the WebCenter Content URL where Oracle HCM Cloud uploads the output XML data.

Perform the following steps to obtain the WebCenter Content URL:

1. Obtain the URL for Oracle HCM Cloud Setup and Maintenance from the **Service Details** section in the cloud environments provisioning email from Oracle.
   The following example shows a sample URL: `https://fs-<domain_name>.oracleoutsourcing.com/setup/faces/TaskListManagerTop`
2. Edit the URL by removing the following path: `/setup/faces/TaskListManagerTop`
   The following URL is a sample of the WebCenter Content URL: `https://fs-<domain_name>.oracleoutsourcing.com`

Prerequisite Tasks for Write Operation

Before you use an Oracle HCM Cloud V1 Connector to write data to an Oracle HCM Cloud V1 target, ensure that the following roles are assigned to you:

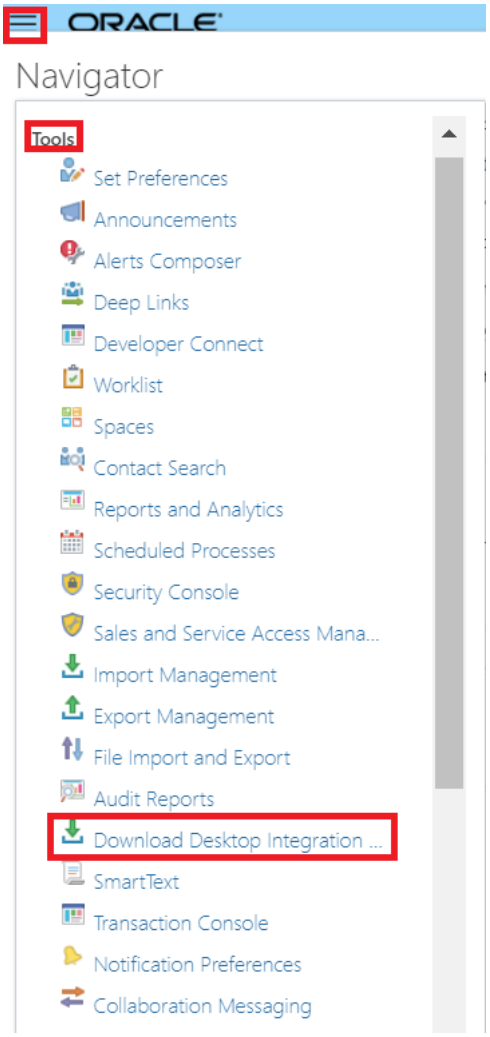
Role	Role Code
Application Administrator	ORA_FND_APPLICATION_ADMINISTRATOR_JOB
Application Developer	ORA_FND_APPLICATION_DEVELOPER_JOB
Application Diagnostics Administrator	ORA_FND_DIAG_ADMINISTRATOR_JOB
Application Implementation Administrator	ORA_ASM_APPLICATION_IMPLEMENTATION_ADMIN_ABSTRACT
Application Implementation Consultant	ORA_ASM_APPLICATION_IMPLEMENTATION_CONSULTANT_JOB
Application Implementation Manager	ORA_ASM_APPLICATION_IMPLEMENTATION_MANAGER_JOB
Human Capital Management Application Administrator	ORA_HRC_HUMAN_CAPITAL_MANAGEMENT_APPLICATION_ADMINISTRATOR_JOB
Human Capital Management Integration Specialist	ORA_HRC_HUMAN_CAPITAL_MANAGEMENT_INTEGRATION_SPECIALIST_JOB
IT Security Manager	ORA_FND_IT_SECURITY_MANAGER_JOB
Integration Specialist	ORA_FND_INTEGRATION_SPECIALIST_JOB

Download and Install ADF Desktop Integration Tool

Perform the following steps to download and install the ADF Desktop Integration Tool:

1. Login to the Oracle HCM Cloud Application.

2. Click **Navigator** > **Tools** > **Download Desktop Integration Installer**.



The application is downloaded to the desktop.

3. Run the installer, `adfdi-excel-addin-installer.exe`.

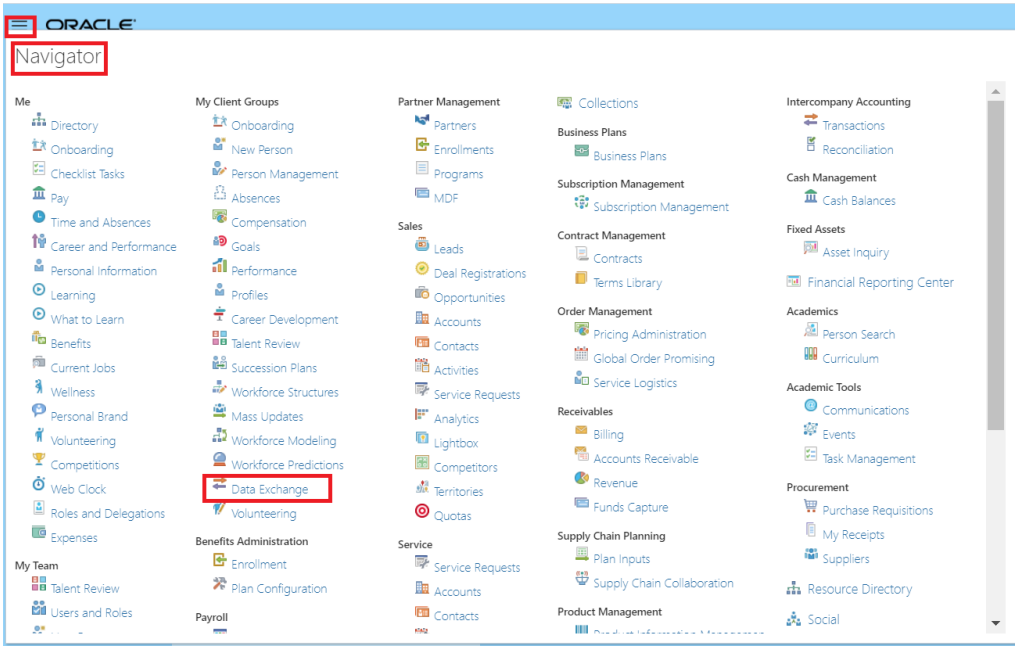
   Note: For the Excel configuration to work with the ADF Desktop Integration, see the following Oracle documentation:
   https://docs.oracle.com/middleware/11119/adf/develop-desktop-integration/adf-desktop-config-env.htm

Downloading Excel Templates

Perform the following steps to download Excel templates:

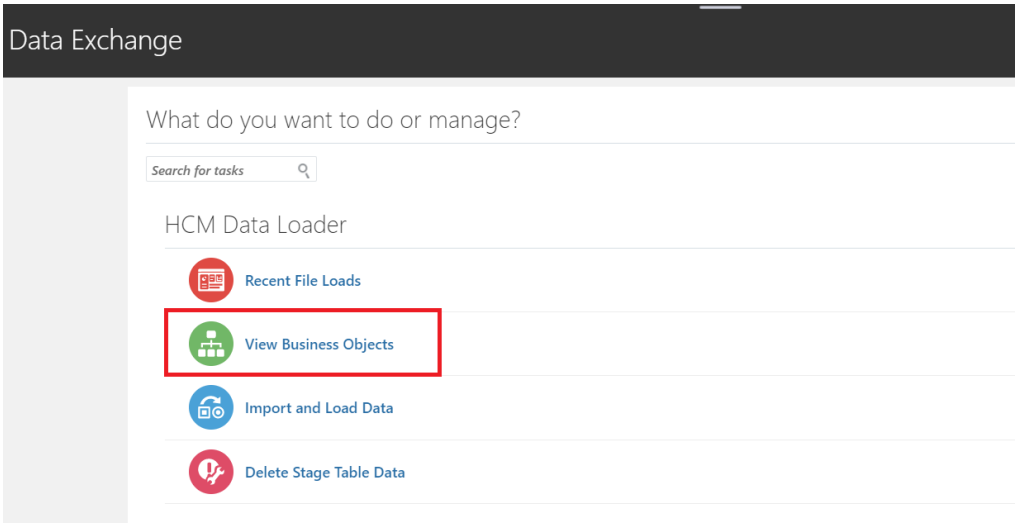
1. Login to the Oracle HCM Cloud Application.

2. Click **Navigator** > **Data Exchange.**

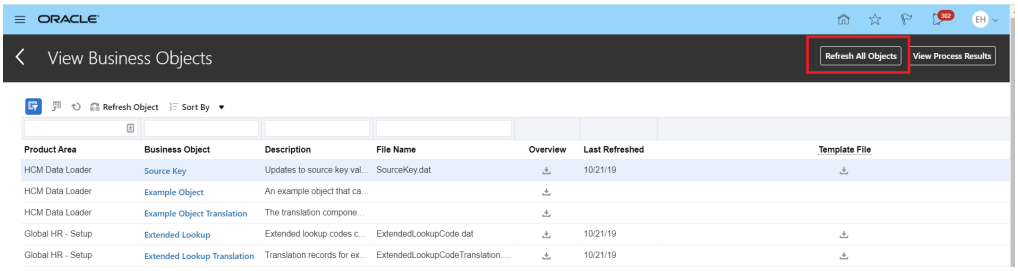


The **Data Exchange** page is displayed.

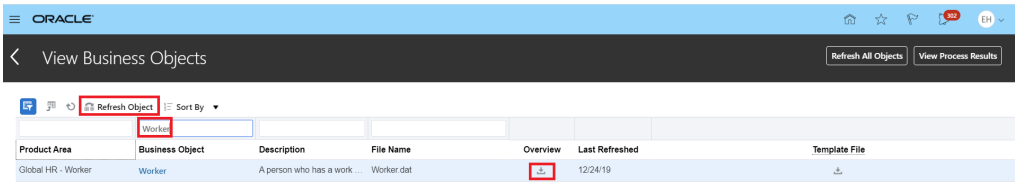
3. Click **View Business Objects** in the HCM Data Loader section.



4. Click **Refresh All Objects**.



5. You can filter a particular business object and refresh that specific object. Click the download icon on the **View Business Objects** page, under the **Overview** column.



The **GenericBusObjDetails.xlsx** template is downloaded.

Note: All Excel templates are downloaded with the same name, **GenericBusObjDetails.xlsx**. Rename the Excel templates as required.

Setting up Excel Templates

Perform the following steps to set up the Excel templates to enable the write operation:

1. Open the downloaded Excel templates.
2. In the **Connect** pop-up window, click **Yes** to generate the metadata for that particular object.
3. If you have not already logged in to the Oracle HCM Cloud V1 Application, you are prompted to log in.
4. Navigate to the Hierarchy Details, Attributes, and Flexfield Attribute sheets to ensure the complete metadata is populated for the template. Save the Excel template.

   Note: In case the data is not populated within the Excel template, verify if you have followed the steps accurately or contact **Oracle Support**.
5. Place all the Excel templates in the Writer directory under the **schema** directory, specified in the connection properties.

   Note: Informatica recommends that you use excel templates corresponding to the latest release version of Oracle Cloud.

Prerequisite Tasks for Person Number Auto Generation

After you perform the pre-requisite tasks for the Write operation, copy the standard Excel templates and perform the modifications mentioned below.

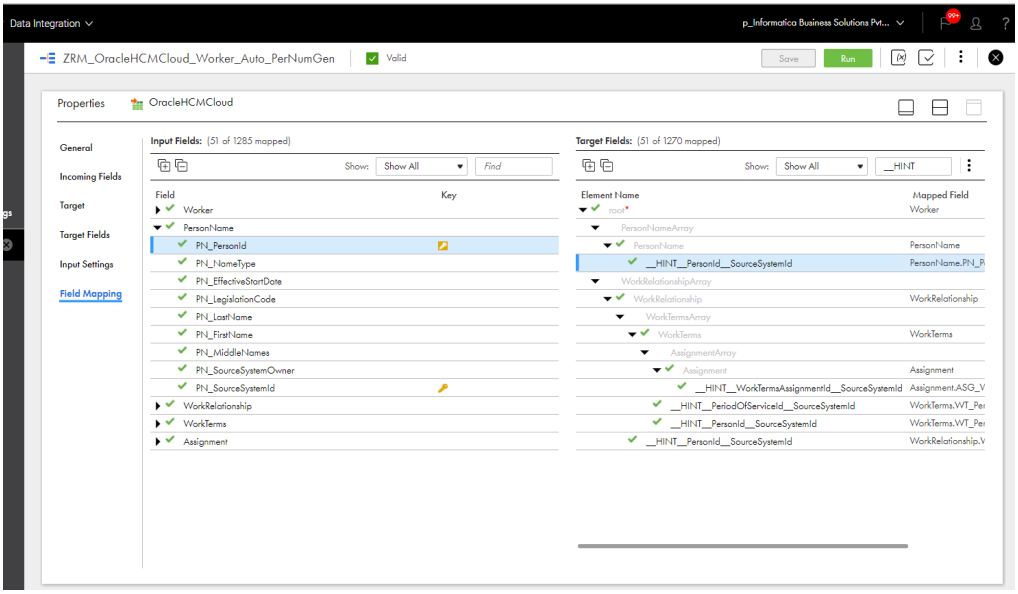
Perform the following steps to automatically generate the Person Number for Worker objects:

1. Change the **AttributeName** to **AttributeName(HintAtrributeName)** as required. For example,
   - **PersonId** to **PersonId(SourceSystemId)**
   - **JobId** to **JobId(GUID)**
2. Change the Attribute data type to **HINT** Attribute data type. For example, change the data type of the **PersonId(SourceSystemId)** attribute from **Number** to **String** as the **Hint** Attribute **SourceSystemId** data type is String.

3. Save the Excel template with the modifications and copy it to the **Writer** folder within the **Schema Directory**.

   Note: After you modify the standard Excel template, you should not connect to the respective Oracle HCM Cloud instance, to avoid the loss of all modifications.

   In the Field Mapping tab, the following image shows the **Hint** attribute as **__HINT__ AtributeName __ HintAttributeName**. For Example: **__HINT__PersonId__SourceSystemId**.



CHAPTER 2

Oracle HCM Cloud V1 Connections

This chapter includes the following topics:

Oracle HCM Cloud V1 Connections Overview

Create an Oracle HCM Cloud V1 connection to connect to Oracle HCM Cloud application. Use Oracle HCM Cloud V1 connection to read data from and write data to an Oracle HCM Cloud application. You can use an Oracle HCM Cloud V1 connections to specify sources or targets in mappings and mapping tasks.

You can create an Oracle HCM Cloud V1 connection in the **Connections** page.

Oracle HCM Cloud V1 connection properties

When you create an Oracle HCM Cloud V1 connection, you must configure the connection properties.

The following table describes the Oracle HCM Cloud V1 connection properties:

Connection Property	Description
Runtime Environment	The name of the runtime environment where you want to run the tasks.
WebCenter Content URL	The URL of WebCenter Content Server where Oracle HCM Cloud uploads the output XML data. **Note:** To validate the WebCenter Content URL, type the following URL in the web browser: `<Webcenter Content URL>/idcws/GenericSoapPort?WSDL` If the URL opens a WSDL file then the WebCenter Content URL is valid.

Connection Property	Description
HCM URL	The URL of HCM Application Server that contains newly created data after the Secure Agent loads the XML data from the WebServer Content Server to the HCM Application Server. The following URL shows a sample HCM URL: `https://adc-xxx-hcm.oracledemo.com/` To validate the HCM URL, type the following URL in the web browser: `<HCM URL>/hcmProcFlowCoreController/FlowActionsService?WSDL` If the URL opens a WSDL file then the HCM URL is valid. **Note:** Applicable when you create an Oracle HCM Cloud V1 connection to write data to an Oracle HCM Cloud application or when you select **Submit Extract** in the connection properties.
Authentication Type	The type of user authentication to connect to the Oracle HCM Cloud application. You can select **Basic Authentication** type.
Username	User name of the Oracle HCM Cloud account.
Password	Password for the Oracle HCM Cloud account.
Schema Directory	The directory path where HCM extract definitions XSD and XLSX are stored on the machine where the Secure Agent is installed. You must click the **Test** button after you create an Oracle HCM Cloud V1 connection. The Secure Agent creates following directories under the schema directory: **Reader** The reader directory contains the XSD files. You must place all the XSD files after you generate them under the reader directory. **Writer** The writer directory contains the XLSX files. You must place all the XLSX files after you download them under the writer directory. **Temp** The temp directory contains the staging files before loading.
Encryption Mode	The encryption type you want to use to encrypt or decrypt the data. Select one of the following options: **NONE** The data is not encrypted. **PGPUNSIGNED** Select this option to encrypt or decrypt the data using the PGPUnsigned encryption method. **PGPSIGNED** Select this option to encrypt or decrypt the data using the PGPSigned encryption method. **Note:** When you read data from an Oracle HCM Cloud V1 source, you must specify the same **Encryption Mode** option that you used in the Oracle HCM Cloud application.
PrivateKey Passphrase	The passphrase that you used to encrypt the private key. For more information about the private key passphrase, refer the Oracle documentation.

Connection Property	Description
PrivateKey Path	Enter the file path of the private key. You must store the private key in the machine on which the Secure Agent is installed. **Note:** You must provide the private key corresponding to the public key that you uploaded in the Oracle HCM Cloud application.
Fusion PublicKey Path	The file path of the fusion public key. You must store the fusion public key in the machine on which the Secure Agent is installed. **Note:** You must raise a service request to Oracle HCM Cloud to retrieve the fusion public key. For more information about the fusion public key, refer the Oracle documentation.
Submit Extract	Submits the HCM extract definitions with the parameter values that you provide in the request message. Default is disabled. When you use the **Submit Extract** option, the Secure Agent submits the instance of the HCM extract definition that you provide and downloads the latest output data file corresponding to the HCM extract definition from the WebCenter Content Server. You can also submit the HCM extract definitions from the Oracle HCM Cloud application directly. **Note:** This property is applicable when you read data from the Oracle HCM Cloud application.

Configuring Proxy Settings

If your organization uses an outgoing proxy server to connect to the internet, the Secure Agent connects to Informatica Intelligent Cloud Services through the proxy server.

Contact your network administrator for the correct proxy settings.

Configuring the Proxy Settings on Linux

You can update the proxy server settings defined for the Secure Agent from the command line. To configure the proxy server settings for the Secure Agent on a Linux machine, you must use a shell command and configure the JVM options of the Secure Agent.

1. Navigate to the following directory:

   ```
   <Secure Agent installation directory>/apps/agentcore
   ```

2. To configure proxy, enter the following command:

   ```
   consoleAgentManager.sh configureProxy <proxy host> <proxy port> <proxy user name> <proxy password>
   ```

3. Log in to Informatica Intelligent Cloud Services.
4. Open Administrator and select **Runtime Environments**.
5. Select the Secure Agent for which you want to configure a proxy server.
6. On the upper-right corner of the page, click **Edit**.
7. In the **System Configuration Details** section, select the **Type** as **DTM** for the Data Integration Service.

- To use an unauthenticated proxy server, add the following parameters in any **JVMOption** field and specify appropriate values for each parameter:

Parameter	Description
-Dhttp.proxyHost=	Host name of the outgoing HTTP proxy server.
-Dhttp.proxyPort=	Port number of the outgoing HTTP proxy server.
-Dhttps.proxyHost=	Host name of the outgoing HTTPS proxy server.
-Dhttps.proxyPort=	Port number of the outgoing HTTPS proxy server.

For example,

```
JVMOption1=-Dhttp.proxyHost=<proxy_server_hostname>
JVMOption2=-Dhttp.proxyPort=8081
JVMOption3=-Dhttps.proxyHost=<proxy_server_hostname>
JVMOption4=-Dhttps.proxyPort=8081
```

- To use an authenticated proxy server, add the following parameters in any **JVMOption** field and specify appropriate values for each parameter:

Parameter	Description
-Dhttp.proxyHost=	Host name of the outgoing HTTP proxy server.
-Dhttp.proxyPort=	Port number of the outgoing HTTP proxy server.
-Dhttp.proxyUser=	User name for the HTTP proxy server.
-Dhttp.proxyPassword=	Password for the user.
-Dhttps.proxyHost=	Host name of the outgoing HTTPS proxy server.
-Dhttps.proxyPort=	Port number of the outgoing HTTPS proxy server.
-Dhttps.proxyUser=	User name for the HTTPS proxy server.
-Dhttps.proxyPassword=	Password for the user.

For example,

```
JVMOption1=-Dhttp.proxyHost=<proxy_server_hostname>
JVMOption2=-Dhttp.proxyPort=8008
JVMOption3=-Dhttp.proxyUser=adminuser
JVMOption4=-Dhttp.proxyPassword=password
JVMOption5=-Dhttps.proxyHost=<proxy_server_hostname>
JVMOption6=-Dhttps.proxyPort=8008
JVMOption7=-Dhttps.proxyUser=adminuser
JVMOption8=-Dhttps.proxyPassword=password
```

Note: You can configure only five **JVMOption** fields in the **System Configuration Details** section. To configure the remaining parameters, you must add the **JVMOption** fields in the **Custom Configuration Details** section. In the **Custom Configuration Details** section, select the **Type** as **DTM** for the Data Integration Service, add the **JVMOption** fields, and specify the remaining parameters and appropriate values for each parameter.

8. Click **Save**.

   The Secure Agent restarts to apply the settings.

Configuring the Proxy Settings on Windows

To configure the proxy server settings for the Secure Agent on a Windows machine, you must configure the proxy server settings through the Secure Agent Manager and the JVM options of the Secure Agent.

1. Click **Start** > **All Programs** > **Informatica Cloud Secure Agent** > **Informatica Cloud Secure Agent** to launch the Secure Agent Manager.

   The Secure Agent Manager displays the Secure Agent status.

2. Click **Proxy** in the Secure Agent Manager page.
3. Click **Use a Proxy Server** to enter proxy server settings.
4. Configure the following proxy server details:

Field	Description
Proxy Host	Required. Host name of the outgoing proxy server that the Secure Agent uses.
Proxy Port	Required. Port number of the outgoing proxy server.
User Name	User name to connect to the outgoing proxy server.
Password	Password to connect to the outgoing proxy server.

5. Click **OK**.
6. Log in to Informatica Intelligent Cloud Services.
7. Open Administrator and select **Runtime Environments**.
8. Select the Secure Agent for which you want to configure a proxy server.
9. On the upper-right corner of the page, click **Edit**.
10. In the **System Configuration Details** section, select the **Type** as **DTM** for the Data Integration Service.
    - To use an unauthenticated proxy server, add the following parameters in any **JVMOption** field and specify appropriate values for each parameter:

Parameter	Description
-Dhttp.proxyHost=	Host name of the outgoing HTTP proxy server.
-Dhttp.proxyPort=	Port number of the outgoing HTTP proxy server.

Parameter	Description
-Dhttps.proxyHost=	Host name of the outgoing HTTPS proxy server.
-Dhttps.proxyPort=	Port number of the outgoing HTTPS proxy server.

For example,

```
JVMOption1=-Dhttp.proxyHost=<proxy_server_hostname>
JVMOption2=-Dhttp.proxyPort=8081
JVMOption3=-Dhttps.proxyHost=<proxy_server_hostname>
JVMOption4=-Dhttps.proxyPort=8081
```

- To use an authenticated proxy server, add the following parameters in any **JVMOption** field and specify appropriate values for each parameter:

Parameter	Description
-Dhttp.proxyHost=	Host name of the outgoing HTTP proxy server.
-Dhttp.proxyPort=	Port number of the outgoing HTTP proxy server.
-Dhttp.proxyUser=	User name for the HTTP proxy server.
-Dhttp.proxyPassword=	Password for the user.
-Dhttps.proxyHost=	Host name of the outgoing HTTPS proxy server.
-Dhttps.proxyPort=	Port number of the outgoing HTTPS proxy server.
-Dhttps.proxyUser=	User name for the HTTPS proxy server.
-Dhttps.proxyPassword=	Password for the user.

For example,

```
JVMOption1=-Dhttp.proxyHost=<proxy_server_hostname>
JVMOption2=-Dhttp.proxyPort=8008
JVMOption3=-Dhttp.proxyUser=adminuser
JVMOption4=-Dhttp.proxyPassword=password
JVMOption5=-Dhttps.proxyHost=<proxy_server_hostname>
JVMOption6=-Dhttps.proxyPort=8008
JVMOption7=-Dhttps.proxyUser=adminuser
JVMOption8=-Dhttps.proxyPassword=password
```

Note: You can configure only five **JVMOption** fields in the **System Configuration Details** section. To configure the remaining parameters, you must add the **JVMOption** fields in the **Custom Configuration Details** section. In the **Custom Configuration Details** section, select the **Type** as **DTM** for the Data Integration Service, add the **JVMOption** fields, and specify the remaining parameters and appropriate values for each parameter.

11. Click **Save**.

    The Secure Agent restarts to apply the settings.

CHAPTER 3

Mappings and Mapping Tasks with Oracle HCM Cloud V1 Connector

This chapter includes the following topics:

Oracle HCM Cloud V1 Source Transformation in Mappings

When you configure a Source transformation, select the Oracle HCM Cloud V1 connection and choose an Oracle HCM operation to represent an Oracle HCM Cloud V1 source.

Configure the advanced source properties to set the tracing level and the cache size for the web service response.

You can view the response structure in the field mapping. When you map the elements from the response structure to the output fields, the Secure Agent creates the output groups, along with the keys for the field names. When you use the mapping in a mapping task and run the task, the Secure Agent reads the data from the Oracle HCM Cloud application.

Note: When you run a mapping to read data that contains a Unicode character from the Oracle HCM Cloud application, the Secure Agent does not read the data correctly.

Source Transformation Properties

You can use one or more Source transformations in a mapping.

When you select a source transformation, the **Properties** panel displays the following sections:

General

Use to configure the name and a description for the source.

Source

Use to select the connection and the operation. You can configure the request options, and advanced source properties.

Field Mapping

Use to map elements of the response structure with the output fields.

Fields

Use to edit the metadata source field metadata that you want to use in the mapping.

Oracle HCM Cloud V1 Advanced Source Properties in Mappings

In a mapping, you can configure or create a Source transformation and configure the advanced properties in the **Source** page of the Mapping Task wizard.

The following table describes the advanced properties that you can configure in a Source transformation:

Property	Description
Tracing Level	Amount of detail that appears in the log for the Source transformation. Use the following tracing levels: - Terse - Normal - Verbose Initialization - Verbose Default is normal.

Source Transformation Mapping Example

You can map an Oracle HCM Cloud V1 source to a target and use the mapping to perform a mapping task.

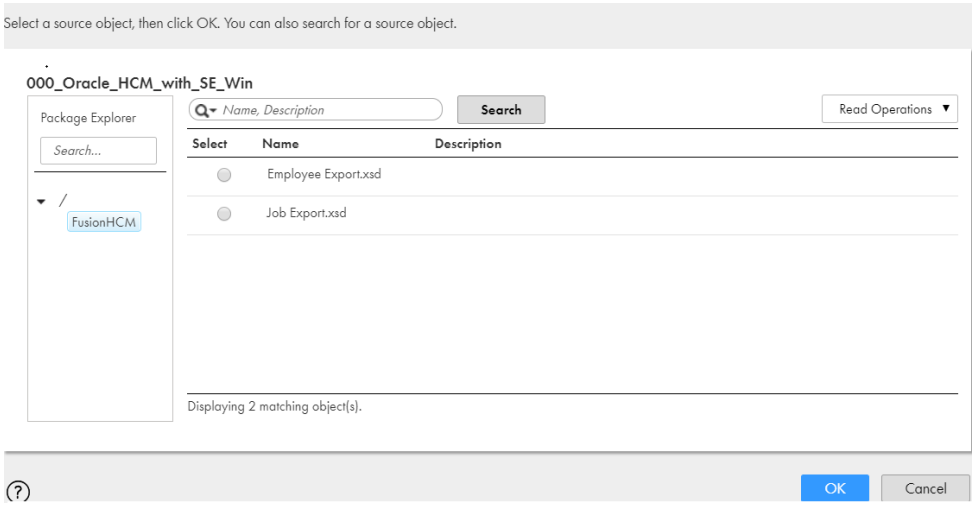
To read data from an Oracle HCM Cloud and write to a flat file, perform the following tasks:

1. In Data Integration, click **New** > **Mapping** > **Create**.

   The **New Mapping** dialog box appears.
2. Enter a name and description for the mapping.
3. On the Source transformation, specify a name and description in the general properties.

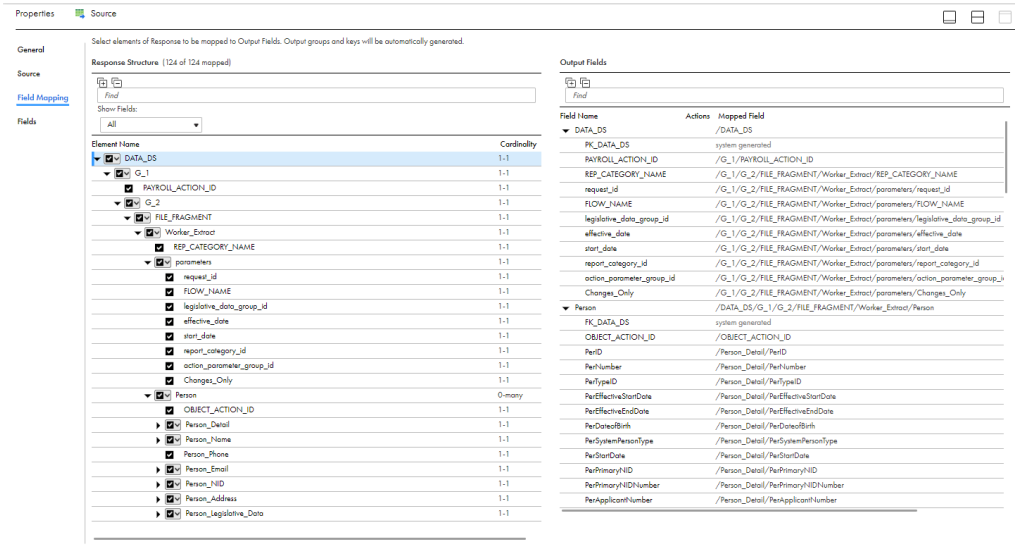
   The following image shows a simple Oracle HCM Cloud V1 reader mapping:

4. On the **Source** tab, perform the following steps to configure the source properties:
    1. In the **Connection** field, select the configured Oracle HCM Cloud V1 connection to connect to Oracle HCM Cloud application.
    2. In the **Operation** field, select the required object in the **Package Explorer** section and select the required operation.
    The following image shows the list of the read operations:



    3. In the **Request Options** section, click **Configure** to configure the request message. For more information about configuring the request message, see "Configuring Request Message" on page 24.
    4. In the **Advanced Properties** section, set the tracing level to normal, and use the default cache size of 1024.
5. On the **Field Mapping** tab, select the elements in the response structure that you want to map to the output fields.

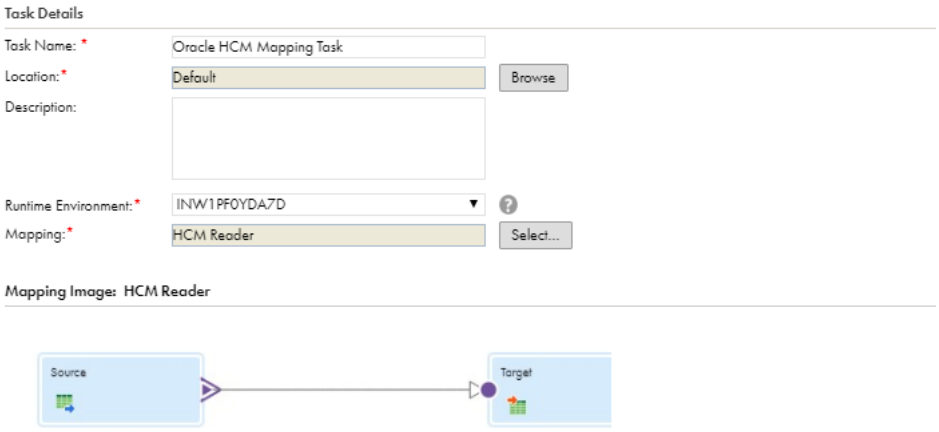
    The following image shows the response structure on the left pane in a hierarchical format and the output groups on the right pane in a relational format:



6. On the Target transformations, specify the target connection, target type, object, and operation for the target transformations.

7. Map the source and target.
8. Click **Save and Run** the mapping.
9. In Data Integration, click **New** > **Task**.
10. Click **Mapping Task** > **Create** and select the mapping for the task.

    The following image shows the Mapping Task wizard with the applied mapping:



In **Monitor**, you can monitor the status of the logs after you run the task.

Configuring Request Message

You can configure the request message based on how you submit the HCM extract definitions to the Oracle HCM Cloud application when you create a mapping.

You can either submit the HCM extract definitions from the Oracle HCM Cloud application directly or use the **Submit Extract** connection property. On the Source transformation, click **Configure** in the **Request Options** section to configure the request message.

When you submit the HCM extract definitions from the Oracle HCM Cloud application directly, specify the request message and attributes in the following XML format and validate the message:

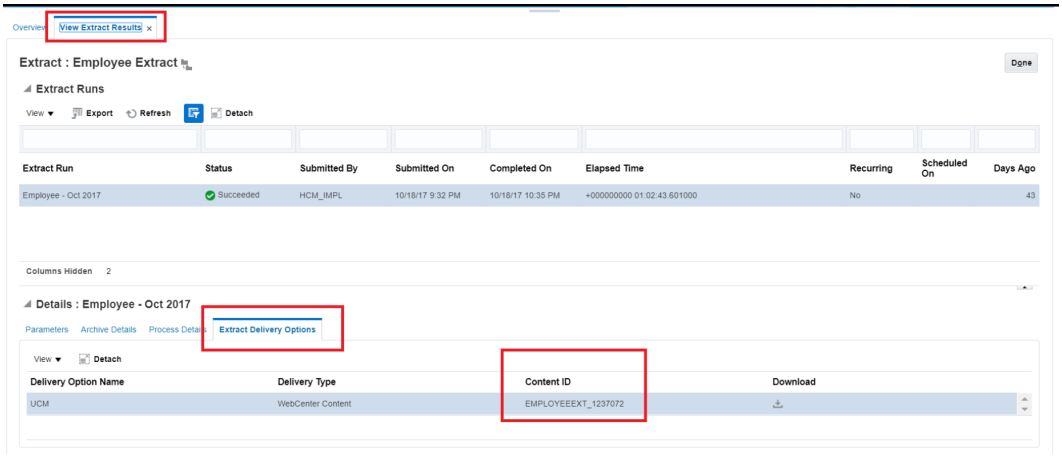
```
<!--1 or more repetitions:-->
<proc:requestMessage_INPUT xmlns:proc="http://xml.schemas/infa/procedure/">
  <!--1 or more repetitions:-->
  <integrationName>
    <!--STRING-->
  </integrationName>
  <!--Optional:-->
  <contentID>
    <!--STRING-->
  </contentID>
  <!--Optional:-->
  <advancedQuery>
    <!--STRING-->
  </advancedQuery>
</proc:requestMessage_INPUT>
```

The **Integration Name** parameter is mandatory. You must specify the same value of the **Integration Name** property that you specified in the Oracle HCM Cloud application when you create the HCM extract definition.

The **advancedQuery** parameter is optional. If you want to process multiple XML files based on the filter query options or between date range, you must provide the **advancedQuery** parameter. When you add the QueryText syntax in the **advancedQuery** parameter, ensure that the QueryText syntax is based on the Verity Query language.

By default, Oracle HCM Cloud V1 Connector processes the XML data of the latest submitted HCM extract definition instance. Specify the **Content ID** parameter if you want to process the XML data corresponding to a different instance of the submitted HCM extract definition.

Note: You can obtain the **Content ID** of the submitted HCM extract definition instance from the Oracle HCM Cloud application. Navigate to the **Extract Delivery Options** tab under the **View Extract Results** page to obtain the **Content ID**. The following image shows the **View Extract Results** page where you can obtain the value of the **Content ID**:



When you submit the HCM extract definitions using the **Submit Extract** connection property, specify the request message and attributes in the following XML format and validate the message:

```
<!--1 or more repetitions:-->
<proc:requestMessage_INPUT xmlns:proc="http://xml.schemas/infa/procedure/">
    <!--1 or more repetitions:-->
     <flowName>
        <!--STRING-->
     </flowName>
<!--1 or more repetitions:-->
     <flowInstanceName>
        <!--STRING-->
     </flowInstanceName>
    <!--Optional:-->
<legislativeDataGroupName>
     <!--STRING-->
</legislativeDataGroupName>
<!--Zero or more repetitions:-->
  <parameterValues>
<!--1 or more repetitions:-->
  <ParameterName>
  <!--STRING-->
  </ParameterName>
<!--1 or more repetitions:-->
  <ParameterValue>
  <!--STRING-->
  </ParameterValue>
 </parameterValues>
<!--1 or more repetitions:-->
  <integrationName>
  <!--STRING-->
  </integrationName>
</proc:requestMessage_INPUT>
```

The **flowName** parameter is mandatory. You must specify the name of the HCM extract definition as **flowName**.

The **flowInstanceName** parameter is optional. If you provide a value for the **flowInstanceName** parameter, it must be unique for each mapping task. If you do not provide a value for **flowInstanceName** or the **flowInstanceName** tag is missing in the request message, the connector generates a unique value based on

the flow name and has the syntax `flowInstanceName = flowName_currentTimeStamp` (timestamp in epoch). For example, if you provide flow name as `Taleo Job` then the flow instance name generated by the connector is `Taleo Job_1565028486`.

Specify the **legislativeDataGroupName** parameter to provide a name for the legislative data group in which you created the HCM extract definition.

Specify the **ParameterValue** parameter to provide parameters that are defined for the HCM extract definition.

The **Integration Name** parameter is mandatory. You must specify the same value of the **Integration Name** property that you specified in the Oracle HCM Cloud application when you created the HCM extract definition.

Note: If you submit multiple instances for the same HCM extract definition in parallel, Informatica recommends that you provide a unique **Integration Name** for each of the HCM extract definitions in the request message.

Oracle HCM Cloud V1 Target Transformation in Mappings

When you configure a Target transformation, select the Oracle HCM Cloud V1 connection and choose an Oracle HCM operation to represent an Oracle HCM Cloud V1 target.

Target Transformation Properties

You can use one or more Target transformations in a mapping.

When you select a target transformation, the **Properties** panel displays the following sections:

General

Use to configure the name and a description for the target.

Incoming Fields

Includes the field rules that define the data written to the target. Allows a preview of the target fields.

Target

Use to select the connection and the operation, and to configure the advanced target properties.

Target Fields

Not applicable for Oracle HCM Cloud V1 targets.

Field Mapping

Use to define the field mappings from the upstream transformation to the target.

Input Settings Properties

You can enable **Sorted Input** under **Input Settings**. Sorted Input indicates that input data is presorted. Default is disabled.

Enable sorted input for better performance.

Note: When **Sorted Input** is enabled and the input is not sorted, the Secure Agent does not process input and the mapping fails.

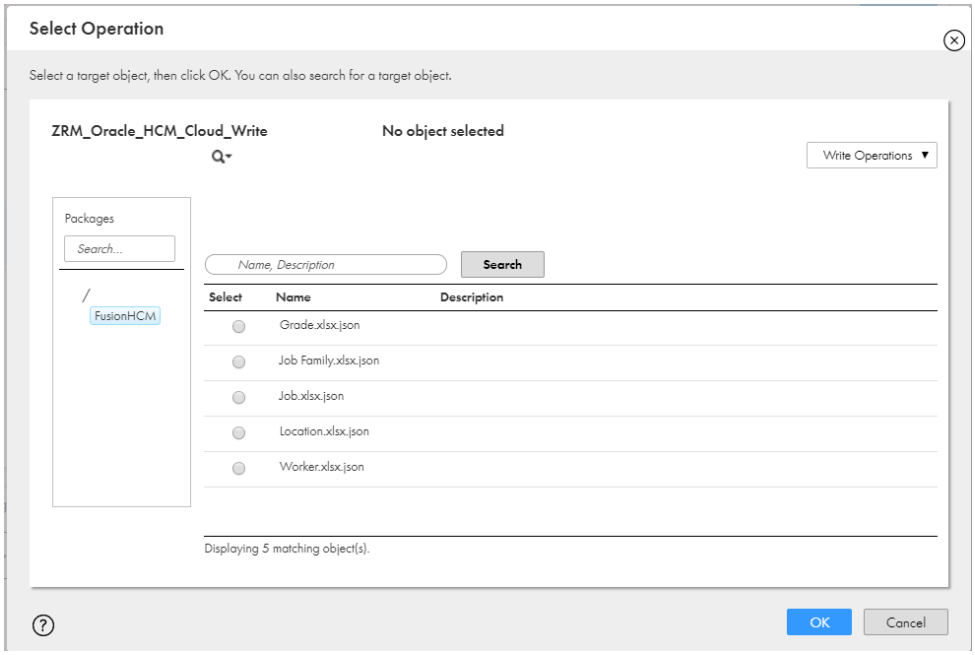
Target Transformation Mapping Example

You can map a source to an Oracle HCM Cloud V1 target and use the mapping to perform a mapping task.

To read data from a source and write to an Oracle HCM Cloud V1 target, perform the following tasks:

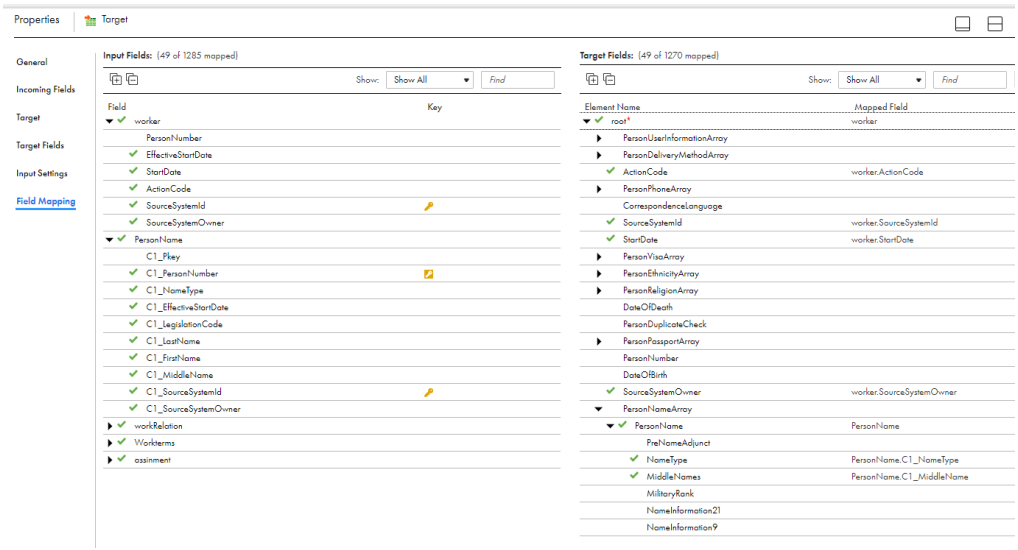
1. In Data Integration, click **New** > **Mapping** > **Create**.

   The **New Mapping** dialog box appears.
2. Enter a name and description for the mapping.
3. On the Source transformation, specify a name and description in the general properties.
4. On the Target transformation, specify a name and description in the general properties. Perform the following tasks on the **Target** tab:
   1. In the **Connection** field, select the Oracle HCM Cloud V1 connection to connect to Oracle HCM Cloud application.
   2. In the **Operation** field, select the required object in the **Package Explorer** section and select the required operation.
      The following image shows the list of the write operations:



   3. In the **Advanced Properties** section, set the cache size.
5. On the **Field Mapping** tab, select the input elements to map to the target fields.

The following image shows all the mapped fields between the input file and the Oracle HCM Cloud V1 target:



6. Map the source and target.
7. Click **Save and Run** the mapping.
8. In Data Integration, click **New** > **Task**.
9. Click **Mapping Task** > **Create** and select the mapping for the task.

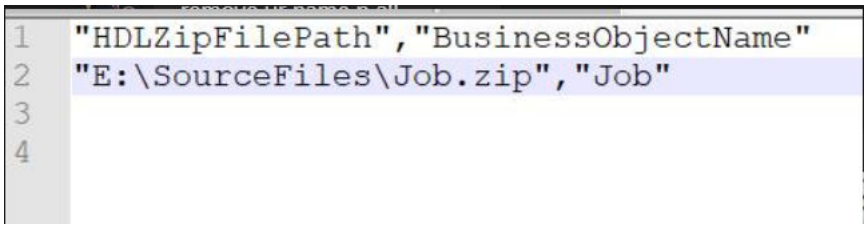
In **Monitor**, you can monitor the status of the logs after you run the task.

Target transformation mapping example for Import and Load Data object

You can use a pre-configured DAT file in zip format to directly upload HDL files to Oracle Cloud. Create a flat file and specify the details of the HDL ZIP file path and the business object name. To upload the HDL files to Oracle Cloud, select the Import and Load data object for the write operation.

Pre-requisites:

- Before you begin, create a flat file and specify the details of the **HDLZipFilePath** and the **BusinessObjectName**. The sample file shows the configured details in the flat file:

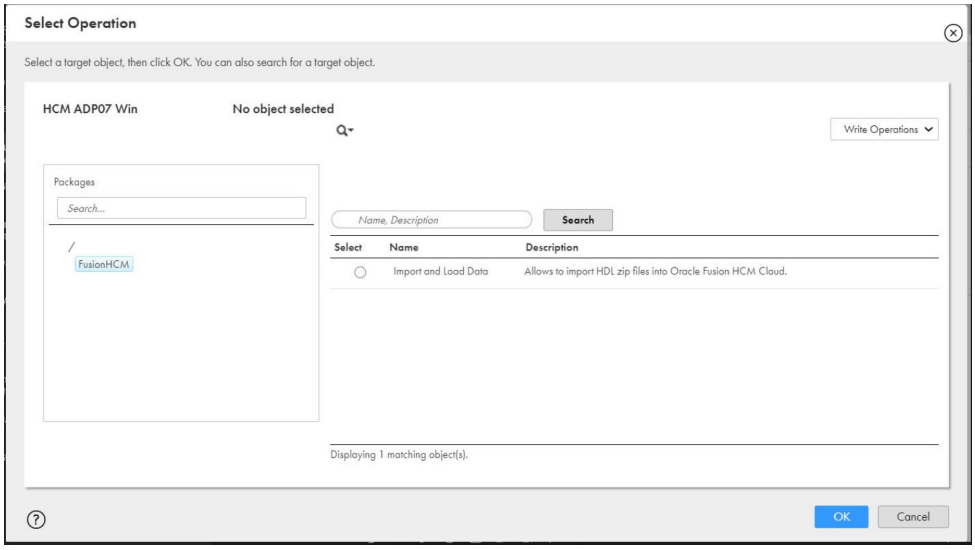


Note: The **HDLZipFilePath** specifies the path to the zip file that encloses the DAT file and **BusinessObjectName** specifies the name of the Oracle HCM target object.

1. In Data Integration, click **New** > **Mapping** > **Create**.

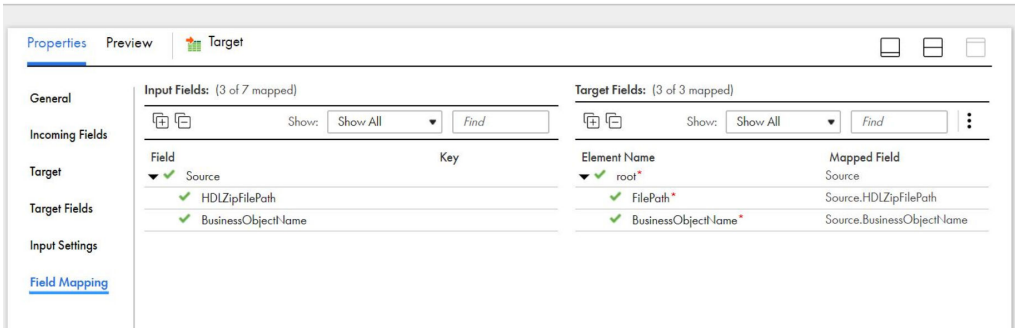
   The **New Mapping** dialog box appears.
2. Enter a name and description for the mapping.
3. In the Source transformation, specify a name and description in the general properties.

4. In the Connection field, select the flat file connection to connect to the configured flat file that contains the DAT file details.
5. In the Target transformation, specify a name and description in the general properties. Perform the following tasks on the **Target** tab:
    1. In the **Connection** field, select the Oracle HCM Cloud V1 connection to connect to Oracle HCM Cloud application.
    2. In the **Operation** field, select the **Import and Load data** object in the **Package Explorer** section. The following image shows the list of the write operations:



6. On the **Field Mapping** tab, map the source fields to the target fields.

    The following image shows all the mapped fields between the input file and the Oracle HCM Cloud V1 target:



7. Click **Save and Run** the mapping.
8. In Data Integration, click **New** > **Task**.
9. Click **Mapping Task** > **Create** and select the mapping for the task.

In **Monitor**, you can monitor the status of the logs after you run the task.

Oracle HCM Cloud V1 Midstream Transformation in Mappings

Before you configure a midstream transformation, you must create a business service. Select an Oracle HCM Cloud V1 connection and choose an Oracle HCM operation when you create a business service.

Midstream Transformation Properties

When you configure the midstream transformation, select the business service and the operation on the **Web Service** tab.

When you select a midstream transformation, the **Properties** panel displays the following areas and information:

General

Use to configure the name and a description for the transformation.

Incoming Fields

Includes the field rules that define the data that you read from the source. Allows a preview of the source fields.

Web Service

Specifies the business service and the operation that you want to perform in an Oracle HCM Cloud application.

Request Mapping

Maps the incoming fields from source file to elements in request structure.

Response Mapping

Maps the selected elements from the response structure with the output fields. You can view the response structure on the **Response Mapping** tab. When you map the elements from the response structure to the output fields, the Secure Agent creates the output groups, along with the primary and foreign keys for the field names.

Output Fields

Displays the fields included in the mapping.

Advanced

The properties required to configure a midstream transformation.

Oracle HCM Cloud V1 Advanced Midstream Properties in Mappings

The following table describes the advanced properties that you can configure for a midstream transformation:

Property	Description
Cache Size for Web Service Request (KB)	Memory available for the web service request. If the request is more than 100 KB, you can increase the cache size. Default is 100 KB.
Cache Size for Web Service Response (KB)	Memory available for the web service response. If the web service response contains many rows or columns, you might want to increase the cache size. Default is 100 KB.
Allow Input Flush	Not applicable.
Transaction Commit Control	Not applicable.

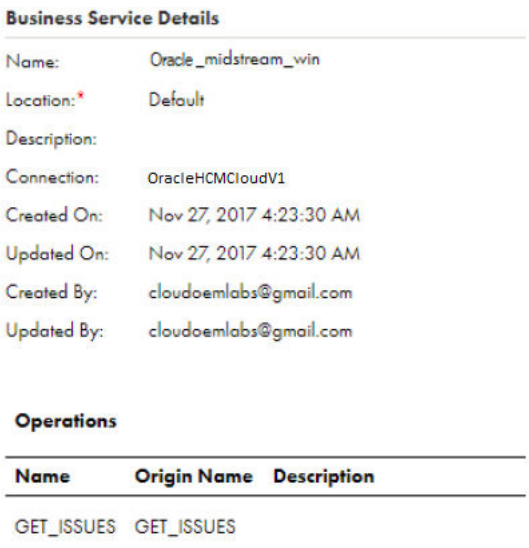
Midstream Transformation Mapping Example

To read data from an Oracle HCM Cloud V1 source and to write the data to a flat file, perform the following tasks:

1. Create an Oracle HCM Cloud V1 connection to read data from an Oracle HCM Cloud V1 source.
2. In Data Integration, click **New** > **Components** > **Business Sevice**.

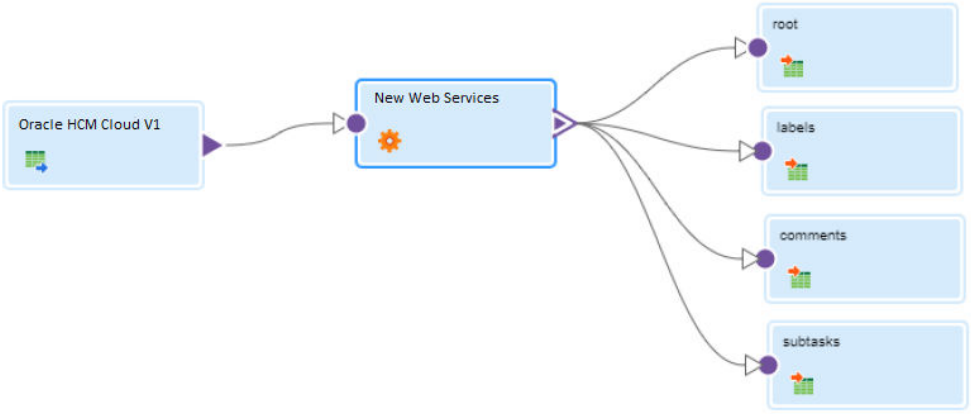
   The **Business Sevice Details** dialog box appears.

   The following image shows the configured business service that associates an Oracle HCM Cloud V1 connection and an operation:



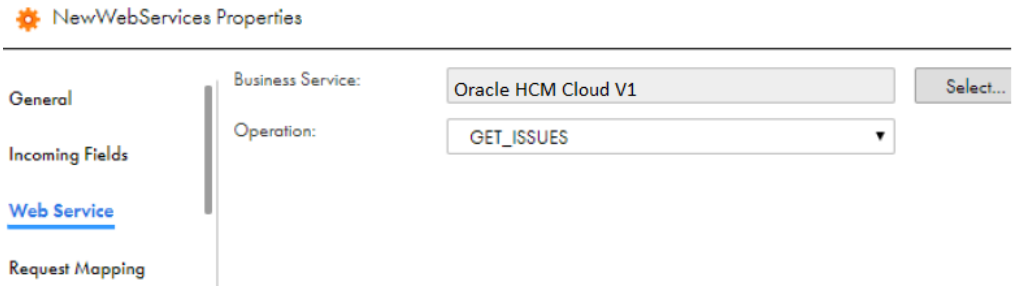
3. Add a Web Services transformation. Specify a name and description in the general properties.

The following image shows the source, web service, and target in the Oracle HCM Cloud V1 mapping:



4. On the **Web Service** tab, select the business service and the operation that you configured.

   The following image shows the configured web service:



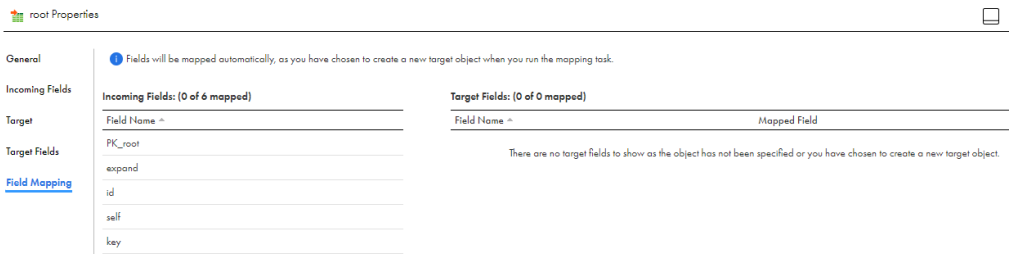
5. On the **Request Mapping** tab, map the incoming fields from the source to the elements of Request Structure to form a web service request:

   The following image shows the fields that you map:

6. On the **Response Mapping** tab, select the source details fields that you want to write to the target file on the **Response Structure**.
7. On the **Advanced** tab, specify the cache size details.

   The fields that you select from the **Response Structure** of the Web Service transformation appear as incoming fields for the target object.

8. If required, map the incoming fields to the flat file fields.



9. Click **Task Wizards** > **Mapping Task**, and select the mapping for the task.
10. When you save and run the mapping, the Secure Agent reads the data that you map on the **Request Mapping** tab from Oracle HCM Cloud application and writes the data to the corresponding flat files.

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