



Platinum
Partner
Cloud Standard

ORACLE INTEGRATED CLOUD SOLUTION ON-PREM TO CLOUD



Candid Source

2019 |

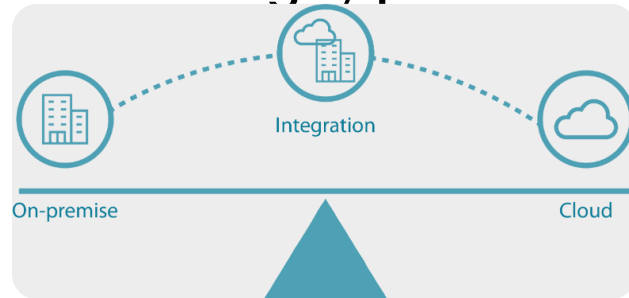
Oracle Cloud Partner



Scope/Requirement



- ❑ Move Files from On-premise (SQL Server) to Cloud System
- ❑ Files are stored in SQL Server image/pdf format



- ❑ .pdf / image file format will be picked from on premise to Cloud
- ❑ This will be achieved using Oracle Integrated Cloud Service

Proposed Solution



- It can be achieved using Oracle Integrated Cloud Service (OIC)

- OIC allows us to achieve this using below
 - Create a MS SQL Server Adapter connection
 - Create a Rest Adapter Connection
 - Map the data using integration

Prerequisite



Create a MS SQL Server Adapter Connection

You must satisfy the following prerequisites to create a connection with the Microsoft SQL Server Adapter:


- Ensure that you have write permissions on the database.
- Ensure that you have the required permissions to run stored procedures and packages and SQL statements against the SQL Server.
- Know the database hostname or IP address and the port number.
- Know the database or instance name.
- Know the username and password for connecting to the database.
- Know the agent group to associate with the Oracle SQL Server Cloud adapter.
- You select the agent group during connection configuration in Configuring an agent Group.

Configuration | OIC



MSSQL Server Connection Setup

Microsoft SQLServer (18.4.3.1)
PREINSTALLED
Integrates your SQL Server database and allows you to add, access, and manage co



Trigger and Invoke

New Connection - Information

Enter information that describes the connection. Use a meaningful name and description to help others find your connection when they create their own integrations. The identifier must be unique. It can be set only when the connection is created.

* Connection Name: onPremisesHRDB

* Identifier: ONPREMISES-RDB

Description: Connection to on-premises HR schema

Create Cancel

Configuration | OIC



MSSQL Server Connection Setup
Continuation

Connection Properties

Enter information so we can connect to your application/endpoint and process requests.

Property Name	Property Value
Host	127.0.0.1
Port	1521
SID	orcl
Service Name	orcl.oracle.com

OK Cancel

Credentials

You can configure the Security Policy for this connection. Please select the Security Policy.

Security Policy

Your application/endpoint requires that users and services provide security credentials for access. Specify the login credentials below.

Property Name	Property Value
Username	hr
Password	*****
Confirm Password	*****

OK Cancel

Configuration | OIC







Agent Group Setup

(Select the agent group to connect On-Prem DB)

Select an Agent group





Select an agent group. Available agent groups are listed below.


	Connection Agent Group Available	CONNECTION_AGENT_GROUP	
	Execution Agent Group Available	EXECUTION_AGENT_GROUP	

Use **Cancel**

ORACLE Integration Cloud Service | robert.van.mobeen...

✔ Connection "OnPremisesHRDB" was saved successfully.

[← Exit Connection](#)  Save  Delete  Test 

OnPremisesHRDB 

Configuration | OIC



Create REST Adapter connection

Create Connection - Select Adapter ?

All Q X

Click "Select" for the type of connection to create. ☐ ☰

REST



Select

Configuration | OIC



**Create REST Adapter connection
(Connection Properties)**

Connection Properties

Enter information so we can connect to your application/endpoint and process requests.

Property Name	Property Value
* Connection Type	< Please select an item from the list >
TLS Version	< Please select an item from the list >
* Connection URL	Please make sure that this value really corresponds to the type selected above.
Enable two way SSL for outbound connect	< Please select an item from the list >
Identity keystore alias name (Optional)	Name of alias to use for establishing identity during two way SSL communication

OK Cancel


Configuration | OIC



Map Data Using Integration

Add the source and target connection to the flow and do the necessary mappings between source and target.

Basic Routing



Basic App to App Routing with Data Mapping.

Select

Source

- *inacult
- *request-wrapper
 - *Note
 - *guid ✓
 - *content ✓
 - *title
 - *notebook
 - *author
 - *latitude
 - *longitude
 - *tagGuids
 - *tagNames
 - *stacking_var_1
 - *stacking_var_2
 - *stacking_var_3

Mappings

Drag and drop source to target to create a mapping.

Click a checkmark on source or target to see mappings.

Target

Source	Target	Mapping
*inacult	*inacult	
*request-wrapper	*attachments	
*Note	attachment	
*guid	*attachmentReference	f(x) content
*content	*attachmentProperties	
*title	*contents	
*notebook	*contentType	"image/png"
*author	*transferEncoding	
*latitude	*partName	"picture.png"
*longitude	*contentDisposition	
*tagGuids	*contentDescription	
*tagNames	*characterSet	
*stacking_var_1	*textInputFieldName	"image"
*stacking_var_2	*ParameterList	
*stacking_var_3	parameter	guid
	name	"id"

Additional Possible Solution



- It can be achieved using Oracle Integrated Cloud Service (OIC)

- OIC also allows us to achieve this using two other ways
 - Using File Adapter
 - Using FTP Adapter

Significance of File vs FTP adapter



This table gives you more details about the significance of using File and FTP adapter for our requirement

S. No.	File Adapter	FTP Adapter
1	File can be processed from the server where the connectivity agent is installed	File can be processed from any SFTP server which is publicly accessible
2	The adapter can be used to connect to the server which is having the network restrictions	The adapter cannot be used to connect to FTP and SFTP servers behind company firewalls
3	File adapter is supported for both trigger and invoke connections	FTP Adapter is only supported as an invoke connection
4	Following operations are supported: Read File Write File	Following operations are supported: Read File Write File List File Delete File Move File Download File
5	Doesn't allow to create encrypted file	Allows developer to create encrypted file using Pretty Good Privacy (PGP) cryptography
6	Doesn't allow to decrypt the files	Allow developer to decrypt a file that is being read or downloaded from a remote FTP / SFTP server using Pretty Good Privacy (PGP) cryptography

Approach A | File Adapter



Flow | Step 2

- **Drop the file adapter and give the necessary information.**

The screenshot shows a software wizard titled "Configure File Operation Endpoint". At the top right, there are navigation buttons: "Help", "< Back", "Next >", "Cancel", and "Done". Below the title bar, a welcome message reads: "Welcome to the File Adapter Configuration Wizard. This wizard helps you to configure File endpoint connection. You will be asked to define parameters and schema for performing the file operation." A sidebar on the left contains a list of steps: "Basic Info" (highlighted in blue), "Configure File Read", "Format Definition", and "Summary". The main content area displays the "Basic Info" step with the following questions and input fields:

- * What do you want to call your endpoint?
PollFileFromServer
- What does this endpoint do?
Describe the endpoint's purpose and detail
- Do you want to define a schema for this endpoint?
 Yes No

Approach A | File Adapter



Flow | Step 3

- **Drop the file adapter and give the necessary information [continuation]**

The screenshot shows a software configuration window titled "Configure File Operation Endpoint". At the top right, there are navigation buttons: "Help", "< Back", "Next >", "Cancel", and "Done". Below the title bar, there is a sub-header "Configure the File Operation Parameters for the Source Endpoint" with a sub-instruction "Define the parameters for File Read operation." and a close button (X).

On the left side, there is a sidebar with a list of tabs: "Basic Info" (checked with a green checkmark), "Configure File Read" (highlighted in blue), "Format Definition", and "Summary".

The main content area is titled "Specify the following parameters for the File Read operation". It contains two required fields (marked with a red asterisk and a question mark icon):

- "Specify an Input Directory" with a text input field containing the value "/home/PollDir".
- "Specify a File Name Pattern" with a text input field containing the value "**".

Below these fields, there is a section titled "Specify how the processing of operation is handled." which includes three more required fields:

- "Maximum Files" with a numeric input field set to "25".
- "Polling Frequency" with a numeric input field set to "60" and the unit "seconds".
- "Processing Delay" with a numeric input field set to "5" and the unit "seconds".

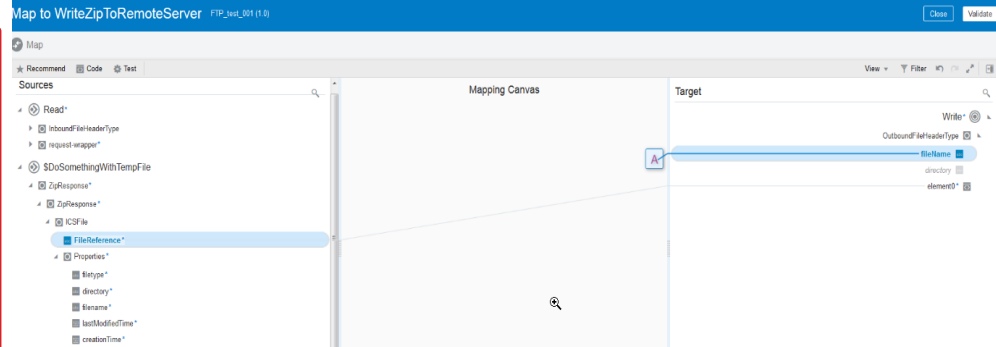
At the bottom of this section, there is a checked checkbox labeled "Delete Files After Successful Reading".

Approach A | File Adapter



Flow | Step 3

- **Create a map service to map the file details to target.**

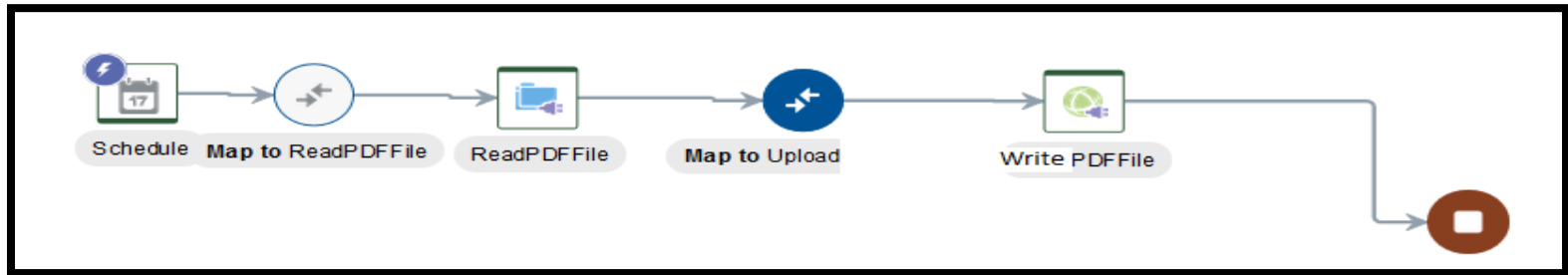


Flow | Step 4

- **Create a target file service to write a file.**

Approach B | FTP Based

- ❑ FTP folder is accessible over internet
- ❑ We must follow the similar approach as same as File adapter, but it will be giving additional benefits provided in the above table.



A sample flow will look like this



Questions

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