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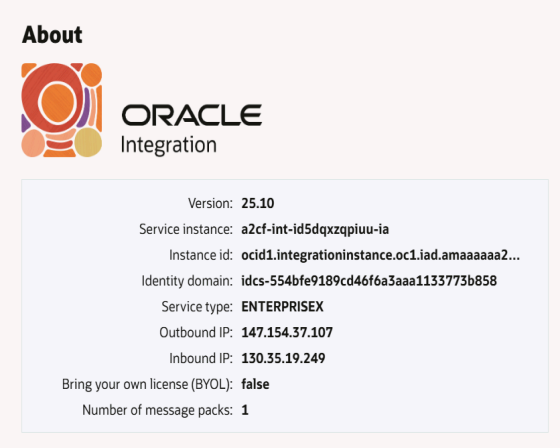
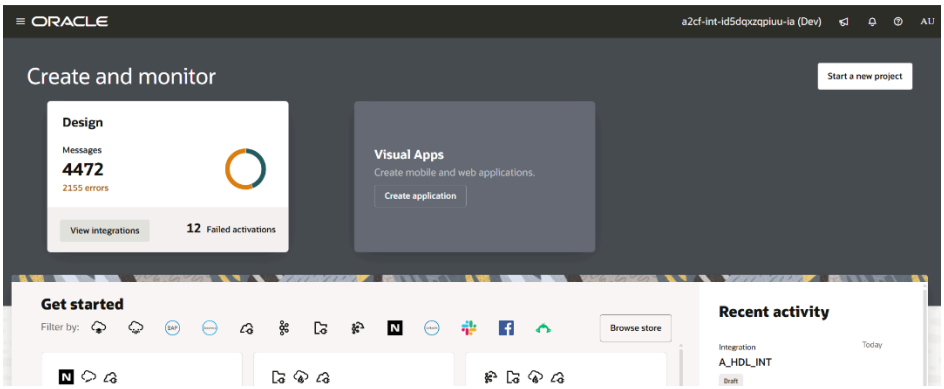
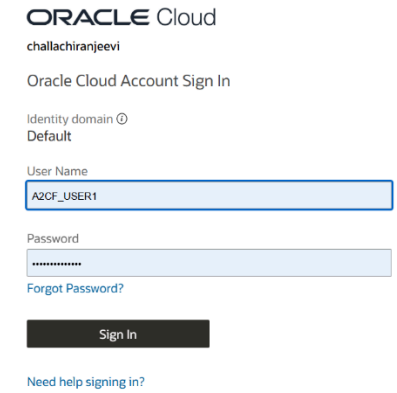
High-Level Overview of Integration Components

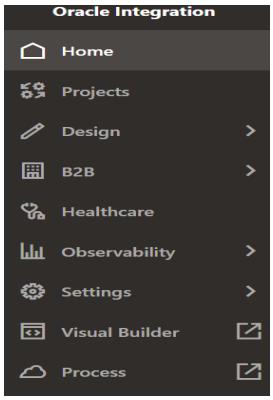
About Integration:



How do I log in to OIC?







When you log into OIC, we can see three main important Services:

Design Integration (95% used by clients) 10/10 clients

VBCS 6/10 clients Visual Builder Cloud Services

Process (PCS) 6/10 clients Process Cloud Services

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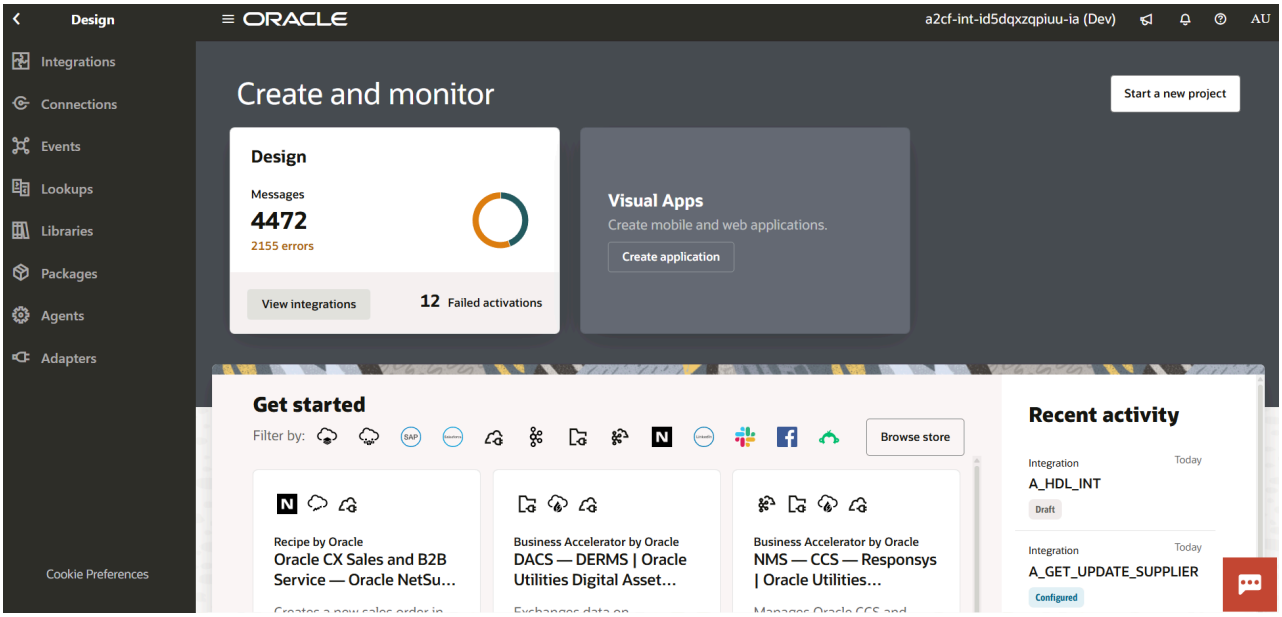
How do I access Integration?

Click on Navigator Click on Design and you can see the following Integration page.



Under Design:

Integrations

Connections

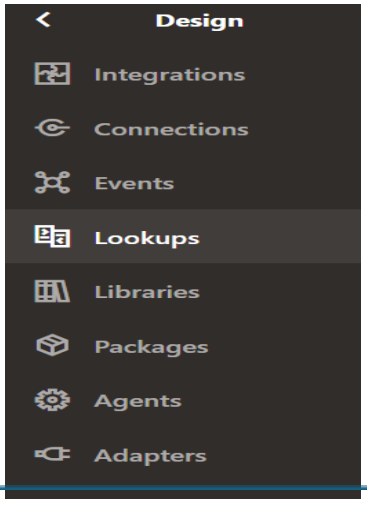
Events

Lookups

Libraries

Packages

Agents



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Adapters

Click on Integrations. The username you logged in with will be applied as a Filter. This is the default behavior.

We can see the count of integrations updated by the logged-in user, for example, showing 100 integrations.

OIC does not go to the DB and load all 100 integrations; it fetches the last 16 integrations that you are working on.

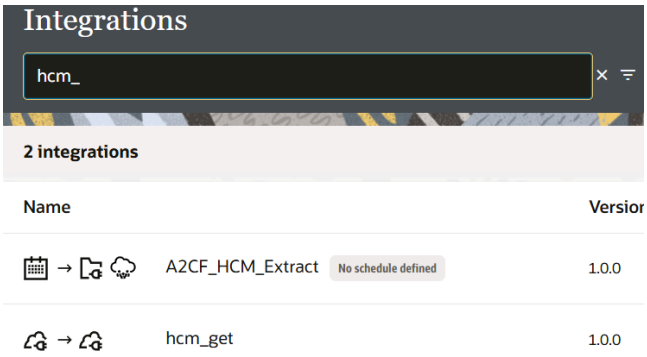
If you go back further, it will load the next 16 integrations.

Means multiples of 16 will be loaded when you scroll down.

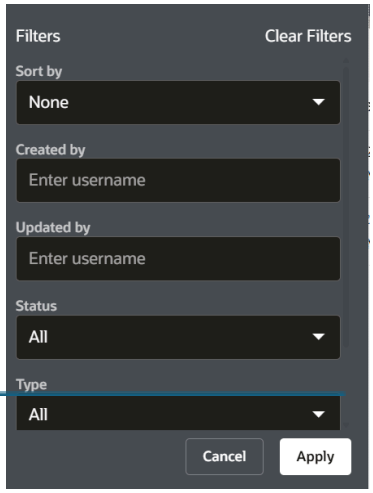
In case you want to search particular integration, then we do have a search option where you can type the Integration name(full, partial, or contains).

You would be seeing the latest or recently updated integrations at the top.

We can also apply the filters based on various other criteria.



Using a filter, we can choose Active Integration, Specific users, Scheduled ones, Style, and other options that you see in the integration page.



Sort By: None, Name, Last Updated

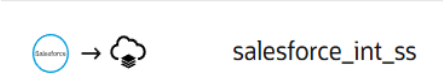
Created By: Enter the Username for OIC login

Status: All, Draft, Configured, Activating, Active, Failed

Type: All, Developed, Extended Accelerator/Business/Technical

Accelerators, Recipe

Style: All, Application, Schedule, Event



If you want to know what connections are

Used in the Integration, then check the

Picture.

It says Salesforce Connection and ERP connections. Just move the cursor to the top of the image to see the connection name.

We can view the Integration page in Card View or List View.

If we remove the logged-in user filter, then we can see other user integrations also on the page. Meaning we can access other users Integrations as well. So, there is no access control(it was a drawback of the OIC Gen2 version)

Suppose, if the implementation project has only one team with 4 or 5 members, we do not worry if other users access the Integration.

We can directly build Integration in the Design screen itself

What if a project has multiple teams based on country, like
US Integration Team

UK Integration Team

FIN Integration Team

HCM Integration Team

Different teams are working on those integrations

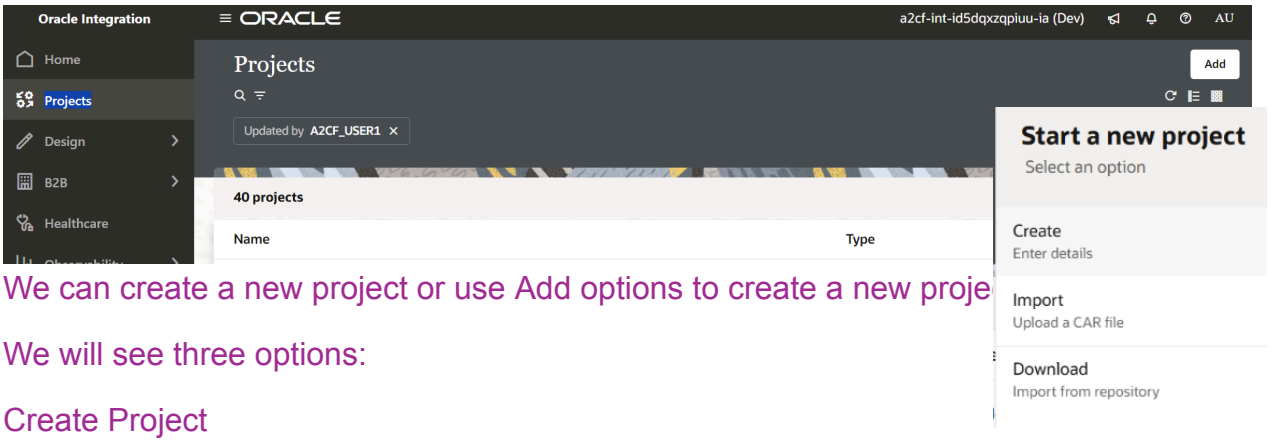
When you are working with multiple teams, access control is required because we need to restrict the users

The FIN Integration Team can only access their users' team integrations, but not the HCM Integration Team users, etc.

This is exactly where the Projects feature comes into play

How do I access Projects?

Click on Navigator, and we can see Projects.



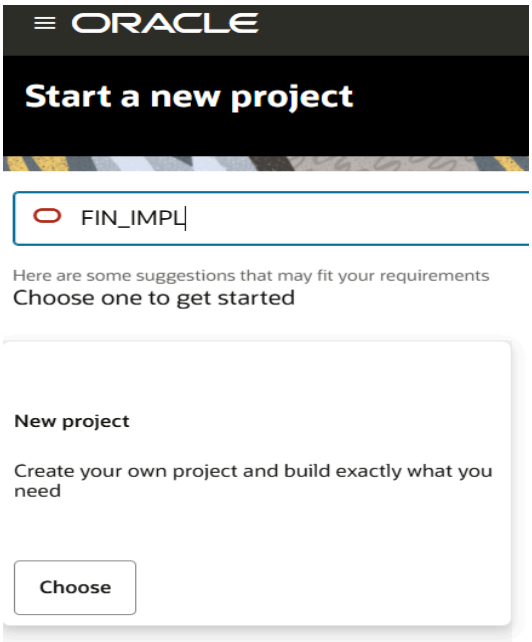
We can create a new project or use Add options to create a new proje

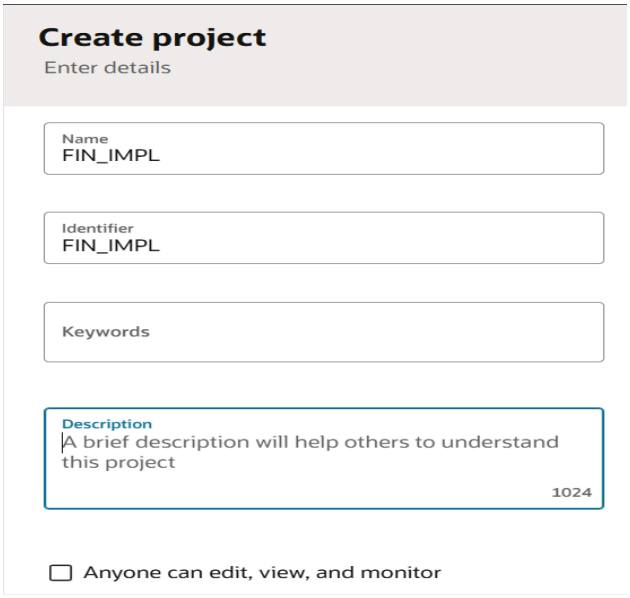
We will see three options:

Create Project

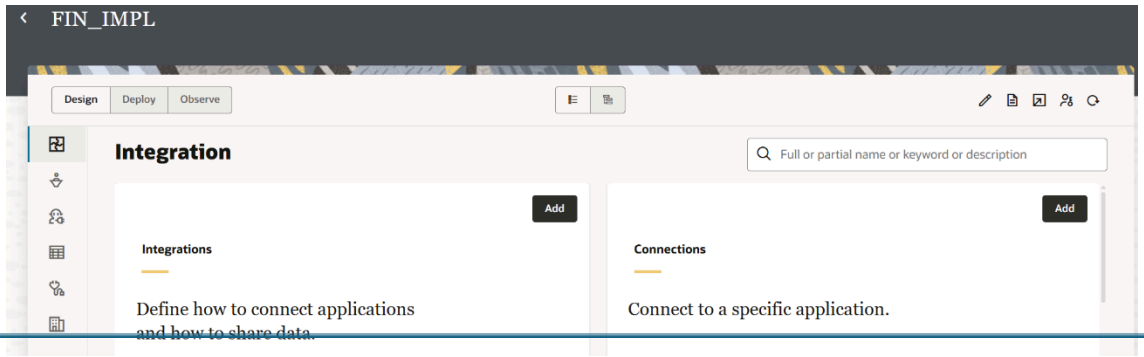
Import Project: Upload a CAR File

Download: Import from repository





Click on Create



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Within the project that we created, we got the following options,

Integrations

Define how to connect applications and how to share data.

Connections

Connect to a specific application.

Lookups

Map values between applications.

Libraries

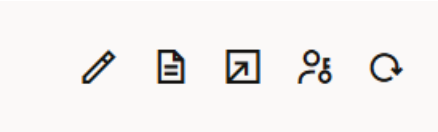
Use JavaScript functions and libraries in your integrations.

Events

Publish and subscribe.

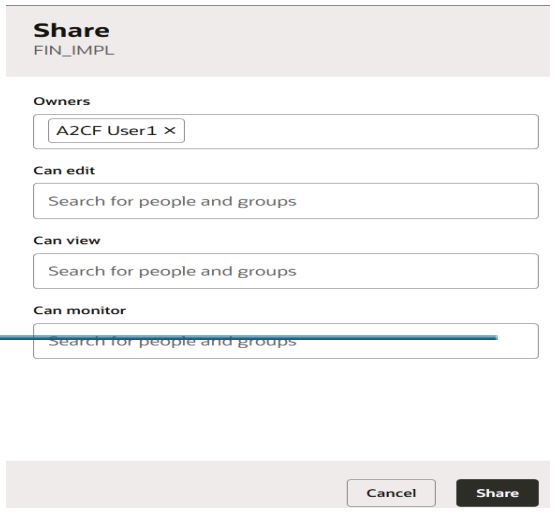
The benefit of creating a project is access control

Meaning I can share access to specific users or team members



Edit the Project

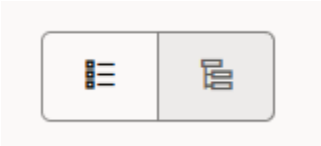
Learn About the Project



Export the Project

Share the Project

Refresh the Project



List Project Views

View Project Dependencies

Integration

AI Agents

Robots

Decision

HealthCare

B2B

We can also see Design, Deploy, and Observe options in Projects

Now, click on Integrations

There will be two options:

Create Integrations or Import Integrations.

Create Integrations will create an integration in the current instance.

Import Integration will help us to migrate the instance from one instance to another

What are the different phases of any implementation project in Oracle ERP?

1.Development Instance (dev1,dev2.dev3…etc.) multiple flavors.

2.SIT Instance(System Integration Testing) first round

3.UAT Instance(User Acceptance Testing) second round

4. Test Instance (final testing)

5. Production Instance

6. Go Live

Similarly, the OIC will undergo the same phases during the implementation project.

Q: How will you migrate the integrations?

Suppose if the client has 100 integrations in the Dev instance and he wants to move them to the SIT instance.

Option is:

Choose the integration, click on the three dots, and use the export option from the dev instance and import the same in the SIT instance

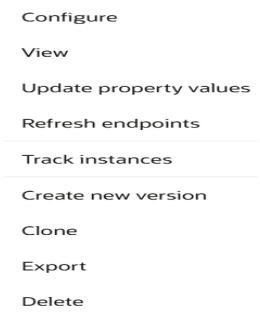
When you click on the export button, the .iar file will be downloaded.

.IAR stands for Integration Archive File

.JAR file means Java Archive

.IAR file not only contains the Integrations but it also contains connections, lookups, libraries, and everything will be included

Then go to a higher instance, Design-□Integration□use Import and then use Drag and Drop option.



Upload the .iar file and import it

But the problem with this approach is that we need to repeat 100 times.

This is where Oracle has introduced a concept called Packages

Meaning the manager informs developers to segregate the integrations and put them in relevant packages

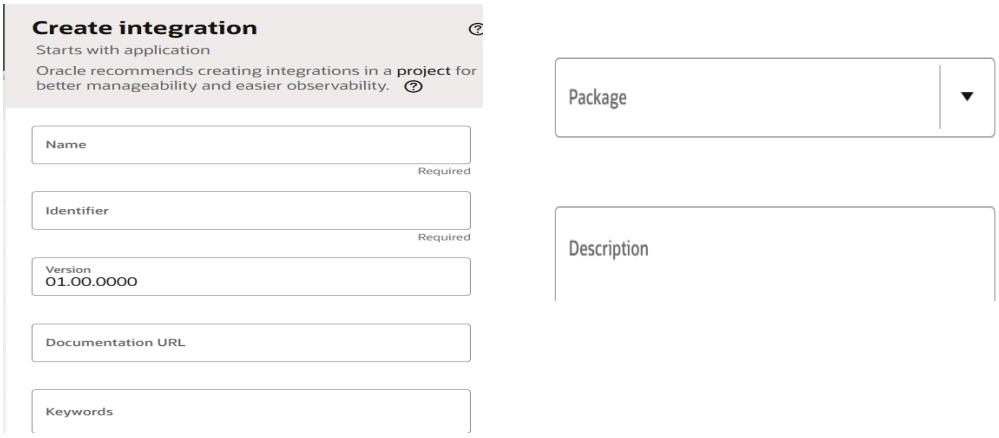
AR Invoice integration -□ERP package

Emp integration □HCM package

Sales integrations □Sales Package

When you create an integration (any style), you will be asked to put it into Packages.

Save the integrations in relevant packages.



Where we can we search for packages?

Go to Design Screen and we can see Packages

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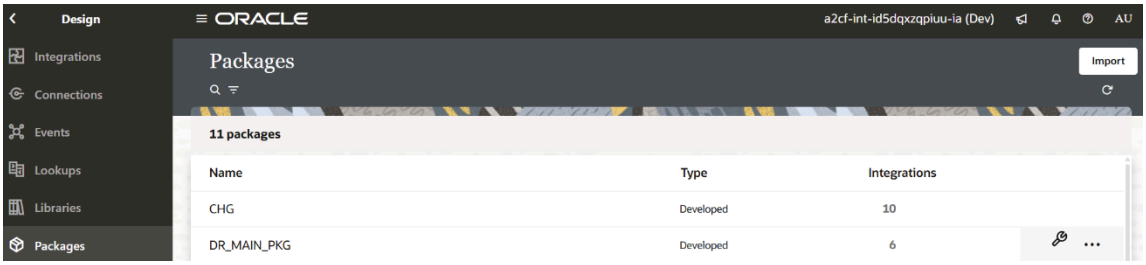


If you want to see active/inactive integrations, then you need to click on the number(10)

If the developer forgot or misplaces the integration in the package

Then we can put them in the correct package.

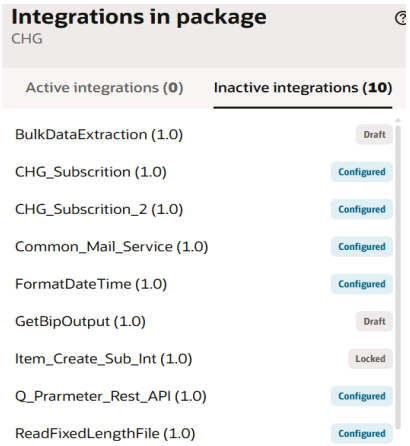
Once the integrations are put in the correct package, then we can

Start exporting the package and proceed with the migration

Process. A .par file would be generated.

.par package archive file. It contains integrations and also

Connections, libraries, lookups, and everything.



When you start creating an integration, you will get three options:

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When exactly is the use of Application Style Integration?

The moment you build Application Style Integration, activate and run it, you will see URL

MetaData, Swagger, Open API

endpoint URL

Swagger

Open API

Another application has to start the integration process(any application can trigger integ)

Or

Client has to trigger the integration process by using the endpoint URL

It is ideal for on-demand integration

Eg: Salesforce to ERP

Inbound app style

Salesforce trigger the integration process as on when customer account is created (input) to the ERP invoke connection to create customer details in Oracle Fusion.:On-Demand

Outbound App style

ERP Cloud triggers the business event as on when AR Invoice is created for the customers and then publishes it to the subscribers(Salesforce): On-demand

```
----------------------
App Driven Orchestration:
----------------------
Billing Systems -> AR Invoices -> Trigger Integration built in OIC and pass invoices payload in xml/json format -> create AR Invoices into Cloud
```

Schedule Integration Style

App A(items get updated) every hour or day. With those updates, a feed would be generated.

When that feed is generated with item updates, it is placed in the SFTP server1 (on-prem FTP server, client network)

Should be available to App B it is placed in SFTP server2.

Client does not expose SFTP server1 to third party apps directly because of sensitive information.

File transfer service from on SFTP to another SFTP servers. How do we do this?

Earlier we used to have MFT, managed File Transfer service but it was stopped

Oracle has introduced Scheduled Orchestration process to do the above task.

Pick the files one by one from server1 and place them in server2.

Client can still use old systems but they will need to process the data in Fusion application

Use Case 1: App A (WMS) -> Items csv Files -> SFTP Server 1 (On Premise, with in client network)

File Transfer service -> Pick up file from SFTP 1 and drop it in SFTP 2 -> Schedule the service

SFTP Server 2 (Outside of client network) -> App B (OTM)

Use Case 2:Core Banking System -> Journals File -> SFTP Server -> 3:00 AM

3:30 AM -> Scheduled Orchestration -> Pick up file from SFTP -> Transform/enrich/validate file -> FBDI -> ERP G Cloud

Use Case 3:Custom .Net/Java App -> HCM Emps/Depts File -> SFTP Server -> 3:00 AM

3:30 AM -> Scheduled Orchestration -> Pick up file from SFTP -> Transform/enrich file -> HCM Data Loader -> HCM Cloud

Everything we can do with the File Transfer Service in OIC

Small File

Big File processing

XML to Jason transformation

Normal file to FBDI file format

Normal File to .dat file format

Event Style Integration:

When something happens in one application, the updates need to be deliver to multiple destinations we build publish subscriber integration using Event Style.

First step:

Publisher Integration using app style

ERP conn as a trigger and subscribe to item update event.

From Publisher integration, we would be define a event in OIC

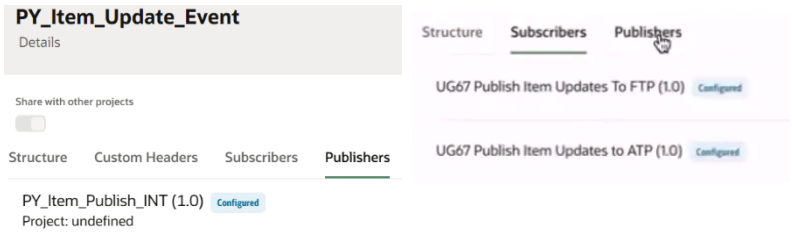
Whenever Item updatedin ERP Cloud -> Merge item details into ATP DB table, Create a file and place it in SFTP, Call a REST API to 0TM App

1) Publisher Service -> ERP Cloud Conn as trig conn -> Subs to item udate business event -> item details will be published to OIC Channel

2) Subscriber Service 1 -> select publish to oic service created above -> Invoke DB Conn and merge records into DB table

3) Subscriber Service 2 -> select publish to oic service created above -> Invoke FTP Conn and place the file in SFTP

4) Subscriber Service 3 -> select publish to oic service created above -> Invoke REST Conn

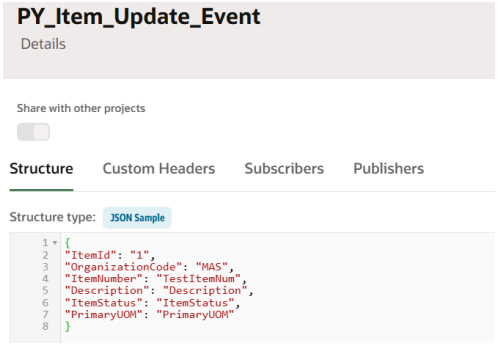


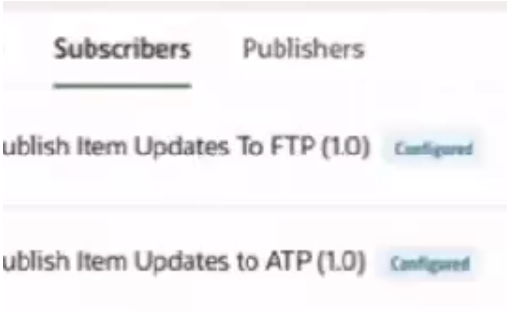
Update in the source system should be delivered to multiple target destinations

Step 1: Publisher Service integration(app style), ERP Cloud conn as a trigger and subscribe to an Event.

Step 2: In the Publisher Service Integration, we would define an Event

With Item structure and format





Step 3: From the Publisher Integration, we would publish the event.

Step 4: The moment you publish the event in Integration, all the subscriber integrations will be triggered.

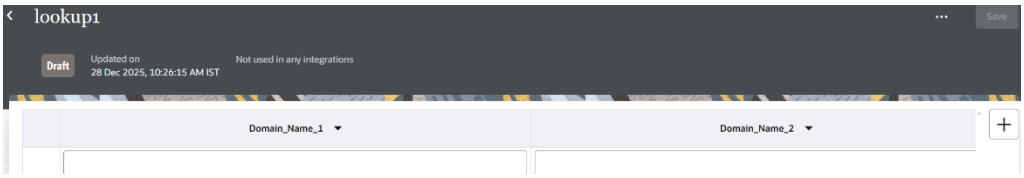
Step 5: One subscriber integration starts writing item updates to FTP and the other to ATP DB.

Lookups:

It can be used for a number of reasons. Lookup are containers to store the data.

To avoid hard-coding, we need to create a Lookup and store the email, short codes, etc

Lookups are used to store the data as follows:



Replace with an adapter

Edit the domain name options once we click on the down diamond symbol

Instead of hard-coding the email, we will create a lookup and enter the email in the lookup.

If the email is inactive, then we will go to Lookups and update the active email.

Libraries: Uses JavaScript to build custom functions.

Agent: A connectivity agent that helps to create a connection between a cloud app and on-prem apps.