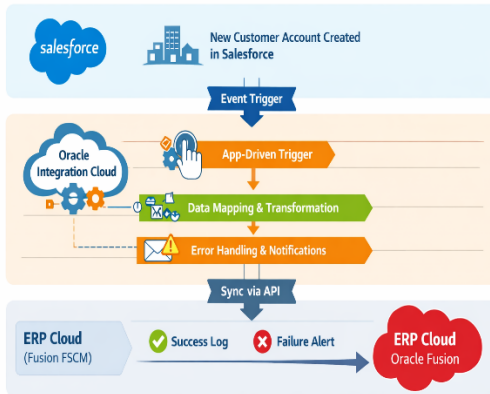


TECHNICAL DESIGN DOCUMENT (TDD)/TECHNICAL SPECIFICATION DOCUMENT(TSD)

Integration Name	Salesforce (Third-Party Cloud App) → ERP Cloud (Fusion FSCM) Salesforce to Fusion Sync Service/Interface/Program
Integration Style	App-Driven Integration
Tool	Oracle Integration Cloud (OIC)
Method	Inbound
Source System	Salesforce (Object: Customer Account)
Target System	Oracle ERP Cloud (Object/Entity: Customer Account entity in Fusion FSCM)

Business Requirement	
Use Case	Whenever a Customer Account is created in Salesforce, the same account must be automatically created in Oracle ERP Cloud (Fusion FSCM).
Purpose	Client manages all customer accounts in Salesforce. These accounts must sync into Fusion to enable AR Invoice creation without manual intervention.
Goal	Achieve real-time synchronization with zero manual effort.

Connections Required	
Source Connection	Salesforce Adapter
Authentication	OAuth 2.0
Endpoint	Salesforce Developer Account (Signup)
Object	Customer Account
Target Connection	ERP Cloud Adapter
Authentication	Basic/Token-based
Endpoint	Oracle ERP Cloud instance
Object	Customer Account Service (via REST API)



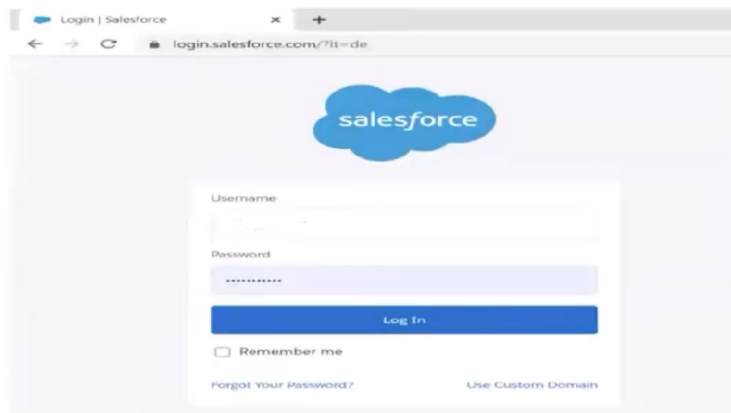
High-Level Flow	
Trigger	Salesforce Adapter listens for Customer Account creation event.
OIC Flow:	
	Receives payload(Request Payload) from Salesforce.
	Performs data mapping & transformation.
	Calls ERP Cloud Adapter.
Target	ERP Cloud creates Customer Account in Fusion FSCM.
Acknowledgement	Success/failure response logged in OIC monitoring.

Step-By-Step Guide

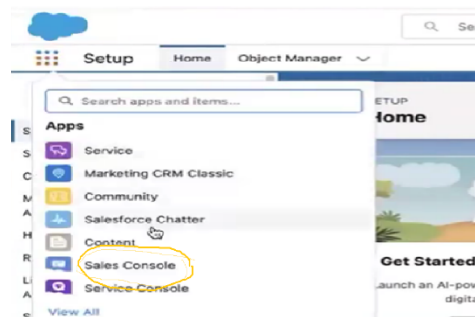
We need to have Salesforce Account. So, visit the web link
<https://developer.salesforce.com/signup>

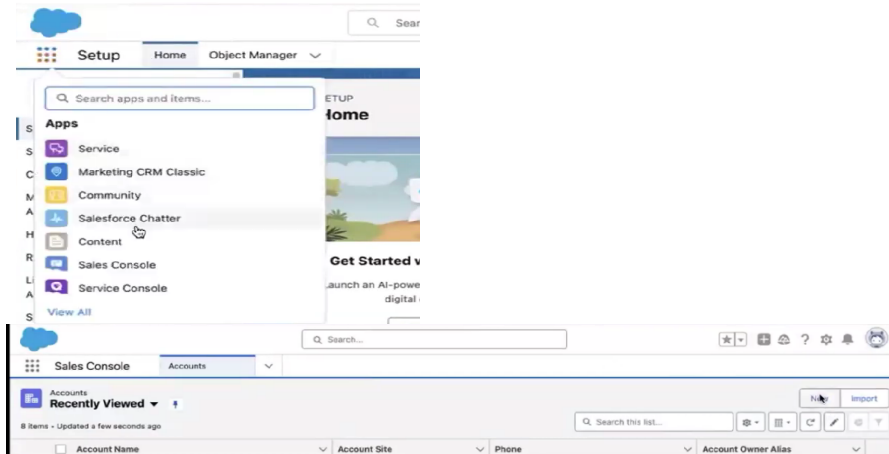
And then create Salesforce Account.

Go to <http://login.salesforce.com?it=de>



After we log into Salesforce Account, we can see “Sales Console”

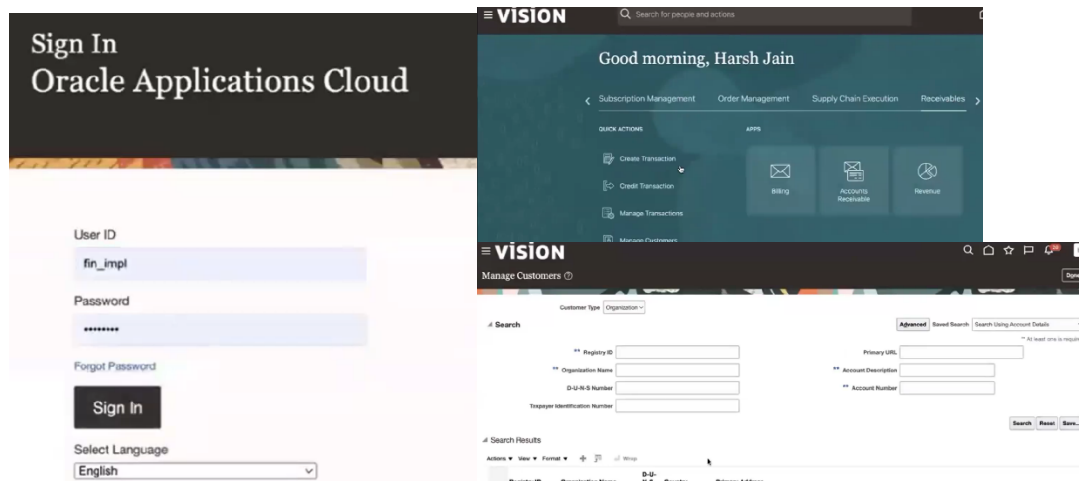




We need to click on New button to create new customer accounts or customer may use this option to create their own accounts in Salesforce.

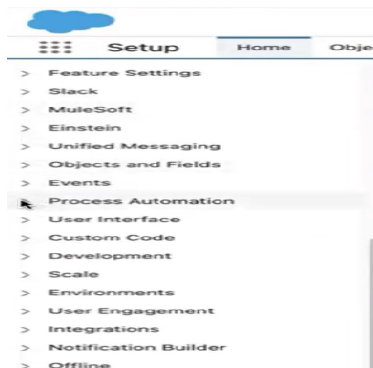
Cancel,save&new and Save button

Once we click on Save button, the customer account details will be saved in Salesforce and it will initiate/trigger our Integration process.

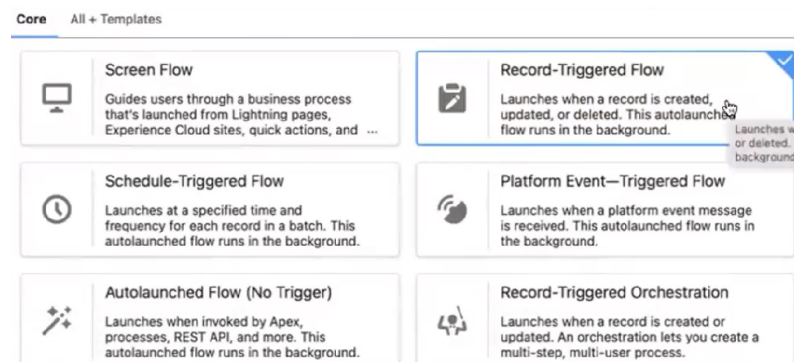
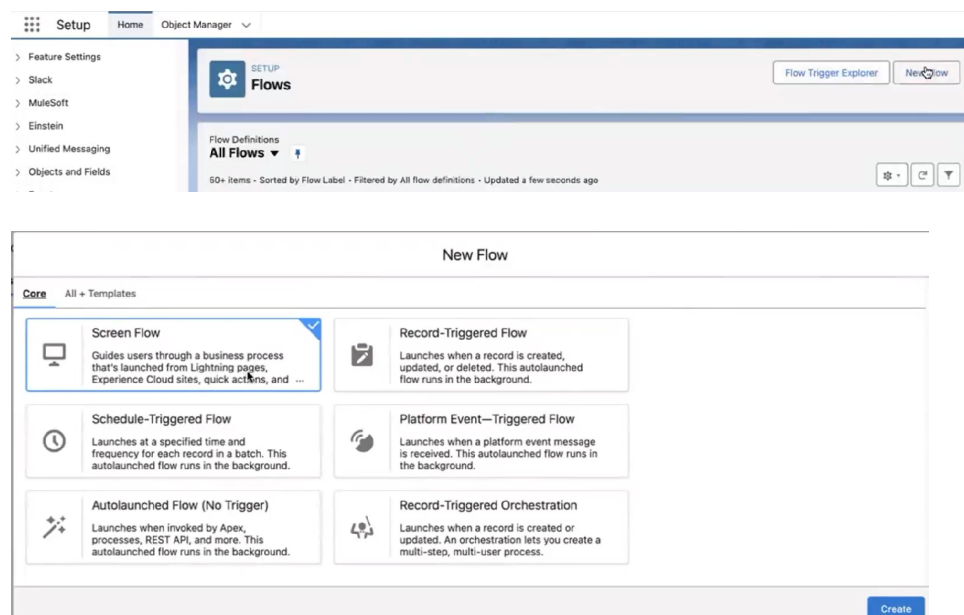


The customer details which are created in Salesforce should has to appear in the above Fusion page. So, we need to implement the logic behind the “Save” button within Salesforce.

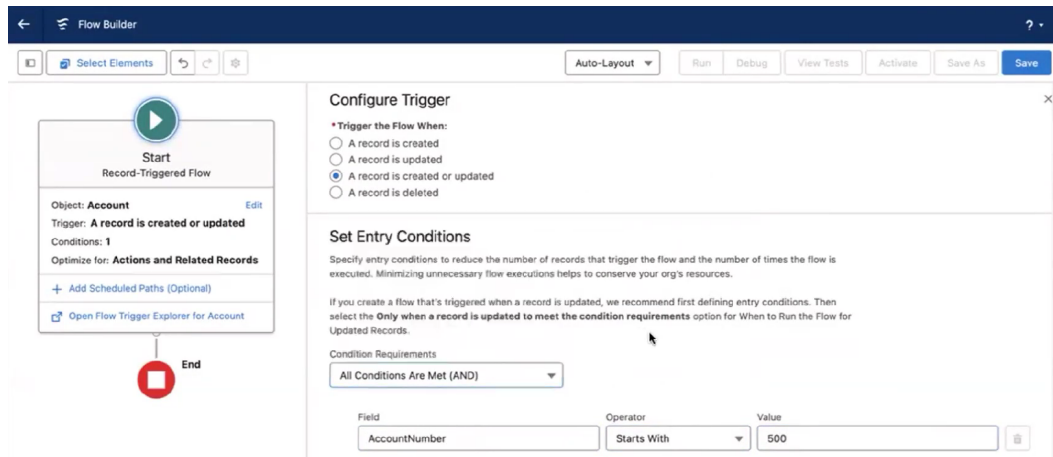
In Salesforce, we need to setup “**process automation**” flow as soon as user click on “Save” button, the following steps need to do:



Go to “Process Automation” and click on create a flow.

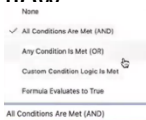


Pick the Record-Triggered Flow and click on “Create” button.

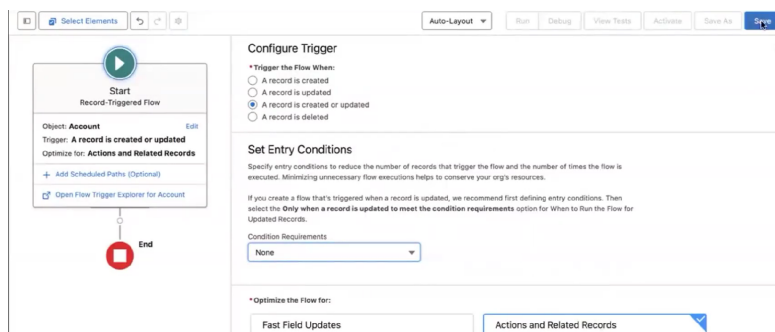


Selected customers can be fetched using logical AND/OR operators within Salesforce

flow.



For now, choose None to sync all the customer accounts.



And click on “Save”.

Save the flow

* Flow Label

* Flow API Name

Description

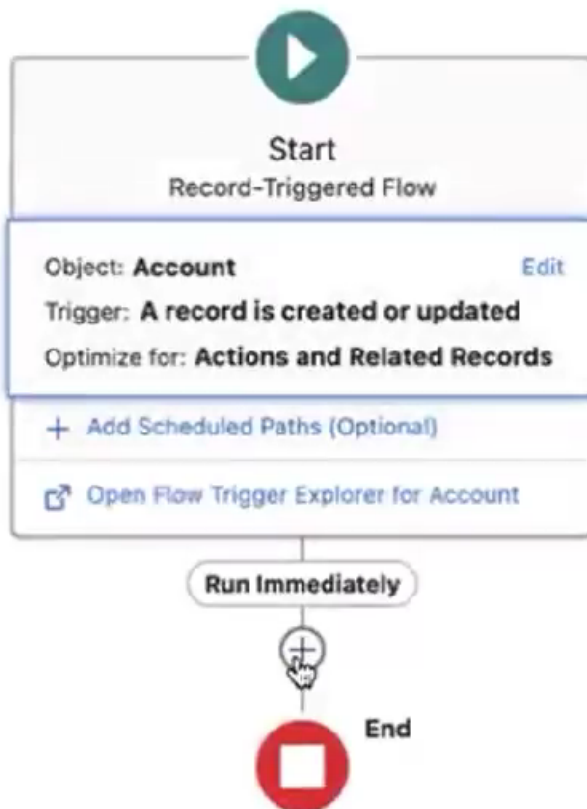
Show Advanced

Cancel Save

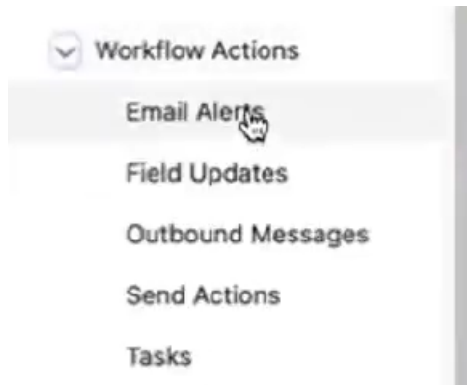
Provide the Flow Label name as: SendAccountToERPFlow

Click on Save.

Within a flow list, we can perform actions

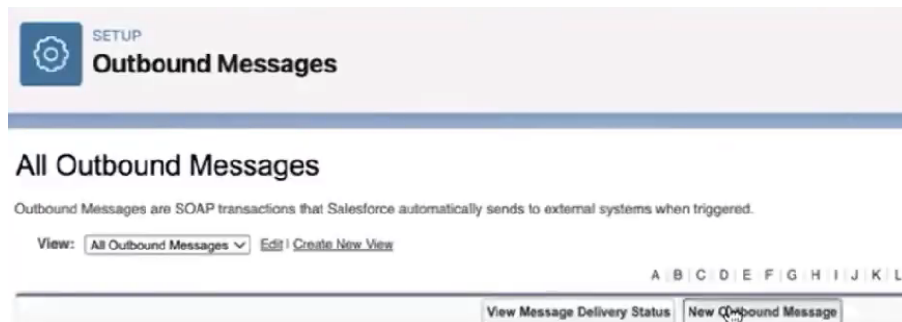


Click on plus symbol



We can perform the above actions.

We need to click on Outbound Messages



New Outbound Messages



Click on next

SETUP
Outbound Messages

New Outbound Message

Help for this Page

Step 2 of 2: Configure Outbound Message

Previous Save Cancel

Enter the details of your outbound message and select the fields you want included in this message. Note that the fields available depend on the type of record previously selected.

Edit Outbound Message: Account

Name: SendAccountToERPFlow

Unique Name:

Description:

Endpoint URL:

User to send as: Admin

Protected Component: ☐

Send Session ID: ☐

Account fields to send

Available Fields

Selected Fields

Since we have not created OIC endpoint url, just put the dummy url

<https://ics.temp.url>

Name: SendAccountToERPFlow

Unique Name: SendAccountToERPFlow

Description:

Endpoint URL: https://ics.temp.url

User to send as: Admin

Protected Component: ☐

Send Session ID: ☐

Account fields to send

Available Fields

Selected Fields

AccountNumber

AccountSource

Active_c

AnnualRevenue

BillingCity

BillingCountry

BillingGeocodeAccuracy

BillingLatitude

BillingLongitude

Add

Remove

Move all the fields to right side by using >

SETUP
Outbound Messages

SendAccountToERPMsg

Workflow Outbound Message Detail

Edit Delete Clone

Outbound Message: Account

Name: SendAccountToERPMsg

Unique Name: SendAccountToERPMsg

Description:

Object: Account

Endpoint URL: https://ics.temp.url

Endpoint WSDL: Click for WSDL

Send Session ID:

Fields to Send

AccountNumber

AccountSource

Active_c

AnnualRevenue

BillingCity

User to send as: Admin

API Version: 60.0

Modified By: Admin

5/2/2024, 5:42 PM

With the fields that we have selected, there will be abstract WSDL generated

Click on "Click for WSDL". It will open Abstract WSDL file, exclude the first commented line and copy the remaining.

Select from definition tag and closing of it.

We need to copy the Abstract WSDL file content and save with the extension.wSDL

```

<!--
Salesforce.com Outbound Notification Web Services API Version 1.0
Generated on 2024-05-03 00:42:31 +0000.

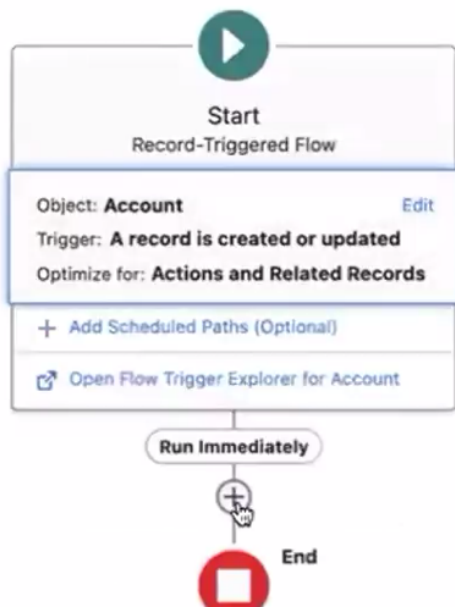
Copyright 2005-2024 Salesforce.com, Inc.
All Rights Reserved
-->
<?xml version="1.0" encoding="UTF-8"?>
<definitions xmlns="http://schemas.xmlsoap.org/wsdl/" xmlns:soap="http://schemas.xmlsoap.org/soap/" xmlns:tns="http://soap.sforce.com/2005/09/outbound"
xmlns:xsd="http://www.w3.org/2001/XMLSchema" xmlns:ent="urn:enterprise.soap.sforce.com" xmlns:ens="urn:subject.enterprise.soap.sforce.com"
targetNamespace="http://soap.sforce.com/2005/09/outbound">
  <types>
    <schema xmlns="http://www.w3.org/2001/XMLSchema" elementFormDefault="qualified" targetNamespace="urn:enterprise.soap.sforce.com">
      <!-- Our simple ID Type -->
      <simpleType name="ID">
        <restriction base="xsd:string">
          <length value="18"/>
          <pattern value="[a-zA-Z0-9]{18}" />
        </restriction>
      </simpleType>
    </schema>
    <schema xmlns="http://www.w3.org/2001/XMLSchema" elementFormDefault="qualified" targetNamespace="urn:subject.enterprise.soap.sforce.com">
      <import namespace="urn:enterprise.soap.sforce.com"/>
      <!-- Base sObject (abstract) -->
      <complexType name="sObject">
        <sequence>
          <element name="fieldsToNull" type="xsd:string" nillable="true" minOccurs="0" maxOccurs="unbounded"/>
          <element name="Id" type="ent:ID" nillable="true"/>
        </sequence>
      </complexType>
      <complexType name="AggregateResult">
        <complexContent>
          <extension base="ens:sObject">
            <sequence>
              <any namespace="##targetNamespace" minOccurs="0" maxOccurs="unbounded" processContents="lax"/>
            </sequence>
          </extension>
        </complexContent>
      </complexType>
    </schema>
  </types>
  <message name="request" part="request" type="tns:sObject"/>
  <message name="notificationsResponse" part="response" type="tns:AggregateResult"/>
  <!-- PortType -->
  <portType name="NotificationPort">
    <operation name="notifications">
      <documentation>Process a number of notifications.</documentation>
      <input message="tns:notificationsRequest"/>
      <output message="tns:notificationsResponse"/>
    </operation>
  </portType>
  <!-- Binding
  You need to write a service that implements this binding to receive the notifications
  -->
  <binding name="NotificationBinding" type="tns:NotificationPort">
    <soap:binding style="document" transport="http://schemas.xmlsoap.org/soap/http"/>
    <operation name="notifications">
      <soap:operation soapAction="" />
      <input>
        <soap:body use="literal"/>
      </input>
      <output>
        <soap:body use="literal"/>
      </output>
    </operation>
  </binding>
  <!-- Service Endpoint -->
  <service name="NotificationService">
    <documentation>Notification Service Implementation</documentation>
  </service>
</definitions>

```

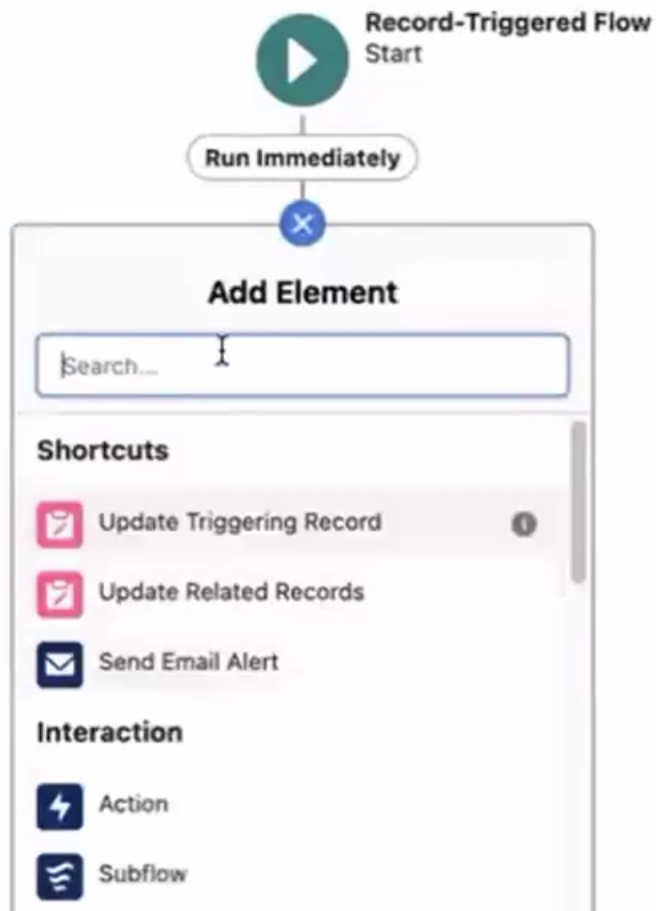
```

<part element="tns:notifications" name="request"/>
</message>
<message name="notificationsResponse">
  <part element="tns:notificationsResponse" name="response"/>
</message>
<!-- PortType -->
<portType name="NotificationPort">
  <operation name="notifications">
    <documentation>Process a number of notifications.</documentation>
    <input message="tns:notificationsRequest"/>
    <output message="tns:notificationsResponse"/>
  </operation>
</portType>
<!-- Binding
  You need to write a service that implements this binding to receive the notifications
-->
<binding name="NotificationBinding" type="tns:NotificationPort">
  <soap:binding style="document" transport="http://schemas.xmlsoap.org/soap/http"/>
  <operation name="notifications">
    <soap:operation soapAction="" />
    <input>
      <soap:body use="literal"/>
    </input>
    <output>
      <soap:body use="literal"/>
    </output>
  </operation>
</binding>
<!-- Service Endpoint -->
<service name="NotificationService">
  <documentation>Notification Service Implementation</documentation>
</service>

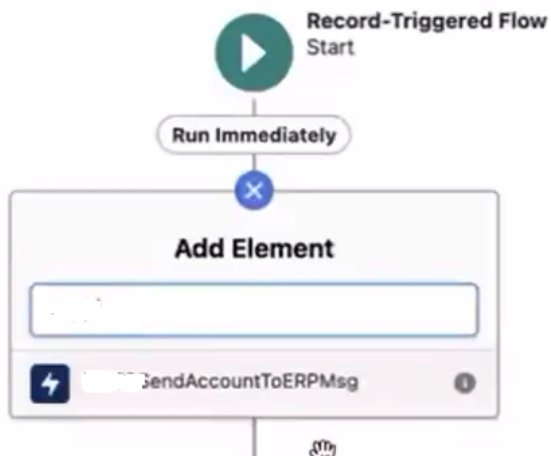
```

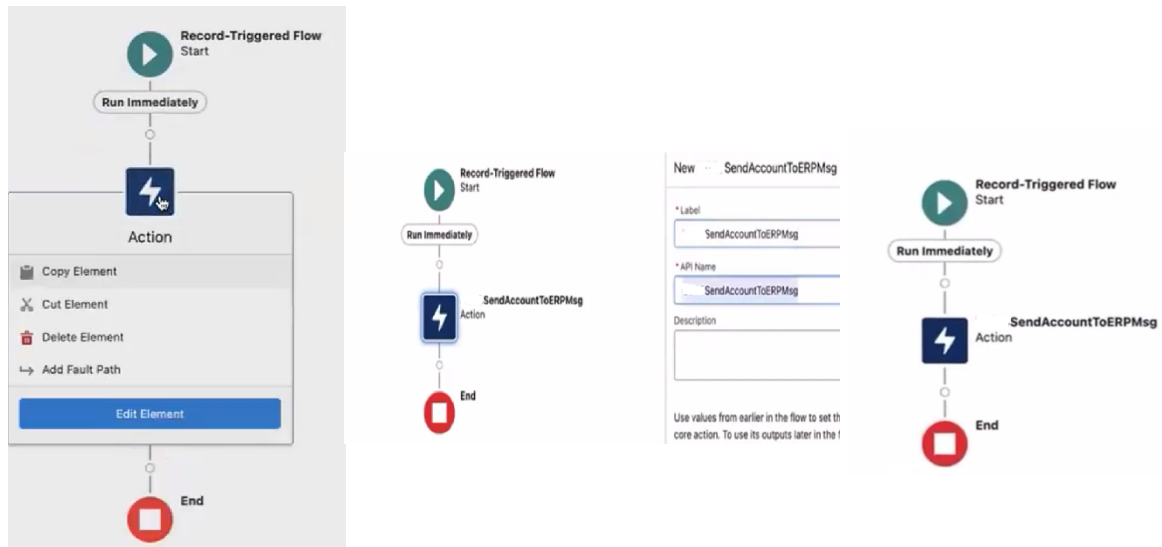


Click on “+” and search for the Flow Label Name here.



Come out of the page and reload the flow list to see the flow name.





Complete the above flow diagram within Salesforce Process Automation.

Create Salesforce Account and below the new version of Salesforce Account.

Enter a new password for **apps2cloudfusion@gmail.com**. Make sure to include at least:

- ✓ 8 characters
- ✓ 1 letter
- ✓ 1 number

* New Password Good

* Confirm New Password Match

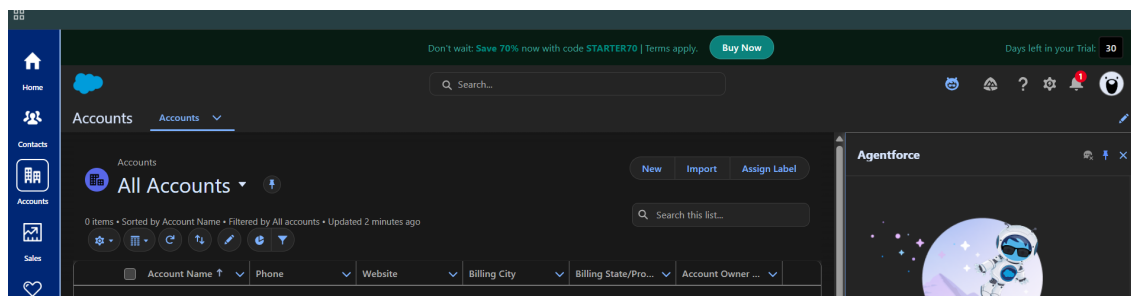
* New Security Question
▼ What is your pet's name?

* New Answer Good

*=required

[Change Password](#)

New Salesforce Account interface appears as below



Target: Oracle Fusion Financials App.

Adapter: Oracle ERP Cloud

ERP Connection confirmation sample pic:

The screenshot shows the 'Configure' page for a connection in Oracle Integration Cloud. At the top, a header bar displays connection details: Role (Trigger and invoke), Identifier (UG70_ERP_CONN), Updated on (Apr 22, 2024, 12:05:57 PM IST), Used in (11 integrations), Share with other projects (Off), and Project (UG70). The main content area is divided into two sections. On the left, under 'Use a shared connection', there is a search bar. Below it, the 'Configure a connection' section includes 'Properties' with an 'ERP Cloud Host' field containing 'https://fa-esev-saasfademo1.ds-fa.oraclepdemos.com', and 'Security' with a 'Security policy' dropdown set to 'Username Password Token', a 'Username' field with 'fin_impl', and a 'Password' field with masked characters. On the right, a 'Configuration progress' bar shows 100% completion, with steps: 'Use shared connection or configure' (checked), 'Save changes' (unchecked), and 'Test connection' (checked).

Source: Salesforce(Third-Party Cloud App)

Adapter Name: Salesforce

Role: Trigger and Invoke

Production: 49

Auth: Username and Salesfroce password+Security Token

The screenshot shows the 'Create connection' dialog in Oracle Integration Cloud. It prompts the user to 'Select the adapter to use for this connection'. A search bar contains the text 'salesforce'. Below the search bar, the 'Salesforce' adapter is listed with its icon and name, and a mouse cursor is pointing at it.

Create connection



Salesforce adapter

Name

Salesforce Conn

Enter a name using letters (A-Z,a-z), numbers (0-9), spaces () and special characters (_ -). It cannot be longer than 50 characters and must start with a letter.

Identifier

SALESFORCE CONN

Role

Trigger and invoke



Keywords

Description

←

Salesforce Conn

Draft

Role
Trigger and invoke

Identifier
UGTO_SALESFORCE_CONN

Updated on
May 3, 2024, 06:17:24 AM IST

Used in
0 integrations

Share with other projects
Off

Project
UGTO

Use a shared connection

Q Search

or

Configure a connection

Properties

Select Salesforce.com Instance Type
Please select an item from the list >

Production

Sandbox

Government

Security policy
Salesforce Username Password Policy

Username

Configuration progress

8 %

Use shared connection or configure

Save changes

Test connection

Description

←

Salesforce Conn

Draft

Role
Trigger and invoke

Identifier
UGTO_SALESFORCE_CONN

Updated on
May 3, 2024, 06:17:24 AM IST

Used in
0 integrations

Share with other projects
Off

Project
UGTO

Use a shared connection

Q Search

or

Configure a connection

Properties

Select Salesforce.com Instance Type
Please select an item from the list >

Production

Sandbox

Government

Security policy
Salesforce Username Password Policy

Username

Configuration progress

8 %

Use shared connection or configure

Save changes

Test connection

< Salesforce Conn

Draft	Role	Identifier	Updated on	Used in	Share with other
	Trigger and Invoke	UG70_SALESFORCE_CONN	May 3, 2024, 06:17:24 AM IST	0 integrations	Off

Use a shared connection

Search

or

Configure a connection

Properties

Select Salesforce.com Instance Type
Production

API Version
49

> Optional properties

Security

Security policy
Salesforce Username Password Policy

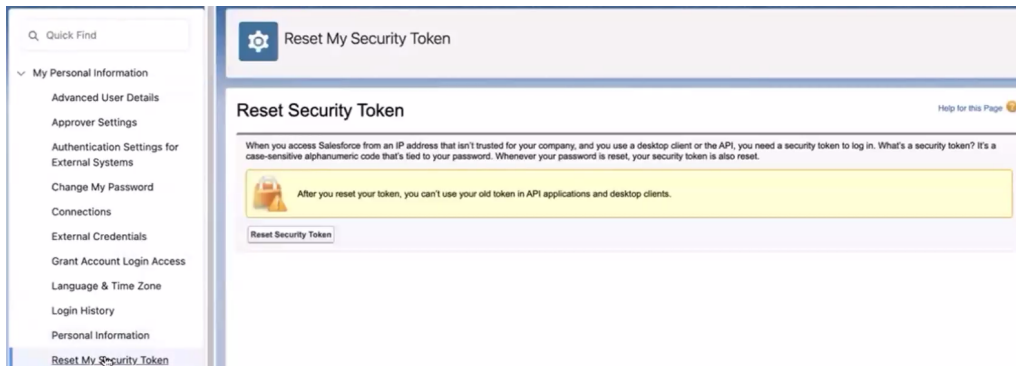
Security Key is valid for one region or per IP address.

Error while connecting:

. CASDK-0004: Failed to authenticate against the application with the credentials provided

LOGIN_MUST_USE_SECURITY_TOKEN: Invalid username, password, security token, or user locked out. Are

If you are at a new location? When accessing Salesforce -- either via a desktop client or the API -- from outside of your company's trusted networks, you must add a security token to your password to log in. To get your new security token, log in to Salesforce. From your personal settings, enter "Reset My Security Token" in the Quick Find box, then select Reset My Security Token. Along with user and password we need to enter the security token. Go to Salesforce, click on head icon>>Settings



Click on Reset Security Token

We will get an email with security token

axGzkIkQCjLIVJd2gHXVobiBX

sec token: axGzkIkQCjLIVJd2gHXVobiBX

oic conn pwd: b3Z9pWi2lcg axGzkIkQCjLIVJd2gHXVobiBX

OIC conn password: We will enter it as the security token and Salesforce login password.

Example of Security Token to be entered in OIC instance

Username: test1

Password: welcome@123

Dfd212adfsafdsafdd

OIC connection for Salesforce: welcome@123Dfd212adfsafdsafdd

This will be changed automatically based on the region's IP address.

Now, try to build the integration

Go to the Design screen, Integration, and click on Create

Create integration
Starts with application

Name
Salesforce to ERP Service

Identifier
SALESFORCE_TO_ERP_SERVICE

If it is needed, enter an identifier using capital letters (A-Z), numbers (0-9) and special characters (_ -). It cannot be longer than 32 characters and must start with a letter.

Version
01.00.0000

Keywords

Description

Use the first node as Salesforce connection

Configure Basic Info
Salesforce trigger

What do you want to call your endpoint?
receiveCustDetailsFromSalesforce

Enter a name using letters (A-Z a-z), numbers (0-9) and special characters (_ -). It cannot be must start with a letter.

What does this endpoint do?

Configure Action
Salesforce trigger

How would you like to receive messages from Salesforce.com?

☒ Outbound Messaging

☐ Streaming API

Select outbound messaging



Configure Outbound Messaging

Salesforce trigger

Pre-requisite

You must first generate the Salesforce outbound messaging WSDL you would want to select on this page. To generate the WSDL, perform these steps:

1. Log in to your Salesforce account and go to Setup -> Outbound Messages.
2. Select the required object.
3. Enter other required details (in the Endpoint URL field, enter a dummy URL), and click Save.
4. Click Generate WSDL to download the WSDL.

Drag and Drop 

Select a file or drop one here.

Upload the WSDL file which we prepared

SendAccountToERPMsg

[Workflow Rules Using This Outbound Message \(0\)](#) | [Approval Processes \(0\)](#)

Outbound Message Detail

Edit

Delete

Clone

Outbound Message: Account

Name SendAccountToERPMsg

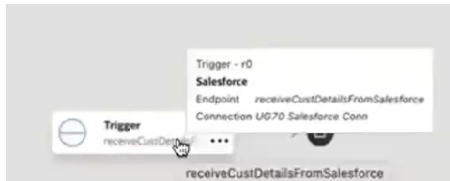
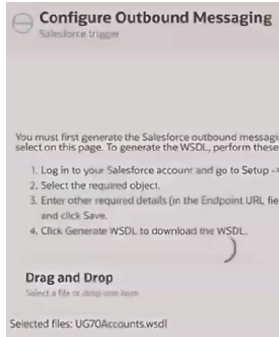
Unique Name SendAccountToERPMsg

Description

Object Account

Endpoint URL <https://ics.tmp.url>

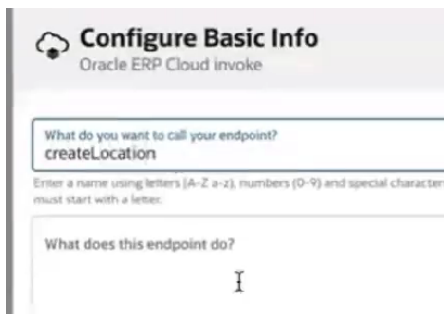
Endpoint WSDL [Click for WSDL](#)



How to create a customer in ERP cloud?

To create a customer account in ERP Cloud, we need to invoke the below in sequence:

1. Create a Location by using “Process Location”(Create or Update actions)
LocationId will be returned with the above action
2. Create Organization by using “Process Organization”(Create or Update actions)
Pass LocationId from above web service call as input to this one. PartyId and PartySiteId returned.
3. Create Customer Account Service ☐ MergeCustomerAccount
Pass PartyId and PartySiteId from REST/SOAP web service call.
CustomerAccountId will be returned



Click on continue



Configure Actions

Oracle ERP Cloud invoke

What would you like to do with Oracle ERP Cloud Adapter?

- ☒ Query, Create, Update or Delete Information
- ☐ Import Bulk Data into Oracle ERP Cloud
- ☐ Send Files to ERP Cloud

Click on continue



Configure Operations

Oracle ERP Cloud invoke

Browse by
Services

Select a Service
locationserv

Select a Service
All

LocationService



Summary

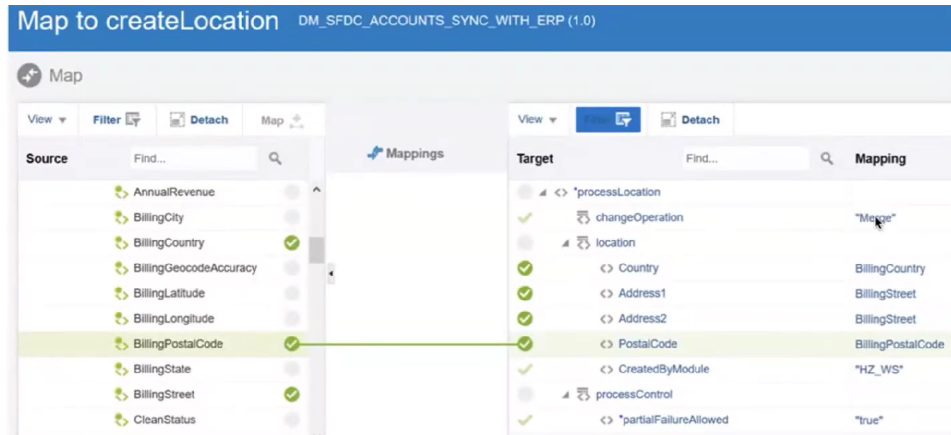
Oracle ERP Cloud invoke

Description

Business Object
LocationService

Operation
processLocation

Process Location means: create or update.



Created by module is mandatory for creating lookups in ERP

Partial failure allowed: True means it can proceed with next location creation process

Change operation: Merge

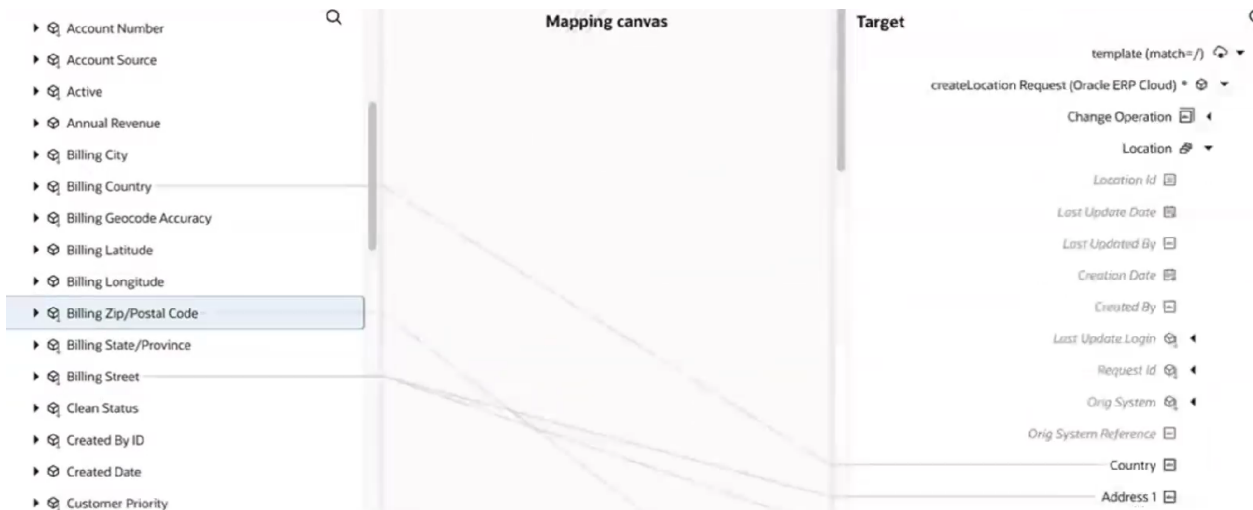
Partial Failure allowed: True

Process Location: Merge

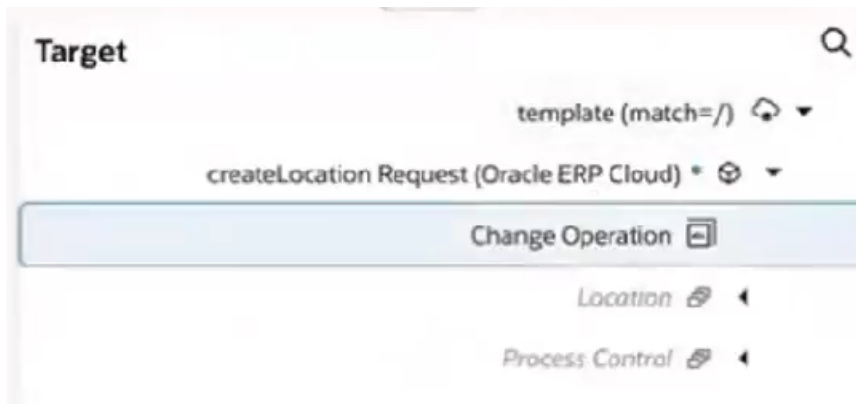
Means, if the location is exists then it will update otherwise it will create.

Created by Module: HZ_WS(seeded value that we must pass it)





Under Target:



Hard code change operation value to: Merge

Partial Failure Allowed: TRUE

And then expand the Location repeating element



Under Notification, expand Account□Sequence



Billing country to country

Billing zip/postal code to postal code

Billing street to address1 and address2

Created by Module: Hz_WS

Validate it

Billing country to country



After location is created, we need to create Party and Party Site

Configure Basic Info
Oracle ERP Cloud invoke

What do you want to call your endpoint?
createOrganization

Enter a name using letters (A-Z a-z), numbers (0-9) and special must start with a letter:

What does this endpoint do?

Continue

Configure Actions
Oracle ERP Cloud invoke

What would you like to do with Oracle ERP Cloud Adapter?

- ☒ Query, Create, Update or Delete Information
- ☐ Import Bulk Data into Oracle ERP Cloud
- ☐ Send Files to ERP Cloud



Description:

Business Object
OrganizationService

Operation:
processOrganization

Map to createOrganization DM_SFDC_ACCOUNTS_SYNC_WITH_ERP (1.0)

Map

View Filter Detach Map

Source Find

- <> *notifications
- <> \$createLocation
- <> \$createLocation_REQUEST
 - <> *processLocation
 - changeOperation
 - location
 - processControl
- <> \$self
 - <> *metadata
 - *integration
 - *runtime
 - *environment
 - <> \$tracking_var_1
 - <> \$tracking_var_2
 - <> \$tracking_var_3

Mappings

Drag and drop source to target to create a mapping

Click a checkmark on source or target to see mappings

View Detach

Target CreatedByModule Mapping

- <> *processOrganization
 - changeOperation "Merge"
 - organizationParty
 - CreatedByModule "HZ_WS"
 - OrganizationProfile
 - OrganizationName Name
 - CreatedByModule "HZ_WS"
 - PartySite
 - LocationId LocationId
 - CreatedByModule "HZ_WS"
 - PartyUsageAssignment
 - PartyUsageCode "CUSTOMER"
 - CreatedByModule "HZ_WS"
 - processControl
 - *partialFailureAllowed

Change Operation: Merge

Partial Failure Allowed: TRUE

Party and Profile ☐ Org Name and created by module: Customer Details and HZ_WS

Part Site ☐ We will pass location ID and created by: hz_ws

PartyUsageAssignment

UsageCode: Customer

Created by module: HZ_WS



We need to:

Change Operation: Merge

Partial Failure Allowed: TRUE

Organization Party repeating element and expand it

Created by module: Hz_ws

Expand Organization Profile repeating element

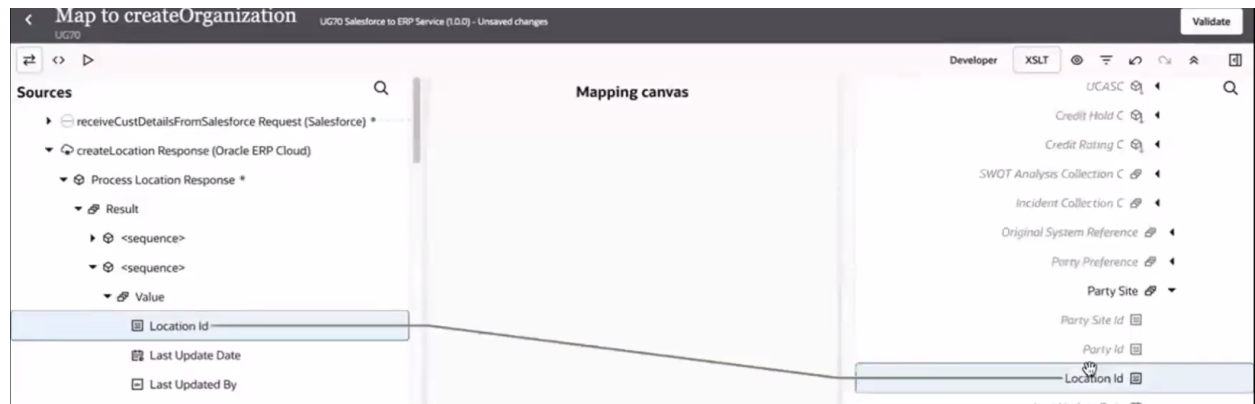


Account sequence from left side

Account name to org name

Created by module: HZ_WS

Expan value

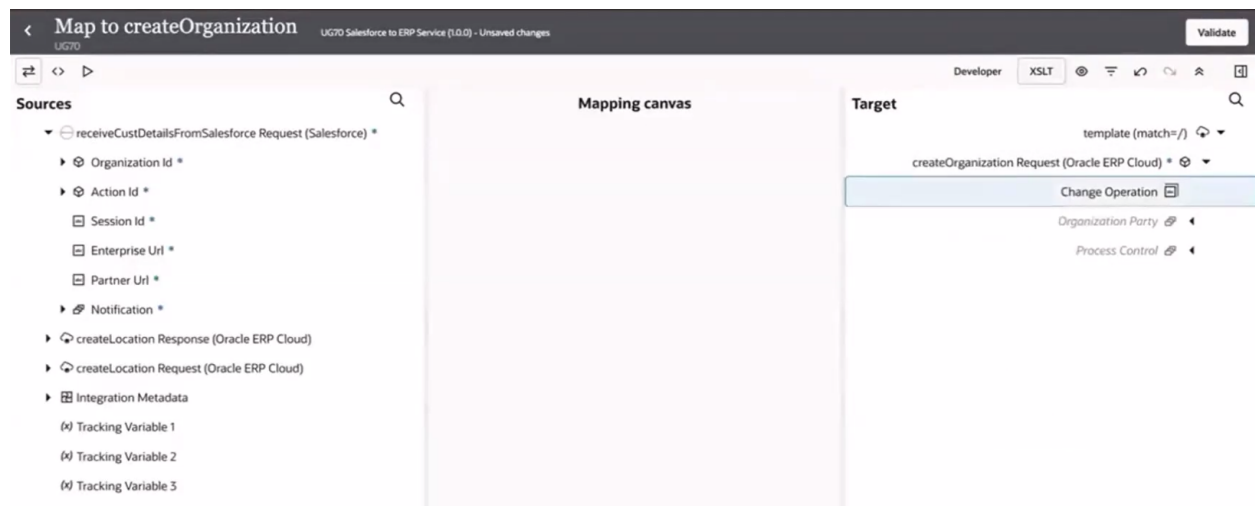


And then hard coded value: Hz_ws

Party site is the repeating element

Party Usage Code: Customer

Created by module: Hz_ws

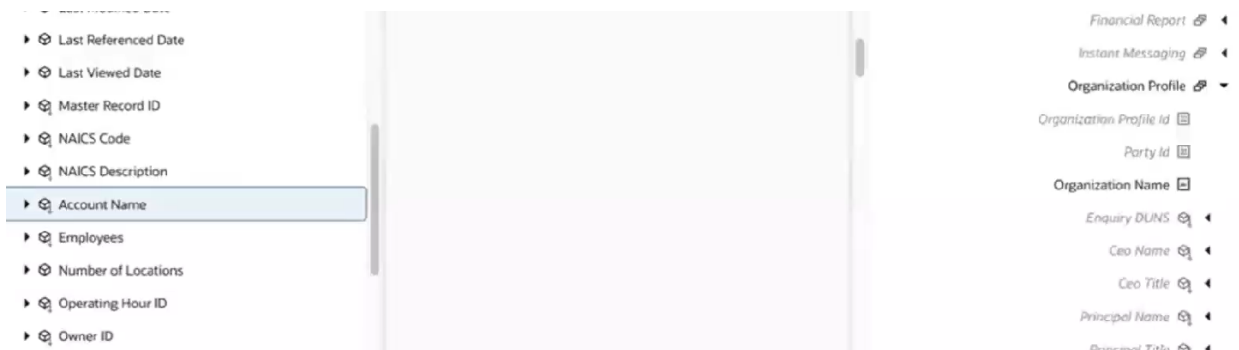


Change Operation: Merge

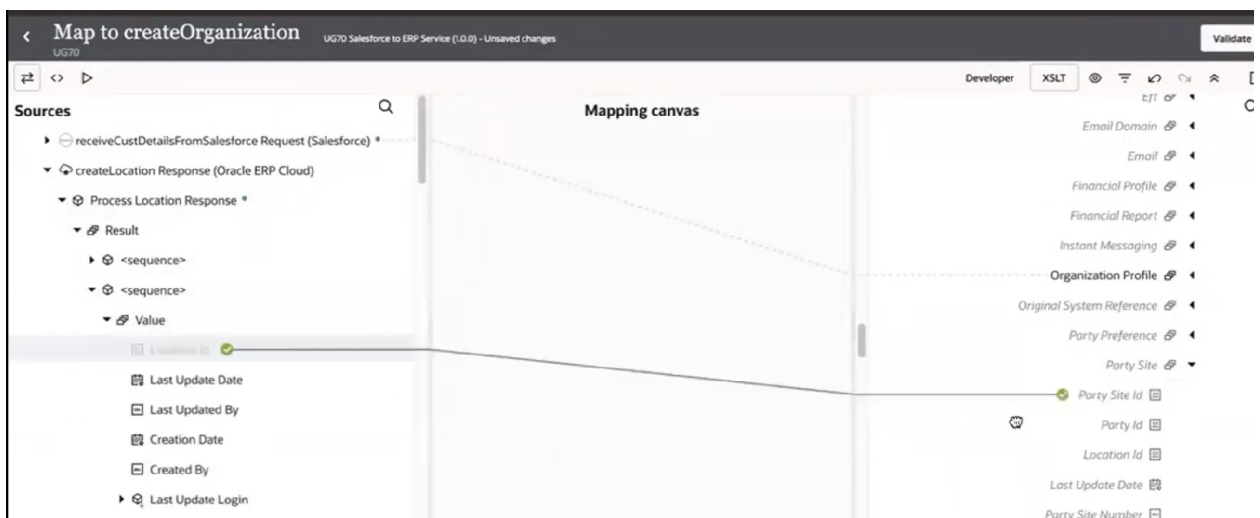
Partial Failure Allowed; True

Created by Module: Hz_WS

Organization Profile is the repeating group



Location Id to party site id



Party side usage code: Customer

The last one is to create customer account service.



Configure Basic Info

Oracle ERP Cloud invoke

What do you want to call your endpoint?

createCustomerAccount

Enter a name using letters (A-Z a-z), numbers (0-9) and special characters (_ -). It cannot be longer than 50 characters and must start with a letter.

What does this endpoint do?



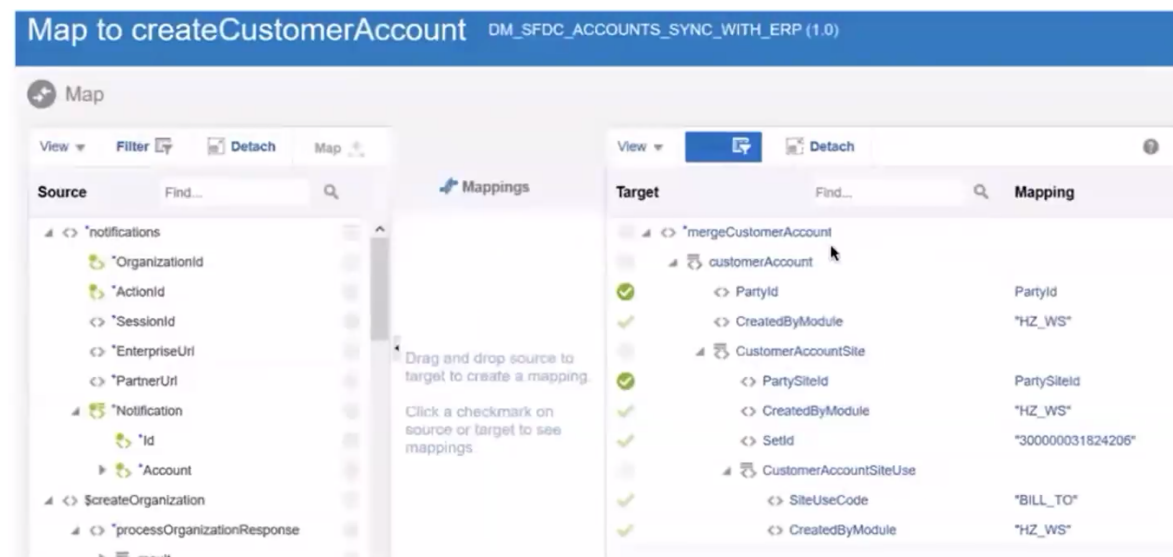
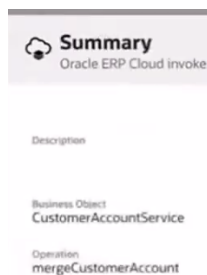
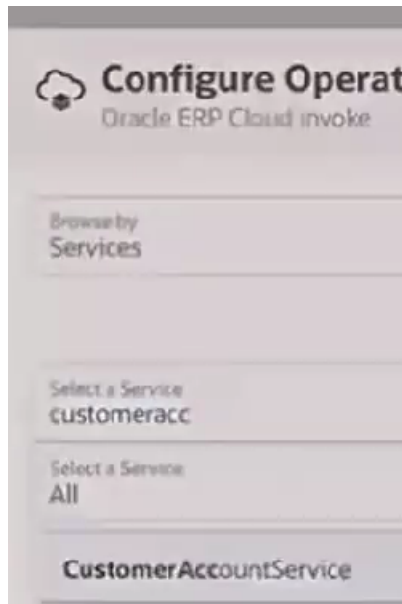
Configure Actions

Oracle ERP Cloud invoke

What would you like to do with Oracle ERP Cloud Adapter?

- ☒ Query, Create, Update or Delete Information
- ☐ Import Bulk Data into Oracle ERP Cloud
- ☐ Send Files to ERP Cloud

Click on continue



Set Code: Using this, we can decide which BU customers you need to create Invoice
We need to provide Set ID for BU for example US1 BU.

Create Transaction: Invoice ?

Save Complete and Create Another Cancel

General Information | Show More

Transaction Class Invoice

* Business Unit US1 Business Unit

* Transaction Source

* Transaction Type

* Transaction Number

Document Number

Transaction Date m/d/yy

Accounting Date m/d/yy

Salesperson

Invoicing Rule

Attachments None

Notes

* Currency

Transaction Total 0.00

Lines 0.00

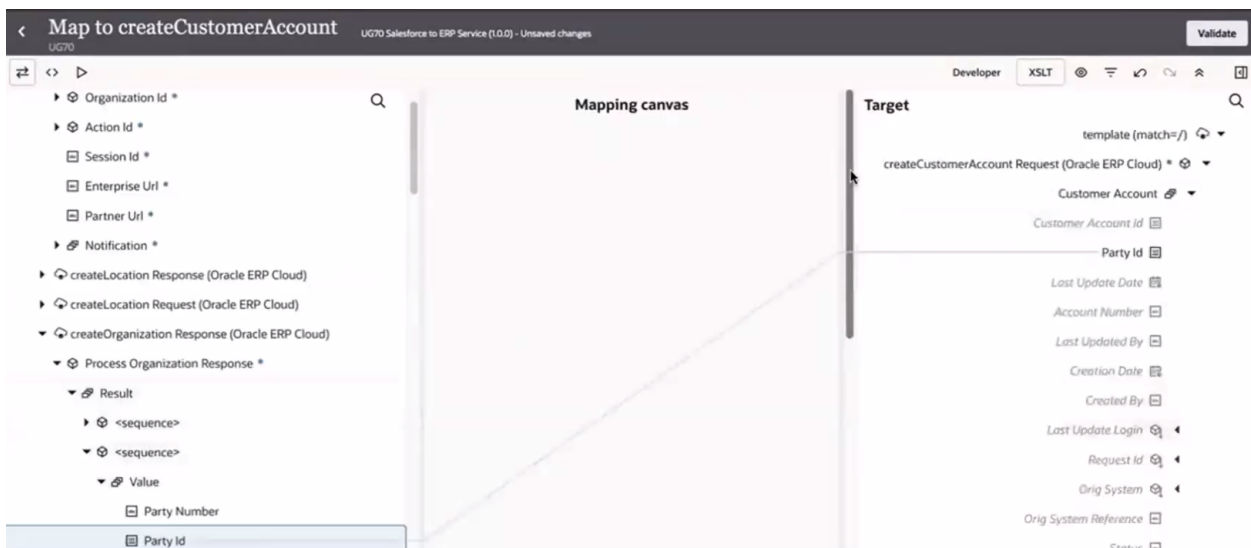
Tax 0.00

Freight 0.00

Charges 0.00

Reference Data is related to functional setup.

In case if want to create an invoice for multiple BU's then we need to choose Data Set as: COMMON.



Party Id to Party Id

Right side, expand customer account site(repeating element)

Expand party site(left)

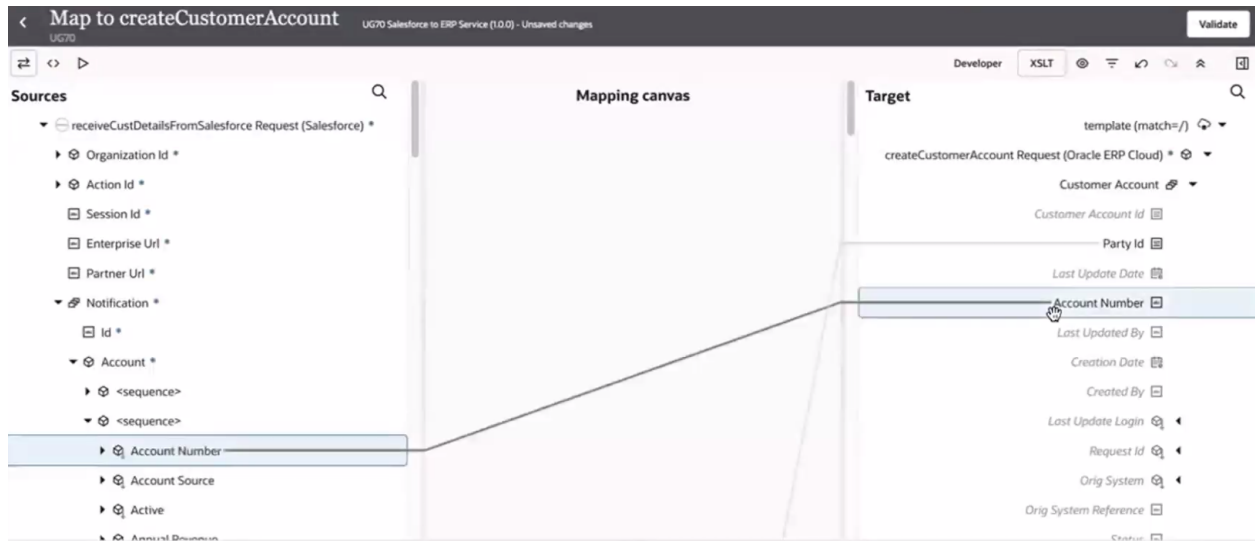
Party set Id to Party Set Id

Created by module: Hz_WS

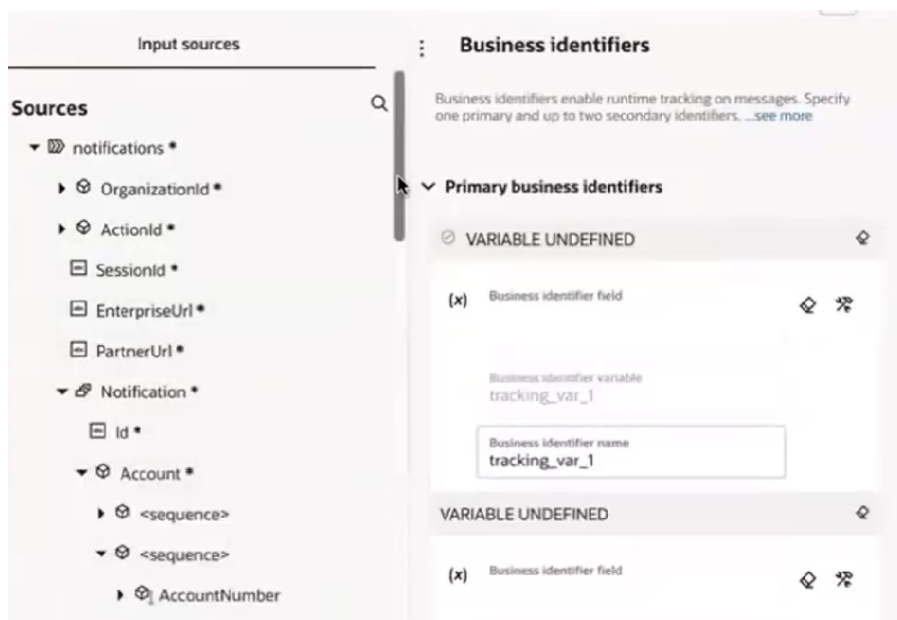
Right side: SetID= hard code the US1 BU Id

right side: Customer Account Site Usage(reapting) site use code=Customer

If you want to create customer account from Salesforce then map it otherwise it will auto generate the account number.



Activate the Integration and choose Run Details to see endpoint url which we need to put in Salesforce.



Under Account, take Name as Business Identifier

Activate the Integration and run it in debug mode

Run details

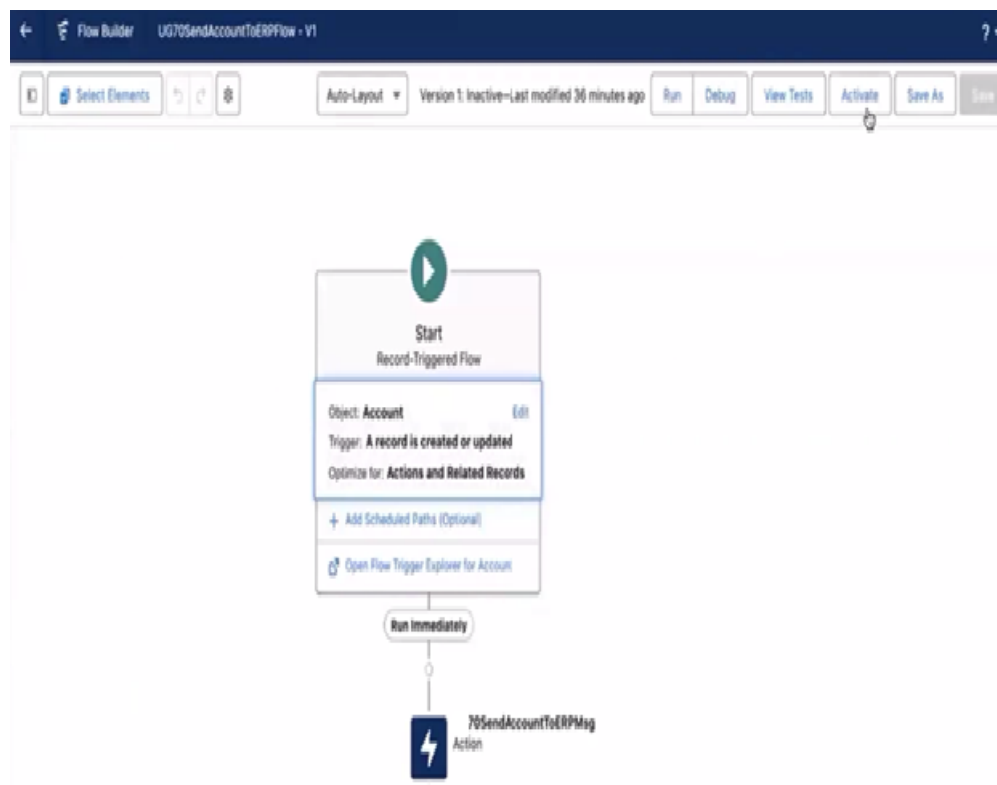
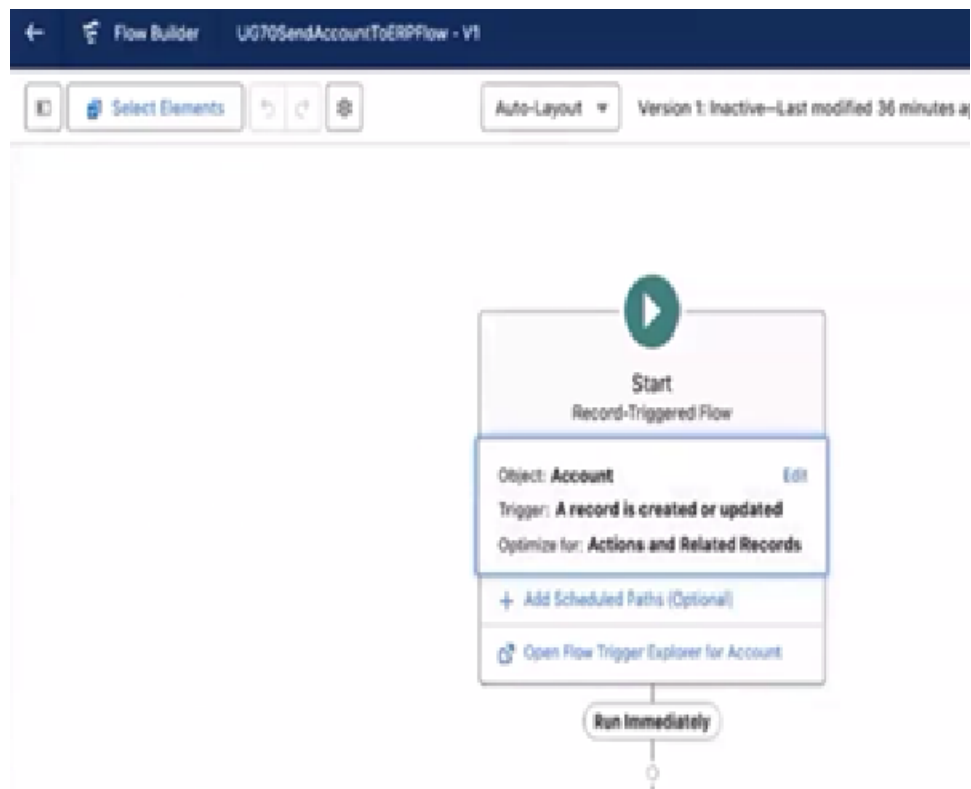
Salesforce to ERP Service (1.0)

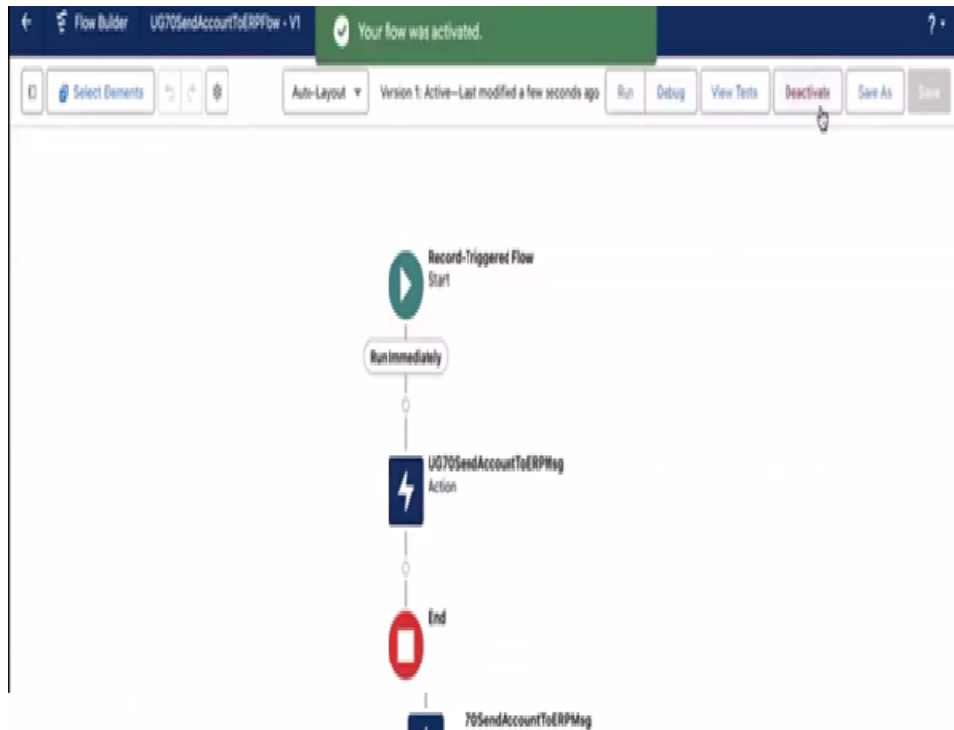
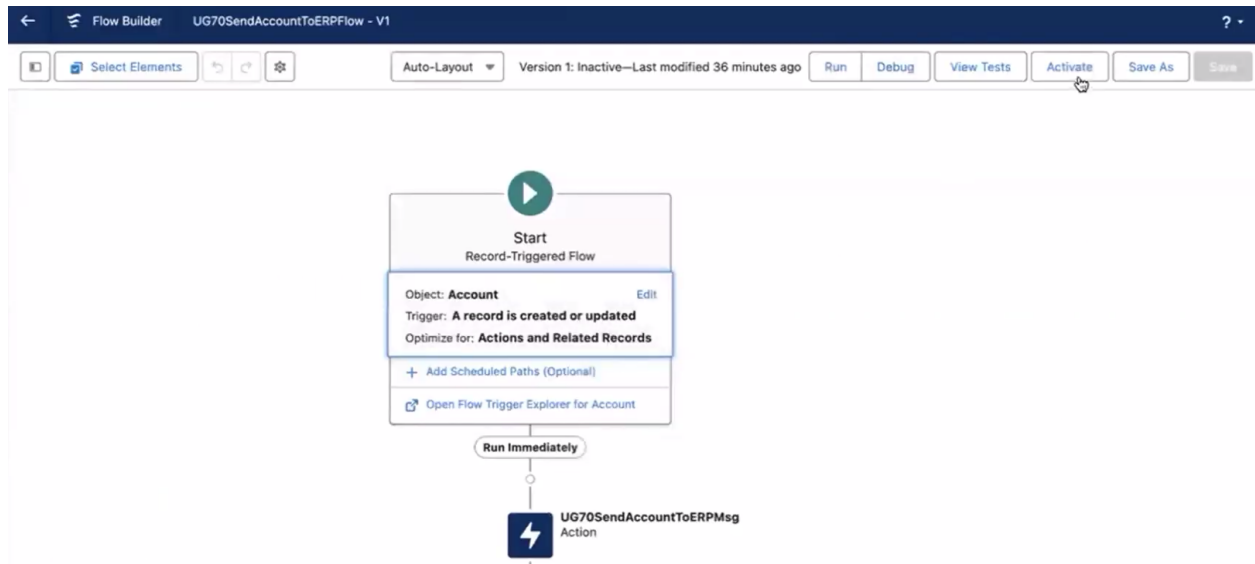
Metadata URL

https://unitegreekswatoc-idm9es0ppdw-ia.integration-us-ashburn-loc.pracl-ecloud.com/c/vs/integration/v2/flows/salesforce/project/UG7Q/UG7Q_SALESFORCE_TO_ERP_SERVICE/1.0.wsdl

How to run

Enter the above WSDL in Salesforce under Endpoint URL:





Verify if the customer account is created or not in Fusion UI screen.

Account Address Details

Customer Category:

Site Language:

☐ Key Account

Trading Partner Identifier:

EDI Location Code:

Translated Customer Name:

Address Purposes

Actions: View Format + X Wrap

Primary	To Date	From Date	Purpose	Site	Bill-to Site
☒		5/3/24	Bill to	85248	

Select *from FND_SETID_SETS where language='US'

If we get only one customer, then it is not required to use FBDI

If there is any error then the integration will trigger fault indicator and we need to record them in ATP custom tables for reprocessing purposes

For multiple apps, we can create integration as a REST Trigger and enter the request payload for creating a customer and the endpoint URL will be created. Share it with the apps from which you want to create a customer.

Final Summary:

Checked that customer details are created automatically on Fusion Financial Application.

Client can able to invoice the customers who purchased items/goods.

