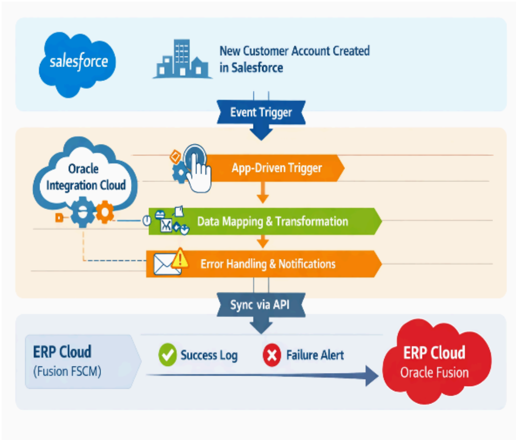
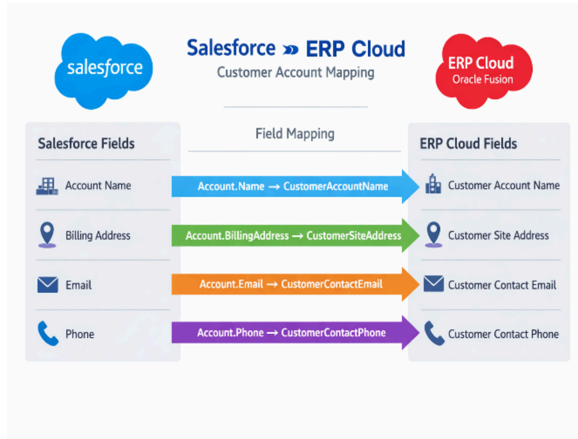
TECHNICAL DESIGN DOCUMENT (TDD)/TECHNICAL SPECIFICATION DOCUMENT(TSD)

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)



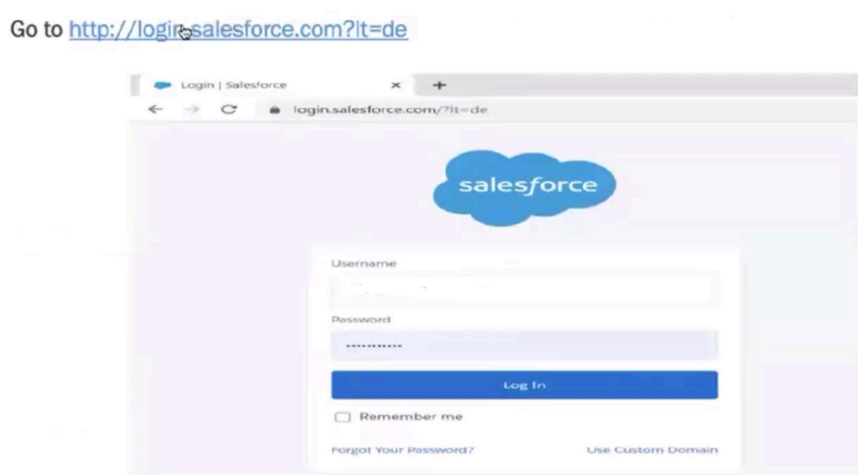


High-Level Flow	
Trigger	Salesforce Adapter listens for Customer Account creation event.
OIC Flow:	
	Receives payload(Request Payload) from Salesforce.
	Performs data mapping & transformation.
	Calls ERP Cloud Adapter.
Target	ERP Cloud creates Customer Account in Fusion FSCM.
Acknowledgement	Success/failure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

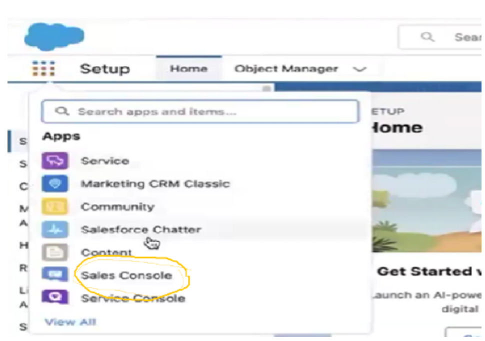
Step-By-Step Guide

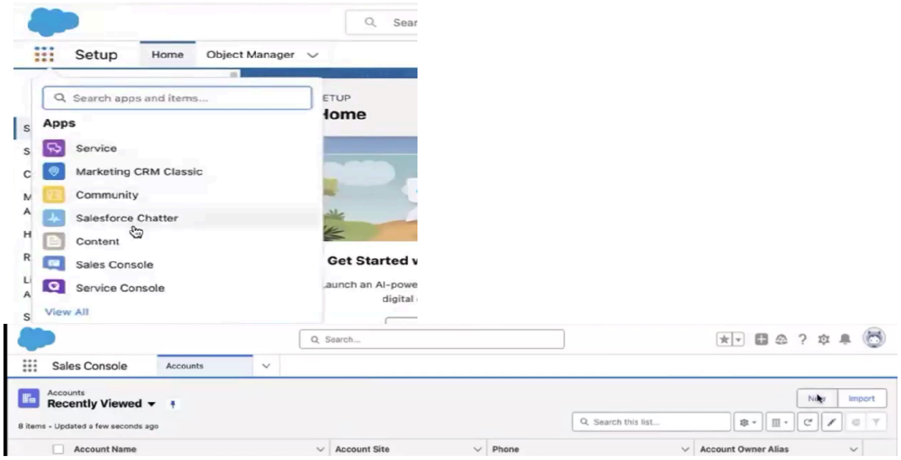
We need to have Salesforce Account. So, visit the web link https://developer.salesforce.com/signup

And then create Salesforce Account.

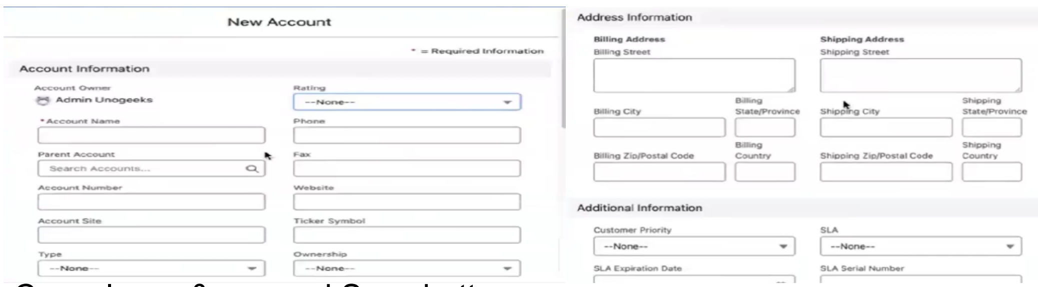


After we log into Salesforce Account, we can see “Sales Console”



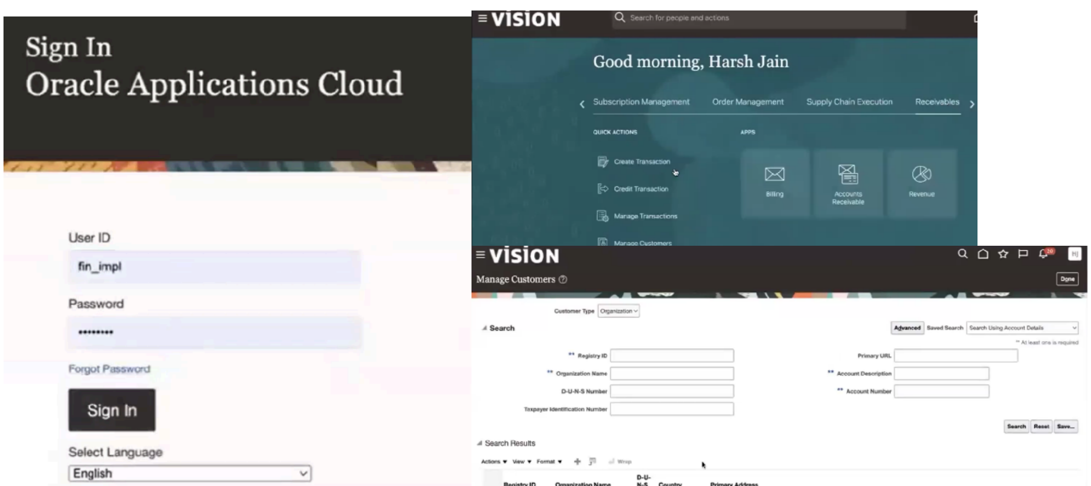


We need to click on New button to create new customer accounts or customer may use this option to create their own accounts in Salesforce.



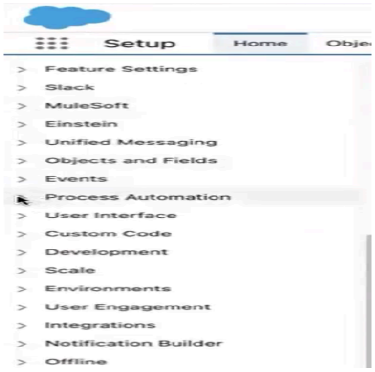
Cancel,save&new and Save button

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

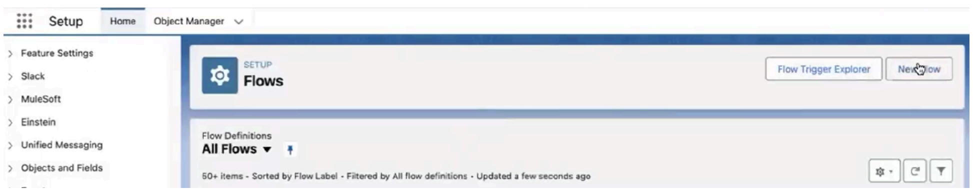


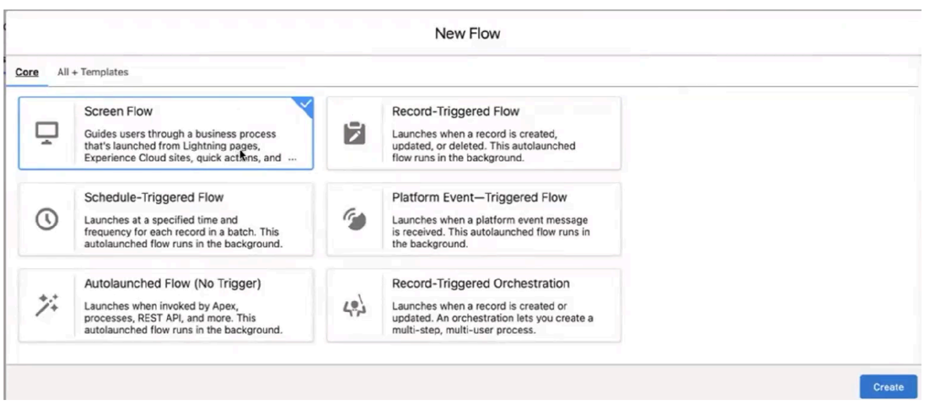
The customer details which are created in Salesforce should has to appear in the above Fusion page. So, we need to implement the logic behind the “Save” button within Salesforce.

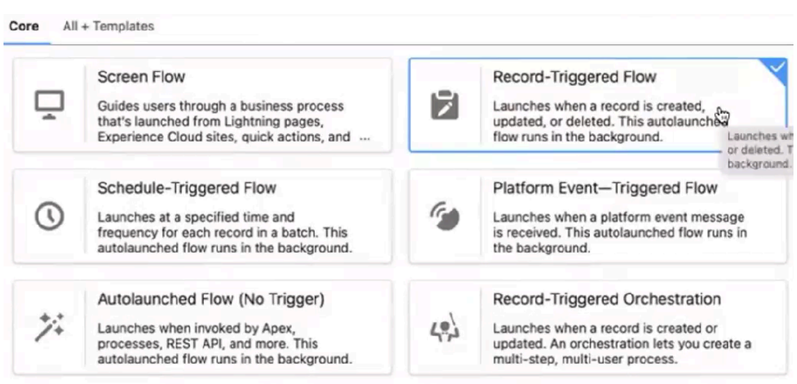
In Salesforce, we need to setup “**process automation”** flow as soon as user click on “Save” button, the following steps need to do:



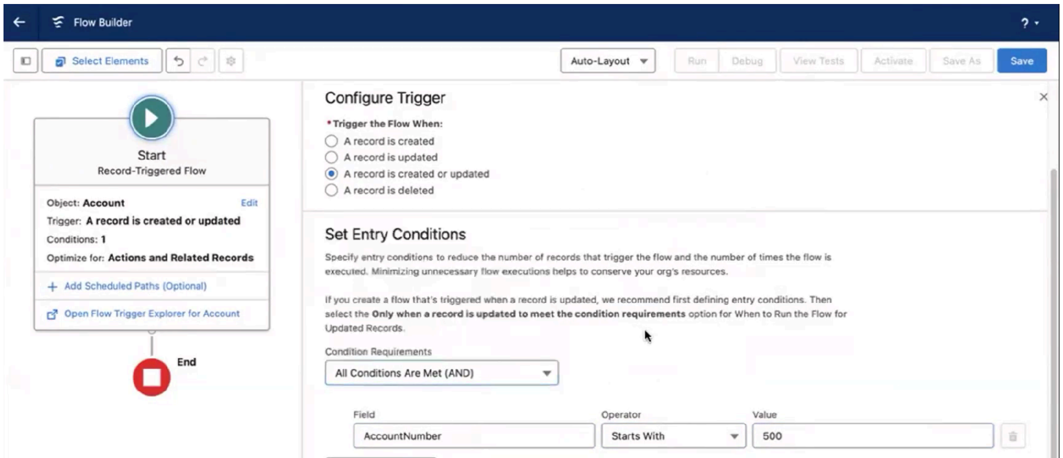
Go to “Process Automation” and click on create a flow.



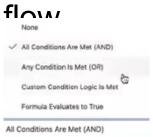




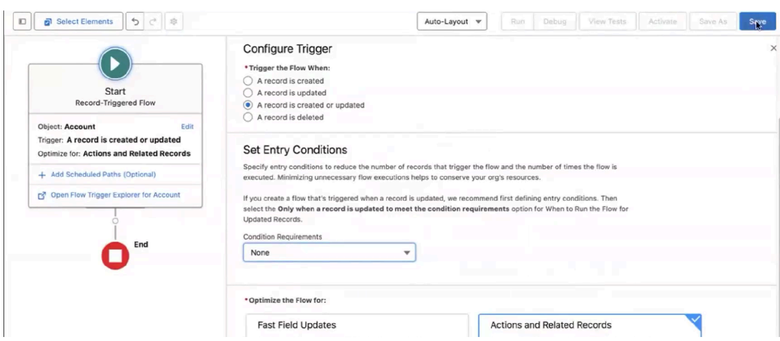
Pick the Record-Triggered Flow and click on “Create” button.



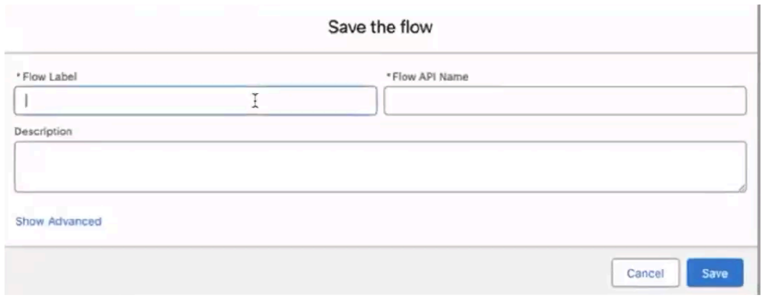
Selected customers can be fetched using logical AND/OR operators within Salesforce flow.



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



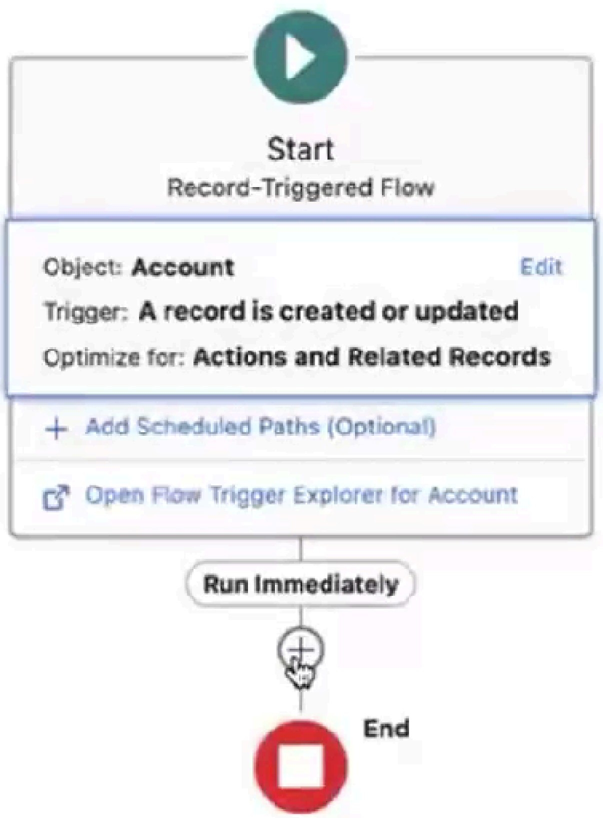
And click on “Save”.



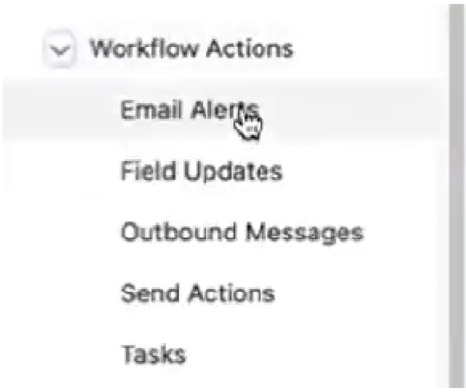
Provide the Flow Label name as: SendAccountToERPFlow

Click on Save.

Within a flow list, we can perform actions



Click on plus symbol

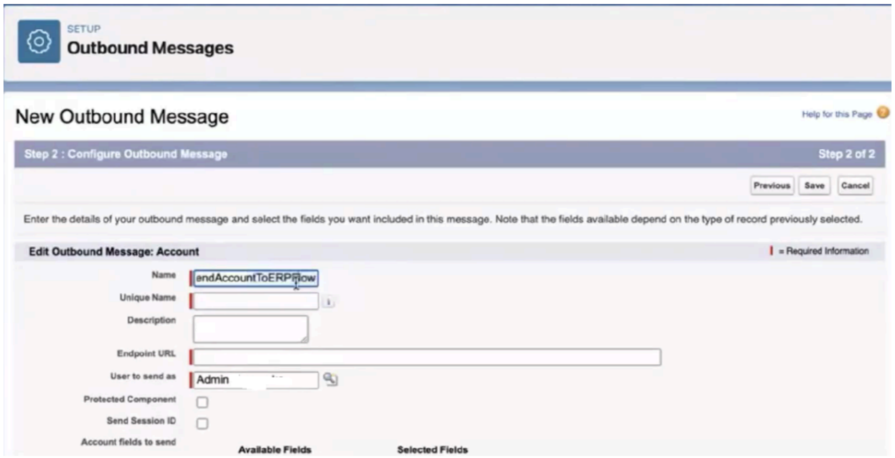


We can perform the above actions.

We need to click on Outbound Messages

New Outbound Messages

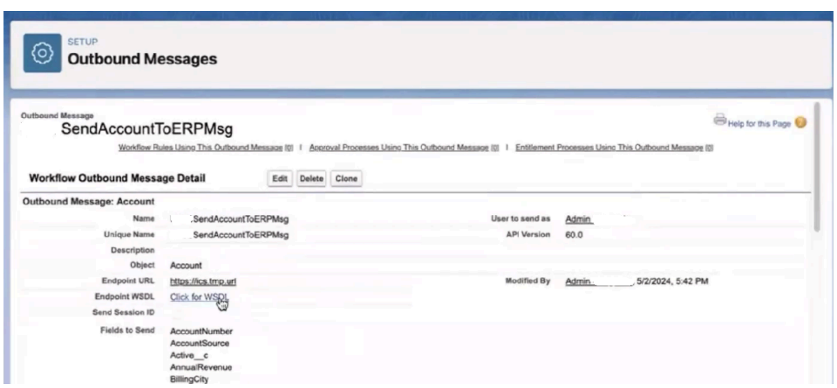
Click on next



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

https://ics.temp.url

Move all the fields to right side by using >



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.

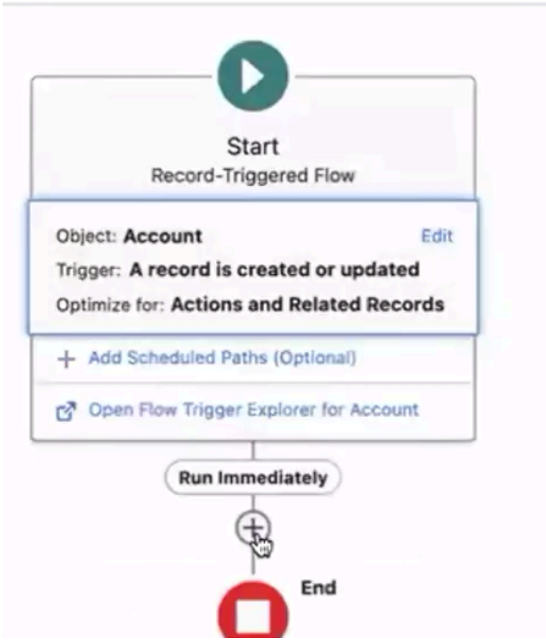
Select from definition tag and closing of it.

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

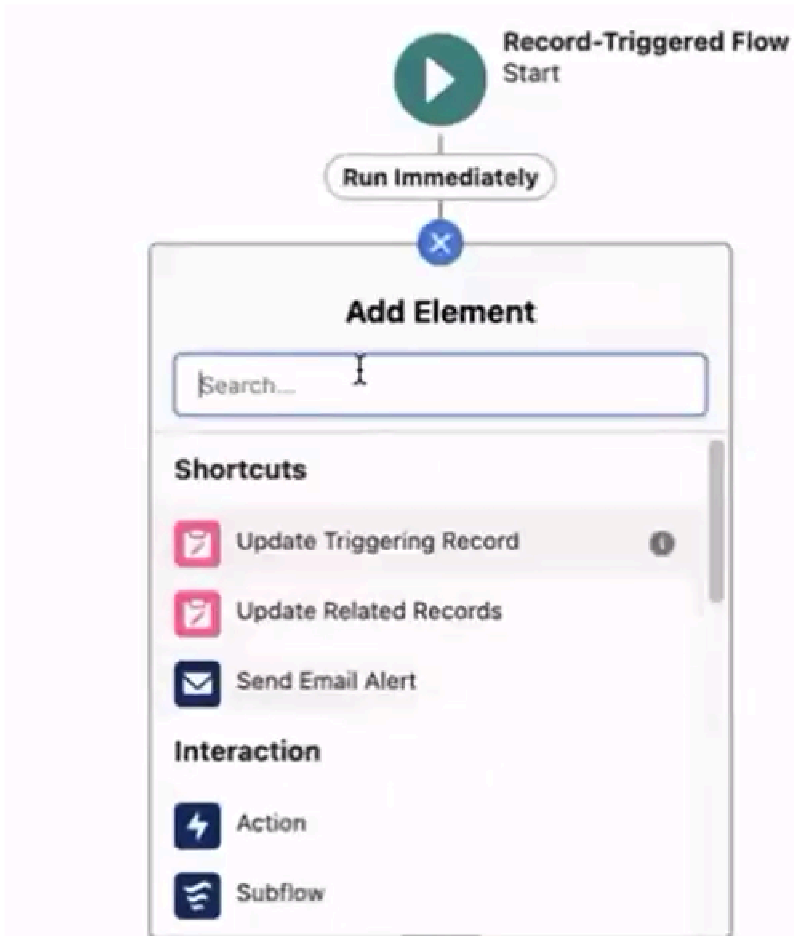
```xml
<!--
Salesforce.com Outbound Notification Web Services API Version 1.0
Generated on 2024-05-03 00:42:31 +0000.

Copyright 2005-2024 Salesforce.com, Inc.
All Rights Reserved
 -->
▼<definitions xmlns="http://schemas.xmlsoap.org/wsdl/" xmlns:soap="http://schemas.xmlsoap.org/wsdl/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:sobject.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:sobject.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>
```

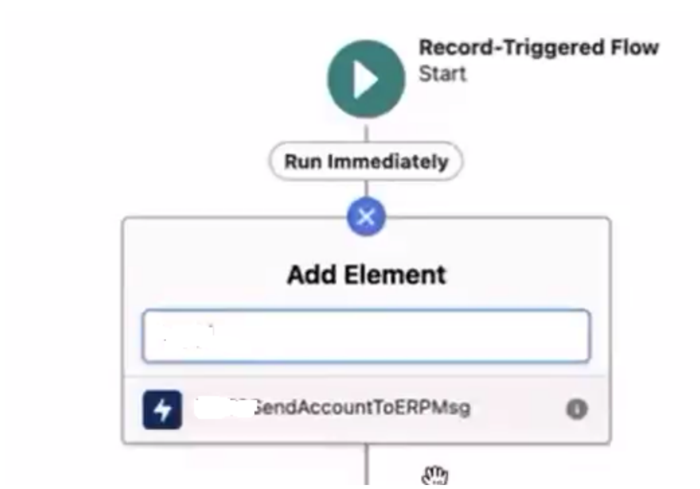
```xml
<part element="tns:notifications" name="request"/>
</message>
<message name="notificationsResponse">
<part element="tns:notificationsResponse" name="response"/>
</message>
<!--  PortType  -->
<portType name="NotificationPort">
<operation name="notifications">
<documentation>Process a number of 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>
```

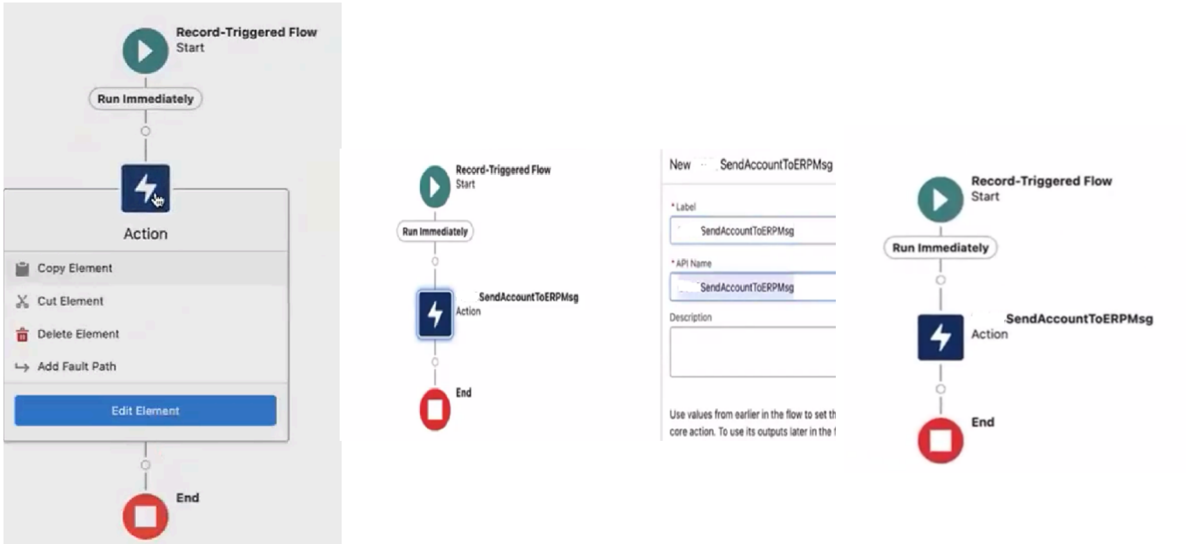


Click on “+” and search for the Flow Label Name here.



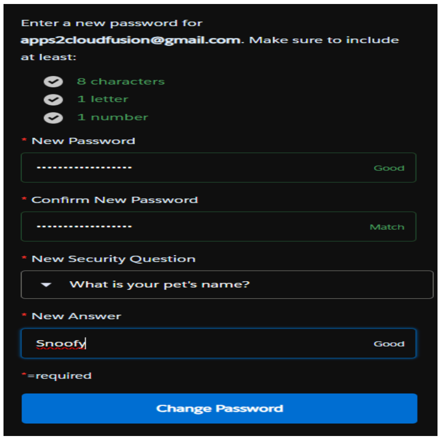
Come out of the page and reload the flow list to see the flow name.



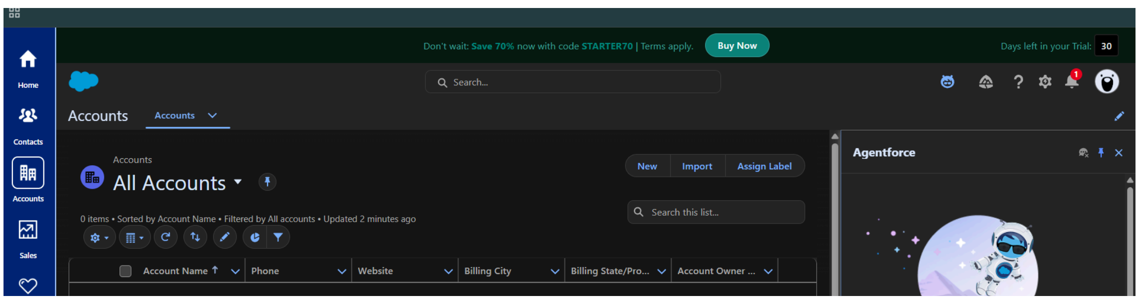


Complete the above flow diagram within Salesforce Process Automation.

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



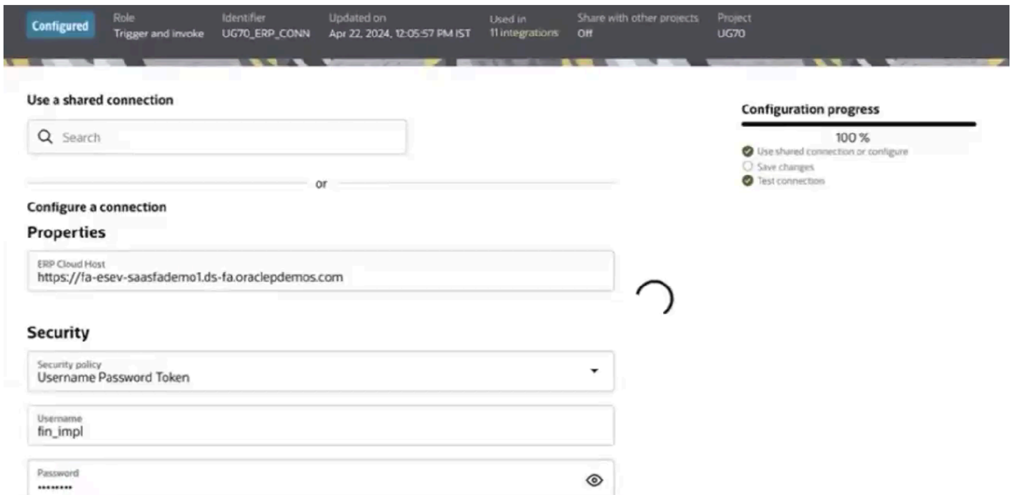
New Salesforce Account interface appears as below



Target: Oracle Fusion Financials App.

Adapter: Oracle ERP Cloud

ERP Connection confirmation sample pic:



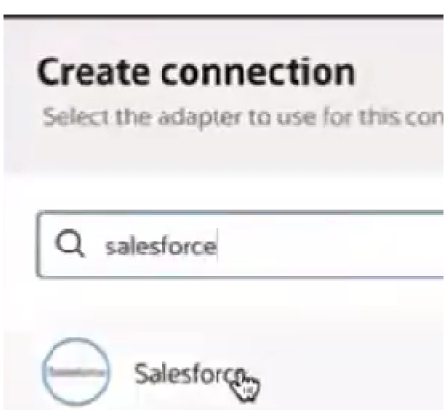
Source: Salesforce(Third-Party Cloud App)

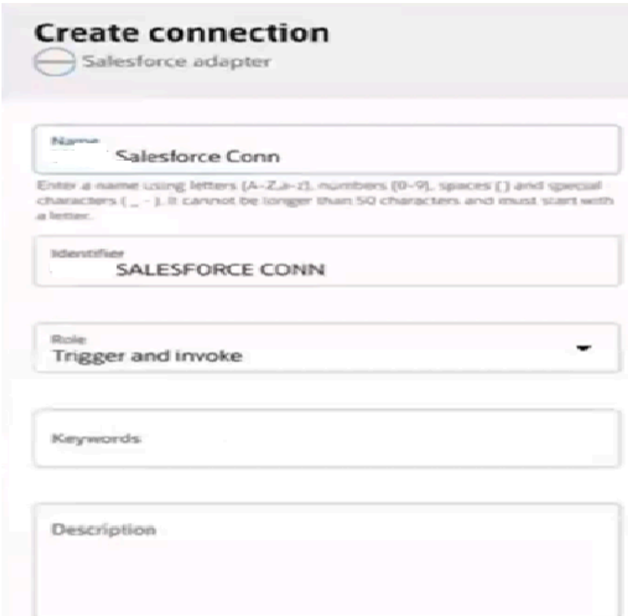
Adapter Name: Salesforce

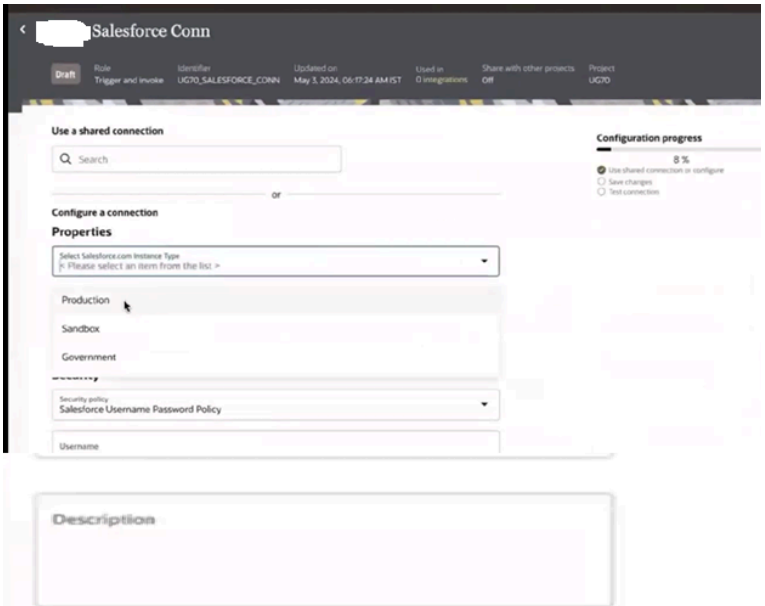
Role: Trigger and Invoke

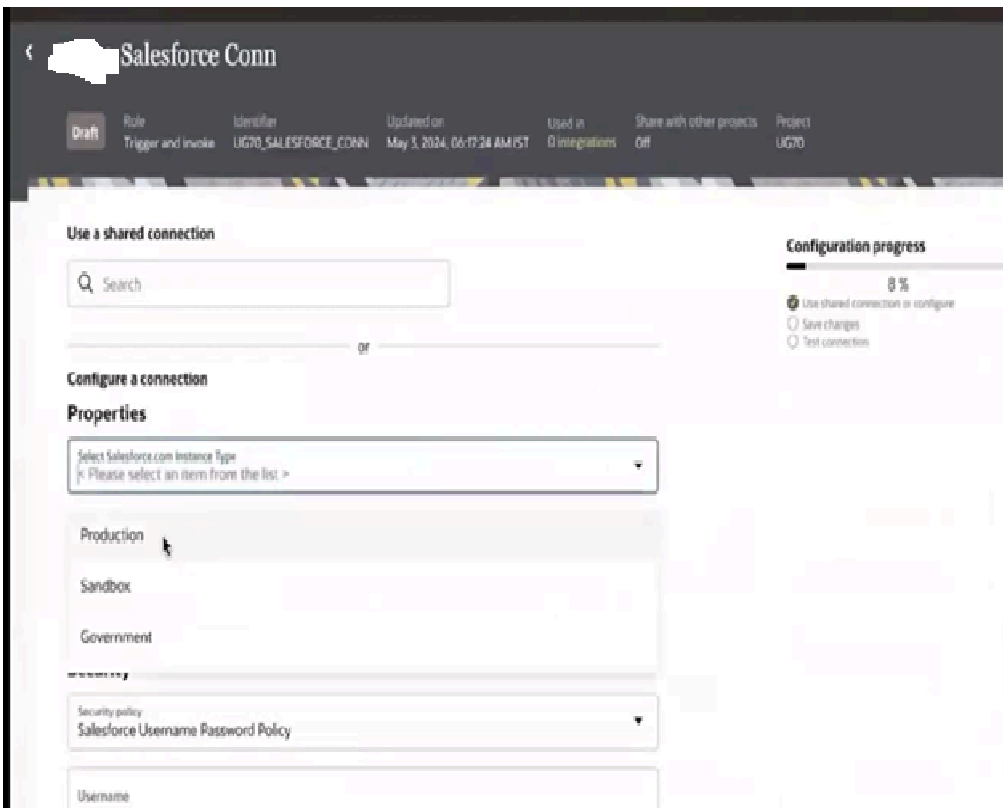
Production: 49

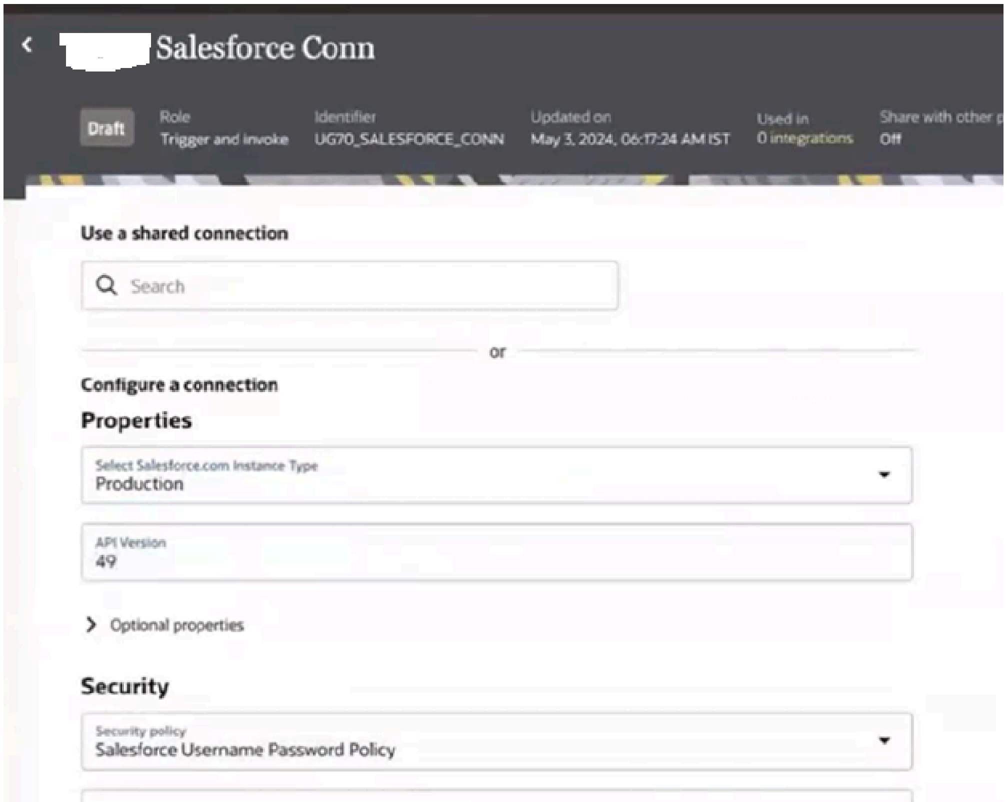
Auth: Username and Salesfroce password+Security Token




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
UG70_SALESFORCE_CONN
Updated on
May 3, 2024, 06:17:24 AM IST
Used in
0 integrations
Share with other projects
Off
Project
UG70
Use a shared connection
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
UG70_SALESFORCE_CONN
Updated on
May 3, 2024, 06:17:24 AM IST
Used in
0 integrations
Share with other projects
Off
Project
UG70
Use a shared connection
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



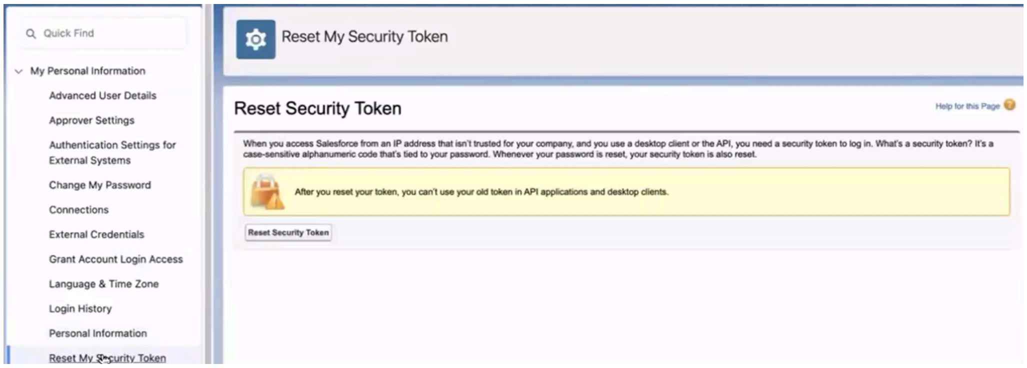
Security Key is valid for one region or per IP address.

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

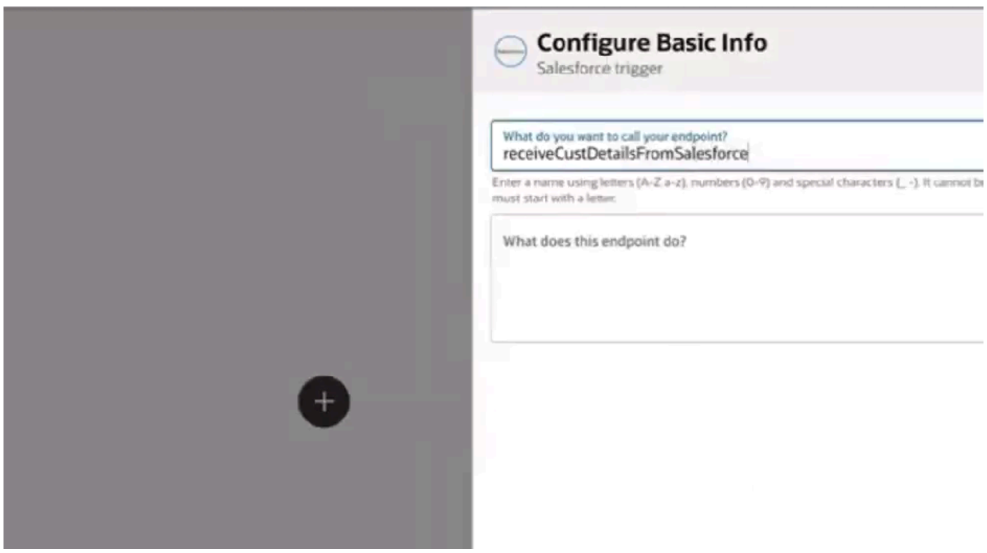
OIC connection for Salesforce: welcome@123Dfd212adfsafdsafdd

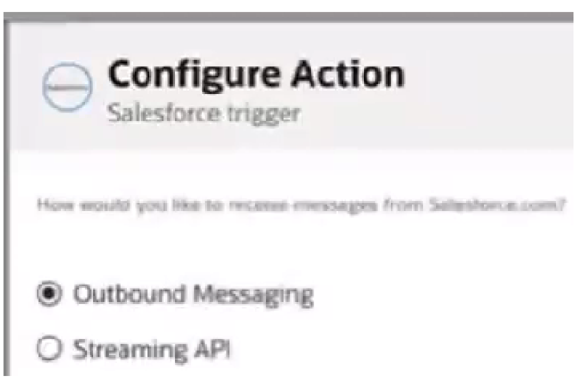
This will be changed automatically based on the region's IP address.

Now, try to build the integration

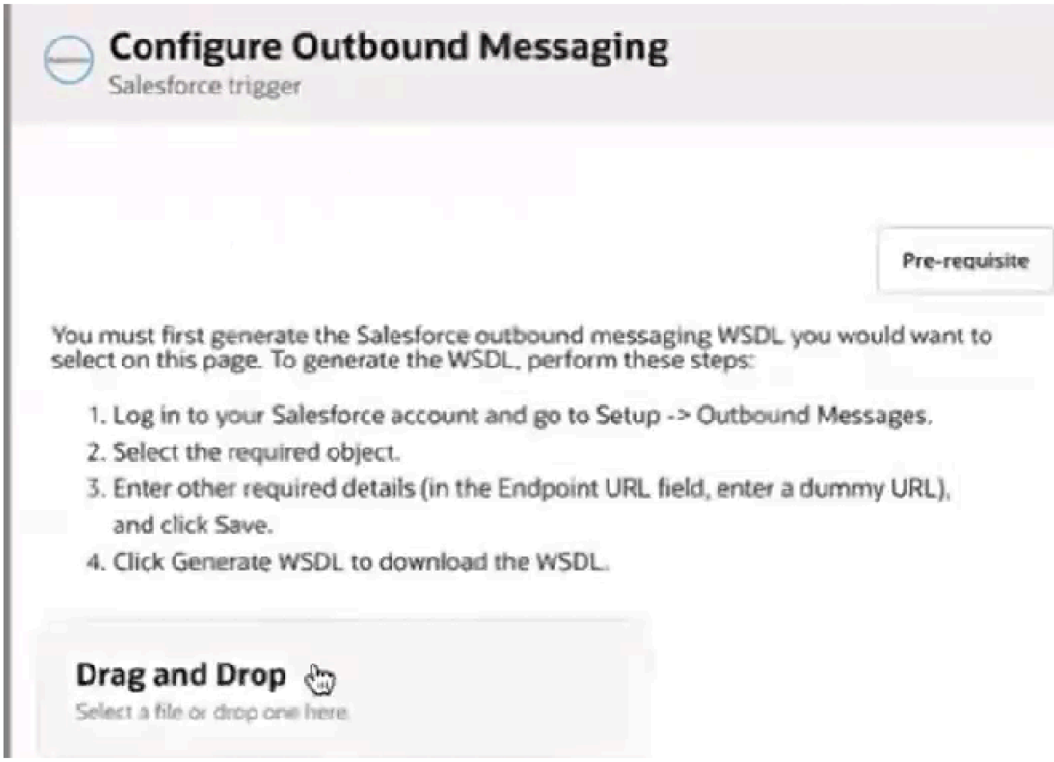
Go to the Design screen, Integration, and click on Create

Use the first node as Salesforce connection

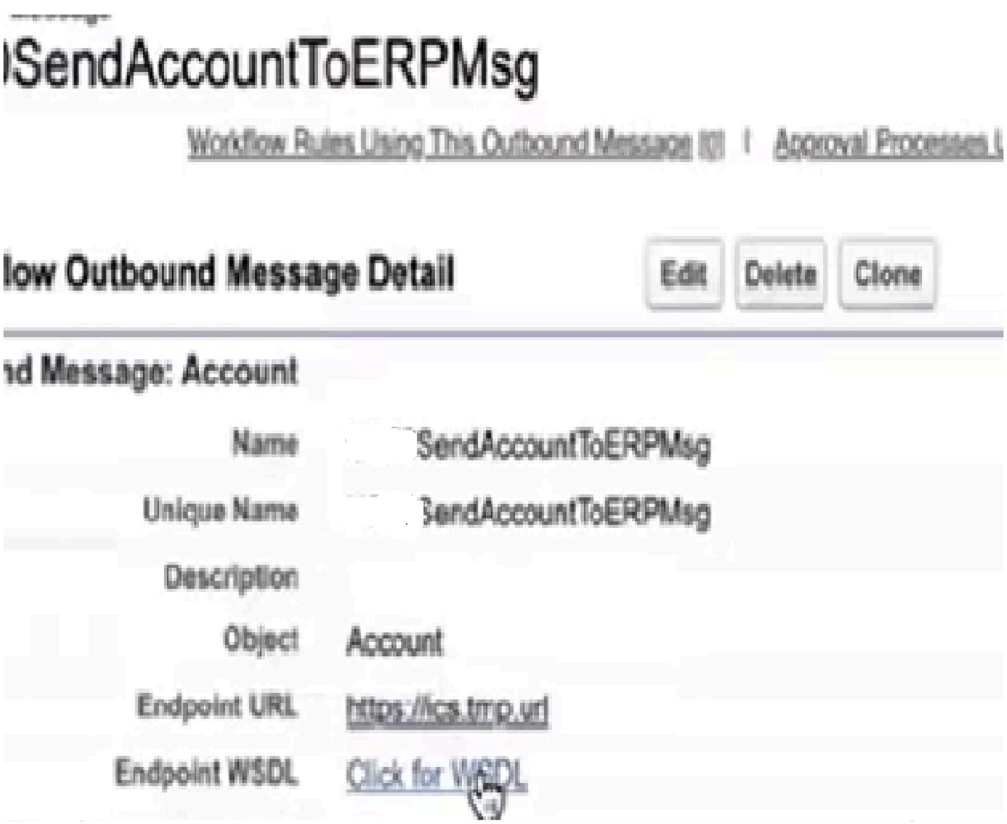


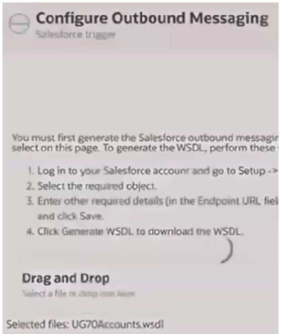


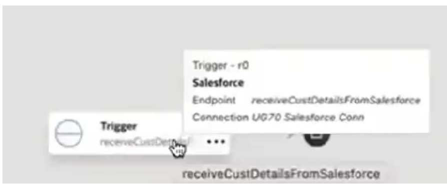
Select outbound messaging



Upload the WSDL file which we prepared



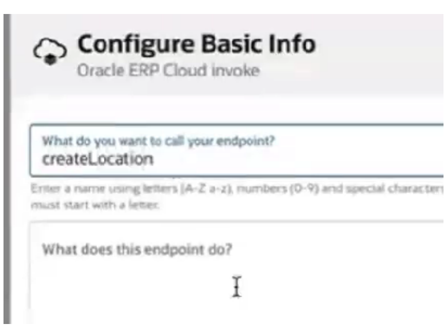




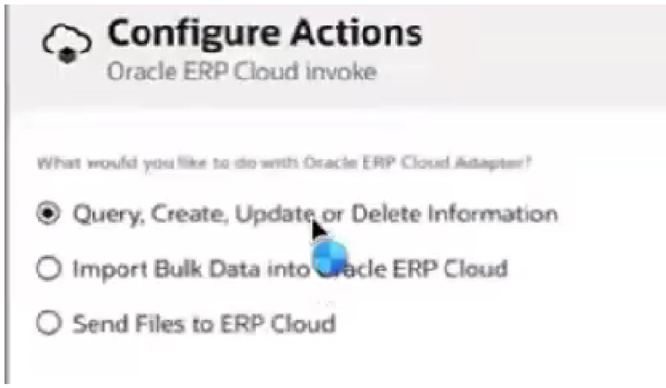
How to create a customer in ERP cloud?

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

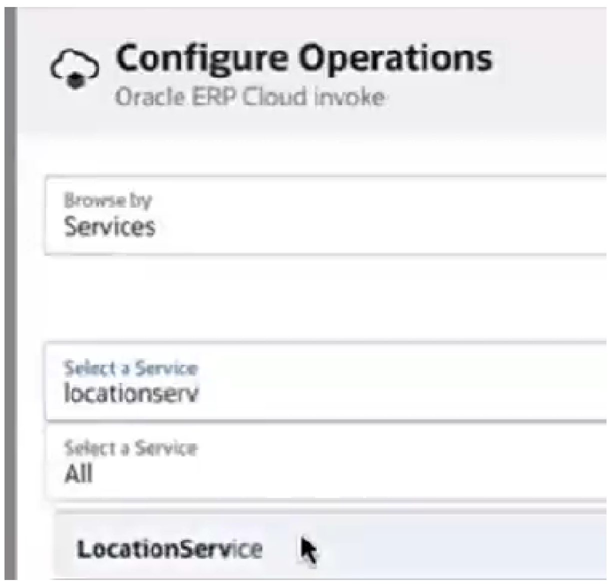
1. Create a Location by using “Process Location”(Create or Update actions)
   LocationId will be returned with the above action
2. Create Organization by using “Process Organization”(Create or Update actions)
   Pass LocationId from above web service call as input to this one. PartyId and PartySiteId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

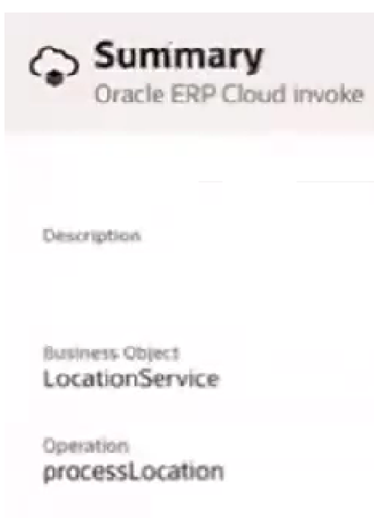


Click on continue

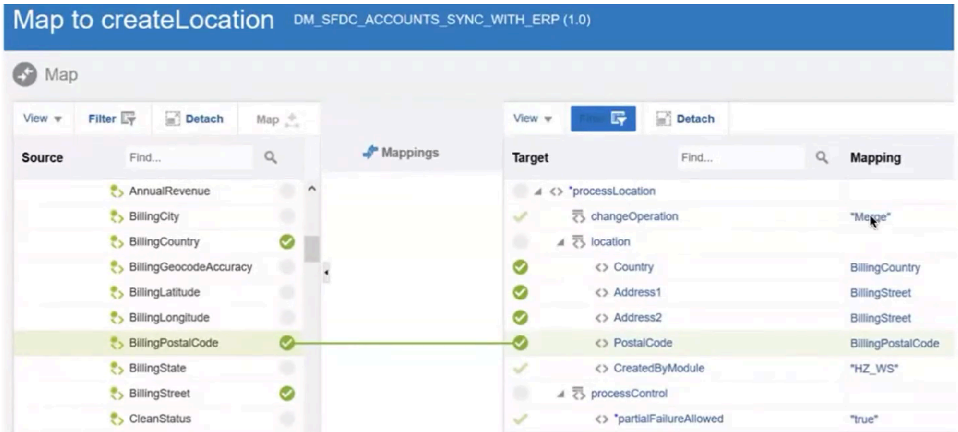


Click on continue





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

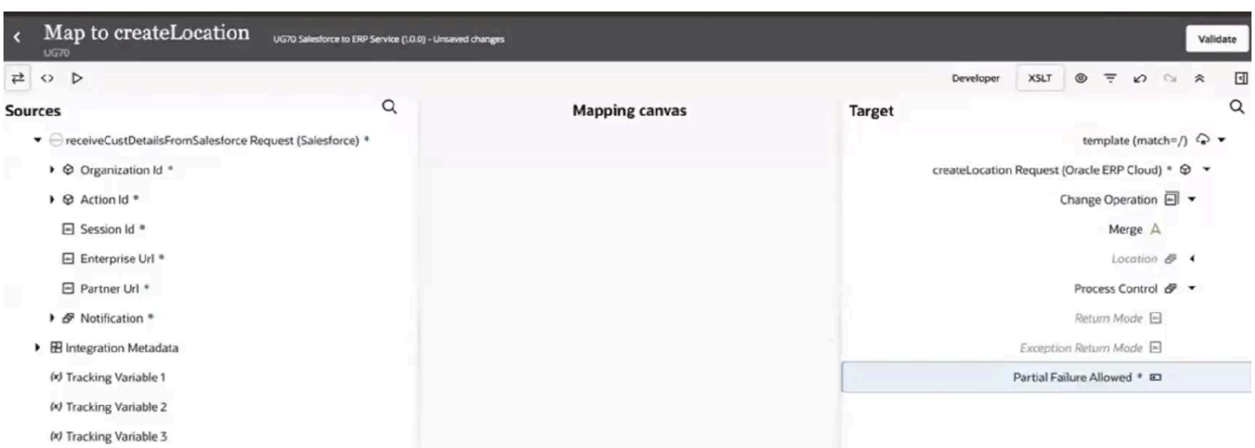
Change operation: Merge

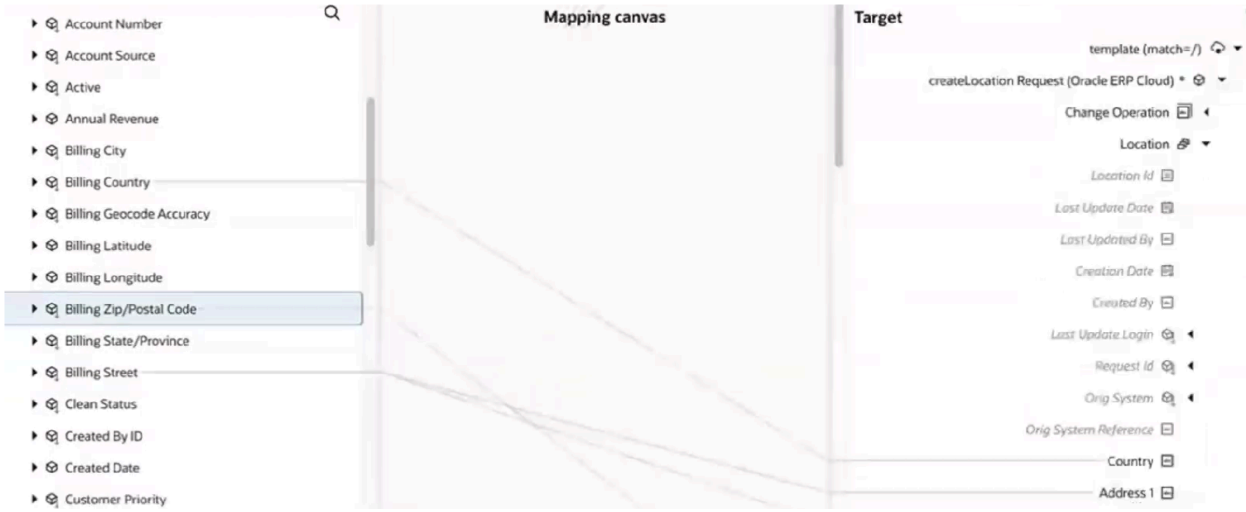
Partial Failure allowed: True

Process Location: Merge

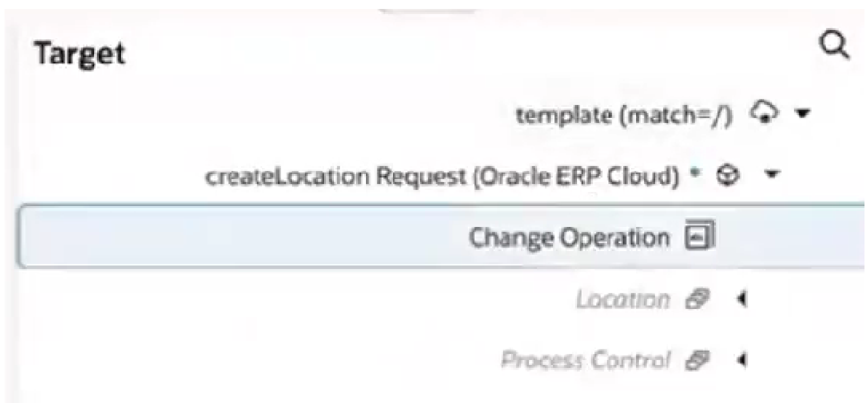
Means, if the location is exists then it will update otherwise it will create.

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





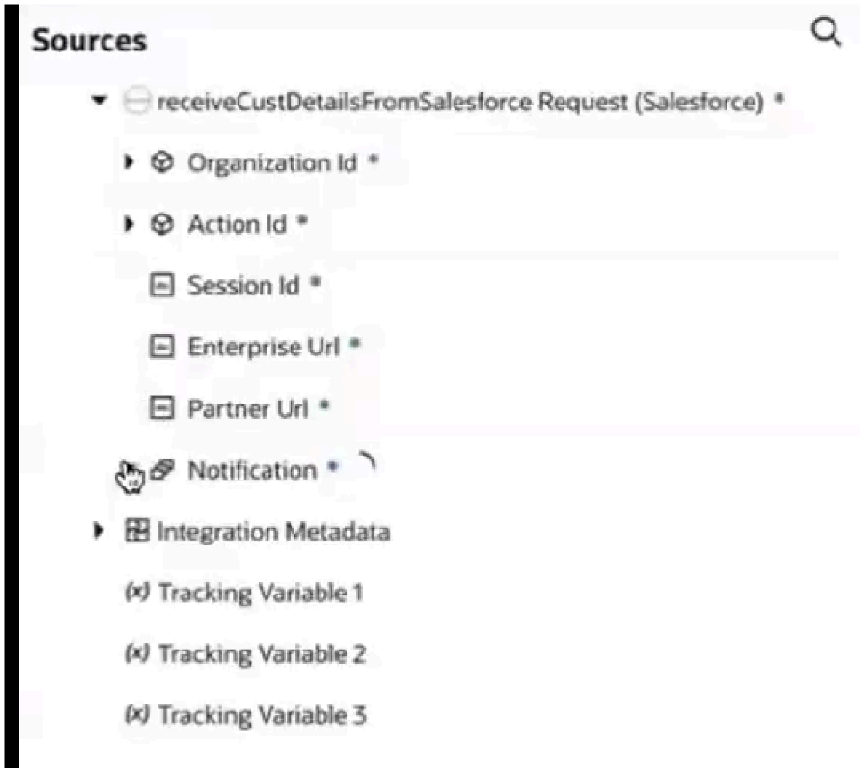
Under Target:



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

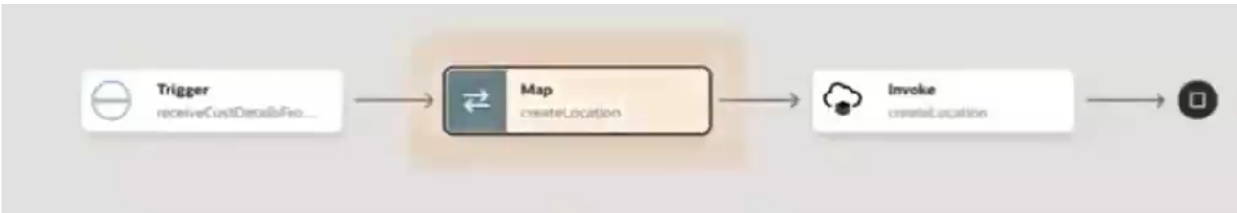
Billing zip/postal code to postal code

Billing street to address1 and address2

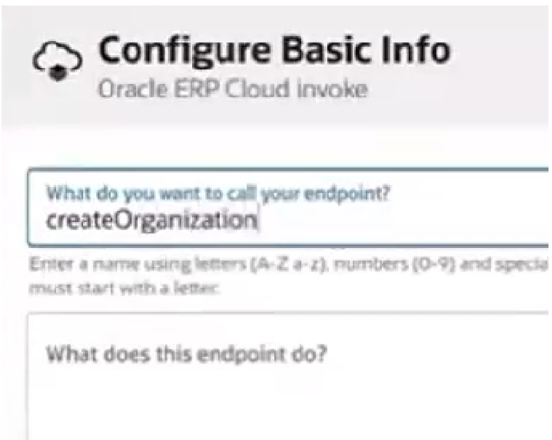
Creaed by Module: Hz_WS

Validate it

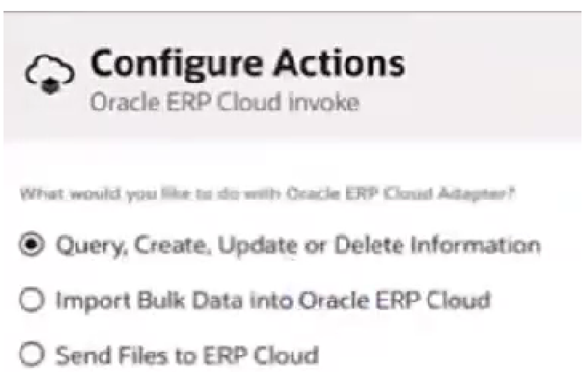
Billing country to country

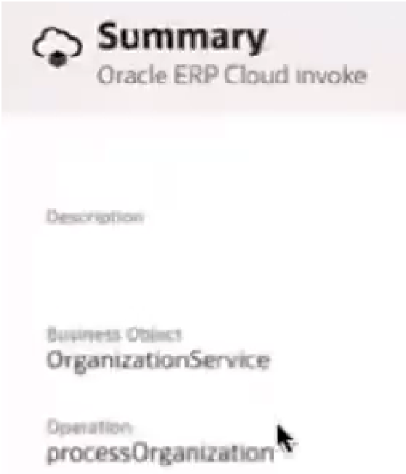


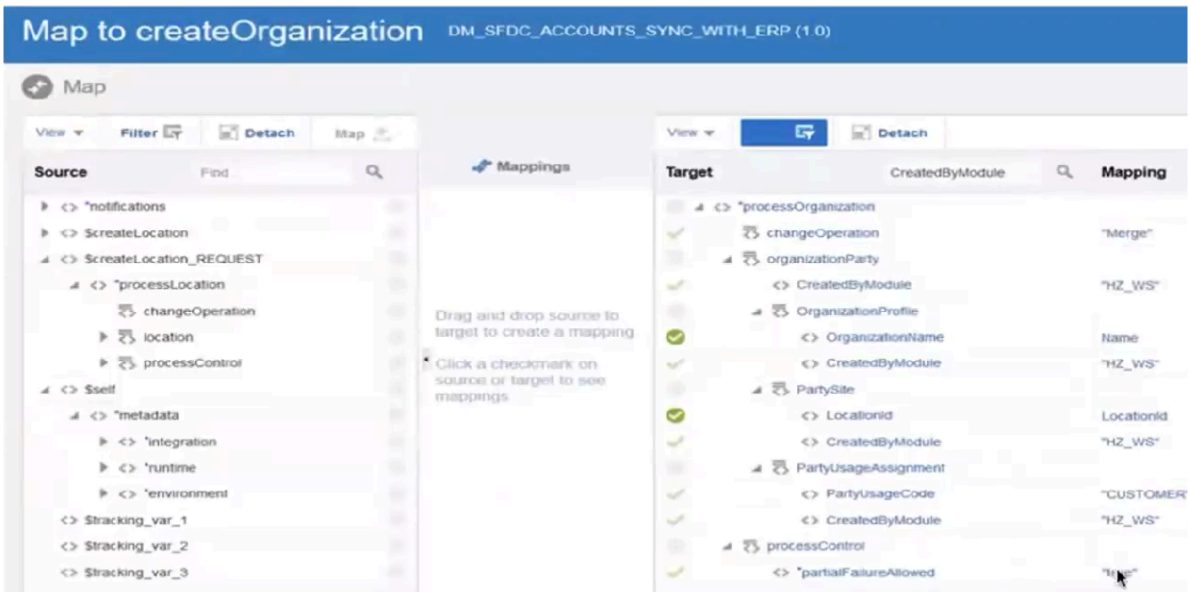
After location is created, we need to create Party and Party Site



Continue







Change Operation: Merge

Partial Failure Allowed: TRUE

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

Part SiteWe will pass location ID and created by: hz_ws

PartyUsageAssignment

UsageCode: Customer

Created by module: HZ_WS

We need to:

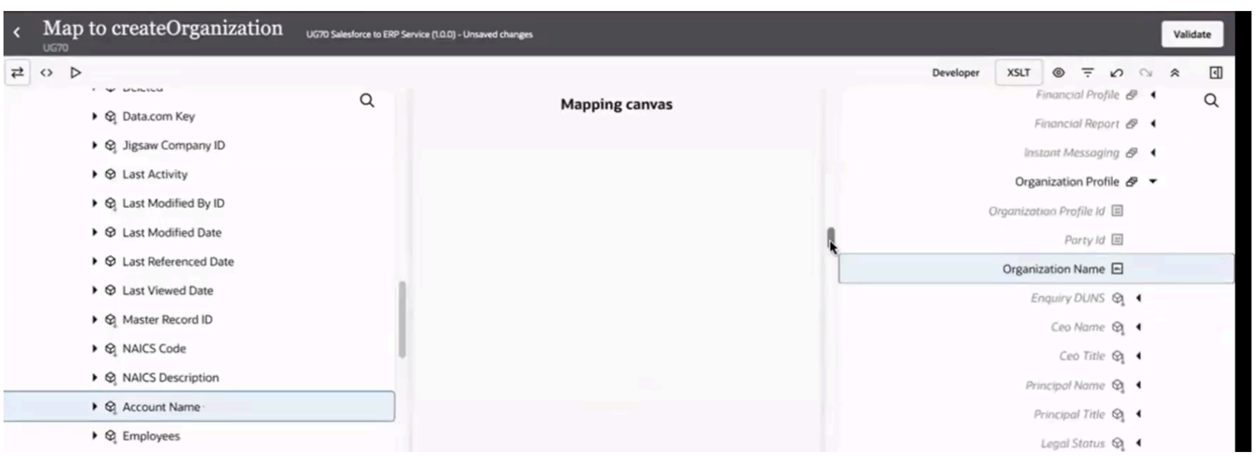
Change Operation: Merge

Partial Failure Allowed: TRUE

Organization Party repeating element and expand it

Created by module: Hz_ws

Expand Organization Profile repeating element

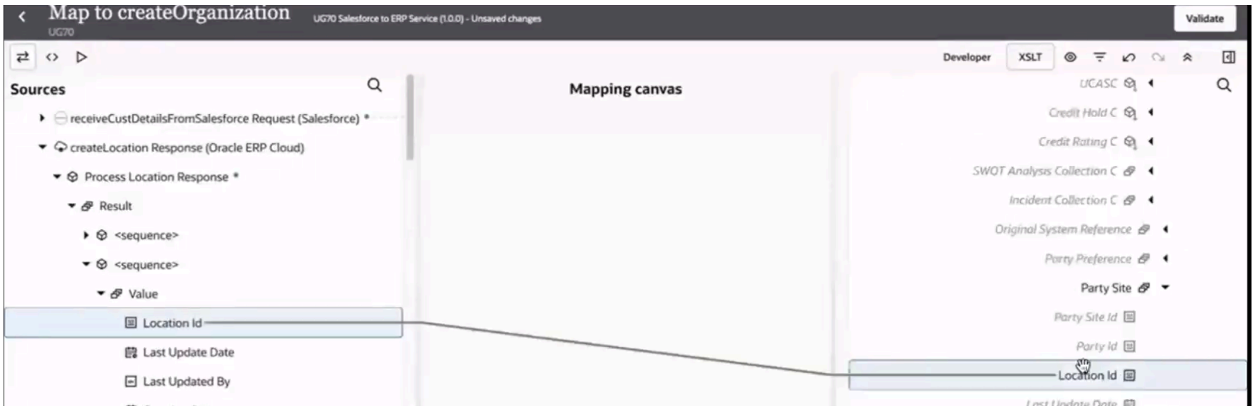


Account□sequence from left side

Account name to org name

Created by module: HZ_WS

Expan value

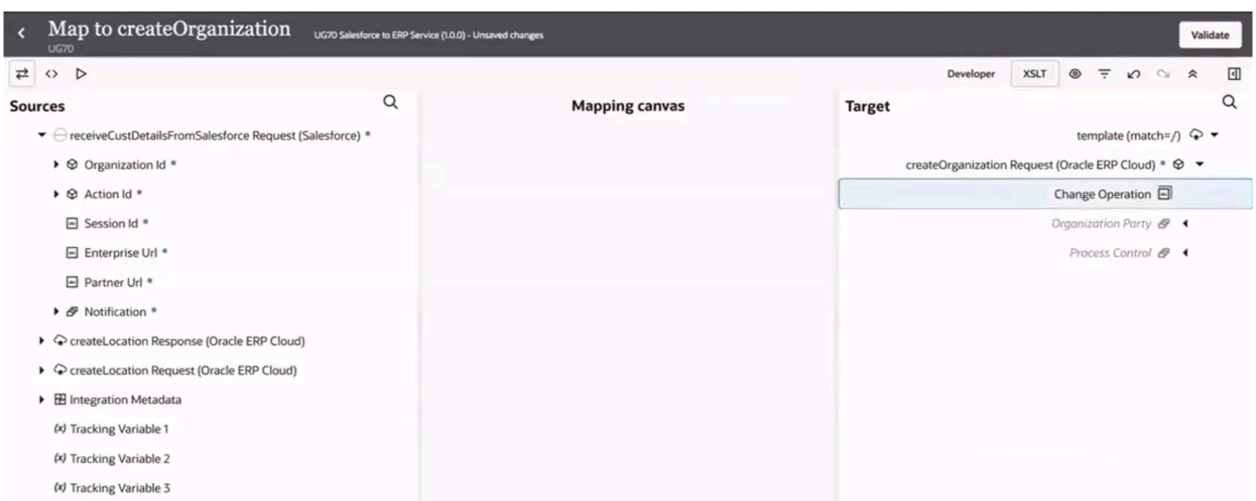


And then hard coded value: Hz_ws

Party site is the repeating element

Party Usage Code: Customer

Created by module: Hz_ws



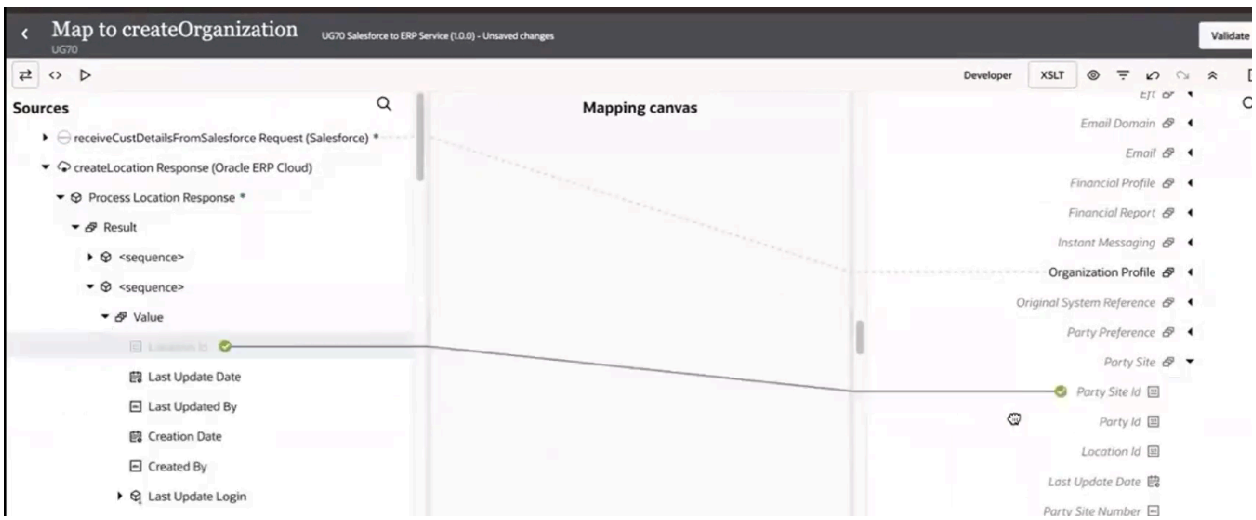
Change Operation: Merge

Partial Failure Allowed; True

Created by Module: Hz_WS

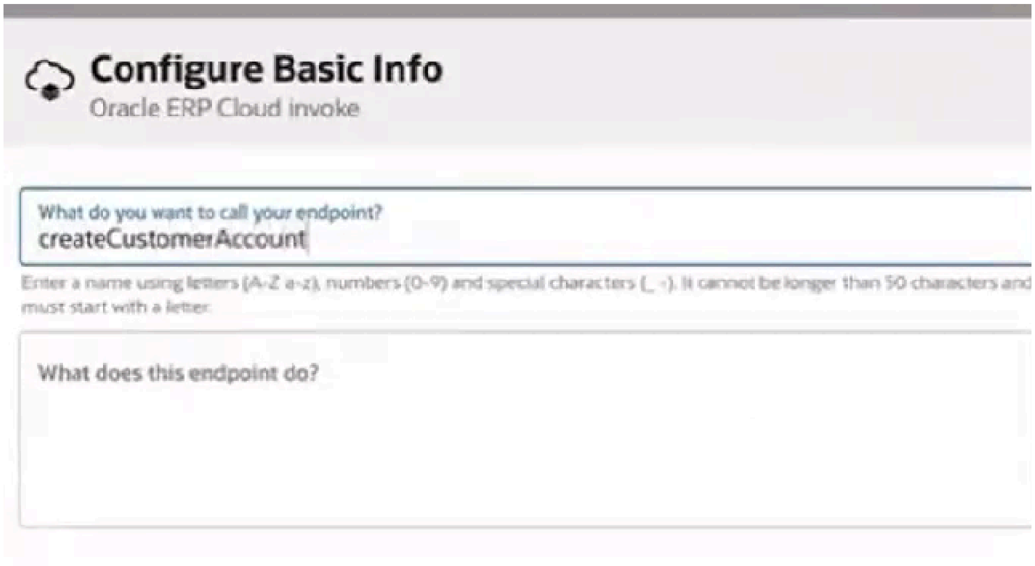
Organization Profile is the repeating group

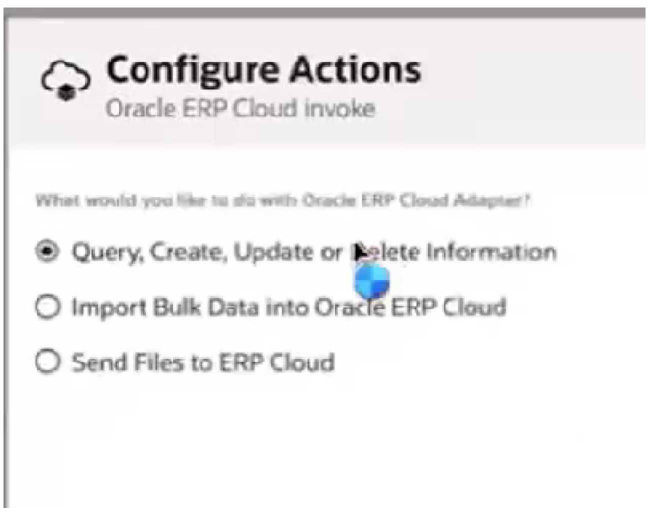
Location Id to party site id



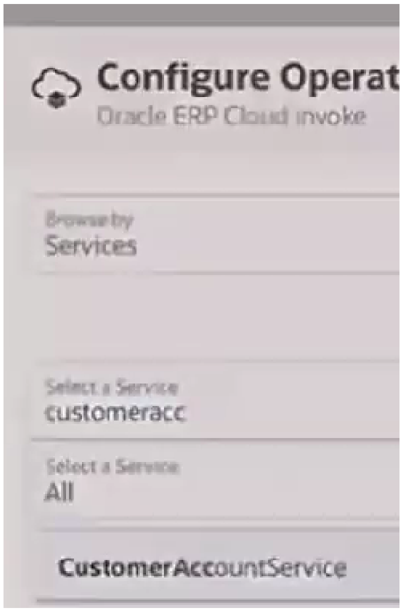
Party side usage code: Customer

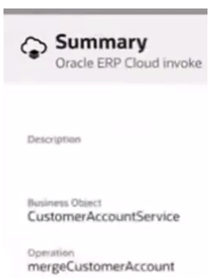
The last one is to create customer account service.

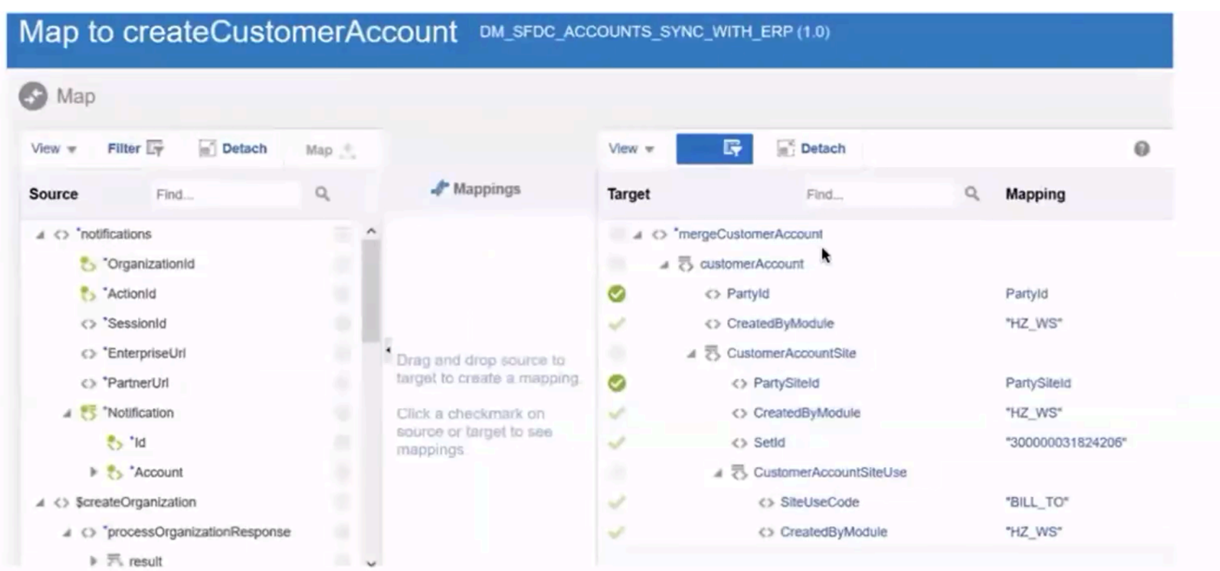




Click on continue

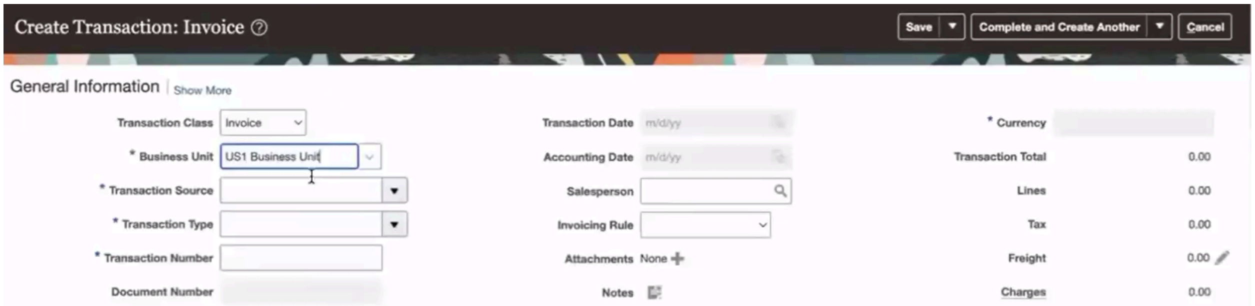






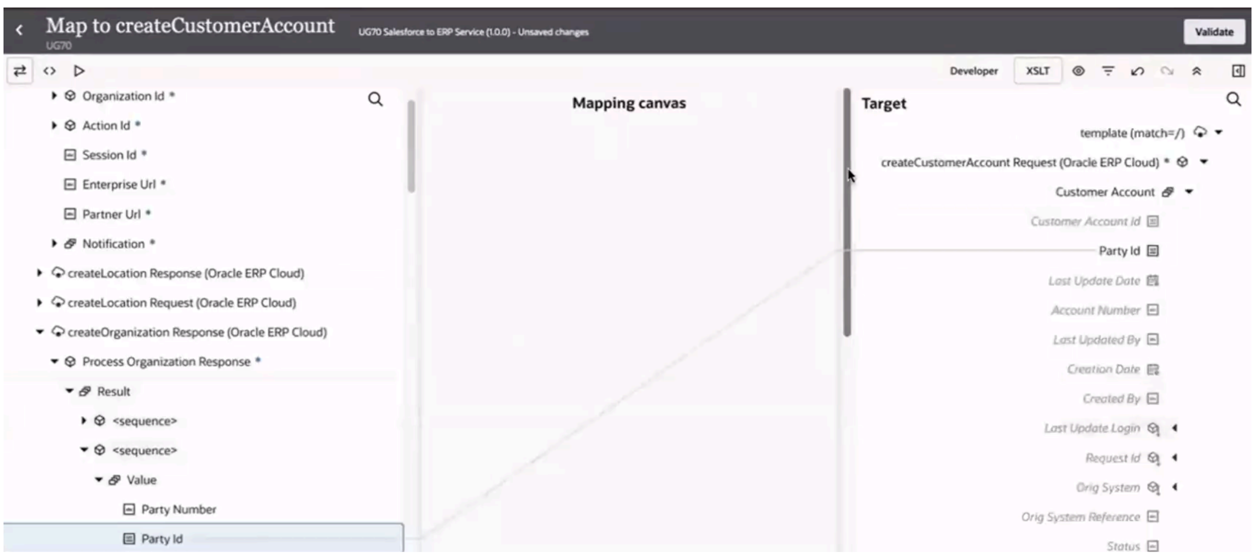
Set Code: Using this, we can decide which BU customers you need to create Invoice

We need to provide Set ID for BU for example US1 BU.



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, expan customer account site(repeating element)

Expand party site(left)

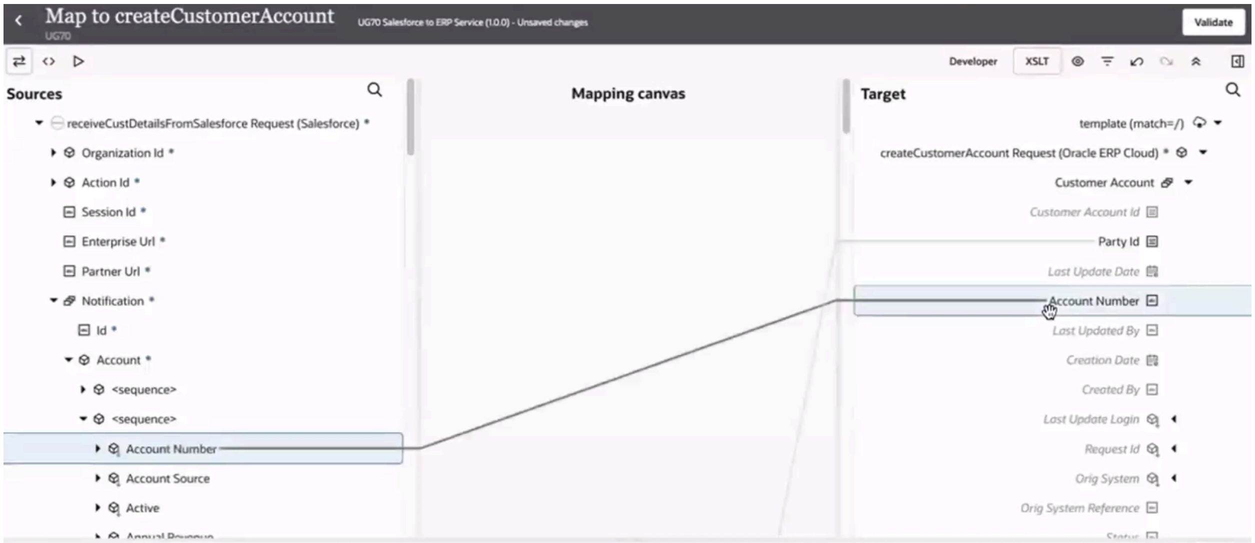
Party set Id to Party Set Id

Created by module: Hz_WS

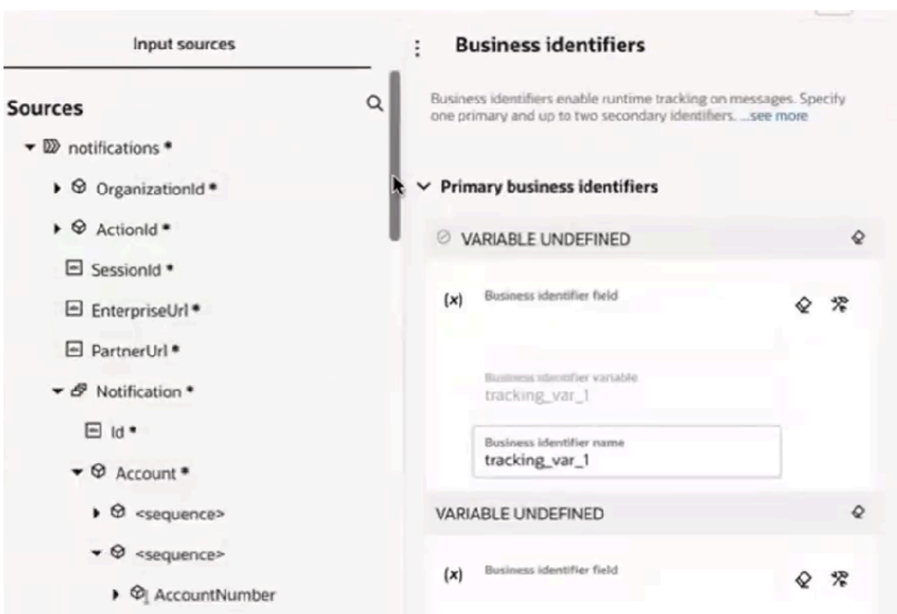
Right side: SetID= hard code the US1 BU Id

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.

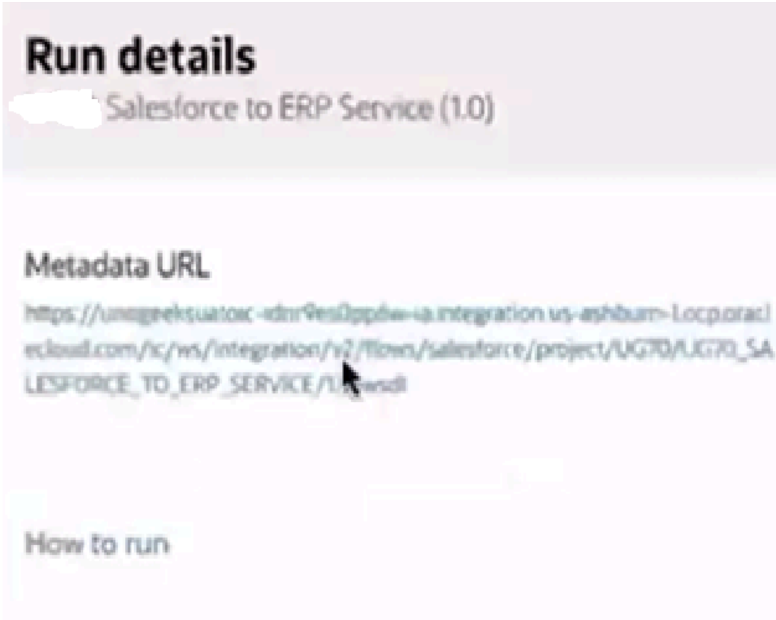


Activate the Integration and choose Run Details to see endpoint url which we need to put in Salesforce.

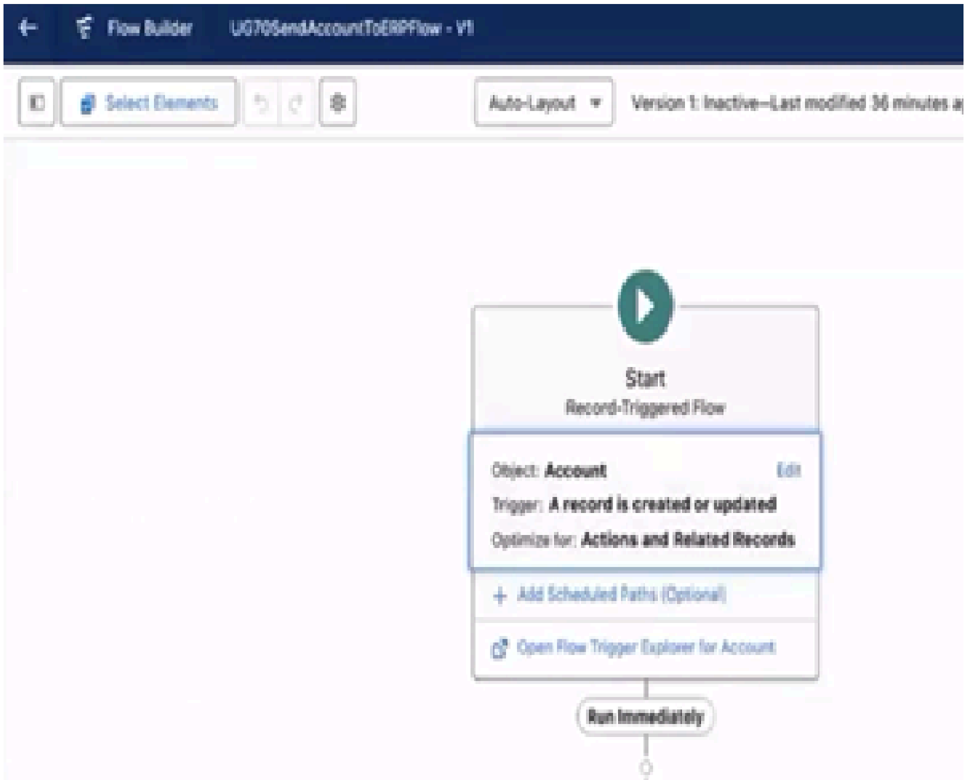


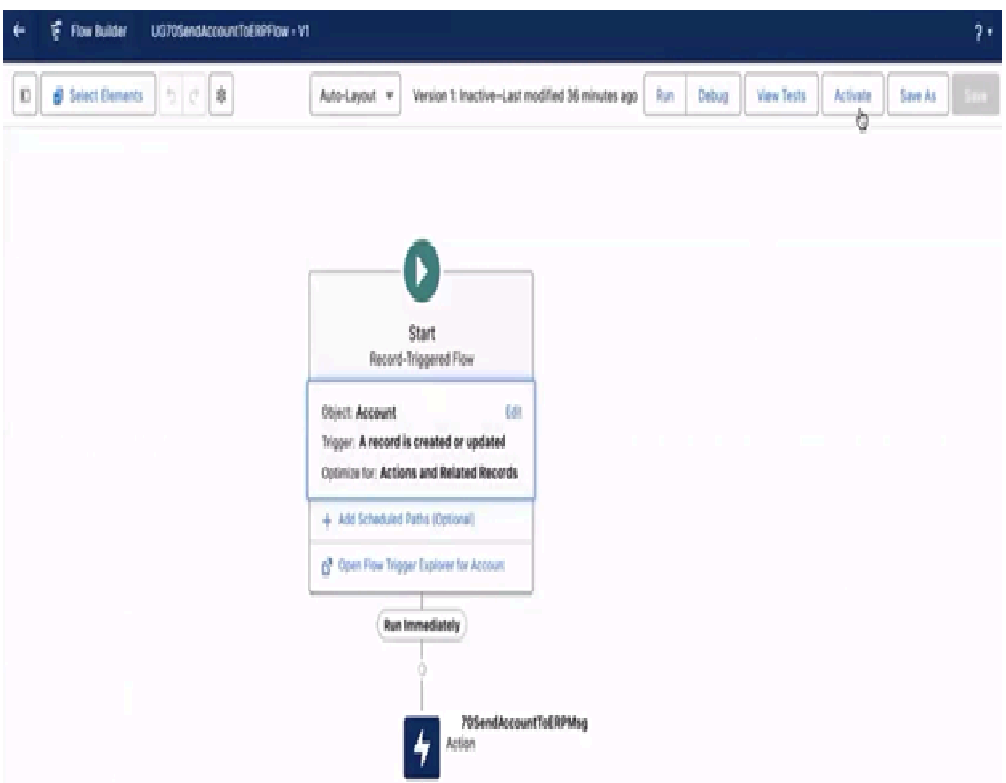
Under Account, take Name as Business Identifier

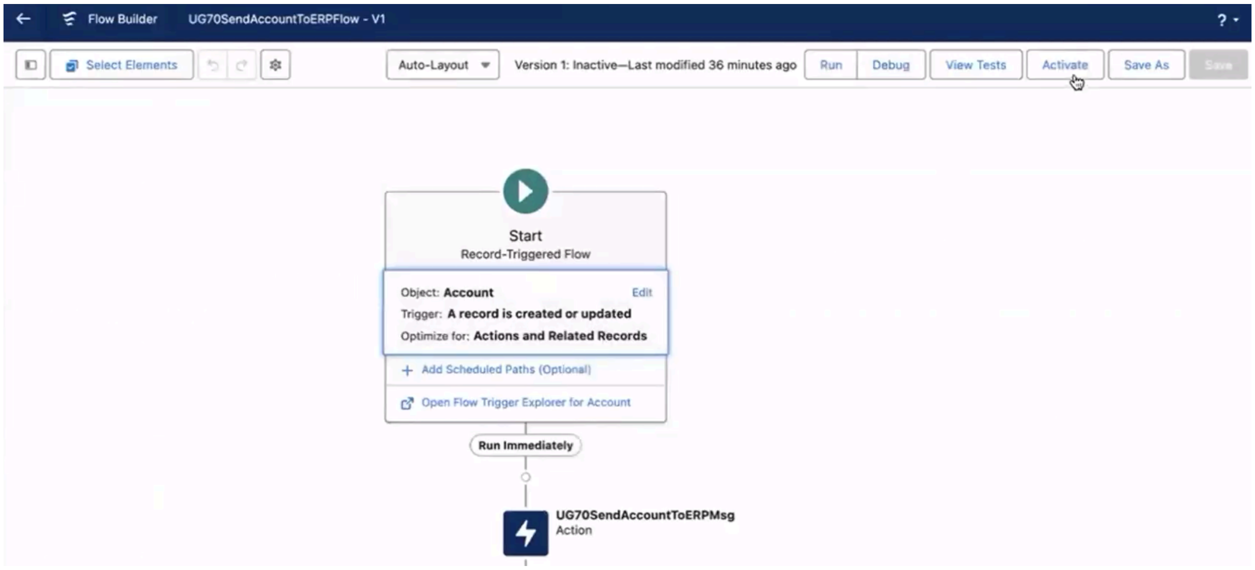
Activate the Integration and run it in debug mode

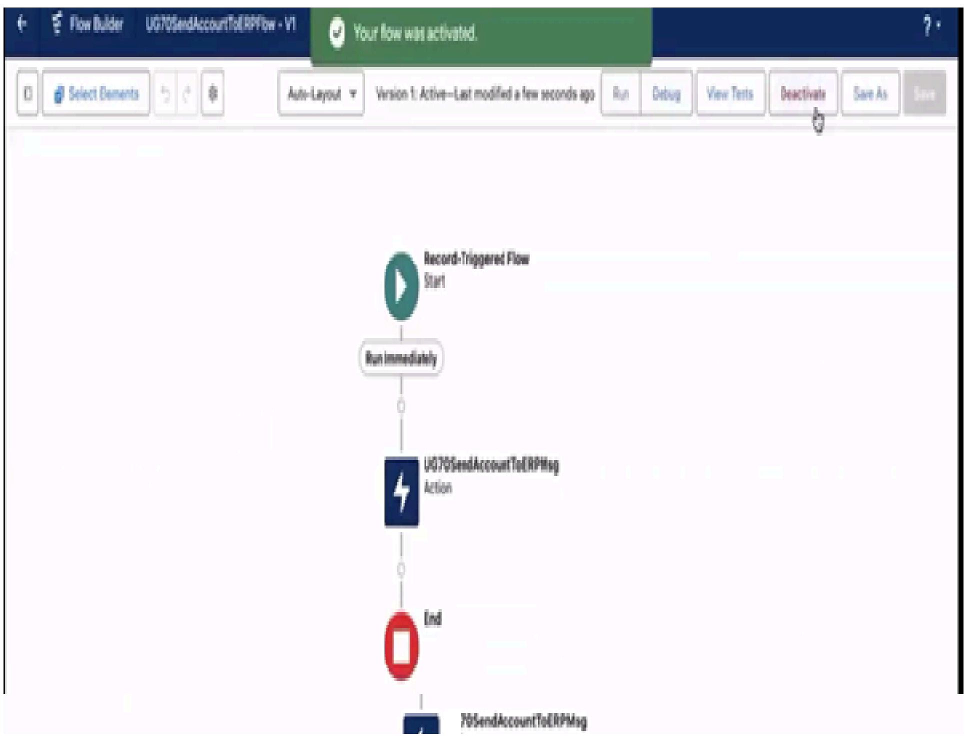


Enter the above WSDL in Salesforce under Endpoint URL:


Flow Builder
UG70SendAccountToERPFlow - V1
Select Elements
Auto-Layout
Version 1: Inactive—Last modified 36 minutes a
Start
Record-Triggered Flow
Object: Account
Edit
Trigger: A record is created or updated
Optimize for: Actions and Related Records
Add Scheduled Paths (Optional)
Open Flow Trigger Explorer for Account
Run Immediately


Flow Builder
UG70SendAccountToERPFlow - V1
Select Elements
Auto-Layout
Version 1: Inactive—Last modified 36 minutes ago
Run
Debug
View Tests
Activate
Save As
Start
Record-Triggered Flow
Object: Account
Edit
Trigger: A record is created or updated
Optimize for: Actions and Related Records
Add Scheduled Paths (Optional)
Run Immediately
70SendAccountToERPMsg
Action





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

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.