SAP S/4HANA Integration with Salesforce Configuration Guide

For SAP Cloud Platform Integration

Version 1.0 – December 2020

Contents

1 Introduction

This is the official guide for the configuration of SAP S/4HANA Integration with Salesforce for SAP Cloud Platform Integration (SAP CPI). This guide covers relevant information for integration developers to configure and deploy the Integration content.

Read this guide carefully before configuring the integration content.

1.1 Coding Samples

Any software coding and/or code lines/strings ("Code") included in this documentation are only examples and are not intended to be used in a productive system environment. The Code is only intended to better explain and visualize the syntax and phrasing rules of certain coding. We do not warrant the correctness and completeness of the Code given herein.

1.2 Internet Hyperlinks

The documentation may contain hyperlinks to the Internet. These hyperlinks are intended to serve as a hint about where to find related information. We do not warrant the availability and the correctness of this related information or the ability of this information to serve a particular purpose.

2 Business Scenario

SAP S/4HANA is the ERP business suite based on the SAP HANA in-memory database. It is an on-premise based system that customers can use to manages various business processes.

Salesforce is a cloud computing service as a software (SaaS) company that specializes in customer relationship management (CRM) and helps your automation of Sales and marketing process in an Enterprise.

The Integration content in SAP Cloud Integration for SAP S/4HANA Integration with Salesforce enables the synchronization of master data like Product, Customer, Pricing, etc.

This integration content helps with the automation of some business processes by integrating SAP S/4HANA to Salesforce through SAP Cloud Platform Integration. Information is retrieved from SAP S/4HANA with the OData adapter. Data retrieved from SAP S/4Hana is then mapped and transformed to a structure that fits SObjects in Salesforce. Lastly, the data is sent to Salesforce using the Salesforce Adapter. Some integration flows also retrieve data from the Salesforce. In which case the data is transformed and mapped in SAP CPI and later sent to SAP S/4HANA using the OData adapter.

3 Preparing the Systems for Integration

3.1 Prerequisites

To configure the integration content using this guide, you would need to have access and authorizations to the systems listed below.

Access required:

- SAP S/4HANA Tenant Details
- SAP Cloud Platform Integration Tenant Details.
- Salesforce Tenant Details

Authorization required:

- SAP S/4HANA Tenant Details
  - Access to SAP Gateway
  - Access to create a user and assign roles
  - Access to Master Data Product Master
  - Access to Sales Master Data
  - Access to Sales Order
- SAP Cloud Platform Integration (CPI) Tenant Details.
  - AuthGroup.IntegrationDeveloper
- Salesforce Tenant
  - Appropriate authorizations for the use of Tenant Salesforce too, among other things, configure Custom Fields for certain objects that we will detail.

3.2 Adapter Installation

For the adapter installation refer to the *Salesforce Adapter and Plug-in Installation Guide* that is included as part of the Salesforce adapter package.

3.3 Plug-in Installation

For the plug-in installation refer to the *Salesforce Adapter and Plug-in Installation Guide* that is included as part of the Salesforce adapter package.

4 Configuration

SAP S/4HANA, Salesforce, and SAP Cloud Platform Integration need to be configured and prepared before the integration content package can be configured and deployed. Follow the steps mentioned in the next sections.

4.1 Configuration in SAP S/4HANA

This section describes the mandatory configurations which need to be performed in the SAP S/4HANA system before you can start implementing the configuration for Salesforce or configuring the Integration content in SAP Cloud Platform Integration. Follow the steps mentioned in the following sub-sections.

4.1.1 Create Technical Communication User

A Technical Communication User is needed to call OData services in SAP S/4HANA from Cloud Platform Integration. Communication Users in SAP S/4HANA are used for inbound communication and for processing messages in the system. Follow the steps below to create a communication user in SAPS/4HANA.

Procedure

1. Access the Transaction Code: SU01
2. On the User Maintenance: Initial screen, enter the <User ID>
3. Choose to **Create**.
4. On the Maintain User screen, maintain the following values, and choose **Save**.

   <Last Name>
   Logon data tab page
   User Type: Communication Data
   Password: <password>

Note: Ensure the user is assigned relevant authorizations to execute ODATA API Calls.

5. Click **Save**.

4.1.2 Activating SAP Gateway

Before you can use the SAP Gateway functionality, it needs to be globally activated in your system.

If SAP Gateway is not activated, OData services will not run, consumer servers cannot communicate with it, and an error message will be sent to any system that calls the services.

You can perform configuration activities via: SAP Reference IMG (transaction SPRO) SAP **NetWeaver** > SAP **Gateway** > **OData Channel** > **Configuration User Settings and Connection Settings**. After you have completed these configuration activities, you must activate SAP Gateway using the steps below:

1. In the transaction SPRO, open the *SAP Reference IMG* and navigate to SAP **NetWeaver** > **SAP Gateway > OData Channel** > **Configuration** > Activate **or Deactivate SAP Gateway** and click on the **Activity** icon. A message will display.
2. Choose **Activate**. A message will inform you of the current status.

4.1.3 Activate OData API in Gateway

The integration between Salesforce and SAPS/4HANA is based on ODATA APIs of SAPS/4HANA.

Follow the steps below to activate the ODATA APIs used by the Integration Content.

Procedure

1. Access the Transaction Code: "/IWFND/MAINT_SERVICE".
   The entry screen of the transaction displays in the target system all activated Gateway services in the Service Catalog and allows you to add new services.
2. Click the **Add Service** button in the toolbar.
3. Enter the **System Alia**s of your front-end server.
4. Enter the External Service Name: "API_BUSINESS_PARTNER".
5. Click the Get Services button in the toolbar to request the services available. As a result, the service is displayed for selection.
6. Select the service created as a result of the last procedure and then **choose Add Selected Services** or click the object link for further selection.
7. The Add Service dialog that appears and suggests already the name "ZAPI_BUSINESS_PARTNER" for the Technical Service, and the Technical Model. The dialog that now appears informs you that the model metadata for the Gateway service is going to be created.
8. Specify the package for service activation.
9. Leave the other details on the dialog screen unchanged and choose **Continue**. The dialog that now appears informs you that the model metadata for the Gateway service has been created successfully in the Gateway.
10. In the information dialog, complete the procedure with  .

Repeat the above process for the below APIs:

1. API_SALES_CONTRACT_SRV
2. API_SALES_ORDER_SRV

4.2 Configuration in Salesforce.com

This section describes the mandatory configurations which need to be performed in Salesforce. It includes the configurations of Security Token and OAuth Credentials and the creation of customfields (external id) in Salesforce to store the SAP S/4HANA ID.

These activities need to be performed before you can start with the implementation and configuration of the Integration content in SAP Cloud Platform Integration.

4.2.1 Configuration of Security Token and OAuth Credentials

Security Token and **OAuth Credentials** are needed for a secure connection to Salesforce, to access them an app needs to be created in the Salesforce tenant. To retrieve the **Security Token** and **OAuth Credentials** follow the below procedure.

Procedure

1. Login to your Salesforce console and select **Setup**.
2. On the left panel in the Build overview, select Create > Apps, then New for the Connected Apps section as shown in Figure 4.1.

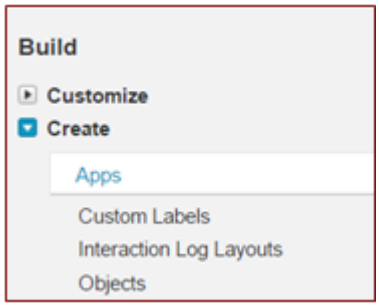


Figure 4.1 Create Salesforce App

3. In the next screen select fill in basic details such as **App Name**, **API Name**, and **Contact Email**. In the **API (Enable OAuth Settings)** select **Enable OAuth Settings**, see Figure **4.2**.

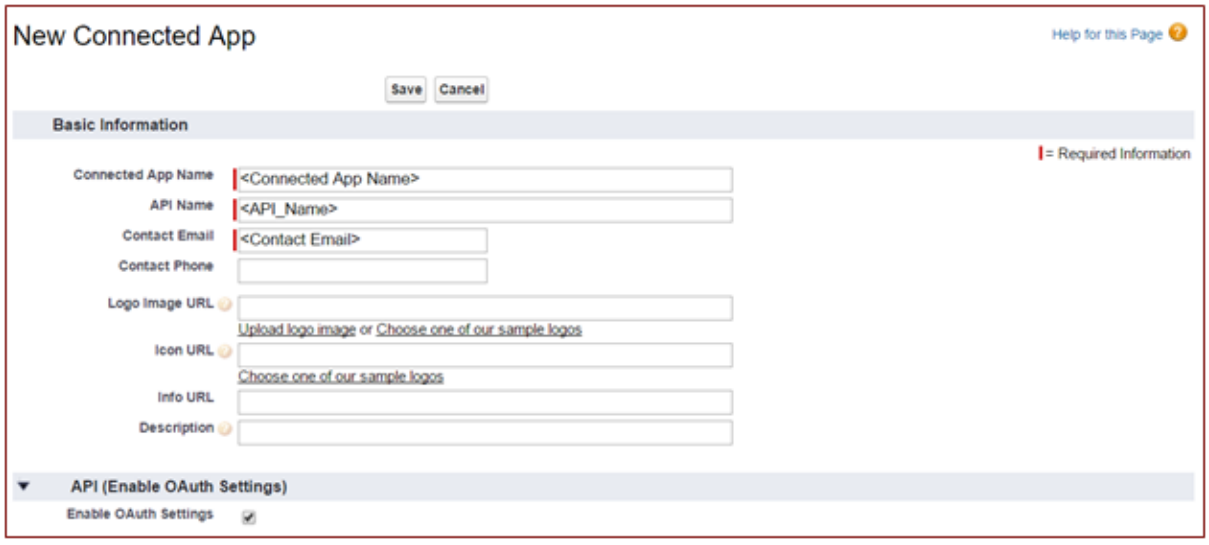


Figure 4.2 New Connected App

4. In the API section (see Figure **4.3**) perform the following actions:

- Disable Enable for Device Flow.
- Fill in a Callback URL.
- Disable Use digital signatures.
- Set Selected OAuth Scopes to Full access (full).
- Enable Require Secret for Web Server Flow.
- Disable Include ID Token.
- Disable Enable Asset Tokens. Select Save to complete the creation of the app as shown in Figure **4.3**.

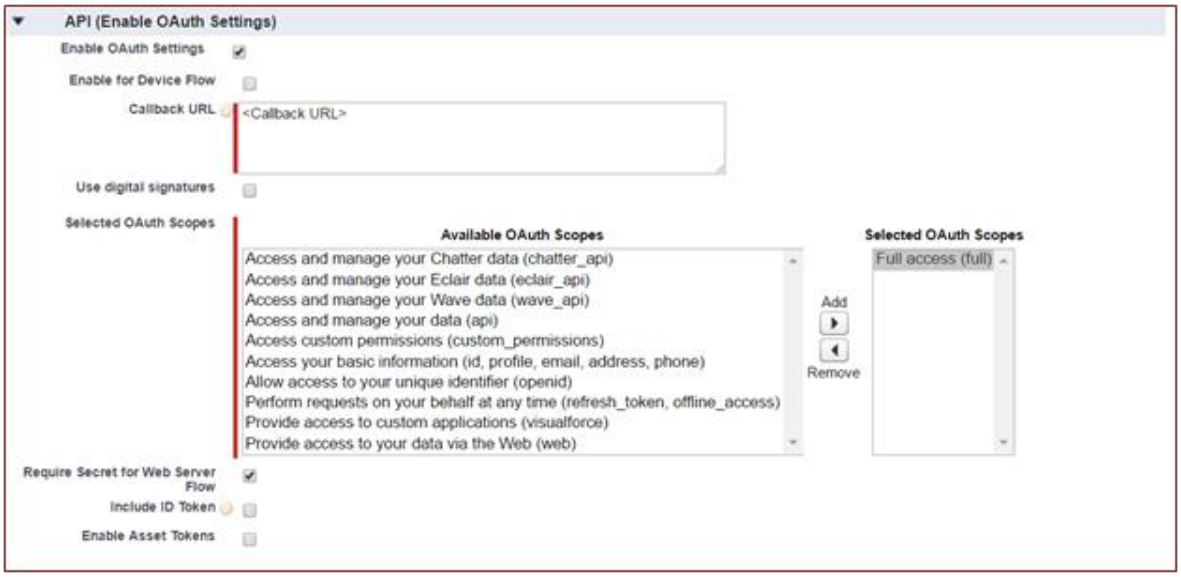


Figure 4.3 API

5. In the next overview, when you select the specific connect app, you can find the **Client ID** and **Client Secret** in the respective **Consumer Key** and **Consumer Secret** fields, see Figure **4.4**.

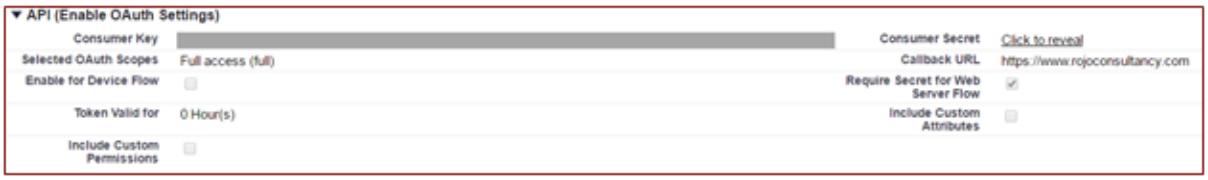


Figure 4.4 Consumer Key and Secret

4.2.2 Activate Entitlement Management in Salesforce

Entitlement management is a collection of Salesforce features that help you provide the correct service levels to your customer. Its features let you define, enforce, and track service levels as part of your support management process.

Follow the Salesforce guide below to enable entitlement management modules in your Salesforce instance:

https://help.salesforce.com/articleView?id=entitlements_enabling.htm&type=5

Procedure

1. From Setup, enter *Entitlement Settings* in the **Quick Find** box, then select Entitlement Settings.
2. Select **Enable Entitlement Management**.
3. Click Save. This takes you to a page where you can customize Entitlement Management settings. You will come back to those settings later on in the Entitlement Management Setup process.

4.2.3 Activate Quotes in Salesforce

Quotes in Salesforce represent the proposed prices of your company's products and services. You create a quote from an opportunity and its products. Each opportunity can have multiple associated quotes, and any one of them can be synced with the opportunity.

Follow the Salesforce guide below to enable quotes modules in your Salesforce instance:

https://help.salesforce.com/articleView?id=quotes_enable.htm&type=5

Procedure

1. From Setup, enter *Quote* in the **Quick Find** box, then select **Quote Settings** (Lightning Experience) or **Quotes Settings** (Salesforce Classic).
2. Select the option for enabling quotes.
3. To display the Quotes related list on the standard opportunity page layout, select **Opportunity Layout**.
4. To add the Quotes related list to all opportunity page layouts that users have customized, select Append to users' personal related list customization.
5. Save your changes.

4.2.4 Activate Multiple Currencies

In case support for multiple currencies is required for your scenario, this section gives an overview of how this can be achieved. Before your organization can use multiple currencies, the feature must be activated in Salesforce. Multiple currencies activation enables selecting multiple currencies throughout Salesforce.

Note: Enabling multiple currencies introduces permanent changes in your Salesforce. Before proceeding, be aware of the implications in the link below:

https://help.salesforce.com/articleView?id=admin_enable_multicurrency_implications.htm&type=5

Follow the Salesforce guide to activate multiple currencies in your Salesforce instance:

https://help.salesforce.com/articleView?id=admin_enable_multicurrency.htm&type=0

Procedure

1. In Setup, enter *Company Information* in the **Quick Find** box.
2. Select **Company Information** and click **Edit**.
3. Ensure that your selected currency locale is the default currency that you want to use for current and future records.
4. Enable **Activate Multiple Currencies**, and then save your changes.

4.2.5 Adding SAP S/4HANA References

The Integration content synchronizes data between SAP S/4HANA Cloud and Salesforce. For this purpose, an SAP S/4HANA Cloud unique identifier needs to be added in Salesforce which will hold SAP S/4HANA Cloud key value. To achieve that, follow the steps below.

Procedure

1. Enter the Setup screen.
2. In the **Quick Find** box type *Accounts**** and click on Fields.
3. Scroll down and click **New**.
4. Choose **Text** as **field type** and click on Next.
5. Enter field name: *SAP_BusinessPartner_Ref*****, enter a Length of 30, and select the **External ID** checkbox.
6. Press next and next and then save.
7. Do the same for the below object types and field names.

The above steps need to be repeated for more Objects. The table below contains a list of fields per object that needs to be added. Perform the above steps for all fields listed in the table below.

Object*	**Field Name****
Products	SAP_Material_Ref
Accounts	SAP_BusinessPartner_Ref
Orders	SAP_SalesOrder_Ref

Order Products	SAP_OrderItem_Ref
Service Contracts	SAP_SalesContract_Ref
Contract Line Items	SAP_SalesContractItem_Ref
Price Book Entries	SAP_PriceBookEntry_Ref

Table 1 SAP S/4HANA References for Salesforce

4.2.6 Adding a Released Custom Field

To have control over the Service Contracts that need to be replicated to SAP S/4HANA, a custom field needs to be created in Salesforce. Follow the below steps below.

Procedure

1. Enter the Setup screen.
2. Type *Service Contracts* in the **Quick Find** box and click on Fields.
3. Scroll down and click **New**.
4. Choose **Checkbox** as field data type and click **Next**.
5. Enter field name *Released* and choose **Unchecked** as the default value.
6. Press next and next and then save.
7. Repeat the steps for **Orders**.

4.2.7 Configuration for Order Process Flow

In Salesforce we need to create a record type corresponding to the partner function in SAP S/4HANA Cloud. Record types determine the business processes, page layouts, and picklist values users have access to.

Procedure

1. Go to Setup.
2. Type *Record Types* in the **Quick Find** box and select **Record Types** in **Accounts**.
3. Click on **New** and create two new Records:
    - SAP Ship-To
    - SAP SoldTo

Note: These names are for reference, adapt as necessary for your organization.

4. Check **Active** and click on **Next**.
5. Select a layout (e.g.: Account Layout) and click on **Save**.
6. Repeat for the other Record.
7. Type *Page Layouts* in the Quick Find box and select **Page Layouts** in Accounts.
8. Edit **Account Layout** (or according to your organization).

9. Select components and drag and drop Orders and Contracts to the layout and click on save.
10. Type *Page Layouts* in the **Quick Find** box and select **Page Layouts** in Opportunities.
11. Edit **Opportunity Layout**.
12. Select **Related Lists** and drag and drop Orders to the layout.
13. Save.

4.3 Configuration in SAP Cloud Platform Integration

In this section, the settings of the Integration Flows are discussed, including the prerequisites, parameters of the Sender and Receiver systems, as well as others specific to each iFlow.

4.3.1 Replicate Account from SAP S/4HANA to Salesforce

4.3.1.1 Business Scenario

This integration flow allows replication of the customer data by replicating the Customer master data from SAP S/4HANA to Salesforce as Accounts. Whenever a Customer in SAP S/4HANA is created or modified, it gets replicated to SAP S/4HANA in the next run of the integration flow (if scheduled to recur). Figure 4.5 depicts the business process to be implemented.

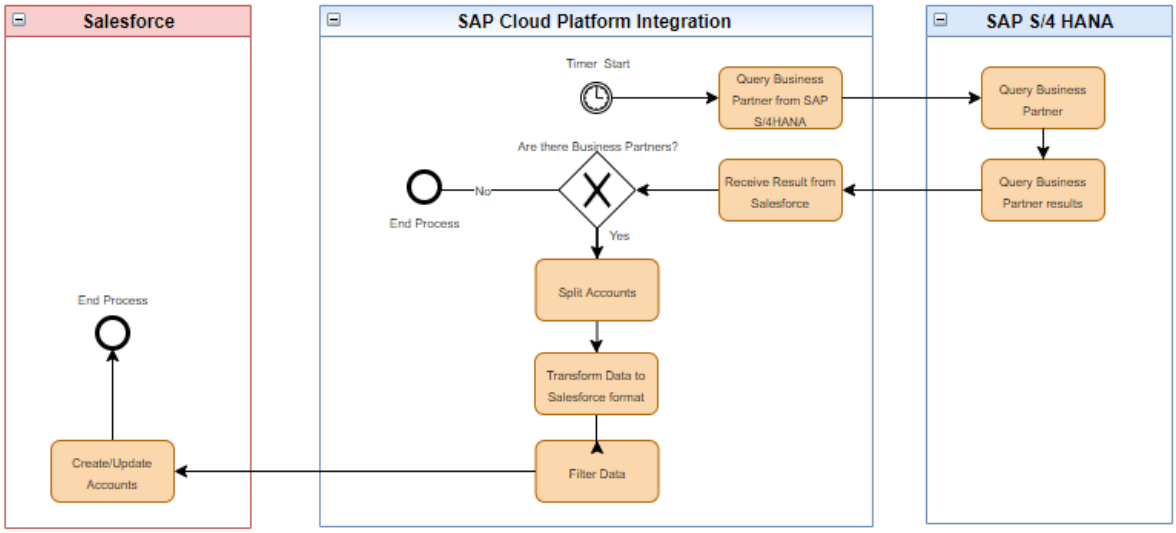


Figure 4.5 Process Diagram

The SAP CPI implementation of the process in Figure 4.5 is shown in Figure 4.6.

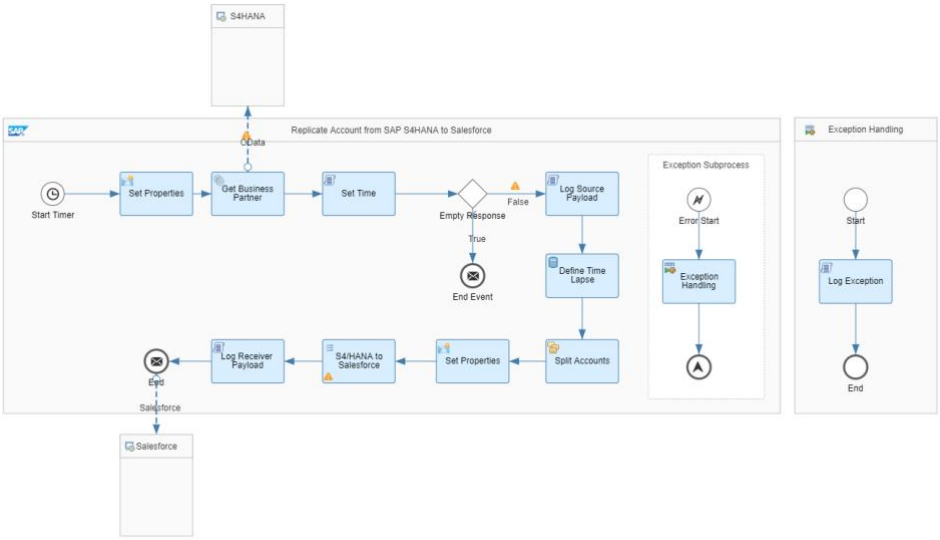


Figure 4.6 Integration Flow

4.3.1.2 Prerequisites

The following steps need to be taken as a prerequisite:

- Deploy the security artifacts that will be required during the configuration of integration content.
- Users need to define the time zone in configuration and the first time run date and hour from when to start replicating.

4.3.1.3 Scope

Note that this integration flow will only replicate the Business Partners of the category Customers.

4.3.1.4 Configuration

Follow the below steps to configure the integration flow:

1. Open the integration flow "Replicate Account from SAP S/4HANA to Salesforce".
2. Click on Configure.
3. Configure "Timer". You can choose between:
   Run Once: iFlow will be executed only once, can be used for the initial load.
   Schedule on Day: iFlow will be executed on a specific date/time.
   Schedule to Recur: iFlow will be executed at a regular interval and will replicate the changes from the source system to the target system (suggested mode).

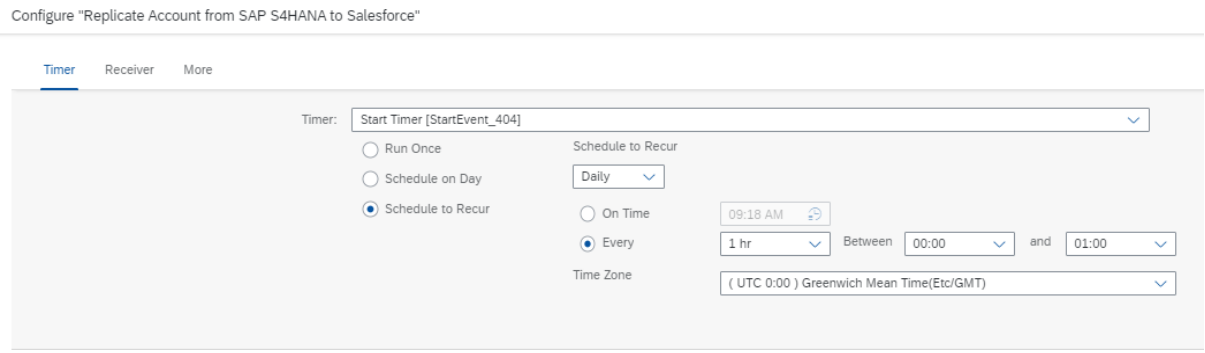


Figure 4.7 Configure Timer SAP S/4HANA

Note: Replace the default values of the parameters in the configurations based on your scenario and landscape.

4. Go to Receiver.
5. Configure the "Receiver" connector named "S4HANA" to fit your specific landscape. See Figure **4.8**.

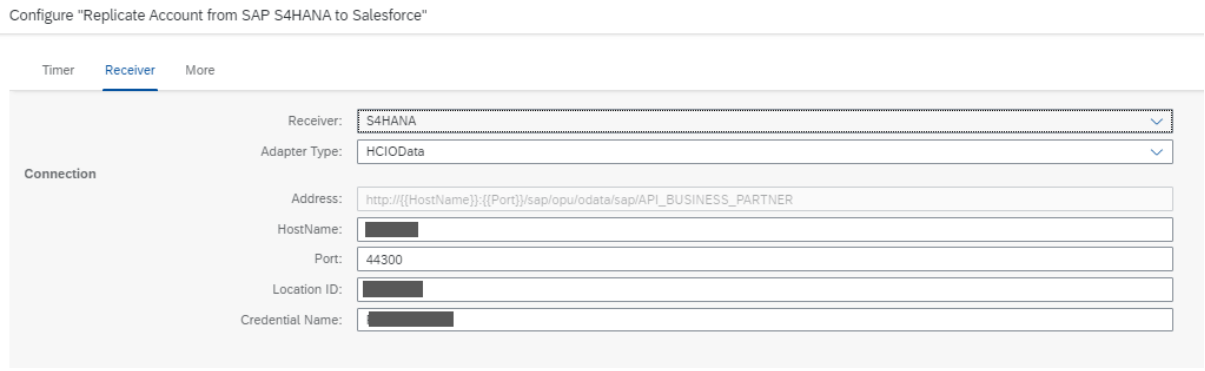


Figure 4.8 Configure Receiver S/4HANA

The description of each of the fields in Figure 4.8 is presented in the table below.

Parameter	Description
Hostname	Enter the API hostname of your SAP S/4HANA system. The hostname is part of the Address. (https://**hostname:**port/sap/opu/odata/sap/API_BUSINESS_PARTNER)
Port	Enter the API port of your SAP S/4HANA system. The port is part of the Address. (https://hostname**:port**/sap/opu/odata/sap/API_BUSINESS_PARTNER)

Location ID	Enter the Location identifier for your SAP S/4HANA tenant.
Credential Name	Enter the name of the credential you have deployed for/4HANA. See below about deploying credential artifacts.

Table 2 Configure Receiver S/4HANA

6. Configure the "Receiver" connector named "Salesforce". See Figure **4.9**.

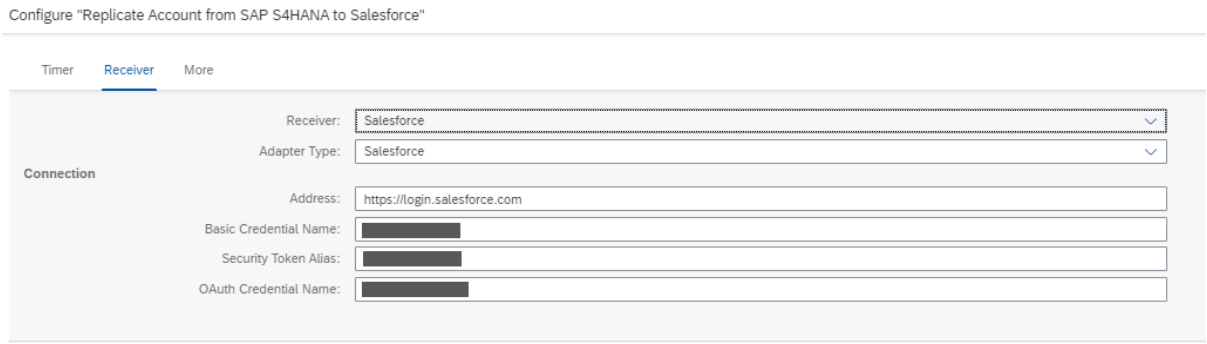


Figure 4.9 Configure Receiver Salesforce

The description of each of the fields in Figure 4.9 is presented in the table below.

Parameter	Description
Address	The data store URL for Salesforce. E.g.: https://login.salesforce.com
Basic Credential Name	Name of a deployed User Credentials artifact that holds Username and Password used to authenticate with Salesforce.
Security Token Alias	Name of a deployed Secure Parameter artifact that holds the real Security Token. The security token is required to log in to Salesforce from an untrusted network.
OAuth Credential Name	Name of deployed OAuth credential name.

Table 3 Configure Receiver Salesforce

7. Configure "More" as shown in Figure **4.10**.

Figure 4.10 Configure More options

The description of each of the fields in Figure 4.10 are presented in the table below.

Parameter	Description
ExceptionLogging	Possible values "YES" / "NO". Specify "YES" to log the exception if any. Specify "NO" or leave blank otherwise.
InitialDate	Date from when the integration flow will replicate for the first time. Correct format: YYYY-MM-DD'T'hh:mm:ss.sss'Z' (E.g.: 1970-01-01T00:00:00.000Z).
InitialHour	Time from when the integration flow will replicate for the first time. Correct format: 'PT'hh'H'mm'M'ss'S' (E.g.: PT00H00M00S).
LogMessageBody	Possible values "YES" / "NO". Specify "YES" to log the Message Body (Not recommended in a live environment). Specify "NO" or leave blank otherwise.
LogMessageHeader	Possible values "YES" / "NO".

	Specify "YES" to log the Message Header. Specify "NO" or leave blank otherwise.
LogMessageProperty	Possible values "YES" / "NO". Specify "YES" to log the Message Properties . Specify "NO" or leave blank otherwise.

Figure 4.11 Configure More options

8. Save and Deploy.

4.3.1.5 Integration Message Mapping

In case your organization uses custom fields in Salesforce, you might need to customize the provided integration flow and adapt it to your needs. Users should update the existing solution by creating a new XSD using the Eclipse Salesforce Plug-in, change this schema in the message mapping, and add custom connections as needed.

4.3.1.6 Value Mapping

Value mapping facilitates the customization of Account Group for Customers in SAP S/4HANA to "RecordType" in Salesforce. In the current version of the content package, there are two records – see Figure 4.12.

Note: Users should rename these Record Types according to their organization.

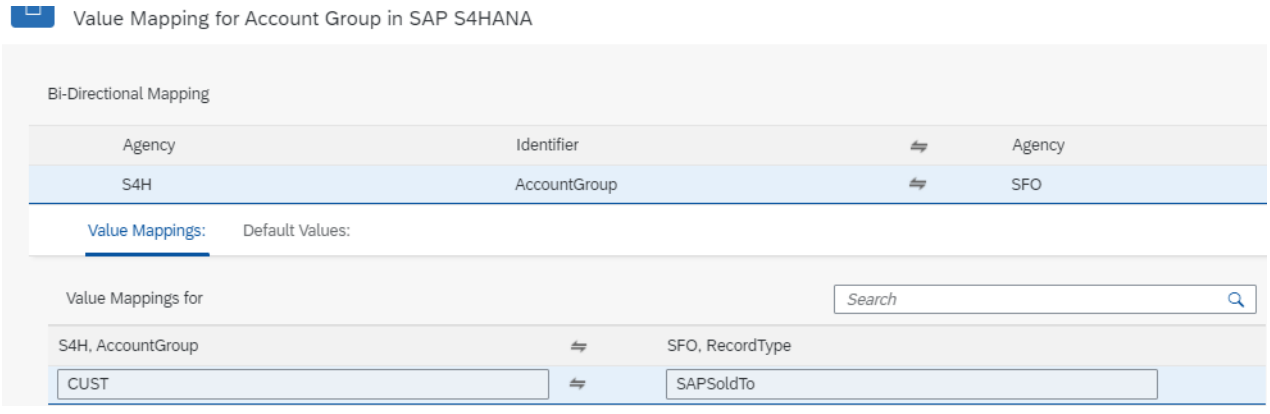


Figure 4.12 Value Mapping for Account Group

4.3.2 Replicate Product from SAP S/4HANA to Salesforce

4.3.2.1 Business Scenario

This integration flow enables the synchronization of the Materials data by replicating the Product master data from SAP S/4HANA to Salesforce as Products. Whenever a Material in SAP S/4HANA is created, it will be replicated to Salesforce in the next run of the integration flow (If scheduled).

Figure 4.13 depicts the business process to be implemented.

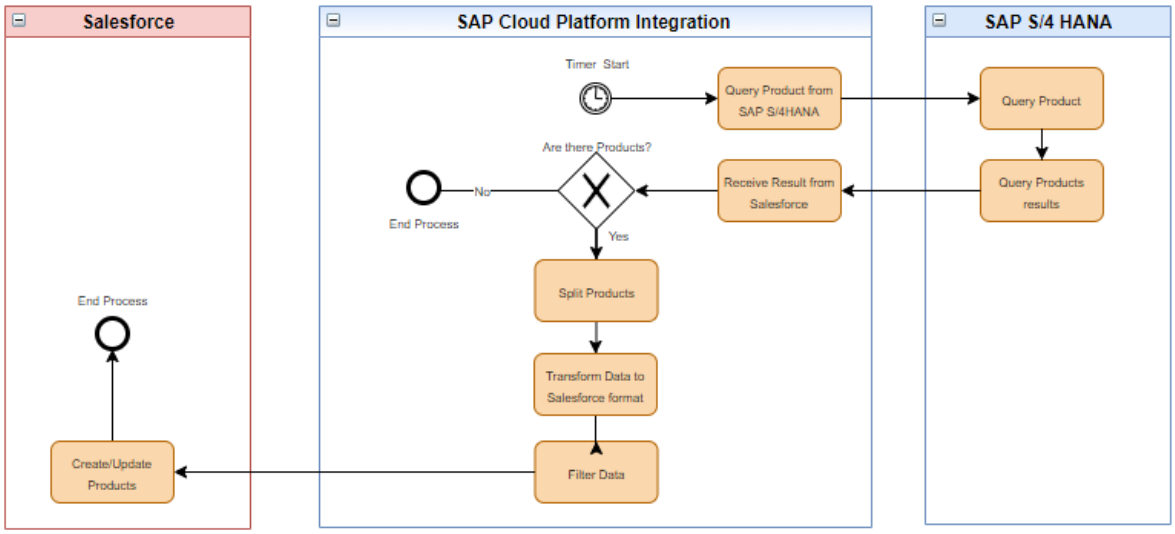


Figure 4.13 Process Diagram

The SAP CPI implementation of the process in Figure 4.13 is shown in Figure 4.14.

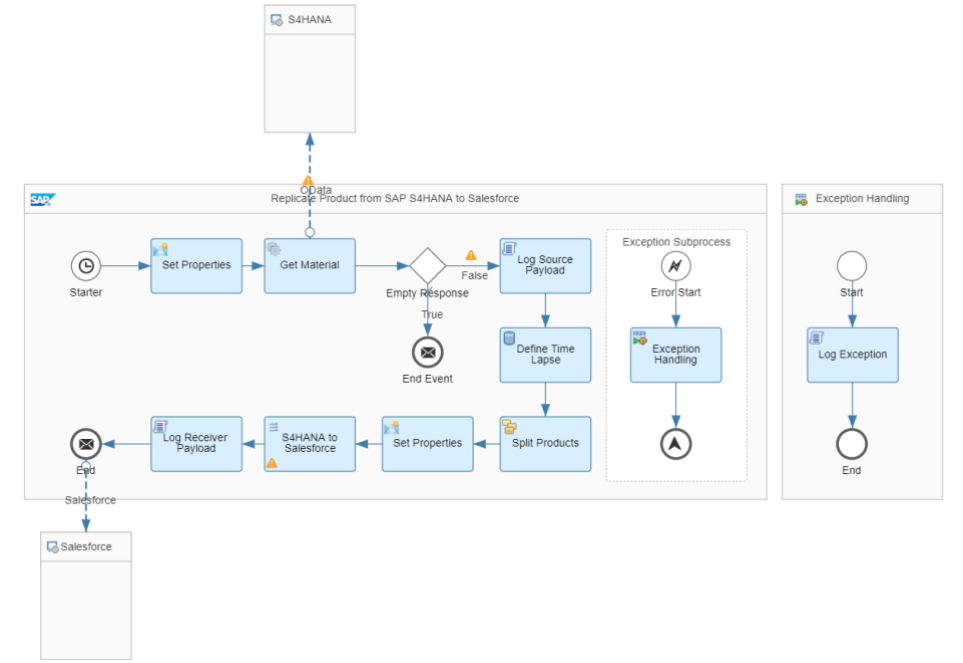


Figure 4.14 Integration Flow

4.3.2.2 Prerequisites

The following steps need to be taken as a prerequisite:

- Deploy the security artifacts that will be required during the configuration of integration content.
- Users need to define the initial time run date from when the data should be replicated.

4.3.2.3 Scope

SAP S/4HANA does not save the modification or creation times, it only saves the date. As a result, only the date is taken into consideration for defining intervals for the replications.

4.3.2.4 Configuration

Follow the below steps to configure the integration flow:

1. Open the integration flow "Replicate Product from SAP S4HANA to Salesforce".
2. Click on Configure.
3. Configure "Timer". You can choose between:
   Run Once: iFlow will be executed only once, can be used for the initial load.
   Schedule on Day: iFlow will be executed on a specific date/time.
   Schedule to Recur: iFlow will be executed at a regular interval and will replicate the changes from the source system to the target system (suggested mode).

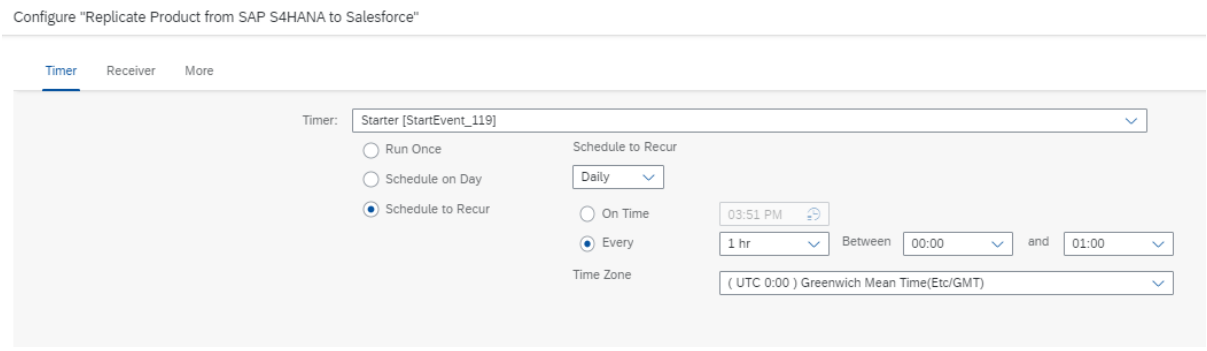


Figure 4.15 Configure Timer

Note: Replace the default values of the parameters in the configurations based on your scenario and landscape.

4. Configure the "Receiver" connector named "S4HANA" to fit your specific landscape. See Figure **4.16**.

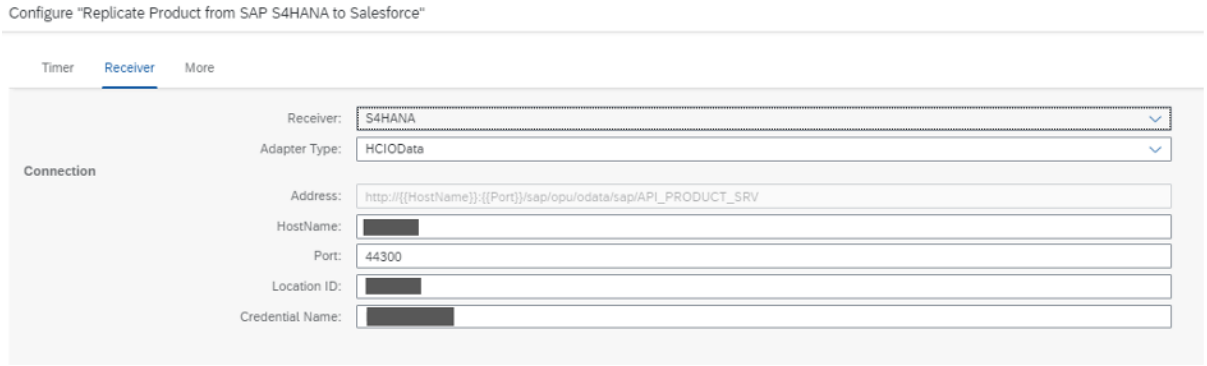


Figure 4.16 Configure Receiver S/4HANA

The description of each of the fields in Figure 4.16 is presented in the table below.

Parameter	Description
Hostname	Enter the API hostname of your SAP S/4HANA system. The hostname is part of the Address. (https://**hostname:**port/sap/opu/odata/sap/API_PRODUCT_SRV)
Port	Enter the API port of your SAP S/4HANA system. The port is part of the Address. (https://hostname**:port**/sap/opu/odata/sap/API_PRODUCT_SRV)

Location ID	Enter the Location identifier for your SAP S/4HANA tenant.
Credential Name	Enter the name of the credential you have deployed for S/4HANA. See below about deploying credential artifacts.

Table 4 Configure Receiver S/4HANA

5. Configure the "Receiver" connector named "Salesforce". See Figure **4.17**.

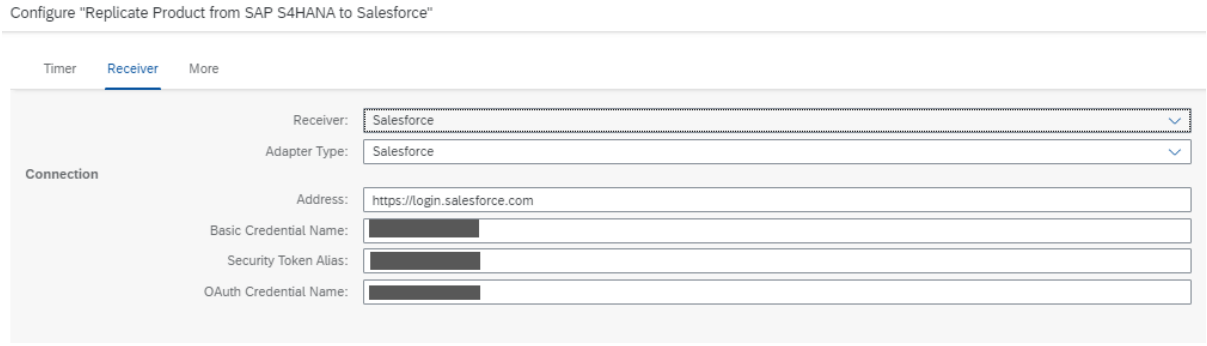


Figure 4.17 Configure Receiver Salesforce

The description of each of the fields in Figure 4.17 is presented in the table below.

Parameter	Description
Login URL	The data store URL for Salesforce. E.g.: https://login.salesforce.com
Basic Credential Name	Name of a deployed User Credentials artifact that holds Username and Password used to authenticate with Salesforce.
Security Token	Name of a deployed Secure Parameter artifact that holds the real Security Token. The security token is required to log in to Salesforce from an untrusted network.
OAuth Credential Name	Name of deployed OAuth credential name.

Table 5 Configure Receiver Salesforce

6. Configure "More" as shown in Figure **4.18**.

Figure 4.18 Configure More options

The description of each of the fields in Figure 4.18 is presented in the table below.

Parameter	Description
ExceptionLogging	Possible values "YES" / "NO". Specify "YES" to log the exception if any. Specify "NO" or leave blank otherwise.
InitialDate	Date from when the integration flow will replicate for the first time. Correct format: YYYY-MM-DD'T'hh:mm:ss.sss'Z' (E.g.: 1970-01-01T00:00:00.000Z).
LogMessageBody	Possible values "YES" / "NO". Specify "YES" to log the Message Body (Not recommended in a live environment). Specify "NO" or leave blank otherwise.
LogMessageHeader	Possible values "YES" / "NO". Specify "YES" to log the Message Header. Specify "NO" or leave blank otherwise.
LogMessageProperty	Possible values "YES" / "NO". Specify "YES" to log the Message Properties.

	Specify “NO” or leave blank otherwise.

Table 6 Configure More options

4.3.3 Replicate Sales Prices from S/4HANA to Salesforce

4.3.3.1 Business Scenario

This integration flow allows the replication of Pricing by replicating the sales pricing data from SAP S/4HANA to Salesforce as pricebook entry. Whenever a new condition in SAP S/4HANA is created, it gets replicated to SAP S/4HANA in the next run of the integration flow (if scheduled to recur).

Figure 4.19 depicts the business process to be implemented.

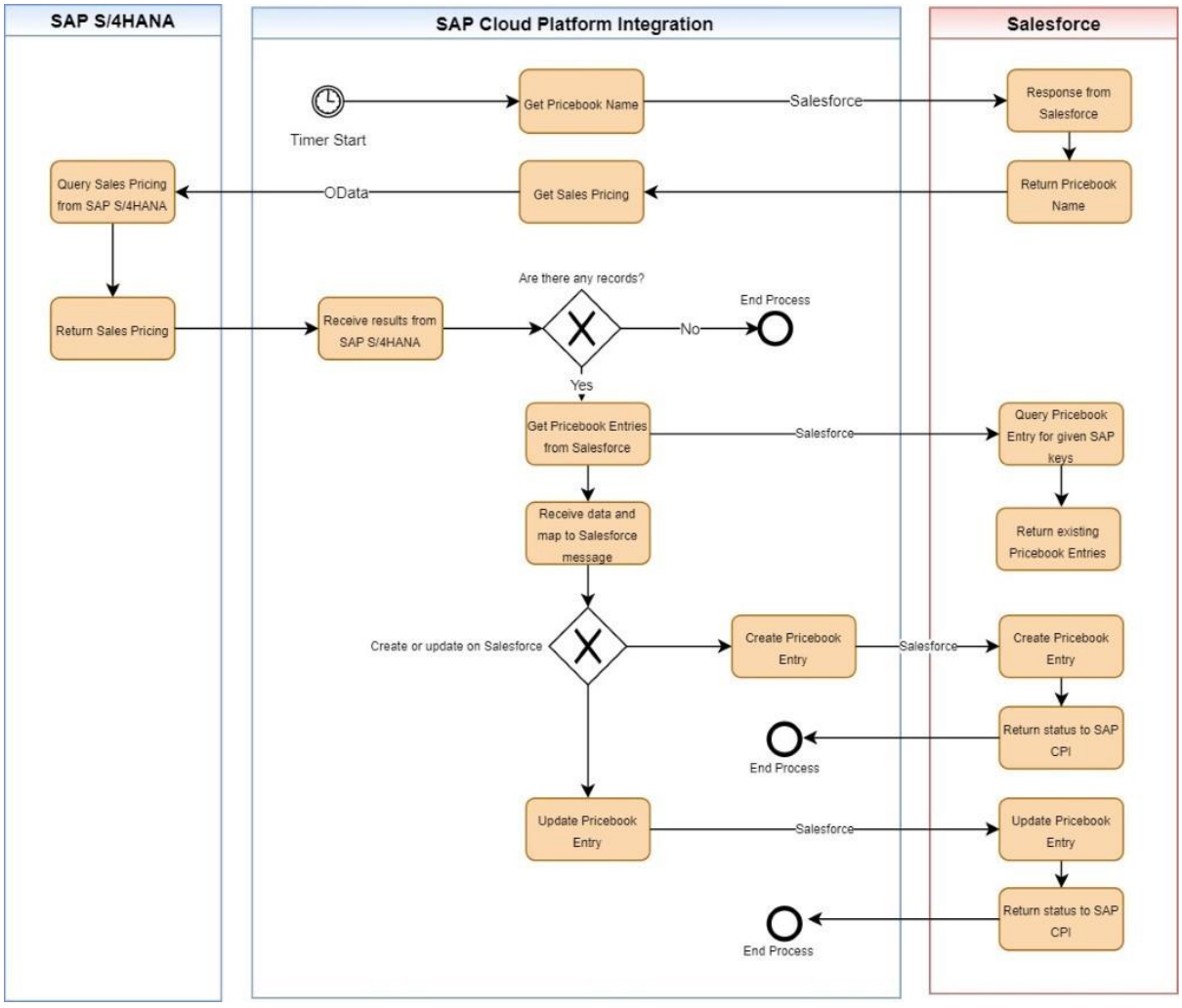


Figure 4.19 Process Diagram

The SAP CPI implementation of the process in Figure 4.19 is shown in Figure 4.20.

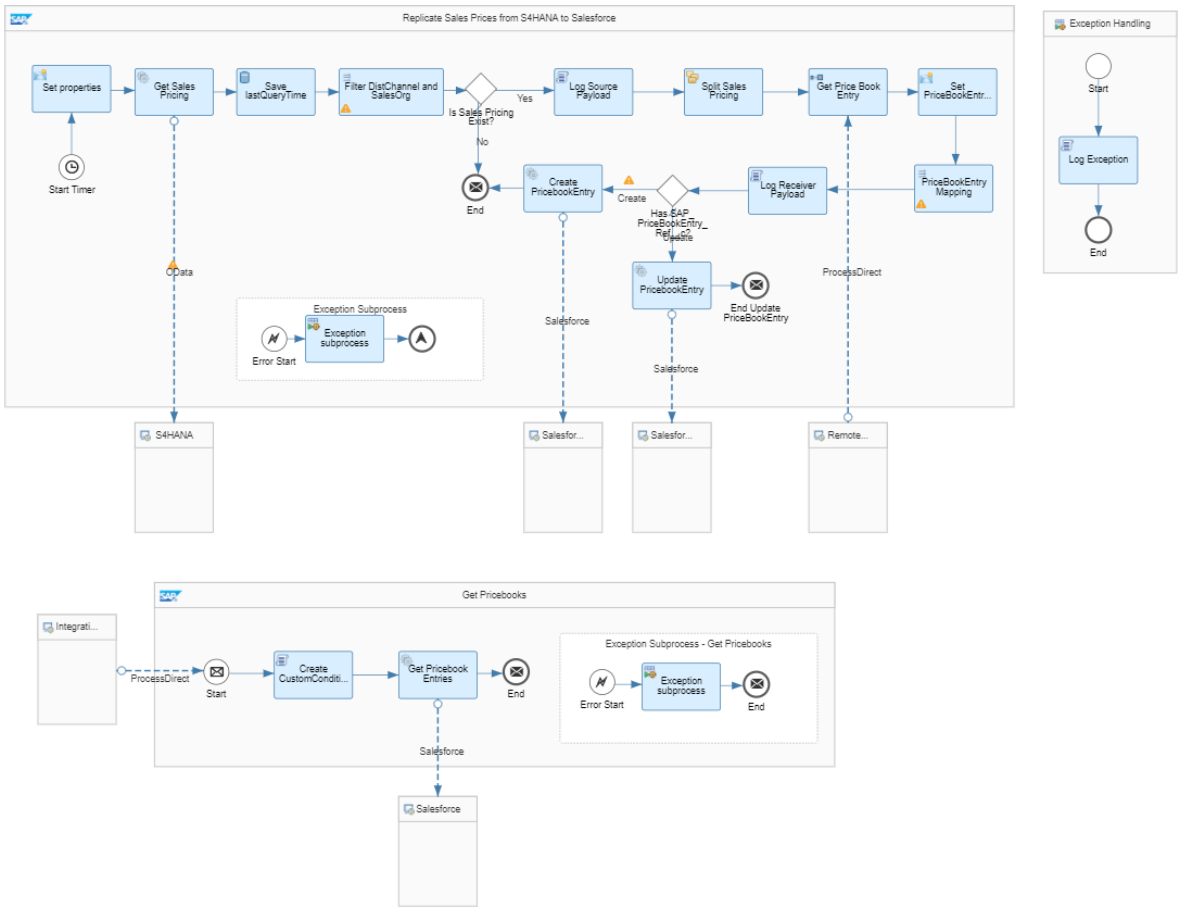


Figure 4.20 Integration Flow

4.3.3.2 Prerequisites

The following steps are prerequisites for this integration scenario:

- Deploy security artifacts that will be required during the configuration of Integration content.
- Products should have been replicated from SAP S/4HANA to Salesforce.
- Condition Type, Distribution Channel, Pricebook Name, and Sales Organization must be configured before replicating the pricing condition.

4.3.3.3 Scope

- This integration flow only covers new sales pricing, update is not covered in this version.
- Salesforce allows only one entry of each material per Price Book.
- The iFlow should be scheduled to recur once a day.

4.3.3.4 Configuration

Follow the below steps to configure the integration flow:

1. Open the integration flow "Replicate Sales Prices from SAP S4HANA to Salesforce".
2. Click on Configure.
3. Configure "Timer". You can choose between:
   Run Once: iFlow will be executed only once, can be used for the initial load.
   Schedule on Day: iFlow will be executed on a specific date/time.
   Schedule to Recur: iFlow will be executed at a regular interval and will replicate the changes from the source system to the target system (suggested mode).

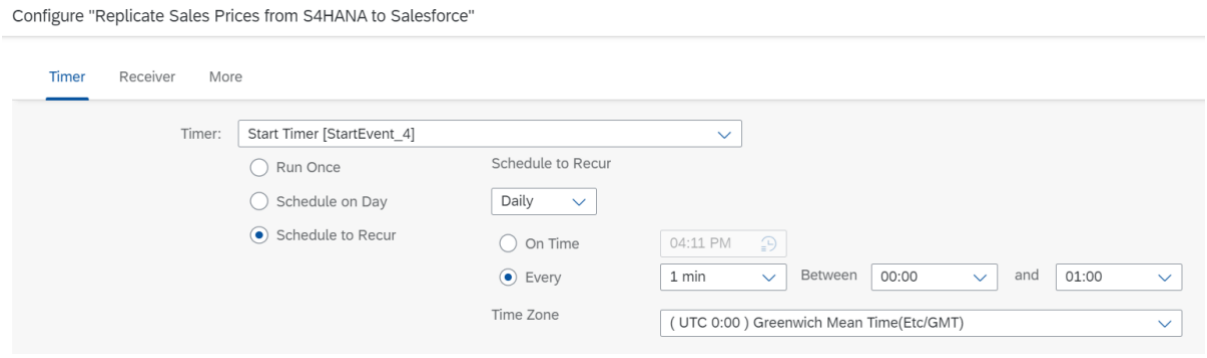


Figure 4.21 Configure Timer

Note: Replace the default values of the parameters in the configurations based on your scenario and landscape.

4. Go to Receiver.
5. Configure the "Receiver" connector named "S4HANA" to fit your specific landscape. See Figure **4.22**.

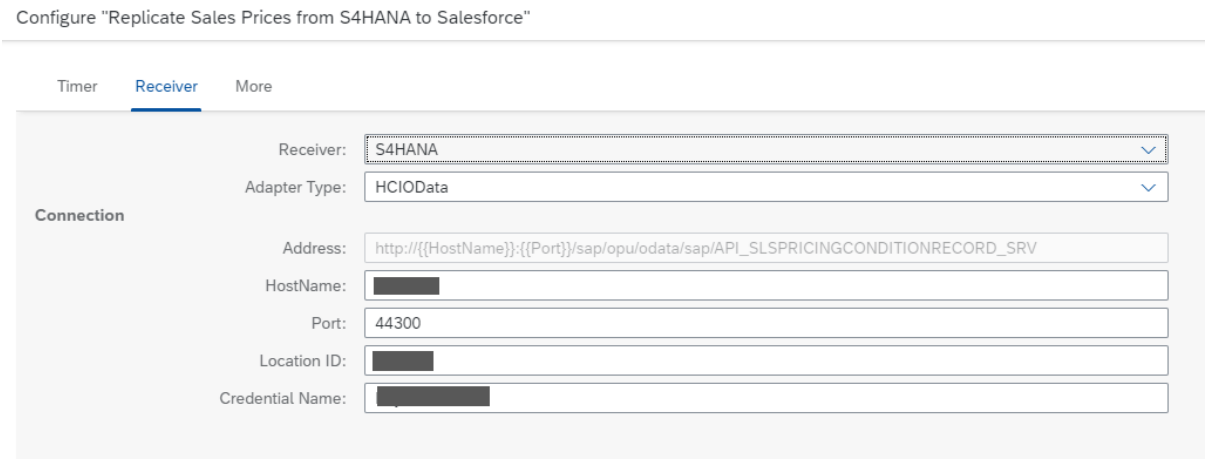


Figure 4.22 Configure Receiver S/4HANA

The description of each of the fields in Figure 4.22 is presented in the table below.

Parameter	Description
Hostname	Enter the API hostname of your S/4HANA system. The hostname is part of the Address. (https://**hostname**:port/sap/opu/odata/sap/API_SLSPRICINGCONDITIONRECORD_SRV).
Port	Enter the API port of your S/4HANA system. The port is part of the Address. (https://hostname:**port**/sap/opu/odata/sap/API_SLSPRICINGCONDITIONRECORD_SRV).
Authentication	Select "Basic" authentication Type.
Credential Name	Enter the name of the credential you have deployed for S/4HANA. See below about deploying credential artifacts.

Table 7 Configure Receiver S/4HANA

6. Configure the "Receiver" connector named "Salesforce". See Figure **4.23**.

Figure 4.23 Configure Receiver Salesforce

Parameter	Description
Address	The data store URL for Salesforce.

	E.g.: https://login.salesforce.com
Credential Name	Name of a deployed User Credentials artifact that holds Username and Password used to authenticate with Salesforce.
Security Token	Name of a deployed Secure Parameter artifact that holds the real Security Token. The security token is required to log in to Salesforce from an untrusted network. Salesforce automatically generates this key.
OAuth Credential Name	OAuth credential name.

Table 8 Configure Receiver Salesforce

7. Configure "More" as shown in Figure **4.24**.

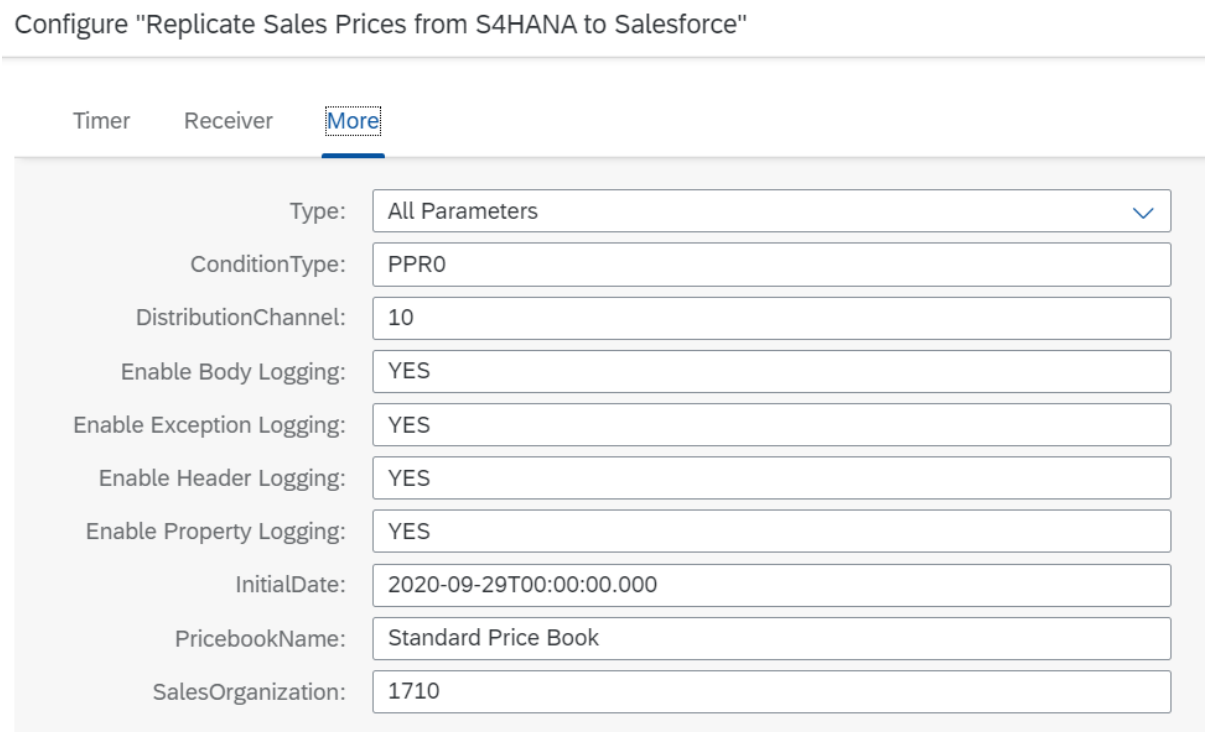


Figure 4.24 Configure More options

The description of each of the fields in Figure 4.24 is presented in the table below.

Parameter	Description
DistributionChannel	Specify the distribution channel to be used in the iFlow. The default value is "10".
SalesOrganization	Specify the sales organization to be used in the iFlow. The default value is "1710".
PricebookName	Pricebook name in Salesforce. The default value is "Standard Price Book"
ExceptionLogging	Possible values "YES" / "NO". Specify "YES" to log the exception if any. Specify "NO" or leave blank otherwise.
LogMessageBody	Possible values "YES" / "NO". Specify "YES" to log the Message Body (Not recommended in a live environment). Specify "NO" or leave blank otherwise.
LogMessageHeader	Possible values "YES" / "NO". Specify "YES" to log the Message Header. Specify "NO" or leave blank otherwise.
LogMessageProperty	Possible values "YES" / "NO". Specify "YES" to log the Message Properties Specify "NO" or leave blank otherwise.

Table 9 Configure More options

4.3.4 Replicate Sales Order from Salesforce to SAP S/4HANA

4.3.4.1 Business Scenario

This integration flow allows the replication of sales orders data by replicating the Orders data Salesforce to SAP S/4HANA as Sales Orders. Whenever an Order in Salesforce is created or modified, it will be replicated to SAP S/4HANA in the next run of the integration flow (if scheduled to recur), as long as it has the custom field *Released*, created in Section 4.2.6, checked.

Figure 4.25 depicts the business process to be implemented.

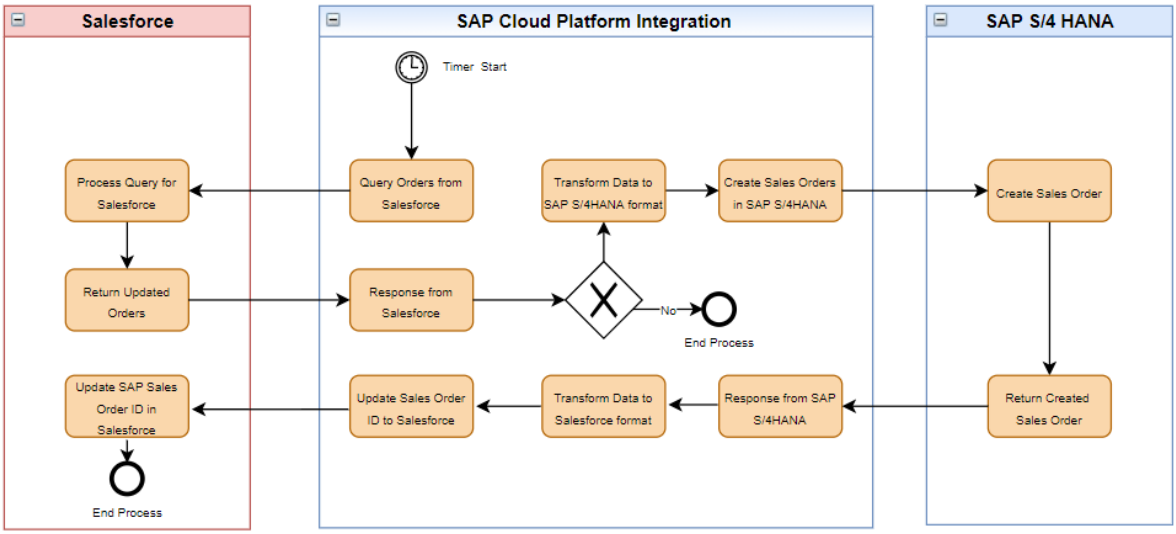


Figure 4.25 Process Diagram

The SAP CPI implementation of the process in Figure 4.25 is shown in Figure 4.26.

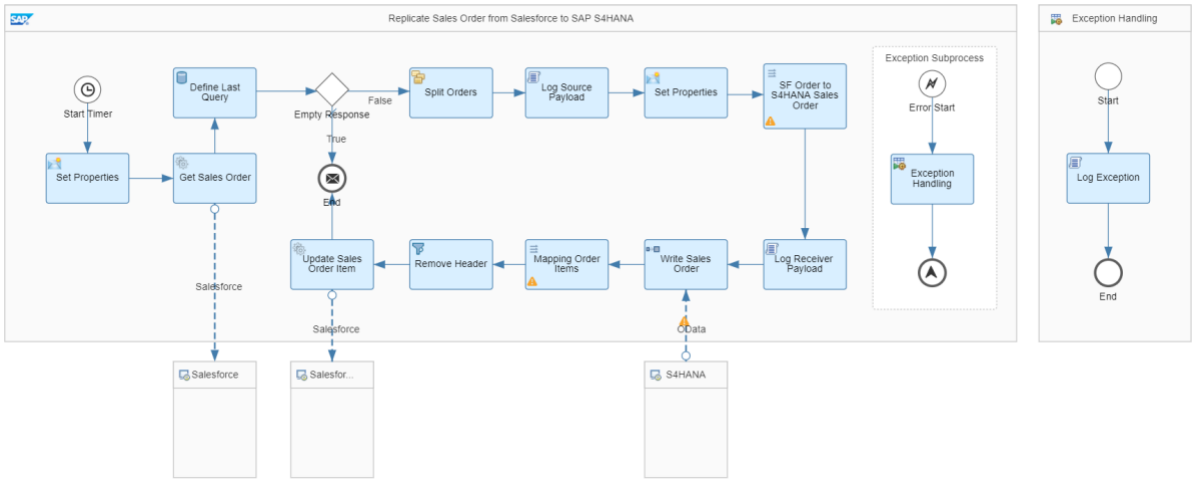


Figure 4.26 Integration Flow

4.3.4.2 Prerequisites

The following steps are the prerequisites for this Integration Scenario:

- Deploy security artifacts that will be required during the configuration of integration content.
- Customers/Accounts should have been replicated from SAP S/4HANA to Salesforce.
- Materials/Products should have been replicated from SAP S/4HANA to Salesforce.
- Orders were created with replicated Accounts and Products from SAP S/4HANA.
- Users need to define the first run date-time from when to start replicating.
- Customer Payment Terms, Distribution Channel, Organization Division, Sales Order Type, Sales Organization, and Shipping Conditions are externalized in iFlow and should be configured to correctly replicate to SAP S/4HANA.

4.3.4.3 Scope

- Sales orders cannot be replicated until extending customers/accounts to the respective sales area.
- This integration flow only covers new orders, update is not covered in this version.

4.3.4.4 Configuration

Follow the steps below to configure the integration flow:

1. Open the integration flow "Replicate Sales Order from Salesforce to SAP S4HANA".
2. Click on Configure.
3. Configure "Timer". You can choose between:
   Run Once: iFlow will be executed only once, can be used for the initial load.
   Schedule on Day: iFlow will be executed on a specific date/time.
   Schedule to Recur: iFlow will be executed at a regular interval and will replicate the changes from the source system to the target system(Suggested mode).

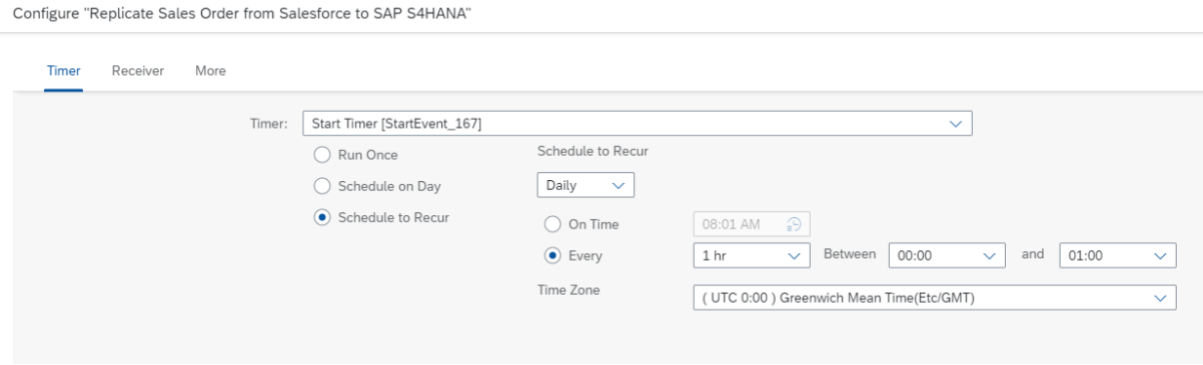


Figure 4.27 Configure Timer

Note: Replace the default values of the parameters in the configurations based on your scenario and landscape.

4. Configure the "Receiver" connector named "S4HANA" to fit your specific landscape. See Figure **4.28**.

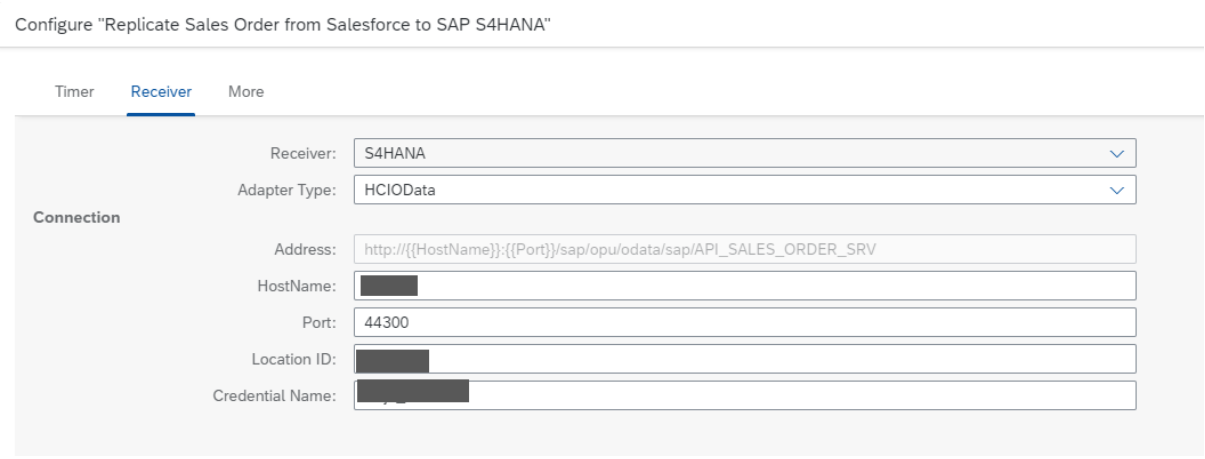


Figure 4.28 Configure Receiver S/4HANA

The description of each of the fields in Figure 4.28 is presented in the table below.

Parameter	Description
Hostname	Enter the API hostname of your SAP S/4HANA system. The hostname is part of the Address. (https://**hostname:**port/sap/opu/odata/sap/API_SALES_ORDER_SRV).
Port	Enter the API port of your SAP S/4HANA system. The port is part of the Address. (https://hostname**:port**/sap/opu/odata/sap/API_SALES_ORDER_SRV).
Location ID	Enter the Location identifier for your SAP S/4HANA tenant.
Credential Name	Enter the name of the credential you have deployed for S/4HANA. See below about deploying credential artifacts.

Table 10 Configure Receiver S/4HANA

5. Configure the "Receiver" connector named "Salesforce". See Figure **4.29**.

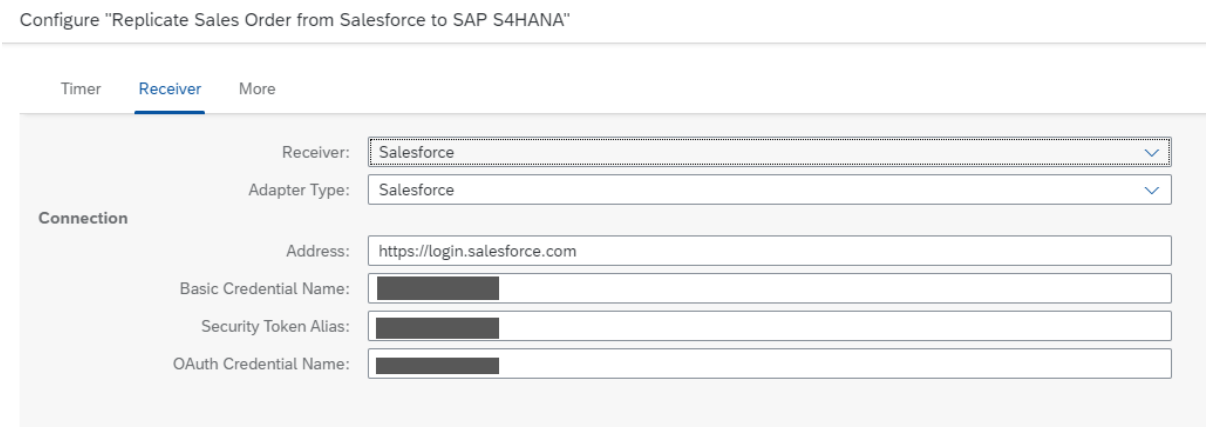


Figure 4.29 Configure Receiver Salesforce

The description of each of the fields in Figure 4.29 is presented in the table below.

Parameter	Description
Address	The data store URL for Salesforce. E.g.: https://login.salesforce.com
Basic Credential Name	Name of a deployed User Credentials artifact that holds Username and Password used to authenticate with Salesforce.
Security Token	Name of a deployed Secure Parameter artifact that holds the real Security Token. The security token is required to log in to Salesforce from an untrusted network
OAuth Credential Name	Name of deployed OAuth credential name.

Table 11 Configure Receiver Salesforce

6. Configure "More" as shown in Figure **4.30**.

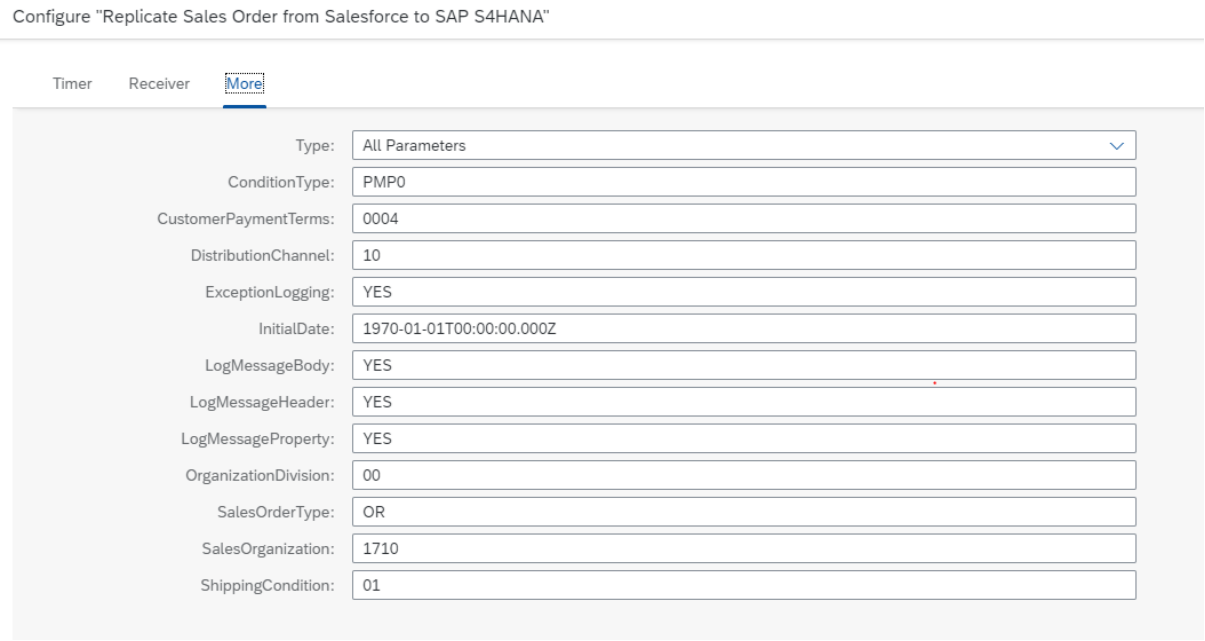


Figure 4.30 Configure More options

The description of each of the fields in Figure 4.30 is presented in the table below.

Parameter	Description
Condition Type	Specify the Condition Type to be used in the iFlow. The default value is "PMP0".
Customer Payment Terms	Specify the Customer Payment Terms to be used in the iFlow. The default value is "0004".
Distribution Channel	Specify the distribution channel to be used in the iFlow. The default value is "10".
Organization Division	Specify the Organization Division to be used in the iFlow. The default value is "00".
Sales Order Type	Specify the document type to be used in the iFlow. The default value is "OR".

Sales Organization	Specify the sales organization to be used in the iFlow. The default value is "1710".
Shipping Condition	Specify Shipping Condition to be used in the iFlow. The default value is "01".
InitialDate	Date from when the integration flow will replicate for the first time. Correct format: YYYY-MM-DD'T'hh:mm:ss.sss'Z' (E.g.: 1970-01-01T00:00:00.000Z)
ExceptionLogging	Possible values "YES" / "NO". Specify "YES" to log the exception if any. Specify "NO" or leave blank otherwise.
LogMessageBody	Possible values "YES" / "NO". Specify "YES" to log the Message Body (Not recommended in a live environment). Specify "NO" or leave blank otherwise.
LogMessageHeader	Possible values "YES" / "NO". Specify "YES" to log the Message Header. Specify "NO" or leave blank otherwise.
LogMessageProperty	Possible values "YES" / "NO". Specify "YES" to log the Message Properties Specify "NO" or leave blank otherwise.

Table 12 Configure More options

4.3.5 Replicate Sales Contract from Salesforce to SAP S/4HANA

4.3.5.1 Business Scenario

This integration flow allows the synchronization of Contracts by replicating the Service Contracts from Salesforce to SAP S/4HANA as Sales Contracts, and by updating it with a reference from SAP S/4HANA.

Figure 4.31 depicts the business process to be implemented.

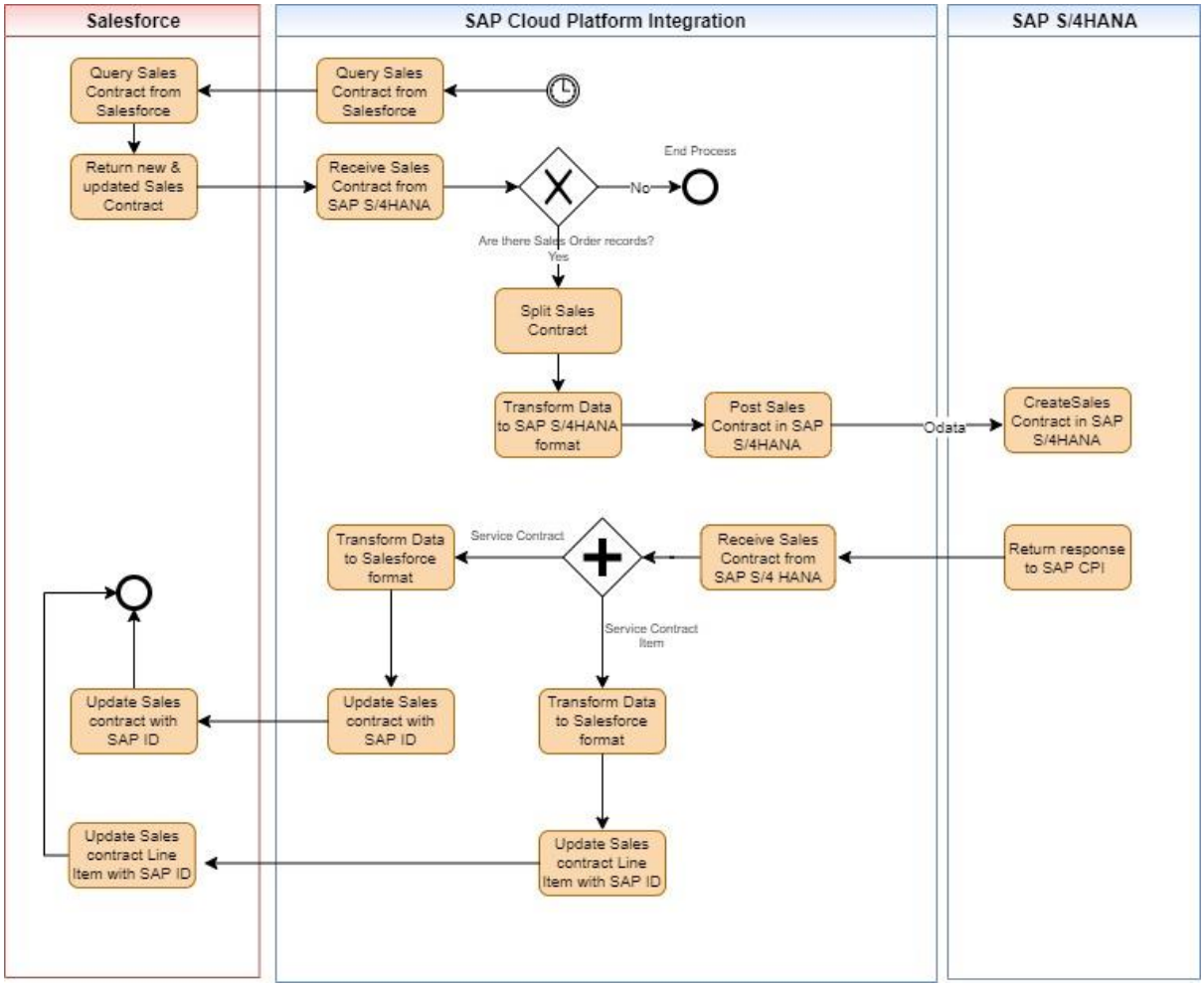


Figure 4.31 Process Diagram

The SAP CPI implementation of the process in Figure 4.31 is shown in Figure 4.32.

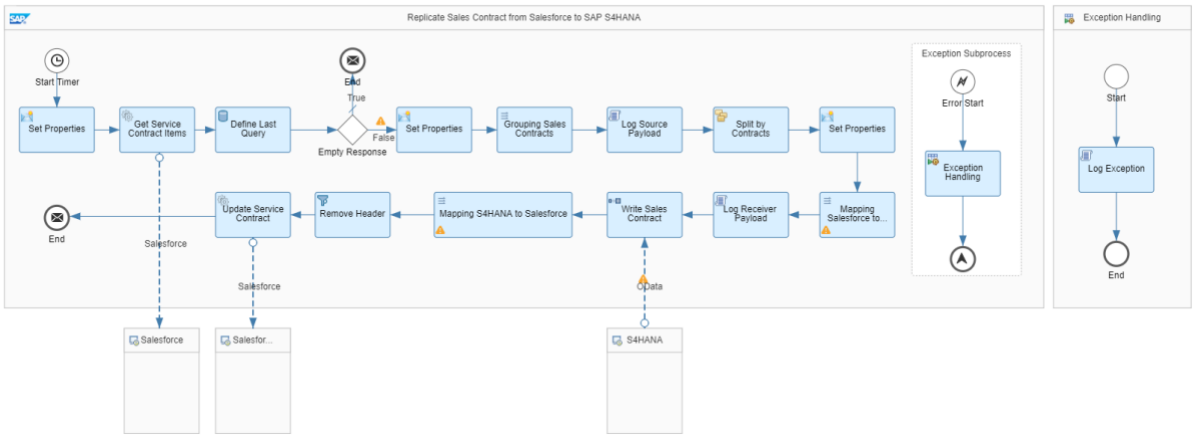


Figure 4.32 Integration Flow

4.3.5.2 Prerequisites

The following steps are the prerequisites for this integration scenario:

- Deploy the security artifacts that will be required during the configuration of integration content.
- Salesforce Entitlement Management feature should be enabled in the user's Salesforce instance.
- Customers/Accounts should have been replicated from SAP S/4HANA to Salesforce.
- Materials/Products should have been replicated from SAP S/4HANA to Salesforce
- Service Contracts were created with replicated Customer/Accounts and Materials/Products from SAP S/4HANA.
- The custom field 'Released' must be checked for the replication to occur.
- Condition Type, Customer Payment Terms, Distribution Channel, Organization Division, Sales Contract Type, and Sales Organization are externalized and should be configured in iFlow before the replication.

4.3.5.3 Scope

- Users cannot create sales contracts until extending the master data to the respective sales area.
- Users need to define the first run date-time from when to start replicating
- This integration flow only covers new service contracts, update is not covered in this version.

4.3.5.4 Configuration

Follow the below steps to configure the integration flow:

1. Open the Integration flow "Replicate Sales Contract from Salesforce to SAP S4HANA"
2. Click on Configure.
3. Configure "Timer". You can choose between:

Run Once: iFlow will be executed only once, can be used for the initial load.
Schedule on Day: iFlow will be executed on a specific date/time.
Schedule to Recur: iFlow will be executed at a regular interval and will replicate the changes from the source system to the target system (suggested mode).

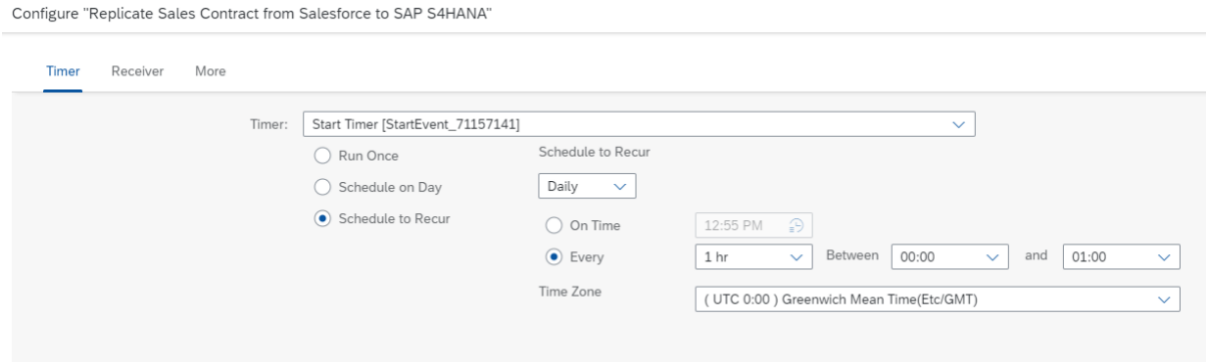


Figure 4.33 Configure Timer

Note: Replace the default values of the parameters in the configurations based on your scenario and landscape.

4. Configure the "Receiver" connector named "S4HANA" to fit your specific landscape. See Figure **4.34**.

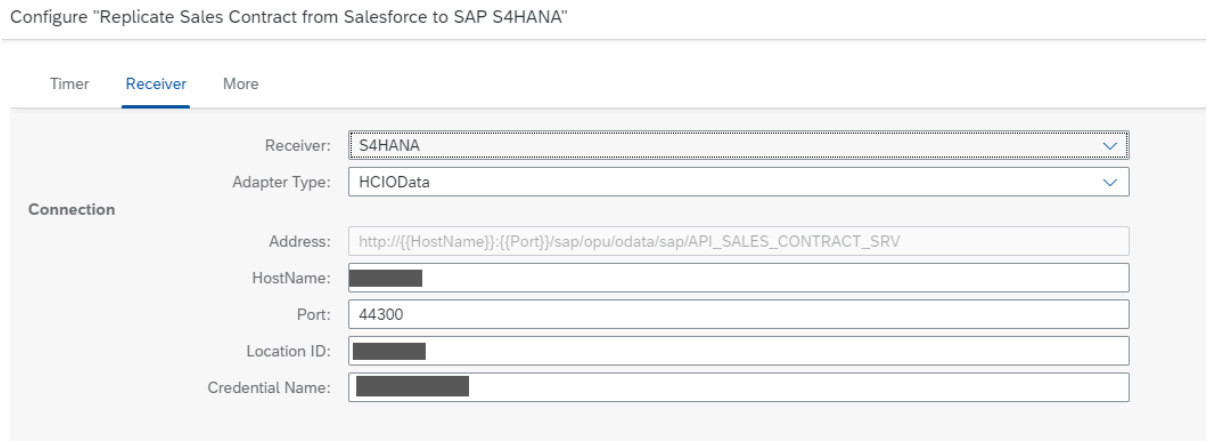


Figure 4.34 Configure Receiver S/4HANA

The description of each of the fields in Figure 4.34 is presented in the table below.

Parameter	Description
Hostname	Enter the API hostname of your SAP S/4HANA system. The hostname is part of the Address.

	https://**hostname:**port/sap/opu/odata/sap/API_SALES_CONTRACT_SRV
Port	Enter the API port of your SAP S/4HANA system. The port is part of the Address https://hostname**:port**/sap/opu/odata/sap/API_SALES_CONTRACT_SRV
Location ID	Enter the Location identifier for your SAP S/4HANA tenant.
Credential Name	Enter the name of the credential you have deployed for S/4HANA. See below about deploying credential artifacts.

Table 13 Configure Receiver S/4HANA

5. Configure the "Receiver" connector named "Salesforce". See Figure **4.35**.

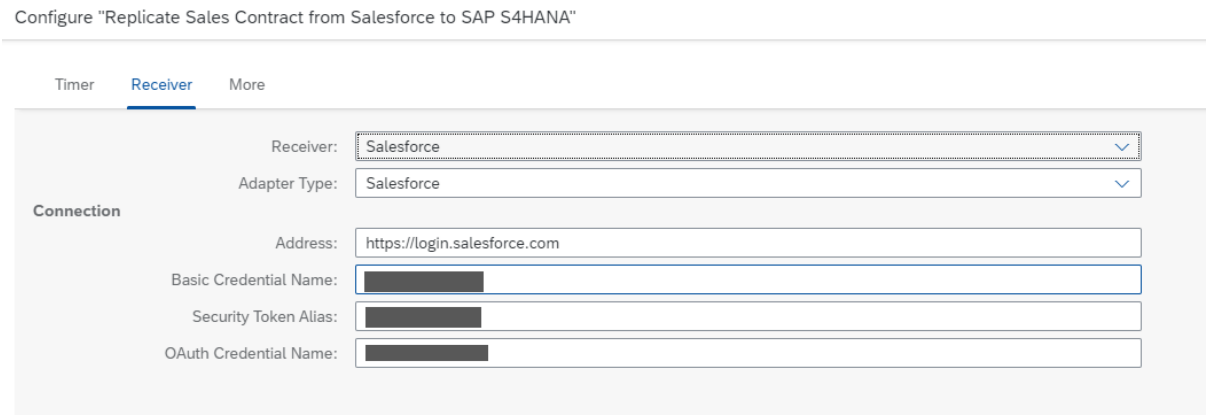


Figure 4.35 Configure Receiver Salesforce

The description of each of the fields in Figure 4.35 is presented in the table below.

Parameter	Description
Address	The data store URL for Salesforce. E.g.: https://login.salesforce.com
Basic Credential Name	Name of a deployed User Credentials artifact that holds Username and Password used to authenticate with Salesforce.

Security Token	Name of a deployed Secure Parameter artifact that holds the real Security Token. The security token is required to log in to Salesforce from an untrusted network.
OAuth Credential Name	Name of deployed OAuth credential name.

Table 14 Configure Receiver Salesforce

6. Configure "More" as shown in Figure **4.36**.

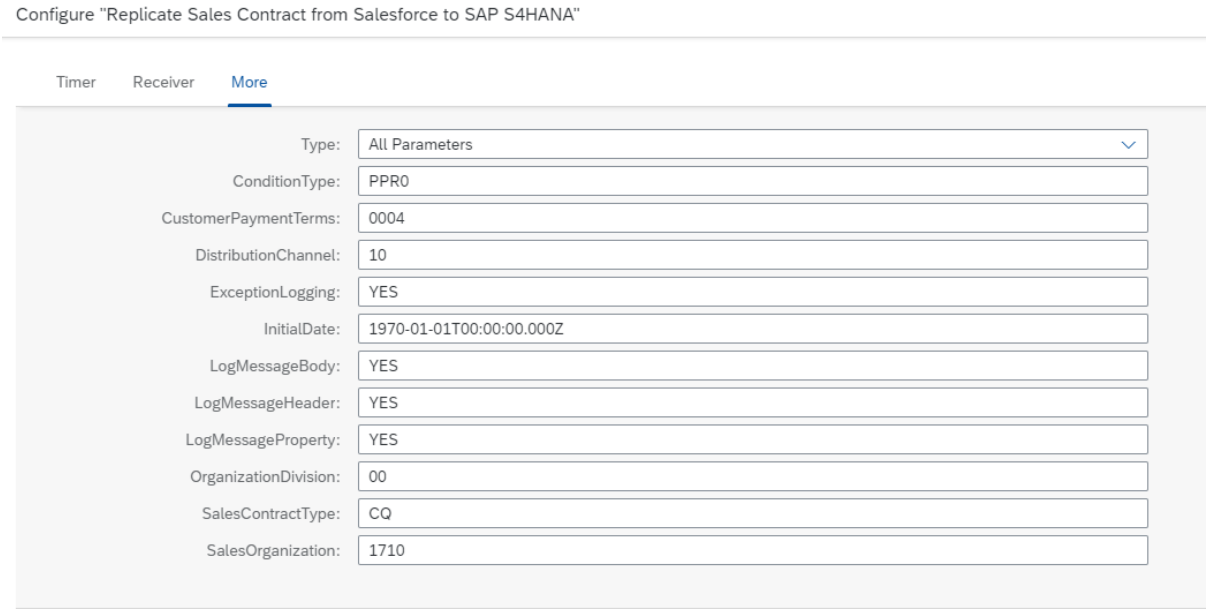


Figure 4.36 Configure More options

The description of each of the fields in Figure 4.36 is presented in the table below.

Parameter	Description
Condition Type	Specify the Condition Type to be used in the iFlow. The default value is "PPR0".
Customer Payment Terms	Specify the Customer Payment Terms to be used in the iflow. The default value is "0004".

Distribution Channel	Specify the distribution channel to be used in the iFlow. The default value is "10".
Organization Division	Specify the Organization Division to be used in the iFlow. The default value is "0".
Sales Contract Type	Specify the document type to be used in the iFlow. The default value is "CQ".
Sales Organization	Specify the sales organization to be used in the iFlow. The default value is "1710".
InitialDate	Date from when the integration flow will replicate for the first time. Correct format: YYYY-MM-DD'T'hh:mm:ss.sss'Z' (E.g.: 1970-01-01T00:00:00.000Z)
ExceptionLogging	Possible values "YES" / "NO". Specify "YES" to log the exception if any. Specify "NO" or leave blank otherwise.
LogMessageBody	Possible values "YES" / "NO". Specify "YES" to log the Message Body (Not recommended in a live environment). Specify "NO" or leave blank otherwise.
LogMessageHeader	Possible values "YES" / "NO". Specify "YES" to log the Message Header. Specify "NO" or leave blank otherwise.
LogMessageProperty	Possible values "YES" / "NO".

	Specify "YES" to log the Message Properties. Specify "NO" or leave blank otherwise.

Table 15 Configure More options

4.3.6 Receive Product Availability from SAP S/4HANA

4.3.6.1 Business Scenario

This integration flow allows users to obtain the availability of materials in a specified plant, as delivered by your SAP S/4HANA through the SOAP protocol. This SOAP protocol can be configured in other platforms to extract current stock or check the availability of a requested quantity.

Figure 4.37 depicts the business process to be implemented.

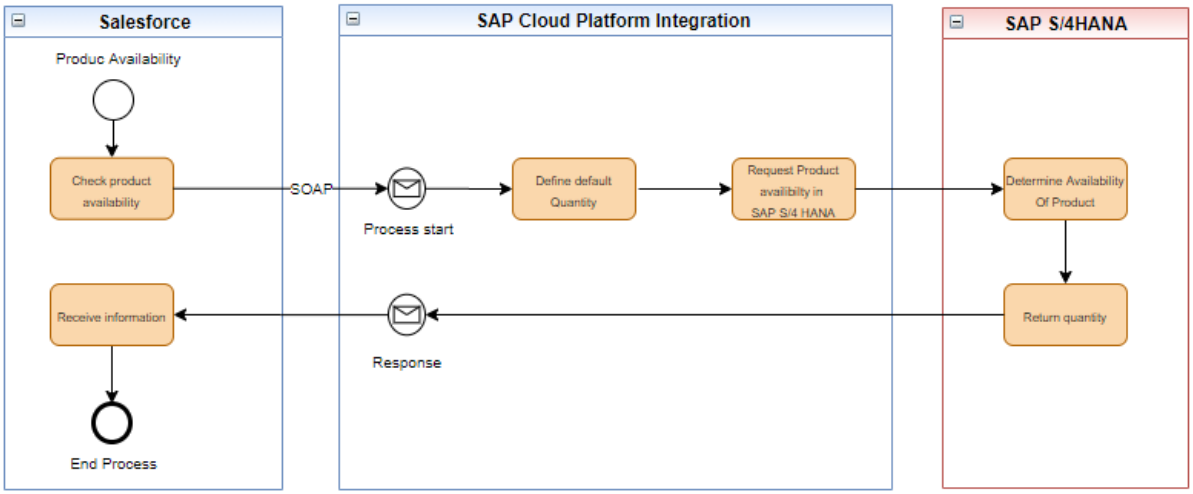


Figure 4.37 Process Diagram

The SAP CPI implementation of the process in Figure 4.37 is shown in Figure 4.38.

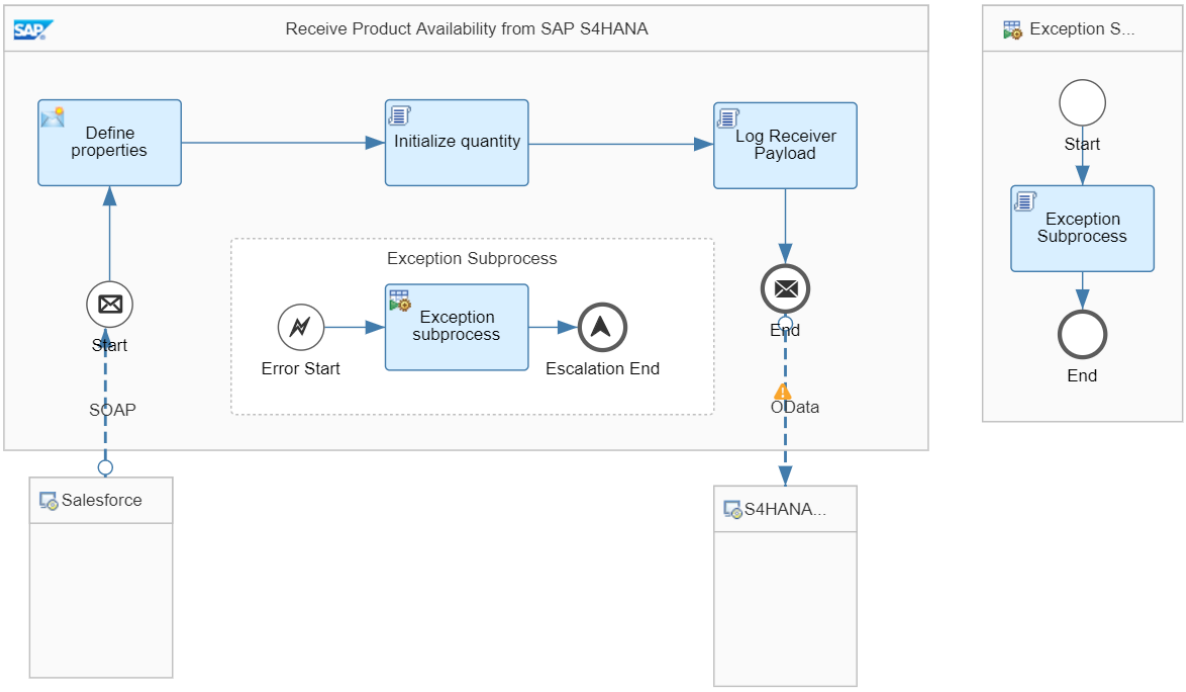


Figure 4.38 Integration Flow

4.3.6.2 Prerequisites

The following steps are the prerequisites for this integration scenario:

- Deploy the security artifacts that will be required during the configuration of Integration content.
- Users need to implement classes to consume this web service with APEX (for reference, see Invoking Callouts Using Apex).

4.3.6.3 Scope

The value of quantity returned in response is always the maximum quantity available of the product in SAP S/4HANA.

4.3.6.4 Configuration

Follow the below steps to configure the integration flow:

1. Open the integration flow "Receive product availability from SAP S4HANA".
2. Click on Configure.
3. Go to Sender and Configure "Sender" Salesforce.

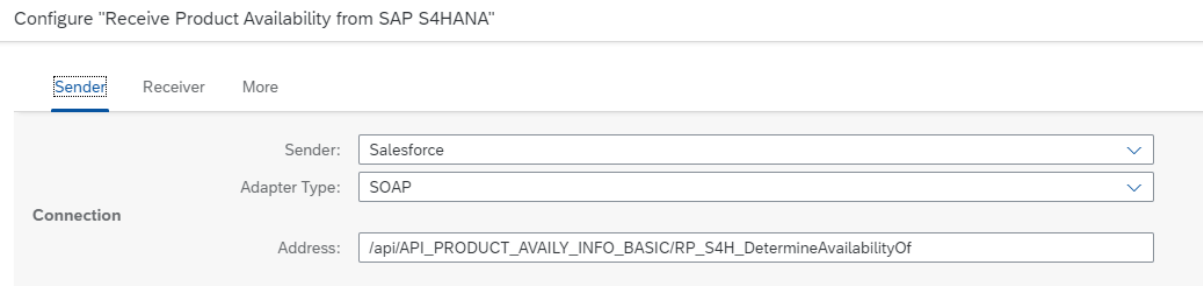


Figure 4.39 Configure Sender Salesforce

Parameter	Description
Address	The endpoint URL where your service can be accessed by a client application.

Note: Replace the default values of the parameters in the configurations based on your scenario and landscape.

4. Configure the "Receiver" connector named "S4HANA" to fit your specific landscape. See Figure **4.40**.

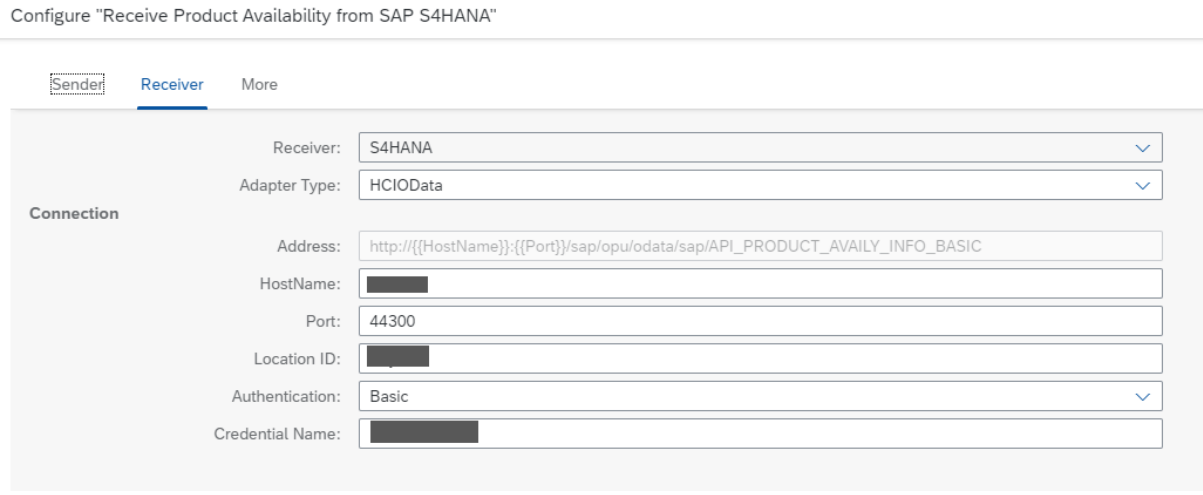


Figure 4.40 Configure Receiver S/4HANA

The description of each of the fields in Figure 4.40 is presented in the table below.

Parameter	Description
Hostname	Enter the API hostname of your S/4HANA system. The hostname is part of the Address. https://**hostname**:port/sap/opu/odata/sap/API_PRODUCT_AVAILY_INFO_BASIC
Port	Enter the API port of your SAP S/4HANA system. The port is part of the Address. https://hostname**:port**/sap/opu/odata/sap/API_BUSINESS_PARTNER
Location ID:	Enter the Location identifier for your SAP S/4HANA tenant.
Authentication	Select "Basic" authentication Type.
Credential Name	Enter the name of the credential you have deployed for/4HANA. See below about deploying credential artifacts.

Table 16 Configure Receiver S/4HANA

5. Configure "More" as shown in Figure **4.41**.

Figure 4.41 Configure More options

The description of each of the fields in Figure 4.41 is presented in the table below.

Parameter	Description
ExceptionLogging	Possible values "YES" / "NO". Specify "YES" to log the exception if any. Specify "NO" or leave blank otherwise.
LogMessageBody	Possible values "YES" / "NO". Specify "YES" to log the Message Body (Not recommended in a live environment). Specify "NO" or leave blank otherwise.
LogMessageHeader	Possible values "YES" / "NO". Specify "YES" to log the Message Header. Specify "NO" or leave blank otherwise.
LogMessageProperty	Possible values "YES" / "NO". Specify "YES" to log the Message Properties. Specify "NO" or leave blank otherwise.

Table 17 Configure More options

4.3.7 Update Account from Salesforce to SAP S/4HANA

4.3.7.1 Business Scenario

This integration flow allows updating Accounts from Salesforce to Customers in SAP S/4HANA. Whenever an Account is modified in Salesforce it can be replicated to SAP S/4HANA in the next run of the integration flow (if scheduled to recur).

Figure 4.42 depicts the business process to be implemented.

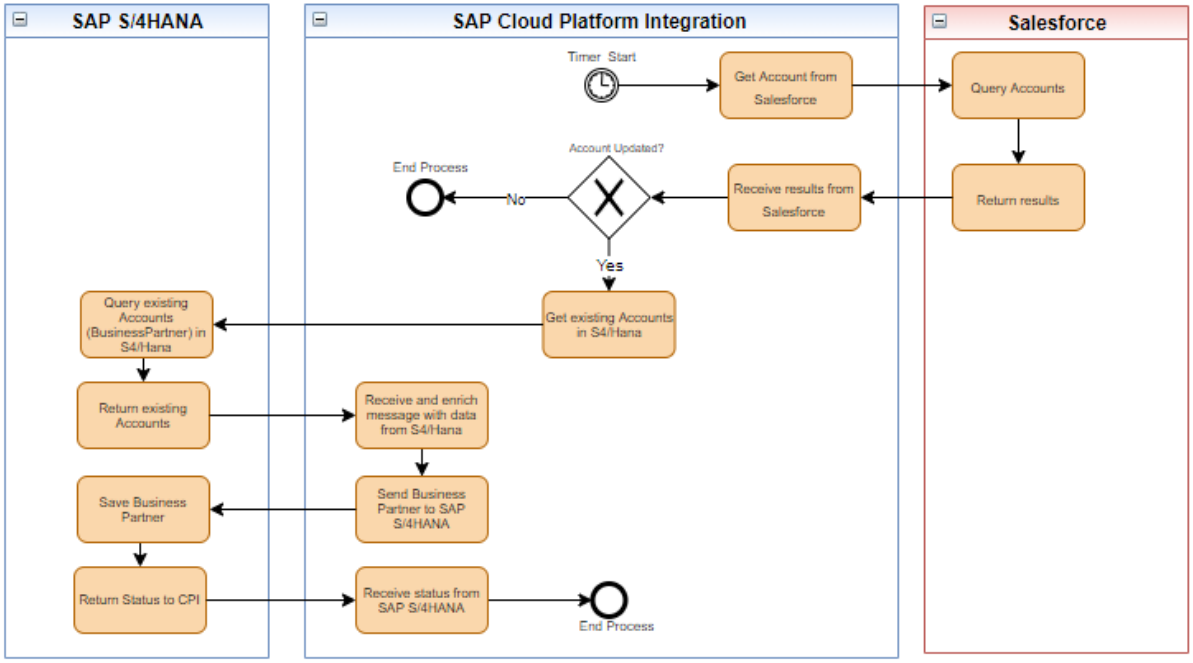


Figure 4.42 Process Diagram

The SAP CPI implementation of the process in Figure 4.42 is shown in Figure 4.43.

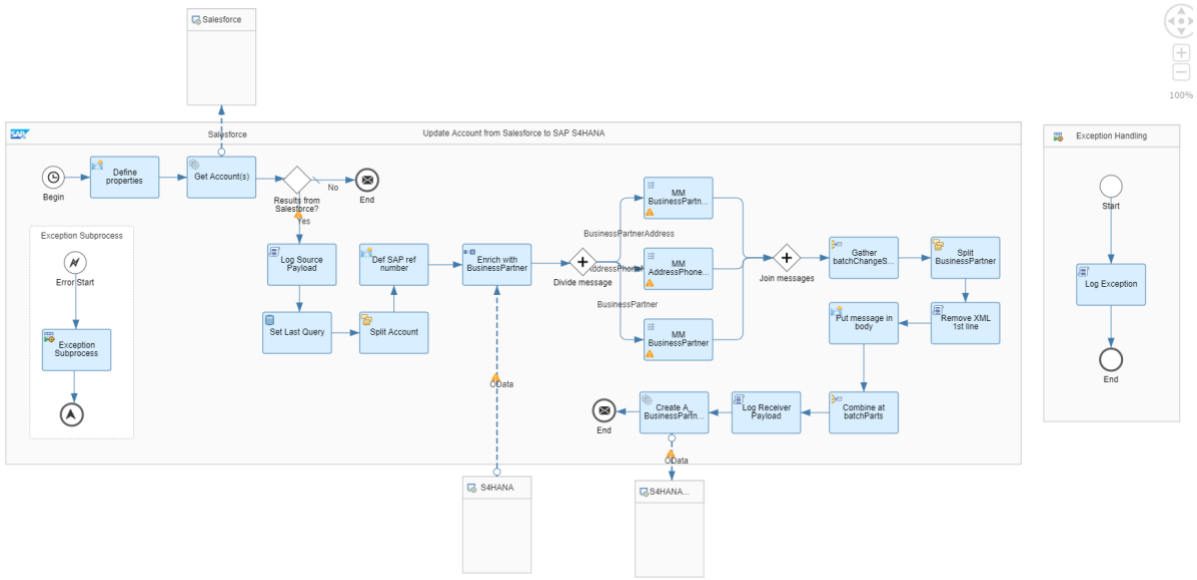


Figure 4.43 Integration Flow

4.3.7.2 Prerequisites

The following steps are the prerequisites for this integration scenario:

- Deploy the security artifacts which will be required during the configuration of integration content.
- Customers should have been replicated from SAP S/4HANA to Salesforce.
- Users need to define the first run date-time from when to start updating.

4.3.7.3 Scope

- This integration flow will replicate only the Accounts of the category Customers.
- Only Accounts created by a pre-determined (communication user used for creation) would be replicated.
- Since the number of field names in SAP and Salesforce is different, account names are separated by spaces, the last value will be mapped to LastName in the case of a person or GroupBusinessPartnerName2 in the case of a group, all other names will go to FirstName and GroupBusinessPartnerName1, respectively.

4.3.7.4 Configuration

1. Open the Integration flow "Update Account from Salesforce to SAP S4HANA".
2. Click on Configure.
3. Configure "Timer". You can choose between:
   Run Once: iFlow will be executed only once, can be used for the initial load.
   Schedule on Day: iFlow will be executed on a specific date/time.
   Schedule to Recur: iFlow will be executed at a regular interval and will replicate the changes from the source system to the target system (suggested mode).

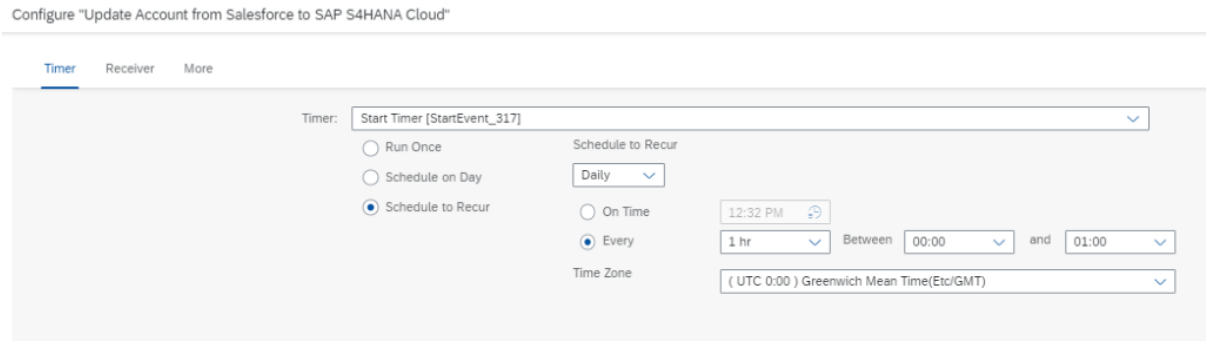


Figure 4.44 Configure Timer

Note: Replace the default values of the parameters in the configurations based on your scenario and landscape.

4. Go to Receiver.
5. Configure the "Receiver" connector named "S4HANA" to fit your specific landscape. See Figure **4.45**.

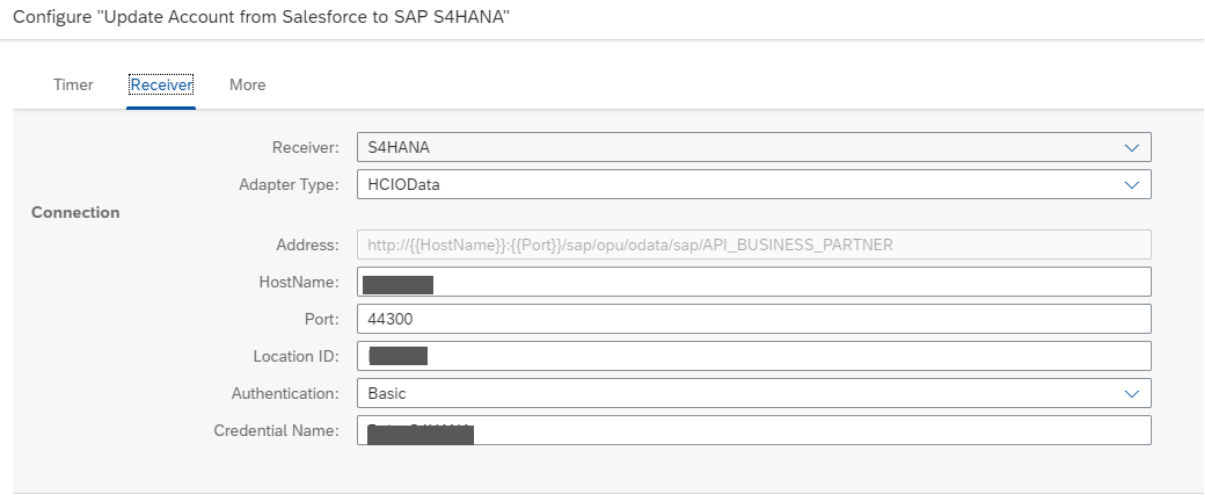


Figure 4.45 Configure Receiver S/4HANA

The description of each of the fields in Figure 4.45 is presented in the table below.

Parameter	Description
Hostname	Enter the API hostname of your S/4HANA system. The hostname is part of the Address. https://**hostname:**port/sap/opu/odata/sap/API_BUSINESS_PARTNER
Port	Enter the API port of your S/4HANA system. The port is part of the Address. https://hostname**:port**/sap/opu/odata/sap/API_BUSINESS_PARTNER
Location ID	Enter the Location identifier for your SAP S/4HANA tenant.
Credential Name	Enter the name of the credential you have deployed for S/4HANA. See below about deploying credential artifacts.

Table 18 Configure Receiver S/4HANA

6. Configure the "Receiver" connector named "Salesforce". See Figure **4.46**.

Figure 4.46 Configure Receiver Salesforce

The description of each of the fields in Figure 4.46 is presented in the table below.

Parameter	Description
Address	The data store URL for Salesforce. E.g.: https://login.salesforce.com
Credential Name	Name of a deployed User Credentials artifact that holds Username and Password used to authenticate with Salesforce.
Security Token	Name of a deployed Secure Parameter artifact that holds the real Security Token. The security token is required to log in to Salesforce from an untrusted network.
OAuth Credential Name	OAuth credential name.

Table 19 Configure Receiver Salesforce

7. Configure "More" as shown in Figure **4.47**.

Figure 4.47 Configure More options

The description of each of the fields in Figure 4.47 is presented in the table below.

Parameter	Description
CreatedBy	Specify the salesforce identification for the user that is used for the creation of Accounts.
ExceptionLogging	Possible values "YES" / "NO". Specify "YES" to log the exception if any. Specify "NO" or leave blank otherwise.
LogMessageBody	Possible values "YES" / "NO". Specify "YES" to log the Message Body (Not recommended in a live environment). Specify "NO" or leave blank otherwise.
LogMessageHeader	Possible values "YES" / "NO". Specify "YES" to log the Message Header. Specify "NO" or leave blank otherwise.
InitialDate	Date from when the integration flow will replicate for the first time. Correct format: YYYY-MM-DD'T'hh:mm:ss.sss'Z' (E.g.: 1970-01-01T00:00:00.000Z).
LogMessageProperty	Possible values "YES" / "NO". Specify "YES" to log the Message Properties. Specify "NO" or leave blank otherwise.

Table 20 Configure More options

8. Save and Deploy.

4.3.8 Replicate Sales Order from SAP S/4HANA to Salesforce

4.3.8.1 Business Scenario

This integration flow allows sending updates to SAP S/4HANA Sales Orders to Salesforce. Changes made in SAP S/4HANA, including the addition of new materials to the Sales Order, would be replicated to Salesforce. Figure 4.48 depicts the business process to be implemented.

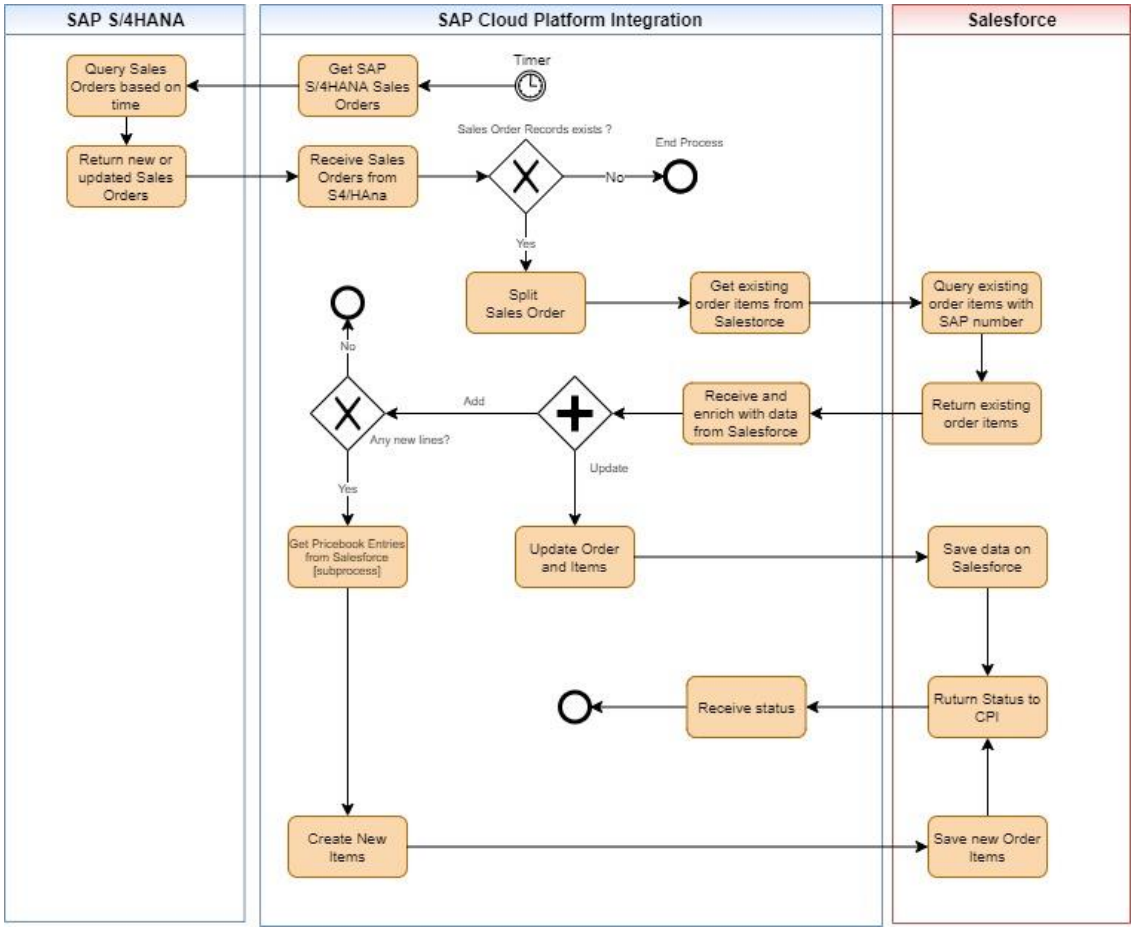
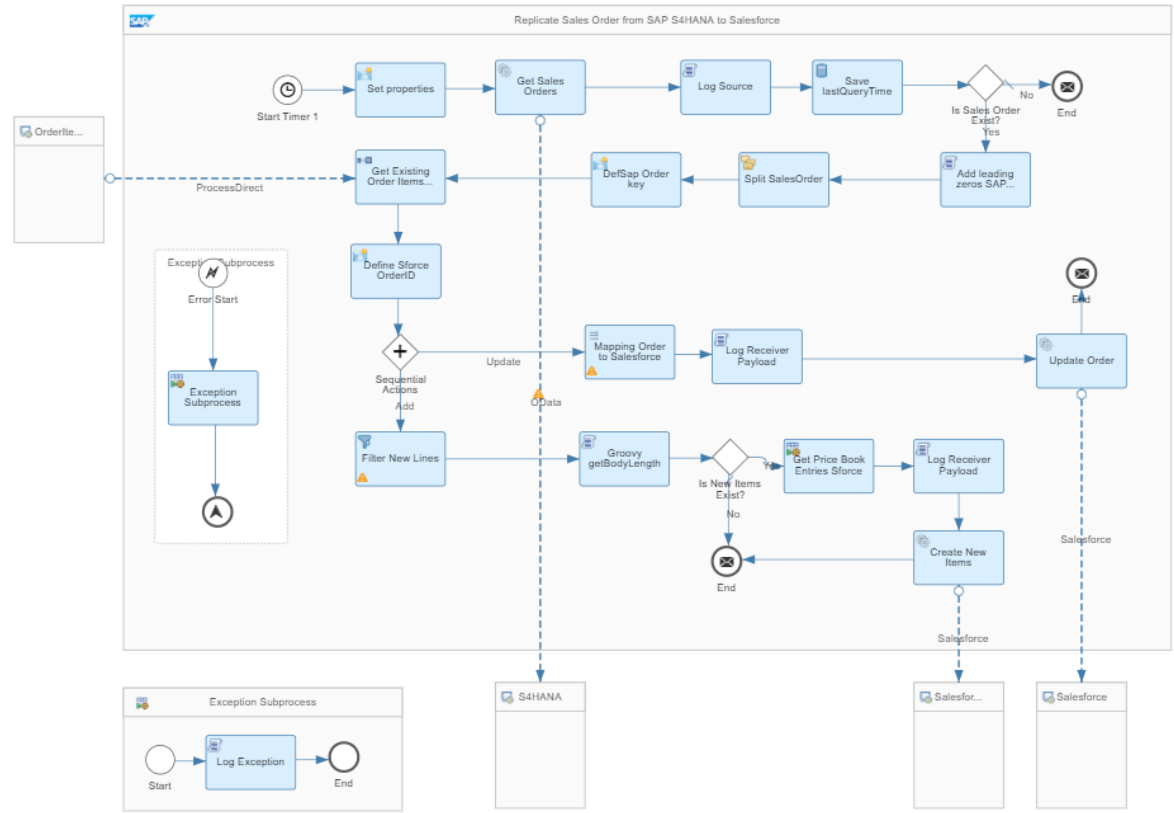
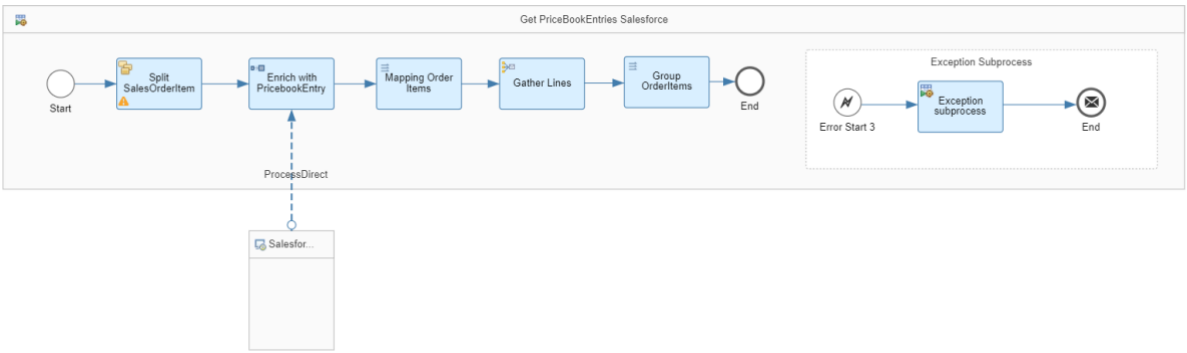


Figure 4.48 Process Diagram

The SAP CPI implementation of the process in Figure 4.48 is shown in Figure 4.49**.**





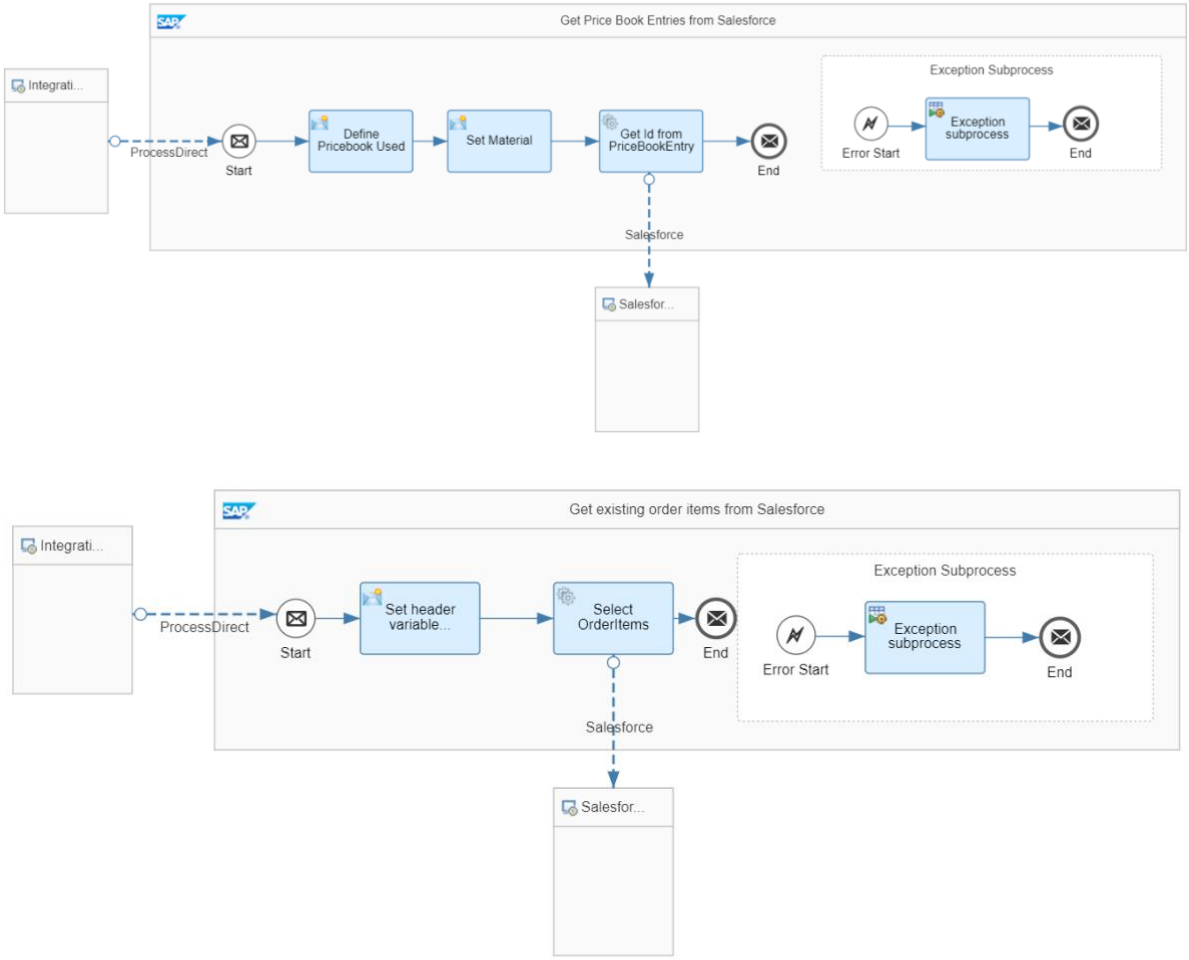


Figure 4.49 Integration Flow

4.3.8.2 Prerequisites

The following steps are the prerequisites for this integration scenario:

- Customers/Products should have been replicated from SAP S/4HANA to Salesforce.
- The order should have been replicated from Salesforce to SAP S/4HANA.
- The query filter uses 'createdBy'. A service user needs to be utilized in SAP S/4HANA for Salesforce integration.
- Users need to define the first run date-time from when to start updating.

4.3.8.3 Scope

- Some information must be hardcoded to correctly replicate to Salesforce, such as: Created by User and Pricebook Name.
- This integration flow only covers updating orders replicated from Salesforce, including adding new items.

4.3.8.4 Configuration

To configure the integration flow, follow the steps below:

1. Open the integration flow.
2. Configure "Timer". You can choose between:
   Run Once: iFlow will be executed only once, can be used for the initial load.
   Schedule on Day: iFlow will be executed on a specific date/time.
   Schedule to Recur: iFlow will be executed at a regular interval and will replicate the changes from the source system to the target system (suggested mode).

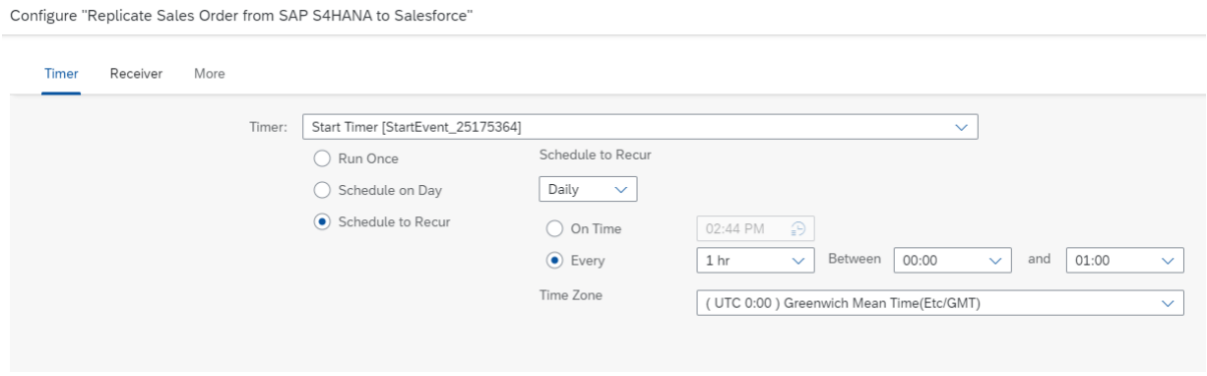


Figure 4.50 Configure Timer

Note: Replace the default values of the parameters in the configurations based on your scenario and landscape.

3. Go to Receiver.
4. Configure the "Receiver" connector named "S4HANA" to fit your specific landscape. See Figure **4.51**.

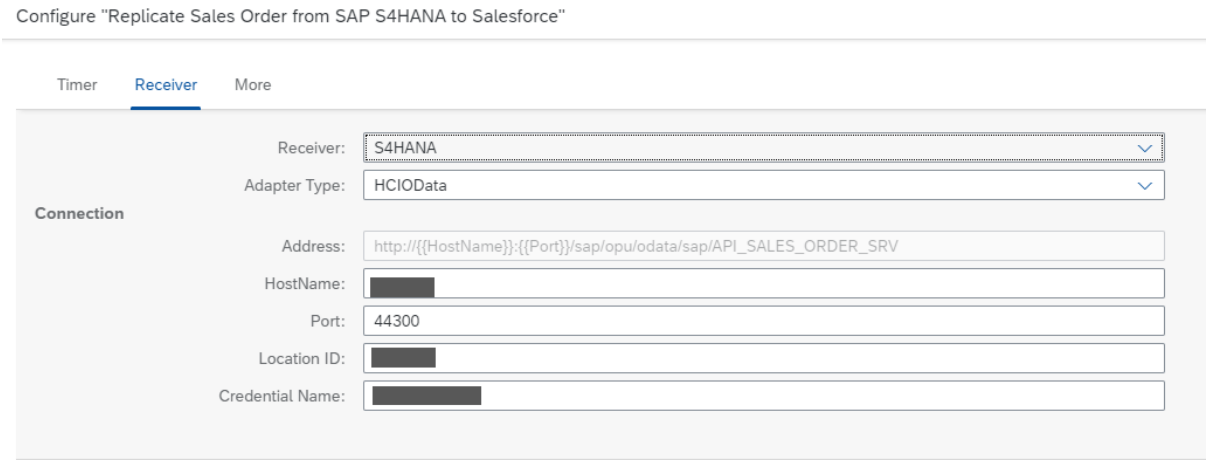


Figure 4.51 Configure Receiver S/4HANA

The description of each of the fields in Figure 4.51 is presented in the table below.

Parameter	Description
Hostname	Enter the API hostname of your S/4HANA system. The hostname is part of the Address. https://**hostname:**port/sap/opu/odata/sap/API_SALES_ORDER_SRV
Port	Enter the API port of your S/4HANA system. The port is part of the Address. https://hostname**:port**/sap/opu/odata/sap/API_SALES_ORDER_SRV
Location ID	Enter the Location identifier for your SAP S/4HANA tenant.
Credential Name	Enter the name of the credential you have deployed for S/4HANA. See below about deploying credential artifacts.

Table 21 Configure Receiver S/4HANA

5. Configure the "Receiver" connector named "Salesforce". See Figure **4.52**.

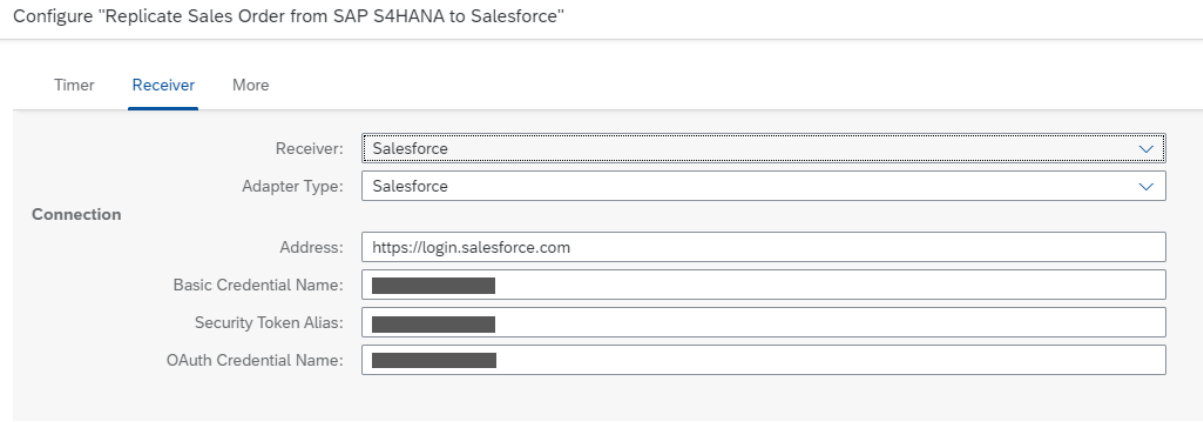


Figure 4.52 Configure Receiver Salesforce

The description of each of the fields in Figure 4.52 is presented in the table below.

Parameter	Description
Address	The data store URL for Salesforce. E.g.: https://login.salesforce.com
Basic Credential Name	Name of a deployed User Credentials artifact that holds Username and Password used to authenticate with Salesforce.
Security Token Alias	Name of a deployed Secure Parameter artifact that holds the real Security Token. The security token is required to log in to Salesforce from an untrusted network. Salesforce automatically generates this key. If you do not have the security token, log into your account, go to Setup > My Personal Information > Reset My Security Token.
OAuth Credential Name	OAuth credential name.

Table 22 Configure Receiver Salesforce

6. Configure "More" to fit your use case, see example in Figure **4.53**.

Figure 4.53 Configure More options

Parameter	Description
CreatedByUser	Specify the salesforce identification for the user that modifies the Accounts. This ID is generated by Salesforce can be extracted using the plug-in, the field name is CreatdById.

ExceptionLogging	Possible values "YES" / "NO". Specify "YES" to log the exception if any. Specify "NO" or leave blank otherwise.
LogMessageBody	Possible values "YES" / "NO". Specify "YES" to log the Message Body (Not recommended in a live environment). Specify "NO" or leave blank otherwise.
LogMessageHeader	Possible values "YES" / "NO". Specify "YES" to log the Message Header Specify "NO" or leave blank otherwise.
InitialDate	Date from when the integration flow will replicate for the first time. Correct format: YYYY-MM-DD'T'hh:mm:ss.sss'Z' (E.g.: 1970-01-01T00:00:00.000Z).
LogMessageProperty	Possible values "YES" / "NO". Specify "YES" to log the Message Properties Specify "NO" or leave blank otherwise.
PricebookName	Pricebook name in Salesforce. The default value is "Standard Price Book".
Salesforce API Version	Choose the version of the Salesforce API to connect to. Default is 48.0.

Table 23 Configure More options

4.3.8.5 Value Mapping

Value mapping allows the customization for OverallSDProcessStatus from Sales Orders in SAP S/4HANA to Status in Salesforce. In the current version of the content package there are two Record Types values as guidance: In Approval Process and Draft.

Users should rename this Order Status to fit their organization's needs.

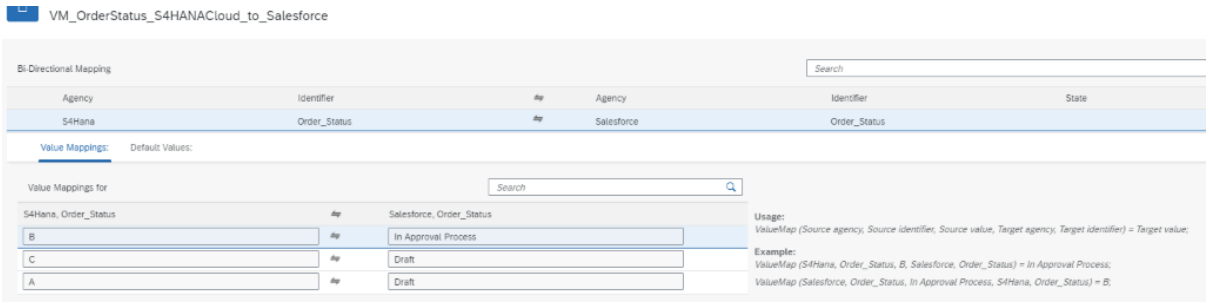


Figure 4.54 Value Mapping Order Status

4.3.9 Receive Sales Order History from SAP S/4HANA

4.3.9.1 Business Scenario

This integration flow allows users to check the order history for a specific customer in a defined time frame, as delivered by your SAP S/4HANA through the SOAP protocol. This SOAP protocol can be configured in other platforms to extract the sales order history for a specific period or sales order type.

Figure 4.55 depicts the business process to be implemented.

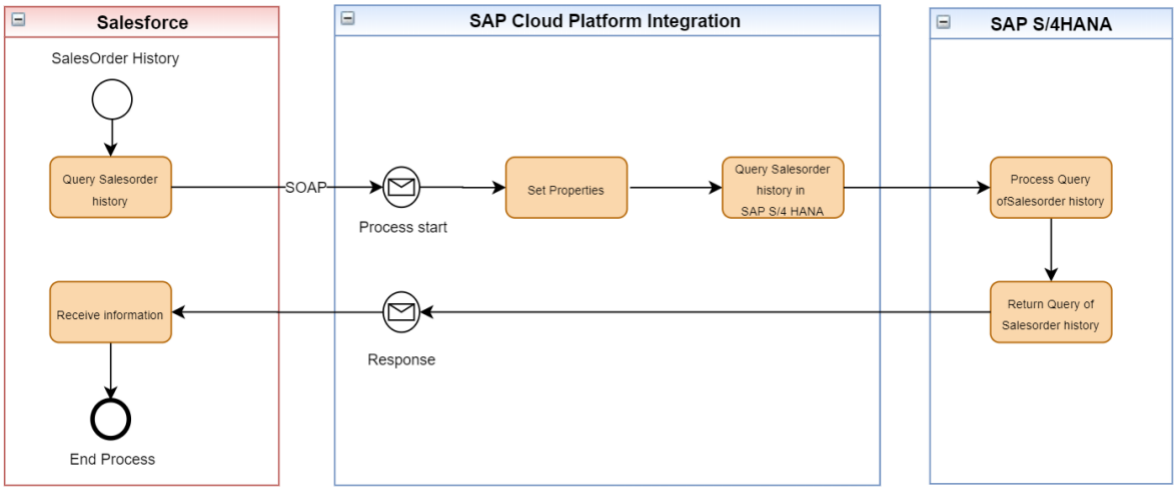


Figure 4.55 Process Diagram

The SAP CPI implementation of the process in Figure 4.55 is shown in Figure 4.56.

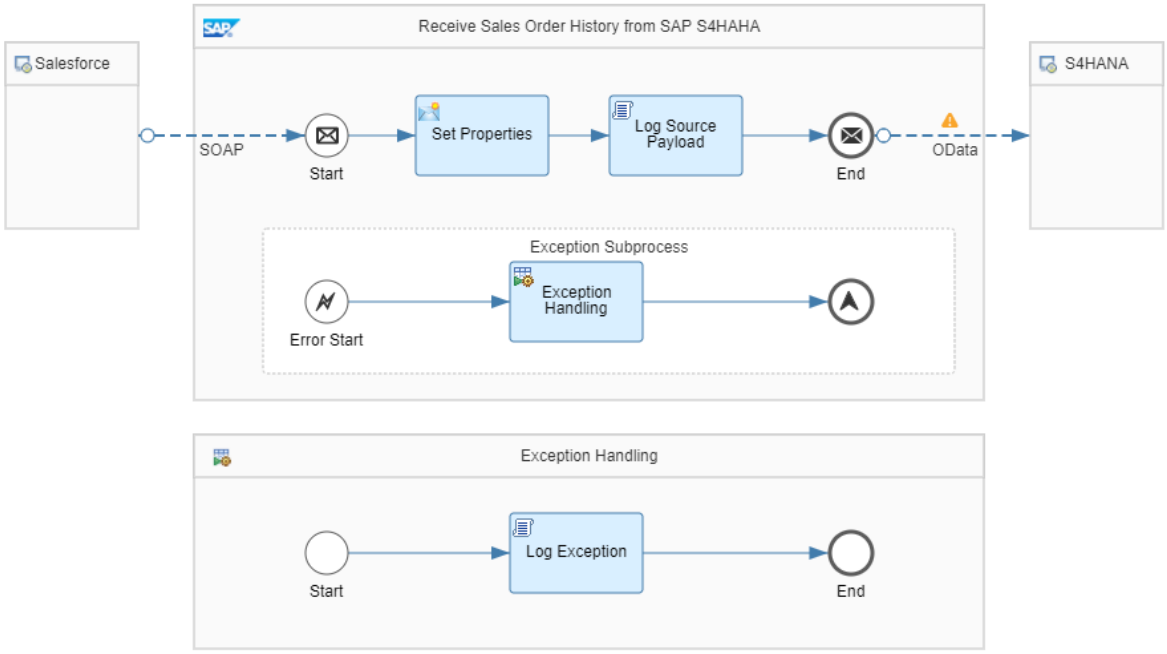


Figure 4.56 Integration Flow

4.3.9.2 Prerequisites

The following steps are the prerequisites for this integration scenario:

- Deploy the security artifacts that will be required during the configuration of integration content.
- Users need to implement classes to consume this web service with APEX (for reference, see Invoking Callouts Using Apex).

4.3.9.3 Configuration

Follow the below steps to configure the integration flow:

1. Open the integration flow "Receive Sales Order History from SAP S4HANA".
2. Click on Configure.
3. Configure "Sender" SOAP and define an address for the SOAP connection.

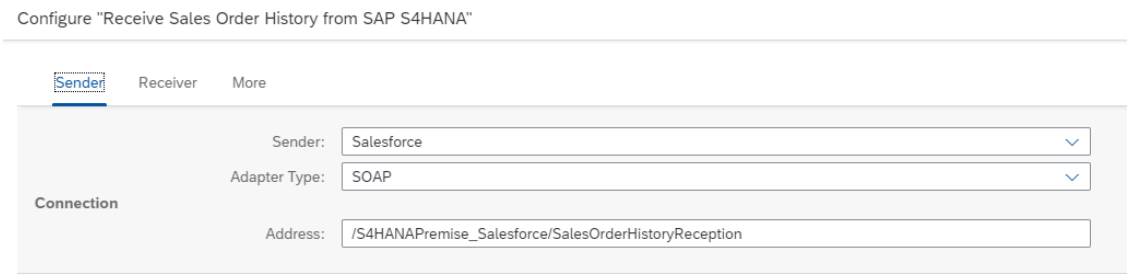


Figure 4.57 Configure Sender SOAP

Note: Replace the default values of the parameters in the configurations based on your scenario and landscape.

4. Configure the "Receiver" connector named "S4HANA" to fit your specific landscape. See Figure **4.58**.

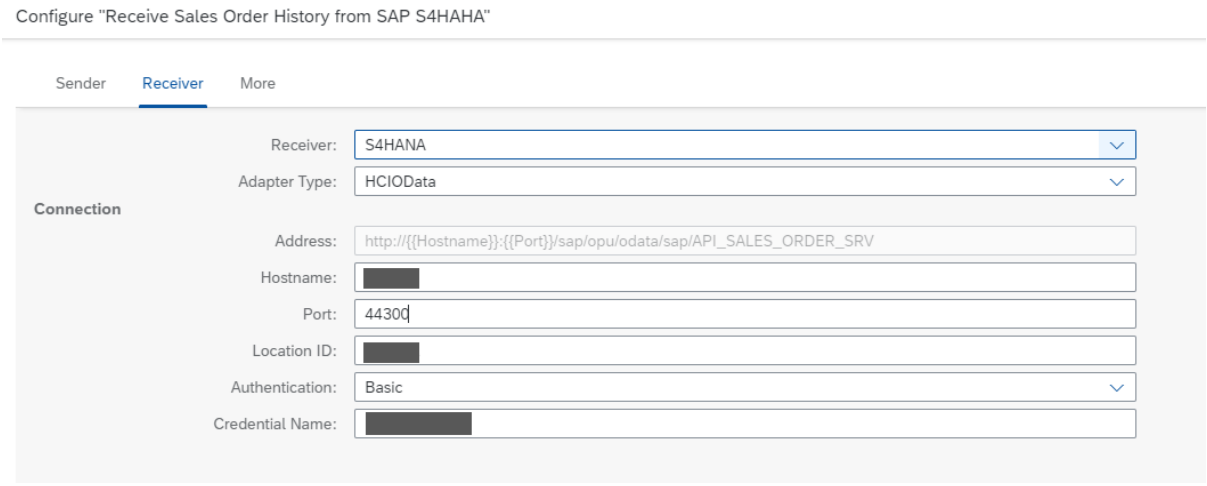


Figure 4.58 Configure Receiver S/4HANA

The description of each of the fields in Figure 4.58 is presented in the table below.

Parameter	Description
Hostname	Enter the API hostname of your SAP S/4HANA system. The hostname is part of the Address. https://**hostname:**port/sap/opu/odata/sap/API_SALES_ORDER_SRV
Port	Enter the API port of your SAP S/4HANA system. The port is part of the Address.

	https://hostname**:port**/sap/opu/odata/sap/API_SALES_ORDER_SRV
Authentication	Select "Basic" authentication Type.
Credential Name	Enter the name of the credential you have deployed for S/4HANA. See below about deploying credential artifacts.

Table 24 Configure Receiver S/4HANA

5. Configure "More" as shown in Figure **4.59**.

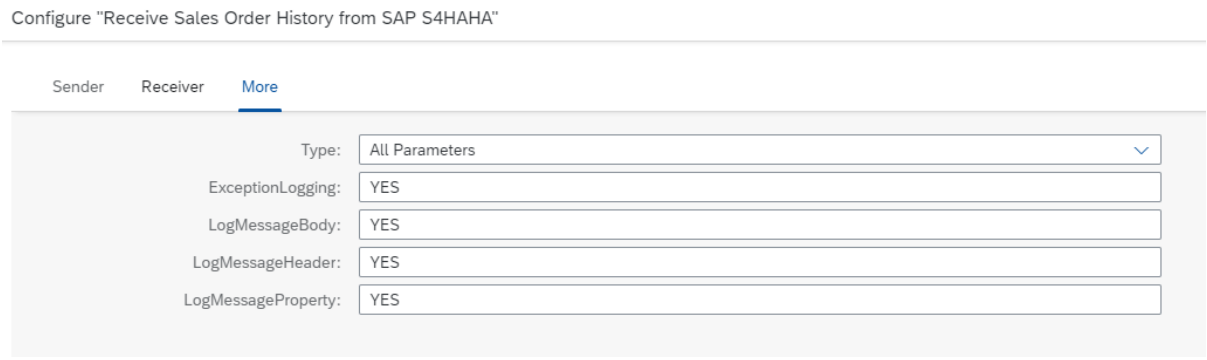


Figure 4.59 Configure More options

The description of each of the fields in Figure 4.59 is presented in the table below.

Parameter	Description
ExceptionLogging	Possible values "YES" / "NO". Specify "YES" to log the exception if any. Specify "NO" or leave blank otherwise.
LogMessageBody	Possible values "YES" / "NO". Specify "YES" to log the Message Body (Not recommended in a live environment). Specify "NO" or leave blank otherwise.
LogMessageHeader	Possible values "YES" / "NO".

	Specify "YES" to log the Message Header. Specify "NO" or leave blank otherwise.
LogMessageProperty	Possible values "YES" / "NO". Specify "YES" to log the Message Properties Specify "NO" or leave blank otherwise.

Table 25 Configure More options

5 Appendix

5.1 Generating Schema from Eclipse Plug-in and Replacing Standard Schema Used in Integration Flow

Currently, the integration package works with the standard fields for Salesforce, except for specific fields created in previous chapters. In case other custom fields are needed; a new XSD must be generated with the Salesforce Eclipse Plug-in, the default XSD on mapping must be replaced by the created one, and these fields should also be mapped.

Steps to create an XSD:

1. Open Eclipse.
2. Go to Windows > Perspective > Open Perspective > Other.
3. Select Salesforce Adapter and click Open.
4. Go to XSD Generator XSD (or XSD Generator Aggregation/Composite if more than one object is needed).
5. Select a Version.
6. Select an API.
7. Select the operation that accommodates the integration flow.
8. Select an Object (or many in case of Aggregation/Composite).
9. Select Request XSD or Response XSD depending on the case.
10. Click on Save XSD and select a folder.
11. Replace default XSD from mapping in SAP CPI to recently created XSD

5.2 Deploying Salesforce User Credentials, Token, and OAuth in SAP Cloud Platform Interface

Note that the information in this section is also specified in the adapter documentation.

5.2.1 Deploying User Credentials

This is necessary to hold the Salesforce username and password information used in the authentication.

Follow the steps below:

1. In your SAP CPI tenant go to Monitor.
2. In Manage Security click on Security Material.
3. Click in the Add dropdown and select User Credentials.
4. Fill Name for future use, User with Salesforce username and Password.
5. Click on Deploy.

5.2.2 Deploying Token

Follow the steps below:

1. In your SAP CPI tenant go to Monitor.
2. In Manage Security click on Security Material.
3. Click in the Add dropdown and select Secure Parameter.
4. Fill Name for future use and Secure Parameter with your Salesforce token.
5. Click on Deploy.

5.2.3 Deploying OAuth

Follow the steps below:

1. In your SAP CPI tenant go to Monitor.
2. In Manage Security click on Security Material.
3. Click in the Add dropdown and select User Credentials.
4. Fill Name for future use and User with your OAuth token.
5. Click on Deploy.