Building block Configuration Guide
Create or Update Customer Master Data from SAP ERP to SAP S4HANA Cloud September 2022
English

CUSTOMER

Create or Update Customer Master Data from SAP ERP to SAP S4HANA Cloud

Document History

Revision	Date	Author
0	September, 2022	Keylla Lima

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1 Prerequisites

The Iflow consists in sending an Customer Master Data from SAP ERP (SAP ECC) to S4HANA Cloud.

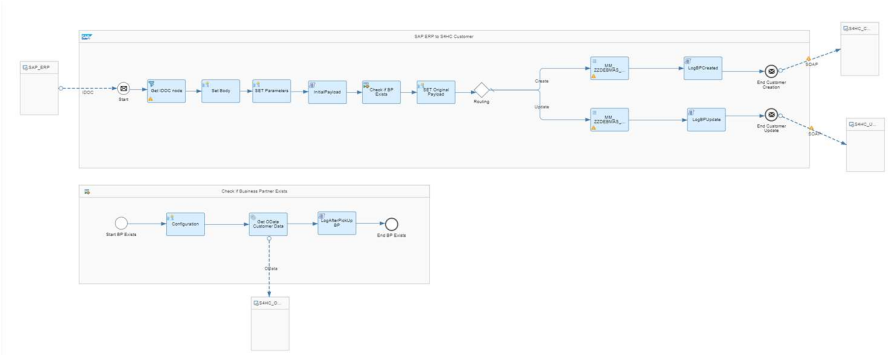
- Configuration steps in SAP ERP (SAP ECC):
    - Setting up of IDoc Communication for create and update scenario which includes:
        - Define Logical Systems, Assign Logical Systems, Create the RFC Destination, Create Port for IDOC Processing, Maintain ALE Distribution Model, Manually Maintain Partner Profile.
- Configuration steps in SAP S4HANA Cloud:
    - Configuration of Communication Arrangement for Scenario ID SAP_COM_0008 Related OData connection details for create and update scenario which includes:
        - Address, Proxy Type and Authorization.

2 Documentation

Regardless of whether the Customer IDoc defined in SAP ERP is DEBMAS07 or ZZ_DEBMAS_360, the flow will filter by the main IDoc node to process all messages as if they were one.

What will define if the Customer is a creation or a change is a call to the API OData with the Customer number to check if the Customer exists in S/4HANA, if it exists, it follows the change route, if not the creation route.

Customer Creation or Change in S/4HANA Cloud is triggered by SOAP API call related to communication Scenario SAP_COM_0008 - Business Partner, Customer and Supplier Integration.



3 Configuration steps on SAP Cloud Integration

To set up the IDOC

Try to define specific section, such as:

- Receiver Configuration
- Sender Configuration
- Cloud Connector Configuration
- Sender System Configuration
- Receiver System Configuration

If there are any backend system configuration needed, please describe them here shortly.

The following subsections are only proposals and can be changed.>

3.1 Configure Sender IDOC Adapter

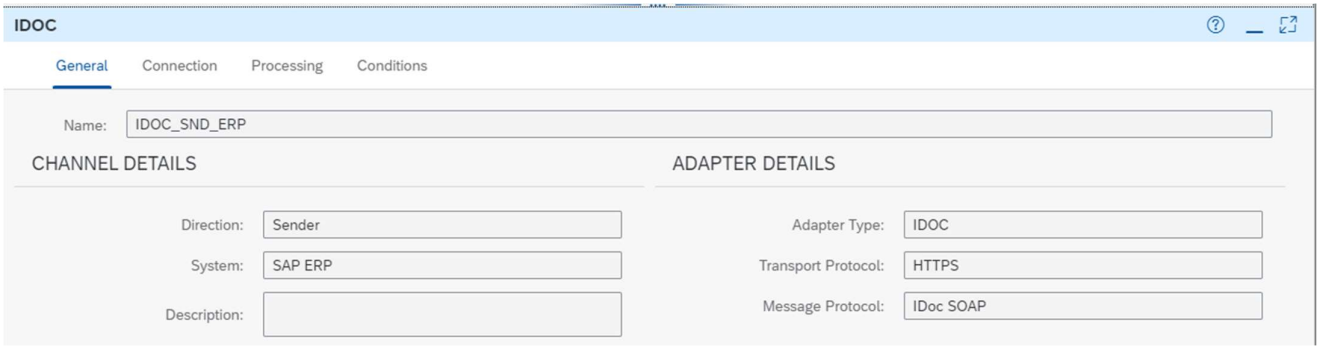


Figure 1 – Sender IDOC Adapter – General/Channel Details.

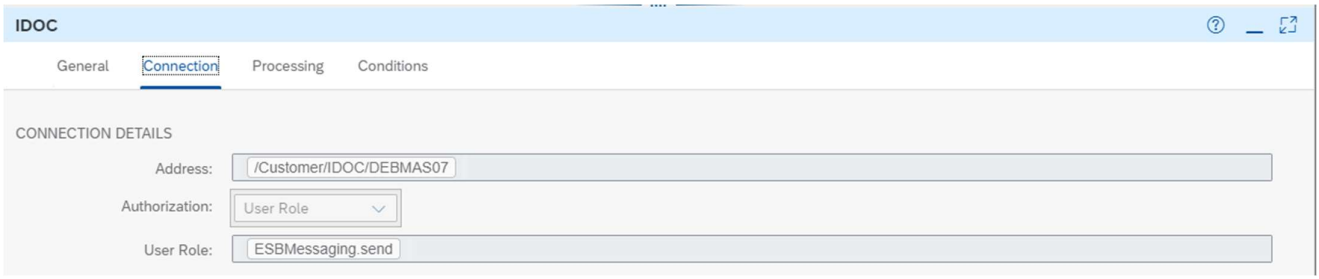


Figure 2 - Sender IDOC Adapter – Connection.

Address	Enter the URL of the SAP ERP system to connect to.
Authorization	Enter the authorization option. In this case, it was used “User Role” type, since this is based on roles defined on the tenant for the user associated with the inbound request.
User Role	Enter the User Role. It is a predefined role provided by SAP which authorizes a sender system to process messages on a tenant.

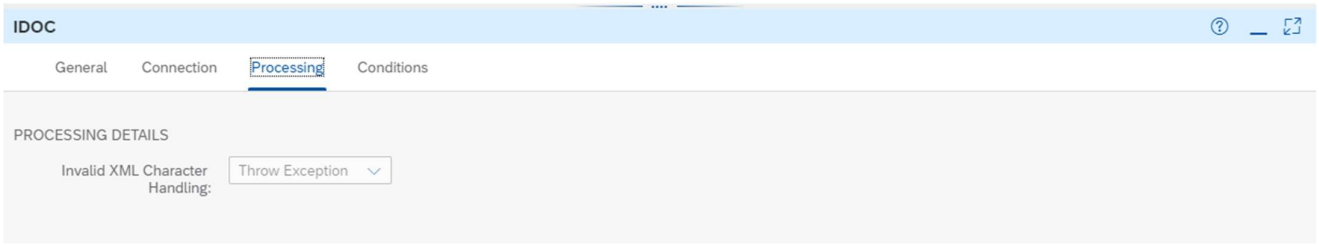


Figure 3 - Sender IDOC Adapter – Request Processing.

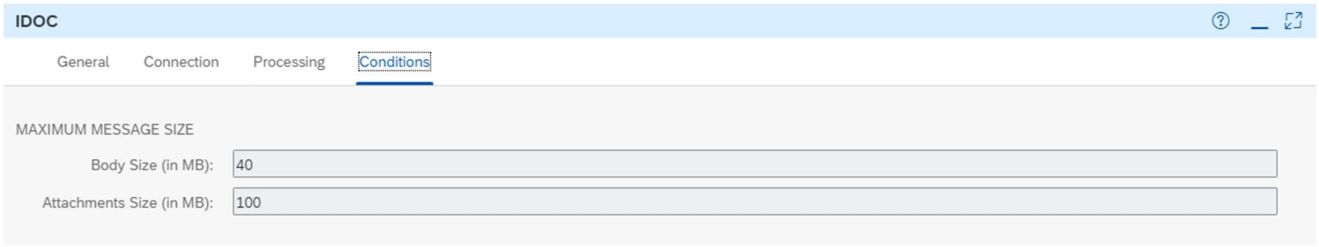


Figure 4 - Sender IDOC Adapter – Conditions/Maximum Message Size.

For further information:

IDOC Adapter:
https://help.sap.com/docs/CLOUD_INTEGRATION/368c481cd6954bdfa5d0435479fd4eaf/6042250661aa437c81dc8b3b4de567c4.html?locale=en-US

3.2 Configure Receiver ODATA Adapter (GET Customer)

The receiver OData Adapter for Get Customer data is described below:

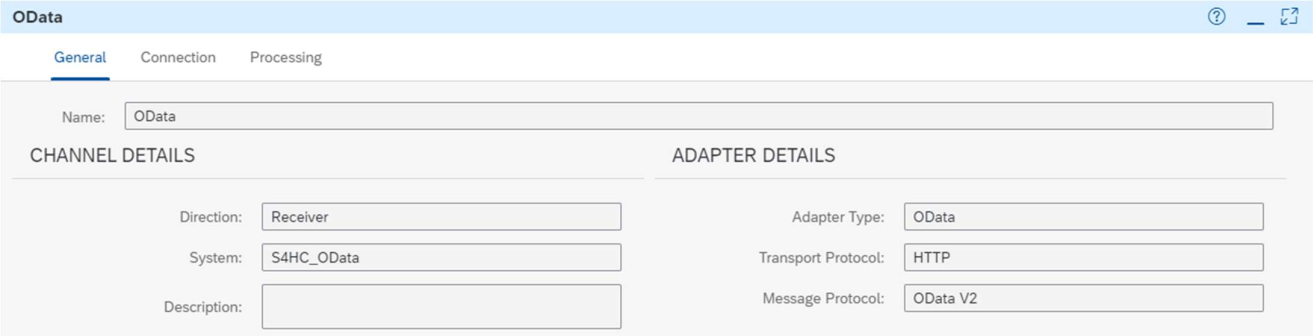


Figure 3 – Receiver OData Adapter (GET Customer) – General/Channel Details.

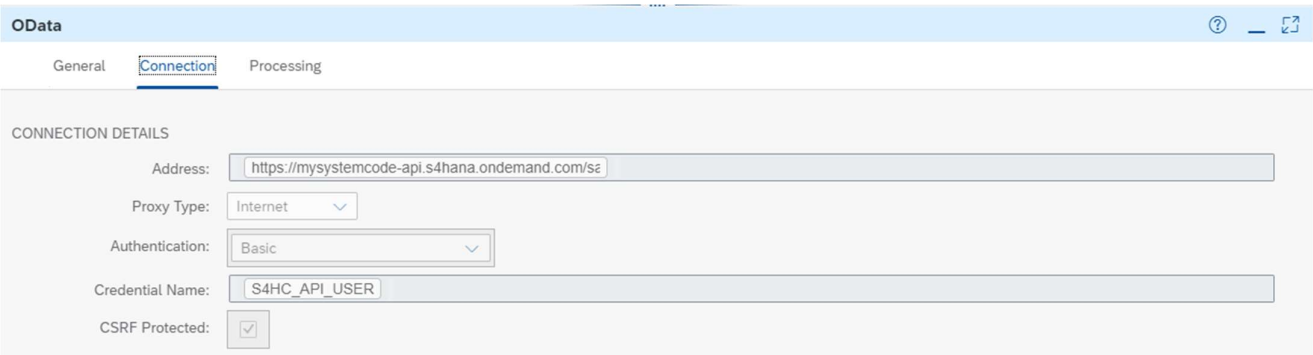


Figure 4 - Receiver OData Adapter (GET Customer) – Connection/Connection Details.

Address	Enter the address of the OData service. *Note: In this case, it is used the API:* *https://mysystem.api.s4hana.ondemand.com/sap/opu/odata/SAP/API_BUSINESS_PARTNER*
Proxy Type	The type of proxy you want to use for establishing connection with OData Service. Currently, you can choose between Internet (default) and On-Premise. Define Internet for S/4HANA Cloud. For On-premise systems it is required to define Location ID.
Location ID (Only Proxy Type as On-Premise)	Location ID that you've configured in the cloud connector installed on your system.
Authentication	Enter the authentication method for connecting to the OData service. E.g Basic, client certificate..
Credential Name	Credential name of the credentials that is deployed in Security Material section of (Operations View)
Private Key Alias (Only for Client Certificate Authentication).	Enter the private key alias that enables the system to fetch the private key from keystore for authentication.
CSRF Protected	Check. By default, option.

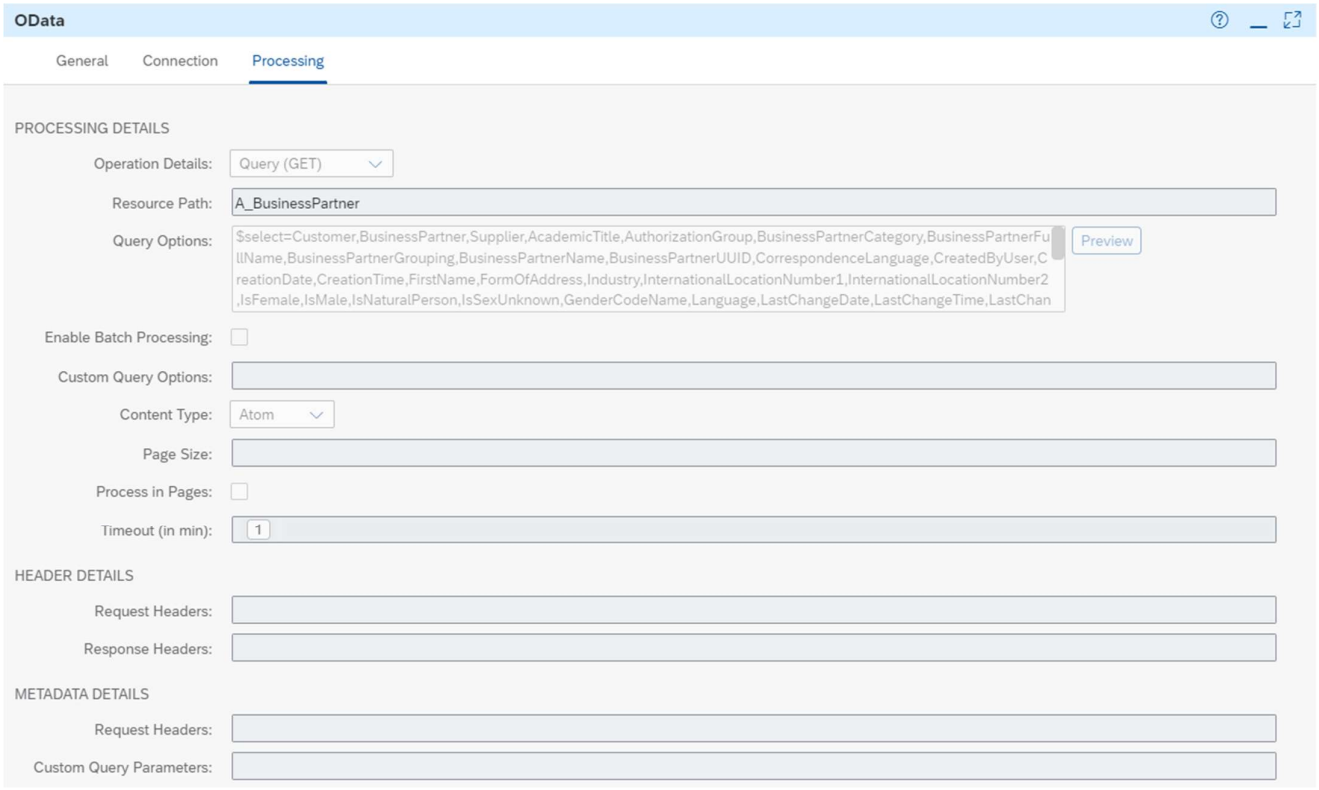


Figure 5 - Receiver OData Adapter (GET Customer) – Processing/Processing Details.

Operation Details	Enter the operation preferred. For this step please define Query GET.
Resource Path	Select the Model Operation where you can find and select the entity preferred and after the fields for model operation. In this case, define *A_BusinessPartner*
Query Options	Select the fields from Resource Path (entity that you're performing the operation on). In this case, consider this select all fields and add this filter: $select=Customer,BusinessPartner,Supplier,AcademicTitle,.....&$filter=Customer eq '${property.Customer}'

For further information:

OData Adapter | SAP Help Portal

API Business Partner A2X Create, read, update or delete the master data for business partner, supplier or customer using this synchronous inbound service :

Overview | Business Partner (A2X) | SAP API Business Hub

3.3 Configure Receiver SOAP Adapter (CREATE Customer)

The receiver SOAP Adapter for Create Customer data is described below:

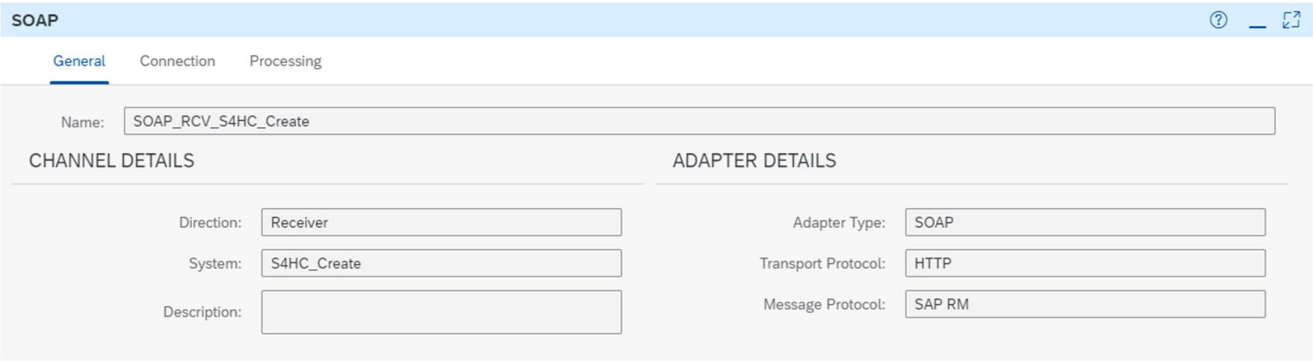


Figure 6 – Receiver SOAP Adapter (Create Customer) – General/Channel Details.

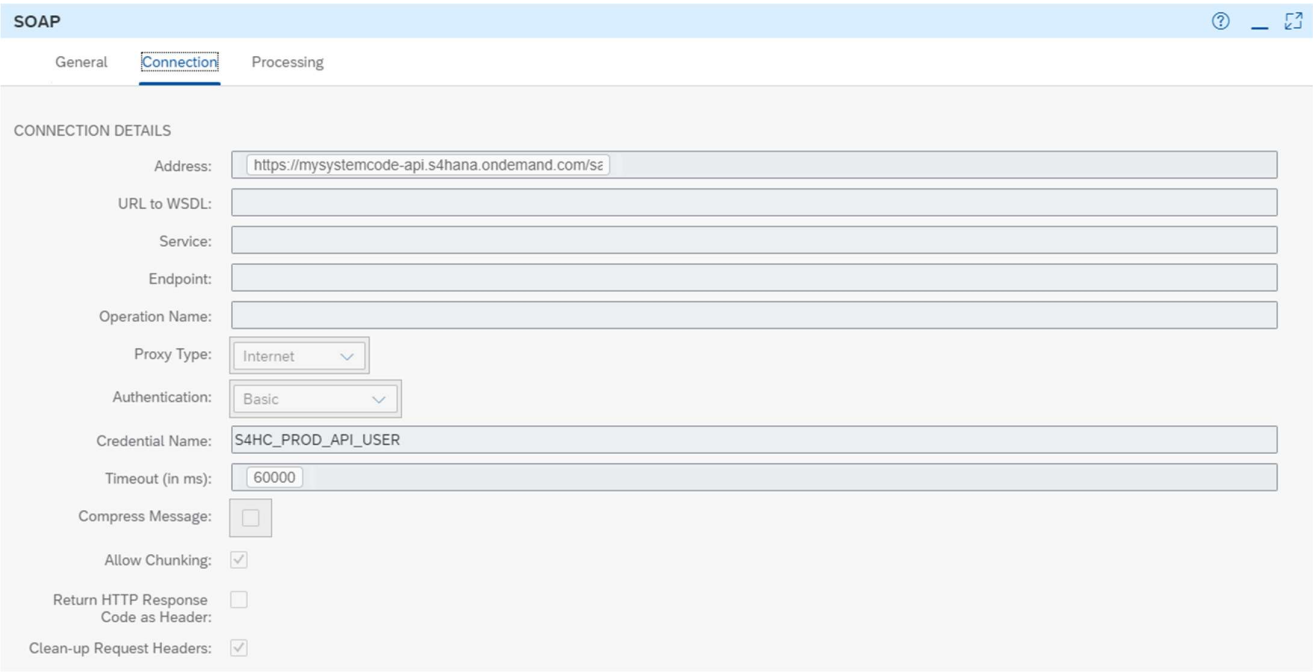


Figure 7 - Receiver SOAP Adapter (Create Customer) – Connection/Connection Details.

Address	Enter the address of the SOAP service. *Note: In this case, it is used the API:* *https://mysystem.api.s4hana.ondemand.com/sap/bc/srt/scs_ext/sap/businesspartnersuitebulkreplic*
Proxy Type	The type of proxy you want to use for establishing connection with SOAP Service. Currently, you can choose between Internet (default) and On-Premise. Define Internet for S/4HANA Cloud. For On-premise systems it is required to define Location ID.
Location ID (Only Proxy Type as On-Premise)	Location ID that you've configured in the cloud connector installed on your system.

Authentication	Enter the authentication method for connecting to the OData service. E.g Basic, client certificate..
Credential Name	Credential name of the credentials that is deployed in Security Material section of (Operations View)
Private Key Alias (Only for Client Certificate Authentication).	Enter the private key alias that enables the system to fetch the private key from keystore for authentication.

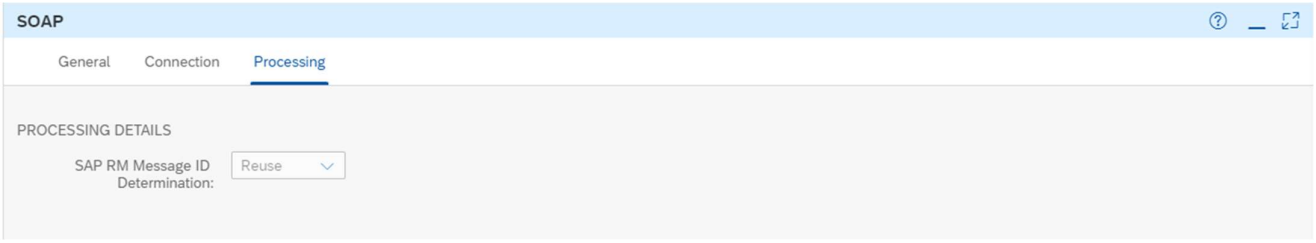


Figure 8 - Receiver SOAP Adapter (Create Customer) – Processing/Processing Details.

For further information:

SOAP (SAP RM) Adapter | SAP Help Portal

API Business Partner Replicate from Client to SAP S/4HANA Cloud :

Business Partner A2A

3.4 Configure Receiver SOAP Adapter (UPDATE Customer)

The receiver SOAP Adapter for Customer Update is described below:

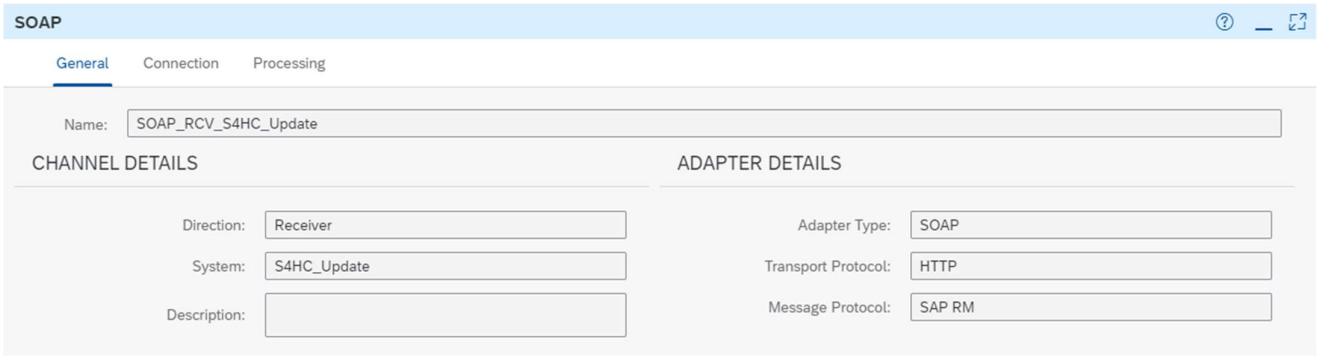


Figure 9 - Receiver SOAP Adapter (Update Customer) – General/Channel Details.

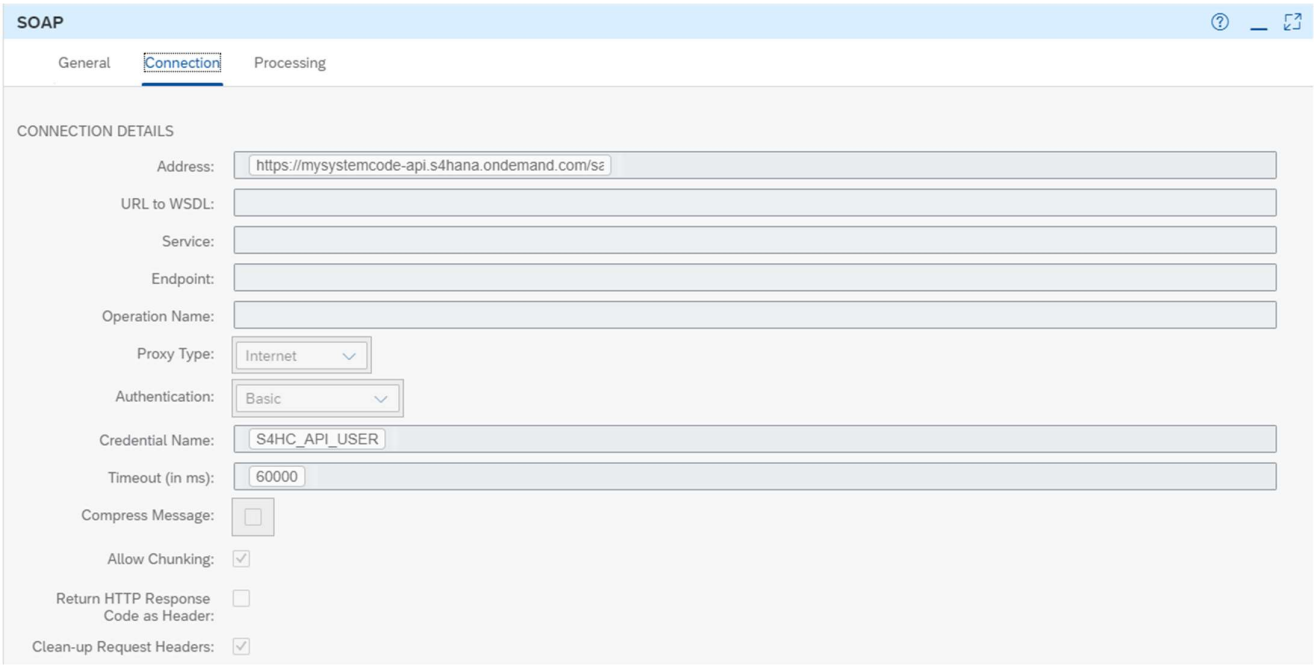


Figure 10 - Receiver SOAP Adapter (Update Customer) – Connection/Connection Details.

Address	Enter the address of the SOAP service. *Note: In this case, it is used the API: https://mysystem.api.s4hana.ondemand.com/sap/bc/srt/scs_ext/sap/businesspartnersuitebulkreplic?MessageId=${header.MessageId}*
Proxy Type	The type of proxy you want to use for establishing connection with SOAP Service. Currently, you can choose between Internet (default) and On-Premise. Define Internet for S/4HANA Cloud. For On-premise systems it is required to define Location ID.
Location ID (Only Proxy Type as On-Premise)	Location ID that you've configured in the cloud connector installed on your system.
Authentication	Enter the authentication method for connecting to the OData service. E.g Basic, client certificate..
Credential Name	Credential name of the credentials that is deployed in Security Material section of (Operations View)

Private Key Alias (Only for Client Certificate Authentication).	Enter the private key alias that enables the system to fetch the private key from keystore for authentication.

Figure 11 - Receiver SOAP Adapter (Update Customer) – Processing/Processing Details.

For further information:

SOAP (SAP RM) Adapter | SAP Help Portal

API Business Partner Replicate from Client to SAP S/4HANA Cloud :

Business Partner A2A

3.5 <Configure Cloud Connector>

<Describe the configuration steps on the Cloud Connector to connect to OnPremise System >

3.6 Configure Receiver system (SAP S/4HANA Cloud)

This section describes how to set up the communication scenario SAP_COM_0008 for Business Partner, Customer and Supplier Integration by using the Communication Arrangement tool.

3.6.1 Prerequisites

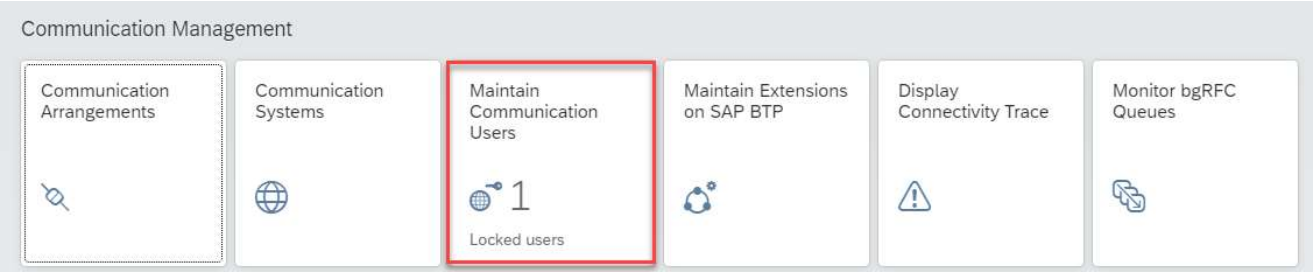
You must create a business role by using the template SAP_BR_ADMINISTRATOR, and assign this to the administrator in the SAP S/4HANA system. For more information, refer to Maintain Business Roles.https://uacp.hana.ondemand.com/http.svc/rc/PRODUCTION/1a93686c176845f0832a2a73221dd90b/1611%20500/en-US/frameset.htm?8980ad05330b4585ab96a8e09cef4688.html

3.6.2 Communication User

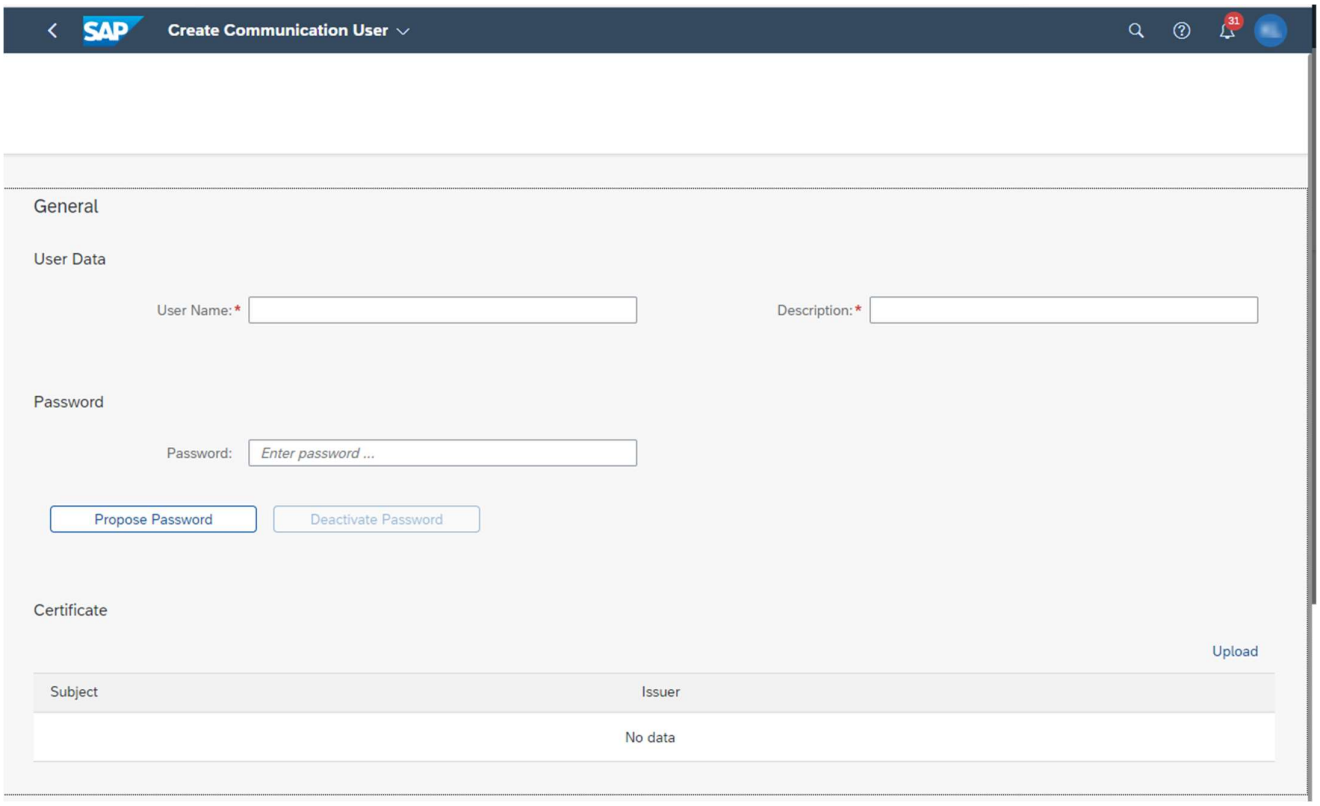
The communication user defined in the SAP S/4HANA system is used for inbound communication and for processing messages in the system.

Procedure

1. Access the SAP S/4HANA system and log on as an Administrator.
2. Choose the Maintain Communication Users tile under Communication Management.



3. Choose New.



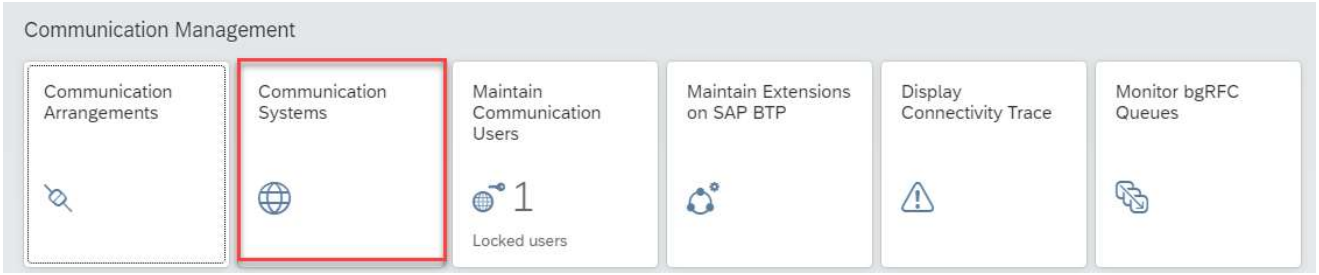
4. Enter the User Name and Description.
5. Enter a password. You can also upload an SSL client certificate.
6. Choose Create.

3.6.3 Communication System

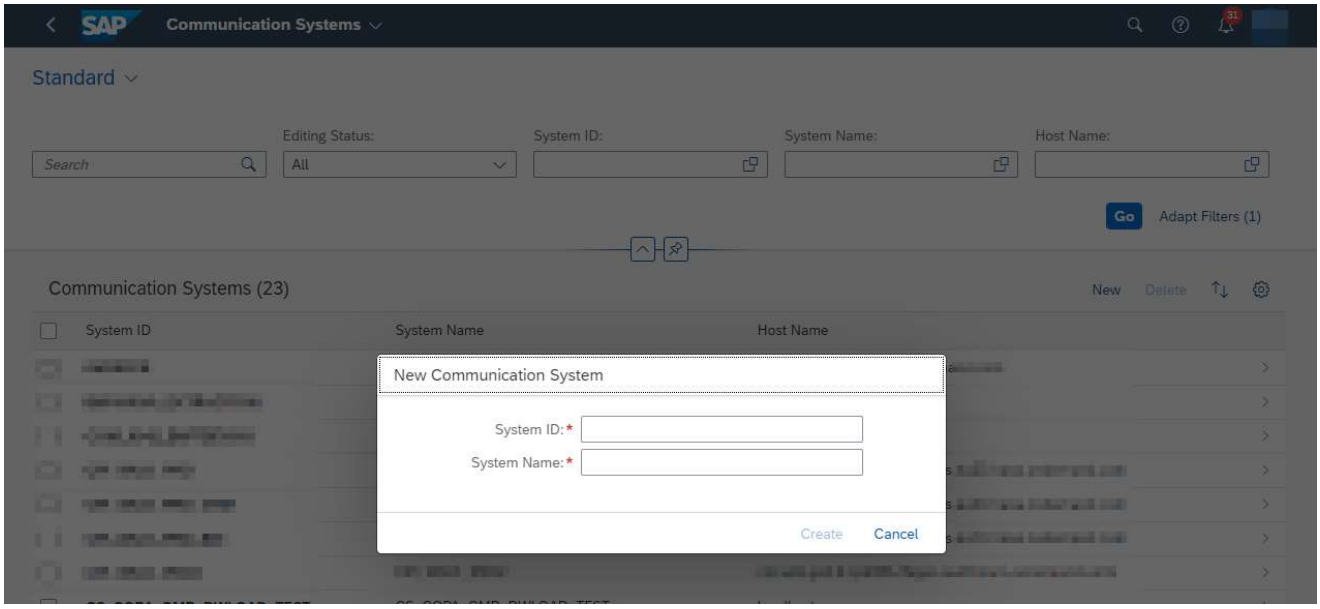
The communication system defined in the SAP S/4HANA system is used as the source or target system.

Procedure

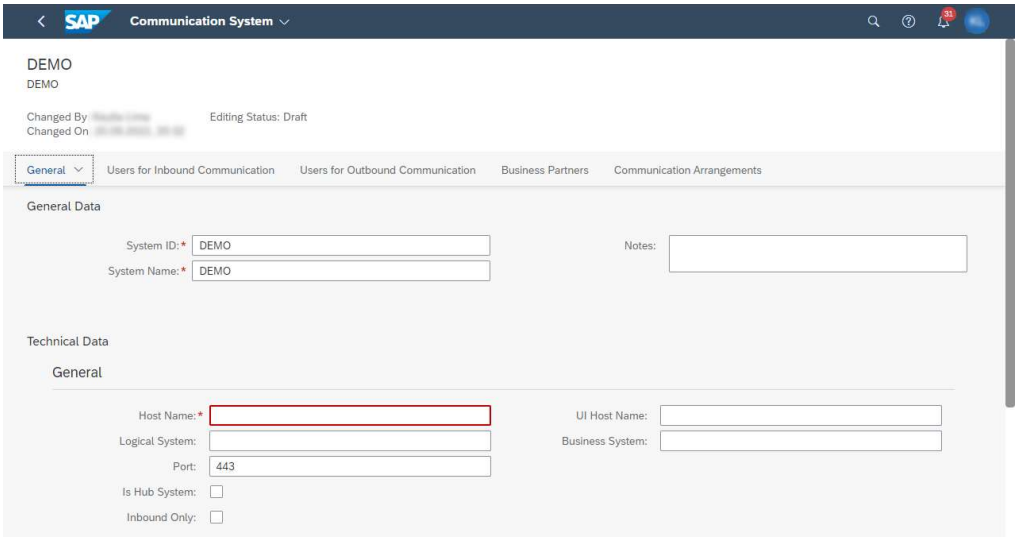
1. Access the SAP S/4HANA system and log on as an Administrator.
2. Choose Communication Systems tile under Communication Management.



3. In the next window, choose New. The following screen appears.



4. Enter the System ID. Optionally, you can enter the ID to recognize the integration system, which relates to the SAP S/4HANA system.
5. Enter a descriptive name in the System Name field.
6. Choose Create.



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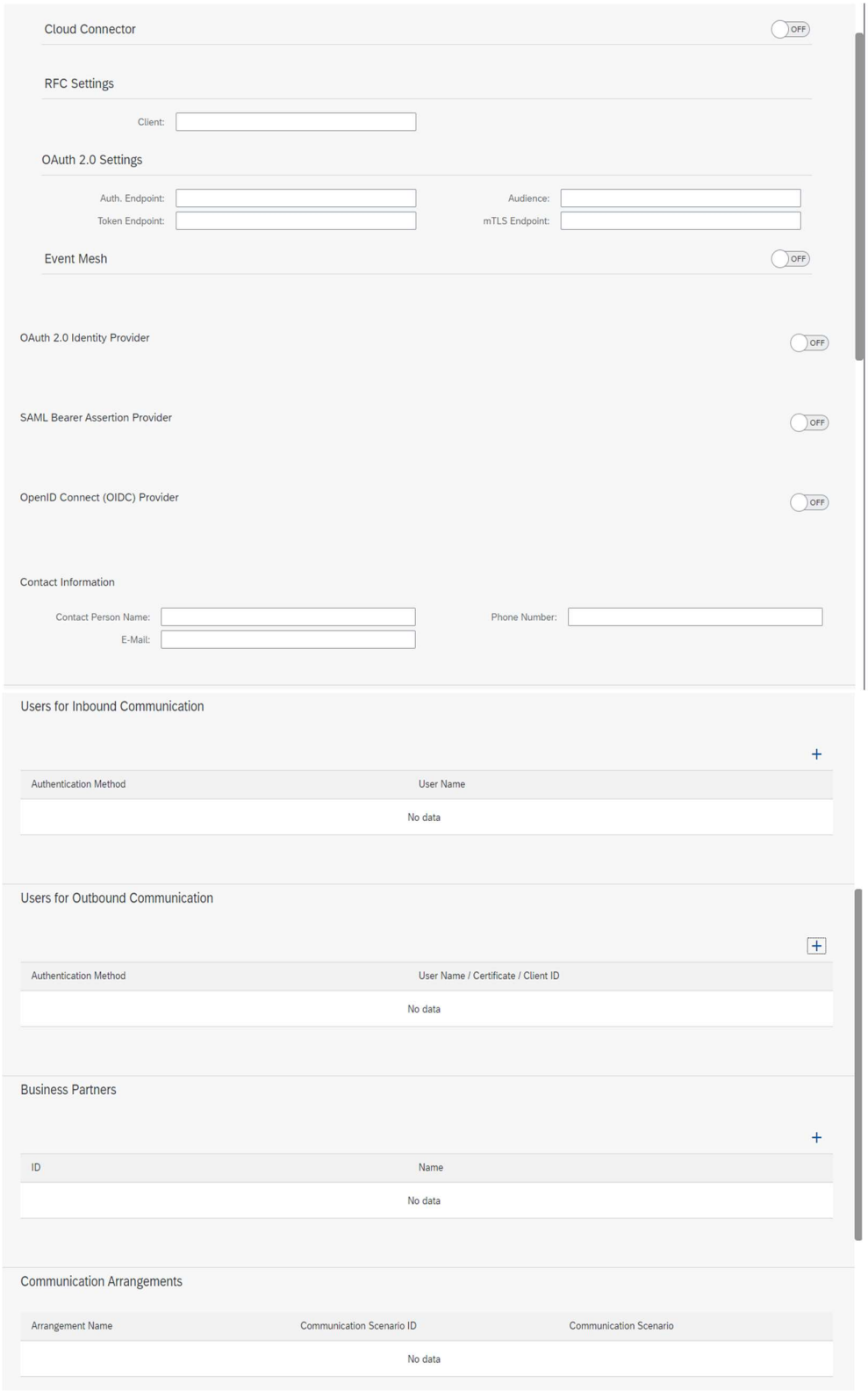
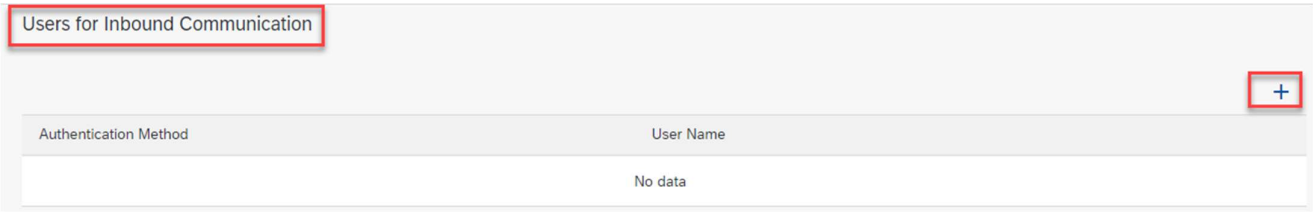
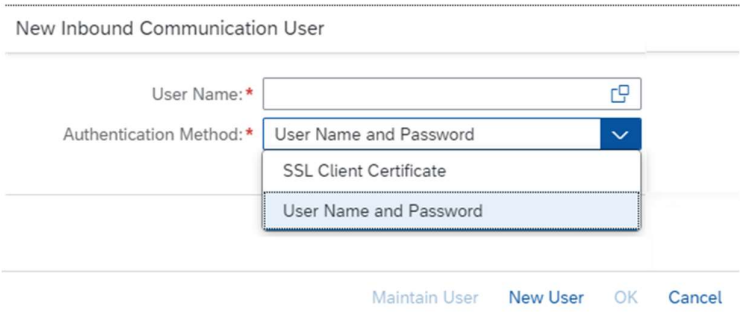


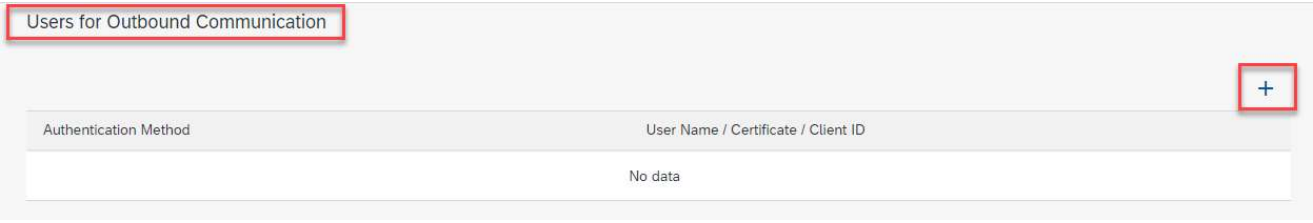
7. In the Host Name field, enter the SAP Runtime URL without HTTPS://
8. Enter the Log System ID as the SAP tenant ID.
9. Enter the Business System ID as the SAP tenant ID.
10. Under User for Inbound Communication, choose Add.



11. Choose an Authentication Method as per your requirements and specify a relevant user name. Choose OK.



12. User for Outbound communication, choose the user name and Authentication Method as per your requirements.



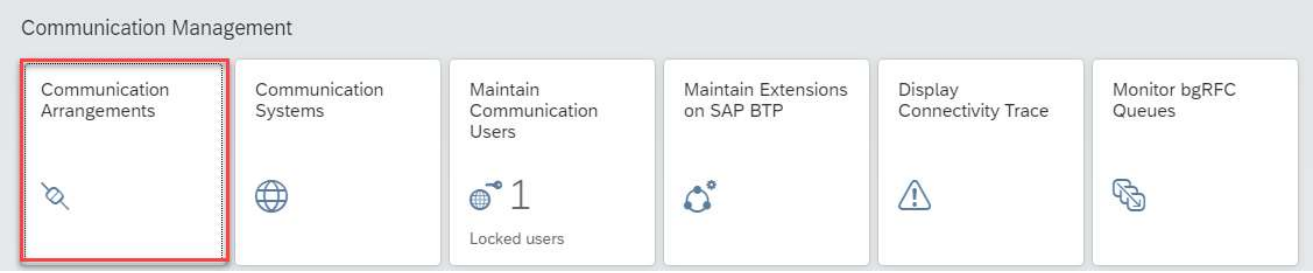
13. Choose Create.
14. Choose Save.

3.6.4 Communication Arrangement

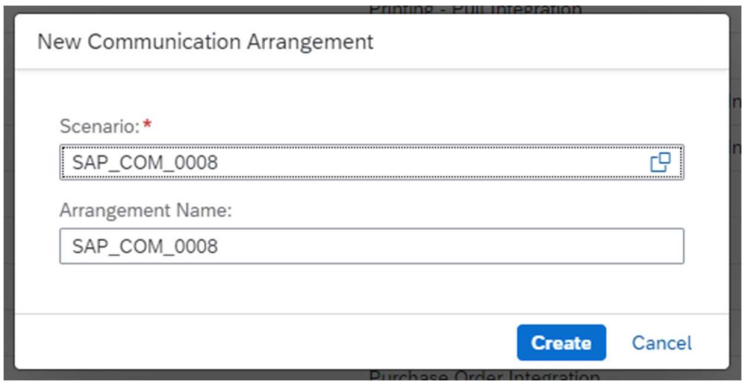
The Communication Arrangements defined in S/4HANA systems enables key users to create and edit communication arrangements that your company has set up with a communication partner.

Procedure

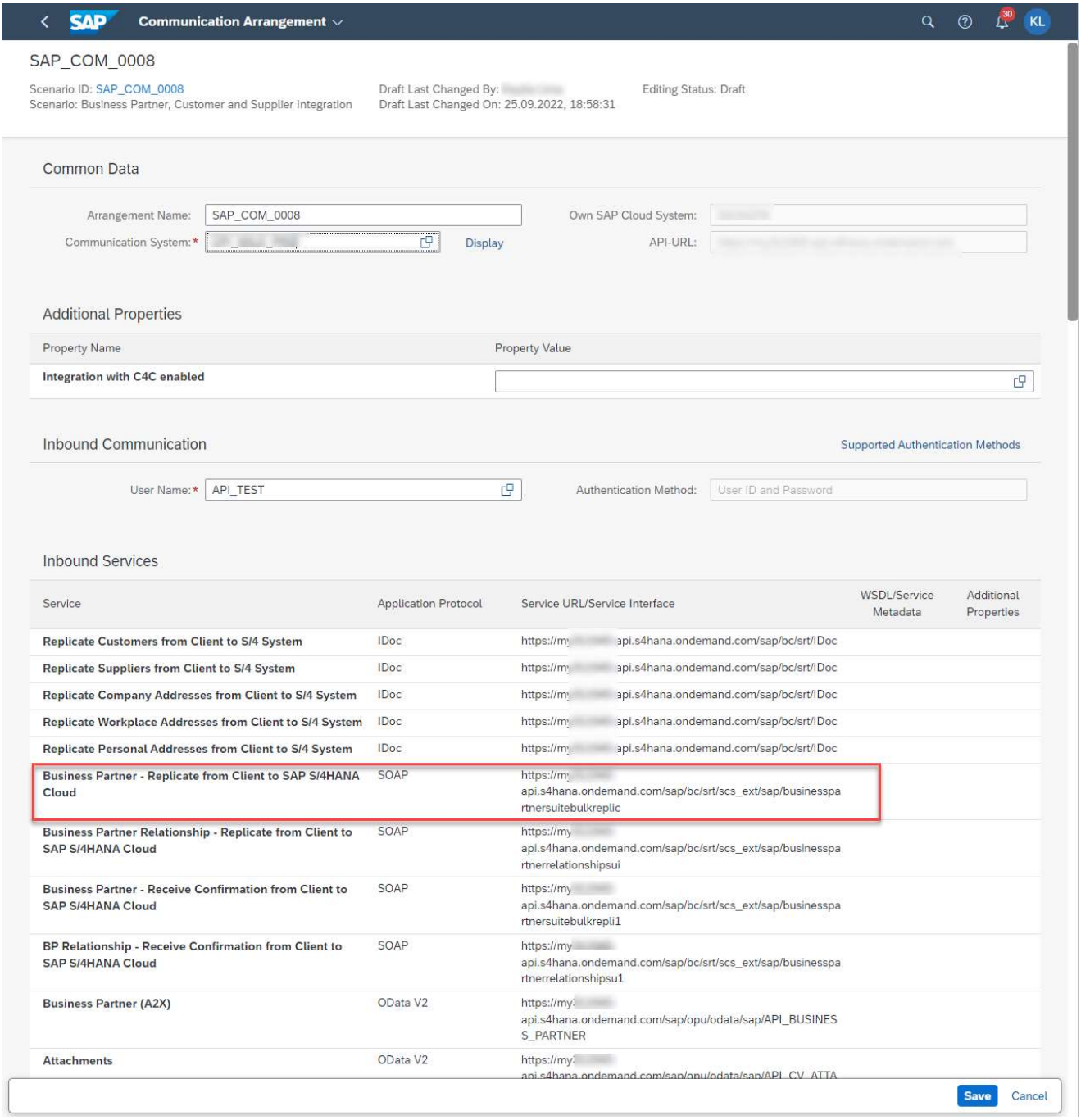
1. Access the SAP S/4HANA system and log on as an Administrator and open the app Communication Arrangements.



2. Choose New.



3. Choose the scenario SAP_COM_0008 from the value help
4. Enter an Arrangement Name.
5. Choose Create.



6. Choose Communication System ID from the value help.
7. Under Inbound Communication, choose User Name using value help. By default, the user, which is associated with Communication System will be shown in the value help. Choose the same.
8. Choose Save.