

## **Configuration Guide**

Microsoft Dynamics CRM Integration with SAP S/4HANA  
Cloud and SAP ERP  
April 2023  
English

# **Create Sales Order from Microsoft Dynamics CRM to SAP S/4HANA Cloud**

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# 1 Prerequisites

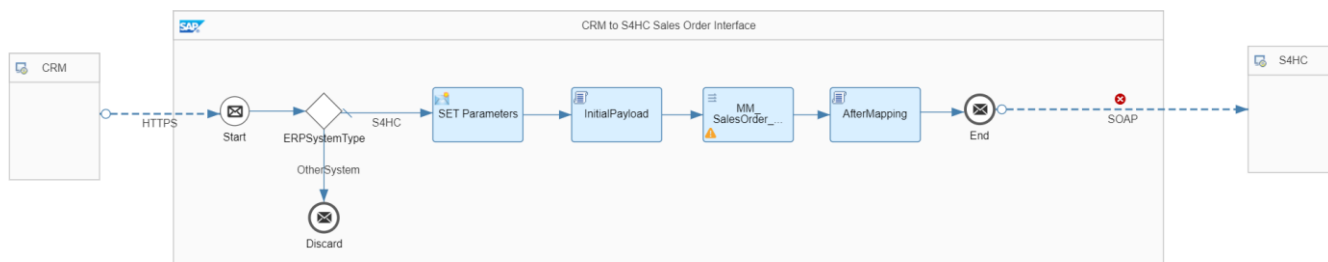
The IFlow consists in sending data of sales orders from Microsoft Dynamics CRM to SAP S/4HANA Cloud.

- Configuration steps in Microsoft Dynamics CRM:
  - o Configuration of HTTPS connection details which includes:
    - Address, Authorization and User Role.
- Configuration steps in SAP S/4HANA Cloud:
  - o Communication Arrangement Configuration in SAP S/4HANA Cloud
    - Scenario ID: SAP\_COM\_0288
    - Scenario: Sales Order Bulk Integration
  - o Configuration of OData connection details for create and update scenario which includes:
    - Address, Proxy Type and Authorization.

## 2 Documentation

Microsoft Dynamics CRM has a standard mechanism for cases in which the actual processing or sales orders will be executed in a back-end system, meaning an SAP ECC or S/4HANA system. It offers a “Submit” button which will set the status field of the order in CRM to “Submitted”.

This will trigger the transmission of the sales order, but only if it changes from “New” to “Submitted”. Then, a message is sent immediately to SAP Cloud Integration. The message is then transformed to the target format and then sent to the SAP S/4HANA Cloud SOAP API which results on the sales order is creation. In this scenario, it was used the SAP\_COM\_0288 communication scenario (Sales Order Bulk Integration).



The main steps in the scenario are the following:

1. Microsoft Dynamics CRM set the status field of the order to “Submitted”.
2. This will trigger the transmission of the sales order, but only if it changes from “New” to “Submitted”.
3. A message is sent immediately from Microsoft Dynamics CRM to SAP Cloud Integration via HTTPS call.
4. In SAP Cloud Integration is defined the following rule: if **erpsystemtype** field is different from ‘S4HC’, the message is discarded, otherwise, the process continues.
5. After the “MM\_SalesOrder\_CRM\_to\_S4HC” mapping between Microsoft Dynamics CRM (salesOrderSource) and SAP S/4HANA Cloud (SALESORDERBULKREQUEST\_IN), a message is sent from SAP Cloud Integration to SAP S/4HANA Cloud via SOAP call.

The following custom fields were created on the Sales Order API:

### Header level:

	ns7:YY1_ProjectFlag
	ns7:YY1_ProjectOpportunity
	ns7:YY1_CRMQuoteNo
	ns7:YY1_CRMOrderNo
	ns7:YY1_CRMOrderID

### Item level:

	ns7:YY1_CRMOrderItemID
	ns7:YY1_ProjectFlagItem
	ns7:YY1_ProjectOpportItem

You can find more information how to create custom fields here:

[https://help.sap.com/docs/SAP\\_S4HANA\\_CLOUD/03c04db2a7434731b7fe21dca77440da/1f4c96d4771a42e18a7eba7c87e72960.html?locale=en-US](https://help.sap.com/docs/SAP_S4HANA_CLOUD/03c04db2a7434731b7fe21dca77440da/1f4c96d4771a42e18a7eba7c87e72960.html?locale=en-US)

### 3 Configuration steps on SAP Cloud Integration

For setting up the HTTPS Adapter connectivity, please check:

[https://help.sap.com/docs/CLOUD\\_INTEGRATION/368c481cd6954bdfa5d0435479fd4eaf/0ae4a78909c4479cbc3cc414250919de.html](https://help.sap.com/docs/CLOUD_INTEGRATION/368c481cd6954bdfa5d0435479fd4eaf/0ae4a78909c4479cbc3cc414250919de.html)

For setting up the SOAP Adapter connectivity, please check:

[https://help.sap.com/docs/CLOUD\\_INTEGRATION/368c481cd6954bdfa5d0435479fd4eaf/57f7b34b9b86438d9cb760c5c541f88c.html?locale=en-US](https://help.sap.com/docs/CLOUD_INTEGRATION/368c481cd6954bdfa5d0435479fd4eaf/57f7b34b9b86438d9cb760c5c541f88c.html?locale=en-US)

For further information regarding, API Sales Order (A2A), please check:

[https://api.sap.com/api/SALESORDERBULKREQUEST\\_IN/overview](https://api.sap.com/api/SALESORDERBULKREQUEST_IN/overview)

# 3.1 Configure Sender HTTPS Adapter

SenderReceiverMore

Connection

Sender:CRM

Adapter Type:HTTPS

Address:/SalesOrder\_CRM\_S4HC

Authorization:User Role

User Role:ESBMessaging.sendSelect

CSRF Protected:☐

Address	Enter the URL of the HTTP 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.

## 3.2 Configure Receiver SOAP Adapter (Sales Order)

Configure "Create Sales Order from Microsoft Dynamics to SAP S4HANA Cloud"

Sender **Receiver** More

**Connection**

Receiver: S4HC

Adapter Type: SOAP

Address: <Endpoint to SalesOrderBulkRequest\_In>

Proxy Type: Internet

Authentication: Basic

Credential Name: <Credential>

Timeout (in ms): 60000

Compress Message: ☐

Allow Chunking: ☒

Clean-up Request Headers: ☒

Address	Enter the address of the SOAP API. <i>Note: In this case, it is used the API:</i> <i><a href="https://mysystem.s4hana.ondemand.com/sap/bc/srt/scs_ext/sap/salesorderbulkrequest_in">https://mysystem.s4hana.ondemand.com/sap/bc/srt/scs_ext/sap/salesorderbulkrequest_in</a></i>
Proxy Type	Enter the proxy type.
Authentication	Enter the authentication method for connecting to the SOAP API.
Credential Name	Enter the credential name of the artifact to authenticate with SAP S/4HANA Cloud. In this case, the communication user created afterwards.

## 3.3 Additional Parameters

Configure "Create Sales Order from Microsoft Dynamics to SAP S4HANA Cloud"

Sender Receiver **More**

Type: All Parameters

Enable Logging: true

Enable Logging	Enter 'true' or 'false' in case you want to log the payload before and after the mapping.
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## 3.4 Configure Backend system (SAP S/4HANA Cloud)

This section describes how to set up the communication scenario SAP\_COM\_0288 for Sales Order Bulk integration by using the Communication Arrangement tool.

### 1.1.1. 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 Cloud system.

For more information, refer to Maintain Business Roles:

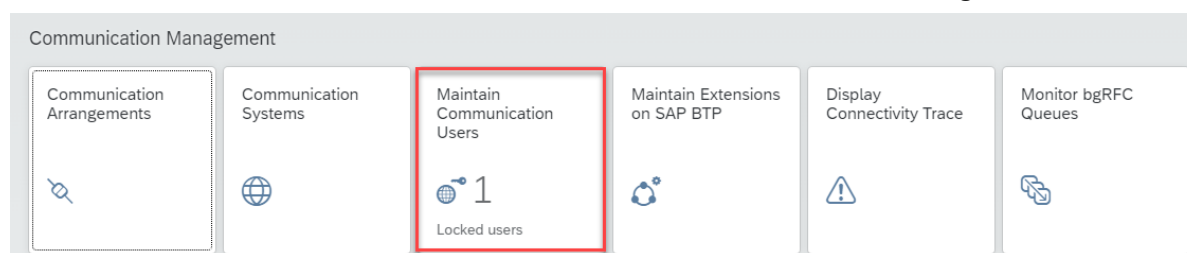
<https://uacp.hana.ondemand.com/http.svc/rc/PRODUCTION/1a93686c176845f0832a2a73221dd90b/1611%20500/en-US/frameset.htm?8980ad05330b4585ab96a8e09cef4688.html>

### 1.1.2. Communication User

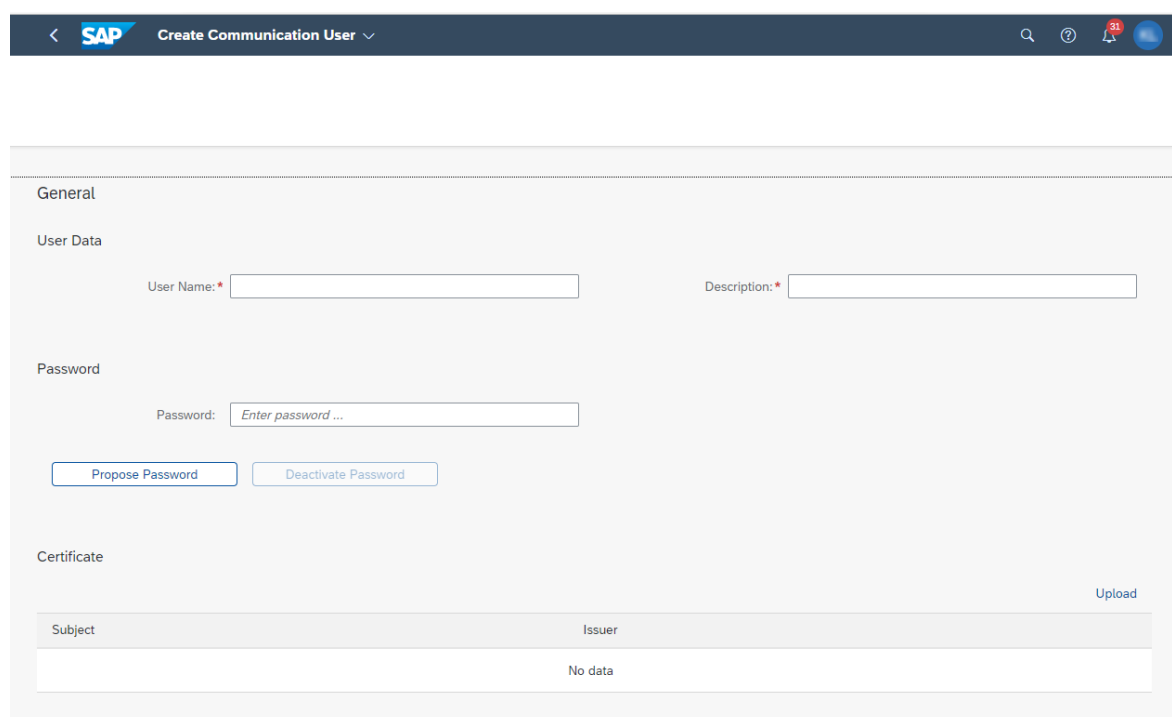
The communication user defined in the SAP S/4HANA Cloud system is used for inbound communication and for processing messages in the system.

#### Procedure

1. Access the SAP S/4HANA Cloud 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.



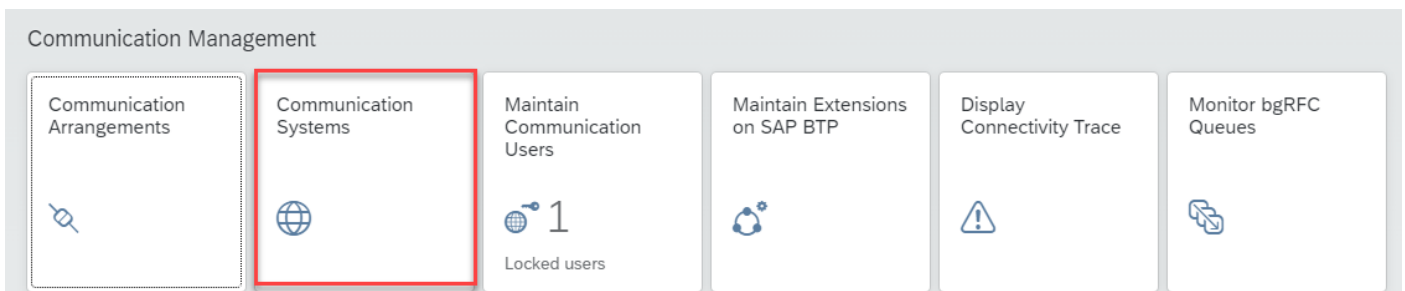
5. Enter a password. You can also upload an SSL client certificate.
6. Choose Create.

### 1.1.3. Communication System

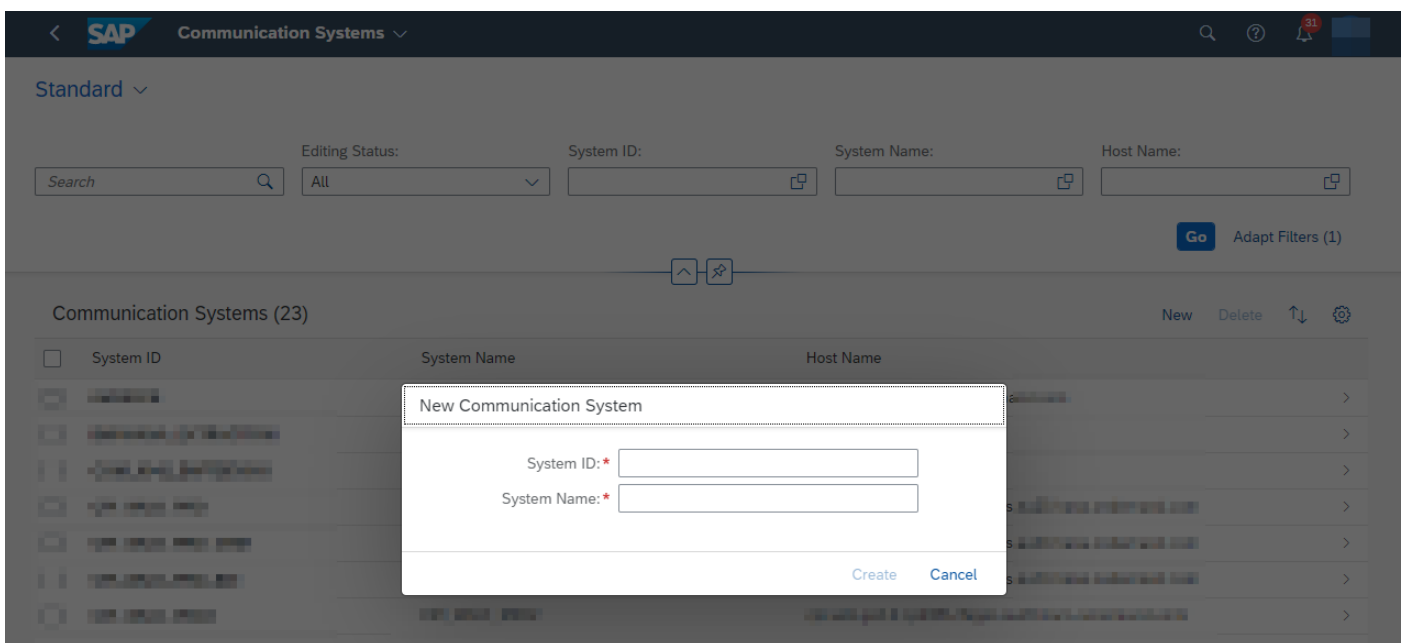
The communication system defined in the SAP S/4HANA Cloud system is used as the source or target system.

#### Procedure

1. Access the SAP S/4HANA Cloud 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 is connected with the SAP S/4HANA Cloud system.
5. Enter a descriptive name in the System Name field.
6. Choose Create.



Users for Inbound Communication

Authentication Method	User Name
No data	

Users for Outbound Communication

Authentication Method	User Name / Certificate / Client ID
No data	

Business Partners

ID	Name
No data	

Communication Arrangements

Arrangement Name	Communication Scenario ID	Communication Scenario
No data		

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.

Users for Inbound Communication

Authentication Method	User Name
No data	

11. Choose an Authentication Method as per your requirements and specify a relevant User Name. Choose OK.

New Inbound Communication User

User Name: \*

Authentication Method: \* User Name and Password

SSL Client Certificate

User Name and Password

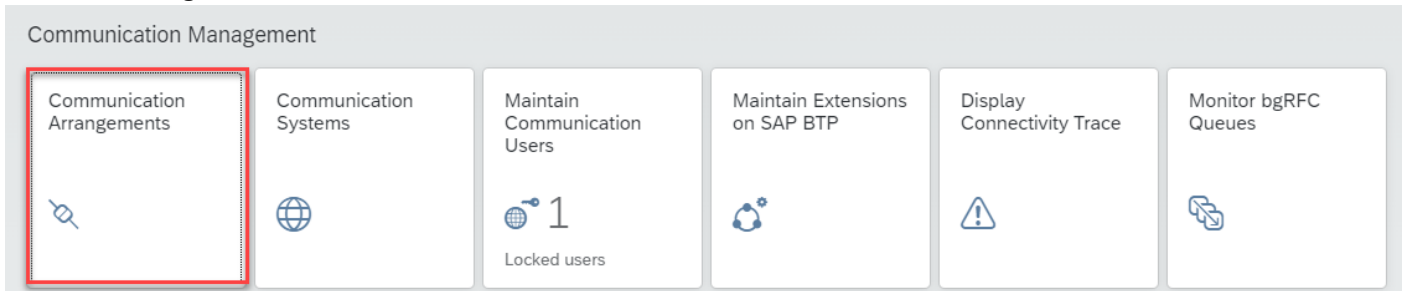
Maintain User New User OK Cancel

## 1.1.4. Communication Arrangement

The Communication Arrangements defined in SAP S/4HANA Cloud 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 Cloud system and log on as an Administrator and open the app Communication Arrangements.



2. Choose New.
3. Choose the scenario SAP\_COM\_0288 from the value help.
4. Enter an Arrangement Name.
5. Choose Create:

Service	Application Protocol	Service URL / Service Interface
Sales Order (A2A)	SOAP	https:// api.s4hana.cloud.sap/sap/bc/rt/scs_ext/sap/salesorderbulkrequest_in

Note: You can find the target URL under the “Service URL / Service Instance” column. This is the endpoint to be configured on the SAP Cloud Integration IFlow.

6. Choose Communication System ID from the value help.
7. Under Inbound Communication, choose User Name using value help. By default, the user, who is associated with Communication System will be shown in the value help. Choose the same.
8. Deactivate all the Outbound Services:

Outbound Communication

User Name: [ ]

Outbound Services

- ▼ Sales Order - Confirm Processing (A2A)  
Service Status: ☒ Active  
Application Protocol: SOAP  
Port: 443
- ▼ Sales Order - Send Processing Notification (A2A)  
Service Status: ☐ Active  
Application Protocol: SOAP  
Port: 443
- ▼ Sales Order - Send Error Log (A2A)  
Service Status: ☐ Active  
Application Protocol: SOAP  
Port: 443

9. Choose Save.