Building block Configuration Guide
Upload Data to S/4HC CBO
June 2022
English

CUSTOMER

Mass Change Data in an SAP S/4HANA Cloud Custom Business Object

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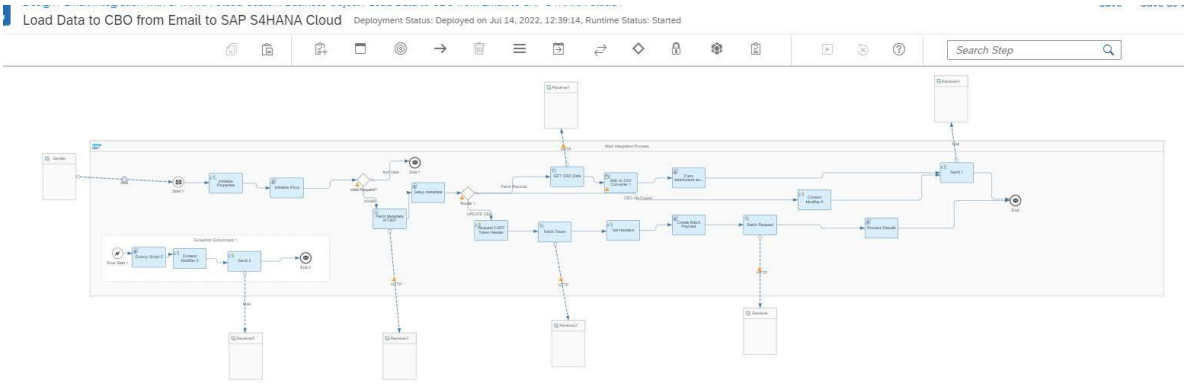
1 Prerequisites

- An SMTP server to support Email integration with Cloud Integration needs to be available. This can be a customer SMTP server, or a new account set up with an internet provider, such as Gmail.
- SAP S/4HANA Cloud Custom Business Objects are exposed as APIs via Communication Scenario / Communication Arrangement
- Credentials created in Cloud Integration has access to any Custom Business Object (CBO) that is in scope for data interaction via email.

2 Documentation

This iFlow allows an end user to retrieve, update and delete data from a SAP S/4HANA Custom Business Object (CBO). The first step would be for the user to retrieve the data to retrieve the correct CSV format (even if the CBO is empty) and then the user can then add, modify or delete the data in the CBO by modifying the CSV file and sending an email back to the inbox monitored by the Cloud Integration iFlow. For reference, you can refer to this blog for information on email integration with Cloud Integration: https://blogs.sap.com/2022/05/17/reprocessing-messages-using-email-for-sap-cloud-integration/ The blog also contains links on working with the mail adapter in Cloud Integration and how to configure a Gmail account if a corporate SMTP server is not available.



3 Configuration steps on Cloud Integration

<Shortly describe the configuration steps for this iflow.

Try to define specific section, such as:

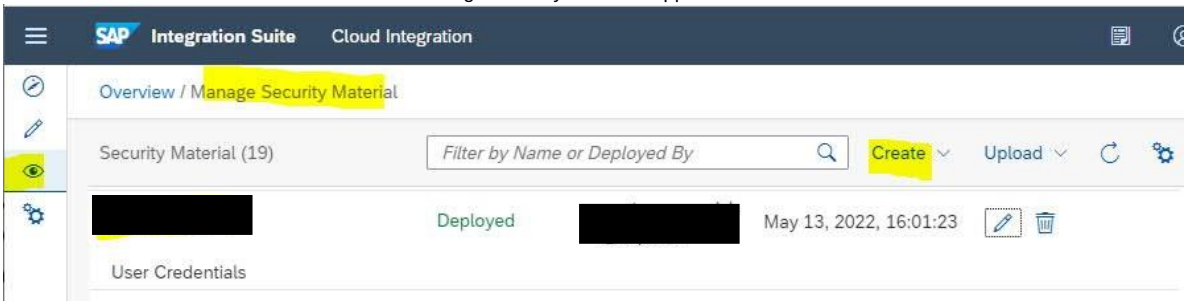
- Receiver Configuration
- Sender Configuration
- Cloud Connector Configuration
- Sender System Configuration
- Receiver System Configuration

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 Mail Sender Adapter

Depending on your mail server requirements, this section will vary but the iFlow should be configured with the username and password to monitor the email address that the payloads will be sent to and from. In this example, we are using GMAIL so a new "User Credentials" artifact was created under "Manage Security Material" application.

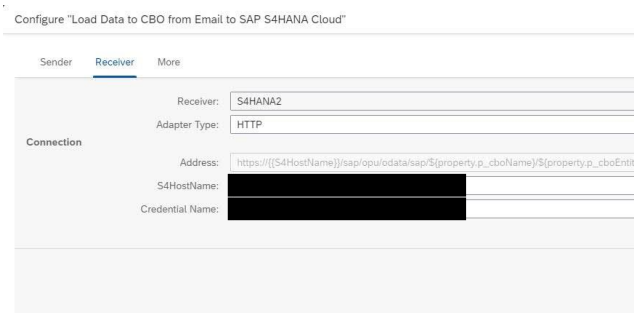


This credential name is used in both the sender and receiver channels.

The address is also required in the Sender channel in addition to the Credential Name.

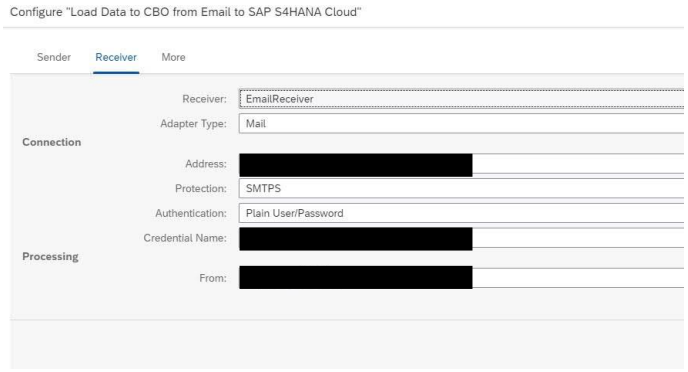
3.2 Configure S4HANA Cloud Receiver Adapter

On the receiver tab, enter the S/4HANA Cloud Hostname and the credentials for the communication arrangement that contains the CBOs.



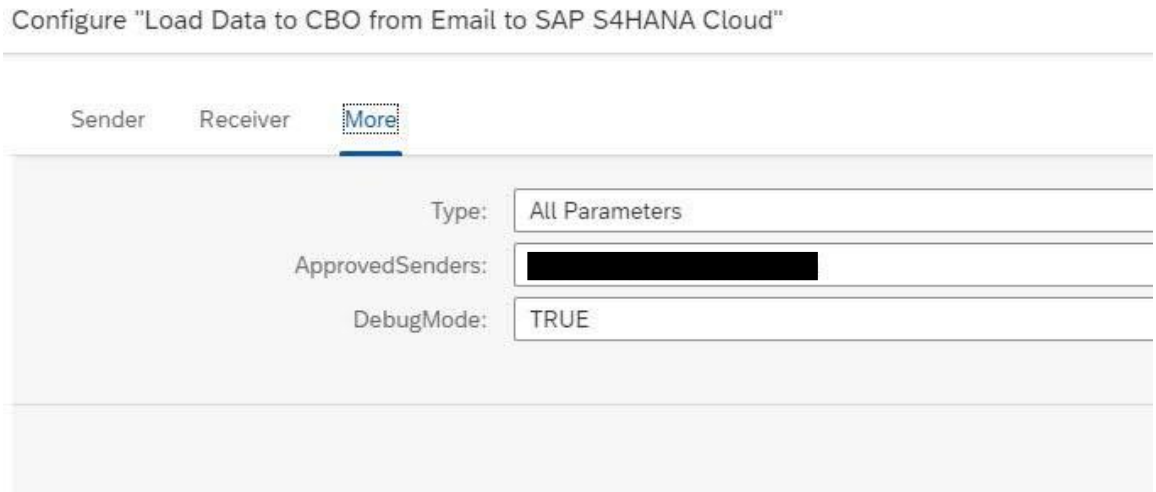
3.3 Configure Email Receiver

Configure the email receiver channel according to your Email SMTP requirements. For example, here is a Gmail configuration.



3.4 Configure iFlow Properties

There are two properties to configure. The first is a comma separated list of approved senders. If the email address is not contained in this property, the iFlow will not execute. The second is a TRUE/FALSE parameter for “DebugMode” which outputs some verbose MPL payloads when enabled (TRUE). Not recommended to use in heavy load productive scenarios.



4 Executing the Integration Flow

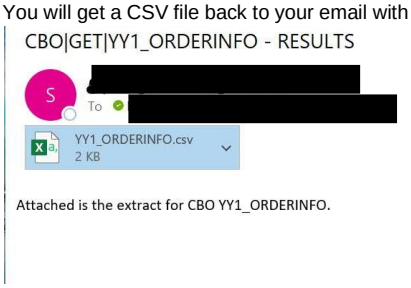
Once the iFlow is deployed, all interactions with it can be done via email from an approved sender.

4.1 Retrieving data from CBO

Typically the first step will be to retrieve the fields and/or any existing data from a CBO. In order to receive an extract of the CBO in csv format, send an email to the inbox configured with the integration with the following subject format:

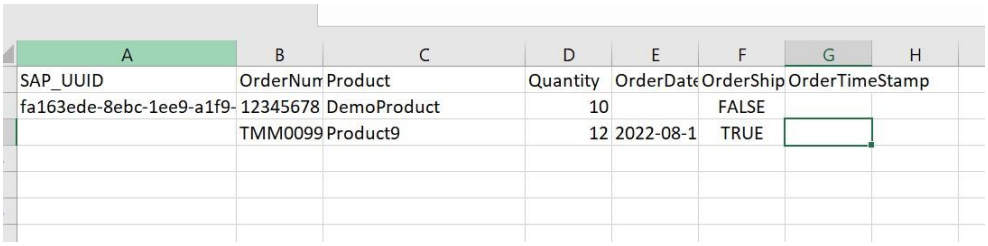
CBO|GET|<CBONAME>

You will get a CSV file back to your email with the CBO data (or just the headers if the CBO is empty).

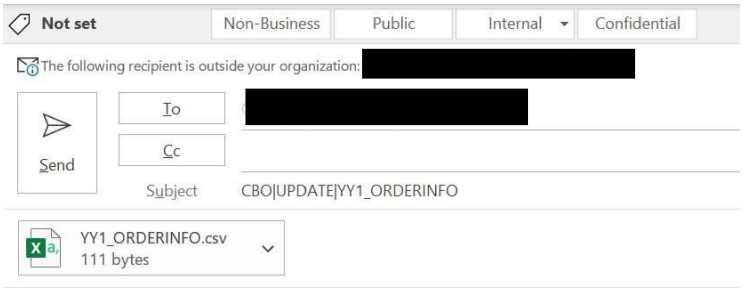


	A	B	C	D	E	F	G	H
1	SAP_UUID	OrderNum	Product	Quantity	OrderDate	OrderShip	OrderTimeStamp	
2	fa163ede-	12345678	DemoProc	10		FALSE		
3	fa163ede-	TMM0012	Product8	11	2021-08-1	TRUE	2021-08-12T12:01:55	
4	fa163ede-	92349999	DemoProc	13	2021-08-1	FALSE	2021-08-12T12:01:55	
5	fa163ede-	TMM0999	Product77	10	2021-08-1	TRUE	2021-08-12T12:01:55	
6	fa163ede-	OR45455	Product2	12		FALSE		
7	fa163ede-	OR65656	Product3	13		FALSE		
8	fa163ede-	OR98989	Product4	14		FALSE		
9	fa163ede-	12345883	DemoProc	13		FALSE		
10	fa163ede-	12345488	DemoProc	13	2021-08-1	FALSE		
11	fa163ede-	TMM0012	Product7	10		FALSE		
12	fa163ede-	12345499	DemoProc	13	2021-08-1	FALSE	2021-08-12T12:01:55	
13	fa163ede-	92349900	DemoProc	13	2021-08-1	FALSE	2021-08-12T12:01:55	
14	fa163ede-	TMM0019	Product77	10	2021-08-1	TRUE	2021-08-12T12:01:55	
15	fa163ede-	OR20009	Product5	14		FALSE		
16	fa163ede-	OR99009	Product7	14		FALSE		
17	fa163ede-	OR88009	Product7	14		FALSE		

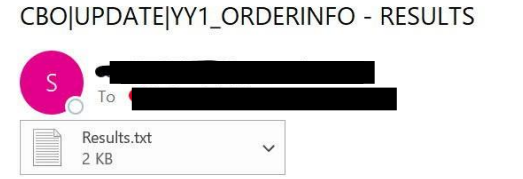
4.2 Adding or Updating Data in the CBO



	A	B	C	D	E	F	G	H
	SAP_UUID	OrderNum	Product	Quantity	OrderDate	OrderShip	OrderTimeStamp	
	fa163ede-8ebc-1ee9-a1f9-	12345678	DemoProduct	10		FALSE		
		TMM0099	Product9	12	2022-08-1	TRUE		



The sender will get an email back from BTP Cloud Integration with status lines and the entire response payload from S/4HC in case of any errors.

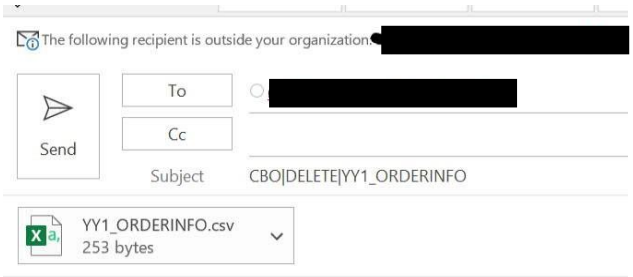
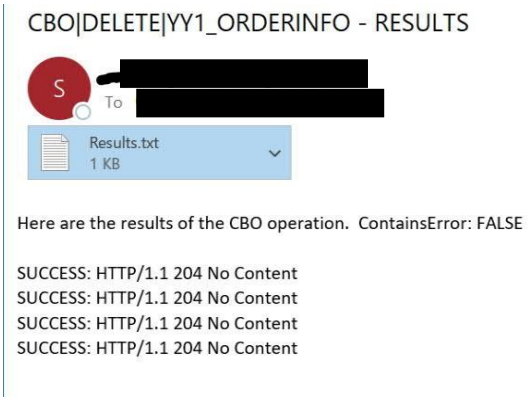


Here are the results of the CBO operation. ContainsError: FALSE

SUCCESS: HTTP/1.1 204 No Content
SUCCESS: HTTP/1.1 201 Created

4.3 Deleting Data from a CBO

To delete data from a CBO, pass in a list of SAP_UUIDs with the email subject “CBO|DELETE|<CBO_NAME>”



And the return email will contain the results. Result code 204 is a successfully DELETE operation and removed the record from the CBO.