Data Transformation: Open Items Receivable

SAP Business ByDesign to SAP S/4HANA Cloud Public Edition Guide

For SAP Cloud Integration

Version 1.0 | March 2025

1. Introduction

In this guide you shall learn how to consume the integration flow to transform data of an object in SAP Business ByDesign into a form suitable and acceptable by SAP S/4HANA Cloud Public Edition.

1.1. Definition

This integration flow is an accelerator that transforms the standard data of 'Open Items Receivable' object in SAP Business ByDesign into the SAP S/4HANA Cloud Public Edition's migration template of object 'FI - Accounts receivable open item'.

1.2. Intended Audience

This integration flow is intended to be used by both partners and customers who are in the data migration phase of their implementation project of moving their SAP Business ByDesign system to SAP S/4HANA Cloud Public Edition system. This integration flow shall act as an accelerator to kick start and speed up your data migration task. However, it does not cover all attributes and mappings, hence enhance it as per your requirement.

1.3. Structure

The structure of this guide follows the sequence of steps required to consume the integration flow for the purpose of data transformation using SAP Integration Suite service on SAP BTP.

1.4. System Connectivity

To use this integration flow, you don't have to connect your SAP Business ByDesign system or SAP S/4HANA Cloud system to SAP Integration Suite. The data extracted from SAP Business ByDesign is passed to SAP Integration Suite over HTTPS and the data prepared as output is a file that can be taken manually and uploaded in SAP S/4HANA Cloud Public Edition via Migration Cockpit.

1.5. Additional Documentation

You may refer to these topics via links to gain insights into various topics you need to know before using the integration flow.

SAP Integration Suite
https://help.sap.com/docs/cloud-integration/sap-cloud-integration/sap-cloud-integration?version=Cloud

SAP Business ByDesign Data Extraction
https://help.sap.com/docs/SAP_BUSINESS_BYDESIGN/2754875d2d2a403f95e58a41a9c7d6de/2bff33a5722d10148b06d3479e04c151.html?version=2002

SAP S/4HANA Cloud Public Edition Migration Cockpit
https://help.sap.com/docs/SAP_S4HANA_CLOUD/d5699934e7004d048c4801b552f3b013/f32db0c240484241abc53a876253e118.html?version=2408.500

Technical Data Migration SAP Business ByDesign to SAP S/4HANA Cloud
https://learning.sap.com/videos/overseeing-the-transition-from-sap-business-bydesign-to-sap-s-4hana-cloud-

Setting up Required systems and Users
https://learning.sap.com/videos/preparing-for-data-migration-from-sap-business-bydesign-to-sap-s-4hana-cloud

2. Business Scenario

Customers who are looking to migrate from SAP Business ByDesign ERP system to SAP S/4HANA Cloud Public Edition ERP system need an easy data migration path to save time and effort on data migration activities which is quite intensive.

With this intention SAP has delivered the mapping of data fields from SAP Business ByDesign Open Items Receivable object to SAP S/4HANA Cloud Public Edition equivalent object as part of this integration flow. The end result of the integration flow will provide you the Open Items Receivable file that is in the form of SAP S/4HANA Cloud Public Edition's product migration template. You shall upload this file via Migration Cockpit in SAP S/4HANA Cloud Public Edition. This helps you to save effort and prepare the file easily for upload.

3. Prerequisites

To consume the integration flow, you should have the following things done

a) Set up account in SAP BTP and subscribe to SAP Integration Suite service.
b) Set up required user roles and authorization in SAP BTP subaccount
c) Set up the required capabilities in SAP Integration Suite to trigger integration flow.
d) User should have authorisation to the Migration Cockpit app in SAP S/4HANA Cloud Public Edition
e) The user should have unrestricted access to Receivables work center and Business Analytics work center in the SAP Business ByDesign system.
f) User should have the date format **DD.MM.YYYY** in SAP Business ByDesign system. if the date format is different user shall change it to the said format by navigating to User->My Settings->Date.

Please refer to the links mentioned in the section Additional Documentation to complete the prerequisites.

4. Consumption of integration flow

Follow the steps below to transform your data and upload to SAP S/4HANA Cloud Public Edition.

4.1. Data Extraction

To consume the integration flow for transformation you need to extract the required Open Items Receivable data from SAP Business ByDesign system.

Extract the data from SAP Business ByDesign: Open Items Receivable data is extracted from the SAP Business ByDesign using the following reports: *Accounts Receivable - Open Items (FINGLAU08_Q0002)* and *Deferred Tax Items (FINTAXU04_Q0002)*.

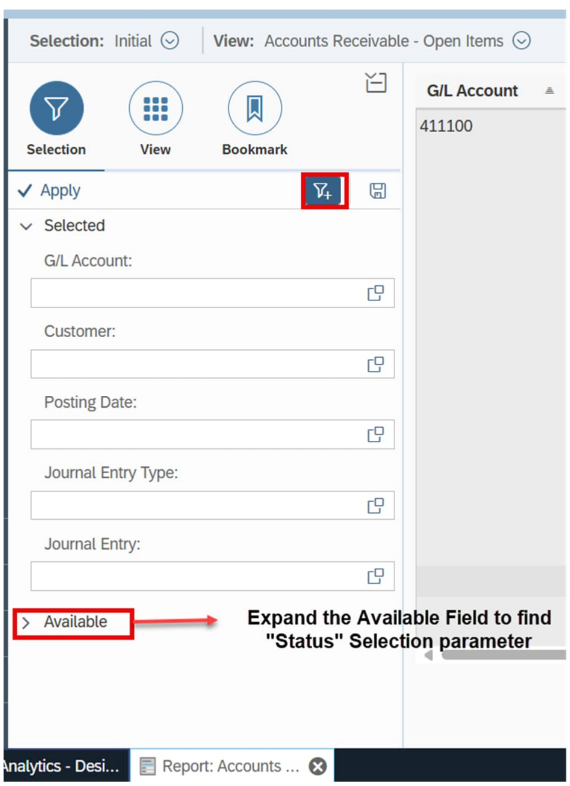
Follow the steps to extract the data for Open Items -Receivable's integration flow.

1. Extract the data from the report *Accounts Receivable - Open Items*

   I. Logon to SAP Business ByDesign system (where the data is residing) and on the left menu, navigate to Business Analytics Work center and then go to Design Reports View.

   II. Search for the report **Accounts Receivable - Open Items**. Click on the report *Accounts Receivable - Open Items* to open it. Once the report is opened, click on "*Click here to start the report"* to get the data.
   Kindly also check the Knowledge article [How Does Reporting Works in Business ByDesign]() for overview on using reports.

   III. Pass the values for the following selection parameters in the report as mentioned below in the table.



Note: If you cannot find any Selection parameter mentioned in below table, In the top right corner, click on Configure icon > Add Fields. Search for missing field and select the checkboxes Display in Report and Display in Selection to add them to Selection and Report.

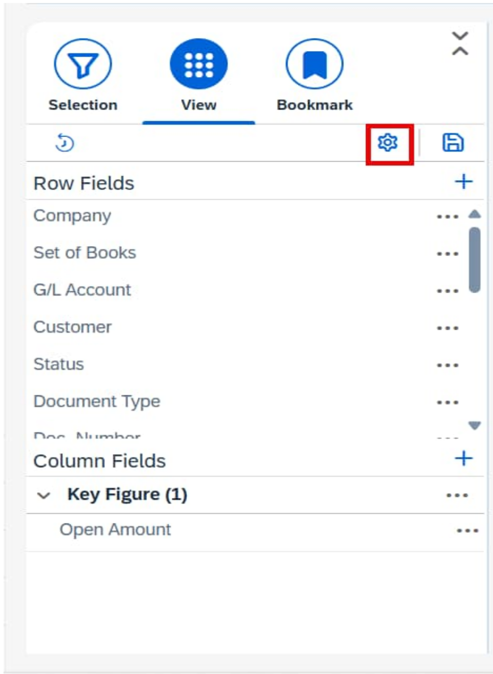
Selection Parameter Name Value	Value
Company	Select relevant Company from Absolute Values
Set Of Books	Default Set of Books ID
Key Date	Today
Status	Select all statuses except: #- Not Assigned

Note: You will have to extract the report data for each Company as the default set of books could be different.

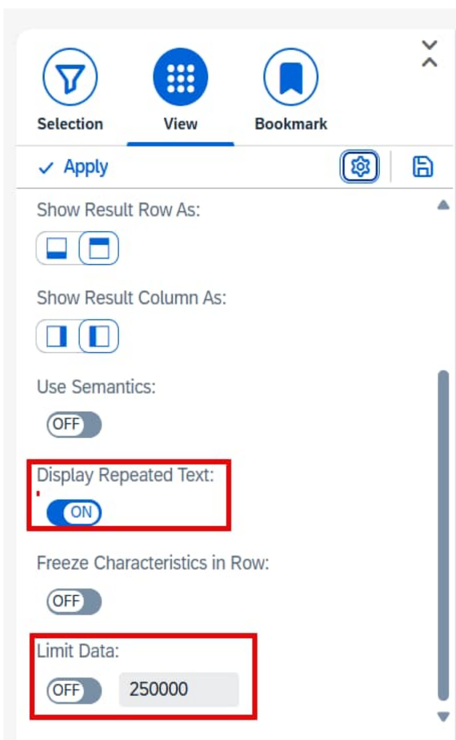
IV. Define a view for the report with the following list of result parameters:

Result Parameter Name	Field format
Company	Only ID
Set of Books	Only ID
G/L Account	Only ID
Customer	Only ID
Status	Only Description
External Reference	Only ID
Document Type	Only Description
Doc. Number	Only ID
Source Doc. Type	Only Description
Source Doc. ID	Only ID
Source Doc. Date	Only ID
Payment Terms (Customer Invoice ID)	Only ID
Journal Entry	Only ID
Journal Entry Type	Only Description
Currency Conversion Date	Only ID
Document Description	Only ID
Payment Block Indicator	Only ID
Transaction Currency	Only ID
Company Currency	Only ID
Open Amount	Only ID

V. Once all the fields in the above list are added to the report, on the left side panel, In the **View** section and click on **Chart/Table Settings** icon.

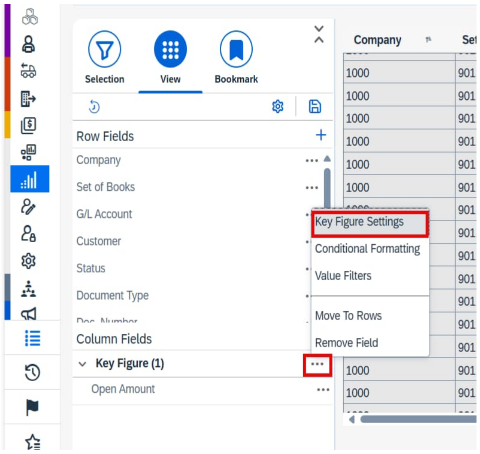


VI. **Enable** the checkbox for **Display Repeated Text** and **Disable** the Checkbox for **Limit Data.**

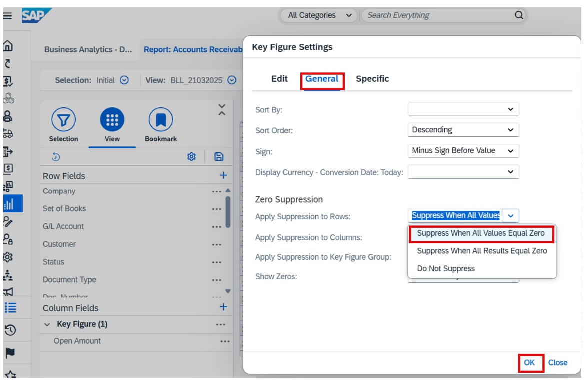


VII. After the making the above changes, click on **Chart/Table Settings** icon again to display Row fields and Column fields.

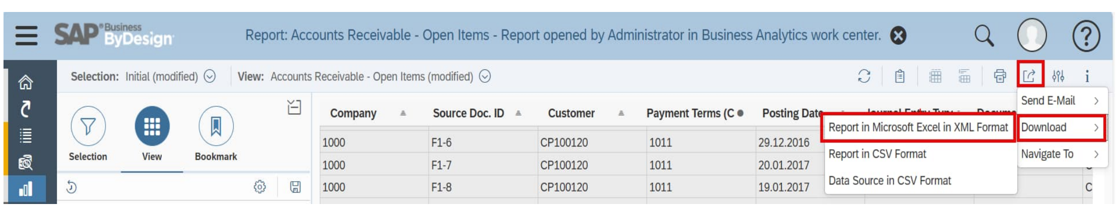
VIII. Select More options for Key Figure (1) and select **Key Figure Settings**.



IX. Select **General** tab and Under Zero Suppression section, for Field **Apply Suppression to Rows** choose "**Suppress When All Values Equal Zero".** Click on **Ok**.



X. Execute the report and download the data into XML file as shown in the screenshot below.
Note: Make sure to hide result row for all the fields in report.



XI. Rename the downloaded XML file as "**Account Receivables Open Items.xml**".

2. Extract the data from the report *Deferred Tax Items*

I. The Deferred tax details can be extracted from the report Deferred Tax Items(FINTAXU04_Q0002) by following the below steps.
II. Search for the report **Deferred Tax Items** in Design Reports View of Business Analytics Work Center. Click on the report *Deferred Tax Items* to open it.

III. Pass the values for the following selection parameters in the report as mentioned below in the table.

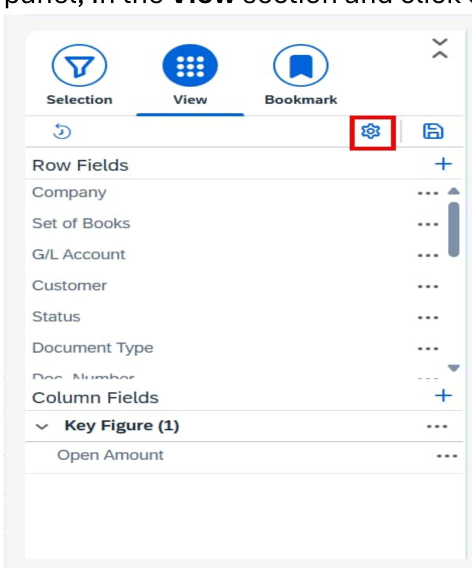
Selection Parameter Name Value	Value
Company	Select relevant Company from Absolute Values
Set Of Books	Default Set of Books ID
VAT / Sales Tax Due Category	Payable
Offset Customer/Supplier ID	Include all Customers except "Not Assigned"
Status	Select all status Except Cleared
G/L Account	Select the G/L account for Output deferred taxes
Key Date	Today

Note: You will have to extract the report data for each Company as the default set of books could be different.

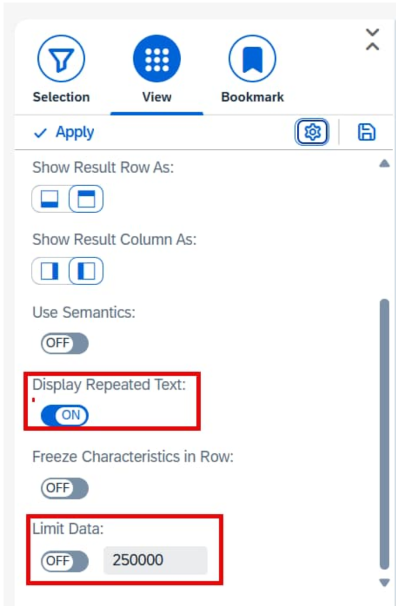
IV. Define a view for the report with the following list of result parameters:

Result Parameter Name	Field format
Company	Only ID
Set of Books ID	Only ID
G/L Account	Only ID
Source Doc. ID	Only ID
Source Document ID	Only ID
Journal Entry	Only ID
Journal Entry Item	Only ID
Journal Entry Type	Only Description
Offset Customer/Supplier ID	Only Description
VAT / Sales Tax Code	Only ID
Balance Transaction Currency	Only ID
Balance Company Currency	Only ID

V. Once all the fields in the above list are added to the report, on the left side panel, In the **View** section and click on **Chart/Table Settings** icon.



VI. **Enable** the checkbox for **Display Repeated Text** and **Disable** the Checkbox for **Limit Data**.



VII. Execute the report and download the data into XML file.
Note: Make sure to hide result row for all the fields in report.

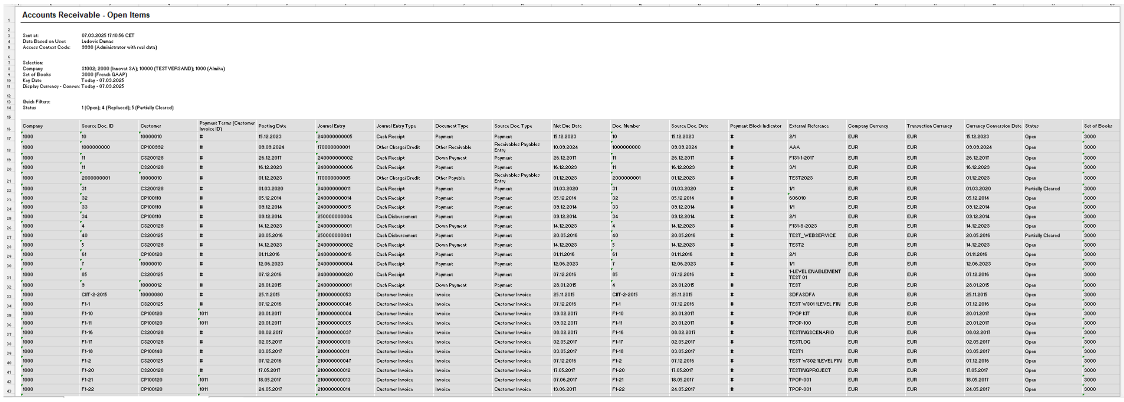
VIII. Rename the downloaded XML file as "**Deferred Tax Items.xml**".

4.2. Data Preparation

The data extracted is in raw form and cannot be consumed by the integration flow. Therefore, you should prepare the data in the form that integration flow can accept.

Prepare the extracted data: Merge the extracted data (XML files) in one file and format the rows and columns as mentioned below

1. Open "**Account Receivables Open Items.xml**" in Microsoft Excel and modify the format as described below



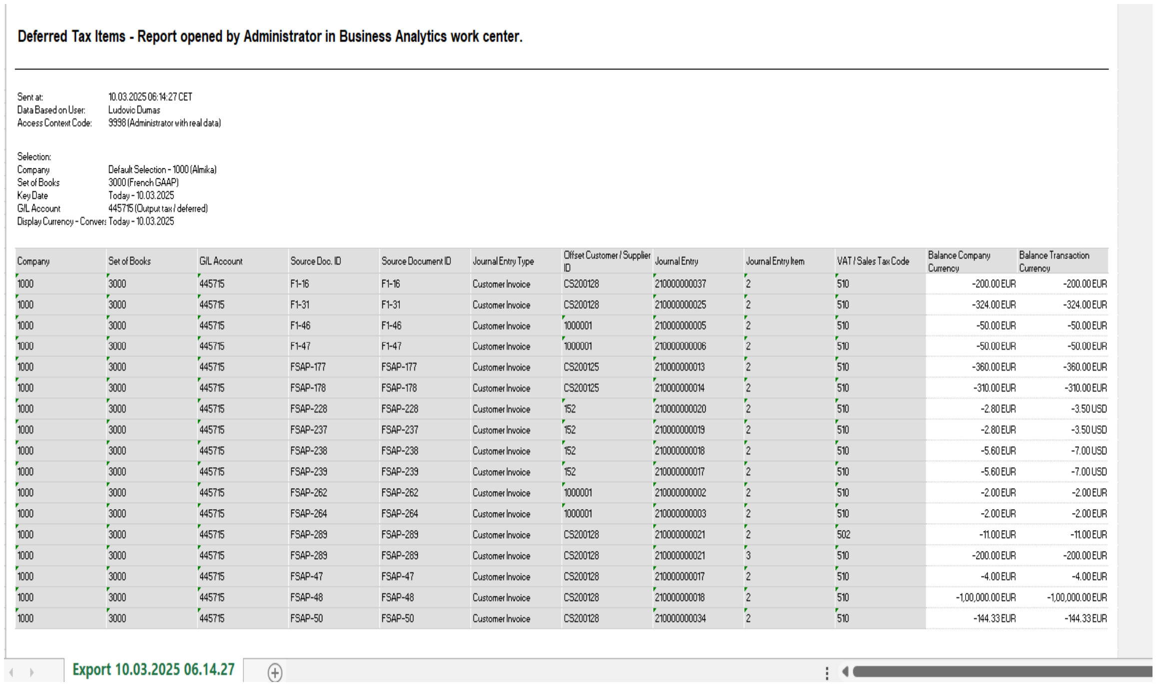
I. Delete the rows 1 to 15 from the sheet in the file so that the result data starts from row 1 in the file as shown below.
II. Delete all empty Columns if any (Check first and last column in the table).
III. Rename the sheet name to "**Open Items**".

Company	Source Doc. ID	Customer	Payment Terms (Customer Invoice ID)	Posting Date	Journal Entry	Journal Entry Type	Document Type	Source Doc. Type	Net Due Date	Doc. Number
1000	10	10000010	#	15.12.2023	240000000005	Cash Receipt	Payment	Payment	15.12.2023	10
1000	1000000000	CP100992	#	09.09.2024	170000000001	Other Charge/Credit	Other Receivable	Receivables Payables Entry	10.09.2024	1000000000
1000	11	CS200128	#	26.12.2017	240000000002	Cash Receipt	Down Payment	Payment	26.12.2017	11
1000	11	CS200128	#	16.12.2023	240000000006	Cash Receipt	Payment	Payment	16.12.2023	11
1000	2000000001	10000010	#	01.12.2023	170000000005	Other Charge/Credit	Other Payable	Receivables Payables Entry	01.12.2023	2000000001
1000	31	CS200128	#	01.03.2020	240000000011	Cash Receipt	Payment	Payment	01.03.2020	31
1000	32	CP100110	#	05.12.2014	240000000014	Cash Receipt	Payment	Payment	05.12.2014	32
1000	33	CP100110	#	09.12.2014	240000000015	Cash Receipt	Payment	Payment	09.12.2014	33
1000	34	CP100110	#	09.12.2014	250000000004	Cash Disbursement	Payment	Payment	09.12.2014	34
1000	4	CS200128	#	14.12.2023	240000000001	Cash Receipt	Down Payment	Payment	14.12.2023	4
1000	40	CS200125	#	20.05.2016	250000000041	Cash Disbursement	Payment	Payment	20.05.2016	40
1000	5	CS200128	#	14.12.2023	240000000002	Cash Receipt	Down Payment	Payment	14.12.2023	5
1000	61	CP100120	#	01.11.2016	240000000016	Cash Receipt	Payment	Payment	01.11.2016	61
1000	7	10000010	#	12.06.2023	240000000004	Cash Receipt	Payment	Payment	12.06.2023	7
1000	85	CS200125	#	07.12.2016	240000000020	Cash Receipt	Payment	Payment	07.12.2016	85
1000	9	10000012	#	28.01.2015	240000000001	Cash Receipt	Down Payment	Payment	28.01.2015	4
1000	CIIT-2-2015	10000080	#	25.11.2015	210000000053	Customer Invoice	Invoice	Customer Invoice	25.11.2015	CIIT-2-2015
1000	F1-1	CS200125	#	07.12.2016	210000000046	Customer Invoice	Invoice	Customer Invoice	07.12.2016	F1-1
1000	F1-10	CP100120	1011	20.01.2017	210000000004	Customer Invoice	Invoice	Customer Invoice	09.02.2017	F1-10
1000	F1-11	CP100120	1011	20.01.2017	210000000005	Customer Invoice	Invoice	Customer Invoice	09.02.2017	F1-11
1000	F1-16	CS200128	#	08.02.2017	210000000037	Customer Invoice	Invoice	Customer Invoice	08.02.2017	F1-16

Open Items

Note: Keep the "**Account Receivables Open Items.xml"** XML file open in Microsoft Excel in the background.

2. Open "**Deferred Tax Items.xml**" downloaded XML file in Microsoft Excel and modify the format as described below.



Deferred Tax Items - Report opened by Administrator in Business Analytics work center.

Sent at: 10.03.2025 06:14:27 CET
Data Based on User: Ludovic Dumas
Access Context Code: 9998 (Administrator with real data)

Selection:
Company Default Selection - 1000 (Almika)
Set of Books 3000 (French GAAP)
Key Date Today - 10.03.2025
G/L Account 445715 (Output tax / deferred)
Display Currency - Convers Today - 10.03.2025

Company	Set of Books	G/L Account	Source Doc. ID	Source Document ID	Journal Entry Type	Offset Customer / Supplier ID	Journal Entry	Journal Entry Item	VAT / Sales Tax Code	Balance Company Currency	Balance Transaction Currency
1000	3000	445715	F1-16	F1-16	Customer Invoice	CS200128	210000000037	2	510	-200.00 EUR	-200.00 EUR
1000	3000	445715	F1-31	F1-31	Customer Invoice	CS200128	210000000025	2	510	-324.00 EUR	-324.00 EUR
1000	3000	445715	F1-46	F1-46	Customer Invoice	1000001	210000000005	2	510	-50.00 EUR	-50.00 EUR
1000	3000	445715	F1-47	F1-47	Customer Invoice	1000001	210000000006	2	510	-50.00 EUR	-50.00 EUR
1000	3000	445715	FSAP-177	FSAP-177	Customer Invoice	CS200125	210000000013	2	510	-360.00 EUR	-360.00 EUR
1000	3000	445715	FSAP-178	FSAP-178	Customer Invoice	CS200125	210000000014	2	510	-310.00 EUR	-310.00 EUR
1000	3000	445715	FSAP-228	FSAP-228	Customer Invoice	152	210000000020	2	510	-2.80 EUR	-3.50 USD
1000	3000	445715	FSAP-237	FSAP-237	Customer Invoice	152	210000000019	2	510	-2.80 EUR	-3.50 USD
1000	3000	445715	FSAP-238	FSAP-238	Customer Invoice	152	210000000018	2	510	-5.60 EUR	-7.00 USD
1000	3000	445715	FSAP-239	FSAP-239	Customer Invoice	152	210000000017	2	510	-5.60 EUR	-7.00 USD
1000	3000	445715	FSAP-262	FSAP-262	Customer Invoice	1000001	210000000002	2	510	-2.00 EUR	-2.00 EUR
1000	3000	445715	FSAP-264	FSAP-264	Customer Invoice	1000001	210000000003	2	510	-2.00 EUR	-2.00 EUR
1000	3000	445715	FSAP-289	FSAP-289	Customer Invoice	CS200128	210000000021	2	502	-11.00 EUR	-11.00 EUR
1000	3000	445715	FSAP-289	FSAP-289	Customer Invoice	CS200128	210000000021	3	510	-200.00 EUR	-200.00 EUR
1000	3000	445715	FSAP-47	FSAP-47	Customer Invoice	CS200128	210000000017	2	510	-4.00 EUR	-4.00 EUR
1000	3000	445715	FSAP-48	FSAP-48	Customer Invoice	CS200128	210000000018	2	510	-1,00,000.00 EUR	-1,00,000.00 EUR
1000	3000	445715	FSAP-50	FSAP-50	Customer Invoice	CS200128	210000000034	2	510	-144.33 EUR	-144.33 EUR

Export 10.03.2025 06.14.27

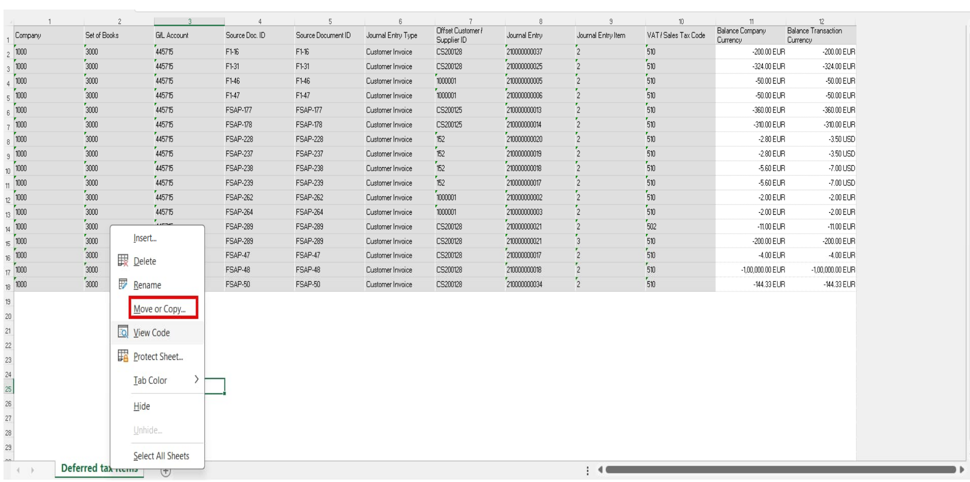
i. Delete the rows 1 to 13 from the sheet in the file so that the result data starts from row 1 in the file as shown below.

ii. Delete all empty Columns if any (Check first and last column in the table)

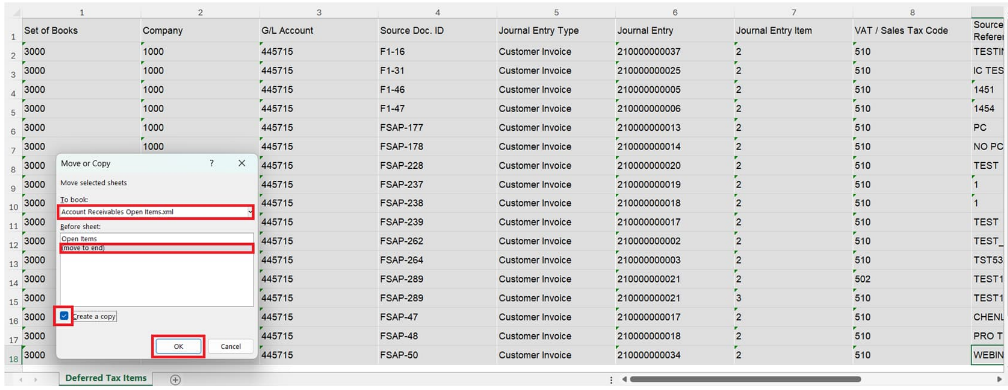
iii. Rename the sheet to “**Deferred Tax Items**”.

3. Merge the data files in one single file.

   i. Right click on the Sheet Deferred tax Items and click on Move or Copy



   ii. Select the “**Account Receivables Open Items.xml**” XML file in ***To Book*** dropdown and select the option ***“(move to end)”*** in before Sheet section, click on Check the ***Create a Copy*** box and click ***Ok*** as shown in the screenshot below



iii. The Deferred Tax details are now copied to "**Account Receivables Open Items.xml**" XML file.

iv. Save the "**Account Receivables Open Items.xml**" XML file with two sheets *Open Items* and *Deferred Tax Items*. Convert it into a ZIP file. This ZIP file should be fed to the iflow for transformation.

4.3. Data Transformation

Once the data is prepared and ready in the required form, you are ready to execute the integration flow.

Make the following preparations to load the integration flow for executing data transformation.

I. Login to SAP Cloud Integration and search for the package "SAP Business ByDesign Accounting Data Transformation to SAP S/4HANA Cloud Public Edition". Open and copy the package into your workspace.

II. Open the Integration flow "ByD Open Items Receivable Data Transformation" from your workspace and click on Edit.

III. Deploy the integration flow. Refer to the learning session for details.

IV. After successful deployment of integration flow, make a note of the End Point URL generated. Refer to the learning session for details.

To consume the integration flow for data transformation and create a S/4HANA migration file, follow the steps below. For details refer to the learning session.

I. Set up an application to trigger the integration flow e.g., Postman.

II. Create a POST HTTP request, provide the user credentials, and upload the extracted ZIP file in the body of the request.

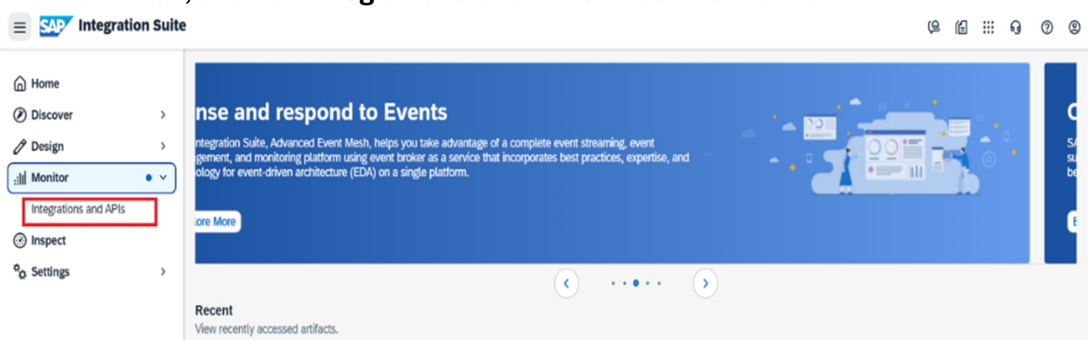
III. Send the request to the end point URL of integration flow. This will trigger the integration flow and start the data transformation. As a result, you shall receive a response file back from your triggering application.

IV. Save the response ZIP file received. Extract the ZIP package and Open the XML file in Microsoft Excel. Click on *Save*.

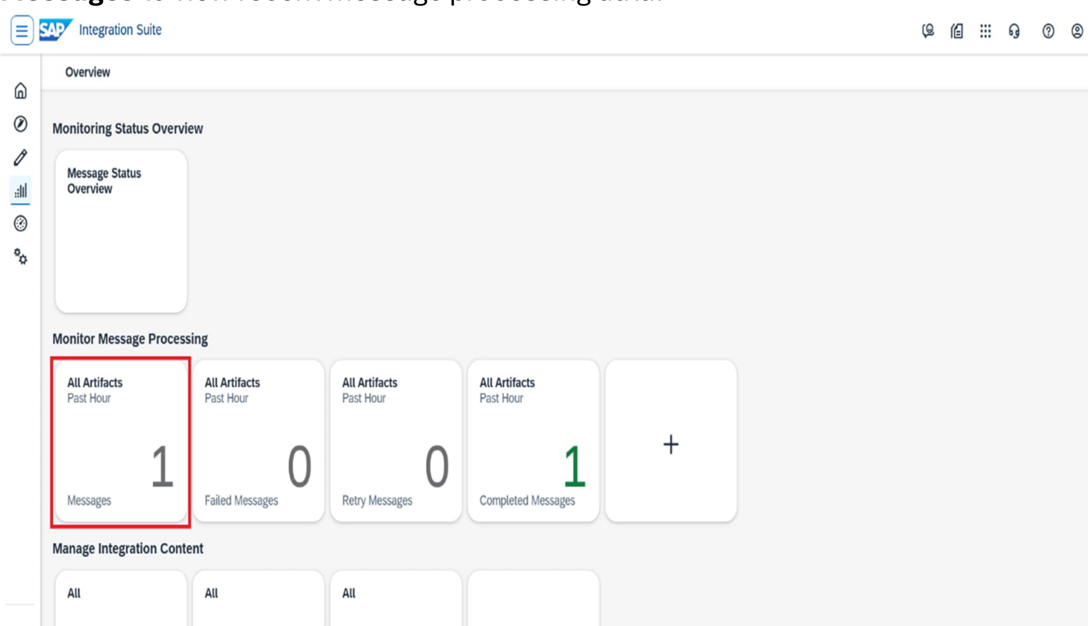
V. **Note:** In the response XML, some records contain fields that require your attention. These instances can be identified by locating cells with the value **“<<Enter Manually>>”**.

VI. **Note:** Unprocessed Records log: During data transformation in the integration flow, certain records may not be processed and requires manual processing. Follow the steps below to find such unprocessed records log and act on them.

a) In SAP Integration Suite, navigate to the left-side menu and select **Monitor**. Then, click on **Integrations and APIs** under the Monitor.

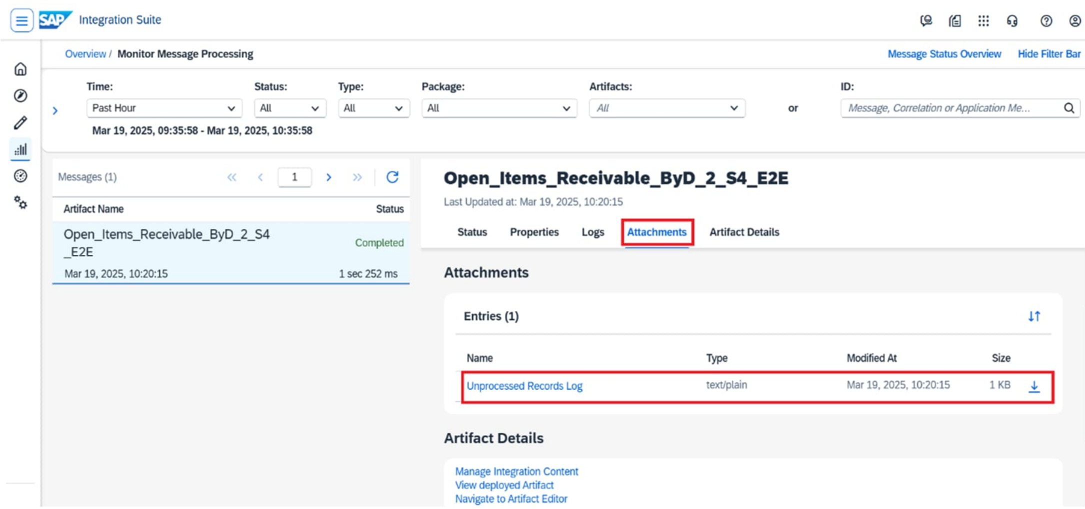


b) Under Monitor Message Processing, Select **All Artifacts - Past Hour Messages** to view recent message processing data.



c) Locate the relevant message based on the integration flow name and trigger time, then click on it. On the right-hand panel, select **Attachments**.

d) In the **Attachments** section, you will find an entry named "**Unprocessed Records Log**".



e) Open the log file to identify records that were not processed. The log specifies unprocessed records in the respective sheets.

f) Example: If the log states **"Open Items: 2, 4, 6"**, it indicates that in the **SAP Business ByDesign extracted XML file**, records **2, 4, and 6** in the **Open Items** sheet were not processed.

   a. **Note:** The first row of the sheet represents column headers and should not be included in the record count.

4.4. Data Upload

Once the data is transformed and you have received the S/4HANA template file filled with the data (response file) you are ready to upload the same to S/4HANA system via Migration Cockpit.

Follow the below steps to upload the data to S/4HANA system:

a. Save the response ZIP file received.
b. Extract the ZIP package and open the XML file in Microsoft Excel. Click on save. Close the file.
c. This is the file that should be taken to SAP S/4HANA Cloud Public Edition migration project and uploaded. For details on uploading a file via migration cockpit in SAP S/4HANA Cloud Public Edition refer to this help document.

5. Customization and Enhancement of integration flow

You can customize the mapping or enhance the integration flow as per your requirement. For details on customization, you can refer to these tutorials:

- Tutorial 1: Customizing standard integration flows for data migration from SAP Business ByDesign to SAP S/4HANA Cloud Public Edition.
- Tutorial 2: Updating data structure in integration flows for data migration from SAP Business ByDesign to SAP S/4HANA Cloud Public Edition.

6. Contact Information

Email:
DL_66604530AF3F4B0136989F8F@global.corp.sap

Support Ticket Component:
CA-S4H-BYD-IFLOW