



PARTNER

SAP BTP Data-to-Value Hands-on Exercise Series

DV200 Exercise02 – Creating a Data Flow with Data Builder of SAP Data Warehouse Cloud

This document will guide you step by step on the process of creating a Data Flow to combine the archived historic book sales order (2011~2020) from Amazon S3 and live book sales order(2021~present) from SAP S/4HANA Cloud, persist the output result into a local table in SAP Data Warehouse Cloud as a complete analytical dataset of book sales order.

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Table of Contents

DISCLAIMER	4
OBJECTIVE	4
SCENARIO.....	4
ENVIRONMENT ACCESS.....	5
PREREQUISITES	5
EXERCISE STEP DETAILS.....	5

DISCLAIMER

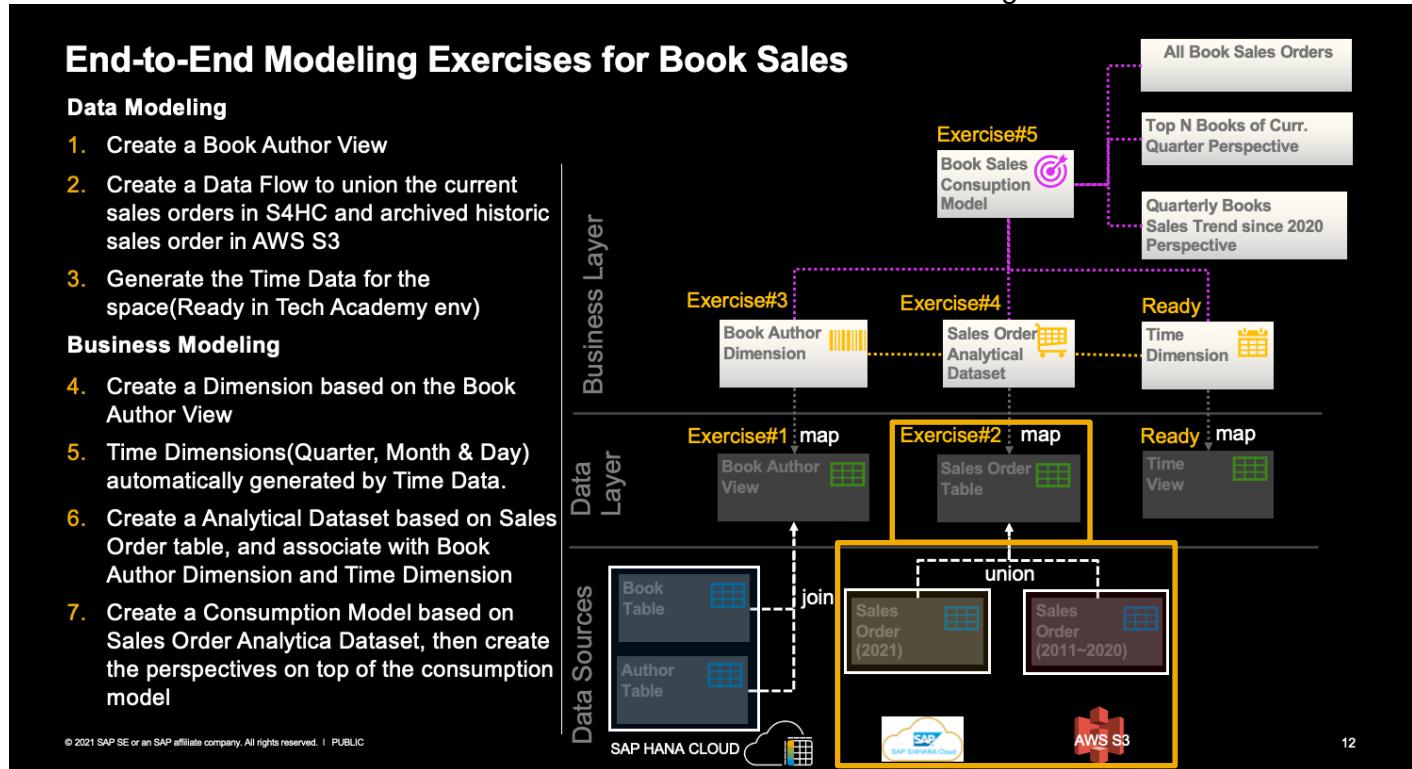
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OBJECTIVE

The objective of this exercise is to provide the steps needed to create a Data flow using S/4 HANA Cloud and Amazon S3 as source.

SCENARIO

In this session we will use the scenario as seen in Demo #2 in the below image



In this session we will create a Data Flow View using Data Builder. We will use the SAP S/4 HANA Cloud connection and Amazon S3 connection.

- The CDS View C_SALESDOCUMENTITEMDEX_1 from S/4 HANA Cloud filtered SDDocumentCategory by Order('C') as Live Sales Order Data of the bookshop
- Archived Sales Order Data of the bookshop from the Amazon S3.

ENVIRONMENT ACCESS

Before the exercise, please obtain the Tenant details and Login Credentials of SAP Data Warehouse Cloud provided to you as instruction below.

SAP Data Warehouse Cloud (To login SAP Data Warehouse Cloud and perform the exercise.)

- Tenant URL
- Username: Your assigned User ID
- Password: Your assigned User Password

For the Bootcamp participants, please use the SAP Data Warehouse tenant provided by SAP, and your assigned user id and password.

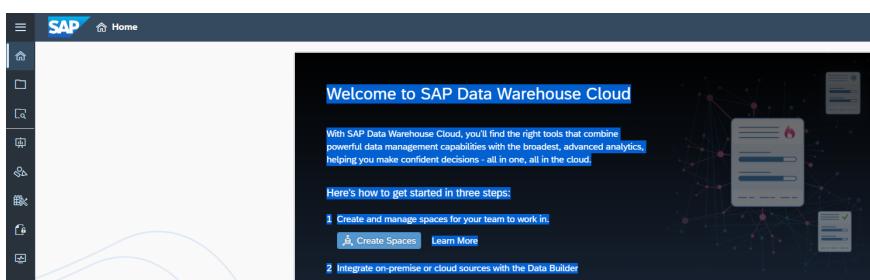
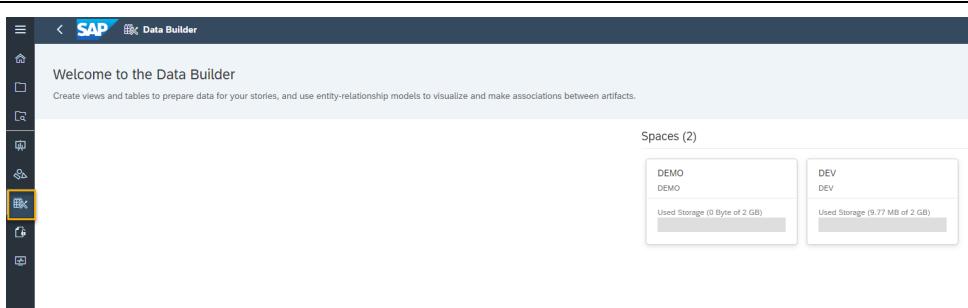
- The SAP Data Warehouse cloud tenant URL is available in the dedicated Microsoft Teams > General (Channel) > System Access (Tab) > SAP Data Warehouse Cloud (Section), which you have been invited.
- Your assigned user id and password for SAP Data Warehouse Cloud are communicated individually via email.

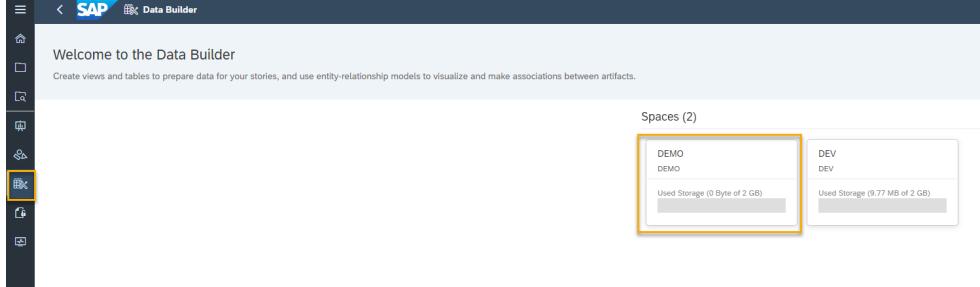
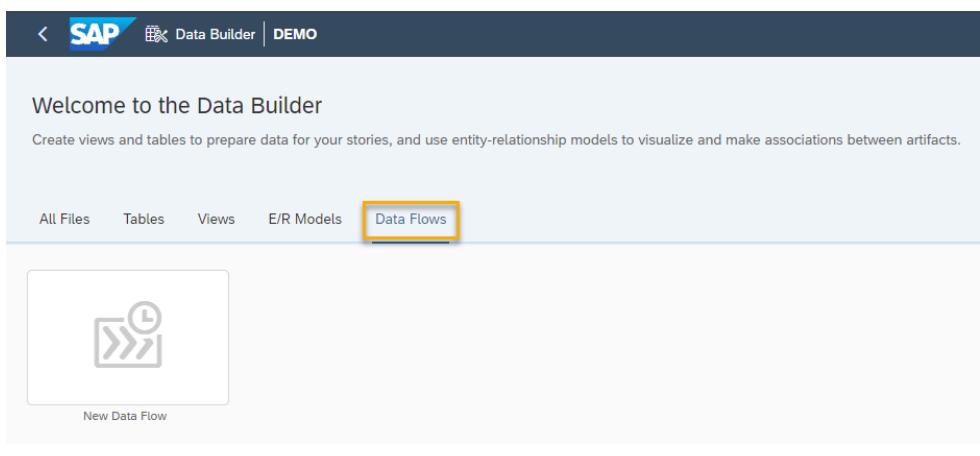
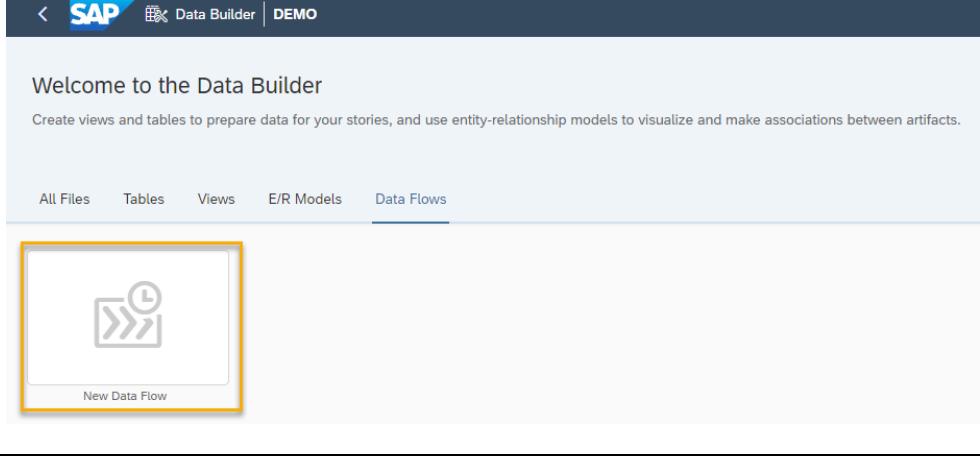
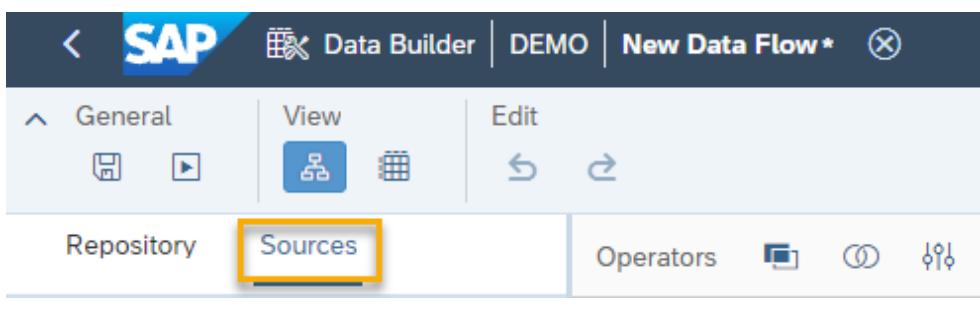
PREREQUISITES

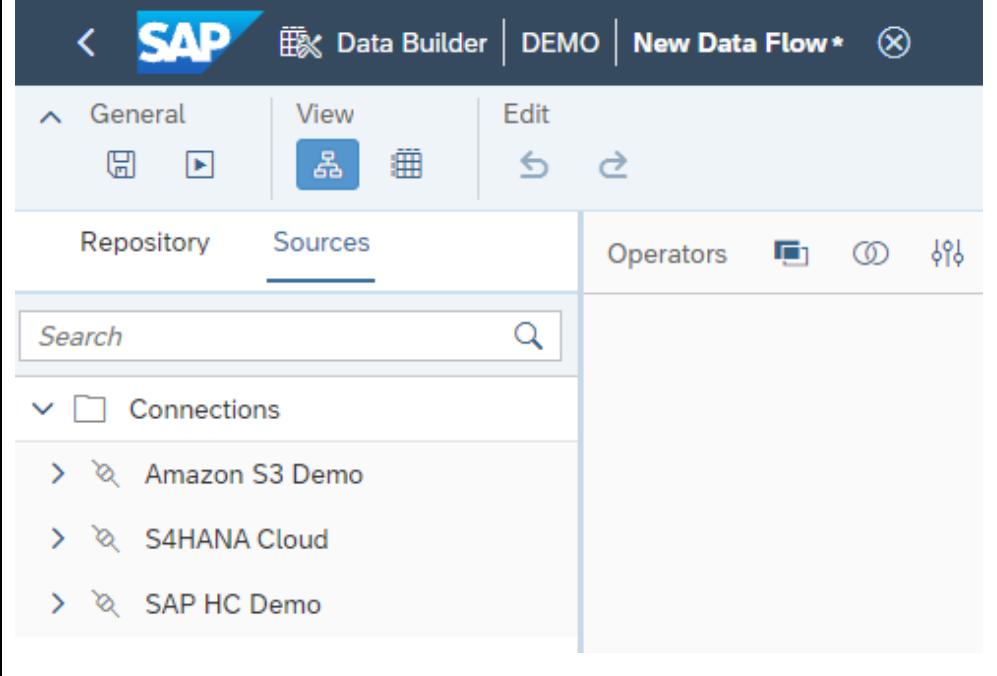
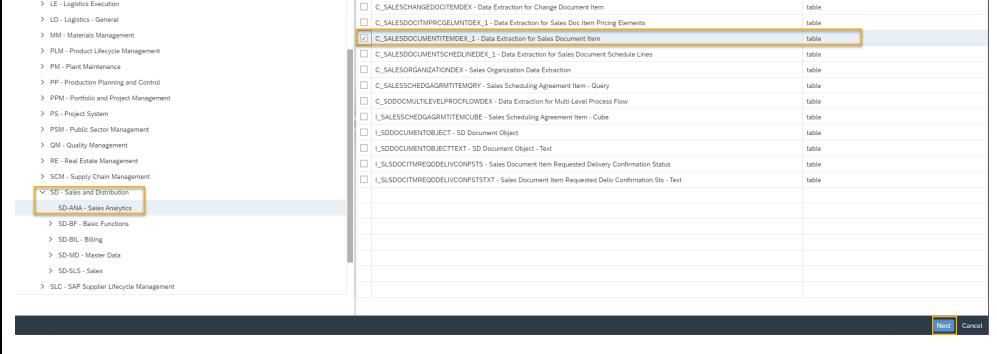
The connection of SAP S/4HANA Cloud and Amazon S3 are created and valid in SAP Data Warehouse Cloud as per

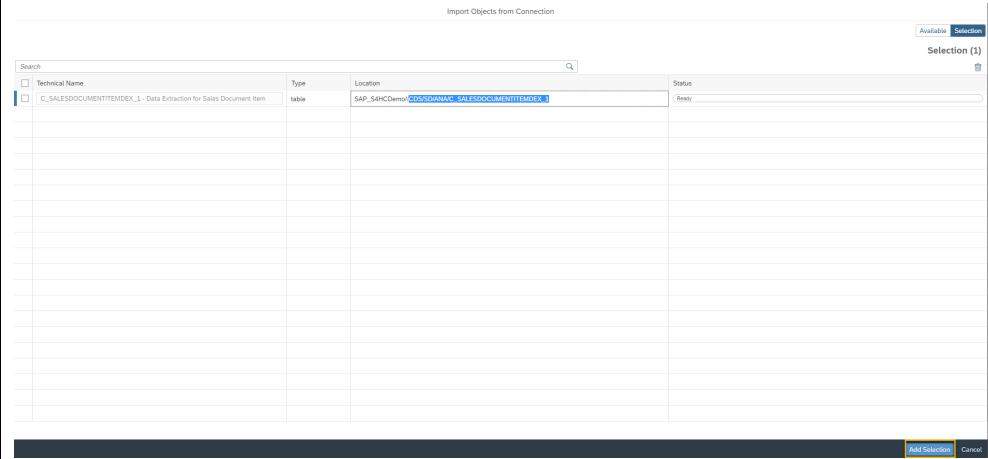
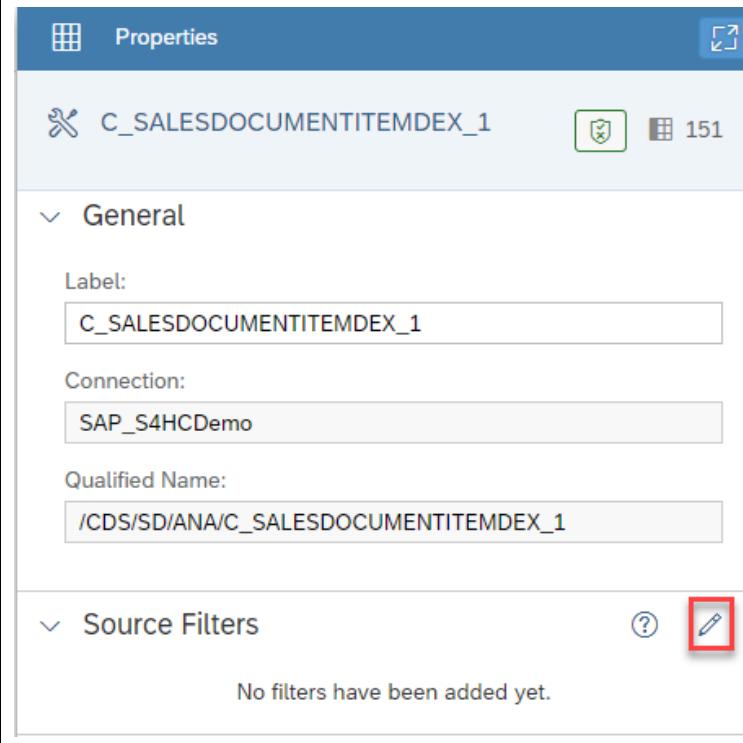
- [DV140_Exercise01](#): Connect SAP S/4HANA Cloud to SAP Data Warehouse Cloud
- [DV140_Exercise03](#): Connect AWS S3 to SAP Data Warehouse Cloud

EXERCISE STEP DETAILS

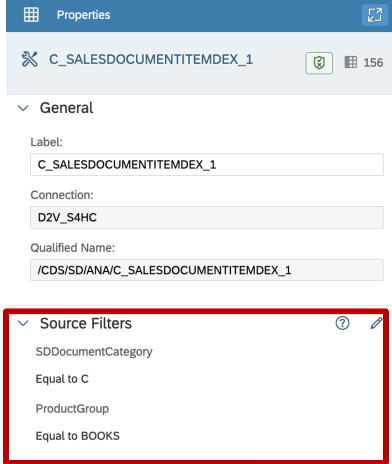
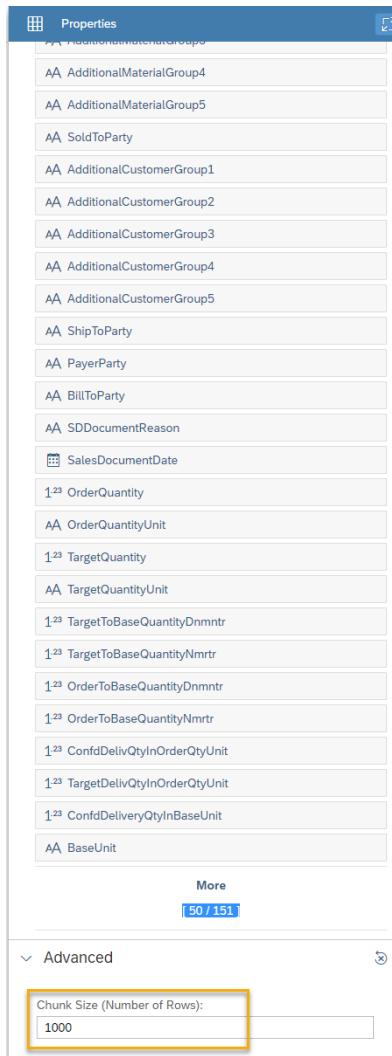
Explanation	Screenshot
Log on to SAP Data Warehouse Cloud with the given tenant URL and assigned user credential mentioned above. Go to the Home Screen.	
Click on the Data Builder icon, you see the space that you are assigned to.	

Explanation	Screenshot
Click on the Space	 <p>Welcome to the Data Builder</p> <p>Create views and tables to prepare data for your stories, and use entity-relationship models to visualize and make associations between artifacts.</p> <p>Spaces (2)</p> <ul style="list-style-type: none"> DEMO (Selected) DEV <p>Used Storage (0 Byte of 2 GB)</p> <p>Used Storage (9.77 MB of 2 GB)</p>
Click on Data Flows	 <p>Welcome to the Data Builder</p> <p>Create views and tables to prepare data for your stories, and use entity-relationship models to visualize and make associations between artifacts.</p> <p>All Files Tables Views E/R Models Data Flows (Selected)</p> <p>New Data Flow</p>
Select New Data Flows	 <p>Welcome to the Data Builder</p> <p>Create views and tables to prepare data for your stories, and use entity-relationship models to visualize and make associations between artifacts.</p> <p>All Files Tables Views E/R Models Data Flows (Selected)</p> <p>New Data Flow (Highlighted)</p>
Navigate to Sources	 <p>< SAP Data Builder DEMO New Data Flow* X</p> <p>General View Edit</p> <p>Repository Sources Operators</p>

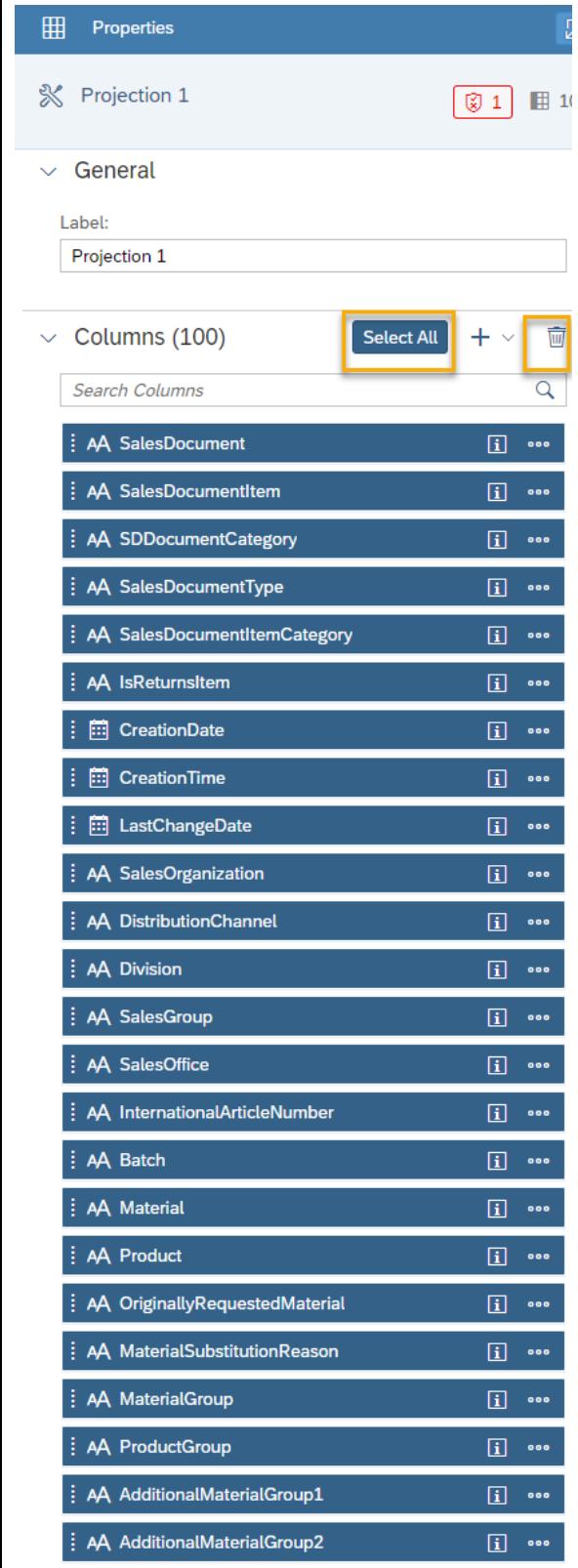
Explanation	Screenshot
Open the Connections	
Open the Connection(S4HANA Cloud) Click on Import connection using the icon shown	
In the popup window. Navigate to SD- Sales and Distribution → SD-ANA- Sales Analysis	
<p>On the Right side select the CDS view C_SALESDOCUMENTITEMDELEX_1 → Click Next</p>	

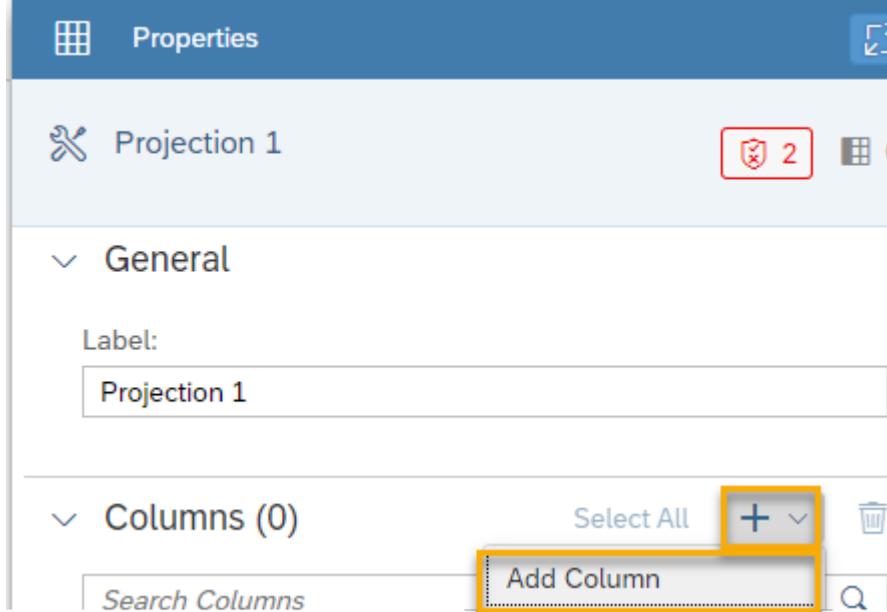
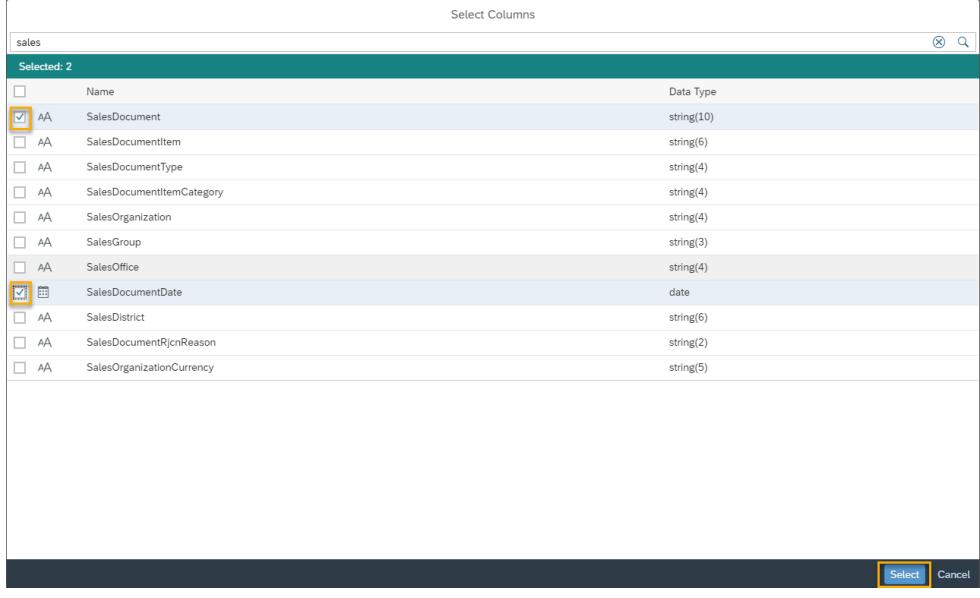
Explanation	Screenshot
We can leave the proposed name and choose Add Selection	
Once the object is imported you will see that on the central canvas	
<p>We only need the data that has the below status SDDocumentCategory = 'C' ProductGroup = 'BOOKS' We will set a filter for this restrictions, which only return the book sales orders.</p>	<p>Select the Object on Central Canvas and Edit the Properties</p> 

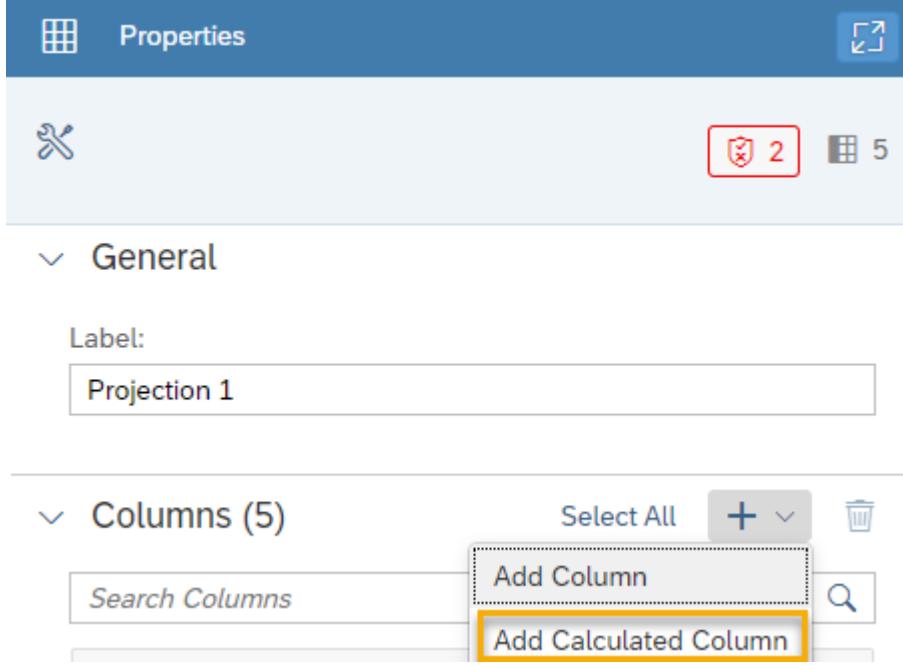
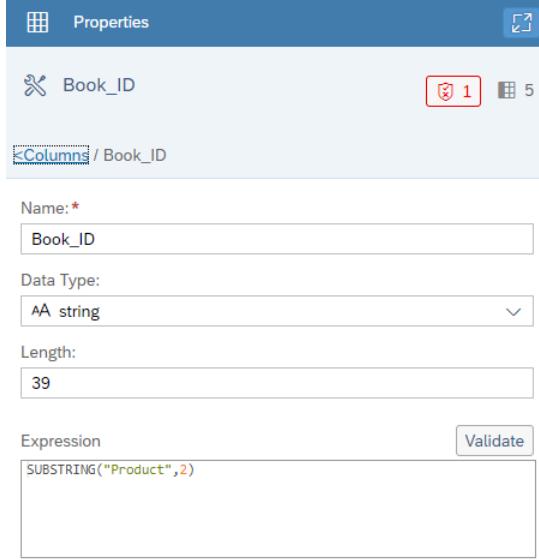
Explanation	Screenshot									
Select the 1 st filter on SalesDocumentCategory	<p>Source Filters</p> <p>Reset</p> <table border="1"> <thead> <tr> <th data-bbox="518 361 584 382">Column</th> <th data-bbox="731 361 796 382">Condition</th> <th data-bbox="975 361 1041 382">Value</th> </tr> </thead> <tbody> <tr> <td data-bbox="540 418 703 439">SalesDocum...</td> <td data-bbox="752 418 915 439">Equal to</td> <td data-bbox="992 418 1029 439">C</td> </tr> </tbody> </table> <p>OK Cancel</p>	Column	Condition	Value	SalesDocum...	Equal to	C			
Column	Condition	Value								
SalesDocum...	Equal to	C								
Click + to add another filter on ProductGroup	<p>Source Filters</p> <p>Reset</p> <table border="1"> <thead> <tr> <th data-bbox="518 1051 584 1072">Column</th> <th data-bbox="752 1051 796 1072">Condition</th> <th data-bbox="975 1051 1041 1072">Value</th> </tr> </thead> <tbody> <tr> <td data-bbox="540 1108 703 1129">SalesDocum...</td> <td data-bbox="752 1108 915 1129">Equal to</td> <td data-bbox="992 1108 1029 1129">C</td> </tr> <tr> <td data-bbox="540 1165 703 1186">ProductGroup</td> <td data-bbox="752 1165 915 1186">Equal to</td> <td data-bbox="992 1165 1029 1186">BOOKS</td> </tr> </tbody> </table> <p>OK Cancel</p>	Column	Condition	Value	SalesDocum...	Equal to	C	ProductGroup	Equal to	BOOKS
Column	Condition	Value								
SalesDocum...	Equal to	C								
ProductGroup	Equal to	BOOKS								

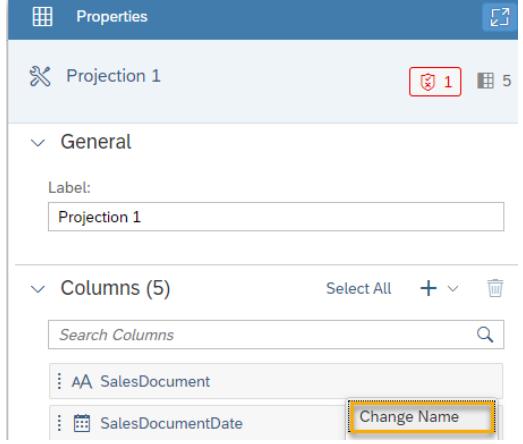
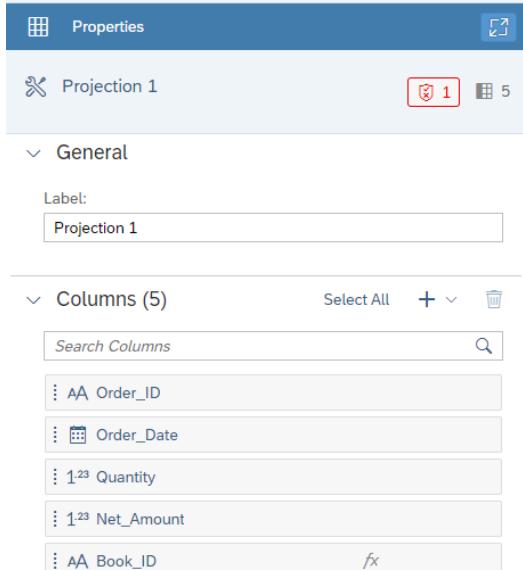
Explanation	Screenshot
<p>You should see the restrictions under the Source Filters section</p>	 <p>The screenshot shows the SAP Fiori Properties interface for a specific entity. The 'Source Filters' section is highlighted with a red box. It contains the following entries:</p> <ul style="list-style-type: none"> SDDocumentCategory Equal to C ProductGroup Equal to BOOKS
<p>Navigate to the Advanced section and set the Chunk size to 1000.</p>	 <p>The screenshot shows the SAP Fiori Properties interface for a different entity, AA_PlantAdditionalCustomerGroups. The 'Advanced' section is highlighted with a yellow box. The 'Chunk Size (Number of Rows)' field is set to 1000.</p>

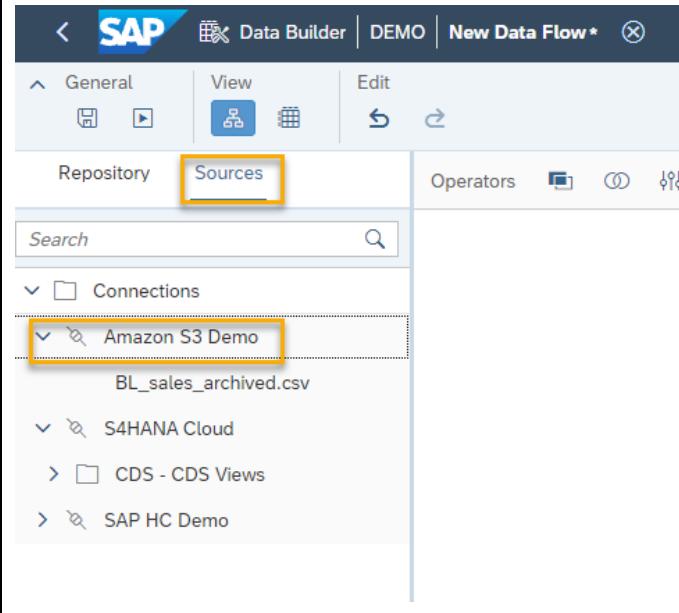
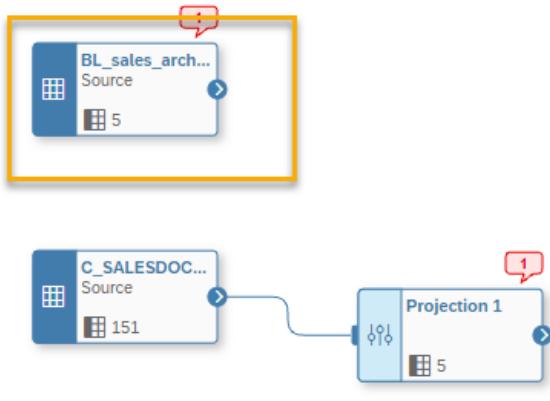
Explanation	Screenshot
<p>We do not need all fields so we will apply a Projection and select the required fields (5).</p> <p>At the top of the central canvas choose projection in the Operators window</p>	
<p>Drag the Projection operator on the central canvas</p>	
<p>Drag the arrow from source to target to link the source with the operator.</p>	

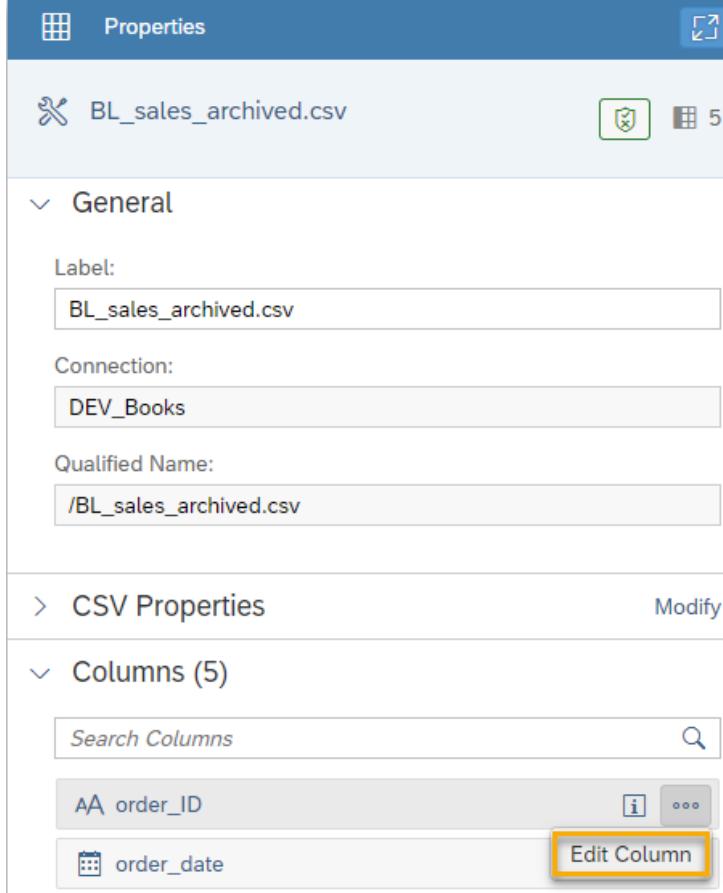
Explanation	Screenshot																																																		
<p>We have to do bulk removals so we will select all and then delete</p>	 <p>The screenshot shows the SAP Fiori Properties interface for a projection named 'Projection 1'. The 'General' section has a 'Label' field containing 'Projection 1'. The 'Columns (100)' section is expanded, showing a list of columns. The 'Select All' button and the trash can icon for deleting selected items are highlighted with orange boxes.</p> <table border="1"> <thead> <tr> <th>Column Name</th> <th>Action</th> </tr> </thead> <tbody> <tr><td>AA SalesDocument</td><td>Info icon</td></tr> <tr><td>AA SalesDocumentItem</td><td>Info icon</td></tr> <tr><td>AA SDDocumentCategory</td><td>Info icon</td></tr> <tr><td>AA SalesDocumentType</td><td>Info icon</td></tr> <tr><td>AA SalesDocumentItemCategory</td><td>Info icon</td></tr> <tr><td>AA IsReturnsItem</td><td>Info icon</td></tr> <tr><td>CreationDate</td><td>Info icon</td></tr> <tr><td>CreationTime</td><td>Info icon</td></tr> <tr><td>LastChangeDate</td><td>Info icon</td></tr> <tr><td>AA SalesOrganization</td><td>Info icon</td></tr> <tr><td>AA DistributionChannel</td><td>Info icon</td></tr> <tr><td>AA Division</td><td>Info icon</td></tr> <tr><td>AA SalesGroup</td><td>Info icon</td></tr> <tr><td>AA SalesOffice</td><td>Info icon</td></tr> <tr><td>AA InternationalArticleNumber</td><td>Info icon</td></tr> <tr><td>AA Batch</td><td>Info icon</td></tr> <tr><td>AA Material</td><td>Info icon</td></tr> <tr><td>AA Product</td><td>Info icon</td></tr> <tr><td>AA OriginallyRequestedMaterial</td><td>Info icon</td></tr> <tr><td>AA MaterialSubstitutionReason</td><td>Info icon</td></tr> <tr><td>AA MaterialGroup</td><td>Info icon</td></tr> <tr><td>AA ProductGroup</td><td>Info icon</td></tr> <tr><td>AA AdditionalMaterialGroup1</td><td>Info icon</td></tr> <tr><td>AA AdditionalMaterialGroup2</td><td>Info icon</td></tr> </tbody> </table>	Column Name	Action	AA SalesDocument	Info icon	AA SalesDocumentItem	Info icon	AA SDDocumentCategory	Info icon	AA SalesDocumentType	Info icon	AA SalesDocumentItemCategory	Info icon	AA IsReturnsItem	Info icon	CreationDate	Info icon	CreationTime	Info icon	LastChangeDate	Info icon	AA SalesOrganization	Info icon	AA DistributionChannel	Info icon	AA Division	Info icon	AA SalesGroup	Info icon	AA SalesOffice	Info icon	AA InternationalArticleNumber	Info icon	AA Batch	Info icon	AA Material	Info icon	AA Product	Info icon	AA OriginallyRequestedMaterial	Info icon	AA MaterialSubstitutionReason	Info icon	AA MaterialGroup	Info icon	AA ProductGroup	Info icon	AA AdditionalMaterialGroup1	Info icon	AA AdditionalMaterialGroup2	Info icon
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Explanation	Screenshot																								
Next we will add the 5 columns that we need	<table border="1"> <thead> <tr> <th data-bbox="523 255 796 287">Source</th><th data-bbox="796 255 997 287">Target</th><th data-bbox="997 255 1400 287">Change</th></tr> </thead> <tbody> <tr> <td data-bbox="523 297 796 329">SalesDocument</td><td data-bbox="796 297 997 329">Order_ID</td><td data-bbox="997 297 1400 329">Name Change</td></tr> <tr> <td data-bbox="523 340 796 371">SalesDocumentDate</td><td data-bbox="796 340 997 371">Order_Date</td><td data-bbox="997 340 1400 371">Name Change</td></tr> <tr> <td data-bbox="523 382 796 413">Product</td><td data-bbox="796 382 997 413">Book_ID</td><td data-bbox="997 382 1400 445">Derived using Expression SUBSTRING("Product",2)</td></tr> <tr> <td data-bbox="523 456 796 487">OrderQuantity</td><td data-bbox="796 456 997 487">Quantity</td><td data-bbox="997 456 1400 487">Name Change</td></tr> <tr> <td data-bbox="523 498 796 530">NetAmount</td><td data-bbox="796 498 997 530">Net_Amount</td><td data-bbox="997 498 1400 530">Name Change</td></tr> </tbody> </table>	Source	Target	Change	SalesDocument	Order_ID	Name Change	SalesDocumentDate	Order_Date	Name Change	Product	Book_ID	Derived using Expression SUBSTRING("Product",2)	OrderQuantity	Quantity	Name Change	NetAmount	Net_Amount	Name Change						
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OrderQuantity	Quantity	Name Change																							
NetAmount	Net_Amount	Name Change																							
To add a column, Click on + icon and then select Add Column																									
Select the fields as shown in the table above	 <table border="1"> <thead> <tr> <th data-bbox="523 1248 556 1269">Name</th><th data-bbox="523 1290 1073 1311">Data Type</th></tr> </thead> <tbody> <tr> <td data-bbox="523 1322 670 1343">SalesDocument</td><td data-bbox="523 1343 1073 1364">string(10)</td></tr> <tr> <td data-bbox="523 1364 687 1385">SalesDocumentItem</td><td data-bbox="523 1385 1073 1406">string(6)</td></tr> <tr> <td data-bbox="523 1406 687 1427">SalesDocumentType</td><td data-bbox="523 1427 1073 1448">string(4)</td></tr> <tr> <td data-bbox="523 1448 736 1469">SalesDocumentItemCategory</td><td data-bbox="523 1469 1073 1491">string(4)</td></tr> <tr> <td data-bbox="523 1491 670 1512">SalesOrganization</td><td data-bbox="523 1512 1073 1533">string(4)</td></tr> <tr> <td data-bbox="523 1533 654 1554">SalesGroup</td><td data-bbox="523 1554 1073 1575">string(3)</td></tr> <tr> <td data-bbox="523 1575 654 1596">SalesOffice</td><td data-bbox="523 1596 1073 1617">string(4)</td></tr> <tr> <td data-bbox="523 1617 687 1638">SalesDocumentDate</td><td data-bbox="523 1638 1073 1660">date</td></tr> <tr> <td data-bbox="523 1660 654 1681">SalesDistrict</td><td data-bbox="523 1681 1073 1702">string(6)</td></tr> <tr> <td data-bbox="523 1702 719 1723">SalesDocumentRjcnReason</td><td data-bbox="523 1723 1073 1744">string(2)</td></tr> <tr> <td data-bbox="523 1744 719 1765">SalesOrganizationCurrency</td><td data-bbox="523 1765 1073 1786">string(5)</td></tr> </tbody> </table>	Name	Data Type	SalesDocument	string(10)	SalesDocumentItem	string(6)	SalesDocumentType	string(4)	SalesDocumentItemCategory	string(4)	SalesOrganization	string(4)	SalesGroup	string(3)	SalesOffice	string(4)	SalesDocumentDate	date	SalesDistrict	string(6)	SalesDocumentRjcnReason	string(2)	SalesOrganizationCurrency	string(5)
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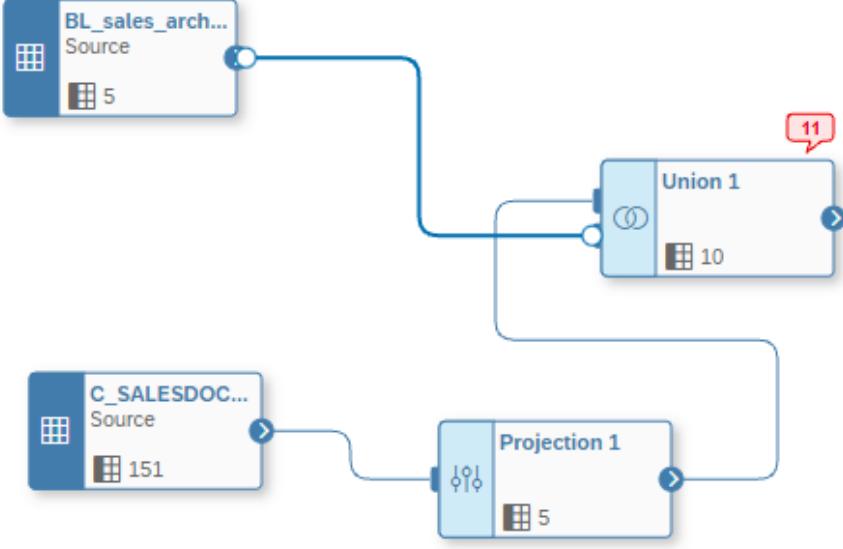
Explanation	Screenshot
Repeat for OrderQuantity, NetAmount	
Add a Calculated column for Book ID	 <p>The screenshot shows the 'Properties' dialog for a calculated column. The 'Label' field contains 'Projection 1'. In the 'Columns (5)' section, there is a search bar and two buttons: 'Add Column' and 'Add Calculated Column'. The 'Add Calculated Column' button is highlighted with a yellow box.</p>
Enter the Properties as shown	 <p>The screenshot shows the 'Properties' dialog for a column named 'Book_ID'. The 'Name:' field is set to 'Book_ID'. The 'Data Type:' dropdown is set to 'string'. The 'Length:' field is set to '39'. The 'Expression' field contains the formula 'SUBSTRING("Product",2)'. A 'Validate' button is visible next to the expression field.</p>
Click on the icon for the column	 <p>The screenshot shows the 'Properties' dialog for a column. The 'More' icon (three dots) is highlighted with a yellow box.</p>

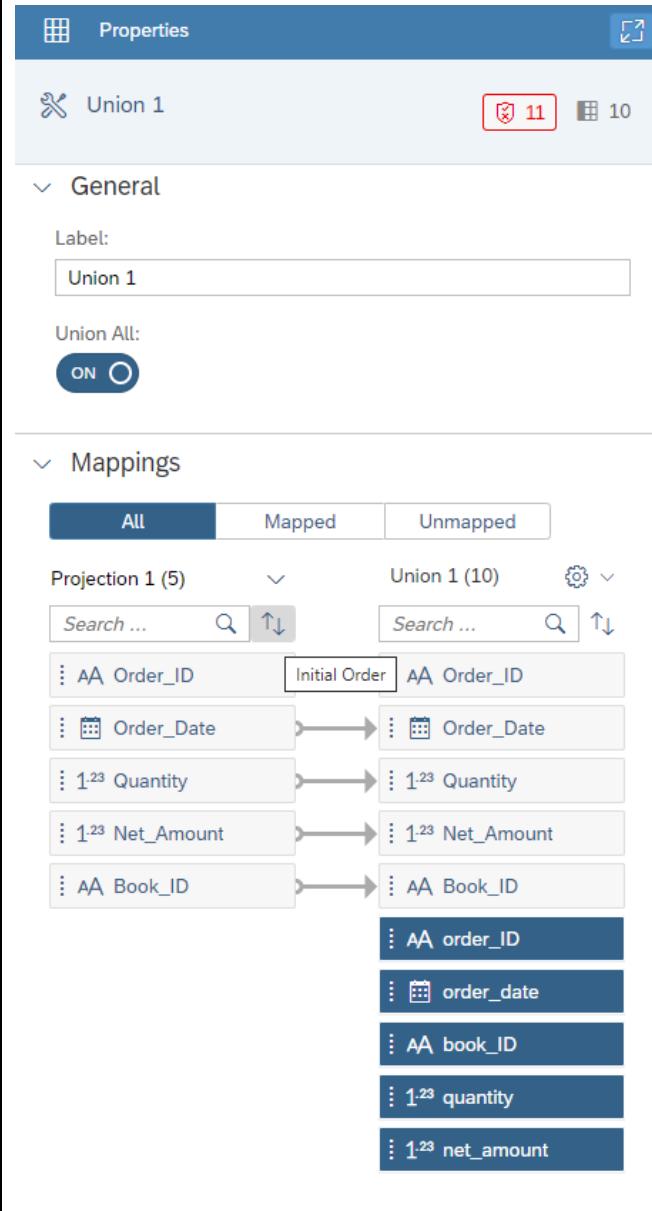
Explanation	Screenshot										
<p>Choose Change Name.</p> <p>Repeat for following source fields.</p> <table border="1" data-bbox="127 382 507 593"> <thead> <tr> <th>Source</th><th>Target</th></tr> </thead> <tbody> <tr> <td>SalesDocument</td><td>Order_ID</td></tr> <tr> <td>SalesDocumentDate</td><td>Order_Date</td></tr> <tr> <td>OrderQuantity</td><td>Quantity</td></tr> <tr> <td>NetAmount</td><td>Net_Amount</td></tr> </tbody> </table>	Source	Target	SalesDocument	Order_ID	SalesDocumentDate	Order_Date	OrderQuantity	Quantity	NetAmount	Net_Amount	
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SalesDocumentDate	Order_Date										
OrderQuantity	Quantity										
NetAmount	Net_Amount										
<p>Now you should have the 5 fields as shown</p>											

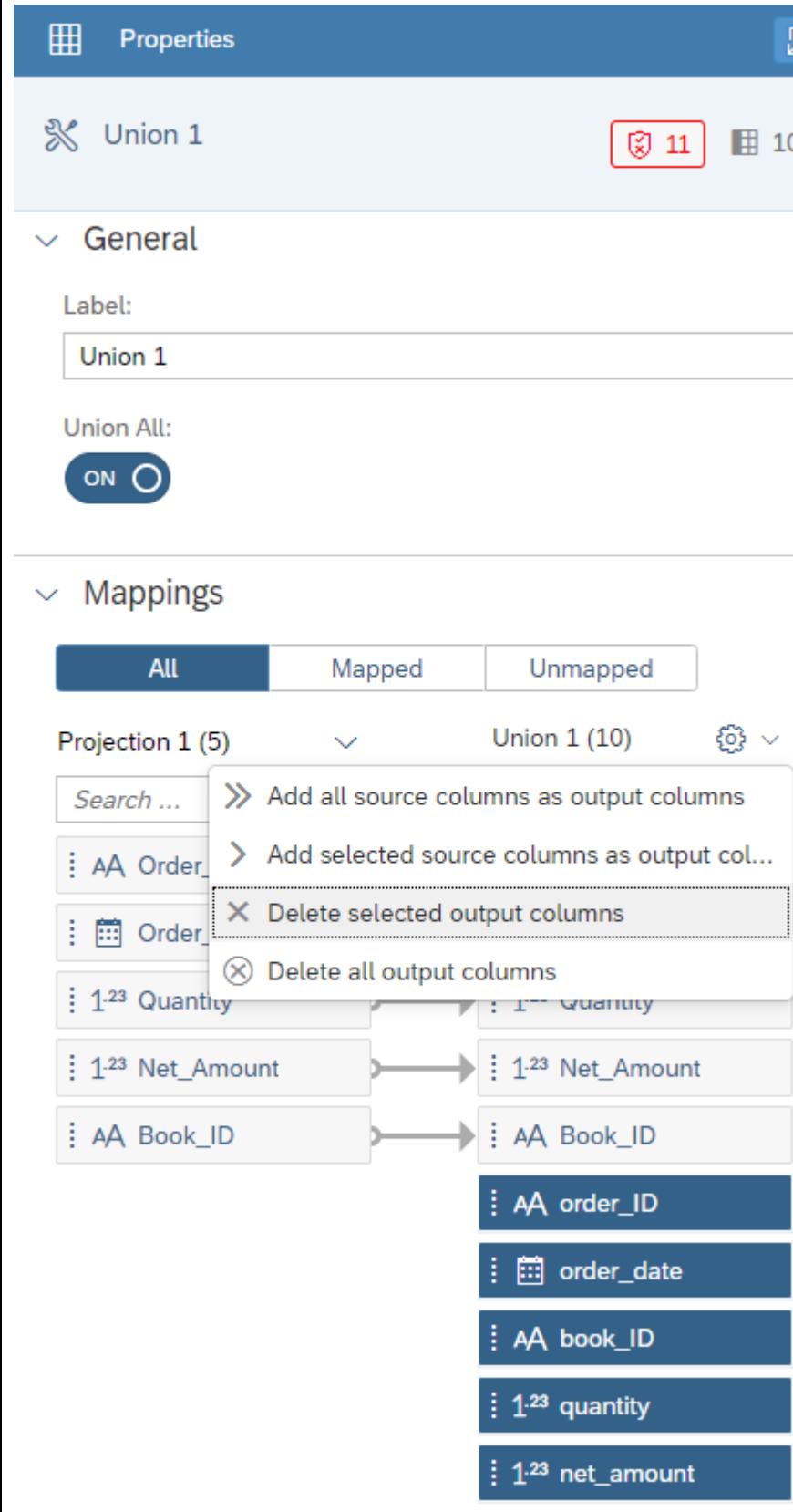
Explanation	Screenshot															
<p>Navigate to Connections→ Select Amazon S3 connection (Amazon S3 Demo)</p>																
<p>Drag the BL_sales_archived.csv file to central canvas</p>																
<p>Change the Datatypes for the BL_Sales_Archived data set as shown here</p>	<table border="1" data-bbox="509 1461 1188 1717"> <thead> <tr> <th data-bbox="509 1461 714 1543">Column Name</th><th data-bbox="714 1461 1008 1543">Existing Data Type</th><th data-bbox="1008 1461 1188 1543">New Data Type</th></tr> </thead> <tbody> <tr> <td data-bbox="509 1543 714 1586">Order_ID</td><td data-bbox="714 1543 1008 1586">int32</td><td data-bbox="1008 1543 1188 1586">String(10)</td></tr> <tr> <td data-bbox="509 1586 714 1628">Book_ID</td><td data-bbox="714 1586 1008 1628">int32</td><td data-bbox="1008 1586 1188 1628">String(39)</td></tr> <tr> <td data-bbox="509 1628 714 1670">Quantity</td><td data-bbox="714 1628 1008 1670">int32</td><td data-bbox="1008 1628 1188 1670">Decimal(15,3)</td></tr> <tr> <td data-bbox="509 1670 714 1712">Net_Amount</td><td data-bbox="714 1670 1008 1712">int32</td><td data-bbox="1008 1670 1188 1712">Decimal(15,2)</td></tr> </tbody> </table>	Column Name	Existing Data Type	New Data Type	Order_ID	int32	String(10)	Book_ID	int32	String(39)	Quantity	int32	Decimal(15,3)	Net_Amount	int32	Decimal(15,2)
Column Name	Existing Data Type	New Data Type														
Order_ID	int32	String(10)														
Book_ID	int32	String(39)														
Quantity	int32	Decimal(15,3)														
Net_Amount	int32	Decimal(15,2)														

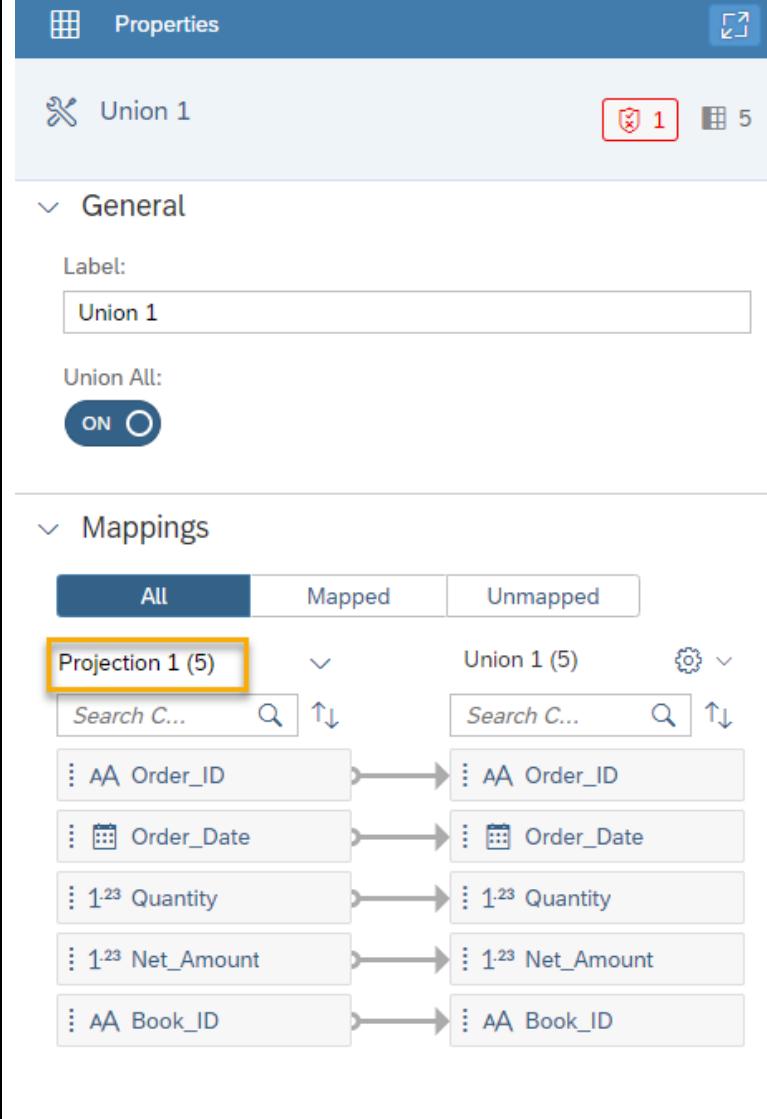
Explanation	Screenshot
<p>Click on the column and select the icon as shown below and</p> 	
<p>Navigate to Operators section and choose UNION operator</p> 	

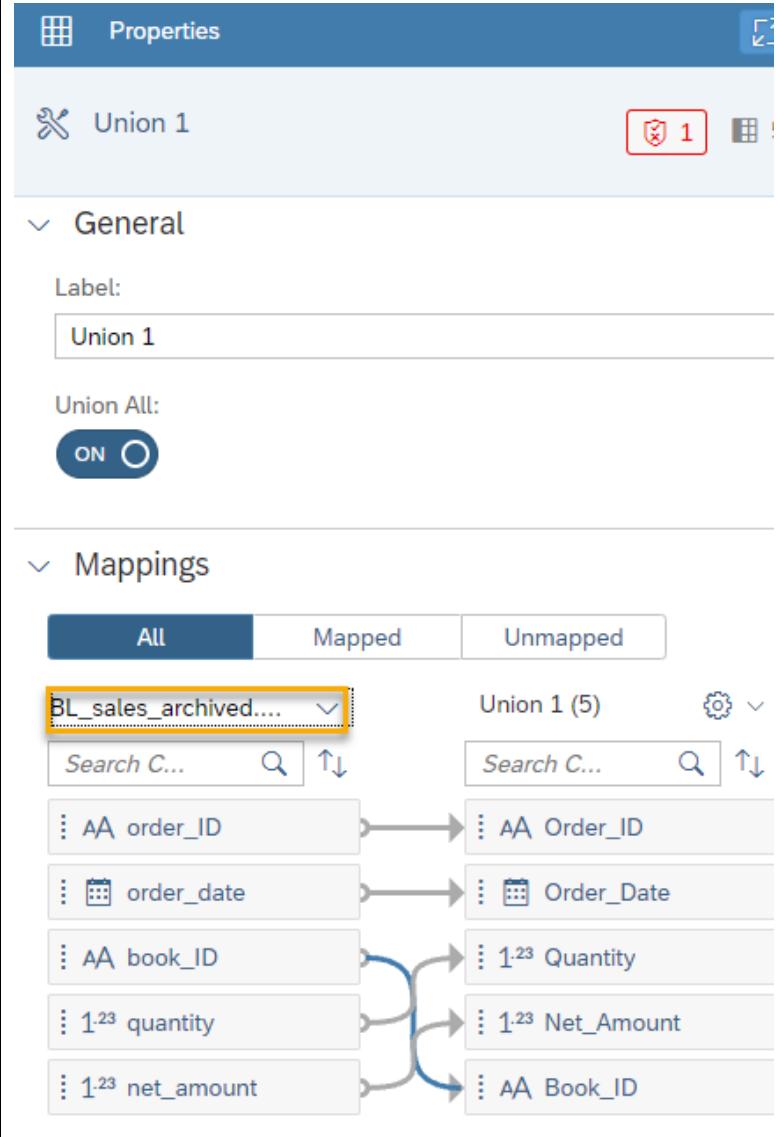
Explanation	Screenshot
Drag the operator to the central canvas	<p>The screenshot shows a data flow diagram with two source nodes: "BL_sales_arch..." and "C_SALESDOC...". Both sources have a count of 5 and 151 respectively. A "Union 1" operator (highlighted with a red box and labeled 1) is connected to both sources. The output of the Union operator is connected to a "Projection 1" operator (highlighted with a red box and labeled 2). The "Projection 1" operator has a count of 5.</p>
Click on Projection 1 and select the arrow to drag to the Union operator	<p>The screenshot shows the same data flow diagram as the previous step. The arrow from the "C_SALESDOC..." source to the "Union 1" operator is highlighted with a red box and labeled 1, indicating it is being selected or dragged.</p>

Explanation	Screenshot
<p>Repeat it for the Archived dataset</p>	 <pre> graph TD S1[Source BL_sales_arch... 5] --> U1[Union 1 10] S2[Source C_SALESDOC... 151] --> P1[Projection 1 5] U1 --> E1(()) P1 --> E2(()) style U1 fill:#e0f2ff,stroke:#336699,color:#336699 style P1 fill:#e0f2ff,stroke:#336699,color:#336699 </pre>

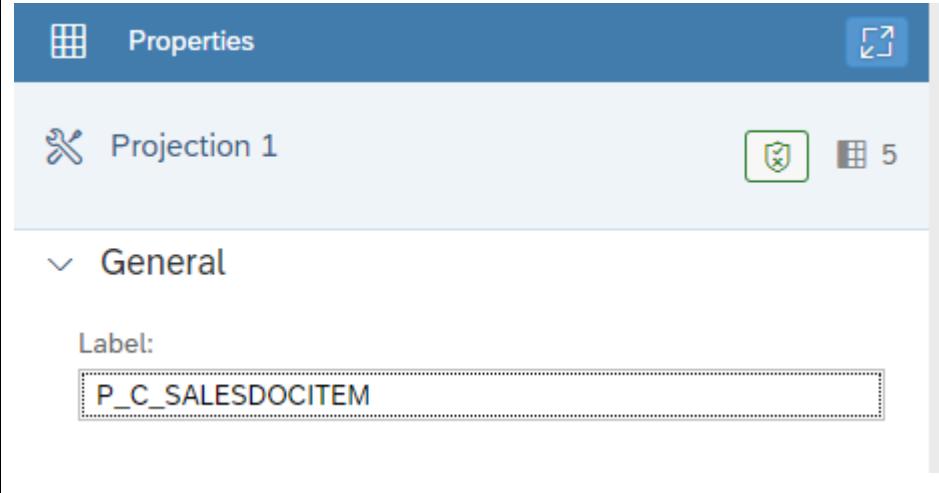
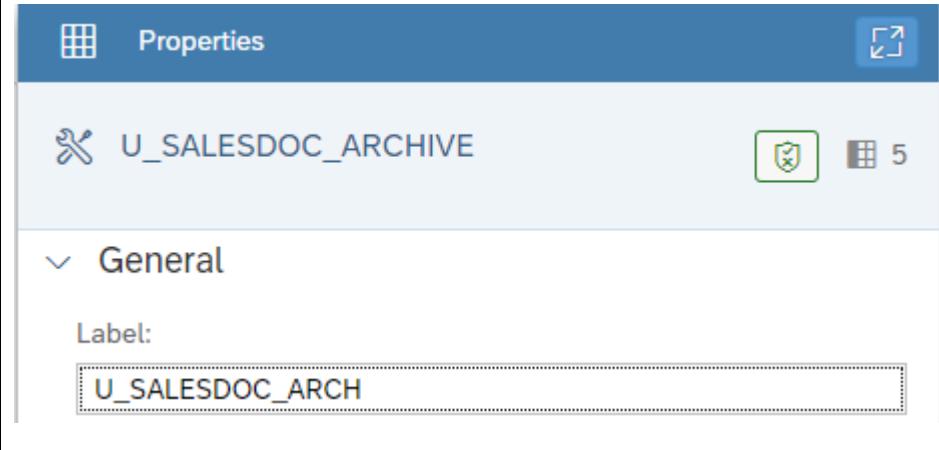
Explanation	Screenshot												
<p>Select the columns on the right as shown</p>	 <p>The screenshot shows the Alteryx Properties pane for a 'Union 1' component. The top bar displays the component name 'Union 1' and its status (11 inputs, 10 outputs). The 'General' section includes a 'Label' input set to 'Union 1' and a 'Union All' toggle switch set to 'ON'. The 'Mappings' section shows a comparison between 'Projection 1 (5)' on the left and 'Union 1 (10)' on the right. Arrows indicate the mapping of columns from the projection to the union output. The mapped columns are: Order_ID (Initial Order), Order_Date, Quantity, Net_Amount, and Book_ID.</p> <table border="1"> <thead> <tr> <th>Projection 1 (5)</th> <th>Union 1 (10)</th> </tr> </thead> <tbody> <tr> <td>Order_ID</td> <td>Initial Order</td> </tr> <tr> <td>Order_Date</td> <td>Order_Date</td> </tr> <tr> <td>Quantity</td> <td>Quantity</td> </tr> <tr> <td>Net_Amount</td> <td>Net_Amount</td> </tr> <tr> <td>Book_ID</td> <td>Book_ID</td> </tr> </tbody> </table>	Projection 1 (5)	Union 1 (10)	Order_ID	Initial Order	Order_Date	Order_Date	Quantity	Quantity	Net_Amount	Net_Amount	Book_ID	Book_ID
Projection 1 (5)	Union 1 (10)												
Order_ID	Initial Order												
Order_Date	Order_Date												
Quantity	Quantity												
Net_Amount	Net_Amount												
Book_ID	Book_ID												

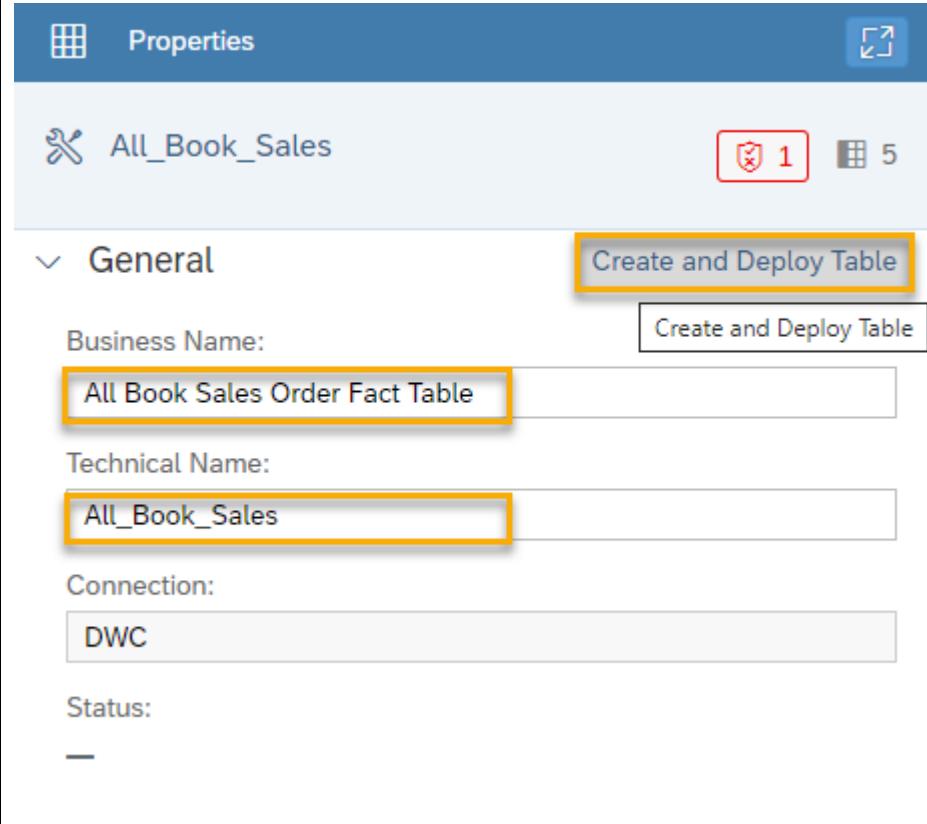
Explanation	Screenshot									
<p>Delete the columns as shown using the option Delete selected output columns</p>	 <p>The screenshot shows the Power BI Properties pane for a 'Union 1' object. At the top, it displays 11 columns and 10 mapped columns. Below this, the 'General' section includes fields for 'Label' (set to 'Union 1') and 'Union All' (set to 'ON'). The 'Mappings' section contains a table showing the mapping between 'Projection 1 (5)' and 'Union 1 (10)'. A context menu is open over the 'Quantity' column in the source projection, with the 'Delete selected output columns' option highlighted.</p> <table border="1" data-bbox="563 950 1379 1890"> <thead> <tr> <th>All</th> <th>Mapped</th> <th>Unmapped</th> </tr> </thead> <tbody> <tr> <td>Projection 1 (5)</td> <td>Union 1 (10)</td> <td> <ul style="list-style-type: none"> » Add all source columns as output columns > Add selected source columns as output col... X Delete selected output columns (X) Delete all output columns </td> </tr> <tr> <td> <input type="button" value="AA Order"/> <input type="button" value="Order"/> <input type="button" value="1..23 Quantity"/> </td> <td> <input type="button" value="1..23 Net_Amount"/> <input type="button" value="AA Book_ID"/> </td> <td> <input type="button" value="1..23 quantity"/> <input type="button" value="1..23 net_amount"/> <input type="button" value="AA order_ID"/> <input type="button" value="order_date"/> <input type="button" value="AA book_ID"/> </td> </tr> </tbody> </table>	All	Mapped	Unmapped	Projection 1 (5)	Union 1 (10)	<ul style="list-style-type: none"> » Add all source columns as output columns > Add selected source columns as output col... X Delete selected output columns (X) Delete all output columns 	<input type="button" value="AA Order"/> <input type="button" value="Order"/> <input type="button" value="1..23 Quantity"/>	<input type="button" value="1..23 Net_Amount"/> <input type="button" value="AA Book_ID"/>	<input type="button" value="1..23 quantity"/> <input type="button" value="1..23 net_amount"/> <input type="button" value="AA order_ID"/> <input type="button" value="order_date"/> <input type="button" value="AA book_ID"/>
All	Mapped	Unmapped								
Projection 1 (5)	Union 1 (10)	<ul style="list-style-type: none"> » Add all source columns as output columns > Add selected source columns as output col... X Delete selected output columns (X) Delete all output columns 								
<input type="button" value="AA Order"/> <input type="button" value="Order"/> <input type="button" value="1..23 Quantity"/>	<input type="button" value="1..23 Net_Amount"/> <input type="button" value="AA Book_ID"/>	<input type="button" value="1..23 quantity"/> <input type="button" value="1..23 net_amount"/> <input type="button" value="AA order_ID"/> <input type="button" value="order_date"/> <input type="button" value="AA book_ID"/>								

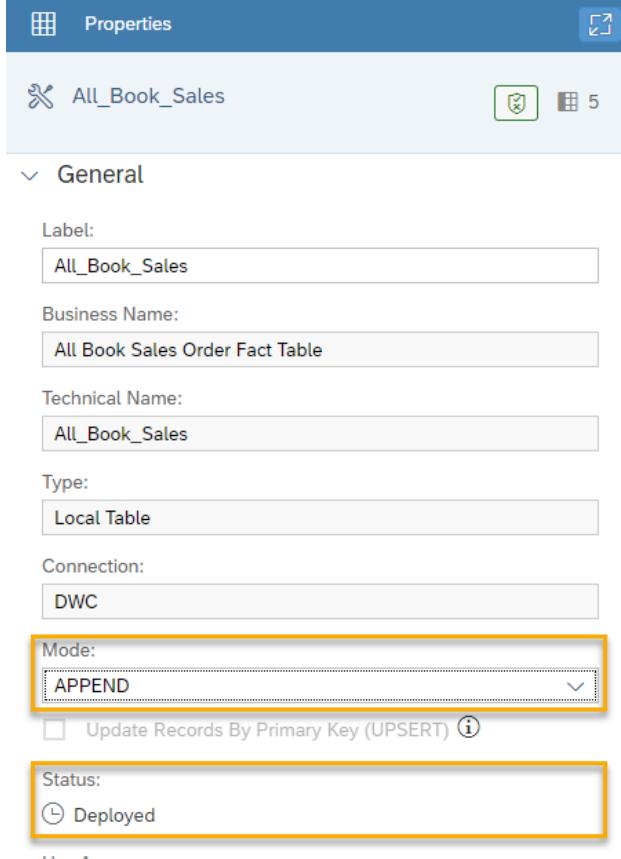
Explanation	Screenshot
<p>The output should be as seen here</p>	 <p>The screenshot shows the 'Properties' dialog for 'Union 1'. In the 'General' section, the 'Label' is set to 'Union 1'. The 'Union All' switch is turned 'ON'. In the 'Mappings' section, the 'All' tab is selected, showing a mapping from 'Projection 1 (5)' to 'Union 1 (5)'. The mapping consists of five columns: Order_ID, Order_Date, Quantity, Net_Amount, and Book_ID, each with a successful mapping status indicated by a green checkmark icon.</p>

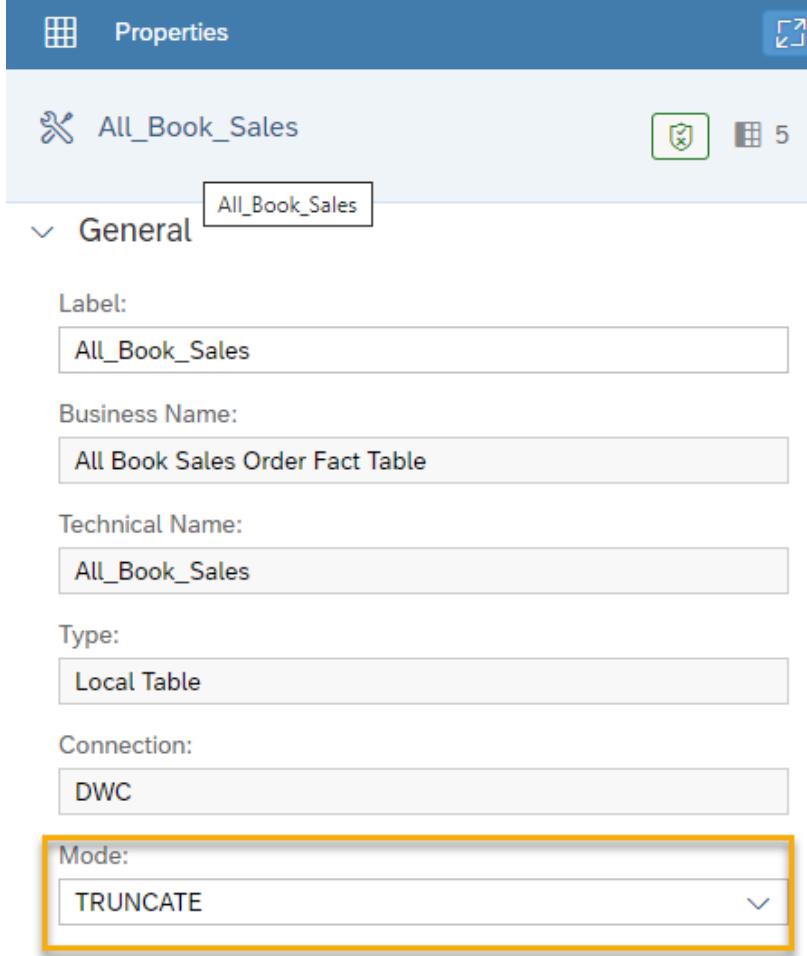
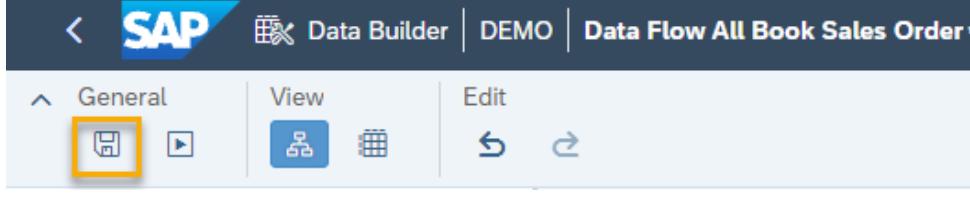
Explanation	Screenshot
	 <p>The screenshot shows the 'Properties' window for 'Union 1'. Under the 'General' tab, the 'Label' is set to 'Union 1'. The 'Union All' option is turned 'ON'. In the 'Mappings' section, there are two tables: 'BL_sales_archived...' (source) and 'Union 1 (5)' (target). The mappings are:</p> <ul style="list-style-type: none"> 'order_ID' maps to 'Order_ID' 'order_date' maps to 'Order_Date' 'book_ID' maps to 'Quantity' (with a 1:23 relationship) 'quantity' maps to 'Net_Amount' (with a 1:23 relationship) 'net_amount' maps to 'Book_ID' (with a 1:23 relationship)
Navigate to the Operator section and select Add Table	 <p>The screenshot shows the operator toolbar with various icons. The 'Add Table' icon (represented by a grid with a plus sign) is highlighted with a yellow box.</p>

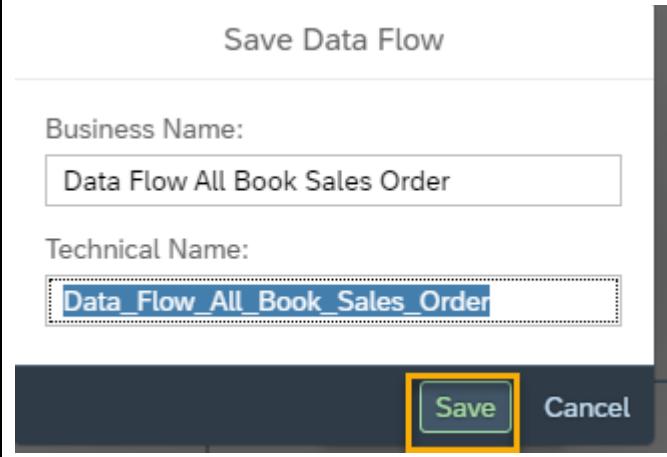
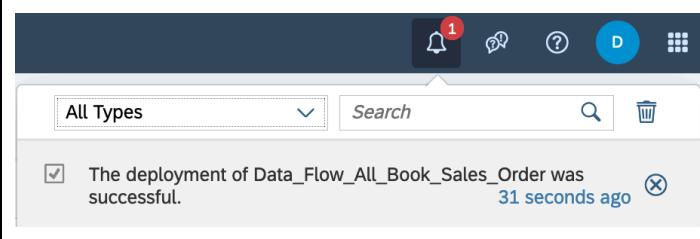
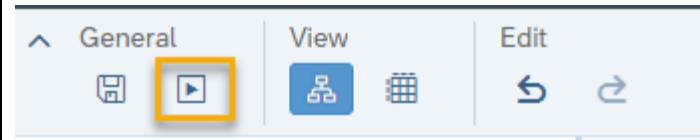
Explanation	Screenshot
Drag it to the central canvas	
Connect the Union 1 to the Table	
Rename the Projection	

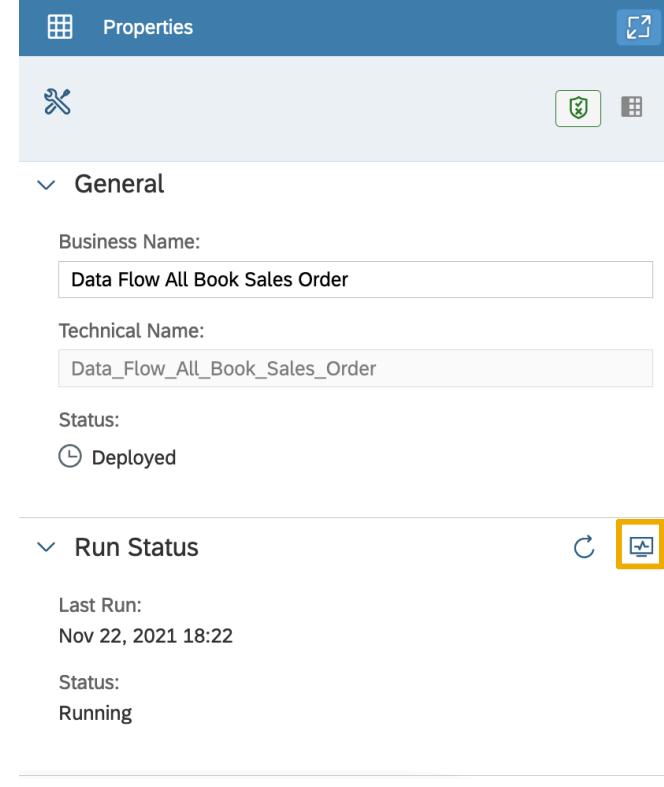
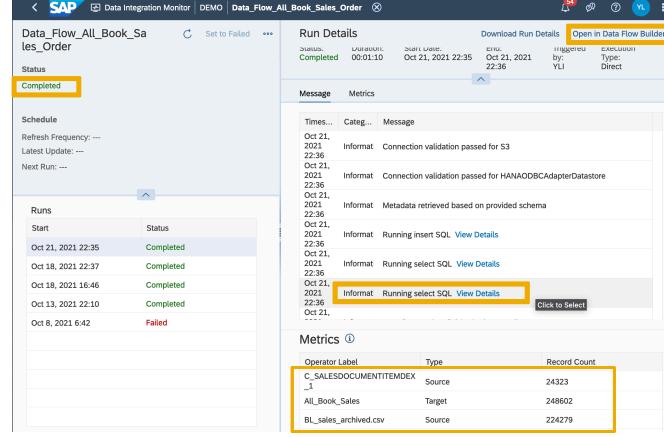
Explanation	Screenshot
New Name P_CSalesDocItem	 <p>The screenshot shows the 'Properties' dialog for 'Projection 1'. Under the 'General' tab, the 'Label' field contains the value 'P_C_SALESDOCITEM'.</p>
Repeat for Union	 <p>The screenshot shows the 'Properties' dialog for 'U_SalesDoc_Archive'. Under the 'General' tab, the 'Label' field contains the value 'U_SALESDOC_ARCH'.</p>

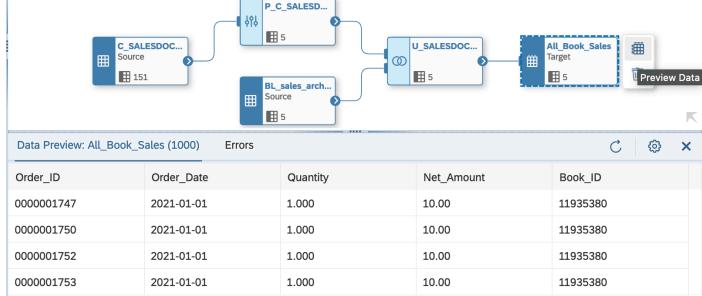
Explanation	Screenshot
<p>Deploy the table with</p> <ul style="list-style-type: none"> Business Name: All Book Sales Order Fact Table Technical name: All_Book_Sales 	
<p>Click Create and Deploy</p>	
<p>Click the Create and Deploy button</p>	<p>i Information</p> <p>The target table 'All_Book_Sales' will be created and deployed in your repository with all the output columns added to the target.</p> <p>Create and Deploy Close</p>

Explanation	Screenshot																
<p>Check the Mode and Status</p>	 <p>The screenshot shows the 'Properties' dialog for the 'All_Book_Sales' fact table. The 'Mode' dropdown is set to 'APPEND' and is highlighted with a yellow box. The 'Status' dropdown is set to 'Deployed' and is also highlighted with a yellow box. Other visible fields include 'Label' (All_Book_Sales), 'Business Name' (All Book Sales Order Fact Table), 'Technical Name' (All_Book_Sales), 'Type' (Local Table), 'Connection' (DWC), and 'Use As' (Source Target).</p> <table border="1"> <tr> <td>Label:</td> <td>All_Book_Sales</td> </tr> <tr> <td>Business Name:</td> <td>All Book Sales Order Fact Table</td> </tr> <tr> <td>Technical Name:</td> <td>All_Book_Sales</td> </tr> <tr> <td>Type:</td> <td>Local Table</td> </tr> <tr> <td>Connection:</td> <td>DWC</td> </tr> <tr> <td>Mode:</td> <td>APPEND</td> </tr> <tr> <td>Status:</td> <td>Deployed</td> </tr> <tr> <td>Use As:</td> <td>Source Target</td> </tr> </table>	Label:	All_Book_Sales	Business Name:	All Book Sales Order Fact Table	Technical Name:	All_Book_Sales	Type:	Local Table	Connection:	DWC	Mode:	APPEND	Status:	Deployed	Use As:	Source Target
Label:	All_Book_Sales																
Business Name:	All Book Sales Order Fact Table																
Technical Name:	All_Book_Sales																
Type:	Local Table																
Connection:	DWC																
Mode:	APPEND																
Status:	Deployed																
Use As:	Source Target																

Explanation	Screenshot
<p>Change the mode to TRUNCATE, which will truncate the existing records in the table before writing new records.</p>	 <p>The screenshot shows the SAP Data Builder Properties dialog for the 'All_Book_Sales' table. The 'Mode' dropdown is highlighted with a yellow box and contains the value 'TRUNCATE'. Other fields shown include Label (All_Book_Sales), Business Name (All Book Sales Order Fact Table), Technical Name (All_Book_Sales), Type (Local Table), and Connection (DWC).</p>
Click Save	 <p>The screenshot shows the SAP Data Builder ribbon with the 'General' tab selected. Other tabs visible include View and Edit.</p>

Explanation	Screenshot
Provide the Business and Technical Name and Click Save	 <p>Save Data Flow</p> <p>Business Name: Data Flow All Book Sales Order</p> <p>Technical Name: Data_Flow_All_Book_Sales_Order</p> <p>Save Cancel</p>
Check Status	 <p>Data Flow saved successfully.</p>
Deploy the Data Flow	 <p>General View Edit</p> <p>Save Deploy Refresh</p>
Check the status of deployment	 <p>All Types Search</p> <p>The deployment of Data_Flow_All_Book_Sales_Order was successful. 31 seconds ago</p>
Click on the Play button icon to execute the Data flow	 <p>General View Edit</p> <p>Save Deploy Refresh</p>

Explanation	Screenshot
<p>The status becomes Running. Click the  icon to open Data Flow Monitor about the execution details.</p>	
<p>In the Data Flow Monitor, you see the details about historic running, and click the Refresh button to see detailed message about the execution.</p> <p>Once the status become completed, the record count of the sources and target table All_Book_Sales will be listed on Metrics.</p> <p>Click Open in Data Flow Builder at the top right, where you can preview the data in the target table All_Books_Sales</p>	

Explanation	Screenshot																									
<p>Select All_Book_Sales table, and click Preview Data. Then it shows 1000 records in the Data Preview.</p>	 <p>Data Preview: All_Book_Sales (1000) Errors</p> <table border="1"> <thead> <tr> <th>Order_ID</th> <th>Order_Date</th> <th>Quantity</th> <th>Net_Amount</th> <th>Book_ID</th> </tr> </thead> <tbody> <tr> <td>0000001747</td> <td>2021-01-01</td> <td>1.000</td> <td>10.00</td> <td>11935380</td> </tr> <tr> <td>0000001750</td> <td>2021-01-01</td> <td>1.000</td> <td>10.00</td> <td>11935380</td> </tr> <tr> <td>0000001752</td> <td>2021-01-01</td> <td>1.000</td> <td>10.00</td> <td>11935380</td> </tr> <tr> <td>0000001753</td> <td>2021-01-01</td> <td>1.000</td> <td>10.00</td> <td>11935380</td> </tr> </tbody> </table>	Order_ID	Order_Date	Quantity	Net_Amount	Book_ID	0000001747	2021-01-01	1.000	10.00	11935380	0000001750	2021-01-01	1.000	10.00	11935380	0000001752	2021-01-01	1.000	10.00	11935380	0000001753	2021-01-01	1.000	10.00	11935380
Order_ID	Order_Date	Quantity	Net_Amount	Book_ID																						
0000001747	2021-01-01	1.000	10.00	11935380																						
0000001750	2021-01-01	1.000	10.00	11935380																						
0000001752	2021-01-01	1.000	10.00	11935380																						
0000001753	2021-01-01	1.000	10.00	11935380																						