



PARTNER

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

DV200 Exercise04 – Creating a Dimension with Business Builder of SAP Data Warehouse Cloud

This document will guide you step by step on the process of creating an Analytical Dataset for Book Sales Orders using Business Builder within SAP Data Warehouse Cloud

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DISCLAIMER

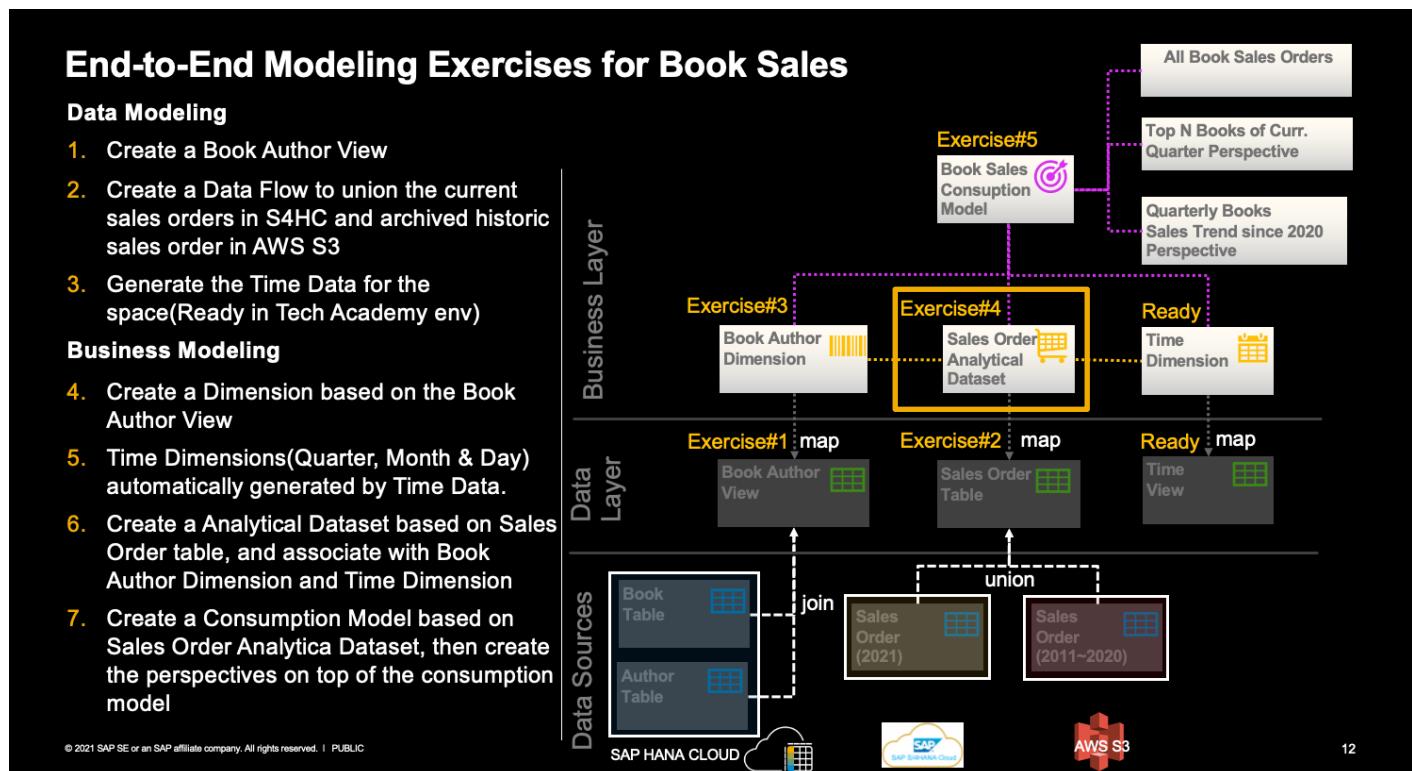
All functionality presented here is subject to change and may be changed by SAP at any time for any reason without notice.

OBJECTIVE

The objective of this exercise is to provide the steps needed to create Analytical Dataset using Business Builder in SAP Data Warehouse Cloud.

SCENARIO

In this session we will use the scenario as seen in Exercise#3 in the below image:



In this session we will create an Analytical Dataset using Business Builder. We will use the All Book Sales Order Table created in the previous exercise DV200_Exercise02 about Data Flow as a source.

ENVIRONMENT ACCESS – SAP DATA WAREHOUSE CLOUD

Before proceeding with 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.

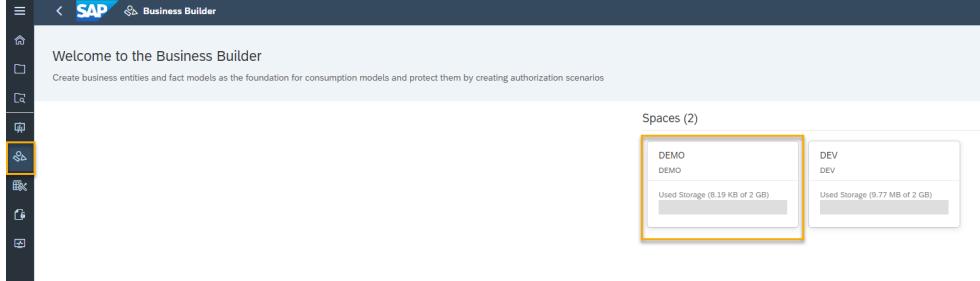
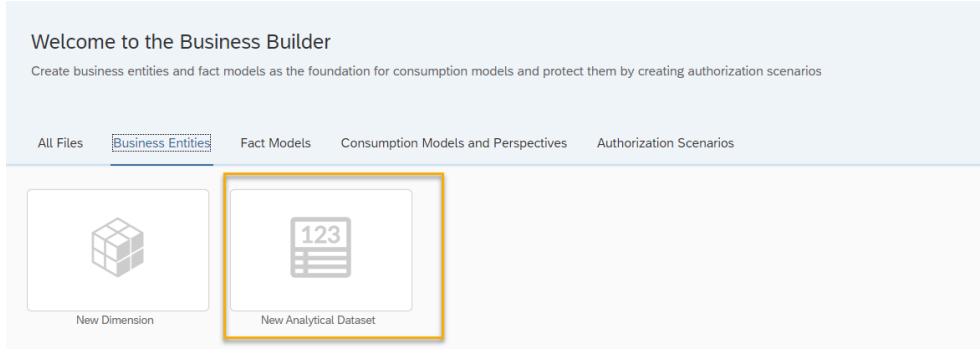
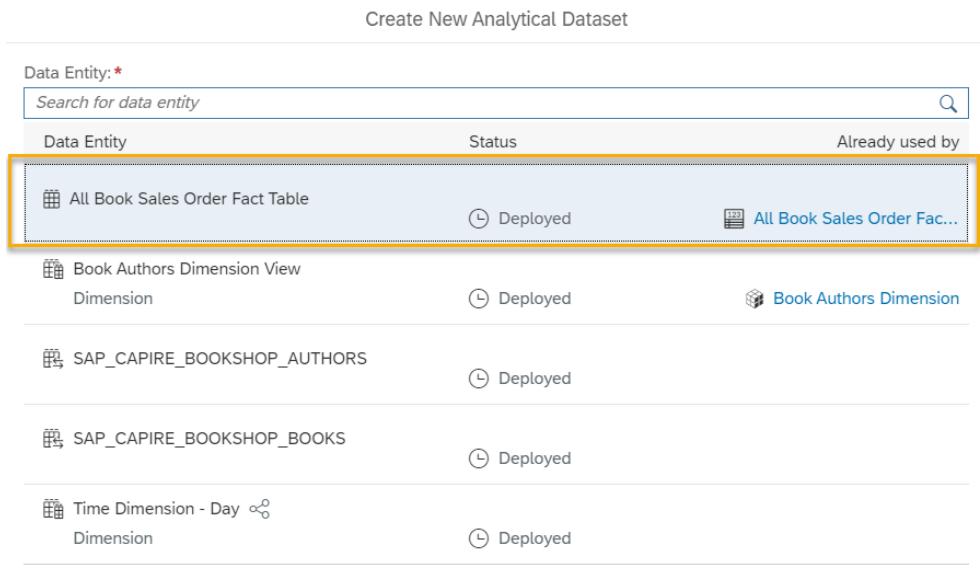
PREREQUISITES

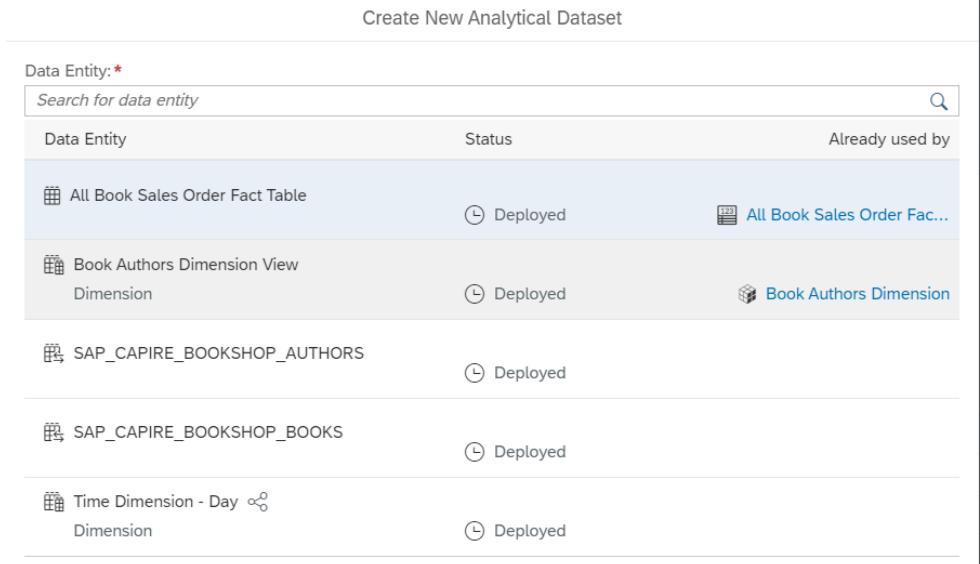
You have completed the previous exercise:

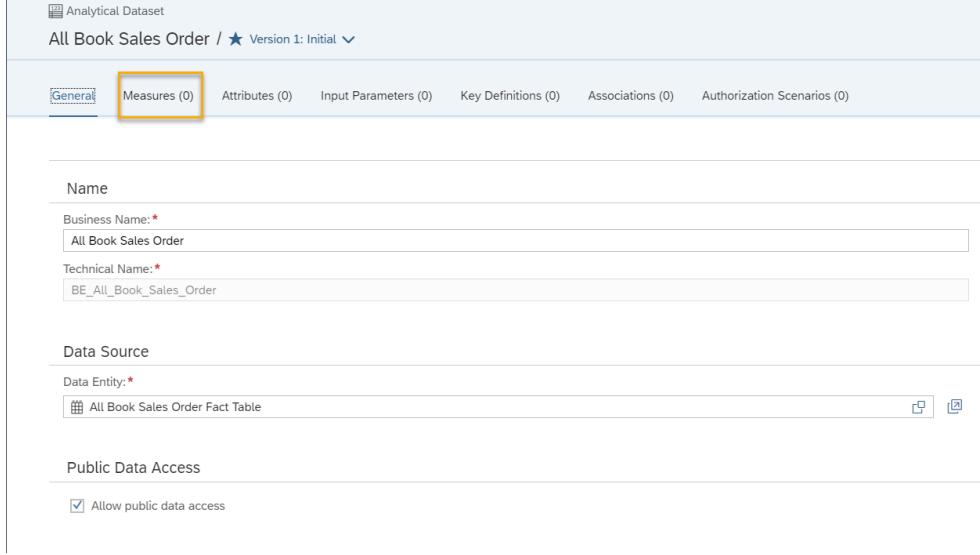
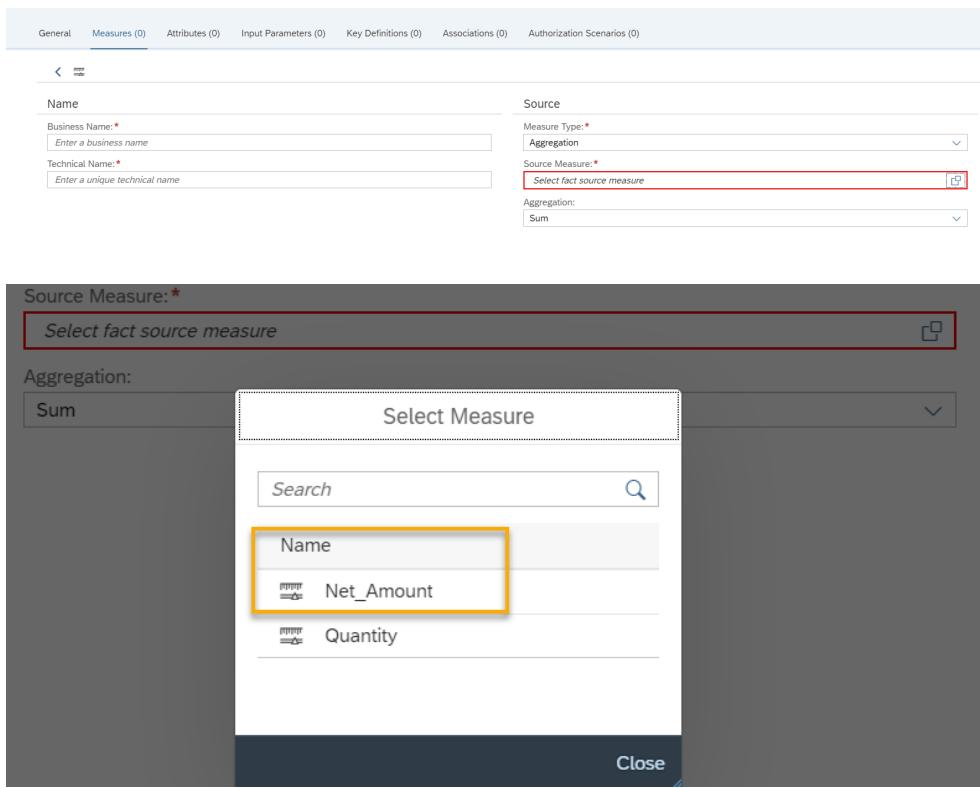
- DV200_Exercise02: Local table All_Book_Sales is created by the Data Flow All Book Sales Order in SAP Data Warehouse Cloud.

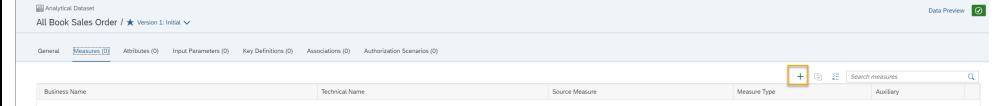
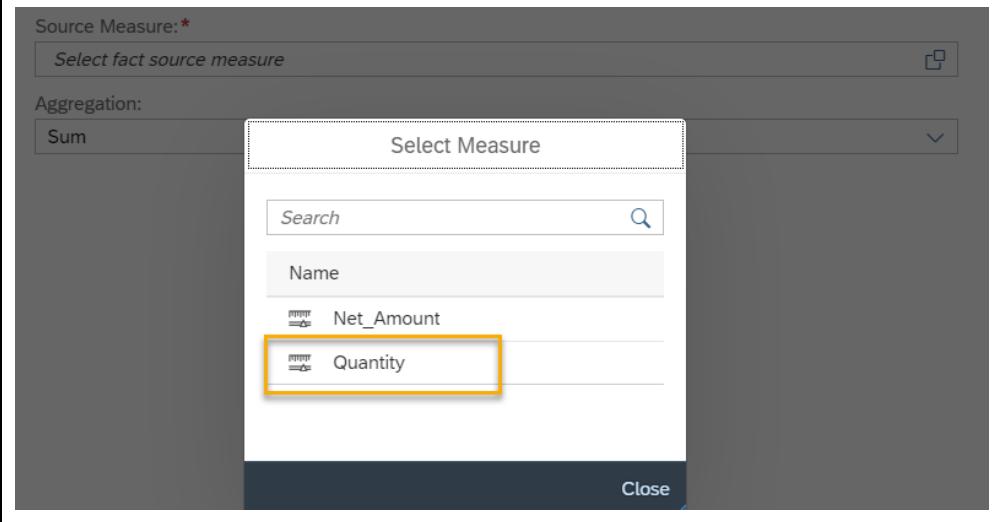
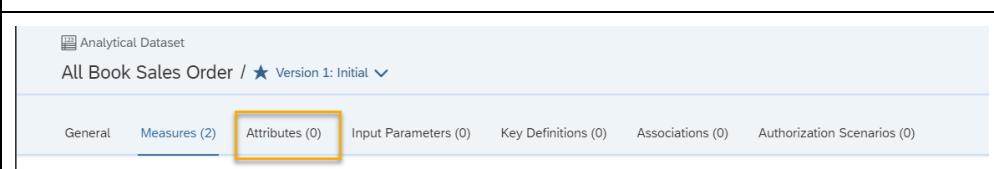
EXERCISE STEP DETAILS

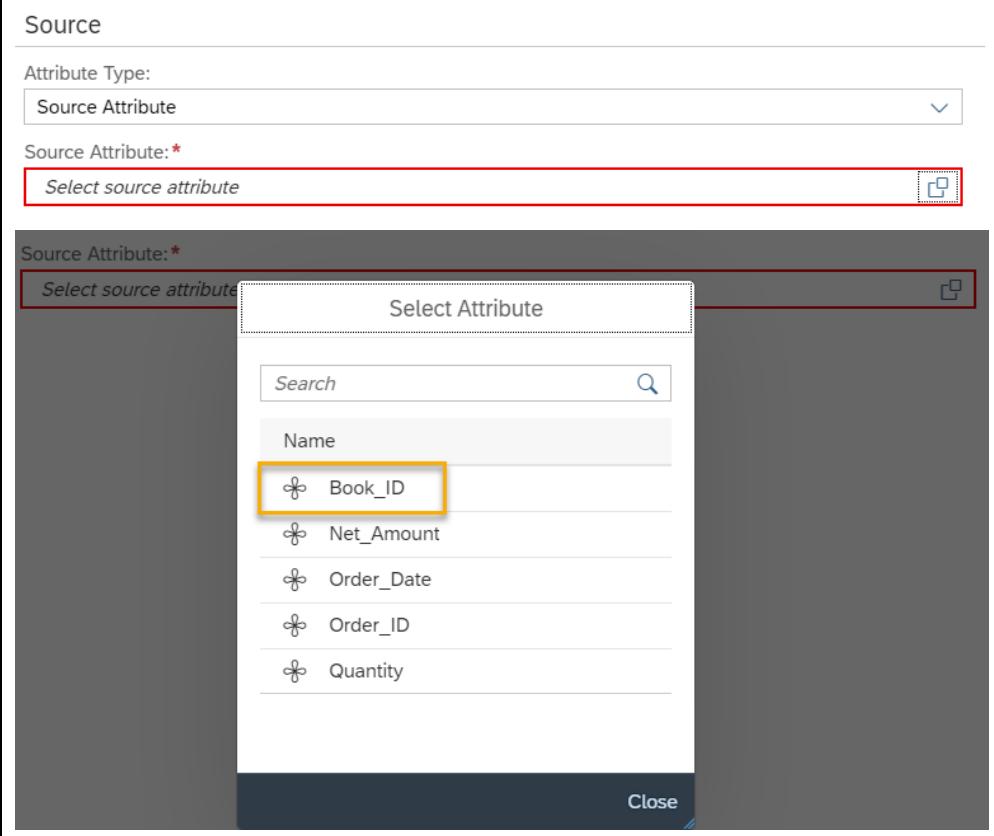
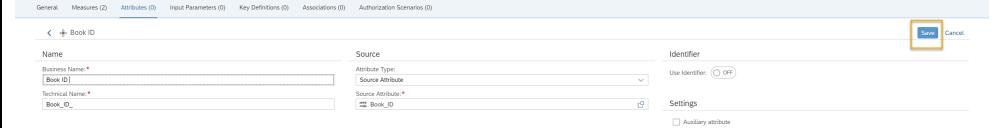
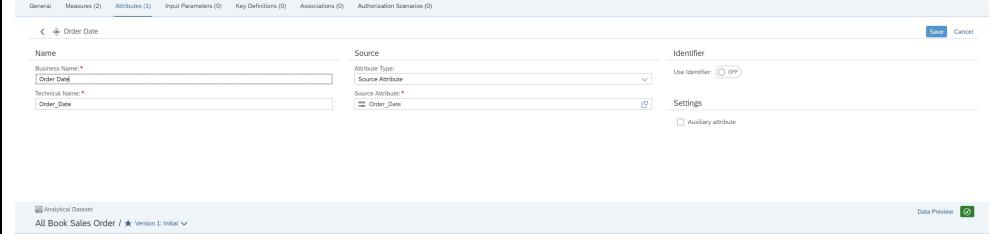
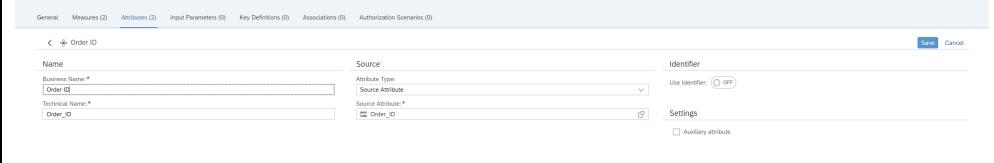
Explanation	Screenshot
Log on to SAP Data Warehouse Cloud with the given tenant URL and assigned user credential mentioned above.	
Go to the Home Screen.	
Click on the Business Builder icon , you see the space that you are assigned to.	

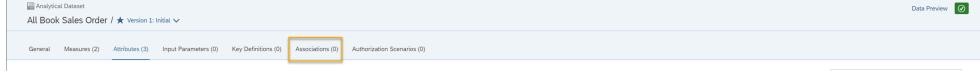
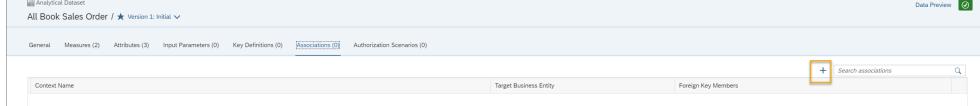
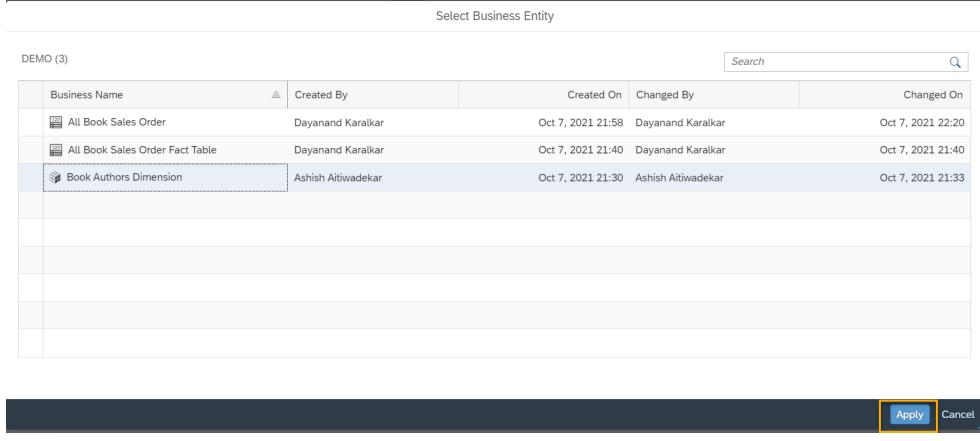
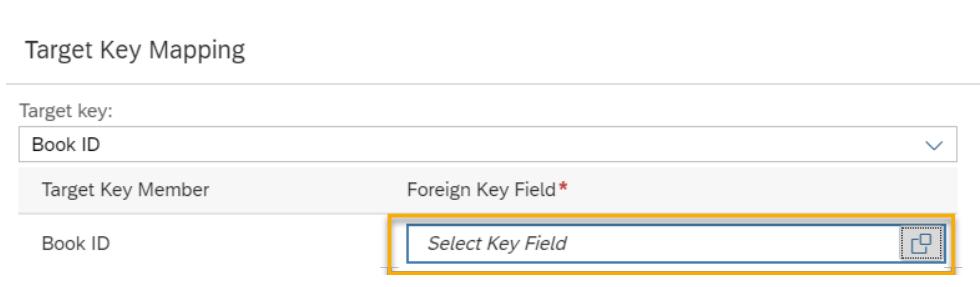
Explanation	Screenshot
Click on the Space.	
Click on Business Entities → Select New Analytical Dataset.	
Select the All Book Sales Order Fact Table as Data Entity which is created in DV200_Exercise02. Click on Create.	

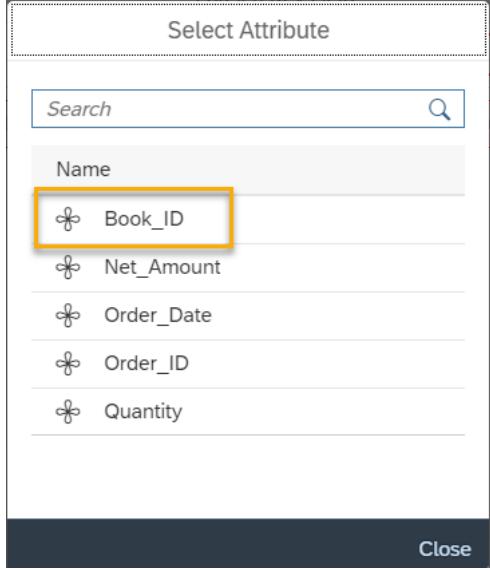
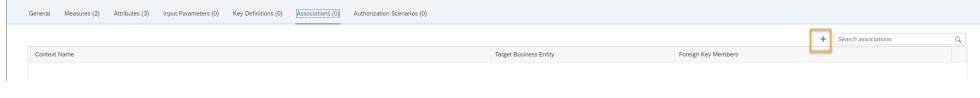
Explanation	Screenshot																		
<p>Enter Business Name as <i>All Book Sales Order</i>, Technical name will be populated automatically.</p>	 <p>The screenshot shows a table titled "Create New Analytical Dataset" with the following data:</p> <table border="1"> <thead> <tr> <th>Data Entity</th> <th>Status</th> <th>Already used by</th> </tr> </thead> <tbody> <tr> <td>All Book Sales Order Fact Table</td> <td>Deployed</td> <td>All Book Sales Order Fac...</td> </tr> <tr> <td>Book Authors Dimension View Dimension</td> <td>Deployed</td> <td>Book Authors Dimension</td> </tr> <tr> <td>SAP_CAPIRE_BOOKSHOP_AUTHORS</td> <td>Deployed</td> <td></td> </tr> <tr> <td>SAP_CAPIRE_BOOKSHOP_BOOKS</td> <td>Deployed</td> <td></td> </tr> <tr> <td>Time Dimension - Day Dimension</td> <td>Deployed</td> <td></td> </tr> </tbody> </table>	Data Entity	Status	Already used by	All Book Sales Order Fact Table	Deployed	All Book Sales Order Fac...	Book Authors Dimension View Dimension	Deployed	Book Authors Dimension	SAP_CAPIRE_BOOKSHOP_AUTHORS	Deployed		SAP_CAPIRE_BOOKSHOP_BOOKS	Deployed		Time Dimension - Day Dimension	Deployed	
Data Entity	Status	Already used by																	
All Book Sales Order Fact Table	Deployed	All Book Sales Order Fac...																	
Book Authors Dimension View Dimension	Deployed	Book Authors Dimension																	
SAP_CAPIRE_BOOKSHOP_AUTHORS	Deployed																		
SAP_CAPIRE_BOOKSHOP_BOOKS	Deployed																		
Time Dimension - Day Dimension	Deployed																		
<p>Then click Create button.</p>	 <p>The dialog box contains the following fields:</p> <ul style="list-style-type: none"> Business Name: All Book Sales Order Technical Name: BE_All_Book_Sales_Order <p>At the bottom, the Create button is highlighted with a yellow box.</p>																		

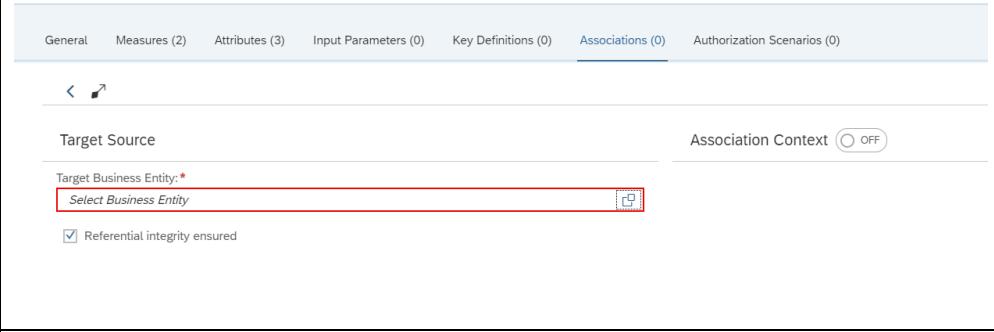
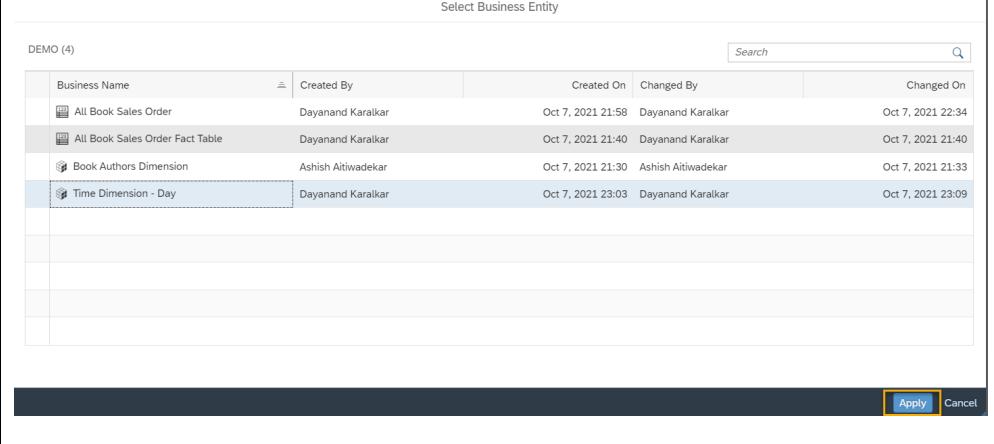
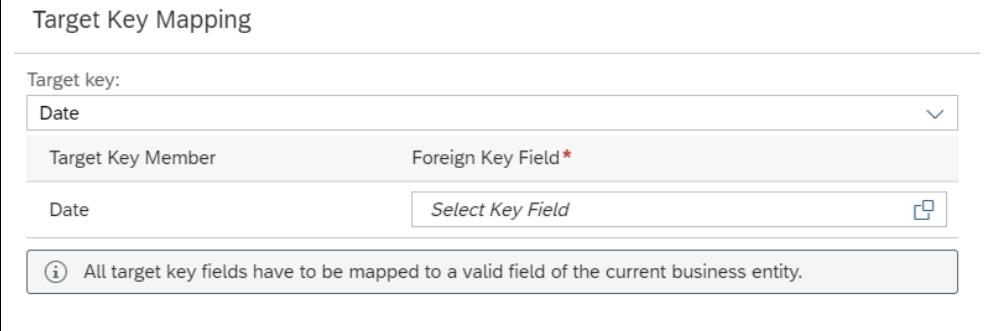
Explanation	Screenshot
Click on Measures.	
Click + to add Measures.	
Click on Source Measure and select Net_Amount.	

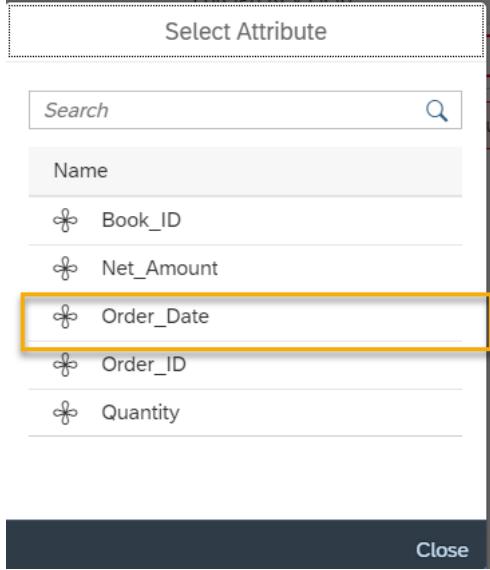
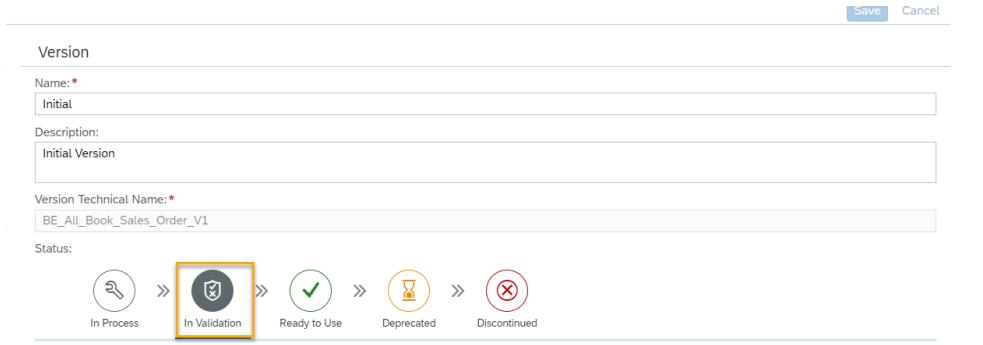
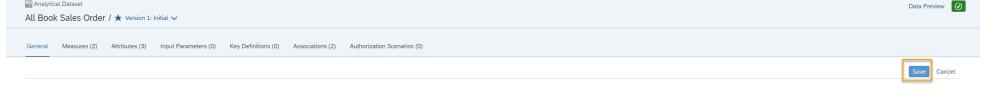
Explanation	Screenshot
Enter Business Name, Technical Name and click on Save.	
Click + to add Measures.	
Click on Source Measure and select Quantity.	
Enter Business Name, Technical Name and click on Save.	
Click on Attributes.	
Click + to add Attributes.	

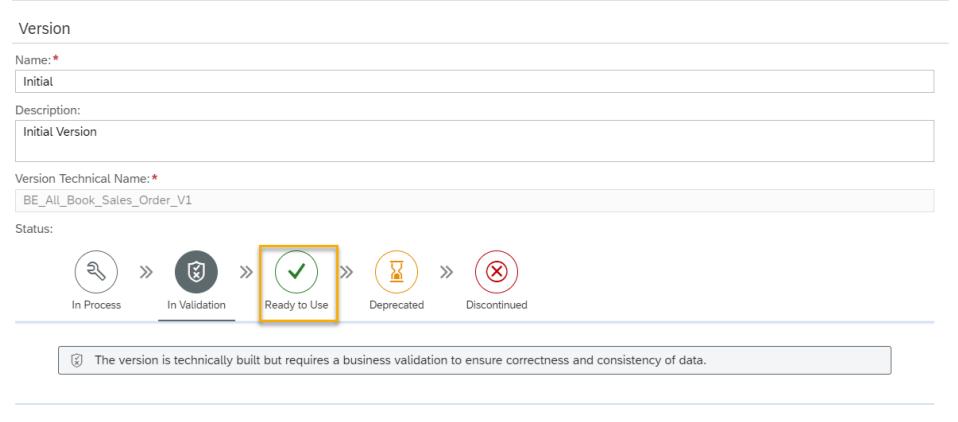
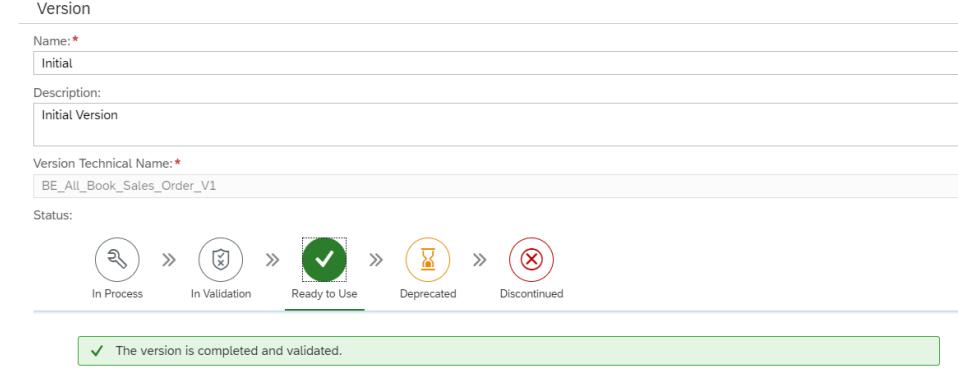
Explanation	Screenshot
<p>Click on Select Source Attribute and select Book_ID.</p>	
<p>Enter Business Name, Technical name and click on Save.</p>	
<p>Repeat the same steps to add Order Date and Order ID attributes.</p>	 
<p>As a result, we have added 3 attributes to our Analytical Dataset about All Book Sales Order.</p>	

Explanation	Screenshot
Click on Associations.	
Click + to add Association.	
In the Target Source section click on the Select Business Entity.	
Select the Book Authors Dimension and click Apply.	
In the Target Key Mapping under the Foreign Key Field, click on Select Key Field.	

Explanation	Screenshot
Select Book_ID.	 <p>Select Attribute</p> <p>Search <input type="text"/></p> <p>Name</p> <ul style="list-style-type: none"> <input checked="" type="checkbox"/> Book_ID <input type="checkbox"/> Net_Amount <input type="checkbox"/> Order_Date <input type="checkbox"/> Order_ID <input type="checkbox"/> Quantity <p>Close</p>
Specify the Association context that recently became mandatory.	<h3>Association Context</h3> <p>Context Name: * <input type="text" value="Book ID Association"/></p> <p>Context Technical Name: <input type="text" value="Book_ID_Association"/></p> <p>Context Description: <input type="text" value="Enter Context Description"/></p>
Click Save to save the association.	 <p>All Book Sales Order / Version 1: initial</p> <p>General Measures (2) Attributes (3) Input Parameters (0) Key Definitions (0) Associations (1) Authorization Scenarios (0)</p> <p>All Book Sales Order to Book Authors Dimension</p> <p>Target Source Target Key Mapping Association Context (OFF)</p> <p>Target Business Entity: * Book Authors Dimension Referential integrity ensured</p> <p>Target Key: Book ID Target Key Member: Foreign Key Field: * Book ID Book_ID</p> <p>Data Preview <input type="button" value="Save"/> Cancel</p>
Click + to add Association.	 <p>All Book Sales Order / Version 1: initial</p> <p>General Measures (2) Attributes (3) Input Parameters (0) Key Definitions (0) Associations (0) Authorization Scenarios (0)</p> <p>Context Name Target Business Entity Foreign Key Members</p> <p>+ Search associations <input type="text"/></p>

Explanation	Screenshot
<p>In the Target Source section click on the Select Business Entity.</p>	 <p>The screenshot shows the 'Target Source' configuration page. At the top, there are tabs: General, Measures (2), Attributes (3), Input Parameters (0), Key Definitions (0), Associations (0), and Authorization Scenarios (0). The 'Associations (0)' tab is selected. Below the tabs, there are two sections: 'Target Source' and 'Association Context'. In the 'Target Source' section, there is a field labeled 'Target Business Entity:' with a dropdown menu open, showing options like 'All Book Sales Order', 'All Book Sales Order Fact Table', 'Book Authors Dimension', and 'Time Dimension - Day'. The 'Time Dimension - Day' option is currently selected. A red box highlights the 'Select Business Entity' button. Below this, there is a checked checkbox for 'Referential integrity ensured' and a 'Save' icon.</p>
<p>Select the Time Dimension Day and click Apply.</p>	 <p>The screenshot shows the 'Select Business Entity' dialog box. It has a header 'Select Business Entity' and a search bar. Below is a table with columns: Business Name, Created By, Created On, Changed By, and Changed On. The table contains four rows: 'All Book Sales Order' (Dayanand Karalkar, Oct 7, 2021 21:58, Dayanand Karalkar, Oct 7, 2021 22:34), 'All Book Sales Order Fact Table' (Dayanand Karalkar, Oct 7, 2021 21:40, Dayanand Karalkar, Oct 7, 2021 21:40), 'Book Authors Dimension' (Ashish Altiwadekar, Oct 7, 2021 21:30, Ashish Altiwadekar, Oct 7, 2021 21:33), and 'Time Dimension - Day' (Dayanand Karalkar, Oct 7, 2021 23:03, Dayanand Karalkar, Oct 7, 2021 23:09). The 'Time Dimension - Day' row is highlighted with a blue selection bar. At the bottom right are 'Apply' and 'Cancel' buttons, with 'Apply' being highlighted with a yellow box.</p>
<p>In the Target Key Mapping under the Foreign Key Field, click on Select Key Field.</p>	 <p>The screenshot shows the 'Target Key Mapping' configuration page. It has a header 'Target Key Mapping'. Below is a section for 'Target key': a dropdown menu with 'Date' selected. Next is a section for 'Target Key Member' and 'Foreign Key Field*', with 'Date' selected in the 'Target Key Member' dropdown and 'Select Key Field' in the 'Foreign Key Field*' dropdown. A note at the bottom states: '(i) All target key fields have to be mapped to a valid field of the current business entity.' with an information icon.</p>

Explanation	Screenshot
Select Order_Date.	 <p>Select Attribute</p> <p>Search <input type="text"/> 🔍</p> <ul style="list-style-type: none"> Name Book_ID Net_Amount Order_Date Order_ID Quantity <p>Close</p>
Specify the Association context that recently became mandatory.	<p>Association Context</p> <p>Context Name: * Order Date Association</p> <p>Context Technical Name: Order_Date_Association</p> <p>Context Description: <i>Enter Context Description</i></p>
Click Save to save the association.	 <p>General Measures (2) Attributes (3) Input Parameters (0) Key Definitions (0) Associations (1) Authorization Scenarios (0)</p> <p>< All Book Sales Order to Time Dimension - Day Save</p> <p>Target Source Target Business Entity: * Time Dimension - Day 🕒</p> <p>Target Key Mapping Target key: Date Foreign Key Field: * Order_Date</p> <p>Association Context off</p> <p>Referential integrity ensured</p>
Click on General. In Status Click  In Validation	 <p>Version</p> <p>Name: * Initial</p> <p>Description: Initial Version</p> <p>Version Technical Name: * BE_All_Book_Sales_Order_V1</p> <p>Status:</p> <p>In Process > In Validation > Ready to Use > Deprecated > Discontinued</p>
Click on Save.	 <p>Analytical Dataset All Book Sales Order / Version 1: Initial</p> <p>General Measures (2) Attributes (3) Input Parameters (0) Key Definitions (0) Associations (1) Authorization Scenarios (0)</p> <p>Save Cancel</p>

Explanation	Screenshot
Click on  Ready to Use	 <p>Version</p> <p>Name: * Initial</p> <p>Description: Initial Version</p> <p>Version Technical Name: * BE_All_Book_Sales_Order_V1</p> <p>Status:</p> <ul style="list-style-type: none">  »  »  »  »  <p>The version is technically built but requires a business validation to ensure correctness and consistency of data.</p>
The version is Validated.	 <p>Version</p> <p>Name: * Initial</p> <p>Description: Initial Version</p> <p>Version Technical Name: * BE_All_Book_Sales_Order_V1</p> <p>Status:</p> <ul style="list-style-type: none">  »  »  »  »  <p>The version is completed and validated.</p>
Click on Save.	 <p>Analytical Dataset All Book Sales Order / ★ Version 1: Initial</p> <p>General Measures (2) Attributes (3) Input Parameters (0) Key Definitions (0) Associations (2) Authorization Scenarios (0)</p> <p>Save Cancel</p>