



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

www.sap.com/contactsap

© 2018 SAP SE or an SAP affiliate company. All rights reserved.

No part of this publication may be reproduced or transmitted in any form or for any purpose without the express permission of SAP SE or an SAP affiliate company.

The information contained herein may be changed without prior notice. Some software products marketed by SAP SE and its distributors contain proprietary software components of other software vendors. National product specifications may vary.

These materials are provided by SAP SE or an SAP affiliate company for informational purposes only, without representation or warranty of any kind, and SAP or its affiliated companies shall not be liable for errors or omissions with respect to the materials. The only warranties for SAP or SAP affiliate company products and services are those that are set forth in the express warranty statements accompanying such products and services, if any. Nothing herein should be construed as constituting an additional warranty.

In particular, SAP SE or its affiliated companies have no obligation to pursue any course of business outlined in this document or any related presentation, or to develop or release any functionality mentioned therein. This document, or any related presentation, and SAP SE's or its affiliated companies' strategy and possible future developments, products, and/or platform directions and functionality are all subject to change and may be changed by SAP SE or its affiliated companies at any time for any reason without notice. The information in this document is not a commitment, promise, or legal obligation to deliver any material, code, or functionality. All forward-looking statements are subject to various risks and uncertainties that could cause actual results to differ materially from expectations. Readers are cautioned not to place undue reliance on these forward-looking statements, and they should not be relied upon in making purchasing decisions.

SAP and other SAP products and services mentioned herein as well as their respective logos are trademarks or registered trademarks of SAP SE (or an SAP affiliate company) in Germany and other countries. All other product and service names mentioned are the trademarks of their respective companies. See www.sap.com/copyright for additional trademark information and notices.

Table of Contents

DISCLAIMER	4
OBJECTIVE	4
SCENARIO.....	4
ENVIRONMENT ACCESS – SAP DATA WAREHOUSE CLOUD.....	5

DISCLAIMER

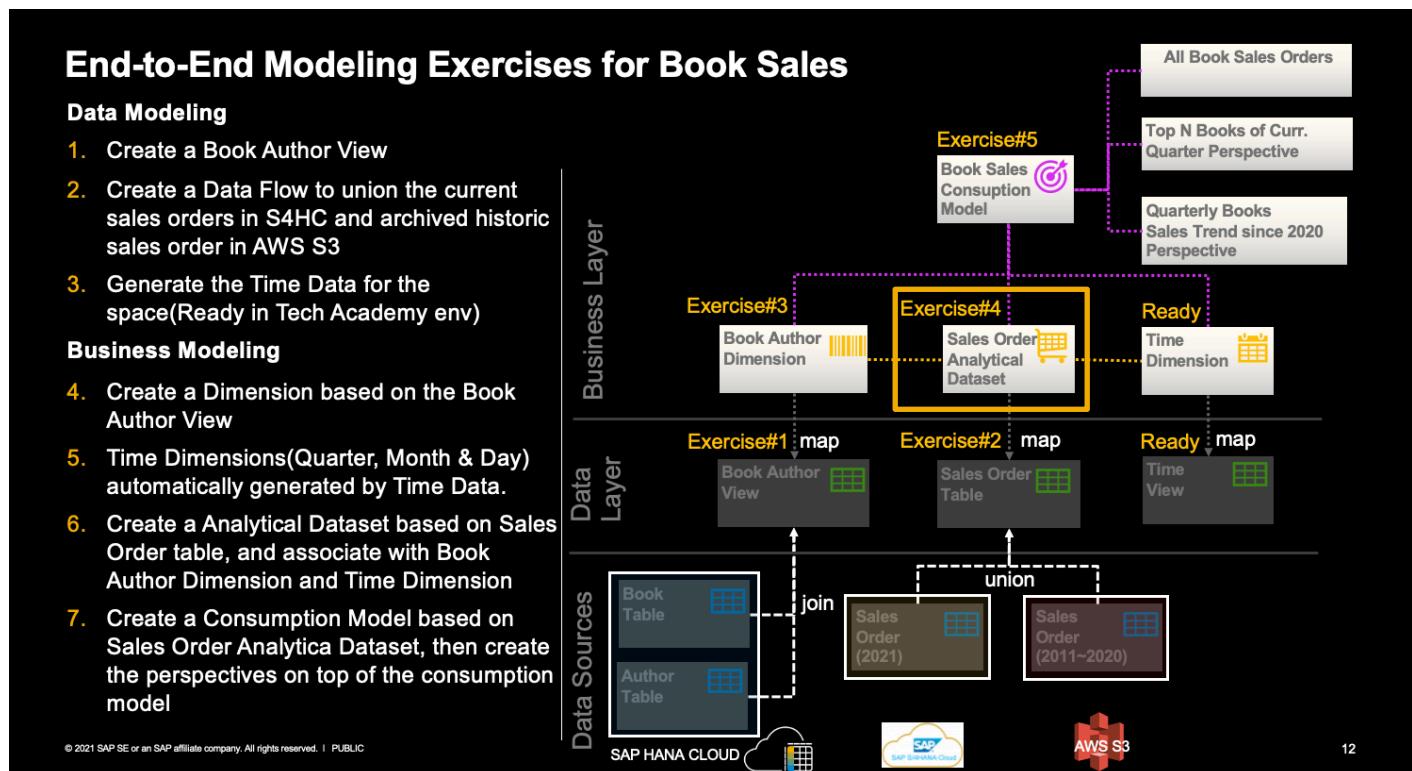
All functionality presented here is subject to change and may be changed by SAP at any time for any reason without notice.

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 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.

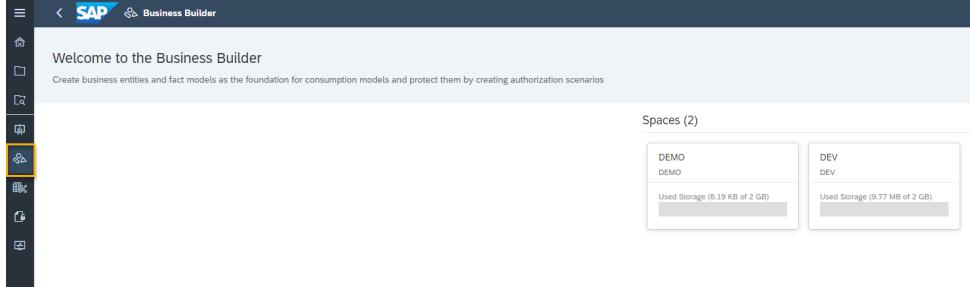
- The SAP Data Warehouse cloud tenant URL is available in the dedicated Microsoft Teams > General (Channel) > System Access (Tab) > SAP Data Warehouse Cloud (Section), which you have been invited.
- Your assigned user id and password for SAP Data Warehouse Cloud are communicated individually via email.

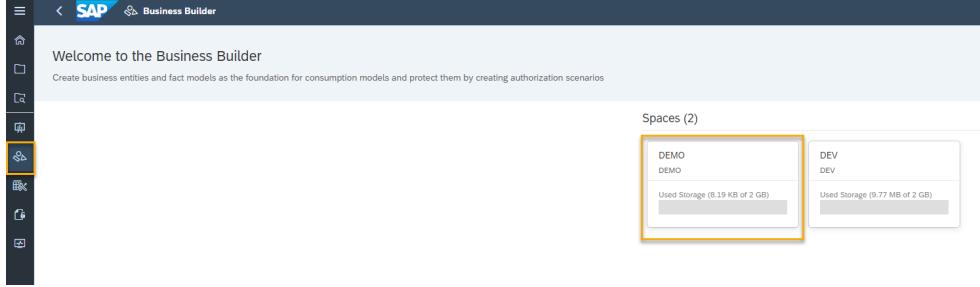
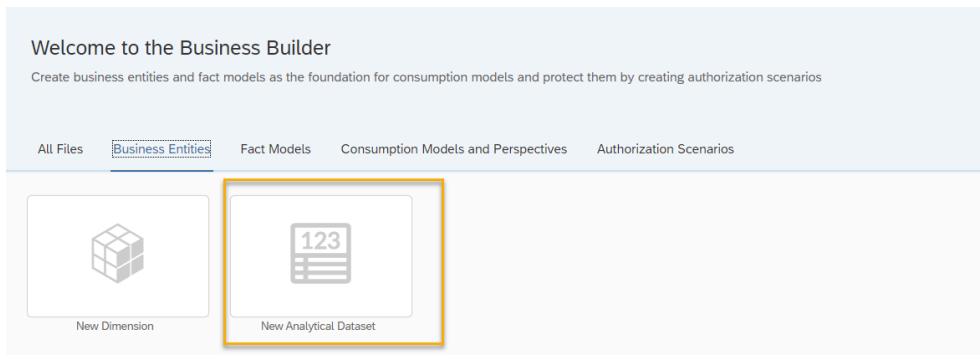
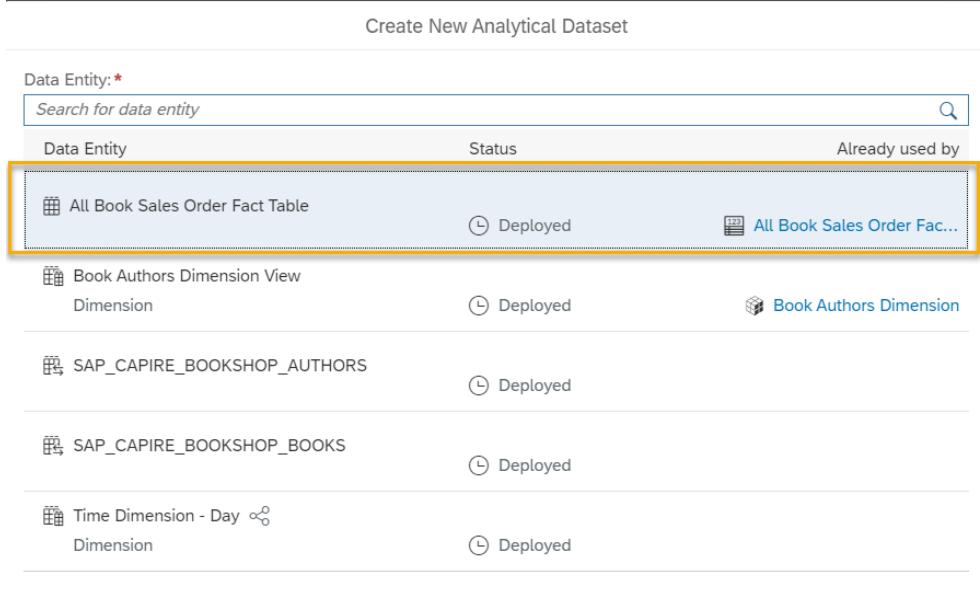
PREREQUISITES

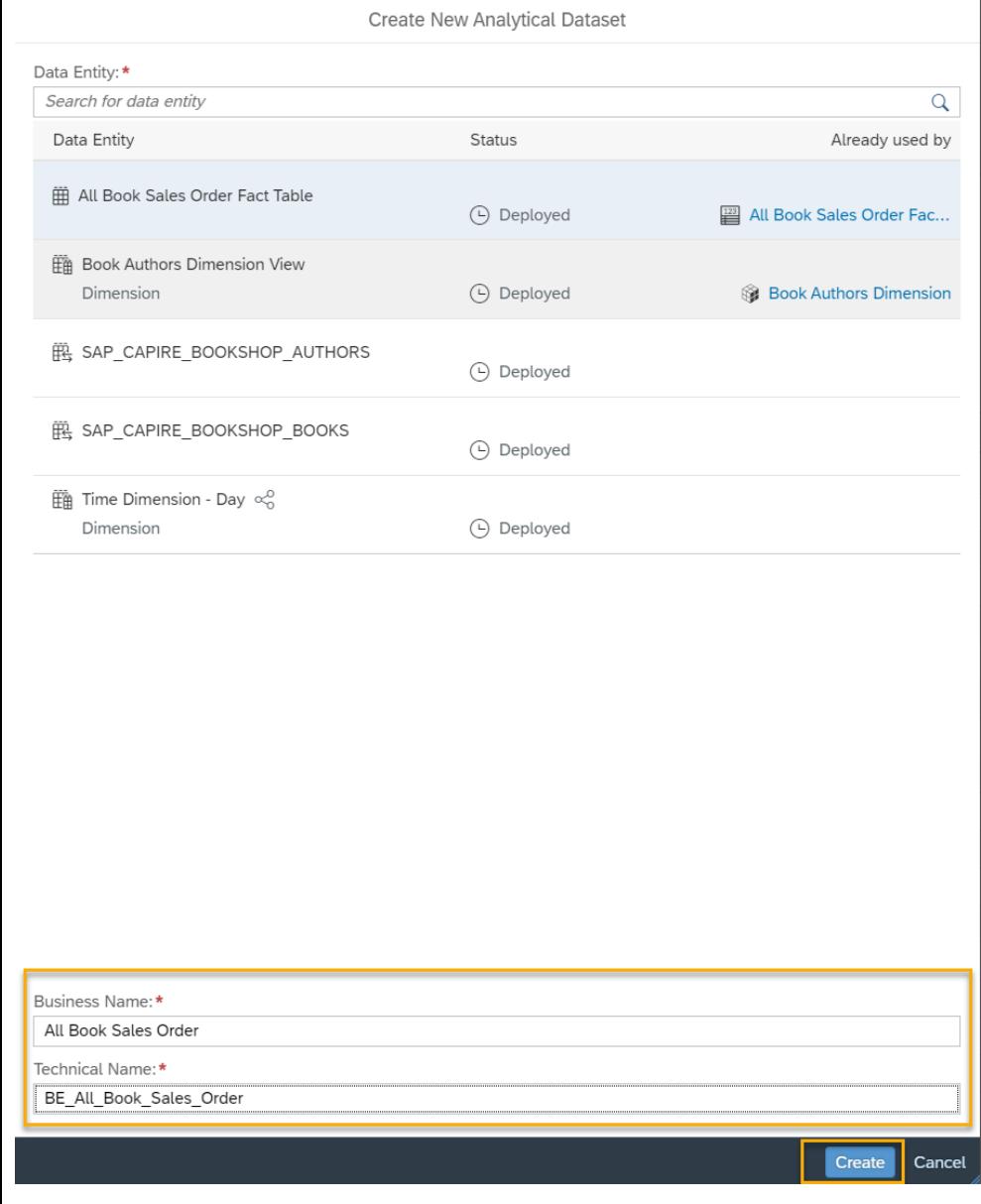
You have completed previous exercise.

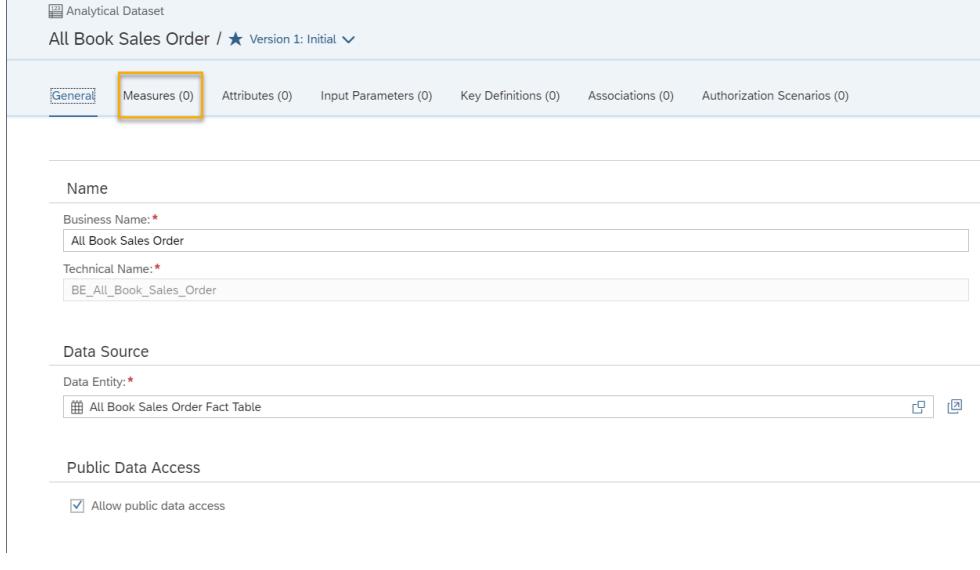
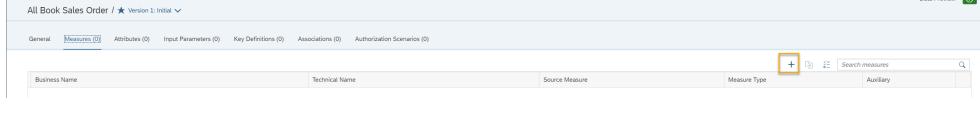
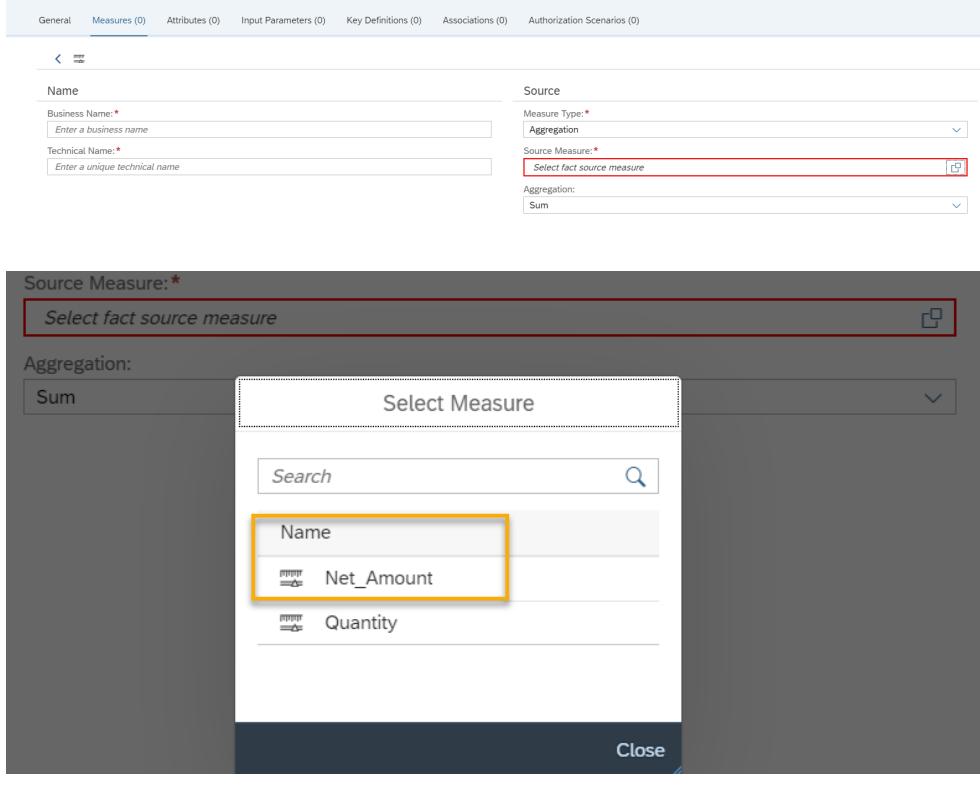
- DV200_Exercise02: Local table All_Book_Sales is created by the Data Flow All Book Sales Order in SAP Data Warehouse Cloud.

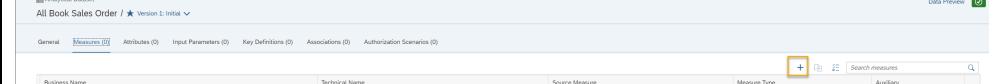
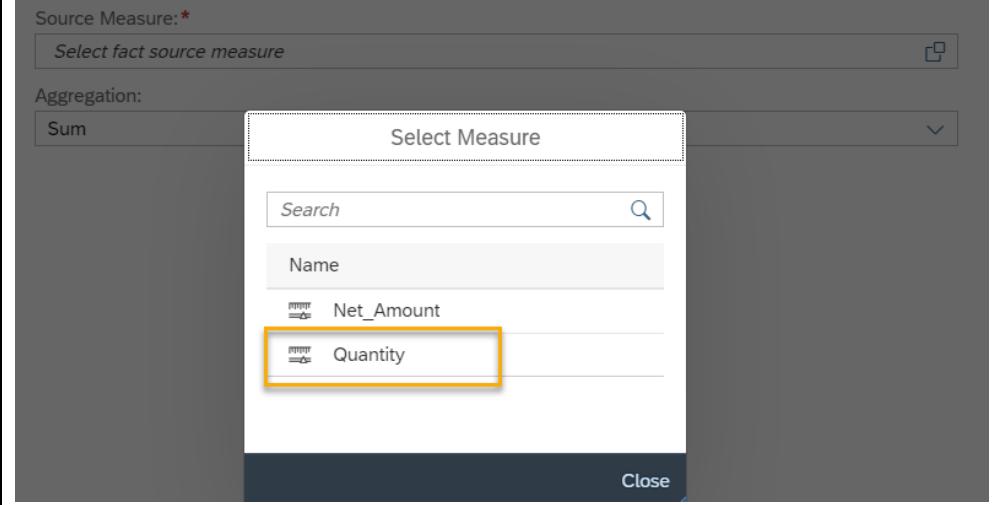
EXERCISE STEP DETAILS

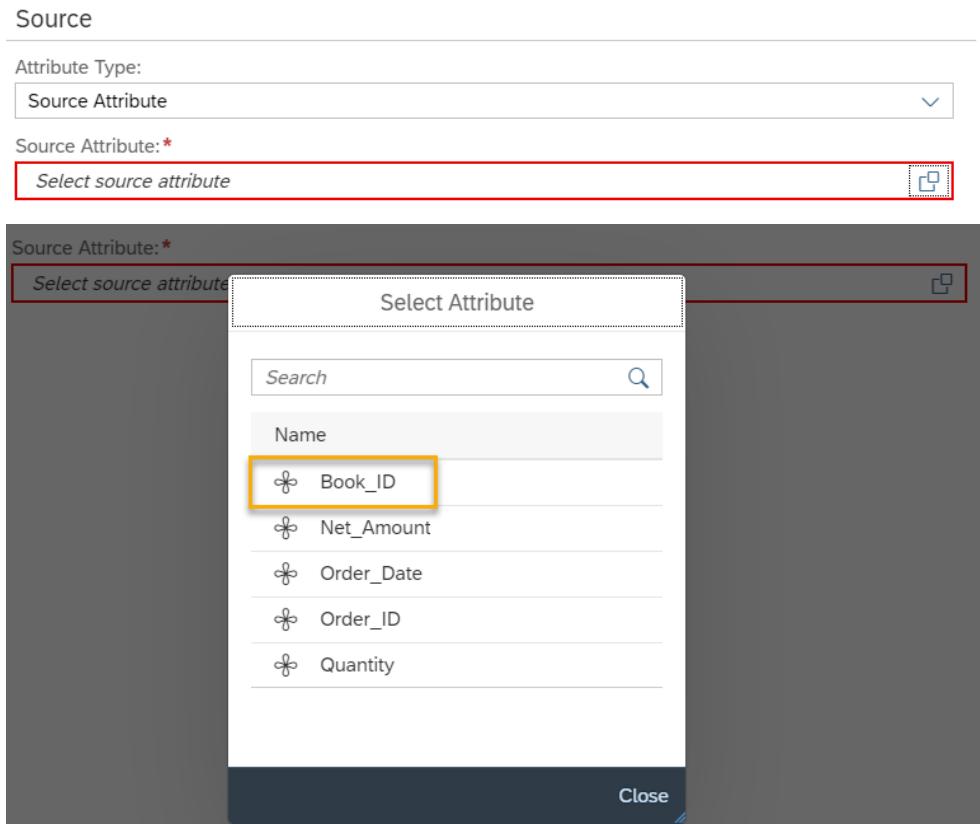
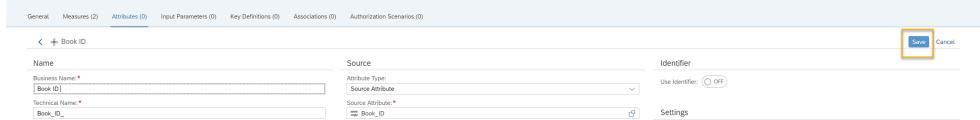
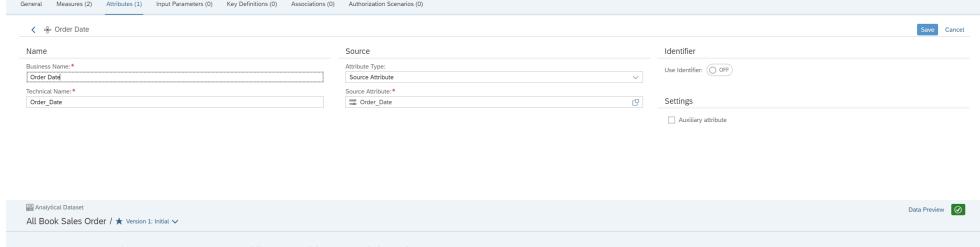
Explanation	Screenshot
Log on to SAP Data Warehouse Cloud with the given tenant URL and assigned user credential mentioned above. Go to the Home Screen.	
Click on the Business Builder icon, you see the space that you are assigned to.	

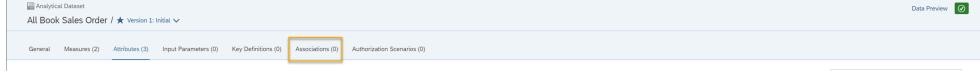
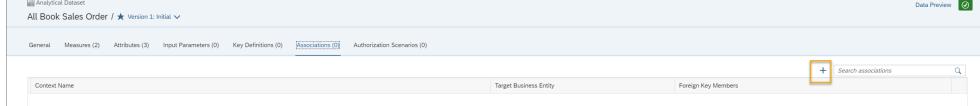
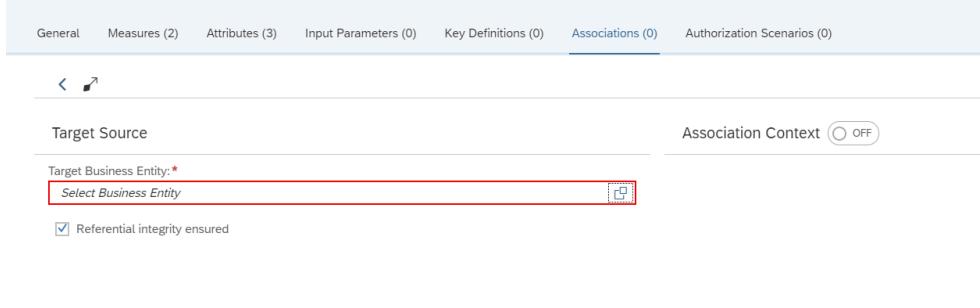
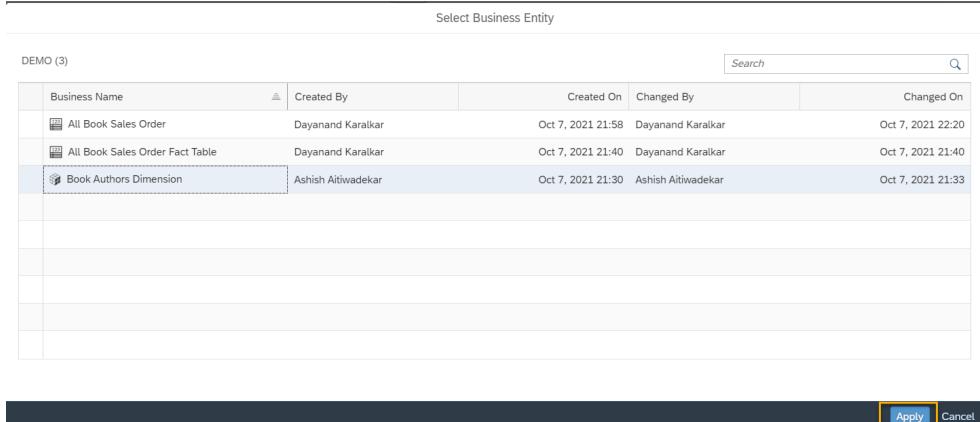
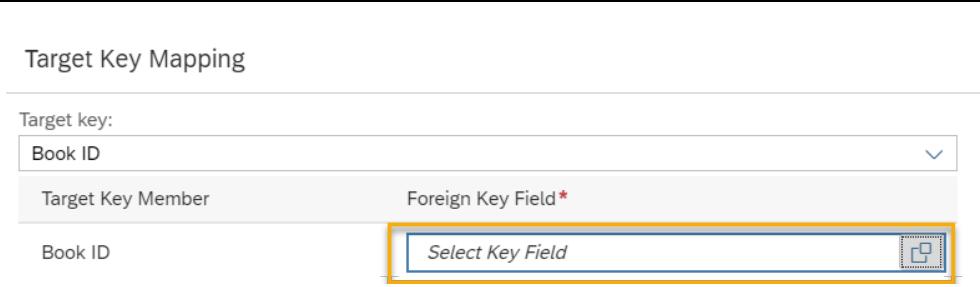
Explanation	Screenshot																					
Click on the Space																						
Click on Business Entities → Select New Analytical Dataset																						
Select the All Book Sales Order Fact Table as Data Entity which is created in DV200_Exercise02. Click on Create	 <table border="1"> <thead> <tr> <th colspan="3">Create New Analytical Dataset</th> </tr> <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</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</td> <td>Deployed</td> <td></td> </tr> </tbody> </table>	Create New Analytical Dataset			Data Entity: *	Status	Already used by	All Book Sales Order Fact Table	Deployed	All Book Sales Order Fac...	Book Authors Dimension View	Deployed	Book Authors Dimension	SAP_CAPIRE_BOOKSHOP_AUTHORS	Deployed		SAP_CAPIRE_BOOKSHOP_BOOKS	Deployed		Time Dimension - Day	Deployed	
Create New Analytical Dataset																						
Data Entity: *	Status	Already used by																				
All Book Sales Order Fact Table	Deployed	All Book Sales Order Fac...																				
Book Authors Dimension View	Deployed	Book Authors Dimension																				
SAP_CAPIRE_BOOKSHOP_AUTHORS	Deployed																					
SAP_CAPIRE_BOOKSHOP_BOOKS	Deployed																					
Time Dimension - Day	Deployed																					

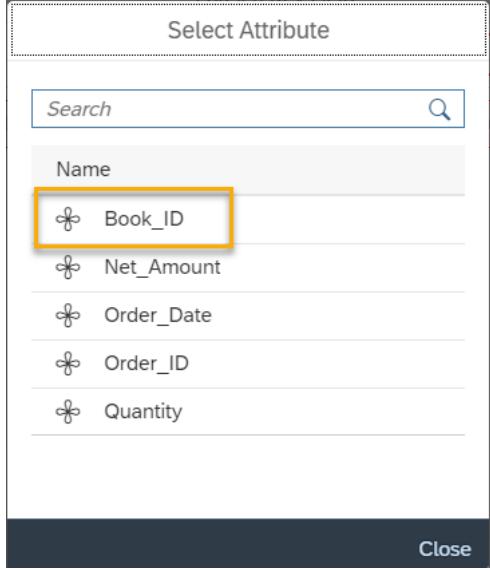
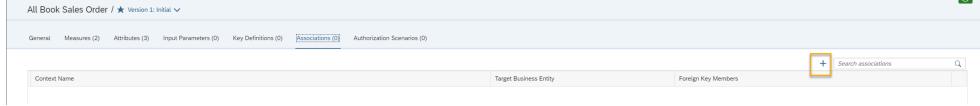
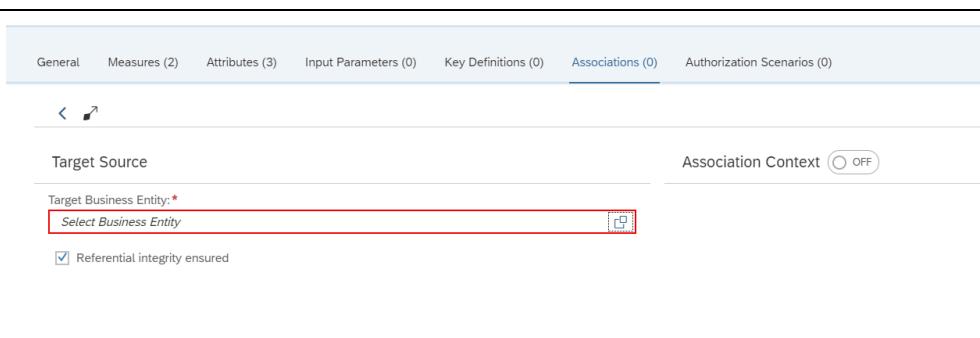
Explanation	Screenshot																		
<p>Enter Business Name as <i>All Book Sales Order</i>, Technical name will be populated automatically.</p> <p>Then click Create button.</p>	 <p>Create New Analytical Dataset</p> <p>Data Entity: *</p> <p>Search for data entity</p> <table border="1"> <thead> <tr> <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> <div style="border: 1px solid #ccc; padding: 10px; margin-top: 10px;"> <p>Business Name: *</p> <input type="text" value="All Book Sales Order"/> <p>Technical Name: *</p> <input type="text" value="BE_All_Book_Sales_Order"/> </div> <div style="background-color: #2e3436; color: white; padding: 5px; display: flex; justify-content: space-between; align-items: center;"> Create Cancel </div>	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																		

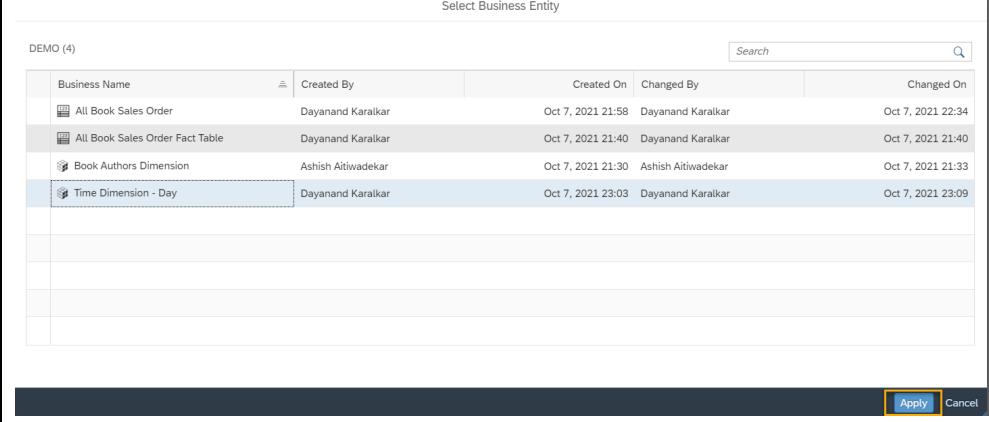
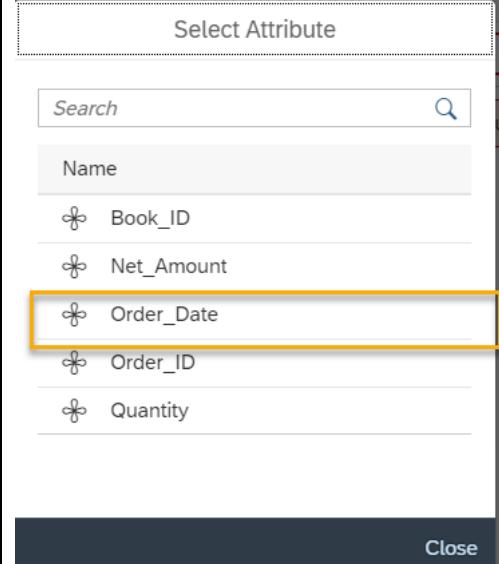
Explanation	Screenshot
Click on Measures	
Click + to add Measures	
Click on Source Measure and Select Net_Amount	

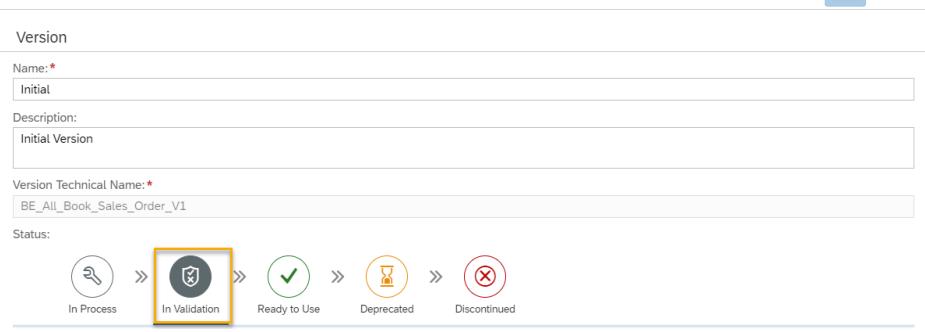
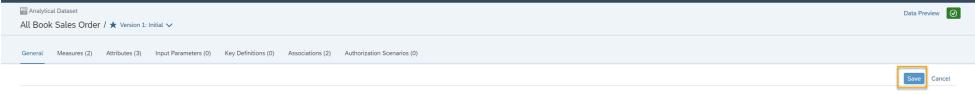
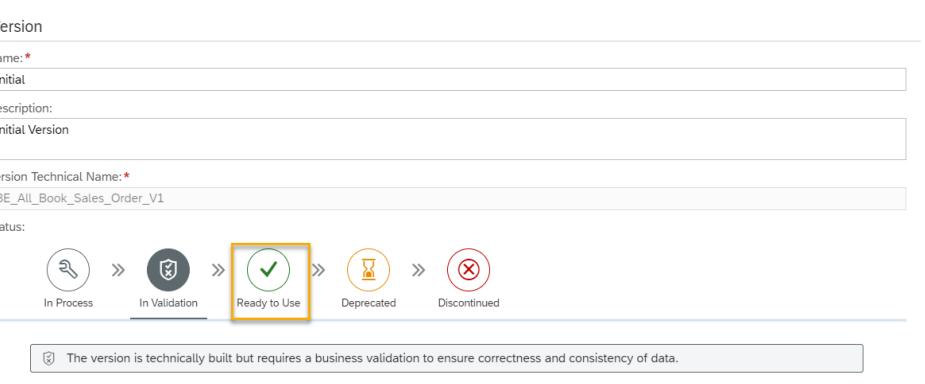
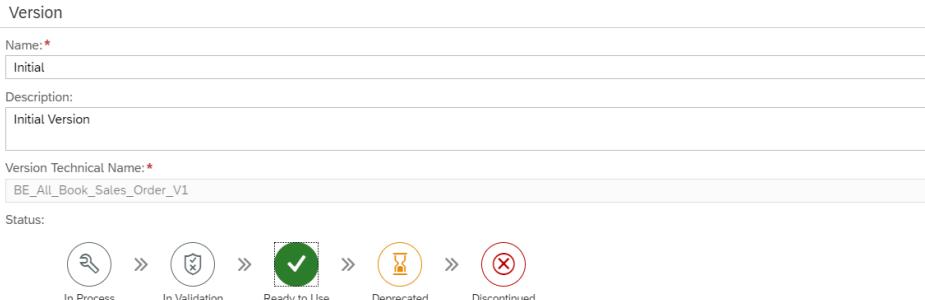
Explanation	Screenshot
Enter Business Name, Technical Name and Click on Save	
Click + to add Measures	
Click on Source Measure and Select Quantity	
Enter Business Name, Technical Name and Click on Save	
Click on Attributes	
Click + to add Attributes	

Explanation	Screenshot																				
<p>Click on Select Source Attribute and select Book_ID</p>	 <p>Source</p> <p>Attribute Type:</p> <p>Source Attribute</p> <p>Source Attribute:*</p> <p>Select source attribute</p> <p>Select Attribute</p> <p>Search</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>																				
<p>Enter Business Name, Technical name and Click on Save</p>	 <p>General Measures (2) Attributes (1) Input Parameters (0) Key Definitions (0) Associations (0) Authorization Scenarios (0)</p> <p>< + Book ID</p> <p>Name</p> <p>Business Name: <input type="text" value="Book ID"/></p> <p>Technical Name: <input type="text" value="Book_ID_"/></p> <p>Source</p> <p>Attribute Type: Source Attribute</p> <p>Source Attribute: <input checked="" type="checkbox"/> Book_ID</p> <p>Identifier</p> <p>Use Identifier: <input type="radio"/> OFF</p> <p>Save Cancel</p>																				
<p>Repeat the Same steps to add Order Date and Order ID attributes</p>	 <p>General Measures (2) Attributes (1) Input Parameters (0) Key Definitions (0) Associations (0) Authorization Scenarios (0)</p> <p>< + Order Date</p> <p>Name</p> <p>Business Name: <input type="text" value="Order Date"/></p> <p>Technical Name: <input type="text" value="Order_Date"/></p> <p>Source</p> <p>Attribute Type: Source Attribute</p> <p>Source Attribute: <input checked="" type="checkbox"/> Order_Date</p> <p>Identifier</p> <p>Use Identifier: <input type="radio"/> OFF</p> <p>Settings</p> <p>Auxiliary attribute</p> <p>Save Cancel</p>  <p>General Measures (2) Attributes (2) Input Parameters (0) Key Definitions (0) Associations (0) Authorization Scenarios (0)</p> <p>< + Order ID</p> <p>Name</p> <p>Business Name: <input type="text" value="Order ID"/></p> <p>Technical Name: <input type="text" value="Order_ID"/></p> <p>Source</p> <p>Attribute Type: Source Attribute</p> <p>Source Attribute: <input checked="" type="checkbox"/> Order_ID</p> <p>Identifier</p> <p>Use Identifier: <input type="radio"/> OFF</p> <p>Settings</p> <p>Auxiliary attribute</p> <p>Save Cancel</p>																				
<p>As a result, we have added 3 Attributes to our Analytical Dataset about All Book Sales Order</p>	 <p>Analytical Dataset All Book Sales Order / Version 1: Initial Data Preview</p> <table border="1"> <thead> <tr> <th>Business Name</th> <th>Technical Name</th> <th>Source Attribute</th> <th>Attribute Type</th> <th>Auxiliary</th> </tr> </thead> <tbody> <tr> <td>Book ID</td> <td>Book_ID_</td> <td>Book_ID</td> <td>Source Attribute</td> <td>No</td> </tr> <tr> <td>Order Date</td> <td>Order_Date</td> <td>Order_Date</td> <td>Source Attribute</td> <td>No</td> </tr> <tr> <td>Order ID</td> <td>Order_ID</td> <td>Order_ID</td> <td>Source Attribute</td> <td>No</td> </tr> </tbody> </table>	Business Name	Technical Name	Source Attribute	Attribute Type	Auxiliary	Book ID	Book_ID_	Book_ID	Source Attribute	No	Order Date	Order_Date	Order_Date	Source Attribute	No	Order ID	Order_ID	Order_ID	Source Attribute	No
Business Name	Technical Name	Source Attribute	Attribute Type	Auxiliary																	
Book ID	Book_ID_	Book_ID	Source Attribute	No																	
Order Date	Order_Date	Order_Date	Source Attribute	No																	
Order ID	Order_ID	Order_ID	Source Attribute	No																	

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 the 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 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>
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</p> <p>Target Key: Book ID</p> <p>Target Key Member: Foreign Key Field: Book_ID</p> <p>Referential integrity ensured</p> <p>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>+ Search associations</p> <p>Contact Name Target Business Entity Foreign Key Members</p>
In the Target Source section click on the Select Business Entity	 <p>General Measures (2) Attributes (3) Input Parameters (0) Key Definitions (0) Associations (0) Authorization Scenarios (0)</p> <p>Target Source Association Context (OFF)</p> <p>Target Business Entity:*</p> <p>Select Business Entity</p> <p>Referential integrity ensured</p>

Explanation	Screenshot				
<p>Select the Time Dimension Day and click Apply</p>					
<p>In the Target Key Mapping under the Foreign Key Field, click on the Select Key Field</p>	<p>Target Key Mapping</p> <p>Target key:</p> <p>Date</p> <table border="0" style="width: 100%;"> <tr> <td style="width: 30%;">Target Key Member</td> <td style="width: 70%;">Foreign Key Field*</td> </tr> <tr> <td>Date</td> <td><input type="button" value="Select Key Field"/></td> </tr> </table> <p>(i) All target key fields have to be mapped to a valid field of the current business entity.</p>	Target Key Member	Foreign Key Field*	Date	<input type="button" value="Select Key Field"/>
Target Key Member	Foreign Key Field*				
Date	<input type="button" value="Select Key Field"/>				
<p>Select Order_Date</p>					
<p>Click Save to save the association</p>					

Explanation	Screenshot
Click on General. In Status  Click _____	 <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">  »  » (highlighted)  »  » 
Click on Save	 <p>Analytical Dataset All Book Sales Order / ★ Version 1: Initial</p> <p>Data Preview </p> <p>General Measures (2) Attributes (3) Input Parameters (0) Key Definitions (0) Associations (2) Authorization Scenarios (0)</p> <p>Save Cancel</p>
Click on  Click on _____	 <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">  »  »  » (highlighted)  »  <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">  »  »  » (highlighted)  »  <p>The version is completed and validated.</p>
Click on Save	 <p>Analytical Dataset All Book Sales Order / ★ Version 1: Initial</p> <p>Data Preview </p> <p>General Measures (2) Attributes (3) Input Parameters (0) Key Definitions (0) Associations (2) Authorization Scenarios (0)</p> <p>Save Cancel</p>