Beer Game on Steroids (BGOS) Tutorial:

Building the basic traditional beer game

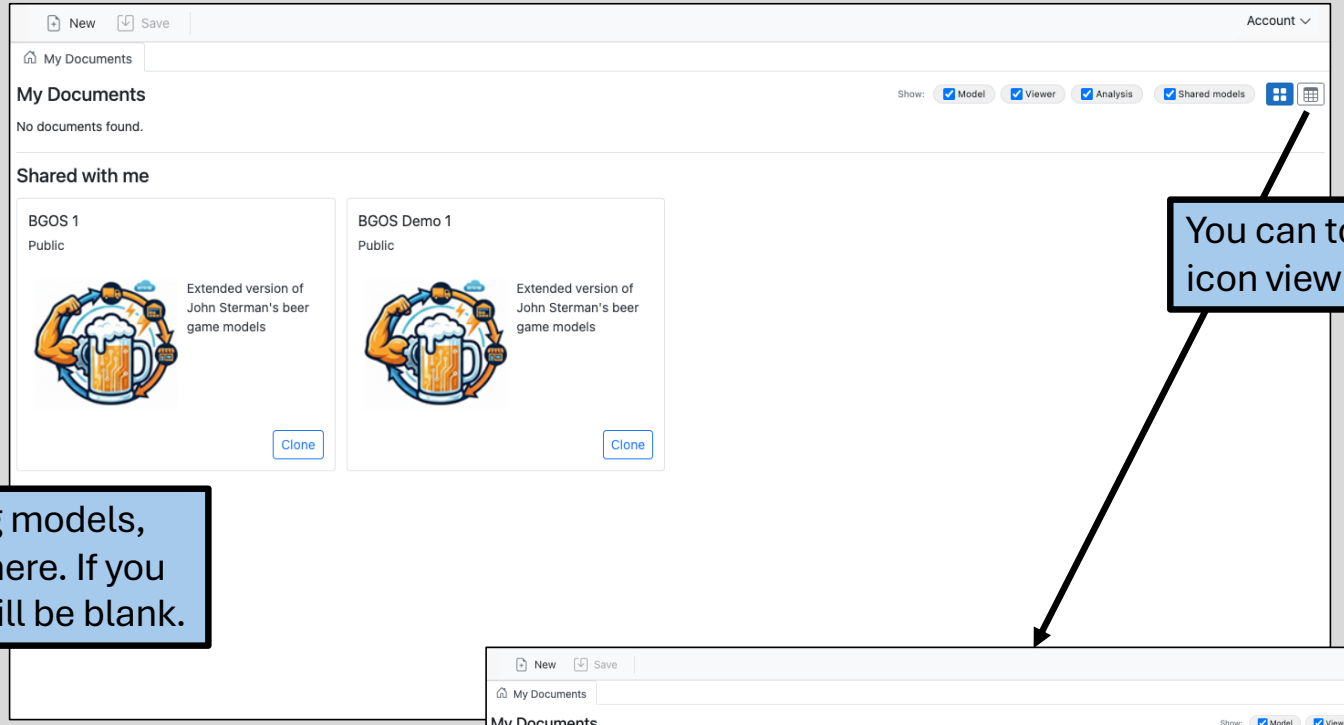
Online version:

bgos.simblox.com

Login if you have an account . . .

Or create a new account.

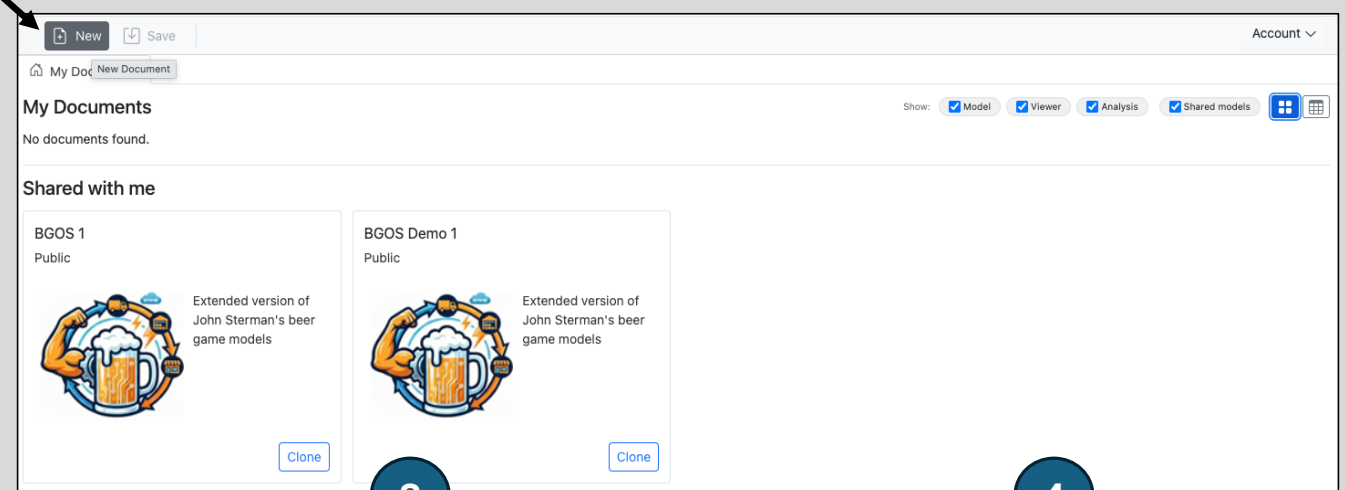
This is what you should see once you install and set up your BGOS environment.

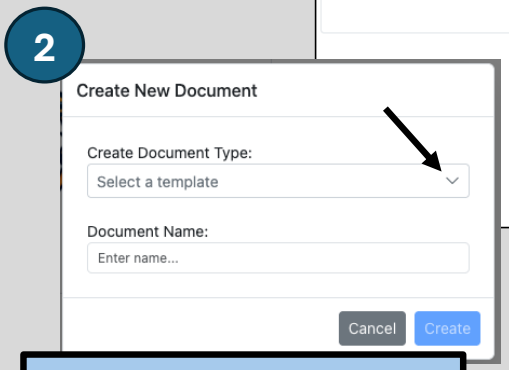


You can toggle between icon view and list view.

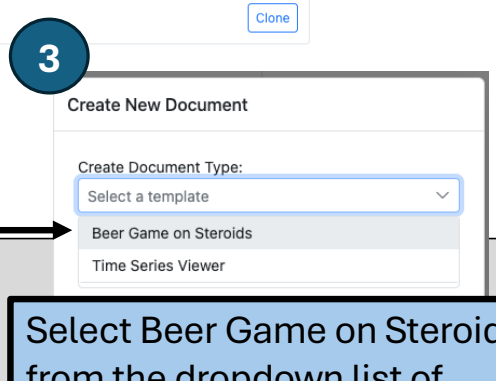
If you have existing models, they will show up here. If you do not, this area will be blank.

Click New to create a new model.

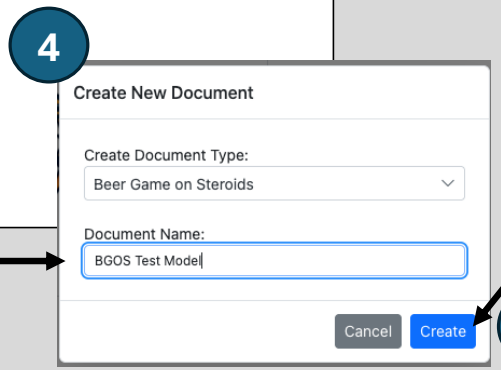




Click the down arrow for Create Document Type.

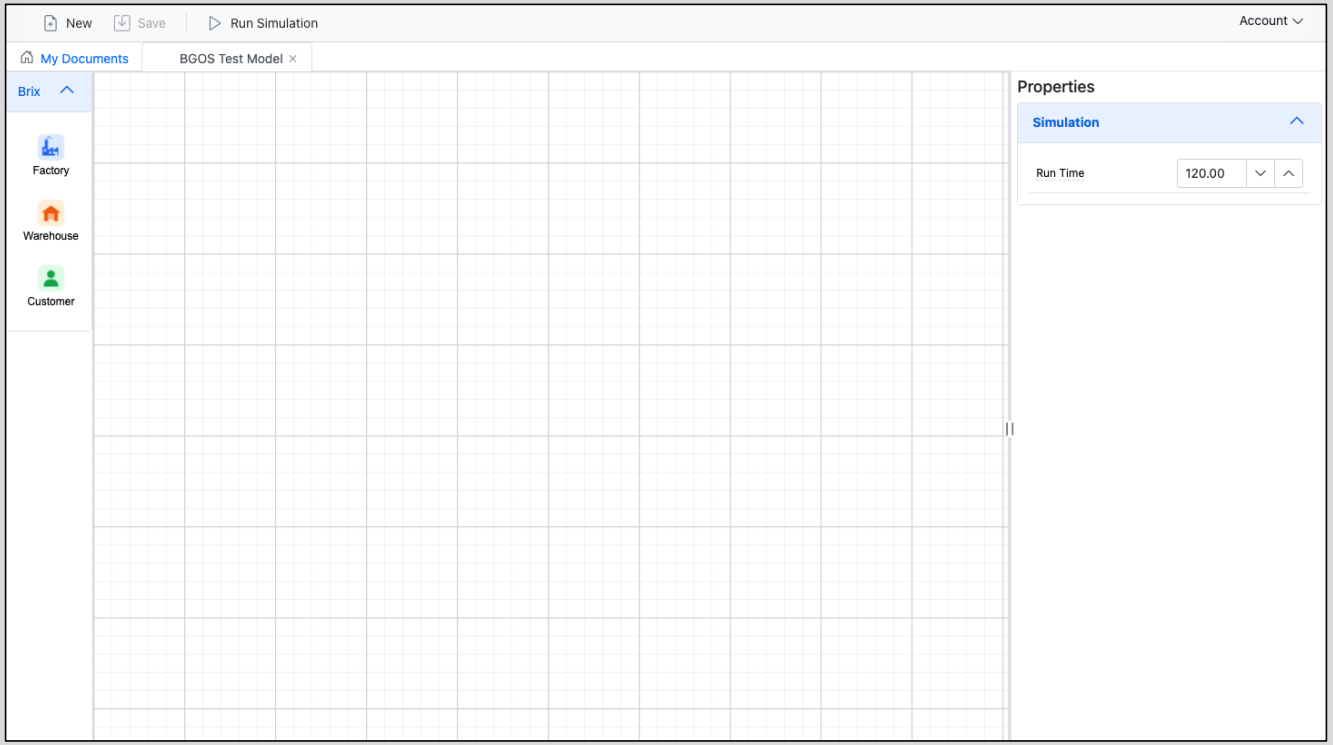


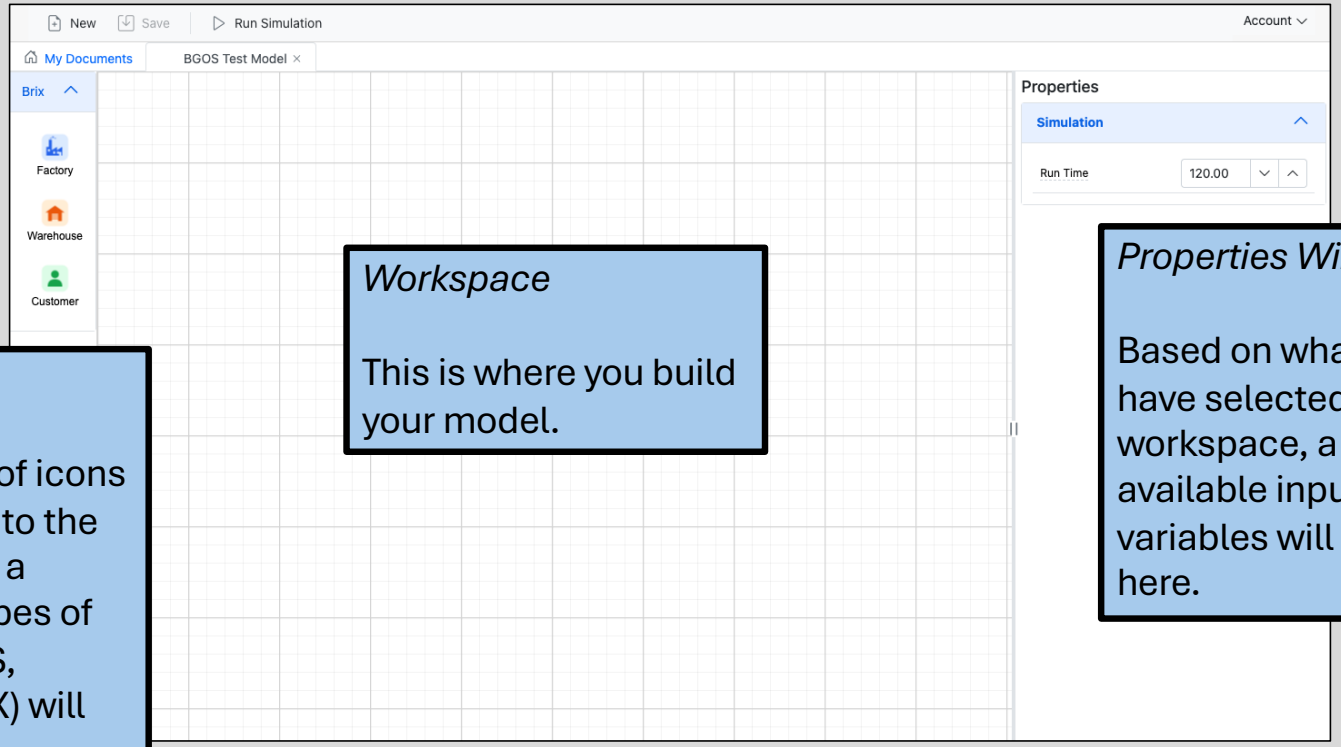
Select Beer Game on Steroids from the dropdown list of document (model) types.



Name the model.

When the new file is opened, you will see a blank workspace.





Brix

Here is the palette of icons to drag-and-drop into the workspace to build a model. Different types of models (e.g., BGOS, pmBLOX, scmBLOX) will have different Brix.

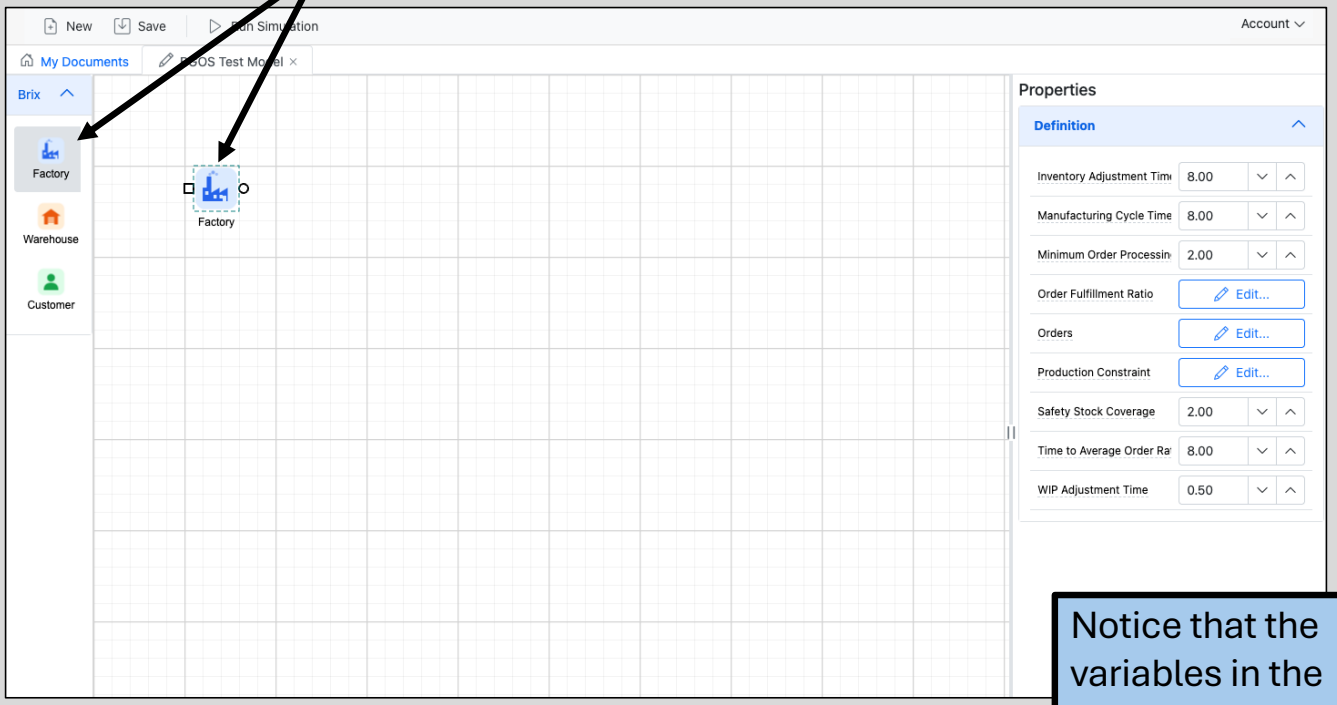
Workspace

This is where you build your model.

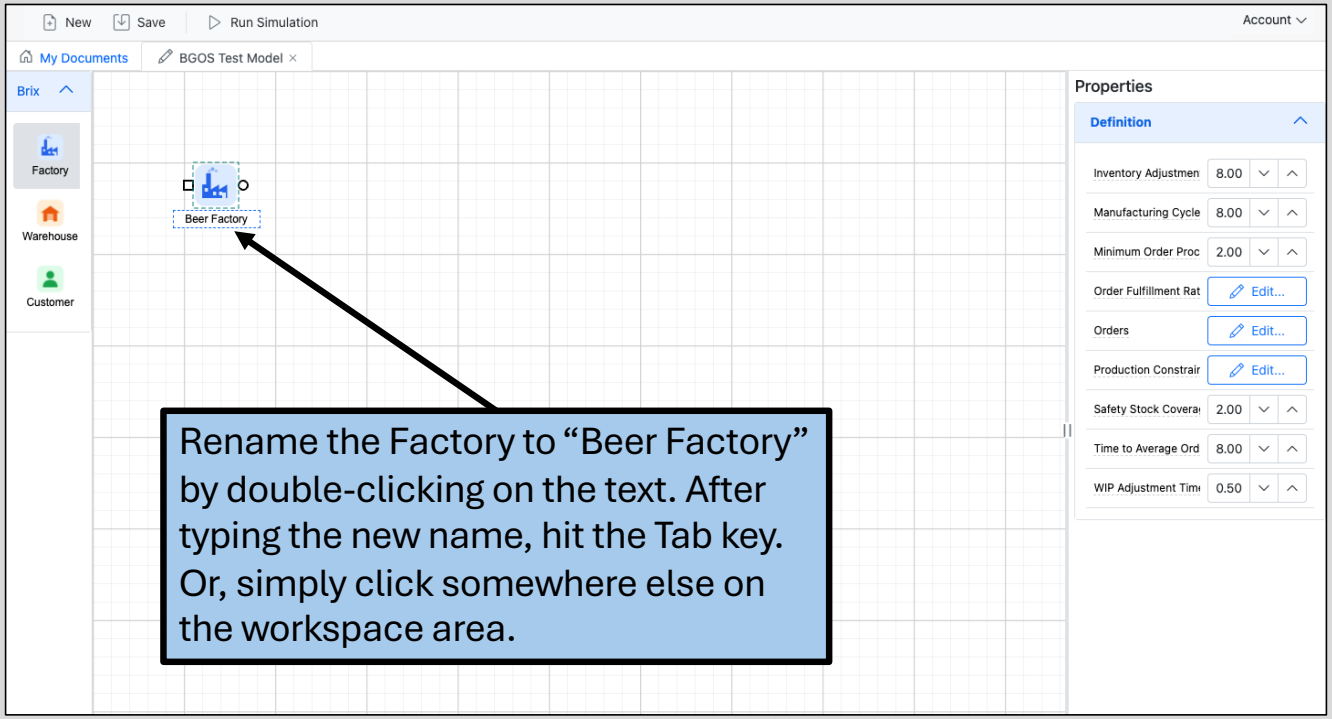
Properties Window

Based on what you have selected in the workspace, a list of available input variables will show here.

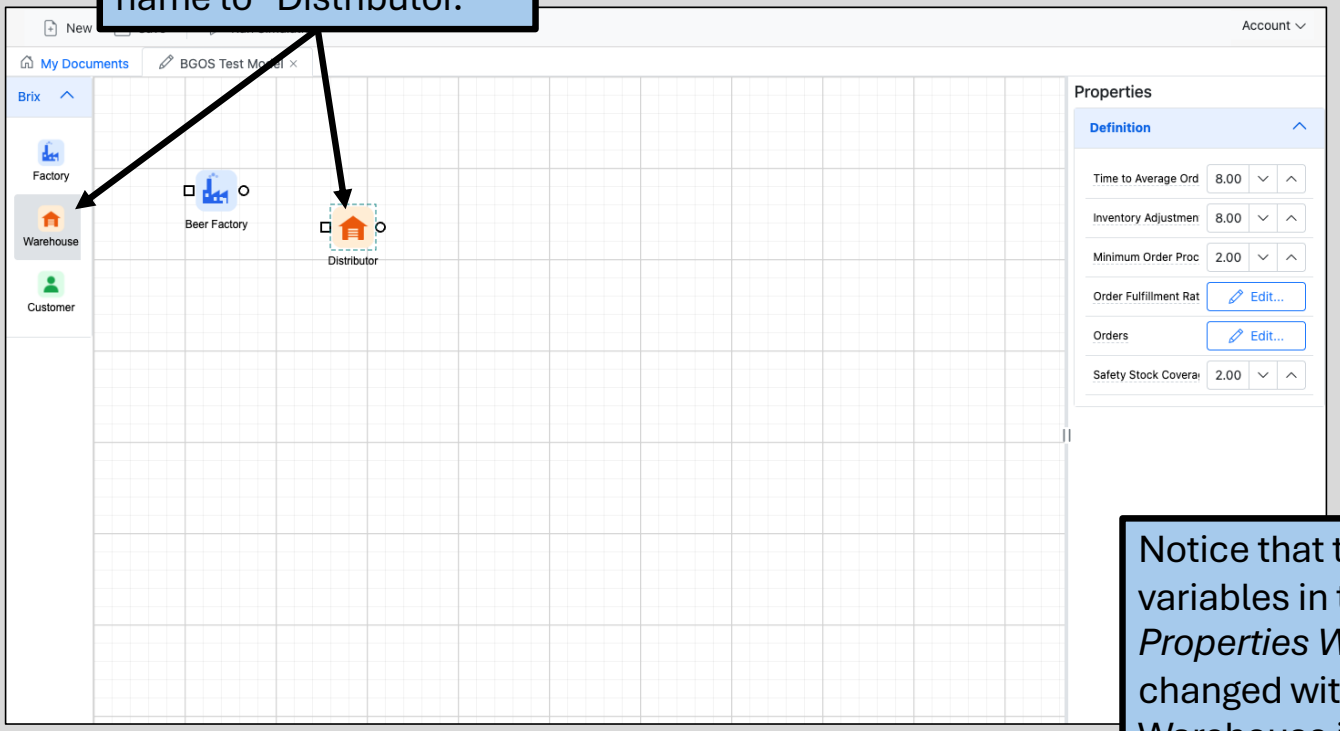
Drag-and-drop a Factory icon on the workspace.



Notice that the variables in the *Properties Window* changed with the Factory icon selected.


New
Save
Run Simulation
Account
My Documents
BGOS Test Model
Brix
Factory
Warehouse
Customer
Beer Factory
Properties
Definition
Inventory Adjustmen
8.00
Manufacturing Cycle
8.00
Minimum Order Proc
2.00
Order Fulfillment Rat
Edit...
Orders
Edit...
Production Constrair
Edit...
Safety Stock Covera
2.00
Time to Average Ord
8.00
WIP Adjustment Tim
0.50
Rename the Factory to “Beer Factory” by double-clicking on the text. After typing the new name, hit the Tab key. Or, simply click somewhere else on the workspace area.

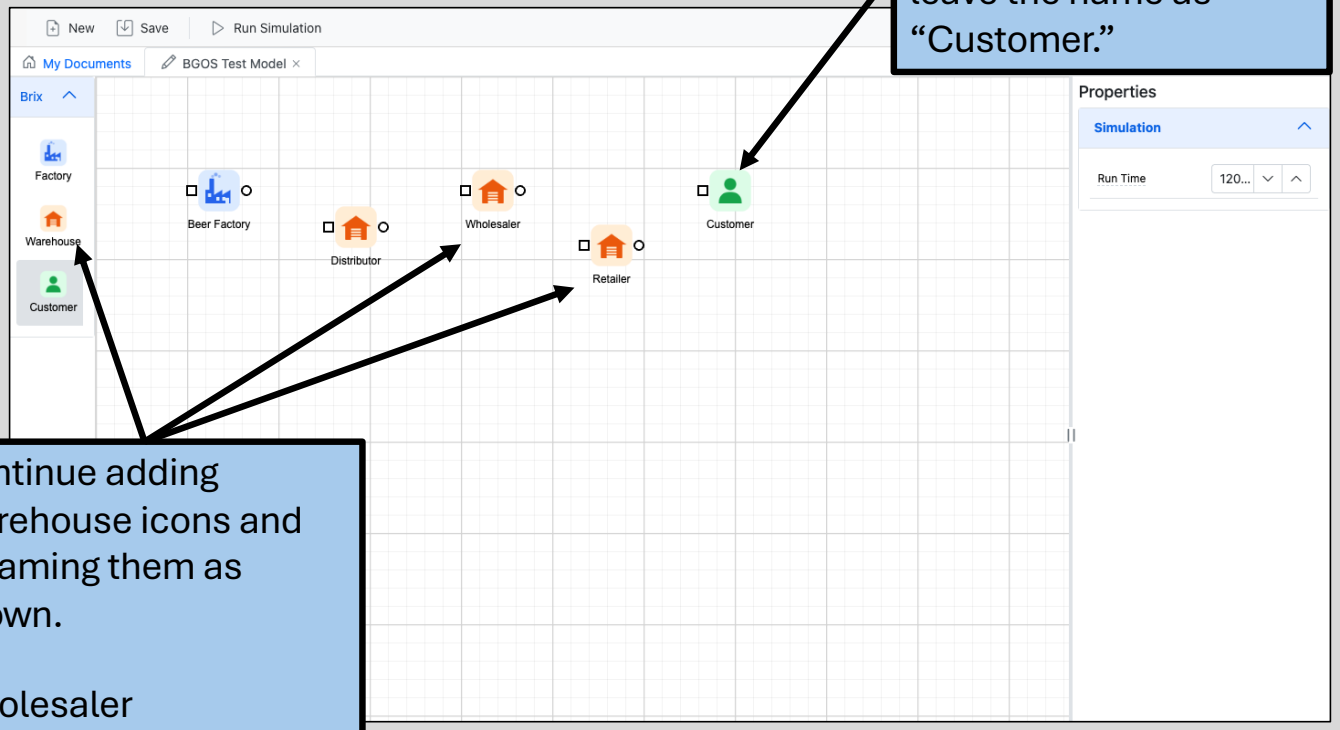
Drag-and-drop a Warehouse icon on the workspace. Change the name to “Distributor.”



Notice that the variables in the *Properties Window* changed with the Warehouse icon selected.

2

Add a Customer icon to the workspace. You can leave the name as “Customer.”

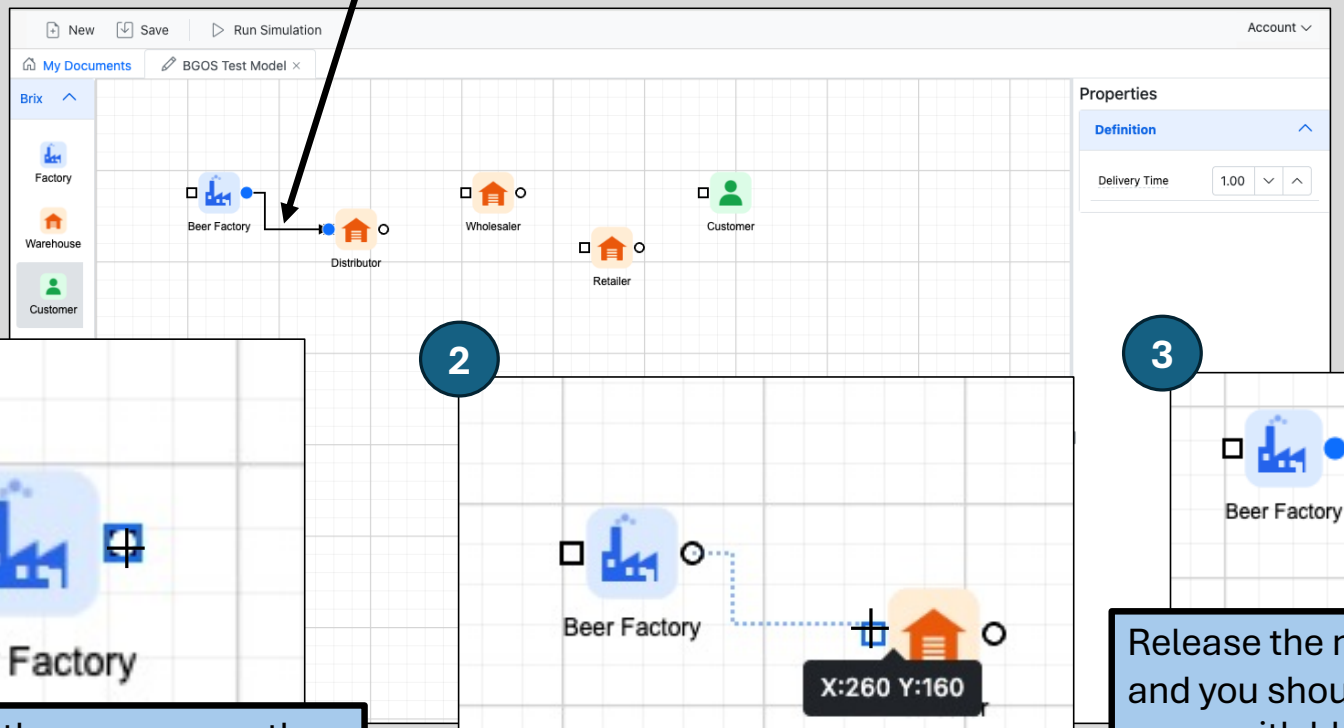


1

Continue adding Warehouse icons and renaming them as shown.

Wholesaler
Retailer

Connect the Beer Factory to the Distributor.



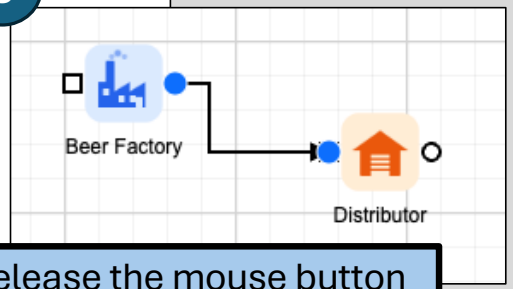
1

Begin by hovering the mouse over the box on the right side of the Beer Factory icon. The mouse arrow will turn into a + sign and the box will have a blue highlight.

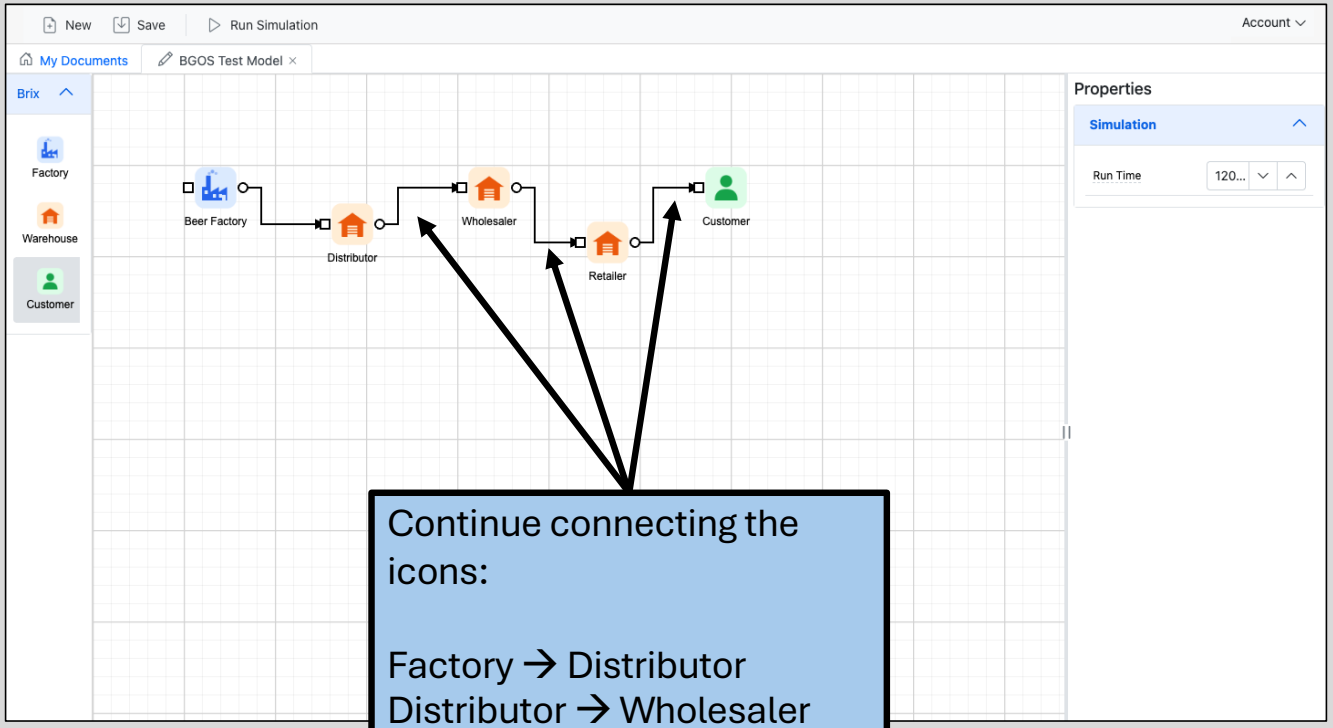
2

Click-and-drag the connection over to the box on the left side of the Distributor icon. The box will have a blue highlight.

3



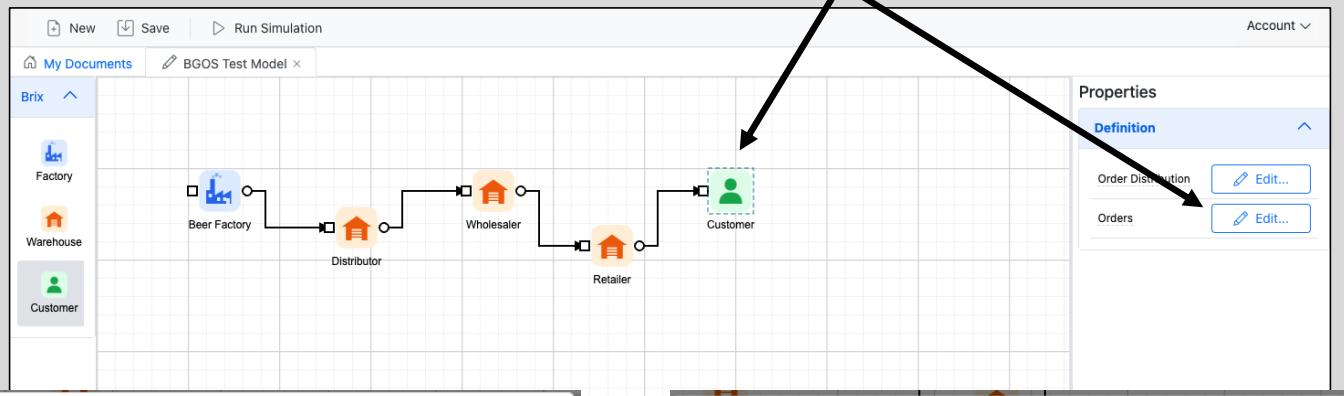
Release the mouse button and you should see an arrow with blue circles at the tail end and the pointed end, indicating the connection has been made.



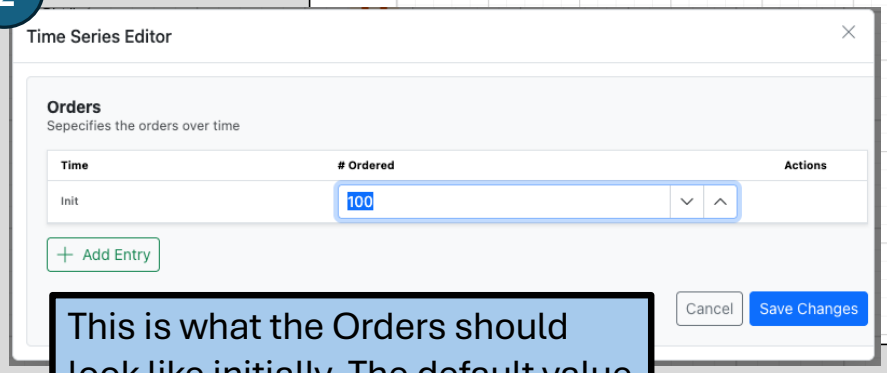
Continue connecting the icons:

Factory → Distributor
Distributor → Wholesaler
Wholesaler → Retailer
Retailer → Customer

1 Click on the Customer icon to show its input variables. Click on the edit box for Orders.



2

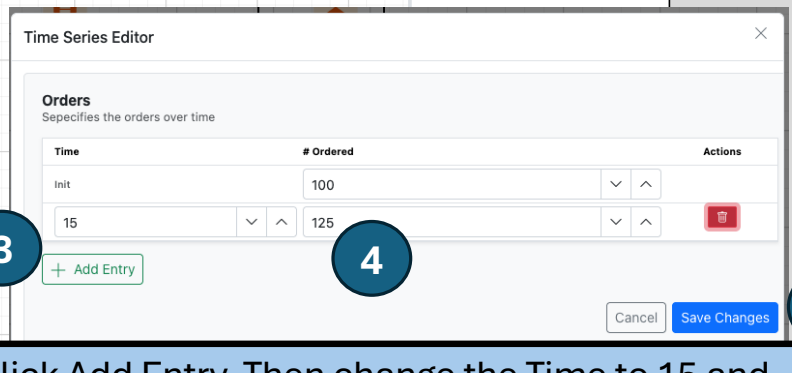


This is what the Orders should look like initially. The default value is 100 units per week for the entire length of the simulation.

3

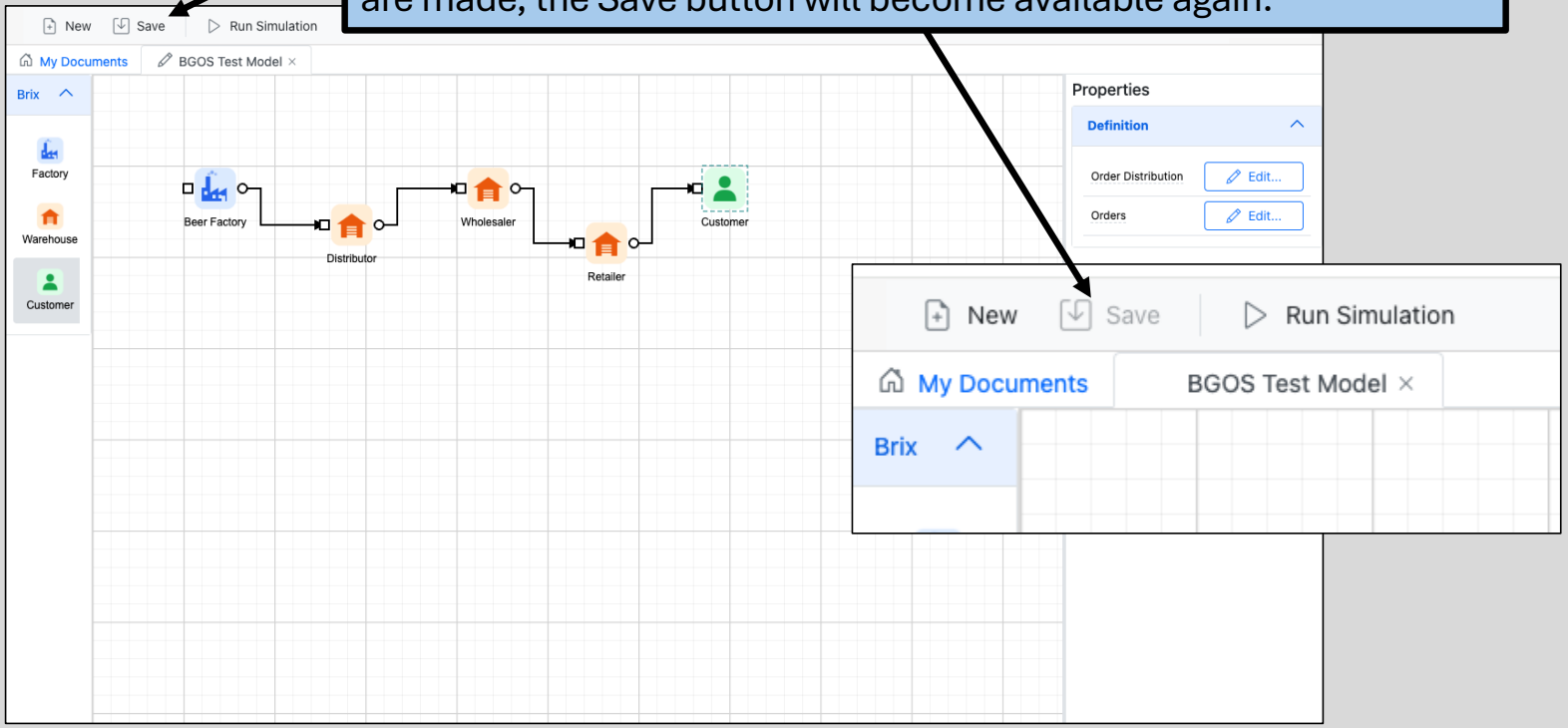
4

5



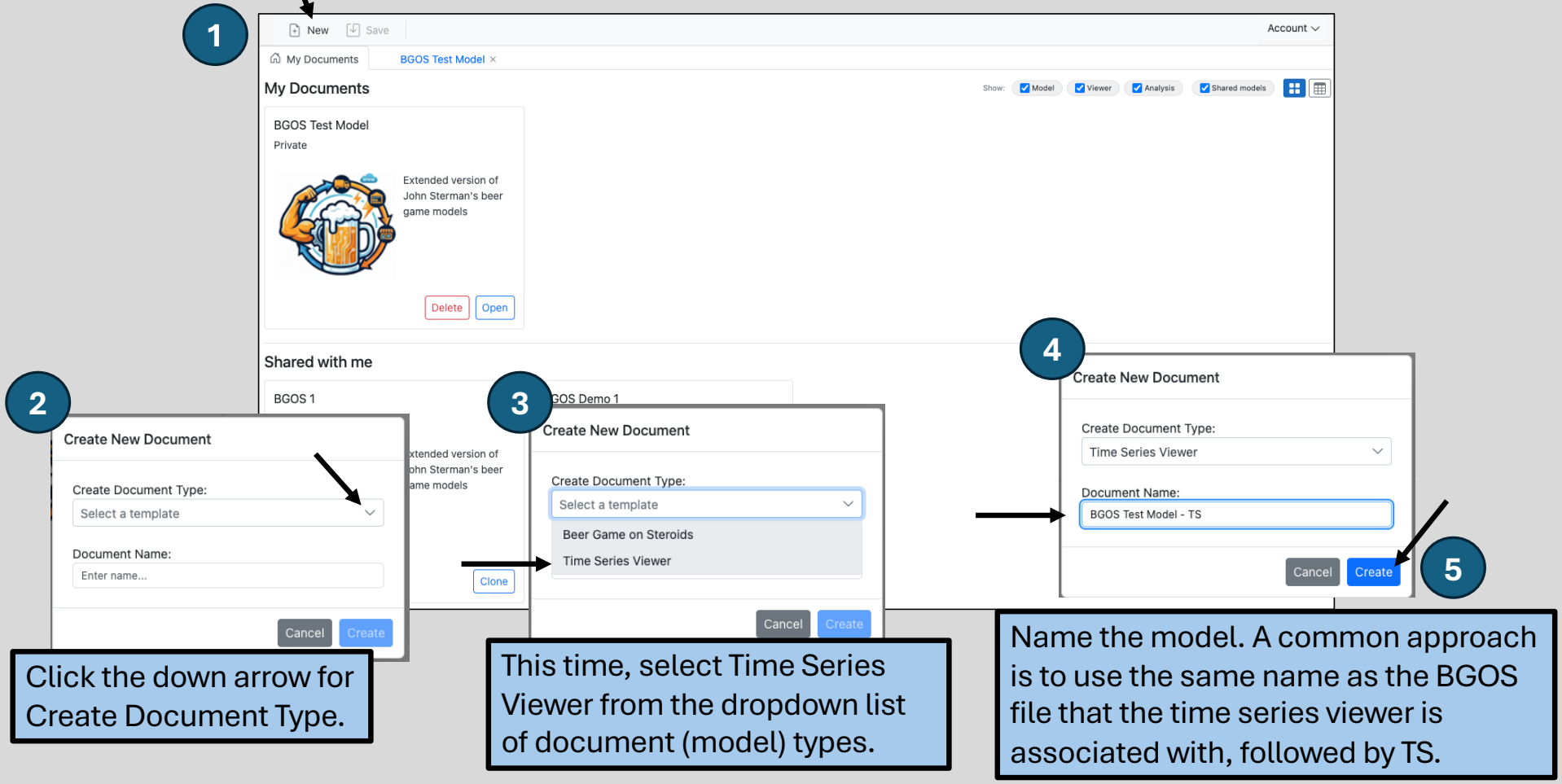
Click Add Entry. Then change the Time to 15 and change the # Ordered to 125. Starting at week 15, the value of orders will increase from 100 to 125. Finally, click Save Changes.

Your BGOS model is now ready to run. Make sure to click Save to save the model at anytime. After you click Save, the Save button will turn gray to indicate that the model has been saved. If any changes are made, the Save button will become available again.



Fantastic, you have a working simulation. Now let’s look at how to display results.

Go back to the My Documents tab and click New to create a new model.

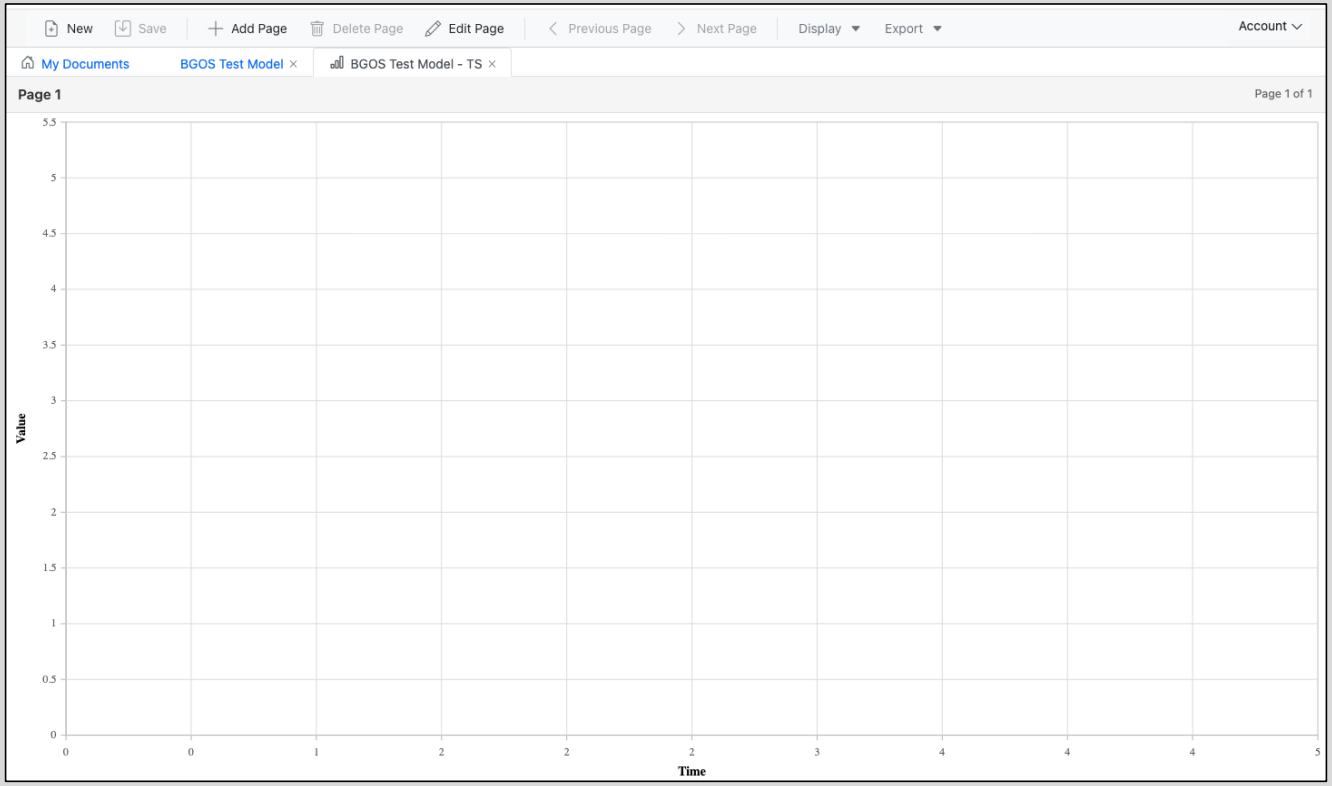


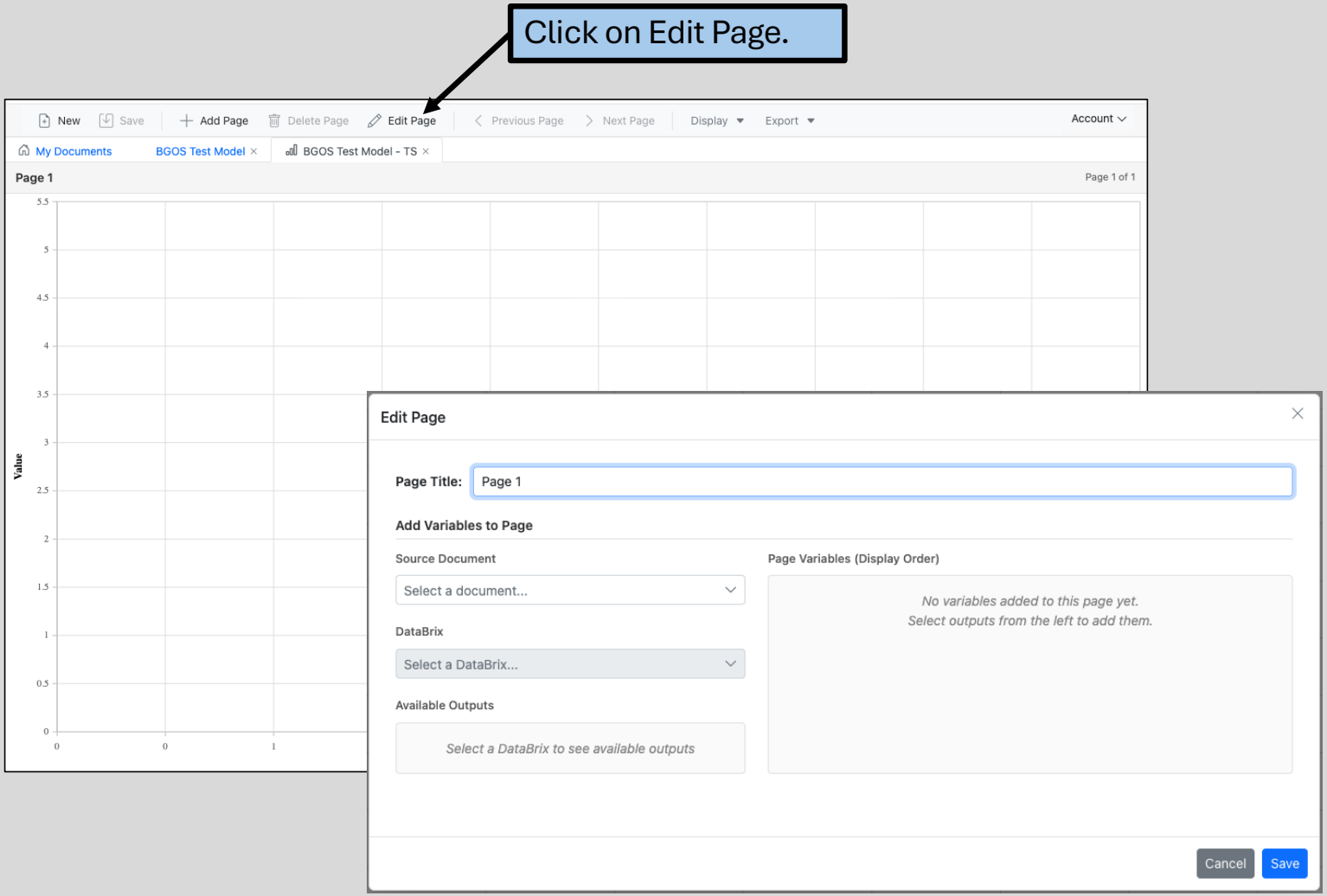
Click the down arrow for Create Document Type.

This time, select Time Series Viewer from the dropdown list of document (model) types.

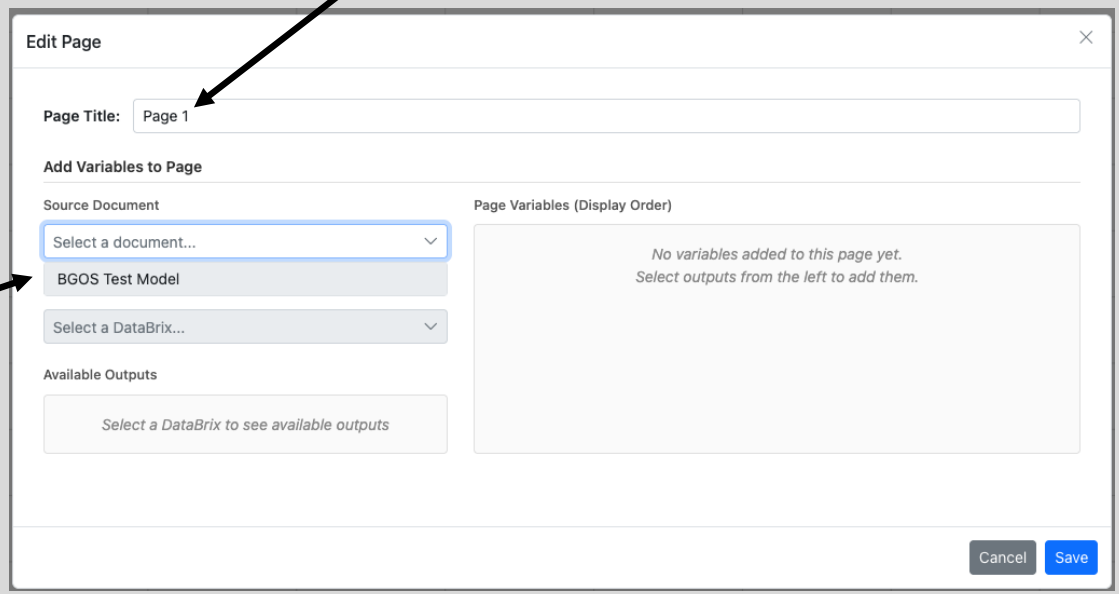
Name the model. A common approach is to use the same name as the BGOS file that the time series viewer is associated with, followed by TS.

When the new time series document is opened, you should see a blank chart with no values.



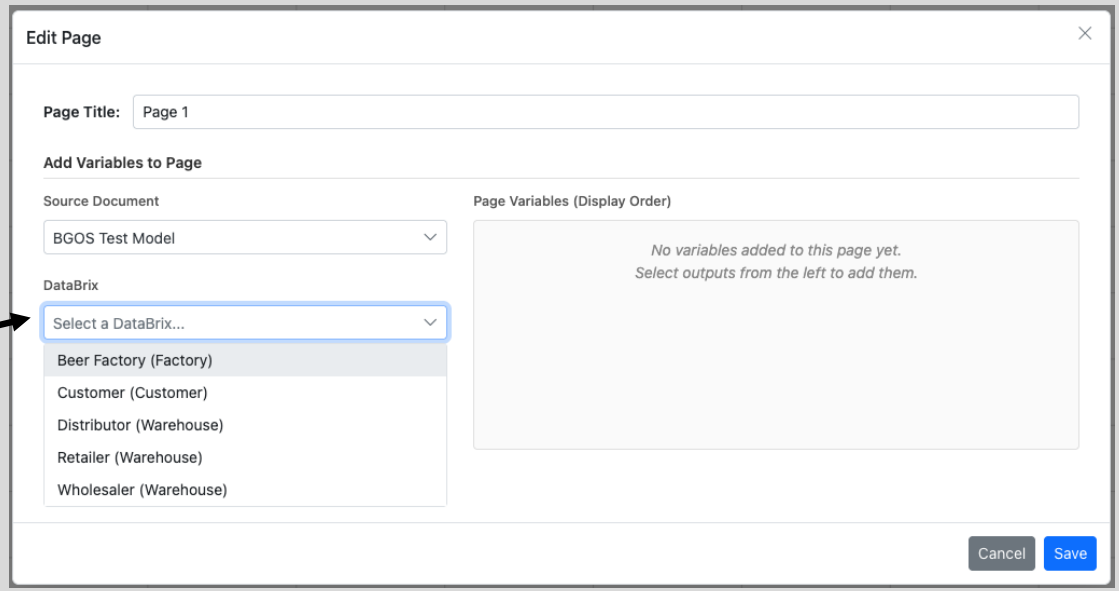

Click on Edit Page.
New
Save
Add Page
Delete Page
Edit Page
Previous Page
Next Page
Display
Export
Account
My Documents
BGOS Test Model
BGOS Test Model - TS
Page 1
Page 1 of 1
Value
Edit Page
Page Title:
Page 1
Add Variables to Page
Source Document
Select a document...
DataBrix
Select a DataBrix...
Available Outputs
Select a DataBrix to see available outputs
Page Variables (Display Order)
No variables added to this page yet.
Select outputs from the left to add them.
Cancel
Save

You can change the name of the page, especially if you are going to have multiple pages of charts.



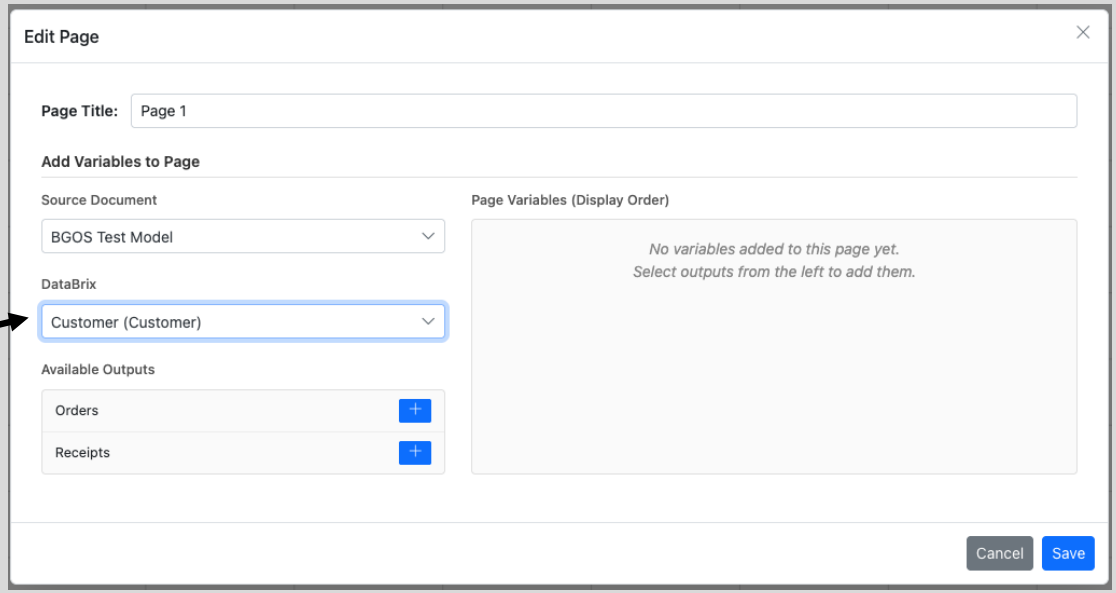
For Source Document, select your BGOS file.

NOTE:
You can share output from multiple models in a single chart. For now, we are just picking a single model.



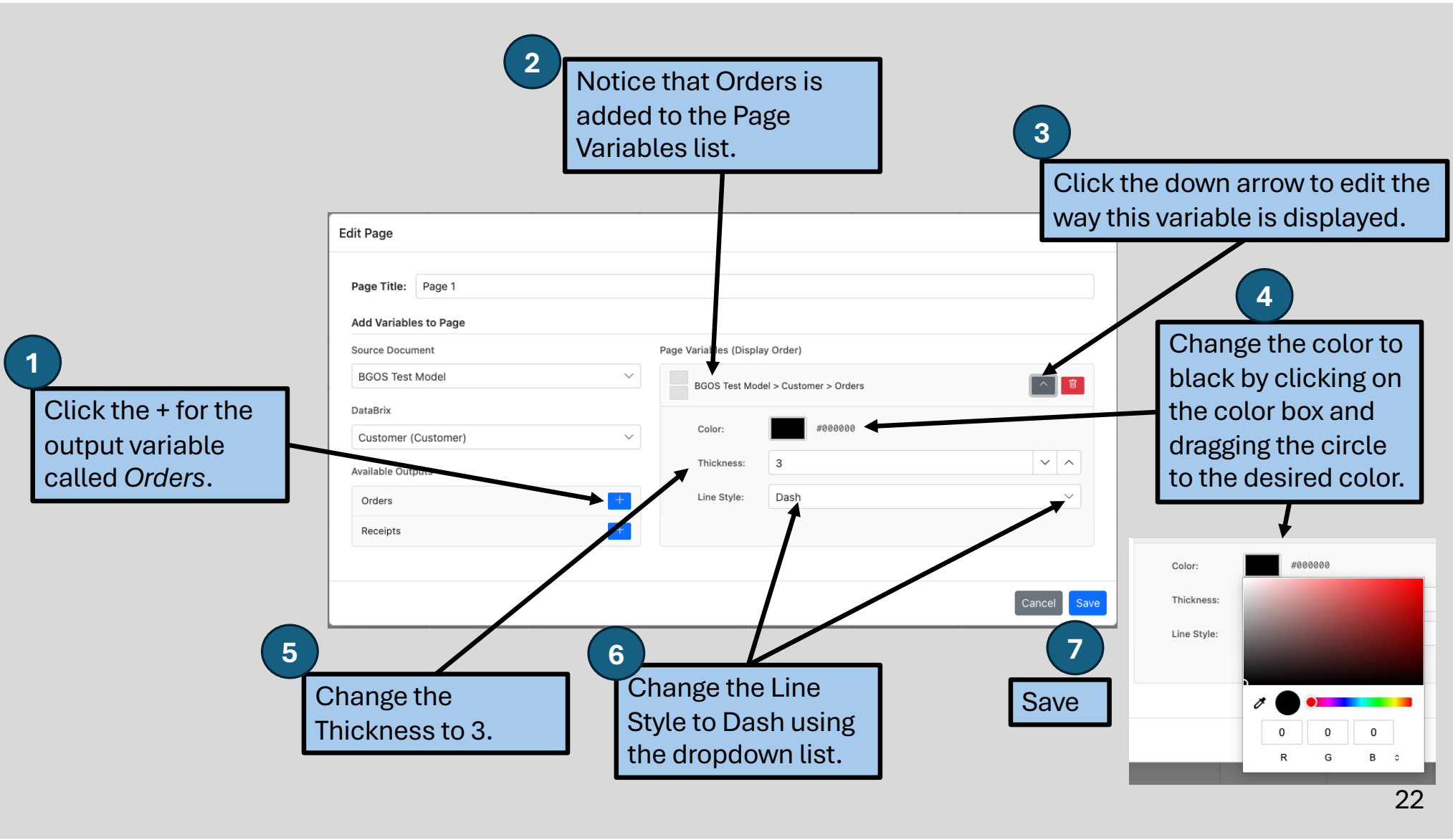
In the DataBrix list you will find all the icons in your model. Notice that the format is:

Icon Name (Icon Type)



Start with your Customer icon.

Notice that you now have a list of Available Outputs. This list changes based on the icon type selected.

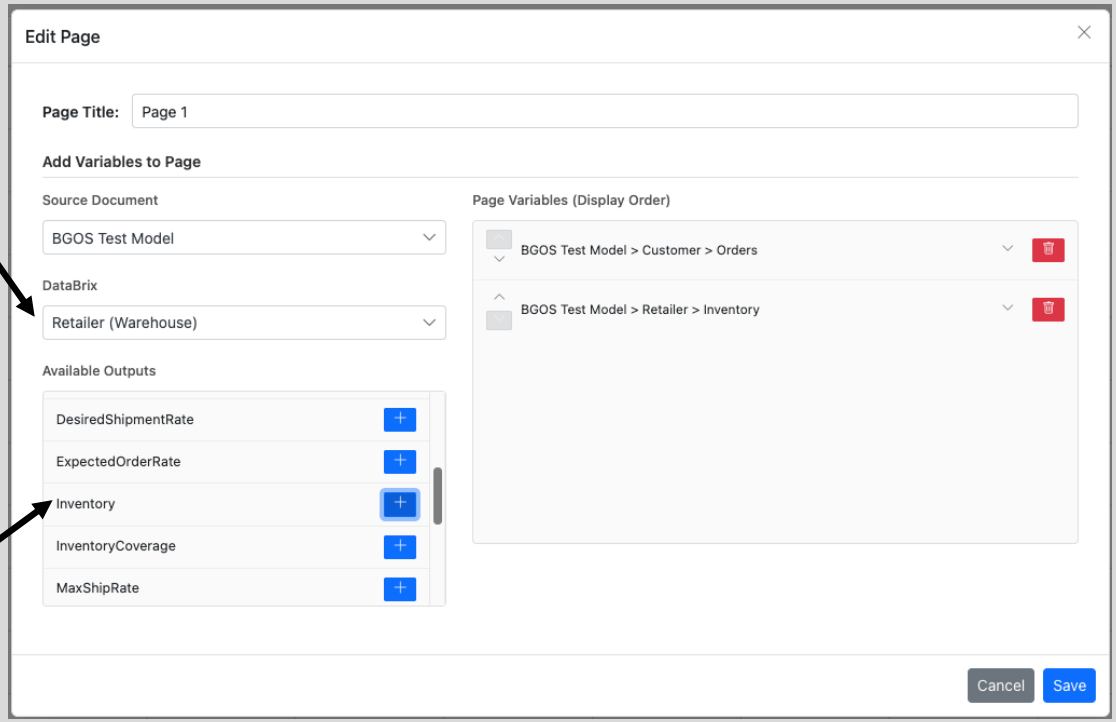

1
Click the + for the output variable called *Orders*.
2
Notice that Orders is added to the Page Variables list.
3
Click the down arrow to edit the way this variable is displayed.
4
Change the color to black by clicking on the color box and dragging the circle to the desired color.
5
Change the Thickness to 3.
6
Change the Line Style to Dash using the dropdown list.
7
Save
Edit Page
Page Title: Page 1
Add Variables to Page
Source Document
BGOS Test Model
DataBrix
Customer (Customer)
Available Outputs
Orders
Receipts
Page Variables (Display Order)
BGOS Test Model > Customer > Orders
Color: #000000
Thickness: 3
Line Style: Dash
Cancel
Save
Color: #000000
Thickness:
Line Style:
0 0 0
R G B

1

Select the Retailer.

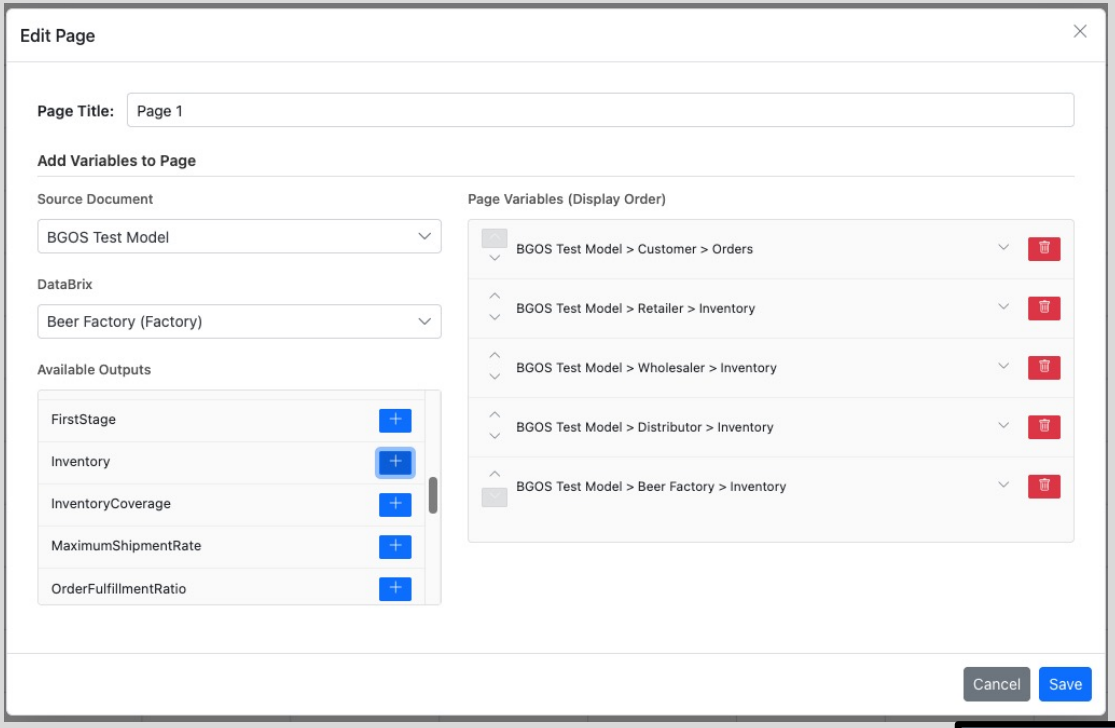
2

Scroll down the list of Available Outputs for the Retailer and find *Inventory*. Click the + to add it to the chart.



Continuing adding the following variables:

Wholesaler: *Inventory*
Distributor: *Inventory*
Beer Factory: *Inventory*

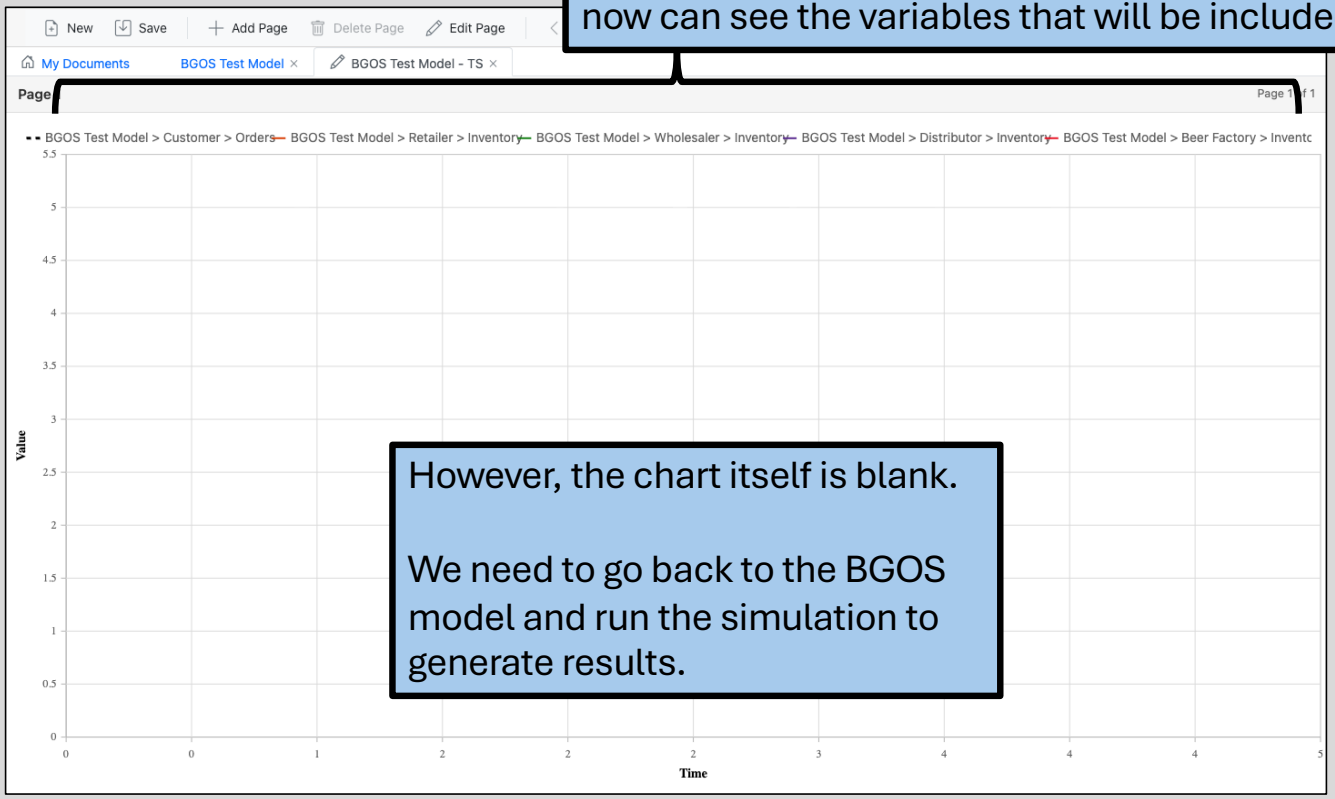


The full list of variables on the chart should look like this:

Customer: *Orders*
Retailer: *Inventory*
Wholesaler: *Inventory*
Distributor: *Inventory*
Beer Factory: *Inventory*

Make sure to click Save when you are done.

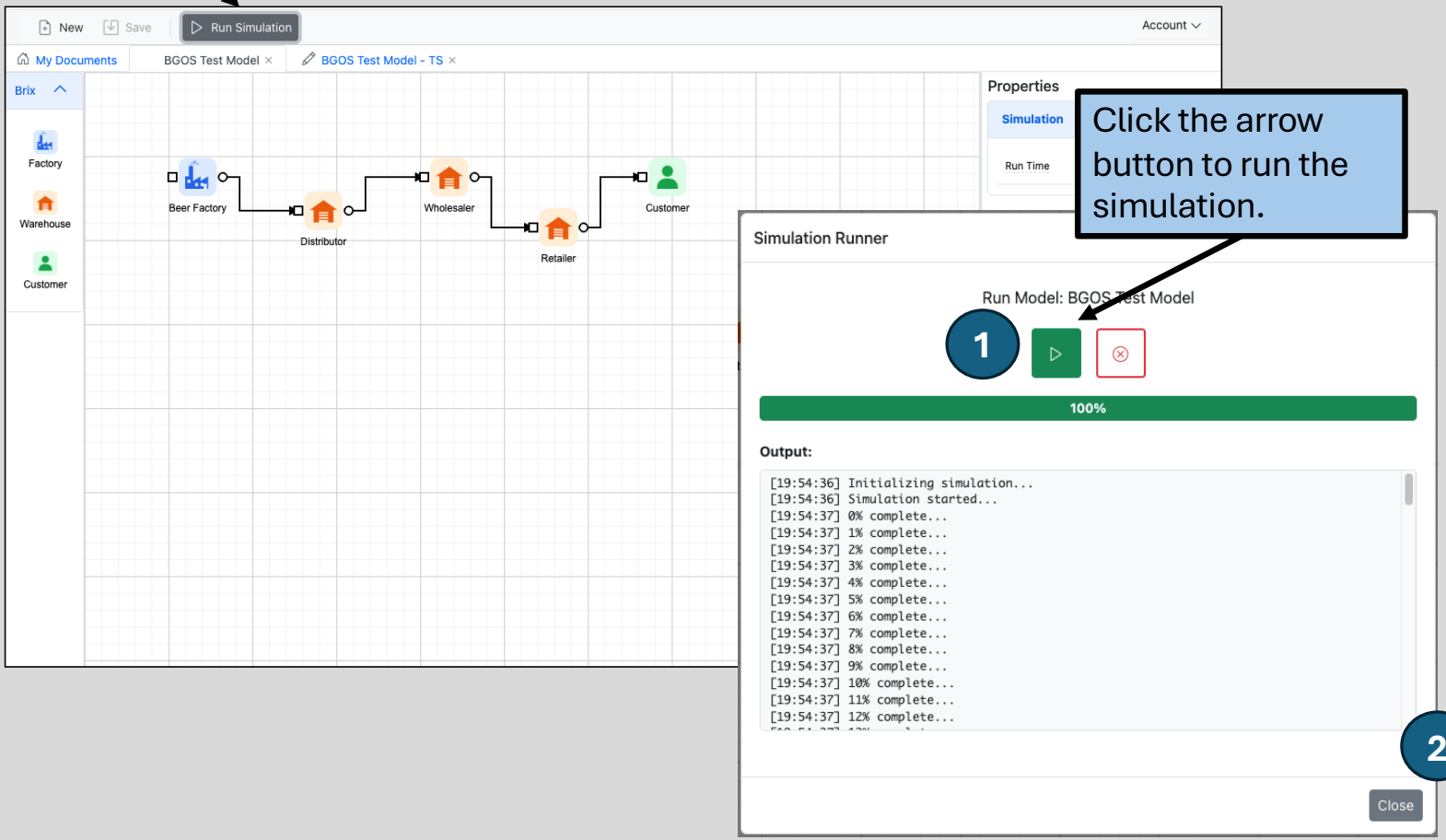
After saving your chart variables, you will be returned to a blank time series viewer chart. Notice that you now can see the variables that will be included.



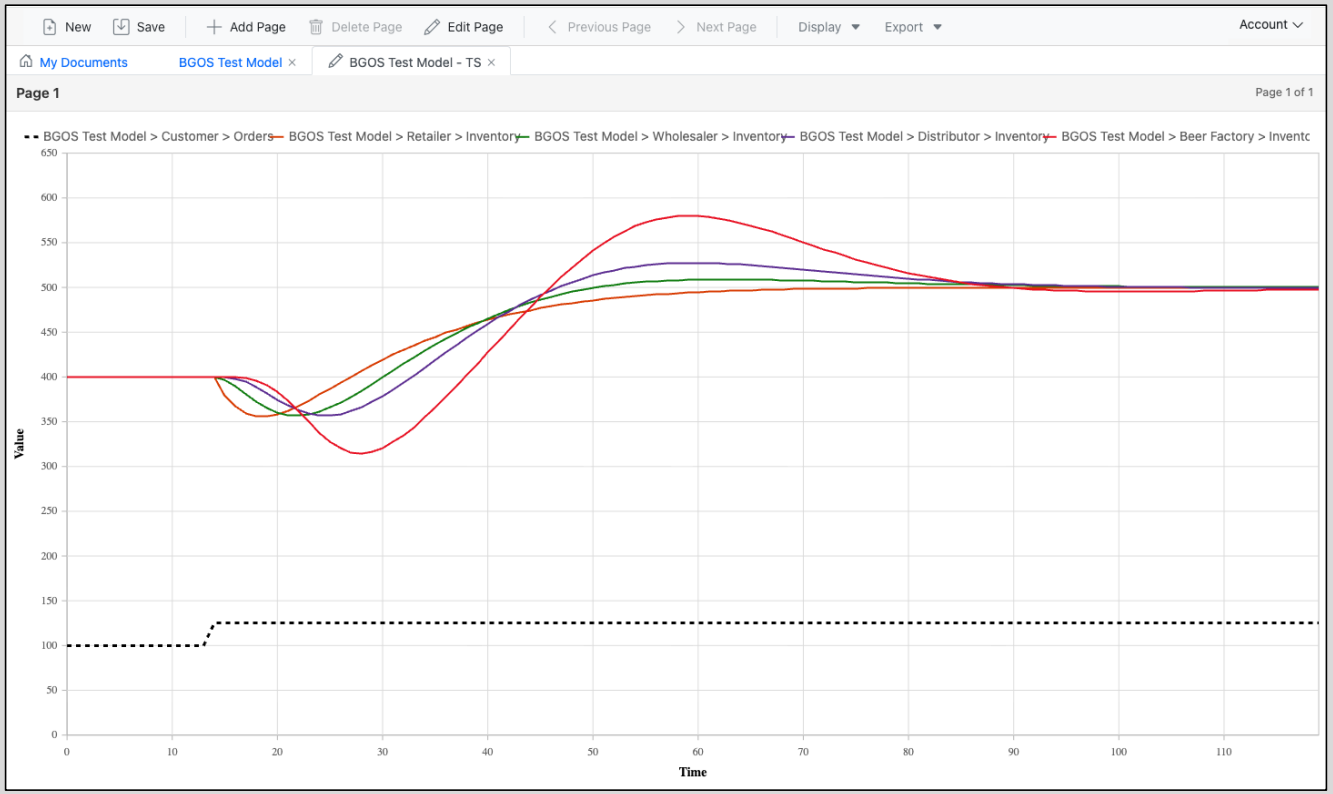
However, the chart itself is blank.

We need to go back to the BGOS model and run the simulation to generate results.

On the model page, click Run Simulation.

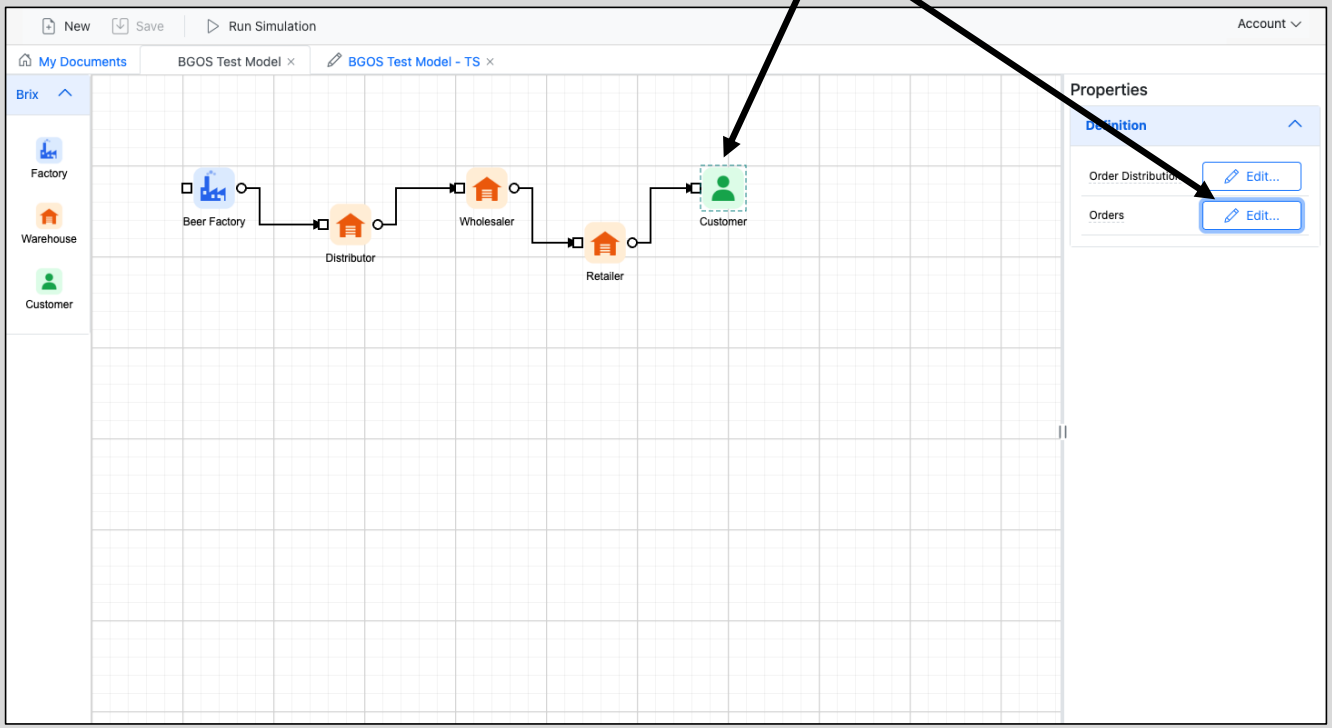


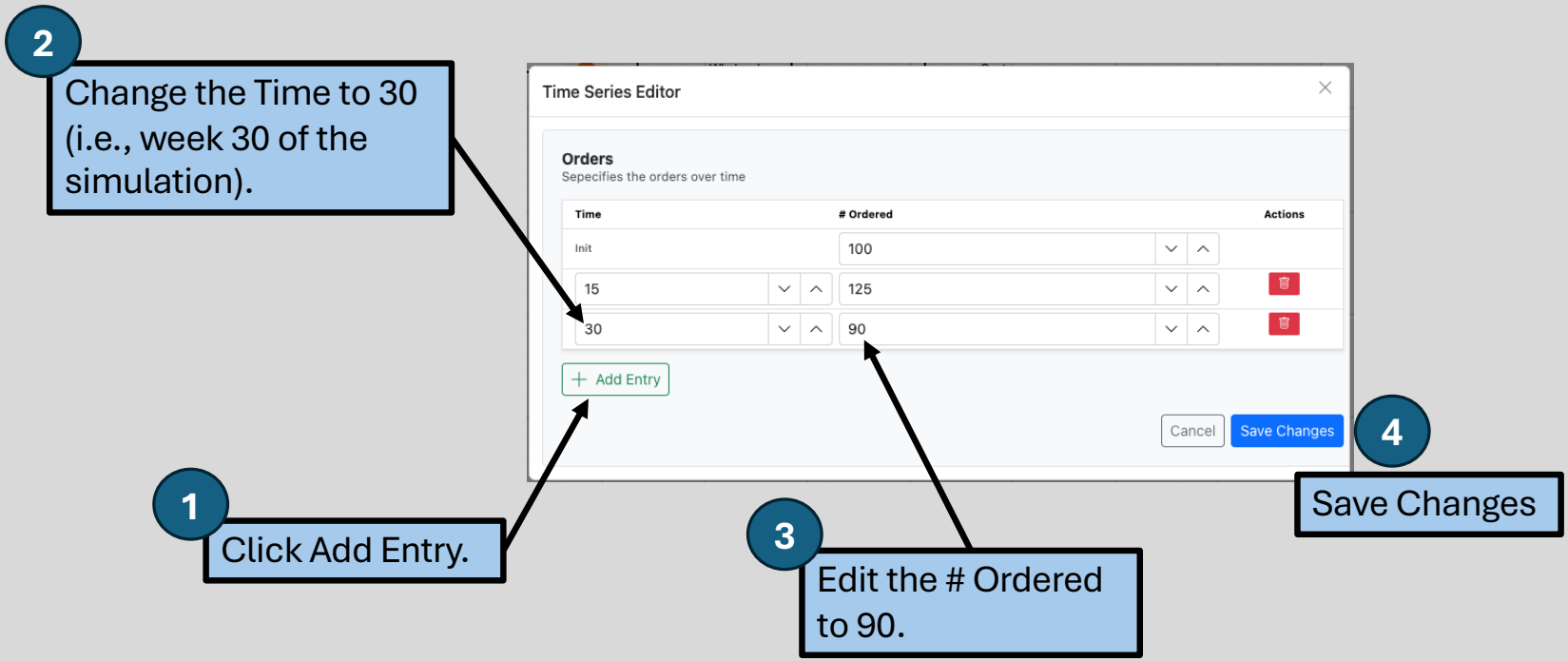
Return to your time series viewer tab and you will now see results.

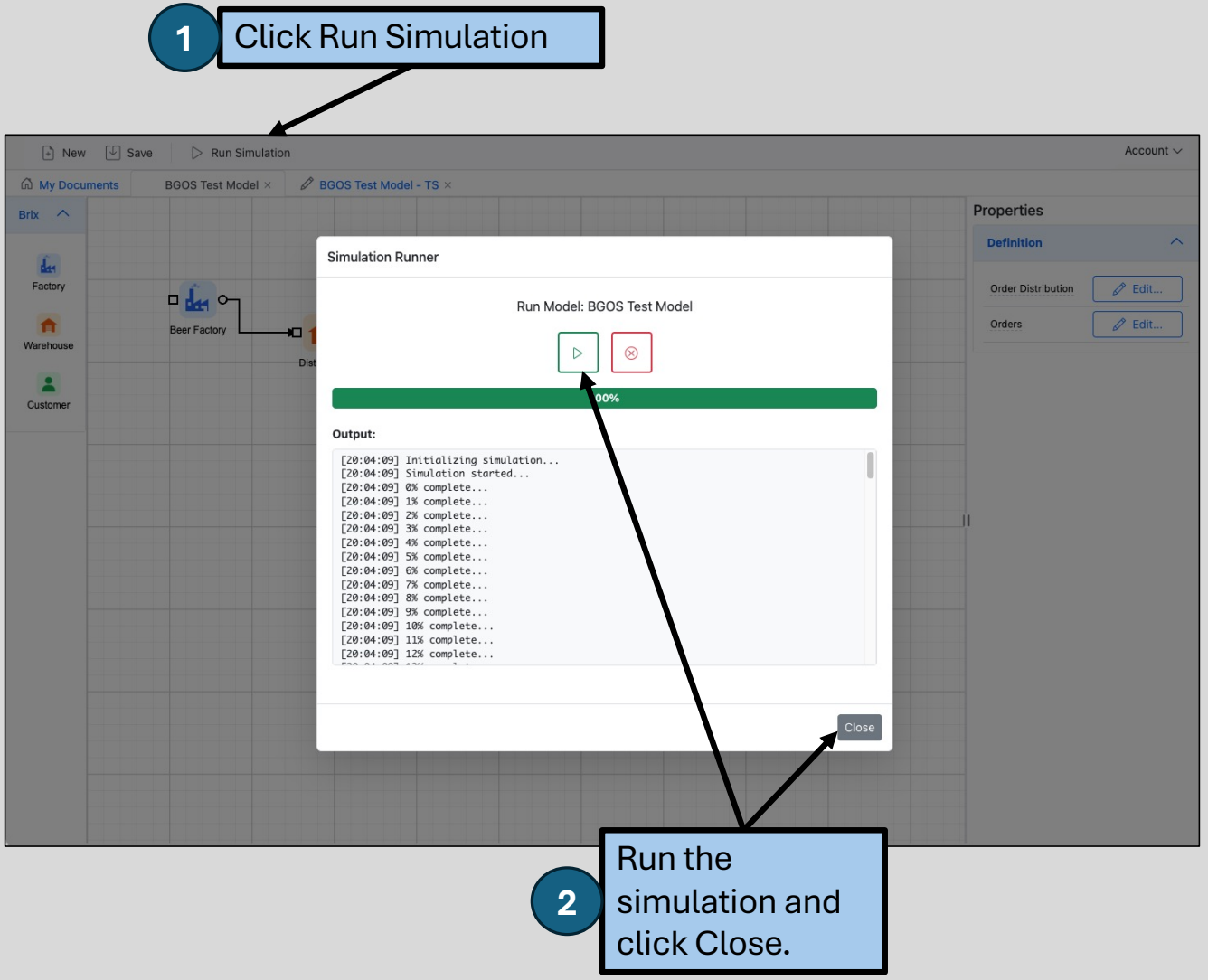


Let’s make another change to Customer *Orders* and see what that does.

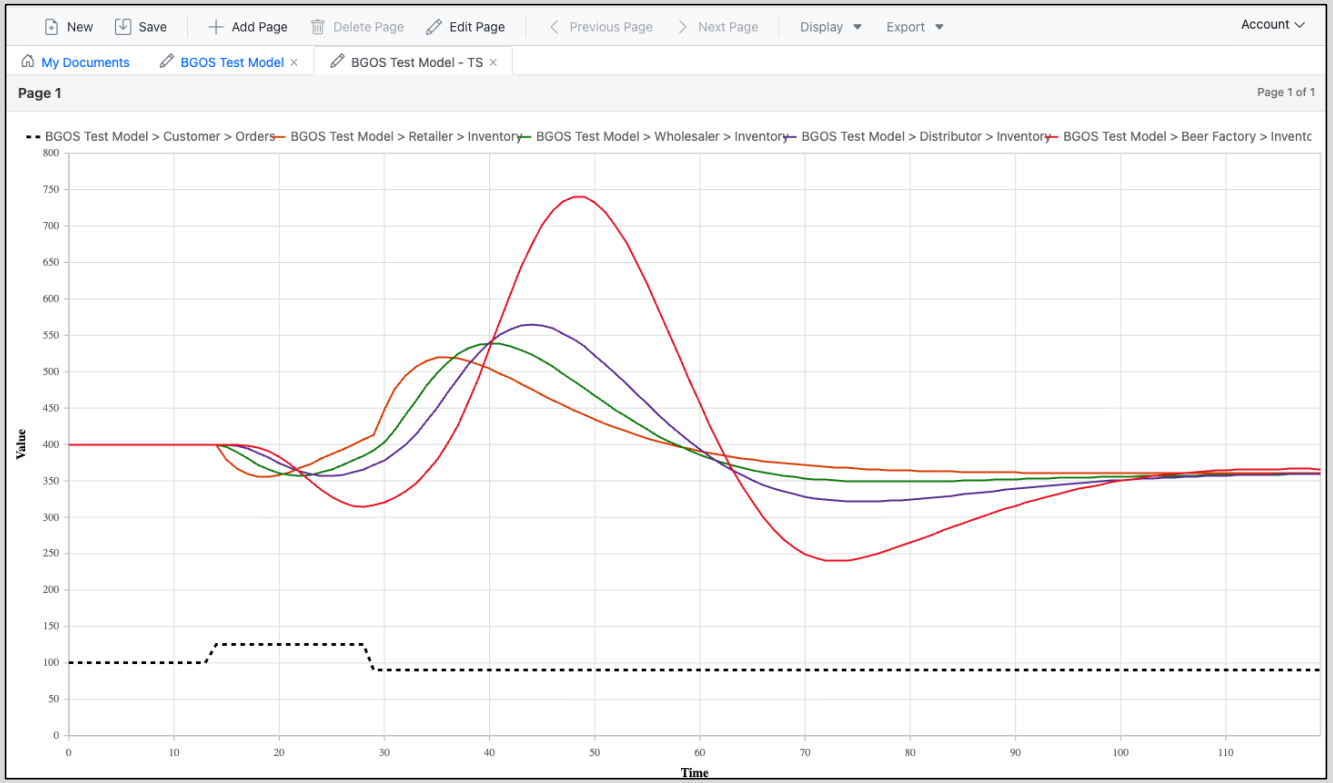
Return to your BGOS model tab and click on the Customer icon, then select Edit for the *Orders*.

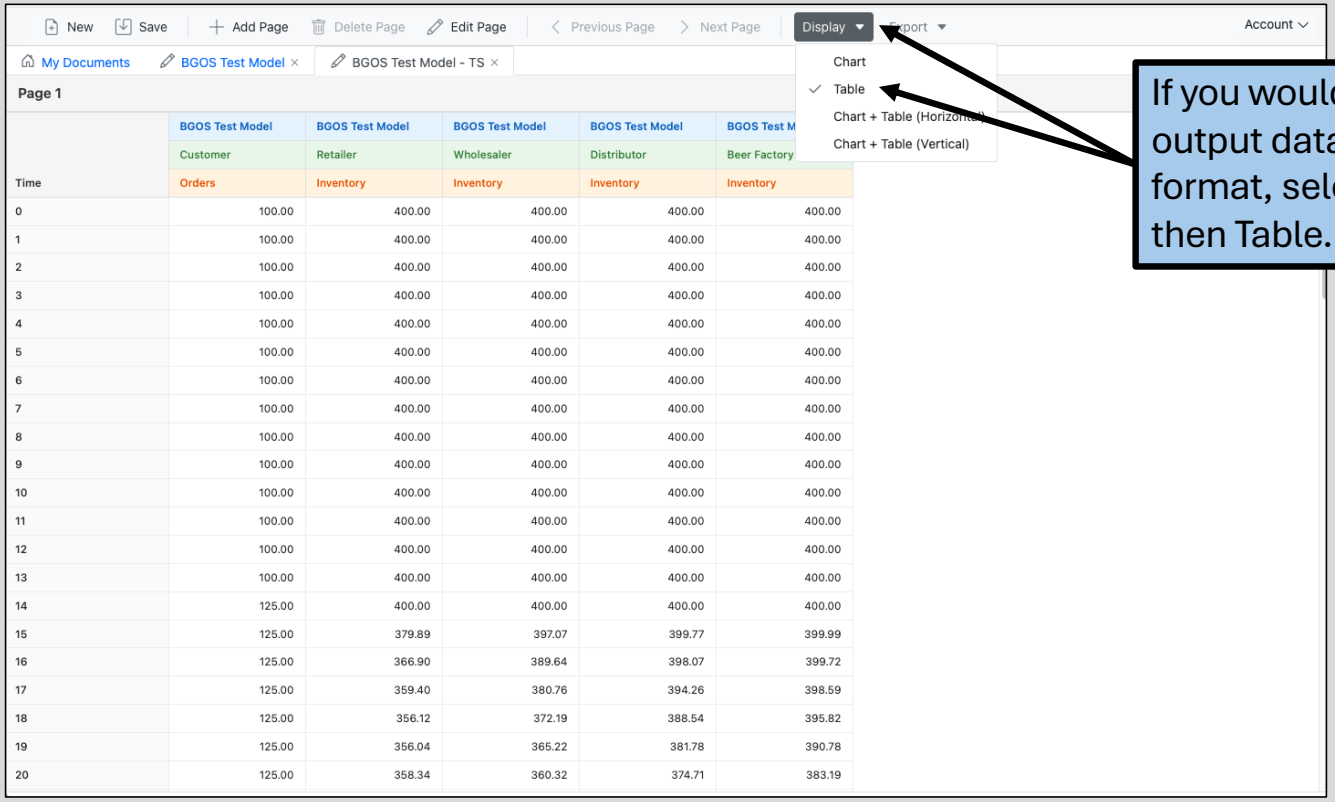



2
Change the Time to 30 (i.e., week 30 of the simulation).
Time Series Editor
Orders
Sepecifies the orders over time
Time
Ordered
Actions
Init
100
15
125
30
90
Add Entry
Cancel
Save Changes
4
Save Changes
1
Click Add Entry.
3
Edit the # Ordered to 90.

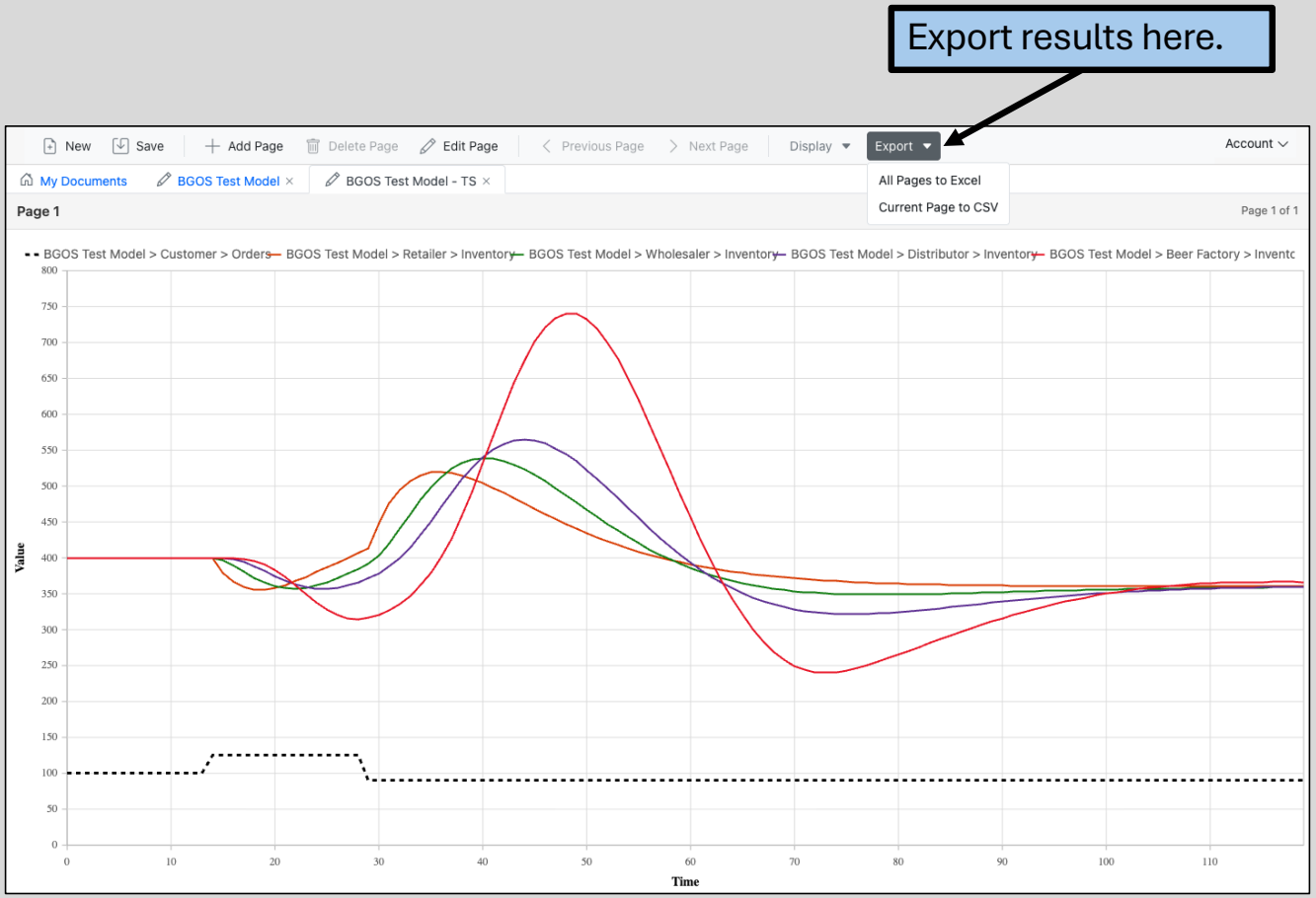

1
Click Run Simulation
New
Save
Run Simulation
Account
My Documents
BGOS Test Model
BGOS Test Model - TS
Brix
Factory
Warehouse
Customer
Beer Factory
Simulation Runner
Run Model: BGOS Test Model
00%
Output:
[20:04:09] Initializing simulation...
[20:04:09] Simulation started...
[20:04:09] 0% complete...
[20:04:09] 1% complete...
[20:04:09] 2% complete...
[20:04:09] 3% complete...
[20:04:09] 4% complete...
[20:04:09] 5% complete...
[20:04:09] 6% complete...
[20:04:09] 7% complete...
[20:04:09] 8% complete...
[20:04:09] 9% complete...
[20:04:09] 10% complete...
[20:04:09] 11% complete...
[20:04:09] 12% complete...
Close
Properties
Definition
Order Distribution
Edit...
Orders
Edit...
2
Run the simulation and click Close.

Return to your time series viewer tab and you will see the new results.





	BGOS Test Model	BGOS Test Model	BGOS Test Model	BGOS Test Model	BGOS Test M
	Customer	Retailer	Wholesaler	Distributor	Beer Factory
Time	Orders	Inventory	Inventory	Inventory	Inventory
0	100.00	400.00	400.00	400.00	400.00
1	100.00	400.00	400.00	400.00	400.00
2	100.00	400.00	400.00	400.00	400.00
3	100.00	400.00	400.00	400.00	400.00
4	100.00	400.00	400.00	400.00	400.00
5	100.00	400.00	400.00	400.00	400.00
6	100.00	400.00	400.00	400.00	400.00
7	100.00	400.00	400.00	400.00	400.00
8	100.00	400.00	400.00	400.00	400.00
9	100.00	400.00	400.00	400.00	400.00
10	100.00	400.00	400.00	400.00	400.00
11	100.00	400.00	400.00	400.00	400.00
12	100.00	400.00	400.00	400.00	400.00
13	100.00	400.00	400.00	400.00	400.00
14	125.00	400.00	400.00	400.00	400.00
15	125.00	379.89	397.07	399.77	399.99
16	125.00	366.90	389.64	398.07	399.72
17	125.00	359.40	380.76	394.26	398.59
18	125.00	356.12	372.19	388.54	395.82
19	125.00	356.04	365.22	381.78	390.78
20	125.00	358.34	360.32	374.71	383.19


Export results here.
New
Save
Add Page
Delete Page
Edit Page
Previous Page
Next Page
Display
Export
Account
All Pages to Excel
Current Page to CSV
My Documents
BGOS Test Model
BGOS Test Model - TS
Page 1
Page 1 of 1
BGOS Test Model > Customer > Orders
BGOS Test Model > Retailer > Inventory
BGOS Test Model > Wholesaler > Inventory
BGOS Test Model > Distributor > Inventory
BGOS Test Model > Beer Factory > Inventc
Value
Time