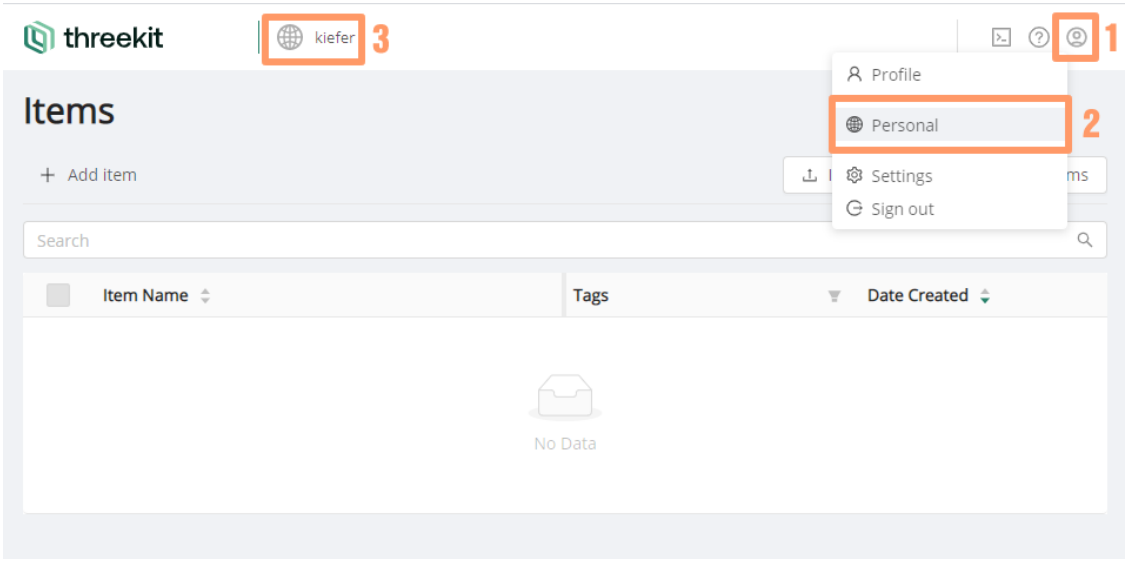
Threekit Platform Self-Guided Training

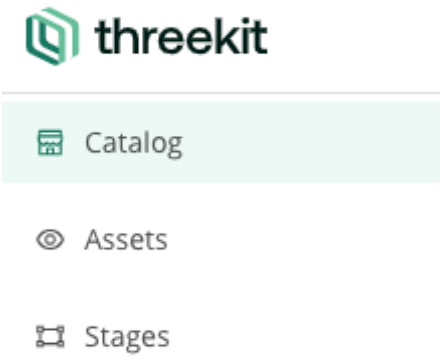
Last updated: April 14, 2021

Accessing the Threekit Platform

1.) **Sign up** via the invitation you received via email
2.) Once **signed in**, select **Personal**
    a.) Confirm the organization you are in by looking at the upper-left globe icon. Your personal one should reflect your username
    b.)



Exercise 1 - Simple Box Configurator

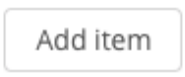


A.) Navigate to your Personal Org in Threekit

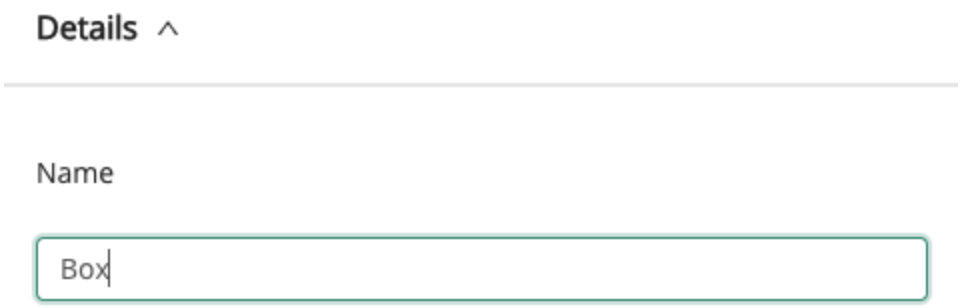
B.) Create the Catalog Item for the Box

Click on “Catalog” in the left-hand sidebar.
NOTE: If you do not see the sidebar, widen your browser window.

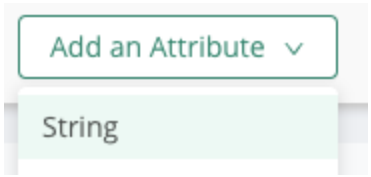
Click “Add Item”



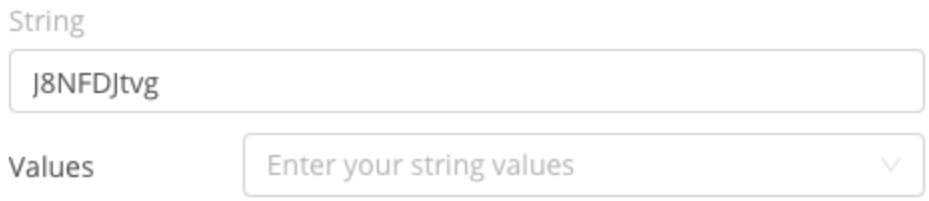
Name your item “box”. No description is necessary for the practice object.



Under "Attributes" click "Add an Attribute" and select the option "String"

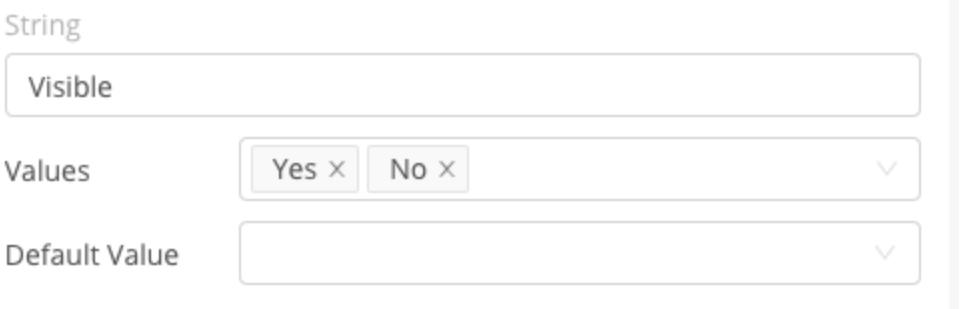


This will generate a new box with the lines "String" and "Values." Initially you will get a random placeholder in the string field.

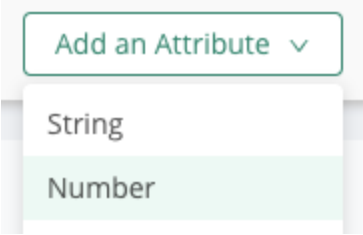


Think of "String" like the name of the attribute. In the box next to "String" type in "Visible"

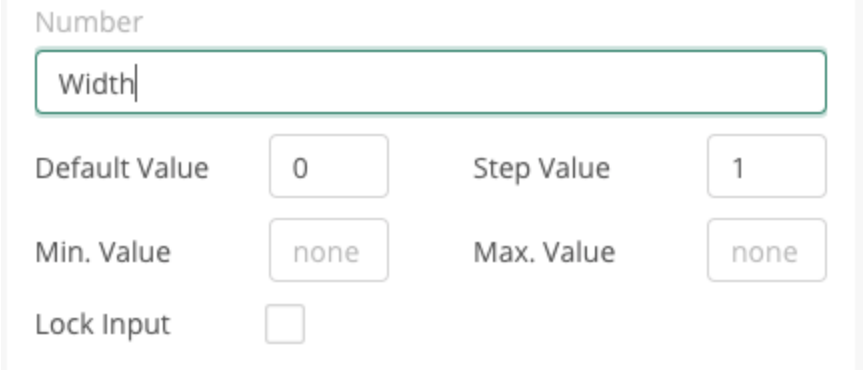
In the box next to "Values" type in "Yes" and press enter (return), then type in "No" and press enter (return). That will give the two different options as values to select from later. By entering the values this way it changes the "string" into a "drop-down" style menu when viewed in the interface. Select a default value of your choice.



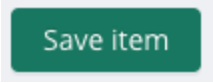
Click “Add Attribute” again to create an attribute with a type of “number”



Name this attribute “width.”

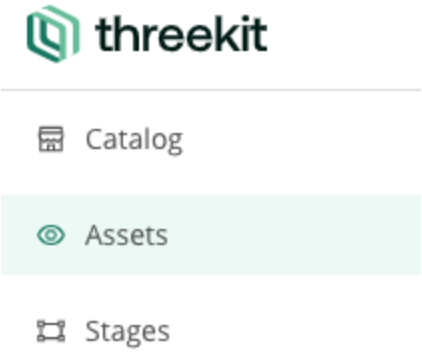


Click “Save Item” at the bottom

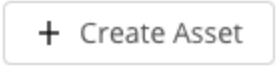


C.) Create corresponding 3D Asset

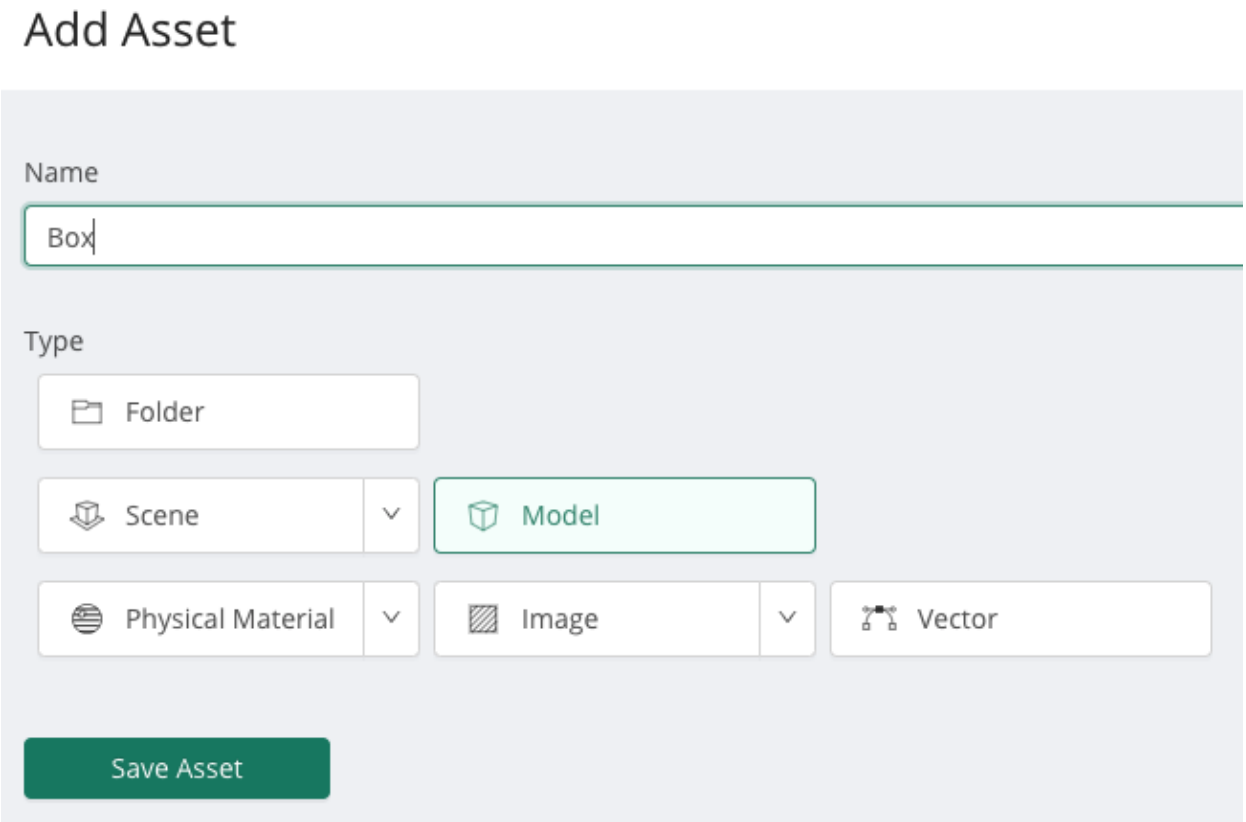
Click on “Assets” in the left-hand sidebar.



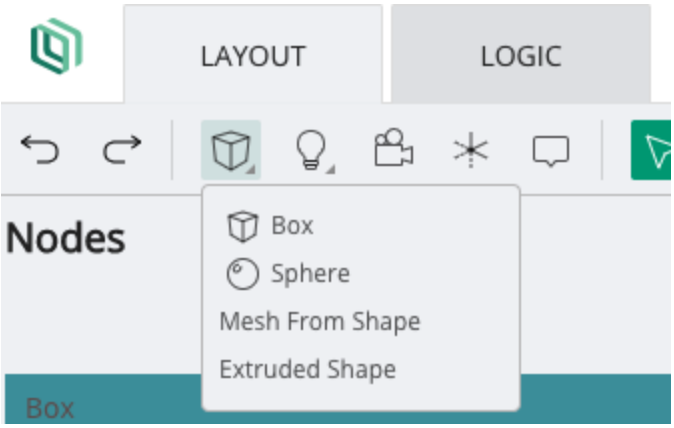
Click “Create Asset”



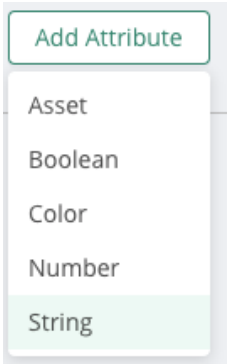
Name your asset “Box” then select “Model” and click “Save Asset”



In the upper left, click on the box icon, then select “box” to add a default box to the editor.

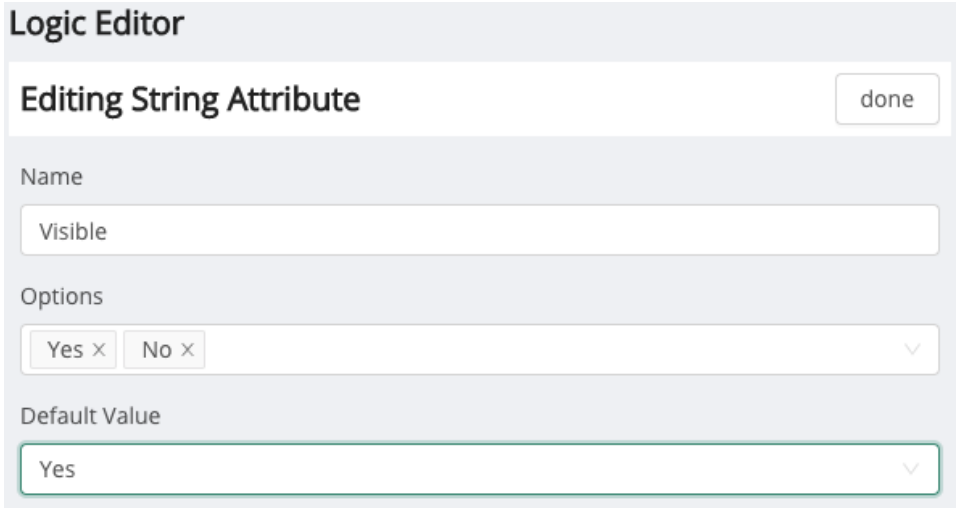


Click on the “LOGIC” tab at the top of the screen.
Click “Add Attribute” and select “String.”

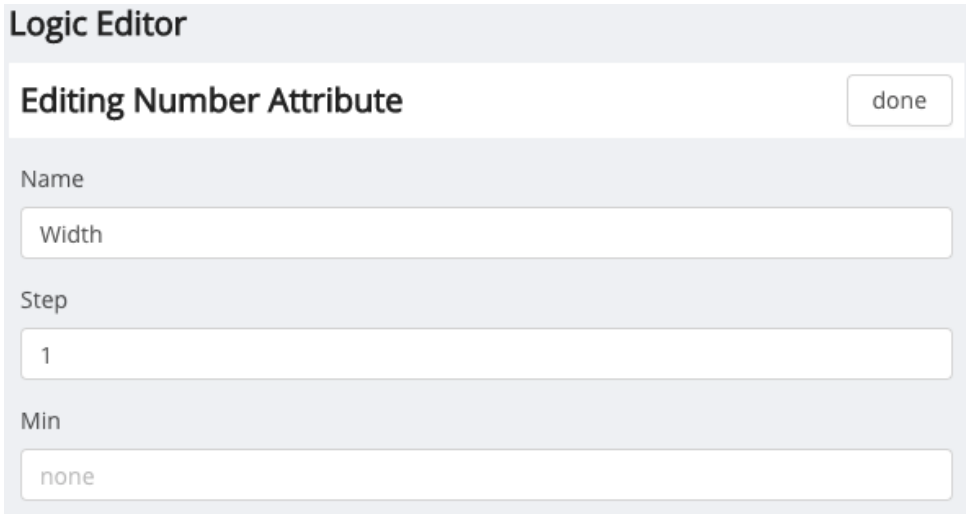


Add **exactly** the same attributes as we did when creating the item above.
This field is case sensitive.

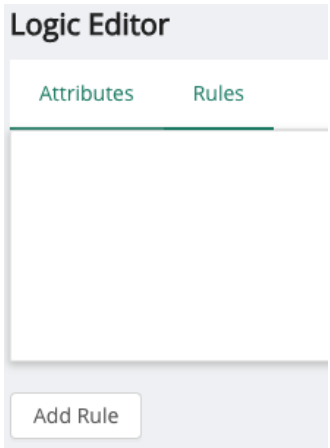
Name: “Visible” Values: “Yes” “No” Default Value: “Yes” [or “No”, your choice]



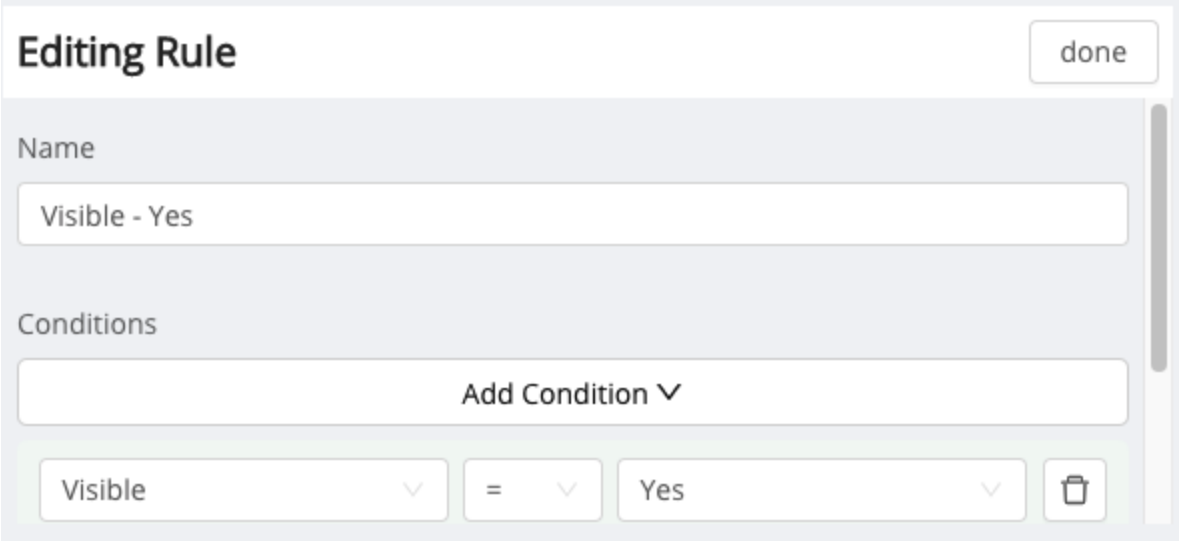
Click “done”
Click “Add Attribute” again, select “Number”, and add the “Width”
“Step” and “Min” are optional.



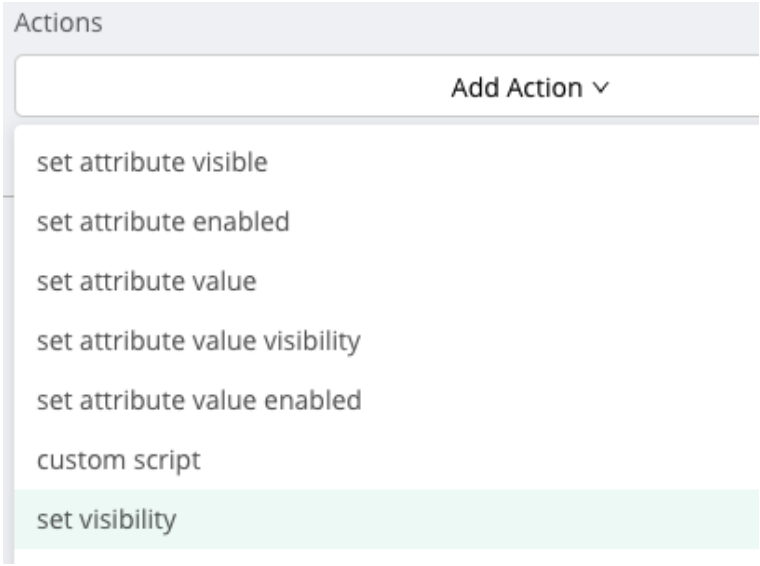
Click “Rules” then “Add Rule”



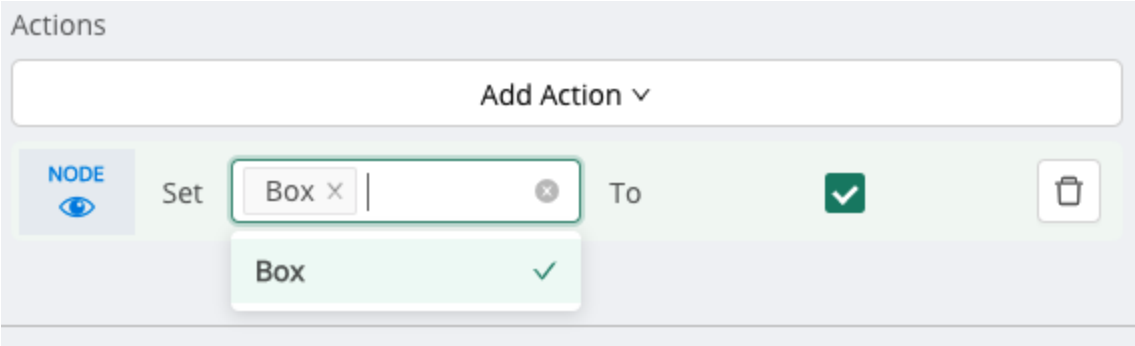
Click “Add Rule” and name it “Visible - Yes”
Click “Add Condition” and set the values: “Visible” “=” “Yes”



Scroll down if needed and click “Add Action” and select “set visibility”

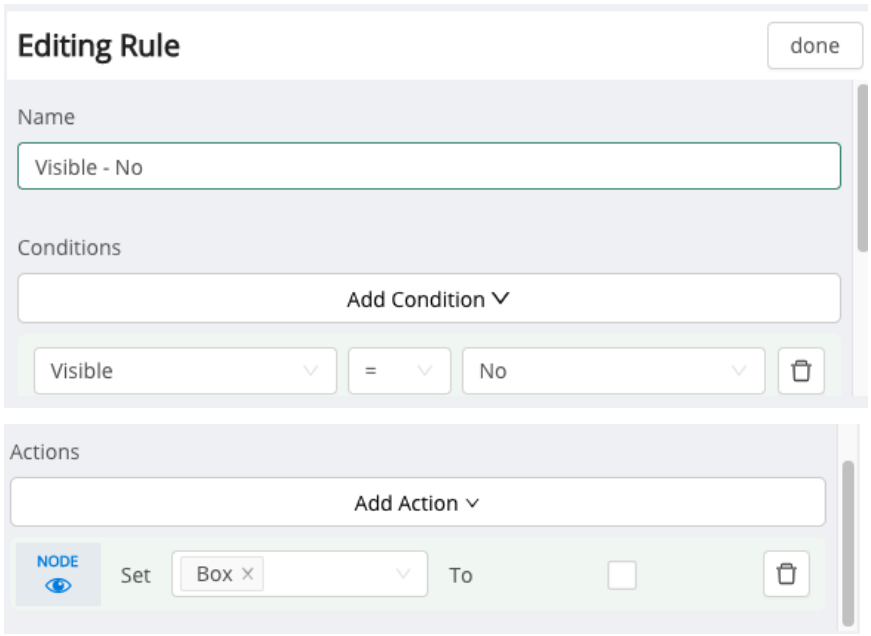


Select “Box” from the dropdown and check the box to set the value to *true*.



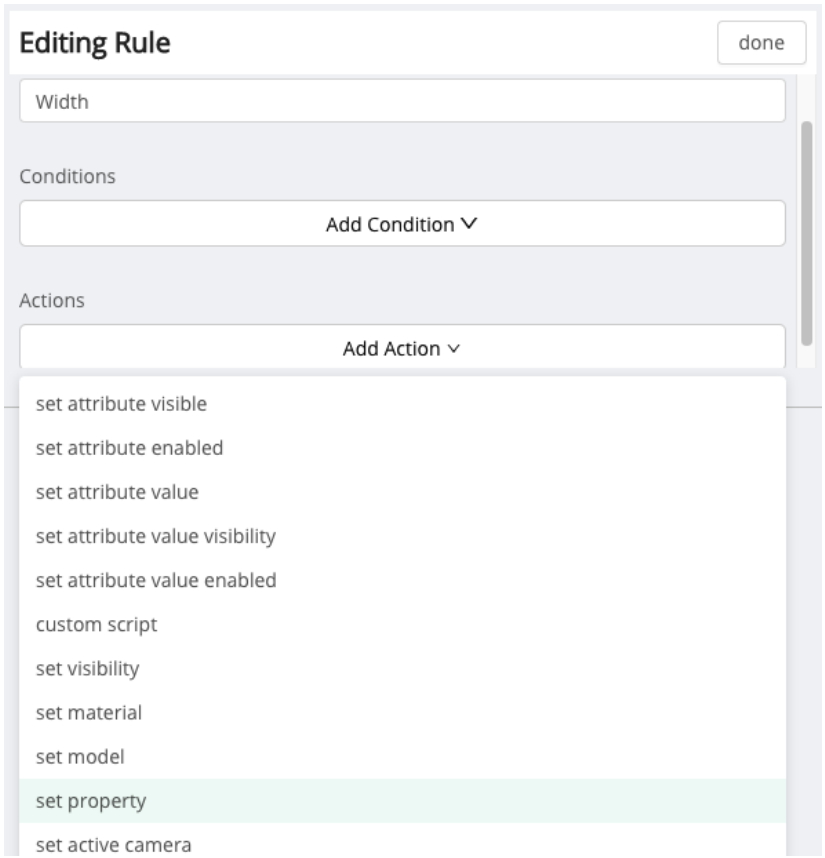
Click “done”

Create a second rule setting the opposite condition for when “Visible” is false.

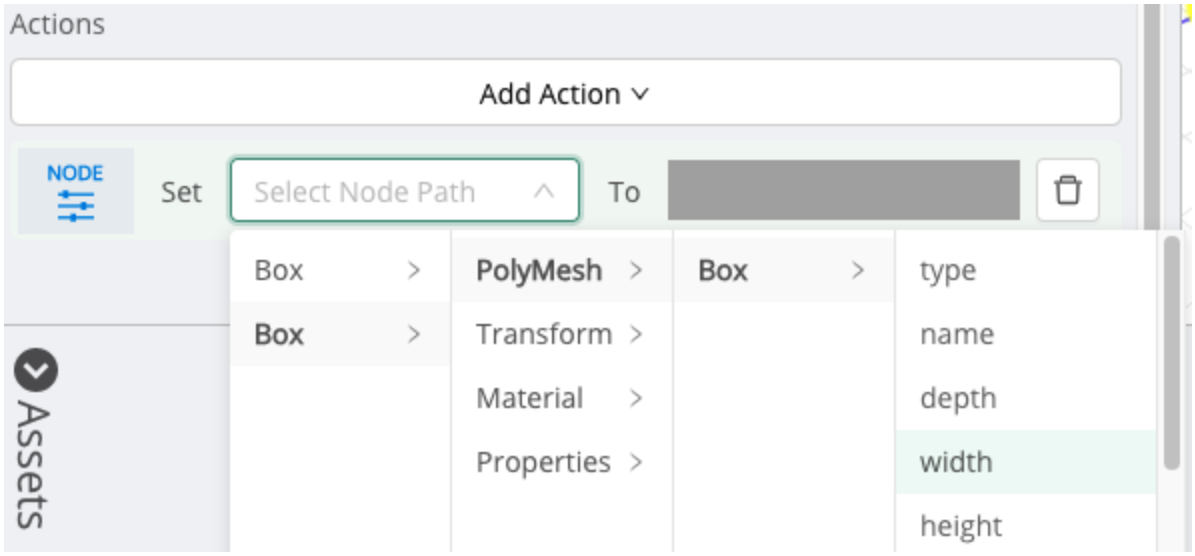


Note: To set the action to *false*, leave the box unchecked.

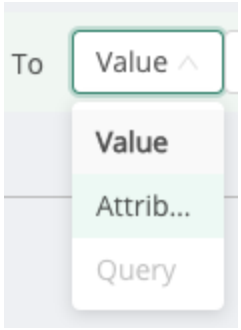
Add another rule for “Width” Under “Add Action” select “set property” (No conditions.)



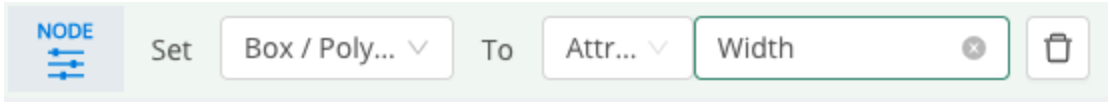
From the left-hand drop-down select the path for *Box -> PolyMesh -> Box -> width*
(You may see two options, but only one will have “PolyMesh” in the second column.)



From the “To” dropdown select “Attribute”



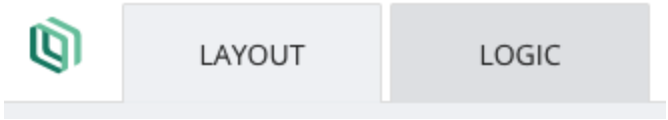
Because we only have one attribute created, it will automatically populate “Width.” If you have more than one attribute, you may select from the dropdown menu.



Click “done.”

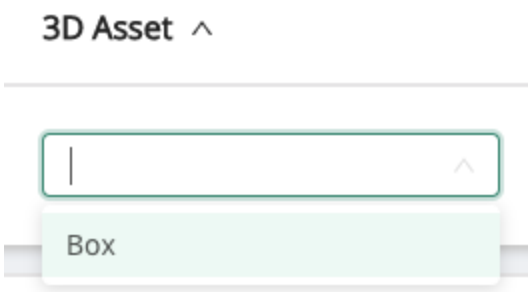
D.) Associate 3D Asset to Box Catalog item

Click the Threekit icon in the upper left corner to return to the “Catalog” view.



Click on the “Box” item. Then click “Edit”

On the right-hand side, in the “3D Asset” box, click the dropdown and select “Box”



Click “Save Item” at the bottom.

E.) Test Configurator in the Box Catalog item

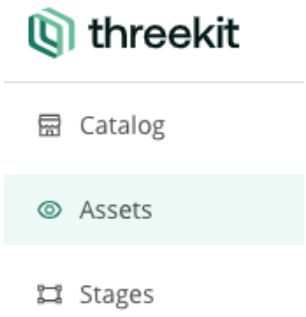
You should now see your box appear in the preview window. Notice how the dimensions change if you change the value of “Width” on the right hand side.
Note: You may need to refresh your browser window to re-initialize the configurator.

Exercise 2 - Wheel Configurator #1

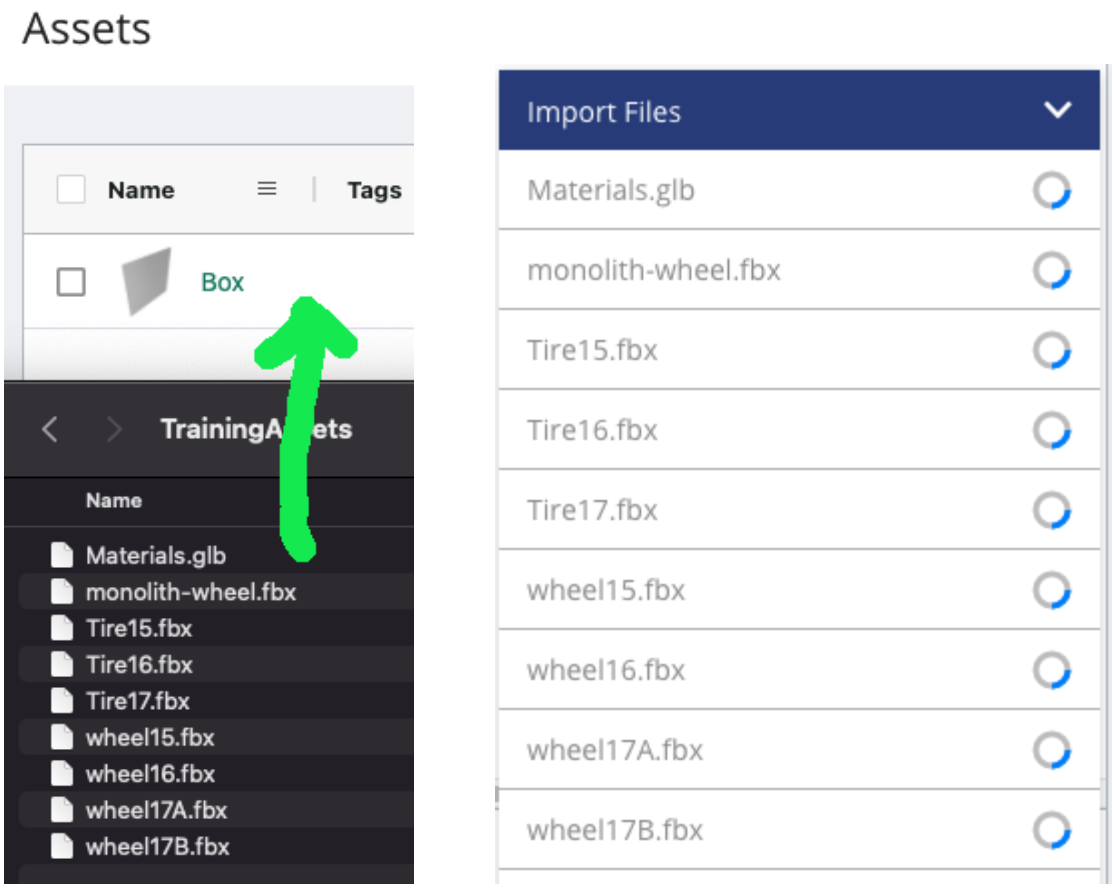
A.) Import *TrainingAssets* from *Threekit Platform > Step B*

If you haven't already, unzip the assets to your local computer.

Click "Assets" in the left-hand menu.



Click and drag the extracted files from your computer into the "Assets" window. You will see a progress window appear in the lower right corner.



Notice when you import those 10 files, they will be split into multiple asset objects within Threekit.

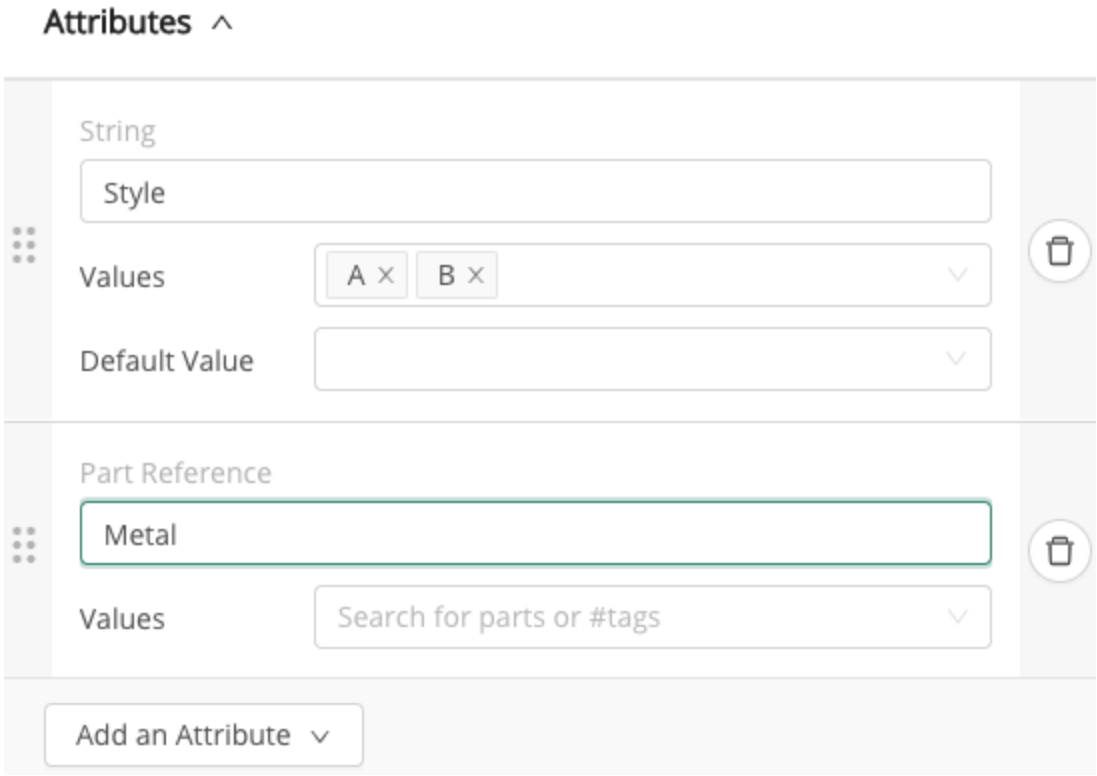
B.) Create necessary Catalog Items

Click on “Catalog” in the left-hand menu.

Click “Add Item” and name it “Wheel Configurator #1”

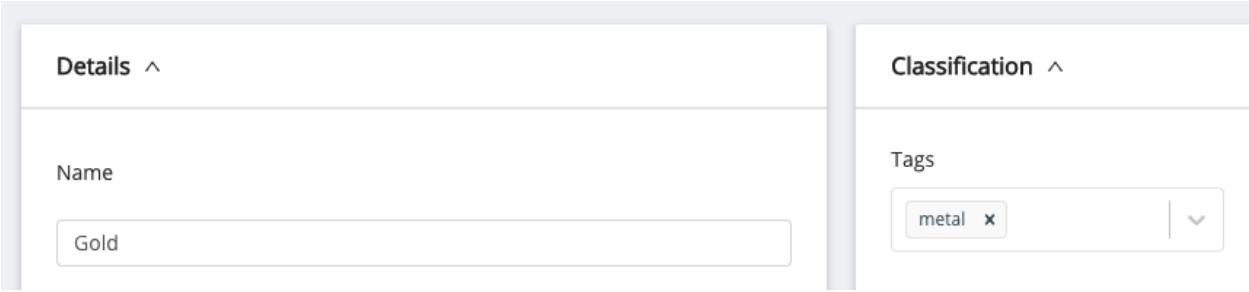
Click “Add Attribute” select type “string” and name it “Style” Assign the values “A” and “B”

Click “Add Attribute” select type “Part Reference” and name it “Metal”

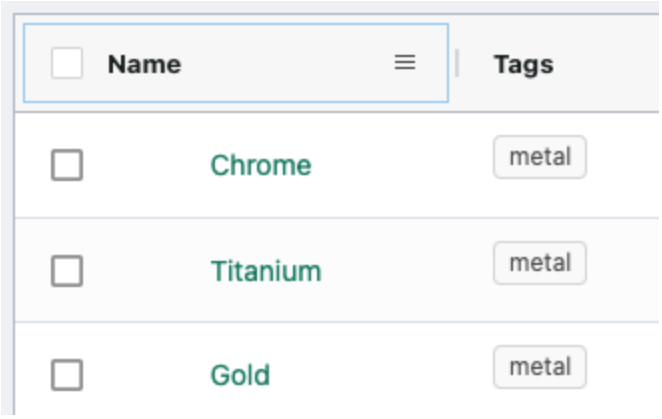


Save the item.

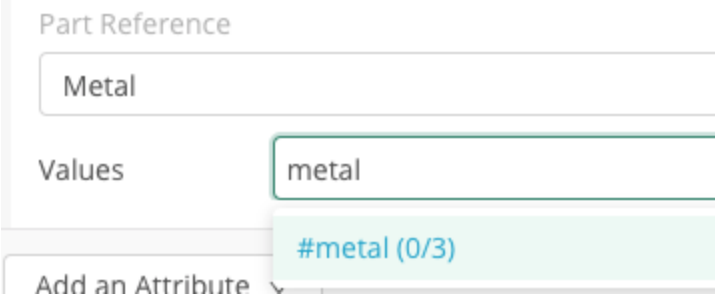
Add another Item named “Gold”
In the edit mode, locate the “Classification” box on the right-hand side. In the tags drop-down type in “metal” and press enter (return).



Repeat this process to create item listings for “Titanium” and “Chrome”
Note: Since we’ve created the “metal” tag once, it will now appear in the “Tags” dropdown list.



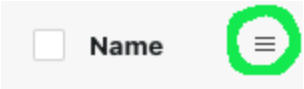
Click on the “Wheel Configurator #1” item created earlier. Click “Edit” in the upper right corner. In the “Attributes” box, locate the “Part Reference” field created earlier. In the “Values” box, type “#metal”



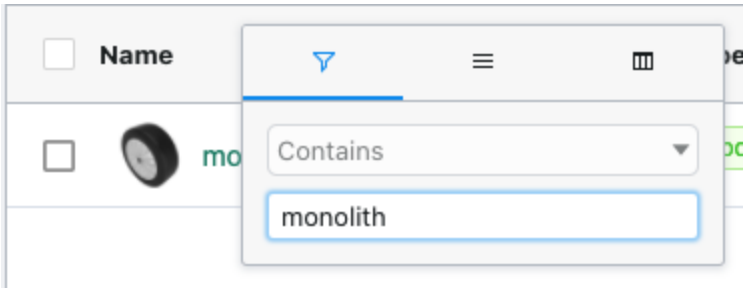
Notice it will display a total number of objects included in the category when you add the tag, in this case “(0/3)”.

C.) Create Assets to Support the Wheel Configurator #1 Catalog Item

Click on “Assets”
Click the three lines (hamburger icon) next to “Name” at the top.

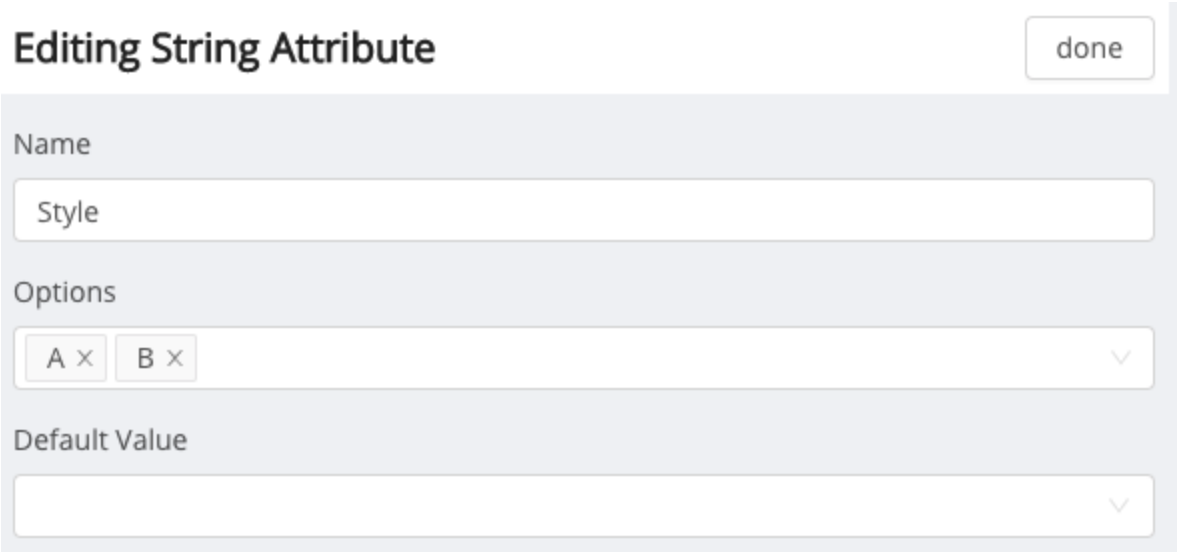


Type “monolith” into the search.

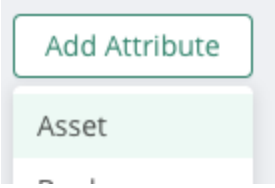


Click on “monolith-wheel.fbx” in the list. (You may need to click on the filter icon in blue to close the search window first.)
Click “Launch editor”

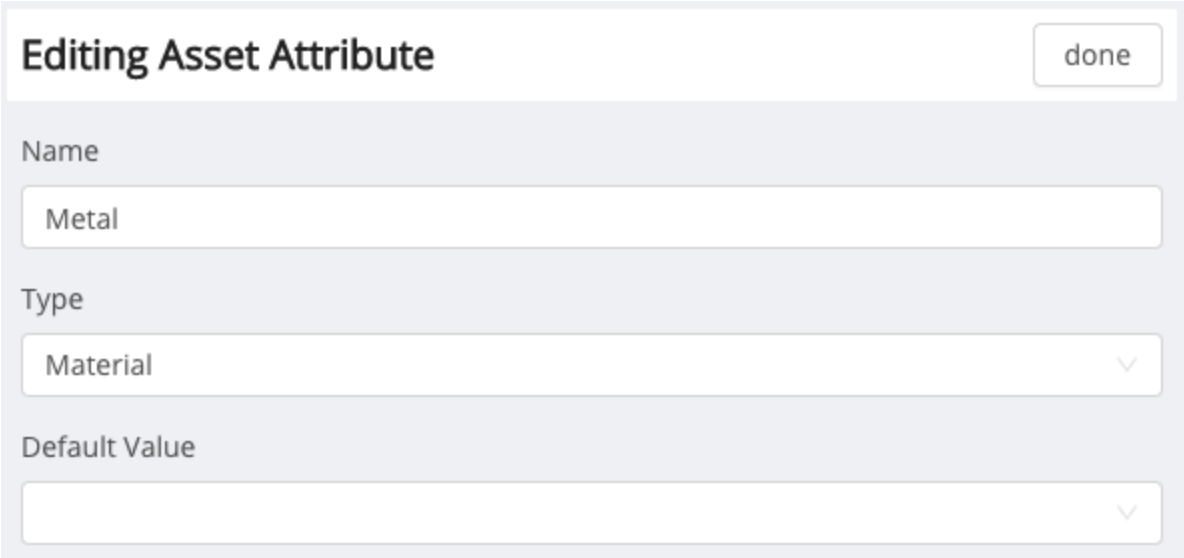
Click the “LOGIC” tab.
Add a string attribute for “Style” set options for “A” and “B” Select a default value of your choice.



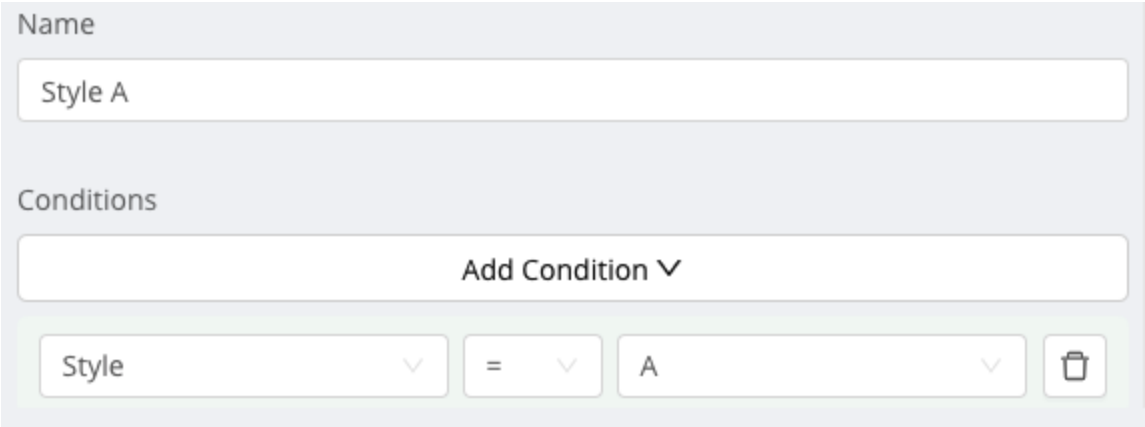
Click “Add Attribute” again and select “Asset”



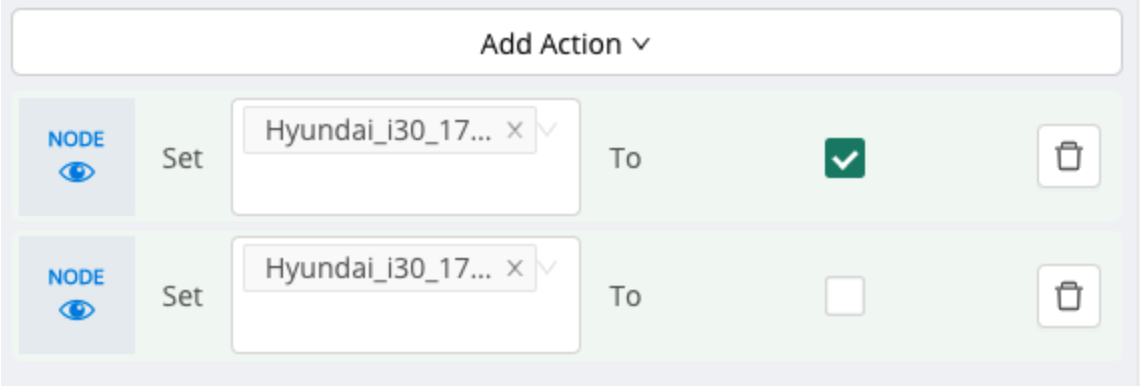
Name the attribute “Metal” and select a type of “Material” from the drop down. Select a default value of your choice.



Click on “Rules”
Click “Add Rule” and name it “Style A”
Add a condition set: “Style” “=” “A”



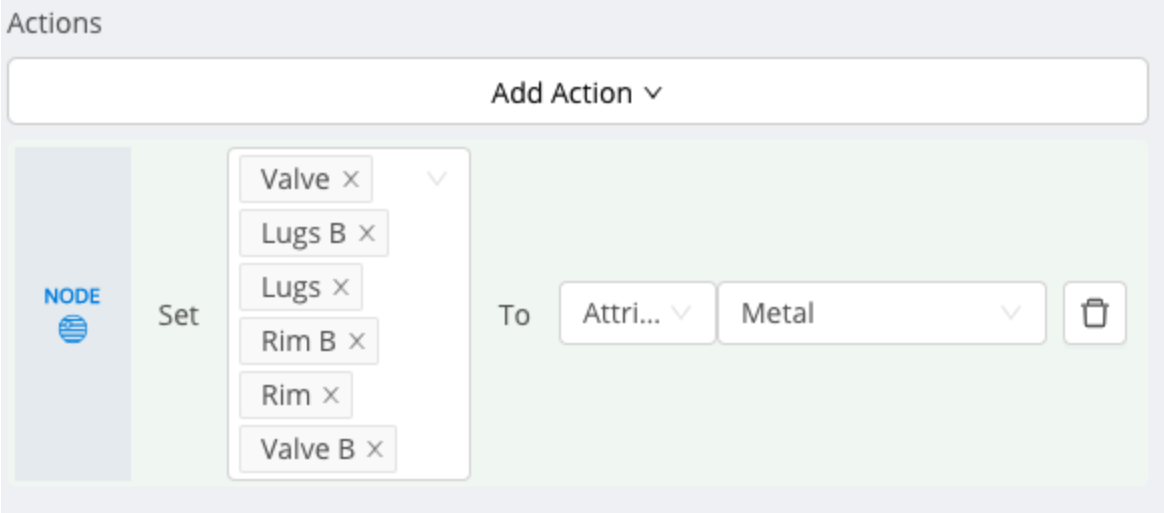
Add an action “set visibility” “Hyundai_i30_17_inch_A” to true (check the box)
Add an action “set visibility” “Hyundai_i30_17_inch_B” to false (leave unchecked)
Note: If you cannot see the entire name in the drop down, hover over it and a popup will appear.



Click “done”

Add another rule named “Style B” for the reverse condition.

Add a third rule named “Set Metal” (No conditions.)
Click “Add Action” and select “set material”. Select Set: “Valve” “Lugs” “Rim” “Valve B” “Lugs B” and “Rim B” To “Attribute” “Metal”



Note: You may use the arrow toggle next to the “Assets” panel at the bottom to hide it so you have more screen space to view your actions. 

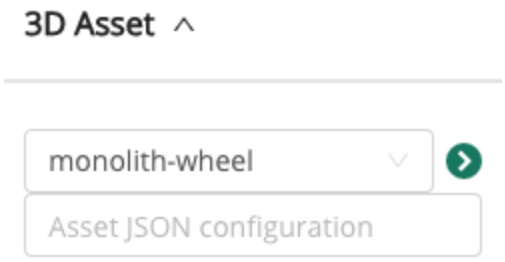
D.) Associate Assets to Catalog Items

Click the Threekit Logo to return to the “catalog” view

Click the “Gold” item created earlier. Click “Edit”
In the “3D Asset” window on the right side, select “Metal Gold”
(Hint: If you start typing the name it will filter the list for you.)

Repeat this process for “Titanium” and “Chrome”

Click “Wheel Configurator #1” in the item list. Click “Edit”
Select the “monolith-wheel” option in the 3D Asset box.

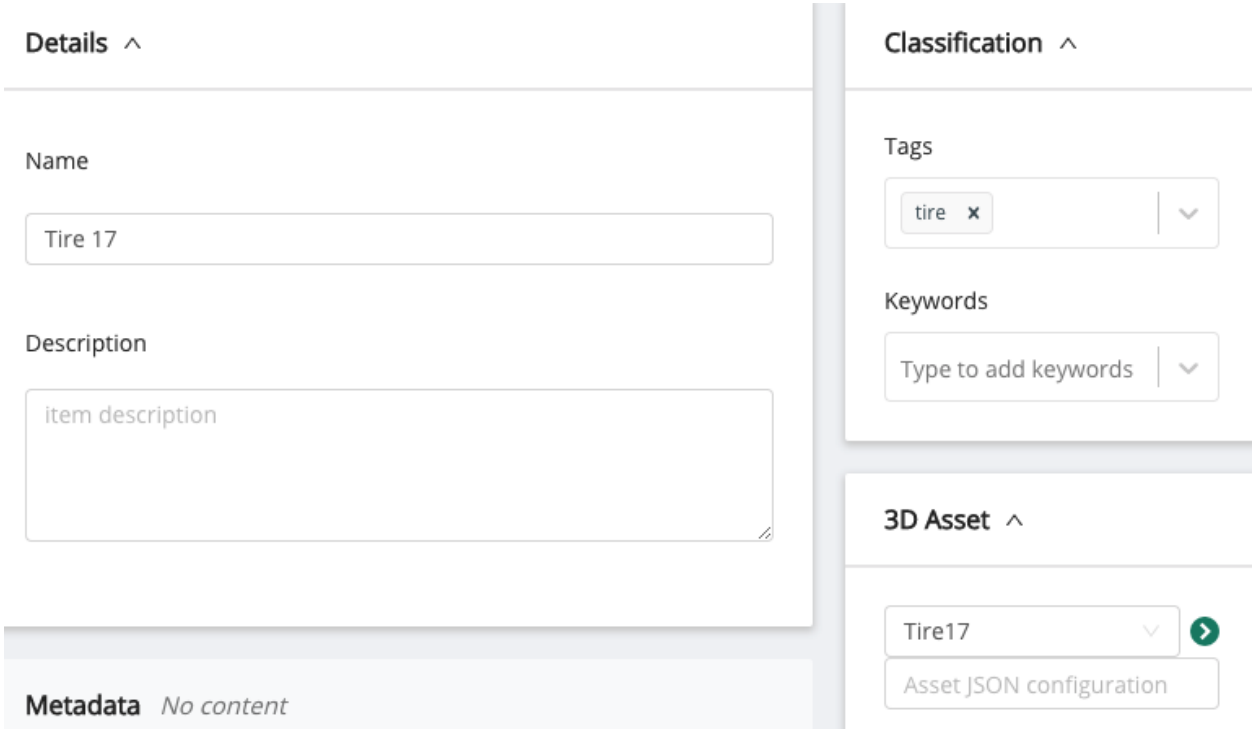


E.) Test Configurator in Wheel Configurator #1

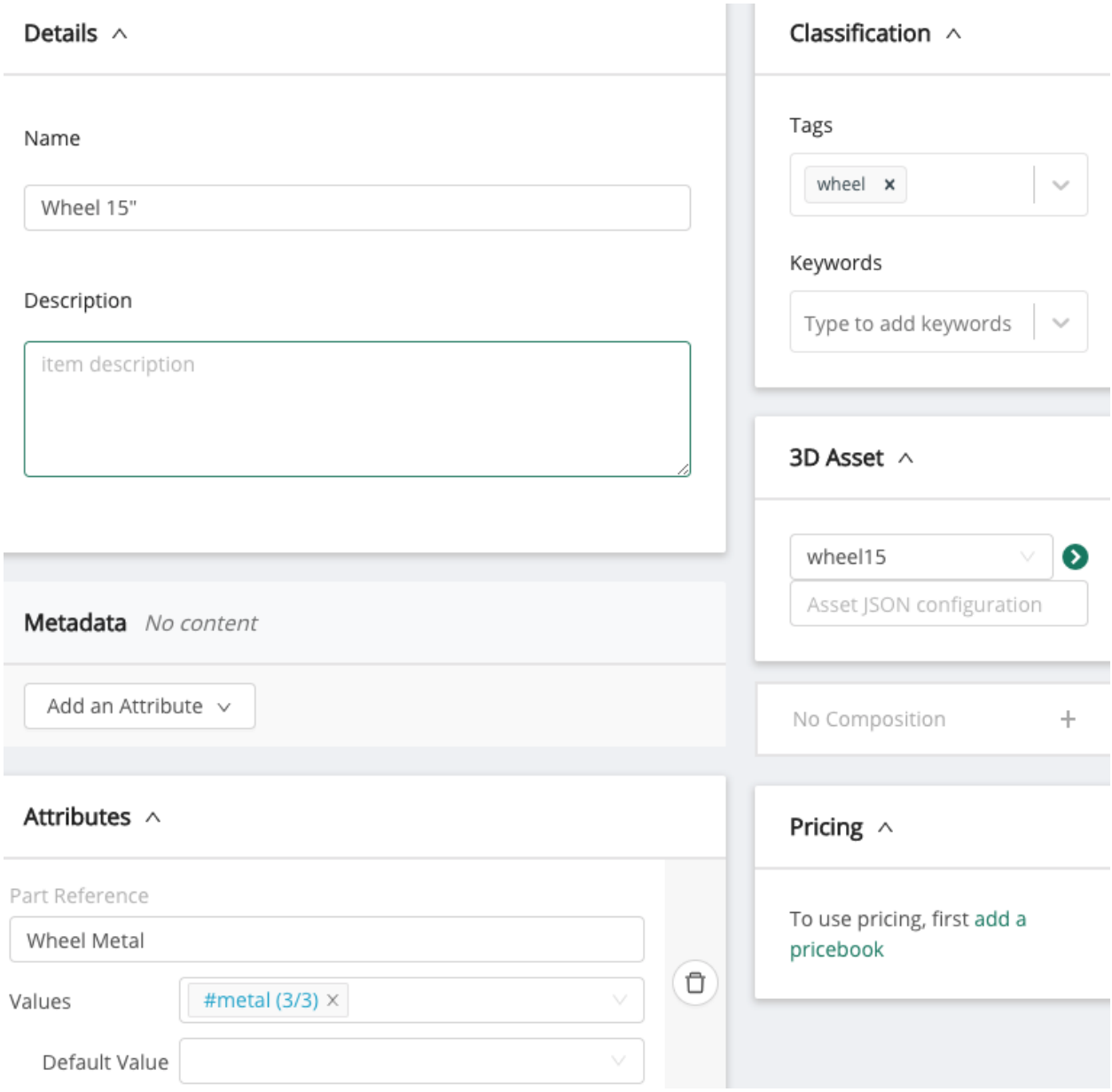
Exercise 3 - Wheel Configurator #2

A.) Create the Necessary Catalog Items

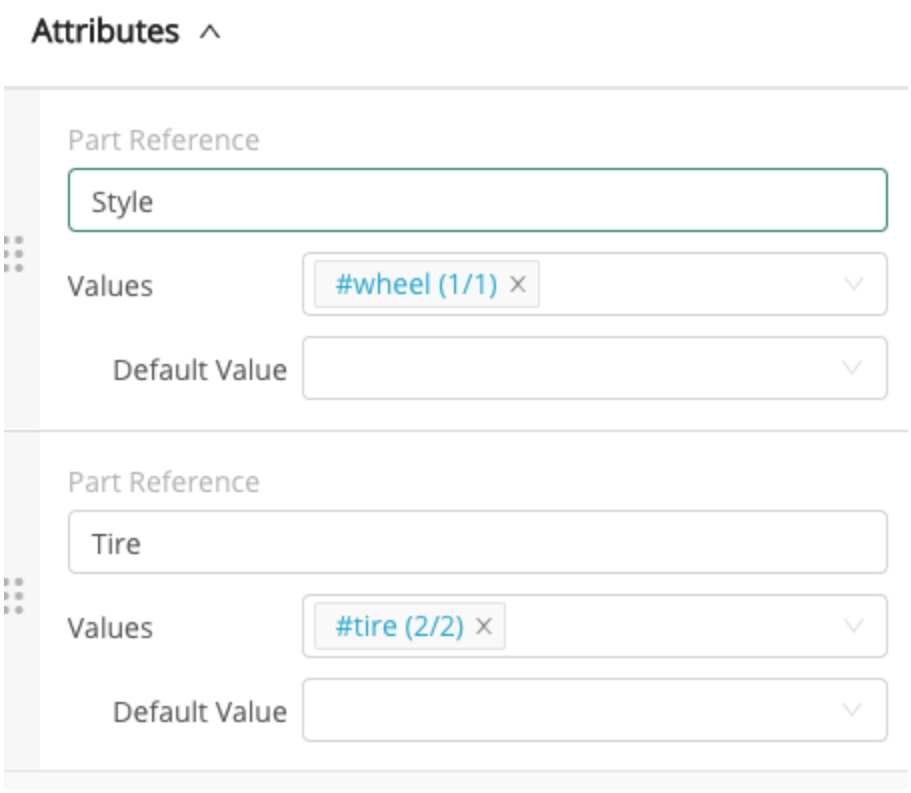
In the “Catalog” add three items named “Tire 15””, “Tire 16””, and “Tire 17”” (as in 15 inch, 16 inch, and 17 inch). For each, add the tag “tire” and assign the appropriately numbered tire in the “3D Asset” dropdown.



Return to the “Catalog” and add three more items named “Wheel 17” A”, “Wheel 17” B”, “Wheel 16””, “Wheel 15””.
For each:
Add the tag “wheel”.
In the “3D Asset” box, select the appropriate wheel option from the list (ex. “wheel17A”)
Add an attribute named “Wheel Metal” of type “Part Reference” with the value of “#metal”



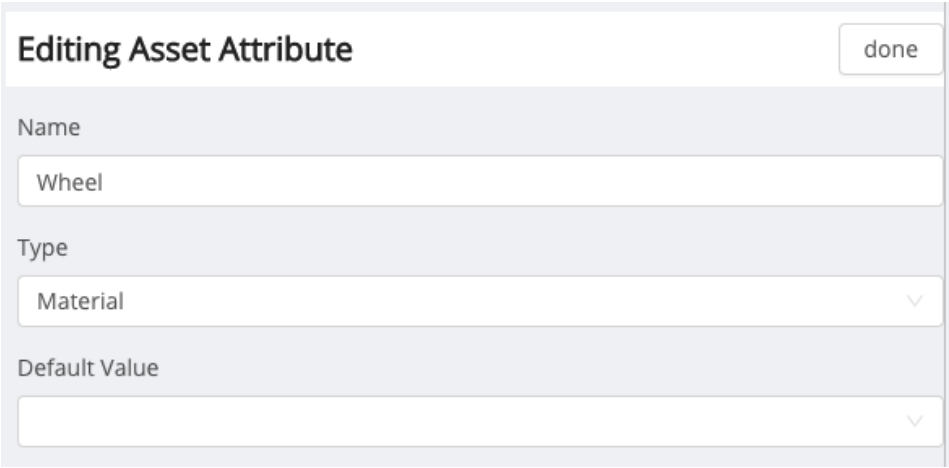
Add a new item with name “Wheel Configurator - Distributed with Nested Config”
Add a “Part Reference” attribute named “Style” with a value “#wheel”
Add a “Part Reference attribute named “Tire” with a value “#tire”



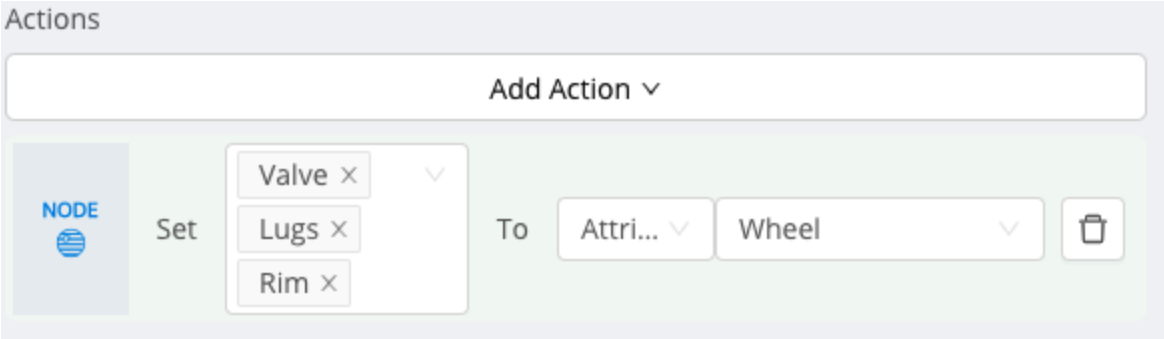
B.) Create Corresponding 3D Wheel Attributes/Rules

Note: If you previously searched (filtered) the results for monolith, you will need to return to the search window to remove your search before all your existing assets will display again.

In assets, **for each** “wheel15”, “wheel16”, “wheel17A”, and “wheel17B”, edit the logic to add “Asset” Attribute with name “Wheel Metal” and type “Material”



Rule with name “Set Wheel Metal” and action “set material” for “Valve”, “Lugs”, and “Rim” to “Attribute” “Wheel”

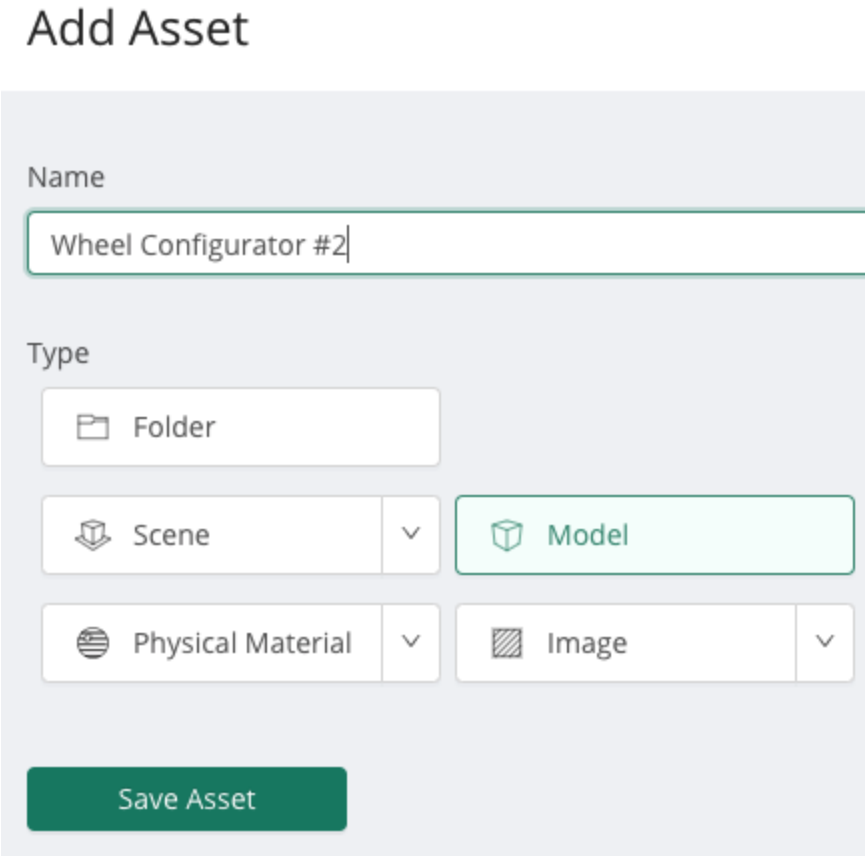


C.) Validate Wheel Metal is applying appropriately

Navigate to the Wheel 15” Catalog Item
Set varying values in the Wheel Metal Attribute (ie. ‘Chrome’, ‘Gold’, ‘Titanium’)
Repeat validation for ‘Wheel 17” A’, ‘Wheel 17” B’, ‘Wheel 16”’

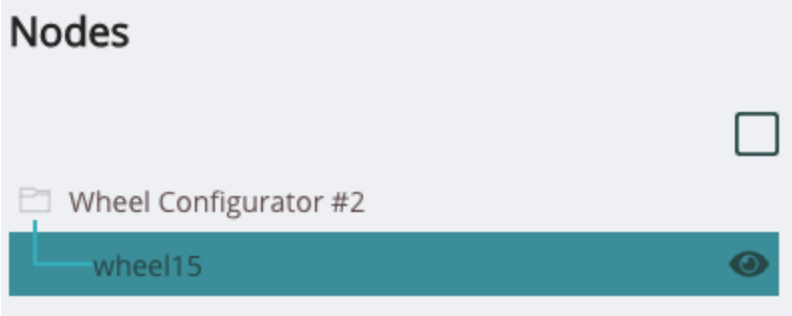
D.) Create the Asset for the Wheel Configurator - Distributed with Nested Config Catalog Item

In assets, create a new asset named “Wheel Configurator #2” of type “Model”



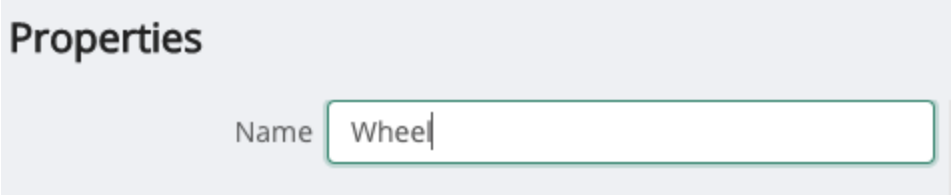
If you previously minimized it, click on the arrow to reopen the bottom “Assets” panel.

From the Asset Panel, drag “wheel15” onto the word “Wheel Configurator #2” in the “Nodes” panel on the left.

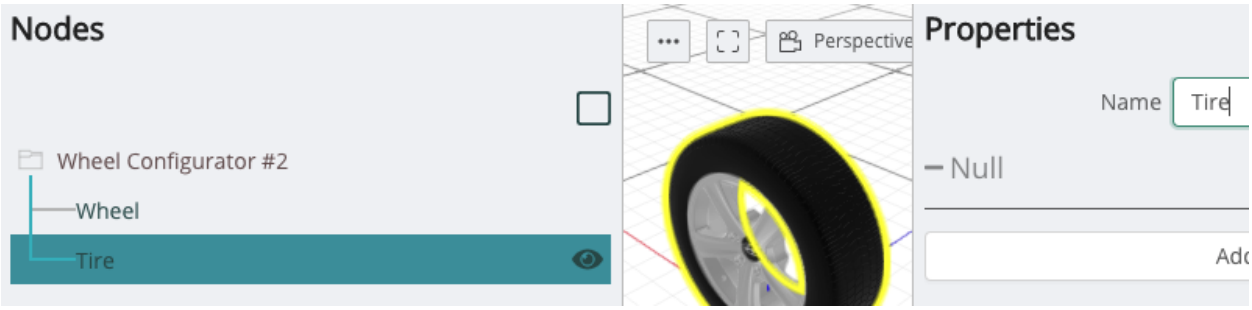


Note: You may need to click on the “Wheel Configurator #2” line to open the tree view.

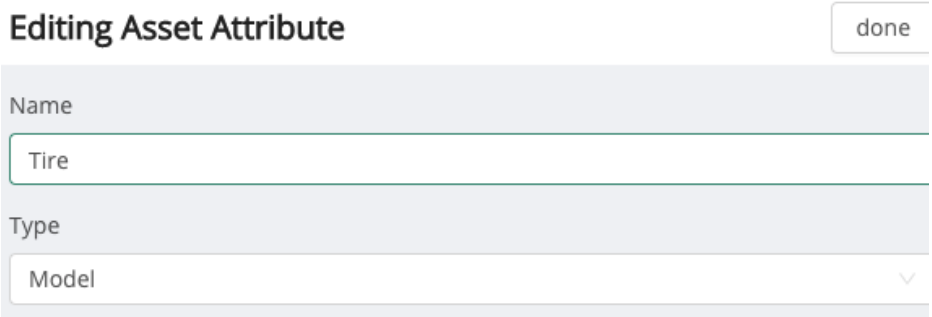
In the Properties Panel on the right, change the name to “Wheel”.



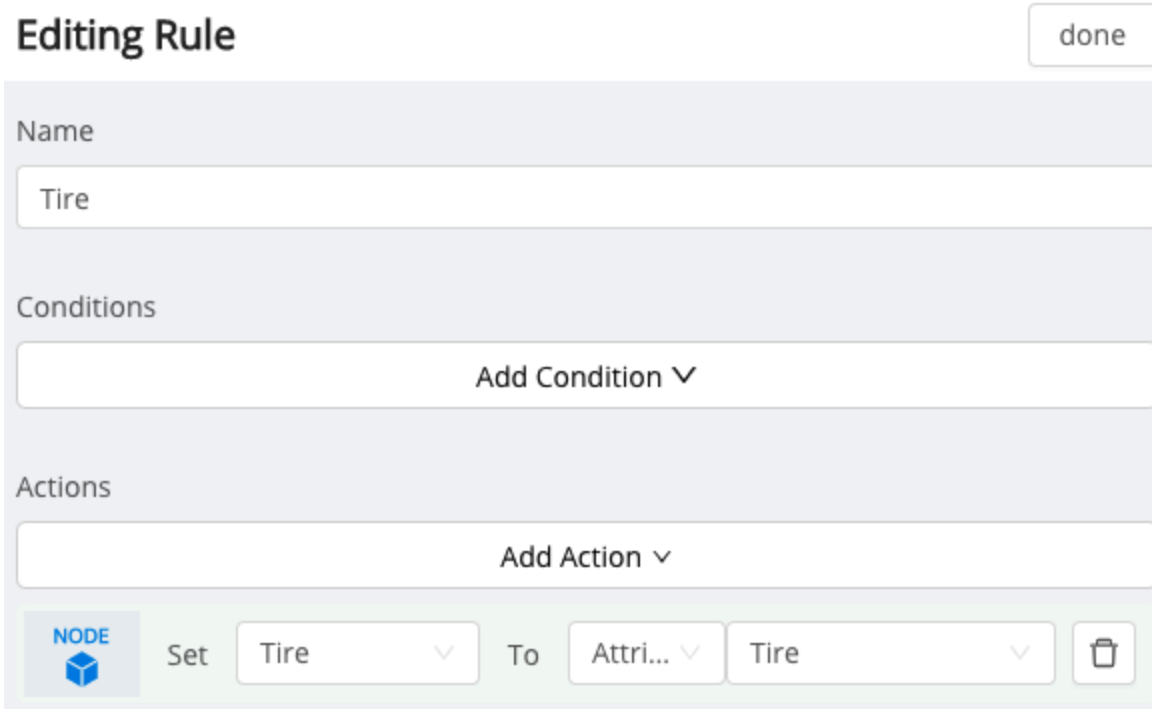
From the Asset Panel, drag ‘tire15’ onto the word “Wheel Configurator #2” in the “Nodes” panel on the left. In the Properties Panel on the right, change the name to “Tire”



In the “LOGIC” tab, add “Asset” attributes for “Style” and “Tire” of the type “Model”

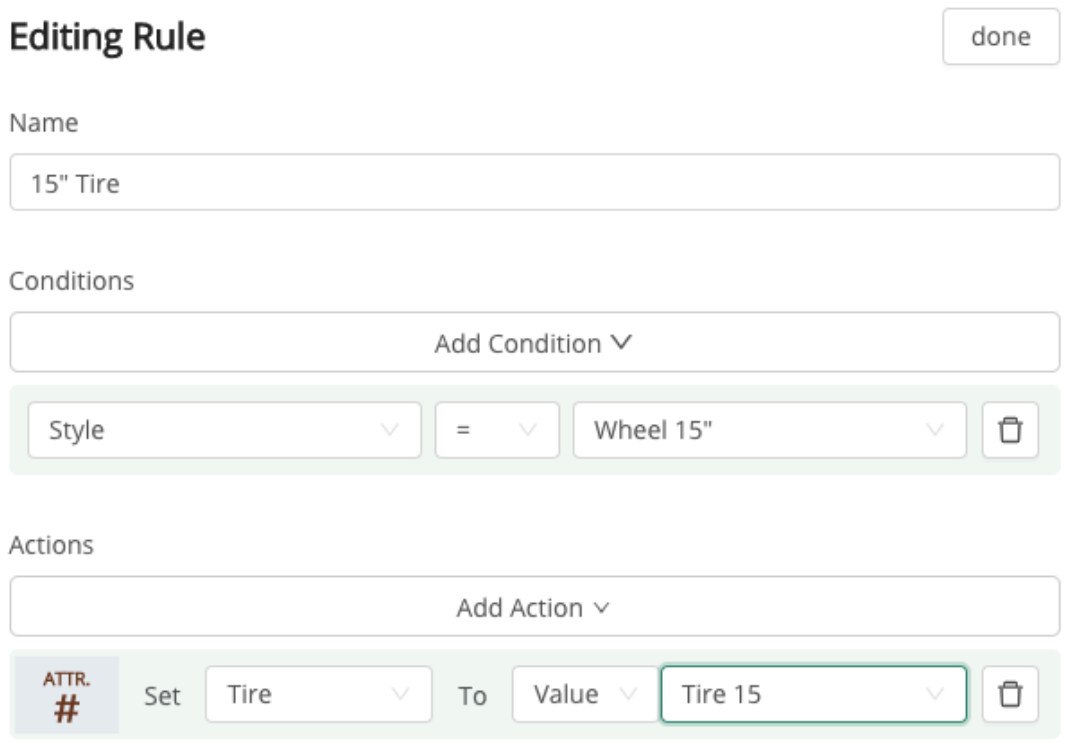


Create rules:
“Style” with action “set model” and values: “Wheel” “Attribute” “Style”
“Tire” with action “set model” and values: “Tire” “Attribute” “Tire”



E.) Ensure the appropriate Tire is present based on Selected Wheel Style

Navigate to the “Wheel Configurator - Distributed with Nested Config” (In “Catalog”)
Click “Edit” and locate the “Rules” box on the bottom left hand side.
Click “Add Rule”.
Click on the line called “New rule”
Name it “15” Tire”.
Add condition: “Style” “=” “Wheel 15””
Add action “set attribute value”: Set “Tire” to “Value” “Tire 15”
Click “done”



Add rules with the appropriate conditions and actions for “Wheel 16””, “Wheel 17” A”, and “Wheel 17” B” using the above for guidance.

F.) Associate Asset to Catalog Item

In the “3D Asset” box for the Wheel Configurator - Distributed with Nested Config, select “Wheel Configurator #2”.

G.) Test the Configurator by Toggling some Values