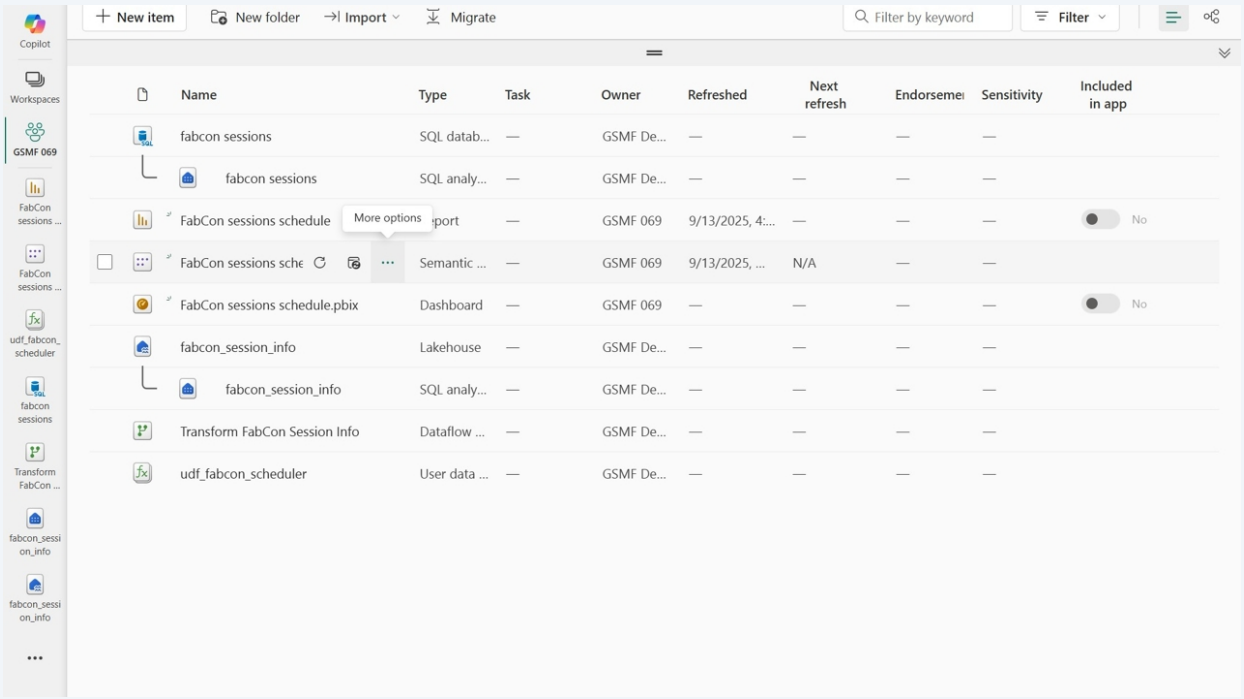
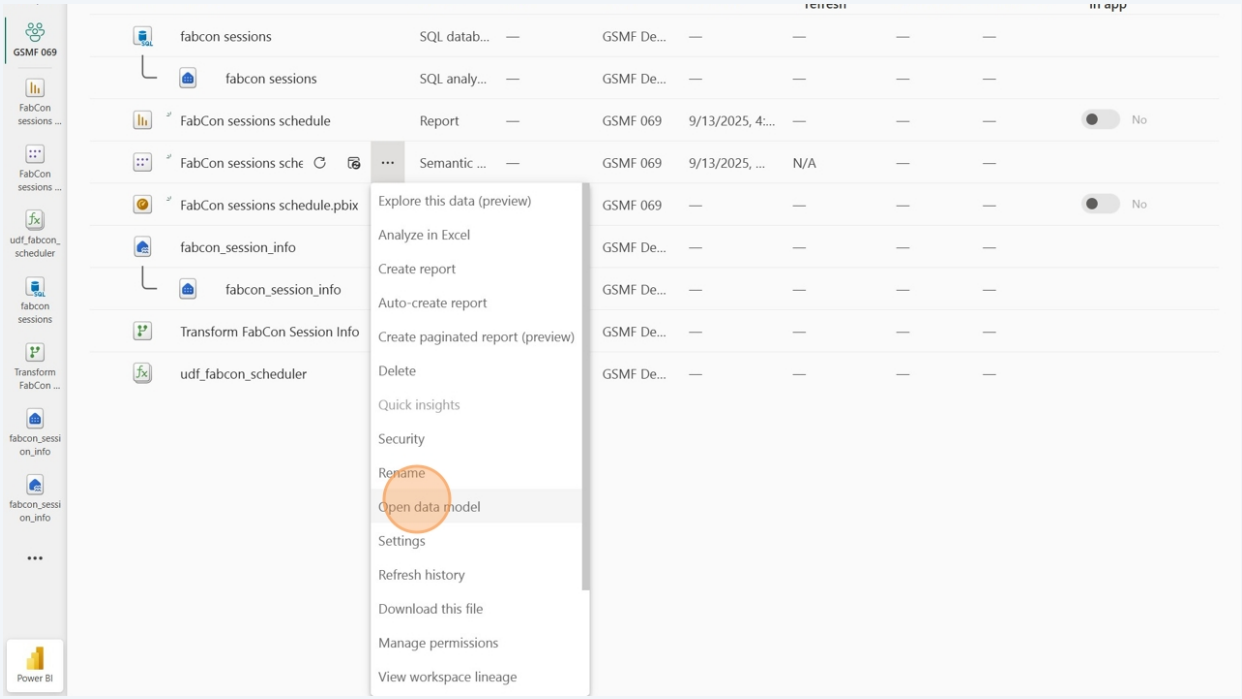
4b. Finish the semantic model in the service

Training.tips

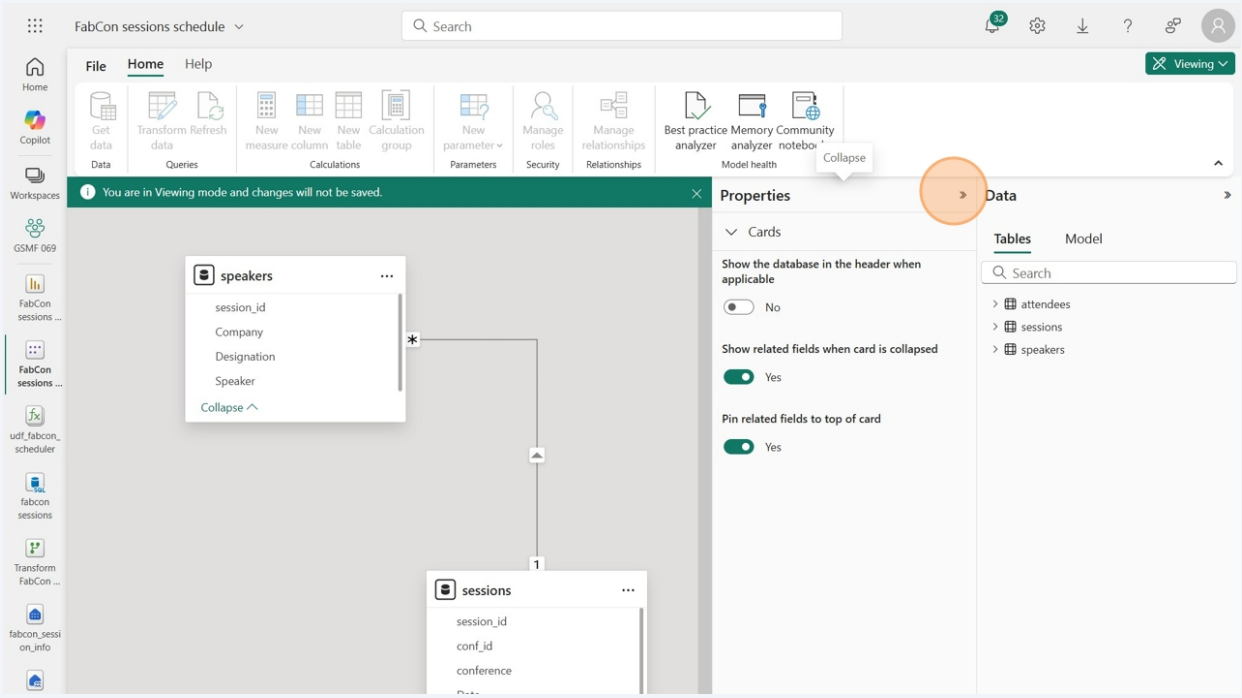
1 Go to your workspace if you're not already there.



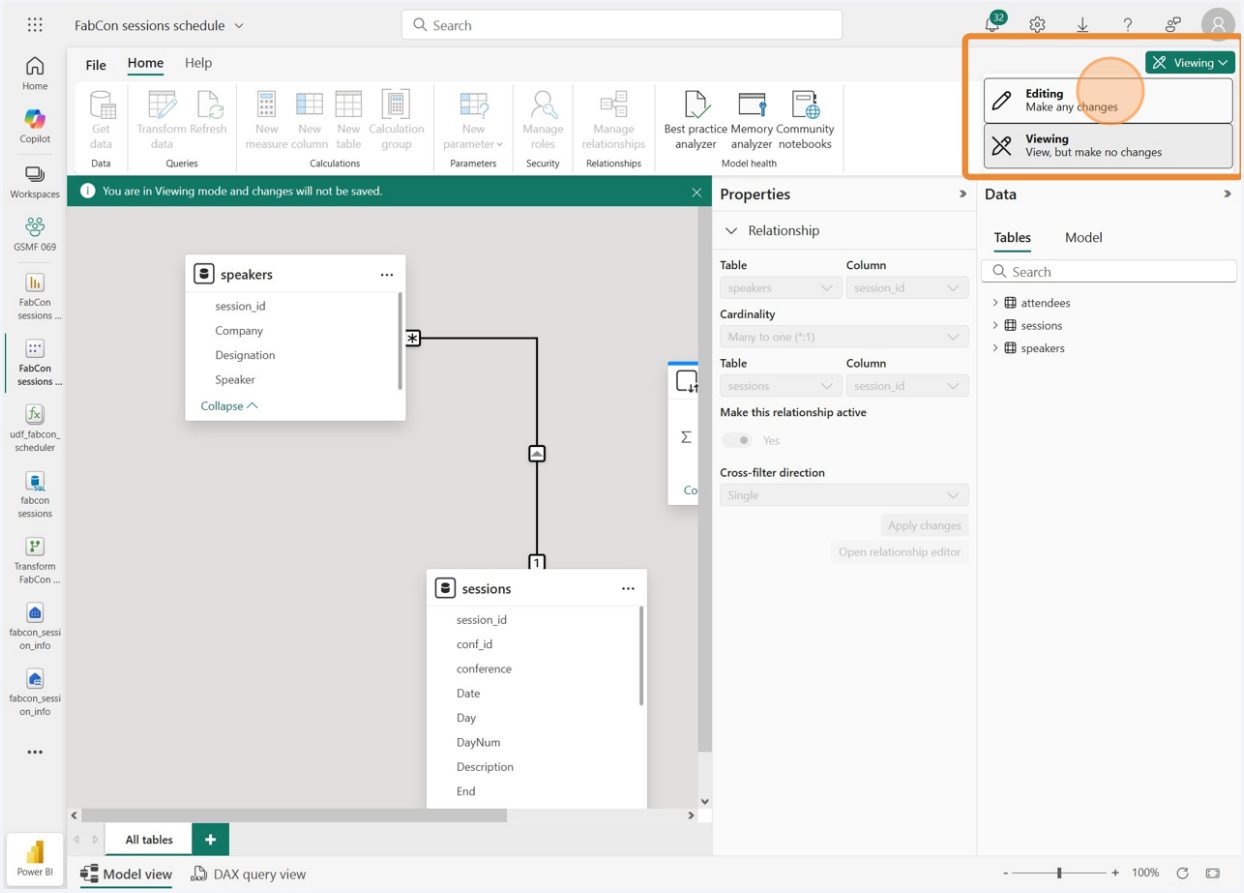
2 Click "Open data model" for the semantic model.



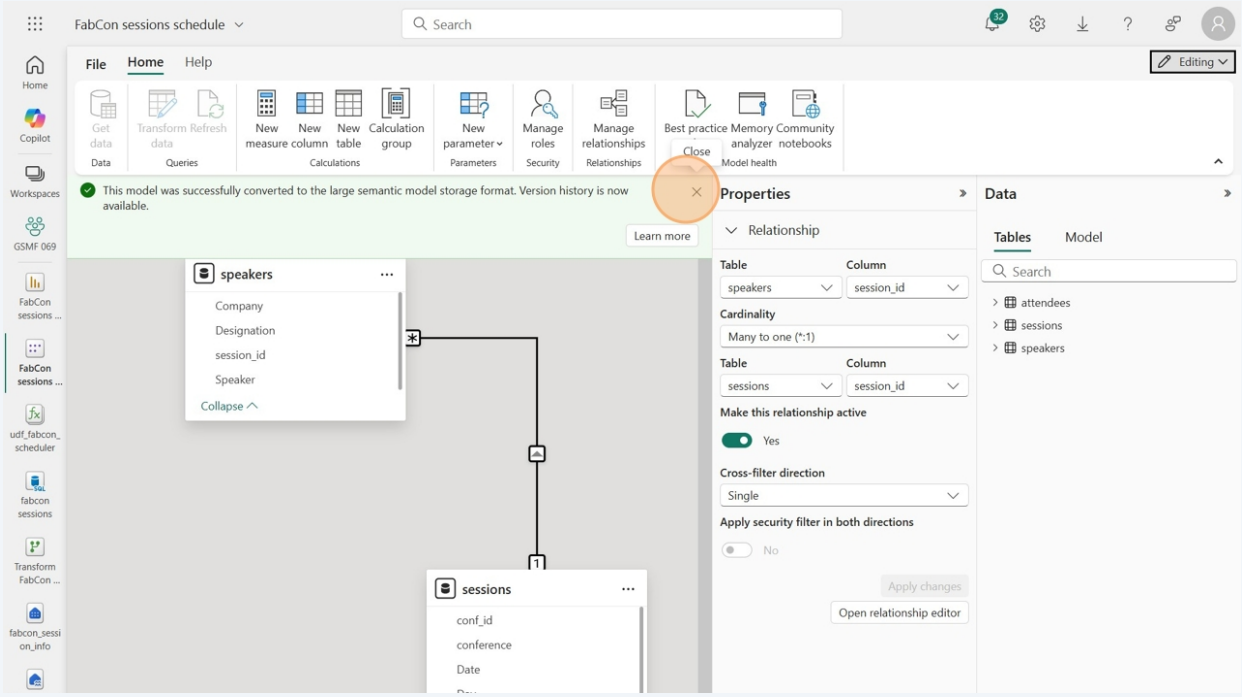
3 This takes you to the semantic model editor. If your screen is small, you can minimize the Properties pane to see more of the model.



4 When you first open a semantic model, you're in "Viewing" mode. We need to be in "Editing" mode to make changes. Click the green "Viewing" dropdown in the top-right, and choose "Editing".



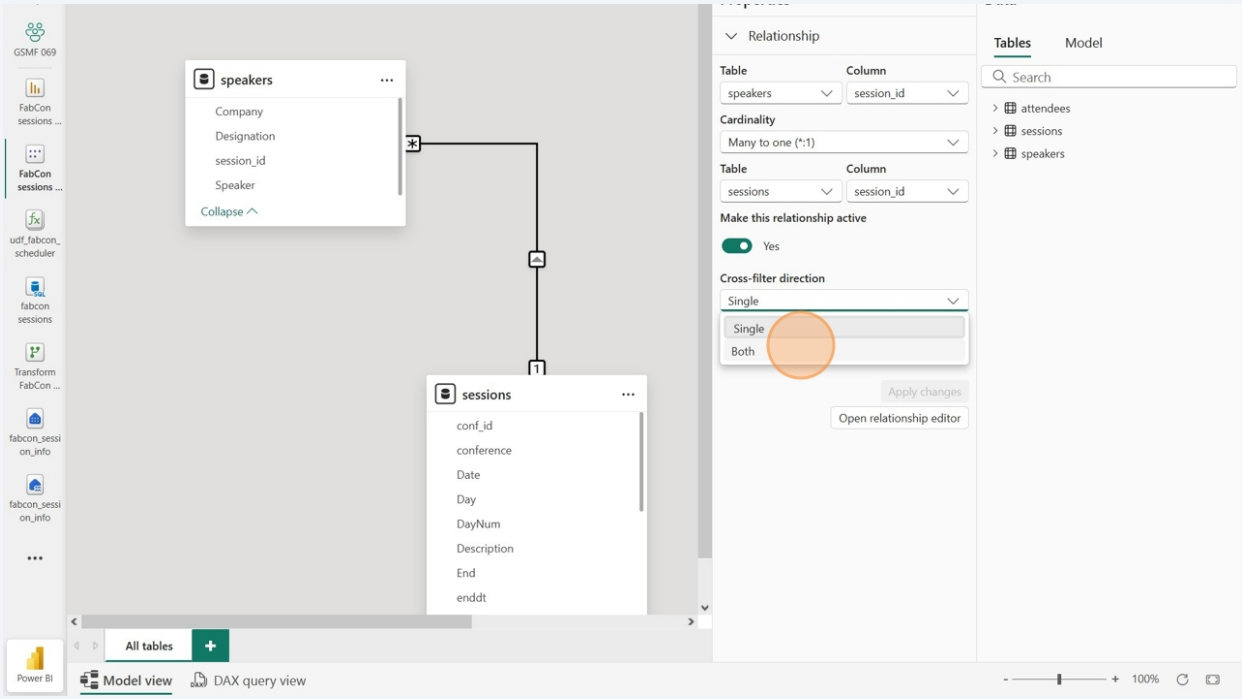
5 You will get a message that the model is being updated to the large semantic model storage format. Once it's finished, you can close the below message.



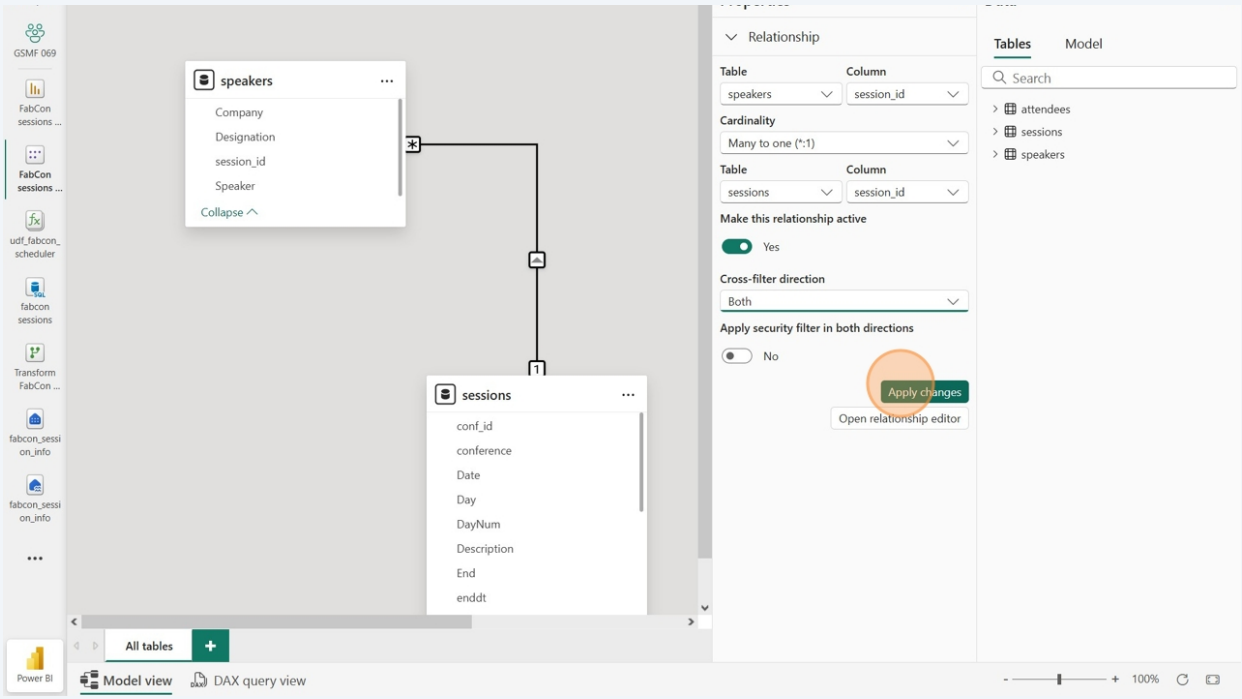
Add relationships

6 We need to add two bi-directional relationships. One between speakers and sessions, and one between sessions and attendees. Both relationships will be on the session_id column in all the tables. You may already have one relationship that was automatically created. If so, you just need to make sure it's bi-directional.

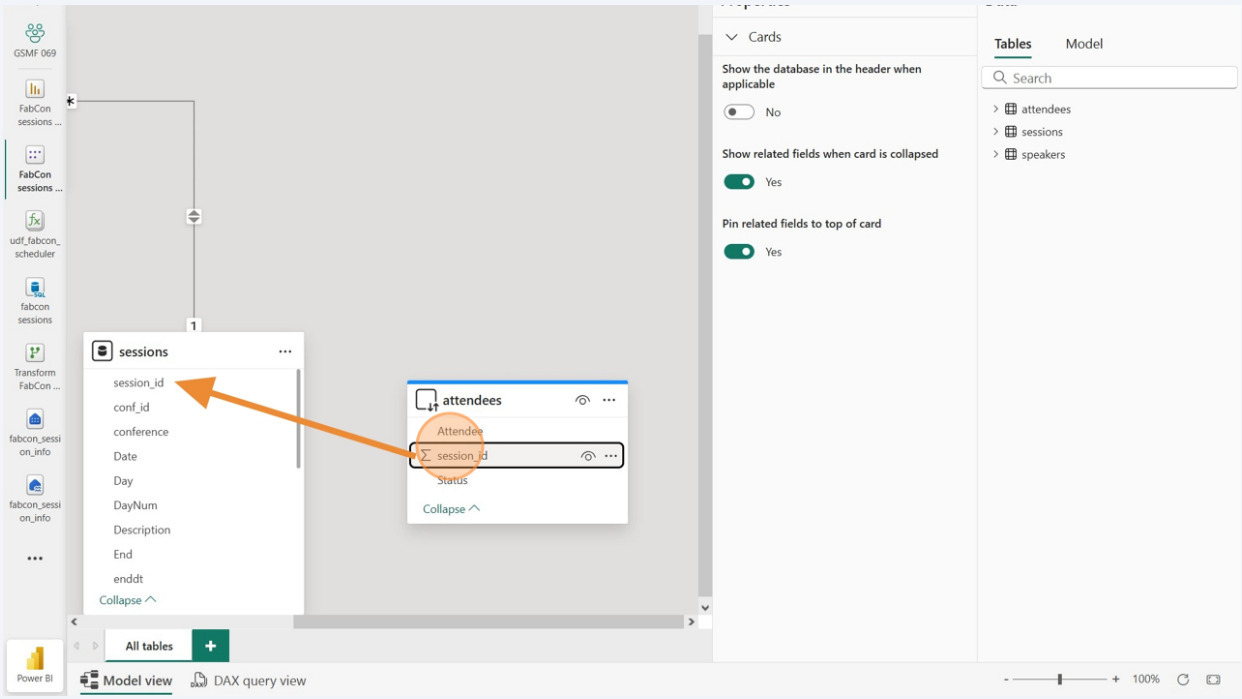
7 Click the relationship between speakers and sessions if it already exists. Update the cross-filter direction to "Both."



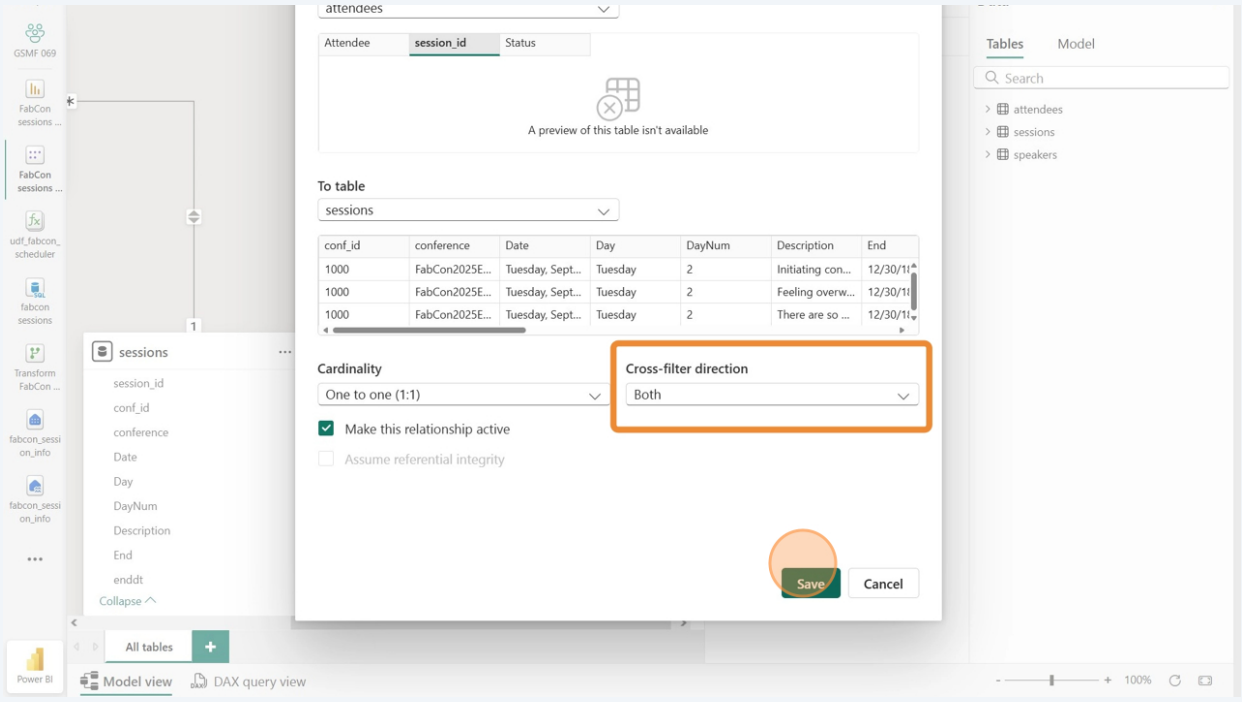
8 Click "Apply changes"



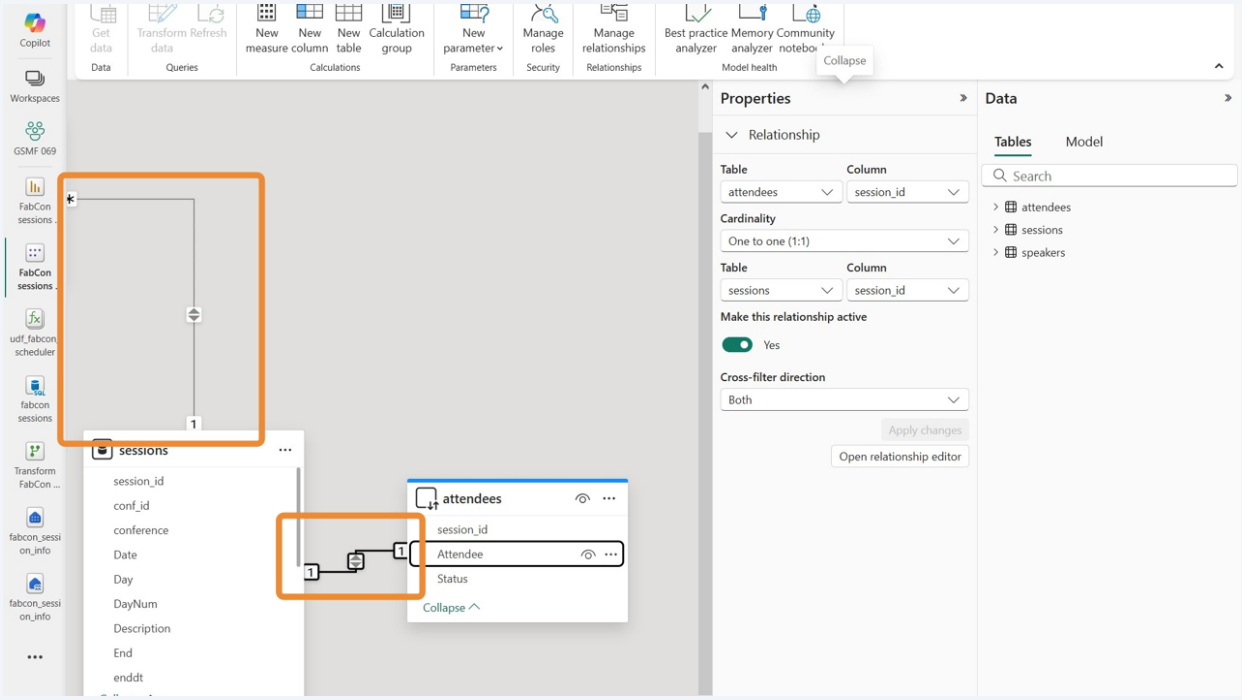
9 If you don't se ethe "attendees" table, scroll over until you find it. Click "session_id" in the attendees table and drag it to "session_id" in the sessions table to create a new relationship.



10 When you let go of the mouse button, the relationship manager will pop up. Make sure that the Cross-filter direction is set to "Both." Click "Save"

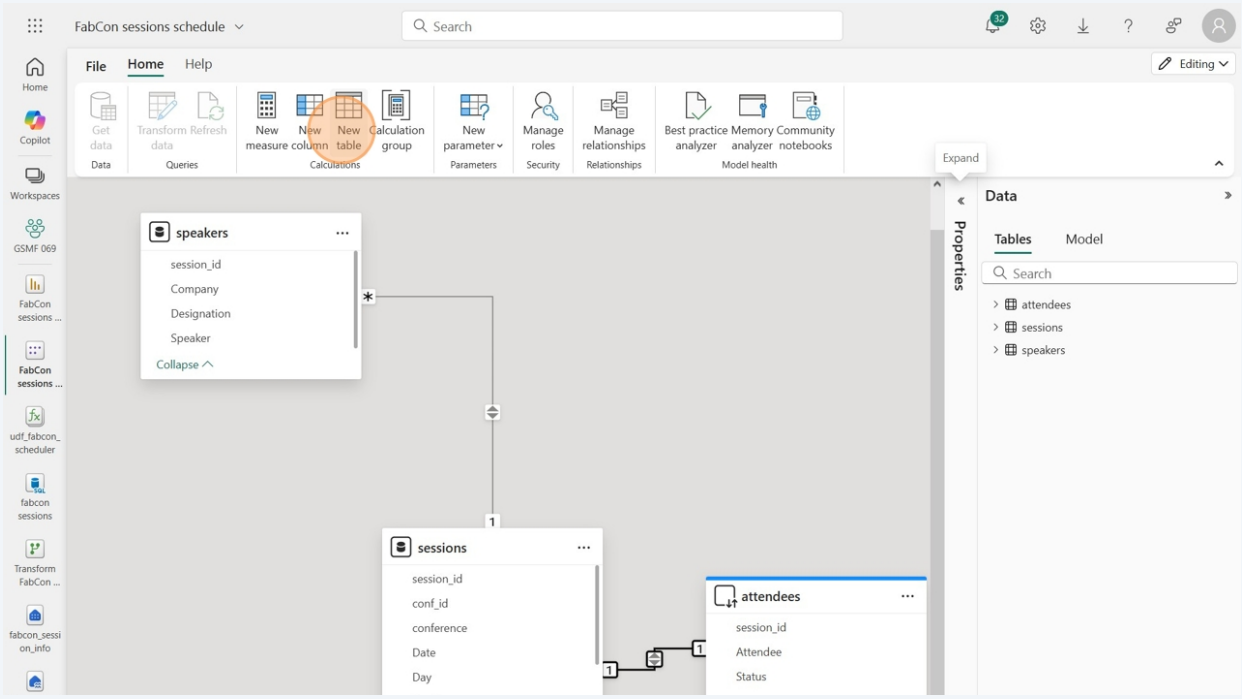


11 You should now see the two bi-directional relationships.



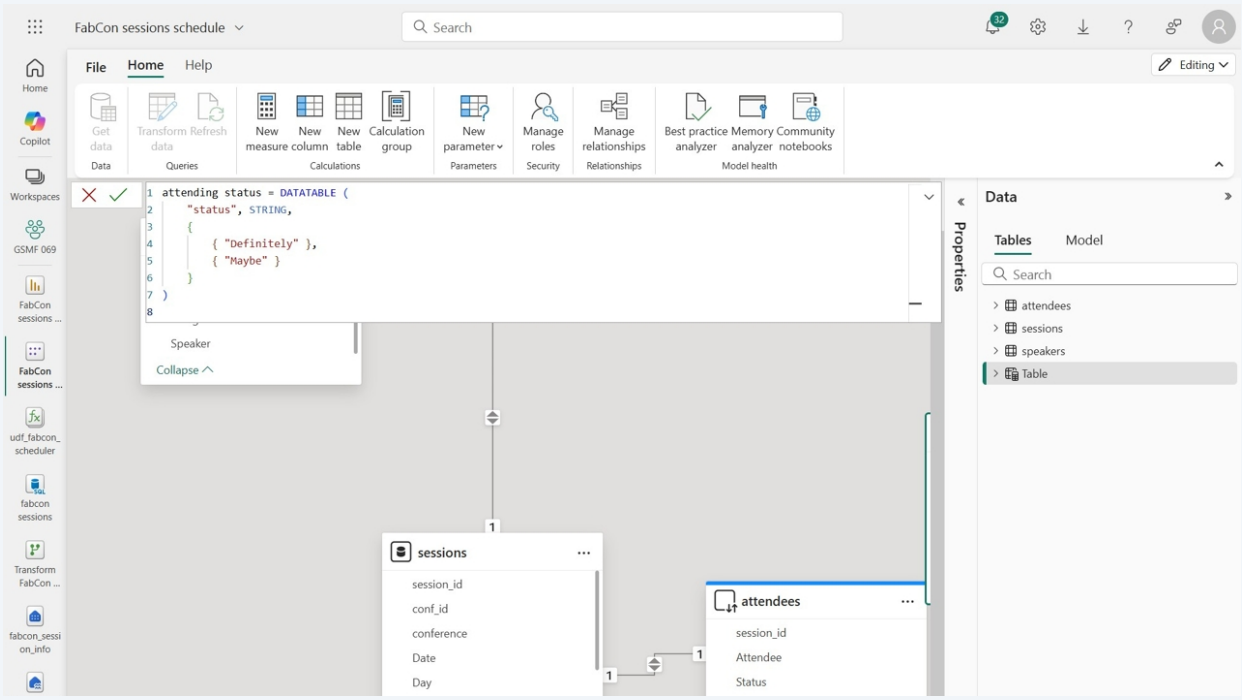
Create a table with DAX

12 We need one more table to populate a slicer for saving our session preferences. We want to be able to decide if we are "Definitely" or "Maybe" attending the sessions. So we'll create a table with just those two rows. No relationship will be required for this table. Click "New table" in the ribbon under the Home tab.

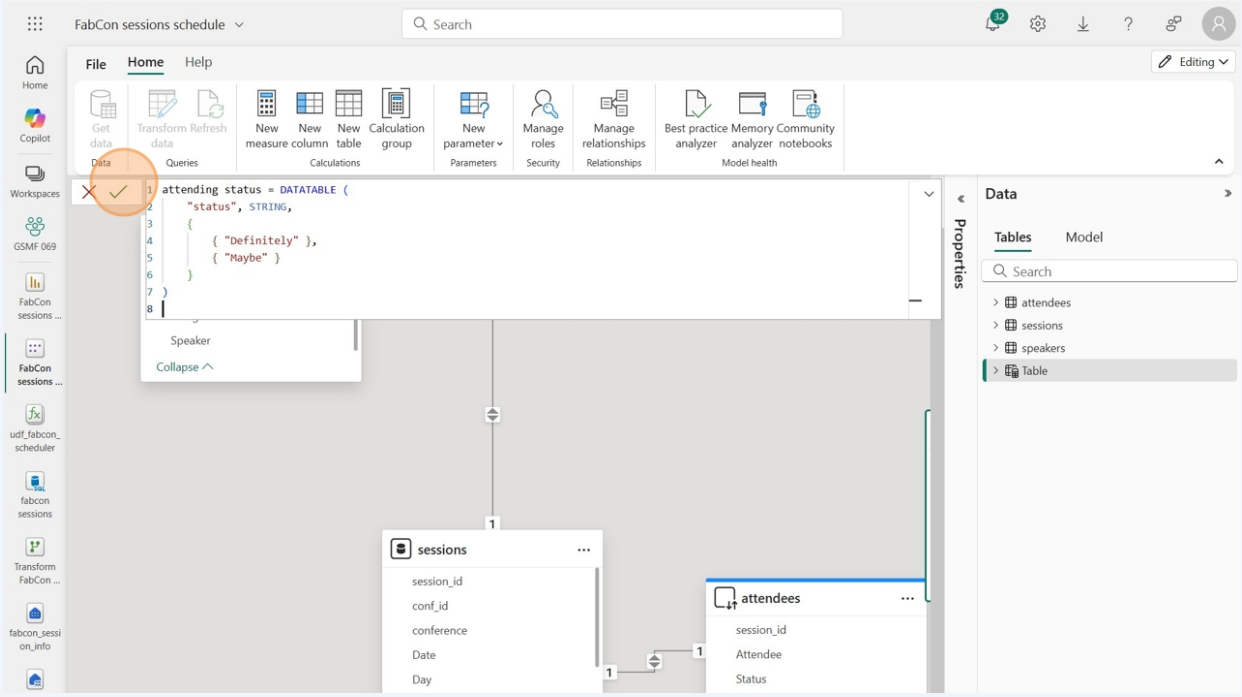


13 Copy and paste the following DAX into the formula bar to create the table and put the two rows into it.

```
attending status = DATATABLE (
    "status", STRING,
    {
        { "Definitely" },
        { "Maybe" }
    }
)
```



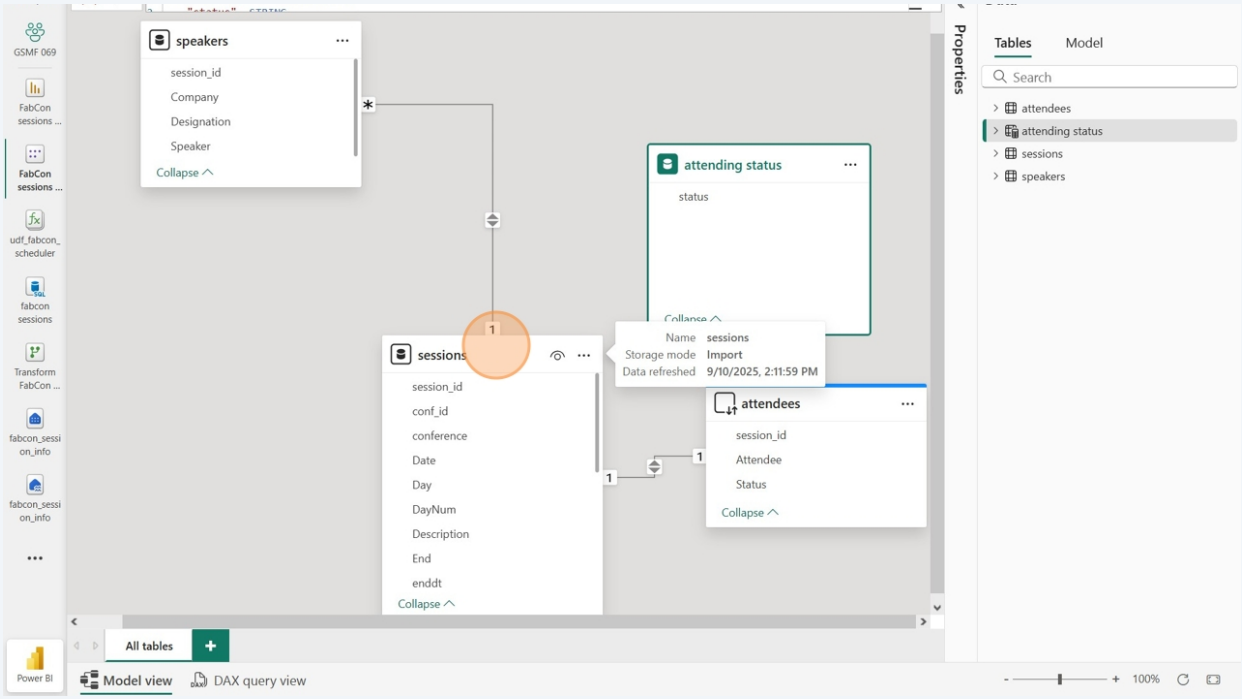
14 Click the green checkmark to the left of the formula bar to enter it.



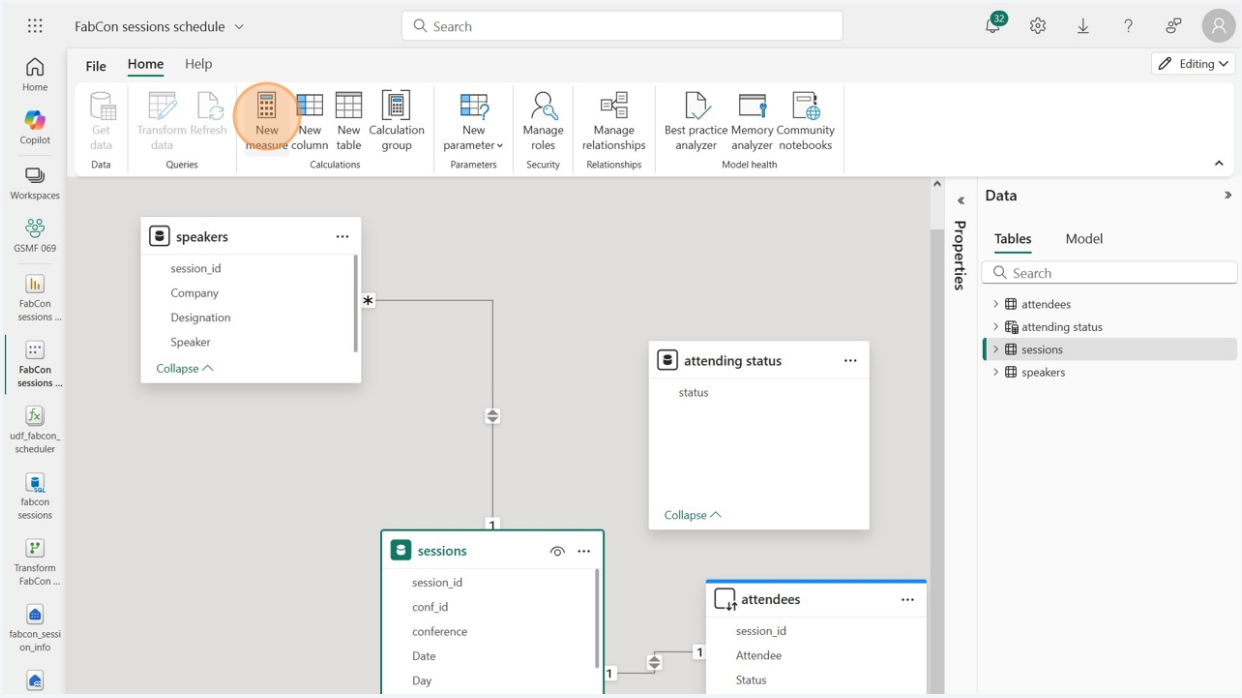
Create measures

Tip! We're building a pretty basic model here and we'll just drop our measures in the sessions table. Today's workshop isn't focused on semantic modeling best practices, but we encourage you to learn more about semantic modeling as well.

15 Click the "sessions" table to select it. We'll add a few measures to this table.



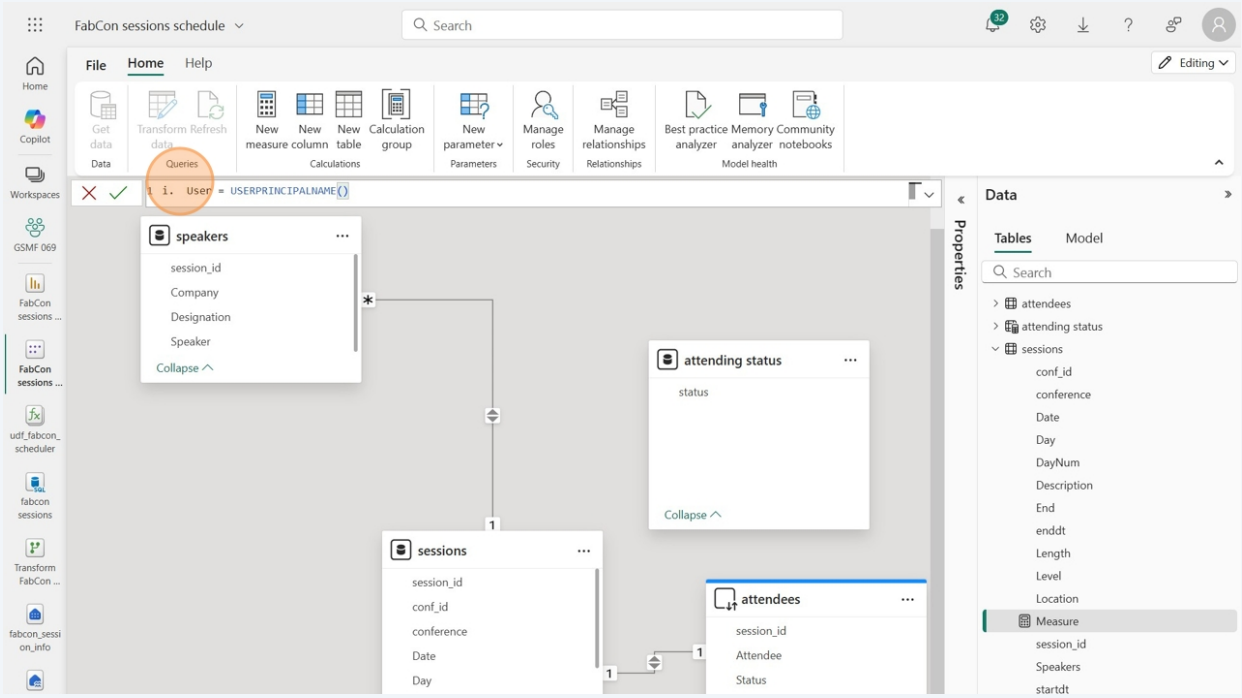
16 Click "New measure"



17

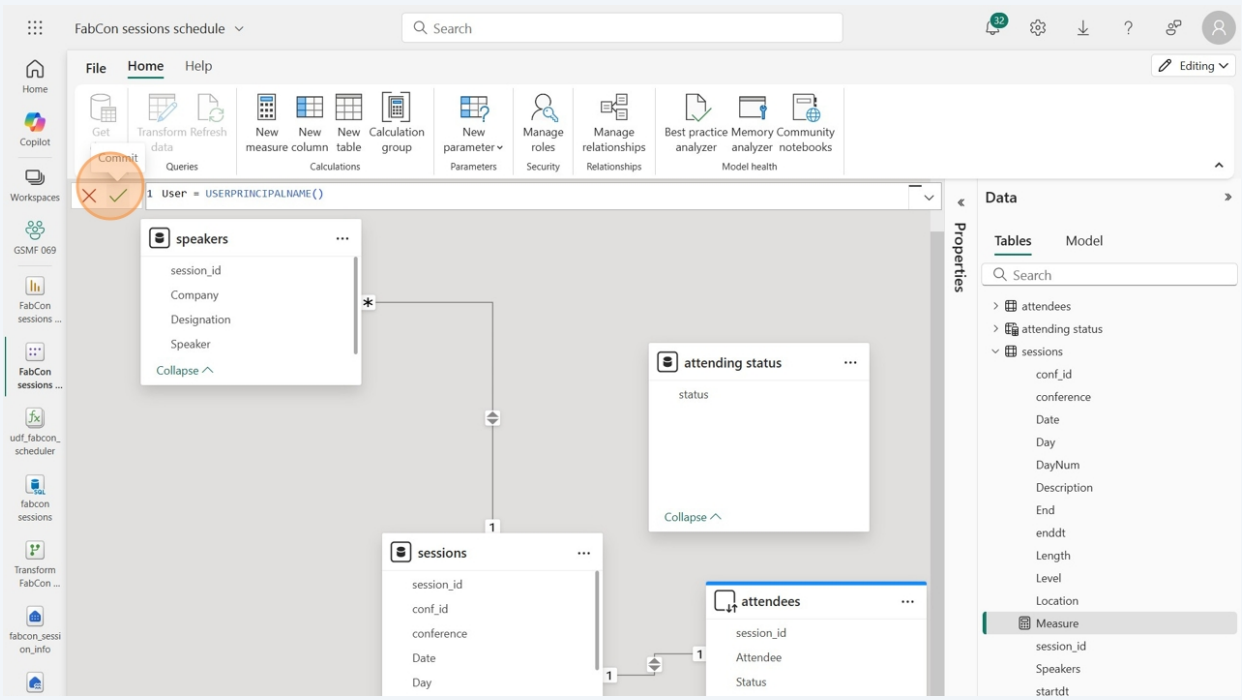
Replace the default text with the following measure:
User = USERPRINCIPALNAME()

This measure will return the UPN of the user running the report. We'll use it for the attendees updates.



18

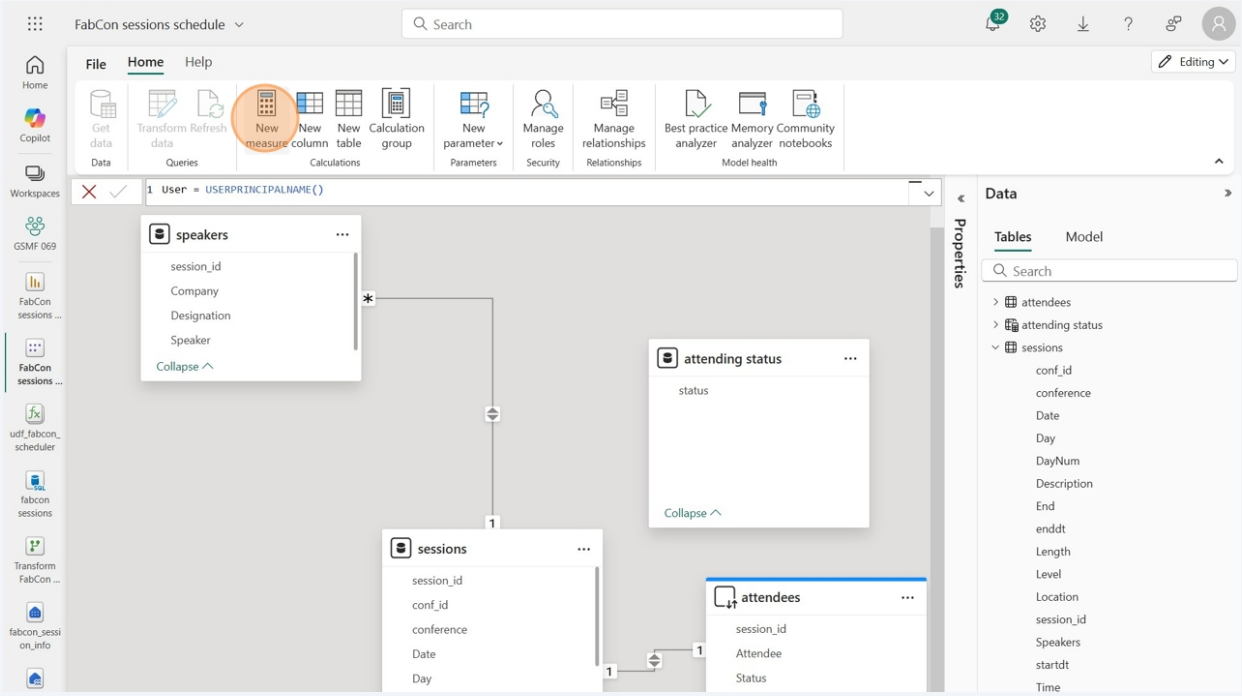
Click green checkmark to enter the measure.



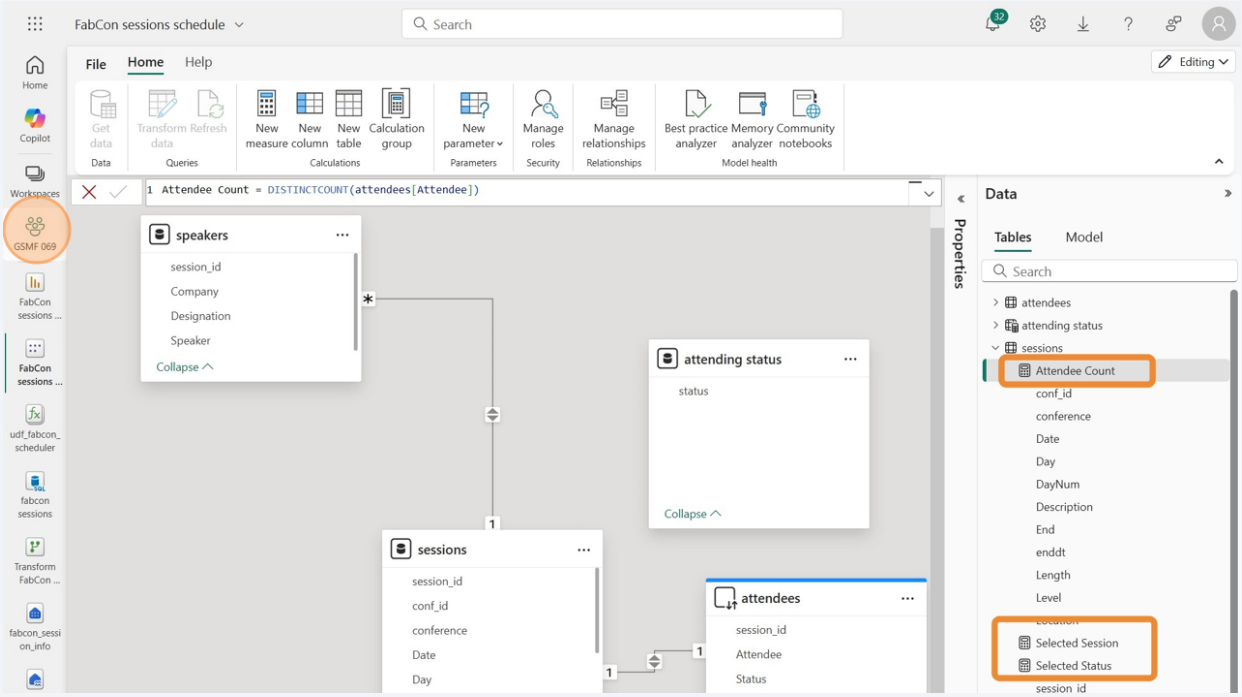
19 Do the same as above to create the following four measures:

[[Selected Session = SELECTEDVALUE(sessions[session_id])]]
[[Selected Status = SELECTEDVALUE(' attending status'[status])]]
[[Speaker count = DISTINCTCOUNTNOBLANK(speakers[Speaker])]]
[[Attendee Count = DISTINCTCOUNT(attendees[Attendee])]]

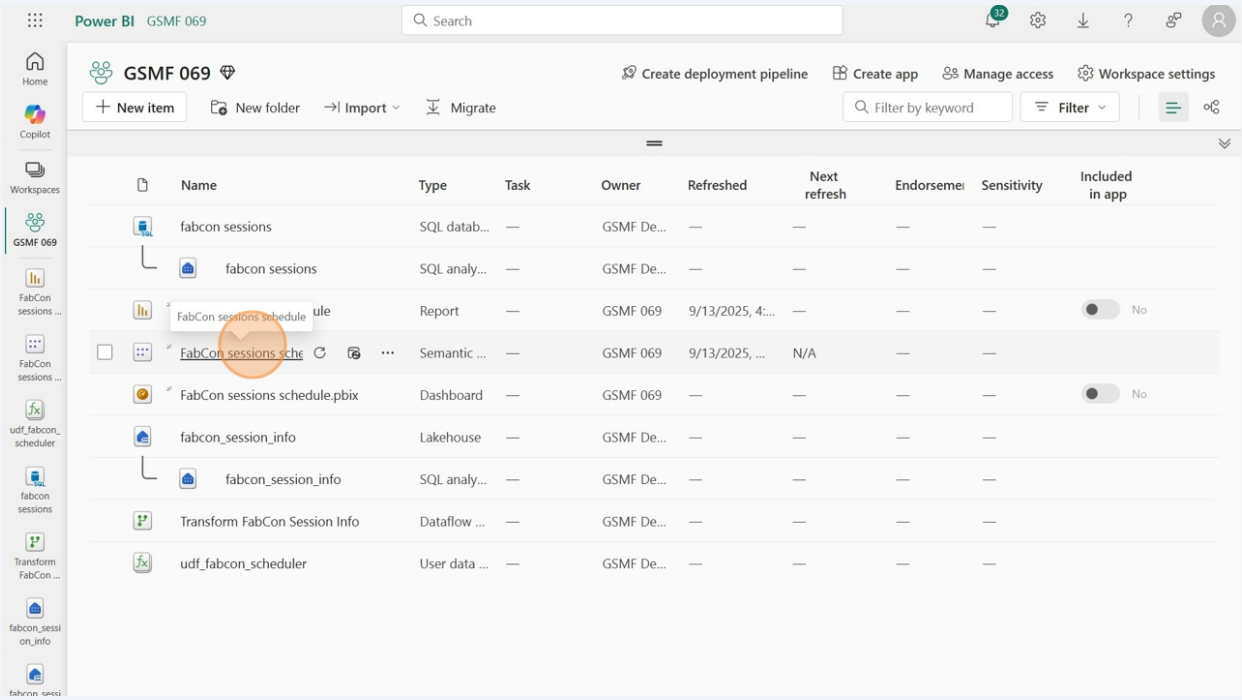
We'll use the selected session and selected status measures for the User Defined Function we created earlier.



20 You should now see all the measures you added in the sessions table. Go back to the workspace.



21 Click the semantic model.



22 This view of the semantic model lets you see what tables and columns are in the model, as well as related items.