Creating and deploying a tabular model in SQL Server Analysis Services (SSAS) using AdventureWorksDW as the data source involves several steps. Here's a step-by-step guide:

**Step 1: Prerequisites**

Before you begin, ensure that you have the following prerequisites in place:

- SQL Server Data Tools (SSDT) installed.

- SQL Server Analysis Services (Tabular) instance set up and running.

- AdventureWorksDW database or an equivalent dataset available.

**Step 2: Create a New Tabular Project**

1. Open SQL Server Data Tools (Visual Studio).

2. Go to `File > New > Project`.

3. In the "New Project" dialog, select " Analysis Services Tabular Project" as the project template.

4. Enter a name and location for your project.

5. Click "Create."

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**Step 3: Data Source Connection**

1. In Tabular Model Explorer, right-click on "Data Sources" and select "Import from Data Source."

2. Select "Microsoft SQL Server" as the connection type.

3. Enter the server name and choose the AdventureWorksDW database as the database name.

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4. Test the connection and ensure it's successful.

(Follow this video from 8:20 to 10:20 to create a login account and give the DW access to it <https://www.youtube.com/watch?v=DqosS9ivpPw&list=PLjNd3r1KLjQvvRu_EZ-TSydhIqNr3ZG94&index=6>)

5. Click “Next”, then Select “Service Account”, “select from a list of tables and views to choose the data to import”.

6. Select “Fact Internet Sales” table and Click “Select related tables”.

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7. Click "Finish" to save the data source.

**Step 4: Create Calculated Tables**

If you would like to select more tables,

1. In Tabular Model Explorer, right-click on "Tables" and select "New Calculated Table."

2. Give a DAX expression to populate the fields.

**Step 5: Model Design**

1. In Solution Explorer, double-click on the "Model.bim" file to open the Tabular Model Designer. Click on the Diagram button in the bottom right

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2. Design your tabular model by creating measures, calculated columns, and hierarchies.

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3. Define formatting, descriptions, and translations for your model objects.

4. Test your model by browsing data and verifying calculations.

**Step 6: Deploy the Tabular Model**

1. Right-click on the project in Solution Explorer and select "Properties."

2. In the "Deployment Server" section, enter the connection information for your SSAS Tabular instance.

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3. Click "OK" to save the properties.

4. Right-click on the project again and select "Deploy."

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**Step 7: Test and Monitor**

1. Test your deployed model open Excel, select Get Data, select From Analysis Services.

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2. Enter your server name, choose Windows Authentication.

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3. Click “Next”, “Finish, “OK”.

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4. Select the fields, place them in columns/values as you like.

Your tabular model is now created, deployed, and ready for use in SSAS. Remember to maintain and update the model as your data evolves.