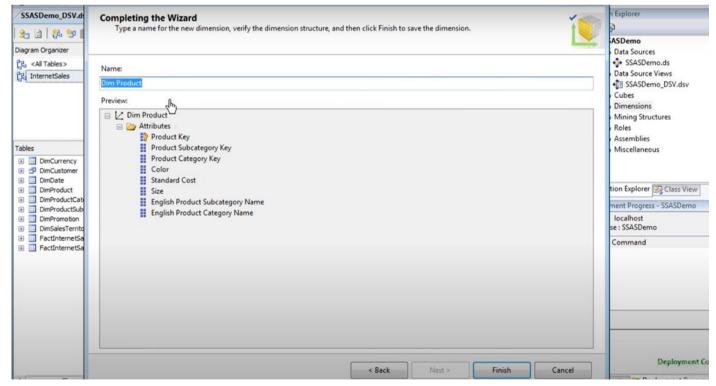
DWDM Lab by Usman Shehzaib

Lab Task Week # 4. Design a Dimension with Natural and Unnatural Hierarchy

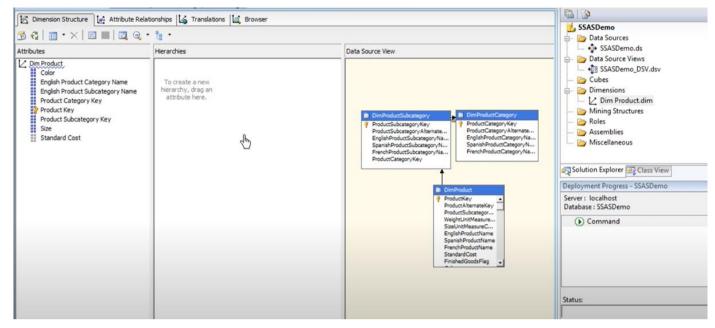
In this Week you will learn how we perform create different types of hierarchies. Remember to start SSMS and SQL Server 2019 before you proceed.

Following tasks will be performed on a DSV which you have already created.

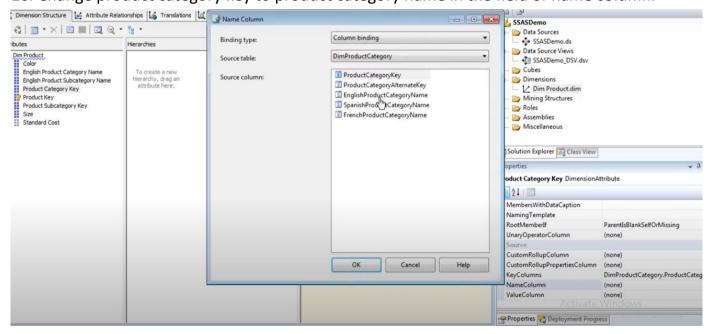
- 1. Right click on Dimensions and choose New Dimension. Use an existing table.
- 2. Choose Dim Product as Main table use product key as key column.
- 3. In Name column give it some descriptive name to use like English product name
- 4. And map it to English product name. If asks for related tables then add those as well
- 5. Select dimension attributes like product key, product category key, product subcategory key, standard cost, color, size, English Product subcategory name and Product category name.



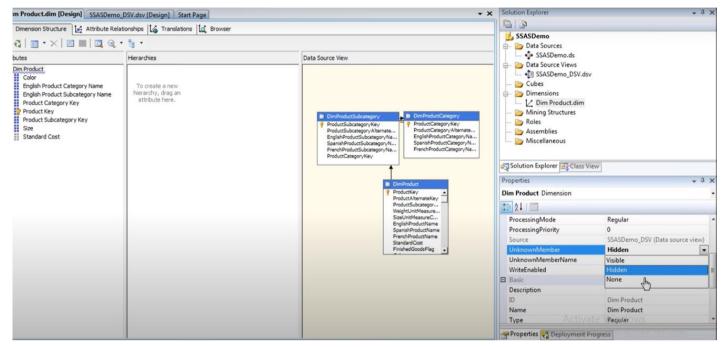
- 6. Here you can enable and disable browsing for now uncheck standard cost on next screen given dimension name as "Dimproduct".
- 7. Now you will see three different sections and 4 tabs.



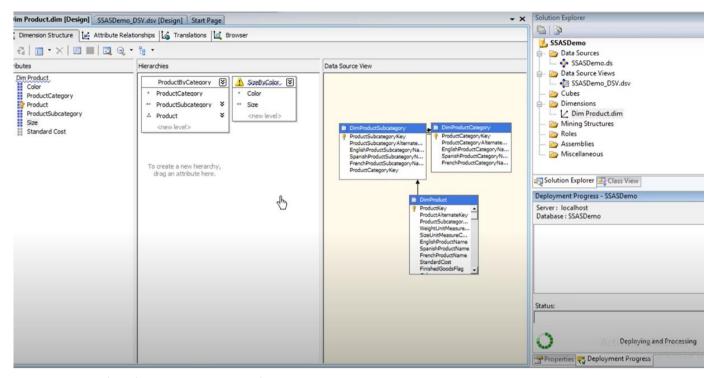
- 8. Process this dimension and you see we can perform aggregation by browsing.
- 9. Reconnect and refresh go to browser.
- 10. Check product key it gives names instead of numbers because in name column we set product name instead of numbers.
- 11. Also check category it gives numbers. Also check size and colors.
- 12. Standard cost is not shown due to non-enabling of browsing option.
- 13. Check product and its cost in member properties.
- 14. Filter members for specific color
- 15. Check product category key properties by right clicking it and Properties pane will open on bottom right.
- 16. Change product category key to product category name in the field of name column.



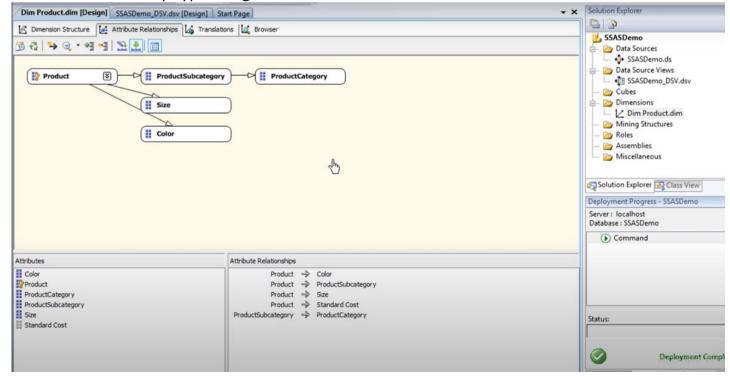
- 17. Also change product subcategory key to subcategory name.
- 18. Now Process it.
- 19. Now instead of numbers we get names of categories and subcategories.
- 20. Some values are displayed as unknown values. We can change it by going to properties and set unknown members to unknown values. Or we can make it Hidden as well.



- 21. Now Delete attributes prod category name and product subcategory name
- 22. Rename the attributes as following product key to product, product subcategory key to product subcategory, Product category key to prod category.
- 23. Now create a Hierarchy by dragging product category to top then product subcategory then product.
- 24. Now rename hierarchy as productbycategory.
- 25. create another hierarchy as sizebycolor. Drag color at top and then size.



- 26. Process the dimension. Go to browser.
- 27. Show productbycategory hierarchy.
- 28. Now check sizebycolor hierarchy
- 29. In sizebycolor same size repeats in different colors so its unnatural hierarchy
- 30. Go to attribute relationships tab it has already identified relationships
- 31. Make relationship type to rigid.



32. we cannot change color and size relationships because its unnatural

- 33. Go to color attribute properties and make attributehierarchyvisible to false.
- 34. Also for product, product category and product subcategory do the same
- 35. Now only two hierarchies will be visible