

# Unit 6.1



# DATAWAREHOUSING

UNIT 6  
CHAPTER 1



# Extra Features:

- Additional editing features, Metadata change management, Recycle Bin, Cut, copy, and paste, Snapshots, Metadata Loader (MDL) exports and imports, Synchronizing objects, Changes to tables, Changes to dimensional objects and auto-binding, Warehouse Builder online resources.

# Metadata change management

- **Metadata change management** includes keeping a track of different versions of an object or mapping as we make changes to it, and comparing objects to see what has changed.

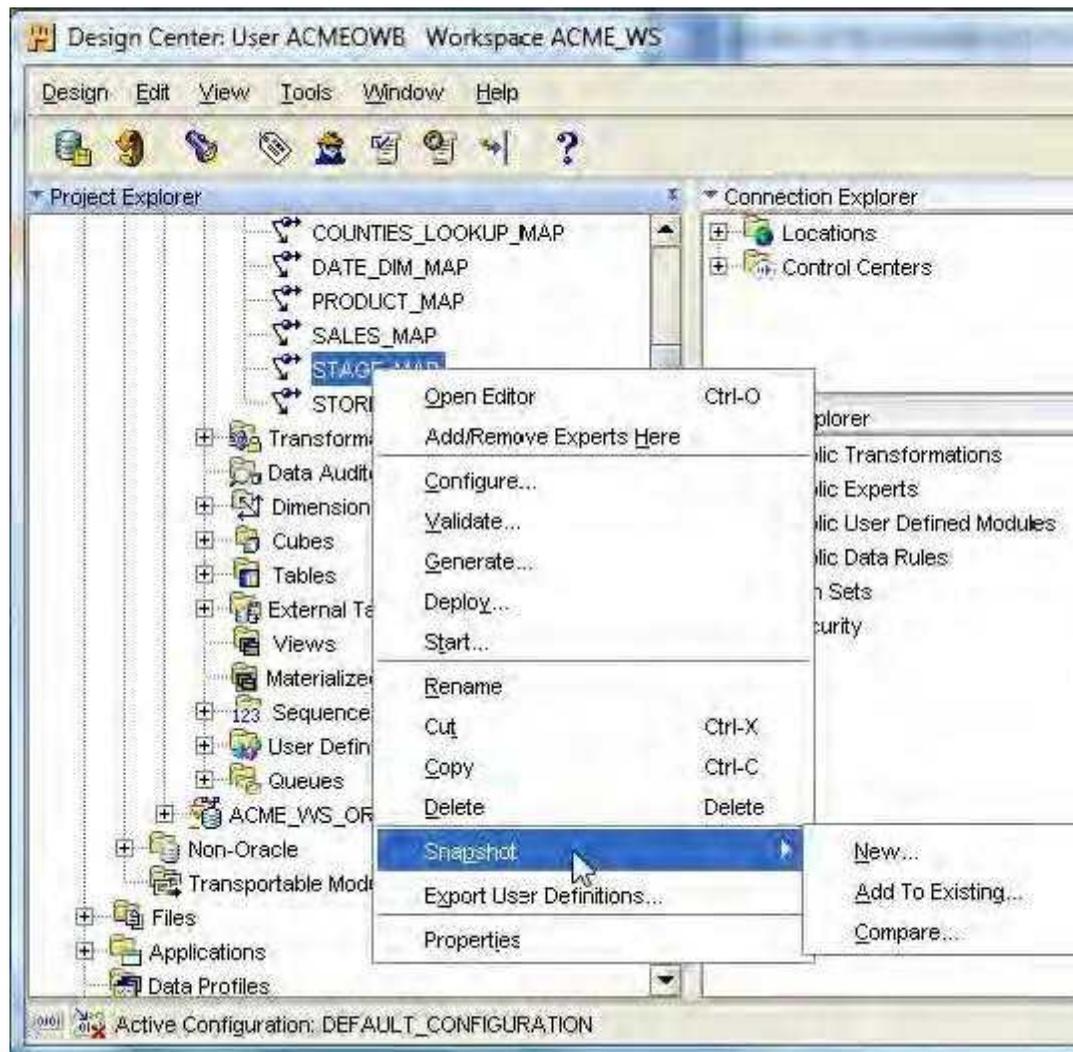


# Cut, copy, and paste

- We can use the cut, copy, and paste features to make a copy of an object in the current project, or to copy an object to another project we might have defined in the Design Center.

# Snapshots

- A snapshot captures all the metadata information about an object at the time the snapshot is taken and stores it for later retrieval. It is a way to save a version of an object should we need to go back to a previous version or compare a current version with a previous one.





Step1: Create Name for snapshot

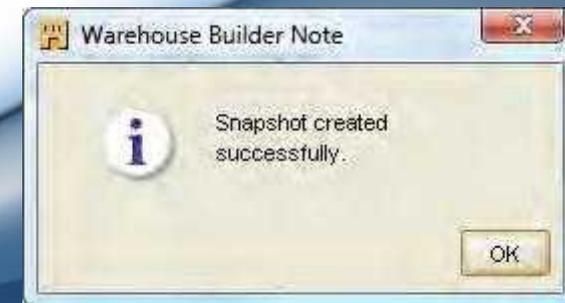
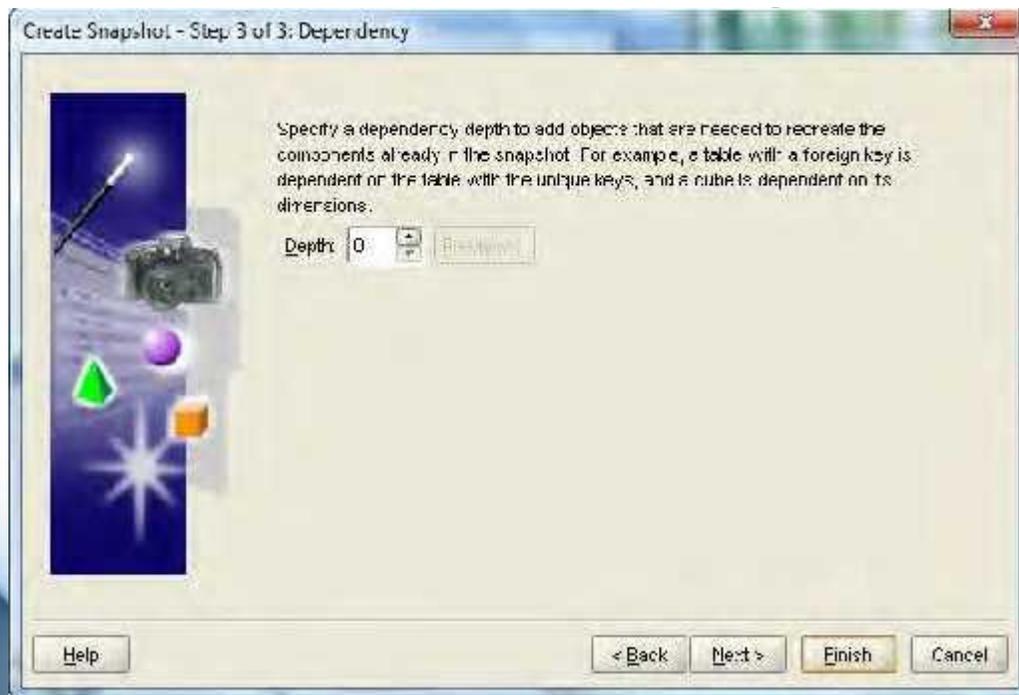
# There are two types of snapshots we can take:

- a full snapshot that captures all metadata and can be restored completely(Backups)
- a signature snapshot that only captures the signature or characteristics of an object just enough to be able to detect changes in an object.

## Step 2:

- This step displays a list of the objects we're capturing in this snapshot. We have the option on this screen to select **Cascade**, which applies to folder-type objects. We can take a snapshot of any workspace object, including nodes and even the entire project itself. We can then select **Cascade** to have it include every object contained within that folder object.

- In the final step we are asked to select a depth to which we'd like to traverse to capture any dependent objects for this object.(leave it 0)



- If we want to see what snapshots we've created, there is an interface we can use, which is available on the Tools menu of the Design Center. It is called Change Manager and will launch the Metadata Change Management interface where we can manage our snapshots.



- The following can be performed on the snapshots by clicking on them and then selecting the corresponding menu entry under the Snapshots main menu:
  - **Restore:**We can restore a snapshot from here, which will copy the snapshot objects back to their place in the project, overwriting any changes that might have been made.
  - **Delete:** If we do not need a snapshot anymore, we can delete it
  - **Convert to Signature:**This option will convert a full snapshot to a signature snapshot.
  - **Export:**We can export full snapshots like we can export regular workspace objects.
  - **Compare:**This option will let us compare two snapshots to each other to see what the differences are.

- We'll do a comparison between a workspace object in our Design Center project and a snapshot.
- Design Center. There we can right-click on the POS\_TRANS\_STAGE table and select **Snapshot | Compare...** to compare this object with a snapshot.
- Select snapshot to compare. click on the OK button and it will do the comparison



Snapshot Comparison: POS\_TRANS\_STAGE (Table) versus POS\_TRANS\_STAGE\_SNAP

View: Changed Objects

POS\_TRANS\_STAGE (Table)  
 STORE\_COUNTRY (Column)

General Properties Links

Property	Value
Physical Name	STORE_COUNTRY
Business Name	STORE_COUNTRY
Object Type	Logica
Properties Changed?	Yes
Child Components Changed?	No
Links Changed?	No

Help Save As... Close

Snapshot Comparison: POS\_TRANS\_STAGE (Table) versus POS\_TRANS\_STAGE\_SNAP

View: Changed Objects

POS\_TRANS\_STAGE (Table)  
 STORE\_COUNTRY (Column)

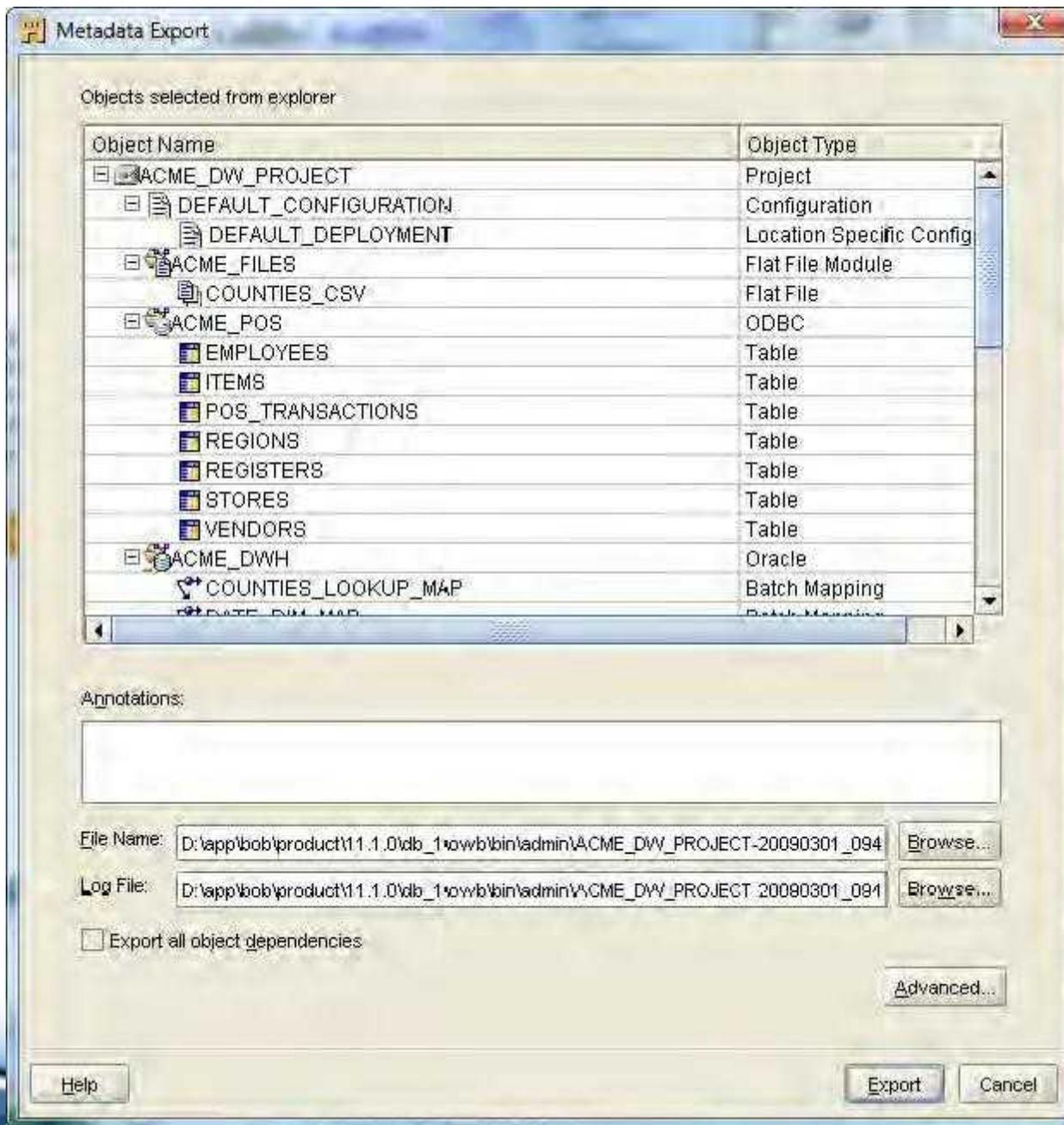
General Properties Links

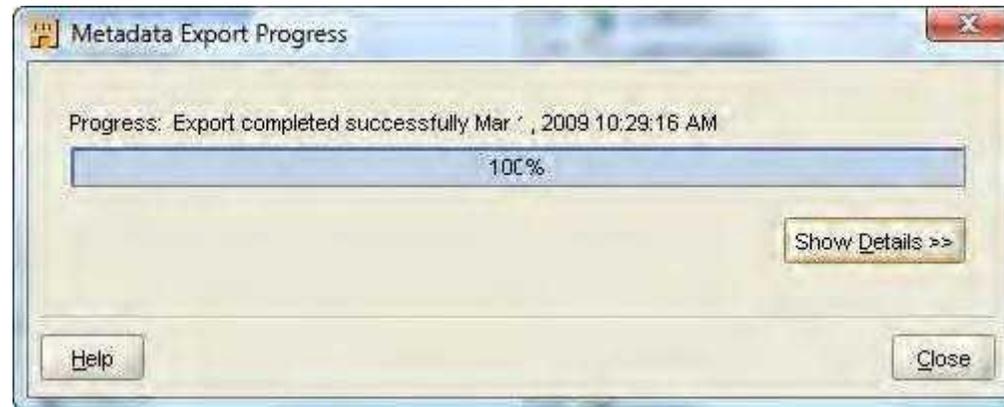
Attribute Name	POS_TRANS_...	POS_TRANS_...	Difference
Physical Name	STORE_COUN...	STORE_COUN...	Unchanged
Business Name	STORE_COUN...	STORE_COUN...	Unchanged
Description			Unchanged
Char Length	false	false	Unchanged
Database Length	0	0	Unchanged
Day Precision	0	0	Unchanged
Decimal Places	0	0	Unchanged
Default Value			Unchanged
Fractional Seco...	0	0	Unchanged
Length	100	50	Modified
Nullable	false	false	Unchanged
Position	18	18	Unchanged
Precision	0	0	Unchanged
Scale	0	0	Unchanged
Year Precision	0	0	Unchanged

Help Save As... Close

# Metadata Loader (MDL) exports and imports

- One final change management related tool for managing our metadata that we'll look at in the Warehouse Builder is the ability to export workspace objects and save them to a file using the **Metadata Loader (MDL) facility**.
- Let's save an export file of our entire main ACME\_DW\_PROJECT to see how an export is done from the Design Center. We'll select the project by clicking on it and then select **Design | Export | Warehouse Builder Metadata from the main menu**.





Metadata Export Results

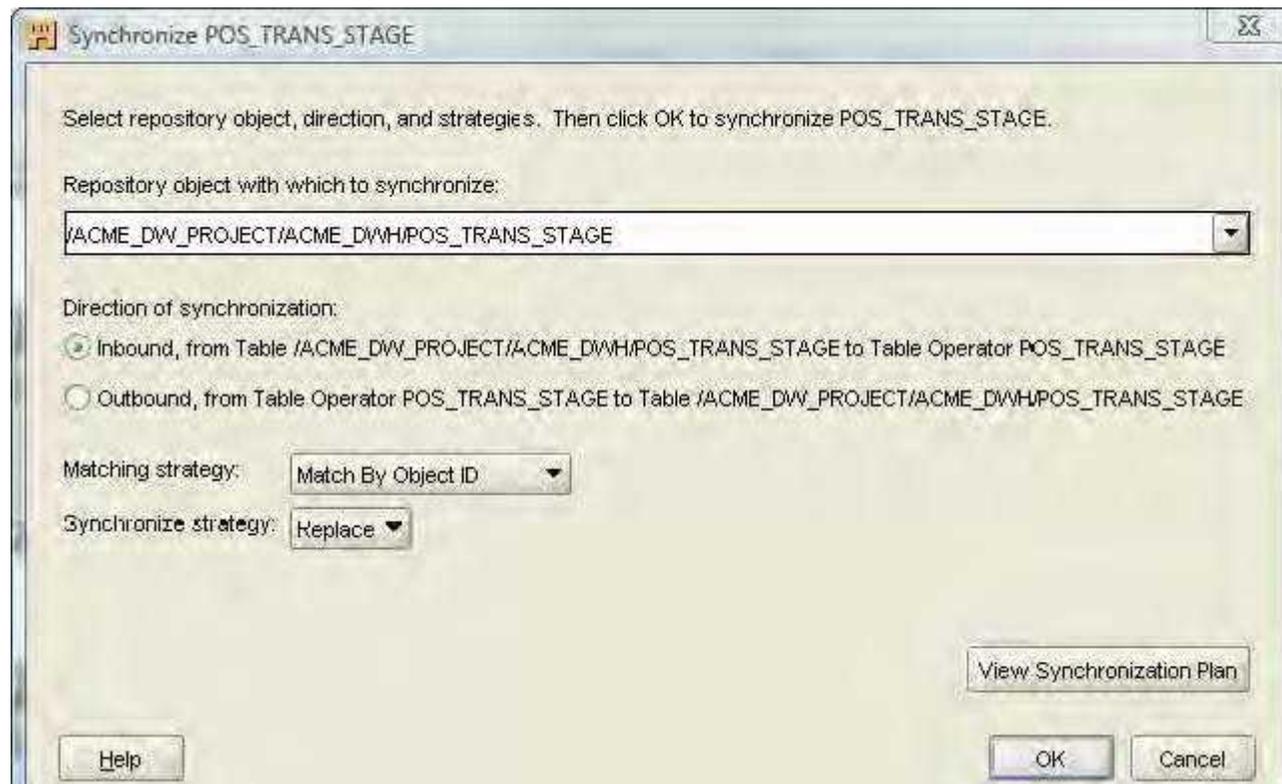
Object Type	Exported
Projects	1
ACME_DW_PROJECT	3815
ATTRIBUTE	479
COLUMN	174
CONFIGURATION	1
CUBE	1
DEPLOYMENT	1
DIMENSION	3
DIMENSION_ATTRIBUTE	34
DIMENSION_USE	3

# Synchronizing objects

- **Updating object definitions**
- There are a couple of ways to update table definitions. Our choice will depend on how the table was defined in the Warehouse Builder in the first place. The two options are:
  - It could be a table in a source database system, in which case the table was physically created in the source database and we just imported the table definition into the Warehouse Builder.
  - It could be a table we defined in our project in the Warehouse Builder and then deployed to the target database to create it. Our staging table would be an example of this second option.

# Synchronizing

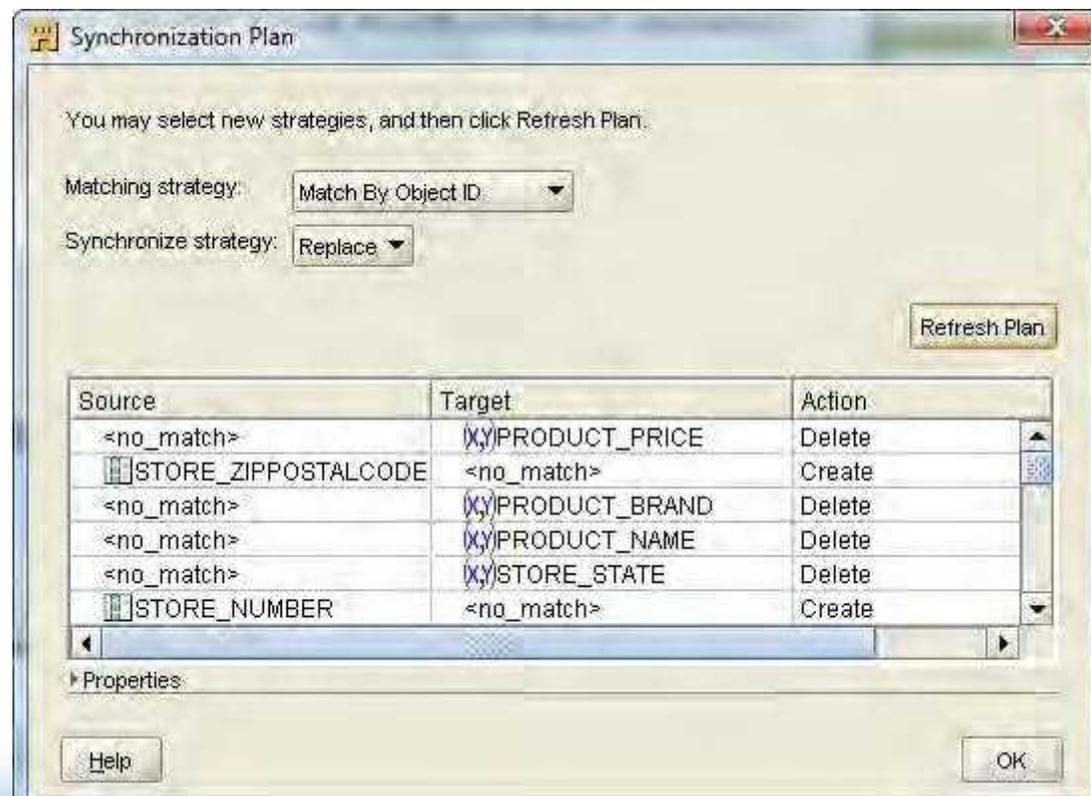
- Many operators we use in a mapping represent a corresponding workspace object. If the workspace object (for instance, a table) changes, then the operator also needs to change to be kept in sync.
- To synchronize, we right-click on the header of the table operator in the mapping and select **Synchronize...** from the pop-up menu, or click on the table operator header and select **Synchronize...** from the main menu **Edit** entry, or press the *F7* key.

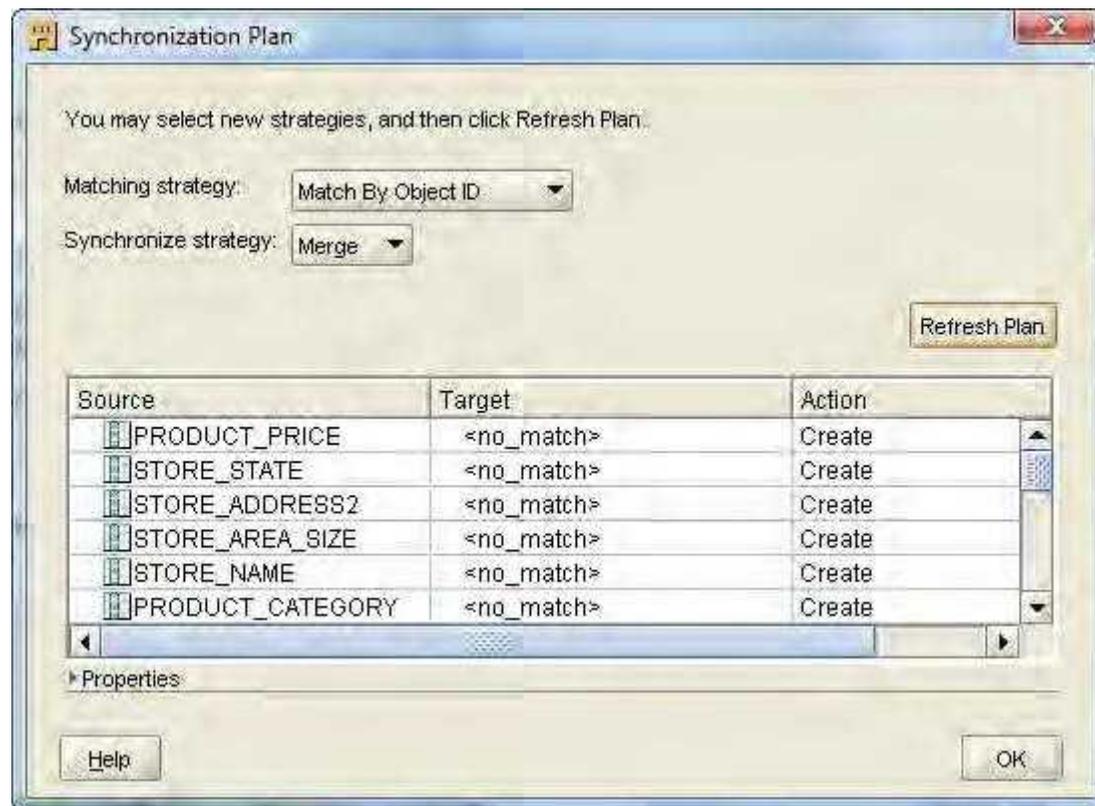


- Inbound or outbound
  - we have to select whether this is an **inbound or outbound synchronization**
- Matching and synchronizing strategy
  - **Match By Object Position or Match By Object Name**
  - **Match by Object ID option uses the underlying unique ID**
- **Replace synchronize strategy**
  - removed all the existing attributes and replaced them with new attributes
- **Merge synchronize strategy**
  - it would leave all the existing attributes alone. However, it would add in (or merge in)

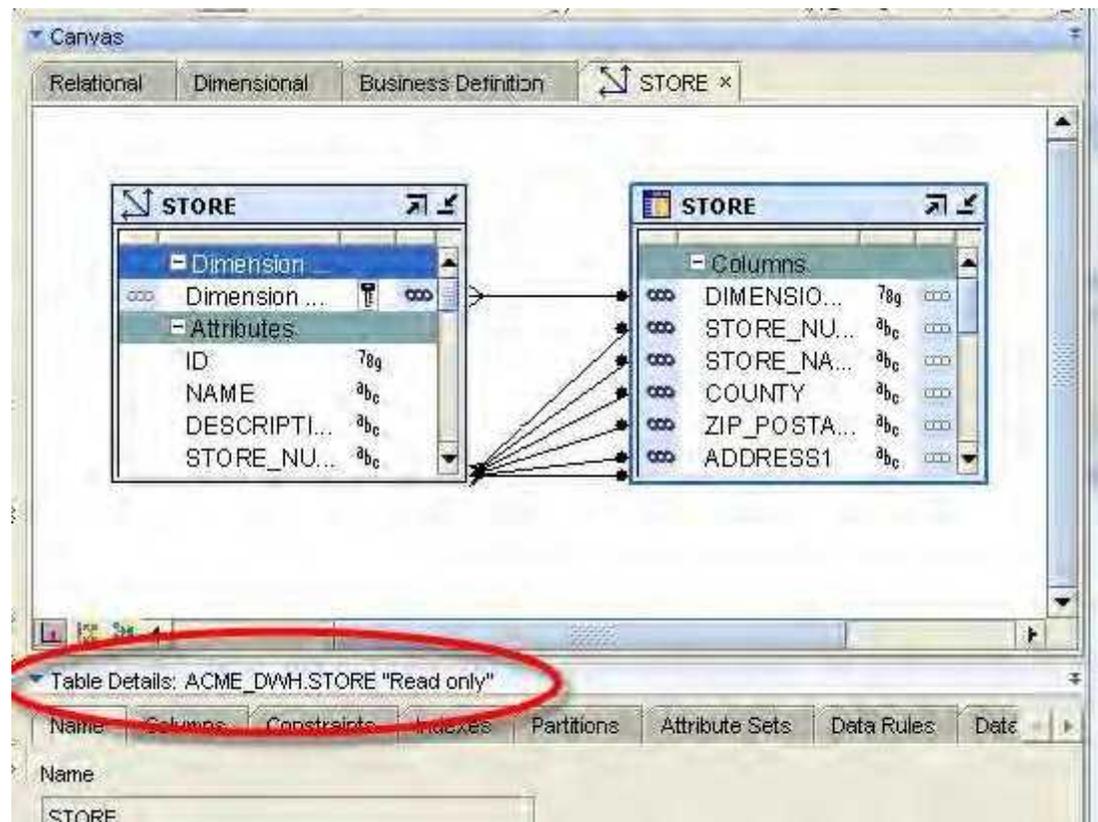
- We can click on the **View Synchronization Plan** button to launch a dialog box

## Viewing the synchronization plan





# Changes to dimensional objects and auto-binding



- Auto Bind, we can have the Warehouse Builder automatically create the table for us with all the dimension attributes properly bound.
- Let's click on the **Dimensional tab**.
- right-click on the STORE dimension and select **Auto Bind from the pop-up menu**
- This will create a new STORE table for us, automatically bind the existing dimension attributes and levels to columns in the table.

# DATAWAREHOUSING

UNIT 6

END OF CHAPTER 1

