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 autobinding, 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.



Recycle Bin

• The Recycle Bin in OWB is the same concept as that which operating systems use to store deleted files.

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			Design Edit ⊻jew	Tools Window Help
			Project Explorer	<u>Control Center Manager</u> <u>Change Manager</u> <u>M</u> etadata Dependency Manager
				Add/Remove Experts Here
		No.	E	Repository Browser
Warehouse Builder Recycle Bin	the in the seconds him. To under	a deletion select an object and		Optimize Repository Repository <u>A</u> ssistant
click Restore. References to a restore	d object, such as foreign key re	ferences in other tables, are not		Recycla Pin
estored automatically. These must be Contents:	recreated manually.			Clipboard F8
estored automatically. These must be Contents: Object	recreated manually Object Parent	Time Deleted		Clip <u>b</u> oard F8 Preferences
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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.

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Image: Materialize Rename Image: Defining Cut Image: Defining Copy Image: Delete Delete	 Interstorm Data Audit Dimension Dutes Tables External Ta Views 	<u>Configure</u> <u>Validate</u> <u>G</u> enerate Deploy Start		 Jic Transformations Jic Experts Jic User Defined Modules Jic Data Rules Sets Surity
	E Materialize E 23 Sequence E Queues E Queues E ACME VVS OR	<u>R</u> ename Cu <u>t</u> Copy Delete	Ctrl-X Ctrl-C Delete	
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Concession of the	This wizard guides you through the creation of a snapshot.
	Step 1: Name the snapshot, choose a type, and provide a description.
	Step 2: Specify the cascade option for each component.
Va a	Step 3: Specify the depth of dependent components.
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	Show this page next time.
Help	Next > Cancel
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Step1. Create	Traine for shapshot

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

Choose the snapshot that you want to compare with the object selected in the Project Explorer. POS_TRANS_STAGE_SNAP	
Help	
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			1.000		
POS_TRANS_STAGE (Table)	Property		Value	value	
STORE_COUNTRY (Column)	Physical Name	_	STORE_COUNTR	RΥ.	
	Business Name		STORE_COUNTR	RY	
	Object Type	050444	Logica	_	
	Properties Chang	led?	Yes		
	Child Componen	to Changed?	NO		
	Links Changed?		No		
Snapshot Comparison; POS_TRANS_STAC	BE (Table) versus POS_	TRANS_STAGE_SN4	1P		
View: Changed Objects 💌	General Proper	ties Links			
E-SA TOS_TRANS_STAGE (Table)	Attribute Name	POS_TRANS	POS_TRANS	Difference	
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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.

Object	Vame	Object Type	
	ME DW PROJECT	Project	-
EB	DEFAULT_CONFIGURATION	Configuration	
194	DEFAULT_DEPLOYMENT	Location Specific Confi	g
	ACME_FILES	Flat File Module	13
121	DOUNTIES_CSV	Flat File	
	ACME_POS	ODBC	
handest	EMPLOYEES	Table	
	TEMS	Table	
	POS_TRANSACTIONS	Table	
	TREGIONS	Table	
REGISTER8		Table	
	T STORES	Table	
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Dbject Type	Exported
Projects	1
EACME_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*.

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Гв	qle			<u>1</u>	/iew Synchroniz	ation Plan Cancel

- 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

Synchronize strategy: Replace -			
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STORE_NUMBER	<no_match></no_match>	Create	1
1			•
Properties			
Help			OK

Synchronize strategy: Merge		Retr	esh Plan
Source	Target	Action	
PRODUCT PRICE	<no match=""></no>	Create	*
STORE STATE	<no match=""></no>	Create	100
STORE ADDRESS2	<no match=""></no>	Create	240
STORE AREA SIZE	<no match=""></no>	Create	
STORE NAME	<no match=""></no>	Create	
PRODUCT CATEGORY	<no match=""></no>	Create	-
4			
▶ Properties			
Help			OK

Changes to dimensional objects and auto-binding

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• 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

