Oracle Data Relationship Management 11.1.2 Administration

Activity Guide

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Author

Sergiy Pecherskyy

Technical Contributors and Reviewers

Matt Lontchar, Brian Brocklesby, Kevin Mckenzie, Randy Wilson, Mark Brieden, Stanley Ziolkowski, Richard Conway, Rahul Kamath

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Practices for Lesson 1: Product Orientation

Chapter 1

Practices for Lesson 1: Overview

Exercises Overview

Throughout this course, you perform hands-on exercises, and these exercises are grouped by lesson. Your instructor may choose to demonstrate some exercises. Therefore, you may not be required to complete all of them. It is, however, important that you complete all exercises that the instructor assigns because many exercises build upon one another in the course.

In this Activity Guide, you are tasked with building an application that contains computer accessories, hardware, and software data. To accomplish your goal, you use a pre-created application named ProjectOne and create a version consisting of data for computer accessories based on a set of spreadsheet reports. To support the data, you manually create properties and import properties in bulk by using the Migration Utility.

Another team in your organization provides the hardware and software data for your application, and you import that data into a new version. Your goal is to combine the data from both versions into a "single version of the truth." To accomplish this goal, you query and compare the data for potential problems, and then make manual fixes and perform bulk updates with action scripts. When the data in both versions is clean, you blend the versions into a new, final version.

At this stage, you are ready to create business rules for your data by creating validations and properties with formulas. To fine-tune the display of properties for nodes, you set up node types. When another team requests data from your application for their application, you meet their needs by exporting data to a file and to a database table.

With your application built, you are ready to provide access to users in your organization. You create users and node access groups, and assign nodes to those access groups. To enable and configure governance workflows you add a governance user and assign the user to a new workflow node access group. You then create a workflow task and workflow model for a new type of change request to maintain products in the ProjectOne application. Lastly, as part of the on-going maintenance of your application, you archive your application.

Practice 1-1: Starting Services

Overview

In this exercise, you start the necessary services for the class learning activities.

Task

1. On the desktop, open the **Managing Services** folder.
2. Double-click **StartServices.bat**.

   When all processes are started, the Oracle Education Support - Oracle Start Services Utility dialog box states, “All Oracle Services started, your environment is now ready for your class. Enjoy!”
3. Click **OK**.
4. In the Managing Services folder, double-click **Services** to open the Services Control Panel.

   The Services window is displayed.
5. Verify that the following services have a status of “Started.”
   - Oracle DRM Server Processes
   - OracleOraDb11g_home1TNSListener
   - OracleServiceORCL
   - World Wide Web Publishing Service

   Note: If any services fail to start, notify your instructor.
6. Close the **Services** window and the **Managing Services** folder.

Practice 1-2: Browsing Web Client

Overview

In this exercise, you access the ProjectOne application and browse the Web Client interface.

Tasks

1. In Web Client, log on to the ProjectOne application as the Administrator (user name is admin, password is Welcome!).
2. Select each task group, review its interface, and make note of the tasks that you can perform.
3. View user preferences, but do not make any changes.
4. View online help options, and then open and view the Administrator's Guide.

Solution 1-1: Starting Services

Steps

1. On the desktop, open the **Managing Services** folder.
2. Double-click **StartServices.bat.**

   When all processes are started, the Oracle Education Support - Oracle Start Services Utility dialog box states, “All Oracle Services started, your environment is now ready for your class. Enjoy!”
3. Click **OK.**
4. In the Managing Services folder, double-click **Services** to open the Services Control Panel.

   The Services window is displayed.
5. Verify that the following services have a status of “Started”:
   - Oracle DRM Server Processes
   - OracleOraDb11g_home1TNSListener
   - OracleServiceORCL
   - World Wide Web Publishing Service

   Note: If any services fail to start, notify your instructor.
6. Close the **Services** window and the **Managing Services** folder.

Solution 1-2: Browsing Web Client

Steps

Logging On to the ProjectOne Application

1. On the desktop, click the **Web Client** icon.
   The logon page for Oracle Data Relationship Management is displayed.
2. In the User Name box, enter the default user name: **admin**.
3. In the Password box, enter the default admin password: **Welcome!**.
4. In the Application box, select **ProjectOne**.
5. Click **Log On.**
   Web Client displays the Home page by default.

Viewing Task Groups

1. View the **Browse** task group, which is selected by default when you first log on to an application.
   - You can browse and manage versions, hierarchies, nodes, and their properties.
   - You can search for nodes and orphan nodes.
2. Select and view the **Query** task group.
   - You can create and run queries, which are queries for properties.
   - You can edit query results based on your user rights, so that you can make changes without navigating to the Browse task group.
   - You can open, copy, and delete existing queries.
   - You can have multiple queries open, but only one can be in focus.
3. Select and view the **Compare** task group.
   - You can create and run compares, which are queries that compare hierarchies.
   - You can edit compare results based on your user rights, so that you can make changes without navigating to the Browse task group.
   - You can open, copy, and delete existing compares.
   - You can have multiple compares open, but only one can be in focus.
4. Select and view the **Script** task group.
   - You can load an action script from a file, transaction log, or node model to apply a bulk set of incremental changes to a version.
   - You can edit action scripts after they are loaded.

5. Select and view the **Import** task group.
    - You can create imports to import hierarchies, nodes, and properties into a version.
    - You can open, copy, and delete existing imports.
    - You can open and run multiple imports on separate tabs, but only one import can be in focus.
6. Select and view the **Blend** task group.
    - You can create blenders to combine hierarchies, nodes, and properties.
    - You can open, copy, and delete existing blenders.
    - You can open and run multiple blenders in separate tabs, but only one blender can be in focus.
7. Select and view the **Export** task group.
    - You can create exports to export data from a Data Relationship Management application to a file or database table.
    - You can create books, which are exports that are grouped and run together.
    - You can open, copy, and delete existing exports and books.
8. Select and view the **Audit** task group.
    - You can query and view data and system transactions.
    - You can query and view requests.
    - You can define query filters and select log fields to be displayed as columns in the query results.
9. Select and view the **Administer** task group.
    - You can administer system metadata and security.
    - For system metadata, you can create and manage property categories, hierarchy groups, property definitions, validations, node types, and glyphs. You can also manage system preferences.
    - For security, you can create and manage users and node access groups. You can also assign users to property categories.

Viewing Preferences

1. At the top of Web Client, select **Preferences**.

   Notice that you can click Change My Password to enter another user password.
2. Click **Home.**

Viewing Help

1. At the top of Web Client, select **Help.**

   View options that you can select: Contents, EPM Documentation, Oracle Support, or About.
2. Select **Contents**, and then **Administrator's Help.**

   The Administrator's Guide is opened in another browser tab.

   Notice that you can search for information by using the table of contents (Contents section), by searching the index (Index section), or by searching for keywords (Search section).
3. Close the Administrator's Guide browser tab.

Practices for Lesson 2: Working with Versions and Hierarchies

Chapter 2

Practices for Lesson 2: Overview

Practices Overview

In these practices, you create a version and hierarchies for the ProjectOne application.

Practice 2-1: Creating the Accessories Version and Hierarchies

Overview

In this practice, you create the Accessories version and three hierarchies.

Tasks

Many of the financial applications in your company have reports that require product, market, and account data. You are given a Microsoft Excel spreadsheet with this data so that you can build hierarchies in the Accessories version.

1. In the class files folder (`D:\CF`), open `Accessories_Dimensions.xlsx` and examine how the business data is divided across three tabs. Each tab represents a dimension in the business.
2. In Web Client, create a version named Accessories with the description Computer Accessories, and save it.
3. Create a hierarchy named Entity, and define the top node as TotalEntities.
4. Create a hierarchy named Account, and define the top node as Measures.
5. Create a hierarchy named Product, and define the top node as TotalBusiness.

Solution 2-1: Creating the Accessories Version and Hierarchies

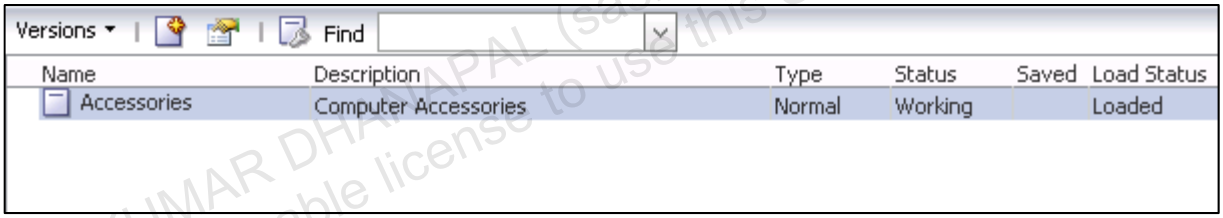
Steps

Examining `Accessories_Dimensions.xlsx`

1. In the `D:\CF` folder, double-click **`Accessories_Dimensions.xlsx`**.
2. Notice that the spreadsheet consists of the following tabs, each representing a dimension of the business:
   - Entity
   - Product
   - Account

Creating the Accessories Version

1. In Web Client, select the **Browse** task group.
2. In the Versions drop-down list, select **New** and then **Version**.
   The New Version dialog box is displayed.
3. In the Name box, enter **`Accessories`**. Make sure that you spell the name correctly, because you cannot modify it later.
4. In the Description box, enter **`Computer Accessories`**.
5. Click **OK**.
   The new version is displayed in an unsaved state.



6. Right-click the **Accessories** version, and select **Save**.
   In the Saved column, a check mark indicates that Accessories is saved to the database.

Creating the Entity Hierarchy

1. On the Hierarchies tab, in the Hierarchies drop-down list, select **New** and then **Hierarchy**.
   The New Hierarchy dialog box is displayed.
2. In the Name box, enter **`Entity`**.
3. Under Top Node in the Name box, enter **`TotalEntities`**.
4. Click **OK**.
   The Entity hierarchy is displayed on the Hierarchies tab.

Creating the Product Hierarchy

1. In the Hierarchies drop-down list, select **New** and then **Hierarchy**.
   The New Hierarchy dialog box is displayed.

2. In the Name box, enter **`Product`**.
3. Under Top Node in the Name box, enter **`TotalBusiness`**.
4. Click **OK**.

   The Product hierarchy is displayed on the Hierarchies tab.

Creating the Account Hierarchy

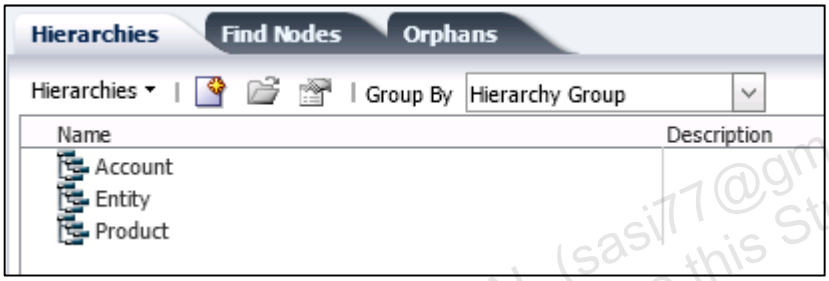
1. In the Hierarchies drop-down list, select **New** and then **Hierarchy**.

   The New Hierarchy dialog box is displayed.
2. In the Name box, enter **`Account`**.
3. Under Top Node in the Name box, enter **`Measures`**.
4. Click **OK**.

   The Account hierarchy is displayed on the Hierarchies tab.

Verifying the Hierarchies

Verify that the hierarchies look the same as the following figure:



Practices for Lesson 3: Working with Nodes

Chapter 3

Practices for Lesson 3: Overview

Practices Overview

In the practice for this lesson, you add nodes to hierarchies in the Accessories version.

Practice 3-1: Adding Nodes to Hierarchies in the Accessories Version

Overview

In this practice, you add nodes to the Product, Entity, and Account hierarchies in the Accessories version.

Tasks

The details for each dimension of your business are contained on the tabs in the spreadsheet named `Accessories_Dimensions.xlsx`. You need to copy the structure of that data to the hierarchies in the Accessories version.

Tip: View node descriptions while building hierarchies in Web Client.

1. Add nodes to the Entity hierarchy based on the data on the Entity tab in the spreadsheet.
2. Add nodes to the Product hierarchy based on the data on the Product tab in the spreadsheet.
3. Add nodes to the Account hierarchy based on the data on the Account tab in the spreadsheet.

Solution 3-1: Adding Nodes to Hierarchies in the Accessories Version

Steps

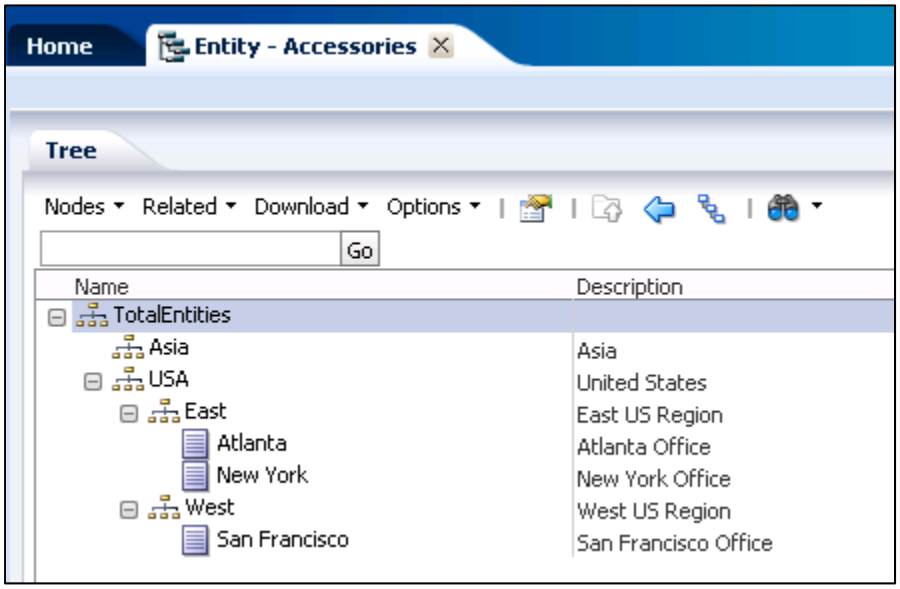
Adding Nodes to the Entity Hierarchy

Note: Continue working in `Accessories_Dimensions.xlsx`.

1. In the spreadsheet, click the **Entity** tab, and examine the data as described in the exercise.
2. Return to Web Client and click **Browse**.
3. On the Hierarchies tab, right-click **Entity**, and select **Open**.
   The Entity - Accessories tab is displayed. The TotalEntities node is selected by default.
4. Configure the hierarchy to show node descriptions:
   a. In the Options drop-down list, select **View By** and then **User Properties**.
      The View By dialog box is displayed.
   b. In the Available list, select **Description**, and click the Select button () to add it to the Selected list.
   c. Click **OK**.
      The Description column is displayed next to the Name column.
5. Add the USA node to the Entity hierarchy:
   a. In the Nodes drop-down list, select **New** and then **Limb**.
      The New Limb Node dialog box is displayed.
   b. In the Name box, enter **USA**.
   c. In the Description box, enter **United States**.
   d. Next to Add As, notice that **Child** is selected and that Sibling is not available.
   e. Click **OK**.
6. Add the Asia node:
   a. Select the **TotalEntities** node.
   b. In the Nodes drop-down list, select **New** and then **Limb**.
      The New Limb Node dialog box is displayed.
   c. In the Name box, enter **Asia**.
   d. In the Description box, enter **Asia**.
   e. Next to Add As, notice that **Child** is selected and that Sibling is not available.
   f. Click **OK**.

7. Add the East node:
    a. Select the **USA** node.
    b. In the Nodes drop-down list, select **New** and then **Limb**.
       The New Limb Node dialog box is displayed.
    c. In the Name box, enter **East**.
    d. In the Description box, enter **East US Region**.
    e. Next to Add As, leave **Child** selected.
    f. Click **OK**.
8. Add the West node:
    a. Select the **USA** node.
    b. In the Nodes drop-down list, select **New** and then **Limb**.
       The New Limb Node dialog box is displayed.
    c. In the Name box, enter **West**.
    d. In the Description box, enter **West US Region**.
    e. Next to Add As, leave **Child** selected.
    f. Click **OK**.
9. Add the Atlanta node:
    a. Select the **East** node.
    b. In the Nodes drop-down list, select **New** and then **Leaf**.
       The New Leaf Node dialog box is displayed.
    c. In the Name box, enter **Atlanta**.
    d. In the Description box, enter **Atlanta Office**.
    e. Next to Add As, leave **Child** selected, and click **OK**.
10. Add the New York node:
    a. Select the **Atlanta** node.
    b. In the Nodes drop-down list, select **New** and then **Leaf**.
       The New Leaf Node dialog box is displayed.
    c. In the Name box, enter **New York**.
    d. In the Description box, enter **New York Office**.
    e. Next to Add As, notice that **Sibling** is selected and that Child is not available.
    f. Click **OK.**
11. Add the San Francisco node:
    a. Select the **West** node.
    b. In the Nodes drop-down list, select **New** and then **Leaf**.
       The New Leaf dialog box is displayed.
    c. In the Name box, enter **San Francisco**.
    d. In the Description box, enter **San Francisco Office**.
    e. Next to Add As, leave **Child** selected.
    f. Click **OK**.

12. Verify that the Entity hierarchy looks the same as the following figure:



13. Close the **Entity - Accessories** tab.

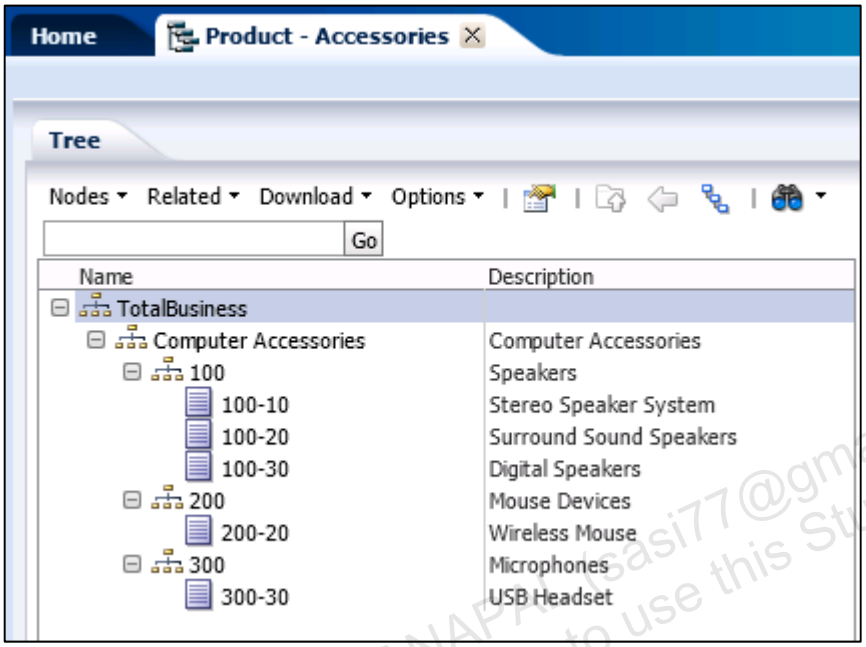
Adding Nodes to the Product Hierarchy

1. In the spreadsheet, click the **Product** tab, and examine the data as described in the exercise.
2. Return to Web Client.
3. Click the **Home** tab if necessary.
4. Right-click the **Product** hierarchy, and select **Open**.
   The Product - Accessories tab is displayed.
5. Configure the hierarchy to show node descriptions:
   a. In the Options drop-down list, select **View By** and then **User Properties**.
      The View By dialog box is displayed.
   b. In the Available list, select **Description**, and click the Select button ( ) to add it to the Selected list.
   c. Click **OK**.
      The Description column is displayed.
6. Add nodes to the Product hierarchy by using the information in the following table. Be sure to add each node as a child to the indicated parent node.

Parent Node Name	Node Name	Node Description	Limb/Leaf
TotalBusiness	Computer Accessories	Computer Accessories	Limb
Computer Accessories	100	Speakers	Limb
100	100-10	Stereo Speaker System	Leaf
100	100-20	Surround Sound Speakers	Leaf
100	100-30	Digital Speakers	Leaf
Computer Accessories	200	Mouse Devices	Limb

200	200-20	Wireless Mouse	Leaf
Computer Accessories	300	Microphones	Limb
300	300-30	USB Headset	Leaf

7. Verify that the Product hierarchy looks the same as the following figure:



8. Close the **Product - Accessories** tab.

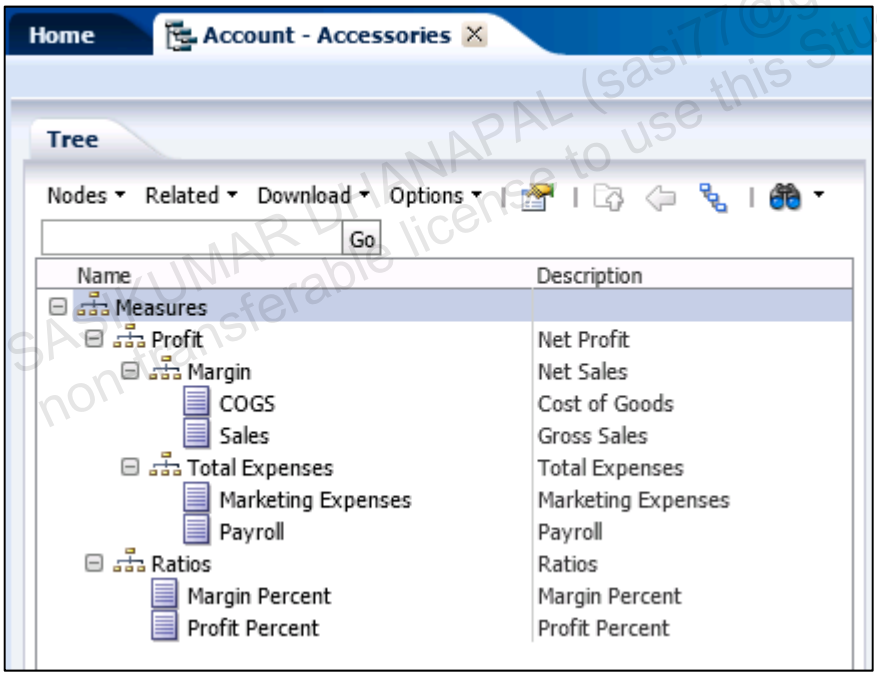
Adding Nodes to the Account Hierarchy

1. In the spreadsheet, click the **Account** tab, and examine the data.
2. Return to Web Client.
3. Click the **Home** tab if necessary.
4. On the Hierarchies tab, right-click the **Account** hierarchy, and select **Open**.
   The Account - Accessories tab is displayed.
5. Configure the hierarchy to show node descriptions:
   a. In the Options drop-down list, select **View By** and then **User Properties**.
      The View By dialog box is displayed.
   b. In the Available list, select **Description**, and click the Select button ( ) to add it to the Selected list.
   c. Click **OK**.
      The Description column is displayed.

6. Add nodes to the Account hierarchy by using the information in the following table. Be sure to add each node as a child to the indicated parent node.

Parent Node Name	Node Name	Node Description	Limb/Leaf
Measures	Profit	Net Profit	Limb
Profit	Margin	Net Sales	Limb
Margin	Sales	Gross Sales	Leaf
Margin	COGS	Cost of Goods	Leaf
Profit	Total Expenses	Total Expenses	Limb
Total Expenses	Marketing Expenses	Marketing Expenses	Leaf
Total Expenses	Payroll	Payroll	Leaf
Measures	Ratios	Ratios	Limb
Ratios	Margin Percent	Margin Percent	Leaf
Ratios	Profit Percent	Profit Percent	Leaf

7. Verify that the Account hierarchy looks the same as the following figure:



8. Close the **Account - Accessories** tab and **`Accessories_Dimensions.xlsx`.**

Practices for Lesson 4: Defining Properties

Chapter 4

Practices for Lesson 4: Overview

Practices Overview

You need to provide several location-type properties to support financial applications in your organization. You decide to create a Location property category and several properties to support the Entity dimension. You also import properties by using the Migration Utility.

Practice 4-1: Creating the Location Property Category

Overview

In this practice, you examine core properties and create a property category named Location.

Tasks

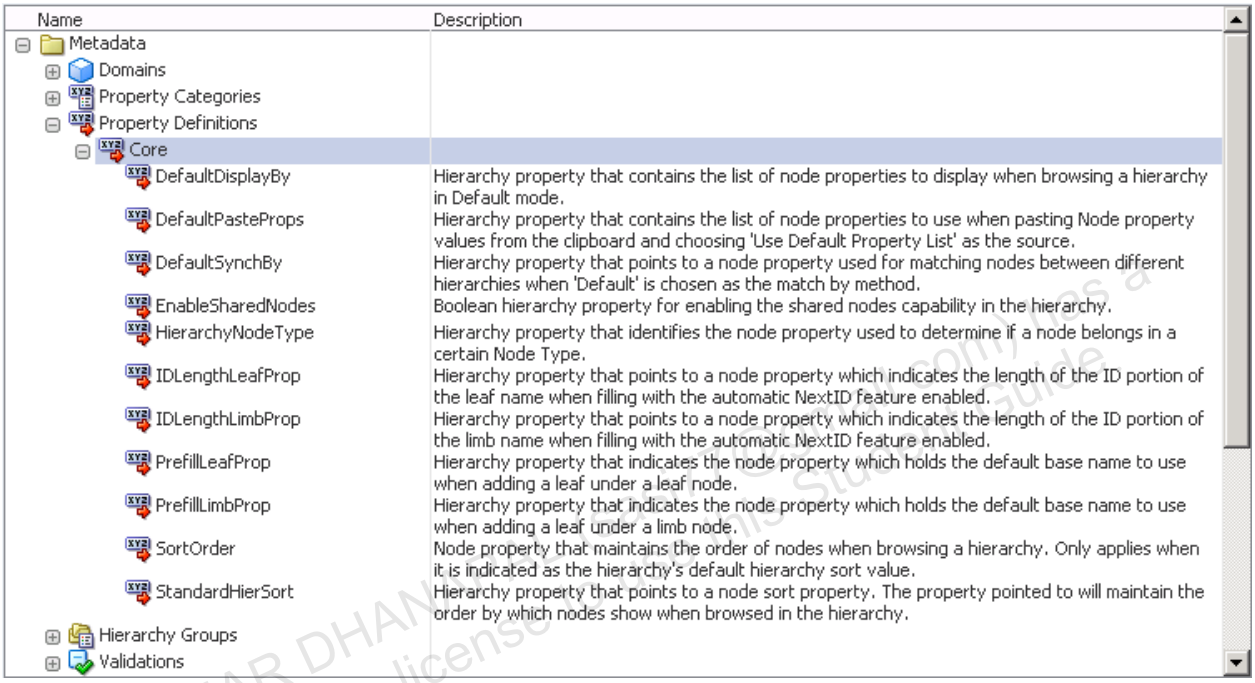
1. Examine core properties.
2. Create a property category named Location.

Solution 4-1: Creating the Location Property Category

Steps

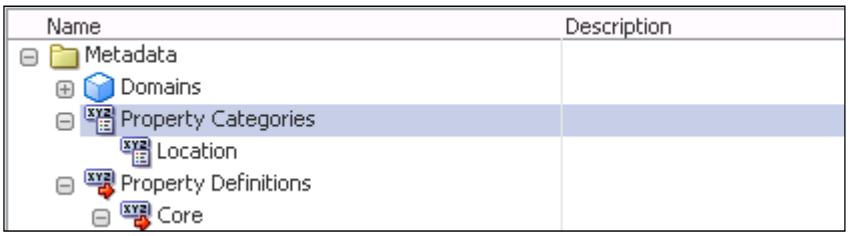
Examining Core Properties

1. In Web Client, select the **Administer** task group.
2. Expand **Property Definitions** and then **Core.**
3. Review the list of the core properties and their descriptions.



Creating the Location Property Category

1. In the New drop-down list, select **Property Category**.
   The New Property Category tab is displayed.
2. In the Name box, enter **Location**.
3. On the toolbar, click the Save button ( ).
   The New Property Category tab is renamed Location.
4. Close the **Location** tab.
5. On the Home tab, expand **Property Categories**.
   Location is listed as a property category, as shown in the following figure:



Practice 4-2: Creating the StateProvince Property

Overview

In this practice, you create a property and add it to the Location property category. You then set the property values to selected nodes.

Tasks

1. Configure the property parameters defined in the following table:

Parameter	Value
Name	State Province
Label	State Province
Description	State or Province
Data Type	String
Property Type	Defined
Property Level	Local Node
Column Width	20
Maximum Length	60

2. Add the StateProvince property to the Location property category, and save the property.
3. Verify that the StateProvince property is listed in the Administer task group.
4. In the Entity hierarchy, set the StateProvince values for the following nodes
    - Atlanta: Georgia
    - New York: New York

Solution 4-2: Creating the StateProvince Property

Steps

Configuring Property Parameters

1. In the Administer task group, in the New drop-down list, select **Property Definition**.
   The New Property tab is displayed.
2. Configure the property parameters defined in the following table:

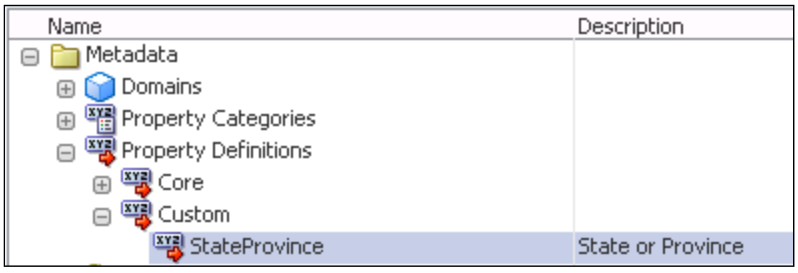
Parameter	Value
Name	StateProvince
Label	State Province
Description	State or Province
Property Level	Local Node
Data Type	String
Property Type	Defined
Column Width	20
Maximum Length	60

Adding the Property to the Location Property Category

1. On the Categories tab, select **Location** in the Available list, and click  (Select) to add it to the Selected list.
2. On the toolbar, click the Save button ().
   The New Property tab is renamed Custom.StateProvince.
3. Close the **Custom.StateProvince** tab.
   The Administer task group is displayed.

Verifying the StateProvince Property

1. Expand **Property Definitions** and then **Custom.**
2. Verify that the StateProvince property is listed.



Setting StateProvince Property Values

1. Select the **Browse** task group.
2. On the Hierarchies tab, double-click the Entity hierarchy to open it.
   The Entity - Accessories tab is displayed.

4. If necessary, expand the **USA** node and then the **East** node.
5. Right-click the **Atlanta** node, and then select **Node Properties**.
   The Properties tab is displayed on the right.
6 In the Category drop-down list, select **Location**.
7. In the Value box for StateProvince, click and enter **Georgia**.
8. Click **Save**.
9. Repeat steps 5 through 8 for the New York node, entering **New York** as the StateProvince property value.

Practice 4-3: Creating the Country Property

Overview

In this practice, you create an inherited property and set its value for the USA node in the Entity hierarchy.

Tasks

1. Configure the property parameters defined in the following table:

Parameter	Value
Name	Country
Label	Country
Description	Country
Property Level	Local Node
Data Type	String
Property Type	Defined
Column Width	20
Inherited	(Selected)

2. Add the Country property to the Location property category, and save the property.
3. Verify that the Country property is listed in the Administer task group.
4. Set the Country property value for the USA node in the Entity hierarchy to USA. Verify that the Country property for the descendant nodes is also set to USA.

Solution 4-3: Creating the Country Property

Steps

Configuring Property Parameters

1. Click the **Home** tab and then the **Administer** task group.
2. In the New drop-down list, select **Property Definition**.
   The New Property tab is displayed.
3. Configure the property parameters defined in the following table:

Parameter	Value
Name	Country
Label	Country
Description	Country
Property Level	Local Node
Data Type	String
Property Type	Defined
Column Width	20
Inherited	(Selected)

Adding the Property to the Location Property Category

1. On the Categories tab, select **Location** in the Available list, and then click the Select button ( ) to add it to the Selected list.
2. On the toolbar, click the Save button ( ).
   The New Property tab is renamed Custom.Country.
3. Close the **Custom.Country** tab.
   The Administer task group is displayed.

Verifying the Country Property

1. If needed, expand **Property Definitions** and then **Custom**.
2. Verify that the **Country** property is listed.

Setting the Country Property Value for the USA Node

1.Click the **Entity - Accessories** tab.

2. In the hierarchy tree, select the **USA** node.

3. On the Properties tab, in the Category drop-down list, select **Location** if needed.

4. In the Country value box, enter **USA**.

5. Click Save.

6. Verify that the descendant nodes of the USA node also have USA as their Country value:

   a. In the hierarchy tree, select the **East** node.

   b. On the Properties tab, verify that the Country value is **USA**.

   c. Repeat steps a and b for the other descendant nodes.

Practice 4-4: Creating the RegionalMgr Property

Overview

In this practice, you create a property to store information about regional managers. You also set values of the property for selected regions and verify the results.

Tasks

1. Configure the property parameters defined in the following table:

Parameter	Value
Name	RegionalMgr
Label	Regional Manager
Description	Regional Manager
Property Level	Local Node
Data Type	String
Property Type	Defined
Column Width	20
Inherited	(Selected)

2. Add the RegionalMgr property to the Location property category, and save the property.
3. Verify that the RegionalMgr property is listed in the Administer task group.
4. Set RegionalMgr property values:
   a. In the Entity hierarchy, set the RegionalMgr property value for the East node to Tom Day. For the Atlanta and New York nodes, verify that the RegionalMgr property is also set to Tom Day.
   b. In the Entity hierarchy, set the RegionalMgr property value for the West node to John Doe. For the San Francisco node, verify that the RegionalMgr property is also set to John Doe.

Solution 4-4: Creating the RegionalMgr Property

Steps

Configuring Property Parameters

1. Click the **Home** tab and then the **Administer** task group.
2. In the New drop-down list, select **Property Definition**.
   The New Property tab is displayed.
3. Configure the property parameters defined in the following table:

Parameter	Value
Name	RegionalMgr
Label	Regional Manager
Description	Regional Manager
Property Level	Local Node
Data Type	String
Property Type	Defined
Column Width	20
Inherited	(Selected)

Adding the Property to the Location Property Category

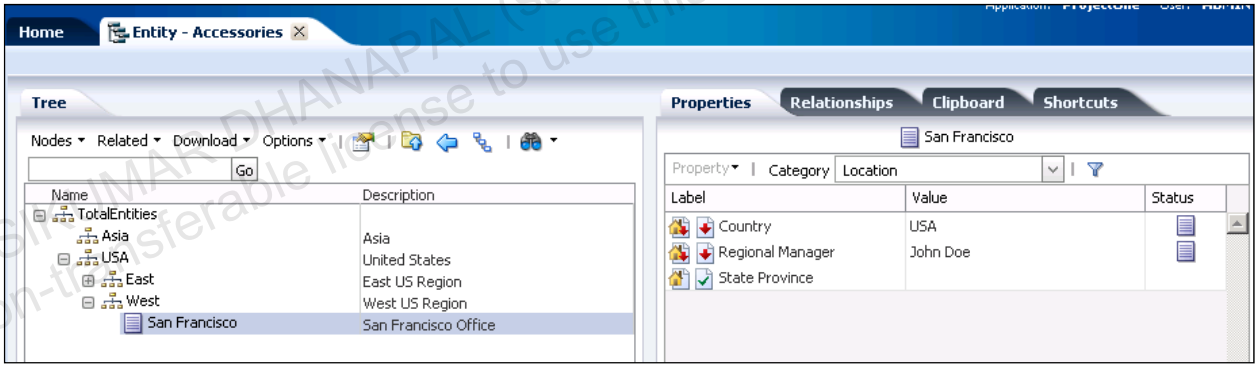
1. On the Categories tab, select **Location** in the Available list, and click the Select button () to add it to the Selected list.
2. On the toolbar, click the Save button ().
   The New Property tab is renamed Custom.RegionalMgr.
3. Close the **Custom.RegionalMgr** tab.
   The Administer task group is displayed.

Verifying the Property

1. Expand **Property Definitions** and then **Custom** if needed.
2. Verify that the **RegionalMgr** property is listed.

Setting Property Values

1. Add a regional manager value for the USA - East region:
    a. Click the **Entity - Accessories** tab.
    b. If necessary, expand the **USA** node.
    c. Select the **East** node.
    d. If needed, in the Category drop-down list on the right, select **Location**.
    e. Select the **Regional Manager** property.
    f. In the Regional Manager box, enter **Tom Day**.
    g. Click **Save**.
    h. Select the **Atlanta** node, and verify that Tom Day is listed as the Regional Manager and that the value is inherited.
    i. Select the **New York** node, and verify that Tom Day is listed as the Regional Manager and that the value is inherited.
2. Add a regional manager value for the USA - West region:
    a. Select the **West** node
    b. On the Properties tab, select the **Regional Manager** property.
    c. In the Regional Manager box, enter **John Doe.**
    d. Click **Save.**
    e. Select the **San Francisco** node, and verify that John Doe is listed as the Regional Manager and that the value is inherited (as shown in the figure):



Practice 4-5: Creating the DefaultCurrency Property

Overview

In this practice, you create a lookup property.

Tasks

1. Configure the property parameters defined in the following table:

Parameter	Value
Name	DefaultCurrency
Label	Default Currency
Description	Default Currency
Property Level	Local Node
Property Type	Lookup
Data Type	String
Lookup Property	Custom.Country
Column Width	20

2. Add the DefaultCurrency property to the Location property category.
3. Configure the lookup table with values from the following table, and save the table:

Lookup Key	Result Value
USA	USD
Canada	CAD
China	CNY
France	EUR
Italy	EUR
South Africa	ZAR
United Kingdom	GBP

4. Verify that the DefaultCurrency property is listed in the Administer task group.
5. In the Entity hierarchy, verify that the DefaultCurrency property value is set to USD for the USA node and its descendants.

Solution 4-5: Creating the DefaultCurrency Property

Steps

Configuring Property Parameters

1. Click the **Home** tab and then the **Administer** task group.
2. In the New drop-down list, select **Property Definition**.
   The New Property tab is displayed.
3. Configure the property parameters defined in the following table:

Parameter	Value
Name	DefaultCurrency
Label	Default Currency
Description	Default Currency
Property Level	Local Node
Property Type	Lookup
Data Type	String
Lookup Property	Custom.Country (namespace is Custom)
Column Width	20

Adding the Property to the Location Property Category

- On the Categories tab, select **Location** in the Available list, and click the Select button () to add it to the Selected list.

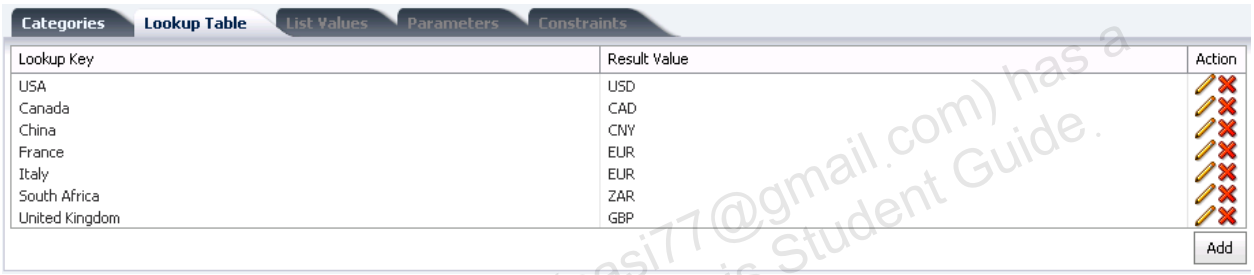
Configuring the Lookup Table

1. Click the **Lookup Table** tab.
2. Click **Add**.
3. Under Lookup Key, enter **USA**.
4. Under Result Value, enter **USD**.
5. In the Action column, click the Update button ().

6. Repeat steps 2 through 5 for the lookup values in the following table:

Lookup Key	Result Value
Canada	CAD
China	CNY
France	EUR
Italy	EUR
South Africa	ZAR
United Kingdom	GBP

7. Compare your table with the following figure:



8. On the toolbar, click the Save button ( ).
   The New Property tab is renamed Custom.DefaultCurrency.
9. Close the **Custom.DefaultCurrency** tab.
   The Administer task group is displayed.

Verifying the Property

- Under Custom properties, verify that the **DefaultCurrency** property is listed.

Verifying Property Values

1. Click the **Entity - Accessories** tab.
2. Select the **USA** node.
3. If needed, on the Properties tab, in the Category drop-down list, select **Location.**
4. Verify that the Default Currency property value is automatically set to USD and that you cannot change the value.
5. Select any node under the USA node, and verify that its Default Currency property value is automatically set to USD.

Practice 4-6: Creating the LocalOffice Property

Overview

In this practice, you create a list property and set its value for selected nodes.

Tasks

1. Configure the property parameters defined in the following table:

Parameter	Value
Name	LocalOffice
Label	Local Office
Description	Local Office
Property Level	Local Node
Property Type	Defined
List	(Selected)
Data Type	String
Default Value	Yes
Column Width	20

2. Add the LocalOffice property to the Location property category.
3. Configure Yes and No as list values, and save the property.
4. Verify that the LocalOffice property is listed in the Administer task group.
5. In the Entity hierarchy, set the LocalOffice property value for the following nodes:
   - Asia: No
   - USA: Yes

Solution 4-6: Creating the LocalOffice Property

Steps

Configuring Property Parameters

1. Click the **Home** tab and then the **Administer** task group.
2. In the New drop-down list, select **Property Definition.**
   The New Property tab is displayed.
3. Configure the property parameters defined in the following table:

Parameter	Value
Name	LocalOffice
Label	Local Office
Description	Local Office
Property Level	Local Node
Property Type	Defined
List	(Selected)
Data Type	String
Default Value	Yes
Column Width	20

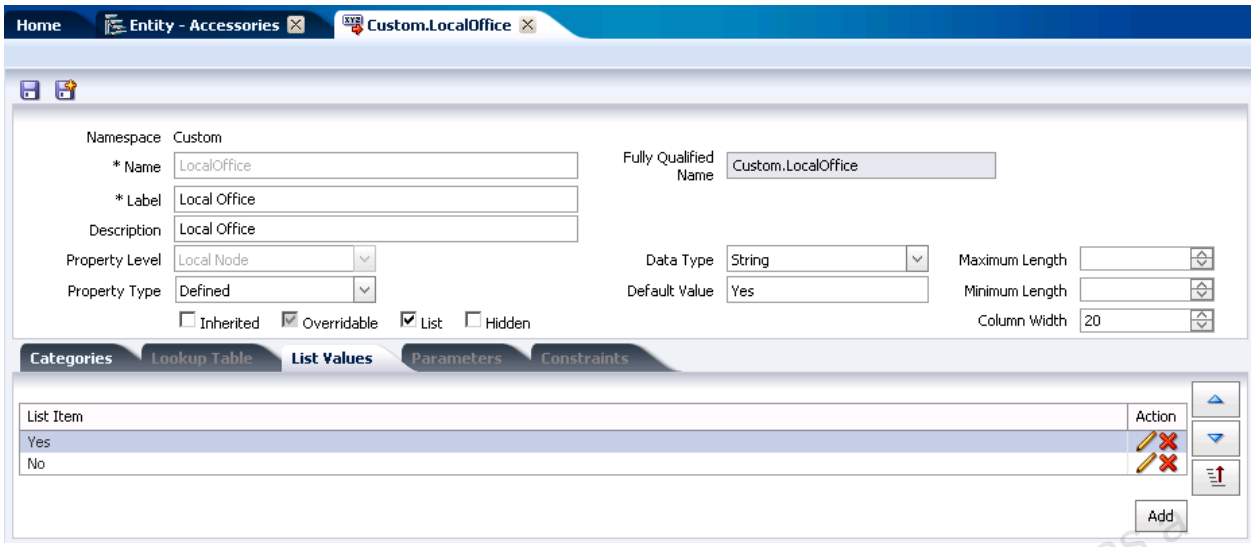
Adding the Property to the Location Property Category

- On the Categories tab, select **Location** in the Available list, and click the Select button () to add it to the Selected list.

Configuring List Values

1. Click the **List Values** tab.
2. Click **Add**.
3. Under List Item, enter **Yes**.
4. In the Action column, click the Update button ().
5. Click **Add**.
6. Under List Item, enter **No**.
7. In the Action column, click the Update button ().
8. On the toolbar, click the Save button ().

The New Property tab is renamed Custom.LocalOffice, as shown in the figure:



9. Close the Custom.LocalOffice tab.
   The Administer task group is displayed.

Verifying the Property

- Under Custom properties, verify that the LocalOffice property is listed.

Setting LocalOffice Property Values

1. Click the **Entity - Accessories** tab.
2. Select the **Asia** node.
3. On the Properties tab, select the **Local Office** property, select **No**, and click **Save.**
4. Select the **USA** node and verify that the Local Office property value is set to Yes.
5. Select children of the USA node (for example, the East and New York nodes), and verify that the Local Office property value is set to Yes.
6. Close the **Entity - Accessories** tab.

Practice 4-7: Importing Properties with the Migration Utility

Overview

In this practice, you create properties by importing them with the Migration Utility.

Tasks

As you continue to support the company teams, you learn that you should include several other properties in your ProjectOne application. The teams send you an application template (XML file) containing their data. With this file in hand, your task is to import the metadata objects into your ProjectOne application.

1. Using the Migration Utility, import all metadata objects from Essbase_FM_objects.xml, which is located in the class files folder, into the Project One application.
    a. Log on as the Administrator (user name is `admin`, password is `Welcome!`).
    b. Review metadata objects before loading them.
    c. Select each filter, and view the results.
    d. Run the load, and download the Load Detail log to the desktop.
2. In Web Client, verify that the following items exist:
    a. Property Categories:
        - Common
        - Essbase
        - FM
        - Location
    b. Custom properties:
        - UDA1
        - UDA2
        - UDA3
    c. Essbase properties:
        - Consolidation
        - DataStorage
        - Formula
        - TwoPassCalc
    d. FM properties:
        - AllowChildrenAdj
        - DefCurrency
        - HoldingCompany
        - IsICP
        - SecurityClass

3. Check property values and lookup tables:
   a. Verify that the Consolidation property in the Essbase property category consists of the following list values:
      - Addition
      - Subtraction
      - Multiplication
      - Division
      - Percent
      - Ignore
   b. Verify that the Data Storage property in the Essbase property category consists of the following list values:
      - Store
      - Dynamic Calc and Store
      - Dynamic Calc
      - Never Share
      - Label Only
      - Shared Member
   c. Verify that the IC Partner property in the FM property category consists of two list values: Y and N.
   d. Verify that the Default Currency and Security Class properties are working correctly:
      - Set the Default Currency property equal to USD. The Security Class property value should automatically equal US.
      - Set the Default Currency property equal to CAD. The Security Class property value should automatically equal Canada.

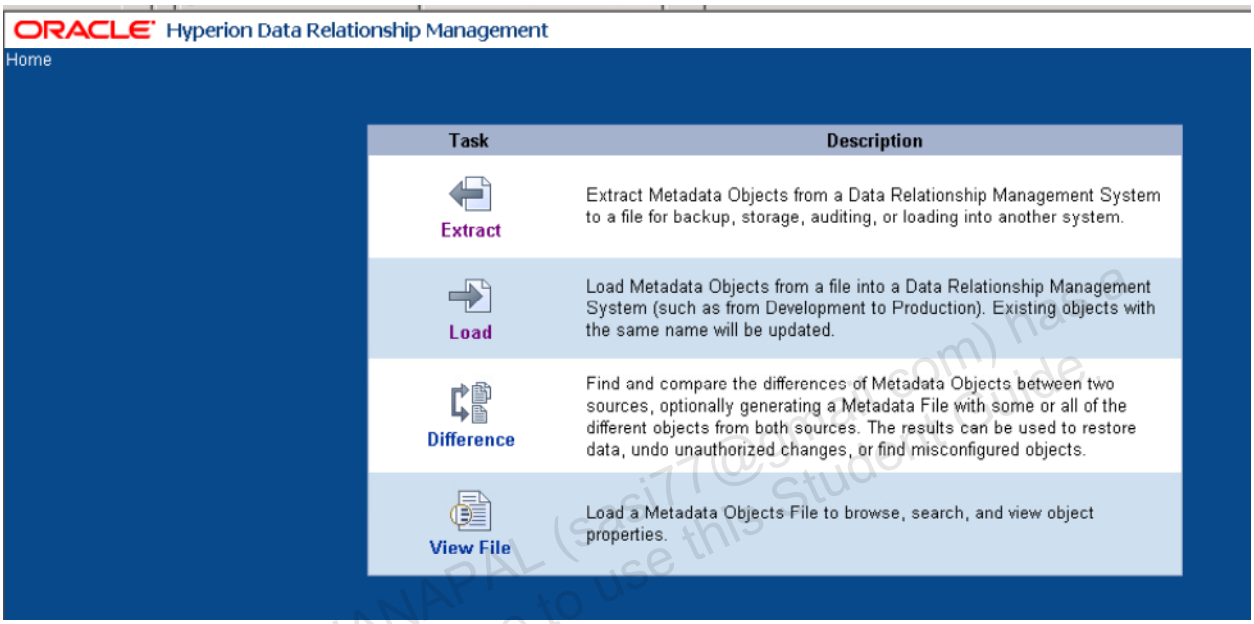
Solution 4-7: Importing Properties with the Migration Utility

Steps

Loading Objects with the Migration Utility

1. Select **Start**, then **All Programs**, then **Oracle EPM System**, then **Data Relationship Management**, and then **Migration Utility.**

   The main menu is displayed, as shown in the following figure:

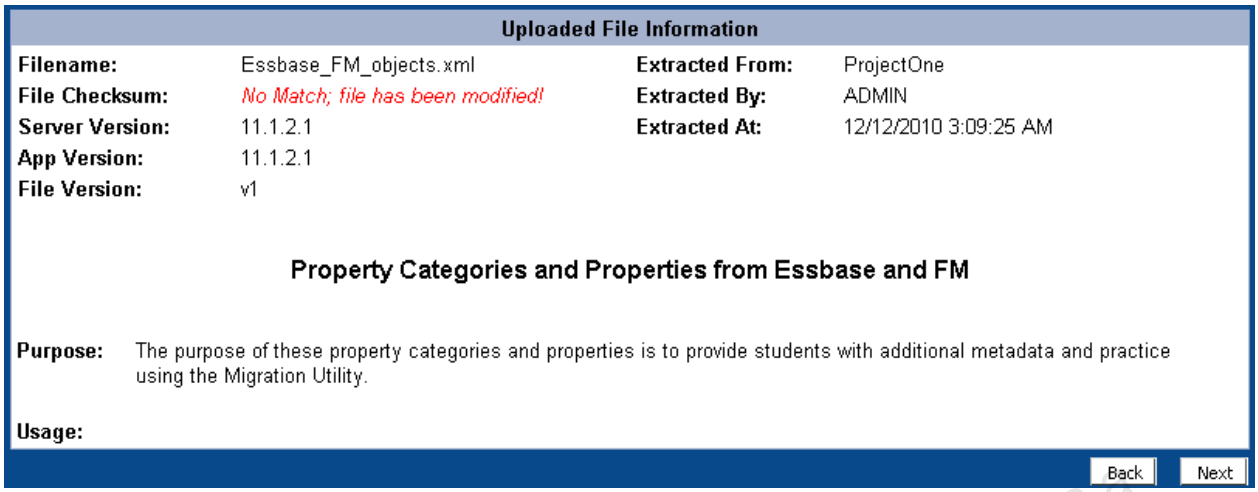


2. Select **Load**.

   The Upload File screen is displayed.

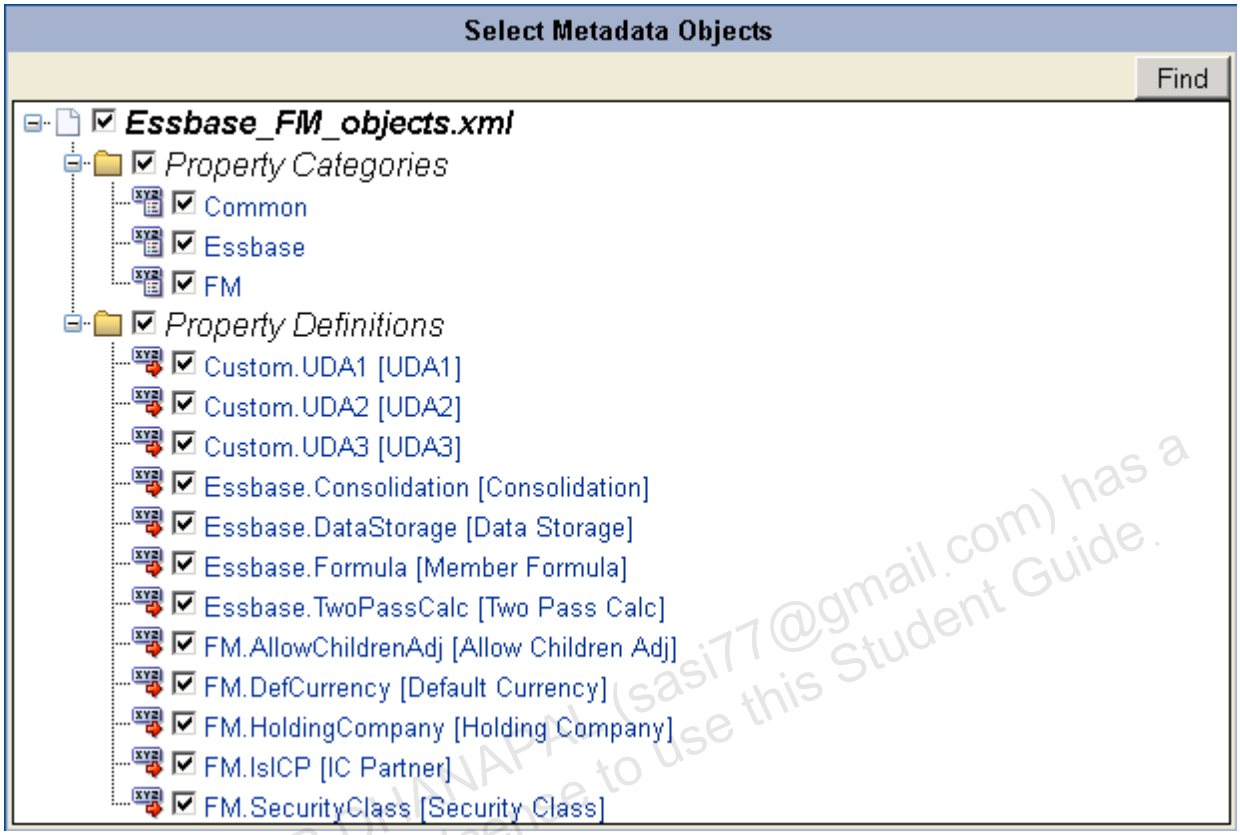
3. Click **Browse**, browse to the class files folder, select **Essbase_FM_objects.xml**, and click **Open**.

4. Click **Upload**.
   The Uploaded File Information screen is displayed similar to the following figure:



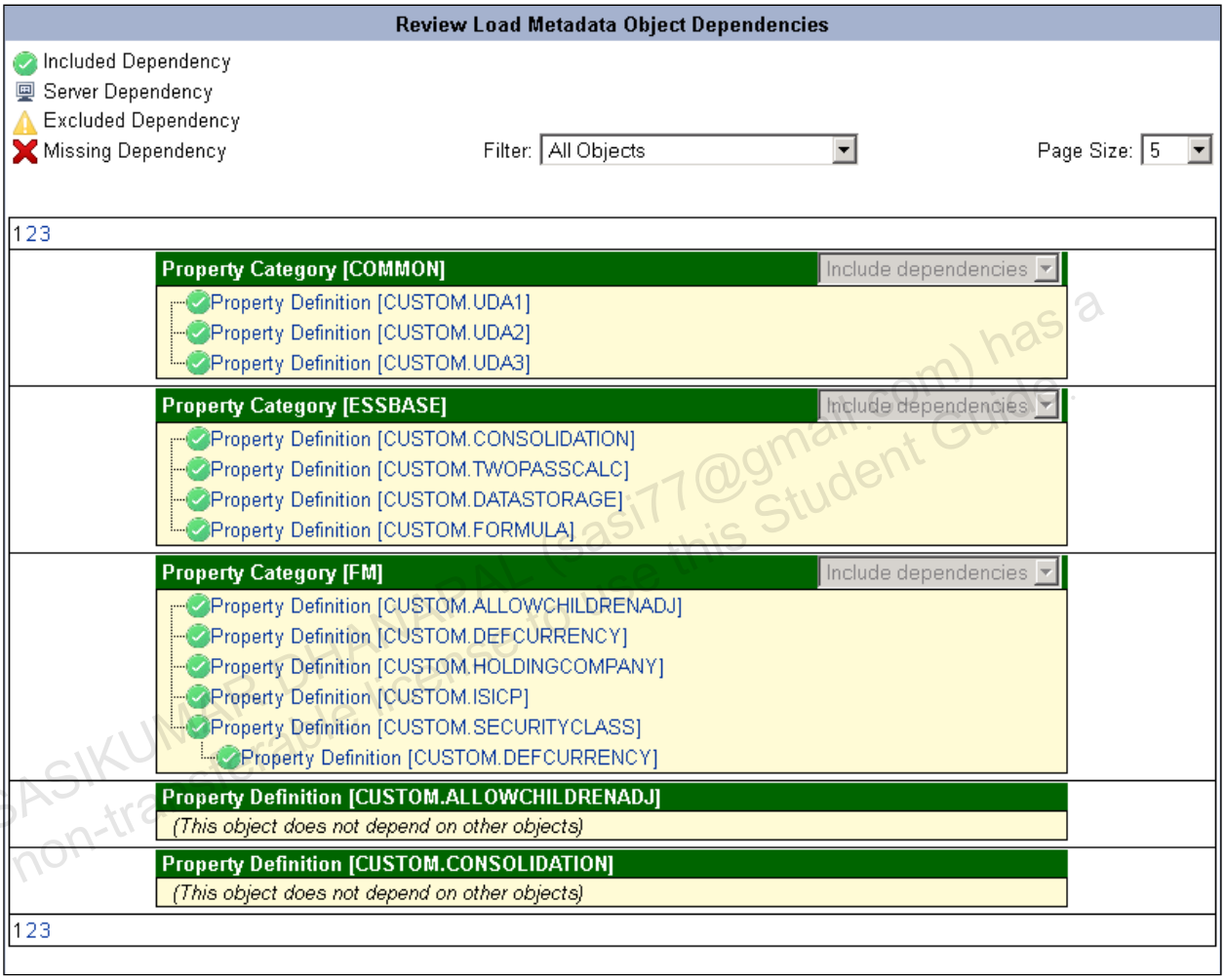
5. Review the information, and click **Next**.
   The Login Connection screen is displayed.
6. Leave the connection information as is.
7. In the Password box, enter **Welcome!**, and click **Log In**.
   The Select Metadata Objects screen is displayed.
8. Select **Essbase_FM_objects.xml** to select all property categories and property definitions.

9. Expand **Property Categories** and **Property Definitions**, and view the list of metadata objects that will be loaded into the ProjectOne application, as shown in the following figure:
   Note: All objects are selected.



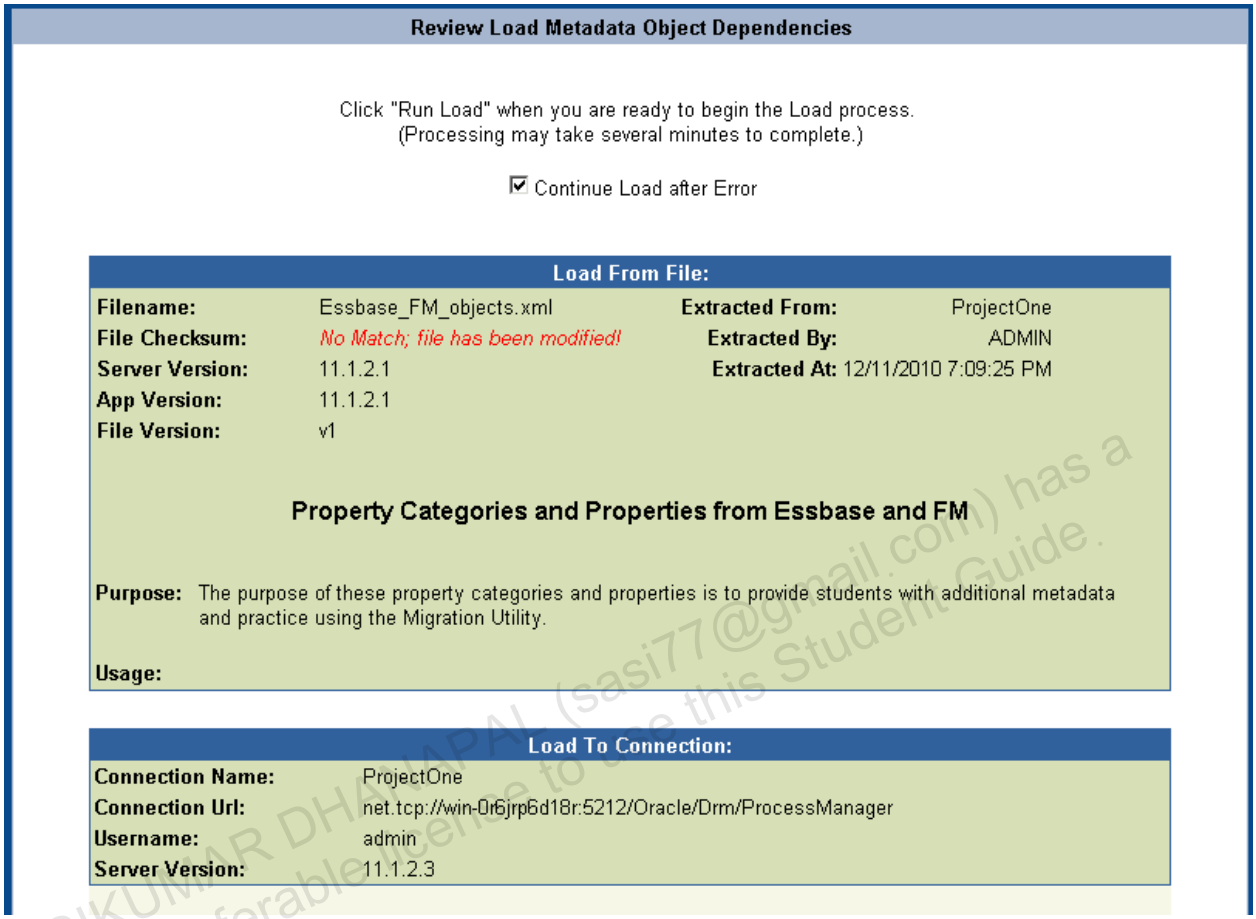
10. Click **Next**.
    The Review Load Metadata Object Dependencies screen is displayed.

11. In the Filter drop-down list, select the following options and view the results (as shown in the figure):
    - **All Objects**
    - **Objects with Dependencies**
    - **Objects with Errors**
    - **Objects with Unresolved Errors**



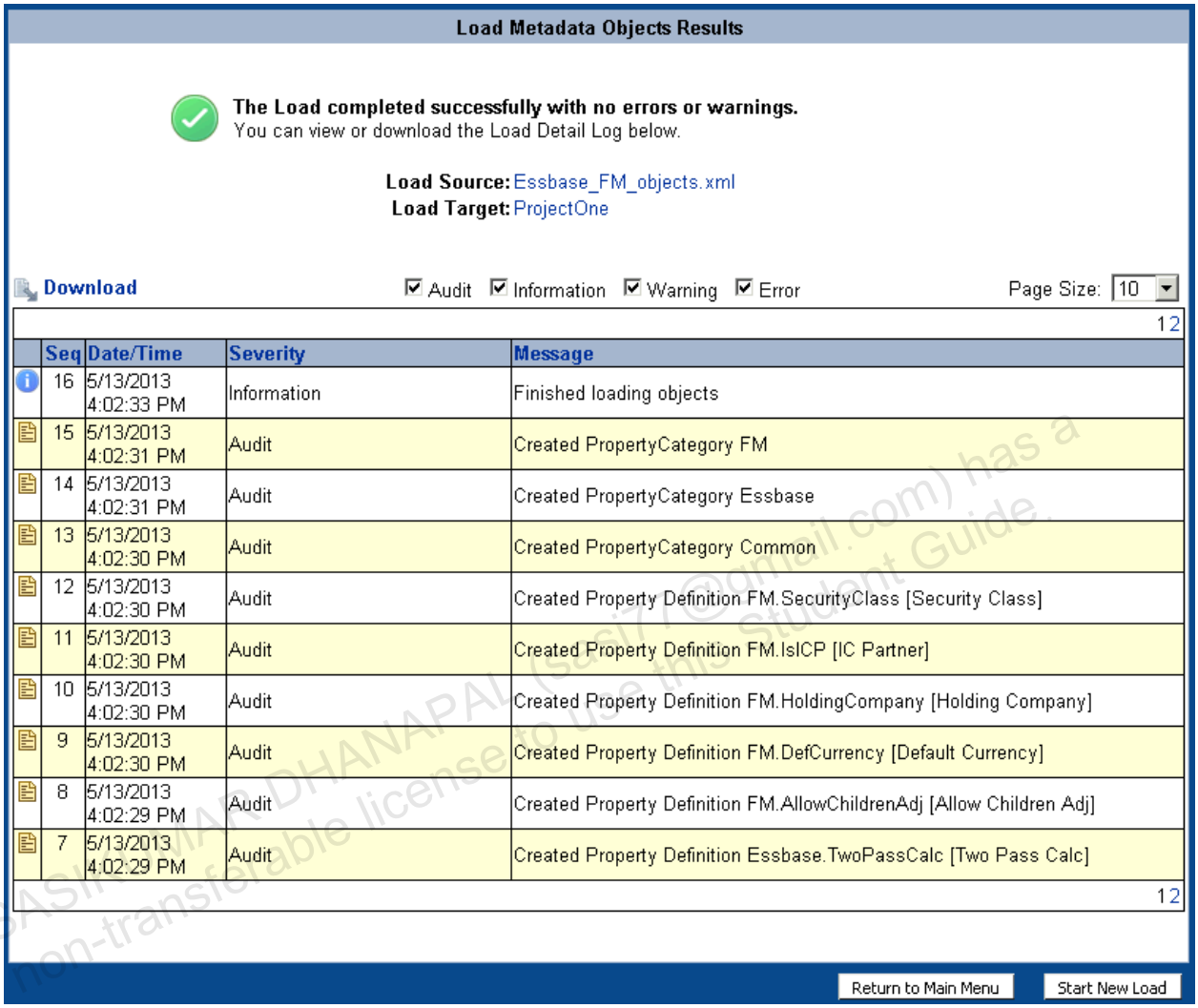
12. Click **Next**.

The Review Load Metadata Object Dependencies screen displays a message to click Run Load when you are ready, as shown in the following figure:



13. Leave **Continue Load after Error** selected, and click **Run Load.**

    A message indicates that the load was completed without errors or warnings, as shown in the following figure:

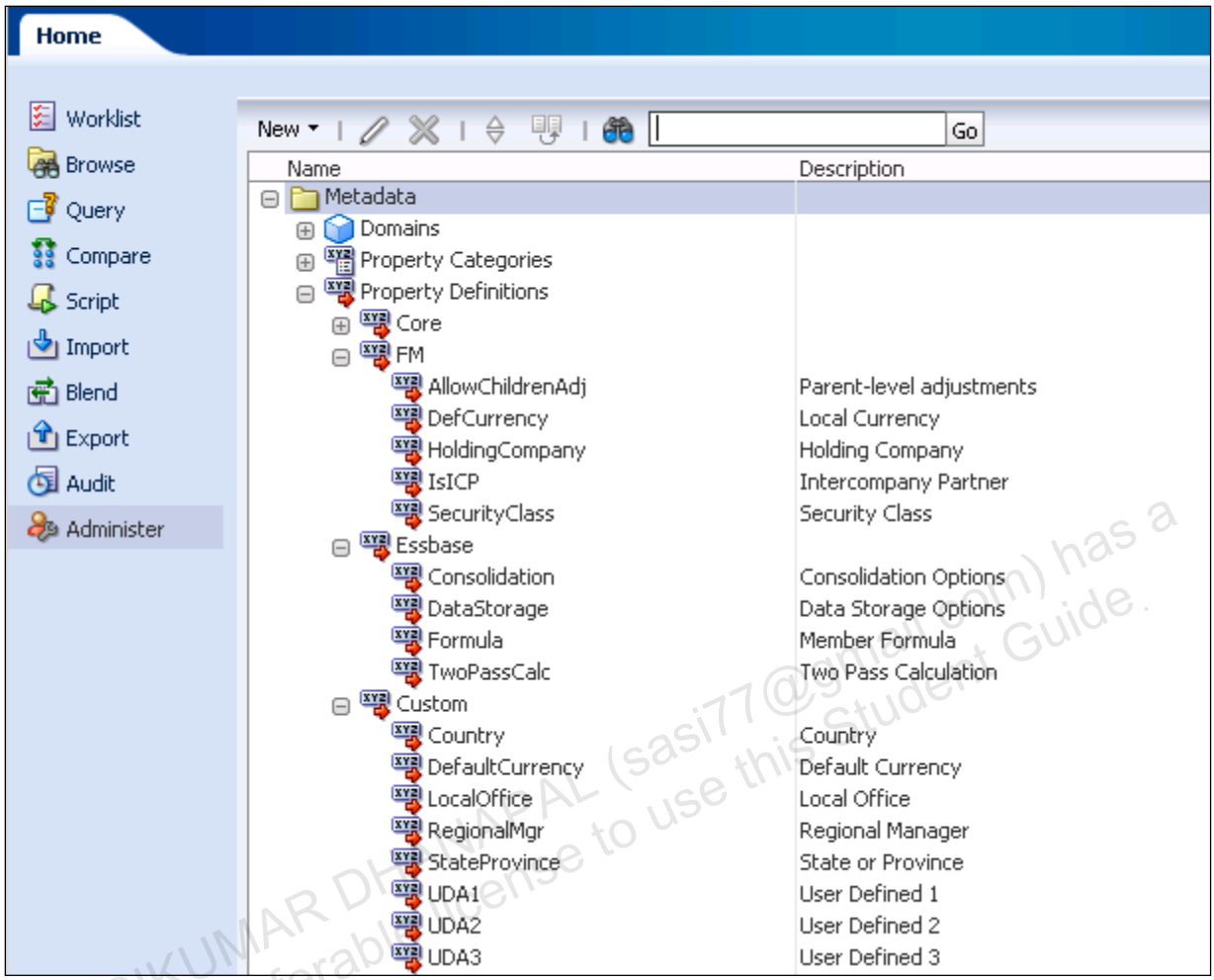


14. Download the Load Detail log:
    a. Click **Download**.
       The File Download dialog box is displayed.
    b. Click **Save**.
       The Save As dialog box is displayed.
    c. Browse to the desktop.
    d. Leave the file name as is, and click **Save**.
       The “Download complete” dialog box is displayed.
    e. Click **Close**.
15. Review the messages on the screen, and click **Return to Main Menu**.
16. Select **Logout**, and close the **Main Menu** tab in the browser.

Verifying the New Property Categories and Properties in the ProjectOne Application

1. Return to Web Client. Click the **Home** tab and then the **Administer** task group.
2. If you are prompted to log on again, click **OK**, and then log on with user name **`admin`** and password **`Welcome!`**
3. If needed, expand **Property Categories** and **Property Definitions.**
4. Verify that the following Property Categories are listed:
    - Common
    - Essbase
    - FM
    - Location
5. If needed, under Property Definitions, expand **Custom**.
6. Verify that the following properties are added to the list of properties that you previously created:
    - UDA1
    - UDA2
    - UDA3
7. Under Property Definitions, expand **Essbase**, and verify that the following properties are listed:
    - Consolidation
    - DataStorage
    - Formula
    - TwoPassCalc
8. Under Property Definitions, expand **FM**, and verify that the following properties are listed:
    - AllowChildrenAdj
    - DefCurrency
    - HoldingCompany
    - IsICP
    - SecurityClass

9. Verify that the Administer task group looks the same as the following figure:

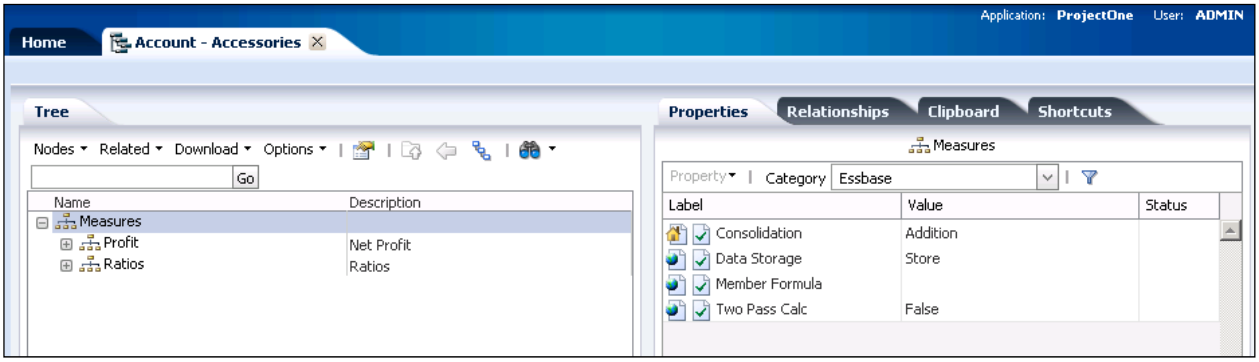


Verifying Property Values and Lookup Tables in the ProjectOne Application

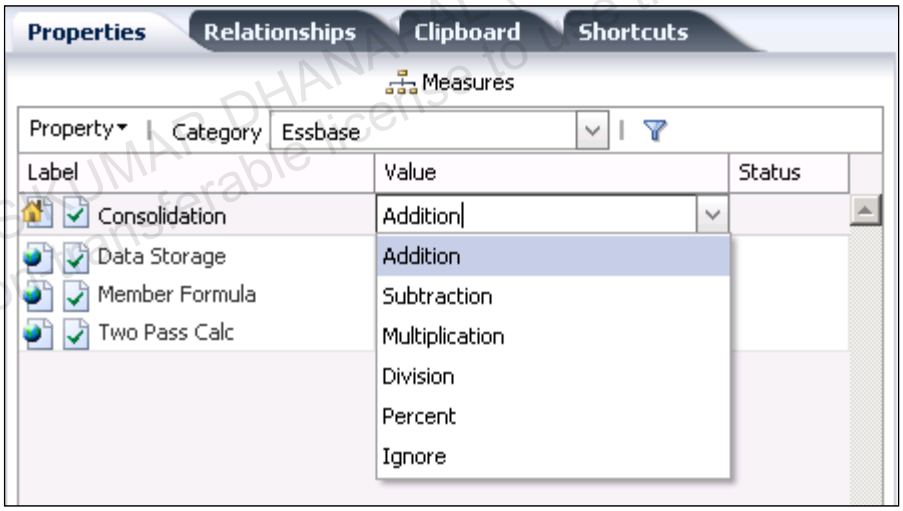
1. Select the **Browse** task group.
2. On the Hierarchies tab, double-click the **Account** hierarchy to open it.

   The Account - Accessories tab is displayed.

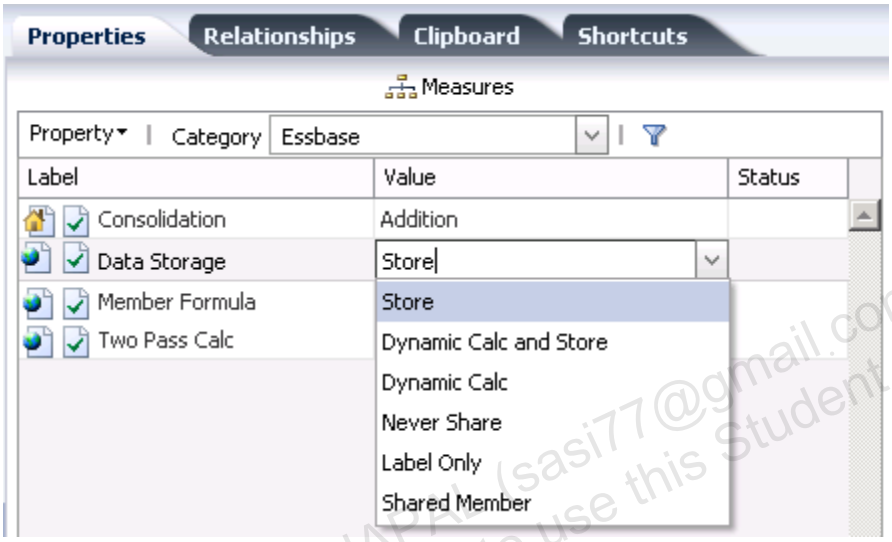
3. In the Category drop-down list on the right, select **Essbase**.
   Properties of the Essbase property category are displayed, as shown in the following figure:



4. Select the **Consolidation** property, select the drop-down list, and verify that the list contains the following values (as shown in the following figure):
   - Addition
   - Subtraction
   - Multiplication
   - Division
   - Percent
   - Ignore



5. Select the **Data Storage** property, select the drop-down list, and verify that the list contains the following values (as shown in the following figure):
   - Store
   - Dynamic Calc and Store
   - Dynamic Calc
   - Never Share
   - Label Only
   - Shared Member



6. In the Category drop-down list, select **FM**.
   Properties of the FM property category are displayed, as shown in the following figure:

7. Select the **IC Partner** property, select the drop-down list, and verify that the list contains the values **Y** and **N**, as shown in the following figure:

8. Select the **Default Currency** property, enter **USD**, and click **Save**.

   US is displayed in the Value box of the Security Class property, as shown in the following figure:

9. In the Value box of the Default Currency property, enter **CAD**, and click **Save**.

   CANADA is displayed in the Value box of the Security Class property, as shown in the following figure:

10. Close the **Account - Accessories** tab.

Practices for Lesson 5: Importing Data

Chapter 5

Practices for Lesson 5: Overview

Practices Overview

In this practice, you will import data into a new version

Practice 5-1: Importing Nodes into a New Version

Overview

In this practice, you import nodes into a new version.

Tasks

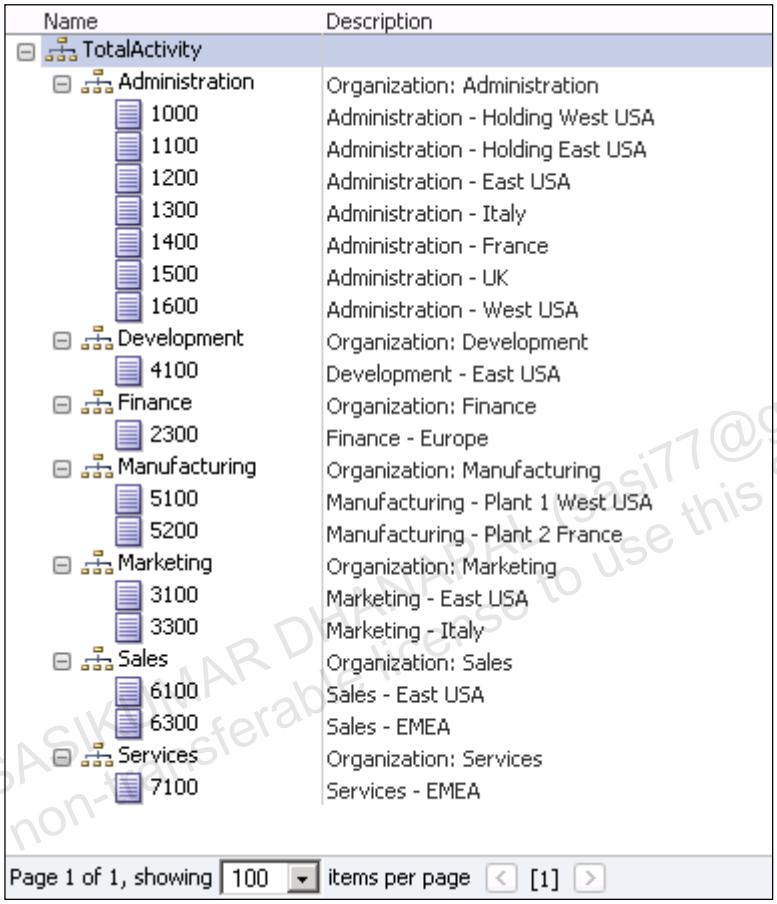
Your company has just acquired another company that sells hardware and software components. You want to incorporate the dimensions from this new company into your ProjectOne application. You are given the data in the form of a comma-delimited text file.

1. In the class files folder, open and review the import file named HardwareSoftwareLoad.txt.
2. Create an import with the following configuration. Accept default values and selections unless otherwise specified.
   a. Examine the import file to determine the delimiter and file sections to specify.
   b. When configuring the style, set up the following:
      - Allow leaf nodes to be determined at the end of the import process.
      - Configure duplicate nodes so that they are named <node>:Shared-<number> (for example, 4100:Shared-001).
   c. Configure the property order for hierarchies as follows:
      1* - Hier Name
      2* - Top Node
   d. Configure the property order for nodes as follows:
      1* - Name
      2 - Description
   e. Configure the property order for relations as follows:
      1* - Name
      2* - Parent Node
      3 - Description
      4 - Default Currency
      5 - UDA1
      6 - UDA2
   f. Configure the target as follows:
      - Name: HardwareSoftware
      - Description: Computer Hardware and Software
      - Maximum errors: 20
      - Save Version to Repository: selected
   g. Save the import as follows:
      - Name: HardwareSoftwareLoad
      - Description: Import for hardware and software dimensions
      - Object Access Group: User

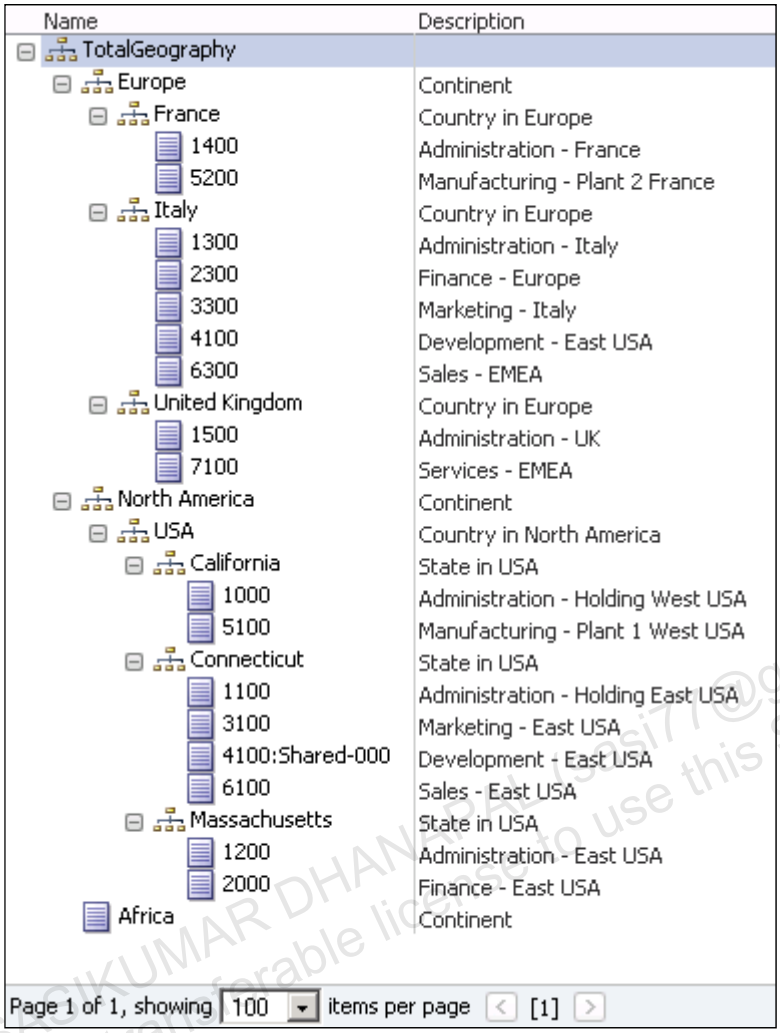
3. Run the HardwareSoftwareLoad import, and review the import process results.
   The Status reads [CompleteSuccess], and there is 1 error and 0 warnings.

The results should show that you added 3 hierarchies, 50 nodes, and 3 orphan nodes. In addition, one duplicate node exists. The error message indicates that the duplicate node is node 4100, located in the Geography hierarchy. The duplicate was renamed 4100:Shared-001.

4. Verify that the following hierarchies exist in the HardwareSoftware version, as shown in the following figures:
    - Activity hierarchy:



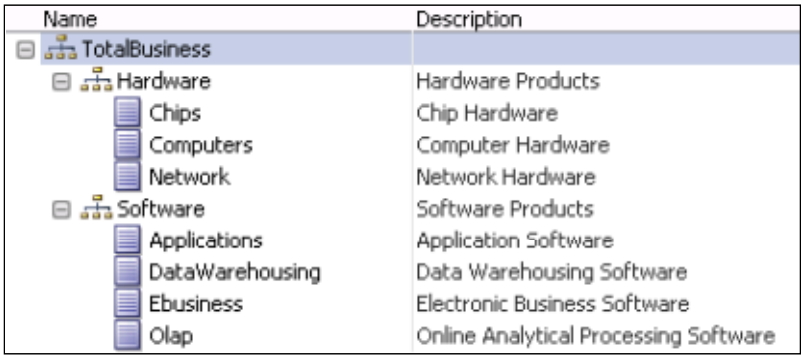
- Geography hierarchy:



Name	Description
TotalGeography	
Europe	Continent
France	Country in Europe
1400	Administration - France
5200	Manufacturing - Plant 2 France
Italy	Country in Europe
1300	Administration - Italy
2300	Finance - Europe
3300	Marketing - Italy
4100	Development - East USA
6300	Sales - EMEA
United Kingdom	Country in Europe
1500	Administration - UK
7100	Services - EMEA
North America	Continent
USA	Country in North America
California	State in USA
1000	Administration - Holding West USA
5100	Manufacturing - Plant 1 West USA
Connecticut	State in USA
1100	Administration - Holding East USA
3100	Marketing - East USA
4100:Shared-000	Development - East USA
6100	Sales - East USA
Massachusetts	State in USA
1200	Administration - East USA
2000	Finance - East USA
Africa	Continent

Page 1 of 1, showing 100 items per page [1]

- Product hierarchy:



Name	Description
TotalBusiness	
Hardware	Hardware Products
Chips	Chip Hardware
Computers	Computer Hardware
Network	Network Hardware
Software	Software Products
Applications	Application Software
DataWarehousing	Data Warehousing Software
Ebusiness	Electronic Business Software
Olap	Online Analytical Processing Software

Solution 5-1: Importing Nodes into a New Version

Steps

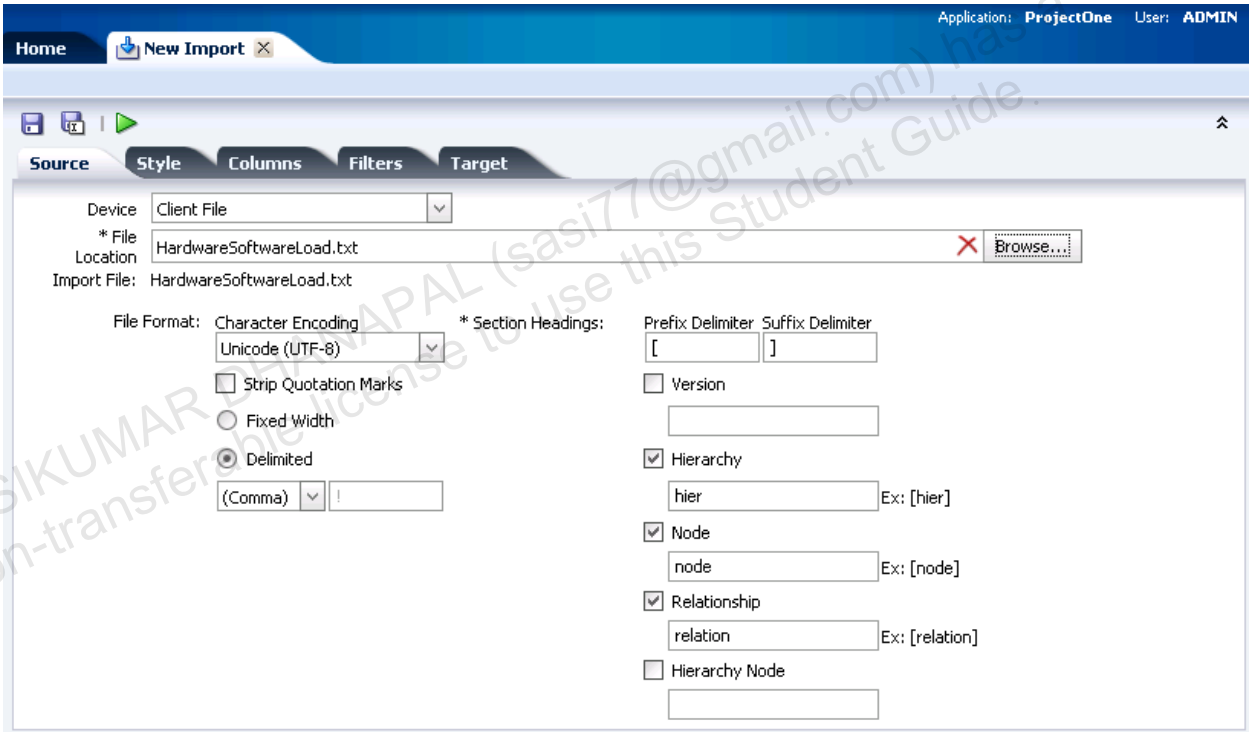
Reviewing the Structure of the Text File

1. In the class files folder, open **HardwareSoftwareLoad.txt**.
2. Review the structure of the text file, and then close it.
   The file contains the following [Hier], [Relation], and [Node] sections:

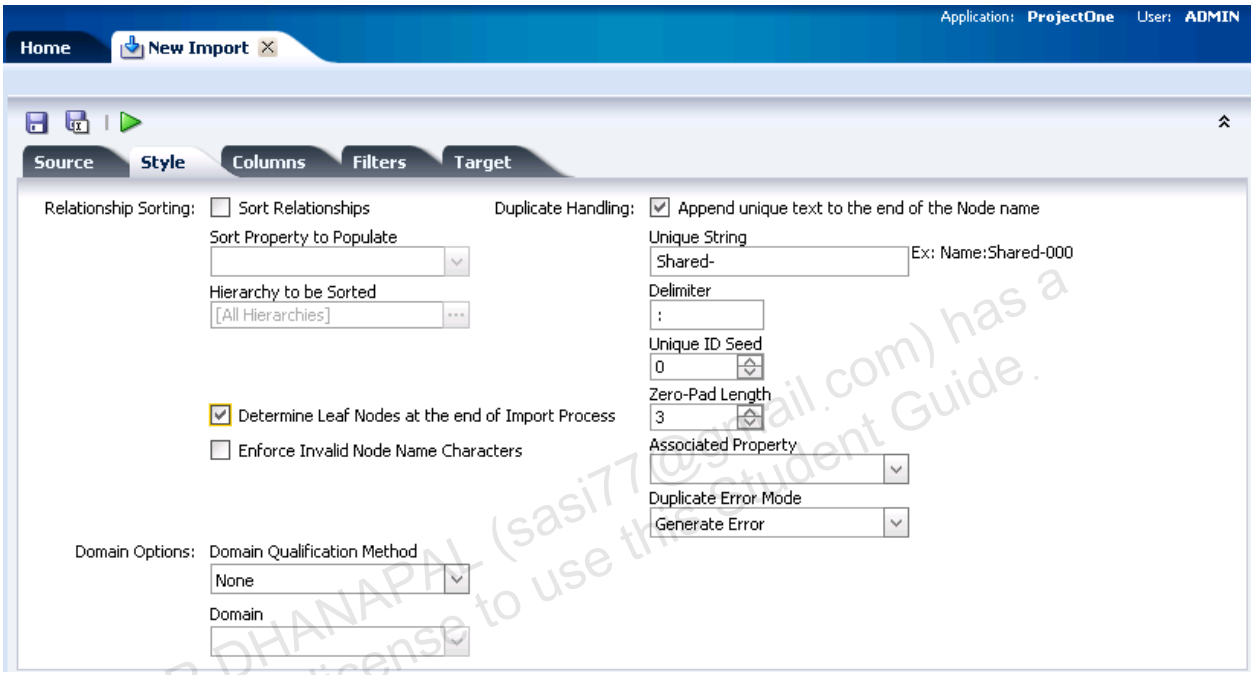
```
[Hier]
Activity,TotalActivity
Geography,TotalGeography
Product,TotalBusiness
[Relation]
Hardware,TotalBusiness,Hardware Products,,,Active
Network,Hardware,Network Hardware,,,Active
Chips,Hardware,Chip Hardware,,,Active
Computers,Hardware,Computer Hardware,,,Active
Software,TotalBusiness,Software Products,,,Active
Applications,Software,Application Software,,,Active
DataWarehousing,Software,Data Warehousing Software,,,Active
Ebusiness,Software,Electronic Business Software,,,Active
.
.
.
Connecticut,USA,State in USA,USD,Development,Active
1100,Connecticut,Administration - Holding East USA,USD,,Active
3100,Connecticut,Marketing - East USA,USD,,Active
4100,Connecticut,Development - East USA,USD,,Active
6100,Connecticut,Sales - East USA,USD,Sales,Active
Massachusetts,USA,State in USA,USD,Development,Active
1200,Massachusetts,Administration - East USA,USD,,Active
2000,Massachusetts,Finance - East USA,USD,,Active
Africa,TotalGeography,Continent,,,Active
4100,Italy,Development - East USA,USD,,Active
[Node]
South Africa,Country in Africa
Asia,Continent
China,Country in Asia
```

Creating the HardwareSoftwareLoad Import

1. In Web Client on the Home tab, select the **Import** task group.
2. On the toolbar, click the New Import button ( ).
   The New Import tab is displayed, and the Source subtab is displayed by default.
3. Configure the Source tab:
   a. In the Device drop-down list, leave **Client File** selected.
   b. Next to File Location, click **Browse**, browse to the class files folder, select **HardwareSoftwareLoad.txt**, and click **Open**.
   c. In the Character Encoding drop-down list, leave **UTF8** selected.
   d. Leave **Delimited** selected, and select **(Comma)**.
   e. Leave the Prefix and Suffix Delimiters set to **[** and **]**.
   f. Leave **Hierarchy**, **Node**, and **Relationship** selected, and clear **Version** and **Hierarchy Node**, as shown in the following figure:



4. Click the **Style** tab, and configure it:
   a. Select **Determine Leaf Nodes at the end of Import Process.**
   b. Leave the Domain Options at their default values.
   c. Leave **Append unique text to the end of the Node name** selected.
   d. Leave **Shared-** as the unique string, and the colon (:) as the delimiter.
   e. Leave Unique ID Seed equal to **0**, Zero-Pad Length equal to **3**, and Duplicate Error Mode equal to **Generate Error**, as shown in the following figure:

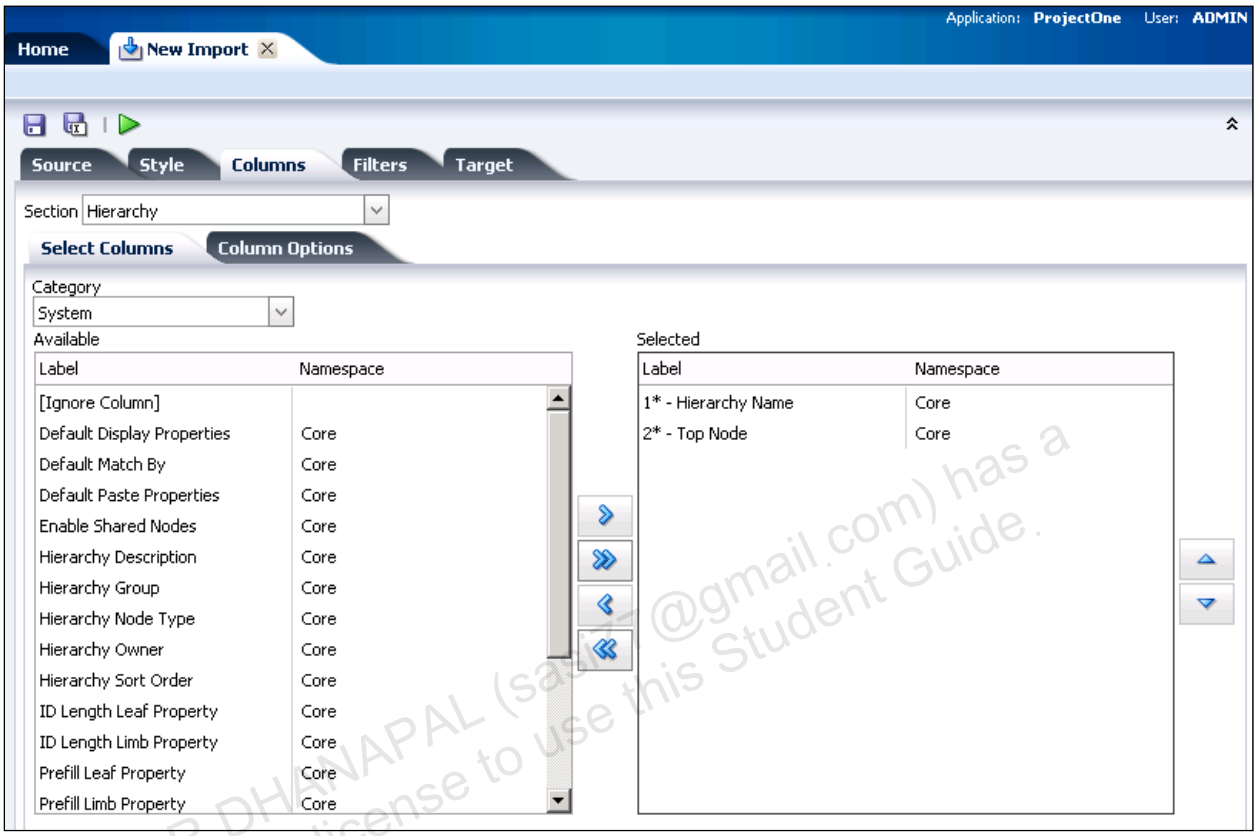


5. Configure the property order for hierarchies:
   a. Click the **Columns** tab.
   b. In the Section drop-down list, select **Hierarchy**.
      Available and selected hierarchy properties are displayed.
   c. In the Selected list, select **3 - Hierarchy Description**, and click the Remove button
      ( ).

The Selected list contains the following properties (as shown in the following figure):

1* - Hierarchy Name

2* - Top Node



6. Configure the property order for nodes:

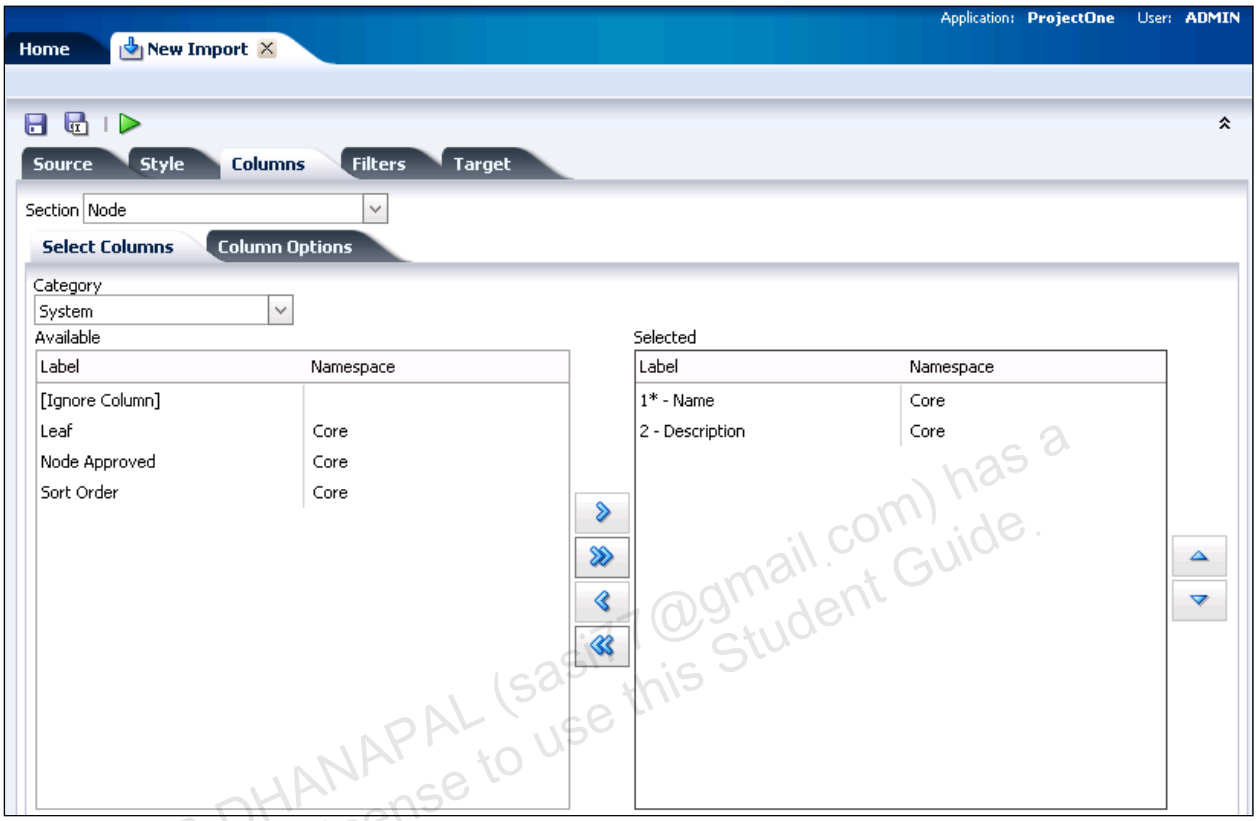
   a. In the Section drop-down list, select **Node**.

   b. In the Selected list, select **3 - Leaf**, and click the Remove button ( ).

The Selected list contains the following properties (as shown in the figure):

1* - Name

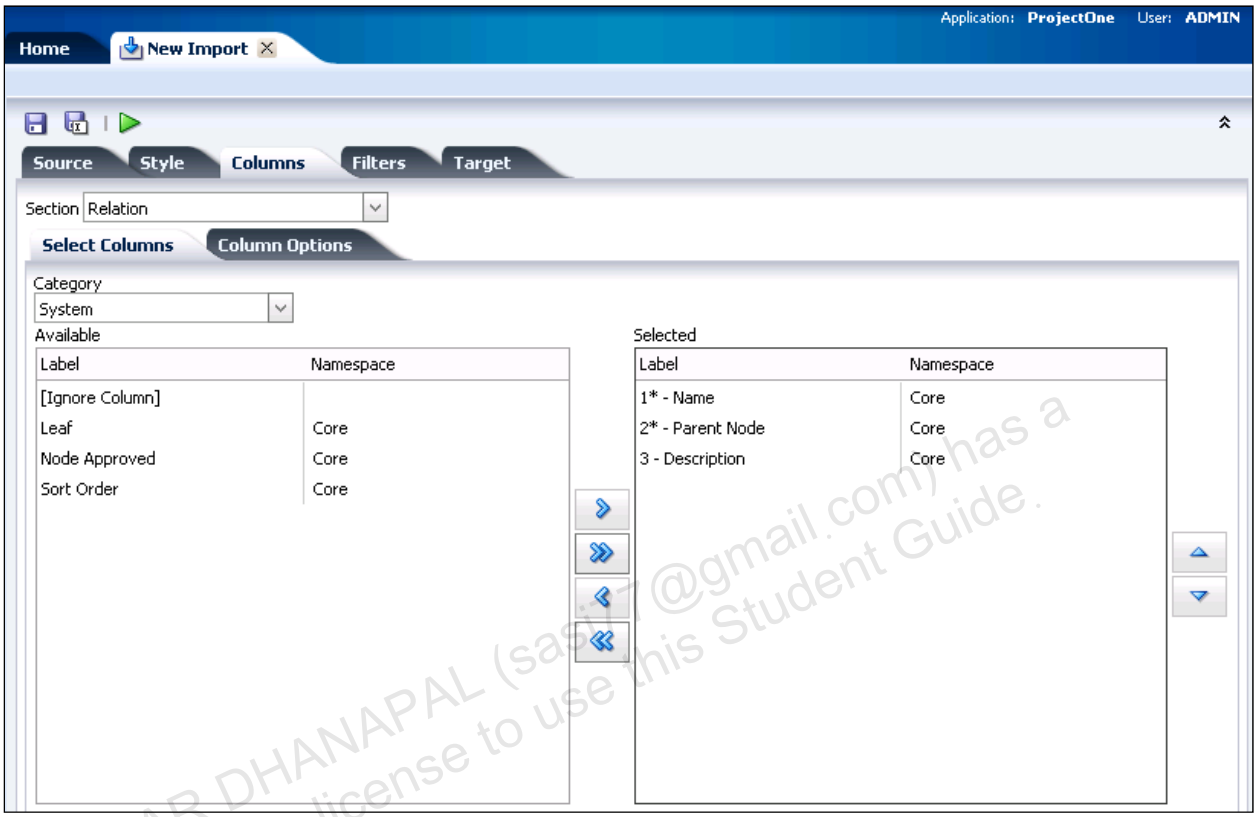
2 - Description



7. Configure the property order for relations:
   a. In the Section drop-down list, select **Relation**.
      Available and selected properties are displayed.

   b. In the Selected list, select **2* - Name**, and click the Move Up button ( ).
      1* - Name is displayed at the top of the Selected list.

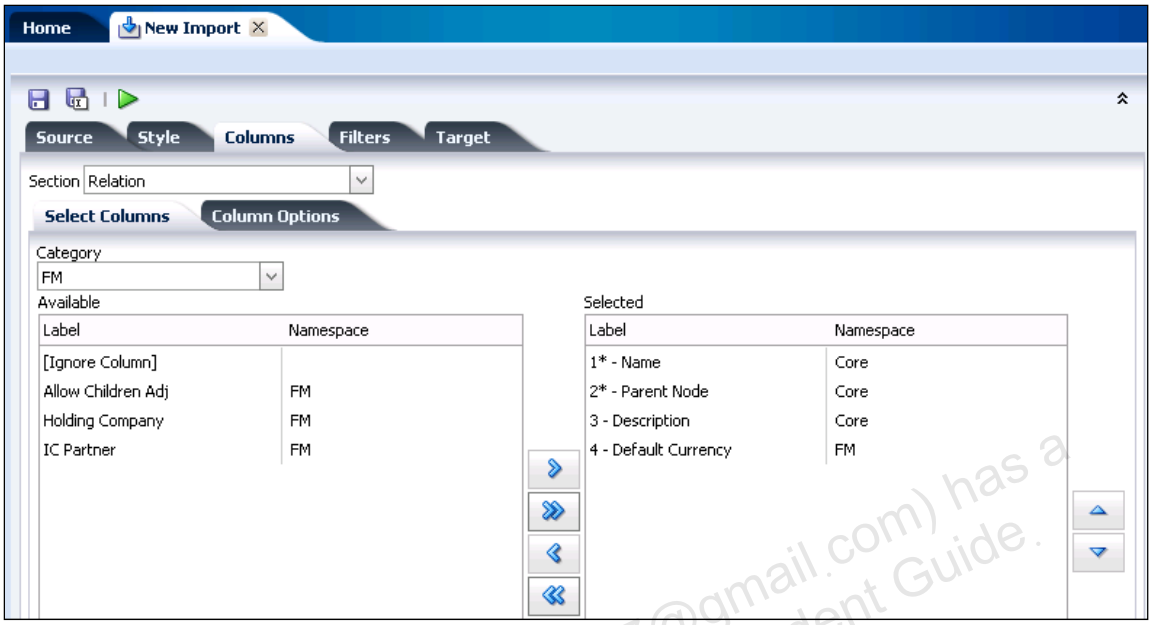
c. In the Selected list, select **4 - Leaf**, and click the Remove button ( ).
Leaf is displayed in the Available list, as shown in the following figure:



d. In the Category drop-down list, select **FM**.
The Available list is populated with FM category properties.

e. In the Available list, select **Default Currency**, and click the Select button ( ).

4 - Default Currency is displayed in the Selected list, as shown in the following figure:



f. In the Category drop-down list, select **Common**.

The Available list is populated with Common category properties.

g. In the Available list, select **UDA1** and **UDA2**, and click (Select).

The Selected list contains the following properties:

1* - Name
2* - Parent Node
3 - Description
4 - Default Currency
5 - UDA1
6 - UDA2

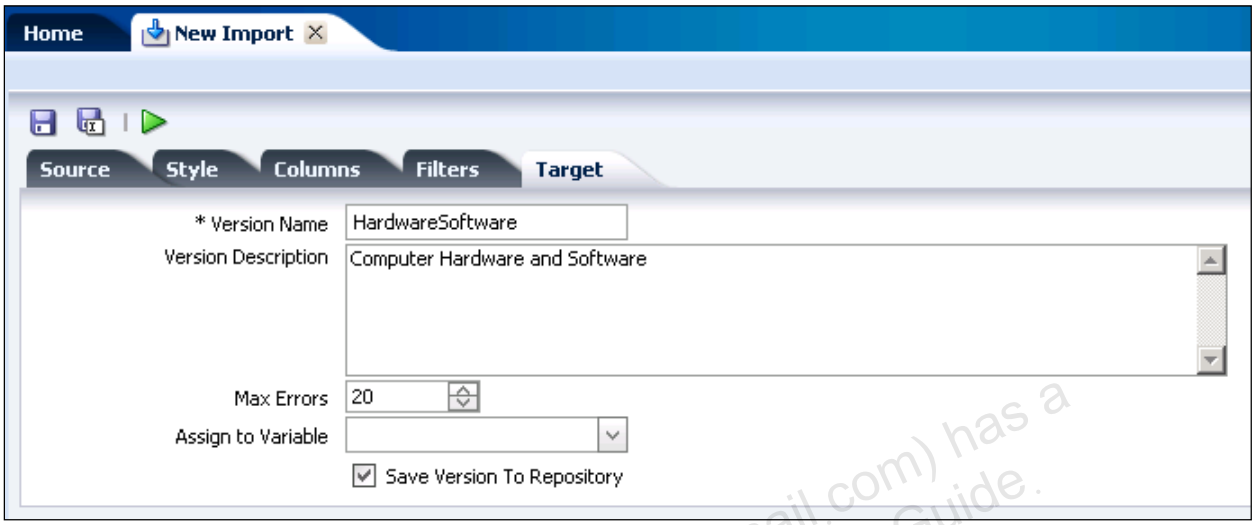
8. **Optional:** View the default configuration for column options:
   a. Click the **Columns Options** tab.
   b. View the default selections.

   Apply Value To All Hiers is selected, and [All Hierarchies] is displayed under Hierarchy Listing.
9. **Optional:** View the default configuration for filters:
   a. Click the **Filters** tab.
   b. View the default selections.

   By default, the import is configured to skip blank values for defined, inheriting, and derived properties. It is also configured to skip default values for defined properties.
10. Configure the target:
   a. Click the **Target** tab.
   b. In the Version Name box, enter **HardwareSoftware.**

b. In the Version Description box, enter **Computer Hardware and Software**.
c. Leave Max errors set to **20**.
d. Select **Save Version to Repository**.

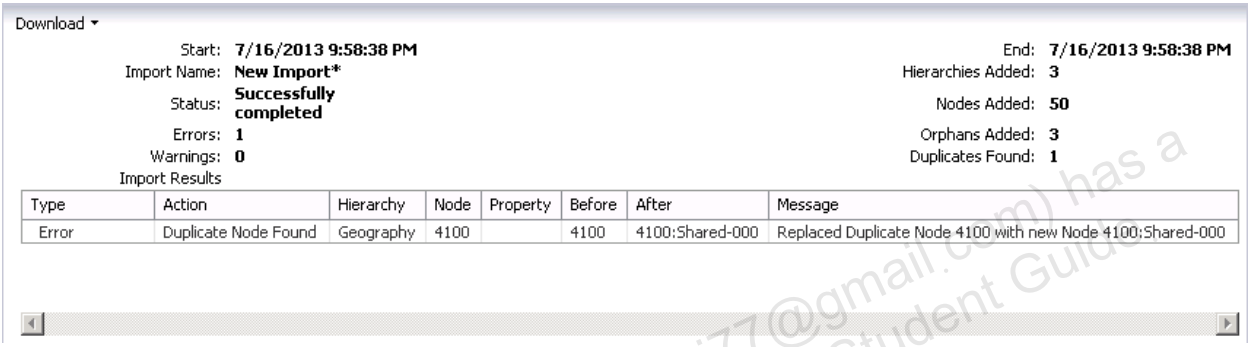
The Target tab is configured, as shown in the following figure:



Running HardwareSoftwareLoad and Reviewing the Results

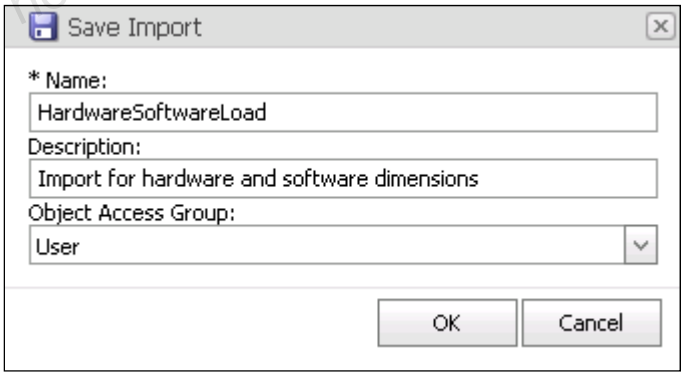
1. On the toolbar, click the Run button ( ).
   The import results are displayed at the bottom of the page.
2. Review the results:
   - The Status reads [Successfully completed], and there is 1 error and 0 warnings.
   - The results show that you added 3 hierarchies, 50 nodes, and 3 orphan nodes. Also, one duplicate node exists. The error message indicates that the duplicate node is node 4100, located in the Geography hierarchy. The duplicate was renamed 4100:Shared-001.

     The following figure shows the results:



Saving the HardwareSoftwareLoad Import

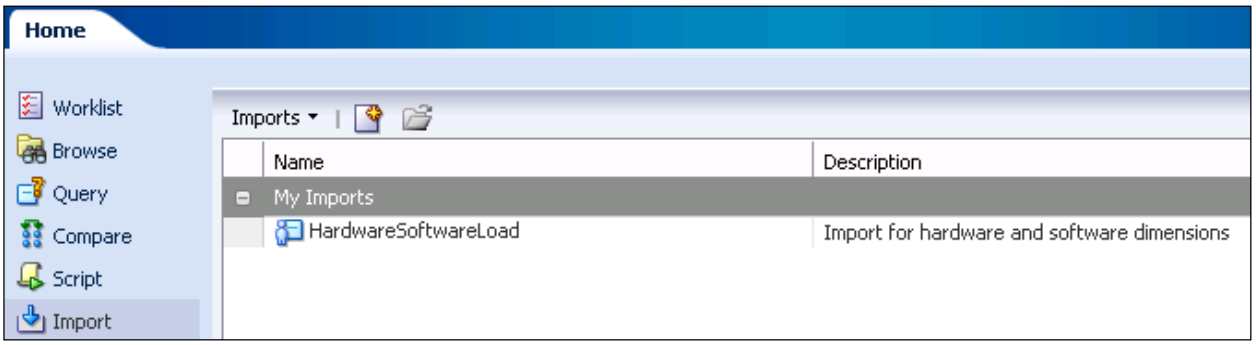
1. On the toolbar, click the Save button ( ).
   The Save Import dialog box is displayed.
2. In the Name box, enter **HardwareSoftwareLoad**.
3. In the Description box, enter **Import for hardware and software dimensions**.
4. In the Object Access Group drop-down list, leave **User** selected.
   The Save Import dialog box is configured, as shown in the following figure:



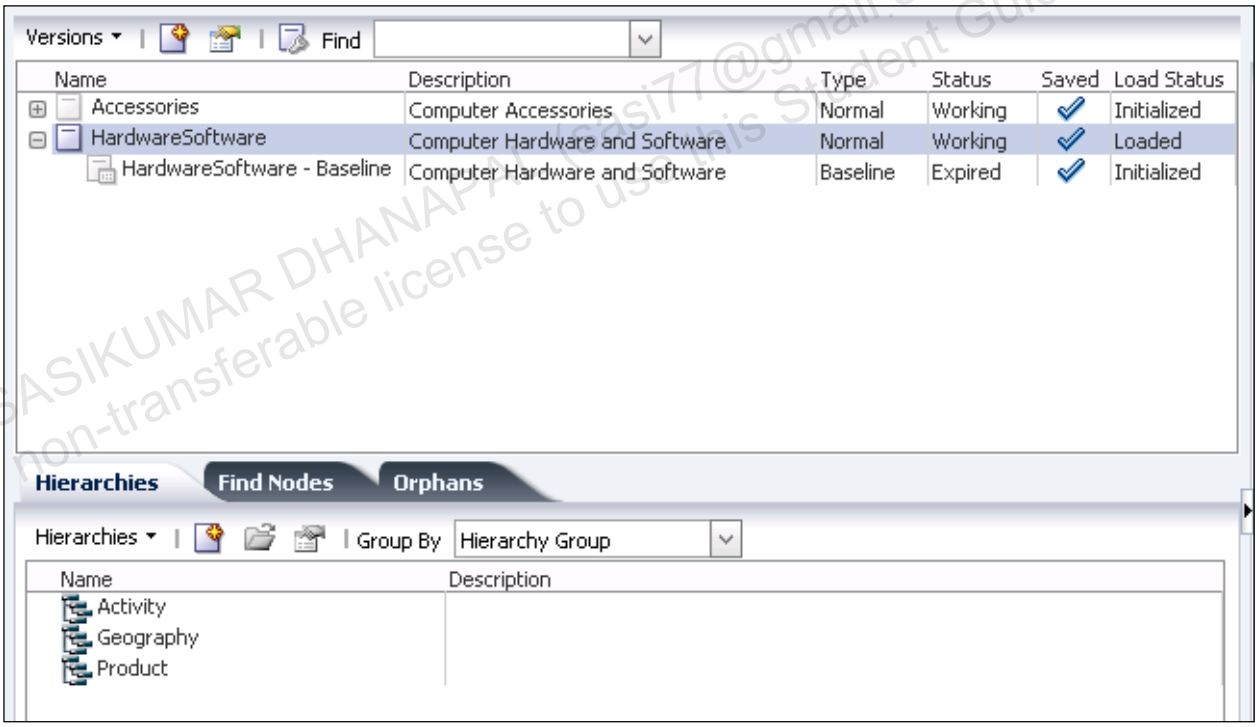
5. Click **OK**.

Verifying the Imported Hierarchies

1. Close the **HardwareSoftwareLoad** tab.
   The Home tab displays the Import task group that lists the HardwareSoftwareLoad import.



2. Select the **Browse** task group.
   The HardwareSoftware version is loaded, saved, and its status is set to Working.
3. Select the **HardwareSoftware** version.
   On the Hierarchies tab, the Activity, Geography, and Product hierarchies are listed, as shown in the following figure:



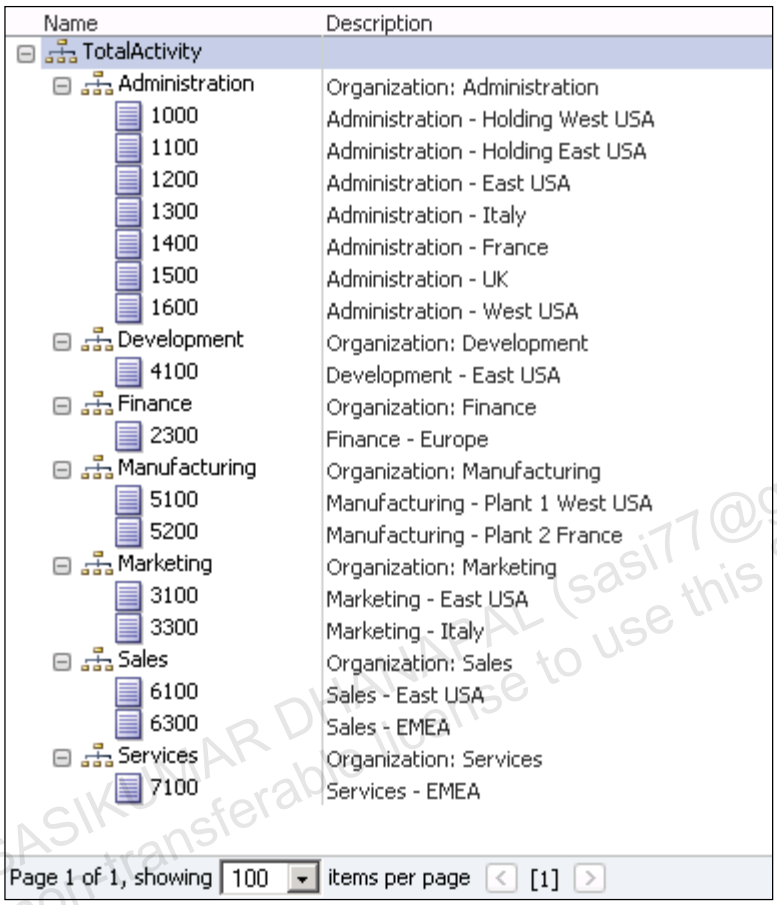
4. On the Hierarchies tab, double-click the **Activity** hierarchy to open it.
5. View node descriptions:
   a. In the Options drop-down list, select **View By**, and then **User Properties**.
      The View By dialog box is displayed.
   b. In the Available list, select **Description**, and click the Select button ( ).
   c. Click **OK**.

6. Expand the tree to display all nodes:

   a. On the toolbar, click the “Expand tree to specified level” button ( ). The “Expand Tree to Level” dialog box is displayed.

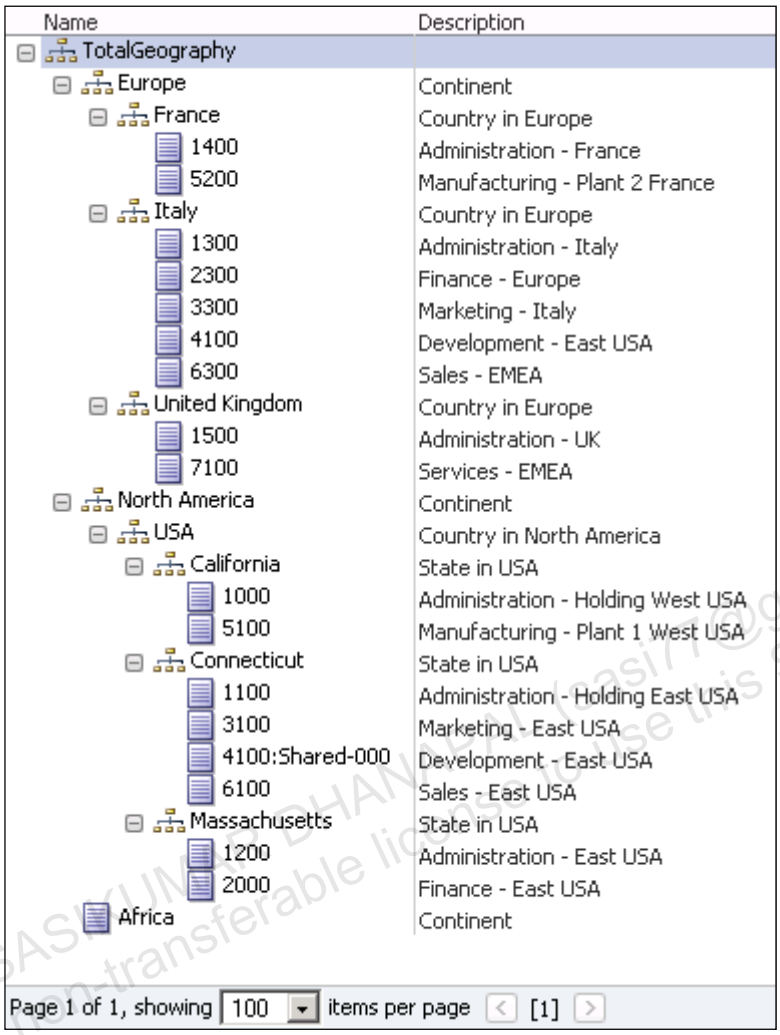
   b. In the box, enter **5**, and click **OK**.

7. Verify that your results are the same as the following figure:

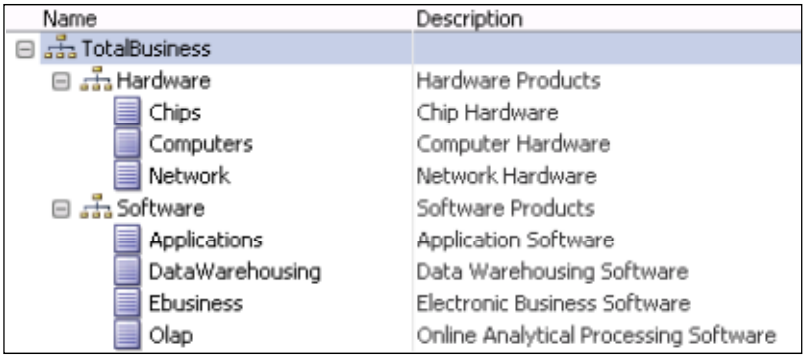


8. Click the **Home** tab and repeat steps 4 through 7 for the Geography and Product hierarchies.

Geography hierarchy:



Product hierarchy:



Practices for Lesson 6: Querying and Comparing Data

Chapter 6

Practices for Lesson 6: Overview

Practices Overview

You now have two versions in your ProjectOne application: Accessories and HardwareSoftware. Your goal is to combine these two versions into one; however, before you can do that, you must ensure that the data is accurate and clean. In these next exercises, you query, compare, and fix the data as needed.

Practice 6-1: Finding and Removing Duplicate Nodes

Overview

In this practice, you find and remove duplicate nodes.

Tasks

You need to find duplicate nodes and remove them because they are not allowed in any version in the ProjectOne application.

1. Search for duplicate nodes in the HardwareSoftware version. You should return one pair of duplicate nodes.

   Tip: Remember how you labeled duplicate nodes when you imported the HardwareSoftware version.
2. Investigate the duplicate nodes to determine the problem.
3. Resolve the duplicate nodes by removing one of the duplicates and moving the other to the appropriate place. Be sure to read the node descriptions to determine where the remaining duplicate belongs.

Solution 6-1: Finding and Removing Duplicate Nodes

Steps

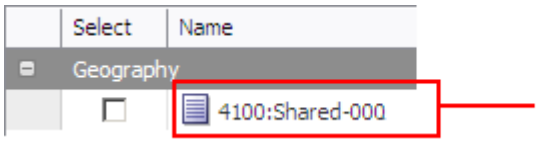
Finding Duplicate Nodes

1. If needed, on the Home page, select the **Browse** task group.
2. Select the **HardwareSoftware** version.
3. Click the **Find Nodes** tab.
4. Click the Find By drop-down list button ( ), and ensure that **Name** is selected.
5. In the search box, enter ***:Shared-***.

   You enter *:Shared-* in the search box because when you created the import, you specified to append the delimiter ":" and the string "Shared-" to duplicate nodes.

   Note: Be sure to include an asterisk before and after :Shared-.
6. Click **Go**.

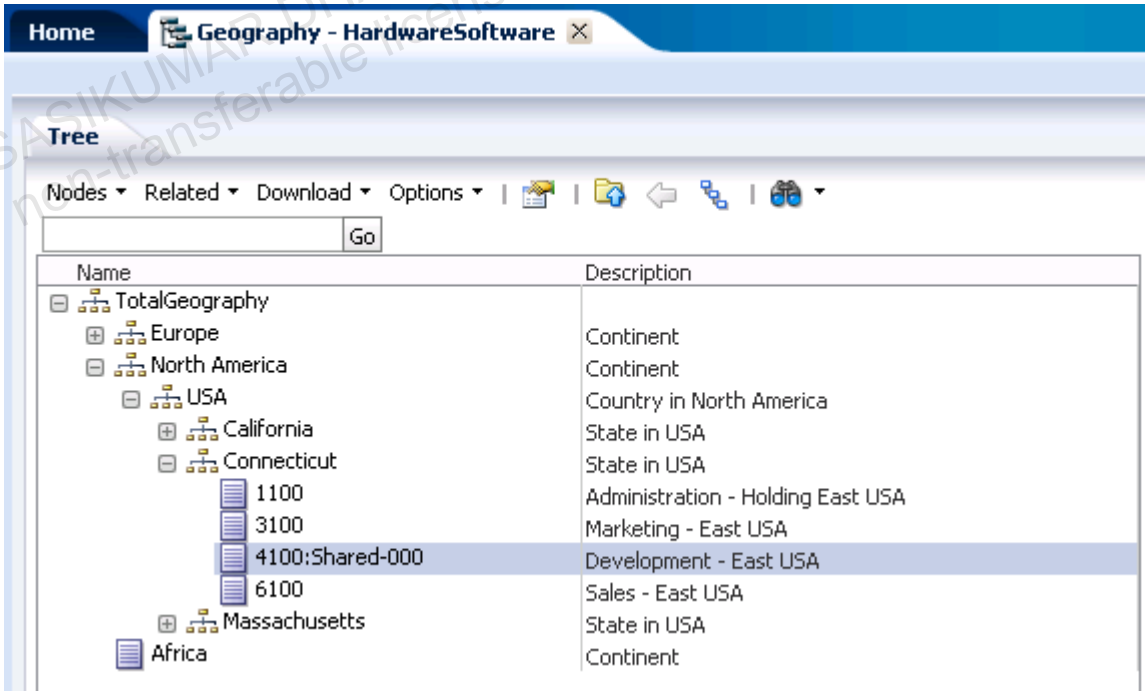
   Node 4100:Shared-000 from the Geography hierarchy is listed, as shown in the following figure:



Investigating the Duplicate Node

1. On the row containing the duplicate node, click the Go To Node button ( ).

   The duplicate node is listed under the Connecticut node, as shown in the following figure:

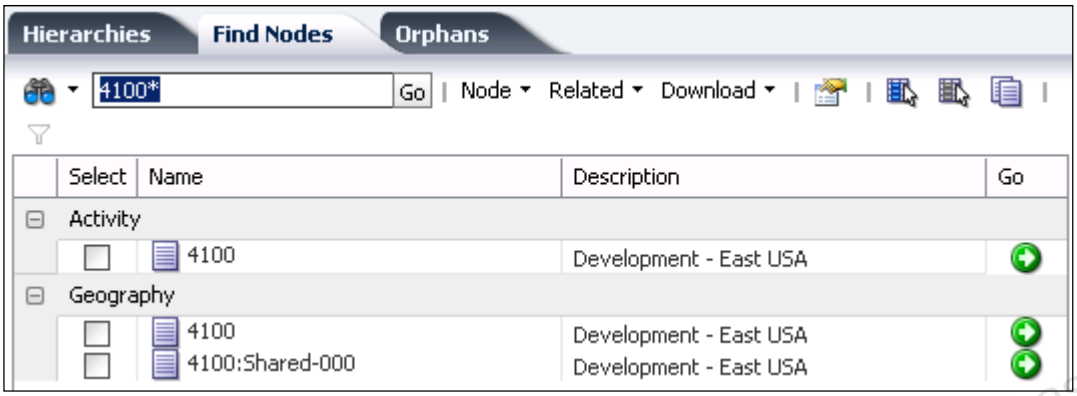


2. Return to the **Home** tab, and click the **Find Nodes** tab.
3. In the search box, enter **4100***.

You enter 4100* in the search box to find all nodes that start with the name 4100.

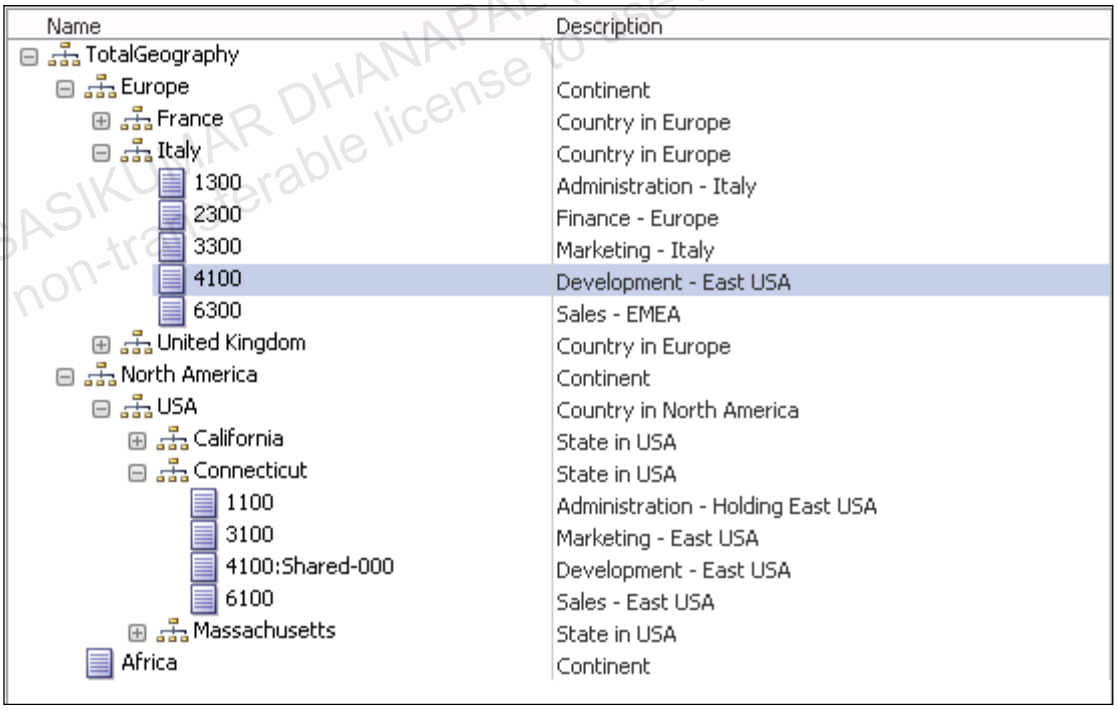
4. Click **Go**.

   The results indicate that node 4100 is part of the Activity and Geography hierarchies (as shown in the following figure). You need to investigate the nodes to determine what to do with the duplicate node.



5. Under the Geography hierarchy, on the node 4100 row, click the Go To Node button ( ).

   Node 4100 is listed as a child of the Italy node, whereas its description is “Development - East USA” (as shown in the following figure). From this investigation, you can conclude that node 4100 should be a child of the Connecticut node, and node 4100:Shared-000 should be removed from the hierarchy because duplicate nodes are not allowed in hierarchies.



Resolving the Duplicate Node

1. From the parent node Italy, drag node **4100** directly onto the **4100:Shared-000** node.

   The Put Node(s) dialog box is displayed. Notice that Put as Sibling is selected and you cannot change it.

2. Click **OK**.

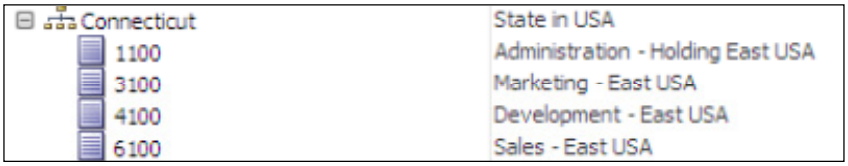
   Node 4100 is displayed as a leaf node under the Connecticut node above the 4100:Shared-000 node.

3. Right-click the **4100:Shared-000** node, and select **Delete**.

   The Delete Node dialog box is displayed.

4. Select **Delete node.**

   Node 4100:Shared-000 is deleted from the Connecticut node. The Connecticut node should look similar to the following figure:



Practice 6-2: Listing and Resolving Orphan Nodes

Overview

In this practice, you locate and resolve orphan nodes.

Tasks

Often after an import, orphan nodes result. You must find any orphan nodes in the HardwareSoftware version and either remove them or put them in a hierarchy.

1. List the orphan nodes in the HardwareSoftware version.

   Hint: You should find three orphan nodes.

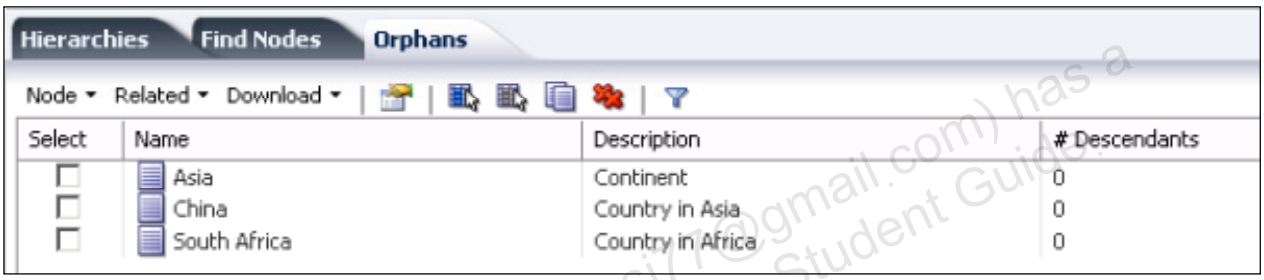
2. Based on their descriptions, correctly place them as leaf or limb nodes in the Geography hierarchy.

Solution 6-2: Listing and Resolving Orphan Nodes

Steps

Listing Orphan Nodes

1. Click the **Home** tab.
   The Browse task group is displayed.
2. If needed, select the **HardwareSoftware** version.
3. Click the **Orphans** tab.
4. Verify that the following orphan nodes are listed (as shown in the following figure):
   - Asia
   - China
   - South Africa



Resolving the Orphan Nodes

1. Select all the orphan node check boxes.
2. In the Node drop-down list, select **Take**.
   The Asia, China, and South Africa nodes are added to the clipboard, as shown in the following figure:

3. Click the **Hierarchies** tab.
4. Double-click the **Geography** hierarchy to open it.
5. Click the **Clipboard** tab.
6. Clear the **China** and **South Africa** nodes.
7. In the hierarchy tree, right-click the **TotalGeography** node, and select **Put**.
   The Put Node(s) dialog box is displayed. Notice that Put as Child is selected and you cannot change it.

8. Click **OK**.
   The Asia node is displayed as a leaf.
9. Right-click the **Asia** node, and select **Node Properties**.
10. In the Category drop-down list on the Properties tab, select the **System** property category if it is not selected.
11. Click in the **Value** box for the Leaf property, select **False**, and click **Save**.
    The Asia node is displayed as a limb node in the hierarchy tree.
12. Click the **Clipboard** tab.
13. Clear the **Asia** check box, and select the **China** node.
14. In the hierarchy tree, right-click the **Asia** node, and select **Put**.
    The Put Node(s) dialog box is displayed.
15. Leave **Put as Child** selected, and click **OK**.
    The China node is displayed as a leaf under the Asia node.

16. In the hierarchy tree, right-click the **Africa** node, and select **Node Properties.**
17. In the Category drop-down list on the Properties tab, select the **System** property category if it is not selected.
18. Click in the Value box for the Leaf property, select **False**, and click **Save**.
    The Africa node is displayed as a limb node in the hierarchy tree.
19. Click the **Clipboard** tab.
20. Clear **China**, and select **South Africa**.
21. In the hierarchy tree, right-click the **Africa** node, and select **Put**.
    The Put Node(s) dialog box is displayed.
22. Leave **Put as Child** selected, and click **OK**.
    South Africa is displayed as a leaf under the Africa node.
23. Select all nodes on the clipboard, and on the clipboard toolbar, click the “Remove node from clipboard” button ().
    The clipboard is emptied. There are no longer any orphan nodes.

Practice 6-3: Finding and Deleting Stranded Parents

Overview

In this practice, you find and resolve limb nodes without children (stranded parents).

Tasks

Part of the data-cleaning process involves removing stranded parents; therefore, you must find and delete those types of nodes in both the Accessories and the HardwareSoftware versions.

1. Create a query that finds stranded parents in the HardwareSoftware version.
   You should not find any stranded parents in this version.
2. Modify the query to find stranded parents in the Accessories version.
   You should find one stranded parent: Asia.
3. Save the query as follows:
   - Name: Stranded Parents
   - Description: Finding stranded parents in versions
   - Object Access Group: User
4. Delete the stranded parent in the Accessories version.

Solution 6-3: Finding and Deleting Stranded Parents

Steps

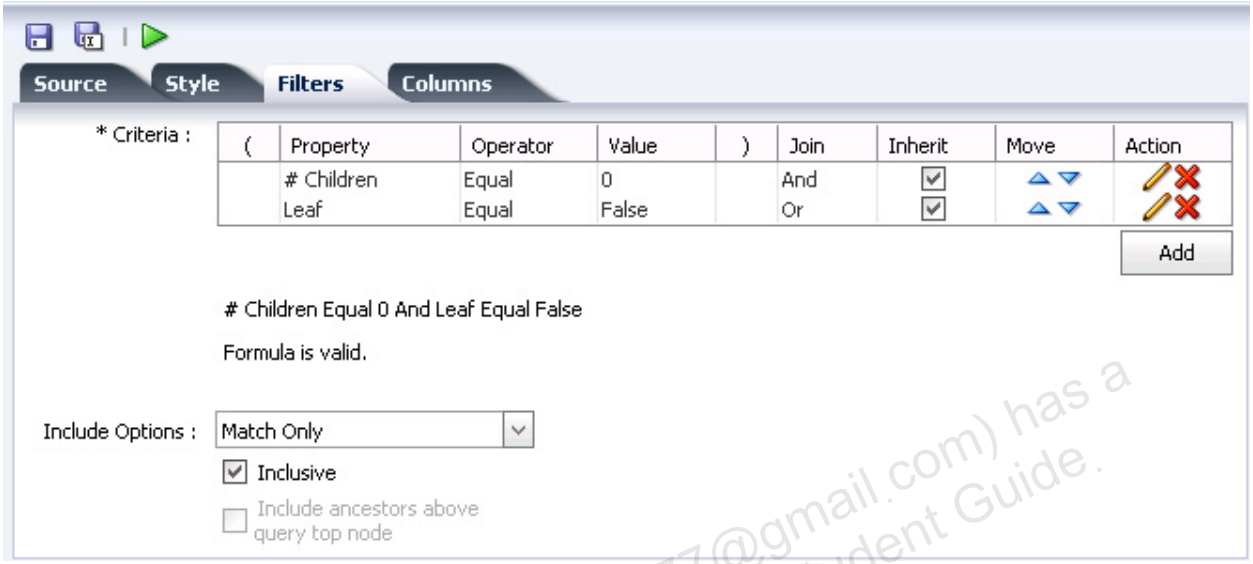
Finding Stranded Parents in the HardwareSoftware Version

1. Click the **Home** tab, and then the **Query** task group.
2. On the toolbar, click the New Query button ( ).
   The New Query tab is displayed, and the Source subtab is displayed by default.
3. In the Version drop-down list, select **HardwareSoftware**.
   Query Scope: Global is displayed, as shown in the following figure:

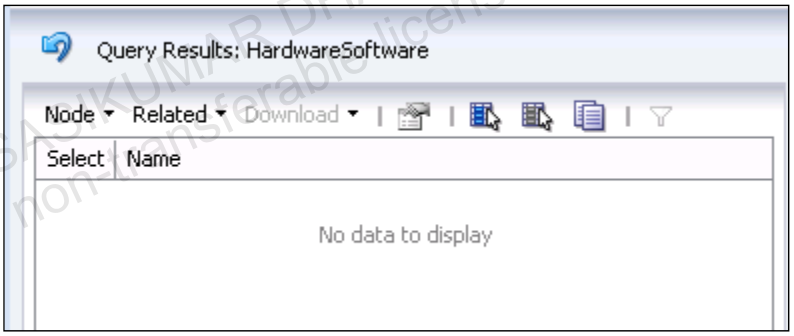
4. Click the **Filters** tab.
5. In the Criteria area, click **Add**.
6. In the Property drop-down list, select **# Children.**
7. In the Operator drop-down list, select **Equal.**
8. In the Value box, enter **0.**
9. In the Join drop-down list, select **And**.
10. In the Action column, click the Update button ( ).
11. Click **Add.**
12. In the Property drop-down list, select **Leaf.**
13. In the Operator drop-down list, select **Equal.**
14. In the Value box, enter **False.**

15. In the Action column, click the Update button ( ).
    The following formula is displayed (as shown in the figure):

```
# Children Equal 0 And Leaf Equal False
Formula is Valid
```



16. On the toolbar, click the Run button ( ).
    The query returns zero results, indicating that the HardwareSoftware version does not have any stranded parents.



Finding Stranded Parents in the Accessories Version

1. Click the “Return to Query Wizard” button ( ).
   The Source tab is displayed.
2. In the Version drop-down list, select **Accessories**.

3. On the toolbar, click the Run button ( ).
   The query returns the Asia node, as shown in the following figure:

Saving the Query

1. Click the "Return to Query Wizard" button ( ).
   The Source tab is displayed.
2. On the toolbar, click the Save ( ).
   The Save Query dialog box is displayed.
3. In the Name box, enter **Stranded Parents**.
4. In the Description box, enter **Finding stranded parents in versions**.
5. In the Object Access Group drop-down list, leave **User** selected.
6. Click **OK**.
7. Close the **Stranded Parents** tab.

Deleting the Asia Node in the Accessories Version

1. Select the **Browse** task group.
2. Select the **Accessories** version.
3. Click the **Find Nodes** tab.
4. In the search box, enter **Asia**, and click **Go**.
5. On the Asia row in the Go column, click the Go To Node button ( ).
   The Entity - Accessories tab is displayed. The Asia node is selected in the hierarchy tree.
6. Right-click the **Asia** node, and select **Delete**.
   The Delete Node dialog box is displayed.
7. Select **Delete node.**
   The Asia node is deleted from the Entity hierarchy.

Practice 6-4: Resolving Nodes with Name Conflicts

Overview

In this practice, you resolve nodes with name conflicts.

Tasks

Before blending data from different versions, it is important to resolve nodes with name conflicts. That is, you must find nodes that share the same name, but have unrelated children. In these cases, you need to give the nodes unique names so that they are not improperly mixed when you blend versions.

1. Create a compare that compares structure similarities between the Entity hierarchy (in the Accessories version) and the Geography hierarchy (in the HardwareSoftware version). During configuration, set the following:
   a. Join on the Name property.
   b. For the result display, list and mark nodes. Expand to marked nodes, too.
2. Save the compare as follows:
   - Name: Nodes with Name Conflicts
   - Description: Finding nodes with the same name but unrelated children in the Entity and Geography hierarchies
   - Object Access Group: User
3. Run the compare and view the results.

   The results should show that the USA node is present in both the Entity and Geography hierarchies.
4. Determine whether the USA nodes are related by analyzing their descendants.

   You should determine that they are not related and that you need to rename one of the nodes.
5. Rename the USA node in the Accessories version United States of America. In the Entity hierarchy, verify the name change.

Solution 6-4: Resolving Nodes with Name Conflicts

Steps

Creating a Compare

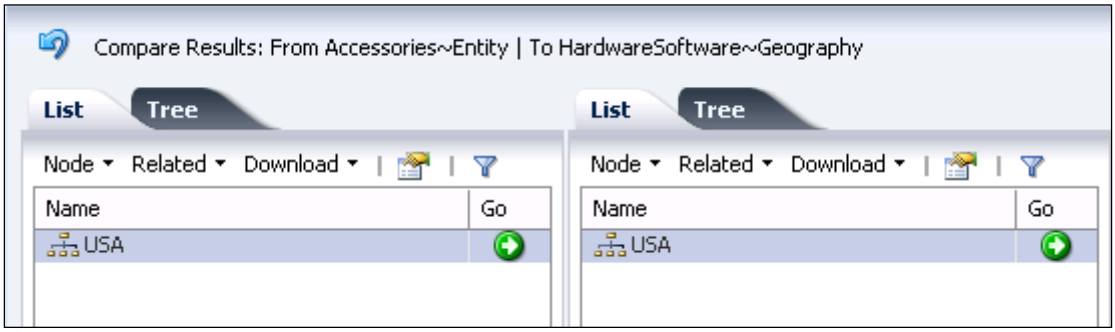
1. Click the **Home** tab and then select the **Compare** task group.
2. On the toolbar, click the New Compare button ( ).
   The New Compare tab is displayed. The Source subtab is displayed by default.
3. In the From Version drop-down list, select **Accessories**.
4. In the Hierarchy/Node box, click the ellipsis button ( ).
   The Select Node dialog box is displayed.
5. In the Hierarchy drop-down list, select **Entity**.
6. In the Nodes list, select **TotalEntities**, and click **OK**.
7. In the To Version drop-down list, select **HardwareSoftware**.
8. In the Hierarchy/Node box, click the ellipsis button ( ).
   The Select Node dialog box is displayed.
9. In the Hierarchy drop-down list, select **Geography**.
10. In the Nodes list, select **TotalGeography**.
11. Click **OK**.
12. Click the **Style** tab.
13. In the Compare Type drop-down list, select **Structure**. (You run a structure compare to look for similarities on limb nodes.)
14. Below the Compare Type drop-down list, select **Similarities**.
15. In the Join Field drop-down list, select **Name**.
16. In the Result Display drop-down list, select **Both** (to list and mark nodes).
17. Select **Expand To Marked Nodes**.

Saving the Compare

1. On the toolbar, click the Save button ( ).
   The Save Compare dialog box is displayed.
2. In the Name box, enter **Nodes with Name Conflicts**.
3. In the Description box, enter **Finding nodes with the same name but unrelated children in the Entity and Geography hierarchies**.
4. In the Object Access Group drop-down list, leave **User** selected.
5. Click **OK**.

Running the Compare and Viewing the Results

- On the toolbar, click the Run button ( ).
  The results are displayed, as shown in the following figure. On the left, the USA node from the Entity hierarchy is displayed. On the right, the USA node from the Geography hierarchy is displayed. Because they share the same node name, you want to make sure that their children are related. If they are not, you need to rename one of the nodes.



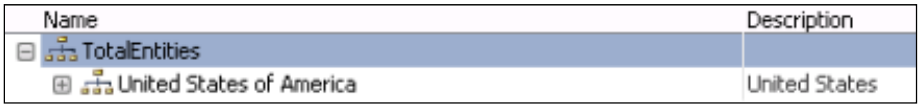
Note: If your results are not the same, click the "Return to Compare Wizard" button ( ) to return to the Source tab, and review your settings for the compare.

Determining Whether the USA Nodes Are Related

1. View the descendants of the USA node in the Entity hierarchy:
   a. In the left list, select the **USA** node.
   b. In the Related drop-down list, select **Descendants**.
   c. On the Relationships tab, view the descendants.
      The children are regions (for example, East) and cities (for example, San Francisco).
2. View the descendants of the USA node in the Geography hierarchy:
   a. In the right list, select the **USA** node.
   b. In the Related drop-down list, select **Descendants**.
   c. On the Relationships tab, view the descendants.
      The children are states (for example, California – State in USA) and activities within those states (for example, node 6100 - Sales - East USA). Therefore, the children of both USA nodes are not related and you should rename one of the nodes.

Renaming the USA Node in the Accessories Version

1. In the left list, select the **USA** node.
2. In the Node drop-down list, select **Properties**.
3. On the Properties tab, click the **Value** box for the Name property.
4. Enter **United States of America**, and click **Save**.
   The USA node is renamed United States of America.
5. In the Entity hierarchy, verify the name change:
   a. Click the **Home** tab, and then select the **Browse** task group.
   b. In the versions list, select the **Accessories** version.
   c. On the Hierarchies tab, double-click the **Entity** hierarchy to open it.
      The Entity - Accessories tab is displayed. The United States of America node is displayed as a child of the TotalEntities node, as shown in the following figure:



6. Close the **Entity - Accessories** and **Nodes with Name Conflicts** tabs.

Practices for Lesson 7: Updating Data with Action Scripts

Chapter 7

Practices for Lesson 7: Overview

Practices Overview

In these practices, you create a copy of the Accessories version and run action scripts to make changes to the copy of the Accessories version. Then, after analyzing the data changes in the copy of the Accessories version, you apply these changes to the Accessories version by running an action script from a transaction log generated out of the copy of the Accessories version.

Practice 7-1: Making Data Changes in a Copy of the Accessories Version

Overview

In this practice, you create a copy of the Accessories version to analyze the effect of adding nodes and changing properties on the hierarchies before applying them on the production version.

Tasks

You have several nodes to add to and node property values to change in the Accessories version. You decide to create a copy of the Accessories version and then use it for making changes to its data.

1. In Web Client, create a copy of the Accessories version, accept the default name, Copy Of Accessories, and save it.
2. In the class files folder, open ActionScript_Accessories.txt, and review the script.
3. Load the action script.
4. Accept the default load settings.
5. Review the information in the ActionName and Param columns and compare it to the content in the action script file.
6. Troubleshoot the load errors:
   a. Locate action scripts marked with a warning sign. Row 15 is marked with a warning sign over DataStorage.
   b. Troubleshoot row 15 to remove the warning sign.
7. Run the action script, and ensure that it ran successfully.
8. In the Account hierarchy in the Accessories version, verify that a limb node named Inventory now exists and that it has the following leaf nodes as children:
   Additions
   Ending Inventory
   Opening Inventory
9. In the Product hierarchy in the Accessories version, verify that limb nodes named 400 and 500 now exist and that they have the following leaf nodes as children:

Solution 7-1: Making Data Changes in a Copy of the Accessories Version

Steps

Creating a Copy of the Accessories Version

1. In Web Client, select the **Browse** task group.
2. In the Versions list, right-click **Accessories**, and select **Copy**.
   The Copy Version dialog box is displayed.
3. Accept all default values and click **OK**.
   The Copy of Accessories version is created in the Version list.
4. Right-click the **Copy of Accessories** version, and select **Save**.
   In the Saved column, a check mark indicates that Copy of Accessories is saved to the database.

Reviewing the Action Script

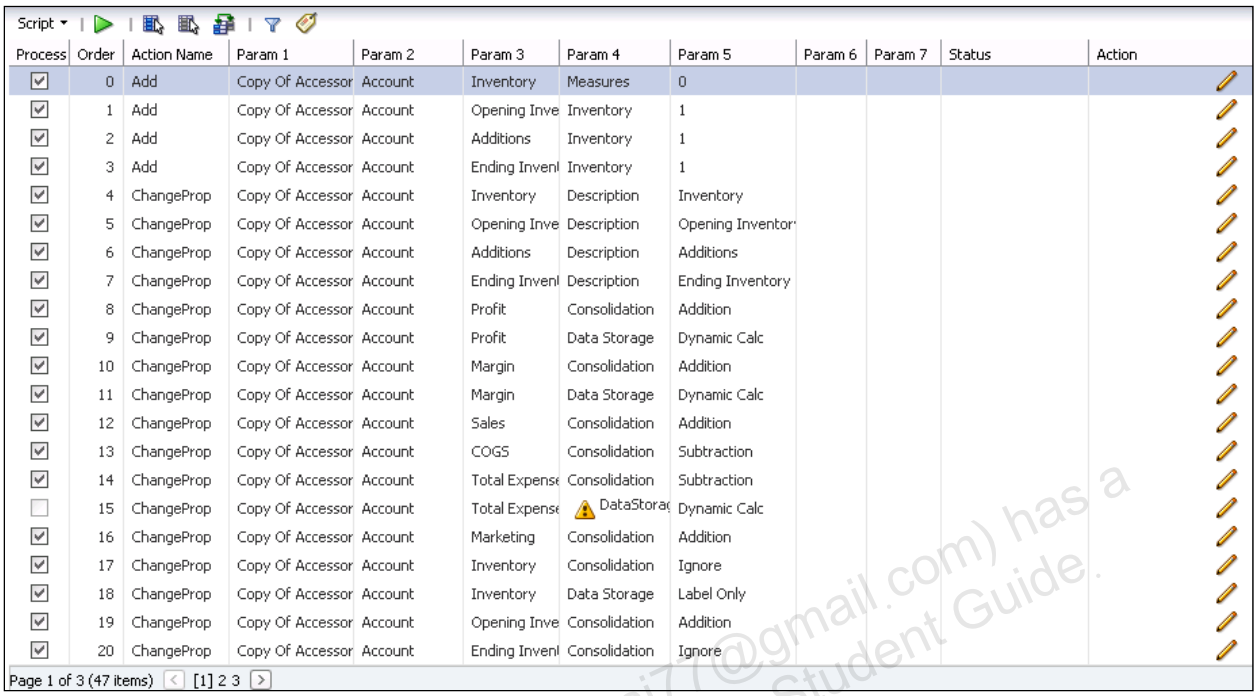
1. In the class files folder, open **ActionScript_Accessories.txt** in Notepad.
2. Review the code in the script file and then close it.

Loading the Action Script

1. On the Home tab, select the **Script** task group.
2. In the Source Type drop-down list, leave **File** selected.
3. Next to the Script File box, click **Browse**.
   The Choose File to Upload dialog box is displayed.
4. Browse to the class files folder, select **ActionScript_Accessories.txt**, and click **Open**.
5. Leave the column order set to **Action**, **Param1**, **Param2**, **Param3**, **Param4**, **Param5**, **Param6**, and **Param7**.
6. Leave the character encoding set to **Unicode (UTF-8)**.
7. Leave the delimiter set to **Comma**.
8. Leave **Strip Quoted Strings** cleared.
9. Leave **Property References By Label** selected.

10. Click **Load**.

    The action script is loaded and the scripts are displayed.



Script

Process	Order	Action Name	Param 1	Param 2	Param 3	Param 4	Param 5	Param 6	Param 7	Status	Action
☑	0	Add	Copy Of Accessor	Account	Inventory	Measures	0				
☑	1	Add	Copy Of Accessor	Account	Opening Inve	Inventory	1				
☑	2	Add	Copy Of Accessor	Account	Additions	Inventory	1				
☑	3	Add	Copy Of Accessor	Account	Ending Invenl	Inventory	1				
☑	4	ChangeProp	Copy Of Accessor	Account	Inventory	Description	Inventory				
☑	5	ChangeProp	Copy Of Accessor	Account	Opening Inve	Description	Opening Inventor				
☑	6	ChangeProp	Copy Of Accessor	Account	Additions	Description	Additions				
☑	7	ChangeProp	Copy Of Accessor	Account	Ending Invenl	Description	Ending Inventory				
☑	8	ChangeProp	Copy Of Accessor	Account	Profit	Consolidation	Addition				
☑	9	ChangeProp	Copy Of Accessor	Account	Profit	Data Storage	Dynamic Calc				
☑	10	ChangeProp	Copy Of Accessor	Account	Margin	Consolidation	Addition				
☑	11	ChangeProp	Copy Of Accessor	Account	Margin	Data Storage	Dynamic Calc				
☑	12	ChangeProp	Copy Of Accessor	Account	Sales	Consolidation	Addition				
☑	13	ChangeProp	Copy Of Accessor	Account	COGS	Consolidation	Subtraction				
☑	14	ChangeProp	Copy Of Accessor	Account	Total Expense	Consolidation	Subtraction				
☐	15	ChangeProp	Copy Of Accessor	Account	Total Expense	⚠ DataStorag	Dynamic Calc				
☑	16	ChangeProp	Copy Of Accessor	Account	Marketing	Consolidation	Addition				
☑	17	ChangeProp	Copy Of Accessor	Account	Inventory	Consolidation	Ignore				
☑	18	ChangeProp	Copy Of Accessor	Account	Inventory	Data Storage	Label Only				
☑	19	ChangeProp	Copy Of Accessor	Account	Opening Inve	Consolidation	Addition				
☑	20	ChangeProp	Copy Of Accessor	Account	Ending Invenl	Consolidation	Ignore				

Page 1 of 3 (47 items) [1] 2 3

11. Review the information in the **ActionName** and **Param** columns.

    Note: Click the forward or backward button [1] 2 3 below the action script to navigate from page to page.

Troubleshooting Load Errors

1. Review the action items, and locate those that are marked with a warning sign.

   Row 15 is marked with a warning sign.
2. On row 15, position the cursor over the warning sign next to **DataStorage** to learn the problem.

   The tooltip displays the following message: “Cannot find a property with this label.”
3. Find another action item that specifies the **Data Storage** property (for example, row 18), and click the Edit button ( ) for that row.
4. Select the drop-down list beside Data Storage (the Param4 value) and make note of the namespace for Data Storage.

   The namespace for Data Storage is Essbase. You need to ensure that the Param4 value on row 15 is consistent with this.
5. Correct the problem:
   a. On row 15, click the Edit button ( ).
   b. In the Param4 column, select **DataStorage**.

      A drop-down list of properties is displayed.
   c. Scroll down and select **Data Storage** where the namespace is equal to Essbase.

      The Apply to All dialog box is displayed.
   d. Select **Apply to this item only**.

      The Param4 value on row 7 is set to Data Storage and the problem is resolved.

Running the Action Script

1. In the Script drop-down list, select **Run**.
   A Confirmation dialog box indicates that the script was completed successfully.
2. Click **OK**.
3. In the Status column, review the information to determine whether the action script ran successfully.
   All actions were successfully processed.

Verifying the Inventory Node and Its Children

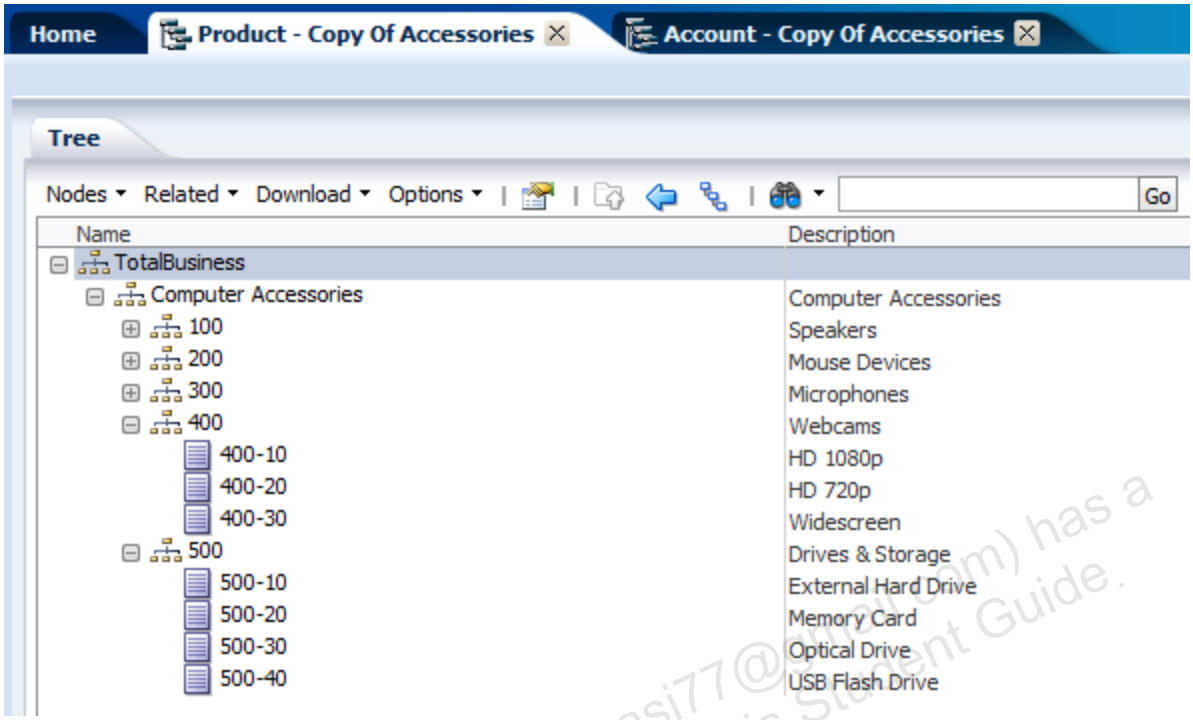
1. On the Home tab, select the **Browse** task group.
2. In the versions list, select the **Copy Of Accessories** version.
3. On the Hierarchies tab, double-click the **Account** hierarchy to open it.
   The Account – Copy Of Accessories tab is displayed.
4. In the hierarchy tree, verify that an **Inventory** limb node exists.

5. Expand the **Inventory** node, and verify that it has the following leaf nodes as children (as shown in the figure):
   - Additions
   - Ending Inventory
   - Opening Inventory

Verifying the 400 and 500 Nodes and Their Children

1. Click the **Home** tab.
2. On the Hierarchies tab, double-click the **Product** hierarchy to open it.
   The Product – Copy Of Accessories tab is displayed.
3. Expand the **Computer Accessories** node.
4. Verify that the **400** and **500** limb node exist.

5. Expand the **400** node and the **500** node, and verify that they have the following leaf nodes as shown in the figure:



6. Close the **Product – Copy Of Accessories** and **Account – Copy Of Accessories** tabs.

Practice 7-2: Applying Data Changes to the Accessories Version

Overview

In this practice, you use a transaction log from the Copy Of Accessories version as a source for an action script to apply changes to the Accessories version.

Tasks

After you analyzed changes made to the Copy Of Accessories version, you decide to apply them to the Accessories version.

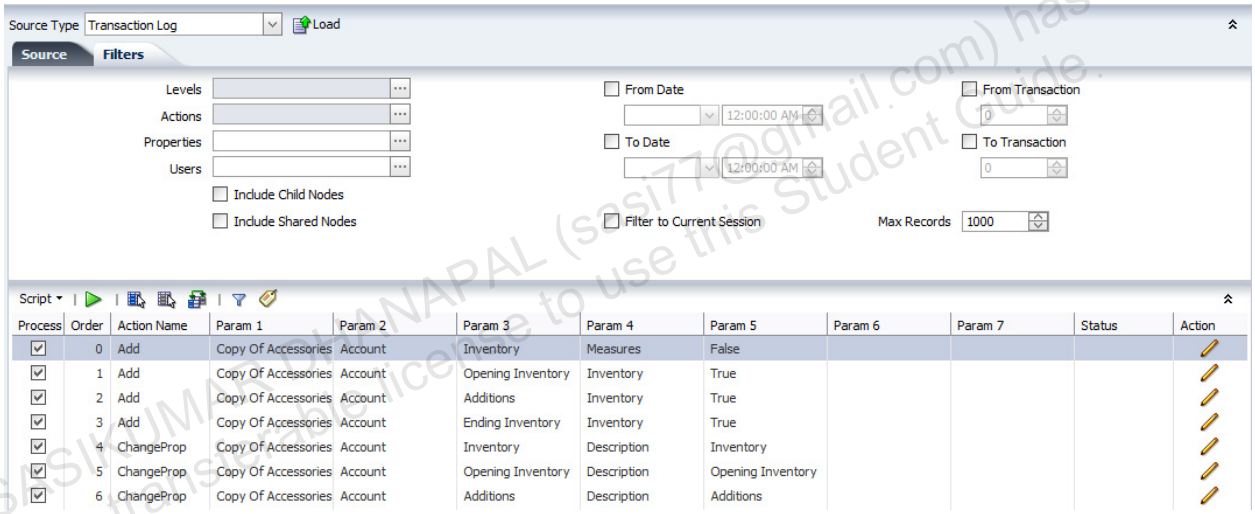
1. Load the transaction log from the Copy Of Accessories as a source for an action script.
   - Select data transactions only.
   - Review the information in the Param1 column and change the version to Accessories.
2. Run the action script.
3. Verify that the Accessories version has all changes made to the Copy Of Accessories version.

Solution 7-2: Applying Data Changes to the Accessories Version

Steps

Loading the Action Script

1. Click the **Home** tab, and then select the **Script** task group.
2. In the Source Type drop-down list, select **Transaction Log**.
   The Source tab and the Filters tab are displayed.
3. On the Source tab, perform the following actions:
   a. In the Version drop-down list, select **Copy Of Accessories**.
   b. Clear the **System Transactions** option.
   c. Leave the **Data Transactions** option selected.
4. On the Filters tab, clear the **Filter to Current Session** option.
5. Click **Load**.
   The action script items are loaded, as shown in the following figure.



Changing the Script Target Version to Accessories

1. In the Script drop-down list, select **Substitute Versions**.
   The Script Version Substitution dialog box is displayed.
2. In the Substitute drop-down list, select **Accessories** and click **OK**.
   The Param1 column values changed to Accessories.

Running the Action Script

1. In the Script drop-down list, select **Run**.
   A message indicates that the script was processed successfully.
2. Click **OK**.

Verifying the Accessories Version

1. In Web Client, select the **Browse** task group.
2. In the Versions list, select **Accessories**.
3. Open the Account hierarchy and verify that it has the Inventory limb node with children.
4. Open the Product hierarchy and verify that it has new 400 and 500 nodes with their children.

Practices for Lesson 8: Blending Versions

Chapter 8

Practices for Lesson 8: Overview

Practices Overview

In this practice, you create a blender to merge data from two versions, Accessories and HardwareSoftware, into a new version TotalComputer. You then reorganize the Geography hierarchy by inserting nodes from the Entity hierarchy.

Practice 8-1: Blending the Accessories and HardwareSoftware Versions

Overview

In this practice, you create a blender to merge data.

Tasks

By now, you have cleaned the data and updated it with action scripts. You are ready to blend the Accessories version and the HardwareSoftware versions. For this particular blend, you want to blend the HardwareSoftware version into the Accessories version. Following the blend, you move some nodes from the Entity hierarchy to the Geography hierarchy, enabling you to delete the Entity hierarchy.

1. Define a blender with the following configuration:
   a. Configure the source:
      - Blend the HardwareSoftware version into the Accessories version.
      - Blend all hierarchies.
   b. Configure the style:
      - Process structure and properties.
      - Allow hierarchy creation.
   c. Configure the filter to process only inserts and moves.
      Note: It is important that you do not process removes.
   d. Configure properties:
      - Blend all properties, but not validations and access control.
      - Propagate property values from the source to the target only when they are different in the source.
   e. Configure the target:
      - Create a new version named TotalComputer.
      - Enter the following description: HardwareSoftware blended into Accessories.
      - Set the maximum number of iterations to 3.
2. Save the blender as follows:
   - Name: TotalComputer
   - Description: Blends the HardwareSoftware version into the Accessories version
   - Object Access Group: User
3. Run the blender and review the run statistics.
4. In the TotalComputer version, verify the blender results:
   a. Verify that the Accounts, Activity, Geography, Entity, and Product hierarchies are listed.
   b. Verify that the Product hierarchy consists of Computer Accessories, Hardware, and Software nodes, as well as their descendants.
5. Make the following adjustments in the Geography hierarchy:
   a. Insert the East and West nodes from the Entity hierarchy into the Geography hierarchy as children of the USA node.

b. Move the Connecticut and Massachusetts nodes under the East node as children. Move the California node under the West node as a child. Move the San Francisco node under the California node as a child.

6. Delete the Entity hierarchy.
7. Adjust the Country property so that it references the correct node level to derive the country name in the Geography hierarchy.
8. Save the TotalComputer version.

Solution 8-1: Blending the Accessories and HardwareSoftware Versions

Steps

Defining the Blender

1. On the Home tab, select the **Blend** task group.
2. On the toolbar, click the New Blender button ( ).
   The New Blender tab is displayed, and the Source subtab is displayed by default.
3. Configure the source:
   a. In the Source Version drop-down list, select **HardwareSoftware**.
   b. In the Target Version drop-down list, select **Accessories**.
   c. Leave **Blend All Hierarchies** selected.
4. Configure the style:
   a. Click the **Style** tab.
   b. Select the following options:
      - **Process Structure**
      - **Allow Hierarchy Creation**
      - **Allow Leaf Promotion**
      - **Process Properties**
5. Configure the filter:
   a. Click the **Filters** tab.
   b. Leave **Process Inserts** and **Process Moves** selected.
   c. Clear the following options:
      - **Process Removes** (It is important that you do not process removes.)
      - **Process Activations**
      - **Process Hierarchy Validation Assignments**
6. Configure properties:
   a. Click the **Properties** tab.
      The Profile Defaults subtab is displayed.
   b. In the Property Selection drop-down list, verify that **All Excluding Val/Access** is selected.
   c. In the Property Propagate Mode drop-down list, select **Difference**.
   d. Leave the Propagate Property Locks option unselected.
7. Configure the target:
   a. Click the **Target** tab.
   b. In the Target Version drop-down list, select **Copy to New Version**.
   c. In the Name box, enter **TotalComputer**.
   d. In the Description box, enter **HardwareSoftware blended into Accessories**.
   e. In the Max Iterations box, enter **3**.
      Leave all other options as is.

Saving the Blender

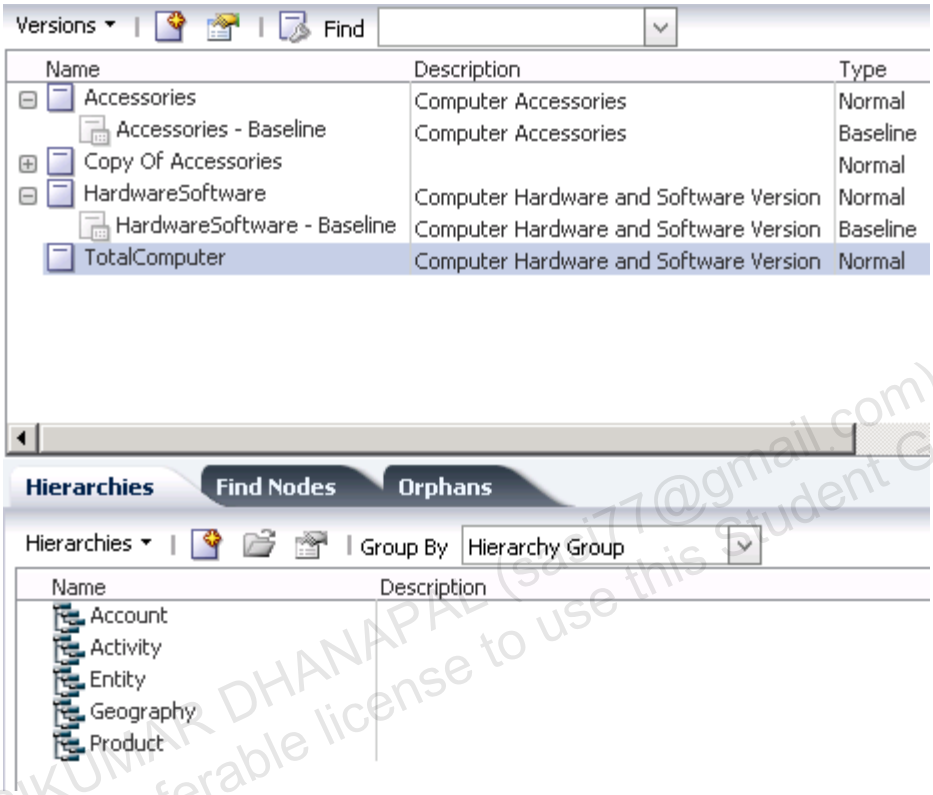
1. On the toolbar, click the Save As button ().
   The Save Blender dialog box is displayed.
2. In the Name box, enter **TotalComputer**.
3. In the Description box, enter Blends the HardwareSoftware version into the Accessories version.
4. In the Object Access Group drop-down list, leave **User** selected.
5. Click **OK**.

Running the Blender

1. On the toolbar, click the Run button ().
   The blender is processed without errors.
2. At the bottom of the Source tab, review the run statistics:
   - Status: [Completed]
   - Errors: [0]
   - Structural Passes: [2]
   - Property Passes: [1]
   - Last Structural Pass Clear: [True]
   - Last Property Pass Clear: [True]
3. Close the TotalComputer Blender tab.

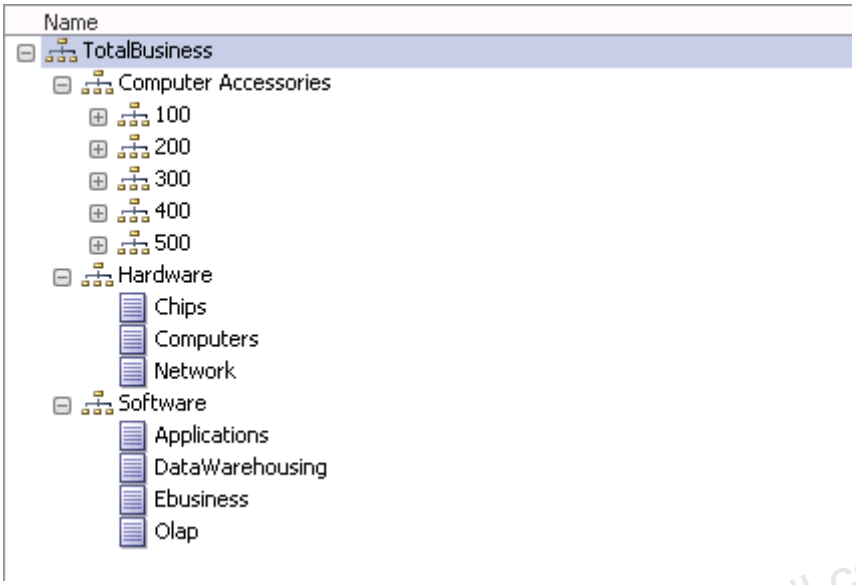
Verifying the Blender Results

1. Select the **Browse** task group.
   In the version list, the TotalComputer version is loaded but not saved.
2. Select the **TotalComputer** version.
3. View the hierarchy structure on the Hierarchies tab and verify that the Account, Activity, Entity, Geography, and Product hierarchies are listed (as shown in the following figure):



4. Verify that the Product hierarchy consists of Computer Accessories, Hardware, and Software nodes, as well as their descendants:
   a. Double-click the **Product** hierarchy.
      The Product - TotalComputer tab is displayed.
   b. Review the hierarchy structure.
      The TotalBusiness node has three children: Computer Accessories, Hardware, and Software.
   c. Expand the **Computer Accessories** node.
      The Computer Accessories node has the following limb nodes: 100, 200, 300, 400, and 500.
   d. Expand the **Hardware** node.
      The Hardware node has the following leaf nodes: Chips, Computers, and Network.
   e. Expand the **Software** node.
      The Software node has the following leaf nodes: Applications, DataWarehousing, Ebusiness, and Olap.

f. Verify that your results are the same as the following figure:

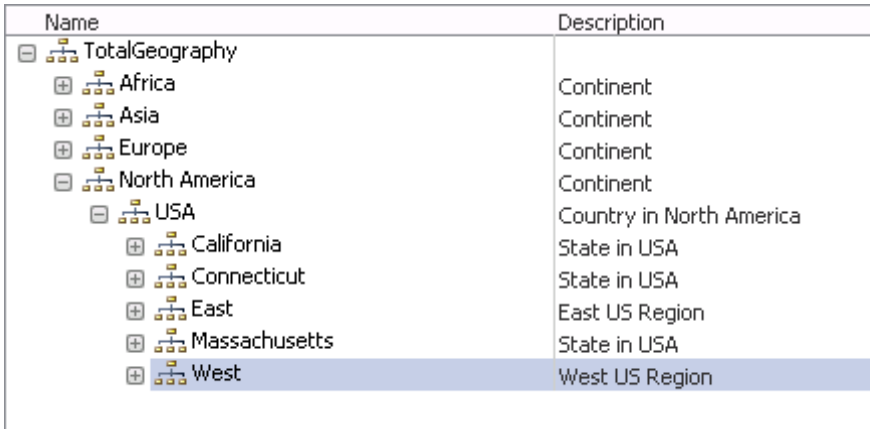


g. Close the **Product - TotalComputer** tab.
The Browse task group is displayed.

Inserting Nodes from the Entity Hierarchy into the Geography Hierarchy

1. On the Hierarchies tab, double-click the **Geography** hierarchy to open it.
The Geography - TotalComputer tab is displayed.
2. Expand the **North America** node.
The USA node is a child node of the North America node.
3. Expand the **USA** node.
The following limb nodes are children of the USA node: California, Connecticut, and Massachusetts.
4. Right-click the **USA** node, and select **Insert**.
The Insert Node dialog box is displayed.
5. Next to Insert From, leave **Existing Hierarchy** selected.
6. In the Hierarchy drop-down list, select **Entity**.
7. In the Nodes list, expand **United States of America - United States**, and select the **East** node.
8. Next to Insert As, leave **Child** selected.
9. Click **OK**.

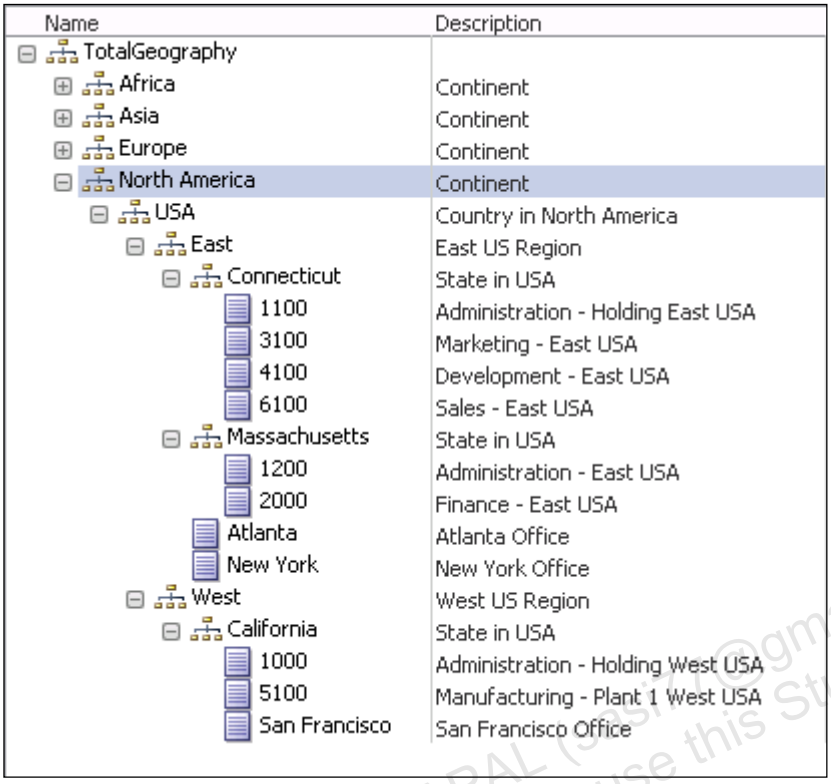
10. Repeat steps 4 through 9 to insert the **West** node from the Entity hierarchy as a child into the USA node (as shown in the following figure):



Reorganizing Nodes Within the Geography Hierarchy

1. Drag the **Connecticut** node to the **East** node.
   The Choose Node Destination dialog box is displayed.
2. Leave **Put as Child** selected, and click **OK**.
   The Connecticut node is displayed as a child of the East node.
3. Repeat steps 1 and 2 to move the **Massachusetts** node under the **East** node.
4. Repeat steps 1 and 2 to move the **California** node under the **West** node.
5. Repeat steps 1 and 2 to move the **San Francisco** node under the **California** node.
6. Select the **USA** node.
7. On the toolbar, click the “Expand tree to specified level” button ( ).
   The Expand Tree to Level dialog box is displayed.
8. In the Expand to Level box, enter **5**, and click **OK**.
   All nodes under the USA node are displayed.

9. Verify that your node structure under the USA node is the same as the following figure, and then close the **Geography - TotalComputer** tab.



Deleting the Entity Hierarchy

1. Click the **Home** tab.
2. On the Hierarchy tab, right-click the **Entity** hierarchy, and select **Delete**.
   The Confirm Delete dialog box is displayed.
3. Select **Delete this item**.
   The Entity hierarchy is removed.

Saving the TotalComputer Version

1. In the versions list, select **TotalComputer**.
2. In the Versions drop-down list, select **Save**.
   A check mark is displayed in the Saved column for the TotalComputer version.

Practices for Lesson 9: Creating Derived Properties

Chapter 9

Practices for Lesson 9: Overview

Practices Overview

You are ready to create business rules for your data. In the exercises for this lesson, you create business rules by creating four derived properties with formulas and scripts.

Practice 9-1: Creating the DefaultAlias Property

Overview

In this practice, you create a formula-derived property that concatenates node name and description values.

Tasks

Create a property named DefaultAlias that concatenates node name and description values. For example, suppose the name is East and the description is East US Region. The value for the DefaultAlias property should be East-East US Region. When a node does not have a description, the property value is null.

1. Define the property:
   a. Configure the property parameters as defined in the following table:

Parameter	Value
Name	DefaultAlias
Label	Default Alias
Description	Alias for Default Table
Property Level	Local Node
Property Type	Derived, Formula
Data Type	String
Maximum Length	80
Column Width	20

   b. Add the property to the Essbase property category.
2. Enter the formula and test it on the East node in the Geography hierarchy in the TotalComputer version. The result should be East-East US Region. Save the property.
3. In the Geography hierarchy in the TotalComputer version, verify that the DefaultAlias values are the same as those listed in the following table:

Node	Default Alias Property Value
TotalGeography	<null>
North America	North America-Continent
USA	USA-Country in North America
East	East-East US Region
Atlanta	Atlanta-Atlanta Office

Solution 9-1: Creating the DefaultAlias Property

Steps

Defining the Property

1. Select the **Administer** task group.
2. In the New drop-down list, select **Property Definition**.
   The New Property tab is displayed.
3. Configure the property parameters as defined in the following table:

Parameter	Value
Name	DefaultAlias
Label	Default Alias
Description	Alias for Default Table
Property Level	Local Node
Property Type	Derived, Formula
Data Type	String
Maximum Length	80
Minimum Length	(leave empty)
Column Width	20

4. On the Categories tab, select **Essbase** in the Available list, and click the Select button ( ) to add it to the Selected list.
   Essbase is added to the Selected list.

Entering and Testing the Formula

1. On the toolbar, click the Save button ( ).
   The New Property tab is renamed Custom.DefaultAlias.
2. Click the **Parameters** tab.
3. In the formula box, enter the following formula:

```
IF(Equals(String,Descr(),),,Concat(Abbrev(),-,Descr()))
```

4. Test the formula:
   a. Leave **Remove Spaces** selected.
   b. Next to Evaluate With, leave **Selected Node** selected.
   c. Next to the Selected Node box, click the ellipsis button ( ).
      The Select Node dialog box is displayed.
   d. In the Version drop-down list, select **TotalComputer**.
   e. In the Hierarchy drop-down list, select **Geography**.
   f. Under Nodes, expand the **North America** and **USA** nodes, and select the **East** node.
   g. Click **OK**.
      "TotalComputer~Geography~East" is displayed in the Selected Node box.
   h. Above the formula box, click **Evaluate**.
   i. Verify that "East-East US Region" is displayed in the Evaluation Results box.
5. On the toolbar, click the Save button ( ).
6. Close the **Custom.DefaultAlias** tab.

Verifying Property Values

1. Select the **Browse** task group.
2. If necessary, select the **TotalComputer** version and click the **Hierarchies** tab.
3. Double-click the **Geography** hierarchy to open it.
   The Geography - TotalComputer tab is displayed.
4. Select the **TotalGeography** node.
5. In the Category drop-down list on the Properties tab, select **Essbase**, and verify that the value for the Default Alias property is blank.
6. Repeat steps 4 and 5 for the **North America**, **USA**, **East**, and **Atlanta** nodes, and verify that the results match the information in the following table:

Node	Default Alias Property Value
North America	North America-Continent
USA	USA-Country in North America
East	East-East US Region
Atlanta	Atlanta-Atlanta Office

Note: Keep the Geography - TotalComputer tab open.

Practice 9-2: Creating the AllowAdj Property

Overview

In this practice, you create a formula-derived property that evaluates whether the node is a leaf.

Tasks

Create a property named AllowAdj that determines whether journal adjustments are allowed. The property value is determined by whether the node is a leaf. If the node is a leaf, then the value is True. If not, then the value is False.

1. Define the property:
   a. Configure the property parameters defined in the following table:

Parameter	Value
Name	AllowAdj
Label	Allow Adj
Description	Allow Journal Adjustments
Property Level	Local Node
Property Type	Derived, Formula
Data Type	Boolean
Column Width	20

   b. Add the property to the FM property category.
2. Enter the formula and test it on the Atlanta node in the Geography hierarchy in the TotalComputer version. The result should be True. Save the property.
3. In the Geography hierarchy in the TotalComputer version, verify that the Allow Adj values match the values listed in the following table:

Node	AllowAdj Property Value
Asia	False
Atlanta	True

Solution 9-2: Creating the AllowAdj Property

Steps

Defining the Property

1. Click the Home tab and then select the **Administer** task group.
2. In the New drop-down list, select **Property Definition**.
   The New Property tab is displayed.
3. Configure the property parameters defined in the following table:

Parameter	Value
Name	AllowAdj
Label	Allow Adj
Description	Allow Journal Adjustments
Property Level	Local Node
Property Type	Derived, Formula
Data Type	Boolean
Maximum Value	(leave empty)
Minimum Value	(leave empty)
Column Width	20

4. On the Categories tab, select **FM** in the Available list, and click the Select button ( ) to move it to the Selected list.
5. On the toolbar, click the Save button ( ).
   The New Property tab is renamed Custom.AllowAdj.

Entering and Testing the Formula

1. Click the **Parameters** tab.
2. In the formula box, enter the following formula: `NodeIsLeaf()`
3. Test the formula:
   a. Leave **Remove Spaces** selected.
   b. Next to Evaluate With, leave **Selected Node** selected.
   c. Next to the Selected Node box, click the ellipsis button ( ).
      The Select Node dialog box is displayed.
   d. In the Version drop-down list, select **TotalComputer**.
   e. In the Hierarchy drop-down list, select **Geography**.
   f. Under Nodes, expand the **North America** node, then the **USA** node, and then the **East** node.
   g. Browse to page 2.
   h. Select the **Atlanta** node, and click **OK**.
      "TotalComputer~Geography~Atlanta" is displayed in the Selected Node box.

i. Above the formula box, click **Evaluate**.
j. Verify that True is displayed in the Evaluation Results box.

4. On the toolbar, click the Save button ().
5. Close the **Custom.AllowAdj** tab.

Verifying Property Values

1. Click the **Geography - TotalComputer** tab.
2. If needed, in the Category drop-down list on the Properties tab, select **FM**.
3. In the hierarchy tree, select the **Asia** node, and verify that the value for the Allow Adj property is False.
4. In the hierarchy tree, select the **Atlanta** node, and verify that the value for the Allow Adj property is True.

   Note: Keep the **Geography - TotalComputer** tab open.

Practice 9-3: Creating the DefaultParent Property

Overview

In this practice, you create a formula-derived property that defines the default parent for the node.

Tasks

Create a property named DefaultParent that concatenates “DefaultParent=” and the name of the parent node. If the node is at the first level in the hierarchy, then the property value is Top Node.

1. Define the property:
   a. Configure the property parameters defined in the following table:

Parameter	Value
Name	DefaultParent
Label	Default Parent
Description	Default Parent
Property Level	Local Node
Data Type	String
Property Type	Derived, Formula
Column Width	20

   b. Add the property to the FM property category.
2. Enter the formula and test it on the Profit Percent node in the Account hierarchy in the TotalComputer version. The result should be DefaultParent=Ratios. Save the property.
3. In the Geography hierarchy in the TotalComputer version, verify that the Default Parent values match the values listed in the following table:

Node	DefaultParent Property Value
East	DefaultParent=USA
New York	DefaultParent=East
TotalGeography	Top Node

Solution 9-3: Creating the DefaultParent Property

Steps

Defining the Property

1. Click the Home tab and then select the **Administer** task group.
2. In the New drop-down list, select **Property Definition**.
   The New Property tab is displayed.
3. Configure the property parameters defined in the following table:

Parameter	Value
Name	DefaultParent
Label	Default Parent
Description	Default Parent
Property Level	Local Node
Data Type	String
Property Type	Derived, Formula
Column Width	20

4. On the Categories tab, select **FM** in the Available list, and click the Select button ( ) to move it to the Selected list.
5. On the toolbar, click the Save button ( ).
   The New Property tab is renamed Custom.DefaultParent.

Entering and Testing the Formula

1. Click the **Parameters** tab.
2. In the formula box, enter the following formula:

```
IF(Equals(String,PropValue(Core.Level),1),Top
Node,Concat(DefaultParent=,ParentPropValue(Core.Abbrev)))
```

   Note: Be sure to *not* include a paragraph return at the end of the formula.
3. Test the formula:
   a. Clear Remove Spaces.
   b. Next to Evaluate With, leave Selected Node selected.
   c. Next to the Selected Node box, click the ellipsis button ( ).
      The Select Node dialog box is displayed.
   d. In the Version drop-down list, select **TotalComputer.**
   e. In the Hierarchy drop-down list, select **Account**.
   f. Under Nodes, expand **Ratios**, select **Profit Percent**, and click **OK**.
      "TotalComputer~Account~Profit Percent" is displayed in the Selected Node box.
   g. Above the formula box, click **Evaluate**.
   h. Verify that "DefaultParent=Ratios" is displayed in the Evaluation Results box.

4. On the toolbar, click the Save button ().
5. Close the **Custom.DefaultParent** tab.

Verifying Property Values

1. Click the Geography - TotalComputer tab.
2. If needed, in the Category drop-down list on the Properties tab, select FM.
3. If needed, expand the USA node in the hierarchy tree.
4. Select the East node, and verify that the value for the Default Parent property is DefaultParent=USA.
5. If needed, expand the East node.
6. Select the New York node, and verify that the value for the Default Parent property is DefaultParent=East.
7. Select the TotalGeography node, and verify that the value for the Default Parent property is Top Node.
8. Keep the Geography - TotalComputer tab open.

Practice 9-4: Creating the EntitySize Property

Overview

In this practice, you create a script-derived property that evaluates the size of the enterprise in each region based on the number of regional offices.

Tasks

Create a property named EntitySize that counts the number of descendants for limb nodes and is assigned a value according to the following business logic:

- If the number of descendants is less than or equal to 5, assign “Small.”
- If the number of descendants is more than 5 and less than or equal to 10, assign “Medium.”
- If the number of descendants is more than 10, assign “Large.”
- For leaf nodes, assign “N/A.”

1. Define the property:
   a. Configure the property parameters defined in the following table:

Parameter	Value
Name	EntitySize
Label	Entity Size
Description	Entity Size
Property Level	Local Node
Property Type	Derived, Script
Data Type	String
Column Width	20

   b. Add the property to the Location property category.
2. Enter the script and test it on the USA node in the Geography hierarchy in the TotalComputer version. The result should be Large. Save the property.
3. In the Geography hierarchy in the TotalComputer version, verify that the EntitySize property values are the same as those listed in the following table:

Node	EntitySize Property Value
USA	Large
East	Medium
Massachusetts	Small
Atlanta	N/A

Solution 9-4: Creating the EntitySize Property

Steps

Defining the Property

1. Click the Home tab and then select the **Administer** task group.
2. In the New drop-down list, select **Property Definition**.
   The New Property tab is displayed.
3. Configure the property parameters defined in the following table:

Parameter	Value
Name	EntitySize
Label	Entity Size
Description	Entity Size
Property Level	Local Node
Property Type	Derived, Script
Data Type	String
Column Width	20

4. On the Categories tab, select **Location** in the Available list, and click the Select button ( ) to move it to the Selected list.
5. On the toolbar, click the Save button ( ).
   The New Property tab is renamed as Custom.EntitySize.

Entering and Testing the Script

1. Click the **Parameters** tab.
2. In the script editor, enter the following script:

```
var numDescendants = node.PropValue("Core.Descendants");
if (numDescendants == 0)
   return ("N/A");
else if (numDescendants > 0 && numDescendants <= 5)
   return ("Small");
else if (numDescendants > 5 && numDescendants <=10)
   return ("Medium");
else
   return ("Large");
```

3. Test the script:
   a. Next to Evaluate With, leave **Selected Node** selected.
   b. Next to the Selected Node box, click the ellipsis button ( ).
      The Select Node dialog box is displayed.

c. In the Version drop-down list, select **TotalComputer**.
d. In the Hierarchy drop-down list, select **Geography**.
e. Under Nodes, expand the **North America** node, select the **USA** node, and click **OK**.
"TotalComputer~Geography~USA" is displayed in the Selected Node box.
f. Above the script editor, click **Evaluate**.
g. Verify that "Large" is displayed in the Evaluation Results box.

4. On the toolbar, click the Save button ().
5. Close the **Custom.EntitySize** tab.

Verifying Property Values

1. Click the **Geography - TotalComputer** tab.
2. In the hierarchy tree, select the **TotalGeography** node.
3. In the Category drop-down list on the Properties tab, select **Location**, and verify that the value for the Entity Size property is **Large**.
4. Repeat steps 2 and 3 for the **USA**, **East**, **Massachusetts**, and **Atlanta** nodes, and verify that the results match the information in the following table:

Node	FM Desc Property Value
USA	Large
East	Medium
Massachusetts	Small
Atlanta	N/A

5. Close the Geography - TotalComputer tab.

Practices for Lesson 10: Validating Data

Chapter 10

Practices for Lesson 10: Overview

Lesson Overview

After working with the data for some time, you conclude that you would always like to enforce some business rules. Therefore, you decide to create validations to handle these situations.

Practice 10-1: Creating a Name Length Validation

Overview

You need to ensure that node names are a certain length. Therefore, you create a validation to ensure that all node names are between 2 and 20 characters long.

Task

1. Define the validation:
   a. Configure the validation parameters defined in the following table:

Parameter	Value
Name	NameLength
Label	Name Length
Failure Message	Name length must be between 2 and 20 characters

   b. Select the appropriate class and level.
   c. Configure the validation to run in real time.
   d. Configure the class parameters.
   e. Save the validation.
2. Assign the validation to the Geography hierarchy in the TotalComputer version.
3. Test the validation by trying to add nodes to the Geography hierarchy that have names less than 2 or greater than 20 characters long.

Solution 10-1: Creating a Name Length Validation

Steps

Defining the Name Length Validation

1. Select the **Administer** task group.
2. In the New drop-down list, select **Validation**.
   The New Validation tab is displayed.
3. In the Name box, enter **NameLength**.
4. In the Label box, enter **Name Length**.
5. In the Failure Message box, enter **Name length must be between 2 and 20 characters**.
6. In the Class drop-down list, select **PropLength - Property length check**.
7. In the Level drop-down list, leave **Node** selected.
8. Clear **Batch (run when manually triggered)**, and select **Real Time (always runs)**.
9. Configure the class parameters:
   a. On the PropName row in the table, click the Edit button ( ).
   b. In the Value drop-down list for the Property parameter, select **Core.Abbrev**, and click the Update button ( ).
   c. On the MinLength row, click the Edit button ( ).
   d. In the Value box for the MinLength parameter, enter **2**, and click the Update button ( ).
   e. On the MaxLength row, click the Edit button ( ).
   f. In the Value box for the MaxLength parameter, enter **20**, and click the Update button ( ).
10. On the toolbar, click the Save button ( ).
    The tab is renamed Custom.NameLength.
11. Close the **Custom.NameLength** tab.

Assigning the Name Length Validation to the Geography Hierarchy

1. Select the **Browse** task group.
2. If needed, in the versions list, select the **TotalComputer** version.
3. Select the **Geography** hierarchy.
4. In the Hierarchies drop-down list, select **Assign Validations**.
   The Properties tab displays validations.
5. Click the Value box for the Name Length validation, and select **Real-Time**.
6. Click **Save**.

Testing the Name Length Validation

1. On the Hierarchies tab, double-click the Geography hierarchy to open it.
   The Geography - TotalComputer tab is displayed.
2. With **TotalGeography** selected, in the Nodes drop-down list, select **New** and then **Limb**.
   The New Limb Node dialog box is displayed.
3. In the Name box, enter any name that is more than 20 characters long (for example, **Extra Long Continent Name**), and click **OK**.
   An Error dialog box displays the following message: “The server returned an error processing the action. AddNode. Error message: DRM-14021: Node Extra Long Continent Name failed validation Name Length with this message: Name length must be between 2 and 20 characters.”
4. Click **OK**.
5. In the Name box, enter one character (for example, **A**), and click **OK**.
   An Error dialog box displays the following message: “The server returned an error processing the action. AddNode. Error message: DRM-14021: Node Extra Long Continent Name failed validation Name Length with this message: Name length must be between 2 and 20 characters.”
6. Click **OK**.
   You successfully tested the validation.
7. Click **Cancel** to close the dialog box.
8. Close the **Geography - TotalComputer** tab.

Practice 10-2: Creating the DynamicCalcLeaf Validation Based on a Validation Script

Overview

You need to ensure that a formula is available in the Member Formula property when a node's Data Storage property is set to Dynamic Calc. You decide to create a validation based on a script that checks this business rule and outputs a failure message including the failed node name and the node hierarchy name. You want the validation to run only when it is manually triggered.

1. Create a validation:
   a. Configure the validation parameters defined in the following table:

Parameter	Value
Name	DynamicCalcLeaf
Label	Dynamic Calc Leaf
Failure Message	Dynamic Calc requires a formula for node *node_name* in hierarchy *hierarchy_name*.

   b. Select the appropriate class and level, configure the validation to run only when manually triggered, develop the script, and save the validation.
2. Assign the validation to the Account hierarchy in the TotalComputer version.
3. Run the validation and verify that the validation results include two nodes: Margin Percent and Profit Percent.
4. Update the Member Formula property for the resulting nodes as follows:
   - For the Margin Percent node, set Member Formula = Margin % Sales.
   - For the Profit Percent node, set Member Formula = Profit % Sales.
5. Rerun the validation on the Account hierarchy.
   The validation should have completed successfully (no nodes should be listed).

Solution 10.2 Creating the DynamicCalcLeaf Validation Based on a Validation Script

Steps

Creating the Dynamic Calc Leaf Validation

1. Select the **Administer** task group.
2. In the New drop-down list, select **Validation**.
   The New Validation tab is displayed.
3. In the Name box, enter **DynamicCalcLeaf**.
4. In the Label box, enter **Dynamic Calc Leaf**.
5. In the Failure Message box, enter **Dynamic Calc requires a formula for node {0} in hierarchy {1}**.
6. In the Class drop-down list, select **Script**.
7. In the Level drop-down list, leave **Node** selected.
8. Leave **Batch (run when manually triggered)** selected.
9. On the toolbar, click the Save button ( ).
   The New Validation tab is renamed to Custom.DynamicCalcLeaf.

Entering and Testing the Script

1. In the Script Editor, enter the following script:

```
var returnObject     = new Object();
var MemberFormulaProp = node.PropValue("Essbase.Formula");
var DataStorageProp  = node.PropValue("Essbase.DataStorage");

if (node.Leaf && MemberFormulaProp.length == 0 && DataStorageProp ==
    "Dynamic Calc") {
     returnObject.success    = Boolean(false);
     returnObject.parameters = Array(node.Abbrev, node.HierAbbrev);
}
else
     returnObject.success = Boolean(true);
return (returnObject);
```

2. Test the script:
   a. Next to Evaluate With, leave **Selected Node** selected.
   b. Next to the Selected Node box, click the ellipsis button ( ).
      The Select Node dialog box is displayed.
   c. In the Version drop-down list, select **TotalComputer**.
   d. In the Hierarchy drop-down list, select **Account**.
   e. Under Nodes, expand the **Ratios** node, select the **Margin Percent** node, and click **OK**.

"TotalComputer~Account~Margin Percent" is displayed in the Selected Node box.

f. Above the script editor, click **Evaluate**.

g. Verify that the following text is displayed in the Evaluation Results box:

```
{
        success: False
        failureMessage: Dynamic Calc requires a formula for node
Margin Percent in hierarchy Account
}
```

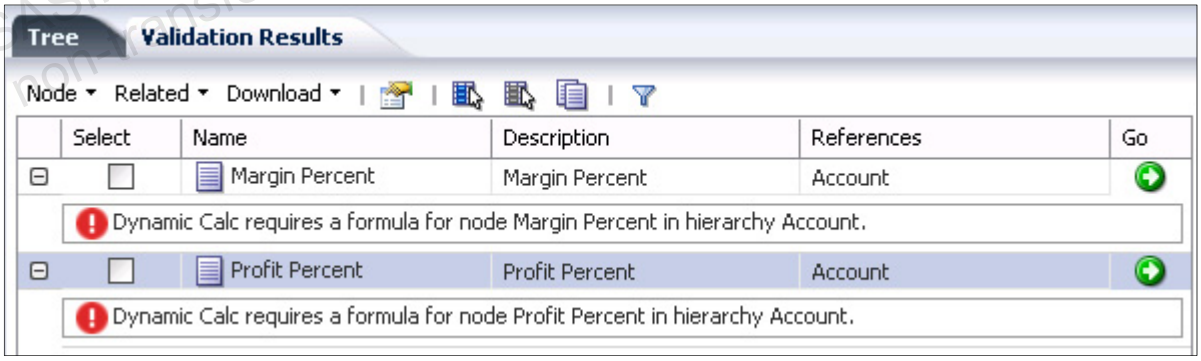
3. On the toolbar, click the Save button ( ).
4. Close the Custom.DynamicCalcLeaf tab.

Assigning the Dynamic Calc Leaf Validation to the Account Hierarchy

1. Select the **Browse** task group.
2. Select the **TotalComputer** version if necessary.
3. Right-click the **Account** hierarchy, and select **Assign Validations**.
   The Properties tab displays validations.
4. Click in the Value box for the Dynamic Calc Leaf validation, and select **Batch**.
5. Click **Save**.

Running the Dynamic Calc Leaf Validation and Verifying Results

1. On the Hierarchies tab, double-click the **Account** hierarchy
   The Account – TotalComputer tab is open.
2. In the hierarchy tree, right-click the **Measures** node, select **Validate**, and then **Assigned**.
   The validation is executed, and the Validation Results tab is displayed.
3. Expand **Margin Percent** and **Profit Percent**.
   The failure message is displayed under both nodes as shown in the following figure:



Updating the Formulas for the Resulting Nodes

1. In the results list, select the **Margin Percent** node.
   Note: Select the name, not the check box.
2. On the Properties tab, in the Category drop-down list, select **Essbase**.
3. Click in the Value box for Member Formula, and enter **Margin % Sales**.
4. Click **Save**.
5. In the results list, select the **Profit Percent** node.

6. On the Properties tab, click in the Value box for Member Formula, and enter **Profit % Sales**.
7. Click **Save**.

Rerunning the Dynamic Calc Leaf Validation

1. Click the **Tree** tab.
2. Right-click the **Measures** node, select **Validate**, and then **Assigned**.
   The Information dialog box indicates that the validation completed successfully. No nodes are listed.
3. Click **OK**.
   The Validation Results tab is no longer displayed.
4. Close the **Account – TotalComputer** tab.

Practices for Lesson 11: Setting Up Node Types

Chapter 11

Practices for Lesson 11: Overview

Lesson Overview

Your ProjectOne application has many properties now. You want to control which properties are displayed for each node; therefore, you decide to set up node types to accomplish this job. You first set up node types for all hierarchies based on their dimension type. Next, you set up a specific node type for the Geography hierarchy in the TotalComputer version to further filter properties in that hierarchy.

Practice 11-1: Setting Up Node Types Based on Dimension Types

Overview

Hierarchies in your application contain entity, product, or finance data. Therefore, you decide to filter properties for nodes based on the kind of data contained in each hierarchy. To do this, you specify a dimension type for each hierarchy through a new hierarchy-level property named DimensionType. You then create node types for each type of dimension. For example, if a hierarchy is an entity-type dimension, only entity-type properties should be displayed for the nodes in that hierarchy.

Tasks

1. Create a property:
   a. Configure the property parameters as defined in the following table:

Parameter	Value
Name	DimensionType
Label	Dimension Type
Description	Type of hierarchy
Property Level	Hierarchy
Data Type	String
Property Type	Defined
List	Selected
Column Width	20

   b. Assign the DimensionType property to the Common property category.
   c. Add Entity, Finance, and Product as list values.
   d. Save the property
2. For the hierarchies in the TotalComputer version, configure the DimensionType property as defined in the following table:

Hierarchy	DimensionType Property Value
Account	Finance
Activity	Finance
Geography	Entity
Product	Product

3. Create glyphs as defined in the following table:

Glyph Name	PNG File (in the class files folder)
Accounts	Accounts.png ()
Product	Product.png ()
Global	Global.png ()
Diamond	Diamond.png ()

4. Create node types as defined in the following table. Alphabetize the property names for each node type.

Node Type Name	Node Type Description	Glyph	Properties to Include
Finance	Nodes that have finance-type properties	Accounts	All properties from the Essbase, FM, and Common property categories
Product	Nodes that have product-type properties	Product	All properties from the Essbase and Common property categories
Entity	Nodes that have geography-type properties	Global	All properties from the Location and Common property categories

5. For each hierarchy in the TotalComputer version, set the HierarchyNodeType property equal to the DimensionType property.
6. Verify that the correct property categories and properties are displayed for each hierarchy.

Solution 11-1: Setting Up Node Types Based on Dimension Types

Steps

Creating the DimensionType Property

1. Select the **Administer** task group.
2. In the New drop-down list, select **Property Definition**.
   The New Property tab is displayed.
3. Configure the property parameters defined in the following table:

Parameter	Value
Name	DimensionType
Label	Dimension Type
Description	Type of hierarchy
Property Level	Hierarchy
Data Type	String
Property Type	Defined
List	Selected
Column Width	20

4. On the Categories tab, select the **Common** category, and click the Select button ( ) to move it to the Selected list.
5. Configure the list values:
   a. Click the **List Values** tab.
   b. Click **Add**.
   c. In the first List Item box, enter **Entity**, and click the Update button ( ).
   d. Click **Add**.
   e. In the second List Item box, enter **Finance**, and click the Update button ( ).
   f. Click **Add**.
   g. In the third List Item box, enter **Product**, and click the Update button ( ).
6. On the toolbar, click the Save button ( ).
   The New Property tab is renamed Custom.DimensionType.
7. Close the **Custom.DimensionType** tab.

Configuring the DimensionType Property for the Hierarchies

1. Configure the Account hierarchy:
   a. Select the **Browse** task group.
   b. On the Hierarchies tab, right-click **Account** and select **Properties**.
      The Properties tab for the Account hierarchy is displayed.
   c. On the Properties tab, in the Category drop-down list, select **Common**.
   d. Select the **Dimension Type** property.
   e. In the Value box, select **Finance**.
   f. Click **Save**.
2. Configure the Activity hierarchy:
   a. On the Hierarchies tab, select the **Activity** hierarchy.
      The Properties tab for the Activity hierarchy is displayed.
   b. On the Properties tab, in the Category drop-down list, leave **Common** selected.
   c. Select the **Dimension Type** property.
   d. In the Value box, select **Finance**.
   e. Click **Save**.
3. Configure the Geography hierarchy:
   a. On the Hierarchies tab, select the **Geography** hierarchy.
      The Properties tab for the Geography hierarchy is displayed.
   b. On the Properties tab, in the Category drop-down list, leave **Common** selected.
   c. Select the **Dimension Type** property.
   d. In the Value box, select **Entity**.
   e. Click **Save**.
4. Configure the Products hierarchy:
   a. On the Hierarchies tab, select the **Product** hierarchy.
      The Properties tab for the Product hierarchy is displayed.
   b. On the Properties tab, in the Category drop-down list, leave **Common** selected.
   c. Select the **Dimension Type** property.
   d. In the Value box, select **Product**.
   e. Click **Save**.

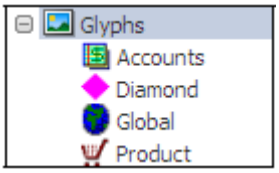
Creating Glyphs

1. Click the Home tab and then select the **Administer** task group.
2. In the New drop-down list, select **Glyph**.
   The New Glyph tab is displayed.
3. In the Name box, enter **Accounts**
4. Next to the Upload New Glyph box, click **Browse**.
   The “Choose File to Upload” dialog box is displayed.
5. Browse to the **Glyphs** folder in the class files folder, select **Accounts.png** (), and click **Open**.
6. Next to Glyph, click **Preview**.
   The glyph is displayed.

7. On the toolbar, click the Save & New button ( ).
   The New Glyph tab is displayed.
8. Repeat steps 3 through 7 to create the glyphs defined in the following table:

Glyph Name	PNG File
Product	Product.png ( )
Global	Global.png ( )
Diamond	Diamond.png ( )

   Note: After defining the Diamond glyph, click the Save button ( ) on the toolbar.
9. Close the **Diamond** tab.
10. In the Administer task group, expand **Glyphs**, and verify that there are four glyphs (as shown in the following figure):



Creating the Finance Node Type

1. In the New drop-down list, select **Node Type**.
   The New Node Type tab is displayed.
2. In the Name box, enter **Finance**.
3. In the Description box, enter **Nodes that have finance-type properties**.
4. In the Glyph drop-down list, select **Accounts**.
   The glyph is displayed next to the Glyph drop-down list.
5. On the Properties tab, in the Category drop-down list, select **Essbase**, and click the Select All button ( ) to move all properties to the Selected list.
6. In the Category drop-down list, select **FM**, and click the Select All button ( ) to move all properties to the Selected list.
7. In the Category drop-down list, select **Common**, and click the Select All button ( ) to move all properties to the Selected list.
8. Click the Alphabetize button ( ) to sort the selected properties in alphabetical order.
9. Verify that the Selected list displays the following properties:
   - Allow Adj
   - Allow Children Adj
   - Consolidation
   - Data Storage
   - Default Alias
   - Default Currency
   - Default Parent
   - Holding Company

- IC Partner
- Member Formula
- Security Class
- Two Pass Calc
- UDA1
- UDA2
- UDA3

Note: If your properties are in another order, verify that their labels are correct. A property label might be missing a space.

10. On the toolbar, click the Save & New button ( ).
    The New Node Type tab is displayed.

Creating the Product Node Type

1. In the Name box, enter **Product**.
2. In the Description box, enter **Nodes that have product-type properties**.
3. In the Glyph drop-down list, select **Product**.
   The glyph is displayed next to the Glyph drop-down list.
4. On the Properties tab, in the Category drop-down list, select **Essbase**, and click the Select All button ( ) to move all properties to the Selected list.
5. In the Category drop-down list, select **Common**, and click the Select All button ( ) to move all properties to the Selected list.
6. Click the Alphabetize button ( ) to sort the selected properties in alphabetical order.
7. Verify that the Selected list displays the following properties:
   - Consolidation
   - Data Storage
   - Default Alias
   - Member Formula
   - Two Pass Calc
   - UDA1
   - UDA2
   - UDA3
8. On the toolbar, click the Save & New button ( ).
   The New Node Type tab is displayed.

Creating the Entity Node Type

1. In the Name box, enter **Entity**.
2. In the Description box, enter **Nodes that have geography-type properties**.
3. In the Glyph drop-down list, select **Global**.
   The glyph is displayed next to the Glyph drop-down list.
4. On the Properties tab, in the Category drop-down list, select **Location**, and click the Select All button ( ) to move all properties to the Selected list.

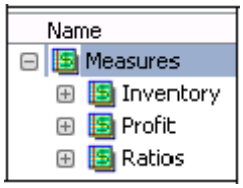
5. In the Category drop-down list, select **Common**, and click the Select All button ( ) to move all properties to the Selected list.
6. Click the Alphabetize button ( ).
7. Verify that the Selected list displays the following properties:
   - Country
   - Default Currency
   - Entity Size
   - Local Office
   - Regional Manager
   - State Province
   - UDA1
   - UDA2
   - UDA3
8. On the toolbar, click the Save button ( ).
   The New Node Type tab is renamed Entity.
9. Close the **Entity** tab.

Configuring the HierarchyNodeType Property

1. Select the **Browse** task group.
2. On the Hierarchies tab, select the **Account** hierarchy.
3. If necessary, on the Properties tab, in the Category drop-down list, select **System**.
4. On the Properties tab, select the **Hierarchy Node Type** property
5. On the Hierarchy Node Type row, click the ellipsis button ( ).
   The Select Property dialog box is displayed.
6. In the Category drop-down list, leave **Common** selected.
7. Select **Dimension Type**, and click **OK**.
8. Click **Save**.
9. Repeat steps 2 through 8 for the **Activity**, **Geography**, and **Product** hierarchies.

Verifying the Properties for the Hierarchies

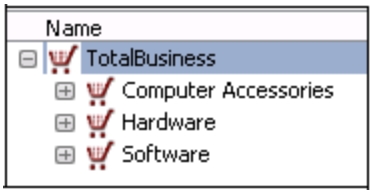
1. Verify the properties for the Account hierarchy:
   a. On the Hierarchies tab, double-click the **Account** hierarchy.
      The Account - TotalComputer tab is displayed.
   b. Notice that there are glyphs displayed next to node names, as shown in the following figure:



   Note: In the Nodes drop-down list, select **Refresh** if necessary.

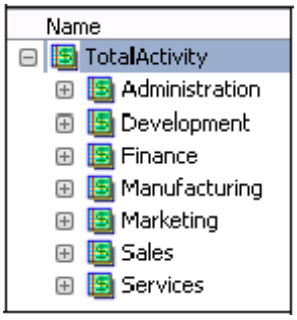
c. On the Properties tab, view the **Category** drop-down list, and verify that the list displays the following property categories:
   - System
   - Common
   - Essbase
   - FM
   - Stats

2. Verify the properties for the Product hierarchy:
   a. On the Hierarchies tab, double-click the **Product** hierarchy.
      The Product - TotalComputer tab is displayed.
   b. Notice that there are glyphs displayed next to node names, as shown in the following figure:

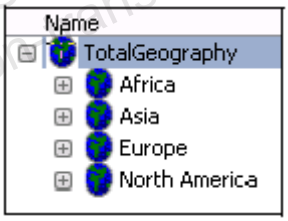


   c. On the Properties tab, view the **Category** drop-down list, and verify that the list displays the following property categories:
      - System
      - Common
      - Essbase
      - Stats

3. Verify the properties for the Activity hierarchy:
   a. On the Hierarchies tab, double-click the **Activity** hierarchy.
      The Activity - TotalComputer tab is displayed.
   b. Notice that there are glyphs displayed next to node names, as shown in the following figure:



   c. On the Properties tab, view the **Category** drop-down list, and verify that the list displays the following property categories:
      - System
      - Common
      - Essbase
      - FM
      - Stats
4. Verify the properties for the Geography hierarchy:
   a. On the Hierarchies tab, double-click the **Geography** hierarchy.
      The Geography - TotalComputer tab is displayed.
   b. Notice that there are glyphs displayed next to node names, as shown in the following figure:



   c. On the Properties tab, view the **Category** drop-down list, and verify that the list displays the following property categories:
      - System
      - Common
      - Location
      - Stats
5. Close the following tabs: **Geography - TotalComputer**, **Activity - TotalComputer**, **Product - TotalComputer**, and **Account - TotalComputer**.

Practice 11-2: Creating a Note Type for the Geography Hierarchy

Overview

The Geography hierarchy still displays unrelated properties for levels 1 to 4 nodes. For example, the Regional Manager property at the continent level is not applicable. Therefore, you decide to create another node type that further filters the property list for these nodes.

Tasks

1. Create a property:
   a. Configure the property parameters as defined in the following table:

Parameter	Value
Name	TypeofNode
Label	Type of Node
Description	Determines nonregional nodes in the Geography hierarchy
Property Level	Local Node
Data Type	String
Property Type	Derived
Deriver Class	Script
Column Width	20

   b. Add the TypeofNode property to the Common property category, and save the property.
   c. Define a script that evaluates the following: If a node is in the Geography hierarchy, and its level is less than 5, then set the TypeofNode property equal to Nonregional; otherwise, set it equal to the hierarchy-level DimensionType property value.
   d. Test the script on the Africa and Connecticut nodes in the Geography hierarchy.
   For the Africa node, the TypeofNode value should be equal to Nonregional. For the Connecticut node, the TypeofNode value should be equal to Entity.
   e. Save the property.
2. Add the property to the Entity node type.
3. In the Geography hierarchy, verify the TypeofNode property values for nodes listed in the following table:

Node	TypeofNode Property Value
TotalGeography	Nonregional
North America	Nonregional
USA	Nonregional
East	Nonregional
Connecticut	Entity

4. Create a node type named Nonregional with the following description and properties:
   - Description: Nodes in the Geography hierarchy that are nonregional
   - Properties: Add only the properties from the Common property category.
   - Glyph: Diamond

5. For the Geography hierarchy, set the HierarchyNodeType property to TypeofNode.
6. Verify the properties in the Geography hierarchy:
    - Select any level 1 through 4 node, and verify that the following property categories are available: System, Common, and Stats.
    - Select any level 5 or 6 node, and verify that the following property categories are available: System, Common, Location, and Stats. The Location property category provides additional entity-type properties for these nodes.

Solution 11-2: Creating a Node Type for the Geography Hierarchy

Steps

Creating the TypeofNode Property

1. Select the **Administer** task group.
2. In the New drop-down list, select **Property Definition**.
   The New Property tab is displayed.
3. Configure the property parameters defined in the following table:

Parameter	Value
Name	TypeofNode
Label	Type of Node
Description	Determines nonregional nodes in the Geography hierarchy
Property Level	Local Node
Data Type	String
Property Type	Derived
Deriver Class	Script
Column Width	20

4. On the Categories tab, select the **Common** category, and click the Select button ( ) to move it to the Selected list.
5. On the toolbar, click the Save button ( ).
   The tab is renamed Custom.TypeofNode.
6. Click the **Parameters** tab.
7. In the Script editor, enter the following script:

```
if (node.Hier=="Geography" && node.Level<5)
   return ("Nonregional");
else
   return (node.Hier.PropValue("Custom.DimensionType"));
```

8. Next to Evaluate With, leave **Selected Node** selected.
9. Next to the Selected Node box, click the ellipsis button ( ).
   The Select Node dialog box is displayed.
10. In the Version drop-down list, select **TotalComputer**.
11. In the Hierarchy drop-down list, select **Geography**.
12. In the Nodes list, select the **Africa** node.
13. Click **OK**.
14. Click **Evaluate**.
    The Evaluation Results box is equal to Nonregional because it is a level 2 node and it is part of the Geography hierarchy.

15. Repeat steps 9 through 14 for the **Connecticut** node.
    The Evaluation Results box is equal to Entity because it is a level 5 node and it is part of the Geography hierarchy.
16. On the toolbar, click the Save button ( ).
17. Close the **Custom.TypeofNode** tab.

Adding the TypeofNode Property to the Entity Node Type

1. If necessary, select the **Administer** task group.
2. Expand **Node Types**, and double-click the **Entity** node type to open it.
3. In the Category drop-down list, select **Common**.
4. In the Available list, select **Type of Node**, and click the Select button ( ) to move it to the Selected list.
5. Click the Alphabetize button ( ) to sort the Selected list is alphabetical order.
6. On the toolbar, click the Save button ( ).
7. Close the **Entity** tab.

Verifying the TypeofNode Property Value in the Geography Hierarchy

1. Click the **Home** tab and then select the **Browse** task group.
2. On the Hierarchies tab, double-click the **Geography** hierarchy to open it.
   The Geography - TotalComputer tab is displayed.
3. On the Properties tab, in the Category drop-down list, leave **Common** selected.
4. On the toolbar, click the "Expand tree to specified level" button ( ).
   The Expand Tree to Level dialog box is displayed.
5. In the Expand to Level box, enter **5**, and click **OK**.
   All nodes are displayed in the hierarchy tree.
6. With TotalGeography selected in the hierarchy tree, view the value for the **Type of Node** property.
   The value should be equal to Nonregional because the node is at level 1.
7. In the hierarchy tree, select the **North America** node, and view the **Type of Node** property value.
   The value should be equal to Nonregional because the North America node is at level 2.
8. Select the **USA** node, and view the **Type of Node** property value.
   The value should be equal to Nonregional because the USA node is at level 3.
9. Select the **East** node, and view the **Type of Node** property value.
   The value should be equal to Nonregional because the East node is at level 4.
10. Select the **Connecticut** node, and view the **Type of Node** property value.
    The value should be equal to Entity because the Connecticut node is at level 5.

Creating the Nonregional Node Type

1. Click the **Home** tab and then select the **Administer** task group.
2. In the New drop-down list, select **Node Type**.
   The New Node Type tab is displayed.

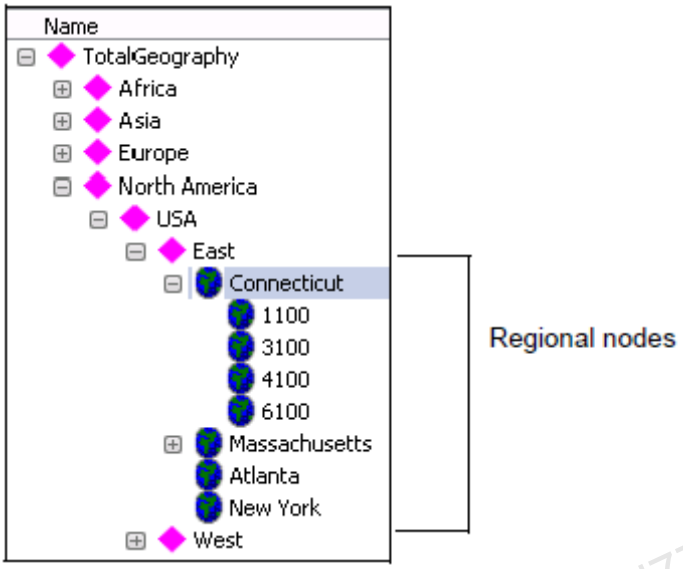
3. In the Name box, enter **Nonregional**.
4. In the Description box, enter **Nodes in the Geography hierarchy that are nonregional**.
5. In the Glyph drop-down list, select **Diamond**.
   The glyph is displayed next to the Glyph drop-down list.
6. In the Category drop-down list, select **Common**, and click the Select All button () to move all properties to the Selected list.
7. Verify that the Selected list displays the following properties:
   - Type of Node
   - UDA1
   - UDA2
   - UDA3
8. On the toolbar, click the Save button ().
9. Close the **Nonregional** tab.

Configuring the HierarchyNodeType Property for the Geography Hierarchy

1. Click the **Home** tab and then select the **Browse** task group.
2. Select the **Geography** hierarchy.
3. On the Properties tab, select the **Hierarchy Node Type** property.
4. On the Hierarchy Node Type row, click the ellipsis button ().
   The Select Property dialog box is displayed.
5. In the Category drop-down list, leave **Common** selected.
6. Select **Type of Node**, and click **OK**.
7. Click **Save**.

Verifying the Properties in the Geography Hierarchy

1. Click the **Geography - TotalComputer** tab.
2. In the Nodes drop-down list, select **Refresh** if necessary.
3. Notice the glyphs for regional and nonregional nodes (as shown in the following figure):



4. In the hierarchy tree, select the **TotalGeography** node.
5. On the Properties tab, verify that the following property categories are available:
   - System
   - Common
   - Stats

   Note: These are property categories of the Nonregional node type.
6. In the hierarchy tree, select the **North America** node, and repeat step 5.
7. Select the **USA** node, and repeat step 5.
8. Select the **East** node, and repeat step 5.
9. Select the **Connecticut** node, and verify that the following property categories are listed:
   - System
   - Common
   - Location
   - Stats

   Note: The Connecticut node is at level 5 and should have one additional property category: Location.
10. Close the **Geography - TotalComputer** tab.

Practices for Lesson 12: Exporting Data

Chapter 12

Practices for Lesson 12: Overview

Practices Overview

In these practices, you export data from the ProjectOne application for further consumption in target systems.

Practice 12-1: Exporting Finance Data to a Flat File

Overview

The Financial Management team requests finance data from the ProjectOne application so that they can transfer it to a Financial Management application. They require the data to be in a comma-delimited flat-file format.

Task

1. Create a hierarchy export:
   a. Include only active leaf and limb nodes.
   b. Recurse from the top node.
   c. Remove duplicates based on the Name property, because you want to export nodes only once, even if they occur in multiple hierarchies.
   d. Set a filter on the Dimension Type property to equal Finance.
   e. Include the following columns in the export file:
      - Name
      - Allow Adj
      - Allow Children Adj
      - Default Parent
      - Default Currency
      - FM Description
      - Holding Company
      - IC Partner
      - Security Class
      - UDA1
      - UDA2
      - UDA3
   f. In the export file, include column headings, a blank line between the header/footer and body, and a header named Finance Nodes. Select the appropriate field delimiter.
2. Save the export as Export_FinanceNodes, and set Object Access Group to User.
3. Run the export, save the export file to the desktop with its default name, and then view and close the export file.

Solution 12-1: Exporting Finance Data to a Flat File

Steps

Creating the Hierarchy Export

1. Select the **Export** task group.
   The Exports tab is displayed.
2. On the toolbar, click the New Export button ().
   The Choose Export Type dialog box is displayed.
3. In the Hierarchy Exports area, select **Hierarchy**.
   The New Export tab is displayed, and the Source subtab is displayed by default.
4. Configure the source:
   a. In the Version drop-down list, select **TotalComputer**.
   b. Click **Add**.
      The Select Node dialog box is displayed.
   c. In the Hierarchy drop-down list, select **Activity**.
   d. In the Nodes list, leave the top node (in this case, TotalActivity) selected.
   e. Click **OK**.
   f. Repeat steps b through e for the **Account**, **Geography**, and **Product** hierarchies.
5. Configure the style:
   a. Click the **Style** tab.
   b. Next to Node Selection, leave **All Nodes** selected.
   c. Leave **Recurse from Top Node** selected.
   d. Clear **Include Inactive Nodes**.
   e. Select **Remove Duplicates Based on Key**.
6. Configure the filter:
   a. Click the **Filter** tab.
   b. Next to the Query drop-down list, click the ellipsis button ().
      The Query: New Query dialog box is displayed.
   c. Click **Add**.
   d. In the Property drop-down list, select **Dimension Type**.
   e. In the Operator drop-down list, select **Equal**.
   f. In the Value box, enter **Finance**.
   g. Leave **Inherit** selected.

h. In the Action column, click the Update button ( ).
The following formula is displayed:
```
Dimension Type Equal Finance
Formula is Valid
```
i. Click **OK**.
The following is displayed in the Description box: “Dimension Type Equal Finance.”

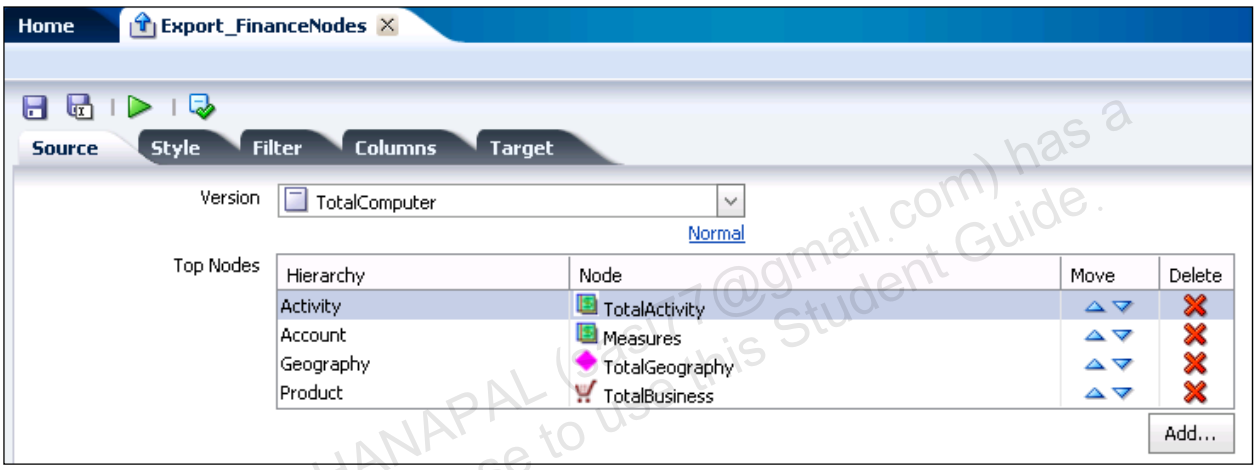
7. Configure the columns:
   a. Click the **Columns** tab.
   b. In the Category drop-down list, leave **System** selected.
   c. In the Available list, select **Name**, and click the Select button ( ) to move it to the Selected list.
   d. In the Category list, select **FM**, and click (Select All) to move all FM properties to the Selected list.
   e. In the Category list, select **Common**.
   f. In the Available list, select the user-defined properties (**UDA1**, **UDA2**, and **UDA3**), and click the Select button ( ) to move them to the Selected list.
   g. Verify that the Selected list consists of the following properties:
      1 - Name
      2 - Allow Adj
      3 - Allow Children Adj
      4 - Default Currency
      5 - Default Parent
      6 - Holding Company
      7 - IC Partner
      8 - Security Class
      9 - UDA1
      10 - UDA2
      11 - UDA3
8. Configure column options:
   a. Click the **Column Options** tab.
   b. On the first row for the [Core] Name property, in the Action column, click the Edit button ( ).
   c. In the Primary Key column on the first row, select the check box.
   d. In the Action column, click the Update button ( ).
   The Name property is set as the primary key.

9. Configure the target:
   a. Click the **Target** tab.
   b. In the Device drop-down list, select **Client File**.
   c. Next to Format, select **Column Headings**.
   d. Next to Header/Footer, select **Blank line between Header/Footer and Body**.

e. In the Header box, enter **Finance Nodes**.
f. In the Field Delimiter drop-down list, select **(Comma)**.

Saving the Export

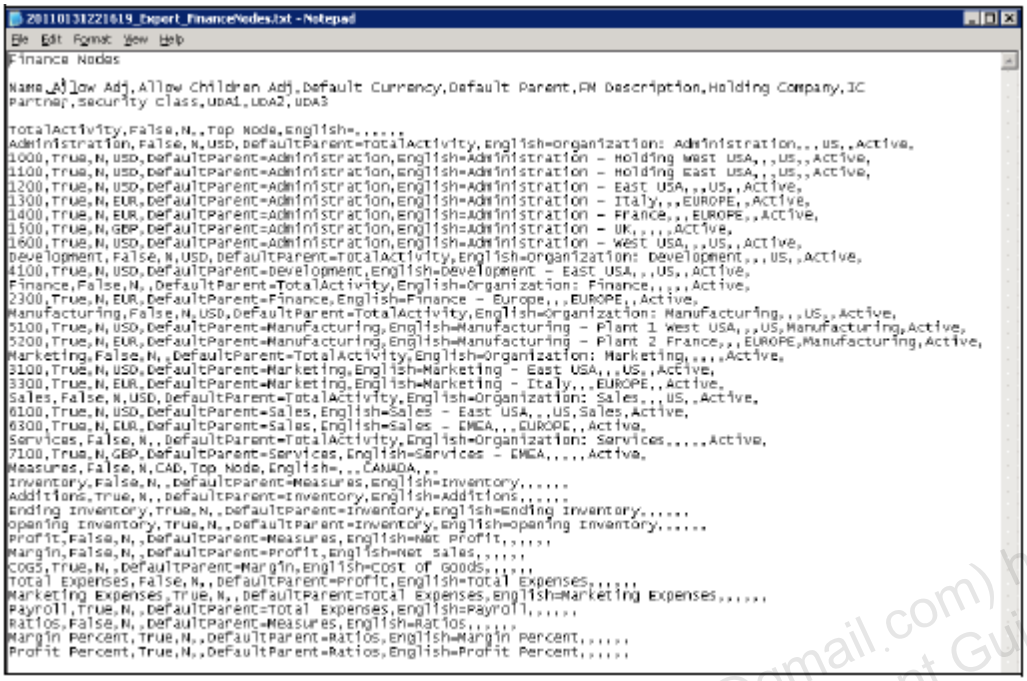
1. On the toolbar, click the Save button ( ).
   The Save Export dialog box is displayed.
2. In the Name box, enter **Export_FinanceNodes**.
3. In the Object Access Group drop-down list, select **User**.
4. Click **OK**.
   The tab is renamed Export_FinanceNodes and the Source tab is displayed, as shown in the following figure:



Running the Export and Saving and Viewing the Export File

1. On the toolbar, click the Run button ( ).
   The Opening File dialog box displays a prompt asking whether you want to open or save the file.
2. Select **Save File** and click **OK**.
   The Save As dialog box is displayed.
3. In the “Save in” drop-down list, leave **Desktop** selected.
4. In the “File name” box, leave the default name as is (it is similar to 20110104105929_Export_FinanceNodes.txt).
5. Click **Save**.
   The download is completed.
6. Click **Open**.
   The file opens in Notepad.

7. Compare your results to the following figure:



8. Close the export file.
9. In Web Client, close the **Export_FinanceNodes** tab.

Practice 12-2: Exporting Essbase Account Measures to an Oracle Database Table

Overview

The Essbase team requires account measures from the ProjectOne application for one of their Essbase applications to be exported into an Oracle table. You decide to use the drm_export.ess_acc_measures table that has been already created in your Oracle database.

Tasks

1. Create an export:
   a. Configure the source as the Account hierarchy in the TotalComputer version.
   b. Export all nodes, recurse from the top node, and include inactive nodes.
   c. Select the following property values to export (be sure to configure this exact order):
      - Parent Node
      - Name
      - Consolidation
      - Description
      - Data Storage
      - Two Pass Calc
      - Member Formula
   d. Set the Name property to be the primary key.
   e. Configure the target, and be sure to perform the following tasks:
      - Clear all rows in the database table.
      - Match the properties to the database columns according to the following table:

Column Name	Database Column
Parent Node [Core]	PARENT
Name [Core]	NAME
Consolidation [Essbase]	CONSOLIDATION
Description [Core]	DESCR
Data Storage [Essbase]	DATASTORAGE
Two Pass Calc [Essbase]	TWOPASSCALC
Member Formula [Essbase]	FORMULA

2. Save the export as Export_EssbaseAccountMeasures, and set Object Access Group to User.
3. Run the export and review the exported data in SQL Developer. You can log on to SQL Developer as `drm_export` with the password `oracle`.

Solution 12-2: Exporting Essbase Account Measures to an Oracle Database Table

Steps

Creating the Export

1. Select the **Export** task group.
   The Exports subtab is displayed.
2. On the toolbar, click the New Export button ( ).
   The Choose Export Type dialog box is displayed.
3. In the Hierarchy Exports section, select **Hierarchy**.
   The New Export tab is displayed.
4. Configure the source:
   a. On the Source tab, in the Version drop-down list, select **TotalComputer**.
   b. Click **Add**.
      The Select Node dialog box is displayed.
   c. In the Hierarchy drop-down list, select **Account**.
   d. In the Nodes list, leave **Measures** selected.
   e. Click **OK**.
5. Configure the style:
   a. Click the **Style** tab.
   b. Leave **All Nodes**, **Recurse from Top Node**, and **Include Inactive Nodes** selected.
   c. Leave all other options cleared.
6. Configure the columns:
   a. Click the **Columns** tab.
   b. In the Category drop-down list, leave **System** selected.
   c. In the Available list, select the following properties, and click the Select button ( ) to move them to the Selected list:
      - **Description**
      - **Name**
      - **Parent Node**
   d. In the Category drop-down list, select **Essbase**.
   e. In the Available list, select the following properties, and click the Select button ( ) to move them to the Selected list:
      - **Consolidation**
      - **Data Storage**
      - **Member Formula**
      - **Two Pass Calc**
   f. In the Selected list, arrange the properties in the following order by using (Move Up) and (Move Down):
      1 - Parent Node
      2 - Name

3 - Consolidation
4 - Description
5 - Data Storage
6 - Two Pass Calc
7 - Member Formula

7. Configure column options:
   a. Click the **Column Options** tab.
   b. On the second row (for the Name property), in the Action column, click the Edit button ( ).
   c. In the Primary Key column on the second row, select the check box.
   d. In the Action column, click the Update button ( ).
   The Name property is set as the primary key.
8. Configure the target:
   a. Click the **Target** tab.
   b. In the Device drop-down list, select **Database Table**.
   c. In the Connection list, leave **Oracle Database** selected.
   d. In the Database Table drop-down list, leave **DRM_EXPORT.ESS_ACC_MEASURES** selected.
   e. Next to Clear Table, select **Clear All Rows**.
   f. For each column in the list, in the Action column, click the Edit button ( ), select the matching name in the Field Name drop-down list, and click the Update button ( ). Refer to the following table for matching column and field names:

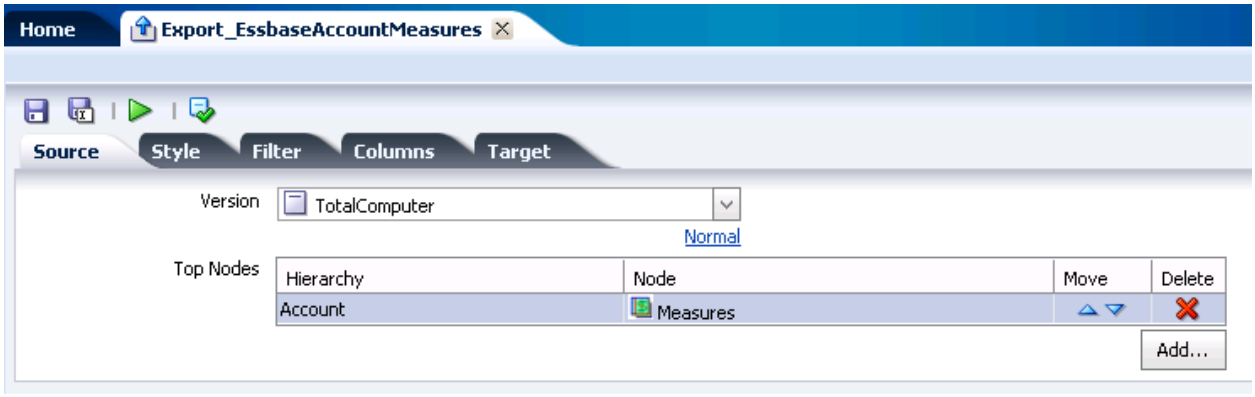
Column Name	Field Name
Parent Node [Core]	PARENT
Name [Core]	NAME
Consolidation [Essbase]	CONSOLIDATION
Description [Core]	DESCR
Data Storage [Essbase]	DATASTORAGE
Two Pass Calc [Essbase]	TWOPASSCALC
Member Formula [Essbase]	FORMULA

Saving the Export

1. On the toolbar, click the Save button ( ).
   The Save Export dialog box is displayed.
2. In the Name box, enter **Export_EssbaseAccountMeasures**.
3. In the Object Access Group drop-down list, select **User**.

4. Click **OK**.

   The tab is renamed Export_EssbaseAccountMeasures and the Source tab is displayed, as shown in the following figure:



Running the Export and Reviewing the Exported Data

1. On the toolbar, click the Run button ( ).

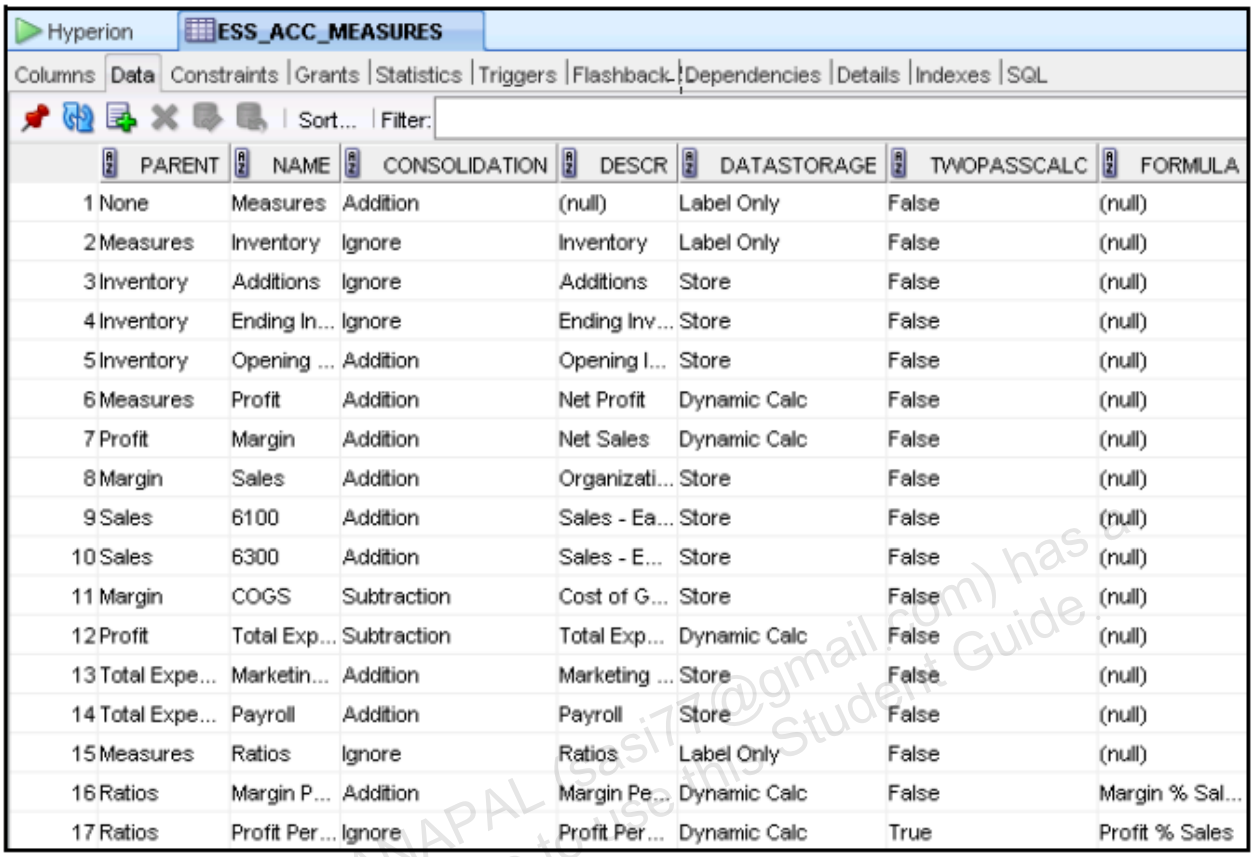
   A Confirmation dialog box indicates that the process is completed successfully.
2. Click **OK**.
3. Minimize Web Client.
4. On the Desktop, double-click the **SQL Developer** shortcut.

   Oracle SQL Developer is started.
5. Under Connections on the left, expand **DRM Exports**.

   The Connection Information dialog box is displayed.
6. On the left, expand **Tables**.
7. Select the **ESS_ACC_MEASURES** table.
8. On the right, click the **Data** tab.

   Table data is displayed.

9. Compare your results to the following figure:


Hyperion ESS_ACC_MEASURES

Columns | Data | Constraints | Grants | Statistics | Triggers | Flashback | Dependencies | Details | Indexes | SQL

Sort... Filter:

	PARENT	NAME	CONSOLIDATION	DESCR	DATASTORAGE	TWOPASSCALC	FORMULA
1	None	Measures	Addition	(null)	Label Only	False	(null)
2	Measures	Inventory	Ignore	Inventory	Label Only	False	(null)
3	Inventory	Additions	Ignore	Additions	Store	False	(null)
4	Inventory	Ending In...	Ignore	Ending Inv...	Store	False	(null)
5	Inventory	Opening ...	Addition	Opening I...	Store	False	(null)
6	Measures	Profit	Addition	Net Profit	Dynamic Calc	False	(null)
7	Profit	Margin	Addition	Net Sales	Dynamic Calc	False	(null)
8	Margin	Sales	Addition	Organizati...	Store	False	(null)
9	Sales	6100	Addition	Sales - Ea...	Store	False	(null)
10	Sales	6300	Addition	Sales - E...	Store	False	(null)
11	Margin	COGS	Subtraction	Cost of G...	Store	False	(null)
12	Profit	Total Exp...	Subtraction	Total Exp...	Dynamic Calc	False	(null)
13	Total Expe...	Marketin...	Addition	Marketing ...	Store	False	(null)
14	Total Expe...	Payroll	Addition	Payroll	Store	False	(null)
15	Measures	Ratios	Ignore	Ratios	Label Only	False	(null)
16	Ratios	Margin P...	Addition	Margin Pe...	Dynamic Calc	False	Margin % Sal...
17	Ratios	Profit Per...	Ignore	Profit Per...	Dynamic Calc	True	Profit % Sales

10. Select **File** and then **Exit**.
11. Return to Web Client, and close the **Export_EssbaseAccountMeasures** tab.

Practices for Lesson 13: Managing Security

Chapter 13

Practices for Lesson 13: Overview

Practices Overview

In these practices, you create two users and two node access groups. You then assign nodes to the nodes groups and test security setup.

Practice 13-1: Creating Users and Node Access Groups

Overview

Set up two users, `ChrisW` (Chris Wilson) and `PatM` (Pat Murray). `ChrisW` maintains the Financial Management hierarchies for the United States. `PatM` maintains the Essbase and Financial Management hierarchies for Europe.

Task

To accomplish this task:

1. Create a user named `ChrisW` with the password `Oracle!` (which should not expire). Assign him the Interactive User role and enable him to edit Common and FM property categories.
2. Create another user named `PatM` with the password `Oracle!` (which should not expire). Assign him the Interactive User role and enable him to edit Common, FM, and Essbase property categories.
3. Create node access groups and assign users to them as defined in the following table:

Name	Label	Description	Group Type	Users
USA	USA	United States of America	Interactive	ChrisW
Europe	Europe	Europe	Interactive	PatM

Solution 13-1: Creating Users and Node Access Groups

Creating the User Chris Wilson

1. Select the **Administer** task group.
2. In the New drop-down list, select **User**.
   The New User tab is displayed.
3. In the Username box, enter **ChrisW**.
4. In the Full Name box, enter **Chris Wilson**.
5. Select **Password does not expire**.
6. On the Roles tab, select **Interactive User**, and click the Select button ( ) to move the role to the Selected list.
7. Click the **Property Categories** tab.
8. In the Available Categories list, select **Common**, and click the Select button ( ) to move it to the Selected Categories list.
9. In the Available Categories list, select **FM**, and click the Select button ( ) to move it to the Selected Categories list.
10. In the Selected Categories list, for the Common property category, click the Edit button ( ).
11. In the Access drop-down list, select **Edit**.
12. In the Action column, click the Update button ( ).
13. Repeat steps 10 through 12 for the **FM** property category.
    The user configuration should look like the following figure:

Selected Categories

Name	Access	Action
System	Edit	
Common	Edit	
FM	Edit	

14. On the toolbar, click the Save & New button ( ).
    The Change User Password dialog box is displayed.
15. In the New Password and Re-enter New Password boxes, enter **Oracle!**.
16. Click **OK**.

Creating the User Pat Murray

1. In the Username box, enter **PatM**.
2. In the Full Name box, enter **Pat Murray**.
3. Select **Password does not expire**.
4. On the Roles tab, select **Interactive User**, and click the Select button ( ) to move the role to the Selected list.
5. Click the **Property Categories** tab.
6. In the Available Categories list, select **Common**, and click the Select button ( ) to move it to the Selected Categories list.
7. In the Available Categories list, select **FM**, and click the Select button ( ) to move it to the Selected Categories list.
8. In the Available Categories list, select **Essbase**, and click the Select button ( ) to move it to the Selected Categories list.
9. In the Selected Categories list, for the Common property category, click the Edit button ( ).
10. In the Access drop-down list, select **Edit**, and click the Update button ( ).
11. Repeat steps 9 and 10 for the **FM** and **Essbase** property categories.
    The user configuration should look the same as the following figure:

Selected Categories

Name	Access	Action
System	Edit	
Common	Edit	
FM	Edit	
Essbase	Edit	

12. On the toolbar, click the Save button ( ).
    The Change User Password dialog box is displayed.
13. In the New Password and Re-enter New Password boxes, enter **Oracle!**.
14. Click **OK**.
15. Close the **PatM** tab.

Creating the USA Node Access Group

1. Ensure that you are working in the **Administer** task group.
2. In the New drop-down list, select **Node Access Group**.
   The New Node Access Group tab is displayed.
3. In the Name and Label boxes, enter **USA**.
4. In the Description box, enter **United States of America**.
5. In the Group Type drop-down list, leave **Interactive** selected.
6. In the Users area, in the Available list, select **ChrisW**, and click the Select button ( ) to move `ChrisW` to the Selected list.

7. On the toolbar, click the Save & New button ( ).
   The USA node access group is saved, and a New Node Access Group tab is displayed.

Creating the Europe Node Access Group

1. In the Name, Label, and Description boxes, enter **Europe**.
2. In the Group Type drop-down list, leave **Interactive** selected.
3. In the Users area, in the Available list, select **PatM**, and click the Select button ( ) to move `PatM` to the Selected list.
4. On the toolbar, click the Save button ( ).
   The Europe node access group is saved.
5. Close the **Custom.Europe** tab.

.

Practice 13-2: Assigning Nodes to Node Access Groups

Overview

Your ProjectOne application has the following security requirements:

- US operations have Financial Management applications that use the Activity and Geography hierarchies.
- European operations have an Essbase application that uses the Product hierarchy (to which the US operations does not have access) and Financial Management applications that use the Geography hierarchy.

You want to enforce security privileges. To accomplish this task, assign nodes to node access groups according to the following table:

Node Access Group	Hierarchy	Node(s)	Limb/Leaf Access
USA	Activity	TotalActivity	Limb Access: Read Leaf Access: Read
	Geography	USA	Limb Access: Read Leaf Access: Add
EUROPE	Product	TotalBusiness	Limb Access: Add Leaf Access: Add
	Geography	Europe	Limb Access: Read Leaf Access: Add

Solution 13-2: Assigning Nodes to Node Access Groups

Assigning Access to the Activity Hierarchy Nodes for the USA Node Access Group

1. Select the **Browse** task group.
2. In the versions list, select the **TotalComputer** version.
3. Double-click the **Activity** hierarchy to open it.
   The Activity - TotalComputer tab is displayed.
4. In the hierarchy tree, right-click the **TotalActivity** node, and select **Assign** and then **Node Access**.
   On the Properties tab, the category is set to Limb Access.
5. For the USA (Limb) value, select **Read**.
6. Click **Save**.
7. In the Category drop-down list, select **Leaf Access**.
8. For the USA (Leaf) value, select **Read**.
9. Click **Save**.

Assigning Access to the Geography Hierarchy Nodes for the USA Node Access Group

1. Click the **Home** tab.
2. On the Hierarchies tab, double-click the **Geography** hierarchy to open it.
   The Geography - TotalComputer tab is displayed.
3. In the hierarchy tree, expand the **North America** node.
4. Right-click the **USA** node, and select **Assign** and then **Node Access**.
   On the Properties tab, the category is set to Limb Access.
5. For the USA (Limb) value, select **Read**.
6. Click **Save**.
7. In the Category drop-down list, select **Leaf Access**.
8. For the USA (Leaf) value, select **Add**.
9. Click **Save**.

Assigning Access to the Geography Hierarchy Nodes for the Europe Node Access Group

1. Right-click the **Europe** node, and select **Assign** and then **Node Access**.
   On the Properties tab, the category is set to Limb Access.
2. For the Europe (Limb) value, select **Read**.
3. Click **Save**.
4. In the Category drop-down list, select **Leaf Access**.
5. For the Europe (Leaf) value, select **Add**.
6. Click **Save**.

Assigning Access to the Product Hierarchy Nodes for the Europe Node Access Group

1. Click the **Home** tab.

2. On the Hierarchies tab, double-click the **Product** hierarchy to open it.
   The Product - TotalComputer tab is displayed.
3. Right-click the **TotalBusiness** node, and select **Assign** and then **Node Access**.
   On the Properties tab, the category is set to Limb Access.
4. For the Europe (Limb) value, select **Add**.
5. Click **Save**.
6. In the Category drop-down list, select **Leaf Access**.
7. For the Europe (Leaf) value, select **Add**.
8. Click **Save**.

Practice 13-3: Testing Security

Before providing `ChrisW` and `PatM` access to the ProjectOne application, you want to log on and verify the security settings.

1. Log on to the ProjectOne application as `ChrisW`, and verify the following security settings:
   - `ChrisW` can access only the Activity and Geography hierarchies.
   - `ChrisW` can only read limb and leaf nodes in the Activity hierarchy.
   - `ChrisW` can read limb nodes in the USA node and add leaf nodes to the USA node in the Geography hierarchy.
   - `ChrisW` can only read other nodes outside the USA node structure in the Geography hierarchy (for example, the Europe and France nodes).
2. Log on to the ProjectOne application as `PatM`, and verify the following security settings:
   - `PatM` can access only the Product and Geography hierarchies.
   - `PatM` can add limb and leaf nodes to the Product hierarchy.
   - `PatM` can read limb nodes in the Europe node and add leaf nodes to the Europe node in the Geography hierarchy.
   - `PatM` can only read other nodes outside the Europe node structure in the Geography hierarchy (for example, the USA node).
3. Log on to the ProjectOne application as `admin` (password is `Welcome!`).

Solution 13-3: Testing Security

Testing Access for `ChrisW`

Note: `ChrisW` belongs to the USA node access group.

1. Log on as `ChrisW`:
   a. At the top of Web Client, select **Logout**.
      The logon page is displayed.
   b. In the User Name box, enter **ChrisW**.
   c. In the Password box, enter **Oracle!**.
   d. Click **Log On**.
2. Verify that `ChrisW` can access only the Activity and Geography hierarchies:
   a. In the versions list, select the **TotalComputer** version.
   b. On the Hierarchies tab, verify that the **Activity** and **Geography** hierarchies are listed.
      The Account and Product hierarchies are not listed, because `ChrisW` is not granted access to them.
3. Verify that `ChrisW` can only read limb and leaf nodes in the Activity hierarchy:
   a. On the Hierarchies tab, double-click the **Activity** hierarchy to open it.
      The Activity - TotalComputer tab is displayed.
   b. With the TotalActivity node selected in the hierarchy tree, verify that Leaf Access and Limb Access are set to Read on the Properties tab.
   c. In the hierarchy tree, select a node at the next level (for example, the Administration node).
   d. On the Properties tab, verify that Leaf Access and Limb Access are set to Read.
   e. In the hierarchy tree, select a node at the next level (for example, expand the **Administration** node and select the **1000** node, which is a leaf node).
   f. On the Properties tab, verify that Leaf Access and Limb Access are set to Read.
4. Verify that `ChrisW` can read limb nodes in the USA node and add leaf nodes to the USA node in the Geography hierarchy:
   a. Click the **Home** tab.
   b. On the Hierarchies tab, double-click the **Geography** hierarchy to open it.
      The Geography - TotalComputer tab is displayed.
   c. In the hierarchy tree, right-click the **North America** node.
      Notice that the New menu item is not available (grayed out). This is because `ChrisW` can only read other nodes outside the USA nodes structure.
   d. Expand the **North America** node and select the **USA** node.
   e. On the Properties tab, verify that the Leaf Access value is Add and the Limb Access value is Read.
   f. In the hierarchy tree, right-click the **USA** node and then select **New**.
      Notice that only the Leaf menu item is available. You confirmed that `ChrisW` can add only leaf nodes to the USA node.

Testing Access for `PatM`

Note: `PatM` belongs to the Europe node access group.

1. Log on as `PatM`:
   a. At the top of Web Client, select **Logout**.
      The logon page is displayed.
   b. In the User Name box, enter **PatM**.
   c. In the Password box, enter **Oracle!**.
   d. Click **Log On**.
2. Verify that `PatM` can access only the Product and Geography hierarchies:
   a. In the version list, select the **TotalComputer** version.
   b. On the Hierarchies tab, verify that the **Geography** and **Product** hierarchies are listed.
      The Account and Activity hierarchies are not listed because `PatM` is not granted access to them.
3. Verify that `PatM` can add limb and leaf nodes to the Product hierarchy:
   a. On the Hierarchies tab, double-click the **Product** hierarchy to open it.
      The Product - TotalComputer tab is displayed.
   b. With the TotalBusiness node selected, verify that Leaf Access and Limb Access are both set to Add on the Properties tab.
   c. In the hierarchy tree, right-click the **TotalBusiness** node, and select **New**.
      Both the Limb and Leaf menu items are available. You confirmed that `PatM` can add limb and leaf nodes to the Product hierarchy.
4. Verify that `PatM` can read limb nodes in the Europe node and add leaf nodes to the Europe node in the Geography hierarchy:
   a. Click the **Home** tab.
   b. On the Hierarchies tab, double-click the **Geography** hierarchy to open it.
      The Geography - TotalComputer tab is displayed.
   c. With the TotalGeography node selected, verify that Leaf Access is set to Read and Limb Access is set to Read on the Properties tab.
   d. In the hierarchy tree, select the **Europe** node.
   e. On the Properties tab, verify that Limb Access is set to Read and that Leaf Access is set to Add.
   f. Right-click the **Europe** node, and select **New**.
      Notice that only the Leaf menu item is available. You confirmed that `PatM` can add only leaf nodes to the Europe node.
5. Verify that `PatM` can only read other nodes outside the Europe node structure in the Geography hierarchy:
   a. In the hierarchy tree, expand the **North America** node.
   b. Select the **USA** node.
   c. On the Properties tab, verify that both Leaf Access and Limb Access are equal to Read.

Logging On to the ProjectOne Application as the Administrator

1. At the top of Web Client, select **Logout**.
   The logon page is displayed.
2. In the User Name box, enter **admin**.

3. In the Password box, enter **Welcome!**.
4. Click **Log On**.
   The Accessories, Copy Of Accessories, HardwareSoftware, and TotalComputer versions are listed on the Home tab.

Practices for Lesson 14: Configuring Governance Workflows

Chapter 14

Practices for Lesson 14: Overview

Practices Overview

In these practices, you add a governance user and assign the user to a new workflow node access group. You then create a workflow task and workflow model for a new type of change request to maintain products in the ProjectOne application. During the creation of the workflow model, you define workflow stages to control how the request is submitted, approved, and committed. After the workflow model is created. You assign workflow node access group to hierarchies used by the workflow model. To test the workflow model, you log on to the ProjectOne application as the governance user and create a new single item change request to add a new product. As the commitment user, you approve the change request and review the request activity.

Practice 14-1: Building the Product Maintenance Workflow Model

Overview

Set up governance users, `BobJ` (Bob Jones) and `PatM` (Pat Murray). Create workflow node access groups for submitting and approving product changes and assign the workflow node access groups to the Product hierarchy. Create a workflow task for submitting requests to add products. Create a workflow model to maintain products and add the workflow task to the model for the Submit stage.

Task

To accomplish this task:

1. Create a user named `BobJ` with the password `Oracle!` (which should not expire). Assign him the Governance User role.
2. Edit the existing user named `PatM` by assigning him the Governance User role.
3. Create workflow node access groups and perform the following assignments:
   a. Assign users to the node access groups as defined in the following table:

Node Access Group Name	Node Access Group Description	Users
ProductWorkflow	Product Workflow Group	BobJ
MgrWorkflow	Manager Workflow Group	PatM

   b. Assign the node access groups to the Product hierarchy as defined in the following table:

Node Access Group Name	Limb Access	Leaf Access
ProductWorkflow	Submit	Submit
MgrWorkflow	Commit	Commit

4. Create a workflow task for adding new products to the Product hierarchy with parameters as defined in the following table:

Workflow Task Parameter	Limb Access
Name and Label	Add Product
Instructions	Define the name, description, and parent for a new product.
Action Type	Add Leaf

5. Create a workflow model for maintaining products with parameters as defined in the following table:

Workflow Model Parameter	Value
Name and Label	Product Maintenance
Description	Make changes to the Product hierarchy.
Request Duration	7
Claim Duration	2

6. Define the details of the workflow model stages:
    - For the Submit stage:

Stage Parameter	Value
Label	Specify Product Changes
Workflow Task	Add Product
Node Access	Custom.ProductWorkflow
Workflow Method	Any Group
Re-Approval	All
Notify	Assignees

    - For the Commit stage

Stage Parameter	Value
Label	Commit Product Changes
Node Access	Custom.MgrWorkflow
Workflow Method	Any Group
Re-Approval	All
Notify	Assignees and Participants

Solution 14-1: Building the Product Maintenance Workflow Model

Creating the User Bob Jones

1. Select the **Administer** task group.
2. In the New drop-down list, select **User**.
   The New User tab is displayed.
3. In the Username box, enter **BobJ**.
4. In the Full Name box, enter **Bob Jones**.
5. Select **Password does not expire**.
6. On the Roles tab, select **Governance User**, and click the Select button ( ) to move the role to the Selected list.
7. On the toolbar, click the Save button ( ).
   The Change User Password dialog box is displayed.
8. In the New Password and Re-enter New Password boxes, enter **Oracle!**.
9. Click **OK**.
10. Close the **BobJ** tab.

Editing the User Pat Murray

1. Ensure that you are working in the **Administer** task group.
2. If necessary, expand **Security** and then **Users** to display the list of the existing users.
3. Right-click **PatM** and select **Edit** from the pull-down menu.
   The PatM tab is displayed.
4. On the Roles tab, select **Governance User**, and click the Select button ( ) to move the role to the Selected list.
5. On the toolbar, click the Save button ( ).
6. Close the **PatM** tab.

Creating the ProductWorkflow Node Access Group

1. Ensure that you are working in the **Administer** task group.
2. In the New drop-down list, select **Node Access Group**.
   The New Node Access Group tab is displayed.
3. In the Name and Label boxes, enter **ProductWorkflow**.
4. In the Description box, enter **Product Workflow Group**.
5. In the Group Type drop-down list, select **Workflow**.
6. In the Users area, in the Available list, select **BobJ**, and click the Select button ( ) to move `BobJ` to the Selected list.
7. On the toolbar, click the Save & New button ( ).
   The ProductWorkflow node access group is saved, and a New Node Access Group tab is displayed.

Creating the MgrWorkflow Node Access Group

1. In the Name and Label boxes, enter **MgrWorkflow**.

2. In the Description box, enter **Manager Workflow Group**.
3. In the Group Type drop-down list, select **Workflow**.
4. In the Users area, in the Available list, select **PatM**, and click the Select button ( ) to move `PatM` to the Selected list.
5. On the toolbar, click the Save button ( ).
   The MgrWorkflow node access group is saved.
6. Close the **Custom.MgrWorkflow** tab.

Assigning the Workflow Node Access Groups to the Product Hierarchy

1. Select the **Browse** task group.
2. In the versions list, select the **TotalComputer** version.
3. Double-click the **Product** hierarchy to open it.
   The Product - TotalComputer tab is displayed.
4. In the hierarchy tree, right-click the **TotalBusiness** node, select **Assign** and then **Node Access**.
   On the Properties tab, the category is set to Limb Access.
5. For the ProductWorkflow (Limb) value, select **Submit**.
6. For the MgrWorkflow (Limb) value, select **Commit**.
7. Click **Save**.
8. In the Category drop-down list, select **Leaf Access**.
9. For the ProductWorkflow (Leaf) value, select **Submit**.
10. For the MgrWorkflow (Leaf) value, select **Commit**.
11. Click **Save**.
12. Close the Product - TotalComputer tab.

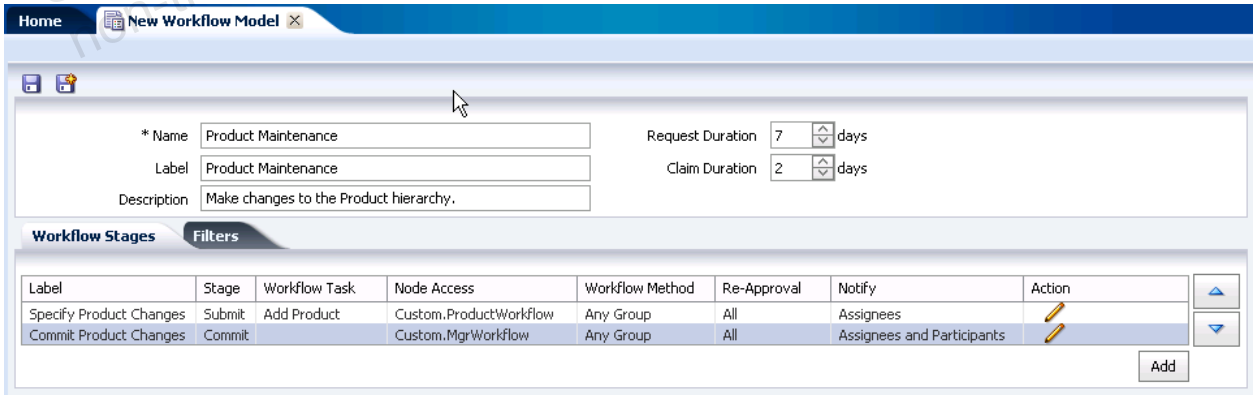
Creating the Add Product Workflow Task

1. Select the **Administer** task group.
2. In the New drop-down list, select **Workflow Task**.
   The New Workflow Task tab is displayed.
3. In the Name and Label boxes, enter **Add Product**.
4. In the Instructions box, enter **Define the name, description, and parent for a new product**.
5. In the Action Type drop-down list, select **Add Leaf**.
   The Name, Description, and Parent Node default properties are added to the Selected list on the Properties tab.
6. On the toolbar, click the Save button ( ).
   The Add Product workflow task is saved.
7. Close the **Add Product** tab.

Creating the Product Maintenance Workflow Model

1. Ensure that you are working in the **Administer** task group.
2. In the New drop-down list, select **Workflow Model**.
   The New Workflow Model tab is displayed.

3. In the Name and Label boxes, enter **Product Maintenance**.
4. In the Description box, enter **Make changes to the Product hierarchy**.
5. In the Request Duration box, enter **7**.
6. In the Claim Duration box, enter **2**.
7. On the Workflow Stages tab, in the Submit stage row, click the Edit button ( ).
   The Submit stage row becomes editable.
8. Perform the following tasks:
   a. In the Label box, enter **Specify Product Changes**.
   b. In the Workflow Task drop-down list, select **Add Product** and click **Close**.
   c. In the Node Access drop-down list, select **ProductWorkflow** and click **Close**.
   d. In the Workflow Method drop-down list, verify that **Any Group** is selected and select it if necessary.
   e. In the Re-Approval drop-down list, verify that **All** is selected and select it if necessary.
   f. In the Notify drop-down list, select **Assignees**.
   g. In the Action column, click the Update button ( ).
9. On the Workflow Stages tab, in the Commit stage row, click the Edit button ( ).
   The Submit stage row becomes editable.
10. Perform the following tasks:
    a. In the Label box, enter **Commit Product Changes**.
    b. In the Node Access drop-down list, select **MgrWorkflow** and click **Close**.
    c. In the Workflow Method drop-down list, verify that **Any Group** is selected and select it if necessary.
    d. In the Re-Approval drop-down list, verify that **All** is selected and that you cannot change it.
    e. In the Notify drop-down list, select **Assignees and Participants**.
    f. In the Action column, click the Update button ( ).



11. On the toolbar, click the Save button ( ).
    The Product Maintenance workflow model is saved.
12. Close the **Product Maintenance** tab.

Practice 14-2: Creating and Approving a New Product Request

Overview

Your company expands the product list and a request to add a product is submitted for approval.

Task

To accomplish this task:

1. Log on to the ProjectOne application as `BobJ` and create a single item change request to add a product with the following properties:

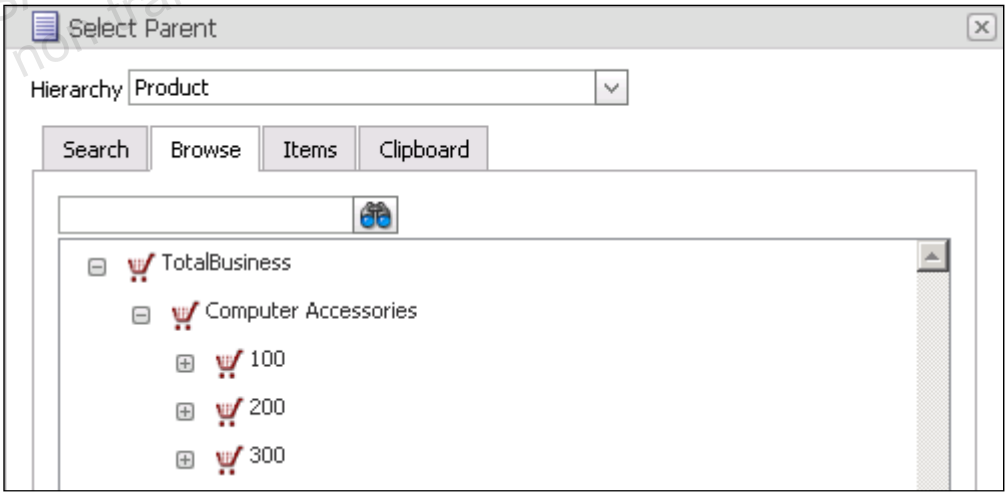
Product Name	Product Description
100-40	Wireless Speakers

   Submit the request for approval and commitment.
2. Log on to the ProjectOne application as `PatM` (password is `Oracle!`), approve the request to commit the request changes to the Product hierarchy, and review all activity for the request.
3. Log on to the ProjectOne application as `admin` (password is `Welcome!`).

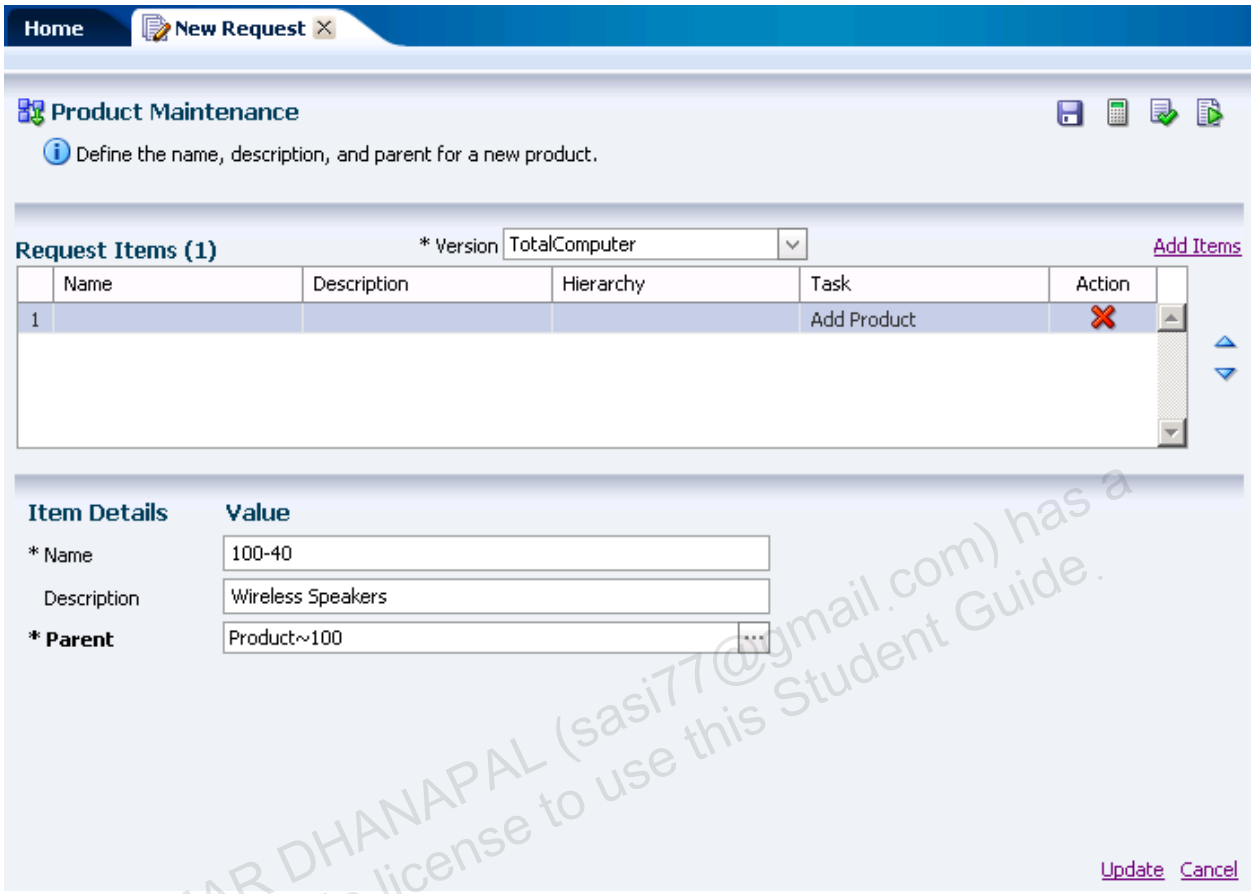
Solution 14-2: Creating and Approving a New Product Request

Creating a Single Item Request

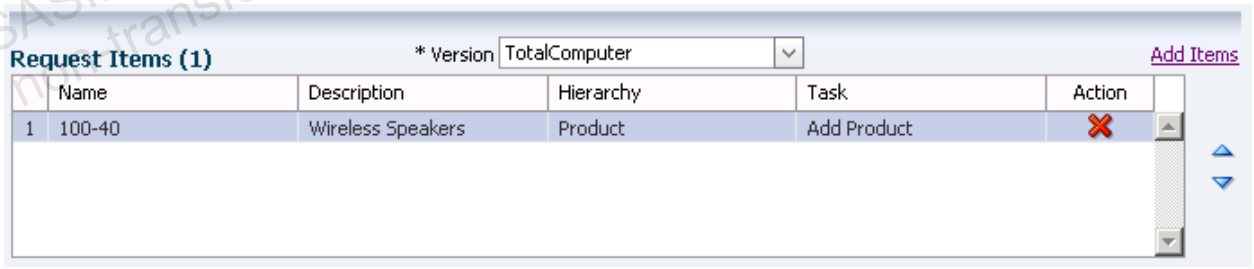
1. Log on as `BobJ`:
   a. At the top of Web Client, select **Logout**.
      The logon page is displayed.
   b. In the User Name box, enter **BobJ**.
   c. In the Password box, enter **Oracle!**.
   d. Click **Log On**.
2. Create a new change request:
   a. In the New Request drop-down list, select **Product Maintenance**.
      The New Request tab is displayed. The workflow model label and description is displayed at the top of the tab.
   b. In the Version drop-down list, select **TotalComputer**.
   c. Click **Add Items**.
      The Add Items dialog box is displayed.
   d. In the Task drop-down list, select **Add Product** and click **OK**.
      The Add Product task is added to the Request Items table and the Item Details fields are displayed below the table.
   e. In the Name box, enter **100-40**.
   f. In the Description box, enter **Wireless Speakers**.
   g. Next to the Parent box, click the ellipsis button (…) to select the parent node.
      The Select Parent dialog box is displayed with the Product hierarchy selected.
   h. Select the **Browse** tab.
      The Product hierarchy top node TotalBusiness is displayed.
   i. Expand **TotalBusiness** and then **Computer Accessories**.



j. Select **100** and click **OK**.
The Product~100 value is added to the Parent box.



k. In the bottom right of the Item Details area, click the Update link to temporarily save your changes to the request item.



l. In the toolbar, click the Save button ( ).
The Save Request dialog box is displayed.

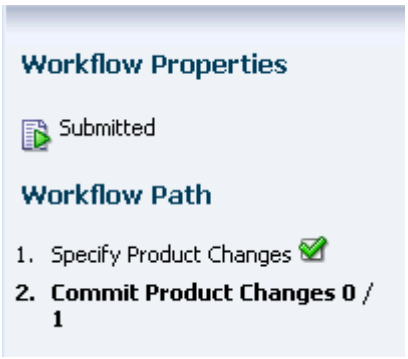
m. In the Request Title box, enter **Wireless Speakers** and click **OK**.
The New Request tab is renamed Wireless Speakers.

3. Submit the Wireless Speakers request:
   a. In the Workflow Path area, view the list of workflow stages associated with the Product Maintenance workflow model.

      The current stage Specify Product Changes is bold faced and the Commit Product Changes stage is displayed after it.

   b. In the toolbar, click the Submit button ( ).

      The request is validated and submitted to the workflow model for assignment to the next user(s). The Workflow Path area displays the request status (Submitted) and the current stage of the request in bold font. The previous stage that has been completed is marked with a checkmark icon.



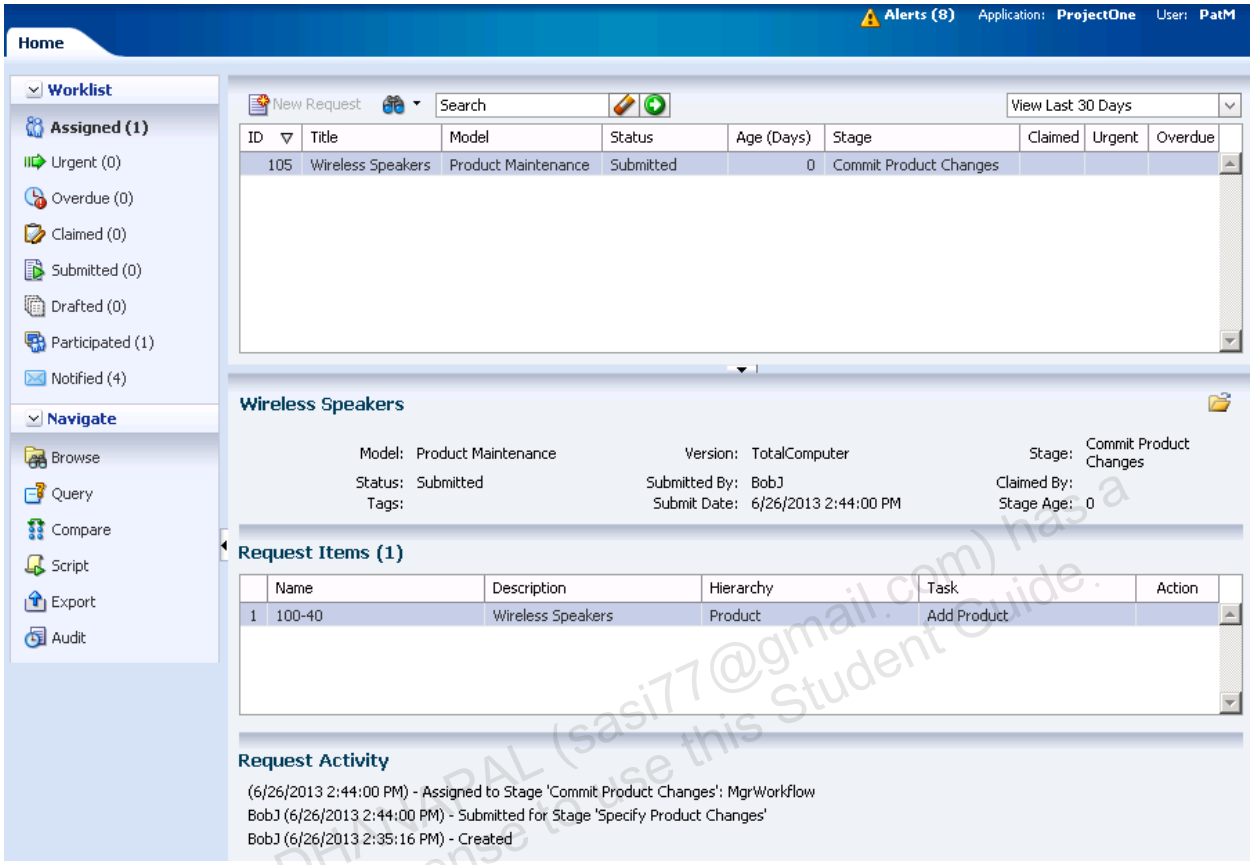
Approving the Wireless Speakers Request

1. Log on as `PatM`:
   a. At the top of Web Client, select **Logout**.

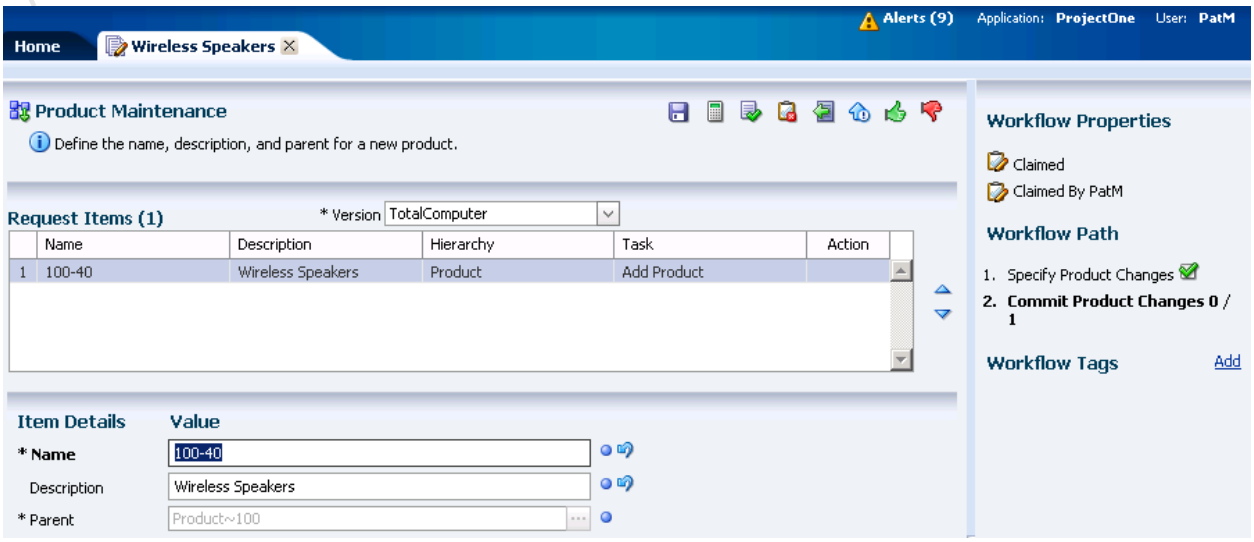
      The logon page is displayed.

   b. In the User Name box, enter **PatM**.
   c. In the Password box, enter **Oracle!**.
   d. Click **Log On**.

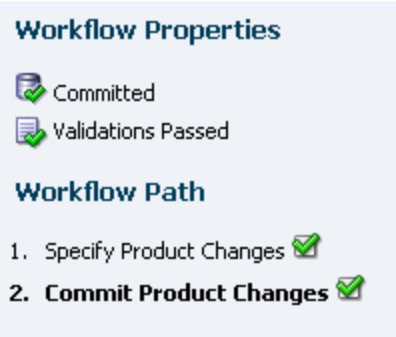
The Worklist page displays the assigned Wireless Speakers request and its summary.



2. Click the Open button ( ) to open the Wireless Speakers request.
   The Wireless Speakers tab is open. Note that the request item details are not yet editable.
3. Click the Claim button ( ) to act upon and lock the request.
   The Workflow Properties area displays that the request is claimed by user `PatM`. Note that item details are now enabled for editing.



4. Click the Approve button ( ) to approve the request.
   The Workflow Properties area displays the Committed status of the request.



Reviewing the Request Activity

Click and drag the slider above the Request Activity area to expand the section for viewing purposes. View the content of the Request Activity area to identify the users who participated in the request, when they participated, and the actions that they took during the life of the request.

Note that the hierarchy owner user (ADMIN) is implicitly used by the workflow model to commit request changes to nodes in a single hierarchy.

Logging On to the ProjectOne Application as the Administrator

1. At the top of Web Client, select **Logout**.
   The logon page is displayed.
2. In the User Name box, enter **admin**.
3. In the Password box, enter **Welcome!**.
4. Click **Log On**.
   The Accessories, Copy Of Accessories, HardwareSoftware, and TotalComputer versions are listed on the Home tab.

Practices for Lesson 15: Analyzing Data Changes

Chapter 15

Practices for Lesson 15: Overview

Practice Overview

In this practice, you create an As-Of version to identify changes in the Member Formula property over time.

Practice 15-1: Identifying Changes to the Member Formula Property

Overview

You want to understand the changes that occurred to the Member Formula property values in the TotalComputer version since the day before. Therefore, you create an As-Of version and then compare the Member Property values in the As-Of version to the current version.

1. Create an As-Of version of the TotalComputer version. Set the transaction date and time as the previous day at 9:00 AM.
2. Create a compare:
   a. Configure the From Version and the To Version appropriately.
   b. When configuring the style, specify to join on the Name property and return the results in a list format.
   c. Set the filter appropriately.
   d. In the results, show the Name and filter properties.
3. Save the compare as follows:
   - Name: Compare Formulas
   - Description: Compare formulas in Account hierarchies
   - Object Access Level: User
4. Run the compare and verify the results: Margin Percent and Profit Percent are listed as different in the As-Of version and the current version.
   - In the As-Of version, the formulas are missing.
   - In the current version, the formula for Margin Percent is Margin % Sales, and the formula for Profit Percent is Profit % Sales.

Solution 15-1: Identifying Changes to the Member Formula Property

Creating an As-Of Version of the TotalComputer Version

1. Select the **Browse** task group.
2. In the version list, right-click the **TotalComputer** version, and select **Create As-Of Version**.
   The Create As-Of Version dialog box is displayed.
3. In the As-Of Type drop-down list, leave **Transaction Date/Time** selected.
4. In the Transaction Date drop-down list, select the previous day.
5. In the Transaction Time box, enter **09:00 AM**.
6. Click **OK**.
   The “TotalComputer - As Of:<date/time>” version is listed. Its status is marked as Expired.

Creating a Compare

1. Select the **Compare** task group.
2. On the toolbar, click the New Compare button ( ).
   The New Compare tab is displayed, and the Source tab is displayed by default.
3. Configure the “From Version”:
   a. In the From Version drop-down list, select the As-Of version that you just created (for example, **TotalComputer - As Of:5/3/2013 9:00:00AM**).
   b. In the Hierarchy/Node box, click the ellipsis button ( ).
      The Select Node dialog box is displayed.
   c. In the Hierarchy drop-down list, select **Account**.
   d. In the Nodes list, leave the **Measures** node selected.
   e. Click **OK**.
4. Configure the “To” version:
   a. In the To Version drop-down list, select the **TotalComputer** version.
   b. Verify that the Hierarchy/Node box displays the **Account** hierarchy and the **Measures** node.
5. Configure the style:
   a. Click the **Style** tab.
   b. In the Compare Type drop-down list, select **Property**.
   c. In the Join Field, leave **Name** selected.
   d. In the Result Display drop-down list, select **List**.
6. Set a filter:
   a. Click the **Filters** tab.
   b. In the Category drop-down list, select **Essbase**.
   c. In the Available list, select **Member Formula**, and click the Select button ( ) to move it to the Selected list.
7. Configure the columns:
   a. Click the **Columns** tab.
   b. In the Category drop-down list, leave **System** selected.

c. In the Available list, select **Name**, and click the Select button ( ) to move it to the Selected list.

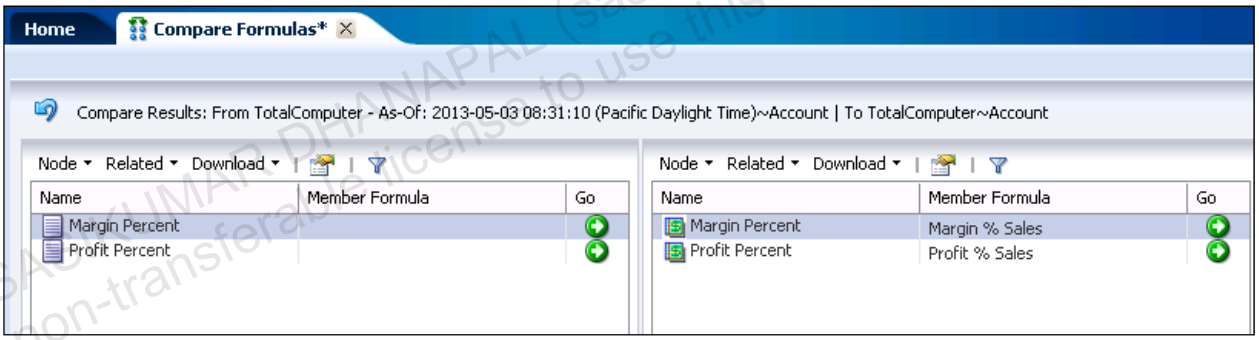
d. At the top, select **Include Compare/Filter Properties**.

Saving the Compare

1. On the toolbar, click the Save button ( ).
   The Save Compare dialog box is displayed.
2. In the Name box, enter **Compare Formulas**.
3. In the Description box, enter **Compare formulas in Account hierarchies**.
4. In the Object Access Level drop-down list, leave **User** selected.
5. Click **OK**.

Running the Compare and Verifying the Results

1. On the toolbar, click the Run button ( ).
2. Verify that your results are the same as the following figure.
   The results indicate that the formulas for Margin Percent and Profit Percent were different the day before. The formulas in the As-Of version are different than the formulas in the current version. In the As-Of version, the formulas are missing. In the current version, the formula for Margin Percent is Margin % Sales, and the formula for Profit Percent is Profit % Sales.



3. Close the **Compare Formulas** tab.