Contents

Documentation Accessibility .......................................................... 17
Documentation Feedback ............................................................. 19
Part I. Introduction to Performance Management Architect .................. 21

Chapter 1. Using Performance Management Architect .......................... 23
  About Performance Management Architect .................................. 23
  Performance Management Architect Modules .............................. 24
  Performance Management Architect Utilities ............................... 26
  Architecture ........................................................................ 27
  Process Overview .................................................................. 28
  Accessing Performance Management Architect ............................... 28
  Security .............................................................................. 29
  Upgrade Considerations ......................................................... 32
  Post-Upgrade Tasks .................................................................. 32
  Using FDMEE with Performance Management Architect .................. 32
  Using Data Relationship Management with Performance Management Architect .................................................. 33
  Lifecycle Management ................................................................ 33
  Navigating Performance Management Architect .............................. 34
    Toolbars ........................................................................... 35
    Menus ............................................................................. 36
      File Menu ........................................................................ 36
      Edit Menu ....................................................................... 36
      View Menu ...................................................................... 37
      Administration Menu ...................................................... 38
      Help Menu ..................................................................... 38
    Transforming Classic Applications into Performance Management Architect .................................................. 38

Chapter 2. Administering Performance Management Architect Servers ....... 41
  Performance Management Architect Services .................................. 41
  Starting and Stopping Performance Management Architect Dimension Server .................................................. 42
  Starting and Stopping Performance Management Architect Application Server .................................................. 42
<table>
<thead>
<tr>
<th>Section</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>Creating Associations</td>
<td>145</td>
</tr>
<tr>
<td>Creating User-Defined Attributes</td>
<td>145</td>
</tr>
<tr>
<td>Deleting User-Defined Attributes</td>
<td>146</td>
</tr>
<tr>
<td>Working with Member Formulas</td>
<td>146</td>
</tr>
<tr>
<td>Validating Formulas</td>
<td>147</td>
</tr>
<tr>
<td>Working with Formula Expressions</td>
<td>147</td>
</tr>
<tr>
<td>Prerequisites</td>
<td>148</td>
</tr>
<tr>
<td>Formula Expressions</td>
<td>148</td>
</tr>
<tr>
<td>Syntax</td>
<td>149</td>
</tr>
<tr>
<td>Including Smart List Values as Variables</td>
<td>150</td>
</tr>
<tr>
<td>Understanding Common Errors</td>
<td>150</td>
</tr>
<tr>
<td>Working with Members in Applications</td>
<td>150</td>
</tr>
<tr>
<td>Adding Members to Applications</td>
<td>150</td>
</tr>
<tr>
<td>Selecting Top Members</td>
<td>152</td>
</tr>
<tr>
<td>Excluding Members</td>
<td>153</td>
</tr>
<tr>
<td>Showing Excluded Members</td>
<td>153</td>
</tr>
<tr>
<td>Setting the Base Member</td>
<td>153</td>
</tr>
<tr>
<td>Chapter 6. Building Applications</td>
<td>155</td>
</tr>
<tr>
<td>About Applications</td>
<td>155</td>
</tr>
<tr>
<td>Workflow for Creating Applications</td>
<td>155</td>
</tr>
<tr>
<td>Manual Workflow</td>
<td>156</td>
</tr>
<tr>
<td>Application Wizard Workflow</td>
<td>156</td>
</tr>
<tr>
<td>Prerequisites</td>
<td>157</td>
</tr>
<tr>
<td>Creating Consolidation Applications</td>
<td>157</td>
</tr>
<tr>
<td>Selecting the Application Type</td>
<td>157</td>
</tr>
<tr>
<td>Selecting Dimensions</td>
<td>159</td>
</tr>
<tr>
<td>Adding Dimensions Using the Wizard</td>
<td>159</td>
</tr>
<tr>
<td>Manually Adding Dimensions</td>
<td>161</td>
</tr>
<tr>
<td>Modifying the Application Settings</td>
<td>162</td>
</tr>
<tr>
<td>Validating and Deploying</td>
<td>164</td>
</tr>
<tr>
<td>Creating Planning Applications</td>
<td>164</td>
</tr>
<tr>
<td>Selecting the Application Type</td>
<td>165</td>
</tr>
<tr>
<td>Defining Plan Types</td>
<td>167</td>
</tr>
<tr>
<td>Specifying the Default Currency</td>
<td>168</td>
</tr>
<tr>
<td>Selecting Dimensions</td>
<td>169</td>
</tr>
<tr>
<td>Defining Dimensions Using the Wizard</td>
<td>170</td>
</tr>
<tr>
<td>Manually Adding Dimensions</td>
<td>171</td>
</tr>
<tr>
<td>Modifying the Application Settings</td>
<td>172</td>
</tr>
</tbody>
</table>
Defining Base Time Periods and Monthly Distribution Spread 174
Defining Calendar Ranges 174
Modifying Performance Settings 176
Setting Data Type Evaluation Order 178
Validating and Deploying 179
Creating Standard, Detailed, and Management Ledger Profitability and Cost Management Applications 180
Selecting the Application Type 180
Selecting Dimension Types 182
Adding Dimensions Using the Wizard 184
Adding Dimensions Manually 186
Modifying the Application Settings 187
Modifying Application Settings Using the Dimension Library 188
Modifying Application Settings Using the Application Wizard 188
Setting the Properties for POV Dimensions 189
Reordering Children Members in Profitability and Cost Management Models 190
Validating and Deploying 190
Creating Essbase Applications 191
Application Requirements 191
Selecting the Application Type 192
Selecting Dimensions 193
Adding Dimensions Using the Wizard 193
Manually Adding Dimensions 194
Modifying the Application Settings 195
Validating and Deploying 197
Creating Generic Applications 197
Common Application Tasks 198
Including Dimensions in Applications 198
Converting Shared Dimensions to Local 199
Converting Local Dimensions to Shared 200
Synchronizing Dimensions with the Shared Library 201
Importing Dimensions into Applications 202
Removing Dimensions 202
Viewing Dimension Associations 202
Activating Dimension Associations 203
Viewing Dimension Associations 203
Setting the Dimension Alias 203
Setting the Dimension Sort Order and Dimension Density 203
### Setting the Dimension Sort Order in the Property Grid
- Page 204

### Viewing Application Membership
- Page 205

---

### Chapter 7. Managing Applications
- Page 207

#### Navigating the Application Library
- Page 207

#### Modifying the Application Library View
- Page 208

#### Organizing Applications
- Page 208

- Creating Folders
- Page 208

- Adding Applications to Folders
- Page 209

- Removing Applications From Folders
- Page 209

- Renaming Folders
- Page 210

- Deleting Folders
- Page 210

- Creating Application Filters
- Page 210

- Refreshing the Application Library
- Page 211

#### Editing Applications
- Page 211

#### Opening Applications
- Page 211

#### Closing Applications
- Page 211

#### Deleting Applications
- Page 211

#### Duplicating Applications
- Page 212

- Duplicating Applications as New Applications
- Page 212

- Duplicating Consolidation Applications as Deployed Applications
- Page 212

#### Finding Applications
- Page 214

#### Reregistering Applications
- Page 214

#### Comparing Applications
- Page 215

- Navigating the Compare Results
- Page 216

- Dimension Compare Results
- Page 216

- Application Compare Summary
- Page 217

- Property Compare Results
- Page 218

- Excluding Members in the Compare Results
- Page 218

#### Viewing the Data Flow
- Page 218

- Changing the Focal Application in the Data Flow
- Page 219

- Viewing Synchronizations
- Page 219

- Editing Synchronizations
- Page 219

- Validating and Executing Synchronizations
- Page 220

- Editing Applications
- Page 220

- Validating and Deploying Applications
- Page 220

- Validating Applications
- Page 221

- Reviewing Deployment Logs for Errors
- Page 222

- Deploying Planning Applications
- Page 222
<table>
<thead>
<tr>
<th>Section</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>Deleting a Reusable Dimension Filter</td>
<td>266</td>
</tr>
<tr>
<td>Adding and Editing Filter Criteria</td>
<td>266</td>
</tr>
<tr>
<td>Assigning Default Members</td>
<td>268</td>
</tr>
<tr>
<td>Inserting Mapping Tables</td>
<td>268</td>
</tr>
<tr>
<td>Editing Mappings</td>
<td>269</td>
</tr>
<tr>
<td>Saving Synchronizations</td>
<td>269</td>
</tr>
<tr>
<td>Working with Mappings</td>
<td>269</td>
</tr>
<tr>
<td>Creating Mapping Tables in the Dimension Mapping</td>
<td>270</td>
</tr>
<tr>
<td>Creating Mapping Tables in the Data Synchronizer</td>
<td>273</td>
</tr>
<tr>
<td>Working with the Data Synchronizer</td>
<td>275</td>
</tr>
<tr>
<td>Navigating the Data Synchronizer</td>
<td>275</td>
</tr>
<tr>
<td>Changing the Data Synchronizer View</td>
<td>276</td>
</tr>
<tr>
<td>Filtering Synchronizations</td>
<td>276</td>
</tr>
<tr>
<td>Editing Synchronizations</td>
<td>277</td>
</tr>
<tr>
<td>Editing Mapping Tables</td>
<td>277</td>
</tr>
<tr>
<td>Duplicating Synchronizations and Mappings</td>
<td>277</td>
</tr>
<tr>
<td>Deleting Synchronizations and Mappings</td>
<td>277</td>
</tr>
<tr>
<td>Validating and Executing Synchronizations</td>
<td>278</td>
</tr>
<tr>
<td>Troubleshooting Data Synchronizations</td>
<td>280</td>
</tr>
</tbody>
</table>

**Part IV. Job Management**                                                                 | 283  |

**Chapter 9. Managing Jobs**                                                                 | 285  |
| Working with the Job Console                                            | 285  |
| Navigating the Job Console                                              | 287  |
| Changing the Job Console View                                           | 288  |
| Refreshing the Job Console                                              | 288  |
| Creating Job Filters                                                    | 288  |
| Filtering Your Jobs                                                     | 290  |
| Filtering Jobs for Other Users                                          | 290  |
| Security                                                               | 290  |
| Security for Submitting Jobs                                            | 290  |
| Security for Displaying Jobs                                            | 290  |
| Viewing Job Attachments                                                 | 291  |
| Viewing Import Results                                                  | 291  |
| Viewing Text Files                                                      | 292  |
| Deleting Jobs                                                           | 293  |
| Manually Time out Jobs                                                  | 293  |
| Performance Management Architect Logs                                  | 294  |
Chapter 12. Working with Planning Dimensions

Properties Applicable to All Planning Dimensions .................................................. 345
Properties Common to Multiple Planning Dimensions ........................................... 347
Account .................................................................................................................. 350
  Valid Combinations of Account Types and Dependent Properties ...................... 352
  Time Balance Property Examples ....................................................................... 352
  Examples of Account Calculation for Zeros and Missing Values ............................ 353
Currency ................................................................................................................. 354
Entity ..................................................................................................................... 356
Period ..................................................................................................................... 357
  Considerations for Alternate Hierarchies in Period Dimensions ......................... 358
Scenario .................................................................................................................. 358
Version ................................................................................................................... 359
Year ......................................................................................................................... 360
Custom Dimensions ............................................................................................... 361
Planning Aliases ..................................................................................................... 362
Planning Attributes .................................................................................................. 362
Working with Planning 9.3.1 and Performance Management Architect .................... 362
Considerations for Working with Public Sector Planning and Budgeting .................. 363
Considerations for Working with Essbase .................................................................. 363
Naming Restrictions for Applications (Essbase) ....................................................... 364
Naming Restrictions for Dimensions, Members, and Aliases .................................. 365
Working with Planning Flat Files .............................................................................. 366
  Sample Planning Flat Files (Regular) .................................................................... 366
  Sample Planning Flat Files (Simple) ..................................................................... 372
Chapter 13. Working with Profitability and Cost Management Properties .............................................. 377
  Dimension and Member Properties ................................................. 377

Chapter 14. Working with Essbase Properties .................................................................................. 383
  Application Properties ................................................................. 383
  Dimension and Member Properties .............................................. 388

Chapter 15. Working with Statistical and System Properties ....................................................... 397
  Statistical Properties .................................................................... 397
  Dimension System Properties .................................................... 398
  Member System Properties ........................................................ 398

Appendix A. Property Considerations when Upgrading to this Release ........................................... 399
  Property Differences from Earlier Releases ................................ 399
  Considerations when Comparing Applications to Deployed Applications ............................. 403
  New Properties Added to Performance Management Architect Since Release 9.3.3 ............. 404

Appendix B. Application Validations .................................................................................................. 407

Appendix C. Member Query Functions Used by the Data Synchronizer ......................................... 415
  Using Member Query Functions ..................................................... 415
    Special Considerations ............................................................... 416
    Syntax ....................................................................................... 417
    Examples .................................................................................... 417
  Parent ............................................................................................. 418
    Syntax ....................................................................................... 418
    Examples .................................................................................... 418
  Children ......................................................................................... 418
    Syntax ....................................................................................... 418
    Example ..................................................................................... 419
  Ancestors ......................................................................................... 419
    Syntax ....................................................................................... 419
    Examples .................................................................................... 419
  Descendants ..................................................................................... 420
    Syntax ....................................................................................... 420
    Examples .................................................................................... 420
  Siblings ......................................................................................... 420
    Syntax ....................................................................................... 420
    Examples .................................................................................... 421
  Member ........................................................................................... 421
    Syntax ....................................................................................... 421
Appendix D. Configuration Settings in BPMA_Server_Config.xml .......................... 425
Changing the Connection Time Out Setting .......................... 429
Documentation Accessibility

For information about Oracle's commitment to accessibility, visit the Oracle Accessibility Program website at http://www.oracle.com/pls/topic/lookup?ctx=acc&id=docacc.

Access to Oracle Support

Oracle customers that have purchased support have access to electronic support through My Oracle Support. For information, visit http://www.oracle.com/pls/topic/lookup?ctx=acc&id=info or visit http://www.oracle.com/pls/topic/lookup?ctx=acc&id=trs if you are hearing impaired.
Documentation Feedback

Send feedback on this documentation to: epmdoc_ww@oracle.com

Follow EPM Information Development on these social media sites:
LinkedIn - http://www.linkedin.com/groups?gid=3127051&goback=.gmp_3127051
Twitter - http://twitter.com/hyperionepminfo
Facebook - http://www.facebook.com/pages/Hyperion-EPM-Info/102682103112642
Google+ - https://plus.google.com/106915048672979407731/#106915048672979407731/posts
YouTube - http://www.youtube.com/user/OracleEPMWebcasts
Part I

Introduction to Performance Management Architect

In Introduction to Performance Management Architect:

- Using Performance Management Architect
- Administering Performance Management Architect Servers
About Performance Management Architect

Oracle Hyperion EPM Architect is a feature of Oracle Hyperion Foundation Services and is integrated with Oracle Hyperion Financial Management, Oracle Hyperion Planning, Oracle Essbase, Oracle Hyperion Profitability and Cost Management, and Oracle Data Relationship Management. Performance Management Architect enables administrators to manage, create, and deploy Hyperion applications within one interface.

Creation and deployment:

- Create applications by dragging and dropping dimensions to the application
- Design applications graphically, within one environment
- Create subject-specific applications that use existing artifacts
- Configure dimensions and define properties from predefined, sample libraries
- Create filters to select specified members of a dimension. For example, select the Balance Sheet accounts of the Account dimension. This enables you to have one dimension to maintain but not use the full dimension in all applications.
- Duplicate applications for testing or what-if analyses
Transform applications administered in Classic application administration to the Dimension Library and Application Library. This ensures that you are ready to get started with the functionality within Performance Management Architect.

Calculating business rules for applications:

Oracle Hyperion Calculation Manager enables you to create, validate, and deploy sophisticated calculations to solve Financial Management and Planning business problems. You can use Calculation Manager to create any of these calculations:

- Allocating costs among entities
- Performing revenue modeling
- Performing expense modeling
- Preparing a balance sheet
- Calculating cash flow
- Calculating currency translation adjustments
- Calculating group and minority interest
- Calculating deferred taxes

Management:

- Visually link and manage applications
- Use dimensions and attributes across multiple applications. (For example, you can create one Account dimension and use it in multiple applications.) Performance Management Architect leverages existing applications and dimensionality to spin off other applications with previously constructed dimensions.
- Graphically manage data flows
- Perform impact analysis—graphically view and model relationships across applications
- Handle and evaluate the impact of exceptions and changes to all models
- Eliminate manual dimensional and data reconciliation between applications

This guide describes administration features introduced in Performance Management Architect. For information on Classic Application Administration features (for applications not being managed using Performance Management Architect), see the Oracle Hyperion Planning Administrator’s Guide or the Oracle Hyperion Financial Management Administrator’s Guide.

To access training on Performance Management Architect, including Oracle by Example, tutorials, and demos, go to http://www.oracle.com/technetwork/tutorials/index.html.

Performance Management Architect Modules

Performance Management Architect has the following modules:

- **Dimension Library**—A centralized location to manage dimensions and dimension properties. You can use the Dimension Library to:
Create dimension import profiles—enabling dimension updates from flat files and relational database interface tables

Add, delete, and modify dimension members in the Shared Library or directly in applications

Modify dimension and member properties in the Shared Library or directly in applications

**Application Library**—A summary of applications that have been created and/or deployed to Financial Management, Planning, Profitability and Cost Management, Essbase Aggregate Storage Option (ASO), or Essbase Block Storage Option (BSO). Applications contain dimensions and dimension attributes that are designed to meet specific requirements for Financial Management, Planning, Profitability and Cost Management, and Essbase (ASO) and (BSO) needs. You can use the Application Library to:

- Create Financial Management, Planning, Profitability and Cost Management, Essbase (ASO), or Essbase (BSO) applications based on Financial Management, Planning, and Profitability and Cost Management applications
- Manage applications in one centralized location
- View the data flow between applications
- Migrate applications to different servers
- Deploy applications to Financial Management, Planning, Profitability and Cost Management, Essbase (ASO), or Essbase (BSO)

**Calculation Manager**—Enables you to create, validate, and deploy business rules and business rule sets.

There are three types of objects that can be calculated in Calculation Manager:

- Components, which are objects that comprise business rules and can contain formulas, scripts, conditions, ranges, fixed loops, and allocations.
- Rules, which are objects that contain groups of components that perform calculations
- Rule Sets, which are objects that contain two or more rules that are calculated simultaneously or sequentially.

If you are using a Financial Management, Planning, or Essbase block storage application, you can include Calculation Manager system templates in business rules. For example, you can use a system template that copies data from one location to another. You can also create custom defined templates to perform calculations that solve problems unique to your business.

**Data Synchronization**—Enables data synchronization between or within Hyperion applications. You can use the Data Synchronizer to:

- Create data synchronizations between Financial Management, Planning, Profitability and Cost Management, Essbase (ASO), and Essbase (BSO) as destinations, and the following sources:
  - Financial Management
  - Planning
For example, an administrator can synchronize data between two Financial Management applications; two Planning applications, and between one Financial Management and a Planning application.

- Create data mappings for reuse
- Create flat file and interface table mappings to import data into Hyperion applications

- **Transform Classic to EPM Architect**—Enables transformations of applications managed in Classic Financial Management and Planning releases to Performance Management Architect
- **Library Job Console**—Provides a summary, including status, of Dimension Library and application processes, including imports, deployments, and data synchronizations

### Performance Management Architect Utilities

You can use the following utilities with Performance Management Architect:

- **Performance Management Architect Batch Client**
  
  Performance Management Architect Batch Client enables you to combine processes such as data export, metadata loads, data loads, and calculations and kickoff these operations during your normal nightly or weekly load process.

  The batch client enables you to kickoff processes using external scheduling tools. You can use the batch client to perform many tasks, including:

  - Load metadata into Performance Management Architect
  - Update security related properties on dimensions and measures
  - Load data to applications

  The batch client is automatically installed when you install Performance Management Architect. For detailed information on using the batch client, see the *Oracle Hyperion Enterprise Performance Management Architect Batch Client User’s Guide*.

- **Performance Management Architect File Generator**
  
  The Performance Management Architect File Generator enables you to create import files from the following sources:

  - Existing Financial Management files such as .PER, .SEC and .XML metadata files.

  **Note:** Only Financial Management .XML format metadata files are supported. The .APP format is not directly supported but users can extract metadata from the system in the XML format to use the converter.
- Existing Financial Management applications
- Existing Planning applications
- Existing Performance Management Architect applications (Consolidation, Planning, and Generic application types)
- Microsoft Excel files

To install Performance Management Architect File Generator, use the Oracle Hyperion Enterprise Performance Management System Installer. For installation information, see the Oracle Hyperion Enterprise Performance Management System Installation and Configuration Guide. For detailed information on using the file generator, see the Oracle Hyperion Enterprise Performance Management Architect File Generator User’s Guide.

**Architecture**

Performance Management Architect provides an interface to various sources for metadata and data including Enterprise Resource Planning systems, relational databases, and data warehouses. Data (dimensional hierarchies as well as data) from these sources can be imported into the system via flat files or Hyperion interface tables.

**Note:** This functional diagram does not represent the number of servers needed for a deployment.

Performance Management Architect provides a direct interface to Financial Management, Profitability and Cost Management, and Planning applications enabling the creation, maintenance, and synchronization of these applications directly from Performance Management Architect.
The middle tier of Performance Management Architect includes the required application service for application construction, metadata management, data synchronization, and surfacing the user interface.

End users access Performance Management Architect and reporting and application content through Oracle Hyperion Enterprise Performance Management Workspace.

Process Overview

At a high-level, follow this process:

- Import dimensions using the Dimension Library. See Chapter 3, “Importing Metadata.”
- Create applications. See Chapter 6, “Building Applications.”
- Use Calculation Manager to create business rules.
- Deploy applications to a Hyperion product, such as Profitability and Cost Management, Planning, Essbase, or Financial Management. The Hyperion product creates the application and the product server loads the metadata. See “Validating and Deploying” on page 164.
- Use Oracle Hyperion Shared Services and assign access permissions. See the Oracle Hyperion Enterprise Performance Management System User and Role Security Guide.
- Use your Hyperion products to load data forms into the application. See the Oracle Hyperion Planning Administrator’s Guide and Oracle Hyperion Financial Management Administrator’s Guide.
- Use your Hyperion products to create data forms, reports, plans, task lists, and so on.

Accessing Performance Management Architect

To access Performance Management Architect:

1. Ensure that Shared Services and EPM Workspace Server are running.
2. Ensure that IIS is running.
3. To start the Hyperion EPMA Server, from the Services panel, click start Hyperion EPMA Server.

   Note: If you have difficulty starting the Dimension server, you might need to change the timeout setting. See “Starting and Stopping Performance Management Architect Dimension Server” on page 42.
4. Start the EPM Architect application server by doing one of the following:
   - From the Services panel, start Hyperion EPM Architect – Web Application.
   - Select Start, then Programs, then Oracle EPM System, then Foundation Services, then Performance Management Architect, and then Start Performance Management Architect Web.
5 Open your Web browser and access Performance Management Architect through EPM Workspace (http://<Web Server>:<port>/workspace/) where <Web Server> is the Web server machine host name and <port> is the Web server port number; for example, 19000 if using the Oracle HTTP server instance configured by Oracle Hyperion Enterprise Performance Management System Configurator.

6 Enter your user name and password, and click Log On.

Note: If an error message indicates that Performance Management Architect is unable to authenticate the user, verify that the user is provisioned for the application (if not, use Shared Services to provision the user), and that the user’s token or session has not timed out (in this case, log off, then log back on to start a new session). If a problem exists with the Financial Management Web Server or Application Server, contact your system administrator.

If you have difficulty accessing Performance Management Architect, see the Oracle Hyperion Enterprise Performance Management System Installation and Configuration Guide.

7 To access the Dimension Library, select Navigate, then Administer, and then Dimension Library.

**Security**

Performance Management Architect supports these roles:

<table>
<thead>
<tr>
<th>Performance Management Architect Roles</th>
<th>Tasks per Role</th>
</tr>
</thead>
<tbody>
<tr>
<td>EPMA Administrator</td>
<td>The EPMA Administrator role is the parent of Application Creator. This role enables the following:</td>
</tr>
<tr>
<td>Application Creator</td>
<td>● Access to all applications, including deployed applications where the user was not the individual who deployed the application.</td>
</tr>
<tr>
<td>Essbase Application Creator</td>
<td>● Ability to manually mark a stalled job as timed out.</td>
</tr>
<tr>
<td>Financial Management Application Creator</td>
<td>● Ability to view hidden jobs.</td>
</tr>
<tr>
<td>Planning Application Creator</td>
<td>● Ability to run application diagnostics and run all tests and solutions on all applications.</td>
</tr>
<tr>
<td>Profitability Application Creator</td>
<td>● Ability to run the Transaction History Purge Utility.</td>
</tr>
</tbody>
</table>

The Application Creator role enables administrators to create applications and change dimensions to which you have access permissions. When an Application Creator deploys an application from Performance Management Architect, you automatically become the application administrator.

Note: All application creators can create Generic applications.

<p>| EPMA Administrator Dimension Editor    | Can import, delete, create, and change dimensions and dimension members. Can also assign access permissions (Dimension Owner and Readers/ Writers) to the dimension. Cannot create applications. |
| Create Integrations                   | Create and execute data synchronizations. |
| Create interface data sources          |                                           |</p>
<table>
<thead>
<tr>
<th>Performance Management Architect Roles</th>
<th>Tasks per Role</th>
</tr>
</thead>
<tbody>
<tr>
<td>Run Integrations</td>
<td>Execute data synchronizations.</td>
</tr>
<tr>
<td>Calculation Manager Administrator</td>
<td>Administers and manages Calculation Manager functions.</td>
</tr>
<tr>
<td>Financial Management Calculation Manager Administrator</td>
<td>Administers Calculation Manager functions in Financial Management</td>
</tr>
<tr>
<td>Planning Calculation Manager Administrator</td>
<td>Administers Calculation Manager functions in Planning</td>
</tr>
</tbody>
</table>

The following table shows how Performance Management Architect roles map to levels of access.

**Table 1  Levels of Access**

<table>
<thead>
<tr>
<th>Role</th>
<th>Levels of Access</th>
</tr>
</thead>
<tbody>
<tr>
<td>Dimension Editor¹</td>
<td>● Dimension Owner for any shared dimension in the Shared Library</td>
</tr>
<tr>
<td></td>
<td>● Can be explicitly assigned Dimension Owner, Dimension Writer, or Dimension Reader access to any local dimension in the Shared Library</td>
</tr>
<tr>
<td>Application Creators²</td>
<td>● Dimension Owner for all dimensions in undeployed applications</td>
</tr>
<tr>
<td></td>
<td>● Can be explicitly assigned Dimension Owner, Dimension Writer, or Dimension Reader access to any dimension in the Shared Library</td>
</tr>
<tr>
<td>Application Administrators³</td>
<td>● Dimension owner for all dimensions in deployed applications</td>
</tr>
<tr>
<td></td>
<td>● Can be explicitly assigned Dimension Owner, Dimension Writer, or Dimension Reader access to any dimension in the Shared Library</td>
</tr>
<tr>
<td>Calculation Manager Administrator</td>
<td>Administers and manages Calculation Manager functions</td>
</tr>
<tr>
<td>Calculation Manager Administrator role comprises these roles:</td>
<td>Financial Management Calculation Manager Administrator administers Calculation Manager functions in Financial Management</td>
</tr>
<tr>
<td></td>
<td>Planning Calculation Manager Administrator administers Calculation Manager functions in Planning</td>
</tr>
<tr>
<td></td>
<td>● Financial Management Calculation Manager Administrator</td>
</tr>
<tr>
<td></td>
<td>● Planning Calculation Manager Administrator</td>
</tr>
</tbody>
</table>

¹Only Dimension Editors can create dimensions in the Shared Library.
²Only Application Creators or Application Administrators can create or add dimensions to an application.
³Only Application Creators or Application Administrators can create or add dimensions to an application.

The following table describes common tasks performed in Performance Management Architect and required levels of access. Be aware of the following considerations:

- You can only edit structure for local dimensions within applications or for shared dimensions within the Shared Library.
You can only copy dimensions if your role also allows you to create dimensions in the target of the copy.

You can only synchronize dimensions if you have at least reader access to the source dimension and writer access to the target dimension.

You can only add dimensions to applications if you are an Application Creator or Application Administrator role.

Table 2  Common Tasks

<table>
<thead>
<tr>
<th>Level of Access</th>
<th>Dimension Level Tasks</th>
</tr>
</thead>
<tbody>
<tr>
<td>Dimension Owner</td>
<td>• Edit dimension structure or properties</td>
</tr>
<tr>
<td></td>
<td>• Copy dimensions</td>
</tr>
<tr>
<td></td>
<td>• Synchronize dimensions from or to dimensions</td>
</tr>
<tr>
<td></td>
<td>• Add dimensions to applications</td>
</tr>
<tr>
<td></td>
<td>• Remove dimensions</td>
</tr>
<tr>
<td></td>
<td>• Delete dimensions</td>
</tr>
<tr>
<td>Dimension Writer</td>
<td>• Edit dimension structure or properties</td>
</tr>
<tr>
<td></td>
<td>• Copy dimensions</td>
</tr>
<tr>
<td></td>
<td>• Synchronize from or to dimensions</td>
</tr>
<tr>
<td></td>
<td>• Add dimensions to applications</td>
</tr>
<tr>
<td>Dimension Reader</td>
<td>• Copy dimensions</td>
</tr>
<tr>
<td></td>
<td>• Synchronize from dimensions</td>
</tr>
<tr>
<td></td>
<td>• Add dimensions to applications</td>
</tr>
</tbody>
</table>

For additional information on roles, see the Oracle Hyperion Enterprise Performance Management System User and Role Security Guide.

Scenarios:

If Bob Smith selects an application in the Application Library and does not have the Application Creator role for that application type or are a provisioned administrator for the application, a dialog box is displayed indicating that Bob Smith does not have access to this application. In addition, the menu items are disabled and the summary information is limited. Consider this example:

Bob Smith selects App2 for which he is not a provisioned administrator and he does not have any creator roles. Upon selecting the application a message is displayed informing him that he has no rights to this application. When Bob Smith right-clicks, all options are disabled.

If an application is not deployed, then all applicable options and summary information is available to users who are creators for that application type (Consolidation, Planning, Essbase (ASO), and Essbase (BSO)). Consider this example:

The Application Library contains five Planning Applications Views (App_6, App7, App8, and App9 (deployed) and App10 (undeployed) and five Consolidation applications (App1, App2, App3, and App4 (deployed) and App5 (undeployed). Bob Smith is a Consolidation Leader role and he has no creator role. Therefore, he has no access to the planning applications. Upon selecting the application a message is displayed informing him that he has no rights to this application. When Bob Smith right-clicks, all options are disabled.
Application Creator, Karen Jones is a Planning Application Creator, and Jim Harrington is an Admin for App1. Bob Smith can perform all applicable operations on App5 (deploy, edit, compare, and so on). Karen Smith can also perform all applicable operations on App10 (deploy, edit, compare, and so on).

Any user who is provisioned as an administrator for deployed applications can perform the full set of operations (delete, redeploy, and so on). Consider this example:

Jim Harrington, the administrator for App1, has full access to App1. Any user who is not a provisioned administrator, but is an application creator has access to all the operations that do not require product specific roles like edit, duplicate, compare, validate, and so on. Operations that require application specific roles will fail (delete, redeploy, and migrate). For example, Bob Smith will be able to edit and compare App1 through App4, but will not be able to delete, redeploy, or migrate them.

**Upgrade Considerations**

For information about property changes and new validations that were introduced in Release 11.1.2.1, see Appendix A, “Property Considerations when Upgrading to this Release.” This section includes default property changes and new validations to show a comparison from the following releases to Release 11.1.2.1:

- Release 9.3.3
- Release 11.1.1.3
- Release 11.1.2

**Post-Upgrade Tasks**

After upgrading Performance Management Architect to Release 11.1.2.1, the SortOrder and IsPrimary column are not present in the upgraded interface tables. You need to manually create the SortOrder and IsPrimary columns in Performance Management Architect interface tables after the upgrade.

**Using FDMEE with Performance Management Architect**

Oracle Hyperion Financial Data Quality Management, Enterprise Edition is a module of Oracle Hyperion Financial Data Quality Management that enables you to perform the following tasks:

- Integrate metadata and data from an Enterprise Resource Planning (ERP) source system into an Enterprise Performance Management (EPM) target application
- Drill through from the EPM target application and view data in the ERP source system
- Write-back budget data to the source system from any Planning, Essbase ASO, or Essbase BSO application.
For information on supported source systems and how to use FDMEE, see the Hyperion Financial Data Quality Management ERP Integration Adapter for Oracle Administrator’s Guide.

**Using Data Relationship Management with Performance Management Architect**

Data Relationship Management is an enterprise change management application for building and retaining consistency within master data assets when there are many changes necessary to support underlying transactional and analytical systems.

In this release, you can import metadata (hierarchies, nodes, and properties) from Data Relationship Management into the Performance Management Architect Shared Library and Application Views. These dimensions can then be shared with and deployed to multiple EPM applications.

Metadata exported from Data Relationship Management can be imported into the following:

**Financial Management**
- Members for Account, Entity, Custom (Generic), and Currency dimension types
- Financial Management related properties for Account, Entity, Custom (Generic), and Currency dimension members
- Hierarchies of dimension members

**Planning**
- Members for Account, Entity, Generic, and Currency dimension types
- Planning related properties for Account, Entity, Generic, and Currency dimension members
- Hierarchies of dimension members

**Essbase ASO and BSO**
- Members for Account, Entity (Country), and Generic dimension types
- Essbase ASO and BSO related properties for Account, Entity (Country), and Generic dimension members
- Hierarchies of dimension members

For information about setting up a Data Relationship Management-Performance Management Architect integration, see the *Oracle Data Relationship Management EPM Architect Integration Guide*.

**Lifecycle Management**

Oracle Hyperion Enterprise Performance Management System Lifecycle Management provides a consistent way for Oracle Enterprise Performance Management System products to migrate
an application, a repository, or individual artifacts across product environments and operating systems. Generally, the Lifecycle Management interface in Oracle Hyperion Shared Services Console is consistent for all EPM System products that support Lifecycle Management. However, EPM System products display different artifact listings and export and import options in the Lifecycle Management interface.

Lifecycle Management features:

- Viewing applications and folders
- Searching for artifacts
- Migrating directly from one application to another
- Migrating to and from the file system
- Saving and loading migration definition files
- Viewing selected artifacts
- Auditing migrations
- Viewing the status of migrations
- Importing and exporting individual artifacts for quick changes on the file system

In addition to providing the Lifecycle Management interface in Shared Services Console, there is a command-line utility called Lifecycle Management Utility that provides an alternate way to migrate artifacts from source to destination. The Lifecycle Management Utility can be used with a third-party scheduling service such as Windows Task Scheduler or Oracle Enterprise Manager.

Lastly, there is a Lifecycle Management Application Programming Interface (API) that enables users to customize and extend the Lifecycle Management functionality.

For detailed information about Oracle Hyperion Enterprise Performance Management System Lifecycle Management, see the *Oracle Hyperion Enterprise Performance Management System Lifecycle Management Guide*.

### Navigating Performance Management Architect

From EPM Workspace access the following from the Navigate menu:

- Applications—enables you to access Consolidation (Financial Management), Planning, Essbase (ASO), and Essbase (BSO) applications. Applications are only displayed when a user has the rights and the applications are available.
- Administer—enables you to manage users, groups, user preferences, roles, and authentication methods. In addition, Administer enables you to access these Performance Management Architect modules:
  - Dimension Library
  - Application Library
  - Data Synchronization
  - Library Job Console
Toolbars

The following toolbars are available in Performance Management Architect:

- **Standard toolbar**—Used for common EPM Workspace features. See the *Oracle Enterprise Performance Management Workspace User’s Guide*.
- **Performance Management Architect toolbar**—Displays buttons specific to Performance Management Architect.

### Table 3  Performance Management Architect Toolbar Buttons

<table>
<thead>
<tr>
<th>Button</th>
<th>Menu Command</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td><img src="image" alt="View, Refresh" /></td>
<td>View, Refresh</td>
<td>Refreshes the window.</td>
</tr>
<tr>
<td><img src="image" alt="View, Clear Filter Criteria" /></td>
<td>View, Clear Filter Criteria</td>
<td>Displays the Find Applications dialog box. Displays in the Application Library only.</td>
</tr>
<tr>
<td><img src="image" alt="View, Download Transaction Logs" /></td>
<td>View, Download Transaction Logs</td>
<td>Displays the Filter Transaction Log dialog box.1</td>
</tr>
<tr>
<td><img src="image" alt="View, Filter Dimensions" /></td>
<td>View, Filter Dimensions</td>
<td>Displays the Dimension Filtering dialog box.2</td>
</tr>
<tr>
<td><img src="image" alt="View, Sort Dimensions" /></td>
<td>View, Sort Dimensions</td>
<td>Displays the Dimension Sorting dialog box.3</td>
</tr>
<tr>
<td><img src="image" alt="None" /></td>
<td>None</td>
<td>In the Dimension Library, displays the Find Members dialog box.In the Application Library, displays the Find Applications dialog box</td>
</tr>
</tbody>
</table>

1Displays in the Dimension Library only.
2Displays in the Dimension Library only.
3Displays in the Dimension Library only.
Menus

Subtopics

- File Menu
- Edit Menu
- View Menu
- Administration Menu
- Help Menu

Performance Management Architect options display in addition to EPM Workspace options. The following sections describe Performance Management Architect options only.

File Menu

Table 4  File Menu

<table>
<thead>
<tr>
<th>Command</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>New, Dimension</td>
<td>Creates a dimension</td>
</tr>
<tr>
<td>New, Application</td>
<td>Launches the application wizard</td>
</tr>
<tr>
<td>New, Folder</td>
<td>Creates a new folder</td>
</tr>
<tr>
<td>Open, Applications</td>
<td>Displays all applications by application type</td>
</tr>
<tr>
<td>Close</td>
<td>Closes the current tab, others (all other tabs open), or all tabs</td>
</tr>
<tr>
<td>Edit Application</td>
<td>Displays a dialog box where you can select the application to edit</td>
</tr>
<tr>
<td>Import, Create Profile</td>
<td>Creates an import profile</td>
</tr>
<tr>
<td>Import, Import Dimensions</td>
<td>Imports dimensions using the Import Dimensions dialog box</td>
</tr>
<tr>
<td>Import, Clear Interface Area</td>
<td>Clears the interface area</td>
</tr>
</tbody>
</table>

1Displays in the Dimension Library only.
2Displays in the Dimension Library only.
3Displays in the Dimension Library only.
4Displays in the Dimension Library only.
5Displays in the Dimension Library only.

Edit Menu

You can use the Edit menu to perform tasks relating to setting search and sort criteria in the Dimension Library.
Table 5  Edit Menu

<table>
<thead>
<tr>
<th>Command</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Search</td>
<td>Finds members by property, name, or alias</td>
</tr>
<tr>
<td>Clear Filter Criteria</td>
<td>Clears an applied filter</td>
</tr>
<tr>
<td>Clear Sort Criteria</td>
<td>Clears an applied sort</td>
</tr>
</tbody>
</table>

View Menu
You can use the View menu to display specific panes in Performance Management Architect. These options do not serve as a toggle. To close a pane, use the close button.

Table 6  View Menu

<table>
<thead>
<tr>
<th>Command</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>View Masthead</td>
<td>Hides the display of the menu bar and toolbars. To show the menu and toolbars after hiding, click the Show button in the upper right corner of the screen.</td>
</tr>
<tr>
<td>Show Shared Library</td>
<td>Displays the Shared Library</td>
</tr>
<tr>
<td>Show App</td>
<td>Displays the application pane</td>
</tr>
<tr>
<td>Show Property Grid</td>
<td>Displays the Property Grid</td>
</tr>
<tr>
<td>Show Member List</td>
<td>Displays the Member Find pane</td>
</tr>
<tr>
<td>Refresh</td>
<td>Refreshes the display</td>
</tr>
<tr>
<td>Download Transaction Logs</td>
<td>Displays the Filter Transaction Log dialog box</td>
</tr>
<tr>
<td>Member Display</td>
<td>Applicable for Alias dimensions. When you select this option, you must manually refresh. After refreshing changes display for dimensions that are associated with alias dimensions that have a Default Member specified in the System properties.</td>
</tr>
<tr>
<td>Sort Dimensions</td>
<td>Sorts dimensions in ascending or descending order</td>
</tr>
<tr>
<td>Filter Dimensions</td>
<td>Filters dimensions by name, type, or owner</td>
</tr>
</tbody>
</table>

Data Synchronization, Library Job Console, and Application Library

<table>
<thead>
<tr>
<th>Command</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Icons</td>
<td>Displays icons and the name of the artifact</td>
</tr>
<tr>
<td>Details</td>
<td>Displays the artifact name, description, and additional details</td>
</tr>
<tr>
<td>Refresh</td>
<td>Refreshes the display</td>
</tr>
<tr>
<td>Filter</td>
<td>Displays the Filter dialog box, enabling you to filter what you see</td>
</tr>
<tr>
<td>Clear Filter Criteria</td>
<td>Clears an applied filter</td>
</tr>
<tr>
<td>Command</td>
<td>Description</td>
</tr>
<tr>
<td>---------------------</td>
<td>-----------------------------------------------------------------------------</td>
</tr>
<tr>
<td>Orphaned Applications</td>
<td>Display the Orphaned Applications dialog box, enabling you to troubleshoot orphaned applications. Displays in the Application Library only.</td>
</tr>
<tr>
<td>Search</td>
<td>Displays the Find Applications dialog box. Displays in the Application Library only.</td>
</tr>
</tbody>
</table>

1Displays in Data Synchronization and Application Library only.

**Administration Menu**

The Administration menu is displayed when you access Performance Management Architect modules (Dimension Library, Application Library, Library Job Console, or Data Synchronization).

**Table 7** Administration Menu

<table>
<thead>
<tr>
<th>Command</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Manage Taskflows</td>
<td>Automates tasks that you commonly perform</td>
</tr>
<tr>
<td>View Taskflow Status</td>
<td>Displays the status of any automated tasks</td>
</tr>
</tbody>
</table>

**Help Menu**

You use the Help menu to access Performance Management Architect online help, Oracle support, the Oracle Technology Network, Oracle website, and information about Performance Management Architect.

**Transforming Classic Applications into Performance Management Architect**

To use Performance Management Architect for application administration, you can transform applications being managed using Financial Management Classic Administration, Planning Classic Administration, or Essbase.

For information on Classic Application Administration features (for applications not being managed using Performance Management Architect), see the *Oracle Hyperion Planning Administrator’s Guide* or the *Oracle Hyperion Financial Management Administrator’s Guide*.

**Note:** Applications must be migrated to Release 11.1.2.1 before they are moved.

If you transform an application created in Classic Application Administration to Performance Management Architect, the application cannot return to Classic Application Administration.
Tasks To Complete Before You Move Applications

- Before transforming a Classic Planning application to Performance Management Architect, remove any spaces in the names of attribute dimensions. For example, rename an attribute called Extra Small to ExtraSmall.

- Before a Classic Planning application is moved to Performance Management Architect, all users must be logged off the application. You can notify users by sending a broadcast message. See the *Oracle Hyperion Planning Administrator’s Guide*.

- To enable support for Performance Management Architect applications, the Financial Management Application Server must have IIS installed. However, the ASP components need not be enabled.

To transform Classic applications to Performance Management Architect:

1. In EPM Workspace, select **Navigate**, then **Administer**, and then **Transform Classic to EPM Architect**.
2. Review the Welcome screen, and then click **Next**.
   The Application Summary page displays the applications to which the user has access to transform. (This information is provided from the Shared Services server. If an application cannot be transformed, an explanation is provided.)
3. Click **Next**.
4. On the Application Selection page, add the application(s) that you want to transform to the **Application to Transform** list and then click **Next**.
5. Review the summary of applications to transform, and then click **Next** to execute the transformation.
6. Click **Finish**.
   To check on the progress of the transformation, navigate to the Library Job Console. (Navigate, then Administer, and then Library Job Console). If the transformation of applications to Performance Management Architect is not successful, you can view detailed information about the transformation in the Import Job log in the Library Job Console—Attachments area. See “Working with the Job Console” on page 285.
7. Open the Application Library to confirm that the applications are in Performance Management Architect.
8. Navigate to Dimension Library, and review the dimensions that were added to Performance Management Architect.
9. Open the application.

**Note:** When a Classic Planning application is transformed to Performance Management Architect, the first occurrence of a member in Planning is shared, after the transformation, the member remains shared, and the hierarchies in Planning and Performance Management Architect are identical.
In This Chapter

Performance Management Architect Services ................................................... 41
Starting and Stopping Performance Management Architect Dimension Server ........ 42
Starting and Stopping Performance Management Architect Application Server .......... 42
Starting and Stopping Performance Management Architect Data Synchronizer Server ....... 43

Performance Management Architect has three servers that must be running:

- Hyperion EPMA Server
- Hyperion EPMA Web tier - Web Application
- Hyperion EPMA Data Synchronizer - Web Application

Before you start a server, you must ensure that Shared Services, EPM Workspace, IIS, and the Hyperion EPMA Server service is running.

Performance Management Architect Services

One service and one console application run in Performance Management Architect and they both run on a single server.

Table 8  Performance Management Architect Service and Console Application

<table>
<thead>
<tr>
<th>Performance Management Architect Application</th>
<th>Description</th>
</tr>
</thead>
</table>
| Hyperion EPMA Server  
EPMA_Server.exe  | Handles all processing of reading and writing of dimension and application data in Performance Management Architect. Also handles all processing for the Library Job Console. Hosts a proxy layer that fields server requests that come in through an API exposed through Web Services. |
| NetJNIBridge Windows console application  
HyS9BPMA_NetJNIBridge.exe  | Serves as a bridge between Performance Management Architect server applications and the Shared Services (HSS) Java application. |

Note: Do not start or stop the console application (HyS9BPMA_NetJNIBridge.exe) manually since it is started and stopped by the service (EPMA_Server.exe).
Note: If you change the Performance Management Architect database user or password, you must rerun the Configure Database task and enter the Performance Management Architect database user and password. After reconfiguring, restart the Hyperion EPMA Server service.

Starting and Stopping Performance Management Architect Dimension Server

You can start and stop the Performance Management Architect Dimension server from the Start menu or through the Services panel.

➢ To start or stop the Dimension server, perform an action:
  • From the Services panel, start Hyperion EPMA Server.
  • Run this startup script: <EPM_ORACLE_INSTANCE>/bin/startEPMAServer.bat.

If you experience problems with starting the service for the Dimension server (Hyperion EPMA Server), you can change the timeout setting. The default timeout setting for startup of the Dimension server is 180 seconds.

➢ To increase the timeout setting for startup of Dimension server:
  1. Open BPMA_Server_Config.xml in <EPM_ORACLE_INSTANCE>\config\EPMA.
  2. Search for DimensionServerStartupTimeout, and change the value of the timeout (in seconds).

For information on all BPMA_Server_Config.xml settings, see Appendix D, “Configuration Settings in BPMA_Server_Config.xml.”

Starting and Stopping Performance Management Architect Application Server

You can start and stop the Performance Management Architect Application Server from the Services panel, the Start menu, or with a command. The location of the command depends on which Java application server you are using.

➢ To start or stop the EPM Architect application server, perform an action:
  • From the Services panel, start Hyperion EPM Architect Web Application.
  • Select Start, then Programs, then Oracle EPM System, then Foundation Services, then Performance Management Architect, and then Start (Stop) Performance Management Architect Web.

On the computer hosting your Java application server, locate the start or stop server command.
Table 9  Location Example for StartEPMAWebServer and StopEPMAWebServer Commands

<table>
<thead>
<tr>
<th>If you are using</th>
<th>Go to the following directory (for example)</th>
<th>Execute this command</th>
</tr>
</thead>
<tbody>
<tr>
<td>● WebLogic 10.3</td>
<td>&lt;drive letter&gt;:&lt;EPM_ORACLE_INSTANCE&gt; deployments&lt;AppServerNameVersion&gt;\bin</td>
<td>Double-click startEPMAWebServer.bat or stopEPMAWebServer.bat</td>
</tr>
<tr>
<td>● WebSphere 7.0.0.19</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Note: You can configure the web services connection timeout setting in the AWBConfig.properties file. The default is 10 minutes: WEBSERVICES_CONNECTION_TIMEOUT_MINUTES=10.

Starting and Stopping Performance Management Architect Data Synchronizer Server

The Data Synchronizer server must be started to use data movement capabilities of Performance Management Architect. However, it is not needed to log in to EPM Workspace.

You can start and stop the Performance Management Architect Data Synchronizer server from the Services panel, the Start menu, or with a command. The location of the command depends on which Java application server you are using.

To start or stop the EPM Architect Data Synchronizer server, perform an action:

● From the Services panel, start Hyperion EPM Architect Data Synchronizer – Web Application.

● Select Start, then Programs, then Oracle EPM System, Foundation Services, then Performance Management Architect, and then Start (Stop) Data Synchronizer.

● On the computer hosting your Java application server, locate the start or stop server command.

Table 10  Location Example for startEpmaDataSync and stopEpmaDataSync Commands

<table>
<thead>
<tr>
<th>If you are using</th>
<th>Go to the following directory (for example)</th>
<th>Execute this command</th>
</tr>
</thead>
<tbody>
<tr>
<td>● WebLogic 10.3</td>
<td>&lt;drive letter&gt;:&lt;EPM_ORACLE_INSTANCE&gt; deployments&lt;AppServerNameVersion&gt;\bin</td>
<td>Double-click startEpmaDataSync.bat or stopEpmaDataSync.bat</td>
</tr>
<tr>
<td>● WebSphere 7.0.0.19</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Part II
Managing Application Metadata

In Managing Application Metadata:

- Importing Metadata
- Working with Dimensions
- Working with Members
- Building Applications
- Managing Applications
The Dimension Library is a central location for Financial Management, Profitability and Cost Management, Essbase, Data Relationship Management, and Planning administrators to view, create, and manage dimensions and hierarchies.

You can import dimension information (metadata) into the Shared Library or into individual applications by: 1) Creating and importing import flat files, 2) Importing metadata from interface tables, or 3) Importing metadata from Data Relationship Management applications.

- For information on preparing to import from flat files, see “Creating Flat Files” on page 49.
- For information on preparing to import from interface tables, see “Using Interface Tables” on page 58.
- For information on preparing to import from Data Relationship Management applications, see the Oracle Data Relationship Management EPM Architect Integration Guide.

**Caution!** To access dimensions in the Dimension Library, you must have the appropriate security credentials. For example, the Dimension Editor security role permits access to all Dimension Library functionality, such as creating, deleting, and changing dimensions and members, creating import profiles, and running transaction logs. Alternatively, dimension level security can also be used to control user access to individual dimensions. See the Oracle Hyperion Enterprise Performance Management System User and Role Security Guide.

The following table describes the dimension types that Performance Management Architect supports. Each dimension type is represented by an icon in the Shared Library.
<table>
<thead>
<tr>
<th>Icon</th>
<th>Type</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td><img src="image" alt="account" /></td>
<td>Account</td>
<td>Chart of account type information, for example, Net Income and Sales, in applications</td>
</tr>
<tr>
<td><img src="image" alt="alias" /></td>
<td>Alias</td>
<td>Defines the set of descriptions or languages for dimension members in Financial Management applications and to create alias tables for Planning, Profitability and Cost Management, and Essbase applications.</td>
</tr>
<tr>
<td><img src="image" alt="allocationtype" /></td>
<td>AllocationType</td>
<td>Stores direct allocations and allocation genealogy. Required for Profitability applications.</td>
</tr>
<tr>
<td><img src="image" alt="attribute" /></td>
<td>Attribute</td>
<td>Classifies members in dimensions in Planning and Essbase applications.</td>
</tr>
<tr>
<td><img src="image" alt="consolidationmethod" /></td>
<td>Consolidation Method</td>
<td>Denotes consolidation behavior for Financial Management applications.</td>
</tr>
<tr>
<td><img src="image" alt="country" /></td>
<td>Country</td>
<td>Tracks business activities in multiple countries in Essbase applications. If you tag dimensions as Country, you can enter the currency name in the Currency text box. <strong>Note:</strong> This dimension type does not apply to aggregate storage outlines.</td>
</tr>
<tr>
<td><img src="image" alt="currency" /></td>
<td>Currency</td>
<td>Currencies in multi-currency applications</td>
</tr>
<tr>
<td><img src="image" alt="entity" /></td>
<td>Entity</td>
<td>Entity or organizational structures in applications</td>
</tr>
<tr>
<td><img src="image" alt="generic" /></td>
<td>Generic</td>
<td>Custom dimensions that can be used in all application types</td>
</tr>
<tr>
<td><img src="image" alt="icp" /></td>
<td>ICP</td>
<td>Specifies intercompany information, such as ICP Entities, in Financial Management applications. When you include an ICP dimension in a Consolidation application, it is automatically populated with members from the Entity dimension in that application. These members cannot be edited or changed. This dimension must be included in Consolidation applications.</td>
</tr>
<tr>
<td><img src="image" alt="measures" /></td>
<td>Measures</td>
<td>Required to build, validate and calculate a Profitability and Cost Management model</td>
</tr>
<tr>
<td><img src="image" alt="period" /></td>
<td>Period</td>
<td>The period structure for applications, for example month, quarter, and half year</td>
</tr>
<tr>
<td><img src="image" alt="scenario" /></td>
<td>Scenario</td>
<td>Scenarios for applications, for example Actual and Budget</td>
</tr>
<tr>
<td><img src="image" alt="securityclass" /></td>
<td>Security Class</td>
<td>Security class information in Financial Management applications</td>
</tr>
<tr>
<td><img src="image" alt="smartlist" /></td>
<td>Smart List</td>
<td>Smart List information in Planning applications</td>
</tr>
<tr>
<td><img src="image" alt="time" /></td>
<td>Time</td>
<td>Specifies how often you collect and update data in Essbase applications. You can tag only one dimension in an Essbase outline as Time.</td>
</tr>
<tr>
<td><img src="image" alt="uda" /></td>
<td>UDA</td>
<td>Specifies user-defined attribute (UDA) information.</td>
</tr>
<tr>
<td>Icon</td>
<td>Type</td>
<td>Description</td>
</tr>
<tr>
<td>------</td>
<td>------</td>
<td>-------------</td>
</tr>
<tr>
<td>![Icon](78x693 to 96x710)</td>
<td>Value</td>
<td>Corresponds to the Value dimension in Financial Management applications. When you include a Value dimension in a Consolidation application, its currency triplet members are automatically generated based on the members of the Currency dimension in that application. These members cannot be edited or changed. This dimension must be included in Consolidation applications.</td>
</tr>
<tr>
<td>![Icon](78x638 to 96x654)</td>
<td>Version</td>
<td>Version information, such as Version 1 and Final Version in Planning applications</td>
</tr>
<tr>
<td>![Icon](78x607 to 96x624)</td>
<td>View</td>
<td>Corresponds to the View dimension in Financial Management applications. In addition to the system Periodic member this dimension should contain members that correspond to each level in the Period dimension in a particular application. For example, if the Period dimension contains months, quarters and half years, the View dimension should contain the following members: Periodic, MTD, QTD, HTD, YTD.</td>
</tr>
<tr>
<td>![Icon](78x552 to 96x568)</td>
<td>Year</td>
<td>Years used in applications</td>
</tr>
</tbody>
</table>

Before you create applications, you need to define some of the dimensions that will be contained in these applications.

To access the Dimension Library, select **Navigate, Administer, Dimension Library**.

## Creating Flat Files

You can import dimensions into the Dimension Library by creating a flat file. Before you create a flat file to import dimensions, see:

- “Flat File Encoding” on page 49
- “Flat File Syntax” on page 49
- “Special Characters in Flat Files” on page 50

### Flat File Encoding

Performance Management Architect import supports text files in the ADS format with the following encodings: UTF-8, UTF-16LE, UTF-16BE, UTF-32LE, UTF-32BE. In addition, ASCII encoded files can also be read but are limited to English characters. The files should contain Byte Order Mark to determine which encoding the file has been saved in. If Byte Order Mark is absent, the default is UTF-8.

### Flat File Syntax

Flat files contain the following sections, which can be arranged in any order.

- Dimensions—See “Dimensions Section” on page 50.
- Dimension Associations—See “Dimension Associations Section” on page 52.
- Members—See “Members Section” on page 52.
- Hierarchies—See “Hierarchies Section” on page 54.
Special Characters in Flat Files

Exclamation points (!) indicate the beginning of sections. Exclamation points must be followed by valid section names (for example, Dimensions or DimensionAssociations).

Lines that start with apostrophes (’) define the columns for each section. Each section header line must be followed by a column header/definition line. For example:

!Section=Dimensions

| 'Name | DimensionClass | DimensionAlias | DimensionStorageType | AllowDuplicatesInDimension | DimensionSolveOrder | BSOMemberFormulaDuplicate | MemberSolveOrderDuplicate | SkipValueDuplicate | TimeBalanceDuplicate | UDADuplicate | TwoPassCalcDuplicate | VarianceReportingDuplicate | DimDataStorage | DimValidForCapex | DimValidForPlan1 | DimValidForPlan2 | DimValidForPlan3 | DimValidForWorkforce | EnumOrder1 | EnumOrder2 | EnumOrder3 | EnumOrderCapex | EnumOrderWF | AttributeType | CurrencyNameDuplicate | customDimensionId | ApplySecurity | DisplayOrder | GridMissingLabelType | Increment | SmartListLabel | StartValue |

True and false values are represented as Y for true and N for false.

Semicolons (;), commas (, ), pipes (|), spaces, and tabs are valid field/column delimiters.

**Note:** You can only use one delimiter per file. For example, you cannot delimit a file with both pipes (|) and semicolons (;).

Underscores (_) can be used in front of a line break to escape the line break and allow a record to span multiple lines in the flat file. For example, you may want to use line breaks to format member formulas since member formulas can be extremely long.

**Note:** Import files cannot contain property names with spaces. For example, when specifying a dimension association where the associated dimension is an attribute dimension, the property name specified in the dimension association section must not contain spaces. In addition, dimension names cannot begin with an exclamation point (!).

Dimensions Section

The Dimensions section defines the dimensions to be imported. Dimensions defined in this section that do not already exist in the Shared Library or target application are created during import execution. Dimensions that exist in the Shared Library or target application have the property values defined in this section updated during import execution. In this section, you can define a subset or a full set of all the dimension level properties supported in Performance Management Architect. The property names used in the column header line need not precisely match the dimension property names in Performance Management Architect. You can map the property names in the file to their corresponding Performance Management Architect property names in the import profile.
Note: This section is required and must always be present in a flat file.

Dimension properties are defined in product-specific chapters:

- Chapter 11, “Working with Financial Management Dimensions”
- Chapter 12, “Working with Planning Dimensions”
- Chapter 14, “Working with Essbase Properties”

Syntax

!Section=Dimensions

'Name;DimensionClass;Dimension_Property1;... ;Dimension_PropertyN

<table>
<thead>
<tr>
<th>Parameter</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Name</td>
<td>A dimension name, for example, Currency. This parameter is required.</td>
</tr>
<tr>
<td>Note:</td>
<td>Dimension names cannot begin with an exclamation point (!).</td>
</tr>
<tr>
<td>DimensionClass</td>
<td>The dimension type. For example, Generic. This parameter is required for new dimensions.</td>
</tr>
<tr>
<td>Dimension_PropertyX</td>
<td>Dimension level property name.</td>
</tr>
</tbody>
</table>

Example

!Section=Dimensions

'Name;DimensionClass;DimensionAlias
MyCurrency;Currency;Currencies
MyScenario;Scenario;Scenarios
MyEntity;Entity;Entities
MyAccount;Account;Accounts

Example (Importing Dimension Readers and Dimension Writers Properties)

You can use the underscore character (_) to add line breaks when loading dimension writer and dimension reader properties, since the lines can be extremely long. Example of dimension reader properties:

Group1@Native Directory_
PowerUsers@Native Directory_
JSmith@EdenCorp

Note: Dimension names should follow standard naming practices. See “Dimension Naming Restrictions” on page 340 and “Naming Restrictions for Dimensions, Members, and Aliases” on page 365. In addition, Smart List dimension names cannot include special characters, hyphens, or spaces.
Dimension Associations Section

This section contains information about the associations between dimensions, for example an association between the account dimension and the security class dimension.

Note: If member properties refer to another dimension, this section is required for new dimensions. It is optional for dimensions if using merge or replace mode.

Syntax

!Section=DimensionAssociations

'BaseDimension;Property;TargetDimension

<table>
<thead>
<tr>
<th>Parameter</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>BaseDimension</td>
<td>Name of the base dimension whose member property will be associated with another dimension. This is a required column.</td>
</tr>
<tr>
<td>Property</td>
<td>The name of the associated property, for example 'Alias.' This is a required column.</td>
</tr>
<tr>
<td>TargetDimension</td>
<td>Name of the dimension with which the associated property is associated. This is a required column.</td>
</tr>
</tbody>
</table>

Example

!Section=DimensionAssociations

'BaseDimension;Property;TargetDimension
Currency;SecurityClass;MySecurityClassDimension
Scenario;Alias;MyAliasDimension
Account;UDA;MyUDADimension

Members Section

This section defines dimension members and their member properties. Relationship member properties cannot be defined in this section since they require a parent child relationship. For example, 'AggregationWeight' cannot be defined in the Members section.

Dimension properties are defined in product-specific chapters:

- Chapter 11, “Working with Financial Management Dimensions”
- Chapter 12, “Working with Planning Dimensions”
- Chapter 14, “Working with Essbase Properties”

Note: This section is optional. Member property values can also be defined in the Hierarchies and PropertyArray sections of the flat file.

Syntax
<table>
<thead>
<tr>
<th>Parameter</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Dimension_Name</td>
<td>Name of dimension whose members are being defined.</td>
</tr>
<tr>
<td>Name</td>
<td>A member name, for example Euro. This is a required column.</td>
</tr>
<tr>
<td>Member_PropertyX</td>
<td>Member-level property name for the respective dimension type. See the product-specific chapters for property information.</td>
</tr>
</tbody>
</table>

**Example**

```plaintext
!Members=Currency
'Name;Scale;TranslationOperator;DisplayInICT
EURO;Whole;;y
GBR;Whole;;
USD;Whole;;

!Members=Scenario
'Name;DefaultFrequency;DefaultView;ZeroViewForNonAdj;_
ZeroViewForAdjConsolidateYTD;MaximumReviewLevel;UsesLineItems;_
Creating Flat Files 3
EnableProcessManagement;SecurityClass;EnableDataAudit;_
DefFreqForICTrans
Actual;MTD;Periodic;Periodic;Periodic;N;10;Y;N;Y;Y;MTD
Budget;MTD;Periodic;Periodic;Periodic;N;10;Y;Y;Y;MTD

!Members=Entity
'Name;Currency;AllowAdjs;AllowAdjFromChildren;_
HoldingCompany;SecurityAsPartner;IsICP;SecurityClass
Entity_[None];[None];N;N;;N;
Regional;USD;Y;N;;N;CORPORATE
UnitedStates;USD;Y;N;;N;US

!Members=Account
'Name;ConsolidationAccountType;IsCalculated;_
IsConsolidated;PlugAccount;Custom1TopMember;Custom2TopMember;_
Custom3TopMember;Custom4TopMember;NumDecimalPlaces;_
EnableCustom1Aggr;EnableCustom2Aggr;EnableCustom3Aggr;_
EnableCustom4Aggr;XBLRTags;ICPTopMember;IsICP;UsesLineItems;_
SecurityClass;EnableDataAudit;CalcAttribute
Account_[None];Revenue;N;N;;;0;Y;Y;Y;;;N;N;N;
ExchangeRates;GroupLabel;Y;Y;Y;Y;Y;Y;N;N;N;
Plug;Revenue;N;Y;Y;Y;Y;N;N;N;N;

Example
Example of defining a member formula in the Members section. (Underscores (_) are used to escape line breaks.)

!Members=Planning_Account
'Name|BSOMemberFormula
SpecialAccount|[OpenInputValueBlock]_ [TimeBalanceFormula("Spread_Average")]_ [CloseInputValueBlock]
```
Note: Smart List member names cannot contain special characters, hyphens, or spaces. For additional information, see “Smart List Names” on page 111.

Note: The MemberFormula property has been deprecated. If the flat file uses MemberFormula, a warning is displayed and the values are ignored. You should use the ASOMemberFormula or BSOMemberFormula property instead. ASOMemberFormula is valid for Essbase ASO and Profitability and Cost Management applications. BSOMemberFormula is valid for Essbase BSO, Profitability and Cost Management, and Planning applications.

Hierarchies Section

This section defines the dimension members, their member and relationship properties, and hierarchical/parent-child relationships. This section:

- is required for new dimensions and existing dimensions that use the replace method.
- is optional for existing dimensions that use the merge method.
- controls the order of members under a parent. Members of existing dimensions are reordered during replace-mode import execution if all members under a parent are present in the Hierarchies section.

Syntax

!Hierarchies=Dimension_Name

'Parent;Child;Member-Relationship_Property1;…;Member-Relationship_PropertyN

<table>
<thead>
<tr>
<th>Parameter</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Dimension_Name</td>
<td>Name of dimension whose members are being defined.</td>
</tr>
<tr>
<td>Parent</td>
<td>Name of parent member. This is a required column.</td>
</tr>
<tr>
<td>Child</td>
<td>Name of child member. This is a required column.</td>
</tr>
<tr>
<td>Member-Relationship_PropertyX</td>
<td>Member-level property or member relationship property name for the respective dimension type. See the product-specific chapters for member property information.</td>
</tr>
<tr>
<td>IsPrimary</td>
<td>Specifies whether an instance of a member under a parent is primary or shared. The IsPrimary parameter is optional; however, we strongly recommend that you use it. If left undefined, it defaults to &quot;True&quot;, which assumes that the member is primary. See “Specifying Primary and Shared Instances of a Member using IsPrimary” on page 55.</td>
</tr>
</tbody>
</table>

Example

!Hierarchies=Currency

'Parent;Child
#root;EURO
#root;GBR
#root;USD
Note: The token '#root' is used to refer to the top dimension member as the parent. Alternatively, the dimension name can also be used to refer to the top dimension member as the parent.

Tip: Properties containing multiple values, like Alias and UDA can be defined in the Hierarchies section.

Example

Example of defining the Alias property in the Hierarchies section:

```
!Hierarchies=Entity 
'Parent;Child;DefaultParent;Currency;AllowAdj;AllowAdjFromChildren;HoldingCompany;Alias =English;Alias=French 
#root;Entity_[None];Y;[None];N;N;;Entity None Alias;French None Alias 
#root;Regional;Y;USD;Y;N;;Regional Operations;Operationes Regionale
```

Example

Example of defining the UDA property in the Hierarchies section:

```
!Hierarchies=Plan1Account 
'Parent;Child;UDA1;UDA2;UDA3; 
111092;HSP_NOLINK;Plan1;Plan3 
111093;HSP_NOLINK;Plan3
```

Specifying Primary and Shared Instances of a Member using IsPrimary

In import files, any two members in the same dimension, with the same name, are always treated as separate instances of the same member. If a member has multiple instances in a dimension, the IsPrimary column specifies which instance is primary and which instance(s) are shared. The
IsPrimary column is not required; however, we strongly recommend that you use it. If left undefined, it defaults to “True”, which assumes that the member is primary. If left undefined, a warning is displayed in the Import Results file.

Note: Older import files, that do not use the IsPrimary column, can still be run. However, if the import file does not have the IsPrimary column, it is not possible to create shared members or move members.

**Property Array Section**

This section can be used to define multi-value and single value properties for members of a dimension.


Note: This section is optional.

**Syntax**

```
!PropertyArray=Dimension_Name

' Property; Name; Key; Value;
```

<table>
<thead>
<tr>
<th>Parameter</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Dimension_Name</strong></td>
<td>Name of dimension whose members are being defined.</td>
</tr>
<tr>
<td><strong>Property</strong></td>
<td>Name of the property that will be modified. This is a required column.</td>
</tr>
<tr>
<td><strong>Name</strong></td>
<td>Name of the member whose property will be modified. This is a required column.</td>
</tr>
<tr>
<td><strong>Key</strong></td>
<td>If Property is:</td>
</tr>
<tr>
<td></td>
<td>UDA—A UDA value. To clear UDA values, leave this field blank and enable the “Clear Before Importing” option for UDA in the profile.</td>
</tr>
<tr>
<td></td>
<td>Alias—The alias table name or description name.</td>
</tr>
<tr>
<td></td>
<td>Other—Should always be blank.</td>
</tr>
<tr>
<td><strong>Value</strong></td>
<td>If Property is:</td>
</tr>
<tr>
<td></td>
<td>UDA—Should always be blank.</td>
</tr>
<tr>
<td></td>
<td>Alias—The alias or description corresponding to the value specified in Key. To clear the Alias value for this member and Key, leave this blank and specify the “Clear Before Importing” option for Alias in the import profile.</td>
</tr>
<tr>
<td></td>
<td>Other—Property value.</td>
</tr>
</tbody>
</table>

**Examples**

**Defining Alias Property Values**
Deleting an Alias Value (Value is left blank)

!PropertyArray=Currency
'Property;Name;Key;Value
Alias;EURO;English;European Euro
Alias;EURO;French;
Alias;EURO;German;
Alias;EURO;Italian;
Alias;EURO;Japanese;
Alias;GBR;English;Great Britain Pounds
Alias;GBR;French;
Alias;GBR;German;
Alias;GBR;Italian;
Alias;GBR;Japanese;
Alias;USD;English;United Stated Dollars
Alias;USD;French;
Alias;USD;German;
Alias;USD;Italian;
Alias;USD;Japanese;

Deleting all Alias Values for a Member (Key and Value are left blank)

!PropertyArray=Currency
'Property;Name;Key;Value
Alias;EURO;;

Defining UDA Property Values

!PropertyArray=Account
'Property;Name;Key;Value
UDA;ExchangeRates;UDA1;
UDA;ExchangeRates;UDA2;
UDA;Plug;UDA1;
UDA;Plug;UDA2;

Deleting all UDA values for a member (Key and Value are left blank)

!PropertyArray=Account
'Property;Name;Key;Value
UDA;ExchangeRates;;

Defining Single-Value Property Values

!PropertyArray=Account
'Property;Name;Key;Value
ACCOUNTTYPE|MemberRev|Revenue
ACCOUNTTYPE|MemberExp|Expense

Performance Management Architect supports single value member properties for dimension imports. It allows a member, property, and value to be entered without a key in either the flat file !PropertyArray section or any of the Property Array interface tables and it is treated as a single-value member property assignment as opposed to an array property. In the interface table, the data would look like:
<table>
<thead>
<tr>
<th>Load ID</th>
<th>Property</th>
<th>Name</th>
<th>Key</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>ACCOUNTTYPE</td>
<td>MemberRev</td>
<td></td>
<td>Revenue</td>
</tr>
<tr>
<td>2</td>
<td>ACCOUNTTYPE</td>
<td>MemberExp</td>
<td></td>
<td>Expense</td>
</tr>
</tbody>
</table>

In the flat file, the `!PropertyArray` section would look like:

```
!PropertyArray=Account
!Property|Name|Key|Value
ACCOUNTTYPE|MemberRev||Revenue
ACCOUNTTYPE|MemberExp||Expense
```

The benefit is that if the ACCOUNTTYPE property was not currently part of your imported data, and you want to start assigning it, it is not necessary to add an ACCOUNTTYPE column to your HS_*Member or HS_*Hierarchy tables. In the case of flat file imports, it is not necessary to add an ACCOUNTTYPE column to your generated !Members and !Hierarchies sections.

### Using Interface Tables

Interface tables allow you to import data and metadata from external systems into Performance Management Architect through a relational database.

Importing metadata from interface tables is a two-part process. The first part, which occurs outside of Performance Management Architect, is denoted in the diagram by a dashed line. The second part occurs within Performance Management Architect.
1. Move information from an ERP system or general ledger system into FDMEE.
2. Move information from FDMEE into Performance Management Architect interface tables.
3. Import metadata from the interface tables into Performance Management Architect.
4. Create Financial Management, Profitability and Cost Management, Planning, and Essbase applications that use the imported metadata.

You can configure multiple Performance Management Architect interface table definitions. The database types of Performance Management Architect and the interface tables can differ. For example, the Performance Management Architect database can use SQL Server and the Performance Management Architect interfaces can use Oracle. As a best practice, interface tables should not be configured in the same database tablespace as Performance Management Architect.

Configuring Interface Data Sources

This procedure is required if you want to use interface tables in Performance Management Architect. Interface tables consist of a set of tables and or views that enable the import of metadata and data from external systems into Performance Management Architect. Before importing metadata and data from interface tables, you must configure interface tables in Performance Management Architect. You configure the tables by creating data source links that can be used during profile creation and data synchronization.

See Chapter 3, “Importing Metadata” and Chapter 8, “Synchronizing Data.”

If you plan to use Performance Management Architect with FDMEE, the interface data source must be in the FDMEE database schema. In addition, if using Oracle Hyperion Financial Data Quality Management, Enterprise Edition, you should deselect the option to create interface tables in the procedure below.

To create an interface data source:

1. In EPM Workspace, select Navigate, Administer, Configure Interface Data Source.
2. When the Interface Data Source tab is displayed, click Create a New Data Source or select File, New, Interface Data Source.
3. In the Interface Data Source Wizard, for Database Details, select a database type (Oracle, Microsoft SQL Server, or IBM DB2), and enter the following details about it:
   a. Enter the name and the port number of the server hosting the database. (The defaults display based on the database type.)
   b. Enter the Service Name/SID of the database. This is the name of the database on the server.
   c. Enter the database username and password.
   d. Optional: Enter the Connection URL for the database.
4. If you want to test the connection to the database, click Test.
For Data Source Details, enter the database name to use as an interface data source. You may also enter a description of the data source.

Select Create Tables, and click Finish to create the tables.

After you finish the wizard, the properties of the new data source (for example, its name, description database type, and database server) are displayed on the Interface Data Source tab.

After you complete the configuration, a set of sample tables is created in the database. For a complete list of the sample tables, see “Defining Interface Tables” on page 61.

**Note:** You can review the configuration log (EPM_ORACLE_INSTANCE/diagnostics/logs/config), correct errors, and rerun the wizard.

### Editing Interface Data Sources

You can edit any of the properties of an interface data source, including the name and description of the data source and the database name, server, and user name.

To edit an interface data source:

1. Select Navigate, Administer, Configure Interface Data Source.
2. When the Interface Data Source tab is displayed, right-click the data source you want to edit, and select Edit.
3. In the Interface Data Source Wizard, for Database Details, edit any of the following properties of the data source:
   a. Edit the name and/or port number of the server hosting the database. (The defaults display based on the database type.)
   b. Edit the Service Name/SID of the database. This is the name of the database on the server.
   c. Edit the database username and/or password.
   d. Edit the Connection URL for the database.
4. If you want to test the connection to the database, click Test.
5. For Data Source Details, edit the description of the data source.

**Note:** While editing a data source, the name you gave to the data source when you created it is displayed in read only; you cannot edit the data source name.

6. Select Create Tables, and click Finish to update the tables with your changes.
Note: If you do not select the Create interface tables check box, no tables are created. If you select the check box to create the interface tables, both IM_ (internal) and HS_ (sample) tables will be created. If the tables already exist, you are prompted to delete the existing IM_ and HS_ tables. If you click Yes to delete the existing tables, the new tables are created. However, if you select No, the existing IM_ and HS_ tables are left unchanged.

Note: You may review the configuration log (EPM_ORACLE_INSTANCE/diagnostics/logs/config), correct errors, and rerun the wizard.

After you finish the wizard, the properties of the edited data source (for example, its name, description database type, and database server) are displayed on the Interface Data Source tab. After you complete the configuration, a set of sample tables is created in the database. For a complete list of the sample tables, see “Defining Interface Tables” on page 61.

Deleting Interface Data Sources
Deleting interface data source tables deletes the tables from the database that is configured to the interface datasource.

➢ To delete an interface data source:

1. Select Navigate, Administer, Configure Interface Data Source.

2. When the Interface Data Source tab is displayed, right-click the data source you want to delete, and select Delete.

3. In the Delete Tables dialog, select Delete Tables, and click Yes to delete the tables or No to return to the Interface Data Source tab.

Defining Interface Tables
Interface tables in Performance Management Architect are grouped into two categories: system tables and user-defined tables.

System tables are created when the interface tables are configured. They contain information used by the import module during profile creation and execution.
<table>
<thead>
<tr>
<th>System Table</th>
<th>Description</th>
</tr>
</thead>
</table>
| IM_Load_Info        | The use of this table is optional. It allows for grouping subsets of the records in the IM_ tables. For example, metadata from different sources can be staged into the same interface tables instance, but each source could be identified with its own Load_ID. The IM_Load_Info table can be used to keep track of the different Load_IDs and their corresponding sources.  
  **Note:** During import execution, you can choose to only import metadata tagged with a specific set of Load_IDs. See “Entering Load ID Information When Importing Dimensions” on page 75.  
  Columns are:  
  - i_Load_ID—Number representing the Load_ID.  
  - c_Source_System—Source system this Load_ID represents. This field is optional.  
  - c_User_Last_Updated—This field is optional.  
  - c_Date_Last_Updated—This field is optional.  
  - c_Last_Update_Login—This field is optional.                                                                                                                                                                                                                                                                                                                                                      |
| IM_Dimension        | Contains information about the dimensions to be processed, their types, and references to all the tables/views containing metadata for those dimensions.  
  **Note:** This table is pre-populated with the names of sample dimensions, sample dimension classes, and HS_ sample tables. (1 row per c_Dimension_Name)  
  Columns are:  
  - i_Load_ID—Load_ID tag for this dimension.  
  - c_Dimension_Name—Name of the dimension.  
  - c_Dimension_Class_Name—Dimension type.  
  - c_Member_Table_Name—Name of the table or view that contains the Members information for this dimension. See “Members Section” on page 52. Populating and specifying this table/view is optional.  
  - c_Hierarchy_Table_Name—Name of the table or view that contains the Hierarchy information for this dimension. See “Hierarchies Section” on page 54. This table/view needs to be specified and defined when performing a replace mode import.  
  - c_Property_Array_Table_Name—Name of the table or view that contains the PropertyArray information for this dimension. See “Property Array Section” on page 56. Populating and specifying this table/view is optional.  
  - c_Dim_Property_Table_Name—This table partly corresponds to the !Dimensions section of the flat file, except that the dimension properties are not defined here. See “Dimensions Section” on page 50.                                                                                                                                                      |
| IM_Dimension_Association | This table directly corresponds to the !DimensionAssociation section of the flat file. See “Dimension Associations Section” on page 52.  
  **Note:** The sample table is not pre-populated.  
  Columns are:  
  - i_Load_ID—Load_ID tag for this dimension.  
  - c_Base_Dimension—Name of the base dimension whose member property will be associated with another dimension. This is a required column.  
  - c_Property—The name of the associated property, for example ‘Alias.’ This is a required column.  
  - c_Target_Dimension—Name of the dimension with which the associated property is associated. This is a required column.                                                                                                                                                                                                                   |

User-defined tables or views can be used to represent the Members, Hierarchies, PropertyArray, and dimension property content for a dimension. Both tables and views can be used as long as they are correctly referenced in the IM_Dimension table. The sample tables follow the naming
convention, **HS_Dimension** Section, where *Dimension* represents the dimension name, such as *HS_Accounts* _Hierarchy*.

**Note:** The table names in the following table are samples and any names can be used for user-defined tables or views.

<table>
<thead>
<tr>
<th>System Table</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>HS_Dimension_</strong> Member</td>
<td>This table directly corresponds to the !Member section of the flat file. See &quot;Members Section&quot; on page 52.</td>
</tr>
</tbody>
</table>
| **HS_Dimension_** Hierarchy | This table directly corresponds to the !Hierarchies section of the flat file. See "Hierarchies Section" on page 54. You can specify an optional SortOrder column. If present, Performance Management Architect uses the values defined to determine the row order when it retrieves the children of a parent. Both Alias and UDA properties can be specified in the HS_Dimension_Hierarchy table even though the sample tables do not have columns for these properties. You can add columns for the Alias and UDA properties in the sample tables if desired. For example:  

**For an Oracle database:**

```sql
ALTER TABLE HS_Account_Hierarchy
  ADD "Alias=English" NVARCHAR2(255);/
ALTER TABLE HS_Account_Hierarchy
  ADD "Alias=French" NVARCHAR2(255);/
```

**For a SQL Server database:**

```sql
ALTER TABLE HS_Account_Hierarchy
  ADD "Alias=English" nvarchar(255)GO
ALTER TABLE HS_Account_Hierarchy
  ADD "Alias=French" nvarchar(255)GO
```

**For an IBM DB2 database:**

```sql
ALTER TABLE HS_Account_Hierarchy
  ADD "Alias=English" VARCHAR(255);
ALTER TABLE HS_Account_Hierarchy
  ADD "Alias=French" VARCHAR(255);
```

An equal sign [=] the column name can be used to represent each Alias dimension member as a separate column. |
| **HS_Dimension_** PropertyArray | This table directly corresponds to the !PropertyArray section of the flat file. See "Property Array Section" on page 56. |
| **HS_Dimension_** Property | This table directly corresponds to the !Dimension section of the flat file. See "Dimensions Section" on page 50. |

**Note:** The following sample tables are created when creating the interface table instance. They can be replaced with user-created tables. These tables are not pre-populated with actual data.
If any import interface data table (dimension, hierarchy, member, or property array data) contains a `SortOrder` column, the data in that table will be loaded into the import engine in that order. The `SortOrder` column must be an integer data type and the data will be loaded in ascending order. If the `SortOrder` column data type is not an integer, the import engine ignores the column, does not add an ORDER BY clause to query, and generates a warning in the import results.

<table>
<thead>
<tr>
<th>Sample Tables</th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>HS_Account_Member</td>
<td>HS_Data_Sales</td>
<td>HS_SmartList_Property</td>
</tr>
<tr>
<td>HS_Account_Hierarchy</td>
<td>HS_Entity_Hierarchy</td>
<td>HS_SmartList_PropertyArray</td>
</tr>
<tr>
<td>HS_Account_Property</td>
<td>HS_Entity_Member</td>
<td>HS_Time_Hierarchy</td>
</tr>
<tr>
<td>HS_Account_PropertyArray</td>
<td>HS_Entity_Property</td>
<td>HS_Time_Member</td>
</tr>
<tr>
<td>HS_Alias_Hierarchy</td>
<td>HS_Generic_Hierarchy</td>
<td>HS_Time_Price</td>
</tr>
<tr>
<td>HS_Alias_Member</td>
<td>HS_Generic_Member</td>
<td>HS_Time_PriceArray</td>
</tr>
<tr>
<td>HS_Alias_Property</td>
<td>HS_Generic_PropertyArray</td>
<td>HS_UDA_Hierarchy</td>
</tr>
<tr>
<td>HS_Attribute_Hierarchy</td>
<td>HS_Generic_Property</td>
<td>HS_UDA_Member</td>
</tr>
<tr>
<td>HS_Attribute_Member</td>
<td>HS_Generic_PropertyArray</td>
<td>HS_UDA_Property</td>
</tr>
<tr>
<td>HS_Attribute_Property</td>
<td>HS_ICP_Hierarchy</td>
<td>HS_Value_Hierarchy</td>
</tr>
<tr>
<td>HS_Attribute_PropertyArray</td>
<td>HS_ICP_Member</td>
<td>HS_Value_Member</td>
</tr>
<tr>
<td>HS_ConsolidationMethod_Hierarchy</td>
<td>HS_ICP_Property</td>
<td>HS_Value_Property</td>
</tr>
<tr>
<td>HS_ConsolidationMethod_Member</td>
<td>HS_ICP_PropertyArray</td>
<td>HS_Value_PropertyArray</td>
</tr>
<tr>
<td>HS_ConsolidationMethod_Property</td>
<td>HS_Period_Hierarchy</td>
<td>HS_Version_Hierarchy</td>
</tr>
<tr>
<td>HS_ConsolidationMethod_PropertyArray</td>
<td>HS_Period_Member</td>
<td>HS_Version_Member</td>
</tr>
<tr>
<td>HS_Country_Hierarchy</td>
<td>HS_Period_PropertyArray</td>
<td>HS_Version_Property</td>
</tr>
<tr>
<td>HS_Country_Member</td>
<td>HS_Period_Property</td>
<td>HS_Version_PropertyArray</td>
</tr>
<tr>
<td>HS_Country_PropertyArray</td>
<td>HS_Period_Property</td>
<td>HS_View_Hierarchy</td>
</tr>
<tr>
<td>HS_Country_Property</td>
<td>HS_Period_PropertyArray</td>
<td>HS_View_Member</td>
</tr>
<tr>
<td>HS_Country_PropertyArray</td>
<td>HS_Period_Property</td>
<td>HS_View_Property</td>
</tr>
<tr>
<td>HS_Currency_Hierarchy</td>
<td>HS_Scenario_Hierarchy</td>
<td>HS_View_PropertyArray</td>
</tr>
<tr>
<td>HS_Currency_Member</td>
<td>HS_Scenario_Member</td>
<td>HS_View_PropertyArray</td>
</tr>
<tr>
<td>HS_Currency_Property</td>
<td>HS_Scenario_PropertyArray</td>
<td>HS_Year_Hierarchy</td>
</tr>
<tr>
<td>HS_Currency_PropertyArray</td>
<td>HS_SecurityClass_Hierarchy</td>
<td>HS_Year_Member</td>
</tr>
<tr>
<td>HS_CapExTemplate</td>
<td>HS_SecurityClass_Member</td>
<td>HS_Year_Property</td>
</tr>
<tr>
<td>HS_Data_CapExTemplate</td>
<td>HS_SecurityClass_PropertyArray</td>
<td>HS_Year_PropertyArray</td>
</tr>
<tr>
<td>HS_Data_Consolidation</td>
<td>HS_SecurityClass_Property</td>
<td>HS_SmartList_Hierarchy</td>
</tr>
<tr>
<td>HS_SecurityClass_Hierarchy</td>
<td>HS_SmartList_Member</td>
<td>HS_SmartList_Member</td>
</tr>
</tbody>
</table>

In addition to the dimension interface tables created by the template script, you can add interface tables for additional dimensions. For example, the template script contains one set of tables for the Entity dimension. You can add more Entity dimensions as needed. For each dimension added to the interface tables, you must also include the dimension in the IM_Dimension system table so that the dimension is available during profile creation. You can find the scripts for creating
The scripts are named for each database type: Oracle_Create_Interface_Tables.sql, DB2_Create_Interface_Tables.sql, and SQL_Server_Create_Interface_Tables.sql.

**Clearing Interface Tables**

Options for the interface tables area:

- All
- Load ID
- Older Than—You can select the number of years, months, weeks, and days.
- Date Range

To clear interface tables:

1. In the Dimension Library, select **File**, **Import**, **Clear Interface Area**.

2. Select the data source.

3. Select one of the options for the type of data source load information to clear.

   You can enter multiple Load IDs separated by comma or can search for load IDs by clicking ![Search](image)

4. Click **Clear**.

5. Click **Yes** to confirm.

6. Click **OK** at the success message.
Creating Import Profiles

Before importing dimensions into the Dimension Library or an application, you must create an import profile. Profiles include important information about the dimensions to be imported such as new dimensions, whether to merge or replace existing dimensions, and dimension properties.

You can import, edit, view, and delete import profiles. See “Managing Import Profiles” on page 74.

To create an import profile:

1. From the Dimension Library, select File, Import, Create Profile.
2. Enter a profile name.
3. From Import Type, select one of these import types:
   - Flat File: to import a text file
   - Interface tables: to import data from a database
   - Data Relationship Management: to import dimensions from Data Relationship Management. For information on preparing metadata for export from Data Relationship Management, see the Oracle Data Relationship Management Administrator’s Guide
4. Optional: Enter a description for the profile.
5. If you want to import into the Dimension Library, select Shared Library, otherwise select an existing application.

The Application list includes Shared Library and all existing applications that you have security access to in the Application Library.

6. If you selected Flat File or Interface Tables as the Import Type, do one of the following:
   - If you selected Flat File in Step 3, click Browse, browse to find the file, and click Upload.

  Note: Performance Management Architect import supports text files in the ADS format with the following encodings: UTF-8, UTF-16LE, UTF-16BE, UTF-32LE, UTF-32BE. In addition, ASCII encoded files can also be read but are limited to English characters.
If you selected Interface Table in Step 3, from Data Source, select the database to use for this profile.

7 Click OK.

8 Click Next.

- If you are importing from a flat file or from a Data Relationship Management application, now you will enter the file or application properties, respectively, as described in “Entering Properties” on page 67.

- If you are importing from an interface table, now you will map dimensions, as described in “Mapping Dimensions” on page 68.

**Entering Properties**

➢ To enter properties:

1 Do one of the following, depending on whether you are entering properties for a flat file or for a Data Relationship Management application.
If you are entering properties for a flat file:

a. In File Properties, select a column delimiter.
   You can select semicolon (;), comma (,), pipeline (|), space, or tab. Semicolon is the default.

   **Note:** The delimiter you select must be found in the file.

b. **Optional:** To remove double quotes from a string, select Remove Double Quotes on Strings.
   If the flat file contains member formulas, deselect Remove Double Quotes on Strings to prevent quotation marks from being removed.

c. **Optional:** To remove spaces in the load file, select Remove White Space.

d. **Optional:** If you do not want transaction logs to be created, select Suppress Transaction Logs.

If you are entering properties for a Data Relationship Management application:

a. Select the Data Relationship Management application from which to import dimensions. (All Data Relationship Management applications that are registered in Shared Services are listed.)

b. Select the Data Relationship Management version from which to import metadata. (All versions you have access to in the Data Relationship Management application are listed.)

c. Select the Data Relationship Management export profile. (All export profiles for the selected application are listed.)

2 **Optional:** If you do not want transaction logs to be created, select Suppress Transaction Logs.

3 Click Next.

Now you will map the dimensions, as described in “Mapping Dimensions” on page 68.

### Mapping Dimensions

In the Map Dimensions section, use the following methods to specify how to import dimensions from the flat file, interface table or Data Relationship Management application. You can map dimensions by performing an automatic mapping or manual mapping.

- **To map dimensions:**
  
  1 **To create new dimensions from the source, select Create Dimensions for the non-mapped dimensions with the source dimension name.** For any dimension that is unmapped (that is, any dimension that is not automatically or manually mapped), the name of the dimension in the flat file, interface table, or Data Relationship Management application is the name used to create the new dimension.

     When you select “Create dimensions for the non-mapped dimensions...”, the Shared Library or application column is automatically populated.
2 If a dimension in the flat file, interface table, or Data Relationship Management application exists in the Shared Library or application, automatically map the dimensions and select to merge the imported dimensions into the target dimension or replace the target dimensions with the imported dimension.

3 To manually map the dimensions, in the Shared Library column, create a new dimension or map the imported dimension to another dimension. If mapping to another dimension, merge the imported dimension into the Shared Library dimension or replace the Shared Library dimension with the imported dimension. Perform one of these actions:

- Select the Shared Library dimension to map to the imported dimension.
- Create a dimension:
  a. From the Shared Library or application, select New Dimension.
  b. In the Add New Dimension dialog box, enter the dimension name and optional description, and click OK.
- Optional: Select the Process Type.

**Note:** If the target application contains the shared dimensions, then the Process Type does not display any options.

- **Merge as Primary**—Merge as Primary processes all sections and adds new dimensions, members, relationships, properties and associations that exist in the source, but do not exist in the Shared Library or target application. **No dimensions, members, relationships, properties, or associations are removed.** If a dimension, relationship, member, or property specified in the source exists in the Shared Library or target application it is overwritten with the value specified in the source. (Members are not moved, but overwritten.) Properties not included in the source are unchanged in the Shared Library or target application.

**Note:** If a member has multiple instances in a dimension, the IsPrimary column specifies which instance is primary and which instance(s) are shared. The IsPrimary parameter is optional; however, we strongly recommend that you use it. If left undefined, it defaults to “True”, which assumes that the member is primary. If you do not define the IsPrimary parameter or if there are duplicate members defined as primary, a warning is displayed in the Import Results file.

- **Merge as Move**—This mode only processes members with IsPrimary set to true, and ignores any others. During processing, the first line specifying a primary location for a member is executed, any subsequent lines specifying a different primary location are ignored, and a warning message is displayed.

- **Replace**—All new elements are added and all property updates are made. Then, any members or member relationships that are not specified in the source are deleted from the Shared Library or target application. You can also use replace mode to reorder members under a parent. Properties not included in the source are unchanged in the Shared Library or target application.
This mode does not create new Shared members unless they are defined in the import file (IsPrimary=false). This mode can detect a primary member under a new parent and process it as a move.

**Note:** The Replace option does not display the Reorder Type and Reorder Existing Members options.

4 **Select the Reorder Type.**

- **Merge to Top**—Places new imported child members at the beginning of the child list under their parent.
- **Merge to Bottom**—Places new imported child members at the end of the child list under their parent.

5 **Select Reorder Existing Members.**

Select Reorder Existing Members to resort existing child members under a parent even when those members are not present in the import source. If “Merge to Top” is selected, the first child member in the import source becomes the first child under the parent, all imported child members are sorted to match the order in the import source, and any existing members not in the import source will be pushed to the end of the child list in their existing order. If “Merge to Bottom” is selected, the last child member in the import source becomes the last child under the parent, all imported child members are sorted to match the order in the import source, and any existing members not in the import source will be pushed to the beginning of the child list in their existing order. For detailed examples, see “Reordering Existing Member Examples” on page 70.

6 **Click Next.**

The Dimension Mapping screen is displayed. Now, define the property mapping options, as described in “Dimension Mapping—Property Mapping Options” on page 72.

### Reordering Existing Member Examples

Creating an import that uses “Merge as Primary” or “Merge as Move” mode can affect the ordering of children, depending on the Reorder Type setting. Consider the Entity hierarchy as an example:
Importing the following flat file information in “Merge as Primary” or “Merge as Move” mode can affect the ordering of California’s children, depending on the Reorder Type setting and whether the Reorder Existing Members setting is enabled.

```
!Hierarchies=Entity
'Parent;Child;IsPrimary
#root;Regional;Y
Regional;UnitedStates;Y
UnitedStates;California;Y
California;Foster City;Y
California;Redwood Shores;Y
California;Sunnyvale;Y
```

Notice that the member Santa Clara is not included in the flat file and that a new member Redwood Shores has been added.

If the **Reorder Type** is set to **MergeToTop** and **Reorder Existing** is set to False, California’s children are Redwood Shores, Sunnyvale, Foster City, and Santa Clara, in that order.

If the **Reorder Type** is set to **MergeToTop** and **Reorder Existing** is set to True, California’s children are Foster City, Redwood Shores, Sunnyvale, and Santa Clara, in that order.

If the **Reorder Type** is set to **MergeToBottom** and **Reorder Existing** is set to False, California’s children are Sunnyvale, Foster City, Santa Clara, Redwood Shores, in that order.

If the **Reorder Type** is set to **MergeToBottom** and **Reorder Existing** is set to True, California’s children are Santa Clara, Foster City, Redwood Shores, and Sunnyvale, in that order.
Dimension Mapping—Property Mapping Options

To define the dimension property mapping options:

1. To import dimension properties from the flat file, interface table, or Oracle Data Relationship Management application, select the properties to import in the Shared Library column. You can double-click on a cell in the Shared Library or application column for a drop-down list of available properties.

   Some cells may not display a default property, in this case, you can use the Property Selector dialog box to choose a property.

2. **Optional:** Right-click an empty cell and select **Find Property**.

   The Property Selector dialog box is displayed.

3. Select the property, then click **OK**.

4. **Optional:** Select **Clear Before Importing** or **Allow Overwrites with Blank**.

   If “Clear Before Importing” is selected, values are cleared and match the import source exactly. If not selected, values are merged with existing values, and all existing values remain.

   **Note:** If you select the Clear Before importing check box when you set up some value (for example, 'A') as a member’s UDA property value, modify the primary member UDA property value to a second value (for example, 'B') in an ads file, and change the shared member’s UDA property value to a third value (for example, 'C') and then import the ads file by selecting the Clear Before Importing check box, the UDA property value is updated to 'C' in the primary and in the shared member. In this case, the final value takes precedence during the import.

   If you clear the Clear Before importing check box when you set up some value (for example, 'A') as a member’s UDA property value, modify the primary member UDA property value to a second value (for example, 'B') in an ads file, and change the shared member’s UDA property value to a third value (for example, 'D') and then import the ads file by clearing the Clear Before Importing check box, the UDA property value is updated to A, B, C, and D in the primary and in the shared member. In this case, all property values are merged during the import.
If “Allow Overwrites with Blank” is selected, the value is overwritten even if the source value is empty.

5 Click Finish.

6 Click Yes to import the profile into the Dimension Library.

Note: For interface table import profiles, a Load ID Input dialog box is displayed. You can enter the load IDs, separated by a comma. See “Entering Interface Table Load IDs for Import Profiles” on page 74.

If you click the link to view the job in the Jobs Console, you can view the import results after the job completes. You can click to refresh the import status.

7 When the import is completed, view the import results for warnings or errors.

If you imported dimensions into an application, the attachments area includes a link to a log file, otherwise the link displays the Import Results screen. For information on viewing job attachments, see “Viewing Job Attachments” on page 291. For information on viewing the import results, see “Viewing Import Results” on page 291.

Note: The ImportErrorThreshold setting in the BPMA_server_config.xml file defines the maximum number of combined errors and warnings that can occur before a running import shuts down. The default value is 1000, however you can change the ImportErrorThreshold setting and increase the import error threshold. See Appendix D, “Configuration Settings in BPMA_Server_Config.xml.”
If you imported dimensions into an application, after the import is complete you can view and edit the dimensions in the application. Otherwise, you can view the dimensions in the Shared Library.

**Entering Interface Table Load IDs for Import Profiles**

When importing dimensions and members from interface tables, all dimensions and members are automatically imported. However, there is a i_Load_ID column in the interface tables that can act as a filter when running the import profile. Your database administrator can populate the i_Load_ID column in the database to enable you to filter the dimensions and members imported. In Performance Management Architect, you can enter a load ID when you create an import profile or import dimensions to filter artifacts from the interface tables so you do not load erroneous metadata.

To enter load IDs:

1. After you create an interface table import profile and click Yes to import the dimensions.
2. In the Load ID Input dialog box, enter the load IDs, separated by a comma or click ![select button] to select the load IDs.

**Note:** The i_Load_ID column must be populated in the interface table by the database administrator before you can select them in Performance Management Architect.

3. Click OK.

**Managing Import Profiles**

After you create import profiles, you can import dimensions into the Dimension library, view profile details, and edit and delete profiles.

See the following sections:

- “Importing Dimensions” on page 74
- “Editing Import Profiles” on page 76
- “Viewing Import Profile Details” on page 76
- “Deleting Import Profiles” on page 77

**Importing Dimensions**

To import dimensions:

1. From the Dimension Library, select File, Import, Import Dimensions.
2. Select an import profile.
3. Select the type of import: Flat File, Interface Tables, or Data Relationship Management.
Note: If you select Interface Tables and want to enter a Load ID, see “Entering Load ID Information When Importing Dimensions” on page 75.

4 Perform an action:
   - If you selected Flat File, click Browse to find the file, then click Upload.
   - If you selected Interface Tables, enter the Interface Load IDs or click Select Interface LoadID.
   - If you selected Data Relationship Management, proceed to the next step.

Tip: You can create a new profile or delete a profile using the buttons in the upper right corner of the Import Dimensions dialog box.

5 Click Import.

Entering Load ID Information When Importing Dimensions

When importing dimensions and members from interface tables, all dimensions and members are automatically imported. However, there is an i_Load_ID column in the interface tables that can act as a filter when importing dimensions. Your database administrator can populate the i_Load_ID column in the database to enable you to filter the dimensions and members imported. In Performance Management Architect, you can enter a load ID when you create an import profile or import dimensions to filter artifacts from the interface tables so you do not load erroneous metadata.

Note: The i_Load_ID column must be populated in the interface table by the database administrator before you can select them in Performance Management Architect.

➢ To enter loadID information:

1 In the Import Dimensions, Interface Load ID field, enter the load ID or click.
Tip: To enter multiple Load IDs separate each entry with a comma (,).

The Load ID Selection dialog box is displayed.

2 In the list of available load IDs on the left, select a load ID to add and click ➤.

3 To deselect a load ID from the list of selections, click ◀.

Tip: To select all load IDs, click ➤. To deselect all load IDs from the list of selections, click ◀.

4 Click OK.

Editing Import Profiles

To edit import profiles:

1 Select File, Import, Import Dimensions.

2 Select the type of import: Flat File, Interface Tables, or Data Relationship Management. (Flat File is displayed by default.)

3 Perform an action:
   - If you selected Flat File, click Browse, browse to find the file, and click Upload.
   - If you selected Interface Tables or Data Relationship Management, proceed to the next step.

4 Right-click a profile, and select Edit Profile.

Note: You must upload a flat file to activate the Edit Profile option.

5 Edit the import profile.
   Follow the steps in “Creating Import Profiles” on page 66.

Viewing Import Profile Details

To view import profile details:

1 Select File, Import, Import Dimensions.

2 Select the type of import: Flat File, Interface Tables, or Data Relationship Management. (Flat File is displayed by default.)

3 Right-click a profile, and select View Details.

4 Click the tabs to view profile information, dimensions, or properties.

5 Click Close.
Deleting Import Profiles

To delete import profiles:

2. Select the type of import: Flat File, Interface Tables, or Data Relationship Management. (Flat File is displayed by default.)
3. Right-click a profile, and select Delete Profile.
4. Click Yes to confirm deletion of the profile.
Creating Dimensions

You can manually create dimensions and edit existing dimensions. You can create dimensions in several ways, but only in the Dimension Library.

Note: When creating dimensions in the Dimension Library, you may be able to deviate from product naming rules. However, within product applications, naming rules must be followed. For Planning dimensions, see “Naming Restrictions for Dimensions, Members, and Aliases” on page 365, for Financial Management dimensions, see Chapter 11, “Working with Financial Management Dimensions”, and for Essbase dimensions, see Chapter 14, “Working with Essbase Properties.”
To create a dimension:

1. Select File, New, Dimension.
2. Enter a name and optional description for the dimension.
3. Select the dimension type.

See Table 11, “Dimension Types,” on page 48.

![Add New Dimension dialog box](image)

**Note:** Dimension names cannot begin with an exclamation point (!). You may be able to enter different characters when creating a dimension in the Dimension Library, but when the dimension is brought into an application, the application's naming rules are applied.

4. Click OK.

The dimension is added to the Dimension Library. You can add members to the dimension by right-clicking on the dimension and selecting to create, add, or insert members. See “Creating Members” on page 127.

Each dimension type is represented in the Shared Library with an icon. For a list of Performance Management Architect dimension types, see Table 11, “Dimension Types,” on page 48.

**Note:** You cannot rename dimensions later. If you need to rename a dimension, you must copy the dimension and give the dimension a new name. Then, you can add the new dimension to applications and remove any associations for the old dimension. Then, if necessary you can delete the old unused dimension. However, in Consolidation and Planning applications, you can change the alias, or dimension name, in order to see a different name in the deployed application. See “Setting the Dimension Alias” on page 203.

**Understanding Shared and Local Dimensions**

Performance Management Architect applications can contain dimensions of two different states: shared and local.
Shared Dimensions are created in an area of the Dimension Library called the Shared Library. These dimensions are available to all applications and can be individually linked to one or more applications when included in each application as a shared dimension. Changes made to the dimension in the Shared Library are automatically inherited to every application sharing that dimension. All types of modifications can be made to the dimension within the Shared Library but only certain types of changes can be made to the shared dimension within the application.

Once a dimension has been included in an application as a shared dimension, changes can be applied to the shared dimension within the application to handle exceptions that may only be relevant to that application. These types of changes include:
- Member filters
- Property value overrides

Structural changes for shared dimensions, such as adding or moving members, can only be performed within the Shared Library.

Local Dimensions originate within a single application and can be created directly within the application or as a copy of a dimension from the Shared Library or another dimension in the application. Local dimensions are separate dimensions and do not inherit any changes made to the dimension in the Shared Library.
- The initial copy of the dimension from the Shared Library copies the entire dimension. Any subsequent actions, such as adding new members, are performed within the application.
- If you make changes to the shared dimension that was used to create the local dimension, you have the option to explicitly merge any further changes to the dimension at the application level. See “Converting Local Dimensions to Shared” on page 200.

### Modifying Properties

From the Dimension Library, you can edit these properties:

- Applications
- Dimensions
- Members

Properties are organized into categories:
- System—used to identify characteristics of a member, such as name, description, and if the member is inactive.
- Statistical—used to provide statistical information about a member such as number of children and number of siblings.
- Essbase (ASO)—Essbase Aggregate Storage Option (ASO) applications
- Planning—used for Planning applications
- Essbase (BSO)—Essbase Block Storage Option (BSO) applications
- Consolidation—Financial Management applications
- Profitability—Profitability and Cost Management applications

Dimension property categories are defined in product-specific chapters:
- Chapter 11, “Working with Financial Management Dimensions”
- Chapter 12, “Working with Planning Dimensions”
- Chapter 14, “Working with Essbase Properties”
- Chapter 15, “Working with Statistical and System Properties”

Each chapter describes these properties, their possible and default values, as well as other characteristics that determine how they should be used. Properties can be global or relationship:

- Global Property—The value of global properties is static for all instances of the member in the hierarchy, including shared instances and orphan instances. For example, the Currency value for Entity member “Kansas” is “USD” for both instances of the member “Kansas”, under “United States” and also under “Management”. The value of global properties can be changed at any instance of the member and the change will be reflected for all instances of the member.

- Relationship Property—The value of relationship properties applies to a particular instance of a member in the hierarchy. For example, the value of “Aggregation for Plan 1” for the Entity member “Washington” can be set to “+” when the member is under the parent “United States”, but can be set to “Never” when “Washington” is under “Management”.

Properties for members of dimensions can also be inherited. There are two types of inheritance: relationship inheritance or application inheritance.

- Relationship Inheritance—The default value is obtained from the value of the property for the parent of the member in the dimension. An inherited property can be global or vary by relationship. A global inherited property inherits from the parent of the primary member in the dimension. A relationship inherited property inherits from the parent for each instance of a member since the property value can differ by relationship. An inherited value is only a default value and can be overridden by a stored value for a member. In this situation, a change to the parent for this property would no longer affect the member because the inheritance was overridden.

- Application Inheritance—The default value of a property for a member in a shared dimension in an application is inherited from value of that member in the Shared Library. At the application level, you can override the Shared Library inherited property value with a value local to the application. The inherited values are only default values for the members in the application, so they can also be overridden within the application. Any changes to the dimension in the Shared Library would no longer affect the property for the member once overridden.
Considerations for Working with Planning Dimensions

You create hierarchical relationships within dimensions by creating and organizing members, which are components of dimensions. You can add dimension members individually or using Import Profiles. Dimension names must use the conventions detailed in “Naming Restrictions for Dimensions, Members, and Aliases” on page 365.

Sparse dimensions lack data values for the majority of member combinations, and have a low percentage of available data positions filled. Dense dimensions have a high probability that one or more data points are occupied in every combination of dimensions.

To optimize database performance, designate dimensions as sparse or dense. If a dimension is sparse, Planning calculates only data values that are occupied in each dimension combination. This optimizes performance by decreasing calculation time and lowering disk usage. By default, Planning designates the Account and Period dimensions as dense and other dimensions as sparse.

Dimension hierarchies define structural and mathematical relationships, and consolidations between members in the database. Members of the same level that belong to the same dimension or member are called siblings. Members that belong to a dimension are called children of the dimension. Members that belong to a member are called children of that member.

For important information about applications, see “Properties Applicable to All Planning Dimensions” on page 345 and “Properties Common to Multiple Planning Dimensions” on page 347. Additional considerations include:

- New dimensions created in the Dimension Library do not have any default associations.
- For dimensions loaded from a flat file, the association must be specified in the flat file.
- For applications transformed from Planning to Performance Management Architect, the associations may be assigned.
- It is not necessary to associate a Smart List with a dimension (such as Account or Entity), but Smart Lists are associated in the Smart List property field. Smart Lists should be associated with members in the Shared Library. Any member associated with a Smart List should have its Data Type set to Smart List.

Additional Planning Dimension Features

Additional Essbase features are now supported for Planning dimensions. You can add children and siblings to Scenario, Version, and Period dimensions, and you can use cut, paste, expand, and collapse members in the dimension hierarchies. You can also use shared members for these dimensions, and can set two pass calculations at the root level for all dimensions. For example, you can:

- In Scenario and Version dimensions, create hierarchies and use shared members. If you assign children to bottom-up versions, these versions display as read-only parents on data forms.
- In the Period dimension, create alternate hierarchies and use shared descendants. Data Storage for all time periods can be set to any valid Data Storage value. The consolidation
operator for all scenarios, versions, and time periods (including BegBalance) can be set to any valid consolidation operator. For example, it can be set to + instead of ~ (ignore).

- For attributes, create hierarchies and assign aliases.
- Turn on two pass calculation at the root level, for example, for Account.

**Caution!** Two pass calculation is ignored on any non-Account member not set to dynamic calc. When using this setting, consider the impact on currency conversion scripts.

**Note:** For multi-currency applications, the pre-built currency conversion calc scripts do not function properly if you change data storage to dynamic for any Scenario, Version, Period, or Year member, or for certain dimension roots (such as Entity, Version, Currency, and custom dimensions). When changing data storage, consider the impact on currency conversion scripts.

## Alias Dimensions

Aliases are alternate names, descriptions, languages, or other items that help to define dimensions. You can assign one or more aliases to Planning accounts, currencies, entities, scenarios, periods, versions, years, attribute values, and user-defined dimension members. You can assign aliases to any Financial Management dimension.

There are three elements to an Alias dimension:

- Alias dimension
- Alias members
- Alias property

You create an Alias dimension and add members to it. Enter a description, alternate name, and so on, in the Alias property value field for members of associated dimensions. For example, you create an Alias dimension with members: English, French, and Italian. In the Currency dimension that is associated with this Alias dimension, there are the members AUD, JPY, and USD. Double-click the alias property value for each member and enter a description for English, French, and Italian. For example, the English descriptions might be Australian Dollar, Japanese Yen, and United States Dollar.

In Planning, alias members are stored in alias tables. When creating a Planning application, Essbase creates an empty default alias table in the database outline. If you do not create other alias tables, all aliases are stored in this default table. You cannot delete the default table.

You can create up to thirty-two alias tables for each Planning application, including the default alias table created by Essbase when you create a Planning application. If you add or change aliases or alias tables, you must refresh the application. Changes are not in effect until the database is updated. You can use only alias tables created from within Planning. Alias tables created outside Planning are deleted during application refresh.
You can set up how you want members and their aliases to display in the Dimension Library. You can display just the member name, just the alias, or both. For example, if you have a currency member named AUD with an alias of Australian Dollar, in the Dimension Library you can display just AUD, just Australian Dollar, or AUD-Australian Dollar.

Aliases enable you to create unique identifiers for dimensions and members. For example, Cost Center dimension members may be identified by a number (100, 200, 210, and so on) or by a descriptive alias (Human Resources, Engineering, Sales, and so on). Members may also have aliases for different languages.

The name of the Alias dimension must follow naming requirements of the Hyperion product. For Planning dimensions, see “Naming Restrictions for Dimensions, Members, and Aliases” on page 365. For Financial Management dimensions, see Chapter 11, “Working with Financial Management Dimensions”.

**Note:** You may be able to enter different characters when creating an Alias dimension in the Dimension Library, but when the Alias dimension is brought into an application, the application’s naming rules are applied.

To set up an Alias dimension:

1. **In the Dimension Library, create an Alias dimension, and add members to it.**

   **Note:** When applications are deployed to Planning, child members of the Alias dimension become Alias Tables.

2. **Associate the main dimension, such as Account or Entity, with the Alias dimension.** See “Creating Dimension Associations” on page 88.

3. **Drag the Alias dimension to an application.** (You also need to drag the main dimensions that have associations with the Alias dimension if they do not exist in the application.)

4. **Activate the associations in the application.** See “Viewing Dimension Associations” on page 202.

5. **In the application, select a main dimension member, for example CashFlow, and double-click in the Alias field of the Property Grid.**
6 Click and enter alias names in the alias tables for the member.

7 Click OK.
To view the alias for a member:

1. Select the Alias dimension for the application.
2. In the Property Grid, select the System category.
3. Double-click Default Member, select an Alias table, then click Save.
4. In the Property Grid, select the Planning category.

If a base dimension, such as Entity, has an active association with the Alias dimension, and an entity member has an alias defined for the selected alias table, the alias is displayed in the Alias field in the Planning category.

Tip: In the Dimension Library, select View, Member, Display, Both to display aliases for an application.

User-Defined Attribute Dimensions

User-defined attribute (UDA) dimensions enable you to reuse UDAs that you create for members in multiple dimensions. UDAs are words or phrases used to describe characteristics of members—within calculation scripts, member formulas, and reports so that they return lists of members associated with the specified UDA. For example, if you have a Product dimension with various product members, you could create a UDA dimension called New Products and base certain calculations only on new products.

To create UDA dimensions:

1. In the Dimension Library, select File, New, Dimension.
2. Enter the dimension name and description.
3. Select UDA.
4. Add members to the UDA dimension.

Members are the UDAs that you can choose from when assigning UDAs to a member using the Property Grid. For additional information, see “Working with User-Defined Attributes” on page 144.

Custom Dimensions

When using custom dimensions, you must follow the naming conventions in “Naming Restrictions for Dimensions, Members, and Aliases” on page 365. Ensure that dimension names and aliases are unique. They can contain up to 80 characters, including spaces. Descriptions have up to 255 characters.

You can assign access permissions to members, rearrange the dimension member hierarchy, and share members of the Entity, Account, and custom dimensions. For information about assigning access permissions, see the Oracle Hyperion Planning Administrator’s Guide.
Dimension Associations

Subtopics

- Creating Dimension Associations
- Viewing and Deleting Dimension Associations

Any dimension that references other dimensions requires associations. For example, any dimension which references dimensions such as security class and currency require associations. Because Oracle’s Hyperion products allow for configuration of the application (which dimensions have security applied), dimensions that require associations depend on an application’s configuration.

Creating Dimension Associations

You create dimension associations to assign security classes, currency, and attributes to dimensions and their members. For example, if you associate an entity dimension with the security class and currency dimensions, the associations are inherited by all members of the entity dimension.

You can also create dimension associations in a flat file. See “Dimension Associations Section” on page 52. Existing associations are automatically created and activated when you transform an application from Classic to Performance Management Architect.

Note: It is impossible to create an association from a shared dimension to a local dimension. If you attempt to create this association, this would result in errors in the downstream products.

To create dimension associations:

1. Right-click a dimension, and select Create Association.

   Note: Security Class and Alias dimensions can only be associated with Attribute dimensions.

2. Select Existing Property or New Property.

3. If you selected Existing Property, from the Property drop-down list, select the property.

4. If you selected New Property, enter the name of the new property.

   Note: When you select New Property, you can only create associations with Attribute dimensions.

5. Optional: Enter a description for the association.

6. From Dimension, select the associated dimension.

7. Click OK.
Note: Associations created in the Dimension Library must be activated in the application. See “Viewing Dimension Associations” on page 202.

Viewing and Deleting Dimension Associations

To view and delete dimension associations:

1. In the Dimension Library, right-click a dimension and select View Associations.

2. Optional: To sort columns in the View Dimension Association dialog box, click the column header.

   Tip: To view a list of applications that use the dimension association, right-click the row of the association and select Search.

3. To delete an association, select the association row and click Delete.

   Tip: You can select multiple dimension associations using the [Ctrl] or [Shift] keys.

4. Click Yes to confirm.

5. Click OK.
Copying Dimensions

You can copy dimensions to create a new dimension of the same type. When a dimension is copied, all members and property values are also copied to the new dimension. There is no link defined between the original dimension and the new copied dimension.

You can copy dimensions:

- Within the Shared Library
- Within an application as a local dimension
- From the Shared Library to an application creating a new local dimension
- From an application to the Shared Library for sharing with other applications

To copy dimensions to the Shared Library:

1. Right-click a dimension in the Shared Library and select **Copy Dimension To, Shared Library**.
2. Change the default dimension name and enter a description.
3. Click **OK**.

   The dimension is added to the Shared Library.

To copy a dimension to an application:

1. Right-click a dimension and select **Copy Dimension To, Application**.
2. Modify the dimension name and enter a description.
3. Select the application and click **OK**.

Viewing Application Membership

Application membership indicates which members or dimensions are used in which application. You can use this information to determine the impact of dimension changes.

To view application membership:

1. In the Dimension Library, right-click a dimension or member and select **Application Membership**.
2. Click **Close**.

Working with Named Generations (Essbase (ASO) and Essbase (BSO) Only)

Generations and levels are layers in a hierarchical tree structure that defines database member relationships. Generations are ordered incrementally from the top member of the dimension (generation 1) down to the child members. Levels are ordered from the bottom dimension member (level 0) up to the parent members.
Note: In a dimension that allows duplicate member names, use the unique generation name to identify a layer in the hierarchical tree structure.

You can create your own names for generations and levels in an outline. The name is a word or phrase that describes the generation or level. For example, you might create a generation name called Cities for all cities in the outline. You can define only one name for each generation or level. Once defined, you can view generation and level names in the Property grid for the selected dimension.

Use generation and level names in calculation scripts and report scripts wherever you need to specify either a list of member names or a list of generation or level numbers. For example, you can limit a calculation in a calculation script to the members of a specific generation.

You can create, modify, or delete named generations in Essbase (ASO) and (BSO) applications.

To create, modify, or delete named generations:

1. In the Dimension Library, right-click a dimension or the application name and select Named Generations.
   
   The Named Generations dialog box is displayed.

2. Click \( \text{add} \) to add a named generation. Then, double-click the cell under Generation Name and enter a descriptive name.

   For example, to later publish sales data generated in all North American regions, create a generation called Region.

3. In the Number column, double-click the cell to modify the number automatically provided.

   Note: You cannot change numbers that are associated with DTS members.

4. Perform any of these optional tasks:

   - Click \( \text{undo} \) to remove changes and revert to saved data.
   - Click \( \text{remove} \), to remove a selected generation.
   - Click \( \text{save} \), to save changes and continue to add named generations.

5. Click OK.

**Working with Named Levels (Essbase (ASO) and Essbase (BSO) Only)**

You can define named levels for logically-related named generations, such as the named level, Month, to apply to all generations containing months. Like named generations, named levels enable you to identify the members to use in calculation or report scripts. The numbers you assign to named levels start at 0 for the lowest member in the dimension and increase to the
highest level of the dimension. In the sample shown, levels are numbered as: 0 (Jan, Feb, March), 1 (Q1 and Q2), 2 (2006), and 3 (Year).

You can create, modify, or delete named generations in Essbase (ASO) and (BSO) applications.

To create, modify, or delete named levels:

1. In the Dimension Library, right-click a dimension or the application name and select Named Levels. The Named Levels dialog box is displayed.

2. Click to add a level. Then, double-click the cell under Level Name, and enter a descriptive name. For example, enter Human Resources Office to later assign this to all levels for human resource offices.

   Note: The name must be unique and not shared with members, generations, aliases, and shared aliases.

3. In the Number column, double-click the cell to modify the number automatically provided.

   Note: You cannot change numbers associated with DTS members.

4. Perform any of these optional tasks:
   - Double-click a cell to modify the level name or number.
   - Click to remove any changes and revert to saved data.
   - Click to remove selected levels.
   - Click to save changes and continue to add levels.

5. Click OK.

Organizing Dimensions

You can organize dimensions by creating folders and copying or moving the dimensions into the folders. The following sections provide detailed information on organizing dimensions.

- “Creating Folders” on page 93
- “Adding Dimensions to Folders” on page 93
- “Renaming Folders” on page 94
- “Deleting Folders” on page 94
Creating Folders

To create folders:

1. In the Dimension Library, select File, New, Folder.

   The Create New Folder dialog box is displayed.

2. Enter the name and description, then click OK.

3. Add dimensions to the new folder. See “Adding Dimensions to Folders” on page 93.

Adding Dimensions to Folders

Subtopics

- Copying Dimensions
- Moving Dimensions

Dimensions can exist in more than one location. For example, you can organize dimensions and have the Accounts dimension exist in multiple folders or have the Accounts dimension exist at the highest level and also within a folder. You can use several methods to copy or move dimensions into folders.

Copying Dimensions

To copy dimensions into folders:

1. In the Shared Library, right-click the folder and select Add Dimensions.

   The Add Dimensions to Folder dialog box is displayed.

   Tip: When you use the Add Dimensions to Folder dialog box, the dimensions are copied to the new location. In this instance, dimensions exist in multiple locations.

2. Using the [Ctrl] key, select one or more dimensions in the list.

   Note: If a dimension already exists in a folder, you cannot add a dimension with the same name into the folder.

3. Click OK.

Moving Dimensions

Dragging dimensions moves them from their original location into a folder. To move dimensions, drag the dimensions in the Shared Library to a folder.

Tip: You can use the [Ctrl] key to select multiple dimensions to move.
To move dimensions out of a folder and back to the root of the Shared Library, right-click a dimension in the folder and select **Remove from Folder**. If the dimension exists only in the folder and not in the Shared Library root folder, a confirmation dialog box is displayed. Click **Yes** to confirm.

### Renaming Folders

To rename folders:

1. Right-click a folder, and select **Rename**.
   - The Rename Folder dialog box is displayed.
2. Enter the folder name, then click **OK**.

### Deleting Folders

#### Subtopics

- Deleting Folders Only
- Deleting Folders with Content

You can delete folders that you create in the Shared Library. When deleting folders, you have two options: 1) delete only the folder, or 2) delete the folder and content.

#### Deleting Folders Only

When deleting folders, keep in mind these guidelines:

- Only the folder is deleted
- Dimensions and sub-folders are not deleted and are moved to the root of the Shared Library
- If deleting a sub-folder, only the sub-folder is deleted—dimensions are not deleted, rather they are moved to the root folder

To delete only folders:

1. Right-click a folder and select **Delete, Only Folder**.
   - A confirmation dialog box is displayed.
2. **Click Yes**.
3. **Click OK**.

#### Deleting Folders with Content

When deleting folders with content, keep in mind these guidelines:

- The entire contents are deleted.
The folder, including any sub-folders and dimensions are deleted

If deleting a sub-folder, the sub-folder, including any folders and dimensions are deleted

To delete folders and contents:

1. **Right-click a folder and select** Delete, Folder with Content. A confirmation dialog box is displayed.
2. **Click Yes.**
3. **Click OK.**
   The folder and all dimensions in the folder are deleted.

### Filtering Dimensions

You can filter the dimensions you see in the Dimension Library. Filtering only applies to dimensions, and not folders.

**Note:** If you create a dimension and have a filter applied that does not include the new dimension, the dimension will not display in the Shared Library until you remove the filter.

To filter dimensions:

1. **Click or select** View, Filter Dimensions. The Dimension Filtering dialog box is displayed.
Tip: For optimum performance, it is important to use filters on all dimensions when you are synchronizing data between applications. For information on filtering dimensions for applications, see “Adding Members to Applications” on page 150.

2 Enter the name, select the type, or enter the name of the user or group that owns the dimensions.

You can use wildcard characters to filter dimensions. The Dimension Server supports these wildcard characters: $^\{ ( | ) + . * ?

3 Click OK.

Tip: To remove filter criteria, select Edit, Clear Filter Criteria.

When dimensions are filtered, a filter icon is displayed in the Shared Library pane.

Sorting Dimensions and Folders

You can sort dimensions and folders in ascending or descending order.

To sort dimensions and folders:

1 Click .

The Dimension Sorting dialog box is displayed.

2 Select the artifact to sort by (Dimension Class, Name, Description, Owner).

3 Select the sort order (Ascending or Descending).

4 Click OK.

Tip: To remove the sort, click Edit, Clear Sort Criteria.

When dimensions are sorted, a sort icon is displayed in the Shared Library pane.

Deleting Dimensions

When you delete a dimension, the dimension and all members of the dimension are deleted from the Shared Library. The dimension and members are also deleted from applications using the dimension. Associations for the dimension are also deleted.

Caution! Before deleting a dimension, right-click the dimension and select Application Membership, to view what applications are using the dimension. If an application contains the dimension, you cannot delete the dimension.
For important information on deleting Planning dimensions, see “Excluding and Deleting Planning Members” on page 137.

To delete dimensions:

1. In the Dimension Library (Shared Library or Application pane), right-click a dimension and select **Delete Dimension**.
2. Click **Yes**.

### Using the Grid Editor

**Subtopics**

- Launching the Grid Editor
- Searching for Members
- Selecting Members
- Selecting Properties
- Working with the Grid Editor

You can use the Grid Editor to view and maintain dimensions within a tabular, grid-based interface. You can also:

- View properties for multiple members simultaneously
- Perform bulk updates to multiple members
- Identify changed values and easily assign values

The following example shows the Grid Editor, enabling you to edit members and properties for the Accounts dimension.
Launching the Grid Editor

To launch the Grid Editor:

1. In the Shared Library or Application pane, right-click a dimension and select Grid Editor.

Note: The Grid Editor option is not available if you right-click a member. You must right-click a dimension.

The Grid Editor Wizard is displayed.
The Grid Editor Wizard enables you to display up to 2000 members within a dimension. You can expand and collapse members within a dimension using the [+] and [-].

The Grid Editor Wizard has two panes—all members in the dimension on the left and selections in the Grid Editor on the right. The left pane has two tabs—Members and Search. The Members tab displays all members available in the dimension, including the member name and a short description, if available. You can use the Search tab to find members. The right pane shows selections for the Grid Editor and displays the member name and the selection type.

You can use the Menu button above each pane to change the columns in the Grid Editor Wizard.

If you are selecting members for a Shared Library dimension, the Grid Editor displays “Shared Library Dimensions,” above the Members and Search tab. However, if you are selecting members in an application, the application name appears above the Members and Search tab. For example, “NewApp Dimensions.”

2 While displaying the Members tab, to collapse all members in a dimension, click and select Collapse All.

Note: When you select Collapse All, all members under the dimension or member that you selected are collapsed. When a dimension or member is collapsed, rest the mouse pointer over the artifact to display a ToolTip indicating the number of descendants.

3 Perform one of these actions:

a. In the left pane, click Show Count.
The Count column displays in addition to Name and Description. The Count column displays the number of child members under the current dimension. This can be a helpful indicator of how long it might take to expand down a branch of the tree.

b. To remove the Count column, click **Show Count.**

4 Perform one of these actions:

a. To display the Alias column, click **Show Alias.**

The Alias column displays in addition to the Name and Description. The Alias column displays the alias, which is an alternate description for dimension members.

b. To remove the Alias column, click **Show Alias.**

5 To modify the columns in the Selections pane, in the Selections pane, click **Show Selection Type.**

Name automatically displays in the Selections pane, however you can decide if you want the Selection Type to display.

**Searching for Members**

You can search for members by selecting the Search tab and entering the name in the text box. The search finds all members in the selected dimension based on the text you enter. For example, you can enter c*, to select the first member that starts with "c".

To search for members:

1 Select the Search tab.

2 To search for a member name, select **Name** or to search by member description, select **Description**.

3 Enter the text you want to search on.

   You can also select the Search tab to search for members and use wildcards in your phrase. For example, if you are searching a customer dimension and select to search by Name and type **Ba** in the text box, and click **Name** only customer names that start with **Ba** display. You can also type ! in the text box to act as a wildcard. For example, you might not know how to spell a customer name, such as **Bassica, Inc.**, since it could be **Bassico, Bassiko, or Bassica.** In this case, you could type **Bass** to find this customer.

   **Note:** The maximum number of children that can be displayed is 2000.

4 Next, select the members to display in the Grid Editor. See “**Selecting Members**” on page 100.

**Selecting Members**

The first step in using the Grid Editor wizard is to select the members that you want to edit using the Grid Editor.
To select members:

1. Select a dimension.

   **Note:** By default, the dimension you selected when you right-clicked and selected Grid Editor is displayed. If you want to choose a different dimension, click the Dimension drop-down arrow.

You can use the Grid Editor for any dimension within the Shared Library or application, however, you can only work with one dimension at a time. For information on shared dimensions in applications, see “Including Dimensions in Applications” on page 198.

   **Note:** The maximum number of children that can be displayed in a dimension is 2000. If you do not see the member you are looking for, trying searching for a specific member.

2. Select the members on the left and click [ ].

3. To add special options for the member, click [ ]. Choose an option:
   - Member
   - Children
   - IChildren
   - Descendants
   - IDescendants
   - Siblings
   - ISiblings
   - Parent
In the above options, “I” indicates inclusive. For example, “IChildren” adds all children for the member, including the selected member, and “IDescendants” adds all the descendants including the selected member. If you select “Children,” the selected member is not included and only its children are included.

The member is moved to the right and displays the option you selected in the Selection Type column. For example, “Descendants” displays in the Selection Type column.

4 Repeat the steps above until you select all members you want to view in the Grid Editor.

Tip: To deselect all members from the list of selections, click

5 If necessary, select new dimensions and members to edit.

6 When finished, click Next.

The Select Properties tab is displayed. See “Selecting Properties” on page 102.

Selecting Properties

You can select the properties that you want to modify using the Grid Editor. When selecting properties using the Grid Editor Wizard, make sure to select the appropriate category.

➢ To select properties:

1 Since properties can differ by category, select the category that includes the properties you want to edit.
2 Select the properties on the left and click .

3 Repeat the steps above until you select all properties you want to edit in the Grid Editor.

4 Click Finish.

The Grid Editor is displayed.
Grid cells that represent read-only properties are dimmed and disabled. Properties utilizing special controls such as check boxes within the Dimension Library Property Grid also use the same controls within the Grid Editor.

If you are editing a Shared Library dimension, the Grid Editor shows the dimension name after “Shared Library,” such as “Shared Library: Account.” However, if you are editing a dimension in an application, the name of the application appears before the dimension name. For example, “NewApp: Account”. In addition, each property category name is displayed above the property columns. For example, Consolidation displays above the properties you selected in the Consolidation category.
Working with the Grid Editor

Subtopics

- Saving Member and Property Changes
- Changing Dimensions
- Viewing Ancestors
- Creating Members
- Adding Members
- Removing and Deleting Members
- Sorting Members and Properties
- Copying and Pasting Cell Data
- Adding and Removing Properties
- Finding Properties
- Closing the Grid Editor

The Grid Editor displays the members and properties you selected in the wizard. Since members and properties can differ, depending on the category, you can select a specific category to display at the top of the Grid Editor. Members appear as rows, displaying member names on the left. Properties appear as columns, showing the name as the second row in the column heading. Each corresponding property value displays as cell data.

Saving Member and Property Changes

When you make changes to members and properties, you can set the changes to occur immediately or wait until you use the Save button. The Grid Editor Auto Commit feature saves each change, individually. Keep in mind these guidelines when using the Auto Commit feature:

- **Save button** —

- **Auto Commit** —

If the Auto Commit feature is *unchecked*:

- The data is saved *only* when you click the Save button.
- If you modify members or properties, the cells are shaded with a new color. Colors include:
  - **Yellow** — A cell that is yellow indicates that the value has been updated. Upon saving the value, it is updated in Dimension Library and the cell color reverts to the default color.
  - **Red** — A row that is red indicates that it is marked for deletion. After a row is marked for deletion, the cells cannot be edited. Upon saving, the members are deleted from the Dimension Library, removed from the application, and the rows are deleted from the current page of the grid.

If you navigate from one page of the grid to another, a confirmation dialog box is displayed, asking you to save any changes.

- All changes are saved when you click the Save button.
If you try to change the auto commit to checked, you will be prompted to save the data.

If the Auto Commit feature is **checked**:
- The data is saved on the individual action performed.
- Property values are saved when you change the row or press the [Enter] key
- Members are deleted immediately when you right-click and select Delete Member

**Note:**
You can click ![refresh](image) to remove the changes made to the grid and refresh the grid with last saved data.

## Changing Dimensions
You can change the dimension that is displayed in the Grid Editor.

1. To change the dimension:
   1. Right-click the dimension name in the upper left corner of the Grid Editor.
   2. Select **Change Dimension**.
      - The Grid Editor Wizard is displayed.
   3. Select a dimension using the Dimensions drop-down arrow.
   4. Select the members to show in the grid and click **Next**.
      - A confirmation dialog box is displayed.
   5. Click **Yes**.
   6. Select the properties and click **Finish**.
      - The Grid Editor is displayed.

## Viewing Ancestors
You can view ancestors for a member using the Grid Editor to identify where a member resides in the dimension hierarchy.

1. To view member ancestors:
   1. Right-click a member (row) and select **Show Ancestors**.
      - The Show Ancestors dialog box is displayed.
   2. Click **OK**.

## Creating Members
You can create children or sibling members using the Grid Editor.
Creating a member as a child to the selected member appends the property values row of the new child member to the current page of the grid. Creating a sibling to the selected member creates a new member as a sibling at the same level of the selected member and appends the property values row of the new sibling member to the current page of the grid.

To create members:

1. Right-click a row and select Create Member. Select As Child or As Sibling.
   
   The New Member dialog box is displayed.

2. Enter the member name and click OK.
   
   The member is displayed in the Grid Editor. When you create new members, the Grid Editor automatically saves the action.

Adding Members

To add existing members to the grid:

1. Right-click a row and select Add Member to Grid.
   
   The Add Member to Grid dialog box is displayed.

   If you are adding a member to a Shared Library dimension, the Grid Editor displays “Shared Library Dimensions,” above the Members and Search tab. However, if you are adding a member to an application, the name of the application appears above the Members and Search tab. For example, “NewApp Dimensions.”

2. Select the member(s) to add and click OK.
   
   The new member is added as a row to the Grid Editor.

Removing and Deleting Members

You can use the Grid Editor to remove or delete members. Removing a member removes the selected member from grid. Deleting a member deletes the selected member by marking it as red in color. Deleting a member physically deletes it from the Dimension Server when you click the Save button.

To remove members from the Grid Editor display:

1. Click before you attempt to remove a member.

2. Right-click the member row and select Remove Member from Grid.
   
   The member is removed from the dimension.
To delete members from the Dimension Server:

1. Right-click a member and select **Delete Member**.
   
   A confirmation dialog box is displayed.

   **Caution!**  Deleting a member deletes it from all views. Be extremely careful.

2. Click **Yes**.

   **Tip:** If you delete a member, you can reverse the deletion before you save changes. Right-click the member and select **Undo Delete Member**.

3. Click **OK**.

   The member is deleted.

### Sorting Members and Properties

You can sort members and properties in the Grid Editor.

To sort artifacts in the Grid Editor:

1. Click **Sort**.

   The GridEditor Sort Dialog is displayed.

2. Select to sort on **Members** or **Properties**.

3. If you selected Members, select the artifact to sort by (Name, Alias, or Property).

4. Select the sort order (Ascending or Descending).

5. Click **OK**.

   **Tip:** You can also sort a Property column by double-clicking the column header. When you sort properties, a sort indicator appears in the column header.

### Copying and Pasting Cell Data

If you are adding content to a cell that you will use in other cells, you can copy and paste the cell data to save time.

**Note:** You can copy and paste information from one cell to another within the same column. You cannot copy and paste information across columns.

To copy and paste cell data:

1. To copy information, perform one of these actions:
   
   - Select the cell you want to copy, then right-click and select **Copy**.
Select the cell you want to copy, then press [Ctrl + C].

To paste information, perform one of these actions:

- Select the cell or column you want to paste the information into, then right-click and select **Paste**.
- Select the cell or column you want to paste the information into, then press [Ctrl + V].

**Tip:** You can copy a value from one cell and then paste the values in all of the cells in the column. Simply copy the value, then right-click the column header and select Paste.

---

**Adding and Removing Properties**

You can add or remove properties for a member using the Grid Editor.

- To add properties:
  1. Right-click a column, then select **Add Property**.
     
     The Property List Selector is displayed.
  2. Select the property to add, then click **OK**.
  3. Click **OK**.

     The Grid Editor is displayed.

To remove properties from the grid, right-click the column of the property you want to remove, then select **Remove Property**.

---

**Finding Properties**

If you are editing numerous members and properties in the Grid Editor, you can search for a property that you want to edit.

- To find properties:
  1. Right-click a column and select **Find Property**.
     
     The Property Selector dialog box is displayed.
  2. Select the property, then click **OK**.

     The Grid Editor displays with the property column highlighted.

---

**Closing the Grid Editor**

- To close the Grid Editor:
  1. Click **Save** to save all changes in the Grid Editor.
Perform one of these actions:

- Right-click the Grid Editor tab and select **Close**.
- Select **File, Close, Current**.

## Working with Smart Lists (Planning Only)

### Subtopics

- Creating Smart Lists
- Smart List Names
- Modifying Smart List Dimension Properties
- Displaying #Missing with Smart Lists

Smart Lists are custom drop-down lists that users access from data form cells in Planning applications. When clicking into data form cells, users select items from drop-down lists instead of entering data. Users cannot type in cells that contain Smart Lists. Smart Lists display in cells as down arrows that expand when users click into the cells.

For example, you can create a drop-down Smart List called Justification that provides selections for Research, Customer Feedback, and Expansion. When users click into an Account named Reason (which is associated with the Justification Smart List), they click the down arrow, which expands into a drop-down list with these selections: Research, Customer Feedback, and Expansion. Users select a Smart List option as a value for the cell.

Administrators use the Dimension Library to create Smart List dimensions and members, and assign properties. Perform these tasks to create and administer Smart Lists:

- Create a new dimension with Smart List selected as the Dimension Type.
- Create members in the dimension. (The members are the items that display in the drop-down, data form, or grid.)
- Assign properties to the Smart List dimension and members. Assign a Label to the Smart List and Smart List members.
- Optionally:
  - Enable Smart Lists for data forms. See the *Oracle Hyperion Planning Administrator’s Guide*.
  - Use Smart List values in member formulas and business rules.
  - Set how #Missing cells associated with Smart Lists display on data forms and within drop-down lists.

Smart List Dimensions do not need to be associated with the member’s dimension. Smart List is a default member property. To remove the association of a Smart List with a member, double-click the Smart List property and delete the Smart List name. To remove a Smart List from a member, right-click the Smart List property field and remove the value.
Creating Smart Lists

To create Smart Lists:

1. **In the Dimension Library, select File, then New, then Dimension.**
   The Add New Dimension dialog box is displayed.

2. **Type the Name, Description, and select the type, SmartList.**

   **Note:** Enter a unique name containing alphanumeric and underscore characters (for example: Position) and no special characters, hyphens, or spaces. Smart Lists cannot match dimension names. Smart List names can be referenced in formula expressions.

   The Smart List dimension is displayed in the Shared Library.

   Data cells can display only one Smart List. If multiple Smart Lists intersect at cells, set which one takes precedence by setting the data type evaluation order.

   Next, create the members that will display as items in the drop-down list.

3. **In the Shared Library, right-click the Smart List dimension and select Create Member, then As Child.**
   The New Member dialog box is displayed.

4. **Type the member name and click OK.**

   **Note:** Enter a unique member name containing alphanumeric and underscore characters and no special characters, hyphens, or spaces.

5. **Create additional members, as necessary, for the dimension.**

Smart List Names

When using Smart Lists, note these considerations. Smart List names and aliases:

- Must begin with a letter, and can contain letters, numbers, _ (underscore), and $ (dollar sign) characters. They cannot include spaces, or be Java reserved words, such as: abstract, assert, boolean, break, byte, case, catch, char, class, const, continue, default, do, double, else, enum, extends, false, final, finally, float, for, if, goto, implements, import, instanceof, int, interface, long, native, new, null, private, protected, public, return, short, static, strictfp, super, switch, synchronized, this, throw, throws, transient, true, try, void, volatile, while.

- Cannot have the same name as the Smart List dimension, another dimension, or a dimension member.

When Smart List dimensions are transformed from Classic to Performance Management Architect, they are appended with the prefix sl_, to ensure that names are unique. (This does not occur when upgrading Smart List member names.)
Modifying Smart List Dimension Properties

Use the Property Grid to set Smart List properties.

1. **Select a Smart List dimension.**

2. **Select the category, Planning.** Define the Smart List properties for the dimension:

<table>
<thead>
<tr>
<th>Property</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Label</strong></td>
<td>Enter the text to display when the Smart List is selected. Smart Lists and Smart List members must have a Label assigned. Spaces and special characters are allowed. Smart List labels can reference a resource, which can be translated into different languages. See the <em>Oracle Hyperion Planning Administrator's Guide</em>.</td>
</tr>
<tr>
<td><strong>Auto Generate ID</strong></td>
<td>Generate a numeric ID for each Smart List entry. If you do not select this option, you can customize Smart List ID values.</td>
</tr>
<tr>
<td><strong>Start Value</strong></td>
<td>Populates the Value property of the first member in the Smart List. For example, if the Smart List dimension is <em>Justification</em> with <strong>Start Value</strong> set to 10, the first member added to this list has a value of 10.</td>
</tr>
</tbody>
</table>
| **Increment**       | This value is appended to the value of the last member in the list to determine the value for the selected member. For example:  
Justification (Start Value=0, Increment=10)  
Research (Value=0)  
Customer Feedback (Value=10)  
Survey (Value=20)  |
| **Display Order**   | How Smart Lists are sorted in the drop-down list: by ID, Name, or Label  
- **ID**—Unique number that sets the order for the displayed entry.  
- **Name**—Unique alphanumeric name containing alphanumeric and underscore characters (for example: Customer_Feedback) and no special characters or spaces  
- **Label**—Displayed text for the Smart List entry on the drop-down list (for example: Customer Feedback). |
| **#Missing Data Form Label** | Determines how #Missing values are represented in cells associated with Smart Lists. Options:  
- **Dropdown**—Displays the label set in #Missing Drop-Down Label.  
- **Grid**—Displays #Missing or leaves cells blank, depending on the Display Missing Values As Blank selection for the data form (see the *Oracle Hyperion Planning Administrator's Guide*).  
  This selection determines what is displayed in the cell when it is not the focus. When the cell is in focus, the Smart List item that is selected from the drop-down is displayed. |
| **#Missing Drop Down Label** | Enter a label (for example, No Justification) to be displayed as an entry in the Smart List whose value is #Missing. Notes:  
- This displays as the first selection in the Smart List drop-down, allowing #Missing as a selection in the data form.  
- When the cell is not in focus, this label displays only if the drop-down list is selected. Otherwise, #Missing or a blank cell is displayed, depending on the Display Missing Values As Blank selection for the data form.  
- #Missing labels determine only the display of cells with #Missing data; #Missing remains the stored value. |
Displaying #Missing with Smart Lists

Administrators set the values that are displayed in Smart Lists and data cells, including what is displayed when there is no data in the cell. When there is no data in a cell, the cell can display no value (that is, the cell is blank), #Missing, or—for cells associated with Smart Lists—another value that you specify.

Use these options to control the display of #Missing in such cells when they are not in focus:

<table>
<thead>
<tr>
<th>Option</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Blank</td>
<td>When designing the data form, select Display Missing Values as Blank. When setting Smart List properties, select Grid.</td>
</tr>
<tr>
<td>#missing</td>
<td>When designing the data form, do not select Display Missing Values as Blank. When setting Smart List properties, select Grid.</td>
</tr>
<tr>
<td>A custom label, such as &quot;No Change&quot;</td>
<td>When setting Smart List properties, enter the custom label in the #Missing Drop-Down Label field (for example, No Change). Select DropDownList.</td>
</tr>
</tbody>
</table>

Viewing Transaction Logs

All operations performed in the Dimension Library are recorded in transaction logs. You can filter logs by date, application, dimension, and property and restrict logs to operations performed in the current session. Each operation is recorded with a time stamp, the user name, the type of action performed, and other relevant information.

<table>
<thead>
<tr>
<th>Action</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>AddApplication</td>
<td>Adds an application to a library</td>
</tr>
<tr>
<td>AddDimension</td>
<td>Adds a dimension to a library</td>
</tr>
<tr>
<td>AddDimensionAssociation</td>
<td>Adds a dimension association between two dimensions</td>
</tr>
<tr>
<td>AddLibrary</td>
<td>Adds a library to the system</td>
</tr>
<tr>
<td>AddMember</td>
<td>Adds the specified member to the specified dimension</td>
</tr>
<tr>
<td>AddOrphanMember</td>
<td>Adds an orphan member to a dimension</td>
</tr>
<tr>
<td>AddView</td>
<td>Adds a view object to an application</td>
</tr>
<tr>
<td>AddViewFilter</td>
<td>Adds a view filter to a view</td>
</tr>
<tr>
<td>AddViewTopMember</td>
<td>Adds the top member for a specified view</td>
</tr>
<tr>
<td>AddViewFilterTopMember</td>
<td>Adds a top member to a view filter</td>
</tr>
<tr>
<td>AutomatorRun</td>
<td>Logged action for an Automator run</td>
</tr>
<tr>
<td>Action</td>
<td>Description</td>
</tr>
<tr>
<td>---------------------------</td>
<td>-----------------------------------------------------------------------------</td>
</tr>
<tr>
<td>ClearApplication</td>
<td>Clears an existing application; deletes data artifacts for the application but does not delete the application record</td>
</tr>
<tr>
<td>ClearDimension</td>
<td>Clears an existing dimension; deletes data artifacts for the dimension but does not delete the dimension record</td>
</tr>
<tr>
<td>CloseLibrary</td>
<td>Logged action for closing a library</td>
</tr>
<tr>
<td>CompareRun</td>
<td>Logged action for a Compare job</td>
</tr>
<tr>
<td>CopyApplication</td>
<td>Copies an existing application</td>
</tr>
<tr>
<td>CopyDimension</td>
<td>Copies an existing dimension</td>
</tr>
<tr>
<td>CopyLibrary</td>
<td>Copies an existing library</td>
</tr>
<tr>
<td>DeleteApplication</td>
<td>Deletes an existing application</td>
</tr>
<tr>
<td>DeleteBranch</td>
<td>Deletes a member and its descendants</td>
</tr>
<tr>
<td>DeleteDimension</td>
<td>Deletes a dimension from a library</td>
</tr>
<tr>
<td>DeleteLibrary</td>
<td>Deletes an existing library</td>
</tr>
<tr>
<td>DeleteMember</td>
<td>Deletes the specified member from the library</td>
</tr>
<tr>
<td>DeleteView</td>
<td>Deletes a view within an application</td>
</tr>
<tr>
<td>ExportRun</td>
<td>Logged action for a export job</td>
</tr>
<tr>
<td>ImportRun</td>
<td>Logged action for a import job</td>
</tr>
<tr>
<td>InsertMember</td>
<td>Inserts the specified member into the specified dimension</td>
</tr>
<tr>
<td>MemberPropertyDataLoss</td>
<td>Loss action for a member property data loss</td>
</tr>
<tr>
<td>MigrateApplication</td>
<td>Migrate application to another server</td>
</tr>
<tr>
<td>MoveMember</td>
<td>Moves the specified member within the dimension</td>
</tr>
<tr>
<td>OpenLibrary</td>
<td>Logged action for opening a library</td>
</tr>
<tr>
<td>RemoveApplicationArrayPropertyValue</td>
<td>Removes (clears) the array value of the specified property of the specified application</td>
</tr>
<tr>
<td>RemoveApplicationPropertyValue</td>
<td>Removes (clears) the value of the specified property of the specified application</td>
</tr>
<tr>
<td>RemoveDescendantValues</td>
<td>Removes property value for a member's descendants</td>
</tr>
<tr>
<td>RemoveDimensionArrayPropertyValue</td>
<td>Removes (clears) the array value of the specified property of the specified dimension. The property itself is not deleted, because other dimensions may be using it.</td>
</tr>
<tr>
<td>RemoveDimensionAssociation</td>
<td>Removes a dimension association between two dimensions</td>
</tr>
<tr>
<td>RemoveDimensionPropertyValue</td>
<td>Removes (clears) the value of the specified property of the specified dimension. The property itself is not deleted, because other dimensions may be using it.</td>
</tr>
<tr>
<td>Action</td>
<td>Description</td>
</tr>
<tr>
<td>--------------------------------</td>
<td>-----------------------------------------------------------------------------</td>
</tr>
<tr>
<td>RemoveDuplicates</td>
<td>Removes (clears) duplicate properties for the specified member</td>
</tr>
<tr>
<td>RemoveLibraryPropertyValue</td>
<td>Removes (clears) the value of the specified property of the specified library. The property itself is not deleted, because other libraries may be using it.</td>
</tr>
<tr>
<td>RemoveMember</td>
<td>Removes the specified member from the dimension</td>
</tr>
<tr>
<td>RemoveMemberArrayPropertyValue</td>
<td>Removes (clears) the array value of the specified property of the specified member. The property itself is not deleted, because other members may be using it.</td>
</tr>
<tr>
<td>RemoveMemberPropertyValue</td>
<td>Removes (clears) the value of the specified property of the specified member. The property itself is not deleted, because other members may be using it.</td>
</tr>
<tr>
<td>RemoveViewFilter</td>
<td>Removes a view filter from an existing application</td>
</tr>
<tr>
<td>RemoveViewFilterTopMember</td>
<td>Remove the top member from the view filter</td>
</tr>
<tr>
<td>TransactionExportRun</td>
<td>Logged action for a transaction query</td>
</tr>
<tr>
<td>UpdateApplicationArrayPropertyValue</td>
<td>Updates the array value of the specified property of the specified application</td>
</tr>
<tr>
<td>UpdateApplicationPropertyValue</td>
<td>Updates the value of the specified property of the specified application</td>
</tr>
<tr>
<td>UpdateDimensionArrayPropertyValue</td>
<td>Updates the array value of the specified property of the specified dimension</td>
</tr>
<tr>
<td>UpdateDimensionPropertyValue</td>
<td>Updates the value of the specified property of the specified dimension</td>
</tr>
<tr>
<td>UpdateLibraryPropertyValue</td>
<td>Updates the value of the specified property of the specified library</td>
</tr>
<tr>
<td>UpdateMemberArrayPropertyValue</td>
<td>Updates the array value of the specified property of the specified member</td>
</tr>
<tr>
<td>UpdateMemberPropertyValue</td>
<td>Updates the value of the specified property of the specified member</td>
</tr>
</tbody>
</table>

To view a transaction log:

1. From the Dimension Library, select View, and then Download Transaction Logs or click ![Download Transaction Logs].
2 Select an application or select Shared Library to view all dimensions in the Shared Library.

**Note:** You must at least select an application or Shared Library to filter the transaction logs.

3 **Optional:** Select a dimension.

**Note:** Only dimensions for the selected application or Shared Library are displayed in the drop-down list, and you can select only one dimension.

4 **Optional:** Click \[\text{select one or more members to include in the log, and click OK.}\]

5 **Optional:** Click \[\text{select one or more properties to include in the log and click OK.}\]

6 **Optional:** Use the date drop-down lists to select a date range.

7 **Optional:** Select Filter to current session.

8 Click OK.

9 After the job is submitted, click the link in the message box to go to the exported transaction log.
10 In the Attachments area, click Transaction Export.

11 Select to open or save the transaction log.

**Note:** Transaction logs use the CSV file extension and can be opened in Microsoft Excel.

The transaction log consists of multiple columns of information. The column display varies, depending upon the criteria that you selected.

<table>
<thead>
<tr>
<th>Column Name</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>TransactionID</td>
<td>Transaction ID associated with one or more transaction actions</td>
</tr>
<tr>
<td>DetailID</td>
<td>Order in which actions are processed within a transaction</td>
</tr>
<tr>
<td>Column Name</td>
<td>Description</td>
</tr>
<tr>
<td>------------------</td>
<td>-----------------------------------------------------------------------------</td>
</tr>
<tr>
<td>Action</td>
<td>Operation that is logged</td>
</tr>
<tr>
<td>ApplicationID</td>
<td>Generated ID associated with the application artifact</td>
</tr>
<tr>
<td>ApplicationName</td>
<td>Application name</td>
</tr>
<tr>
<td>ClassID</td>
<td>Classification of the artifact being added</td>
</tr>
<tr>
<td>CreatedDateTime</td>
<td>Timestamp of the action</td>
</tr>
<tr>
<td>Description</td>
<td>Description of the action</td>
</tr>
<tr>
<td>DimensionID</td>
<td>Generated ID of the dimension artifact</td>
</tr>
<tr>
<td>DimensionName</td>
<td>Dimension name, in which the action is performed</td>
</tr>
<tr>
<td>FromOrigin</td>
<td>For property updates, the origin of the property value before an update occurs.</td>
</tr>
<tr>
<td>FromValue</td>
<td>For property updates, the value of the property before an update occurs.</td>
</tr>
<tr>
<td>Level</td>
<td>A designation given to a transaction action: Core, Logged, Loss, Result, or Admin.</td>
</tr>
<tr>
<td>MemberDescription</td>
<td>If the action is related to a member, the name of the member is logged in this column.</td>
</tr>
<tr>
<td>MemberID</td>
<td>Generated ID of a member</td>
</tr>
<tr>
<td>MemberName</td>
<td>Member name, in which the action is performed</td>
</tr>
<tr>
<td>NewMemberOrder</td>
<td>Order in which the member is inserted under a parent</td>
</tr>
<tr>
<td>NewParentID</td>
<td>ID of a parent under which a member is inserted</td>
</tr>
<tr>
<td>OriginalMemberOrder</td>
<td>Original position of a child order for a parent member</td>
</tr>
<tr>
<td>OriginalParentID</td>
<td>ID of the original parent prior to a move member operation</td>
</tr>
<tr>
<td>OriginatingDetailID</td>
<td>For actions that initiate other actions, this is the detail ID of the initiating action.</td>
</tr>
<tr>
<td>OriginatingID</td>
<td>For actions that initiate other actions, this is the ID of the initiating action.</td>
</tr>
<tr>
<td>PropertyID</td>
<td>Generated ID of the property definition.</td>
</tr>
<tr>
<td>PropertyName</td>
<td>Name of the property definition</td>
</tr>
<tr>
<td>ToOrigin</td>
<td>The origin of the property value</td>
</tr>
<tr>
<td>ToValue</td>
<td>The new value for a property value</td>
</tr>
<tr>
<td>UserName</td>
<td>The username that performed the action</td>
</tr>
<tr>
<td>LibraryID</td>
<td>The Library ID, which defaults to 1.</td>
</tr>
<tr>
<td>LibraryName</td>
<td>The Library name on which the action is performed</td>
</tr>
</tbody>
</table>
Purging Transaction History

Subtopics

- Launching the Transaction History Purge Utility
- Viewing the Transaction History Purge Logs
- Working with the Transaction History Purge Utility
- Native Database Log Considerations

Performance Management Architect creates transactions in the Performance Management Architect database. This database is automatically created during installation and configuration. Since Performance Management Architect does not delete these artifacts, the database size can increase over time. The Performance Management Architect Transaction History Purge Utility enables you to remove transactions from the database to reduce database size.

The Transaction History Purge removes transactions to reduce database size. If you use the utility, you should make a full backup of the Performance Management Architect database before running the utility to keep an audit trail for Sarbanes-Oxley compliance.

**Note:** You must have the LCM Administrator or EPMA Administrator security role to purge the transaction history. See the *Oracle Hyperion Enterprise Performance Management System User and Role Security Guide*.

## Launching the Transaction History Purge Utility

You can run the Transaction History Purge Utility using a command line or by using the Windows Start Menu shortcut, EPMA Transaction History Purge.

**Note:** You must start the Hyperion EPMA Server before running the Transaction History Purge Utility. In Windows, from the Services panel, select Hyperion EPMA Server, right-click and select Start or on a command line, enter: `net start EPMA_Server.exe`.

**Caution!** This utility deletes transactions from the database. You must be extremely careful and ensure that you have performed a full backup of the Performance Management Architect database before running the Transaction History Purge Utility.

The utility automatically retrieves database connection information (database name, location, login information, and so on) from the Shared Services database so that the cleanup affects the same database that is used by Performance Management Architect. Keep in mind that you cannot run this utility on a remote client. You must run the utility on the Dimension Server Application Server.

➢ To launch the utility:

1. **To launch the utility in a graphical user interface, perform one of these actions:**
Select **Start, Programs, Oracle EPM System, Foundation Services, Performance Management Architect, EPMA Transaction History Purge**.

Navigate to `<EPM_ORACLE_INSTANCE>products\Foundation\BPMA\AppServer\DimensionServer\ServerEngine\bin`. Then, double-click **EPMA_database_cleanup_utility.exe**.

The EPMA Transaction History Purge Utility dialog box is displayed.

2. Enter your user name and password that you use to login to Performance Management Architect, then click **Log On**.

   **Note:** You must have the LCM Administrator or EPMA Administrator security role to purge the transaction history. See the *Oracle Hyperion Enterprise Performance Management System User and Role Security Guide*.

3. To launch the utility on a command line, open a command prompt, change the directory location to the location of the **dimension_server.exe** file. For example, `C:\EPM_ORACLE_INSTANCE\BPMA\AppServer\DimensionServer\ServerEngine\bin`, then type: `database_cleanup_utility -h`
“Working with the Transaction History Purge Utility” on page 122 describes how to use the graphical user interface and also includes important information about the utility. Command line parameters are described in “Using the Transaction History Purge Utility in a Command Window” on page 123.

4 Enter `database_cleanup_utility -u<user> -p<password>`, where `<user>` is your user name and `<password>` is your password.

### Viewing the Transaction History Purge Logs


```
2009-04-03 17:27:28,484 Connecting to database...
2009-04-03 17:27:28,484 Connected successfully
2009-04-03 17:27:28,484 Only items dated April 3, 2009 or earlier will be deleted.
2009-04-03 17:27:28,484 Deleting transactions...
2009-04-03 17:27:36,234 The purge has completed. 129 transactions were deleted.
```

**Tip:** You can also click the Open file button in the EPMA Transaction History Purge Utility dialog box to access the log file after the process runs.
Working with the Transaction History Purge Utility

Subtopics

- Deleting Transactions
- Using the Transaction History Purge Utility in a Command Window
- Scheduling Database Cleanup Tasks

The following section describes how to delete transactions using the graphical user interface.

Deleting Transactions

**Caution!** This utility deletes transactions from the database. You must be extremely careful and ensure that you have performed a full backup of the Performance Management Architect database before running the Transaction History Purge Utility. You cannot reverse the deletion of transactions. Be certain before deleting any transactions.

To delete transactions:

1. In the EPMA Transaction History Purge Utility dialog box, select the criteria to delete the transactions. Perform one of these actions:
   - Select Dated on or before, then select the date.
   - Select Older than and select the number of days. The maximum setting is 100 days. If you change the value to a number greater than 100, an error message is displayed.
2. Click **Start**.
   A Warning dialog box is displayed.

   **Caution!** Before you click Yes, keep in mind that you cannot cancel the deletion of transactions while in progress.

3. Click **Yes**.
   When you click the Start button, the utility determines which transactions to delete, and then when you click Yes in the Warning dialog box, it begins to delete all transactions. When you click Yes, the deletion process begins. The controls in the dialog box are inaccessible until the process completes. A summary of the transactions deleted is provided at the end of the process and is included in the log file referenced at the bottom of the dialog box. When the deletion is complete, the dialog box controls are re-enabled.

**Note:** If you attempt to close the application while the deletion is in-progress, an error message is displayed indicating that if you close the application the current deletion process to be rolled back.
Note: If you experience problems with the Transaction History Purge Utility timing out, you can increase the value of the CommandTimeout setting. The default timeout is 900 seconds or 15 minutes. You can modify the timeout setting in the BPMA_Server_Config.xml file. See the Data_Access_Layer setting in Appendix D, “Configuration Settings in BPMA_Server_Config.xml.”

Using the Transaction History Purge Utility in a Command Window

When you launch the utility from a command prompt with the -h parameter, a list of valid parameters are listed in the command window. Keep in mind these guidelines:

- Each parameter must be separated by a space.
- If a parameter takes a value, it should not be separated by a space. For example, -d05/08 passes a date.
- Commands are not case sensitive.

To launch the utility in a command window, see “Using the Transaction History Purge Utility in a Command Window” on page 123.

The following table describes each parameter available in the command window:

<table>
<thead>
<tr>
<th>Parameter</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>-a&lt;n&gt;</td>
<td>Specifies a minimum age to delete, where &lt;n&gt; is an integer number of days. The maximum value allowed is 100. If you enter a value greater than 100, an error is logged.</td>
</tr>
<tr>
<td>-d&lt;d&gt;</td>
<td>Specifies a maximum date, where &lt;d&gt; represents the date. The date format should follow the format in the Regional Settings in the Control Panel. The year is not necessary if it is the same as the current year. However, you must specify the month and day. For example, if the current year is 2008, then 9/8 and 09/08 would represent September 8, 2008.</td>
</tr>
<tr>
<td>-np</td>
<td>Suppresses all prompts.</td>
</tr>
<tr>
<td>-h</td>
<td>Displays parameters help.</td>
</tr>
<tr>
<td>-u</td>
<td>Specifies the user name.</td>
</tr>
<tr>
<td>-p</td>
<td>Specifies the password.</td>
</tr>
</tbody>
</table>

You can use multiple parameters to complete the process. Examples of commands are listed below:

<table>
<thead>
<tr>
<th>Command</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>database_cleanup_utility -u&lt;user&gt; -p&lt;password&gt;</td>
<td>Specifies the user name and password. Every command line execution of the utility requires a user name and password, except the -h command to access the utility help text.</td>
</tr>
<tr>
<td>database_cleanup_utility -np</td>
<td>Deletes all applicable transaction with no prompts.</td>
</tr>
<tr>
<td>database_cleanup_utility -d04/08</td>
<td>Deletes applicable transactions dated on or before April 8th of the current year.</td>
</tr>
<tr>
<td>Command</td>
<td>Description</td>
</tr>
<tr>
<td>---------------------------------</td>
<td>-----------------------------------------------------------------------------</td>
</tr>
<tr>
<td>database_cleanup_utility -d04/08/2005</td>
<td>Deletes applicable transactions dated on or before April 8th of 2005 (the year must be specified if the date does not fall within the current year).</td>
</tr>
<tr>
<td>database_cleanup_utility -a50</td>
<td>Deletes applicable transactions older than 50 days.</td>
</tr>
<tr>
<td>database_cleanup_utility -h</td>
<td>Displays the help text.</td>
</tr>
</tbody>
</table>

**Note:** When running the utility on a command line, any errors that occur will display an Exit Code message.

The following exit codes can be displayed in the command line. The following table lists the exit code, the associated number that displays for the code in the command line, and a description.

<table>
<thead>
<tr>
<th>Exit Code</th>
<th>Associated Number</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Success</td>
<td>0</td>
<td>The command ran successfully.</td>
</tr>
<tr>
<td>Input Errors</td>
<td>1</td>
<td>The command line parameter that you used is invalid.</td>
</tr>
<tr>
<td>Configuration File Error</td>
<td>2</td>
<td>Problem with the BPMA_Server_Config.xml file. For example, BPMA_Server_Config.xml must be in the same directory as this utility, otherwise an error occurs. Though this file is not needed for database connection information, it still must be present.</td>
</tr>
<tr>
<td>Connection Failure</td>
<td>3</td>
<td>Connection problem accessing the database.</td>
</tr>
<tr>
<td>Hyperion EPMA Server Not Running</td>
<td>4</td>
<td>You must start the Hyperion EPMA Server before launching the Transaction History Purge Utility. See “Using the Transaction History Purge Utility in a Command Window” on page 123 for information on starting the Hyperion EPMA Server using a command line.</td>
</tr>
<tr>
<td>Unknown Error</td>
<td>5</td>
<td>Contact Oracle Support.</td>
</tr>
<tr>
<td>SQL Error</td>
<td>6</td>
<td>An error occurred while attempting to run the purge against the database.</td>
</tr>
</tbody>
</table>

**Note:** If you experience problems with the Transaction History Purge Utility timing out, you can increase the value of the CommandTimeout setting. The default timeout is 900 seconds. You can modify the timeout setting in the BPMA_Server_Config.xml file. See the Data_Access_Layer setting in Appendix D, “Configuration Settings in BPMA_Server_Config.xml.”

**Scheduling Database Cleanup Tasks**

You can schedule the Transaction History Purge Utility to run using the Windows Control Panel.

To schedule tasks, use the Control Panel to open **Scheduled Tasks**. Then add a scheduled task for the Transaction History Purge Utility and follow the instructions in the Scheduled Task Wizard. Make sure to view advanced properties on the last screen of the wizard.
When you view the properties for the scheduled task, you can add parameters at the end of the Run text box. For example, if you add parameters to the end of the string in the Run text box, it may show: `database_cleanup_utility.exe -u<user> -p<password> -a20 -np`, which deletes all applicable transactions older than 20 days without any prompts.

The exit codes and logging capabilities are useful when using Windows Scheduler, since you do not need to be logged in when it runs, and if it fails you can view a log to determine the cause. You can find the log file, `Database_Cleanup_Utility_Log.txt`, in `<EPM_ORACLE_INSTANCE>/logs/epma`.

**Native Database Log Considerations**

Using this utility can generate a large number of native database log entries. A large number of these entries can significantly increase the storage used by your database. You can use a variety of methods to manage transaction logging space, depending on your database type (Oracle, SQL Server, or DB2).

**Note:** Reclaiming logging space is a task that should be performed by a database administrator.

The following examples show how to reclaim transaction logging space in Oracle and SQL Server.

- **Oracle**—The following command attempts to resize the Redo log file, "EPMAREdo.log," to 600k.
  ```
  ALTER DATABASE DATAFILE 'F:\oradata\live\EPMAREdo.log' RESIZE 600k;
  ```

- **SQL Server**—The following command decreases the size of the data and log files in a database called "EPMA," with the goal of creating 5 percent free space within each file.
  ```
  DBCC SHRINKDATABASE (EPMA, 5);
  GO
  ```

**Note:** In DB2, log file size is generally not an issue since it is overwritten if "circular logging" is enabled. If "non-circular logging" is enabled, it can be deleted when DB2 begins to use the next log file in sequence. For additional information, see your DB2 documentation.
Creating Members

You can create members as siblings or children of the selected member. You can create members only in the Dimension Library. If you want to add members to applications, you must first create the members in the Shared Library and then add them to the applications.

Member names must follow product naming requirements. For Planning dimensions, see “Naming Restrictions for Dimensions, Members, and Aliases” on page 365.

For Financial Management dimensions, see Chapter 11, “Working with Financial Management Dimensions”. For additional information on creating Profitability and Cost Management members, see the Oracle Hyperion Profitability and Cost Management Administrator’s Guide.

Note: You may be able to enter different characters when creating members in the Dimension Library, but when the member is brought into an application, the application’s naming rules are applied.
Performance Management Architect supports large member domains. For information on collapsing the parent of a large member domain, see “Collapsing the Parent” on page 141.

To create members:

1. Right-click a member, select Create Member, and then select As Child or As Sibling.
   
   **Note:** If you right-click on a top member for a dimension, you do not have the option to create a sibling.

2. Enter the member name and click OK.

### Working with Shared Members

**Subtopics**

- Creating Shared Members by Copying and Pasting
- Creating Shared Members Using the Member Selector
- Selecting Members
- Searching for Members Using the Member Selector
- Shared Members within Planning Applications

Sharing members allows alternate hierarchical structures within the Dimension Library. Base members must exist before creating shared members. You can create multiple shared members for a member.

The second instance of any member is tagged as a shared member, with “Shared” in parentheses.

In the following example, the entity Washington is a member of the UnitedStates hierarchy and a member of the Management-Gates hierarchy.
Note: When only parent members are shared, the Dimension Library displays the shared parent and its children, though only the parent is created as a shared member. The Application Library displays only the shared parent members (not the children) for Essbase, Planning, and Profitability and Cost Management applications; for Financial Management applications, children are displayed under the shared parent.

You can create shared members in two ways:

- Copy and paste the shared member as a child or sibling. See “Creating Shared Members by Copying and Pasting” on page 129.
- Insert the shared member using the member selector, which enables you to select members from a different portion of the dimension without losing your position in the Shared Library tree view. See “Creating Shared Members Using the Member Selector” on page 129.

Note: You can modify global properties for shared instances of members. For information on global and relationship properties, see “Modifying Properties” on page 81.

### Creating Shared Members by Copying and Pasting

To create shared members:

1. Right-click a member and select Copy.
2. Locate the position in the hierarchy where you want the new member to be, right-click a member and select Paste, As Child or As Sibling.

### Creating Shared Members Using the Member Selector

You can use the member selector to choose a member from a different portion of the dimension without losing your position in the Shared Library tree view.

To create shared members:

1. Right-click a member and select Insert Shared Member.
2. Select As Child or As Sibling.

The Insert Shared Member dialog box is displayed.
Select the member(s) to insert. See “Selecting Members” on page 130.

Selecting Members

You can use the member selector to view and select members within a dimension. To find the member(s) you want to select, you can expand and collapse members within a dimension using the [+ ] and [- ].

The Insert Shared Member dialog box has two panes—all members in the dimension on the left and selections on the right. The left pane, showing all members available in the dimension, displays the member name and a short description, if available. The right pane, showing selections, displays the member name and the selection type.

To use the member selector:

1 Optional: Use the Menu button above each pane to change the columns in the member selector. For example:

- In the left pane, click Show, Count.

  The Count column displays in addition to Name and Description. The count column displays the number of child members under the current dimension. This can be a helpful indicator of how long it might take to expand down a branch of the tree.
To remove the Count column, click [Show Count], and select Show Count.

To collapse a dimension, click [Collapse All], and select Collapse All.

**Note:** When you select Collapse All, all members under the dimension or member that you selected are collapsed. When a dimension or member is collapsed, rest the mouse pointer over the artifact to display a ToolTip indicating the number of descendants.

In the list of available dimensions and members on the left, select a member to add as shared and click [Add Member].

**Tip:** If you cannot find a member, you can search for members in the member selector. See “Searching for Members Using the Member Selector” on page 131.

To deselect a member from the list of shared members, click [Remove Member].

To deselect all members from the list of selections, click [Clear Selections].

Click OK.

**Searching for Members Using the Member Selector**

You have two options to search for members in the member selector.

- Members tab—You can enter the member name or partial member name in the Find a Member text box and then click the Search button. Then, you can use the Next and Previous buttons to navigate to the next or previous occurrence. You can also click the Advanced Search button to search by Name, Alias, or Property.

- Search tab—You can use the Search tab to enter the member name or partial member name and view a list of members that are returned in the search.

You can use wildcard characters, such as * or %, when searching for members. For example, if you are searching for a customer dimension, you can enter Ba** to search for customer names that start with Ba.

To search for members using the Members tab:

1. **In the member selector Find a member text box, enter the member name or partial member name with wildcard characters.**

2. **Click .**

The member is automatically selected in the list of members in the left pane.

3. **Click the Next or Previous buttons to navigate through the members until you find the member you want to select.**

4. **Optional: Click in the Find a member area. Perform these tasks:**
a. Select Name, Alias, or Property.
b. Enter a value.

**Tip:** You can use wildcard characters to enter a value in the Find Member dialog box.
c. Click OK.

The member is selected in the list of members in the left pane.
d. Click the Next or Previous buttons to navigate through the members until you find the member you want to select.

5 When you find the member, click the Select button to move the member to the selections area.
6 Click OK.

To search for members using the Search tab:
1 In the member selector select the Search tab.
2 Find text box, enter the member name or partial member name with wildcard characters, and then click .

The member is automatically selected in the Results list.

3 **Optional:** Click . Perform these tasks:
   a. Select Name, Alias, or Property.
   b. Enter a value.

   **Tip:** You can use wildcard characters to enter a value in the Find Member dialog box.
   c. Click OK.

4 When you find the member, click the Select button to move to member to the selections area.
5 Click OK.

**Shared Members within Planning Applications**

Sharing members allows alternate rollup structures within Planning applications. A base member must exist before you can create a shared member. You can create multiple shared members for the base member. A base member must display before its shared members in position from top to bottom.

Shared members are allowed for Account, Entity, Scenario, Version, Period, and custom dimensions. Shared members share some property definitions with base members, such as member name, alias name, base currency, and plan types for which members are valid. The Data Storage property for shared members must be Shared or ShareData. Custom properties, custom property values, and member formulas are not allowed for shared members.

Shared members cannot be moved to other parent members. You must delete shared members and re-create them under different parent members. Shared members must be at the lowest level.
(level zero) in the hierarchy, and cannot have children. (The base member need not be level zero.) You can enter data in shared members; values are stored with base members. With shared members:

- A base member cannot be the parent of the shared member. The shared member can be anywhere else in the dimension hierarchy.
- A shared member and its base member must have the same name.
- You must set data storage for shared members to ShareData in Performance Management Architect. Otherwise, shared members are not added when the application is deployed to Planning.

In dimension hierarchies for member selection in Oracle Hyperion Business Rules and Oracle Smart View for Office, shared members are displayed similarly to base members. For Oracle Hyperion Business Rules, there is no labeling distinction, so you might not be able to select shared members for actions such as Copy Data.

**Setting up Dynamic Time Series Members**

You can use Dynamic Time Series (DTS) members to create reports that show period-to-date data, such as quarter-to-date expenses. DTS members are used with members of the Period dimension. For example, to calculate quarter-to-date values, you can enable the Q-T-D member and associate it with generation number 2. You can then use the Q-T-D DTS member to calculate monthly values up to the current month in the quarter.

Predefined DTS members:

- Y-T-D: Year-to-date
- H-T-D: History-to-date
- S-T-D: Season-to-date
- Q-T-D: Quarter-to-date
- P-T-D: Period-to-date
- M-T-D: Month-to-date
- W-T-D: Week-to-date
- D-T-D: Day-to-date

**Caution!** If you are using the Y-T-D or P-T-D member, you must rename the Year or Period dimension so it does not conflict with the reserved Dynamic Time Series generation names, Year and Period. Before using Y-T-D, rename the Year dimension; before using P-T-D, rename Period. After doing so, you must update all application artifacts affected by these changes, such as member formulas and business rules, and any reports that reference the dimension by name.
The DTS members provide up to eight levels of period-to-date reporting. Your data and database outline determine which members you can use. For example, if the database contains hourly, daily, weekly, monthly, quarterly, and yearly data, you can report day-to-date (D-T-D), week-to-date (W-T-D), month-to-date (M-T-D), quarter-to-date (Q-T-D), and year-to-date (Y-T-D) information. If the database contains monthly data for the past 5 years, you can report year-to-date (Y-T-D) and history-to-date (H-T-D) information, up to a specific year. If the database tracks data for seasonal time periods, you can report period-to-date (P-T-D) or season-to-date (S-T-D) information.

Avoid assigning time balance properties (such as First and Average) to members set for dynamic calculations if you plan to use the members in Dynamic Time Series calculations. Doing so may retrieve incorrect values for parent members in your accounts dimension. For detailed information, see the Oracle Essbase Database Administrator’s Guide.

You can use the DTS Manager dialog box to set up DTS members with these options: **DTSEnabled**, **DTS Generation**, and **Alias**. (Setting the DTS properties for non-DTS members has no effect.) Additional Period properties are not applicable to DTS members.

Considerations for using DTS members with Performance Management Architect:

- DTS members must be level 0 members and children of the root member (such as Period).
- The **Period Type** property for DTS members is **Dynamic Time Period**.
- For members enabled as DTS, a **DTS Generation** must be selected.
- If you are using **Y-T-D**, the Year dimension cannot be named Year.
- If you are using **P-T-D**, the Period dimension cannot be named Period.
- DTS members do not display as actual members in the Period dimension hierarchy. For Planning, DTS members are enabled in Planning and Essbase after the application is deployed.

➢ To set up DTS members:

1. From the Dimension Library, right-click the Period dimension. Then, select **DTS Manager**.

2. In the **DTS Manager** dialog box, select **Enabled** for the DTS series to use: Y-T-D, H-T-D, S-T-D, Q-T-D, P-T-D, M-T-D, W-T-D, or D-T-D.
3 **Select a generation.**
   
   You cannot associate DTS members with the highest generation (the dimension root).

4 **Optional:** If the dimension is associated with an alias, select an alias.

5 **Click Save.**

---

**Renaming Members**

You can rename members in the Dimension Library. Keep in mind these guidelines (organized by the application type):

**All Applications:** You cannot rename system members—members with names displayed in brackets [ ].

**Consolidation (Financial Management)**

- For Financial Management applications, renaming only applies to Performance Management Architect, not Classic Administration features. After a rename, these artifacts are *not* updated automatically in Financial Management:
  - Rules
  - Member Lists
  - Web Data Entry Forms
  - Data Grids
  - Reports
  - POVs
- Period, Year, and View members should not be renamed after the first successful deployment of the application
- If the default currency member is renamed, the application property, Default Currency, must be manually updated for existing Financial Management applications

**Planning**

- You cannot rename Currency members
- You cannot rename Year members

For Profitability applications, if you rename members after the initial deployment, you must redeploy the application.

**Note:** When you deploy applications, the log file notes all renamed members and all items that are not automatically updated.

➢ To rename members:

1 **Right-click a member and select Rename Member.**
The Rename Member dialog box is displayed.

2 Enter the name, then click **OK**.

## Removing and Deleting Members

### Subtopics

- Removing Members
- Deleting Members
- Excluding and Deleting Planning Members

You can remove and delete members, including shared members, from the Shared Library hierarchy.

### Removing Members

You can remove members, including shared members, from the Shared Library hierarchy. When you remove local members, the member becomes an orphan. When you remove local members, the member and all of its descendants are removed from the hierarchy and are moved to the orphan area as individual members without a hierarchical structure. When you remove a shared member, the member is removed from the alternate hierarchy and does not become an orphan. The same member in other hierarchy structures is not removed.

To remove members:

1. **In the Dimension Library, right-click a member and select Remove Member.**

   **Note:** You can use the [Ctrl] and [Shift] keys to select multiple members.

2. **Click Yes to confirm.**

### Deleting Members

You can remove members, including shared members, from the Shared Library hierarchy and reuse them later. Orphan members are created when you remove members from the hierarchy. When you remove members, the member and all of its descendants are removed from the hierarchy and are moved to the orphan area as individual members without a hierarchy structure. When you remove a shared member, only that member is moved to the orphan area. The same member in other hierarchy structures is not removed.

You can delete members, including shared members, from the Shared Library hierarchy. When you delete a member, the member and all of its descendants are deleted from the hierarchy and from all views. When you delete a shared member, only that member is deleted. The same member in other hierarchy structures is not deleted.
To delete members:

1. In the Dimension Library, right-click a member and select **Delete Member**.

   **Note:** You can use the [Ctrl] and [Shift] keys to select multiple members to delete.

2. Click **Yes** to confirm.

### Excluding and Deleting Planning Members

Each data value in Planning is identified by a set of dimension members and a plan type. Excluding dimension members from Performance Management Architect applications can translate to a delete action on deployment. Hence, excluding dimension members can result in data loss when redeploying.

On redeployment, a Planning application is refreshed from Performance Management Architect, and all dimensions used in the application are refreshed with their current structure in Performance Management Architect. Redeployment refreshes all dimensions and their members, whether or not changes have occurred.

When excluded members are used elsewhere (such as a selection in a data form), their associations are removed. Before excluding members from an application, use the Planning Show Usage feature within Planning to determine where members are used in the application and review the implications of excluding dimension members. For information about the Show Usage feature, see the *Oracle Hyperion Planning Administrator’s Guide*.

When a member is excluded from a dimension in an Performance Management Architect application and the application is deployed to Planning, the member is deleted from that dimension in Planning. This also deletes any associated supporting detail, data, and references to the member. For example:

- Excluding a Scenario, Version, or Entity dimension member deletes a planning unit and all of its history (data) and annotations.
- Excluding a member referenced by data forms changes the data form definition so it uses only the root dimension member. This may result in loss of access permission or cause no data to be displayed in a data form.
- Excluding a currency dimension member that is referenced by an entity changes the entity dimension so it uses the default currency for the application in Performance Management Architect.
- Excluding a currency member that is referenced as a triangulation currency removes the triangulation.

Custom dimensions and attribute dimensions that are excluded from an application in Performance Management Architect are not deleted from Planning during deployment. However, when members for these dimensions are excluded from an application in Performance Management Architect, they are deleted from Planning during deployment.
To improve performance when deleting entities, first exclude planning units for the subtree (by excluding the root member) for all scenarios and versions. After deleting entity members, you must update and validate business rules, reports, and data forms.

**Note:** When you delete a member that is used in a data validation rule, the member is not deleted from Planning. When you deploy the application to Planning, the job console shows that deployment completes with errors and the Messages log shows that the member was not deleted.

# Finding Members

You can search for members in the Dimension Library.

To find members:

1. **Perform one of these actions to display the Find Members dialog box:**
   - Click  
   - Right-click a dimension and click **Find Members**.
   - Select **Edit, Search**.

2. **Select to search by the member: Name, Alias, or Property.**

3. **Enter the value.**

   **Note:** Enter alpha-numeric characters only. You can also enter wildcard characters, however other special characters are not supported.

4. **Select an option to view the results:**
   - **List View**—replaces the Property Grid and lists all members in the Member Find pane.
   - **Navigation Button**—displays the first member in the Shared Library pane (selected). You can use navigation buttons on the Standard toolbar to move to the next or previous member.

   For example, if you searched for the member, “Budget,” using the Navigation Button option, the first member found is automatically selected in the Shared Library, then you can click  to search for the next occurrence of “Budget,” continuing to click Next to search for the next occurrence. If you want to navigate to the previous occurrence, you can click  

5. **Click OK.**

   If you selected List View, the search results replace the Property Grid. You can double-click the member in the Member Find pane to locate the member in the hierarchy. When you double-click the member, the dimension that contains the member automatically expands in the Shared Library.
If you selected the Navigation Button option, the dimension that contains the member automatically expands in the Shared Library. You can select the member to view the properties in the Property Grid.
6 **Optional:** To reapply a search, click the search again. The information you entered previously is saved in the Search Members dialog box.

7 **Optional:** To clear a search, click the clear search button.

8 **Optional:** To refresh the artifacts displayed in a search, click the refresh icon.

9 Click to close the Member Find.

## Sorting Members

You can sort members in the Dimension Library (Shared Library and Application pane).

- To sort members:
  1. Right-click a dimension. Then, select **Sort Members**.
  2. Select the sort order (Ascending or Descending).
Collapsing the Parent

Performance Management Architect supports large member domains. If you have expanded a dimension with a large number of members, you can collapse the parent instead of manually scrolling up to find the parent and click [-].

To collapse the parent, right-click a member and select **Collapse Parent**.

Reordering Children Members

You can reorder children in the Dimension Library.

1. In the Shared Library or Application pane, drag a member up or down the tree to change the order, or right-click the dimension where you want to reorder the children, and then select **Reorder Children**.

   **Note:** For Profitability and Cost Management models, you must reorder the list of members for all business dimensions in the model to display **NoMember** as the last member; otherwise, validation of the model fails. This step is not required for systems dimensions, such as Alias, AllocationType, Measures, Periods, Scenarios, or Years.

2. Perform an action to change the order:
   - Double-click the sort order, and enter a new number.
   - Select the row, then press F2 and enter a new number.
   - Select the row and use the arrows to change the order.

3. To preview the new order, click **Preview**.

4. Click **Save**.

Managing Orphan Members

Subtopics

- **Viewing Orphan Members**
- **Deleting Orphan Members**

You can remove members, including shared members, from the Shared Library hierarchy and reuse them later. Orphan members are created when you remove members from the hierarchy. When you remove members, the member and all of its descendants are removed from the hierarchy and are moved to the orphan area as individual members without a hierarchy structure.
When you remove a shared member, only that member is moved to the orphan area. The same member in other hierarchy structures is not removed.

You can view orphan members and also permanently delete orphan members.

**Viewing Orphan Members**

To view orphan members, right-click a dimension and select **Orphan Members**. The list of orphan members replaces the Property Grid.

**Deleting Orphan Members**

To delete orphan members, right-click the member in the Orphan Members list and select **Delete Orphan Member**. The orphan member is permanently deleted.

**Tip:** To re-display the Property Grid, select View, **Show Property Grid**.

**Editing Property Values**

When a dimension member is created, it takes on a default set of properties and property values. Properties are organized by category.

For example, the following properties are displayed for the New Account dimension when the category is set to Planning:

![Properties of New Account](image)

Both global and relationship properties can be edited for all instances of a member. See “Modifying Properties” on page 81. Properties, valid property values, and default values are defined in the following chapters:

- Chapter 11, “Working with Financial Management Dimensions”
- Chapter 12, “Working with Planning Dimensions”
- Chapter 14, “Working with Essbase Properties”
Chapter 15, “Working with Statistical and System Properties”

Property values are in the following forms:

- String and Memo—Enter text.
- Integer—Enter a number.
- Boolean—Select True or deselect for False.
- Member—Click \[ \ldots \] and select a member.
- Drop-down list—Select an item.
- String Map—Map an Alias property to an Alias dimension.

To edit property values:

1. Double-click a cell in the Value column of the property to edit.
2. Modify the value for the property.

Note: When you modify a value, the cell changes color.

3. Click \[ \ldots \] .

The property editor displays an icon to the right of each property. Each icon indicates a type of property:

- Default
- User-defined
- Derived
- Inherited

Finding Properties

Some cells may not display a default property, in this case, you can use the Property Selector dialog box to choose a property.

To find a property:

1. In the Property Grid, right-click an empty cell and select Find Property.

   The Property Selector dialog box is displayed.
Select the property, then click **OK**.

**Working with User-Defined Attributes**

Subtopics

- Creating Associations
- Creating User-Defined Attributes
- Deleting User-Defined Attributes

You can use user-defined attributes (UDAs)—words or phrases describing a characteristic of members—within calculation scripts, member formulas, and reports so that they return lists of members associated with the specified UDA. For example, if you have a Product dimension with various product members, you could create a UDA called New Products and base certain calculations only on new products. For information on creating and using UDAs, see the *Oracle Hyperion Essbase Database Administrator’s Guide* and *Online Help*.

Creating UDAs is a three-step process:

1. Create one or more UDA dimensions. See “User-Defined Attribute Dimensions” on page 87.
2. Create a dimension association between the UDA property and the UDA dimension.
3. Create UDA members.
Creating Associations

Before you create user-defined attributes, you must associate the dimension in which you want to create UDAs in to a UDA dimension. Creating an association with the UDA dimension enables you to reuse the UDAs in multiple dimensions.

**Note:** If you have previously associated this dimension to a UDA dimension, it is not necessary to follow these steps prior to creating UDAs.

To create a dimension association:

1. Expand the dimension and select the member for which you want to create a user-defined attribute.
2. In the Property Grid, double-click UDA, then click ...

   **Note:** If you do not have the dimension associated with a UDA dimension, the Create Association - Warning dialog box is displayed. To add user-defined attributes for this member, you must first create a dimension association.

3. Click Yes to create an association.
   The Create New Association dialog box is displayed.
4. Select the UDA property, optionally add a description, then select a UDA dimension.

Creating User-Defined Attributes

You can create UDAs using one of these options:

- Add members to a UDA dimension. See “Creating Members” on page 127.
- Add members using the UDA Selection dialog box, accessed via the Property Grid.

To create UDA members via the Property Grid:

1. In the Property Grid, double-click UDA, then click ...
   The UDA Selection dialog box is displayed.
2. To create a UDA, click Add.
   The Add New UDA Members dialog box is displayed.
3. Enter the UDA name.
4. Optional: To add multiple UDAs, perform these actions:
   - Select Create Multiple Members
   - Enter the UDA names, separated by a comma. For example, Spring Collection, Summer Collection, Fall Collection, Winter Collection. In this example, four new UDAs are created.
5. Click OK.
The UDA Selection dialog box is displayed.

6  Perform one of these actions:

- Select one or more UDA members on the left and click \( \text{button} \).
- To add all UDA members, click \( \text{button} \).
- To remove one or more members from the Select UDA members list, select the members and click \( \text{button} \).
- To remove all members from the Select UDA members list, click \( \text{button} \).

7  Click \text{Save}.

The UDAs are displayed in the UDA property and as members in the UDA dimension in which you created the association with for the UDA property.

### Deleting User-Defined Attributes

To delete UDAs in the UDA Selection dialog box:

1. Select one or more members in the UDA Selection dialog box.
2. Right-click and select \text{Delete Members}.

To delete UDAs in the Dimension Library:

1. Expand the UDA dimension that includes the member(s) you want to remove.
2. Right-click the member, select \text{Delete Member}.
3. Click \text{Yes}.

   You cannot delete UDAs referenced by another member. You must first remove the UDA from the referenced member using the UDA Selection dialog box that you access in the Property Grid.

### Working with Member Formulas

**Subtopics**

- Validating Formulas
- Working with Formula Expressions

You can define member formulas in the Property Grid for Planning, Profitability, Essbase (ASO), and Essbase (BSO) categories. Member formulas can combine operators, calculation functions, dimension and member names, and numeric constants to perform calculations on members. Member formulas can also include:

- Operator type, function, value, member name, UDA, and so on that are allowed in Essbase formulas (see the Oracle Essbase Database Administrator’s Guide and Online Help)
• Predefined formula expressions—including Smart List values—that expand into a formula or value upon database refresh

➢ To define member formulas:
1 Select the dimension member to add or change a formula.

   Note: The Member Formula property displays in the following categories: Planning, Essbase (ASO), and Essbase (BSO).

2 In the Property Grid, double-click Member Formula.

3 Click ... The Memo Editor dialog box is displayed.

   See the Oracle Essbase Database Administrator’s Guide for syntax, rules, and usage on Essbase formulas.

4 To wrap the formula text, click Word Wrap.

5 Click OK.

Validating Formulas

You can only validate member formulas after you deploy an application.

➢ To validate member formulas:
1 Double-click the member formula to validate.

2 Click ... The Memo Editor dialog box is displayed.

3 Click Validate.

4 If necessary, edit the formula. When finished, click OK.

Working with Formula Expressions

Member formulas support Essbase native formulas and formula expressions that are evaluated and expanded into Essbase code blocks when the database is refreshed. In these expressions, you can address Smart Lists by name, which are replaced with their numerical values in calculations.

You can include predefined formula expressions in member formulas, and test them after you deploy an application using the Validate button in the Memo Editor. You can also load them using Oracle Hyperion Application Link or Shared Services.

You can update the dimension outline without updating all the business rules and calc scripts that depend on the outline. Calculations become more independent of specifics in the outline. Performance is not decreased when you use formula expressions because they are run only when you refresh the database.
To use a formula expression in a member formula:

1. Select the dimension member to add or change a formula.

2. Double-click Member Formula, then click ...

3. In the Memo Editor dialog box, define formulas for the member.

You can include formula expressions and Essbase native formulas in the member formula. See the Oracle Essbase Database Administrator’s Guide for syntax, rules, and usage on Essbase native formulas.

Planning provides predefined formula expressions that you can use in member formulas. You cannot edit or create your own formula expressions. See “Formula Expressions” on page 148.

4. Click OK.

Prerequisites

Before using formula expressions in member formulas, you should understand Essbase formulas and calculation and the application outline. See the Oracle Essbase Database Administrator’s Guide.

Formula Expressions

Formula expressions can include these predefined variables and functions.

Table 13 Variables in Formula Expressions

<table>
<thead>
<tr>
<th>Variable</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>OpenInputValueBlock</td>
<td>Generates an IF statement if the application is a multi-currency application, or an empty string if it is one currency application. Used with CloseInputValueBlock.</td>
</tr>
<tr>
<td>CloseInputValueBlock</td>
<td>Generates an End IF statement if the application is a multi-currency application, or an empty string if it is one currency application. Used with OpenInputValueBlock.</td>
</tr>
<tr>
<td>NumberOfPeriodsInYear</td>
<td>Returns the number of time periods in the year</td>
</tr>
<tr>
<td>NumberOfYears</td>
<td>Returns the number of years in the application</td>
</tr>
</tbody>
</table>
### Table 14  Functions in Formula Expressions

<table>
<thead>
<tr>
<th>Function</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Dimension(dimTag)</td>
<td>Returns the name of a predefined dimension. The dimtags are:</td>
</tr>
<tr>
<td></td>
<td>- DIM_NAME_PERIOD</td>
</tr>
<tr>
<td></td>
<td>- DIM_NAME_YEAR</td>
</tr>
<tr>
<td></td>
<td>- DIM_NAME_ACCOUNT</td>
</tr>
<tr>
<td></td>
<td>- DIM_NAMEENTITY</td>
</tr>
<tr>
<td></td>
<td>- DIM_NAME_SCENARIO</td>
</tr>
<tr>
<td></td>
<td>- DIM_NAME_VERSION</td>
</tr>
<tr>
<td></td>
<td>- DIM_NAME_CURRENCY</td>
</tr>
<tr>
<td>Period(periodName)</td>
<td>Returns the specified period. The periodName options are:</td>
</tr>
<tr>
<td></td>
<td>- FIRST_QTR_PERIOD</td>
</tr>
<tr>
<td></td>
<td>- SECOND_QTR_PERIOD</td>
</tr>
<tr>
<td></td>
<td>- THIRD_QTR_PERIOD</td>
</tr>
<tr>
<td></td>
<td>- FOURTH_QTR_PERIOD</td>
</tr>
<tr>
<td></td>
<td>- FIRST_PERIOD</td>
</tr>
<tr>
<td></td>
<td>- LAST_PERIOD</td>
</tr>
<tr>
<td>CrossRef(accountName)</td>
<td>Generates a cross reference for the account</td>
</tr>
<tr>
<td>CrossRef(accountName, prefix)</td>
<td>Generates a cross-reference for the account. The account name contains a prefix that you define. The default prefix is No, followed by a blank space and the account name, for example, No Salary.</td>
</tr>
<tr>
<td>getCalendarTPIndex()</td>
<td>Generates a member formula that returns an index for the time period; the index is based on the calendar year.</td>
</tr>
<tr>
<td>getFiscalTPIndex()</td>
<td>Generates a member formula that returns an index for the time period; the index is based on the fiscal year.</td>
</tr>
<tr>
<td>CYTD(memberName)</td>
<td>Generates a calendar year-to-date formula for the member</td>
</tr>
<tr>
<td>CYTD(memberName, calTPIndexName, fiscalTPIndexName)</td>
<td>Generates a calendar year-to-date formula for the member, and the time period index based on the calendar year and fiscal year. Use when members are renamed. The default member names are “Cal TP-Index” and “Fiscal TP-Index”</td>
</tr>
</tbody>
</table>

### Syntax

Formula expressions support functions and variables. Follow these syntax rules for functions and variables when you create formula expressions:

- Enclose variables or properties with square brackets, [ ] . If you omit square brackets, the variable is treated as a native variable.
- Enclose member names with quotation marks (for example, “Account 200”).
- Characters in variables are case-insensitive, but cannot have extra spaces or characters such as the underscore ( _ ) .
- You can include subcalls to other functions within an expression.
• Do not enter text where a number is required.

• The order of the outline is important in a member formula. For example, do not reference a value that has not been calculated yet.

**Including Smart List Values as Variables**

You can include a Smart List as a variable in a formula expression, such as the formula expression, “Status”= [Status.Dparted]

“Status” is the member name, Status is the Smart List dimension name, and Departed is a Smart List member name. If the Smart List value for Departed is 2, Essbase replaces Status.Dparted with 2 in the member formula (Planning treats Smart Lists as text and Essbase treats Smart Lists as numbers). If the Smart List value for Departed is 2, Essbase replaces Status.Dparted with 2 in the calculation and stores 2 in the database.

Write Smart Lists in this format: [SmartListDimensionName.SmartListMemberName]

**Understanding Common Errors**

Follow the rules of syntax carefully. If formula expression syntax contains errors, error messages are returned when you deploy an application. To get information about error messages, view your Planning Application Server log. The most common error message is “Failed to execute.” This occurs when you use parameters in the expression incorrectly. These actions cause “Failed to execute” error messages:

• Entering the wrong number of parameters in the formula expression
• Misspelling member names, functions, or variable names
• Not surrounding member names with quotation marks
• Including numbers where strings are required

See the *Oracle Hyperion Planning Administrator’s Guide*.

**Working with Members in Applications**

As you create applications, you can add only certain members to applications, exclude members, and set the base member. For information on creating applications, see Chapter 6, “Building Applications.”

**Adding Members to Applications**

You can narrow the results that display in an application by using a subset of a dimension. For example, you may want to show only specific members in an application, such as a product or region. When you add only certain members, the application results are narrowed to these members. This is extremely helpful if you have dimensions containing numerous members and you only need to show data for a few members.
To add members to an application:

1. In the Shared Library, right-click a dimension and select **Add to App View**.

The Add to App View dialog box is displayed.

The member selector enables you to filter members within a dimension. You can expand and collapse members within a dimension using the [+] and [-].

The Add to App View dialog box has two panes——all members in the dimension on the left and selections on the right. The left pane, showing all members available in the dimension, displays the member name and a short description, if available. The right pane, showing selections, displays the member name and the selection type. In new applications, all members display in the selections pane by default.

2. **Optional:** Use the Menu button above each pane to change the columns in the member selector. For example:

   - In the left pane, click **Show, Count**.

     The Count column displays in addition to Name and Description. The count column displays the number of child members under the current dimension. This can be a helpful indicator of how long it might take to expand down a branch of the tree.

   - To remove the Count column, click **Show, Count**.

3. To collapse expanded members, click **Collapse All**.
In the list of available members on the left, select a member to filter by and click ➡.  

**Tip:** If you cannot find a member, you can search for members in the member selector. See “Searching for Members Using the Member Selector” on page 131.

To deselect a member from the list of members to filter by, click ◀.  

Continue to add members to the filter. (Members that the application will be filtered by appear on the right.)  

**Tip:** To deselect all members from the list of selections, click ◀.

When finished, click OK.

### Selecting Top Members

The Select Top Members feature is similar to the Add to App View feature. Adding members to the application, as described in “Adding Members to Applications” on page 150, pushes only the members you want into the application from the Shared Library. Whereas selecting top members pushes the entire dimension into the application, then you can exclude members by picking one or more "top" members. For example, if you have an Entity dimension with a geographical hierarchy with all geographies and you want an application to contain only a country–specific structure. For the shared dimension in the application you can select a country such as Germany, as a top–level member. Similarly you can select other top members from a functional hierarchy. When you select a top member you can also specify if you want just the member, with children, or all the descendants.

**Note:** A top member does not need to be at the highest level. You can select a child member as a top member and then if you add children in the Shared Library, or change them, it is reflected in the application.

➢ To select a top member:

1. In an application, right-click a shared dimension and choose **Select Top Members**.
   
   The Member Selector dialog box is displayed.

2. Select a member on the left, then click ➡ to move the member to the Selections area.

3. Click OK.

**Tip:** To change your selections, right-click a shared dimension and choose Select Top Members again.
Excluding Members

In an application, you can exclude members from a dimension if the dimension is shared. Members can be excluded if you previously included them in selections when defining the member filter for the dimension.

When you exclude a member, a property is automatically set to ensure that the member no longer appears in the application. Excluding a member does not remove existing property values set for the member or its descendants. If you later add the member to the application, the property values are retained, just as they were before you excluded it.

If you have a Planning and Financial Management product installation, and create a Planning application, you may need to exclude unnecessary Financial Management system members. You should select all the Financial Management system members, displayed with square brackets, such as [None] and [Active], and exclude them. For example, in the Accounts dimension, when creating a Planning application, you would exclude all items under Account except Liabilities and Intangible Assets.

To exclude a member, in the application, right-click the member to exclude and select Exclude Member.

Showing Excluded Members

1. To show excluded members:

   a. In the application, right-click the dimension and select Show Excluded Members.

   The Exclusions dialog box is displayed.

   ![Exclusions: Budget1 dialog box]

   b. To show the excluded members in the application, select the member and select Include Member. Otherwise, click Cancel.

   The excluded member is displayed in the application.

Setting the Base Member

Setting the base member enables you to exclude any of the children under the parent in a shared dimension. For example, in the Entity roll up, Europe has the children of Italy and United
Kingdom, if you make Europe the base for this roll up, then Italy and United Kingdom are no longer visible.

**Note:** The Set Base Member feature is not related to shared members.

To set the base member, in the application, right-click the member in a shared dimension, select **Set as base member**.

To remove the base member setting, right-click the base member and select **Enable Descendants**.
About Applications

The Application Library enables you to view, create, validate, and deploy Performance Management Architect applications to Hyperion financial applications. Applications contain dimensions and dimension attributes that are designed to meet financial management and planning needs. Each application contains accounts, entities, scenarios, and other dimension elements.

As the application creator, you can create unlimited numbers of applications. For example, you can create applications for the following purposes:

- By cost center, to budget operating expenses
- By product line, to plan revenues
- To report on tax data
- To report on Security and Exchange Commission data

To open the Application Library, select Navigate, Administer, Application Library.

Workflow for Creating Applications

The following sections provide information on creating different types of applications:

- Consolidation—See “Creating Consolidation Applications” on page 157.
Manual Workflow

Using the manual method, you can create blank applications and define the application in seven steps:

1. In the application wizard select an application type, then select Create Blank Application.
2. Drag dimensions (or dimension hierarchy subsets) from the Shared Library to the application or create local dimensions in the application.
3. Activate all dimension associations.
4. Modify dimension, application, and member properties (only if the application properties differ from the Shared Library properties).
5. Validate the application.
6. Deploy the application to the Hyperion product environment.

Application Wizard Workflow

The application wizard makes it easy to create applications and guides you through the following screens:

- Application Type—enables you to enter the name, select the type, and enter a description. See “Selecting the Application Type” on page 157. Depending on the application type, additional options display.
- Dimension Selection—enables you to select or create dimensions. See “Selecting Dimensions” on page 159.
- Application Settings—enables you to associate dimensions, set the dimension alias, and modify other application properties. See “Modifying the Application Settings” on page 162.

You can access the application wizard by selecting File, New, Application in the Dimension Library or Application Library.
Prerequisites

To create applications, you must have the Application Creator global role for your Hyperion product (Financial Management, Profitability and Cost Management, Planning, Essbase (ASO), or Essbase (BSO)). In addition, to create applications that use shared dimensions you also must have the Dimension Editor role. For information on Performance Management Architect roles, see “Security” on page 29. For information on creating or assigning global roles, see the Oracle Hyperion Enterprise Performance Management System User and Role Security Guide.

Before you create applications, complete the following tasks:

- Install and configure Shared Services.
- Configure the product in which you plan to deploy applications. (Configuration includes creating the product instance and the data source.)
- Optional: In Performance Management Architect, create a profile and load dimensions into the Shared Library. See Chapter 3, “Importing Metadata.”

Note: For all application types, you cannot name an application “Master.” The application name, “Master,” is a reserved name in Performance Management Architect. If you inadvertently name an application “Master,” an error message will display indicating that the application exists.

Creating Consolidation Applications

You can create Consolidation applications using the application wizard. The following sections provide step-by-step information on creating Consolidation applications:

- “Selecting the Application Type” on page 157
- “Selecting Dimensions” on page 159
- “Modifying the Application Settings” on page 162
- “Validating and Deploying” on page 164

Selecting the Application Type

The following steps describe creating Consolidation and Tax Provisioning applications.

1. To create Consolidation applications:
   1. Select File, then New, and then Application.
   2. Enter the application name.

   Application names must not contain any special characters or spaces and cannot begin with HFM, HSV, HSX, or a number. Application names must be no more than 10 characters in length. If the application name contains non-ASCII characters and is between 6 and 10 characters in length, an error will occur when the application is deployed.
3  **For Application Type**, select one of these options:

- **Standard Consolidation**, if you want to create a standard consolidation application
- **Tax Provisioning**, if you want to create an application specifically for tax provisioning. Tax provisioning applications enable you to collect, calculate, and report on corporate tax provisions under both US GAAP and IFRS.

**Note:** You can create and validate a tax provisioning application in Performance Management Architect and deploy it to Financial Management. You can open and work with tax provisioning applications in a future release of Financial Management.

4  **Enter a description.**

Descriptions may contain special characters, and more than 256 characters.

5  **Optional:** If you are creating a standard consolidation application, select **Create Blank Application** to create an empty application and use the Dimension Library to drag dimensions into the application. See “Manually Adding Dimensions” on page 161.

**Note:** If you are creating a tax provisioning application, you cannot create a blank application.

6  **Optional:** **Select Auto Create Local Dimensions.**

Selecting Auto Create Local Dimensions automatically creates new dimensions for all dimensions that are required in the application. The dimension name for each new dimension is identical to the dimension type with (New) in parentheses. Automatically creating local dimensions helps save time since it populates the required dimensions necessary to create the application.

7  **Perform one of these actions:**

- If using the application wizard, click **Next**.
  
  The Dimension Selection screen is displayed. See “Selecting Dimensions” on page 159.

- If creating the application manually, click **Finish**.

**Note:** If you are creating a tax provisioning application, the Finish button is disabled. Click Next to populate dimensions with metadata. Then you can validate the application, and make any required changes, or click Finish.

The Dimension Library is displayed. See “Manually Adding Dimensions” on page 161.
Selecting Dimensions

The next step in creating an application is to add dimensions to the application. Consolidation applications must contain the following dimension instances:

- 1 Scenario
- 1 Year
- 1 View
- 1 Period
- 1 Entity
- 1 Value
- 1 Account
- 1 ICP
- 2 Generic (There must be one dimension with a value of 'To' for the Use For Currency property, and one dimension with a value of 'From' for the Use For Currency property.)
- 1 Security Class (Optional)
- 1 Alias (Optional)
  
  The alias dimension should contain no more than 10 members.
- 1 Currency
- 1 Consolidation Method

Note: If you use the application wizard to create an application, all required dimensions are automatically shown on the Dimension Selection screen.

If you are using the application wizard, see “Adding Dimensions Using the Wizard” on page 159. If you created a blank application, see "Manually Adding Dimensions" on page 161.

Adding Dimensions Using the Wizard

When you use the application wizard, all required dimensions for Standard consolidation and tax provisioning applications are automatically displayed If there is an exact match, it automatically populates the dimension column for the dimension type. Dimension types are automatically categorized and displayed with a shaded heading. For example, Primary Dimensions, Custom Dimensions, and Other Dimensions. Primary dimensions are required.

If you selected Auto Create Local Dimensions, new local dimensions are created for each required dimension. The name of each new dimension is the same as the dimension type, with (New) in parentheses. For example, Account (New).

► To define dimensions:

1. To map a dimension type to a dimension, click [Select] in the Dimension column.
If a required dimension type matches to a dimension in the Dimension Library, the
dimension name displays in the Dimension column.

2 Select a dimension.

The dimensions that display in the drop-down list map to the type of dimension. For
example, if you are mapping a dimension to the Account dimension type, only account
dimensions display in the list.

In some cases, you may want to create a new dimension.

3 Optional: Create a new dimension. To create a new dimension:

a. Using the Dimension drop-down arrow, select Create New Dimension.

   The Add New Dimension dialog box is displayed.

b. Enter the dimension name and description. The type is automatically selected according
to the dimension type you are mapping the dimension to in the Dimension Type
column.

c. Click OK.

   Note: When you create a dimension in the application wizard, it is always a local
dimension and cannot be shared in the application wizard. If you want to share
a dimension, you must use the Dimension Library. See “Understanding Shared
and Local Dimensions” on page 80.

4 Continue to select or create new dimensions for all primary, custom, and other dimensions.

5 If you want the dimension to be local, select the local check box at the end of each row.
Note: If you automatically created new local dimensions on the first screen of the wizard, you cannot change the dimensions to be shared.

For information on shared and local dimensions, see “Understanding Shared and Local Dimensions” on page 80.

Note: All dimensions must be mapped to a dimension or [None] before you can move to the next screen.

6 Click Next.

The Application Settings screen is displayed.

Manually Adding Dimensions

When you create blank applications, you use the Dimension Library to select dimensions. The Dimension Library has three panes:

- **Shared Library**—Displays on the left and displays all dimensions currently available in the Shared Library.
  
  For information on loading dimensions into the Shared Library, see Chapter 3, “Importing Metadata.”

- **Application**—Appears in the middle and when expanded, lists the names of all dimensions in the current application.

- **Property Grid**—Displays on the right and displays the properties of the selected dimension or member.
  
  For information on editing properties, see “Editing Property Values” on page 142.

To add dimensions to applications:

1 Drag the dimensions from the Shared Library to the application.

The Copy Dimension dialog box is displayed.

2 Select Local Dimension or Shared Dimension.

Tip: To add only members to an application, in the Shared Library, right-click the dimension and select Add to App View. See “Adding Members to Applications” on page 150.

For information on shared and local dimensions, see “Understanding Shared and Local Dimensions” on page 80.

The expanded application lists all dimensions.
Tip: If you add a member to the Shared Library and include the dimension in the application, you can click and the new member will display in the application.

**Modifying the Application Settings**

The next step in creating applications is to modify application properties and other application settings. If you are creating the application manually, you use these options, plus additional options in the Shared Library.

If you are creating the application manually, the Dimension Library is displayed, with the Shared Library, Application, and Property Grid. You can use the right-click menu to modify the application dimensions or the application at the highest level.

**Modifying Application Settings Using the Dimension Library**

If you created a blank application and are modifying application settings in the Dimension Library, you can perform these actions:

- Set the dimension alias—See “Setting the Dimension Alias” on page 203.
- Associate dimensions and view existing dimension associations—See “Viewing Dimension Associations” on page 202.
- View application membership—See “Viewing Application Membership” on page 205.
- Create dimensions—See “Creating Dimensions” on page 79
- Remove dimensions—See “Removing Dimensions” on page 202.
- Copy dimensions—See “Copying Dimensions” on page 90
- Detach dimensions—See “Converting Local Dimensions to Shared” on page 200
- Modify property values—See “Editing Property Values” on page 142
- Add members, exclude members, and set the base member—See “Working with Members in Applications” on page 150.

Modifying Application Settings Using the Application Wizard

If you are creating the application using the wizard, the application dimensions and members display on the left, the Property Grid displays on the right, and the validation and deployment options display at the bottom.

For wizard applications, use the right-click menu to modify the application dimensions or members. You can perform these actions:

- Set the dimension alias—See “Setting the Dimension Alias” on page 203.
Validating and Deploying

If you are using the application wizard, when you finish modifying the application dimensions and members, you can validate the application and correct any errors before finalizing the creation of the application. You can also bypass the validation and deployment options in the wizard and later use the deployment option in the Application Library.

If you are creating the application manually, you validate and deploy the application using options in the Application Library. For detailed information on validation and deployment, see “Validating and Deploying Applications” on page 220.

To validate and deploy an application using the wizard:

1. In the application wizard, Application Settings screen, select Validate.
   All errors display in the grid, showing the error type and error message.
2. If validation errors occur, correct any problems before you deploy the application.
3. To deploy an application, on the Application Settings screen, select Deploy when finished.
4. Click Finish.
   If you selected Deploy when finished, the Deploy dialog box is displayed.

Note: After you deploy an application, you cannot change the Year, Period, Alias, or View dimensions. In addition, you cannot add languages after deployment.

Creating Planning Applications

You can create Planning applications manually or using the application wizard. Planning applications must meet these requirements:

- The application must have a name, and it must be assigned to at least one plan type.
- The Default Currency property must be defined.
- The Fiscal Year Start Date property must be defined. The year must be four digits long, such as 2010.
The first year member in the Year dimension and the Fiscal Year Start Date property must describe the same year. For example, if the Fiscal Start Year is 2010, the first year in the Year dimension must be FY10.

Year members must start with FY, followed by a two-digit year, such as FY10.

The Fiscal Year First Month property must be defined.

The Default Alias Table property must be defined. For information, see “Alias Dimensions” on page 84.

The application must include the Planning required dimensions. Single-currency applications require Scenario, Version, Entity, Account, Period, and Year. Multiple-currency applications require Scenario, Version, Entity, Account, Period, Year, and Currency.

The application must meet the qualifications specified in Chapter 12, “Working with Planning Dimensions.”

For information on requirements specific to Planning modules, see the appropriate guide. For Oracle Hyperion Public Sector Planning and Budgeting, see the Oracle Hyperion Public Sector Planning and Budgeting User’s Guide. For Oracle Hyperion Workforce Planning and Oracle Hyperion Capital Asset Planning, see the Oracle Hyperion Workforce Planning Administrator’s Guide and Oracle Hyperion Capital Asset Planning Administrator’s Guide.

**Selecting the Application Type**

Use these steps to create Planning applications. When specifying application information, ensure that:

- The application has a name, and it is assigned to at least one plan type.
- The Default Currency property is defined.
- The Fiscal Year Start Date property is defined. The year must be four digits long, such as 2010.
- The first year member in the Year dimension and the Fiscal Start Year property describe the same year. For example, if the Fiscal Start Year is 2010, the first year in the Year dimension is FY10.
- Year members start with FY, followed by a two-digit year, such as FY10.
- The Fiscal Year First Month property is defined.

To create Planning applications using the application wizard:

1. **Select File, then New, and then Application.**
   
The first screen of the wizard displays.

2. **Enter the application name.**
   
   Names must not contain any special characters and must contain no more than eight characters.
3 For Application Type, select Planning.

4 Enter an optional description.

5 Optional: Select Create Blank Application to create an empty application and use the Dimension Library to drag and drop dimensions into the application. Optionally, click Finish. See “Manually Adding Dimensions” on page 161.

   If you are creating a blank application, define the plan types, default currency, and enable multiple currencies. See “Defining Plan Types” on page 167 and “Specifying the Default Currency” on page 168.

6 Optional: Select Auto Create Local Dimensions if you want to create a local application, creating all required dimensions locally using the default name of the dimension class.

   For example, this creates an Entity dimension named Entity, an Account dimension named Account, and so on. With this setting, dimensions are selected as local dimensions on the Dimension Selection screen, and you can add dimensions under Custom Dimensions and Other Dimensions, if necessary.

7 Perform these actions:

   ● For Application Type, select one of these options: General.
     ○ General
     ○ Public Sector Planning and Budgeting
     ○ Project Financial Planning
   ● Define the plan types: see “Defining Plan Types” on page 167.
Specify the default currency: see “Specifying the Default Currency” on page 168.

Set calendar options for the base time period. If you select 12 Months, enter the fiscal start month and weekly distribution. See “Defining Calendar Ranges” on page 174.

8 Optional: Perform these actions:

- Select Create New Local Period Dimension.
  
  If you want to create a local Period dimension, enter the period name for the new dimension in the Calendar area. If you select Custom for Base Time Period, enter the period name, prefix, and periods per year.

- Select Create New Local Year Dimension.
  
  If you want to create a local Year dimension, enter the appropriate information for the new dimension in the Calendar area, including the year name, first fiscal year, and total number of years.

9 Click Next.

The Dimension Selection screen is displayed. See “Selecting Dimensions” on page 169.

Defining Plan Types

In an application, you must configure at least one plan type. An Essbase database is created for each plan type. You can have up to three plan types for Planning applications, and two for separate modules. You cannot change the name or number of plan types after creating an application.

As you create accounts, entities, and other elements of the application, you associate them with plan types, so the database for each plan type contains only application dimensions, members, and data values relevant to the plan type. This optimizes application design, size, and performance.

The number of plan types depends on the needs of your organization. For example, if the sales department has a yearly revenue plan, and the finance department has a P&L plan, you can define two plan types, Revenue and P&L.

Data can be shared between plan types. For example, the Revenue plan may include several sales detail accounts that roll up into a Total Product Sales account. You can configure the P&L plan to include the Total Product Sales account. This configuration enables you to bring the data value for Total Product Sales into the P&L plan, without account details. Thus, the database for your P&L plan is smaller and more efficient.

Plan type names can have up to eight characters. You can enter more than eight bytes, including single-byte and double-byte characters, but an error message displays when the Essbase database is created. If Essbase is installed on a UNIX server, the plan type name cannot contain underscore characters.

For information on Public Sector Planning and Budgeting, see the Oracle Hyperion Public Sector Planning and Budgeting User’s Guide.

For information on Oracle Project Financial Planning, see the Oracle Project Financial Planning User’s Guide.
To define plan types, perform one of these actions:

- If you are using the application wizard, select the plan types and enter the plan type names.
  - For the **General** application type, you can have up to three generic plan types, a Workforce plan type, and a Capital Asset plan type.
  - For the **Public Sector Planning and Budgeting** application type, you can have up to three generic plan types and a Human Capital planning plan type. The Human Capital Planning plan type is selected by default and cannot be removed. Select the level of budget detail:
    - **Employee**: includes employee data only
    - **Position**: includes position data only
    - **Position and Employee**: includes both position and employee data
  - For the **Project Financial Planning** application type, you can have up to three generic plan types. Additionally, you can select whether or not to create an **Industry Sample** application:
    - **None**: Select this option if you are creating a basic Project Financial Planning application, and you do not want to create a sample application.
    - **Information Technology**: Select this option if you are creating an information technology (IT) industry-specific Project Financial Planning application, and you want to create a sample application. The sample application contains projects, employees, assets, and other metadata and data specific to the IT industry.

  **Note:** If you select None, you need to define the calendar range. If you select Information Technology from the Industry Sample drop-down, the values for Default Currency, Use Multiple Currencies, Base time Period, Fiscal Year Start Month, Number of Fiscal Years, and all of the other calendar related properties are set automatically and cannot be changed.

- If you are creating the application manually, double-click the **Plan 1 Name** property and enter the name of the plan type. Repeat the process for additional plan types.

### Specifying the Default Currency

You must specify the default currency for the entities of an application and establish whether the application supports currency conversions. Multiple currency support (also known as currency overrides) is available for level 0 members, regardless of their base currency.

These examples show several supported currency codes:

- USD: US dollar
- EUR: European Union Euro
- AUD: Australian dollar
For a list of currency codes, see the ISO 4217 currency code list for banking and business. You can use a predefined three-letter currency code, or add your own. Performance Management Architect does not require adherence to the ISO standard.

If you support multiple currencies, two dimensions are created in the deployed application: Currency and HSP_Rates. The multiple currency setting cannot be changed later.

- To set the default currency:
  - If you are using the application wizard, select a currency to use for the **Default Currency**. If the application has multiple currencies, select **Multiple Currencies**.
  - If you are creating the application manually, select the application at the highest level. Double-click the **Default Currency** property and enter the currency code. If you support multiple currencies, select the application at the highest level and select **Multiple Currencies** in the Property Grid.

**Selecting Dimensions**

The next step in creating an application is to add dimensions to the application. Planning applications must meet these requirements:

- Single-currency applications require these dimensions:
  - Entity
  - Version
  - Scenario
  - Account
  - Year
  - Period
- Multiple-currency applications require the above dimensions as well as Currency.

**Note:** For required dimensions for the Planning modules, see Chapter 12, “Working with Planning Dimensions.”

- The Default Alias Table property must be defined. For information, see “Alias Dimensions” on page 84.

- The application must meet the requirements specified in Chapter 12, “Working with Planning Dimensions.”

**Tip:** If you use the wizard to create an application, all required dimensions are automatically marked on the Dimension Selection screen.

If you are using the wizard, see “Defining Dimensions Using the Wizard” on page 170. If you created a blank application, see “Manually Adding Dimensions” on page 171.
Defining Dimensions Using the Wizard

When you use the application wizard, all required dimensions are displayed in bold. Dimension types are categorized and displayed with a heading, for example, All Plan Types, Custom Dimensions, and Other Dimensions. Dimensions under All Plan Types are required.

To define dimensions using the application wizard:

1. To map a dimension type to a dimension, click [Select] in the Dimension column.

   If a required dimension type matches to a dimension in the Dimension Library, the dimension name displays in the Dimension column.

2. Select a dimension.

   The dimensions that display in the drop-down list map to the type of dimension. For example, if you are mapping a dimension to the Account dimension type, only Account dimensions display in the list.

   In some cases, you may want to create a new dimension.

   **Note:** When selecting dimensions for Project Financial Planning applications, the Scenario, Year, and Period dimensions must be local and cannot be shared. If any of the remaining dimensions are shared, ensure that the UDA, Currency, and Alias dimensions are also shared.

3. Optional: Create a new dimension. To create a new dimension:
a. Using the Dimension drop-down arrow, select Create New Dimension. The Add New Dimension dialog box displays.

b. Enter the dimension name and description. The type is automatically selected according to the dimension type you are mapping the dimension to in the Dimension Type column.

c. Click OK.

4 Continue to select or create new dimensions for all required, custom, and other dimensions.

5 To add an attribute dimension, identify its base dimension. Attribute dimensions must be associated with a base dimension.

6 To create a dimension as local to the application, select Local Dimension at the end of each row.

Note: If you automatically created new local dimensions on the first screen of the wizard, you cannot change the dimensions to be shared.

You cannot have a Shared Base dimension, such as Entity, with a local associated dimension, such as Alias. For information on shared and local dimensions, see “Understanding Shared and Local Dimensions” on page 80.

Note: All required dimensions must be mapped to a dimension before you can move to the next screen. It is not necessary for any non-required dimensions to be mapped.

7 Review the application settings to ensure that they meet the requirements described in “Selecting Dimensions” on page 169. For example, you must make a selection for all of the required dimensions. (Single-currency applications require Scenario, Version, Entity, Account, Period, and Year. Multiple-currency applications require these dimensions in addition to Currency.)

8 When you have resolved any issues, click Next.

If errors display, ensure that the application meets the requirements described in “Selecting Dimensions” on page 169. You can click Show Details to view information about the error, then click Hide Details. Then click OK. After resolving any errors, click Next again.

The Application Settings screen is displayed. See “Modifying the Application Settings” on page 172.

Manually Adding Dimensions

When you create applications manually, you use the Dimension Library to select dimensions. The Dimension Library has three panes:

- Shared Library—Displays on the left and displays all dimensions currently available in the Shared Library.

For information on loading dimensions into the Dimension Library, see Chapter 3, “Importing Metadata.”
• **Application**—Appears in the middle, and, when expanded, lists the names of all dimensions in the current application.

• **Property Grid**—Displays on the right with the properties of the selected dimension or member.

  For information on editing properties, see “Editing Property Values” on page 142.

For information on filtering dimensions for applications, see “Adding Members to Applications” on page 150.

➢ To add dimensions to applications:

1. **Drag the dimensions from the Shared Library to the application.**
   
The Copy Dimension dialog box is displayed.

2. **Select Local Dimension or Shared Dimension.**

**Tip:** To add only members to an application, see “Adding Members to Applications” on page 150.

The expanded application lists all dimensions. For information on shared and local dimensions, see “Understanding Shared and Local Dimensions” on page 80.

You can modify application properties. Depending on the application type, requirements and properties vary. See “Modifying the Application Settings” on page 172.

### Modifying the Application Settings

The next step in creating applications is to modify application properties and other application settings. If you are creating the application manually, you use these options, plus additional options in the Dimension Library.

If you are creating the application manually, the Dimension Library is displayed, with the Shared Library, Application, and Property Grid. You can use the right-click menu to modify the application dimensions or the application at the highest level.

**Modifying Application Settings Using the Dimension Library**

If you created a blank application and are modifying application settings in the Dimension Library, you can perform these actions:

- Optimize application performance. See “Modifying Performance Settings” on page 176
- Set the data type evaluation order. See “Setting Data Type Evaluation Order” on page 178
- Set the dimension alias—See “Setting the Dimension Alias” on page 203.
- Associate dimensions and view existing dimension associations—See “Viewing Dimension Associations” on page 202.
- Create dimensions—See “Creating Dimensions” on page 79
- Remove dimensions—See “Removing Dimensions” on page 202.
- Copy dimensions—See “Copying Dimensions” on page 90
- Detach dimensions—See “Converting Local Dimensions to Shared” on page 200
- Modify property values—See “Editing Property Values” on page 142
- Add members, exclude members, and set the base member—See “Working with Members in Applications” on page 150.

Modifying Application Settings Using the Application Wizard

If you are creating the application using the wizard, the application dimensions and members display on the left, the Property Grid displays on the right, and the validation and deployment options display at the bottom.

For wizard applications, use the right-click menu to modify the application dimensions or members. You can perform these actions:

- Optimize application performance. See “Modifying Performance Settings” on page 176
- Set the default alias table. The Default Alias Table property is set to default at the application level. If you create another alias table (another member of the Alias dimension, such as English) and want this to be the default alias table used by the application, you must set this manually. See “Setting the Dimension Alias” on page 203.
- View application membership—See “Viewing Application Membership” on page 205.
- View dimension associations—See “Viewing Dimension Associations” on page 202
Defining Base Time Periods and Monthly Distribution Spread

You can select a base time period and a monthly distribution pattern, based on the number of fiscal weeks in a month. Base time periods are the bottom-level time periods in an application. Predefined options are quarters or months. You can create a custom base time period, such as weeks or days.

You use monthly distribution patterns to determine how data entered into a summary time period is distributed (spread) among the base time periods. During data entry, users can enter data into summary time periods, such as years or quarters. Planning distributes the entered values over the base time periods that constitute the summary time period.

If you select a weekly distribution pattern other than Even Distribution, Planning treats quarterly values as if they were divided into 13 weeks and distributes weeks according to the pattern that you selected. For example, if you select the 5-4-4 pattern, Planning treats the first month of a quarter as if it has five weeks and the last two months of the quarter as if they have four weeks. The options for the weekly distribution pattern are available only if you select the base time period option “12 Months.”

To define base time periods and weekly distribution patterns:

1. Select the application (at the highest level), then double-click the Base Time Period property, select 12 Months, Quarters, or Custom.
2. Double-click the Weeks Distribution property, select a weekly distribution pattern. (Options include: Even, 445, 454, and 544.)

Defining Calendar Ranges

For applications, you can specify the fiscal start year and start month. When specifying the fiscal start year, consider how much historical data your organization needs and wants in the application. You can add years to the calendar, but you cannot change the fiscal start year.

For the fiscal year, you can set the fiscal year first month and specify whether the fiscal year starts from the same calendar year or the previous calendar year. You can later set up calculations based on the calendar year, for example, using formula expressions. When setting up formulas for Planning applications, keep in mind that formula expressions such as [TPDate] and [FirstDate] produce different results if the application starts in the same calendar year or previous calendar year.
The following table provides examples of how the Fiscal Year First Month and the Fiscal Start Year options affect the calendar for the application, assuming the Fiscal Start Year is 2010.

**Table 15   Examples of Fiscal Year First Month and Fiscal Start Year Calendar Options**

<table>
<thead>
<tr>
<th>Fiscal Year First Month</th>
<th>Fiscal Start Year</th>
<th>Year - Period</th>
<th>Year Dimension</th>
</tr>
</thead>
<tbody>
<tr>
<td>January</td>
<td>Same Calendar Year</td>
<td>Jan-10 to Dec-10</td>
<td>FY10</td>
</tr>
<tr>
<td>July</td>
<td>Same Calendar Year</td>
<td>Jul-10 to Jun-11</td>
<td>FY10</td>
</tr>
<tr>
<td>July</td>
<td>Previous Calendar Year</td>
<td>Jul-09 to Jun-10</td>
<td>FY10</td>
</tr>
<tr>
<td>February</td>
<td>Same Calendar Year</td>
<td>Feb-10 to Jan-11</td>
<td>FY10</td>
</tr>
<tr>
<td>February</td>
<td>Previous Calendar Year</td>
<td>Feb-09 to Jan-10</td>
<td>FY10</td>
</tr>
<tr>
<td>December</td>
<td>Same Calendar Year</td>
<td>Dec-10 to Nov-11</td>
<td>FY10</td>
</tr>
<tr>
<td>December</td>
<td>Previous Calendar Year</td>
<td>Dec-09 to Nov-10</td>
<td>FY10</td>
</tr>
</tbody>
</table>

To set up the calendar:

1. **In the Calendar section of the application wizard, select a Base Time Period option to set how calendars roll up:**

   **Note:** If your application type is Project Financial Planning, and you selected to create an industry sample application, the calendar properties are set automatically and cannot be changed.

   - **12 Months:** Four quarters per year; months roll up into parent quarters and quarters into years.
   - **Quarters:** Quarters roll up into years. After you select this option, proceed to step 7 below.
   - **Custom:** A custom time period, such as weeks or days. After you select this option, proceed to step 7 below.

   **Note:** You may use only a 12 month calendar range for Project Financial Planning applications.

See the *Oracle Hyperion Planning Administrator's Guide* for additional information on how to use the application wizard to create Planning applications.

2. **If you selected the Create New Local Year Dimension option, the First Fiscal Year option is displayed.** Use this option to define the starting fiscal year for the application. You cannot change it after creating the application. Before specifying the first fiscal year, consider how much historical data your organization needs and wants in the application.

   **Note:** For Project Financial Planning applications, this option is selected by default and cannot be changed.
If you selected the Create New Local Year Dimension option, the Number of Fiscal Years option is displayed. Select the Number of Fiscal Years for the application to define the number of years in the calendar. You can add more years to the calendar after the application is created.

Note: For Project Financial Planning applications, this option is selected by default and cannot be changed.

If you set the base time period as 12 Months, select the Fiscal Year First Month for a new local period dimension.

This is the first month in the fiscal year for the application, which depends on the First Fiscal Year option.

If you set the base time period as 12 Months, select the Fiscal Year Start Date:

- **Same Calendar Year.** Set the fiscal year to start with the current calendar year. For example, selecting the year 2010 with a starting period of Jun creates the starting year as FY10, defined as Jun-10 to May-11.
- **Previous Calendar Year.** Set the year to start with the previous calendar year. For example, selecting the year 2010 with a starting period of Jun creates the starting year as FY10, defined as Jun-09 to May-10.

If you set the base time period as 12 Months, select a Weekly Distribution option: Even, 445, 454, or 544.

Weekly distribution sets the monthly distribution pattern, based on the number of fiscal weeks in a month. This determines how data in summary time periods spreads within the base time period. When users enter data into summary time periods, such as quarters, the value is distributed over base time periods in the summary time period.

If you select a weekly distribution pattern other than Even, Planning treats quarterly values as if they were divided into 13 weeks and distributes weeks according to the selected pattern. For example, if you select 5-4-4, the first month in a quarter is considered to have five weeks, and the last two months in the quarter have four weeks.

Click Next.

To define the calendar range:

1. Select the application (at the highest level), and then click Fiscal Start Year. Enter the year.
2. Double-click Fiscal Year First Month, and then select the month.
3. Double-click Fiscal Year Start Date, and then select SameCalendarYear or PreviousCalendarYear.

Modifying Performance Settings

Use these methods to optimize application performance:

- Assign dimensions as dense or sparse.

  You can accelerate data retrieval and minimize memory and disk space requirements by assigning dimensions to one of two types: dense or sparse.
If a dimension lacks data values for the majority of member combinations, define it as sparse. If a dimension has data values for the majority of member combinations, define it as dense. Often, dense dimensions are Period and Account. Usually, Period is highly populated with data, whereas Account is dense due to intensive calculations.

Essbase requires that at least one dimension be set to dense. Custom attributes cannot be assigned to dense dimensions. See the *Oracle Hyperion Planning Administrator’s Guide*.

- Change dimension order.
- Allocate memory for the supporting detail cache. See the *Oracle Hyperion Planning Administrator’s Guide*.

To improve performance for Planning applications:

1. **Right-click the application (at the highest level) and select Performance Settings.**

   The Plan Type Performance Settings dialog box is displayed.

   ![Plan Type Performance Settings](image)

2. **Select plan type.**

   Dimensions belonging to the plan type are displayed with the number of dimensions for the plan type. Applications can have up to five plan types.

   If applications are created with a single currency, the HSP_Rates dimension is not displayed.

3. **Double-click a cell in the Density column and select:**

   - **Sparse**—Lack data values for the majority of member combinations. A sparse dimension is a dimension with a low percentage of available data positions filled.
   - **Dense**—A dimension with a high probability that one or more data points is occupied in every combination of dimensions.

   **Caution!** Deployment of an application fails if you do not assign at least one dimension in a cube to be dense.
You can speed calculation time by changing the order for calculating dimensions. The order of dimensions is critical in the structure and performance of Essbase databases. Dense dimensions calculate faster than sparse dimensions, so dimensions should be in order of most to least dense. Aggregating dimensions aggregate children into the parent to create new data; non-aggregating dimensions do not create new data by the hierarchies (for example, a Scenario or Version dimension).

Separate sparse dimensions into aggregating and non-aggregating dimensions, with aggregating dimensions before non-aggregating dimensions.

Optimize performance by ordering dimensions according to these guidelines:

- Make Period and Account dense.
- Order dense dimensions from the most to least dense. The most dense is usually Period, followed by Account.
- Separate sparse dimensions into aggregating and non-aggregating dimensions. Place aggregating dimensions before non-aggregating dimensions. Order sparse dimensions from most to least dense.

4 Select a dimension:
   - Click to move the dimension up in the list.
   - Click to move the dimension down in the list.

5 Click OK.

Setting Data Type Evaluation Order

Data types are a property that are defined for all dimension members. Data types can have conflicting results on the face of a data form depending upon the cell intersections defined for the data form. For example, the intersection of a "percent" data type and a "currency" data type need to be resolved based upon a defined order set by a Power User. The Data Type Evaluation Order is the defined order. You set a dimension order by plan type to determine the precedence when multiple data types intersect. Data types associated with the first dimension in the list take precedence over data types associated with subsequent dimensions.

To modify the evaluation order:

1 Right-click the application (at the highest level) and select Data Type Evaluation Order(s).

The Evaluation Order dialog box is displayed.
Note: If you want to allow users to enter dates or text into data form cells having Date and Text data types in Planning applications, select those members' dimensions and move them to Selected Dimensions.

2 Select a Plan Type.
Applications can have up to five plan types.

3 Select a dimension and perform one action:
   - Click [UP] to move the dimension up in the list.
   - Click [DOWN] to move the dimension down in the list.

4 Click OK.

Validating and Deploying

If you are using the application wizard, when you finish modifying the application dimensions and members, you can validate the application and correct any errors prior to finalizing the creation of the application. You can also bypass the validation and deployment options in the wizard and later use the deployment option in the Application Library.

If you are creating the application manually, you validate and deploy the application using options in the Application Library. For detailed information on validation and deployment, see “Validating and Deploying Applications” on page 220.

➤ To validate and deploy an application using the wizard:

1 In the application wizard, Application Settings screen, select Validate to view and resolve any issues before deploying.

   Any errors display in the grid, showing the error type and error message. Use the scroll bars as necessary to view the messages.

   To save a copy of one or all of the messages, right-click a message, and select Copy Selected to Clipboard or Copy All to Clipboard. You can paste the information into a text editor and save or print the messages. To clear the list of messages, click Clear.
If validation errors or warnings display, correct them before you deploy the application.

To deploy after creating the application, on the Application Settings screen, select **Deploy when finished**.

**Note:** When deploying Project Financial Planning applications, for **Shared Services Project**, select **Default Application Group**. (This is the project for which you defined security and provisioning.)

Click **Finish**.

If you selected Deploy when finished, the Deploy dialog box is displayed.

For more information on validating and deploying Public Sector Planning and Budgeting applications, see the *Oracle Hyperion Public Sector Planning and Budgeting User’s Guide*.

For information on validating and deploying Project Financial Planning applications, see the *Oracle Project Financial Planning User’s Guide*.

**Creating Standard, Detailed, and Management Ledger Profitability and Cost Management Applications**

You can create Standard, Detailed, and Management Ledger Profitability and Cost Management applications using the application wizard. The following sections provide step-by-step information on creating Profitability and Cost Management applications:

- “Selecting the Application Type” on page 180
- “Selecting Dimension Types” on page 182
- “Modifying the Application Settings” on page 187

**Selecting the Application Type**

The following steps describe creating Profitability and Cost Management applications.

- To create Profitability and Cost Management applications:
  1. Populate the new shared library in Performance Management Architect using a flat file import or a Performance Management Architect interface table import.

  **Caution!** Add any business dimensions to be included in the application, for example, Generic, Account, Entity, Time, or Country, to the Dimension Library before creating the application; otherwise, the dimensions will not be available for the Application Wizard to select. See “Creating Dimensions.”

  2. Select **Navigate, Administer, Application Library**.

  The Application Library is displayed.

  3. Select **File, New, Application**.
The first screen of the Application Creation Wizard is displayed - Application Type.

4 Enter the application name.
Names must be 7 characters or less, and must not contain any special characters, including “&” (ampersands).

5 From the Type drop-down list, select one of the following application types. The type of application that you select depends on the type of modelling that you require to effectively manage your organization's models.

- **Standard**: A Standard application contains costs and revenue dimensions and members that are similar to your organization’s chart of accounts. Standard applications are focused on contribution analysis, following the flow of cost and revenue funds to determine where funds are coming from and where they are going.

- **Detailed**: A Detailed application also contains costs and revenue dimensions and members that are similar to your organization's chart of accounts. However, Detailed applications are focused on profitability analysis, following the flow of cost and revenue to determine which areas of your organization are profitable.

- **Management Ledger**: A Management Ledger application contains costs and revenue dimensions and members that are similar to your organization's general ledger. Management Ledger applications offer management reporting and modeling with data structured similarly to users’ Oracle General Ledger or Oracle Hyperion Financial Management implementations. Allocations and other calculations required for management reporting are performed using a more free-form approach than is supported in Standard Profitability models.
Optional: Enter a description.

Optional: To manually add dimensions to the blank application, select Create Blank Application, and then click Finish. See “Adding Dimensions Manually” on page 186.

Optional: To automatically create all required dimensions, select Auto Create Local Dimensions.

Selecting Auto Create Local Dimensions automatically creates new dimensions for all dimensions that are required in the application. The dimension name for each new dimension is identical to the dimension type with (New) in parentheses.

If you are creating a Detailed or a Management Ledger application, under Profitability, select Detailed or Management Ledger. (The default setting is None.)

Click Next.

The second screen of the wizard is displayed - Dimension Selection. See “Selecting Dimensions” on page 159 “Selecting Dimension Types” on page 182.

Selecting Dimension Types

After creating the application, you must select the dimension types that are to be included in the application. All profitability applications have a common set of dimensions that you should include. In addition to the common dimensions, Detailed Profitability and Management Ledger applications include dimensions that are specific to their application types. For a complete description of dimension types and their associated members, see the Oracle Hyperion Profitability and Cost Management Administrator’s Guide.

The following dimension types are required for all Profitability and Cost Management applications, including Standard, Detailed, and Management Ledger applications:

- At least one Point of View (POV) dimension type must be defined by the user. The model POV provides a specific view of your model information for a selected point of view or period. For example, POV dimension types may include some of the following dimensions:
  - Year
  - Time
  - Period
  - Scenario
  - Months
  - Financial Quarters
  - Seasons
- The Alias dimension is optional, and only required if you want to use aliases in your model.

Caution! Duplicate member names or aliases are not allowed.

- At least one Business Dimension type must be defined by the user. Business dimensions are created to describe the business elements within the model, such as business-specific departments, general ledger accounts, activities, locations, customers, or products.
Generic business dimensions may include some of the following examples, and may apply to one or more stages or models:

- Accounting dimensions may contain chart of account-type information, such as Net Income and Sales, in applications.
- Organizational dimensions may outline departments, task forces, or other internal or external groups, such as Human Resources, Information Technology, and so on.
- National or country dimensions may be used to track business activities in multiple countries, states, provinces or locations.

**Note:** Although these business dimensions can be included as part of a Profitability and Cost Management application, when the Essbase outlines are deployed, they are created as basic or generic dimensions, with no type.

- Attribute dimensions are a special type of dimension that are associated with a business dimension, and contain members that can be used to classify members of another, associated dimension. Attribute dimensions describe characteristics of data, such as the size and color of products.

There are two Attribute dimension types in Performance Management Architect:

- Attribute dimensions:
  - The attribute can be created using different structures, such as Boolean, Date, Numeric and Text.
  - An attribute has a hierarchy, and the hierarchies can be rolled up for aggregate values.
  - Only one attribute from a given attribute dimension can be associated with one member.
- User-defined attribute dimensions (UDAs):
  - The attribute can only be created using Text.
  - A UDA does not have a hierarchy, and cannot be easily used in reports to generate sums.
  - Multiple UDAs can be associated with a member.

Each type of attribute dimension offers different advantages, depending on the requirements for your model and reporting needs.

**Note:** Model stages are not dimensions, and are therefore not available in Performance Management Architect. Stages are added to a model in Profitability and Cost Management, and are used to organize dimensions into logical steps or stages.

Standard Profitability applications should also contain the following two system dimensions:

- The Measures dimension contains the members required to build, validate and calculate a model, including driver measures, reporting measures, and allocation measures. Users may
add any user-defined driver measures (or sub-hierarchies) to the hierarchy under the member ’UserDefinedDriverMeasures’.

- The AllocationType dimension is used to store direct allocations and allocation genealogy.

Detailed Profitability applications should also contain the MeasuresDetailed dimension. The MeasuresDetailed dimension is a reserved dimension that is required for calculation and stage balancing. It contains Allocation Measures, but does not include Driver measures.

**Caution!** Do not edit this dimension, as modifications may result in the loss of data or the corruption of your model.

Management Ledger applications should also contain the following system dimensions:

- The Balance dimension tracks the movement of data in and out of the intersections of the modeling dimensions (like cost center, account, and so on), the net change, current balance, and remainders.
- The Rule dimension tracks the specific rule that caused the data movements.

After creating the application, select the dimensions to be added to the application using the appropriate procedure:

- If you are using the wizard, see “Adding Dimensions Using the Wizard” on page 184.
- If you created a blank application, see “Adding Dimensions Manually” on page 186.

**Adding Dimensions Using the Wizard**

When you use the application wizard, all required dimensions are automatically displayed. If there is an exact match, it automatically populates the dimension column for the dimension type. The required dimension types for Profitability and Cost Management are automatically categorized and displayed with a shaded heading.

- Measures Dimension (Standard applications only)
- AllocationType Dimension (Standard applications only)
- MeasuresDetailed (Detailed applications only)
- Balance Dimension (Management ledger applications only)
- Rule Dimension (Management Ledger applications only)
- POV Dimension (at least one must be defined)
- Business Dimension (at least one must be defined)
- Alias Dimension (Optional)
- Attribute Dimension (Optional)
If you selected Auto Create Local Dimensions when selecting the application type, new local dimensions are created for each required dimension. The name of each new dimension is the same as the dimension type, with (New) in parentheses. For example, Account (New).

**Caution!** Any business dimensions you want to include in the application, for example, Account, Entity, Time, or Country, must be added to the Dimension Library before creating the application; otherwise, the dimensions will not be available for the Application Wizard to select. See “Creating Dimensions.”

To select dimensions:

1. On the Dimension Selection tab (Step 2 of the Application Wizard), under **Dimension Type**, review the required dimension types for your application type.

   **Note:** The required dimension types for Profitability and Cost Management applications are automatically categorized and displayed with a shaded heading.

2. For each existing dimension to be added for the application, under the **Dimension** column, click [Select] to display the drop-down list of available dimensions for that dimension type.

   Only the dimensions for the associated dimension type are displayed. For example, if you are mapping a dimension to the Measures dimension type, only measure dimensions display in the list.

3. Select a dimension from the drop-down list.
4 Optional: Create a new dimension, as follows:
   a. In the Dimension column, click [Select] to display the drop-down list of available dimensions for that dimension type.
   b. From the drop-down list, select [Create New Dimension].
      The Add New Dimension dialog box is displayed.
   c. Enter the Name and Description of the new dimension. The Type is automatically selected, based on the dimension type selected in the Dimension Type column.
   d. Click OK.

   Note: When you create a dimension in the application wizard, it is always a local dimension and cannot be shared in the application wizard. If you want to share a dimension, you must use the Dimension Library.

5 Repeat step 3 and step 4 to select or create new dimensions as necessary.

   Note: All required dimensions must be mapped to a dimension or [None] before you can move to the next screen.

6 Optional: To set the dimension as a local dimension, select the Local Dimension check box at the end of each row.

7 Click Next.
   The Application Settings screen is displayed.

Adding Dimensions Manually

When you create blank applications, you use the Dimension Library to select dimensions. The Dimension Library has three panes:

- **Shared Library** - Displays on the left and displays all dimensions currently available in the Shared Library.

  For information on loading dimensions into the Dimension Library, see Chapter 3, “Importing Metadata.”

- **Application** - Appears in the middle and when expanded, lists the names of all dimensions in the current application.
- **Property Grid** - Displays on the right and displays the properties of the selected dimension or member.

For information on editing properties, see “Editing Property Values” on page 142.

After you create a blank application, you can add dimensions.

1. **To add dimensions to blank applications:**
   - **In the Dimension Library, drag the dimensions from the Shared Library to the application.**
     - The Copy Dimension dialog box is displayed.

   **Tip:** To create new local dimensions, right-click the application name in the Application View, and select Create Dimension. The Add New Dimension dialog box is displayed.

2. **Select Local Dimension or Shared Dimension for each dimension.**

   **Tip:** To add only members to an application, in the Shared Library, right-click the dimension and select Add to App View. See “Adding Members to Applications” on page 150.

For information on shared and local dimensions, see “Understanding Shared and Local Dimensions” on page 80.

3. **Add all required dimensions to the application. (Measures, AllocationType, POV, and so on.)**
   - The expanded application lists all dimensions.

   **Tip:** If you add a member to the Shared Library and include the dimension in the application, you can click the Refresh button, and the new member will display in the application.

4. **Reorder the dimensions so that NoMember is moved to the last Gen2 position.** See “Reordering Children Members in Profitability and Cost Management Models” on page 190.

5. **Modify the application settings, as required.** See “Modifying the Application Settings” on page 187.

### Modifying the Application Settings

The next step in creating an application is to modify application properties, associations, and other application settings. If you are creating a blank application and using the Dimension Library to modify the application settings, you have similar options, except that you are using the Dimension Library instead of the wizard to make the modifications.

Use the appropriate options to modify the application settings:

- Use the Dimension Library for blank applications. See “Modifying Application Settings Using the Dimension Library” on page 188.

- Use the Application Wizard for auto-generated applications. See “Modifying Application Settings Using the Application Wizard” on page 188.
Note: Dimension associations are required for shared hierarchies, and may not be required in all models.

Modifying Application Settings Using the Dimension Library

In the Dimension Library, the Shared Library, Application and Property Grid are displayed. You can use the right-click menu to modify the application dimensions and perform these actions:

- Set the properties for the POV dimensions. See “Setting the Properties for POV Dimensions” on page 189.
- Set the POV Display Order for multiple POV dimensions. See “Reordering Children Members in Profitability and Cost Management Models” on page 190.
- Set the dimension alias—See “Setting the Dimension Alias” on page 203.
- Associate dimensions and view existing dimension associations—See “Viewing Dimension Associations” on page 202.
- View application membership—See “Viewing Application Membership” on page 205.
- Create dimensions—See “Creating Dimensions” on page 79.
- Remove dimensions—See “Removing Dimensions” on page 202.
- Copy dimensions—See “Copying Dimensions” on page 90.
- Detach dimensions—See “Converting Local Dimensions to Shared” on page 200.
- Modify property values—See “Editing Property Values” on page 142.
- Find members, exclude members, and set the base member—See “Common Application Tasks” on page 198.

Modifying Application Settings Using the Application Wizard

If you are creating the application using the wizard, the application dimensions and members display on the left, the Property Grid displays on the right, and the validation and deployment options display at the bottom.

- Set the properties for the POV dimensions. See “Setting the Properties for POV Dimensions” on page 189.
- Set the POV Display Order for multiple POV dimensions. See “Reordering Children Members in Profitability and Cost Management Models” on page 190.
- Set the dimension alias—See “Setting the Dimension Alias” on page 203.
- View application membership—See “Viewing Application Membership” on page 205.
- Synchronize dimensions—See “Synchronizing Dimensions with the Shared Library” on page 201.
- Create members—See “Creating Members” on page 127.
- Insert shared members—See “Working with Shared Members” on page 128.
- Modify dimension performance settings—See “Setting the Dimension Sort Order and Dimension Density” on page 203.
- Manage orphan members—See “Managing Orphan Members” on page 141.

**Setting the Properties for POV Dimensions**

At least one POV, or Point of View, dimension must be set for every Profitability and Cost Management model. The POV dimension may be set to any custom value, but usually denotes time periods, such as Year, Period, or Scenario.

If more than one POV dimension is designated, a POV Display Order must also be set to control the order for display and staging tables. The POV Display Order that is set in Performance Management Architect is automatically picked up in Profitability and Cost Management.

➢ To set POV dimension properties:

1. **On the Application Settings tab of the Application Creation Wizard, select the first POV dimension, such as Year.**

2. **In the Property Grid under Category, select Profitability.**

3. **For a POV dimension in your application, select the property, POV Dimension.**

4. **Optional:** Repeat step 1 to step 3 to select other POV dimensions, such as Period or Scenario.

5. **Optional:** If more than one POV Dimension was selected, set the **POV Display Order** for each POV Dimension.

   Double-click the POV Display Order cell and type the sequence number for the selected POV dimension. For example, if Year, Period and Scenario are set as POV Dimensions, set the POV Display Order for Year to 1, Period to 2, and Scenario as 3 as the display order.
Reordering Children Members in Profitability and Cost Management Models

For all business dimensions in the model, you must reorder the list of members to display NoMember as the last member; otherwise, validation of the model will fail.

You can also reorder members to suit your particular requirements as long as NoMember is moved to the last position.

**Note:** This step is not required for systems dimensions, such as Alias, AllocationType, Measures, Periods, Scenarios or Years.

To reorder children:

1. From EPM Workspace, select **Navigate**, then **Administer**, and then **Dimension Library** to display the Shared Library.
2. In the Shared Library, right-click the dimension that you want to reorder, and select **Reorder Children**.
   The Reorder Children dialog box is displayed.
3. Select the member to be moved, and use the up and down arrows to change the order of the children.
   **Note:** Ensure the NoMember dimension is moved to the end of the list; otherwise, the deployment will fail.
4. Repeat step 3 to order all members.
5. To preview the changes, click **Preview**.
6. Click **Save**.

Validating and Deploying

If you are using the application wizard, when you finish modifying the application dimensions and members, you can validate the application and correct any errors before finalizing the creation of the application. You can also bypass the validation and deployment options in the wizard and later use the deployment option in the Application Library.

If you are creating the application manually, you validate and deploy the application using options in the Application Library. For detailed information on validation and deployment, see Appendix B, “Application Validations.”

To validate and deploy an application using the wizard:

1. In the application wizard, Application Settings screen, select **Validate** to view and resolve any issues before deploying.
   All errors display in the grid, showing the error type and error message.
2. If validation errors occur, correct any problems before you deploy the application.
3. To deploy after creating the application, on the Application Settings screen, select **Deploy when finished**.
4 Click Finish.

If you selected Deploy when finished, the Deploy dialog box is displayed; otherwise, the application is displayed in the Dimension Library.

Creating Essbase Applications
You can create Essbase applications using the application wizard. The following sections provide step-by-step information on creating Essbase (ASO) and Essbase (BSO) applications.

- “Selecting the Application Type” on page 192
- “Selecting Dimensions” on page 193
- “Modifying the Application Settings” on page 195
- “Validating and Deploying” on page 197

It is important to review the application requirements when you create an Essbase ASO or BSO application. See “Application Requirements” on page 191.

Note these limitations with Performance Management Architect and Essbase.

You cannot:

- Use Performance Management Architect to create Hybrid Analysis or Advanced Relational Access cubes.
- Transform existing Essbase applications with more than one cube to Performance Management Architect. (Note: Performance Management Architect supports transformations with one (non-currency) cube only.) See “Transforming Classic Applications into Performance Management Architect” on page 38.
- Validate formulas within Performance Management Architect

Performance Management Architect does not support:

- Varying attributes
- Database administration features including partition management, drill-through definitions, and security
- The concept of multiple databases. Performance Management Architect allows a 1-to-1 relationship between an Essbase application and an Essbase database.

Application Requirements
Keep in mind the following guidelines and requirements when creating Essbase applications:

- Essbase applications do not require a fixed set of dimensions. For example, you can create and deploy an Essbase application containing just one generic dimension and one member.
- When adding an alias member, you must create a dimension of “Alias” type to associate with this member. See “Creating Dimension Associations” on page 88 for information on creating dimension associations.
The alias dimension can contain up to 10 members. At a minimum, a member named “Default” is required in this dimension.

- When adding an attribute member, you associate the member to a base dimension. See “Creating Dimension Associations” on page 88 for information on creating dimension associations.
- Performance Management Architect only supports the attribute type, “Text.”

**Note:** In some cases, if you make changes to the “Auto Configure” property in Performance Management Architect, it does not overwrite in Essbase. If you set the “Dimension Storage Type” property in Essbase applications, you must set the ”Auto Configure” property value to False before you deploy or redeploy the application to Essbase.

Properties for Essbase applications, dimensions and members are described in Chapter 14, “Working with Essbase Properties.”

Information on Essbase requirements for applications and databases are available in the Oracle Essbase Database Administrator’s Guide and the Oracle Essbase Administration Services Online Help.

### Selecting the Application Type

The following steps describe creating an Essbase application.

- To create Essbase (ASO) and Essbase (BSO) applications:
  
  1. Select **File**, and then **New, Application**.
  2. Enter the application name.
     
     Names are limited to 8 characters. In addition, names must not contain any special characters.
  3. Select **Essbase (ASO)** or **Essbase (BSO)**.
  4. **Optional:** Enter a description.
     
     Descriptions can include up to 255 characters.
  5. **Optional:** Select **Create Blank Application** to create an empty application and use the Dimension Library to drag and drop dimensions into the application. See “Manually Adding Dimensions” on page 194.
     
     **Note:** The Auto Create Local Dimensions feature is not available since it automatically creates new dimensions for all dimensions that are required in the application. Essbase applications do not have any specific required dimensions.
  6. Enter the **Essbase Database Name**.
     
     When you create an Essbase application, an Essbase database is also created. The database name is required for all Essbase applications. Database names can include no more than 8
characters. For specific database naming conventions, see the Oracle Essbase Database Administrator's Guide.

7 Optional: Select Unicode.

If you choose the Unicode option, members of the dimensions are stored in Unicode format and all characters are available. For additional information, see the Oracle Essbase Database Administrator's Guide.

8 Perform one of these actions:

- If using the application wizard, click Next.
  
  The Dimension Selection screen is displayed. See “Adding Dimensions Using the Wizard” on page 193.

- If creating the application manually, click Finish.
  
  The Dimension Library is displayed. See “Manually Adding Dimensions” on page 194.

Selecting Dimensions

The next step in creating an application is to add dimensions to the application.

Tip: If you use the wizard to create an application, all required dimensions are automatically shown on the Dimension Selection screen. For Essbase, no dimensions are required, however you must choose at least one dimension.

If you are using the application wizard, see “Adding Dimensions Using the Wizard” on page 193. If you created a blank application, see “Manually Adding Dimensions” on page 194.

Adding Dimensions Using the Wizard

When you use the application wizard to add dimensions, dimension types are automatically categorized and displayed with a shaded heading. For example, Account dimensions, Period dimensions, Entity dimensions, Currency dimensions, and Other dimensions, such as Scenario or Version.

To define dimensions:

1 To map a dimension type to a dimension, click [Select] in the Dimension column.

   If a required dimension type matches to a dimension in the Dimension Library, the dimension name displays in the Dimension column.

2 Select a dimension.

   The dimensions that display in the drop-down list map to the type of dimension. For example, if you are mapping a dimension to the Account dimension type, only account dimensions display in the list.

   In some cases, you may want to create a new dimension.
3. **Optional: Create a new dimension. To create a new dimension:**
   
   a. Using the **Dimension** drop-down arrow, select **Create New Dimension**.
      
      The **Add New Dimension** dialog box is displayed.
      
      **Note:** When you create a dimension in the application wizard, it is always a local dimension and cannot be shared in the application wizard. If you want to share a dimension, you must use the **Dimension Library**. See “Understanding Shared and Local Dimensions” on page 80.
      
   b. Enter the dimension name and description. The type is automatically selected according to the dimension type you are mapping the dimension to in the **Dimension Type** column.
      
   c. Click **OK**.

4. **Continue to select or create new dimensions as necessary.**

5. **For existing dimensions:** If you want the dimension to be local, select the local check box at the end of each row.

   **Note:** If you created a new dimension, you cannot change a dimension to be shared.

   For information on shared and local dimensions, see “Understanding Shared and Local Dimensions” on page 80.

   **Note:** You must map at least one dimension to a dimension before you can move to the next screen.

6. **Click Next.**

   The **Application Settings** screen is displayed. See “Modifying the Application Settings” on page 195.

---

**Manually Adding Dimensions**

When you create blank applications, you use the **Dimension Library** to select dimensions. The **Dimension Library** has three panes:

- **Shared Library**—Displays on the left and displays all dimensions currently available in the **Shared Library**.
  
  For information on loading dimensions into the **Dimension Library**, see Chapter 3, “Importing Metadata.”

- **Application**—Appears in the middle and when expanded, lists the names of all dimensions in the current application.

- **Property Grid**—Displays on the right and displays the properties of the selected dimension or member.

  For information on editing properties, see “Editing Property Values” on page 142.
To add dimensions to applications:

1. Drag the dimensions from the **Shared Library** to the application.

   The **Copy Dimension** dialog box is displayed.

   **Tip:** To create new local dimensions, right-click the application name in the **Application View**, and select **Create Dimension**. The **Add New Dimension** dialog box is displayed.

2. Select **Local Dimension** or **Shared Dimension**.

   **Tip:** To add only members to an application, in the **Shared Library**, right-click the dimension and select **Add to App View**. See “Adding Members to Applications” on page 150.

For information on shared and local dimensions, see “Understanding Shared and Local Dimensions” on page 80.

The expanded application lists all dimensions.

**Tip:** If you add a member to the **Shared Library** and include the dimension in the application, you can click ![click here](image) and the new member will display in the application.

### Modifying the Application Settings

The next step in creating applications is to modify application properties and other application settings. If you are creating the application manually, you use these options, plus additional options in the **Dimension Library**.

If you are creating the application manually, the **Dimension Library** is displayed, with the **Shared Library, Application**, and **Property Grid**. You can use the right-click menu to modify the application dimensions or the application at the highest level.

**Modifying Application Settings Using the Dimension Library**

If you created a blank application and are modifying application settings in the Dimension Library, you can perform these actions:

- Modify dimension performance settings—See “Setting the Dimension Sort Order and Dimension Density” on page 203.
- Create, modify, and delete named levels—See “Working with Named Levels (Essbase (ASO) and Essbase (BSO) Only)” on page 91.
- Create, modify, and delete named generations—See “Working with Named Generations (Essbase (ASO) and Essbase (BSO) Only)” on page 90.
- Associate dimensions and view existing dimension associations—See “Viewing Dimension Associations” on page 202.
- View application membership—See “Viewing Application Membership” on page 205.
- Create dimensions—See “Creating Dimensions” on page 79
Modifying Application Settings Using the Application Wizard

If you are creating the application using the wizard, the application dimensions and members display on the left, the **Property Grid** displays on the right, and the validation and deployment options display at the bottom.

For wizard applications, use the right-click menu to modify the application dimensions or members. You can perform these actions:

- **View application membership**—See “Viewing Application Membership” on page 205.
- **Exclude members**—See “Excluding Members” on page 153.

If you are using the application wizard, when you finish modifying the application dimensions and members, you can validate the application and correct any errors before finalizing the creation of the application. See “Validating and Deploying” on page 197.
Validating and Deploying

If you are using the application wizard, when you finish modifying the application dimensions and members, you can validate the application and correct any errors before finalizing the creation of the application. You can also bypass the validation and deployment options in the wizard and later use the deployment option in the Application Library.

If you are creating the application manually, you validate and deploy the application using options in the Application Library. For detailed information on validation and deployment, see “Validating and Deploying Applications” on page 220.

➢ To validate and deploy an application using the wizard:

1. In the application wizard, Application Settings screen, select Validate.
   All errors display in the grid, showing the error type and error message.
2. If validation errors occur, correct any problems before you deploy the application.
3. To deploy an application, on the Application Settings screen, select Deploy when finished.
4. Click Finish.
   If you selected Deploy when finished, the Deploy dialog box is displayed. Otherwise, the application is displayed in the Dimension Library.

Creating Generic Applications

You can create generic applications if you want to:

• Create a template application that can be duplicated to create deployable applications of different types
• Model local dimensions in your own work area until you are ready to include them in the Shared Library or a deployable application
• Use them as a source for producing an ADS file from the Performance Management Architect File Generator. See “Performance Management Architect Utilities” on page 26.

When you create Generic applications, you create blank applications using the application wizard. Then, you can use the Dimension Library to add dimensions.

➢ To create generic applications:

   The first screen of the wizard is displayed—Application Type.
2. Enter the application name.
   Names must not contain any special characters or spaces. In addition, names must contain no more than 10 characters.
Enter a description.

Click Finish.

The Dimension Library is displayed.

Add dimensions from the Shared Library to the application. See “Common Application Tasks” on page 198.

## Common Application Tasks

This section describes common tasks for all application types. For tasks specific to an application type, see:

- “Creating Consolidation Applications” on page 157
- “Creating Planning Applications” on page 164
- “Creating Standard, Detailed, and Management Ledger Profitability and Cost Management Applications” on page 180
- “Creating Essbase Applications” on page 191
- “Creating Generic Applications” on page 197

## Including Dimensions in Applications

Performance Management Architect enables you to manage and share dimensions across applications as well as use independent dimensions that are unique to your application. You can also change a dimension within an application from shared to local or vice versa. This capability provides a deployed application the flexibility to modify its dimension sharing requirements with other applications over time without having to define them at the time of application creation.

You can create local dimensions and maintain the dimensions locally in the application. At a subsequent time, you can decide to share these local dimensions (converting from local to shared) or copy them to the Shared Library as separate dimensions for independent use by other applications. Once a dimension is in the Shared Library, you can distribute updates to other applications that use the dimension in several ways (inherited using a shared dimension or explicitly using dimension synchronization to move changes between the Shared Library and an application).

Detaching dimensions (converting from shared to local) enables you to break the shared link between the dimension in the Shared Library and its counterpart in an application while allowing you to retain the same dimension structure and property values in the application. Any changes made to the dimension in the Shared Library are then no longer automatically inherited to the application.

To add dimensions to an application:

1. Drag the dimensions from the Shared Library to the application.

   The Dimension Status Selection dialog box is displayed.
2 Select Local Dimension or Shared Dimension.
3 Click OK.

Dimensions that are shared in an application display (Shared) after the dimension name. Dimensions that are local in an application display (local) after the dimension name.

Converting Shared Dimensions to Local

There may be cases where you have a shared dimension that you want to change to a local dimension in the application. After you convert a shared to dimension to local, all subsequent changes you make in the Shared Library will not be consumed by the local dimension in the application.

You can convert a shared dimension to local by detaching the dimension in the application. The Detach Dimension feature is only available if the dimension is shared in the application. Detaching a dimension converts the shared dimension to a local dimension by making a copy. After the dimension is copied, the dimension is no longer shared, but rather a local dimension where you can make structure changes without effecting the Shared Library or vice versa.

In a case where you want to make the dimension shared again, you can reconnect it with the same dimension in the Shared Library that previously was included in the application. See “Converting Local Dimensions to Shared” on page 200.

When a dimension is converted from shared to local, the dimension is not synchronized since the dimension is copied to the application. Property overrides and filters are applied to the local dimension so the resulting dimension has the same structure and property values as the shared version.

To detach a dimension:
1 Right-click a shared dimension in the application.
2 Select Detach Dimension.

The Detach Dimension dialog box is displayed.

3 Select Retain Filtered Structure and/or Retain Property Overrides.

To retain the same filtered structure and overridden property values in the local dimension that you had in the shared dimension, select both options. To discard any application level filtering and overrides you may have created in the shared dimension and to create a local dimension with the same structure as the source dimension in the shared library, using inherited property values of the source dimension, do not select either option.

4 Click OK.
Note: If you change the property value in the application, that property value becomes an application level overridden value. In this case, it is "detached" from the property value of the same member in the Shared Library, even if the Shared Library’s version is changed. To revert the application-level property back to inheriting the Shared Library’s version, right-click and remove the value in the application.

Converting Local Dimensions to Shared

Local dimensions consist of two types:

- Dimensions that are sourced from the Shared Library but are not linked to the Shared Library dimension
- Dimensions that are sourced from outside the shared library

You can convert local dimensions in an application to shared. Upon conversion, the local dimension becomes shared and reconnects with the same shared dimension that was originally included in the application. When you convert local dimensions, you can determine whether to merge the changes or simply replace the dimension in the Shared Library.

Merging Changes—If you make changes to the original shared dimension, a merge operation merges any structure changes that were made to the dimension in the application. You can select an existing dimension from the Shared Library and the merge adds members from the dimension in the Shared Library to the dimension in the application. Property value differences for existing members are retained as local property values within the application. You also have the option to create a new shared dimension to merge.

Replacing Changes—If you make changes to the local dimension in an application, and then convert to a shared dimension, a replace operation replaces the dimension in the Shared Library with the structure and property values from the dimension in the application.

A local dimension can be pushed into the Shared Library for use by other applications.

Note: You cannot update the following Consolidation dimensions after application deployment: Period, View, ICP, Year, Value, Currency.

To convert a local dimension to shared:

1. Right-click a local dimension in the application.
2. Select Share Dimension.
   The Share Dimension dialog box is displayed.
3 Perform one of these actions:
   - To make a copy of the dimension and create a new copy, select **Create a new shared Dimension**.

   **Note:** A dimension is created with the same name in the Shared Library, if one already exists, an error displays indicating that you cannot create a new shared dimension. Dimension names must be the same since the 'share' action results in the local dimension moving to the Shared Library and it being shared into the application, as if it were dragged there from the beginning of the process when adding dimensions to the application. Shared dimensions in an application always have the same name as their source dimension in the Shared Library.

   - Select the existing dimension to merge or replace.

4 Select **Merge As Shared** or **Replace**.

5 Click **OK**.

### Synchronizing Dimensions with the Shared Library

You have two options to synchronize local dimensions in applications: 1) synchronize changes from a dimension in the Shared Library to a local dimension in an application 2) synchronize changes from a local dimension in an application to a dimension in the Shared Library.

To synchronize dimensions:

1 Right-click a local dimension in the application.

2 Select **Synchronize**.

3 Select either:
   - To Shared Library
   - From Shared Library
4 Select the target dimension to synchronize (to or from).

The list of available target dimensions from the Shared Library are filtered to only those of the same dimension type as the selected application dimension. If a copy of the local dimension exists in the Shared Library, it is automatically selected by default.

5 Select Merge As Shared or Replace, then click OK.

You can use the Merge As Shared option to merge similar dimensions from two different applications. For example, if you transform two applications that have similar dimensionality (such as, a similar Products dimension) that are transformed to Performance Management Architect. In this case, you can copy one of the dimensions to the Shared Library and then merge the second dimension into this dimension. This allows for retaining the structures in the individual applications while also creating a master dimension.

Importing Dimensions into Applications

You can import dimensions directly into Performance Management Architect applications. See “Creating Import Profiles” on page 66 and “Managing Import Profiles” on page 74 for detailed information.

Removing Dimensions

To remove a dimension from an application, right-click the dimension, and select Remove Dimension.

Viewing Dimension Associations

Dimension associations enable you to assign security classes and currency to dimensions and dimension members. For example, for an entity dimension, you can create associations to the security classes and currency dimensions. Associations are created at the dimension level and associations are inherited by all members under the dimension. Dimension associations are created in the Dimension Library. See “Creating Dimension Associations” on page 88.

Dimension associations are used to denote the inter-relationships between the dimensions within the Shared Library and applications. For example, within Consolidation applications there are Account dimension properties that reference security class, custom dimension intersections (<DimensionAliasName>TopMember), and so on, which directly relate to other dimensions. Dimension Associations enable you to define the relationships between these properties and the other dimensions which then enables you to pick the value directly from the referenced dimension.

An example of associating dimensions for Planning applications, is the Start Period and End Period properties of the Scenario dimension would have a dimension association with the Period dimension. The Start Year and End Year property of the Scenario dimension would have a dimension association with the Year dimension.

A dimension association is created for all properties where the property value refers to a member of another dimension. Once you create the association, you need to activate it in the application.
Activating Dimension Associations

To activate all dimension associations, right-click the application (at the highest level) and select *Activate all associations*.

**Note:** If you have a multi-currency application, the Currency dimension must be associated with the base Entity dimension. If you activate all dimension associations, it will automatically activate the association for you.

For information on creating an association for one or more dimensions, see “Creating Dimension Associations” on page 88.

Viewing Dimension Associations

Dimension associations are not automatic, so you must activate all associations before you can view associations.

To view dimension associations:

1. In the application, right-click a dimension, and select *View Associations*.
    
The View Dimension Association dialog box is displayed.

    **Tip:** To delete an association, select the association you want to delete, then click Delete.

2. Click *OK*.

Setting the Dimension Alias

In Consolidation and Planning applications, you can change the alias, or dimension name, in order to see a different name in the deployed application. The Dimension Alias property is useful in cases where you want to view a different name for a dimension in the deployed application versus what is displayed in the Shared Library or application.

To set the Dimension Alias property:

1. Select the dimension in the Shared Library.
2. In the Property Grid, change the category to *System*.
3. Double-click the Dimension Alias property and enter a new dimension name (alias).

Setting the Dimension Sort Order and Dimension Density

You can modify the dimension performance settings for Profitability and Cost Management and Essbase applications. Performance settings include modifying the dimension sort order and dimension density.
To set the dimension sort order:

1. In the Dimension Library, right-click the application name and select **Dimension Performance Settings**.

2. Under **Dimensions (Type)**, select a dimension, then use the **Move up** and **Move down** buttons to set the dimension sort order described in the following sections.

A dimension sort order must be set for every Profitability and Cost Management dimension in the model, except Alias and UDA dimensions. The dimension sort order should be sequential, unique, and greater than or equal to 1; otherwise, validation of the model will fail. See Table 16 for the recommended dimension sort order settings.

### Table 16: Recommended Profitability and Cost Management Dimension Sort Order Settings

<table>
<thead>
<tr>
<th>Dimension Type</th>
<th>Setting</th>
</tr>
</thead>
<tbody>
<tr>
<td>Measure</td>
<td>1 (Default)</td>
</tr>
<tr>
<td>AllocationType</td>
<td>2</td>
</tr>
<tr>
<td>POV and Business Dimensions</td>
<td>3 or higher</td>
</tr>
<tr>
<td>Attribute Dimensions</td>
<td>Sort as the last dimensions. For example, if you have four attribute dimensions in a sequence of 12 dimensions, the attribute dimensions must be set as 9, 10, 11, and 12.</td>
</tr>
</tbody>
</table>

In Essbase, dimension sort order determines the order dimensions appear in the outline and, in turn, impacts the order that dimensions are calculated. Calculation order for ASO and BSO databases should be determined in advance, when designing the database. Note that dimension order can affect performance, especially for BSO databases. Calculation of ASO and BSO databases is described in the *Oracle Essbase Database Administrator’s Guide*. However, keep in mind the following:

- **ASO**—The dimension solve order is used by ASO databases and should be taken into account when setting the dimension sort order. If no dimension solve order or sort order is set, aggregations are performed in outline order. Attributes are calculated last.

- **BSO**—Dimension sort order is based on the calculation order, which is intrinsic in Essbase. Dense dimensions (for example, the time or measures dimensions) are calculated first, sparse dimensions are calculated next, and attribute dimensions are calculated last.

3. **Optional**: For Essbase BSO and Profitability and Cost Management, under **Density**, select the required density for the dimension.

4. Click **OK**.

### Setting the Dimension Sort Order in the Property Grid

You can set the processing order for a model dimension in the Dimension Sort Order property in the Property Grid.
A dimension sort order must be set for every dimension in the model, except Alias and UDA dimensions. The dimension sort order should be sequential, unique, and greater than or equal to 1.

**Note:** The Alias dimension is ignored for Dimension Sort Order, as it does not exist as a dimension in Profitability and Cost Management and Essbase.

For Profitability and Cost Management, the dimensions must be sorted sequentially in the sequence specified in Table 16, “Recommended Profitability and Cost Management Dimension Sort Order Settings,” on page 204; otherwise, validation of the model will fail:

1. Select **Navigate, Administer, Dimension Library**.
2. Edit a Profitability and Cost Management or Essbase application.
3. Select a dimension.
4. In the Property Grid, select one of the following categories, based on the type of application you are editing: **Profitability**, **Essbase (BSO)**, or **Essbase (ASO)**.
5. **For Profitability applications only**, perform these tasks:
   a. Set the dimension sort order. For the recommended order, see “Setting the Dimension Sort Order and Dimension Density” on page 203.
   b. Validate the model. See “Validating and Deploying” on page 190.

**Note:** For Essbase applications, if you change the dimension sort order after you deploy an application, you should redeploy and select “Full Deploy.”

### Viewing Application Membership

Application membership provides a view of where specific members or dimensions are used in the list of available applications. This information helps you understand the impact of changes. For example, a division is being reorganized, and you are planning to update the Entity dimension. You use the Application Membership feature to determine which applications may be impacted and to determine the scope of the change.

1. **Right-click a dimension or member and select Application Membership.**
   - The Applications List dialog box lists all applications of which the dimension is a member and a description of each application.
2. Click **OK**.
Managing Applications

In This Chapter

Navigating the Application Library.................................................................................. 207
Editing Applications........................................................................................................ 211
Opening Applications...................................................................................................... 211
Closing Applications....................................................................................................... 211
Deleting Applications.................................................................................................... 211
Duplicating Applications............................................................................................... 212
Finding Applications..................................................................................................... 214
Reregistering Applications............................................................................................. 214
Comparing Applications................................................................................................. 215
Viewing the Data Flow................................................................................................... 218
Validating and Deploying Applications........................................................................... 220
Viewing the Application Deployment History............................................................... 236
Troubleshooting Application Problems........................................................................... 236
Managing Planning Data Sources.................................................................................. 244

To open the Application Library, select **Navigate, Administer, Application Library**.

**Navigating the Application Library**

The Application Library shows all of your applications. You can select an application in the top pane and view summary information in the lower pane. The lower pane displays:

- **Summary**—Name, type, date created, date last deployed, and the associated data synchronizations
- **Description**—The information you provided in the Description field of the New Application dialog box or application wizard
- **Dimensions**—The dimensions available in the application
- **Properties**—The status, default currency, and specific properties set for the application
- **Synchronizations**—The data synchronizations for this application
- **Rules / Rule Set**—Rules and Rule Sets defined in Calculation Manager for this application
Modifying the Application Library View

To modify the Application Library view:

1. Choose View, Details.

2. Perform one or more actions:
   - To sort by a column, click the column heading. For example, if you want to sort by name, click Name.
   - To move a column, drag the column heading to a new location.
   - To change the view to icon view, select View, Icons.

Organizing Applications

You can create folders in the Application Library and move applications into the folders to help organize applications.

Creating Folders

To create folders:

1. In the Application Library, select File, New, Folder.
The Create New Folder dialog box is displayed.
Folder names can include spaces, but cannot include any special characters.

2 **Enter the folder name and description, then click OK.**

The folder is created.

## Adding Applications to Folders

After you create folders in the Application Library, you can add applications to the folders.

- **To add applications to the folder:**
  1 **In the Application Library, drag the applications to the folder or right-click the folder and select Add Applications.**
     The Applications List dialog box is displayed.
  2 **Select one or more applications to add to the folder.**

  **Tip:** You can press the [Shift] or [Ctrl] keys to select multiple applications in the Applications List dialog box.

  3 **Click OK.**

     The applications are moved to the folder you created.

  4 **To open the folder, double-click the folder or right-click the folder and select Open.**

     When you open a folder in the Application Library the name of the folder is displayed near the top of the Application Library window.

     **Tip:** If you have a folder open, and then create a new application, the application is automatically stored in the folder. Keep this in mind, since when you create a new folder and return to the Application Library the root of the library displays, and not the folder. If you do not see the newly created application, make sure to check the folders.

     If you want to remove an application from the folder, see “Removing Applications From Folders” on page 209.

  5 **To return to the Application Library (root) and close the current folder, click [X].**

## Removing Applications From Folders

- **To remove applications from folders:**
  1 **Open the folder.**
  2 **Right-click the application and select Remove From Folder.**

     The application is removed from the folder and moved back to the Application Library root.
Renaming Folders

To rename a folder:

1. Right-click the folder, then select Rename.
   The Rename Folder dialog box is displayed.
2. Enter the new folder name and click OK.

Deleting Folders

You can delete folders without removing the applications that reside in the folder. When you delete a folder, all applications are automatically moved to the Application Library root.

To delete folders:

1. Right-click the folder, then select Delete.
   The Application Library – Warning dialog box is displayed.
2. Click Yes.
   The folder is removed and applications are moved to the Application Library root.

Creating Application Filters

You can create filters that allow you to see only specific applications in the Application Library.

Note: The Application Library does not filter the applications based on security. All applications are shown. For example, a user will see 20 applications in the Application Library even if he only has access to one of them.

To create application filters:

1. Select View, Filter.

2. Deselect the types that you do not want to see.
3. Under Status, deselect the status that you do not want see. For example, you might want to see applications that are not deployed.
4. Click OK.
Refreshing the Application Library
To ensure the most current display of application information, you can refresh the Application Library. To refresh the Application Library, select View, Refresh.

Editing Applications
To edit applications, in the Application Library, double-click an application or right-click and select Edit. The Dimension Library displays the Shared Library, application, and Property Grid.

Opening Applications
After you deploy an application, you can open it in the application to which it was deployed, such as Financial Management. To open deployed applications, in the Application Library, right-click a deployed application and select Open.

Tip: You can also click Navigate, Applications, then choose the Application type, such as Planning, and select the application.

The application displays in Financial Management, Profitability and Cost Management, or Planning.

Note: The Open option in the right-click menu is not available if the application has not been deployed.

Closing Applications

To close applications perform one of these actions:

- In the upper right corner of the view, click Close.
- Right-click the Dimension Library tab that displays the open application and select Close.
- Select File, Close, Current.

Deleting Applications
In the Application Library, you can delete application with Deployed or Not Deployed status. If the status is Deployment Pending, you cannot delete the application. To delete applications in the Application Library, right-click an application and select Delete.

An authorization check for the deletion is performed, then a request is passed to the Hyperion product server for a completion status. The application status is updated to “Delete Pending”
so that no other operation can access it. After an application is deleted, it is removed from the Application Library.

**Note:** Before deleting a Planning application, back up the application and the application databases as described in the *Oracle Hyperion Enterprise Performance Management System Backup and Recovery Guide*. After backing up, use the standard procedure for deleting applications. After deleting, ensure that the application is deleted from Essbase, and that the Planning relational tables are deleted from the relational database.

### Duplicating Applications

Within the Application Library, you can copy applications to create new applications. If you modify artifacts in the Shared Library the changes are automatically reflected in both non-deployed applications. When you duplicate applications you have two options:

- Duplicate applications as new applications
- Duplicate applications as deployed applications

#### Duplicating Applications as New Applications

1. To duplicate applications:
   - In the Application Library, right-click an application and select **Duplicate, As New Application**.
     
     The Duplicate Application dialog box is displayed.

2. Enter the name, description (optional), and select the type. Then click **OK**.

   **Note:** If you select a different application type, such as Consolidation to Planning, only the like dimension properties are copied. After you duplicate the application, you should update the new application type properties.

   It may be necessary to refresh the Application Library to see the new application created by duplicating the existing application.

3. **Select View, Refresh** or click ![Refresh icon](image)

4. As necessary, double-click the application and use the Dimension Library to modify the properties.

#### Duplicating Consolidation Applications as Deployed Applications

You can copy deployed Consolidation applications and duplicate from one server to another. Consolidation applications cannot be copied across types of databases. For example,
Consolidation applications created using a SQL Server database must be copied to another SQL Server database.

Follow these guidelines:

- The source and destination computers must be registered to the same Shared Services server.
- Applications cannot be duplicated from one Performance Management Architect server to another Performance Management Architect server.

To duplicate deployed applications:

1. In the Application Library, right-click an application and select **Duplicate, Deployed Application**.

   ![Application Duplication GUI](image)

   **Note:** The Copy Data and Copy Audit Data options are available for Consolidation applications only.

2. Enter the name of the new application.

3. Optionally enter a description.

4. Select the instance name, application server, and Shared Services project.

5. Optionally enter notes in the Notes field.

   The notes you enter here are appended to the job description in the Job Console. This text field allows for 150 characters (because it is appended to the description), and can contain any characters.

6. Optionally select **Copy Data** and/or **Copy Audit Data**.
You can select Copy Data to copy the data along with the metadata/application structure information. Select Copy Audit Data to copy the data and task audit information that has been generated with the application up to the point of migration.

7  Click **OK**.

**Note:** To view the status of a duplication, select **Navigate, Administer, Library Job Console**.

After you duplicate a deployed application, it is automatically registered in Shared Services. For information on assigning user roles, see the *Oracle Hyperion Enterprise Performance Management System User and Role Security Guide*.

## Finding Applications

You can search for applications in the Application Library. Searching for applications searches the Application Library root and all folders. You can enter the following criteria for a search:

- Application name
- Application type
- Status

To find applications:

1  **Click** or select **View, and then Search**.

   The Find Applications dialog box is displayed.

2  **Perform one or more actions**:

   - **Optional**: Enter the application name.
   - Select the application type.
   - Select the status. Options include: Not Deployed, Deployed, Deployment Pending, and Deployed with Errors.

3  **Click** **OK**.

## Reregistering Applications

Reregistering is for Shared Services only and is used in the case where Shared Services is unavailable and the applications need to be reregistered.

To reregister applications:

1  **Right-click the application and select Reregister**.

2  **Select the options for your application, then click Reregister**.
Note: The Reregister dialog box displays different options, depending on the type of application.

**Comparing Applications**

Comparing applications is an integral part of the application flow. The Compare report shows all excluded members and property differences.

You can compare applications in these ways:

- Compare to Shared Library—Compares the dimensions and members in an application to the dimensions and members in the Shared Library.
- Compare to Deployed Application—Compares an application to a deployed application.

To compare applications:

1. **Right-click an application, select Compare, then perform an action:**
   - Compare to Shared Library
   - Compare to Deployed Application

   The Compare dialog box is displayed.

2. **Click View Results.**

   The Dimension Compare Results is displayed.
Navigating the Compare Results

The Compare View has three panes:

- “Dimension Compare Results” on page 216
- “Application Compare Summary” on page 217
- “Property Compare Results” on page 218

Dimension Compare Results

Dimension Compare Results, on the left, displays dimensions and members that have been added or deleted. Initially, the Compare Results displays the application collapsed, with the total number of differences in parentheses. When you expand the application, each dimension displays the number of differences in parentheses when it is collapsed, and upon expansion, artifacts that have been removed from the application display with a strike through. Artifacts with property differences display in bold.

When you select artifacts the value updates in the Compare Summary and Property Compare Results. (Depending on your selection, the Compare Summary heading displays: Application
Compare Summary, Dimension Compare Summary, or Member Compare Summary.) If you select the:

- **Application**—The Application Compare Summary displays the total number of differences for the entire application.
- **Dimension**—The total differences for the entire dimension.
- **Removed member (with strike through)**—The Member Compare Summary Total Differences and Removes update to reflect the values of the selected member.
- **Member with property differences (in bold)**—The Member Compare Summary updates and the Property Compare Results displays the Property Name that differs in the applications being compared.

To change the dimension compare results view:

1. **Click Show Side-by-Side Tree to display a side-by-side tree.**
   
   The Dimension Compare Results displays the compared views side by side.

2. **Click Show Single Compare Tree to display a single tree (default view).**

**Application Compare Summary**

Compare Summary, in the upper right, displays a summary of all changes between the application and Shared Library. The Compare Summary updates, depending on your selection. For example, if you select a dimension in the Dimension Compare Results, the Compare Summary heading displays *Dimension* Compare Summary. The Compare Summary values are based on the selected artifact in the Dimension Compare Results. It displays:

- **Total Differences**—total number of differences between the application and Shared Library.
- **Property Differences**—total number of property differences
- **Additions**—total number of artifacts added to the application.
- **Deletes**—total number of deleted artifacts.
- **Renames**—total number of renamed members. (The number that displays for renamed members are counted in addition to the Total Differences. For example, you may see 6 total differences and 2 renames, therefore you have a grand total of 8 differences.)
- **Removes**—total number of removed artifacts.
- **Moves**—A member was moved from one location to another in dimension.
- **Shares**—A shared member was inserted into the dimension.
- **Includes**—A shared dimension was added to the application.
- **Excludes**—A member was filtered out of a dimension.

Each summary displays a radio button. The radio buttons are filters. You can select the Additions, Removes, or Property Differences radio buttons to update the Dimension Compare Results. For example, if you select Additions, the display is updated to show only additions. In addition, any members without additions are not displayed, unless it has a child that needs to be shown.
Property Compare Results

Property Compare Results, in the lower right, displays changed member properties for the selected member in the Dimension Compare Results. The Property Compare Results displays three columns: Property Name, Shared Library, and the application name.

Excluding Members in the Compare Results

➢ To exclude members:

1 Right-click a member in the Dimension Compare Results and select Add to Exclude Filter.

   The number of 'Removes' is updated in the Application Compare Summary.

2 When finished, click in the upper right corner of the view.

Viewing the Data Flow

You can access the data flow from the Application Library. The Data Flow shows how data is moved between applications using synchronizations created with the Data Synchronizer. Data Flow takes data synchronizations and graphically depicts the relationships of data movement between applications.

Note: To view the data flow, you must have applications that are synchronized. See Chapter 8, “Synchronizing Data.”

➢ To view the data flow, in the Application Library, right-click an application and select Data Flow.

The data flow is displayed. The data flow map shows data flowing in and out of a focal application. The focal application is the application in the center of the data flow.
When you select an application in the data flow, properties are displayed in the lower pane. The Application Properties include, Name, Description, and Synchronizations.

**Changing the Focal Application in the Data Flow**

To change the focal application, right-click the application, and select **Center**. The focal application changes according to the application you selected.

**Viewing Synchronizations**

To view a synchronization, right-click the application, select **Synchronizations** and select the synchronization name.

You can select a synchronization to edit, validate, or execute. See “Editing Synchronizations” on page 219 and “Validating and Executing Synchronizations” on page 220.

**Editing Synchronizations**

- To edit a synchronization:
  
  1. Perform a task:
In the data flow, select the synchronization in the Application Properties area. In the Synchronization Execution dialog box, select the synchronization, select the Action, Edit and click OK.

Access the Data Synchronizer (Navigate, Administer, Data Synchronization), right-click the synchronization and select Edit.

2 Modify the data mappings as necessary.

See Chapter 8, “Synchronizing Data.”

Validating and Executing Synchronizations

You can execute synchronizations from the Data Flow.

➢ To validate and execute synchronizations:

1 In the Data Flow, select an application.

2 In the Application Properties, select the synchronization to execute.

   The Synchronization Execution dialog box is displayed.

3 Select the Action, Validate or Execute, and click OK.

   If you validate the synchronization, the Data Sync Validation Options dialog box is displayed. If you execute the synchronization from the data flow, the Data Sync Execute Options dialog box is displayed.

Editing Applications

You can edit applications that display in the Data Flow. To edit an application, in the Data Flow, right-click the application and select Edit.

Validating and Deploying Applications

In Performance Management Architect, you create applications which describe the dimensionality and other information about an application. When you create applications, you can then validate and deploy the applications to Oracle's Hyperion products. The deployment process creates an application in the desired product, such as Financial Management, Profitability and Cost Management, Essbase, or Planning.

To deploy applications, you must be provisioned in Shared Services with the user role of Application Creator for the specific product type. See “Security” on page 29 for additional information.

The deployment process involves:

➢ Validating the Application—The application is validated for a product, such as Financial Management, Profitability and Cost Management, Essbase, or Planning.
If the application is missing dimensions or other required information, the deployment is aborted. Also, if another deployment for the application is in progress, the request is cancelled.

- **Selecting the Environment Information for Deployment**—Select the environment to which you are deploying the application.

- **Export and Deploy the application**—When you deploy an application, the deployment job begins and the application is exported from Performance Management Architect to a specific Hyperion product. When you initiate deployment, the status of the application displays “Deployment Pending” in the Application Library.

- **Product Application Creation**—In new deployments, the Hyperion product creates the application and the Hyperion product server attempts to load the metadata. After deployment is complete, the status and deployment timestamp is updated in the Application Library. Then, the deployment job is marked as “Completed.” For information on viewing deployment jobs, see Chapter 9, “Managing Jobs.”

### Validating Applications

---

To validate an application:

1. **Right-click the application and select Validate, Application.**
   
   The Job Task dialog box is displayed.

2. **Click the link to navigate to the Library Job Console.**

3. **Click the validation log link in the Attachments area.**

4. **Click Open to open the log file in a text editor.**

   Below is an excerpt from a validation log:

   ```
   Validation Log
   =============

   Job Id: 191
   Created : 3/4/2008 8:08:30 PM
   Application : Consol

   Validation Summary
   ===================

   Result : Success
   Summary : There were 0 errors and 0 warnings during the validation process. For details refer the error and warning section of this log.
   ```

For detailed information on application validations, see Appendix B, “Application Validations.”
Reviewing Deployment Logs for Errors

After you deploy applications, you can view the Summary area and the deployment log (if available) in the Library Job Console. See Chapter 9, “Managing Jobs.”

For Consolidation applications, the deployment log (displaying in the Library Job Console) includes the Financial Management metadata load file. In most cases, invalid members and errors appear in the log and it is not necessary to access Financial Management logs to access additional information. However, in rare cases, where the metadata log does not provide enough information, you can check for more detail in the Financial Management application server log.

For Planning, Essbase, and Profitability applications, the Library Job Console displays the deployment log. If there are errors, click the Validation Log link in the Attachments area to view a complete listing of all validation errors or messages.

Deploying Planning Applications

Planning requires certain dimensions, depending on how the application is set up. To avoid validation errors, ensure that the application includes all required dimensions. For Planning dimension requirements, see Chapter 12, “Working with Planning Dimensions.”

The deploy process creates:

- Tables and values in the Planning database.
- An application and outline in Essbase without the need to refresh the cube from the Planning Web user interface.
- HSP_Rates, for multi-currency applications, upon deployment (it is not a dimension that you create manually).

**Note:** Be sure that the Planning application server is running before deploying any Planning applications. Deployment of applications from Performance Management Architect to Planning is a long-running operation. The initial deployment may take more time than subsequent re-deployments.

Before deploying Planning applications, be sure that all the properties are correct and meet your needs. If you need to update any settings, do so before deploying. If applications are not set up correctly, deployment fails and error messages are displayed. To deploy correctly, Planning applications must meet the qualifications specified in this chapter, Chapter 3, “Importing Metadata,” and Chapter 12, “Working with Planning Dimensions.” For example:

- The Fiscal Start Year property must be defined. The year must be four digits long, such as 2010.
- Year dimensions must start with FY, followed by a two-digit year, such as FY10.
- The first year member in the Year dimension and the Fiscal Start Year property must describe the same year. For example, if the Fiscal Start Year is 2010, the first year in the Year dimension must be FY10.
For 12 Month Base Time Period applications only, the Start Month property must be defined.

- The Default Alias Table property must be defined. For information, see “Alias Dimensions” on page 84.
- The Default Currency property must be defined.
- Applications must include predefined dimensions of the following types: Scenario, Version, Entity, Account, Period and Year. Multi-currency applications also require a dimension of type Currency.
- The application must meet the qualifications specified in Chapter 12, “Working with Planning Dimensions.”

Note: These requirements are specific to Planning applications that use the Plan1, Plan2, or Plan3 plan type. For Planning modules that use other plan types, requirements may differ. For information on Public Sector Planning and Budgeting, see the Oracle Hyperion Public Sector Planning and Budgeting User’s Guide. For information on Workforce Planning and Capital Asset Planning, see the Oracle Hyperion Workforce Planning Administrator’s Guide and Oracle Hyperion Capital Asset Planning Administrator’s Guide.

Some information cannot be changed after the application is deployed, such as the application name and data source. When the application is deployed, any unreferenced UDAs are removed from the application. See “Working with User-Defined Attributes” on page 144.

Caution! Each data value in Planning is identified by a set of dimension members and a plan type. Excluding dimension members from an application can translate to a delete action on redeployment. If excluded members are used elsewhere (such as a selection in a data form), those associations are removed. For information, see “Excluding and Deleting Planning Members” on page 137.

Before excluding members from an application, use the Show Usage feature within Planning to determine where members are used in the application and the implications of excluding dimension members from an application during deployment. For information about the Show Usage feature, see the Oracle Hyperion Planning Administrator’s Guide.

▶ To deploy Planning applications:

1 Click Navigate, then Administer, and then Application Library.

2 Right-click the Planning application, then select Deploy, and then Application.

You can also select Rules to deploy only rules, or All to deploy the application with its business rules. For information on deploying business rules, see the Oracle Hyperion Calculation Manager Designer’s Guide.

Applications are validated before they are deployed. Any validation errors display in the Job Console. You will need to correct all validation errors before deploying. For information on
resolving business rule errors, see the *Oracle Hyperion Calculation Manager Designer’s Guide*.

The Deploy dialog box displays.

![Deploy dialog box](image)

3. **Perform these tasks:**

If you are redeploying, some options are not available, such as instance name, application server, and data source.

a. **Optional:** Include notes about the deployment in the Notes field. The notes you enter here are appended to the job description in the Job Console. This text field allows for 150 characters (because it is appended to the description), and can contain any characters. The text field will be scrollable vertically if the text exceeds the length on screen.

b. Select the **Instance Name**.

c. Select the **Application Server**.

d. Select the **Shared Services Project**.

e. Select the **Data Source** used by the application.

f. **Optional:** If you want to create a data source, click the icon next to **Data Source**. For detailed instructions, see “Entering Data Source Information” on page 244.

g. **Optional:** If you are deploying the application for the first time, select **Create Outline** to update the Essbase databases that store application data.
h. Optional: To refresh the application database after changing the application structure, select **Refresh Outline**.

i. Optional: Select **Create Security Filters** to store access permissions in an encrypted data file (Essbase.sec). To generate security filters for all users in the application, select **Create Security Filters** but do not select **Validate Security Filter Limit**.

j. Optional: Select **Shared Members Security Filters** to apply access permissions to shared members.

k. Optional: **Validate Security Filter Limit** to identify security filters that exceed the Essbase security filter limit of 64 KB per row. This validates filter size to ensure it does not exceed the size limit before building Essbase security filters.

l. The **Full Deploy** option is available when you redeploy applications. For additional information, see “Considerations for Redeploying Planning Applications” on page 232.

m. If you are deploying business rules, you can also select **Deploy Rules** or **Continue Deploy Rules Even if Rules Validation Fails**. For information on deploying business rules, see the *Oracle Hyperion Calculation Manager Designer’s Guide*.

4 Click **Deploy**.

**Note:** When you deploy a single-currency application, the Entity member Currency property is set to the application default property.

The Planning application is automatically registered with Shared Services during Planning application creation. To view progress and error messages, open the Planning application server.

To access a Planning application created after deployment, you must perform a refresh of Planning applications in EPM Workspace and then choose the application. If prompted, enter your logon information. See the *Oracle Hyperion Planning Administrator’s Guide*.

**Note:** If a deployment is interrupted or deleted, the status may show “deploy pending,” and the deployment may time out. The default time out value is 480 minutes (8 hours). You can change the default in BPMA_Server_Config.xml. (See “Changing the Connection Time Out Setting” on page 429.) If a deployment times out, you should deploy the application again. Even though the status may indicate that it is in sync with deployment, which it may not be, because of the time out.

### Deploying Consolidation Applications

Financial Management requires certain dimensions, depending on how the application is set up. To avoid validation errors, ensure that the application includes all required dimensions.

**Note:** For information on deploying business rules, see the *Oracle Hyperion Calculation Manager Designer’s Guide*. 


To deploy Consolidation applications:

1. Click Navigate, Administer, Application Library.

2. Right-click the Consolidation application, select Deploy, Application.
   You can also select Rules to deploy only rules, or All to deploy the application with its business rules. For information on deploying business rules, see the Oracle Hyperion Calculation Manager Designer’s Guide.

3. If the Application Validation Errors dialog box is displayed, fix the errors and then try to deploy again.
   The Deploy dialog box is displayed.

   ![Deploy dialog box](image)

   If you are redeploying, some options are not available, such as instance name, application server, and data source.

4. Perform these tasks:
   a. Optional: Add notes pertaining to the deployment of this application. These notes are appended to the job description in the Job Console. This text field allows up to 150 characters and contain any characters.
   b. Select the Instance Name (Cluster name).
   c. Select the Application Server.
   d. Select the Shared Services Project.
   e. Optional: Select Clear All Metadata and Data—all dimension members in the application database are deleted as well as any corresponding data, journals, and intercompany transactions.
See the Oracle Hyperion Financial Management Administrator’s Guide for information on clearing data from removed dimension members.

f. Optional: Select **Check Referential Integrity**—checks the metadata against the data to ensure integrity. For example, if you rename members and select Check Referential Integrity, the deployment log lists all artifacts affected by the rename. See the Oracle Hyperion Financial Management Administrator’s Guide.

**Note:** After you deploy an application, you cannot change the Year, Period or View dimensions.

5 If you are deploying business rules, you can also select **Deploy Rules** or **Continue Deploy Rules Even if Rules Validation Fails**. For information on deploying business rules, see the Oracle Hyperion Calculation Manager Designer’s Guide.

**Note:** The “Full Deploy” option is available when you redeploy applications. For additional information, see “Redeploying Applications” on page 231.

6 Click **Deploy**.

**Note:** If a deployment is interrupted or deleted, the status may show “deploy pending” and the deployment may time out. The default time out is 480 minutes (8 hours). You can change the default in `awbconfig.properties`. If a deployment times out you should deploy the application again, even though the status may indicate that it is in sync with deployment, it may not be because of the time out.

## Deploying Profitability Applications

To deploy a Profitability and Cost Management application in Performance Management Architect:

1 **Select Navigate, then Administer, and then Application Library.**

2 **Right-click the name of the application to be deployed, and select Deploy from the drop-down list.**

Applications are validated before they are deployed, and any validation errors display in the Job Console. You must correct all validation errors before deploying. When the validation is complete, the Deploy dialog box is displayed, showing the Application Name.
3 **Optional:** In **Description**, enter a brief description for the application.

4 **Optional:** Under **Notes**, add notes pertaining to the deployment of this application. These notes are appended to the job description in the Job Console. This text field allows up to 150 characters and contain any characters.

5 **Under Instance Name**, select the name of the Profitability and Cost Management installation to which you want to deploy the application.

A Profitability and Cost Management application may be installed on a single machine, or on more than one machine as part of a cluster. Each installation, or instance, is displayed on the Instance Name drop-down list. Default is the name of the instance used by the Configurator Tool for the first installation.

6 **Select the Application Server.**

7 **Under Shared Services Project**, select the Profitability and Cost Management application group to which this application is to be assigned.

8 **Optional:** Decide whether **Full Deploy** should be selected, as follows:

   - If this is the first deployment of the application, the Full Deploy check box is disabled because Performance Management Architect automatically sends all dimensions to Profitability and Cost Management.

   - If Full Deploy is checked for any subsequent deployment, then Performance Management Architect sends all dimensions to Profitability and Cost Management.

   - If Full Deploy is not checked, then Performance Management Architect sends only modified dimensions to Profitability and Cost Management. If no changes were made to a dimension, then that dimension is not included in the deployment.

9 **Click Deploy.**

   The Job Task window opens, to confirm the Validation Job has been submitted, and display the Job ID.

10 **On the Job Task window, click the link to display the job status.**
When the job is complete, a message is displayed under **Detail** to indicate the new application has been created and deployed to Profitability and Cost Management. The new application is available for selection.

**Deploying Essbase (ASO) and Essbase (BSO) Applications**

This topic covers deployment of Essbase ASO and BSO application. If you are redeploying an Essbase (ASO) or Essbase (BSO) application, see “Redeploying Essbase (ASO) and Essbase (BSO) Applications” on page 234.

Before deploying Essbase applications, you must complete the following:

- You must have successfully configured Performance Management Architect, Essbase, and Oracle Essbase Studio using the EPM System Configurator. See *EPM System Installation and Configuration Guide* for information on configuration.
- You must be provisioned in Shared Services with the user role of Essbase Application Creator (in the User Management Console, Hyperion Shared Services, Global Roles, Application Creator, Essbase Application Creator). Refer to the Shared Services documentation for information on provisioning.

The following are guidelines to consider when deploying or redeploying Essbase applications:

- Essbase applications do not require a fixed set of dimensions. For example, you can create and deploy an Essbase application containing just one generic dimension and one member.
- Empty dimensions are allowed.
- You cannot use Performance Management Architect to create Hybrid Analysis or Advanced Relational Access cubes.
- A common validation error is that an invalid character exists in a member name. This often occurs when member names contain square brackets ([ ]) or other invalid characters. To work around this, you can do one of the following:
  - If the members are in a shared dimension, clear the members using the Exclude Member command, described in “Excluding Members” on page 153.
  - If the members are local members, clear the members using the Remove Members command described in “Removing Members” on page 136, or the Delete Members command, described in “Deleting Members” on page 136.
- If you want to allow duplicate member names, you must set the Allow Duplicates property flag at the application level. Once the application has been deployed with this property set, the Allow Duplicates property is permanently set for the application; you cannot later clear the property. Essbase Studio does not allow updates to the Allow Duplicates property when you redeploy an application.
**Note:** After a successful initial deployment of an Essbase ASO or BSO application, the user performing the deployment is not automatically provisioned as an application administrator. To redeploy an Essbase ASO or BSO application, you need to be provisioned as an Application Administrator for the Essbase application in Shared Services.

**Note:** There is no difference in the deployment process for Essbase (ASO) or Essbase (BSO) applications.

Properties for Essbase applications, dimensions and members are described in Chapter 14, “Working with Essbase Properties.”

Information on Essbase requirements for applications and databases is available in the *Oracle Essbase Database Administrator’s Guide* and the *Oracle Essbase Administration Services Online Help*.

**Note:** For information on deploying business rules, see the *Oracle Hyperion Calculation Manager Designer’s Guide*.

➢ To deploy an Essbase (ASO) or Essbase (BSO) application:

1. **Click** Navigate, then **Administer**, and then **Application Library**.

2. **Right-click** an Essbase (ASO) or Essbase (BSO) application, and select **Deploy**.

   The **Deploy** dialog box is displayed.

   ![Deploy dialog box](image)

   If there are errors, the **Job Task** dialog box is displayed. Perform these steps:
a. Click the link in the Job Task dialog box to access the Job Console.

b. In the Job Console, under Attachments, click the link to the error report. The error report is in text file format.

c. Open or save the error report, review the errors and correct them, and then begin the deployment process again.

3 Optional: In the Deploy dialog box, add notes about this deployment in the Notes box.

   The notes you enter are appended to the application description in the Job Console. There is a 150 character limit (because it is appended to the description), and can contain any characters.

4 Select the Instance Name of the Essbase Studio Server instance which you want to use to deploy the application.

   This is the name of a machine where an Essbase Studio Server instance is installed and configured. See the EPM System Installation and Configuration Guide for configuration information.

   Note: You can only deploy Essbase applications using Essbase Studio Server.

5 Select the Application Server.

   This is the name of a machine where an Essbase Server instance or cluster is installed and configured. See the EPM System Installation and Configuration Guide for configuration information.

6 Click Deploy.

   The Full Deploy and Clear Data check boxes do not apply to a first-time deployment. These options apply to redeployments only. See “Redeploying Essbase (ASO) and Essbase (BSO) Applications” on page 234 for information on using these check boxes during redeployment.

   Note: If a deployment is interrupted or deleted, the status may show “deploy pending” and the deployment may time out. The default time out is 480 minutes (8 hours). You can change the default in awbconfig.properties. If a deployment times out, you should deploy the application again. Even though the status may indicate that it is in sync with deployment; it may not be because of the time out.

7 View and edit the deployed application outline in Essbase Administration Services Console; query the application database using either Smart View or Oracle Essbase Spreadsheet Add-in.

Redeploying Applications

Redeploying performs a merge or a replace of the application metadata based on the types of changes made since the last deployment. For example, if any members have been moved or deleted in any hierarchies in the application, then the redeployment of the metadata is performed using a replace mode. If only property updates were made to the application since the last deployment, then the redeployment of the metadata will be performed using a merge mode.
To redeploy applications:

1 Right-click the application and select **Deploy**.

2 **Optional:** Select the Shared Services project.

   **Note:** When you redeploy Consolidation, Essbase (ASO), or Essbase (BSO) applications, if Performance Management Architect cannot find the application server previously specified, you can select a different application server.

3 **Optional:** Select **Full Deploy**.

   Selecting “Full Deploy” ensures that Performance Management Architect includes all dimensions and members in the application in the deployment. If you do not select “Full Deploy,” only dimensions that have been modified since the last deployment are included. Select this option in cases where your Performance Management Architect metadata may be out of sync or your product database or Performance Management Architect database has been restored. (This option can only be selected when redeploying applications.)

**Considerations for Redeploying Planning Applications**

Before redeploying, be sure the properties are correct and meet your needs. If applications are not set up correctly, deployment fails and error messages are displayed. After a Planning application is deployed, you cannot change these properties:

- Whether the application uses a single currency or multiple currencies. For example, after you deploy with Multiple Currency selected, you cannot later clear Multiple Currency to use a single currency. Likewise, with a single-currency application, you cannot later select Multiple Currency.

- The default application currency. For example, if you use USD, you cannot later change it to EUR.

- The type of calendar. For example, if you set Base Time Period to 12 Months, you cannot later change it to Quarters.

- The fiscal start month. After you set the Start Month, you cannot change it.

- The start year. For example, if you set the Start Year to 2010, you cannot change it to 2009. You can, however, add years after the first year.

- Any years added. After years are added, you cannot remove them. For example, if the deployed application includes FY09, you cannot remove this year.

- The Weeks Distribution pattern. For example, if you set Weeks Distribution to 445, you cannot later change it to 544 or Even.

- The plan types that are contained in the application. For example, if you deploy an application with plan types Plan1 and Plan2 selected, you cannot later add Plan3 or remove Plan2 from this application. You can change the Valid for Plan type for dimension members at any time. However, you cannot change the plan types contained in the application after deployment.
Dimensions added. You can add dimensions up to a total of twenty, including the predefined dimensions. You can rename dimensions, by changing the dimension alias, but you cannot delete them. See “Setting the Dimension Alias” on page 203.

Predefined dimensions. You cannot delete the predefined dimensions. Single-currency applications require these dimensions: Scenario, Version, Entity, Account, Period, and Year. Multiple-currency applications require these dimensions: Scenario, Version, Entity, Account, Period, Year, and Currency.

**Caution!** Each data value in Planning is identified by a set of dimension members and a plan type. Excluding dimension members from an application can translate to a delete action on deployment. For information, see “Excluding and Deleting Planning Members” on page 137.

**Note:** For information on applications enabled for Workforce Planning and Capital Asset Planning, see the *Oracle Hyperion Workforce Planning Administrator’s Guide* and *Oracle Hyperion Capital Asset Planning Administrator’s Guide*. For information on Public Sector Planning and Budgeting, see the *Oracle Hyperion Public Sector Planning and Budgeting User’s Guide*.

Before excluding members from an application or deploying to Planning, use the Show Usage feature within Planning to determine where members are used in the application and the implications of excluding dimension members from the application on deployment. For information about the Show Usage feature, see the *Oracle Hyperion Planning Administrator’s Guide*.

### Redeploying Planning Applications

1. **To redeploy Planning applications:**
   1. Right-click a Planning application and select **Deploy**.
   2. Select the **Shared Services Project**.
      
      Applications are automatically registered under the selected Shared Services Project upon deployment in Performance Management Architect.

   3. **Optional:** Select **Refresh Outline** and select additional security options, as necessary. See “Deploying Planning Applications” on page 222.

   4. Click **OK**.

      The application is deployed to Planning. To view progress and error messages, open the Planning Application Server.

      **Note:** When you redeploy a single currency application, the Entity member Currency property will be set to the application default property.
Redeploying Essbase (ASO) and Essbase (BSO) Applications

Before you begin, be sure to review the guidelines listed in “Deploying Essbase (ASO) and Essbase (BSO) Applications” on page 229.

Note: For information on deploying business rules, see the Oracle Hyperion Calculation Manager Designer’s Guide.

To redeploy an Essbase (ASO) or Essbase (BSO) application:

1. Follow the procedure in “Deploying Essbase (ASO) and Essbase (BSO) Applications” on page 229, step 1 through step 5.

   Note: When you redeploy an application, if Performance Management Architect cannot find the application server previously specified, you can select a different application server.

2. Select the Clear Data check box, according to your requirements.

   Note: The Full Deploy check box is selected by default and cannot be cleared. Performance Management Architect exports complete metadata during a full deploy.

   Table 17 Result of Selecting and Clearing the Clear Data Check Box with the Full Deploy Check Box Selected

<table>
<thead>
<tr>
<th>“Full Deploy” Check Box State</th>
<th>“Clear Data” Check Box State</th>
<th>Result</th>
</tr>
</thead>
<tbody>
<tr>
<td>Selected</td>
<td>Selected</td>
<td>Essbase Studio will delete all outline members, then add all members to the outline. Outline restructure will clear all data.</td>
</tr>
<tr>
<td>Selected</td>
<td>Deselected</td>
<td>Essbase Studio will delete all outline members, then add all members to the outline. Outline restructure will keep data.</td>
</tr>
<tr>
<td>Selected</td>
<td>Selected</td>
<td>Essbase Studio will add outline members without deleting existing members. Outline restructure will clear all data.</td>
</tr>
<tr>
<td>Selected</td>
<td>Deselected</td>
<td>Oracle Essbase Studio will add outline members without deleting existing members. Outline restructure will keep data.</td>
</tr>
</tbody>
</table>

3. Click Deploy.

   Note: If a deployment is interrupted or deleted, the status may show “deploy pending” and the deployment may time out. The default time out is 480 minutes (8 hours). You can change the default in awbconfig.properties. If a deployment times out, you should deploy the application again. Even though the status may indicate that it is in sync with deployment; it may not be because of the time out.

4. View and edit the deployed application outline in Essbase Administration Services Console; query the application database using either Oracle Smart View for Office or Oracle Essbase Spreadsheet Add-in.
Redeploying Detail Profitability Applications

Redeploying performs a merge or a replace of the application metadata based on the types of changes made since the last deployment.

For Detailed Profitability applications, you may be prevented from redeploying if either of the following conditions exist:

- A user-defined Measures Detailed dimension has been deleted. To continue with the redeploy, you must restore the deleted dimension using one of the following methods:
  - Import the correct version of the application
  - Recreate the dimension
  - Copy the dimension from the Shared Library in the Dimension Library screen

- A dimension that is not used in the model has been deleted. All Model Data Registration Column Mappings to that dimension are also deleted. The list of deleted mappings is displayed in the EPMA log and the hpcm.log.

Note: If users try to delete the dimensions in either case, a warning is generated during deployment and displayed in the EPMA.log on the Job Console screen in EPM Workspace.

To redeploy a Profitability and Cost Management application in Performance Management Architect:

1. Optional: Correct any validation conditions that may exist, and save the application.
2. From EPM Workspace, select Navigate, then Administer, and then Application Library.
3. Right-click the name of the application to be deployed, and select Deploy from the drop-down list.
   Applications are validated before they are deployed, and any validation errors display in the Job Console. You must correct all validation errors before deploying. When the validation is complete, the Deploy dialog box is displayed, showing the Application Name.
4. Select Full Deploy to have Performance Management Architect send all dimensions sent to Profitability and Cost Management.
5. Click Deploy.
   The Job Task window opens, to confirm the Validation Job has been submitted, and display the Job ID.
6. On the Job Task window, click the link to display the job status.
   When the job is complete, a message is displayed under Detail to indicate the application has been deployed to Profitability and Cost Management. The application is available for selection.
Viewing the Application Deployment History

You can view an application’s deployment history to troubleshoot problems with deployment. You must have specific roles assigned in Shared Services to view application deployment history:

- For applications that have not been deployed, you must have Performance Management Architect Application Creator rights to view the deployment history.
- For deployed applications, you must have Shared Services Application Administrator rights to view the deployment history.

Note: The default number of application deployment history entries is 10. To override this setting, add the MaxDeploymentHistoryEntries entry to the BPMA_Server_Config.xml file. See Appendix D, “Configuration Settings in BPMA_Server_Config.xml.”

To view the deployment history:

1. Navigate to the Application Library.
2. Right-click a deployed application, and then select Deployment History.

The Job Console is displayed. The Job Console view is filtered by the source application and these job types: Export, Transform Classic to EPM Architect, Application Migration, and Application Deployment. (Application Deployment jobs include deployment, redeployment, and deploy business rules only.)

For information on using the Job Console, see “Working with the Job Console” on page 285.

Troubleshooting Application Problems

In some cases, the state of Performance Management Architect applications may become out of sync with the Dimension Server, object repository, Shared Services, or target Hyperion product. This may occur if your database becomes corrupted or has had a restoration or migration failure. You have two options to troubleshoot application problems:

- View orphaned applications. See “Viewing Orphaned Applications” on page 237.

  Orphaned applications are applications that exist in the Dimension Server, but are corrupted or missing in the object repository. Although orphaned applications exist in the Dimension Server, they do not display in the Performance Management Architect Application Library user interface.

- Run tests on applications that exist in the Application Library. See “Running Application Diagnostics” on page 237.

  The application diagnostics tool enables you to run tests on applications that are visible in the Application Library. Orphaned applications cannot be accessed in the application diagnostics tool.
Viewing Orphaned Applications

Orphaned applications are applications that are missing from the Application Library but have not been deleted from the Performance Management Architect Dimension Server.

To view orphaned applications:
1. In the Application Library, select View, and then Orphaned Applications.
2. If orphaned applications are displayed, select a solution: Resolve or Delete.
   You can use the “Choose Option” column to resolve the orphaned application problem or delete the application.
   Resolve—Brings the application back into the Application Library. When the orphaned application is brought back, it is in a “Not Deployed” state. In some cases, this state can cause inconsistencies with the Dimension Server. However, because you can view the application, you can resolve any inconsistencies by running application diagnostics. See “Running Application Diagnostics” on page 237.
   Delete—Removes the application from the Dimension Server.
3. Click Apply.
4. After resolving the problem, click Cancel to close the dialog box.

Running Application Diagnostics

You can run application diagnostics, and if a diagnostics test fails, Performance Management Architect provides an automated solution or manual steps to resolve the problem.

Some tests are dependent on others. There are three test categories (listed in the order in which they run):
1. Performance Management Architect inconsistencies
2. Shared Services tests
3. Hyperion product tests

If a Performance Management Architect test fails, the other dependent tests are not run and show “Not Applicable”. To run a dependent test, you should deselect the dependent tests.

Note: You must have the EPMA Administrator security role to run application diagnostics on any Performance Management Architect application. For information on Performance Management Architect security roles, see the Oracle Hyperion Enterprise Performance Management System User and Role Security Guide.

To diagnose application problems:
1. In the Application Library, right-click an application and select Diagnostics.
The Application Diagnostics dialog box shows the application name and an overall status of the testing below the application name. For example, before you run selected tests, the status is “Not Tested.” After you run the tests, the status may show “Completed With Failure” if some tests failed, “Completed With Errors” if errors occurred, or “Completed Successfully” if all tests passed.

2. Review the tests available to run in application diagnostics. See “Application Tests” on page 238.

3. Select the tests you want to run, and then click Run Selected Tests.

   Only Performance Management Architect tests are selected by default. You can use the Select All toggle to select or clear all tests.

   The status column for each test displays “Passed,” “Failed,” or “Error” for each individual test. If it is unnecessary to run the test for the application, or the application type does not support the test, the status “Not Applicable” is displayed. Deselected tests display a status of “Not Tested.”

4. If a test fails, select the failed test to display details and choose a solution. Then, click Apply.

   For a failed test example, see “Example: Test Failed—Deployed but Missing from Shared Services” on page 243.

5. Click Yes to confirm the changes.

6. Click Close.

---

**Application Tests**

The following tests are available to run on applications:

- **Partially deleted**—The application partially resides in the Dimension Server database and not in the object repository database. This problem can occur in cases where a database restoration was interrupted or a database has become corrupted. If this test fails, delete the application in Performance Management Architect and recreate the application.

  This solution deletes the application from Performance Management Architect only. If this application has been deployed, manually delete the application from Shared Services and from the appropriate Hyperion product.

- **Inconsistent status**—The status of the application is not consistent throughout the database. This scenario can occur if the application status is not consistent in the object repository database. This problem can also occur in cases where a database restoration was interrupted or a database has become corrupted. To resolve the problem: Synchronize the status information in the database.

  This solution synchronizes all the status information in the database to ensure consistency.

- **Incomplete pending deployment**—The application is in an incomplete deployment state. To resolve the problem:
  - Update the application to reflect a deployed state.
This solution is available if the application has been successfully deployed at least once. This reverts the state of the application to the previous successful deployed state—enabling you to redeploy.

- Update the application to reflect a not deployed state.

This solution is available if the application has never been successfully deployed. This reverts the application to a not-deployed state—enabling you to deploy the application again.

- **Incomplete deployment**—The application state reflects a partially completed deployment. This scenario can occur when the application is in a “deploy pending” state in the Dimension Server database and in a “deployed” state in the object repository database. This problem can also occur in cases where a database restoration was interrupted or a database has become corrupted. To resolve the problem: Redeploy the application.

  This solution completes the deployment in the Dimension Server database and synchronizes the status between the Dimension Server and the object repository.

- **Partially deployed**—The application is currently in a partially deployed state. This scenario can occur when the application is not deployed in the Dimension Server database and is deployed in the object repository database. This problem can also occur in cases where a database restoration was interrupted or a database has become corrupted. To resolve the problem:
  - Update the application to reflect a “not deployed” state.
    - You should manually delete the application, if it exists, from any Hyperion products.
  - Delete the application from Performance Management Architect only.
    - You should manually delete the application, if it exists, from any Hyperion products.

- **Partially deploy pending**—The application is currently in a partial deploy pending state. This scenario is similar to the “incomplete deployment” scenario, yet there are further inconsistencies. If the application is in a partially deploy pending state, the pending deployment may not be the current deployment; therefore, it is deployment pending from a previously attempted deployment. This scenario can occur if there was a system failure when the application was deployed, followed by a correction to the application (a restoration to a deployed state), followed by another failure to deploy to the Hyperion product. Database corruption can also cause this problem. To resolve the problem:
  - Update the application to reflect a deployed state.
    - This solution is available if the application has been successfully deployed at least once.
  - Update the application to reflect a “not deployed” state.
    - This solution is available if the application has never been successfully deployed.

- **Inconsistent deployment state (deploy pending vs. not deployed)**—The application is in both a not deployed and deploy pending state. This scenario can occur when the application is not deployed in the Dimension Server database and in a “deploy pending” state in the object repository database. This problem can also occur in cases where a database restoration was interrupted or a database has become corrupted. To resolve the problem: Update the application to reflect a “not deployed” state.
This solution reverts the application to its initial “not deployed” state.

- **Deploy pending**—The application is currently in a “deploy pending” state. This problem can occur in instances where the Hyperion product that the application was deployed to became unresponsive. To resolve the problem:
  - Update the application to reflect a deployed state.
    - This solution is available if the application has been successfully deployed at least once. This reverts the state of the application to the previous successful deployed state—enabling you to redeploy.
  - Note: If an application has not been deployed, you can resolve the problem by returning the application to a “not deployed” state or you can promote the application to a “deployed state”.
  - Update the application to reflect a not deployed state.
    - This solution is available if the application has never been successfully deployed. This reverts the application to a not-deployed state—enabling you to deploy the application again.

- **Delete pending**—The application is in a “delete pending” state. This scenario can only occur with a deployed application. Since the application is deployed, an application may be in a “delete pending” state when you attempt to delete the application from the Hyperion product, such as Planning, and the product becomes unresponsive. To resolve the problem:
  - Delete from Performance Management Architect only.
    - If the application resides in the Hyperion product, such as Financial Management or Shared Services, manually delete it.
  - Update the application to reflect a deployed state.
    - This solution reverts the application to “deployed” and removes the “deploy pending” state information, enabling you to attempt to delete the application in the Hyperion product to which it was deployed.

- **Application reserved for delete**—The application has been reserved for deletion by the user but has not been deleted. This scenario can occur if an application is in the update process from a “delete pending” state. For example, if an attempt to delete the application failed, and the Dimension Server database was not updated to reflect that the application is not in a delete pending state. This problem can occur in cases where a database restoration was interrupted or a database has become corrupted. To resolve the problem: Remove the deletion reservation for the user and reset the application as valid.
  - This solution allows you to delete the application again.

- **Deployed but missing from Shared Services**—The application does not exist in Shared Services but appears in Performance Management Architect. This problem can occur in cases where Shared Services stopped working. To resolve the problem:
  - Delete from Performance Management Architect only.
    - Use this solution only if you know that the application has not been deployed to a Hyperion product and currently exists in that product.
Change status in Performance Management Architect to “Not Deployed” and perform necessary cleanup.

Changing the status of the application reverts the application to a “not deployed” state in Performance Management Architect, enabling you to redeploy the application.

Reregister the application with Shared Services.

This solution synchronizes the application in Performance Management Architect and Shared Services.

**Not deployed but in Shared Services**—The application exists in Shared Services but shows as “not deployed” in Performance Management Architect. This problem can occur in cases where a database restoration was interrupted or a database has become corrupted. To resolve the problem:

- Delete the application from Performance Management Architect.
  
  This solution deletes the application from Performance Management Architect only. If the application resides in Shared Services or in the Hyperion product, such as Financial Management, manually delete it.

- Manually delete the application from Shared Services.
  
  To delete the application from Shared Services, log in to Shared Services, locate the project that the application was deployed to, and then delete the application.

**Inconsistent deployment state (deployed vs. deploy pending)**—The application is in both a “deployed” and a “deploy pending” state. This scenario can occur when the Dimension Server database shows that the application is deployed and the object repository database shows that the application is deploy pending. This problem can also occur in cases where a database restoration was interrupted or a database has become corrupted. To resolve the problem: Update the application to reflect a deployed state.

This solution synchronizes the object repository database with the Dimension Server database and places the application into a deployed state.

**Inconsistent deployment state (deployed vs. not deployed)**—The application is in both a deployed and not deployed state. This problem can occur when the Dimension Server database shows that the application is deployed and the object repository database shows that the application is not deployed. This problem can also occur in cases where a database restoration was interrupted or a database has become corrupted. To resolve the problem:

- Delete from Performance Management Architect only.
  
  Available if the application is registered in Shared Services. This solution deletes the application from Performance Management Architect. You should manually delete the application from Shared Services.

- Update the application to reflect a not deployed state.
  
  Available if the application has not been registered in Shared Services. This solution reverts the application to a not deployed state.

**Invalid deployment information**—The application is deployed to an invalid location. To resolve the problem is a two-step process:
1. Retrieve the instance name and cluster for potential deployed locations.

2. Select the correct deployment location and synchronize the deployment data with the new location.

- **Deployed but Classic Application in product**—The application is deployed in the web application server and Dimension Server but is a Classic application in Planning or Financial Management. (This test is not applicable for Essbase or Profitability and Cost Management applications.) To resolve the problem:
  - Delete from Performance Management Architect only. After the application is deleted, you can run the Transform Classic to EPM Architect wizard to move the application to Performance Management Architect. See “Transforming Classic Applications into Performance Management Architect” on page 38.
  - Manually delete the application from Planning or Financial Management.

- **Deployed status but not in product**—The application has been deployed in Performance Management Architect but has not been deployed to the appropriate product (This test is not applicable for Essbase applications.) To resolve the problem:
  - Change the status in Performance Management Architect to a “not deployed” status and clean up the application as necessary.
  - Retrieve the instance name, Web Server, cluster, data source (for Planning applications) and Shared Services ID to view the current deployment location.

If you run this test and the status displays “Error,” no solution is displayed. To resolve the problem, follow the instructions in the error message displayed in the Test Details area.

- **Not deployed status in EPMA, but in product**—The application has not been deployed in Performance Management Architect but appears in the product, such as Planning, Profitability and Cost Management, or Financial Management. (This test is not applicable for Essbase applications.) To resolve the problem:

  For Consolidation and Planning applications:
  - Delete from Performance Management Architect only. After the application is deleted, you can run the Transform Classic to EPM Architect wizard to move the application to Performance Management Architect. See “Transforming Classic Applications into Performance Management Architect” on page 38.
  - Manually delete the application from Planning or Financial Management.

  For Profitability applications: Clean up the application in Profitability and Cost Management. (Select “Clean up application,” and then select the appropriate instance name for Profitability and Cost Management.) If you choose to clean up the application, it is deleted in Profitability and Cost Management.
Example: Test Failed—Deployed but Missing from Shared Services

If the “Deployed but missing from Shared Services” test fails, the application exists in Performance Management Architect but is missing from Shared Services. In this case, several solutions are displayed. For example, you can select the option to change the status in Performance Management Architect to “Not Deployed” and perform the necessary cleanup, and then click Apply.

After you click Apply, a confirmation dialog box is displayed.

After you click Yes in the Warning dialog box, the “Deployed but missing from Shared Services” test displays the “Passed” status.

In some cases, even though this test has passed, another test may fail. Consider this scenario:

1. You run the application diagnostics tool on an application and the “Deployed but missing from Shared Services” fails.
2. You apply the “Change status in EPMA to 'Not Deployed' and perform necessary cleanup” solution.

The first test passes; however, now the “Not Deployed status in EPMA, but in product” test fails.

The application diagnostics tool automatically detects this new problem. In this case, the deployment status changed in Performance Management Architect when you applied the first solution. Now, the application is not deployed in Performance Management Architect, but still exists in the product.
3. To correct this problem, you select the “Not Deployed status in EPMA, but in product” and select the appropriate solution. All tests now pass.

Managing Planning Data Sources

Data sources link the relational database and the Essbase server. For Planning, each application must be associated with a data source. You can view summary details for a data source, including name, description, Unicode support, use, database type, name, server, and user name, and Essbase server information.

Note: If you use the EPM System Configurator to change the Essbase server, update the server name within Performance Management Architect.

To create and update data sources, see “Entering Data Source Information” on page 244. To delete data sources, see “Deleting Data Sources” on page 246.

Note: Each application must also be associated with an instance. You work with instances in the EPM System Configurator. For more information, see the Oracle Hyperion Enterprise Performance Management System Installation and Configuration Guide.

Starting the Data Source Wizard

You can create and update data sources for Planning applications using the Data Source wizard. Data sources link the relational database and the Essbase Server. Ensure that the Essbase Server is running before completing this task.

To delete data sources, see “Deleting Data Sources” on page 246.

To start the Data Source wizard:

1. In the Application Library, select Tools, then select Manage Planning Data Source.

2. Perform one action:
   - To create a data source, select File, then New, then Data Source.
   - To update a data source, right-click the data source and select Edit.

3. Continue with “Entering Data Source Information” on page 244.

Entering Data Source Information

To enter data source information:

1. In the Data Source wizard navigation frame, click 1. Data Source Details.
To start the wizard, see “Starting the Data Source Wizard” on page 244.

2 Enter the data source name.
   After the data source is created, you cannot update the name.

3 **Optional:** Enter a description of the data source.

4 **Optional:** Select **Supports Unicode** to set the application to Unicode mode. Unicode-mode applications support multiple character sets.

5 Click **Next**, and continue with “Selecting the Database” on page 245.

**Selecting the Database**

The database must be connected, and must be a supported database type. For information on supported databases, see the *Oracle Hyperion Enterprise Management System Installation Start Here* guide.

**Note:** Ensure that Planning is registered with Shared Services and is deployed to an application server before configuring the database. If you are configuring a database for Planning and a previously configured database is detected, you are prompted to create a new database or reuse the existing database. If you are configuring a product upgrade, the fields on this page are read-only except for the password.

You can select an option to set the application to Unicode mode. Unicode-mode applications support multiple character sets, and Essbase uses UTF-8 encoding to interpret and store character text. Character-based artifacts in Unicode-mode applications, such as member and alias names, can include characters from different languages. For more information, see the *Oracle Essbase Database Administrator’s Online Help*.

To select the database:

1 **In the Data Source wizard navigation frame, click 2. Database Details.**
   To start the wizard, see “Starting the Data Source Wizard” on page 244.

2 **If the Database Type field is activated, select MS SQL Server, Oracle, or IBM DB2.**

3 **Add or update the database configuration details:**
   - **Server:** The server that hosts the database.
   - **Port:** A port number. For information about default ports, see the *Oracle Hyperion Enterprise Performance Management System Installation Start Here* guide.
   - **Database:** The name of the database.
   - **User Name:** The database user name.
   - **Password:** The database password.

4 **Optional:** Click **Test Connection** to test the connection to the data source.

5 Click **Next**, and continue with “Configuring the Essbase Server” on page 246.
Configuring the Essbase Server

To configure the Essbase Server:

1. In the Data Source wizard navigation frame, click **3. Essbase Server Details**.
   
   To start the wizard, see “Starting the Data Source Wizard” on page 244.

2. Update the server details:
   
   - Essbase server name
     
     You can list the Essbase server name along with the part number, for example, `localhost:1423`.
   
   - Essbase user name
   
   - Essbase password

3. **Optional**: Click **Test Connection** to test the connection to the Essbase server.

4. Click Next and continue with “Viewing Summary Details” on page 246.

Viewing Summary Details

After viewing details, you can create or update the data source.

**Note:** After creating the data source, you can use Oracle Hyperion Enterprise Performance Management System Configurator to update instances as necessary. For more information, see the *Oracle Hyperion Enterprise Performance Management System Installation and Configuration Guide*.

To view summary details:

1. In the Data Source wizard navigation frame, click **4. Summary Details**.
   
   To start the wizard, see “Starting the Data Source Wizard” on page 244.

2. If you are satisfied with the settings, click **Finish**.

   To update any settings, click **Back**, make the changes, then return to this tab and click **Finish**.

Deleting Data Sources

You can delete data sources that are not associated with applications.

To delete data sources:

1. In the Application Library, select **Tools**, then select **Manage Planning Data Source**.

2. Right-click a data source that is not associated with an application, then select **Delete**.

   If the data source is associated with an application, this option is not available.
3 At the prompt, click OK to delete the data source.
Part III
Managing Application Data Loads

In Managing Application Data Loads:

- Synchronizing Data
Understanding Data Synchronization

Data synchronization enables you to synchronize and map data between Hyperion applications, interface tables, and external files.

Tasks enabled by the Data Synchronization module:

- Create and modify synchronizations
- Select source and destination applications or files (external sources for source only)
- Define mappings between sources and destinations
- Validate synchronizations
- Execute synchronizations
- View logs of synchronization activities

The Data Synchronization module enables you to create synchronizations between Financial Management, Planning, Profitability and Cost Management, Essbase (ASO), and Essbase (BSO) as destinations, and the following sources:

- Financial Management
- Planning
- Profitability and Cost Management
- Essbase ASO
Performance Management Architect enables you to synchronize data in three locations:

- Application Library ("Synchronizing Data in the Application Library" on page 252)
- Data Flow ("Viewing the Data Flow" on page 218)
- Data Synchronizer ("Synchronizing Data in the Data Synchronizer" on page 252)

### Synchronizing Data in the Application Library

You can synchronize applications in the Application Library if two applications are selected and your user name is assigned the Create Integrations access role. See the Oracle Hyperion Enterprise Performance Management System User and Role Security Guide.

To synchronize data in the Application Library:

1. Select Navigate, Administer, Application Library.
2. Select the source application.
3. Press [Ctrl] and select the destination application.
4. Right-click and select Synchronize.

**Note:** If you are synchronizing a Planning application, you are prompted to select the plan type.

The dimension mapping is displayed. See “Mapping Dimensions” on page 259.

### Synchronizing Data in the Data Synchronizer

You can synchronize applications in the Data Synchronizer.

To synchronize data in the Data Synchronizer:

1. Select Navigate, Administer, Data Synchronization.
2. Select File, New, Synchronization.
   
   The New Synchronization wizard is displayed.
3. Select Hyperion Application, and click Next.
4. Select the source application, and click Next.
5. Perform an action:
   - If you synchronize two Financial Management applications, click Finish and omit steps 6–8.
If you synchronize a Planning source or destination application, click **Next**.

The Select Plan Types dialog box is displayed.

![New Synchronization](image)

Data can be shared between plan types. For example, the Revenue plan may include sales detail accounts that rollup into a Total Product Sales account. You can set up the P & L plan to include the Total Product Sales account, and omit the sales detail accounts. Thus, you can bring the data value for Total Product Sales into your P & L plan, without the account detail and make the database for your P & L plan smaller and more efficient. For information on synchronizing multiple currency Planning applications, see “Synchronizing Multiple Currency Planning Applications” on page 254.

6 **Select a plan type and click Finish.**

The Dimension Mapping is displayed.
7 Click

The Save Data Synchronization dialog box is displayed.

8 Enter a Name and Description and click OK.

After you save the synchronization, you can map dimensions. See “Mapping Dimensions” on page 259.

**Synchronizing Multiple Currency Planning Applications**

You can synchronize multiple currency Planning applications.

For example, you may want to link a Financial Management Value (source) to HSP_Rates (destination). For every row that Financial Management generates, two rows are returned to Planning.

In this instance, the Financial Management row

```
Account,Entity,Period,Scenario,Year,Value"NetProfit","UnitedStates.Massachusetts","January","Actual","2006","USD",10.0
```

is transformed into
The reverse scenario works similarly. If you synchronize from Planning to Consolidation applications and you map HSP_Rates to Consolidation Value, the two rows are merged into one row (reverse of the example). Otherwise, the rows are unchanged, and every row from the source is sent to the destination (after metadata and data translation).

**Note:** The generation of the new rows or merging of the original rows occurs immediately, before data is sent to the destination. All metadata and data transformations occur before the auto-generation or merging of the rows.

To synchronize multi-currency applications, right-click the HSP_Rates dimension and select **Generate Currency Members**.

**Note:** The Generate Currency Members option is available when you are synchronizing from Financial Management to Planning. For example, you can right-click to map the Value dimension in a Consolidation application to the HSP_Rates dimension in a Planning application. If your synchronization is between two Planning applications, this option is not available.

If you synchronize an application with a multi-currency Planning application and the HSP_Rates dimension is linked, the HSP_Rates dimension the right-click menu displays “Generate Currency Members.”

**Note:** Synchronizing multi-currency applications is available for one-to-one mappings and not available if HSP_Rates is linked to multiple dimensions.

When mapping Financial Management to Planning, it is expected that the Value dimension in Financial Management be mapped to HSP_Rates in Planning and a Default member “Local” should be assigned to the Currency dimension.

**Using Hyperion Data Interface Tables as Sources**

Interface tables enable you to bring information into the Hyperion schema through database operations (SQL loads or leveraging Hyperion data integration products). After information is stored in interface tables, the standard mapping and load mechanisms provided within data synchronization can be used to bring the information into the respective Hyperion product. Interface tables are useful in situations where you do not want to pre-format text files for flat file loads and want the power and flexibility of a relational database for staging information into
the Hyperion product suite. The following sections provide additional detail on using data interface tables as sources:

- “Defining Interface Areas” on page 256
- “Creating Synchronizations” on page 257

### Defining Interface Areas

Before you create synchronizations using an interface area as the source, you must create interface data sources. See “Configuring Interface Data Sources” on page 59.

1. **To create interface areas:**

   1. **Select File, New, Data Interface Area Definition.**
   
   ![Data Interface Area Mapping Wizard](image)

   2. Select the interface table source, database table that contains the data to import, and the column that contains the data values for each row, and click **Next**.

   3. Define the dimension by selecting a column on the left and entering the dimension name on the right. Then, click **+** to add more columns.

   For example, if the column name is SCENARIO_DIMENSION_NAME, you can change the name displayed to “Scenario.”

   **Tip:** Click **-** to remove a column.

   4. Click **Next**.

   5. Enter the interface table name, optional description, and then click **Finish**.
Creating Synchronizations

After you create an interface area, you can create a synchronization that uses an interface table as the source.

**Note:** You must define the interface table before creating a synchronization using an interface table as the source. See “Defining Interface Areas” on page 256.

To create synchronizations:

1. From the Data Synchronizer, select **File, New, Synchronization**.
2. Select **Hyperion Data Interface Area**.
3. Click **Next**.
4. Select a source, and then click **Next**.
5. Select a destination application, and then click **Next**.
6. If the destination application is a Planning application, select the plan type.
7. Click **Finish**.
8. Click ![Save Data Synchronization](image)
   The Save Data Synchronization dialog box is displayed.
9. Enter a **Name** and **Description** and click **OK**.

Using External Files as Sources

You can define external files to use as sources in data synchronizations. Data Synchronization supports a delimited file with data in the last column, and does not support fixed length fields. You must enter all mapping rules and filters pertaining to the flat file source.
Before you create a synchronization that uses an external file as the source, you must define the external file.

To define external files:

1. **Select File, New, External File Definition.**
   The External File Mapping Wizard is displayed.

2. **Perform all actions:**
   - Select the **Delimiter**—the character that separates the fields of external files. You can use a comma (,), semicolon (;), tab, or space as the file delimiter. You can also specify a delimiter using the “Other” field.
   - Select the **Quote character**—the character that identifies text values. For example, if the quote character is " (double quotation mark), the parser expects all members to be enclosed in double quotation marks. If the parser finds text values that are not enclosed in the double quotation marks the parser returns an error.

   **Note:** If the delimiter appears in the member name or data value, you must specify the quote character. The delimiter and quote character cannot be the same.

   - Enter the number of **Header lines to skip**. For example, an external file may have headings such as Name, Address, City, State, and ZipCode to skip.
   - Enter the **Line number of dimension fields**. The following example shows an external file where the total number of header lines to skip is 4 and the line number with dimension names is line 3.
     ```
     #first Row of the header
     #Second Row of the header
     Account,Time,Data
     #fourth Row of the header
     Sales,FY10,34.123
     ```

3. **Click Next.**

4. **Perform an action to preview a file:**
   - Click 🗂, click **Browse**, select the file, and click **Upload**.
   - Select **Specify a file URL to preview** and enter a URL; for example, `file:///c:/data/previewfile.csv`.

     Because you specify the format of the external file, you are not constrained to a rigid format. However, remember the following rules:
     - Every line must contain the same number of columns.
     - Every line must have a member value for each dimension (no blank values).
     - The last column of every line is the value for the intersection (text or numeric value).

5. **Click Preview Sample File.**
   When you preview a file, the options specified in the wizard are applied so you can see how the options affect the data.
6 Click Next.

7 Enter the number of dimensions in the file, and then click Update.

8 Enter the field label, which corresponds to the dimensions in the target, and then click Next.

9 Enter the external file name, optionally enter a description, and then click Finish.

**Mapping Dimensions**

After you create a synchronization, you must map the dimensions that comprise each source and destination so that the synchronization can recognize all relevant elements. When defining a detailed synchronization, you can create links, leverage a predefined mapping table, or assign default values to dimensions that are not required to be mapped.

- To map dimensions:
  1. If you created a new synchronization, the Dimension Mapping is automatically displayed. Otherwise, to access the Dimension Mapping, in the Data Synchronizer, right-click a synchronization and click Edit.

     The Dimension Mapping is displayed.
You can use the Dimension Mapping to create, modify, or delete links between source and destination dimensions. Data Synchronization automatically links common dimensions between applications. You can drag and drop to create or change links between source and destination dimensions dynamically.

2 Create a link between a source and destination dimension by performing an action:
   - Drag the dimensions that you want to map. For example, you can drag the Accounts dimension of the source application to the Accounts dimension of the destination application.
   - Right-click the source dimension, and select Start New Link. Right-click the destination dimension, and select End Link.

Note: You can create one-to-one, one-to-many, or many-to-one relationships between source and destination dimensions.

A link can be static or you can apply a mapping table to a link to further define the relationship between the two dimensions. See “Creating Mapping Tables in the Dimension Mapping” on page 270.

The line types represent relationships between the source and destination dimensions:
   - Solid line—No mapping table is assigned. A solid line is valid for one-to-one mappings and one-to-many mappings.
• **Dotted line**—A mapping table is associated with the relationship. See “Creating Mapping Tables in the Dimension Mapping” on page 270.

The links are interactive, in that you can select a link to see a summary of the relationship defined between the linked dimensions. The summary includes:

• Source Dimension
• Destination Dimension
• Relationship Type (member relationship—for example, one-to-one or mapping table defined)
• Filter Summary
• Default Member Selection

3 **Optional:** To remove a link, right-click a link and select **Remove Link**.

After you define mappings you can optionally filter dimensions, define mappings, and assign default members. Then, when finished, you must save the synchronization. See “Filtering Dimensions” on page 261, “Creating Mapping Tables in the Dimension Mapping” on page 270, “Assigning Default Members” on page 268, and “Saving Synchronizations” on page 269.

### Filtering Dimensions

When you create relationships between dimensions, you can also restrict the set of members available from the source application. The filter is applied at synchronization execution against the source dimension members. Some instances require filtering. For example if you move data from Entity_1 in the source to Entity_2 in the destination with a January to February Period mapping, a filter on the source is required to extract only from Period—January; otherwise, results may be unpredictable.

Filtering constraints:

• Filters are not supported for flat files.
• Function filters are not supported for interface tables; however, EQUAL and LIKE are supported.

After you create and save a filter, it is available from the Data Synchronization tab. You can share the filter across different data synchronization objects.

**Tip:** For optimum performance, it is important to use filters on all dimensions when you are synchronizing data between applications. For information on filtering dimensions for applications, see “Adding Members to Applications” on page 150.

To filter dimensions:

1 **Right-click a dimension, and select Create Filter.**

   The Filter Criteria box is displayed.
2 Select a filter. (EQUAL, LIKE, or FUNCTION).

**Note:** You can create multiple filter selections, by delimiting each entry with a semicolon; for example, Actual; Budget.

- EQUAL—any valid member, such as Actual for the Scenario dimension.
- LIKE—use wild cards in the filter:
  - * for multiple characters (Only use * wildcard characters at the end of a string)
  - ? for single character
    For example:
    Actua? or Act* returns Actual
    J?? or J* returns Jan, Jun, and Jul
- FUNCTION—use any valid member selection function, such as BottomOfHierarchy() retrieving the base level members for the dimension. See Appendix C, “Member Query Functions Used by the Data Synchronizer” for a list of functions that Performance Management Architect supports.

3 Enter the member to filter by.

The Filter Criteria box is displayed.

4 Select multiple members to filter by and click [ ] Then, click OK.

**Note:** You can insert multiple members, separated by a semi-colon (;). For example, “Descendents(NetProfit);Children(Sales);NoMember”.

**Tip:** If you cannot find a member, you can search for members in the member selector.

5 Click OK.

When a filter is applied in the dimension mapping, a funnel is displayed next to the dimension.

### Adding Reusable Filters

There are several rules for reusable filters:

- You can add reusable filters to existing filter criteria on a source dimension. Existing filter criteria is combined with reusable filter criteria.
- Deleting the dimension associated with a reusable filter object invalidates the object, but it is not deleted.
- If you edit a reusable filter object, the changes are applied to all instances of the filter that you included in Data Synchronization objects.
If you edit the reusable filter criteria associated with a source dimension, the change only applies locally and does not impact the reusable filter object.

To create a reusable dimension filter:

1. Select Navigate, Administer, Data Synchronization.
2. When the Data Synchronizer tab is displayed, select File, New, Filter Definition.
   The Filter Definition Wizard is displayed.
3. For the Filter Definition, do the following tasks:
   a. Select the application for which you want to create the reusable filter.
   b. Select the dimension type.
   c. Select the dimension for which you want to create the reusable filter.
   Note: You can select a shared dimension if you select the shared library from the Application drop-down list.
   d. Select the filter type (EQUAL, LIKE, or FUNCTION).
   Note: You can create multiple filter selections, by delimiting each entry with a semicolon; for example, Actual; Budget.
   
   ● EQUAL—any valid member, such as Actual for the Scenario dimension.
   ● LIKE—use wild cards in the filter:
     ○ * for multiple characters (Only use * wildcard characters at the end of a string)
     ○ ? for single character
     For example:
     Actual? or Act* returns Actual
     J?? or J* returns Jan, Jun, and Jul
   ● FUNCTION—use any valid member selection function, such as BottomOfHierarchy() retrieves the base level members for the dimension. See Appendix C, “Member Query Functions Used by the Data Synchronizer” for a list of functions that Performance Management Architect supports.
   e. In Filter Criteria, enter the member to filter by or click .
      The Filter Criteria dialog box is displayed.
   f. Select multiple members to filter by and click . Then, click OK.
   Note: You can insert multiple members, separated by a semi-colon (;). For example, “Descendents(NetProfit);Children(Sales);Nomember”.
Tip: If you cannot find a member, you can search for members in the member selector. See “Searching for Members Using the Member Selector” on page 131.

4 Click Next.

5 For the Filter Properties, do the following tasks:
   a. Enter a name for the reusable filter.
   b. Enter a description of the reusable filter.

6 Click Finish.

After you create the reusable filter, an icon of it is displayed on the Data Synchronizer tab. A summary of the filter’s properties (such as the filter name, description, and creator, as well as the application and dimension for which the filter was created) is displayed below the icon.

Note: While saving the data sync definition, if there are unmapped source dimensions without filters, then an Informational dialog is displayed stating this. After you click OK, a filter of type [LIKE] and criteria * will be applied to all of the unmapped source dimensions that did not have a filter.

### Editing a Reusable Dimension Filter

You can edit a reusable dimension filter from within the Data Synchronizer tab. You use the Filter Definition Wizard to create and edit reusable filters. When you make changes to a filter, the changes affect every dimension to which the filter is applied.

To edit a reusable dimension filter:

1 Select Navigate, Administer, Data Synchronization.

2 When the Data Synchronizer tab is displayed, right-click the reusable filter you want to edit, and select Edit.

   The Filter Definition Wizard is displayed.

3 Make changes to the filter definition and properties. See step 3 on page 263 through step 6 on page 264.

4 Click Finish.

### Inserting a Reusable Dimension Filter

After you create a reusable dimension filter, you can insert it into a source dimension from within Dimension Mapping.

To insert a reusable dimension filter:

1 If you created a new synchronization, the Dimension Mapping is automatically displayed. Otherwise, to access the Dimension Mapping, in the Data Synchronizer, right-click a synchronization, and click Edit.
The Dimension Mapping is displayed.

**Note:** If you insert the filter definition within the data sync definition, you can edit only the Filter Criteria field.

2 Right-click a source dimension, and select **Insert Filter Definition** to insert a reusable dimension filter for the dimension.

**Note:** If the dimension has a reusable filter associated with it, the Add Filter menu is replaced with an Edit Filter menu.

3 In **Insert Filter Definition**, do either of these tasks:
   - To create a new filter definition to insert, do these tasks:
     a. Click **Create Filter Definition**.
     b. Use the **Filter Definition Wizard** to create the filter. See “Filtering Dimensions” on page 261.
     c. Select the new filter definition in the **Insert Filter Definition** dialog.
   - To insert an existing filter definition, select it.

4 Click OK.

When a filter is applied in the dimension mapping, a funnel is displayed next to the dimension name.

**Copying a Reusable Dimension Filter**

After you create a reusable dimension filter, an icon of the filter is displayed on the Data Synchronizer tab. From the Data Synchronizer tab, you can edit, delete, and copy the reusable filter.

➢ To copy a reusable dimension filter:

1 **Select Navigate, Administer, Data Synchronization**.

2 **When the Data Synchronizer** tab is displayed, right-click the reusable filter you want to copy, and select **Duplicate**.

   The **Duplicate** dialog is displayed.

3 **Enter a name and an optional description for the filter, and click OK**.

   A copy of the filter is displayed on the Data Synchronizer tab.

**Removing a Reusable Dimension Filter**

You can remove a reusable filter from a dimension with which it is associated in Dimension Mapping. When you remove a reusable filter, it is removed only from the dimension with which
you remove it; it is not removed from other dimensions with which it is associated. If you want to remove a filter from all of the dimensions with it is associated, you need to delete the filter. See “Deleting a Reusable Dimension Filter” on page 266.

To remove a reusable dimension filter:

1. If you created a new synchronization, the Dimension Mapping is automatically displayed. Otherwise, to access the Dimension Mapping, in the Data Synchronizer, right-click a synchronization and click Edit.
   
   The Dimension Mapping is displayed.

2. Right-click the dimension from which you want to remove the filter, and select Remove Filter.
   
   If there are reusable filters associated with the dimension, the Remove Filter dialog box displayed; it lists the filters associated with the dimension.

3. Select one or more filters to remove, and click OK.
   
   The selected filters are removed from the dimension.

4. To remove all of the associated reusable filters from a dimension, right click on the dimension and select Remove All Filters.
   
   If any or all filters are removed, the funnel icon that represents a filter is removed from the dimension name.

**Deleting a Reusable Dimension Filter**

You can delete a reusable dimension filter from the Data Synchronizer tab. When you delete a reusable dimension filter, it is deleted from all of the Source Dimension Mapping with which it is associated.

You cannot delete a filter definition if it is associated with source dimensions in Dimension Mapping. If you try to do this, you receive the error: "Unable to delete the definition. It is referenced by one of the Data synchronization definitions." Before deleting any filter definition, you must remove its reference from other data sync definitions where it is used. If there is no reference, it deletes successfully.

To delete a reusable dimension filter:

1. Select Navigate, Administer, Data Synchronization.

2. When the Data Synchronizer tab is displayed, right-click the reusable filter you want to delete, and select Delete.

3. Click Yes to confirm you want to delete the filter or No to return to the Data Synchronizer tab.

   After you delete a filter, its icon is removed from the Data Synchronizer tab.

**Adding and Editing Filter Criteria**

You can add and edit filter criteria for reusable dimension filters.
To add or edit filter criteria:

1. If you created a new synchronization, the Dimension Mapping is automatically displayed. Otherwise, to access the Dimension Mapping, in the Data Synchronizer, right-click a synchronization and click Edit. The Dimension Mapping is displayed.

2. Right-click a dimension, and do either of these tasks, depending on whether you want to add or edit filter criteria:
   - To add filter criteria, select Add Filter Criteria.
   - To edit filter criteria, select Edit Filter Criteria.

The Filter Criteria dialog box is displayed.

3. Select a filter. (EQUAL, LIKE, or FUNCTION).

   **Note:** You can create multiple filter selections, by delimiting each entry with a semicolon; for example, Actual; Budget.

   - EQUAL—any valid member, such as Actual for the Scenario dimension.
   - LIKE—use wild cards in the filter:
     - * for multiple characters (Only use * wildcard characters at the end of a string)
     - ? for single character
     For example:
     - Actua? or Act* returns Actual
     - J?? or J* returns Jan, Jun, and Jul
   - FUNCTION—use any valid member selection function, such as BottomOfHierarchy() retrieves the base level members for the dimension. See Appendix C, “Member Query Functions Used by the Data Synchronizer” for a list of functions that Performance Management Architect supports.

4. Enter the member to filter by or click .

   The Filter Criteria dialog box is displayed.

5. Select multiple members to filter by and click . Then, click OK.

   **Note:** You can insert multiple members, separated by a semi-colon (;). For example, “Descendents(NetProfit);Children(Sales);NoMember”.
Tip: If you cannot find a member, you can search for members in the member selector. See “Searching for Members Using the Member Selector” on page 131.

6 Click OK.

When a filter is applied in the dimension mapping, a funnel is displayed next to the dimension name.

Note: You can use Save As to save a copy of the reusable filter.

Assigning Default Members

If a relationship is not defined for a dimension on the destination application, one member needs to be identified to complete the linking process. This member is used to complete each data point intersection at synchronization execution time.

To assign default members:

1 In the Destination application in which you want to assign a default member, right-click a dimension that has not been mapped.

2 Select Assign Default Member.

The Pick Member dialog box is displayed.

3 Select the member to assign as the default, and click OK.

A green check mark is displayed next to the dimension of the default member.

Note: To remove a default member, right-click the dimension that contains the default member, and select Remove Default Member. If you cannot find a member, you can search for members in the Pick Member dialog box. For information on searching for members, see “Searching for Members Using the Member Selector” on page 131.

Inserting Mapping Tables

Mapping tables are mappings that you can reuse in data synchronizations. If you have created mapping tables, you can insert them into a synchronization. For information on creating mapping tables, see “Working with Mappings” on page 269.

To insert mapping tables:

1 Click  

The Insert Mapping Table dialog box is displayed.
2 Select a mapping table to insert, and click OK.

When a mapping table is used in a dimension mapping, the link is a dotted line.

**Editing Mappings**

If you are editing an existing mapping table, the Mapping Table Designer displays the source application, destination application, and the mapped dimensions relationship.

- To edit mappings:
  1. Right-click a mapping (dotted line link).
  2. Select Edit Mapping.

    The Mapping Table Designer is displayed.

- Edit the mapping. Click Next to move through the screens, and click Finish.

**Saving Synchronizations**

You must save synchronizations before validating and executing them.

- To save a synchronization:
  1. In the Dimension Mapping, click 

    The Save Data Synchronization dialog box is displayed.
  2. Enter the name and description, and click OK.

**Working with Mappings**

You can use mapping tables to define relationships between dimensions. Mappings are used in scenarios where you can define the mapping once and reuse it in multiple synchronizations.

When you create mapping tables, you can select multiple source application dimensions, but only one destination application dimension. The relationship displayed signifies that source
dimension(s) members are used as members in the destination dimension. You can define one-to-one, one-to-many, and many-to-one relationships. Data synchronization leverages:

- Mapping tables, to perform simple or complex transformations, and
- A transformation engine to map from external sources or from application to application.

You use the Mapping Table Designer to create mapping tables. See “Creating Mapping Tables in the Dimension Mapping” on page 270 and “Creating Mapping Tables in the Data Synchronizer” on page 273.

You can edit mapping tables in the Data Synchronizer, see “Editing Mapping Tables” on page 277.

Creating Mapping Tables in the Dimension Mapping

The following procedure provides step-by-step information on defining mappings while linking dimensions in the Dimension Mapping. The source and destination applications are automatically selected, so the first screen of the Mapping Table Designer is skipped.

1. In the Dimension Mapping, right-click a link, and select Define Mapping.

The Mapping Table Designer (Map Data) is displayed.

Each row represents a mapping rule between the source and destination application dimensions. You double-click a cell to enter values directly into the cells or click a cell and select Pick Member to select a member.

When entering source values directly into a cell, you can use symbols as wild cards and indicators.

Table 18: Source Dimension Rule Syntax

<table>
<thead>
<tr>
<th>Symbol</th>
<th>Usage</th>
</tr>
</thead>
<tbody>
<tr>
<td>*</td>
<td>Matches on one or more characters. For example, Acc* matches Acc100, Acc101, and so on.</td>
</tr>
<tr>
<td>?</td>
<td>Matches on one character. For example, Acc??? matches Acc100 but not Acc1000.</td>
</tr>
<tr>
<td>~</td>
<td>Matches on a range of characters. For example, Acc100~Acc200 matches on Acc100, Acc101, and so on up to Acc200. If both fields are numeric, the range is evaluated numerically. If either field is alphanumerical, the range is evaluated lexicographically.</td>
</tr>
<tr>
<td>\</td>
<td>Indicates that the next character is interpreted literally. For example, Acc* matches only and precisely Acc*.</td>
</tr>
<tr>
<td>^</td>
<td>Indicates a space. Required—for leading and trailing spaces. Optional—for spaces displayed in the middle of inputs.</td>
</tr>
<tr>
<td>{NULL}</td>
<td>Matches on an empty field.</td>
</tr>
</tbody>
</table>
Destination dimensions use different rule syntax. The source rule syntax defines which intersections match the rule. When a row is passed through the translation engine, each source rule is checked to see if the member fits within the rules defined. If a match is found, the destination rule is applied to that member. The destination rules define the modifications to be made to the members that match the source rules. The rule syntax in destination dimensions accepts the following entries:

- Member names
- Source member names in combination with literal strings
- Contents of wild cards

### Table 19  Destination Dimension Rule Syntax

<table>
<thead>
<tr>
<th>Symbol</th>
<th>Usage</th>
</tr>
</thead>
<tbody>
<tr>
<td>[]</td>
<td>Destination values which can be concatenated.</td>
</tr>
<tr>
<td>[field#]</td>
<td>Transfer value of the indicated input field in its entirety. An input field is identified by its sequence number based on the order of definition for the input field. For example, [1] indicates that the value of the first input is the output. FY[1] [2] indicates that the output value is the string FY concatenated with the value of input 1 and the value of input 2, so if input 1 is Years, and input 2 is Months, the result is FYYearMonths.</td>
</tr>
<tr>
<td>[field#, *]</td>
<td>The value of * from the input field. For example, if Output1 is defined as [1,<em>] and Input1 is defined as 123</em>, if Input1 = 123456, Output1 = 456.</td>
</tr>
</tbody>
</table>
| [field#, *#] | Required format if the referenced * is not the first instance of * in the input. 
# is the position of the * in the input field. 
[1, *1] is equivalent to [1, *]. 
For example, if Input3 = *123* and Output1 = abc[3, *2], Input3 = 91234 and Output1 = abc4. |
| [field#,?] | The value of ? from the input field. For example, if Output1 is defined as [1,?] and Input1 is defined as 123?, if Input1 = 123456, Output1 = 4. |
| [field#,?#] | Required format if the referenced ? is not the first one in the input. 
# is the position of the ? in the input field. 
[2, ?1] is equivalent to [2, ?]. 
For example, if Input1 = 123?, Input2 = 4??, and Output1 = abcd[2, ?2] and Input1 = 123?, and Input2 = 498, Output1 = abcd8. |
| \ | Indicator that the next character is interpreted literally. A \ is necessary when the [ or ] character is used in an output. 
In an output, the use of \ within a [] definition is not allowed. |
| ^ | A space indicator. 
Required—for leading and trailing spaces. 
Optional—for spaces displayed in the middle of inputs. |
| {NULL} | Value used to output an empty field. |

2 Perform an action:

- For the source, double-click a cell, and enter a rule. Use the syntax described in Table 18, “Source Dimension Rule Syntax,” on page 270. (You can also select a cell and select Pick...
**Member**, then in the Pick Member dialog box, select a member, and click **OK**. For information on searching for members in the Pick Member dialog box, see “Searching for Members Using the Member Selector” on page 131.

- For the destination, double-click a cell and enter a rule. Use the syntax described in Table 19, “Destination Dimension Rule Syntax,” on page 271. (You can also select a cell and select **Pick Member**, then in the Pick Member dialog box, select a member, and click **OK**.)

If you select Pick Member, the member selector enables you to view and select members within a dimension. You can expand and collapse members within a dimension using the [+ ] and [- ].

If you cannot find a member, you can search for members in the member selector Pick Member dialog box. See “Searching for Members Using the Member Selector” on page 131.

3 If necessary, modify the mapping:

- To insert a row at the end of the table, click **Add**.
- To copy a row, select a row, and click **Duplicate**.

  Duplicate rows are inserted at the end of the table.

- To delete a row, select multiple rows, and click **Remove**.
- To move rows up or down in the table, select the rows, and click **Move Up** or **Move Down**.

  The rules are processed in order. When a match occurs, the rule is applied to the member and processing completes (no other rules are applied to that member). In some cases, members may match multiple rules so you can control the order of the rules.

- To edit a cell, double-click the cell or press [F2].

  **Tip:** You can navigate the table using the [Tab] key.

4 Click **Next** to validate the mapping tables.

The Validate Mappings screen contains a table with mapping rules in each row. Only rule syntax, not member information is validated. Each rule is marked as passed or failed.

5 Click **Validate**.

  **Tip:** You can click View All to view all rules or View Exceptions Only to view only rules that do not pass validation. If View All is selected, the failed rule is highlighted in red.

6 If a rule did not pass validation, click **Back** to return to the Map Data page, fix the errors, and click **Next** to re-validate.

7 Click **Next**.

The Mapping Properties screen is displayed, enabling you to provide a name and description for the mapping table. It is helpful to provide a prefix, such as MAP_.

8 Enter a name and description, and click **Finish**.
There are no restrictions for names and descriptions.

A dotted line indicates that a mapping is defined.

The mapping also displays in the Data Synchronizer. See “Working with the Data Synchronizer” on page 275.

Creating Mapping Tables in the Data Synchronizer

The following procedure provides step-by-step information on defining mapping tables in the Data Synchronizer, including selecting the source and destination applications.

Before you create a mapping table, you must create at least one application.

To create mapping tables in the Data Synchronizer:

1. Select File, New, Mapping Table.

   The Mapping Table Designer is displayed.

2. Click to select a source application.

   The Source Application dialog box is displayed.

3. Select a Source Application. If the application is a Planning application, select the Plan Type. Then, click OK.

4. Click to select a destination application.

5. Select a Destination Application. If the application is a Planning application, select the Plan Type. Then, click OK.

   The dimensions change depending on the plan type.

6. Choose the Source and Destination Dimensions, and click Next.

7. Perform an action:
   
   - For the source, double-click a cell, and enter a rule. Use the syntax described in Table 18, “Source Dimension Rule Syntax,” on page 270. (You can also select a cell and select Pick Member, then in the Pick Member dialog box, select a member, and click OK.)
   
   - For the destination, double-click a cell and enter a rule. Use the syntax described in Table 19, “Destination Dimension Rule Syntax,” on page 271. (You can also select a cell and select Pick Member, then in the Pick Member dialog box, select a member, and click OK.)

If you select Pick Member, the member selector enables you to view and select members within a dimension. You can expand and collapse members within a dimension using the [+ ] and [-].

If you cannot find a member, you can search for members in the member selector. See “Searching for Members Using the Member Selector” on page 131.

8. If necessary, modify the mapping:
To insert a row at the end of the table, click **Add**.

To copy a row, select a row, and click **Duplicate**.

Duplicate rows are inserted at the end of the table.

To delete a row, select multiple rows, and click **Remove**.

To move rows up or down in the table, select the rows, and click **Move Up** or **Move Down**.

The rules are processed in order. When a match occurs, the rule is applied to the member and processing completes (no other rules are applied to that member). In some cases, members may match multiple rules so you can control the order of the rules.

To edit a cell, double-click the cell or press [F2].

**Tip:** You can navigate the table using the [Tab] key.

9. **Click Next to validate the mapping tables.**

   The Validate Mappings screen contains a table with mapping rules in each row. Only rule syntax, not member information is validated. Each rule is marked as passed or failed.

10. **Click Validate.**

    **Tip:** You can click View All to view all rules or View Exceptions Only to view only rules that do not pass validation.

11. **If a rule did not pass validation, click Back to return to the Map Data page, fix the errors, and click Next to re-validate.**

12. **Click Next.**

    The Mapping Properties screen is displayed, enabling you to provide a name and description for the mapping table. It is helpful to provide a prefix, such as MAP_.

13. **Enter a name and description, and click Finish.**

    You can view all defined mapping tables in the Data Synchronizer. See “Working with the Data Synchronizer” on page 275.
Working with the Data Synchronizer

To access data synchronizations and mapping tables, click **Navigate, Administer, Data Synchronization**.

Navigating the Data Synchronizer

The Data Synchronizer identifies all synchronizations and mapping tables. If you select a synchronization, the lower pane displays the following information:

- **Summary**—Name, date created, date last modified, and the user that created the synchronization
- **Description**—The information that you provided in the Description text box when you created a new synchronization
- **Properties**—The status and the date last synchronized
- **Applications**—The source and destination applications in the synchronization
- **Mapping Tables**—The mapping tables used in the synchronization

If you select a mapping table, the lower pane displays the following information:
Changing the Data Synchronizer View

To change the Data Synchronization view:

1. **Select View, Details.**
   - Viewing details shows the synchronization name, description, type, the user that created the synchronization, and the date created.

2. To sort by a column, click the column heading. For example, if you want to sort by name, click Name.

3. To move a column, click and drag the column heading to a new location.

4. To change the view to icon view, click View, Icons.

Filtering Synchronizations

You use filters to hide synchronizations or mappings from view.

To create data synchronization filters:

1. **Select View, Filter.**

2. Select the types that you want to view.

3. Select the status that you want to view, for example, you may want to see synchronizations that are out of sync.

4. Click OK.
Editing Synchronizations

- To edit synchronizations:
  1. Right-click a synchronization, and select **Edit**.
     
     The Dimension Mapping is displayed.
  2. As necessary, modify the mappings and click **OK**.

Editing Mapping Tables

- To edit mapping tables:
  1. Double-click a mapping or right-click a mapping and select **Edit**.
     
     The Mapping Table Designer is displayed.
  2. Modify the values to be mapped, then click **Next**.
  3. Validate the mappings, then click **Next**.
  4. Modify the mapping properties, then click **Finish**.

Duplicating Synchronizations and Mappings

- To duplicate synchronizations and mappings:
  1. In the Data Synchronization module, right-click a synchronization or mapping, and select **Duplicate**.
     
     If you duplicate a synchronization and are using a mapping table, the mapping table is used for the original and duplicated synchronization.
  2. In the Duplicate dialog box, enter the name and description, then click **OK**.

Deleting Synchronizations and Mappings

- To delete synchronizations and mappings:
  1. In the Data Synchronization module, right-click a synchronization or mapping, and select **Delete**.

     **Note:** If a mapping table, external file definition, or data interface table definition is referenced by the data synchronization, it cannot be deleted.
  2. If necessary, select **View, Refresh**.
     
     The synchronization or mapping is removed.
Validating and Executing Synchronizations

When you execute a synchronization, data is retrieved from the source application, transformed according to mapping rules, and pushed to the destination application where it is committed to the application. When you validate a synchronization, the same process is followed but the data is not committed to the destination application. This enables the source and destination to process the request and resulting data to generate errors that might occur without writing the data. You can quickly identify if issues exist with the synchronization.

If your destination is an Essbase application, the Data Synchronizer uses the default values for:

- **abortOnError**—Determines whether this operation should be aborted if there is error. Valid values are true or false.
- **DryRun**—Determines whether it is a dry run with no actual data update. Valid values are true or false.
- **delimiter**—Indicates the delimiter for the data stream.

**Note:** If a shared location is used for an external file, this data file needs to be accessible by the server validating or executing the synchronization.

To validate and execute synchronizations:

1. **Perform an action:**
   - **To validate a synchronization:**
     - In the Data Synchronizer, right-click a synchronization, and select **Validate Synchronization**.
     - In the Dimension Mapping, click 📊.
   - **To execute a synchronization:**
     - In the Data Synchronizer, right-click a synchronization, and select **Execute Synchronization**.
     - In the Dimension Mapping, click 📊.

2. **Select the Operator and type the Value.**
   
   You should select the operator and enter a value if the values from the source are on a different scale than the destination. You can select Multiply, Divide, Add, or Subtract and then enter a numeric value to apply with the operator. For example, if you select the operator * (Multiply) and enter the value, 10, each data value sent to the destination will be multiplied by 10.

3. **Select the data load option Mode.**
   
   Data Load Options for Planning and Essbase ASO and BSO applications are:
   
   - **Add**—Adds the values in the loaded data. For example, consider that the source data for “Account A” has a value of 60, and the target data for “Account A” contains a value
of 100. After the data synchronization with “Add” selected, the target application data for “Account A” displays a value of 160.

- **Subtract**—Subtracts the values in the loaded data. For example, consider that the source data for “Account A” has a value of 60, and the target data for “Account A” contains a value of 100. After the data synchronization with “Subtract” selected, the target application data for “Account A” displays a value of 40.

- **Overwrite**—Overwrites the data in the target application with the last loaded value from the source data. For example, consider that there are two rows in the source data for “Account 1010.” The first row is the oldest and has a value of 500.00. The second row was loaded last and has a value of 1100. After the data synchronization, the data is overwritten with the last loaded value: 1100.

**Note:** In Essbase (ASO) synchronizations, the “Overwrite” load option differs in that it accumulates the duplicate records source data, and then overwrites the target application data.

Data Load Options for Financial Management applications are:

- **Merge**—Merges the data in the target application with the most recent value from the source data and does not modify any subcubes. For example, consider that there are four rows in the source data for “Account 1000.” The first row is the oldest and has a value of 1000.00. The second and third rows also have values of 1000.00. The fourth row, which is the most recent, has a value of 2000. After the data synchronization, the data is merged with the most recent value: 2000.

- **Replace**—Replaces the data with the most recent value and modifies the values in the subcubes. For example, consider that there are two rows in the source data for “Account 10.” The first row is the oldest and has a value of 5000.00. The second row has a value of 1000.00. After the data synchronization, the data is replaced with the most recent value: 1000.

- **Accumulate in Source**—(*Equivalent to “Accumulate in File” in Classic Financial Management*) Consider these scenarios when selecting Accumulate in Source in combination with the Merge and Replace options:
  - Select **Merge and Accumulate in Source**—Adds the duplicate values in the source and the subcubes are not modified.
  - Select **Merge and deselect Accumulate in Source**—The most recent value is loaded in the source and the subcubes are not modified.
  - Select **Replace and Accumulate in Source**—Adds the duplicate values in the source and the subcubes are modified.
  - Select **Replace and deselect Accumulate in Source**—Loads the most recent value and the subcubes are modified.

- **Accumulate**—Adds the values in the loaded data. For example, consider that there are two rows in the source data for “Account A.” The values are: 50.5 and 100. After the data synchronization, the value that displays in the target application for “Account A” is 150.5.
Note: Selecting or clearing “Accumulate in Source” has no affect on how values are loaded if you select “Accumulate”.

4 If the synchronization uses an external source file, enter the URL for the source, or click Upload to use a file as the source.

5 Click OK.

Troubleshooting Data Synchronizations

You can enable additional logging to help you troubleshoot problems with data synchronizations.

Caution! Enabling debug tracing results in extra debug files being created and accessed. This affects data synchronization performance and uses extra hard disk space. You should only enable these options when troubleshooting problems. Make sure to disable these options when in production.

To enable additional logging:

1 Navigate to: `%EPM_ORACLE_INSTANCE%\config\EPMA\DataSync`.
   For example, C:\Oracle\Middleware\user_projects\epmsystem1\config\EPMA\DataSync\.

2 Using a text editor, open `dme.properties`.

3 Uncomment the following debug lines by removing leading #.

   ```
   preTranslationProcessingClass=com.hyperion.awb.datasync.custom.FileBasedRowLogger
   preTranslationProcessingClass.outputFile=preTransOut.txt
   postTranslationProcessingClass=com.hyperion.awb.datasync.custom.FileBasedRowLogger
   postTranslationProcessingClass.outputFile=postTransOut.txt
   createDebugFiles=true
   debugSampleSize=1000
   ```

   Enabling `preTranslationProcessingClass` saves the data from the source before any mappings or transformations are applied in a temporary file. The file is named with a unique ID appended as a suffix: `_preTransOut`. This is useful to track what data is returned by the source.

   Enabling `postTranslationProcessingClass` saves the data from the source after all mappings and transformations are applied in a temporary file. The file is named with a unique ID appended as a suffix: `_postTransOut`. This is useful to track what data is sent to the source and how metadata is mapped and transformed.

   Enabling `createDebugFiles` generates these log files every time a data synchronization is executed or validated:

   - SynRequest.xml — traces each step in the data synchronization execution
- ALEQuery.xml — the query in ALE format to be executed by the source

The `debugSampleSize` setting ensures that file size will not exceed the number of bytes set.

4 Save and close `dme.properties`.

5 Restart the Hyperion EPM Architect Data Synchronizer – Web Application service.

6 Execute the data synchronization.

The resulting log files are generated in the folder created for each data synchronization execution or validation job. If `dme.log` is located in the standard Web Logic server folder it should have path to the temporary folder. Typically, the temporary folder is: `%EPM_ORACLE_INSTANCE%\tmp\Oracle\Temp`.

For debug files that are created in a folder with a unique ID in the temporary folder, the files are created in the temporary folder with a unique ID appended as a suffix: `_preTransOut` and `_postTransOut`.

After you enable additional logging to resolve problems, you should disable the options when you return to your production environment.

> To disable additional logging:

1 Using a text editor, open `dme.properties`.

2 Comment the following debug lines by adding leading #.

   - `preTranslationProcessingClass=com.hyperion.awb.datasync.custom.FileBasedRowLogger preTranslationProcessingClass.outputFile=preTransOut.txt`
   - `postTranslationProcessingClass=com.hyperion.awb.datasync.custom.FileBasedRowLogger postTranslationProcessingClass.outputFile=postTransOut.txt`
   - `createDebugFiles=true`
   - `debugSampleSize=1000`

3 Save and close `dme.properties`.

4 Restart the Hyperion EPM Architect Data Synchronizer – Web Application service.
In Job Management:

- Managing Jobs
- Using Task Automation
Managing Jobs

In This Chapter

- Working with the Job Console ................................................................. 285
- Navigating the Job Console .................................................................... 287
- Viewing Job Attachments ....................................................................... 291
- Deleting Jobs ........................................................................................ 293
- Manually Time out Jobs ........................................................................... 293
- Performance Management Architect Logs .............................................. 294

Working with the Job Console

The Library Job Console is a central component that provides the infrastructure for handling jobs across many functional areas. A job is an asynchronous process that you submit to run behind the scenes in Performance Management Architect.

The Job Console enables you to view and manage jobs in one centralized location. Generally, there are two job categories: jobs and job status that need availability across sessions and jobs that are tied to a session.

The Job Console supports the following job types:

<table>
<thead>
<tr>
<th>Job Type</th>
<th>Job associated with...</th>
</tr>
</thead>
<tbody>
<tr>
<td>Dimension Import</td>
<td>importing dimensions into the Dimension Library</td>
</tr>
<tr>
<td>Consolidation Application Deployment</td>
<td>deploying a Consolidation application</td>
</tr>
<tr>
<td>Planning Application Deployment</td>
<td>deploying a Planning application</td>
</tr>
<tr>
<td>Analytics Application Deployment</td>
<td>deploying an Analytic Services application</td>
</tr>
<tr>
<td>Profitability Application Deployment</td>
<td>deploying a Profitability application</td>
</tr>
<tr>
<td>Data Synchronization</td>
<td>executing data synchronizations</td>
</tr>
<tr>
<td>Compare</td>
<td>comparison of applications</td>
</tr>
<tr>
<td>Property Query</td>
<td>property queries</td>
</tr>
<tr>
<td>Export</td>
<td>export of application</td>
</tr>
<tr>
<td>Job Type</td>
<td>Job associated with...</td>
</tr>
<tr>
<td>-------------------------------</td>
<td>----------------------------------------------------------------------------------------</td>
</tr>
<tr>
<td>Query Member</td>
<td>session level jobs created when running member queries specifically from Oracle Hyperion Calculation Manager (these queries can be very large)</td>
</tr>
<tr>
<td>Transaction Log Export</td>
<td>export of transaction logs</td>
</tr>
<tr>
<td>Transform Classic to EPM Architect</td>
<td>transforming applications managed in Classic Planning, Financial Management, or Essbase</td>
</tr>
<tr>
<td>Application Migration</td>
<td>migrating existing Hyperion applications</td>
</tr>
<tr>
<td>Application Validation</td>
<td>validation of existing Hyperion applications</td>
</tr>
<tr>
<td>Detach Dimension</td>
<td>changing a shared dimension to local in an application</td>
</tr>
<tr>
<td>Share Local Dimension</td>
<td>changing a local dimension to shared</td>
</tr>
<tr>
<td>Application Copy</td>
<td>copying an application</td>
</tr>
<tr>
<td>Dimension Copy</td>
<td>copying a dimension</td>
</tr>
<tr>
<td>Dimension Export</td>
<td>exporting a dimension</td>
</tr>
</tbody>
</table>

To open the Job Console, click **Navigate, Administer, Library Job Console**.

The Job Console is displayed.

Each job captures information during the life of a job, during the initial submitted time or job processing.
Navigating the Job Console

The Job Console shows Performance Management Architect jobs. You can select a job in the top pane and view summary information in the bottom pane. The bottom pane displays:

- **Summary**—Information about the job
  - Started Time—Used for smaller strings
  - Submitted Time—Used for large quantities of content
  - Last Updated Time—Last time the job was updated
  - User Name—User name that submitted the job
  - Process Name—Process name in which the job is running
  - Thread—Thread ID of the current job
  - Server—Server name where the job is running
  - Detail—Job summary, including errors and warnings

- **Attachments**—Each job can have multiple attachments to include additional information. Each attachment can differ and be independent. For example, you can use input parameter files, output log files, or output result files. There are two types of attachments:
  - Plain Text—Used for smaller strings
  - File—Used for large quantities of content

- **Status**—Displays the status and progress. Each job can have the following status:
  - Invalid—No job is running on the server
  - Scheduled Start—Queued but has not yet started
  - Scheduled Stop—Cancelled, but is still running
  - Starting—Preparing to start
  - Running—Currently running
  - Paused
  - Stopping—In the process of stopping
  - Stopped—Stopped at the user’s request
  - Aborted—Aborted due to an error
  - Completed—Completed successfully
  - Completed With Errors—Completed, but with errors. (You should check the validation log.)
  - Not Responding

*Note:* You cannot change the status of a job.
Changing the Job Console View

1. To change the number of jobs per page, click **Per Page** and select the number of jobs, such as 100.
2. To sort by a column, click the column heading. For example, if you want to sort by name, click **Name**.
3. To scroll through pages of jobs, click ⬅️ and ➤️ to scroll to the last page.
4. To scroll through previous pages, click ⬆️ or ⬇️ to go to the first page.

**Tip:** As you move through pages of jobs, you may want to refresh the Job Console to view the latest job status. See “Refreshing the Job Console” on page 288.
5. To go to a page, enter the page number, and then click ➤️.

Refreshing the Job Console

You can refresh the Job Console to view the latest status of jobs. To refresh the number of jobs displayed, on the toolbar, click ➤️.

Creating Job Filters

You can create filters to see specific jobs in the Job Console.

1. To create a filter:
   a. Perform one of these options:
      - Click **Job Filter Options**.
      - Right-click a job and then select **Filter**.
      - Click **View, Filter**.

     The Jobs Filter dialog box is displayed.
2 You can filter jobs by these options:
   a. **Self or Other User**—Select Self to create a filter to view jobs submitted by your user name or select Other User and enter the user name. See “Filtering Your Jobs” on page 290 and “Filtering Jobs for Other Users” on page 290.
   b. **Job ID**—Enter the Job ID.
   c. **Job Type**—Select the job type to filter, such as Dimension Import.
   d. **Job Status**—Select the status to filter, such as Completed.
   e. **Submitted Time From and To**—Select a start date and end date to filter by a date range.

   **Note:** There are certain actions that start hidden system jobs. Only users with the EPMA Administrator role can view hidden system jobs. To view hidden jobs, select “Show Hidden Jobs” in the Jobs Filter dialog box. For additional information on security roles, see the Oracle Hyperion Enterprise Performance Management System User and Role Security Guide.

3 **Select the Source Object.**

   The Source Object drop-down list displays all applications with an associated job. For example, if you want to see all jobs for the “NewBudget” application you can filter by the Source Object: “NewBudget”.

4 **Click OK.**

   **Tip:** To reset the filter to the default options, in the Jobs Filter dialog box, click Reset.
Filtering Your Jobs

You can filter the jobs you see in the Job Console to only your jobs. Filtering jobs helps in managing jobs, including deleting outdated jobs. For information on deleting jobs, see “Deleting Jobs” on page 293.

To filter your jobs:

1. Select View, Filter.
2. If available, enter the Job ID.
3. Select the Job Type.
4. Optional: Select the Job Status, or Submitted Time. Then, click OK.

The Job Console displays only your jobs, according to the selections in the Jobs Filter dialog box.

Filtering Jobs for Other Users

You can filter jobs you see in the Job Console for another user.

To filter jobs for other users:

1. Select View, Filter.

   The Jobs Filter dialog box enables you to filter by another user ID. When you select Other User, you must type in the user name or login ID.

2. Enter the User Name.
3. If available, enter the Job ID.
4. Select the Job Type.
5. Optional: Select the Job Status, or Submitted Time. Then, click OK.

   The Job Console displays jobs according to the selections in the Jobs Filter dialog box.

Security

The Job Console uses Performance Management Architect roles for submitting and displaying jobs.

Security for Submitting Jobs

Authenticated users can submit jobs for the job types described in the previous sections.

Security for Displaying Jobs

Users who submit jobs have full access to the jobs in the Job Console—to update and to read. In addition, users who are part of other Performance Management Architect roles (Dimension
Editor, Application Creators, Create Integrations, Run Integrations) can also have access to jobs based on the following table.

Table 20 Job Type Security

<table>
<thead>
<tr>
<th>Job Type</th>
<th>Who can see:</th>
</tr>
</thead>
<tbody>
<tr>
<td>Dimension Import</td>
<td>User, Dimension Editor</td>
</tr>
<tr>
<td>Consolidation Application Deployment</td>
<td>User, Financial Management Application Creator, Dimension Editor</td>
</tr>
<tr>
<td>Planning Application Deployment</td>
<td>User, Planning Application Creator, Dimension Editor</td>
</tr>
<tr>
<td>Profitability Application Deployment</td>
<td>User, Profitability Application Creator, Dimension Editor</td>
</tr>
<tr>
<td>Analytics Application Deployment</td>
<td>User, Essbase Application Creator, Dimension Editor</td>
</tr>
<tr>
<td>Data Synchronization</td>
<td>User, Create Integrations, Run Integrations</td>
</tr>
<tr>
<td>Compare</td>
<td>User, Dimension Editor</td>
</tr>
<tr>
<td>Property Query</td>
<td>User, Dimension Editor</td>
</tr>
<tr>
<td>Export</td>
<td>User, Financial Management Application Creator, Essbase Application Creator</td>
</tr>
<tr>
<td>Query Member</td>
<td>User, Financial Management Application Creator, Planning Application Creator, Essbase Application Creator</td>
</tr>
<tr>
<td>Transaction Log Export</td>
<td>User, Financial Management Application Creator, Planning Application Creator, Essbase Application Creator</td>
</tr>
<tr>
<td>Transform Classic to EPM Architect</td>
<td>User, Financial Management Application Creator, Planning Application Creator, Essbase Application Creator, Dimension Editor</td>
</tr>
<tr>
<td>Application Migration</td>
<td>User, Financial Management Application Creator, Planning Application Creator, Essbase Application Creator</td>
</tr>
<tr>
<td>Application Validation</td>
<td>User, Financial Management Application Creator, Planning Application creator, Essbase Application creator</td>
</tr>
</tbody>
</table>

**Viewing Job Attachments**

Each attachment type can be associated with the viewer type on the results of the job. For example, you can view an error log file generated from the import process using the Import Error Log Viewer. If an attachment does not have a specific viewer implemented, by default you can view it as a text file.

**Viewing Import Results**

To view import results, in the Job Console – Attachments area, click **Import Results**.
See “Creating Import Profiles” on page 66.

**Note:** The ImportErrorThreshold setting in the BPMA_server_config.xml file defines the maximum number of combined errors and warnings that can occur before a running import shuts down. The default value is 1000, however you can change the ImportErrorThreshold setting and increase the import error threshold. See Appendix D, “Configuration Settings in BPMA_Server_Config.xml.”

### Viewing Text Files

You can view the following jobs as text file attachments:

- Data Synchronizations—Session log files created for the source, destination, and data synchronization.

- A text file is created for each of these jobs:
  - Compare—A text file is attached to the job.
  - Deploy—A text file is attached to the job.
  - Transform Classic to EPM Architect and Application Upgrade—A text file is attached to the job
  - Export—A text file is attached to the job
Validation—A text file is attached to the job

To view a text file attachment, in the Job Console – Attachments area, click the log file link. The following figure shows the log files in the Attachments area for a data synchronization.

Deleting Jobs

It is important to delete jobs, as it can be difficult to maintain large numbers of jobs in the database. Deleting jobs makes it easy to navigate the Job Console. Remember, you must have the appropriate user permissions to delete jobs.

To delete jobs:
1. In the Job Console, right-click a job and select Delete Jobs.
   The Confirm Delete dialog box is displayed.
2. Click OK.

Manually Time out Jobs

In some cases, a job continues to run and consume resources. You can force a job to time out so it does not continue to consume resources.
To force a job to time out:

1. In the Library Job Console, right-click the job(s) to force a time out.
2. Select Manually Timeout Jobs.
3. Click Yes.

**Performance Management Architect Logs**

Performance Management Architect has the following log files:

- `epma.log`—Lifecycle Management activity
- `epma_err.log`—Information written by the Web server
- `awb.log`—Information written by the Web server
- `DMEngine.log`—Data Synchronization Web application activity
- Windows Event Viewer—Dimension Server activity
- Transaction logs—Transactions (View transaction logs from the Dimension Library. See “Viewing Transaction Logs” on page 113.)

For additional information and details on Oracle Enterprise Performance Management System and Performance Management Architect log files, see the Oracle Hyperion Enterprise Performance Management System Installation and Configuration Troubleshooting Guide.
Using Task Automation

Overview

Task Automation is a Web-based module that provides a method for linking a series of tasks into a taskflow. You can use task automation to automate tasks that you commonly perform using Performance Management Architect.

When you work with Performance Management Architect, you routinely perform tasks such as importing dimensions, data synchronizations, and redeploying applications. You can create and maintain taskflows to perform Performance Management Architect operations and schedule critical tasks to be run as required.

Performance Management Architect supports these taskflows:

- Data Synchronizations
- Import dimensions from flat files
- Import dimensions from interface tables
- Consolidation Redeploy
- Planning Redeploy
- Analytic Services Redeploy (for Essbase (ASO) and Essbase (BSO) applications)
Prerequisites for Task Automation

Consider these prerequisites for Task Automation:

- You must install Shared Services. See the Oracle Hyperion Enterprise Performance Management System Installation and Configuration Guide.

- You must register your application with Shared Services. Registration automatically occurs when you deploy an application in Performance Management Architect.

- Assign one of the following Shared Services roles to users performing taskflow operations:
  - Manage Taskflows—Permits users to create and edit taskflows.
  - Run Taskflows—Permits users to only run and view taskflows. Users with this role cannot create new taskflows or edit existing taskflows.

  **Note:** Both of these roles are global user roles. Users assigned these roles can either modify or run taskflows for any application and product. See the Oracle Hyperion Enterprise Performance Management System User and Role Security Guide.

  Users should have sufficient roles to run taskflows. If users have the same user names, the users should be ordered in such a way that the privileged user appears at the top of the search order.

Managing Taskflows

A taskflow is a sequence of tasks that you can create in task automation. For example, you can create a taskflow to load, calculate, and consolidate data. From the Manage Taskflows option, you can create, edit, save, copy, and delete a taskflow, view a list of available taskflows, assign access to a taskflow, run a taskflow manually for testing, and schedule a taskflow to run automatically.

See these procedures:

- “Viewing Taskflows” on page 297
- “Creating Taskflows” on page 297
- “Editing Taskflows” on page 303
- “Deleting Taskflows” on page 304
- “Copying Taskflows” on page 304
- “Running Taskflows Manually for Testing” on page 304
- “Controlling Access to Taskflows” on page 304
- “Scheduling Taskflows” on page 305
- “Viewing Taskflow Status” on page 306
Viewing Taskflows

You store and manage taskflows in Shared Services. The Taskflow Listing Summary shows the available taskflows by application, the user who created the taskflow, and a description. To view taskflows, from Performance Management Architect, select **Administration, Manage Taskflows**.

**Note:** When viewing tasks in a taskflow, users can only view those tasks to which they have access.

Creating Taskflows

You create a taskflow to link a series of tasks and specify the time to run them. When you create a taskflow, you assign it a name and description. Then you add task stages and links between tasks. Stages define specific tasks, such as data loads. Links specify how the system should proceed after completion of the step.

1. **To create taskflows:**
   1. From the Taskflow Listing Summary, click **New**.
   2. For **Name**, enter a taskflow name. You may want to prefix the taskflow name with EPMA, to easily recognize Performance Management Architect taskflows.
      - The name can contain up to 40 characters.
      - The Application text box displays the name of the current application.
   3. For **Description**, enter a taskflow description.
   4. **Click Submit**.

      The taskflow editor is displayed, where you can add stages and links.

To continue creating the taskflow, see these topics:

- “Performance Management Architect Actions” on page 297
- “Adding Stages” on page 300
- “Adding Links” on page 302

Performance Management Architect Actions

Performance Management Architect supports these actions:

- “Data Synchronization” on page 298
- “Import Dimensions From Flat File” on page 298
- “Import Dimensions from Interface Table” on page 298
- “Redeployment” on page 299
Data Synchronization

To create a data synchronization taskflow:

1. Select Processing, and select the application. For example, EPMA-Budget.
2. Select the action, Execute Data Synchronization.
3. Perform these actions:
   - Synchronization Type—select URL, then click Edit. Choose the synchronization and click Submit.
   - Optional: External Source File—if the synchronization uses an external source file for the source of the synchronization, type the location of the external source file. The location must be a URL location in which your web server has access. For example, file:///blrl14983a/FlatFile/SimpleHFM.txt.
   - Mode—select Scan or Load.
     - Scan—does not commit the data for the synchronization, instead, it tests the synchronization by running it without writing the new data.
     - Load—fully executes the synchronization.
4. Click Save.

Import Dimensions From Flat File

To create flat file import taskflows:

1. Select the application.
2. Select the action, Import Dimensions From Flat File.
3. Perform these actions:
   - Select Profile Name—select URL, click Edit, select the profile, and click Submit.
   - Optional: Import Dimensions File—if the profile uses an external flat file, type the location in the text box. The location must be a Universal Naming Convention (UNC) location in which your web server has access. For example, \server\file.dat.
4. Click Save.

Import Dimensions from Interface Table

To create interface table import taskflows:

1. Select the application.
2. Select the action, Import Dimensions From Interface Area.
3. In Select Profile Name, select URL, click Edit, select the profile, and click Submit.
4 Click Save.

Redeployment

You can create taskflows for Consolidation, Planning, and Analytic Services redeployments.

Consolidation

➢ To create consolidation redeploy taskflows:
1 Select the application.
2 Select the action, Consolidation Redeploy.
3 Perform these actions:
   • Consolidation App—select URL, then click Edit. Choose the application and click Submit.
   • Optional: Clear All Metadata and Data—select PICKLIST, then select True or False.
   • Optional: Check Referential Integrity—select PICKLIST, then select True or False.
4 Click Save.

Planning

➢ To create planning redeploy taskflows:
1 Select the application.
2 Select Planning Redeploy.
3 Perform these actions:
   • Planning App—select URL, then click Edit. Choose the application and click Submit.
   • Datasource—select TEXTBOX, then type the original Planning data source location. (The database or Essbase cube that the application uses.)
   • Optional:
     o Create Outline—select PICKLIST, then select True or False
     o Refresh Outline—select PICKLIST, then select True or False
     o Create Security Filters—select PICKLIST, then select True or False
     o Shared Members Security Filters—select PICKLIST, then select True or False
     o Validate Security Filter Limit—select PICKLIST, then select True or False

Note: You must assign security to members in Planning Dimension Editor on the Planning web. The Planning security options are described in the Oracle Hyperion Planning Administrator’s Guide.
Click Save.

Analytic Services

To create Analytic Services redeploy taskflows:
1 Select the application.
2 Select the action, Analytic Services Redeploy.
3 Perform these actions:
   - Essbase App—select URL, then click Edit. Choose the application and click Submit.
   - Optional: Clear All Data—select PICKLIST, then select True or False.
4 Click Save.

Adding Stages

A stage describes a step in a taskflow usually performed by one individual. Each stage has an action. These actions can have parameters in which values are supplied at runtime.

You define a stage using these three tabs:

- General: Defines the stage name, description and user ID of the user responsible for running the stage. The user can be an initiator, which is the owner of the first stage in the taskflow, or another user for the other stages.
- Processing: Defines the action to be performed when the taskflow is run and any required parameters.
- Starting Event: Defines the taskflow start time, and the scheduled times for the event to occur, based on the application server time, not the local user’s computer. This tab is displayed only for the first stage in the taskflow. It displays the scheduled event (taskflow start time), or is disabled (for the manual start of a taskflow executed by the Run Now option).

To add stages:
1 From the taskflow editor, click Add Stage.
A new stage is displayed in the left panel, and stage details are displayed in the right panel. If stages exist in the taskflow, the new stage is created at the end of the taskflow.
2 Select General and enter this information:
   a. For Name, enter a stage name; for example, Data_Synchronization.
      
      Note: Stage names cannot contain spaces. The name can contain up to 30 characters.
   b. Optional: For Description, enter a taskflow description; for example, Perform synchronization daily.
c. From Run As, select UserName, and enter a username and password for the user who
launches the taskflow.

**Note:** Stage 1 requires that you enter a username and password. When you create future
stages, you can select to run as the Initiator, which tells the system to use the user
ID and password that was defined in Stage 1.

3 **Select Processing and enter this information:**
   a. From Application, select an application from which to run the task.
   b. From Action, select an action to perform; for example, Data_Synchronization.

**Note:** See “Shared Services Stage Actions and Parameters” on page 302.

c. From Type for each parameter, select Picklist, Text Box, or URL for the Point of View,
depending on the action, and enter values for the parameter.

For the data file and log file names and paths, you must manually enter the information
in a text box. The taskflow is executed from the server, so you must make sure that the
file names and paths are valid and can be accessed from the server running the task.
Therefore, you should not enter a path such as c:\file.dat that references your own
hard drive. You must identify the computer name and share directory for the file using
Universal Naming Convention (UNC); for example, \HFMServer\share\path\file.dat.

4 **Select Starting Event and enter this information:**
   a. From Starting Event, select an event.

   The Server Date information is displayed for informational purposes.
   b. For Start Date, enter the date for the task to be run, or click the pop-up calendar and
      select a date.
   c. From Start Time, select a time for the task to be run.

**Note:** This time is based on the application server, which is identified on the Server Date
line.

d. For a recurring task, select Recurrence, and from Recurrence Pattern, select the task
frequency.

e. Select an option for the task end date and time:

   + No End Date
   + End After occurrences, and enter the number of occurrences
   + End Date, enter an end date and select an End Time.

5 **Optional:** To add a stage, click Add Stage and complete the stage information for General and
Processing
Note: The Starting Event tab is available only for the first stage. However you can schedule taskflows independent of creating stages by using the Schedule Taskflow functionality. See “Scheduling Taskflows” on page 305.

Shared Services Stage Actions and Parameters

The following table lists available actions and parameters.

Table 21 Stage Actions and Parameters for Shared Services

<table>
<thead>
<tr>
<th>Action</th>
<th>Parameters</th>
</tr>
</thead>
</table>
| Email  | Action that enables email messages to be sent automatically to an e-mail address. Complete these parameters for the e-mail action:  
  - To: Type an email address for the recipient  
  - Subject: Type a subject for the email  
  - Message: Select a variable (by double-clicking a variable from the variables list) to display success or failure  
  - Variables: Lists the available variables for the email action |
| Execute| Action that runs external programs from a command line. For the Execute action, type a Command parameter to run an external program.  
  The external program can be a valid command line script (such as a “bat” script on Windows or a “sh” script on UNIX) and any valid program execution command. Make sure that your bat file does not resolve the path dynamically; if the files uses any variables to resolve the path, it will not work.  
  The command must include the full path to the executable. For example, to launch Internet Explorer, type: C:\Program Files\Internet Explorer\IEXPLORE.EXE |

Adding Links

A link is the point during the taskflow execution where the activity in one stage is completed and the control passes to another stage, which starts. A link can be unconditional, where the completion of one stage leads to the start of another, or conditional, where the sequence of operation depends on multiple link conditions.

A link specifies the action for the system to take next. Every stage needs a link. In general, most stages have two links: success and failure. For the success link, you can specify that if the first stage succeeds, the system should proceed to the second stage, called the Receiving stage. For the failure link, you specify the action to be performed if problems occur in the first stage.

For example, you can set a success link so that if the first stage of Data_Synchronization succeeds, the system proceeds to the Redeploying_Consolidation stage. You can set a failure link so that if failure occurs or any problems are encountered in the Data_Synchronization stage, the system proceeds to the Redeploying_Consolidation stage of End, which ends the process and terminates the taskflow.

The last stage in the taskflow must have a final link with “End” as the target to complete the taskflow.

You can specify variables for an event. For example, you can add a variable for a load data task such as Data_Synchronization_Result= =Success.
You must enter two equal signs (= =) after the variable, and place single quotation marks (") around the condition. The value can be True or False.

➢ To add links:
1. Click Add Link.
2. Select General and for Name, enter a link name.
   The name can contain up to 30 characters.
3. For Description, enter a link description.
   Sending Stage is displayed for informational purposes.
4. From Receiving Stage select a stage.
5. Select Condition tab if applicable, and from Variable, select a variable, for example, Data_Synchronization_Result.
6. From Value, select Success or Failure.
7. Click Add.

   Note: Ensure that the last stage in the taskflow has a link with an End target.

   Tip: To delete a condition, click Delete.

Editing Taskflows

After you create a taskflow, you can edit the taskflow description, and create, edit, or delete taskflow variables. You can also add or delete a stage or a link.

➢ To edit taskflows:
1. Select Administration, Manage Taskflows.
2. Select the taskflow to edit and click Edit.
3. In the taskflow editor, select an option:
   - To add a stage, click Add Stage. See “Adding Stages” on page 300.
   - To add a link, click Add Link. See “Adding Links ” on page 302.
   - To delete a stage or link, click Delete.

   Note: If you delete a stage, all links associated with it are also deleted.
   - To edit the taskflow description, click Properties.
4. Edit the taskflow and perform an action:
   - To save the edits, click Save.
To cancel the edits, click **Cancel**. The system returns you to the Taskflow Listing Summary without saving your changes.

**Deleting Taskflows**

You can delete a taskflow that you no longer need.

To delete taskflows:

1. Select Administration, Manage Taskflows.
2. From the list of taskflows, select the taskflow to delete, and click **Delete**.

**Copying Taskflows**

After you define a taskflow for an application, you can copy it to a different application.

To copy taskflows:

1. Select Administration, Manage Taskflows.
2. Select the taskflow to copy and click **Save As**.
3. Enter a new name and description for the taskflow.
4. Click **Submit**.

Shared Services adds a copy of the taskflow with a new name to the Taskflow Listing Summary.

**Running Taskflows Manually for Testing**

You can run a taskflow manually instead of waiting for it to start automatically. You might want to test a taskflow before the time that it is scheduled to run. This enables you to make adjustments to the taskflow before it runs.

To run taskflows manually:

1. Select Administration, Manage Taskflows.
2. From the list of taskflows, select the taskflow to run and click **Run Now**.

**Controlling Access to Taskflows**

In addition to role-based authorization using Shared Services Console, you can manage access permissions at the more granular taskflow level by using Access Control Lists (ACLs). Before you can assign permissions to taskflows, you must first ensure that the appropriate roles are created using Shared Services Console. For example, create a Performance Management
Architect role with a descriptive name like “Manage Financials TF” (which provides the ability to manage all Financials taskflows), then choose the Manage Taskflows base role. Once the role is created using Oracle Hyperion Shared Services Console, you can assign access permissions to individual taskflows.

Shared Services provides these types of permissions for each taskflow:

- Manage
- Execute

To assign permissions to individual taskflows:

1. Select **Administration, Manage Taskflows**.
2. From the list of taskflows, select a taskflow and click **Access Control**.
3. Select the appropriate base roles for **Manage Permission Role** and **Execute Permission Role**.
   
   For example, select the “Manage Financials TF” role for the Manage Permission Role and “Execute Financials TF” for the Execute Permission Role.
4. Click **Save**.

### Scheduling Taskflows

You can schedule a taskflow to run automatically without creating or editing a taskflow. Schedule Taskflow enables you to define the taskflow start time and the scheduled times for the event to occur, based on the application server time, not the local user’s computer.

To schedule a taskflow:

1. Select **Administration, Manage Taskflows**.
2. From the list of taskflows, select a taskflow and click **Schedule Taskflow**.
3. Enter this information:
   a. From **Starting Event**, select **Scheduled Event**.
   
      The Server Date information is displayed for informational purposes.
   b. For **Start Date**, enter the date for the task to be run, or click the pop-up calendar and select a date.
   c. From **Start Time**, select a time for the task to be run.
   d. For a recurring task, select **Recurrence**, and from **Recurrence Pattern**, select the task frequency.
   e. Select an option for the task end date and time:
      
      - **No End Date**
End After Occurrences, and enter the number of occurrences
- End Date, enter an end date and select an End Time.

4 Click Save.

Viewing Taskflow Status

The Taskflow Status Summary enables you to check the status of taskflows, including taskflows that are active, completed, or stopped. You can view all taskflows, or you can filter the list of taskflows by status, application, or the date or range of dates on which the taskflow was initiated.

You can drill down on individual taskflows to view details of the taskflow in the Taskflow Participant Summary. The Taskflow Participant Summary displays the status for each stage of the taskflow and the time it was completed. You can see the stages that were completed successfully and those that failed. This information can be used to troubleshoot the automation routine.

To view taskflow status:

1 Select Administration, View Taskflow Status.
2 Double-click a task ID to display its status.
3 To search for a taskflow, select the filter criteria, and click Search.

Table 22 Taskflow Status Summary Elements

<table>
<thead>
<tr>
<th>Element</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Status</td>
<td>Filter on these taskflow types:</td>
</tr>
<tr>
<td></td>
<td>● Active</td>
</tr>
<tr>
<td></td>
<td>● Done</td>
</tr>
<tr>
<td></td>
<td>● Stopped</td>
</tr>
<tr>
<td></td>
<td>● All</td>
</tr>
<tr>
<td>Application</td>
<td>Application participating in the taskflow</td>
</tr>
<tr>
<td>Taskflow</td>
<td>Taskflow name</td>
</tr>
<tr>
<td>Initiated between (optional)</td>
<td>Enter or select by clicking the date or range of dates in which the taskflow was initiated</td>
</tr>
<tr>
<td>Search</td>
<td>Click to display in the Taskflow Listing area a list of taskflows that meet the search criteria that you specify</td>
</tr>
<tr>
<td>Element</td>
<td>Description</td>
</tr>
<tr>
<td>---------------</td>
<td>---------------------------------------------------------------------------------------------------------------------------------------------</td>
</tr>
</tbody>
</table>
| Taskflow Listing | Displays taskflows that meet the search criteria that you specify, such as:  
|                |   - ID  
|                |   - Application*  
|                |   - Taskflow*  
|                |   - Initiator*  
|                |   - Started* (lists the latest taskflow first)  
|                |   - Status*  
|                |   - Description  
|                | *Indicates data that is sortable. You may sort taskflows by Application, Taskflow, Initiator, Started, or by Status by clicking on the column header. |
| Stop          | Stop an active taskflow instance.                                                                                                         |
| Delete        | Delete the selected taskflow instance.                                                                                                    |
|               | **Note:** You must stop the taskflow before deleting it.                                                                                   |
| Delete All    | Delete all of the selected taskflow instances.                                                                                             |
|              | Display in the Taskflow Listing area the first page of taskflow instances that meet the specified search criteria.                        |
|              | Display in the Taskflow Listing area the previous page of taskflow instances that meet the specified search criteria.                    |
| Page          | Select a page to display in the Taskflow Listing area.                                                                                     |
|              | Display in the Taskflow Listing area the page you selected in the Page drop-down list box.                                               |
|              | Display in the Taskflow Listing area the next page of taskflow instances that meet the specified search criteria.                         |
|              | Display in the Taskflow Listing area the last page of taskflow instances that meet the specified search criteria.                          |
| Refresh       | Refresh the taskflow instances listed in the Taskflow Listing area.                                                                         |

From the Taskflow Status Summary, you can also stop an active taskflow, view a taskflow participant summary, or view taskflow participant details:

- “Stopping Active Taskflows” on page 307
- “Viewing the Taskflow Participant Summary” on page 308
- “Viewing the Taskflow Participant Details” on page 309

**Stopping Active Taskflows**

Active taskflows are taskflows that are in progress. You can stop taskflows that are not in progress. For example, you can stop a taskflow that has errors and make adjustments to it.
To stop active taskflows:

1. Select Administration, View Taskflow Status.
2. From Status, select Active.
3. Optional: To filter the list, select search criteria for the taskflow, and click Search.
4. Select the taskflow to stop and click Stop.

**Viewing the Taskflow Participant Summary**

The Taskflow Participant Summary lists the participants in a taskflow and provides status information for each participant instance.

To view taskflow participant status:

1. Select Administration, View Taskflow Status.
2. Select the search criteria for the taskflows, and click Search.
   - To view all of the taskflows in the Shared Services taskflow management system, select (Status) All and click Search.
3. In the Taskflow Listing area, find the taskflow for which to view the participant summary and click the taskflow ID.
   - The Taskflow Participant Summary window is displayed.
4. Click Cancel to return to the Taskflow Status Summary window.

**Table 23  Taskflow Participant Summary Window Elements**

<table>
<thead>
<tr>
<th>Element</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Taskflow Summary</td>
<td>Summary information for the selected taskflow (items appear in the order of completion):</td>
</tr>
<tr>
<td></td>
<td>- ID</td>
</tr>
<tr>
<td></td>
<td>- Application</td>
</tr>
<tr>
<td></td>
<td>- Taskflow</td>
</tr>
<tr>
<td></td>
<td>- Initiator</td>
</tr>
<tr>
<td></td>
<td>- Started</td>
</tr>
<tr>
<td></td>
<td>- Status</td>
</tr>
<tr>
<td></td>
<td>- Description</td>
</tr>
<tr>
<td>Participant</td>
<td>Stage participant name. Participants are selectable. Click a participant to view details about a taskflow participant.</td>
</tr>
<tr>
<td>Stage Name</td>
<td>Stage name</td>
</tr>
<tr>
<td>Element</td>
<td>Description</td>
</tr>
<tr>
<td>---------------</td>
<td>--------------------------------------</td>
</tr>
<tr>
<td>Status</td>
<td>Stage status:</td>
</tr>
<tr>
<td></td>
<td>● Active</td>
</tr>
<tr>
<td></td>
<td>● Done</td>
</tr>
<tr>
<td></td>
<td>● Stopped</td>
</tr>
<tr>
<td></td>
<td>● All</td>
</tr>
<tr>
<td>Success Variable</td>
<td>Outcome of the completed stage</td>
</tr>
<tr>
<td>Completed</td>
<td>Date and time of stage completion</td>
</tr>
</tbody>
</table>

**Viewing the Taskflow Participant Details**

The Taskflow Participant Details window displays the details for a taskflow participant.

➤ To view taskflow participant details:

1. **Select Administration, View Taskflow Status.**
2. **Select the search criteria for the taskflows, and click Search.**

   To view all the taskflows in the Shared Services taskflow management system, select (Status) All and click Search.

3. **In Taskflow Listing, find the taskflow for which to view the participant summary and click the taskflow ID.**
4. **Click a participant to view taskflow participant details.**
   Shared Services displays the Taskflow Participant Details window and sorts the participant events chronologically.
5. **Click Cancel to return to Taskflow Participant Summary.**
Part V

Product-Specific Properties, Requirements, and Additional Considerations

In Product-Specific Properties, Requirements, and Additional Considerations:

- Working with Financial Management Dimensions
- Working with Planning Dimensions
- Working with Profitability and Cost Management Properties
- Working with Essbase Properties
- Working with Statistical and System Properties
In Financial Management, you must associate some dimensions with others because some properties refer to members of other dimensions. For example, the Security Class property of the Account dimension points to a member of the Security Class dimension. See “Creating Dimension Associations” on page 88.

Dimension names cannot exceed 80 characters. For additional information, see “Dimension Naming Restrictions” on page 340.

Table 24  Financial Management Associations

<table>
<thead>
<tr>
<th>Dimension (Source)</th>
<th>Property Name</th>
<th>Dimension (Target)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Account</td>
<td>Plug Account</td>
<td>Account</td>
</tr>
<tr>
<td>Alias</td>
<td></td>
<td>Alias</td>
</tr>
<tr>
<td>CustomTopMember&lt;DimAliasName&gt;</td>
<td></td>
<td>Custom</td>
</tr>
<tr>
<td>Security Class</td>
<td></td>
<td>Security Class</td>
</tr>
<tr>
<td>Dimension (Source)</td>
<td>Property Name</td>
<td>Dimension (Target)</td>
</tr>
<tr>
<td>--------------------</td>
<td>---------------------------</td>
<td>--------------------</td>
</tr>
<tr>
<td>Consolidation Method</td>
<td>Alias</td>
<td>Alias</td>
</tr>
<tr>
<td>Currency</td>
<td>Alias</td>
<td>Alias</td>
</tr>
<tr>
<td>Custom</td>
<td>Alias</td>
<td>Alias</td>
</tr>
<tr>
<td></td>
<td>Security Class</td>
<td>Security Class</td>
</tr>
<tr>
<td>Entity</td>
<td>Alias</td>
<td>Alias</td>
</tr>
<tr>
<td></td>
<td>Currency</td>
<td>Currency</td>
</tr>
<tr>
<td></td>
<td>Holding Company</td>
<td>Entity</td>
</tr>
<tr>
<td></td>
<td>ICP Top member</td>
<td>ICP</td>
</tr>
<tr>
<td></td>
<td>Security Class</td>
<td>Security Class</td>
</tr>
<tr>
<td></td>
<td>Security As Partner</td>
<td>Security Class</td>
</tr>
<tr>
<td>ICP</td>
<td>Alias</td>
<td>Alias</td>
</tr>
<tr>
<td></td>
<td>Security Class</td>
<td>Security Class</td>
</tr>
<tr>
<td>Period</td>
<td>Alias</td>
<td>Alias</td>
</tr>
<tr>
<td>Scenario</td>
<td>Alias</td>
<td>Alias</td>
</tr>
<tr>
<td></td>
<td>Security Class</td>
<td>Security Class</td>
</tr>
<tr>
<td></td>
<td>Default Frequency</td>
<td>View</td>
</tr>
<tr>
<td></td>
<td>Default Frequency For IC Transactions</td>
<td>View</td>
</tr>
<tr>
<td></td>
<td>Phased Submission Start Year</td>
<td>Year</td>
</tr>
<tr>
<td>Value</td>
<td>Alias</td>
<td>Alias</td>
</tr>
<tr>
<td>View</td>
<td>Alias</td>
<td>Alias</td>
</tr>
<tr>
<td>Year</td>
<td>Alias</td>
<td>Alias</td>
</tr>
</tbody>
</table>

**Account**

The following table describes member properties of the Account dimension. The Property Label column shows the label displayed for the property in the Performance Management Architect Property Grid. You can use the name, displayed in the Property Name column, to modify property values using the Performance Management Architect Batch Client. See the *Oracle Hyperion Enterprise Performance Management Batch Client User’s Guide* for additional information on running scripts.
### Table 25  Member Properties of the Account Dimension

<table>
<thead>
<tr>
<th>Property Label</th>
<th>Value Description</th>
<th>Property Name</th>
</tr>
</thead>
</table>
| Alias          | Member description (maximum of 80 characters)  
To use the Alias property, you create an Alias dimension, define properties, and associate the Alias dimension with another dimension. For example, you can create an Alias dimension with the values English, French, and Italian and then associate the Alias dimension with the Account dimension. | Alias         |
| Calc Attribute | Calculation description (maximum of 80 characters)  
This information is displayed in data forms and data grids.  
**Note:** When you define the value for this property at the parent level, all children automatically inherit the value. | CalcAttribute |
| Consolidation Account Type | One of these values:  
- ASSET  
- LIABILITY  
- REVENUE  
**Note:** In Financial Management releases prior to 4.1, this account type is named INCOME.  
- EXPENSE  
- FLOW  
- BALANCE  
- BALANCERECURRING  
- CURRENCYRATE  
- GROUPLABEL  
- DYNAMIC  
**Note:** When you define the value for this property at the parent level, all children automatically inherit the value. | ConsolidationAccountType |
| Default Parent | Default parent for the account. The default parent value is a derived value and you cannot enter a value. | DefaultParent |
| `<DimensionAliasName>` Top Member | Top member of a Custom dimension that is valid for the account  
The specified member and all of its descendants are valid for the account.  
To enter a value for this property, you must associate the Account and Custom dimensions. | `<DimensionAliasName>`TopMember |
| Enable `<DimensionAliasName>` Aggregation | Whether aggregation is enabled for intersections of the Account and Custom dimensions  
This property is used for special totals, not summing. Specify Y if the account can aggregate with Custom dimensions or N if it cannot.  
**Note:** When you define the value for this property at the parent level, all children automatically inherit the value. | Enable `<DimensionAliasName>`Aggregation |
<table>
<thead>
<tr>
<th>Property Label</th>
<th>Value Description</th>
<th>Property Name</th>
</tr>
</thead>
</table>
| Enable Data Audit   | Whether the scenario is audited and what can be audited  
  - Y to audit all accounts. Even accounts that have Enable Data Audit set to False are audited.  
  - N to disable auditing for all accounts                                                                                                           | EnableDataAudit    |
| ICP Top Member      | ICP top member for the account  
  The specified member and all of its descendants are valid for the account.  
  To enter a value for this property, you must associate the Account and ICP dimensions.                                                        | ICPTopMember       |
| Is Calculated       | Whether the account is calculated  
  Only base-level accounts can be calculated. You cannot enter values into base-level, calculated accounts. Specify Y to calculate the account; otherwise, specify N.  
  **Note:** When you define the value for this property at the parent level, all children automatically inherit the value. | IsCalculated       |
| Is Consolidated     | Whether the account is consolidated to a parent account  
  Specify Y to consolidate to a parent account, or N not to consolidate to a parent account.  
  **Note:** When you define the value for this property at the parent level, all children automatically inherit the value.                 | IsConsolidated     |
| Is ICP              | Whether the account is an intercompany account  
  - Y if ICP transactions, including self-ICP transactions, are enabled for the account  
  - N if ICP transactions are not enabled for the account  
  - R if ICP transactions are enabled for the account, but the account cannot have ICP transactions with itself  
  For an intercompany account, you must specify a plug account.                                                                                       | IslCP              |
<table>
<thead>
<tr>
<th>Property Label</th>
<th>Value Description</th>
<th>Property Name</th>
</tr>
</thead>
</table>
| Name                   | Name for the account (required)  
Names can contain up to 80 characters, including spaces, and cannot start with a space or contain these characters:  
- Ampersand ( & )  
- Asterisk ( * )  
- At sign ( @ )  
- Comma ( , )  
- Curly brackets ( { } )  
- Double quote ( " )  
- Minus sign ( - )  
- Number sign ( # )  
- Period ( . )  
- Plus sign ( + )  
- Semicolon ( ; )  
- Slash mark ( / ) | Name           |
| Number of Decimal Places | For account values, the number of digits (0–9) to be displayed to the right of the decimal point (required)  
**Note:** When you define the value for this property at the parent level, all children automatically inherit the value. | NumDecimalPlaces |
| Plug Account           | Name of the account that is used for identifying discrepancies in intercompany transactions (required when the IsICP property for the account is selected)  
To enter a value for this property, you must associate two Account dimensions. | PlugAccount    |
| Security Class         | Name of the security class that defines the users who can access the account data (can contain up to 80 characters)  
To enter a value for this property, you must associate the Account and Security Class dimensions. | SecurityClass  |
| Submission Group       | The Submission group (0 to 99).  
If the submission group is set to zero (0), the account is not included in the review process.  
**Note:** When you define the value for this property at the parent level, all children automatically inherit the value.  
*Default Value:* 1 | SubmissionGroup |
| User Defined 1, User Defined 2, User Defined 3 | Custom information for the account (maximum of 80 characters)  
The User Defined1, User Defined2, and User Defined3 functions retrieve the text stored in this property. | UserDefined1, UserDefined2, UserDefined3 |
<table>
<thead>
<tr>
<th>Property Label</th>
<th>Value Description</th>
<th>Property Name</th>
</tr>
</thead>
<tbody>
<tr>
<td>Uses Line Items</td>
<td>Whether an account can have line items. Specify Y if the account uses line items or N if the account does not use line items.</td>
<td>UsesLineItems</td>
</tr>
</tbody>
</table>

**Caution!** If you change this property after line-item detail is entered, the stored line-item detail may no longer be valid for the account:

- If the account accepted line items and now it cannot, the line-item detail stored in the database is no longer valid. Only the total is displayed.
- If the account did not accept line items and now it can, only the total amount is displayed, but you can extract the total and load it as line-item detail data so that the total and the line-item detail information match.

## Account Type Behavior

The following table describes how account types behave in the system. For example, ASSET accounts do not total across periods, and REVENUE accounts provide year-to-date totals. If you debit an ASSET account, the value that you enter is added to the account. If you credit an ASSET account, the value that you enter is subtracted from the account. All account types, except GROUPLABEL, contain data.

**Table 26 Account Type Behavior**

<table>
<thead>
<tr>
<th>Account Type</th>
<th>YTD Total</th>
<th>Debit</th>
<th>Credit</th>
<th>Default Translation</th>
</tr>
</thead>
<tbody>
<tr>
<td>ASSET</td>
<td>No</td>
<td>Add</td>
<td>Sub</td>
<td>DefaultRateForBalance Accounts</td>
</tr>
<tr>
<td>LIABILITY</td>
<td>No</td>
<td>Sub</td>
<td>Add</td>
<td>DefaultRateForBalance Accounts</td>
</tr>
<tr>
<td>REVENUE</td>
<td>Yes</td>
<td>Sub</td>
<td>Add</td>
<td>DefaultRateForFlow Accounts</td>
</tr>
<tr>
<td>EXPENSE</td>
<td>Yes</td>
<td>Add</td>
<td>Sub</td>
<td>DefaultRateForFlow Accounts</td>
</tr>
<tr>
<td>FLOW</td>
<td>Yes</td>
<td>Add</td>
<td>Sub</td>
<td>None</td>
</tr>
<tr>
<td>BALANCE</td>
<td>No</td>
<td>Add</td>
<td>Sub</td>
<td>None</td>
</tr>
<tr>
<td>BALANCE RECURRING</td>
<td>No</td>
<td>Add</td>
<td>Sub</td>
<td>None</td>
</tr>
<tr>
<td>CURRENCYRATE</td>
<td>No</td>
<td>N/A</td>
<td>N/A</td>
<td>N/A</td>
</tr>
<tr>
<td>GROUPLABEL</td>
<td>N/A</td>
<td>N/A</td>
<td>N/A</td>
<td>N/A</td>
</tr>
<tr>
<td>DYNAMIC</td>
<td>N/A</td>
<td>N/A</td>
<td>N/A</td>
<td>N/A</td>
</tr>
</tbody>
</table>

Different account types behave differently when consolidated into different types of parent accounts. For example ASSET account values are added into parent ASSET and EXPENSE accounts and subtracted from parent LIABILITY and REVENUE accounts.
Note: The account types across the top of the table are identified by the first one or two letters of the account type.

Table 27  Account Type Behaviors During Aggregation into Parent Accounts

<table>
<thead>
<tr>
<th>Type</th>
<th>ASSET</th>
<th>LIABILITY</th>
<th>REVENUE</th>
<th>EXPENSE</th>
<th>FLOW</th>
<th>BALANCE</th>
<th>BALANCE RECURRING</th>
<th>CURRENCYRATE</th>
<th>GROUPLABEL</th>
<th>DYNAMIC</th>
</tr>
</thead>
<tbody>
<tr>
<td>Type</td>
<td>A</td>
<td>L</td>
<td>R</td>
<td>E</td>
<td>F</td>
<td>B</td>
<td>BR</td>
<td>C</td>
<td>G</td>
<td>D</td>
</tr>
<tr>
<td>ASSET</td>
<td>Add</td>
<td>Sub</td>
<td>Sub</td>
<td>Add</td>
<td>Add</td>
<td>Add</td>
<td>Add</td>
<td>No</td>
<td>No</td>
<td>No</td>
</tr>
<tr>
<td>LIABILITY</td>
<td>Sub</td>
<td>Add</td>
<td>Add</td>
<td>Sub</td>
<td>Add</td>
<td>Add</td>
<td>Add</td>
<td>No</td>
<td>No</td>
<td>No</td>
</tr>
<tr>
<td>REVENUE</td>
<td>Sub</td>
<td>Add</td>
<td>Add</td>
<td>Sub</td>
<td>Add</td>
<td>Add</td>
<td>Add</td>
<td>No</td>
<td>No</td>
<td>No</td>
</tr>
<tr>
<td>EXPENSE</td>
<td>Add</td>
<td>Sub</td>
<td>Sub</td>
<td>Add</td>
<td>Add</td>
<td>Add</td>
<td>Add</td>
<td>No</td>
<td>No</td>
<td>No</td>
</tr>
<tr>
<td>FLOW</td>
<td>Add</td>
<td>Add</td>
<td>Add</td>
<td>Add</td>
<td>Add</td>
<td>Add</td>
<td>Add</td>
<td>No</td>
<td>No</td>
<td>No</td>
</tr>
<tr>
<td>BALANCE</td>
<td>Add</td>
<td>Add</td>
<td>Add</td>
<td>Add</td>
<td>Add</td>
<td>Add</td>
<td>Add</td>
<td>No</td>
<td>No</td>
<td>No</td>
</tr>
<tr>
<td>BALANCE RECURRING</td>
<td>Add</td>
<td>Add</td>
<td>Add</td>
<td>Add</td>
<td>Add</td>
<td>Add</td>
<td>Add</td>
<td>No</td>
<td>No</td>
<td>No</td>
</tr>
<tr>
<td>CURRENCYRATE</td>
<td>No</td>
<td>No</td>
<td>No</td>
<td>No</td>
<td>No</td>
<td>No</td>
<td>No</td>
<td>No</td>
<td>No</td>
<td>No</td>
</tr>
<tr>
<td>GROUPLABEL</td>
<td>No</td>
<td>No</td>
<td>No</td>
<td>No</td>
<td>No</td>
<td>No</td>
<td>No</td>
<td>No</td>
<td>No</td>
<td>No</td>
</tr>
<tr>
<td>DYNAMIC</td>
<td>No</td>
<td>No</td>
<td>No</td>
<td>No</td>
<td>No</td>
<td>No</td>
<td>No</td>
<td>No</td>
<td>No</td>
<td>No</td>
</tr>
</tbody>
</table>

Note: In this table, No indicates that the account type is not aggregated into the parent account.

Example of how account types are aggregated into parent accounts:

- Total Assets 80
  - Fixed Assets 100
  - Amortization 20

In this example, Total Assets, an ASSET account, is the parent of Fixed Assets (an ASSET account) and Amortization (a LIABILITY account). When accounts are consolidated into the parent account, the Fixed Assets value of 100 is added, the Amortization value of 20 is subtracted, and the resulting value for Total Assets is 80.

**Defining Dynamic Accounts**

Dynamic accounts are dynamically calculated when their data is requested. Their values are not stored. The most common type of dynamic calculation is ratio calculation.

- To define dynamic accounts and calculations:
  1. Set up an account that uses the Dynamic account type.
     - Only base accounts can be dynamic.
Note: The following account properties are ignored for dynamic accounts: Is Calculated, Is Consolidated, Enable Custom1 Aggregation, Enable Custom2 Aggregation, Enable Custom3 Aggregation, Enable Custom4 Aggregation, Uses Line Items.

2 In a rules file, create a Sub Dynamic () section.

3 In the rules file, define a calculation.

**Cell Text Label**

Cell text labels enable you to easily identify types of information when you view cell text. You can use cell text labels in data grids and data forms.

<table>
<thead>
<tr>
<th>Property Label</th>
<th>Value Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Name</td>
<td>Name for the cell text label (required) Names can contain up to 80 characters, including spaces, and cannot start with a space or contain these characters:</td>
</tr>
<tr>
<td></td>
<td>● Ampersand ( &amp; )</td>
</tr>
<tr>
<td></td>
<td>● Asterisk ( * )</td>
</tr>
<tr>
<td></td>
<td>● At sign ( @ )</td>
</tr>
<tr>
<td></td>
<td>● Comma ( , )</td>
</tr>
<tr>
<td></td>
<td>● Curly brackets ( { } )</td>
</tr>
<tr>
<td></td>
<td>● Double quote ( &quot; )</td>
</tr>
<tr>
<td></td>
<td>● Minus sign ( - )</td>
</tr>
<tr>
<td></td>
<td>● Number sign ( # )</td>
</tr>
<tr>
<td></td>
<td>● Period ( . )</td>
</tr>
<tr>
<td></td>
<td>● Plus sign ( + )</td>
</tr>
<tr>
<td></td>
<td>● Semicolon ( ; )</td>
</tr>
<tr>
<td></td>
<td>● Slash mark ( / )</td>
</tr>
</tbody>
</table>

**Custom**

Custom dimensions are represented by the Generic dimension type in Performance Management Architect. The Generic dimension property, Custom Dimension, maps the Generic Performance Management Architect dimension to a Custom Consolidation dimension. You can add any number of Custom Dimensions within a Financial Management Application View.
<table>
<thead>
<tr>
<th>Property Label</th>
<th>Value Description</th>
<th>Property Name</th>
</tr>
</thead>
<tbody>
<tr>
<td>Alias</td>
<td>Member description (maximum of 80 characters)</td>
<td>Alias</td>
</tr>
<tr>
<td></td>
<td>To use the Alias property, you create an Alias dimension, define properties, and associate the Alias dimension with another dimension. For example, you can create an Alias dimension with the values English, French, and Italian and then associate the Alias dimension with the Custom dimension.</td>
<td></td>
</tr>
<tr>
<td>Aggregation Weight</td>
<td>The aggregation weight for the Custom dimension can be any value (positive or negative), and fractions are allowed (for example, 1.5 is valid). The default values are 0 (no aggregation) and 1 (to aggregate). If the value is not 0 or 1, then the child member is aggregated to the parent using that multiplier. For example, if you set the aggregation weight to .5, only 50 percent of the member's value is aggregated to the parent.</td>
<td>AggregationWeight</td>
</tr>
<tr>
<td>Default Parent</td>
<td>The default parent for the Custom member. The default parent value is a derived value and you cannot enter a value.</td>
<td>DefaultParent</td>
</tr>
</tbody>
</table>
| Dimension Alias     | - This is a dimension-level property.  
- Allows a maximum of twenty characters  
- The value cannot be blank.  
- Uses the existing dimension alias property  
- No Spaces allowed  
- Cannot be changed after initial deployment                                                                 | DimensionAlias  |
| Dimension Size      | - This is a dimension-level property.  
- Valid values are: Large, Medium, Small  
- Cannot be changed after initial deployment                                                                 | DimensionSize   |
|                     | **Note:** When you create a custom dimension, by default the Dimension Size is set to Large, but you can change the Dimension Size to Medium or Small before you deploy the application for the first time. |                 |
| Is Calculated       | Whether the base-level Custom account is calculated  
Only base-level Custom accounts can be calculated. You cannot enter values into base-level, calculated Custom accounts. Specify Y to calculate the Custom account; otherwise, specify N. | IsCalculated    |
<table>
<thead>
<tr>
<th>Property Label</th>
<th>Value Description</th>
<th>Property Name</th>
</tr>
</thead>
</table>
| Name          | Name for the Custom member (required)  
Names can contain up to 80 characters, including spaces, and cannot start with a space or contain these characters:  
- Ampersand ( & )  
- Asterisk ( * )  
- At sign ( @ )  
- Comma ( , )  
- Curly brackets ( { } )  
- Double quote ( " )  
- Minus sign ( - )  
- Number sign ( # )  
- Period ( . )  
- Plus sign ( + )  
- Semicolon ( ; )  
- Slash mark ( / )  
**Note:** The name of a Custom1 dimension member cannot duplicate the name of a consolidation method. | Name          |
| Security Class| Name of the security class that defines the users who can access the Custom dimension data (can contain up to 80 characters)  
To enter a value for this property, you must associate the Custom and Security Class dimensions. | SecurityClass |
| Short Name    |  
- This is a dimension-level property.  
- Allows a maximum of ten characters  
- The value cannot be blank.  
- No Spaces allowed  
- Cannot be changed after initial deployment | ShortName     |
| Submission Group| The Submission group (0 to 99).  
The default, blank, defaults to 1. If the submission group is set to zero (0), the Custom member is not included in the review process. | SubmissionGroup |
| Switch Sign For Flow| Specifies sign change (Debit or Credit) for FLOW accounts that use these rules:  
- ASSET to LIABILITY  
- LIABILITY to ASSET  
- EXPENSE to REVENUE  
- REVENUE to EXPENSE  
- BALANCE to FLOW  
- FLOW to BALANCE  
Specify Y if the sign for the account is switched or N if the sign for the account is not switched.  
**Note:** When you define the value for this property at the parent level, all children automatically inherit the value. | SwitchSignForFlow |
### Switch Type For Flow

Specifies the account type change for FLOW accounts that use these rules:
- ASSET to EXPENSE
- EXPENSE to ASSET
- LIABILITY to REVENUE
- REVENUE to LIABILITY
- BALANCE to FLOW
- FLOW to BALANCE

Specify Y if the account type for the account is switched or N if the account type for the account is not switched.

**Note:** When you define the value for this property at the parent level, all children automatically inherit the value.

### Use For Currency

- This is a dimension-level property.
- Valid values are: 'To', 'From', 'None'
- Requires one and only one 'To' and 'From' per application
- Dimension flagged as either 'To' or 'From' must have size 'Large'
- Cannot be changed after initial deployment

### User Defined 1, User Defined 2, User Defined 3

Custom information for the Custom member (maximum of 80 characters)
The User Defined 1, User Defined 2, and User Defined 3 functions retrieve the text stored in this property.

---

## Entity

### Table 30  Member Properties of the Entity Dimension

<table>
<thead>
<tr>
<th>Property Label</th>
<th>Value Description</th>
<th>Property Name</th>
</tr>
</thead>
<tbody>
<tr>
<td>Alias</td>
<td>Member description (maximum of 80 characters) To use the Alias property, you create an Alias dimension, define properties, and associate the Alias dimension with another dimension. For example, you can create an Alias dimension with the values English, French, and Italian and then associate the Alias dimension with the Entity dimension.</td>
<td>Alias</td>
</tr>
<tr>
<td>Allow Adjustments</td>
<td>Specifies whether journal postings are permitted for this entity. Specify Y if journal postings are permitted for the entity or N if journal postings are not permitted for the entity.</td>
<td>AllowAdj</td>
</tr>
<tr>
<td>Allow Adjustments From Children</td>
<td>Specifies whether journal postings from children are permitted for the parent entity. Specify Y if journal postings from children are permitted or N if journal postings from children are not permitted.</td>
<td>AllowAdjFromChildren</td>
</tr>
<tr>
<td>Property Label</td>
<td>Value Description</td>
<td>Property Name</td>
</tr>
<tr>
<td>---------------------</td>
<td>-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------</td>
<td>-----------------</td>
</tr>
<tr>
<td>Currency</td>
<td>Specifies the default currency for the entity. A value for this property is required. To enter a value for this property, you must create an association between the Entity and Currency dimensions. Note: When you define the value for this property at the parent level, all children automatically inherit the value.</td>
<td>Currency</td>
</tr>
<tr>
<td>Default Parent</td>
<td>Specifies the default parent for the entity. The default parent value is a derived value and you cannot enter a value.</td>
<td>DefaultParent</td>
</tr>
<tr>
<td>Holding Company</td>
<td>Specifies the holding company for the entity. Can be the name of an entity or &lt;blank&gt;. To enter a value for this property, you must create an association between two Entity dimensions.</td>
<td>HoldingCompany</td>
</tr>
<tr>
<td>Is ICP</td>
<td>Specifies whether the entity is an intercompany entity. Specify Y if the entity is an intercompany entity or N if the entity is not an intercompany entity. If the entity is an intercompany entity, it is displayed in the POV in the ICP dimension under [ICP Entities]. Default Value: N</td>
<td>IsICP</td>
</tr>
<tr>
<td>Name</td>
<td>Name for the entity (required) Names can contain up to 80 characters, including spaces, and cannot start with a space, cannot be the word ALL; and cannot use these characters: • Ampersand ( &amp;) • Asterisk ( * ) • At sign ( @ ) • Comma ( , ) • Curly brackets ( { } ) • Double quote ( &quot; ) • Minus sign ( - ) • Number sign ( # ) • Period ( . ) • Plus sign ( + ) • Semicolon ( ; ) • Slash mark ( / )</td>
<td>Name</td>
</tr>
<tr>
<td>Security As Partner</td>
<td>Specifies the name of a valid security class for the ICP entity. This property enables you to secure the entity in an ICP dimension. To enter a value for this property, you must create an association between the Entity and Security Class dimensions.</td>
<td>SecurityAsPartner</td>
</tr>
<tr>
<td>Security Class</td>
<td>Name of the security class that defines the users who can access the entity data (can contain up to 80 characters) To enter a value for this property, you must associate the Entity and Security Class dimensions.</td>
<td>SecurityClass</td>
</tr>
<tr>
<td>User Defined 1, User Defined 2, User Defined 3</td>
<td>Custom information for the entity (maximum of 80 characters) The User Defined 1, User Defined 2, and User Defined 3 functions retrieve the text stored in this property.</td>
<td>UserDefined1, UserDefined2, UserDefined3</td>
</tr>
</tbody>
</table>
### Scenario

#### Table 31  Scenario Dimension Properties

<table>
<thead>
<tr>
<th>Property Label</th>
<th>Value Description</th>
<th>Property Name</th>
</tr>
</thead>
<tbody>
<tr>
<td>Alias</td>
<td>Member description (maximum of 80 characters)</td>
<td>Alias</td>
</tr>
<tr>
<td></td>
<td>To use the Alias property, you create an Alias dimension, define properties, and associate the Alias dimension with another dimension. For example, you can create an Alias dimension with the values English, French, and Italian and then associate the Alias dimension with the Scenario dimension.</td>
<td></td>
</tr>
<tr>
<td>Consolidate YTD</td>
<td>Specifies the view for consolidation. A value for this property is required. Specify Y for YTD or N for periodic.</td>
<td>ConsolidateYTD</td>
</tr>
<tr>
<td>Default Frequency</td>
<td>Specifies the types of periods for which data input is valid for the scenario. A value for this property is required. For example, a value of Monthly indicates that you can extract input data only in month-based periods, not in quarter-based or year-based periods. To enter a value for this property, you must create an association between the Scenario and View dimensions.</td>
<td>DefaultFrequency</td>
</tr>
<tr>
<td>Default Frequency For IC Transactions</td>
<td>Specifies the default frequency for intercompany transactions. This property must be a valid frequency and can contain a maximum of 20 characters. The default for this property is &lt;blank&gt;. To enter a value for this property, you must create an association between the Scenario and View dimensions.</td>
<td>DefFreqForICTrans</td>
</tr>
<tr>
<td>Default Parent</td>
<td>Specifies the default parent for the scenario. The default parent value is a derived value and you cannot enter a value.</td>
<td>DefaultParent</td>
</tr>
<tr>
<td>Default View</td>
<td>Specifies the view to use when Scenario View is selected in the point-of-view bar. A value for this property is required. Specify YTD or Periodic. If you change the default view for a scenario and line-item detail has been entered, you should first extract the line-item detail and save it. Then delete the line-item detail from the scenario before changing the view. You must change the extracted line-item detail to match the new default view before loading it.</td>
<td>DefaultView</td>
</tr>
<tr>
<td>Enable Data Audit</td>
<td>Specifies whether the scenario is audited. This property for an account or a scenario determines what can be audited. Specify one of these values: Y to automatically audit all accounts. Even accounts that have Enable Data Audit set to False are audited. O to audit only those accounts that have Enable Data Audit set to True N to disable auditing for all accounts.</td>
<td>EnableDataAudit</td>
</tr>
</tbody>
</table>

*Default Value: N*
<table>
<thead>
<tr>
<th>Property Label</th>
<th>Value Description</th>
<th>Property Name</th>
</tr>
</thead>
</table>
| Enable Process Management      | Specifies whether Process Management functionality is enabled. Specify one of these values:  
  - Y to enable the Process Management option  
  - N to disable the Process Management option  
  - A to enable Process Management and e-mail alerting  
  *Default Value*: N                                                                                                                                | HfmEnableProcessManagement    |
| Maximum Review Level           | Specifies the maximum Process Management review level for the scenario. Specify a review level from 1 to 10. A value for this property is required.                                                                | MaximumReviewLevel            |
| Name                           | Name for the scenario (required)  
  Names can contain up to 80 characters, including spaces, and cannot start with a space or contain these characters:  
  - Ampersand (&)  
  - Asterisk (*)  
  - At sign (@)  
  - Comma (,)  
  - Curly brackets ({}  
  - Double quote (")  
  - Minus sign (-)  
  - Number sign (#)  
  - Period (.)  
  - Plus sign (+)  
  - Semicolon (;)  
  - Slash mark (/)                                                                                                                                     | Name                           |
| Phased Submission Start Year   | Specifies the start year. You can set the start year by deploying an application in Performance Management Architect or by loading metadata in a classic Financial Management application. This setting enables flexibility of setting a year of a scenario to start phased submission of process management. | PhasedSubStartYear            |
| Security Class                 | Name of the security class that defines the users who can access the scenario data (can contain up to 80 characters)  
  To enter a value for this property, you must associate the Scenario and Security Class dimensions.                                                                                     | SecurityClass                 |
| User Defined 1, User Defined 2, User Defined 3 | Custom information for the scenario (maximum of 80 characters)  
  The User Defined 1, User Defined 2, and User Defined 3 functions retrieve the text stored in this property.                                                                 | UserDefined1  
  UserDefined2  
  UserDefined3 |
Uses Line Items

 Specifies whether the scenario can have line items. Specify Y if the scenario can accept line items or N if the scenario cannot accept line items.

**Note:** If you change this property after line-item detail is entered, the stored line item detail may no longer be valid for the scenario. The following behaviors occur:

- If the scenario accepted line items and now it cannot, the line-item detail stored in the database is no longer valid. Only the total is displayed.
- If the scenario did not accept line items and now it can, there is a total amount but no corresponding line-item detail information for the scenario. You can extract the total and then load it as line-item detail data so that the total matches the line-item detail information.

Zero View For Adjustments

 Specifies how to interpret missing, adjusted data values for the period. A value for this property is required. Specify YTD or Periodic.

Zero View For Non-adjustments

 Specifies how to interpret missing, unadjusted data values for the period. A value for this property is required. Specify YTD or Periodic.

---

**Application**

Application properties are the equivalent of the application settings section in the Classic Financial Management metadata files. Application properties apply to an entire Financial Management application and determine the following information for the application:

- Is the organization dynamic, using organization by period?
- Which dimensions are secured?
- What default translation rates are used?
- What is the ICP weight?
- Are consolidation rules applied?
- What is the default currency?

---

### Table 32  Application Properties

<table>
<thead>
<tr>
<th>Property Label</th>
<th>Value Description</th>
<th>Property Name</th>
</tr>
</thead>
<tbody>
<tr>
<td>Consolidation Rules</td>
<td>Specifies if consolidation rules are supported for the application. Specify one of these values:</td>
<td>ConsolidationRules</td>
</tr>
<tr>
<td></td>
<td>• Y to use the rules written in the Consolidate() routine in a user-defined rule</td>
<td></td>
</tr>
<tr>
<td></td>
<td>• R to derive the proportional value in the Value dimension. Note that the proportional data is not stored.</td>
<td></td>
</tr>
<tr>
<td></td>
<td>• N to use the default consolidation and eliminations</td>
<td></td>
</tr>
<tr>
<td></td>
<td><em>Default Value: N</em></td>
<td></td>
</tr>
<tr>
<td>Property Label</td>
<td>Value Description</td>
<td>Property Name</td>
</tr>
<tr>
<td>--------------------------------</td>
<td>--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------</td>
<td>--------------------------------------------------</td>
</tr>
<tr>
<td>Default Currency</td>
<td>Specifies the default currency for the application. A value for this property is required.</td>
<td>DefaultCurrency</td>
</tr>
<tr>
<td>Default Rate For Balance Accounts</td>
<td>Specifies the account that contains the translation rate to use for ASSET or LIABILITY accounts. A value for this property is required.</td>
<td>DefaultRateForBalanceAccounts</td>
</tr>
<tr>
<td>Default Rate For Flow Accounts</td>
<td>Specifies the account that contains the translation rate to use for REVENUE or EXPENSE accounts. A value for this property is required.</td>
<td>DefaultRateForFlowAccount</td>
</tr>
<tr>
<td>Default Value For Active</td>
<td>Specifies if entities in the application are active by default or inactive by default. Inactive entities are not consolidated to their parent. A value for this property is required. Specify 0 for inactive or 1 for active.</td>
<td>DefaultValueForActive</td>
</tr>
</tbody>
</table>
| Enable Metadata Security Filtering | Specifies if users of an application see all dimension members or only the members to which they have access. The system can filter these dimensions:  
  - Scenario  
  - Entity  
  - Intercompany Partner (ICP)  
  - Account  
  - Custom  
Specify Y to display only the dimension members to which the user has access or N to display all dimension members in the application. The default value is N. | EnableMetadataSecurityFiltering                    |
| ICP Entities Aggregation Weight | Specifies the percentage of intercompany partner entity [ICP Entities] amounts that aggregate to the [ICP Top] member of the ICP dimension. The percentage is scaled to hundreds, with 1.0 equalling 100 percent. The value can be positive or negative. A value for this property is required.  
*Default Value: 1* | ICPEntitiesAggregationWeight                        |
| Maximum Cell Text Size         | Specifies the maximum number of characters that can be used for cell text. Valid values are -1 for no limit or a positive number up to 2,147,483,647.  
*Default Value: 1900* | MaxCellTextSize                                    |
<table>
<thead>
<tr>
<th>Property Label</th>
<th>Value Description</th>
<th>Property Name</th>
</tr>
</thead>
<tbody>
<tr>
<td>Maximum Document Attachment Size</td>
<td>Specifies the maximum number of bytes for the size of document attachments. Valid values are -1 for no limit or a positive number up to 2,147,483,647.</td>
<td>MaxDocAttachmentSize</td>
</tr>
<tr>
<td>Maximum Number of Document Attachments</td>
<td>Specifies the maximum number of document attachments per user. Valid values are -1 for no limit or a positive number up to 2,147,483,647.</td>
<td>MaxNumDocAttachments</td>
</tr>
<tr>
<td>Node Security</td>
<td>Specifies the type of security access for nodes. Valid values are Parent or Entity. Specify Entity to check node data based on security access for the entity and Parent to check node data based on security access for the parent. A value for this property is required.</td>
<td>NodeSecurity</td>
</tr>
<tr>
<td>Org By Period Application</td>
<td>Specifies if new consolidation structures can coexist with past consolidation structures in the application. Specify one of these values: - Y to allow new and old organizational structures in the application - N to allow only active organizational structures</td>
<td>OrgByPeriodApplication</td>
</tr>
<tr>
<td>Security For Accounts</td>
<td>Specifies if accounts in the application are protected by security. Specify Y for security on accounts in the application or N for no security on accounts in the application.</td>
<td>SecurityForAccounts</td>
</tr>
<tr>
<td>Security For &lt;DimensionAliasName&gt;</td>
<td>Specifies whether Custom dimensions in the application are protected by security. Specify Y for security on Custom dimensions in the application or N for no security on Custom dimensions in the application.</td>
<td>SecurityFor&lt;DimensionAliasName&gt;</td>
</tr>
<tr>
<td>Security For Entities</td>
<td>Specifies whether entities in the application are protected by security. Specify Y for security on entities in the application or N for no security on entities in the application.</td>
<td>SecurityForEntities</td>
</tr>
<tr>
<td>Security For ICP</td>
<td>Specifies whether ICP members in the application are protected by security. Specify Y for security on ICP members in the application or N for no security on ICP members in the application.</td>
<td>SecurityForICP</td>
</tr>
<tr>
<td>Security For Scenarios</td>
<td>Specifies whether scenarios in the application are protected by security. Specify Y for security on scenarios in the application or N for no security on scenarios in the application.</td>
<td>SecurityForScenarios</td>
</tr>
<tr>
<td>Property Label</td>
<td>Value Description</td>
<td>Property Name</td>
</tr>
<tr>
<td>-----------------------------------</td>
<td>------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------</td>
<td>---------------------------------------------------</td>
</tr>
</tbody>
</table>
| Support Submission Phase for Account | Specifies whether phased submissions in process management are supported for accounts in the application. Valid values are True or False.  
*Default Value: False*                                                                                                                                                                                                                                                                                                                                                      | SupportSubmissionPhaseForAccount                 |
| Support Submission Phase for `<DimensionAliasName>` | Specifies whether phased submissions in process management are supported for the Custom members in the application. Valid values are True or False.  
*Default Value: False*                                                                                                                                                                                                                                                                                                                                                      | SupportSubmissionPhaseFor<DimensionAliasName>     |
| Support Submission Phase for ICP   | Specifies whether phased submissions in process management are supported for ICP members in the application. Valid values are True or False.  
*Default Value: False*                                                                                                                                                                                                                                                                                                                                                      | SupportSubmissionPhaseForICP                     |
| Use PVA For Balance Accounts      | Specifies the default translation method for BALANCE accounts. Specify one of these values:  
- Y to use the periodic value (PVA) translation method  
- N to use the value at exchange rate (VAL) translation method                                                                                                                                                                                                                                                                                                          | UsePVAForBalanceAccounts                         |
| Use PVA For Flow Accounts         | Specifies the default translation method for FLOW accounts. Specify one of these values:  
- Y to use the periodic value (PVA) translation method  
- N to use the value at exchange rate (VAL) translation method                                                                                                                                                                                                                                                                                                          | UsePVAForFlowAccounts                             |
| Use Submission Phase              | Specifies whether phased submissions in process management are used in the application. Valid values are Y or N. Default is N.                                                                                                                                                                                                                                                                                                                                                                      | UseSubmissionPhase                               |
| Validation Account                | Specifies the name of the account to use for validation. The account used for validation must be an existing account and must have a valid intersection with [ICPTop] in the Custom dimensions.                                                                                                                                                                                                                                                                                               | ValidationAccount                                |
| Validation Account 2 to 9         | Validation accounts are used to ensure that the value equals zero before a process unit can be promoted to the next review level. For example, Validation Account3 requires a valid account for Submission Phase4.                                                                                                                                                                                                                                                                   | ValidationAccount2 to 9                          |
Organization by Period

Organizational structures can change for many reasons, including acquisitions, disposals, mergers, and reorganizations. The organization by period functionality enables the most recent consolidation structure to coexist with past structures in the same application.

To support organizational changes, Financial Management uses the Active system account to reflect the active or inactive consolidation status of a child into its parent. The Active account is an intercompany account that stores data at the parent level and uses the ICP dimension to store information about children. This account acts as a filter of the entity hierarchy.

For an ICP member that corresponds to a child of a parent, the Active account indicates to the system whether the child should be considered as an active consolidation member for the current year, scenario, and time period. Children that correspond to ICP members for which the Active account equals 0 are considered to be inactive children and are not consolidated. Children that correspond to ICP members for which the Active account equals 1 are considered to be active children and are consolidated. Active account values can be viewed or changed. Changes to active child data affect the parent, while changes to inactive child data do not affect the parent.

The Default Value For Active property controls the status of children for which the Active account is blank, so, every parent-child intersection does not need to be specified as active or inactive. By default, every child entity is active in relation to its parent unless otherwise specified.

Consolidation Method

<table>
<thead>
<tr>
<th>Property Label</th>
<th>Value Description</th>
<th>Property Name</th>
</tr>
</thead>
<tbody>
<tr>
<td>Alias</td>
<td>Member description (maximum of 80 characters)</td>
<td>Alias</td>
</tr>
<tr>
<td>Control</td>
<td>Specifies the threshold that corresponds to the type of control to be used by the calculation routine. Specify one of these values for this property:</td>
<td>Control</td>
</tr>
<tr>
<td></td>
<td>• Blank</td>
<td></td>
</tr>
<tr>
<td></td>
<td>• No</td>
<td></td>
</tr>
<tr>
<td></td>
<td>• Limited</td>
<td></td>
</tr>
<tr>
<td></td>
<td>• Full</td>
<td></td>
</tr>
<tr>
<td>Property Label</td>
<td>Value Description</td>
<td>Property Name</td>
</tr>
<tr>
<td>---------------------</td>
<td>-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------</td>
<td>---------------------</td>
</tr>
<tr>
<td>Is Holding Method</td>
<td>Specifies if the consolidation method is used for the holding company. Specify Y to use the method for the holding company or N to use a different method for the holding company.</td>
<td>IsHoldingMethod</td>
</tr>
<tr>
<td>Name</td>
<td>Name for the consolidation method (required)</td>
<td>Name</td>
</tr>
<tr>
<td></td>
<td>Names can contain up to 80 characters, including spaces, and cannot start with a space or contain these characters:</td>
<td></td>
</tr>
<tr>
<td></td>
<td>● Ampersand ( &amp; )</td>
<td></td>
</tr>
<tr>
<td></td>
<td>● Asterisk ( * )</td>
<td></td>
</tr>
<tr>
<td></td>
<td>● At sign ( @ )</td>
<td></td>
</tr>
<tr>
<td></td>
<td>● Comma ( , )</td>
<td></td>
</tr>
<tr>
<td></td>
<td>● Curly brackets ( { } )</td>
<td></td>
</tr>
<tr>
<td></td>
<td>● Double quote ( &quot; )</td>
<td></td>
</tr>
<tr>
<td></td>
<td>● Minus sign ( - )</td>
<td></td>
</tr>
<tr>
<td></td>
<td>● Number sign ( # )</td>
<td></td>
</tr>
<tr>
<td></td>
<td>● Period ( . )</td>
<td></td>
</tr>
<tr>
<td></td>
<td>● Plus sign ( + )</td>
<td></td>
</tr>
<tr>
<td></td>
<td>● Semicolon ( ; )</td>
<td></td>
</tr>
<tr>
<td></td>
<td>● Slash mark ( / )</td>
<td></td>
</tr>
<tr>
<td>Percent Consol</td>
<td>Specifies the consolidation percentage applied by the ownership calculation routine. Specify one of these values:</td>
<td>PercentConsol</td>
</tr>
<tr>
<td></td>
<td>● POWN</td>
<td></td>
</tr>
<tr>
<td></td>
<td>● POWNMIN</td>
<td></td>
</tr>
<tr>
<td></td>
<td>● PERCENTAGE</td>
<td></td>
</tr>
<tr>
<td></td>
<td><strong>Note:</strong> If you select PERCENTAGE as the value, you must enter a value for the Percent Consol Value property.</td>
<td></td>
</tr>
<tr>
<td>Percent Consol Value</td>
<td>Specifies the consolidation percentage value applied by the ownership calculation routine.</td>
<td>PercentConsolValue</td>
</tr>
<tr>
<td></td>
<td><strong>Note:</strong> This property is used by system only if PERCENTAGE is the value for the Percent Consol property.</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Specify a value between 1 and 100.</td>
<td></td>
</tr>
<tr>
<td>To Percent Control</td>
<td>Specifies the upper boundary of the range for percent control. Used for the ownership calculation routine. Specify a value between 0 and 100.</td>
<td>ToPercentControl</td>
</tr>
<tr>
<td></td>
<td><strong>Note:</strong> One of the method records must have a value of 100.</td>
<td></td>
</tr>
<tr>
<td>To Percent Control Compare</td>
<td>Specifies if the upper boundary of the range of percent control is included in the range. Used for the ownership calculation routine and the To Percent Control property. This property is optional if the Used By Calc Routine property is N.</td>
<td>ToPercentControlComp</td>
</tr>
<tr>
<td>Property Label</td>
<td>Value Description</td>
<td>Property Name</td>
</tr>
<tr>
<td>---------------------</td>
<td>-----------------------------------------------------------------------------------</td>
<td>---------------------</td>
</tr>
<tr>
<td>Used By Calc Routine</td>
<td>Specifies if the method is used for the automatic ownership calculation routine. Specify Y to use the method for ownership calculations.</td>
<td>UsedByCalcRoutine</td>
</tr>
</tbody>
</table>

**Using Consolidation Methods**

Consolidation methods are used during the consolidation and calculate ownership processes.

When you define consolidation methods in the metadata, the system automatically generates the [ConsolMethod] system list for the Custom1 dimension. The system list consists of all methods defined in the consolidation methods section of the metadata.

There are two ways to assign the consolidation method to an entity for use during consolidation. You can assign the method manually through data load or data entry. You can also assign the method using the calculate ownership routine, which is based on the ultimate percent control assigned to the entity.

**Assigning Consolidation Methods Manually**

To enter consolidation method information manually, you can create a data grid with the following information:

POV: Scenario, Year, Period, View, Entity, Value, Account, C2, C3, C4

Scenario: Applicable scenario
Year: Applicable year
Period: Applicable period
Entity: A parent entity
Value: [None]
Account: [Method], a system generated account called Method
C2 [None]
C3: [None]
C4: [None]
Row: ICP entities (For parent entities, you can use the [ICP Entities] system list or the user-defined list of selected ICP entities.)
Column: Custom1 (You should use the [ConsolMethods] system-generated list.)

Method assignment information is stored in the account method of the data file of the parent entity. For each child of a parent, the system stores the consolidation method assignment in the ICP dimension. The assigned method is used when the children are consolidated to the parent.

For an intersection of the grid, use 1 to indicate the method assignment to the ICP entity. For example, if a parent group has two children, A and B, and you assign the Global method to A
and the Equity method to B, enter 1 in the intersection for the Global method and entity A, and 1 in the intersection for the Equity method and entity B.

## Currency

Table 34  Member Properties in the Currency Dimension

<table>
<thead>
<tr>
<th>Property Label</th>
<th>Value Description</th>
<th>Property Name</th>
</tr>
</thead>
<tbody>
<tr>
<td>Alias</td>
<td>Member description (maximum of 80 characters)</td>
<td>Alias</td>
</tr>
<tr>
<td></td>
<td>To use the Alias property, you create an Alias dimension, define properties, and</td>
<td></td>
</tr>
<tr>
<td></td>
<td>associate the Alias dimension with another dimension. For example, you can create</td>
<td></td>
</tr>
<tr>
<td></td>
<td>an Alias dimension with the values English, French, and Italian and then associate</td>
<td></td>
</tr>
<tr>
<td></td>
<td>the Alias dimension with the Currency dimension.</td>
<td></td>
</tr>
<tr>
<td>Display In ICT</td>
<td>Specifies if currencies display in the drop-down list in the intercompany transactions module. Specify Y to display currencies or N to not display currencies.</td>
<td>DisplayInICT</td>
</tr>
<tr>
<td>Name</td>
<td>Name for the currency (required)</td>
<td>Name</td>
</tr>
<tr>
<td></td>
<td>Names can contain up to 80 characters, including spaces, and cannot start with a space or contain these characters:</td>
<td></td>
</tr>
<tr>
<td></td>
<td>● Ampersand ( &amp; )</td>
<td></td>
</tr>
<tr>
<td></td>
<td>● Asterisk ( * )</td>
<td></td>
</tr>
<tr>
<td></td>
<td>● At sign ( @ )</td>
<td></td>
</tr>
<tr>
<td></td>
<td>● Comma ( , )</td>
<td></td>
</tr>
<tr>
<td></td>
<td>● Curly brackets ( { } )</td>
<td></td>
</tr>
<tr>
<td></td>
<td>● Double quote ( “ )</td>
<td></td>
</tr>
<tr>
<td></td>
<td>● Minus sign ( - )</td>
<td></td>
</tr>
<tr>
<td></td>
<td>● Number sign ( # )</td>
<td></td>
</tr>
<tr>
<td></td>
<td>● Period ( . )</td>
<td></td>
</tr>
<tr>
<td></td>
<td>● Plus sign ( + )</td>
<td></td>
</tr>
<tr>
<td></td>
<td>● Semicolon ( ; )</td>
<td></td>
</tr>
<tr>
<td></td>
<td>● Slash mark ( / )</td>
<td></td>
</tr>
<tr>
<td>Property Label</td>
<td>Value Description</td>
<td>Property Name</td>
</tr>
<tr>
<td>---------------</td>
<td>--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------</td>
<td>---------------</td>
</tr>
</tbody>
</table>
| Scale         | Specifies the unit in which amounts are displayed and stored for the currency by identifying where the decimal point is placed. A value for this property is required. Determines how the exchange rate must be entered. Specify one of these values for this property:  
  ● Blank = None  
  ● 0 = Units  
  ● 1 = Tens  
  ● 2 = Hundreds  
  ● 3 = Thousands  
  ● 4 = Ten thousands  
  ● 5 = Hundred thousands  
  ● 6 = Millions  
  ● 7 = Ten millions  
  ● 8 = Hundred millions  
  ● 9 = Billions                                                                                                                                       | Scale         |
| Translation Operator | Specifies the conversion calculation for intercompany transactions. The default is blank. Specify one of these values:  
  ● D to calculate the local currency by dividing the transaction currency by the rate  
  ● M to calculate the local currency by multiplying the transaction currency by the rate  
  ● <blank> to default the value to D                                                                                                                | TranslationOperator |

The system member list [Currencies] is available for the Custom1 and Custom2 dimensions. Currencies that you add to the application are added to the [Currencies] member list. The [Currencies] list enables the entry of currency translation rates for pairs of currencies and provides a way of filtering out non-currency members.

### System-Generated Accounts

When you create an application, system accounts for consolidation and ownership are automatically created for the application.

**Note:** You can change only the description, security class, and decimal location for system accounts. All other properties for system accounts are predefined and cannot be modified.

### Consolidation Accounts

The following system accounts are required for each parent in the Account dimension and are used in the consolidation process.
Note: All system accounts, except the Active account, that are used for consolidation are BALANCE accounts. The Active account is a BALANCERECURRING account.

### Table 35  System Accounts for Consolidation

<table>
<thead>
<tr>
<th>System Account</th>
<th>Value Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Active</td>
<td>Consolidation status of a child into its parent. Yes if the child is consolidated into its parent. No if the child is not consolidated into its parent.</td>
</tr>
</tbody>
</table>
| [PCON]         | Percent consolidation. The percentage of the value of an entity that consolidates to the parent of the entity. Positive or negative numbers between -100 and 100, including 0. Default value is 100.  
**Note:** For subsequent periods, derived as 0. Therefore, you must enter the percentage in all subsequent periods. |
| [POWN]         | Percent ownership based on the shares of the entity that are owned by other entities. A positive number between 0 and 100. Default value is 100. |
| [DOWN]         | Percent of direct ownership. A positive number between 0 and 100. Default value is 100. |
| [PCTRL]        | Percent control based on the voting shares of the entity that are owned by other entities. A positive number between 0 and 100. Default value is 100. |
| Method         | Consolidation method assigned to the entity. <None> or a selection from the list of available methods. |
| Consol1, Consol2, Consol3 | Consolidation methods. A number between 0 and 255. |

### Ownership Accounts

The following system accounts are used for ownership calculations.

Note: All system accounts that are used for ownership calculations are BALANCE accounts.

### Table 36  System Accounts for Ownership

<table>
<thead>
<tr>
<th>System Account</th>
<th>Value Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>SharesOwned</td>
<td>Total number of shares owned. Positive number or 0. Default is 0.</td>
</tr>
<tr>
<td><strong>Note:</strong></td>
<td>Total shares owned must be less than or equal to the total shares outstanding.</td>
</tr>
<tr>
<td>VotingOwned</td>
<td>Number of voting shares owned. Positive number or 0. Default value is 0.</td>
</tr>
<tr>
<td><strong>Note:</strong></td>
<td>Total voting shares owned must be less than or equal to the total voting shares outstanding.</td>
</tr>
</tbody>
</table>
| SharesOutstanding | Total number of shares outstanding or the percentage of shares outstanding. Positive number or 0. Default value is 0.  
**Note:** Enter the number of shares outstanding, or enter shares outstanding as a percentage. Enter 100 for percentage. |
### Setting Up Intercompany Partners

Intercompany transactions are managed across the Intercompany Partner (ICP) dimension. The ICP dimension stores all intercompany balances that exist for an account. ICP is a reserved dimension used in combination with the Account dimension and Custom dimensions to track and eliminate intercompany transaction details.

To set up an application for intercompany transactions, you must perform these actions:

- Indicate the accounts that perform intercompany transactions and indicate a plug account for each intercompany account (Is ICP and Plug Account properties in account metadata)
- Indicate the entities that perform intercompany transactions (Is ICP property in entity metadata)

When you create intercompany transactions, each group must have at least one intercompany account and one plug account. You designate an account as intercompany by selecting the Is ICP property for the account. When an account is designated as intercompany and intercompany transactions are entered, eliminating or reversing entries are generated in the [Elimination] value dimension member through the consolidation process.

A plug account is an account that, when eliminations are completed, stores the difference between two intercompany accounts. A plug account can be set up as an ICP account. For a plug account to be detailed by ICP, set the Is ICP property to Y or R so that the system writes eliminations to the corresponding ICP member. If you do not want a plug account to be detailed by ICP, set the Is ICP property to N so that the system writes eliminations to [ICP None]. During consolidation, transactions between valid intercompany entities are eliminated.

### Table 37  System-Generated ICP Elements

<table>
<thead>
<tr>
<th>System-Generated ICP Element</th>
<th>Value Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>[ICP Top]</td>
<td>Specifies the top intercompany member</td>
</tr>
<tr>
<td>[ICP None]</td>
<td>Specifies that no intercompany member is used</td>
</tr>
<tr>
<td>[ICP Entities]</td>
<td>Specifies the entities that are designated for intercompany transactions</td>
</tr>
<tr>
<td>Property Label</td>
<td>Value Description</td>
</tr>
<tr>
<td>---------------</td>
<td>-------------------</td>
</tr>
<tr>
<td>Alias</td>
<td>Member description (maximum of 80 characters) To use the Alias property, you create an Alias dimension, define properties, and associate the Alias dimension with another dimension. For example, you can create an Alias dimension with the values English, French, and Italian and then associate the Alias dimension with the ICP dimension.</td>
</tr>
<tr>
<td>Default Parent</td>
<td>The default parent for the ICP. The default parent value is a derived value and you cannot enter a value.</td>
</tr>
<tr>
<td>Name</td>
<td>Name for the ICP (required) Names are defined and cannot be changed.</td>
</tr>
<tr>
<td>Security Class</td>
<td>Name of the security class that defines the users who can access the ICP data (can contain up to 80 characters) To enter a value for this property, you must associate the ICP and Security Class dimensions.</td>
</tr>
<tr>
<td>Submission Group</td>
<td>The Submission group (0 to 99). The default, blank, defaults to 1. If the submission group is set to zero (0), the ICP is not included in the review process.</td>
</tr>
</tbody>
</table>

### Editing System-Generated Value Members

When you create an application, Value members are automatically created for the application.

**Note:** You can modify only the description for Value members. All other properties are predefined and cannot be modified.

After you load metadata, Financial Management automatically creates three Value dimension members for each currency in your application: `CurrencyName`, `CurrencyName Adjs`, and `CurrencyName Total`, where `CurrencyName` is the currency label. For example, for a currency of USD, Financial Management creates the following Value dimension members: USD, USD Adjs, and USD Total.

### Metadata Filtering Based on Security

When you filter metadata based on security, users see only the elements of the Scenario, Entity, ICP, Account, and Custom dimensions to which they have access. You set up metadata filtering at the application level by setting the `EnableMetadataSecurityFiltering` property to Y. For elements a user can view in a hierarchy, assign a security class and assign the user metadata access to the security class.

Users have implied access to the parents and ancestors of members to which they have access. With implied access, users see ancestors and parents in a hierarchical tree structure but cannot access them. For example, in the following tree structure, the user has access to only Connecticut.
even though the parents (UnitedStates and Imbler) and the ancestors (Management and Regional) are displayed in the tree.

![Image of a tree with nodes labeled as: Entity, Regional, UnitedStates, Connecticut, Management, Imbler, Connecticut.]

**Metadata Referential Integrity**

To prevent a referential integrity problem from occurring in the application, Financial Management verifies that metadata changes are valid to the application in its current state before accepting the changes.

When you load metadata, the system compares the metadata load file with the metadata elements in the application. All changes are recorded, and some changes are checked against existing data. Modifications that cause referential integrity problems are not allowed.

**Note:** When you load metadata, make sure that the Check Integrity option is selected.

**Metadata Property Changes That Affect Referential Integrity**

The following table provides information about specific changes in metadata properties that require the system to check existing data in regard to the metadata file that you are loading. Only metadata properties that have an effect on referential integrity are listed in the table.

<table>
<thead>
<tr>
<th>Dimension</th>
<th>Metadata Property Change</th>
<th>Condition That Prevents Metadata From Loading</th>
</tr>
</thead>
<tbody>
<tr>
<td>Account</td>
<td>Is Calculated (from N to Y)</td>
<td>Checks to see if a journal or template exists for the account, and, if found, prevents the metadata from loading.</td>
</tr>
<tr>
<td></td>
<td>Is ICP (from Y to R)</td>
<td>Checks to see if a journal or template exists for the account and ICP=&lt;Entity&gt;, and, if found, prevents the metadata from loading.</td>
</tr>
<tr>
<td></td>
<td>Is ICP (from Y to N or from R to N)</td>
<td>Checks to see if a journal or template exists for the account and ICP &lt;&gt; [ICP None] (because the account is not an intercompany account and ICP members other than [ICP None] is invalid), and, if found, prevents the metadata from loading.</td>
</tr>
<tr>
<td></td>
<td>Uses Line Items (from Y to N or from N to Y)</td>
<td>Checks to see if regular data exists for the scenario and account, and, if found, prevents the metadata from loading.</td>
</tr>
<tr>
<td>Custom</td>
<td>Is Calculated (from N to Y)</td>
<td>Checks to see if a journal or template exists for this Custom dimension, and, if found, prevents the metadata from loading.</td>
</tr>
</tbody>
</table>

**Note:** From Y to N, the system does not allow access to line-item detail.
<table>
<thead>
<tr>
<th>Dimension</th>
<th>Metadata Property Change</th>
<th>Condition That Prevents Metadata From Loading</th>
</tr>
</thead>
<tbody>
<tr>
<td>Entity</td>
<td>Currency</td>
<td>Checks to see if a journal exists for &lt;Entity Currency Adjs&gt; or &lt;Parent Currency Adjs&gt;, and, if found, prevents the metadata from loading.</td>
</tr>
<tr>
<td></td>
<td>Allow Adjustments (from Y to N)</td>
<td>For Allow Adjustments, checks to see if a journal with &lt;Entity Curr Adjs&gt; or &lt;Parent Currency Adjs&gt; exists for the entity, and, if found, prevents the metadata from loading.</td>
</tr>
<tr>
<td></td>
<td>Allow Adjustments From Children (from Y to N)</td>
<td>For Allow Adjustments From Children, checks to see if a journal with [Parent Adjs] or [Contribution Adjs] exists for the entity, and, if found, prevents the metadata from loading.</td>
</tr>
<tr>
<td></td>
<td>Is ICP (from Y to N)</td>
<td>Checks to see if a journal in which the entity is used in the ICP dimension exists, and, if found, prevents the metadata from loading.</td>
</tr>
<tr>
<td>Scenario</td>
<td>Zero View For Adjustments</td>
<td>Checks to see if a journal exists for the scenario, and, if found, prevents the metadata from loading.</td>
</tr>
<tr>
<td></td>
<td>Uses Line Items</td>
<td>Checks to see if regular data exists for an account with this property enabled for the specified scenario, and, if found, prevents the metadata from loading.</td>
</tr>
<tr>
<td>Application</td>
<td>Default Value For Active</td>
<td>Checks to see if a journal or recurring template exists for [Parent Adjs] or [Contribution Adjs], and, if found, prevents the metadata from loading.</td>
</tr>
</tbody>
</table>

The system also checks for invalid points of view between the load file and the metadata in the application. If a dimension member is not in the load file but exists in a journal in the application, the metadata load is prevented.

### Metadata Log File Referential Integrity Errors

In the metadata log file, referential integrity errors are displayed under the following section:

**Metadata referential integrity check started at**

Each line in the referential integrity check section refers to a metadata integrity error in the load file. Errors found during the integrity check are displayed in the following format:

```
Journals::SINGLECA1 Scenario::Actual Year::2012 Value::[Contribution Adjs] Period::January has 1 occurrences of Changed::[SCENARIO::Actual::ZeroViewForAdj: Periodic -> YTD]
```

This example shows that the metadata integrity error occurs in the SINGLECA1 journal with the following point of view: Scenario Actual, Year 2012, Value [Contribution Adjs], Period January. The error is that the ZeroViewForAdj property for the Actual scenario was changed from Periodic to YTD. This change is not allowed because a journal exists for the Actual scenario.

### Dimension Naming Restrictions

When naming Consolidation dimensions, follow these rules:

- Names can include up to 80 characters.
Names cannot start with an underscore, any whitespace character, or any non-alphanumeric character. After the first character, names can have any whitespace character, any non-alphanumeric character, and any alphanumeric character including the underscore.

Do not include these words in dimension names

- ALL AND ASSIGN AVERAGE CALC CALCMBR COPYFORWARD CROSSDIM CURMBRNAME DIM DIMNAME DIV DYNAMIC EMPTYPARM EQ EQOP EXCEPT EXP EXPRERROR FLOAT FUNCTION GE GEN GENRANGE GROUP GT ID IDERROR INTEGER LE LEVELRANGE LOOPBLOCK LOOPPARMS LT MBR MBRNAME MBRONLY MINUS MISSING MUL MULOP NE NON NONINPUT NOT OR PAREN PARENPARM PERCENT PLUS RELOP SET SKIPBOTH SKIPMISSING SKIPNONE SKIPZERO TO TOLOCALRATE TRAILMISSING TRAILSUM UMINUS UPPER VARORXMBR XMBRONLY $$\text{UNIVERSE}$$ #MISSING #MI

Using Consolidation Flat Files Created in 9.3.1

If you are using .ads flat files created in previous releases, you must make manual updates before using them in the current release. In your flat file, make these updates:

- You must add PhasedSubStartYear to the scenario dimension in the .ads file
- You must remove the DefaultParent from the .ads file

Working with Financial Management 9.3.1 and Performance Management Architect

If you are using Financial Management 9.3.1 with the current release of Performance Management Architect, you can use all of the features available in this release. Follow the standard process for upgrading Performance Management Architect, Oracle Hyperion Enterprise Performance Management Workspace, and Shared Services. No additional steps are necessary.
Following is a list of Planning application types and the number of dimensions each type can contain.

- General Planning applications can contain thirty-two standard and custom dimensions. There are seven standard dimensions: Account, Entity, Scenario, Version, Period, Years, and Currency. In addition, general Planning applications can include up to and twenty-five custom dimensions. For more information about dimensions for general Planning applications, see the *Oracle Hyperion Planning Administrator’s Guide*.

- Multi-currency Planning applications can contain twenty-five custom dimensions and seven standard dimensions. The seven standard dimensions are: Scenario, Version, Entity, Account, Period, Year, and Currency. For more information about dimensions for multi-currency Planning applications, see the *Oracle Hyperion Planning Administrator’s Guide*.
**Note:** Single-currency Planning applications can contain twenty-five custom dimensions and six standard dimensions. The six standard dimensions are: Scenario, Version, Entity, Account, Period, and Year.

- Workforce Planning and Capital Asset Planning applications can contain twenty-four custom dimensions and three standard dimensions. The three standard dimensions in Workforce Planning applications are: Account, Employee, and Job. The three standard dimensions in Capital Asset Planning applications are: Account, Asset Class, and Asset Detail. For more information about dimensions for Workforce Planning and Capital Asset Planning applications, see the *Oracle Hyperion Workforce Planning Administrator’s Guide* and the *Oracle Hyperion Capital Asset Planning Administrator’s Guide*.

- Public Sector Planning and Budgeting applications can contain twenty-one custom dimensions and eleven standard dimensions. The standard dimensions are: Account, Scenario, Version, Period, Year, Currency, Entity, Element, Budget Item, Request, Employee, Job Code, Position, and (for multi-currency applications only) HSP_Rates. For more information about dimensions for Public Sector Planning and Budgeting applications, see the *Oracle Hyperion Public Sector Planning and Budgeting User’s Guide*.

- Project Financial Planning applications can contain twenty-three custom dimensions and nine standard dimensions. The standard dimensions are; Account, Project, Project Element, Job, Employee, Asset Class, and Asset Detail. For more information about dimensions for Oracle Project Financial Planning applications, see the *Oracle Project Financial Planning User’s Guide*.

**Note:** The total number of standard and custom dimensions for all Planning application types cannot exceed thirty-two.
# Properties Applicable to All Planning Dimensions

<table>
<thead>
<tr>
<th>Property Label</th>
<th>Description</th>
<th>Property Name</th>
</tr>
</thead>
<tbody>
<tr>
<td>Plan Name</td>
<td>Up to eight characters.</td>
<td>Plan1Name, Plan2Name, Plan3Name, PlanWrkforceName, PlanCapexName, PlanHCPName</td>
</tr>
<tr>
<td></td>
<td>There are six plan types available in Planning (across various applications): Plan1, Plan2, Plan3, Workforce, Capital Asset, and HCP. However, the total number of plan types for a given application cannot exceed five.</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Plan1, Plan2, and Plan3 are standard plan types that are available for all Planning applications.</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Standard Planning applications can use these additional modules: Workforce and Capital Asset.</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Public Sector Planning and Budgeting applications can use one additional module: HCP.</td>
<td></td>
</tr>
<tr>
<td></td>
<td><strong>Note:</strong> Public Sector Planning and Budgeting does not support Workforce Planning or Capital Asset Planning, so if you use those modules, set them up as separate applications.</td>
<td></td>
</tr>
<tr>
<td></td>
<td>For Workforce Planning and Capital Asset Planning, see the Oracle Hyperion Workforce Planning Administrator’s Guide and Oracle Hyperion Capital Asset Planning Administrator’s Guide. For Public Sector Planning and Budgeting, see the Oracle Hyperion Public Sector Planning and Budgeting User’s Guide.</td>
<td></td>
</tr>
<tr>
<td></td>
<td><strong>Default Value:</strong> Plan1: True, Plan2: True, Plan3: True, Workforce: False, Capital Asset: False, HCP: False</td>
<td></td>
</tr>
<tr>
<td>Valid For Plan</td>
<td>The standard Planning application has up to three plan types.</td>
<td>AppValidForPlan1, AppValidForPlan2, AppValidForPlan3, AppValidForWrkforce, AppValidForCapex</td>
</tr>
<tr>
<td></td>
<td>For Workforce Planning and Capital Asset Planning, see the Oracle Hyperion Workforce Planning Administrator’s Guide and Oracle Hyperion Capital Asset Planning Administrator’s Guide.</td>
<td></td>
</tr>
<tr>
<td></td>
<td>An Essbase database is created for each plan type. As you create accounts, entities, and other dimensions, you associate them with plan types, so the database for each plan type contains only the dimensions, members, and data values relevant to that plan type. This allows for optimal application design, size, and performance. You must set up at least one plan type. (The number of plan types depends on the needs of your organization.) You cannot reduce the number of plan types or change the plan type names after you create the application.</td>
<td></td>
</tr>
<tr>
<td></td>
<td><strong>Caution!</strong> Deselecting a plan type for dimension members after data is entered into applications may result in loss of data when applications are refreshed. For Account members, data is lost if the deselected plan type is the source plan type.</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Plan types are inherited from parents to child members. If you select a different plan type for a parent member, all descendant members in that hierarchy are also updated. To set a different plan type for certain members, select them individually and set a different property.</td>
<td></td>
</tr>
<tr>
<td></td>
<td><strong>Note:</strong> When you define the value for this property at the parent level, all descendants automatically inherit the value. If the value is overridden for a descendant member of the original parent, its own descendants inherit the new value.</td>
<td></td>
</tr>
<tr>
<td></td>
<td>This property value is a relationship value. If you make changes to this value, it is not automatically changed for the members in other hierarchies.</td>
<td></td>
</tr>
<tr>
<td></td>
<td><strong>Default Value:</strong> Plan1: True, Plan2: True, Plan3: True, Workforce: False, Capital Asset: False</td>
<td></td>
</tr>
<tr>
<td>Property Label</td>
<td>Description</td>
<td>Property Name</td>
</tr>
<tr>
<td>----------------------</td>
<td>-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------</td>
<td>-----------------------------</td>
</tr>
<tr>
<td>Date Format</td>
<td>Set the date format as MM-DD-YYYY or DD-MM-YYYY.</td>
<td>DateFormat</td>
</tr>
<tr>
<td></td>
<td>Default Value: MM-DD-YYYY</td>
<td></td>
</tr>
<tr>
<td>Default Currency</td>
<td>This is the default currency for the application and application entities.</td>
<td>DefaultCurrency</td>
</tr>
<tr>
<td></td>
<td>Default Value: N/A</td>
<td></td>
</tr>
<tr>
<td>Multiple Currencies</td>
<td>Indicates that the application supports multiple currencies. Once specified, this cannot be changed. A Currency dimension is required. Multiple currency support is available for level 0 members, regardless of base currency.</td>
<td>MultiCurrency</td>
</tr>
<tr>
<td></td>
<td>Performance Management Architect does not create Currency dimensions automatically. HSP_Rates is created during Planning application creation for multi-currency applications; it is not defined in Performance Management Architect. HSP_Rates is available in the Performance Settings dialog box to tune Planning application performance.</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Default Value: True</td>
<td></td>
</tr>
<tr>
<td>Base Time Period</td>
<td>Defines the bottom-level time period in the application to set how calendars roll up. Select the appropriate value for the Period dimension structure:</td>
<td>BaseTimePeriod</td>
</tr>
<tr>
<td></td>
<td>12 Months (months roll up into quarters, and quarters into years)</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Quarters</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Custom (such as weeks or days)</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Default Value: 12 months</td>
<td></td>
</tr>
<tr>
<td>Weeks</td>
<td>Pattern for fiscal weeks in a month: Even, 445, 454, or 544. Sets how data entered into a summary time period spreads among base time periods.</td>
<td>WeeksDistribution,</td>
</tr>
<tr>
<td></td>
<td>If you select a weekly pattern other than Even, Planning treats quarterly values as if they were divided into 13 weeks, and distributes the weeks according to the selected pattern.</td>
<td>WeeksDistributionMember</td>
</tr>
<tr>
<td></td>
<td>Weekly patterns are available only after selecting the base time period option 12 Months.</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Default Value: Even</td>
<td></td>
</tr>
<tr>
<td>Fiscal Start Year</td>
<td>The fiscal start year for the application. Fiscal Start Year uses a four digit year format, such as 2008 or 2009. Do not change this setting after creating the application.</td>
<td>AppStartYear</td>
</tr>
<tr>
<td></td>
<td>Default Value: N/A</td>
<td></td>
</tr>
<tr>
<td>Fiscal Year First Month</td>
<td>The fiscal year start month for an application that has a Base Time Period set to 12 Months. For other Base Time Period types, this field is not relevant. Do not change the Fiscal Year First Month for the application after it has been deployed.</td>
<td>StartMonth</td>
</tr>
<tr>
<td></td>
<td>Default Value: N/A</td>
<td></td>
</tr>
<tr>
<td>Property Label</td>
<td>Description</td>
<td>Property Name</td>
</tr>
<tr>
<td>----------------</td>
<td>-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------</td>
<td>---------------</td>
</tr>
</tbody>
</table>
| Default Alias Table | Required for each application. If other alias tables are not created, aliases are stored in the Default table (which cannot be deleted). You can create up to nine additional alias tables.  
To create alias tables in Performance Management Architect, create a dimension of type Alias, and create a child member named Default. This member is the default alias table required by Planning and Essbase. You can create additional alias tables by adding child members to the Alias dimension. Create dimension associations to associate the Alias dimension to the main or base dimension, such as Account, Entity, or a user-defined dimension. You can change the default alias table by selecting the Alias dimension and changing the Default Member property in the System category.  
*Default Value: default*                                                                                                                                                                                                                                                                                                                                                                                                                                                                 | DefaultAliasTable |

### Properties Common to Multiple Planning Dimensions

<table>
<thead>
<tr>
<th>Property Label</th>
<th>Description</th>
<th>Property Name</th>
</tr>
</thead>
</table>
| Valid for Plan | Plan 1, Plan 2, Plan 3, Workforce, Capital Asset, and HCP. (The Workforce, Capital Asset, and HCP plan types pertain to separate modules. See the Oracle Hyperion Workforce Planning Administrator's Guide, the Oracle Hyperion Capital Asset Planning Administrator's Guide, or the Oracle Hyperion Workforce Planning Administrator's Guide.)  
Assign plan type access for members. Not assigning a plan type to a member prevents its children from accessing that plan type. For Custom dimensions, deselecting makes all dimension members invalid for the deselected plan type.  
When moving members, if the new parent is valid for different plan types, members remain valid only for the plan types they have in common with the new parent.  
When you define the value for this property at the parent level, all descendants automatically inherit the value. If the value is overridden for a descendant member of the original parent, its own descendants inherit the new value.  
*Note:* Public Sector Planning and Budgeting does not support Workforce Planning or Capital Asset Planning, so if you use those modules, set them up as separate applications.                                                                                                                                                                                                                                                                                                                                 | AppValidForPlan1,  
AppValidForPlan2,  
AppValidForPlan3,  
AppValidForWrkforce,  
AppValidForCapex,  
AppValidForHCP |
<table>
<thead>
<tr>
<th>Property Label</th>
<th>Description</th>
<th>Property Name</th>
</tr>
</thead>
</table>
| Data Storage   | Determines how data is stored in the database and enables optimization of performance and disk usage:  
- StoreData: Stores data values of members. Do not set a parent member to Store if its children are set to Dynamic Calc; when users save and refresh data forms, the new total for the parent is not calculated.  
- NeverShare: Use for parent members that have only one child member aggregating to that parent, to apply security to the child member.  
- DynamicCalc: Use for members of dense dimensions or for data values that are being accessed concurrently by many users. In most cases, use for calculating members of sparse dimensions. Do not use for base-level members for which users enter data. Data values are not saved for Dynamic Calc members. Do not use for a parent member if data is entered for the member in target versions. Parent members set to Dynamic Calc are read-only in target versions. The Essbase limit is 100 children under a dynamic calc parent.  
  **Caution**! Changing the member storage to Dynamic Calc may result in loss of data, depending on how the data was derived. You may need to update outlines, calculations, or both to get the dynamically calculated value.  
- DynamicCalcAndStore: Calculates the data values of the member, then stores the values. In most cases, you can optimize calculations and lower disk usage by using Dynamic Calc instead of Dynamic Calc and Store when calculating members of sparse dimensions with complex formulas or members that users retrieve frequently.  
- LabelOnly: Use for virtual members to aid navigation or minimize database space, not for data. Members can display values. In multi-currency applications, you cannot apply LabelOnly data storage to the top members in these dimensions because this is where the exchange rates are stored: Entity, Versions, Currencies, and user-defined custom dimensions, which must use Never Share. Do not use for level 0 members. For data forms, do not use a label-only parent following its first child member.  
- ShareData: Allow members in the same dimension to share data values, enabling alternate rollup structures in the application. For shared members, you must set Data Storage to Share Data. Otherwise, the shared member is not added when the application is deployed to Planning.  
  When you define the value for this property at the parent level, all descendants automatically inherit the value. If the value is overridden for a descendant member of the original parent, its own descendants inherit the new value.  
  This property value is a relationship value. If you make changes to this value, it is not automatically changed for the members in other hierarchies.  
  **Default Value**: NeverShare | DataStorage |
| Two Pass Calculation | Recalculate data values of members that are based on data values of the parent member or other members. Available for Account and Entity members with Dynamic Calc or Dynamic Calc and Store properties  
  **Default Value**: False | TwoPassCalc |
| UDA | Defines any UDA (user-defined attribute) associated with the member. To enter multiple UDAs for a member, place a comma between the UDA members. For additional information on UDAs, see the Oracle Essbase Database Administrator's Guide.  
  The default UDA members are HSP_NOLINK and HSP_UDF.  
  **Default Value**: N/A | UDA |
<table>
<thead>
<tr>
<th>Property Label</th>
<th>Description</th>
<th>Property Name</th>
</tr>
</thead>
</table>
| Member Formula | An outline formula that is made up of a combination of operators, calculation functions, dimension and member names, and numeric constants to calculate values for individual members.  
  *Default Value:* N/A                                                                                                                                                                                                                     | BSOMemberFormula |
| Alias         | Defines the alias table in which to store the alias name or an alternate member name. Use naming rules defined in "Naming Restrictions for Dimensions, Members, and Aliases" on page 365.  
  *Default Value:* N/A                                                                                                                                                                                                                     | Alias         |
| Aggregation   | For Plan1, Plan2, Plan3, Workforce, Capital Asset or HCP, determine how children roll up into parents during consolidation:  
  * + (addition)  
  * - (subtraction)  
  * * (multiplication)  
  * / (division)  
  * % (percent)  
  * ~ (ignore during consolidation)  
  * Never (do not aggregate, regardless of hierarchy)  
  
  When you define the value for this property at the parent level, all descendants automatically inherit the value. If the value is overridden for a descendant member of the original parent, its own descendants inherit the new value.  
  
  This property value is a relationship value. If you make changes to this value, it is not automatically changed for the members in other hierarchies.  
  *Default Value:* Plan1: +, Plan2: +, Plan3: +, Wrkforce: ~, Capital Asset: ~, HCP: ~ | Plan1Aggregation, Plan2Aggregation, Plan3Aggregation, WrkforceAggregation, CapexAggregation, HCPAggregation |
| Data Type     | How values are stored and displayed:  
  * Currency  
  * Non Currency  
  * Percentage  
  * Smart List  
  * Date  
  * Text  
  * Unspecified  
  
  For accounts, if Data Type is set to any value except Currency, you must set Exchange Rate Type to None.  
  *Default Value:* Unspecified                                                                                                   | DataType      |
<table>
<thead>
<tr>
<th>Property Label</th>
<th>Description</th>
<th>Property Name</th>
</tr>
</thead>
<tbody>
<tr>
<td>Attribute Type</td>
<td>Attribute values to associate with the selected member, of type Text, Boolean, Date, or Number. For Planning, attribute values can only be assigned to a single level within a dimension. Create attribute values for attributes assigned to dimension members. You can filter members by attribute values when creating data forms and reports. You can assign attributes only to sparse dimensions. You cannot assign attributes to label-only members. If you need to add an attribute to a dense dimension, you must change that dimension to sparse for all plan types. If you change a dimension from sparse to dense, all attributes and attribute values for the dimension are automatically deleted. When you delete attribute members, all associated attribute values are also deleted. The values are removed from any members to which they had been assigned, and the attribute is removed from any dimensions to which it had been assigned. Default Value: Text</td>
<td>AttributeDataType</td>
</tr>
<tr>
<td>Smart List</td>
<td>A unique name containing alphanumeric and underscore characters, and no special characters or spaces. For more information, see “Creating Smart Lists.” Default Value: N/A</td>
<td>SmartList</td>
</tr>
</tbody>
</table>

**Account**

In addition to the properties described in the table, Account dimension members use most of the common properties described in “Properties Applicable to All Planning Dimensions” on page 345, such as:

- Valid for Plan
- Two Pass Calculation
- Aggregation
- UDA
- Member Formula
- Alias
- Data Storage
- Smart List
- Data Type

Accounts specify information needed from budget planners. You can define calculations in the account structure. Account dimensions must have an association with Attribute and Alias dimensions in order to assign attribute values and aliases to members of the dimension. If accounts are valid for multiple plan types, specify the source plan type to determine which database stores the account value. For accounts with Dynamic Calc or Dynamic Calc and Store properties, you can use Two Pass Calculation to recalculate data values of members that are based on data values of the parent member or other members.
<table>
<thead>
<tr>
<th>Property Label</th>
<th>Description</th>
<th>Property Name</th>
</tr>
</thead>
<tbody>
<tr>
<td>Time Balance</td>
<td>Set the method for calculating the value of summary time periods: None, Flow, First, Balance, Average, Fill, Weighted Average - Actual Actual, Weighted Average - Actual 365, Last.</td>
<td>TimeBalance</td>
</tr>
</tbody>
</table>
| Skip Value    | If the time balance property is First, Balance, or Average, specify how database calculations treat zeros and missing values when calculating parent values:  
  - None: Zeros and #MISSING values are considered  
  - Missing: Excludes #MISSING values  
  - Zeros: Excludes zero values  
  - Missing and Zeros: Excludes #MISSING and zero values  
  
  When you define the value for this property at the parent level, all descendants automatically inherit the value. If the value is overridden for a descendant member of the original parent, its own descendants inherit the new value.  
  *Default Value: None* | SkipValue |
| Expense       | Set whether the account is treated as an expense for variance reporting:  
  - Expense: Actual value is subtracted from budgeted value  
  - Non Expense: Budgeted value is subtracted from actual value  
  
  When you define the value for this property at the parent level, all descendants automatically inherit the value. If the value is overridden for a descendant member of the original parent, its own descendants inherit the new value.  
  *Default Value: Non-Expense* | VarianceReporting |
| Account Type  | Define account time balance (how values flow over time) and sign behavior for variance reporting: Expense, Revenue, Asset, Liability, Equity, and Saved Assumption.  
  
  When you define the value for this property at the parent level, all descendants automatically inherit the value. If the value is overridden for a descendant member of the original parent, its own descendants inherit the new value.  
  *Default Value: Revenue if a new member is created at root level. Otherwise it inherits the value from the parent.* | AccountType |
| Exchange Rate Type | Set how numeric values are stored in Account members and used to calculate values. This setting determines which exchange rate is used during calculations to calculate reporting currency values. For accounts with Currency data type, these options are valid for any time period:  
  - None  
  - Average: Average exchange rate  
  - Ending: Ending exchange rate  
  - Historical: Exchange rate in effect at some point  
  
  For accounts, if Data Type is set to any value except Currency, Exchange Rate Type must be set to None.  
  
  When you define the value for this property at the parent level, all descendants automatically inherit the value. If the value is overridden for a descendant member of the original parent, its own descendants inherit the new value.  
  *Default Value: Average (or None if Data Type is not set to Currency)* | ExchangeRateType |
<table>
<thead>
<tr>
<th>Property Label</th>
<th>Description</th>
<th>Property Name</th>
</tr>
</thead>
<tbody>
<tr>
<td>Source Plan Type</td>
<td>If an account is used in multiple plan types, the plan type database that stores the account value. When an Account member is moved, valid plan types are determined by what is common to the member and its new parents. If the new parent has a different source plan type, the source plan type of the member is set to the first new valid plan type of that member. When you define the value for this property at the parent level, all descendants automatically inherit the value. If the value is overridden for a descendant member of the original parent, its own descendants inherit the new value. If the new parent of an Account member has another source plan type, the source plan type is set to the first new valid plan type of that member. <em>Default Value:</em> Plan1</td>
<td>SourcePlanType</td>
</tr>
</tbody>
</table>

### Valid Combinations of Account Types and Dependent Properties

<table>
<thead>
<tr>
<th>Account Type</th>
<th>Time Balance</th>
<th>Variance Reporting</th>
<th>Purpose</th>
</tr>
</thead>
<tbody>
<tr>
<td>Revenue</td>
<td>Flow</td>
<td>Non-Expense</td>
<td>Source of income</td>
</tr>
<tr>
<td>Expense</td>
<td>Flow</td>
<td>Expense</td>
<td>Cost of doing business</td>
</tr>
<tr>
<td>Asset</td>
<td>Balance</td>
<td>Non-Expense</td>
<td>Company resource</td>
</tr>
<tr>
<td>Liability and Equity</td>
<td>Balance</td>
<td>Non-Expense</td>
<td>Residual interest or obligation to creditors</td>
</tr>
<tr>
<td>Saved Assumption</td>
<td>User-defined</td>
<td>User-defined</td>
<td>Centralized planning assumptions to ensure consistency across an application</td>
</tr>
</tbody>
</table>

### Time Balance Property Examples

Time balance and variance reporting settings are system-defined.

<table>
<thead>
<tr>
<th>Time Balance Property</th>
<th>Description</th>
<th>Example</th>
</tr>
</thead>
<tbody>
<tr>
<td>Flow</td>
<td>Aggregate of values for a summary time period as the period total.</td>
<td>Jan = 10, Feb = 15, Mar = 20, Q1 = 45</td>
</tr>
<tr>
<td>First</td>
<td>Beginning value in a summary time period as the period total.</td>
<td>Jan = 10, Feb = 15, Mar = 20, Q1 = 10</td>
</tr>
<tr>
<td>Balance</td>
<td>Ending value in a summary time period as the period total.</td>
<td>Jan = 10, Feb = 15, Mar = 20, Q1 = 20</td>
</tr>
<tr>
<td>Average</td>
<td>Average</td>
<td>Jan = 10, Feb = 15, Mar = 20, Q1 = 15</td>
</tr>
<tr>
<td>Fill</td>
<td>The value for the parent time period is filled into its descendents. If a child value changes, the default aggregation logic applies up to its parent.</td>
<td>Jan = 20, Feb = 20, Mar = 20, Q1 = 20</td>
</tr>
<tr>
<td>Time Balance Property</td>
<td>Description</td>
<td>Example</td>
</tr>
<tr>
<td>-------------------------------</td>
<td>------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------</td>
<td>------------------------------------------------------------------------</td>
</tr>
<tr>
<td>Weighted Average - Actual_Actual</td>
<td>Weighted daily average, based on the actual number of days in a year. Accounts for leap year, in which February has 29 days. In the example, the average for Q1 is calculated: (1) Multiply each value in Q1 by the number of days in the month, (2) Sum these values, (3) Divide the total by the number of days in Q1. Assuming it is a leap year, the result is calculated: ((10 \times 31 + 15 \times 29 + 20 \times 31) / 91 = 15)</td>
<td>Jan = 10, Feb = 15, Mar = 20, Q1 = 5</td>
</tr>
<tr>
<td>Weighted Average - Actual_365</td>
<td>A weighted daily average, based on 365 days in a year, assuming that February has 28 days. Does not account for leap years. In the example, the average for Q1 is calculated: (1) Multiply each value in Q1 by the number of days in the month, (2) Sum these values, (3) Divide the total by the number of days in Q1. Assuming it is not a leap year, the result is calculated: ((10 \times 31 + 15 \times 28 + 20 \times 31) / 90 = 15)</td>
<td>Jan = 10, Feb = 15, Mar = 20, Q1 = 15</td>
</tr>
</tbody>
</table>

You can use the Weighted Average - Actual_Actual and Weighted Average - Actual_365 properties only with standard monthly calendars that roll up to four quarters. For information on how Planning calculates and spreads data, see the Oracle Hyperion Planning User's Guide.

**Note:** For Planning application deployments: If Time Balance is set to Last, the property is sent to Planning as Balance; If Time Balance is set to None, the property is sent to Planning as Flow.

### Examples of Account Calculation for Zeros and Missing Values

These examples assume that Time Balance is set to First.

<table>
<thead>
<tr>
<th>Skip Option</th>
<th>Example</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>None</td>
<td>Jan = 0, Feb = 20, Mar = 25, Q1 = 0</td>
<td>The value of the first child (Jan) is 0, and zero values are considered when calculating the parent value.</td>
</tr>
<tr>
<td>Missing</td>
<td>Jan = #MISSING, Feb = 20, Mar = 25, Q1 = 20</td>
<td>The value of the first child (Jan) is #MISSING, and #MISSING values are not considered when calculating parent values, so Q1 = second child (Feb), or 20.</td>
</tr>
<tr>
<td>Zeros</td>
<td>Jan = 0, Feb = 20, Mar = 25, Q1 = 20</td>
<td>The value of the first child (Jan) is 0, and zero values are not considered when calculating parent values, so Q1 = second child (Feb), or 20.</td>
</tr>
<tr>
<td>Missing and Zeros</td>
<td>Jan = 0, Feb = #MISSING, Mar = 25, Q1 = 25</td>
<td>The value of the first child (Jan) is zero, and second child (Feb) is #MISSING. Because #MISSING and zero values are not considered when calculating parent values, Q1 = third child (Mar), or 25.</td>
</tr>
</tbody>
</table>
Currency

In addition to the properties described in the table, Currency dimension members use most of the common properties described in “Properties Applicable to All Planning Dimensions” on page 345, such as:

- Valid for Plan
- Two Pass Calculation
- UDA
- Member Formula
- Alias
- Data Storage
- Smart List
- Data Type
- Attribute Values
- Apply Security

You can plan, forecast, and analyze financial information in multiple currencies. You can set:

- Which currencies are used by applications for reporting
- How currencies display in reports and data forms
- How currencies are translated into other currencies
- Whether a third currency is used (triangulation currency)
- When currency conversions occur

For information on managing exchange rates, currency conversion, and exchange rate tables, see the Oracle Hyperion Planning Administrator’s Guide.

<table>
<thead>
<tr>
<th>Property Label</th>
<th>Description</th>
<th>Property Name</th>
</tr>
</thead>
<tbody>
<tr>
<td>Thousands Separator</td>
<td>● None: 1 000&lt;br&gt;● Comma: 1,000&lt;br&gt;● Dot: 1,000&lt;br&gt;● Space: 1 000&lt;br&gt;● Currency Setting: Setting for the currency&lt;br&gt;&lt;br&gt;&lt;i&gt;Default Value: Comma&lt;/i&gt;</td>
<td>ThousandSep</td>
</tr>
<tr>
<td>Decimal Separator</td>
<td>● Dot: 1.00&lt;br&gt;● Comma: 1,000&lt;br&gt;● Currency Setting: Setting for the currency&lt;br&gt;&lt;br&gt;&lt;i&gt;Default Value: Dot&lt;/i&gt;</td>
<td>DecimalSep</td>
</tr>
<tr>
<td>Property Label</td>
<td>Description</td>
<td>Property Name</td>
</tr>
<tr>
<td>-----------------------</td>
<td>-----------------------------------------------------------------------------</td>
<td>-----------------</td>
</tr>
</tbody>
</table>
| Negative Sign         | ● Prefixed Minus: -1000
                      ● Suffix Minus: 1000-
                      ● Parentheses: (1000)
                      ● Currency Setting: Setting for the currency | NegativeSign    |
|                       | Default Value: Prefixed Minus                                               |                 |
| Negative Color        | ● Black: Negative numbers in black
                      ● Red: Negative numbers in red
                      ● Currency Setting: Setting for the currency                             | NegativeColor   |
|                       | Default Value: Red                                                           |                 |
| Scale                 | Scaling determines the display of values in whole numbers, tens, hundreds, thousands, millions, and so on. Set how to enter and display the currency. For example, 3 yen represents 3000 yen if scaling is set to Thousands. | Scale           |
|                       | ● Whole
                      ● Tens
                      ● Hundreds
                      ● Thousands
                      ● TThousands
                      ● HThousands
                      ● Millions
                      ● TMillions
                      ● HMillions
                      ● Billions |
<p>|                       | Default Value: Whole                                                         |                 |
| Currency Code         | Market-established abbreviation for the currency name, or custom currency code that you create. | CurrencyCode    |
|                       | Default Value: N/A                                                            |                 |
| Symbol                | Market-established currency symbol for the currency name, for example, $ for US Dollars. | Symbol          |
|                       | Default Value: N/A                                                            |                 |
| Triangulation Currency| Interim currency for currency conversion. If you modify a triangulation currency, you must re-enter exchange rates for the triangulation currency property and refresh the application to transfer and store the exchange rates. You cannot select the default currency as a triangulation currency. When you define the value for this property at the parent level, all descendants automatically inherit the value. If the value is overridden for a descendant member of the original parent, its own descendants inherit the new value. | TriangulationCurrency |
|                       | Default Value: N/A                                                            |                 |</p>
<table>
<thead>
<tr>
<th>Property Label</th>
<th>Description</th>
<th>Property Name</th>
</tr>
</thead>
<tbody>
<tr>
<td>Reporting Currency</td>
<td>Currency used to prepare financial statements. Converted reporting currency values are stored and read-only for all users. Default Value: N/A</td>
<td>ReptCurrency</td>
</tr>
</tbody>
</table>

**Entity**

In addition to the properties described in the table, Entity dimension members use most of the common properties described in “Properties Applicable to All Planning Dimensions” on page 345, such as:

- Valid for Plan
- Aggregation
- UDA
- Member Formula
- Alias
- Data Storage
- Smart List
- Data Type
- Attribute Values

You can create Entity members for groups that submit plans for approval, such as regions, countries, and departments. Data forms support multiple currencies per entity, enabling data entry for multiple currencies and reporting against one currency. You can set the currency for entered values, which are converted to other currencies with defined exchange rates.

The Entity dimension requires an association with the Currency dimension in order to enter a value for Base Currency. For multi-currency applications, the Currency dimension must be associated with the base entity dimension. Entity dimensions require an association with Attribute and Alias dimensions to be able to assign attribute values and aliases to members of the dimension. You can activate associations for applications in the Shared Library by right-clicking the name and selecting Activate all Associations.

Typically, Entity members prepare different plans. When defining Entity members, specify plan types for which they are valid. Because data forms are associated with plan types, you can control which entity members can enter data for each plan type.
<table>
<thead>
<tr>
<th>Property Label</th>
<th>Description</th>
<th>Property Name</th>
</tr>
</thead>
<tbody>
<tr>
<td>Currency</td>
<td>Enter the three-letter currency code, for example, USD (for US dollars). For multi-currency applications, specify the base currency for each Entity member. Not applicable for aggregate storage outlines. When you define the value for this property at the parent level, all descendants automatically inherit the value. If the value is overridden for a descendant member of the original parent, its own descendants inherit the new value. <strong>Default Value:</strong> Application’s default currency</td>
<td>Currency</td>
</tr>
</tbody>
</table>

### Period

In addition to the properties described in the table, Period dimension members use most of the common properties described in “Properties Applicable to All Planning Dimensions” on page 345, such as:

- Valid for Plan
- Aggregation
- UDA
- Member Formula
- Alias
- Data Storage
- Smart List
- Data Type
- Attribute Values

Use the Period dimension to view and change the yearly rollup structure. You can specify base time periods and the number of weeks.

After the calendar is created, you cannot change the base time period. An application can have up to 500 time periods. Actual limits are defined by a combination of calendar years and time periods. The number of time periods and years also depends on whether your application uses multiple currencies. These practical limits are recommended: 400 time periods per year and 27 years, or 360 time periods per year and 30 years.

You can add and change summary time periods or the BegBalance member, including updating the name, description, alias, starting period, and ending period. You cannot skip or change the order of base time periods. The range cannot extend beyond the current fiscal year. To enforce a balanced hierarchy for 12 Month and Quarterly base Time Periods, all base members must be the same number of levels from the root.

For a successful first deployment, Planning applications must include the required members, BegBalance and YearTotal, and you must not rename these members prior to the first deployment. (YearTotal is the summary time period that aggregates Quarters or Weeks for
custom time periods.) After the first deployment, however, you can rename the BegBalance and YearTotal members in the Application Library.

**Note:** If renaming the BegBalance and YearTotal members caused the first deployment to fail, rename them “BegBalance” and “YearTotal”, redeploy the application, and then rename these members again with unique names in the Application Library.

After you create the Period dimension and deploy the application to Planning, you cannot change the order of the members.

<table>
<thead>
<tr>
<th>Property Label</th>
<th>Description</th>
<th>Property Name</th>
</tr>
</thead>
<tbody>
<tr>
<td>Use Beginning Balance</td>
<td>Whether to use the BegBalance time period.</td>
<td>UseBegBalance</td>
</tr>
<tr>
<td></td>
<td><em>Default Value: N/A</em></td>
<td></td>
</tr>
<tr>
<td>Period Type</td>
<td>The type of Period: Base Time Period, Summary Time Period, Year Time Period, or Alternate Time Period.</td>
<td>PeriodType</td>
</tr>
</tbody>
</table>

**Considerations for Alternate Hierarchies in Period Dimensions**

When using alternate hierarchies, note these considerations:

- The Period type **Alternate Time Period** must be set on all alternate hierarchy members.
- The parent for an alternate hierarchy member can be either the root member of the Period dimension (such as Period) or another alternate hierarchy member.

**Scenario**

In addition to the properties described in the table, Scenario dimension members use most of the common properties described in “Properties Applicable to All Planning Dimensions” on page 345, such as:

- Valid for Plan
- Aggregation
- UDA
- Member Formula
- Alias
- Data Storage
- Smart List
- Data Type
You can create Scenario dimensions to group data. Each Scenario contains data for accounts and other dimensions of each entity. After users enter Entity and Version data, they can submit or promote the data to other users for review and approval. The intersection of Entity, Scenario, and Version is called a planning unit. Planning tracks planning unit status through the review process. Scenarios can cover different time spans. The Scenario dimension requires an association with Period and Year dimensions to enter start and end time period values.

Use scenarios to:

- Apply different planning methods.
- Create forecasts and budgets.
- Store historical actuals.

<table>
<thead>
<tr>
<th>Property Label</th>
<th>Description</th>
<th>Property Name</th>
</tr>
</thead>
<tbody>
<tr>
<td>Enable Process Management</td>
<td>Whether the Scenario is enabled for process management. This allows managing a planning unit that contains this member. Default Value: True</td>
<td>EnableProcessManagement</td>
</tr>
<tr>
<td>Start Year, End Year, Start Period, End Period</td>
<td>A range of years and time periods for which the Scenario is valid. When users access data forms, they can enter into that scenario only years and periods within the range. You can modify the time range of scenarios. Default Value: N/A</td>
<td>StartYear, EndYear, StartPeriod, EndPeriod</td>
</tr>
<tr>
<td>Use Beginning Balance</td>
<td>Whether to use the BegBalance time period. Default Value: N/A</td>
<td>UseBegBalance</td>
</tr>
<tr>
<td>Exchange Rate Table</td>
<td>Only for multi-currency applications. Assign an exchange rate table to the scenario. Default Value: N/A</td>
<td>ExchangeRateTable</td>
</tr>
</tbody>
</table>

You can specify access permissions for Scenario members to determine whether groups or users can view or modify data. For information about setting access permissions for Planning, see the Oracle Hyperion Planning Administrator’s Guide.

When you delete a Scenario, all planning units that use the Scenario (including data) are deleted. You cannot delete a Scenario that is used in a planning unit that is started or assigned to an axis (row or column) on a data form. You must first remove references to the Scenario from data forms and assign a different Scenario.

Version

In addition to the properties described in the table, Version dimension members use most of the common properties described in “Properties Applicable to All Planning Dimensions” on page 345, such as:

- Valid for Plan
- Aggregation
● UDA
● Member Formula
● Alias
● Data Storage
● Smart List
● Data Type

Use the Version dimension to:

● Provide multiple iterations of a plan, such as preliminary and final
● Model possible outcomes based on assumptions such as best case and worst case
● Control plan data, such as internal and external
● Facilitate target setting

Versions are independent of Scenarios. You can change Version names and access permissions. The application must have at least one Version. For information on setting access permissions, see the Oracle Hyperion Planning Administrator’s Guide.

Table 40  Version Properties

<table>
<thead>
<tr>
<th>Property Label</th>
<th>Description</th>
<th>Property Name</th>
</tr>
</thead>
<tbody>
<tr>
<td>Enable Process Management</td>
<td>Select whether the Version is enabled for process management. This allows for managing a planning unit that contains this Version member. Not available for target versions. Default Value: N/A</td>
<td>EnableProcessManagement</td>
</tr>
<tr>
<td>Version Type</td>
<td>Target: Users enter data for members at any level, and use business rules to distribute values from parent members to descendants. Use target versions to set high-level targets for plans. Planners working with bottom-up versions can reference targets when entering plan data. Target versions use top-down budgeting. Workflow tasks are not allowed, and children of target members must be blank (for example, #MISSING) to enable data input at the top level. Target members must be set to Store (Dynamic Calc overrides data input with the sum of children). Bottom Up: Users enter data into bottom-level members. Parent-level members are read-only. Values for parent members are aggregated from bottom level members. Default Value: Bottom Up</td>
<td>VersionType</td>
</tr>
</tbody>
</table>

Year

Year dimension members use most of the common properties described in “Properties Applicable to All Planning Dimensions” on page 345, such as:

● Valid for Plan
● UDA
Use the Year dimension to add years to the calendar. Year dimension names must start with FY, followed by a two-digit year, such as FY08. Fiscal Start Year is based on the first Year member in the Year dimension structure. You cannot modify the Fiscal Start Year of an application after it is deployed. However, you can add years on to the end of the initial year range identified.

The first year member in the Year dimension and Fiscal Start Year property must describe the same year. For example, if the Fiscal Start Year is 2008, the first year in the Year dimension must be FY08. If there is a discrepancy between the years, such as 2008 and FY07, an error displays and the application cannot be deployed.

You can add, change, or assign aliases to years. You cannot reduce the number of calendar years unless you create a new database. Performance Management Architect adds No Year as a system member, as the first member in the Year dimension. In Performance Management Architect, No Year is saved as the first member in the Year dimension, but it is saved as the last year in the Planning repository.

### Custom Dimensions

In addition to the properties described in the table, Account dimension members use most of the common properties described in “Properties Applicable to All Planning Dimensions” on page 345, such as:

- Valid for Plan
- Two Pass Calculation
- Aggregation
- UDA
- Member Formula
- Alias
- Data Storage
- Smart List
- Data Type

Use the Apply Security property to apply security to the custom dimensions. Custom dimensions must follow the naming conventions in “Naming Restrictions for Dimensions, Members, and Aliases” on page 365. Ensure that dimension names and aliases are unique. They can contain up to 80 characters, including spaces. Descriptions have up to 255 characters.
PlanningAliases

Aliases are alternate names, descriptions, languages, or other items that help define dimensions. You can assign aliases to accounts, currencies, entities, scenarios, periods, versions, years, and user-defined dimension members.

If a base dimension, such as Entity, has an active association with the Alias dimension, and an entity member has an alias defined for the selected alias table, the alias is displayed in the Alias field in the Planning category. When applications are deployed to Planning, child members of the Alias dimension become Alias Tables, and must include a member named Default. Alias names must follow naming requirements described in “Naming Restrictions for Dimensions, Members, and Aliases” on page 365.

PlanningAttributes

You can use attributes to facilitate grouping, selecting, or calculating data by creating hierarchies and assigning aliases. Attribute names must be unique, and must follow the naming conventions in “Naming Restrictions for Dimensions, Members, and Aliases” on page 365. Attribute data type can include Text, Boolean, Date, Numeric. For detailed information about attributes and attribute values, see the Oracle Essbase Database Administrator’s Guide.

You can assign attributes only to sparse dimensions. When sparse dimensions are changed to dense, all attributes and attribute values for the dimension are automatically deleted. You cannot assign attributes to label-only members. Dimensions such as Entity and Product must be associated with Attribute and Alias dimensions to enable assigning attribute values and aliases.

Before upgrading Classic Planning applications to Performance Management Architect, you must remove any spaces in the names of attribute dimensions.

If you change or delete attributes, you must update and validate business rules, reports, and data forms. When you delete attributes, all associated attribute values are deleted and removed from custom dimension members to which they are assigned. When using Import Profiles to load attribute values, you must create attribute dimensions before loading. Note, before upgrading applications, you must remove spaces in attribute dimension names.

Working with Planning 9.3.1 and Performance Management Architect

If you are using Planning 9.3.1 with the current release of Performance Management Architect, you can use most of the current Performance Management Architect features. However, some features are not available with Planning 9.3.1, such as creating data sources and using the new attribute types, Boolean, Date, and Number. For compatibility information, see the Oracle Hyperion Enterprise Performance Management System Installation Start Here guide.
Considerations for Working with Public Sector Planning and Budgeting

For Planning applications enabled for Public Sector Planning and Budgeting, the Performance Management Architect dimension aliases Employee, Position, and Budget Item must retain their predefined names when the application is validated, deployed, or transformed from Classic Planning to Performance Management Architect. For more information, see the Oracle Hyperion Public Sector Planning and Budgeting User’s Guide.

Considerations for Working with Essbase

Creating and refreshing on the Planning Manage Database page affects data in the Essbase database. When you click Create, data is erased and Planning plan types are rebuilt. When you click Refresh, data might be replaced. For important information, see the Oracle Hyperion Planning Administrator’s Guide.

If you transform an application created in Classic application administration to Performance Management Architect, you cannot return to working with that application in Classic application administration. Modifying Essbase outlines directly through Oracle Essbase Administration Services is not supported.

When you refresh Planning applications, the Essbase database makes these changes:

- If a member does not exist in the Planning relational database, the member and its properties, attributes, and User-Defined Attributes (UDAs) are not retained in Essbase on Refresh.
- Planning first retrieves member properties from any existing member in Essbase, then sets and overrides any member property definable in Planning.

This behavior is different from prior releases, where the refresh process was incremental and retained modifications made directly to the outline in Essbase, even where those members, attributes, and UDAs did not exist in Planning.

The HSP_UDF UDA preserves member formulas defined outside of Performance Management Architect. Unassigning them through Performance Management Architect refresh does not unassign the UDAs from members in the Essbase outline. If a member with the HSP_UDF UDA is added directly in Essbase, refreshing the database preserves any formula on this member in Essbase, and does not generate a formula placeholder (;) on members that are level zero and dynamic calc. Other UDAs, such as custom UDAs and the HSP_NOLINK UDA, are retained only if defined in Performance Management Architect or in Planning (for Classic applications).

Because member formula support is available in Performance Management Architect and Planning (for Classic applications) there is less need for the HSP_UDF UDA. Every effort should be made to define UDAs in Performance Management Architect or in Planning (for Classic applications).

The @XREF function looks up a data value from another database to calculate a value from the current database. You can add the HSP_NOLINK UDA to members to prevent the @XREF function from being created on all plan types that are not the source plan type selected for that member.
For more information on UDAs and functions, see the *Oracle Essbase Database Administrator’s Guide*.

It is not necessary to modify Essbase outlines directly for the most commonly used Essbase member properties. Performance Management Architect and Planning support Dynamic Time Series in the Period dimension, alternate hierarchy in the Period dimension, hierarchies in Scenario and Version dimensions, and hierarchy and aliases for attribute dimensions.

Use these guidelines for working in Essbase while logged on as a supervisor or application administrator:

- Do not change dense/sparse dimension settings or the order of dimensions in Essbase.
- You can use any attribute dimension type, including text, Boolean, numeric, and date.
- Do not use Link Reporting Objects (LRO).
- Do not change the Time Balance default settings. The defaults are Ending for Balance and None for Flow.
- Do not change the Variance Reporting settings. These are preset for all account types except Saved Assumptions. For Saved Assumptions account types, Expense and Non-Expense are valid settings.
- Back up the database before refreshing.

### Naming Restrictions for Applications (Essbase)

For detailed information on creating Essbase applications and databases, see the Essbase product documentation.

When naming Planning or Essbase reporting applications, follow these rules:

- For non-Unicode mode applications and databases, use no more than 8 characters; for Unicode-mode applications and databases, use no more than 30 characters.
- Do not use spaces.
- Do not use these special characters:
  - asterisks
  - backslashes
  - brackets
  - colons
  - commas
  - equal signs
  - greater than signs
  - less than signs
  - periods
  - plus signs
For Planning application names in relational database environments, do not use extended characters (except for underscores).

For aggregate storage databases, do not use DEFAULT, LOG, METADATA, or TEMP as application names.

Enter names in the preferred case. Application names are created exactly as entered.

Naming Restrictions for Dimensions, Members, and Aliases

When naming dimensions, members, and aliases, follow these rules:

- For non-Unicode mode dimensions, members, or aliases, use no more than 80 single byte characters. For Unicode-mode dimensions, members, or aliases, use no more than 80 characters (multi-byte characters are counted as a single character).
- Distinguish between upper and lower case only if case sensitivity is enabled.
- Do not use HTML tags in member names, dimension names, aliases, and descriptions.
- Do not use quotation marks, brackets, back slashes, or tabs. Brackets are permitted but not recommended in block storage outlines. They cause errors when converting to aggregate storage outlines.
- To begin dimension or member names, do not use these characters:
  - at signs
  - backslashes
  - brackets
  - commas
  - dashes, hyphens, or minus signs
  - equal signs
  - less than signs
  - parentheses
  - periods
  - plus signs
  - quotation marks
underscores
vertical bars

Do not place spaces at the beginning or end of names. Essbase ignores such spaces.

Do not use forward slashes in member names.

For time periods in custom calendars, do not use spaces in prefixes.

Do not use these words as names of dimensions, members, or aliases:

- Calculation script commands, operators, and keywords; for a list of commands, see the Essbase product documentation.
- Report Writer commands; for a list of commands, see the Oracle Essbase Technical Reference.
- Function names and function arguments.
- Names of other dimensions and members (unless the member is shared), and generation names, level names, and aliases in the database.
- Reserved words: for a list of the reserved words for Financial Management, Profitability and Cost Management, Essbase, and Planning, see these guides:
  - Oracle Hyperion Financial Management Administrator’s Guide
  - Oracle Hyperion Profitability and Cost Management Administrator’s Guide
  - Oracle Essbase Technical Reference
  - Oracle Hyperion Planning Administrator’s Guide

If Dynamic Time Series is enabled, do not use History, Year, Season, Period, Quarter, Month, Week, or Day.

Working with Planning Flat Files

You can create .ads flat files to import metadata into Performance Management Architect as described in “Creating Flat Files” on page 49. When loading metadata for Planning applications, keep in mind that you cannot load exchange rates into Performance Management Architect. For Planning applications, you can use regular or simple flat files, as shown in the examples in the following sections.

Sample Planning Flat Files (Regular)

This example shows a regular flat file that can be used for Planning.
![FILE_FORMAT=ADS](image)

**!VERSION=1.0**

**!Section=Dimensions**

<table>
<thead>
<tr>
<th>Name</th>
<th>DimensionClass</th>
<th>DimensionAlias</th>
<th>DimDataStorage</th>
<th>Plan1Density</th>
<th>Plan2Density</th>
<th>Plan3Density</th>
<th>WorkforceDensity</th>
<th>CapexDensity</th>
<th>EnumOrder1</th>
<th>EnumOrder2</th>
<th>EnumOrder3</th>
<th>EnumOrderWF</th>
<th>EnumOrderCapex</th>
<th>DimValidForPlan1</th>
<th>DimValidForPlan2</th>
<th>DimValidForPlan3</th>
<th>DimValidForWorkforce</th>
<th>DimValidForCapex</th>
</tr>
</thead>
<tbody>
<tr>
<td>Account</td>
<td>Account</td>
<td>Account</td>
<td>NeverShare</td>
<td>Dense</td>
<td>Dense</td>
<td>Dense</td>
<td>Dense</td>
<td>Dense</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>Y</td>
<td>Y</td>
<td>Y</td>
<td>N</td>
<td>N</td>
</tr>
<tr>
<td>Currency</td>
<td>Currency</td>
<td>Currency</td>
<td>NeverShare</td>
<td>Sparse</td>
<td>Sparse</td>
<td>Sparse</td>
<td>Sparse</td>
<td>Sparse</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>Y</td>
<td>Y</td>
<td>Y</td>
<td>Y</td>
<td>N</td>
</tr>
<tr>
<td>Entity</td>
<td>Entity</td>
<td>Entity</td>
<td>NeverShare</td>
<td>Dense</td>
<td>Dense</td>
<td>Dense</td>
<td>Dense</td>
<td>Dense</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>Y</td>
<td>Y</td>
<td>Y</td>
<td>N</td>
<td>N</td>
</tr>
<tr>
<td>NewCustomDimension</td>
<td>Generic</td>
<td>NewCustomDimension</td>
<td>NeverShare</td>
<td>Sparse</td>
<td>Sparse</td>
<td>Sparse</td>
<td>Sparse</td>
<td>Sparse</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>Y</td>
<td>Y</td>
<td>Y</td>
<td>N</td>
<td>N</td>
</tr>
<tr>
<td>Period</td>
<td>Period</td>
<td>Period</td>
<td>NeverShare</td>
<td>Dense</td>
<td>Dense</td>
<td>Dense</td>
<td>Dense</td>
<td>Dense</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>Y</td>
<td>Y</td>
<td>N</td>
<td>Y</td>
<td>N</td>
</tr>
<tr>
<td>Scenario</td>
<td>Scenario</td>
<td>Scenario</td>
<td>NeverShare</td>
<td>Sparse</td>
<td>Sparse</td>
<td>Sparse</td>
<td>Sparse</td>
<td>Sparse</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>Y</td>
<td>Y</td>
<td>N</td>
<td>Y</td>
<td>N</td>
</tr>
<tr>
<td>Version</td>
<td>Version</td>
<td>Version</td>
<td>NeverShare</td>
<td>Sparse</td>
<td>Sparse</td>
<td>Sparse</td>
<td>Sparse</td>
<td>Sparse</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>Y</td>
<td>Y</td>
<td>N</td>
<td>Y</td>
<td>Y</td>
</tr>
<tr>
<td>Year</td>
<td>Year</td>
<td>Year</td>
<td>NeverShare</td>
<td>Sparse</td>
<td>Sparse</td>
<td>Sparse</td>
<td>Sparse</td>
<td>Sparse</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>Y</td>
<td>Y</td>
<td>N</td>
<td>Y</td>
<td>N</td>
</tr>
<tr>
<td>Alias</td>
<td>Alias</td>
<td>Alias</td>
<td>NeverShare</td>
<td>Dense</td>
<td>Dense</td>
<td>Dense</td>
<td>Dense</td>
<td>Dense</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>Y</td>
<td>Y</td>
<td>Y</td>
<td>N</td>
<td>N</td>
</tr>
</tbody>
</table>

**!Section=DimensionAssociations**

<table>
<thead>
<tr>
<th>BaseDimension</th>
<th>Property</th>
<th>TargetDimension</th>
</tr>
</thead>
<tbody>
<tr>
<td>Colors</td>
<td>Alias</td>
<td>Alias</td>
</tr>
<tr>
<td>Account</td>
<td>Alias</td>
<td>Alias</td>
</tr>
<tr>
<td>Currency</td>
<td>Alias</td>
<td>Alias</td>
</tr>
<tr>
<td>Currency</td>
<td>TriangulationCurrency</td>
<td>Currency</td>
</tr>
<tr>
<td>Entity</td>
<td>Alias</td>
<td>Alias</td>
</tr>
<tr>
<td>Entity</td>
<td>Currency</td>
<td>Currency</td>
</tr>
<tr>
<td>Entity</td>
<td>Colors</td>
<td>Colors</td>
</tr>
<tr>
<td>NewCustomDimension</td>
<td>Alias</td>
<td>Alias</td>
</tr>
<tr>
<td>Period</td>
<td>Alias</td>
<td>Alias</td>
</tr>
<tr>
<td>Scenario</td>
<td>Alias</td>
<td>Alias</td>
</tr>
<tr>
<td>Scenario</td>
<td>StartPeriod</td>
<td>Period</td>
</tr>
<tr>
<td>Scenario</td>
<td>EndPeriod</td>
<td>Period</td>
</tr>
<tr>
<td>Scenario</td>
<td>StartYear</td>
<td>Year</td>
</tr>
<tr>
<td>Scenario</td>
<td>EndYear</td>
<td>Year</td>
</tr>
<tr>
<td>Version</td>
<td>Alias</td>
<td>Alias</td>
</tr>
<tr>
<td>Year</td>
<td>Alias</td>
<td>Alias</td>
</tr>
<tr>
<td>smartLists</td>
<td>Alias</td>
<td>Alias</td>
</tr>
</tbody>
</table>

**!Members=Colors**

<table>
<thead>
<tr>
<th>Name</th>
<th>DataType</th>
<th>SourcePlanType</th>
<th>AccountType</th>
<th>VarianceReporting</th>
<th>TimeBalance</th>
<th>SmartList</th>
<th>UDA</th>
<th>TwoPassCalc</th>
<th>SkipValue</th>
<th>Description</th>
<th>BSOMemberFormula</th>
</tr>
</thead>
<tbody>
<tr>
<td>blue</td>
<td>Currency</td>
<td>Plan1</td>
<td>Revenue</td>
<td>NonExpense</td>
<td>Flow</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**!Hierarchies=Colors**

<table>
<thead>
<tr>
<th>Parent</th>
<th>Child</th>
<th>DataStorage</th>
</tr>
</thead>
<tbody>
<tr>
<td>#root</td>
<td>blue</td>
<td></td>
</tr>
<tr>
<td>#root</td>
<td>green</td>
<td></td>
</tr>
<tr>
<td>#root</td>
<td>purple</td>
<td></td>
</tr>
</tbody>
</table>

**!Members=Account**

<table>
<thead>
<tr>
<th>Name</th>
<th>DataType</th>
<th>SourcePlanType</th>
<th>AccountType</th>
<th>VarianceReporting</th>
<th>TimeBalance</th>
<th>SmartList</th>
<th>UDA</th>
<th>TwoPassCalc</th>
<th>SkipValue</th>
<th>Description</th>
<th>BSOMemberFormula</th>
</tr>
</thead>
<tbody>
<tr>
<td>100</td>
<td>Currency</td>
<td>Plan1</td>
<td>Revenue</td>
<td>NonExpense</td>
<td>Flow</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Hierarchies=Account

'Parent|Child|DataStorage|ExchangeRateType|MemberValidForPlan1|MemberValidForPlan2|
MemberValidForPlan3|MemberValidForWorkforce|MemberValidForCapex|Plan1Aggregation|
Plan2Aggregation|Plan3Aggregation|WorkforceAggregation
#root|100|NeverShare|Average|Y|Y|Y|||+|+|+|+

Hierarchies=Account

'Property|Name|Key|Value
Alias|100|Aliases_Table_1|Aliases_Table_1 100
Alias|100|Aliases_Table_2|Aliases_Table_2 100
Alias|100|Aliases_Table_3|Aliases_Table_3 100
Alias|100|Aliases_Table_4|Aliases_Table_4 100
Alias|100|Default|Alias_100

Hierarchies=Currency

'Parent|Child|DataStorage|MemberValidForPlan1|MemberValidForPlan2|MemberValidForPlan3|
MemberValidForWorkforce|MemberValidForCapex
#root|Local|StoreData|Y|Y|Y|N|
#root|USD|StoreData|Y|Y|Y|
#root|DEM|StoreData|Y|Y|Y|
#root|EUR|StoreData|Y|Y|Y|
#root|FRF|StoreData|Y|Y|Y|
#root|IEP|StoreData|Y|Y|Y|

Members=Currency

'Name|DataType|Currency|SmartList|UDA|Colors|Description
Local|Unspecified-null|Unspecified|null|None|Dot||Black|N|||Local currency
USD|Unspecified|$|Whole|None|Dot||Black|Y|Y|||United States of America dollar
DEM|Unspecified|DM|Whole|None|Dot||Black|Y|Y|||Germany deutsche mark
EUR|Unspecified|EUR|Whole|None|Dot||Black|Y|Y|||European Union Euro
FRF|Unspecified|FRF|Whole|None|Dot||Black|Y|Y|||France franc
IEP|Unspecified|IEP|Whole|None|Dot||Black|Y|Y|||Ireland punt

Members=Entity

'Name|DataType|Currency|SmartList|UDA|Colors|Description
ParentMMM|Unspecified|USD|||ParentMMM
Mem_3|Unspecified|USD|||Mem_3
Mem_2|Unspecified|USD|||Mem_2
Mem_1|Unspecified|USD|||Mem_1
ParentMMM_Shared|Unspecified|USD|||ParentMMM_Shared
Canada|Unspecified|USD|||Canada
United States|Unspecified|USD|||United States
Washington|Unspecified|USD|||Washington
East|Unspecified|USD|||East
NY|Unspecified|USD|||NY
West|Unspecified|USD|||West
CA|Unspecified|USD|||CA
WA|Unspecified|USD|||WA
NJ|Unspecified|USD|||

!Hierarchies=Entity
'Parent|Child|DataStorage|MemberValidForPlan1|MemberValidForPlan2|MemberValidForPlan3|
MemberValidForWorkforce|MemberValidForCapex|Plan1Aggregation|Plan2Aggregation|
Plan3Aggregation|WorkforceAggregation
#root|ParentMMM|NeverShare|Y|Y|Y|N|++|+|+
ParentMMM|Mem_3|NeverShare|Y|Y|Y|N|++|+|+
ParentMMM|Mem_2|NeverShare|Y|Y|Y|N|++|+|+
ParentMMM|Mem_1|NeverShare|Y|Y|Y|N|++|+|+
#root|ParentMMM_Shared|NeverShare|Y|Y|Y|N|++|+|+
ParentMMM_Shared|Mem_3|ShareData|Y|Y|N|++|+|+
ParentMMM_Shared|Mem_2|ShareData|Y|Y|N|++|+|+
ParentMMM_Shared|Mem_1|ShareData|Y|Y|N|++|+|+
#root|Canada|NeverShare|Y|Y|Y|N|++|+|+
#root|United States|NeverShare|Y|Y|Y|N|++|+|+
United States|Oregon|NeverShare|Y|Y|Y|N|++|+|+
United States|California|NeverShare|Y|Y|Y|N|++|+|+
California|San Francisco|NeverShare|Y|Y|Y|N|++|+|+
United States|Washington|NeverShare|Y|Y|Y|N|++|+|+
#root|East|NeverShare|Y|Y|Y|N|++|+|+
East|NY|NeverShare|Y|Y|Y|N|++|+|+
#root|West|NeverShare|Y|Y|Y|N|++|+|+
West|CA|NeverShare|Y|Y|Y|N|++|+|+
West|WA|NeverShare|Y|Y|Y|N|++|+|+
West|NJ|NeverShare|Y|Y|Y|N|++|+|+

!PropertyArray=Entity
'Property|Name|Key|Value
Alias|Canada|Default|Alias_Canada
Alias|United States|Default|Alias_United States
Alias|Oregon|Default|Alias_Oregon
Alias|California|Default|Alias_California
Alias|San Francisco|Default|Alias_San Francisco
Alias|Washington|Default|Alias_Washington

!Members=NewCustomDimension
'Name|DataType|SmartList|UDA|Description
One|Unspecified|++|+

!Hierarchies=NewCustomDimension
'Parent|Child|DataStorage|MemberValidForPlan1|MemberValidForPlan2|MemberValidForPlan3|
MemberValidForWorkforce|MemberValidForCapex|Plan1Aggregation|Plan2Aggregation|
Plan3Aggregation|WorkforceAggregation
#root|One|NeverShare|Y|Y|Y|N|++|+|+

!PropertyArray=NewCustomDimension
'Property|Name|Key|Value
Alias|One|Default|Alias_One

!Members=Period
'Name|DataType|SmartList|UDA|Description
BegBalance|Unspecified|++|+
YearTotal|Unspecified|++|+
Q1|Unspecified|++|+
Jan|Unspecified|++|+
Feb|Unspecified|++|+
Mar|Unspecified|||
Q2|Unspecified|||
Apr|Unspecified|||
May|Unspecified|||
Jun|Unspecified|||
Q3|Unspecified|||
Jul|Unspecified|||
Aug|Unspecified|||
Sep|Unspecified|||
Q4|Unspecified|||
Oct|Unspecified|||
Nov|Unspecified|||
Dec|Unspecified|||

!Hierarchies=Period

'Parent|Child|DataStorage|MemberValidForPlan1|MemberValidForPlan2|MemberValidForPlan3|
MemberValidForWorkforce|MemberValidForCapex|PeriodType
#root|BegBalance|StoreData|Y|Y|N|N|Base Time Period
#root|YearTotal|StoreData|Y|Y|N|N|Year Time Period

YearTotal|Q1|StoreData|Y|Y|N|N|Summary Time Period
Q1|Jan|StoreData|Y|Y|N|N|Base Time Period
Q1|Feb|StoreData|Y|Y|N|N|Base Time Period
Q1|Mar|StoreData|Y|Y|N|N|Base Time Period
YearTotal|Q2|StoreData|Y|Y|N|N|Year Time Period
Q2|Apr|StoreData|Y|Y|N|N|Base Time Period
Q2|May|StoreData|Y|Y|N|N|Base Time Period
Q2|Jun|StoreData|Y|Y|N|N|Base Time Period
YearTotal|Q3|StoreData|Y|Y|N|N|Year Time Period
Q3|Jul|StoreData|Y|Y|N|N|Base Time Period
Q3|Aug|StoreData|Y|Y|N|N|Base Time Period
Q3|Sep|StoreData|Y|Y|N|N|Base Time Period
YearTotal|Q4|StoreData|Y|Y|N|N|Year Time Period
Q4|Oct|StoreData|Y|Y|N|N|Base Time Period
Q4|Nov|StoreData|Y|Y|N|N|Base Time Period
Q4|Dec|StoreData|Y|Y|N|N|Base Time Period

!PropertyArray=Period

'Property|Name|Key|Value
Alias|Aug|Default|Alias_Aug_New

!Members=Scenario

'Name|DataType|StartYear|EndYear|StartPeriod|EndPeriod|UseBegBalance|
EnableProcessManagement|SmartList|ExchangeRateTable|UDA|Description
Current|Unspecified|FY06|FY09|Jan|Dec|N|Y|||
A_Scenario|Unspecified|FY06|FY06|Jan|Jan|N|Y|||A_FXRate|||
B_Scenario|Unspecified|FY06|FY06|Jan|Dec|N|Y|||A_FXRate|||

!Hierarchies=Scenario

'Parent|Child|DataStorage|MemberValidForPlan1|MemberValidForPlan2|MemberValidForPlan3|
MemberValidForWorkforce|MemberValidForCapex
#root|Current|StoreData|Y|Y|Y|
#root|A_Scenario|StoreData|Y|Y|N|
#root|B_Scenario|StoreData|Y|Y|N|

!PropertyArray=Scenario

'Property|Name|Key|Value
Alias|A_Scenario|Default|Alias_A_Scenario

370
Alias|B,_Scenario|Default|Alias_B,_Scenario

!Members=Version
'Name|DataType|VersionType|EnableProcessManagement|SmartList|UDA|Description
BU Version_1|Unspecified|BottomUp|Y|Y|||
A_Version|Unspecified|BottomUp|Y|Y|||
B,_Version|Unspecified|BottomUp|Y|Y|||
C,_Version|Unspecified|Target|N|N|||
D_Version|Unspecified|Target|N|N|||

!Hierarchies=Version
'Parent|Child|DataStorage|MemberValidForPlan1|MemberValidForPlan2|MemberValidForPlan3|
MemberValidForWorkforce|MemberValidForCapex
#root|BU Version_1|StoreData|Y|Y|Y|N|
#root|A_Version|StoreData|Y|Y|Y|N|
#root|B,_Version|StoreData|Y|Y|Y|N|
#root|C,_Version|StoreData|Y|Y|Y|N|
#root|D_Version|StoreData|Y|Y|Y|N|

!PropertyArray=Version
'Property|Name|Key|Value
Alias|A_Version|Default|Alias_A_Version
Alias|B,_Version|Default|Alias_B,_Version
Alias|C,_Version|Default|Alias_C,_Version
Alias|D_Version|Default|Alias_D_Version

!Members=Year
'Name|DataType|SmartList|UDA|Description
FY06|Unspecified|Y|Y|Y|N|
FY07|Unspecified|Y|Y|Y|N|
FY08|Unspecified|Y|Y|Y|N|
FY09|Unspecified|Y|Y|Y|N|
FY10|Unspecified|Y|Y|Y|N|
FY11|Unspecified|Y|Y|Y|N|

!Hierarchies=Year
'Parent|Child|DataStorage|MemberValidForPlan1|MemberValidForPlan2|MemberValidForPlan3|
MemberValidForWorkforce|MemberValidForCapex
#root|FY06|StoreData|Y|Y|Y|N|
#root|FY07|StoreData|Y|Y|Y|N|
#root|FY08|StoreData|Y|Y|Y|N|
#root|FY09|StoreData|Y|Y|Y|N|
#root|FY10|StoreData|Y|Y|Y|N|
#root|FY11|StoreData|Y|Y|Y|N|

!PropertyArray=Year
'Property|Name|Key|Value
Alias|FY06|Default|Alias_FY06

!Members=Alias
'Name
Aliases_Table_1
Aliases_Table_2
Aliases_Table_3
Aliases_Table_4
Default
## Sample Planning Flat Files (Simple)

This example shows a simple flat file that can be used for Planning. With simple flat files, the Members and Property Array sections are not included, and the information from those sections is moved to the Hierarchies section.

```plaintext
!FILE_FORMAT=ADS
!VERSION=1.0

!Section=Dimensions
'Name|DimensionClass|DimensionAlias|DimDataStorage|Plan1Density|Plan2Density|
Plan3Density|WorkforceDensity|CapexDensity|EnumOrder1|EnumOrder2|EnumOrder3|EnumOrderWF|
EnumOrderCapex|DimValidForPlan1|DimValidForPlan2|DimValidForPlan3|DimValidForWorkforce|
DimValidForCapex
Colors|Attribute|Colors|NeverShare|Dense|Dense|Dense|Dense|0|0|0|0|Y|Y|Y|N|
Currency|Currency|Currency|NeverShare|Sparse|Sparse|Sparse|Sparse|0|0|0|0|Y|Y|Y|N|
Entity|Entity|Entity|NeverShare|Sparse|Sparse|Sparse|Sparse|0|0|0|0|Y|Y|Y|N|
NewCustomDimension|Generic|NewCustomDimension|NeverShare|Sparse|Sparse|Sparse|Sparse|0|0|0|0|Y|Y|Y|N|
Period|Period|Period|NeverShare|Dense|Dense|Dense|Dense|0|0|0|0|Y|Y|Y|N|
Scenario|Scenario|Scenario|NeverShare|Sparse|Sparse|Sparse|Sparse|0|0|0|0|Y|Y|Y|N|
Version|Version|Version|NeverShare|Sparse|Sparse|Sparse|Sparse|0|0|0|0|Y|Y|Y|N|
Year|Year|Year|NeverShare|Sparse|Sparse|Sparse|Sparse|0|0|0|0|Y|Y|Y|N|
Alias|Alias|Alias|NeverShare|Sparse|Sparse|Sparse|Sparse|0|0|0|0|Y|Y|Y|N|
```

```
!Section=DimensionAssociations
'BaseDimension|Property|TargetDimension
Colors|Alias|Alias
Account|Alias|Alias
Currency|Alias|Alias
Currency|TriangulationCurrency|Currency
Entity|Alias|Alias
Entity|Currency|Currency
Entity|Colors|Colors
NewCustomDimension|Alias|Alias
Period|Alias|Alias
Scenario|Alias|Alias
Scenario|StartPeriod|Period
Scenario|EndPeriod|Period
Scenario|StartYear|Year
Scenario|EndYear|Year
Version|Alias|Alias
Year|Alias|Alias
smartLists|Alias|Alias
```

```
!Hierarchies=Colors
'Parent|Child|DataStorage
```

372
"#root\blue
#root\green
#root\purple

!Hierarchies=Account

'Parent|Child|DataStorage|MemberValidForPlan1|MemberValidForPlan2|MemberValidForPlan3|
MemberValidForWorkforce|MemberValidForCapex|Plan1Aggregation|Plan2Aggregation|
Plan3Aggregation|WorkforceAggregation|DataType|SourcePlanType|AccountType|
ExchangeRateType|VarianceReporting|TimeBalance|SmartList|UDA|TwoPassCalc|SkipValue|
Description|BSOMemberFormula|Alias=Default|Alias=Aliases_Table_1|Alias=Aliases_Table_2|
Alias=Aliases_Table_3|Alias=Aliases_Table_4

#root|100|NeverShare|Y|Y|N|+|+|+|Currency|Plan1|Revenue|Average|NonExpense|
Flow|||Alias_100|Aliases_Table_1 100|Aliases_Table_2 100|Aliases_Table_3 100|
Aliases_Table_4 100

!Hierarchies=Currency

'Parent|Child|DataStorage|MemberValidForPlan1|MemberValidForPlan2|MemberValidForPlan3|
MemberValidForWorkforce|MemberValidForCapex|DataType|Symbol|Scale|ThousandSep|
DecimalSep|NegativeSign|NegativeColor|ReptCurrency|TriangulationCurrency|CurrencyCode|
SmartList|UDA|Description|Alias=Default

#root|Local|StoreData|Y|Y|Y|N||Unspecified|null|Whole|None|Dot|Prefix Minus|Black|N|||Local currency
#root|USD|StoreData|Y|Y|N|Unspecified|\$|Whole|None|Dot|Prefix Minus|Black|Y|||
United States of America dollar
#root|DEM|StoreData|Y|Y|N|Unspecified|DM|Whole|None|Dot|Prefix Minus|Black|Y|||
Germany deutsche mark|Alias_DEM
#root|EUR|StoreData|Y|Y|N|Unspecified|€|Whole|None|Dot|Prefix Minus|Black|Y|||
European Union Euro
#root|FRF|StoreData|Y|Y|N|Unspecified|F|Whole|None|Dot|Prefix Minus|Black|Y|EUR||
France franc|Alias.FRFR
#root|IEP|StoreData|Y|Y|N|Unspecified|IR£|Whole|None|Dot|Prefix Minus|Black|Y|||
Ireland punt

!Hierarchies=Entity

'Parent|Child|DataStorage|MemberValidForPlan1|MemberValidForPlan2|MemberValidForPlan3|
MemberValidForWorkforce|MemberValidForCapex|Plan1Aggregation|Plan2Aggregation|
Plan3Aggregation|WorkforceAggregation|DataType|Currency|SmartList|UDA|Colors|
Description|Alias=Default

#root|ParentMMM|NeverShare|Y|Y|N|+|+|+|Unspecified|USD|||
ParentMMM|Mem_3|NeverShare|Y|Y|N|+|+|+|Unspecified|USD|||
ParentMMM|Mem_2|NeverShare|Y|Y|N|+|+|+|Unspecified|USD|||
ParentMMM|Mem_1|NeverShare|Y|Y|N|+|+|+|Unspecified|USD|||
#root|ParentMMM_Shared|NeverShare|Y|Y|N|+|+|+|Unspecified|USD|||
ParentMMM_Shared|Mem_3|ShareData|Y|Y|N|+|+|+|Unspecified|USD|||
ParentMMM_Shared|Mem_2|ShareData|Y|Y|N|+|+|+|Unspecified|USD|||
ParentMMM_Shared|Mem_1|ShareData|Y|Y|N|+|+|+|Unspecified|USD|||
#root|Canada|NeverShare|Y|Y|N|+|+|+|Unspecified|USD|||Alias_Canada
#root|United States|NeverShare|Y|Y|N|+|+|+|Unspecified|USD|||blue|Alias_United
United States|Oregon|NeverShare|Y|Y|N|+|+|+|Unspecified|USD|||Alias_Oregon
United States|California|NeverShare|Y|Y|N|+|+|+|Unspecified|USD|||
Alias_California
California|San Francisco|NeverShare|Y|Y|N|+|+|+|Unspecified|USD|||
Alias_Washington
<table>
<thead>
<tr>
<th>#root</th>
<th>FY08</th>
<th>StoreData</th>
<th>Y</th>
<th>Y</th>
<th>N</th>
<th>Unspecified</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>#root</td>
<td>FY09</td>
<td>StoreData</td>
<td>Y</td>
<td>Y</td>
<td>N</td>
<td>Unspecified</td>
<td></td>
</tr>
<tr>
<td>#root</td>
<td>FY10</td>
<td>StoreData</td>
<td>Y</td>
<td>Y</td>
<td>N</td>
<td>Unspecified</td>
<td></td>
</tr>
<tr>
<td>#root</td>
<td>FY11</td>
<td>StoreData</td>
<td>Y</td>
<td>Y</td>
<td>N</td>
<td>Unspecified</td>
<td></td>
</tr>
</tbody>
</table>

Hierarchies=Alias

'Parent|Child

#root|Aliases_Table_1
#root|Aliases_Table_2
#root|Aliases_Table_3
#root|Aliases_Table_4
#root|Default
Dimension and Member Properties

The properties for Profitability and Cost Management dimensions and members are displayed in alphabetical order in Table 41, which displays the following information:

- The Property Label, which provides a more readable display name for the property. If applicable, the associated database type is appended to the name (ASO or BSO). If no database type is specified, the property applies to both types.
- A Description of each property
- The Property Name, which provides a unique identifier for the property that is used when updating data in the import and batch client.

You can modify any property that presents a drop-down list or data entry text box when you select the property in the Dimension Library.

**Note:** For information on Essbase properties, refer to “Dimension and Member Properties” on page 388.

<table>
<thead>
<tr>
<th>Property Label</th>
<th>Description</th>
<th>Property Name</th>
</tr>
</thead>
</table>
| Alias          | Enter the alias for the selected dimension or member. The alias is the dimension name that displays in a deployed application.  
                    - To assign or change the default alias name for the current dimension or member, click the existing alias name and enter the new one. Follow the proper naming rules. All databases have an alias table named Default.  
                    - To assign or change an alias name for the current dimension or member, click the existing alias name next to the alias table and enter the new name. Follow the proper naming rules. | Alias |
<table>
<thead>
<tr>
<th>Property Label</th>
<th>Description</th>
<th>Property Name</th>
</tr>
</thead>
</table>
| Application Type | Displays the type of Profitability and Cost Management application:  
  - General - Standard Profitability application  
  - Detail - Detailed Profitability application | |
| Attributes | Enter the characteristics of a dimension member.  
  For example, the Product dimension members may have several attributes, such as a size and flavor.  
  See "Dimension and Member Properties" on page 388 for more detailed descriptions. | Attributes |
| Attribute Type | Associate an attribute type with the selected member. Create attribute values for attributes assigned to dimension members that you can use to query on and to filter members.  
  Attribute types are:  
  - Text  
  - Boolean  
  - Date  
  - Numeric  
  For example, the attribute type for "Caffeinated" would be Boolean; data values would be True or False. | AttributeDataType |
| Comment | Enter a comment for the dimension or member. Comments can contain up to 255 characters. By default, this text box displays the current comment, if one exists.  
  You cannot assign a comment to an attribute dimension or member.  
  **Note:** For Unicode-enabled databases, a maximum of 80 characters is allowed. | Comment |
| Consolidation | Member consolidation properties determine how children roll up into their parents. If the current member is not a dimension or an attribute, select the consolidation operator to assign to the member:  
  - + (addition) - Default  
  - - (subtraction)  
  - * (multiplication)  
  - / (division)  
  - % (percent)  
  - ~ (ignore during consolidation)  
  - ^ (never consolidate)  
  - NotUsed  
  **Note:** There are some restrictions with use of consolidation operators in aggregate storage outlines. Refer to the *Oracle Essbase Database Administrator's Guide* for additional information. | Consolidation |
<table>
<thead>
<tr>
<th>Property Label</th>
<th>Description</th>
<th>Property Name</th>
</tr>
</thead>
</table>
| **Data Storage(ASO)** | Select the ASO storage options for dimensions and members:  
- **StoreData**—Data is stored with the dimension.  
- **ShareData**—Data associated with this member can be shared. The ShareData property applies to the member only. The Dimension Root Member cannot be shared.  
- **NeverShare**—Data associated with this dimension cannot be shared, even if there is an implied share relationship, such as with a parent with one child. In this case, the data is duplicated in the parent and child.  
  **Note:** This option does not apply to stored hierarchies in aggregate storage outlines.  
- **LabelOnly**—No data is associated with this dimension. |  
- **ASODimensionDataStorage** (for dimension root member)  
- **ASOMemberDataStorage** (for dimension members) |
| **Data Storage(BSO)** | Select the BSO storage options for dimensions and members:  
- **StoreData**—Data is stored with the dimension.  
- **ShareData**—Data associated with this member can be shared. The ShareData property applies to the member only. The Dimension Root Member cannot be shared.  
- **NeverShare**—Data associated with this dimension cannot be shared, even if there is an implied share relationship, such as with a parent with one child. In this case, the data is duplicated in the parent and child.  
- **LabelOnly**—No data is associated with this dimension.  
- **DynamicCalcAndStore**—Data associated with this dimension is not calculated until requested by a user. Once calculated, the data is stored.  
- **DynamicCalc**—Data associated with this dimension is not calculated until requested by a user. The data is not stored but is discarded after the request is completed. |  
- **BSODimensionDataStorage** (for dimension root member)  
- **BSOMemberDataStorage** (for dimension members) |
<p>| <strong>Dimension Formula(ASO)</strong> | Double-click the cell and then click the Selector button to open the Memo Editor. Enter the formula, and then click OK. Use the appropriate ASO MDX syntax. | <strong>ASODimensionFormula</strong> (for dimension root member) |
| <strong>Dimension Formula(BSO)</strong> | Double-click the cell and then click the Selector button to open the Memo Editor. Enter the formula, and then click OK. Use the appropriate BSO CALCULATOR syntax. | <strong>BSODimensionFormula</strong> (for dimension root member) |
| <strong>Dimension Solve Order</strong> | Enter the numeric value in the solution sequence for selected dimensions. For example, if this dimension is to be solved second, enter “2.” | <strong>DimensionSolveOrder</strong> |</p>
<table>
<thead>
<tr>
<th>Property Label</th>
<th>Description</th>
<th>Property Name</th>
</tr>
</thead>
</table>
| Dimension Sort Order           | Enter a numeric value that indicates where the dimension should be placed in the Essbase outline that is generated by Profitability and Cost Management. For example, if this dimension is to be the second in the Essbase outline, enter “2.” Dimension Sort Order must be set for every dimension in the model, except Alias and UDA dimensions. The dimension sort order must be sequential, unique and greater than or equal to 1. Set the sort order as follows:  
  - Measures dimension is set to 1, by default.  
  - AllocationType dimension is set to 2, by default.  
  - POV and business dimensions must be set to 3 or higher.  
  - Attribute dimensions must always be sorted as the last dimensions.  
  For example, if you have four attribute dimensions in a sequence of 12 dimensions, the attribute dimensions must be set as 9, 10, 11, and 12. | DimensionSortOrder         |
| Dimension Storage Type         | The **Dimension Storage Type** property applies only to Block Storage (BSO) databases in Essbase. Select the type of storage required for the dimension:  
  - Dense  
  - Sparse                                                                                                                                  | DimensionStorageType      |
| Hierarchy Type (Dimensions Only)| The **Hierarchy Type** property applies only to Aggregate Storage (ASO) databases in Essbase. The Reporting database is generated by Profitability and Cost Management. Set the type of hierarchy for the dimension:  
  - Select “STORED” for any dimension members that use the following consolidation symbols:  
    - +ADDITION  
    - ~ IGNORE  
    **Note:** The no-consolidation or IGNORE (~) operator can only be used in a STORED hierarchy if the member's parent is set to LABEL_ONLY  
  - Select “DYNAMIC” for dimension members that use any consolidation symbol, including ADDITION and IGNORE, or if the dimension member contains a formula.  
  - Select “ENABLED” to support alternate hierarchies                                                                                        | DimensionHierarchyType    |
| Hierarchy Type (Members Only)  | Set the type of hierarchy for the member:  
  - Stored (For first Gen2 child)  
  - Dynamic (For Second Gen2 child onwards. The Second Gen2 member can host the alternate hierarchies)  
  - None (Do Not Use)                                                                                                                       | HierarchyType             |
<p>| Level Usage for Aggregation    | Displayed for PrimaryLevelWeightingDim on the Property Grid.                                                                                                                                          |                             |</p>
<table>
<thead>
<tr>
<th>Property Label</th>
<th>Description</th>
<th>Property Name</th>
</tr>
</thead>
<tbody>
<tr>
<td>Member Formula(ASO)</td>
<td>Double-click the cell and click the Selector button to open the Memo Editor. Enter the formula, then click OK. Use the appropriate ASO MDX syntax.</td>
<td>ASOMemberFormula</td>
</tr>
<tr>
<td>Member Formula(BSO)</td>
<td>Double-click the cell and then click the Selector button to open the Memo Editor. Enter the formula, and then click OK. Use the appropriate BSO CALCULATOR syntax.</td>
<td>BSOMemberFormula</td>
</tr>
<tr>
<td>Member Solve Order (Members Only)</td>
<td>Enter a numeric value to represent the priority with which Essbase calculates the formulas. For example, if this member is to be solved second, enter “2.” This property applies to ASO databases only. Members that have a solve order of 0 inherit the solve order of their dimension. Members with the same solve order are evaluated in the order in which their dimensions appear in the database outline, unless otherwise specified by the dimension sort order property. Members with no solve order are evaluated after members with a solve order.</td>
<td>MemberSolveOrder</td>
</tr>
<tr>
<td>POV Dimension</td>
<td>Click the checkbox to set this dimension as a POV dimension for the selected model.</td>
<td>IsPOVDimension</td>
</tr>
<tr>
<td>POV Display Order</td>
<td>If there are multiple POV dimensions, enter the numeric value (such as 1, 2, 3, and so on) to set the display order for each POV dimension.</td>
<td>POVDisplayOrder</td>
</tr>
</tbody>
</table>
| Primary Level Weighting | Restricts the levels which can be selected by the view selection engine during aggregation operations. These settings only apply to Essbase (ASO) applications. Select one of the following options:  
  - Default – The view selection engine is free to decide which levels to pick. This is the initial value for new hierarchies.  
  - AllLevels – The view selection engine considers all levels of the hierarchy for aggregation.  
  - NoAggregation – The view selection engine cannot select any levels for aggregation.  
  - TopLevelOnly – The view selection engine considers only the highest level of the dimension for aggregation.  
  - BottomToTop – The view selection engine considers only the highest level and the lowest level of the dimension for aggregation.  
  - BottomLevelOnly – The view selection engine considers only the bottom level of the dimension for aggregation. | PrimaryLevelWeighting |
<p>| Two Pass Calculation (Dimensions Only) | For BSO databases only, select the check box to calculate a dimension on the second pass through the outline. | TwoPassCalc |
| Two Pass Calculation (Members Only) | For BSO databases only, select the check box to calculate a member on the second pass through the outline. | TwoPassCalc |</p>
<table>
<thead>
<tr>
<th>Property Label</th>
<th>Description</th>
<th>Property Name</th>
</tr>
</thead>
<tbody>
<tr>
<td>UDA</td>
<td>Enter the UDA name for the selected member.</td>
<td>UDA</td>
</tr>
<tr>
<td></td>
<td>A UDA dimension must exist in Performance Management Architect, and be associated to the base to which the UDA is being added. See “Viewing Dimension Associations”.</td>
<td></td>
</tr>
<tr>
<td></td>
<td>You can enter up to 256 alphanumeric characters.</td>
<td></td>
</tr>
<tr>
<td></td>
<td><strong>Note:</strong> For Unicode-enabled databases, a maximum of 80 characters is allowed.</td>
<td></td>
</tr>
<tr>
<td>Unicode</td>
<td>Select Unicode to set the application to Unicode mode. Unicode-mode applications support multiple character sets.</td>
<td>Unicode</td>
</tr>
</tbody>
</table>
In This Chapter

- Application Properties ................................................................. 383
- Dimension and Member Properties ................................................. 388

Application Properties

Use Performance Management Architect to create Essbase (ASO) and Essbase (BSO) applications, providing reporting based on the dimensionality of Essbase as well as other applications, such as Planning or Profitability and Cost Management.

The following table describes Essbase (ASO) and Essbase (BSO) application properties in alphabetical order. Unless noted, properties apply to both application types. The Label column contains the labels for each property displayed in the Performance Management Architect Property Grid. Use the name displayed in the Property Name column to modify property values using the Performance Management Architect Batch Client. See the Oracle Hyperion Enterprise Performance Management Batch Client User’s Guide.

Note: Essbase (ASO) is also referred to as Enterprise Analytics. Essbase (BSO) is also referred to as Essbase Analytics.

Table 42  Essbase (ASO) and Essbase (BSO) Application Properties

<table>
<thead>
<tr>
<th>Label</th>
<th>Description</th>
<th>Property Name</th>
</tr>
</thead>
<tbody>
<tr>
<td>Allow Duplicates in Outline</td>
<td>Select to allow duplicate member names in an outline. By default, Essbase outlines require that member names are unique. If you want to allow duplicate member names in an existing unique outline, you can select this option to convert the application to allow duplicate members. Once an application is converted, it cannot be changed back to unique. By default, all dimensions in a duplicate member name application allow duplicate member names. You can clear the “Allow Duplicates in Dimension” option for one or more dimensions in a duplicate member name outline to require unique member names in the dimension.</td>
<td>AllowDuplicatesInOutline</td>
</tr>
</tbody>
</table>

Default Value: False
<table>
<thead>
<tr>
<th>Label</th>
<th>Description</th>
<th>Property Name</th>
</tr>
</thead>
<tbody>
<tr>
<td>Attribute Calculations Avg Name</td>
<td>To avoid duplicating names in an outline, you may need to change the name of the Attribute Calculations dimension or its members. If desired, specify a new name for the Attribute Calculations dimension or a new name for any of the members. The names specified are used in reports and spreadsheets. The function of the member is not affected by the member name. For example, the second member of the dimension counts, regardless of what the name is. <strong>Optional</strong>: Specify a new name for the Attribute Calculations Avg member. <strong>Note</strong>: This option only applies to Essbase (BSO) applications. Default Value: Avg</td>
<td>AttributeCalculationsAvgName</td>
</tr>
<tr>
<td>Attribute Calculations Boolean False Name</td>
<td><strong>Optional</strong>: Enter the name for all False members of Boolean attribute dimensions; for example, all members with a False value might be named No. Default Value: False</td>
<td>AttributeCalculationsBooleanFalseName</td>
</tr>
<tr>
<td>Attribute Calculations Boolean True Name</td>
<td><strong>Optional</strong>: Enter the name for all True members of Boolean attribute dimensions; for example, all members with a True value might be named Yes. Default Value: True</td>
<td>AttributeCalculationsBooleanTrueName</td>
</tr>
<tr>
<td>Attribute Calculations Count Name</td>
<td><strong>Optional</strong>: Specify a new name for the Attribute Calculations Count member. <strong>Note</strong>: This option only applies to Essbase (BSO) applications. Default Value: Count</td>
<td>AttributeCalculationsCountName</td>
</tr>
</tbody>
</table>
| Attribute Calculations Date Name | Select the format for names of members of date attribute dimensions:  
  - Month First (mm-dd-yyyy)  
  - Day First (dd-mm-yyyy)  
  Default Value: MonthFirst                                                                                                               | AttributeCalculationsDateName      |
<p>| Attribute Calculations Dimension Name | <strong>Optional</strong>: Specify a new name for the Attribute Calculations dimension. Default Value: Attribute Calculations                                                                                             | AttributeCalculationsDimensionName |
| Attribute Calculations Max Name | <strong>Optional</strong>: Specify a new name for the Attribute Calculations Max member. <strong>Note</strong>: This option only applies to Essbase (BSO) applications. Default Value: Max                                                                                       | AttributeCalculationsMaxName       |
| Attribute Calculations Min Name | <strong>Optional</strong>: Specify a new name for the Attribute Calculations Min member. <strong>Note</strong>: This option only applies to Essbase (BSO) applications. Default Value: Min                                                                                     | AttributeCalculationsMinName       |</p>
<table>
<thead>
<tr>
<th>Label</th>
<th>Description</th>
<th>Property Name</th>
</tr>
</thead>
</table>
| Attribute Calculations Range Name | Specify whether the attribute value is the top or bottom value of a numeric range. For example, if Tops of Ranges is selected, with attributes named 1000, 100000, and 1000000, the ranges are 0-1000, 1001-100000, and 100001-1000000. Select one of the following options:  
- Bottoms of ranges  
- Tops of ranges | AttributeCalculationsRangeName |
| Attribute Calculations Sum Name | Optional: Specify a new name for the Attribute Calculations dimension.  
*Default Value:* Sum | AttributeCalculationsSumName |
| Auto Configure | Indicates whether or not Essbase automatically determines whether dimensions have a dense or sparse data configuration.  
- True: Essbase automatically sets each dimension as dense or sparse. You cannot manually change the dimension storage type.  
- False: The dense or sparse data configuration can be manually changed.  
*Note:* This setting only applies to Essbase (BSO) applications.  
*Default Value:* False  
*Note:* In some cases, if you make changes to the “Auto Configure” property in Performance Management Architect it does not overwrite in Essbase. If you set the “Dimension Storage Type” property in Essbase applications, you must set the “Auto configure” property value to False before you deploy or redeploy the application to Essbase. | AutoConfigure |
| Case Sensitive | Indicates whether or not members are treated as case sensitive.  
- If the check box is selected: Member names are case-sensitive; for example, Product is different from product. Members whose names differ only by case are treated as separate members in all member comparison and search operations. This is the default.  
- If the check box is cleared: Member names are case-insensitive. | CaseSensitive |
| Comment | Optional: Type a descriptive comment for this application. | Comment |
| Conversion Method | Select the conversion method to be used during the conversion calculation:  
- Multiply: Multiplies local data values in the main database by exchange rates in the currency database.  
- Divide (the default): Divides local data values in the main database by exchange rates in the currency database.  
*Note:* This setting only applies to Essbase (BSO) applications. | ConversionMethod |
<table>
<thead>
<tr>
<th>Label</th>
<th>Description</th>
<th>Property Name</th>
</tr>
</thead>
<tbody>
<tr>
<td>Currency</td>
<td>Select a currency database to link to for currency conversion calculations. If no currency database is linked to the current database, the currency database is None. <strong>Note</strong>: This setting only applies to Essbase (BSO) applications.</td>
<td>CurrencyDatabase</td>
</tr>
<tr>
<td>Database</td>
<td>Type the name of the multidimensional database to be created when this application is deployed.</td>
<td>DatabaseName</td>
</tr>
<tr>
<td>Name</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Date Format</td>
<td>Select a date format:</td>
<td>DateFormat</td>
</tr>
<tr>
<td></td>
<td>• mon dd yyyy</td>
<td></td>
</tr>
<tr>
<td></td>
<td>• month dd yyyy</td>
<td></td>
</tr>
<tr>
<td></td>
<td>• mm/dd/yy</td>
<td></td>
</tr>
<tr>
<td></td>
<td>• mm/dd/yyyy</td>
<td></td>
</tr>
<tr>
<td></td>
<td>• yy.mm.dd</td>
<td></td>
</tr>
<tr>
<td></td>
<td>• dd/mm/yyyy</td>
<td></td>
</tr>
<tr>
<td></td>
<td>• dd.mm.yy</td>
<td></td>
</tr>
<tr>
<td></td>
<td>• dd-mm-yy</td>
<td></td>
</tr>
<tr>
<td></td>
<td>• dd month yy</td>
<td></td>
</tr>
<tr>
<td></td>
<td>• dd mon yy</td>
<td></td>
</tr>
<tr>
<td></td>
<td>• month dd, yy</td>
<td></td>
</tr>
<tr>
<td></td>
<td>• mon dd, yy</td>
<td></td>
</tr>
<tr>
<td></td>
<td>• mm-dd-yy</td>
<td></td>
</tr>
<tr>
<td></td>
<td>• yy/mm/dd</td>
<td></td>
</tr>
<tr>
<td></td>
<td>• yymmdd</td>
<td></td>
</tr>
<tr>
<td></td>
<td>• dd Month yyyy</td>
<td></td>
</tr>
<tr>
<td></td>
<td>• dd mon yyyy</td>
<td></td>
</tr>
<tr>
<td></td>
<td>• yyyy-mm-dd</td>
<td></td>
</tr>
<tr>
<td></td>
<td>• yyyy/mm/dd</td>
<td></td>
</tr>
<tr>
<td></td>
<td>• Long Format</td>
<td></td>
</tr>
<tr>
<td></td>
<td>• Short Format</td>
<td></td>
</tr>
</tbody>
</table>

Date measures enable members to be associated with date-type values. The ability to process dates in the measures dimension can be useful for types of analysis that are difficult to represent using the Time dimension.

Select the Typed Measure Enabled property for an application, then select a date format, and add a measure defined as type Date.

The date values are stored internally as numeric values, although you deploy them to Essbase as formatted date strings. When queried, date measures are displayed according to the selected date format.

For more information on date format and date measures, see the *Oracle Essbase Database Administrator's Guide*.  

---

386
<table>
<thead>
<tr>
<th>Label</th>
<th>Description</th>
<th>Property Name</th>
</tr>
</thead>
</table>
| **Prefix/Suffix Format** | Select the source of the value that Essbase attaches to the names of members of Boolean, date, and numeric attribute dimensions:  
- None: Uses the complete member name with no prefix or suffix attached; for example, 6000000.  
- Dimension: Attaches the name of the attribute dimension as prefix or suffix to the complete member name; for example, Population_6000000.  
- Parent: Attaches the name of the immediate parent as prefix or suffix to the complete member name; for example, Small_6000000.  
- Grandparent: Attaches the name of the grandparent as prefix or suffix to the complete member name; for example, Population_6000000.  
- Ancestors: Attaches the name of all higher-level generations as the prefix or suffix to the complete member name; for example, Population_Small_6000000.  
*Default Value:* None | PrefixSuffixFormat |
| **Prefix/Suffix Separator** | Separator: Select one of the following separators to insert between the prefix or suffix and the attribute member name:  
- _ Underscore: For example, Population_Small_6000000.  
- | Pipe: For example, Population| Small| 6000000.  
- ^ Caret: For example, Population^Small^6000000.  
*Default Value:* _ (underscore) | PrefixSuffixSeparator |
| **Prefix/Suffix Value** | Select prefix or suffix.  
- Prefix: Attaches the specified prefix before the names of members of Boolean, date, and numeric attribute dimensions; for example, Population_6000000. Prefix is the default value.  
- Suffix: Attaches the specified suffix after the names of members of Boolean, date, and numeric attribute dimensions; for example, 6000000_Population.  
*Default Value:* Prefix | PrefixSuffixValue |
| **Typed Measure Enabled** | Select to enable the application for typed measures.  
In addition to numeric values, measures can also be associated with text- or date-typed values.  
See the Oracle Essbase Database Administrator’s Guide and Oracle Essbase Administration Services Online Help for more information on typed measures. | TypedMeasureEnabled |
| **Unicode** | Select this check box to migrate an application to Unicode mode.  
**Caution!** Once an application has been deployed, the Unicode mode setting cannot be undone. See the Oracle Essbase Database Administrator’s Guide for information on migrating applications to Unicode Mode.  
*Default Value:* False | Unicode |
# Dimension and Member Properties

This table describes the dimension and member properties for Essbase (ASO) and Essbase (BSO) dimensions and members. Unless noted properties apply to both types of dimensions and members.

**Table 43** Essbase (ASO) and Essbase (BSO) Dimension and Member Properties

<table>
<thead>
<tr>
<th>Label</th>
<th>Description</th>
<th>Name</th>
</tr>
</thead>
<tbody>
<tr>
<td>Alias</td>
<td>Enter the alias in the text box. Displays all alias tables defined for the database and all aliases defined for the current member.</td>
<td>Alias</td>
</tr>
<tr>
<td>Allow Duplicates In Dimension</td>
<td>In an outline that allows duplicate member names, select one of the following options to specify member name uniqueness at a granular level:</td>
<td>AllowDuplicatesInDimension</td>
</tr>
<tr>
<td></td>
<td>- true: Duplicate member names are allowed in the dimension.</td>
<td></td>
</tr>
<tr>
<td></td>
<td>- false: Unique member names are required within the dimension. This is the default for duplicate member name outlines.</td>
<td></td>
</tr>
<tr>
<td></td>
<td><strong>Note:</strong> This setting does not apply to outlines that require unique member names.</td>
<td></td>
</tr>
<tr>
<td>Attribute Type</td>
<td>Associate an attribute type with the selected member. Create attribute values for attributes assigned to dimension members that you can use to query on and to filter members.</td>
<td>AttributeType</td>
</tr>
<tr>
<td></td>
<td>Attribute types are:</td>
<td></td>
</tr>
<tr>
<td></td>
<td>- Text</td>
<td></td>
</tr>
<tr>
<td></td>
<td>- Boolean</td>
<td></td>
</tr>
<tr>
<td></td>
<td>- Date</td>
<td></td>
</tr>
<tr>
<td></td>
<td>- Numeric</td>
<td></td>
</tr>
<tr>
<td></td>
<td>For example, the attribute type for “Caffeinated” would be Boolean; data values would be True or False.</td>
<td></td>
</tr>
<tr>
<td>Comment</td>
<td>Enter a comment for the dimension or member. Comments can contain up to 255 characters. By default, this text box displays the current comment, if one exists. You cannot assign a comment to an attribute dimension or member.</td>
<td>Comment</td>
</tr>
<tr>
<td>Compression</td>
<td>Create the selected dimension as the compression dimension. Oracle recommends optimizing aggregate storage databases by compressing the accounts dimension.</td>
<td>Compression</td>
</tr>
<tr>
<td></td>
<td>- When selected, data is grouped in the dimension as (key, multiple values).</td>
<td></td>
</tr>
<tr>
<td></td>
<td>- When not selected, data is stored as (key, single value), (key, single value).</td>
<td></td>
</tr>
<tr>
<td></td>
<td><strong>Note:</strong> This setting only applies to Essbase (ASO) applications.</td>
<td></td>
</tr>
<tr>
<td>Label</td>
<td>Description</td>
<td>Name</td>
</tr>
<tr>
<td>------------------------</td>
<td>-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------</td>
<td>---------------------</td>
</tr>
<tr>
<td>Consolidation</td>
<td>Member consolidation properties determine how children roll up into their parents. If the current member is not a dimension or an attribute, select the consolidation operator to assign to the member:</td>
<td>Consolidation</td>
</tr>
<tr>
<td></td>
<td>- + (addition)</td>
<td></td>
</tr>
<tr>
<td></td>
<td>- - (subtraction)</td>
<td></td>
</tr>
<tr>
<td></td>
<td>- * (multiplication)</td>
<td></td>
</tr>
<tr>
<td></td>
<td>- / (division)</td>
<td></td>
</tr>
<tr>
<td></td>
<td>- % (percent)</td>
<td></td>
</tr>
<tr>
<td></td>
<td>- ~ (ignore during consolidation)</td>
<td></td>
</tr>
<tr>
<td></td>
<td>- ^ (never consolidate)</td>
<td></td>
</tr>
<tr>
<td></td>
<td>- NotUsed</td>
<td></td>
</tr>
<tr>
<td>Default Value</td>
<td>+ (addition)</td>
<td></td>
</tr>
<tr>
<td></td>
<td>See also “Calculating Attribute Data” in the Essbase Administration Services Online Help.</td>
<td></td>
</tr>
<tr>
<td>Note</td>
<td>There are some restrictions with use of consolidation operators in aggregate storage outlines.</td>
<td></td>
</tr>
<tr>
<td>Currency</td>
<td>Shown if the selected item is a dimension, and if the dimension is tagged as country. Enter the currency name, for example USD (for US dollars). When preparing a main database outline for currency conversion, you need to assign currency names to the country dimension and its members (for example, assigning dollars to the U.S., Euro to Germany, and so forth).</td>
<td>Currency</td>
</tr>
<tr>
<td></td>
<td>Note: This setting only applies to Essbase (BSO) applications.</td>
<td></td>
</tr>
<tr>
<td>Currency Conversion</td>
<td>If the current member is a member of the accounts dimension and within a currency application, complete the following options.</td>
<td>CurrencyConversion</td>
</tr>
<tr>
<td></td>
<td>Note: This setting only applies to Essbase (BSO) applications.</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Currency conversion drop-down list box. Select one of the following currency conversion options to define categories of currency exchange rates.</td>
<td></td>
</tr>
<tr>
<td></td>
<td>- None: The member has no relationship to currency conversion. This is the default setting.</td>
<td></td>
</tr>
<tr>
<td></td>
<td>- No Conversion: The member is not converted because it is not a currency value. It can be a value such as a quantity or percentage.</td>
<td></td>
</tr>
<tr>
<td></td>
<td>- Category: The member requires currency conversion to the Category you specify.</td>
<td></td>
</tr>
<tr>
<td></td>
<td>See “Preparing the Main Database Outline for Currency Conversion” in the Essbase Administration Services Online Help.</td>
<td></td>
</tr>
<tr>
<td>Currency Category</td>
<td>If the current member is a member of the accounts dimension and the member requires currency conversion, enter the type of currency conversion required.</td>
<td>CurrencyCategory</td>
</tr>
<tr>
<td></td>
<td>Currency category types are the names of members of the accounts dimension of the currency database.</td>
<td></td>
</tr>
<tr>
<td></td>
<td>See also “Assigning Currency Categories to Accounts Members” in the Essbase Administration Services Online Help.</td>
<td></td>
</tr>
<tr>
<td>Note</td>
<td>This setting only applies to Essbase (BSO) applications.</td>
<td></td>
</tr>
</tbody>
</table>
**Data Storage**

Select one of the following storage options:

- **StoreData**: Select to specify that the data is stored with the dimension.
- **DynamicCalcAndStore**: Select to specify that the data associated with this dimension is not calculated until requested by a user. Once calculated, the data is stored.
  
  This option does not apply to aggregate storage outlines.
- **DynamicCalc**: Select to specify that the data associated with this dimension is not calculated until requested by a user. The data is not stored but is discarded after the request is completed.
  
  This option does not apply to aggregate storage outlines.
- **NeverShare**: Select to specify that the data associated with this dimension cannot be shared, even if there is an implied share relationship, such as with a parent with one child. In this case, the data is duplicated in the parent and child.
  
  **Note**: This option does not apply to stored hierarchies in aggregate storage outlines.
- **LabelOnly**: Select to specify that no data be associated with this dimension.
  
  This option has restrictions for aggregate storage outlines.
- **Share Data**: For shared members. The member shares storage space with another member of the same name. In outlines enabled for duplicate member names, if the outline contains multiple members that have the same name as the member you are tagging as shared, the Duplicate Shared Member dialog box is displayed. This dialog box displays all member names in the outline that match the shared member name. Select the duplicate member that you want to be the basis for the shared member. For more information about using shared members with aggregate storage databases, see “Alternate Hierarchies” in the *Oracle Essbase Database Administrator’s Guide*.

**Default Value**: NeverShare

**Note**: You cannot use Performance Management Architect to create Hybrid Analysis or Advanced Relational Access cubes.

---

**Dimension Solve Order**

Select one of the following solve order options:

- **Existing value or 0**: Select to use the solve order setting that is specified in the outline. If there is no existing setting, Essbase sets the solve order value to 0.
- **New value**: Select to specify a number to represent the priority with which Essbase calculates the formulas. The formula on the member that has the highest solve order takes precedence. You can specify a solve order between 0 and 127. Values less than 0 or greater than 127 are reset to 0 and 127 respectively. No warning message is displayed. The default value is 0.

You can also specify solve order at the member level. Members that do not have a solve order inherit the solve order of their dimension.

For complete information about solve order, see “Calculation Order” in the *Essbase Database Administrator’s Guide*.

**Note**: These settings only apply to Essbase (ASO) applications.
<table>
<thead>
<tr>
<th>Label</th>
<th>Description</th>
<th>Name</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Dimension Sort Order</strong></td>
<td>Enter a numeric value that indicates where the dimension should be placed in the Essbase outline. For example, if a dimension should be fourth in the outline, enter: 4</td>
<td>DimensionSortOrder</td>
</tr>
</tbody>
</table>
| **Expense Reporting**        | For an accounts member that is assigned a formula that includes the @VAR or @VARPER function, you can specify Expense or NonExpense to determine how Essbase calculates the difference between actual and budget data.  
**Note:** These settings only apply to Essbase (BSO) applications                                                                 | ExpenseReporting            |
| **Format String**            | Use format strings, to format the values (cell contents) of Essbase database members in numeric type measures so that they appear, for query purposes, as text, dates, or other types of predefined values. The resultant display value is the cell’s formatted value (FORMATTED_VALUE property in MDX).  
To use this property, the Typed Measure Enabled property must be selected. This property is applicable to these dimensions and their members: Account, Time, Generic, Currency, Country, and Attribute.  
Use MDX language to write the format string expression. This is the format:  
MdxFormat( string_value_expression )  
For example, the following format string displays negative cell values as positive values enclosed in parentheses. This expression refers to the MDX function, CellValue(), to access the cell value being formatted.  
/* Enclose negative values in "(", ")" */  
IIF(CellValue() < 0,  
    Concat(Concat("(", numtostr(-CellValue())), ",")" numtostr(CellValue())))  
See the *Oracle Essbase Data Administrator's Guide* and *Oracle Essbase Technical Reference* for more information on format strings. | FormatStringDuplicate (for dimension)  
FormatString (for members) |
| **Fully Qualified Shared Member** | In outlines enabled for duplicate member names, displays the qualified name for members with duplicate (non-unique) names. A qualified member name is constructed by prefixing ancestor names to the member name, up to the ancestor that makes the name unique.  
For example, if the outline has two members named New York, one under State and one under City, the qualified member names include the first ancestor name that differentiates the members from each other:  
[State],[New York]  
[City],[New York] | FullyQualifiedSharedMember |
<table>
<thead>
<tr>
<th>Label</th>
<th>Description</th>
<th>Name</th>
</tr>
</thead>
</table>
| Hierarchy Type         | For any dimension and parent members of an aggregate storage database, select an option to define a hierarchy type:  
  - **Enabled**: Multiple hierarchies are enabled. Select to use both stored and dynamic hierarchies in the dimension. (This option is only available on the dimension level.)  
  - **Disabled**: Multiple hierarchies are disabled. (This option is only available on members.)  
  - **Stored**: Select to set a dimension or a parent member as a stored hierarchy. This is the default, except for accounts dimensions.  
  - **Dynamic**: Select to set a dimension or a parent member as a dynamic hierarchy. The dimension tagged as accounts is automatically considered a dynamic hierarchy. You cannot specify the accounts dimension as a stored hierarchy.  
  
  **Default Value**: Stored  
  **Note**: These settings only apply to Essbase (ASO) applications. For important information about restrictions with using dynamic and stored hierarchies, see “Hierarchies” in the Essbase Administration Services Online Help.                                                                                     | HierarchyType             |
| Member Formula ASO    | Enter a formula to associate with the member. Formulas for ASO (aggregate storage) must be in MDX format. For information and other guidelines on developing formulas in MDX, see the Oracle Essbase Technical Reference. **Note**: The MemberFormula property is deprecated. Importing values for it will result in a warning and the values will be ignored. The ASOMemberFormula property should be used instead for Essbase ASO applications. | ASOMemberFormula          |
| Member Formula BSO     | Enter a formula to associate with the member. Formulas for BSO (block storage) must be in the standard Essbase calculation script format.  
  Note that if member names in a formula are surrounded by quotation marks, for example, "Root Beer"+"Cream Soda";, then surround the entire formula with quotations marks ("..."). Failure to do this results in Essbase stripping out the opening and closing quotation marks, for example, Root Beer"+"Cream Soda, making the formula invalid.  
  The correct syntax is:  
  ""Root Beer"+"Cream Soda""  
  For information and other guidelines on developing formulas in calculation script format, see the Oracle Essbase Database Administrator's Guide. **Note**: The MemberFormula property is deprecated. Importing values for it will result in a warning and the values will be ignored. The BSOMemberFormula property should be used instead for Essbase BSO applications. | BSOMemberFormula          |
<table>
<thead>
<tr>
<th>Label</th>
<th>Description</th>
<th>Name</th>
</tr>
</thead>
<tbody>
<tr>
<td>Member Solve Order</td>
<td>Specify a number to represent the priority with which Essbase calculates the formulas. The formula on the member that has the highest solve order takes precedence. You can specify a solve order between 0 and 127. Values less than 0 or greater than 127 are reset to 0 and 127 respectively. No warning message is displayed. Default Value: 0</td>
<td>MemberSolveOrder</td>
</tr>
<tr>
<td></td>
<td>Members that have a solve order of 0 inherit the solve order of their dimension. Members with the same solve order are evaluated in the order in which their dimensions appear in the database outline, unless otherwise specified by the dimension sort order property. Members with no solve order are evaluated after members with a solve order. Note: These settings only apply to Essbase (ASO) applications. For more information, see “Calculation Order” in the Oracle Essbase Administration Services Online Help.</td>
<td></td>
</tr>
<tr>
<td>Named Level</td>
<td>Specify a unique name for a level that can be applied to all logically-related named generations. For example, a named level called Product can apply to all levels containing products. See “Working with Named Levels (Essbase (ASO) and Essbase (BSO) Only)” on page 91.</td>
<td>NamedLevel</td>
</tr>
<tr>
<td>Named Generation</td>
<td>Specify a unique name to associate related members. For example, a generation called Regional Revenue contains the revenue figures produced in each region. See &quot;Working with Named Generations (Essbase (ASO) and Essbase (BSO) Only)” on page 90.</td>
<td>NamedGeneration</td>
</tr>
<tr>
<td>Period Type</td>
<td>Specify the kind of time period, such as Base Time Period or Year Time Period</td>
<td>PeriodType</td>
</tr>
<tr>
<td>Level Usage for</td>
<td>Restrictions the levels for base dimensions which can be selected by the view selection engine during aggregation operations. Select one of the following options: Default: The view selection engine is free to decide which levels to pick. This is the initial value for new hierarchies. AllLevels: The view selection engine considers all levels of the hierarchy for aggregation. NoAggregateTop: The view selection engine cannot select any levels for aggregation. TopLevelOnly: The view selection engine considers only the highest level of the dimension for aggregation. BottomTop: The view selection engine considers only the highest level and the lowest level of the dimension for aggregation. Note: These settings only apply to Essbase (ASO) applications.</td>
<td>PrimaryLevelWeighting</td>
</tr>
<tr>
<td>Aggregation (For base dimensions.)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Label</td>
<td>Description</td>
<td>Name</td>
</tr>
<tr>
<td>-------</td>
<td>-------------</td>
<td>------</td>
</tr>
</tbody>
</table>
| Level Usage for Aggregation (For attribute dimensions.) | Restricts the levels for attributes which can be selected by the view selection engine during aggregation operation. Select one of the following options:  
- **Default**: The view selection engine is free to decide which levels to pick. This is the initial value for new hierarchies.  
- **AllLevels**: The view selection engine considers all levels of the hierarchy for aggregation.  
- **NoAggregation**: The view selection engine cannot select any levels for aggregation.  
- **BottomLevelOnly**: The view selection engine considers only the bottom level of the attribute dimension for aggregation.  
**Note**: These settings only apply to Essbase (ASO) applications. | SecondaryLevelWeighting |
| Skip Value | Select an option to determine what Essbase skips, or ignores, during a time balance calculation. You can only specify skip settings if you set the time balance properties as first, last, or average.  
- **None**: Select to include zeros and missing values when calculating parent values.  
  **Note**: If Essbase encounters #MISSING values when calculating, the #MISSING values are not divided by the total number of members. Instead, the #MISSING values are divided by the number of members with actual values.  
- **Missing**: Select to exclude #MISSING values when calculating parent values.  
- **Zeros**: Select to exclude zeros when calculating parent values.  
- **Missing and zeros**: Select to exclude #MISSING values and zeros when calculating parent values.  
**Default Value**: None | SkipValue |
| Smart List | Specify a unique name containing alphanumeric and underscore characters, and no special characters or spaces. When you specify a measure "Type" as text, use a Smart List to map text-based content to measures. Storage and analysis of textual content can be useful when a cell needs to have one of a finite list of textual values; for example, a product may be sold in five different colors. The color is a text measure whose value must be one of the five colors. The colors are a set of text strings mapped to corresponding numeric IDs. These mappings are contained in dimension-level Smart List objects that you create.  
See “Creating Smart Lists” on page 111 and “Modifying Smart List Dimension Properties” on page 112. | SmartList |
<table>
<thead>
<tr>
<th>Label</th>
<th>Description</th>
<th>Name</th>
</tr>
</thead>
</table>
| Time Balance        | Select an option to set time balance properties on the accounts dimension.  
  - Existing definition or none: Use the setting specified in the outline. If there is no existing setting, Essbase sets the time balance property to none. This is the default.  
  - None: Use no time balance properties. Member values are calculated in the default manner.  
  - First: Select as the time balance property when the parent value represents the value at the beginning of a time period.  
  - Average: Select as the time balance property when the parent value represents the average value of a time period.  
  - Last: Select as the time balance property when a parent value represents the value at the end of a time period.  
  - Skip property: Select one of the following options to determine what Essbase skips, or ignores, during a time balance calculation. You can only specify skip settings if you set the time balance properties as first, last, or average.  
    - None: Select to include zeros and missing values when calculating parent values.  
    - Missing: Select to exclude #MISSING values when calculating parent values.  
    - Zeros: Select to exclude zeros when calculating parent values.  
    - Missing and zeros: Select to exclude #MISSING values and zeros when calculating parent values.  
  Note: When you define the value for this property at the parent level, all children automatically inherit the value.  
  Note: These options do not apply to Essbase applications: Fill, Flow, Balance, Weighted Average - Actual Average, Weighted Average, Actual 365.  
For Essbase application deployments: If Time Balance is set to Balance, the property is sent to Essbase as Last; If Time Balance is set to Flow, it is sent to Essbase as None.  
Default Value: Existing definition or none | TimeBalance |
| Two Pass Calculation| Select this check box to calculate a dimension on the second pass through the outline.  
Note: These settings only apply to Essbase (BSO) applications. | TwoPassCalc |
| Type                | Select an option:  
- Numeric: the default  
- Text: select if the member is a text measure.  
- Date: select if the member is a date measure  
If the type is Text, you must associate this member with a Smart List.  
If the type is Date, you must associate a date format with this member.  
Default Value: Numeric | Type |
<table>
<thead>
<tr>
<th>Label</th>
<th>Description</th>
<th>Name</th>
</tr>
</thead>
<tbody>
<tr>
<td>UDA</td>
<td>Enter the UDA name for the selected member. Multiple UDAs must be comma separated; for example: Small Market, New Market.</td>
<td>UDA</td>
</tr>
</tbody>
</table>
| Variance Reporting | Select one of the following options to determine how to calculate the difference between actual and budget data.  
Note: When you define the value for this property at the parent level, all children automatically inherit the value.  
- Existing definition or non-expense: Select to use the setting specified in the outline to calculate the difference between actual and budget data. If there is no existing setting, Essbase stores the dimension as non-expense. This is the default.  
- Non-expense: Select to set the member as non-expense. When you budget non-expense items, such as sales, you want the actual sales to be greater than the budget. When the actual sales is lower than the budget, the variance is negative.  
- Expense: Select to set the member as an expense. When you budget expenses for a period, you want the actual expenses to be lower than the budget. When actual expenses are greater than the budget, the variance is negative.  
Default Value: NonExpense  
Note: These settings only apply to Essbase (BSO) applications. | VarianceReporting |
There are statistical and system properties that apply to dimension members regardless of the category selected. Access properties by as follows:

- Select **Administer**, then **Dimension Library**.
- Select the dimension or member.
- In the property grid to the right, select the type (e.g. system) from **Category**.

### Statistical Properties

<table>
<thead>
<tr>
<th>Label</th>
<th>Description</th>
<th>Name</th>
</tr>
</thead>
<tbody>
<tr>
<td>Child Count</td>
<td>Number of children</td>
<td>ChildCount</td>
</tr>
<tr>
<td>Descendant Count</td>
<td>Number of descendants</td>
<td>DescendantCount</td>
</tr>
<tr>
<td>Sibling Count</td>
<td>Number of siblings</td>
<td>SiblingCount</td>
</tr>
<tr>
<td>Reference Count</td>
<td>Number of parents</td>
<td>ReferenceCount</td>
</tr>
<tr>
<td>Hidden Member</td>
<td>Used for internal purposes only</td>
<td>MemberHidden</td>
</tr>
</tbody>
</table>
**Dimension System Properties**

Table 45  Statistical Properties for Dimensions

<table>
<thead>
<tr>
<th>Label</th>
<th>Description</th>
<th>Name</th>
</tr>
</thead>
<tbody>
<tr>
<td>Dimension Type</td>
<td>The kind of data a dimension gathers, such as text or numeric, that enables the use of predefined functionality. For example, dimensions tagged as time have a predefined calendar functionality.</td>
<td>DimensionClass</td>
</tr>
<tr>
<td>Default Member Class</td>
<td>Used for internal purposes only</td>
<td>Default Member Class</td>
</tr>
<tr>
<td>Dimension State</td>
<td>The dimension state: Local or Shared</td>
<td>Dimension State</td>
</tr>
<tr>
<td>Dimension Name</td>
<td>Name of the dimension</td>
<td>DimensionName</td>
</tr>
<tr>
<td>Dimension Description</td>
<td>Summary of the data the dimension gathers or represents</td>
<td>DimensionDescription</td>
</tr>
<tr>
<td>Display Properties</td>
<td>Used for internal purposes only</td>
<td>DisplayProperties</td>
</tr>
<tr>
<td>Default Member</td>
<td>The top-most member</td>
<td>DefaultMember</td>
</tr>
<tr>
<td>Dimension Alias</td>
<td>Name displayed for dimensions in deployed applications</td>
<td>DimensionAlias</td>
</tr>
<tr>
<td>Dimension Owner</td>
<td>Users or groups who can modify and delete dimensions. For information about specifying permissions, see the Oracle Hyperion Enterprise Performance Management System User and Role Security Guide.</td>
<td>DimensionOwner</td>
</tr>
<tr>
<td>Dimension Readers</td>
<td>Users and groups who can view dimensions. For information about specifying permissions, see the Oracle Hyperion Enterprise Performance Management System User and Role Security Guide.</td>
<td>DimensionReaders</td>
</tr>
<tr>
<td>Dimension Writers</td>
<td>Users and group who can modify dimensions. For information about specifying permissions see the Oracle Hyperion Enterprise Performance Management System User and Role Security Guide.</td>
<td>DimensionWriters</td>
</tr>
<tr>
<td>Source Dimension</td>
<td>The source dimension from which current dimension is copied or synchronized from.</td>
<td>SourceDimensionName</td>
</tr>
<tr>
<td>IsCloned</td>
<td>Used for internal purposes only</td>
<td>IsCloned</td>
</tr>
</tbody>
</table>

**Member System Properties**

Table 46  System Properties for Members

<table>
<thead>
<tr>
<th>Label</th>
<th>Description</th>
<th>Name</th>
</tr>
</thead>
<tbody>
<tr>
<td>Member Class</td>
<td>Used for internal purposes only.</td>
<td>MemberClass</td>
</tr>
<tr>
<td>Parent</td>
<td>Name of the owning dimension or higher member</td>
<td>Parent</td>
</tr>
<tr>
<td>Parent Description</td>
<td>Summary of the data gathered or represented by the parent</td>
<td>ParentDescription</td>
</tr>
<tr>
<td>Display String</td>
<td>Used for internal purposes only</td>
<td>DisplayByString</td>
</tr>
</tbody>
</table>
Property Considerations when Upgrading to this Release

In This Appendix

- Property Differences from Earlier Releases ............................................................ 399
- Considerations when Comparing Applications to Deployed Applications ...................... 403
- New Properties Added to Performance Management Architect Since Release 9.3.3 ............. 404

This appendix provides information about property changes and new validations that were introduced in Performance Management Architect in this release. It includes default property changes and new validations to show a comparison from the following releases to this release:

- Release 9.3.3
- Release 11.1.1.3
- Release 11.1.2.x

If you receive validation errors after upgrading, you may need to make manual updates. See Appendix B, “Application Validations.”

Property Differences from Earlier Releases

New releases of Performance Management Architect may introduce changes to existing member and dimension properties. For example, default values for properties may have changed based on business requirements or property types may have changed. This table describes the differences in properties from earlier releases of Performance Management Architect.

<table>
<thead>
<tr>
<th>Property Name</th>
<th>Old Value</th>
<th>New Value</th>
<th>Impact</th>
<th>Applicable Application Types</th>
</tr>
</thead>
<tbody>
<tr>
<td>AttributeCalculationSumName</td>
<td>&lt;blank&gt;</td>
<td>Sum</td>
<td>No changes required.</td>
<td>Essbase ASO</td>
</tr>
<tr>
<td>CapexAggregation</td>
<td>~ (ignore)</td>
<td>+ (add)</td>
<td>Update required.</td>
<td>Planning</td>
</tr>
</tbody>
</table>

If all members in the capital asset planning plan types, manually reset the value to ~.
<table>
<thead>
<tr>
<th>Property Name</th>
<th>Old Value</th>
<th>New Value</th>
<th>Impact</th>
<th>Applicable Application Types</th>
<th>Applicable Versions</th>
</tr>
</thead>
<tbody>
<tr>
<td>DataStorage</td>
<td>NeverShare</td>
<td>StoreData</td>
<td>Update required. Manually reset the value to NeverShare.</td>
<td>Planning, Essbase ASO, Essbase BSO</td>
<td>9.3.1, 11.1.1, 11.1.2</td>
</tr>
<tr>
<td>DataStorage</td>
<td>DynamicCalcAndStore</td>
<td>DynamicCalc</td>
<td>Update required. Manually reset the value to DynamicCalcAndStore.</td>
<td>Essbase BSO, Profitability</td>
<td>9.3.1, 11.1.1, 11.1.2</td>
</tr>
<tr>
<td>DataStorage (member property)</td>
<td>DynamicCalc</td>
<td>StoreData</td>
<td>Update required. Manually reset the value to DynamicCalc.</td>
<td>Essbase BSO, Profitability</td>
<td>9.3.1, 11.1.1, 11.1.2</td>
</tr>
<tr>
<td>DataStorageDuplicate</td>
<td>Store Date</td>
<td>StoreData</td>
<td>Typographical correction. No changes required.</td>
<td>Essbase ASO</td>
<td>9.3.1, 11.1.1, 11.1.2</td>
</tr>
<tr>
<td>DimensionHierarchyType</td>
<td>&lt;blank&gt;</td>
<td>Stored</td>
<td>The default value should be set to Stored unless multiple hierarchies are enabled. Changes are required if multiple hierarchies are enabled and the value is set to Stored.</td>
<td>Essbase ASO, Profitability</td>
<td>9.3.1, 11.1.1, 11.1.2</td>
</tr>
<tr>
<td>DimensionSortOrder</td>
<td>0</td>
<td>9</td>
<td>This property should be set using the Performance Setting. See &quot;Modifying Performance Settings&quot; on page 176. For Essbase applications, new validations force you to use unique and sequential settings. If these properties are not set correctly for existing applications the new validations will fail and you will need to use the Performance Settings screen to set the properties accordingly.</td>
<td>Profitability, Essbase ASO, Essbase BSO</td>
<td>9.3.1, 11.1.1, 11.1.2</td>
</tr>
<tr>
<td>DimensionStorageType</td>
<td>&lt;blank&gt;</td>
<td>Sparse</td>
<td>No changes are required. This property is defaulted during dimension initialization.</td>
<td>Essbase BSO</td>
<td>9.3.1, 11.1.1, 11.1.2</td>
</tr>
<tr>
<td>DriverMeasures</td>
<td>&lt;blank&gt;</td>
<td>Disabled</td>
<td>No changes are required.</td>
<td>Profitability</td>
<td>11.1.1, 11.1.2</td>
</tr>
<tr>
<td>Property Name</td>
<td>Old Value</td>
<td>New Value</td>
<td>Impact</td>
<td>Applicable Application Types</td>
<td></td>
</tr>
<tr>
<td>---------------</td>
<td>-----------</td>
<td>-----------</td>
<td>--------</td>
<td>-----------------------------</td>
<td></td>
</tr>
<tr>
<td>ExchangeRateType</td>
<td>&lt;blank&gt;</td>
<td>Average</td>
<td>Update required. Manually reset the value to None.</td>
<td>Planning</td>
<td></td>
</tr>
<tr>
<td>GridMissingLabelType</td>
<td>Data from Setting</td>
<td>Dropdown</td>
<td>Update required. Manually reset the value to Data from Setting.</td>
<td>Planning</td>
<td></td>
</tr>
<tr>
<td>HierarchyType (Account, Generic, Year, Entity, and Period member property)</td>
<td>&lt;blank&gt;</td>
<td>Disabled</td>
<td>No changes are required.</td>
<td>Essbase ASO</td>
<td></td>
</tr>
<tr>
<td>HierarchyType (Account, Measures, and Period member property)</td>
<td>&lt;blank&gt;</td>
<td>Disabled</td>
<td>No changes are required.</td>
<td>Profitability</td>
<td></td>
</tr>
<tr>
<td>HierarchyType (Entity member property)</td>
<td>Stored</td>
<td>Disabled</td>
<td>No changes are required.</td>
<td>Essbase ASO</td>
<td></td>
</tr>
<tr>
<td>HierarchyType (Account member property)</td>
<td>Stored</td>
<td>&lt;blank&gt;</td>
<td>No changes are required.</td>
<td>Essbase ASO</td>
<td></td>
</tr>
<tr>
<td>HierarchyType (Account dimension property)</td>
<td>Stored</td>
<td>Dynamic</td>
<td>No changes are required.</td>
<td>Essbase ASO, Profitability</td>
<td></td>
</tr>
<tr>
<td>MaximumReviewLevel</td>
<td>&lt;blank&gt;</td>
<td>1</td>
<td>No changes required.</td>
<td>Consolidation</td>
<td></td>
</tr>
<tr>
<td>MaxDocAttachmentSize</td>
<td>&lt;blank&gt;</td>
<td>-1</td>
<td>No changes required.</td>
<td>Consolidation</td>
<td></td>
</tr>
<tr>
<td>MaxNumDocAttachments</td>
<td>&lt;blank&gt;</td>
<td>-1</td>
<td>No changes required.</td>
<td>Consolidation</td>
<td></td>
</tr>
<tr>
<td>Member (Account and Period dimension property)</td>
<td>&lt;blank&gt;</td>
<td>Disabled</td>
<td>No changes required.</td>
<td>Profitability</td>
<td></td>
</tr>
<tr>
<td>MemberFormula</td>
<td>&lt;blank&gt;</td>
<td>DirectAllocation + GenealogyAllocation + SysAllocVar1</td>
<td>No changes required.</td>
<td>Essbase ASO</td>
<td></td>
</tr>
<tr>
<td>MemberFormula</td>
<td>&quot;DirectAllocation&quot;+&quot;GenealogyAllocation&quot;+&quot;SysAllocVar1&quot;</td>
<td>DirectAllocation + GenealogyAllocation + SysAllocVar1</td>
<td>No changes required.</td>
<td>Essbase BSO</td>
<td></td>
</tr>
<tr>
<td>Property Name</td>
<td>Old Value</td>
<td>New Value</td>
<td>Impact</td>
<td>Applicable Application Types</td>
<td>Applicable Version</td>
</tr>
<tr>
<td>-----------------------------------</td>
<td>------------</td>
<td>-----------</td>
<td>---------------------------------------------</td>
<td>------------------------------</td>
<td>--------------------</td>
</tr>
<tr>
<td>MemberValidForCapex</td>
<td>FALSE</td>
<td>TRUE</td>
<td>Update required. Manually reset the value to False.</td>
<td>Planning</td>
<td>9.3.x, 11.1.x, 11.1.x</td>
</tr>
<tr>
<td>MemberValidForCapexAggregation</td>
<td>FALSE</td>
<td>TRUE</td>
<td>Update required. Manually reset the value to False.</td>
<td>Planning</td>
<td>9.3.x, 11.1.x, 11.1.x</td>
</tr>
<tr>
<td>MemberValidForWorkforce</td>
<td>FALSE</td>
<td>TRUE</td>
<td>Update required. Manually reset the value to False.</td>
<td>Planning</td>
<td>9.3.x, 11.1.x, 11.1.x</td>
</tr>
<tr>
<td>NegativeColor</td>
<td>Red</td>
<td>Black</td>
<td>Update required. Manually reset the value to Red.</td>
<td>Planning</td>
<td>9.3.x, 11.1.x, 11.1.x</td>
</tr>
<tr>
<td>PrimaryLevelWeighting</td>
<td>TopLevelOnly</td>
<td>Default</td>
<td></td>
<td>Essbase ASO</td>
<td>11.1.x</td>
</tr>
<tr>
<td>Scale</td>
<td>&lt;blank&gt;</td>
<td>Whole</td>
<td>No changes required.</td>
<td>Consolidation</td>
<td>9.3.x, 11.1.x, 11.1.x</td>
</tr>
<tr>
<td>SysAllocVar2</td>
<td>&quot;DirectAllocation&quot;+&quot;GenealogyAllocation&quot;+ &quot;SysAllocVar1&quot;</td>
<td>DirectAllocation +GenealogyAllocation + SysAllocVar1</td>
<td>No changes required.</td>
<td>Essbase BSO, Profitability</td>
<td>9.3.x, 11.1.x, 11.1.x</td>
</tr>
<tr>
<td>ThousandSeparator</td>
<td>Comma</td>
<td>None</td>
<td>Update required. Manually reset the value to Comma.</td>
<td>Planning</td>
<td>9.3.x, 11.1.x, 11.1.x</td>
</tr>
<tr>
<td>UseForMapping</td>
<td>TRUE</td>
<td>FALSE</td>
<td>Update required. Manually reset the value to False.</td>
<td>Planning, Profitability</td>
<td>9.3.x, 11.1.x, 11.1.x</td>
</tr>
<tr>
<td>VarianceReporting</td>
<td>Non-Expense</td>
<td>NonExpense</td>
<td>Typographical correction. No changes required.</td>
<td>Planning</td>
<td>9.3.x, 11.1.x, 11.1.x</td>
</tr>
<tr>
<td>WeeksDistributionMember</td>
<td>EVEN</td>
<td>True</td>
<td>The property type has changed from a drop-down list to a boolean. The upgrade process maps the old drop-down list values to a True or False value. In most cases no manual changes are required.</td>
<td>Planning</td>
<td>9.3.x, 11.1.x, 11.1.x</td>
</tr>
<tr>
<td>Property Name</td>
<td>Old Value</td>
<td>New Value</td>
<td>Impact</td>
<td>Applicable Application Types</td>
<td></td>
</tr>
<tr>
<td>------------------------</td>
<td>-----------------</td>
<td>-----------</td>
<td>---------------------------------------------</td>
<td>------------------------------</td>
<td></td>
</tr>
<tr>
<td>WorkforceAggregation</td>
<td>~ (ignore)</td>
<td>+ (add)</td>
<td>Update required. Manualy reset the value to ~ for any Public Sector Planning and Budgeting or Workforce Planning plan types.</td>
<td>Planning</td>
<td></td>
</tr>
</tbody>
</table>

**Considerations when Comparing Applications to Deployed Applications**

You should ignore these property differences when comparing an application to a deployed application:

- **Aggregation for Capex**: If the application and member are not valid for the Capex plan type
- **Aggregation for Workforce**: If the application and member are not valid for the Workforce plan type
- **Weeks Distribution**: The Weeks Distribution property has been changed from a drop-down list to a boolean in 11.1.1.x. The upgrade process migrates the value, however, the difference is shown when you compare the applications.
- **Exchange Rate Type**: If the new value is None and the value is read-only, then it is correct according to the restrictions placed on this property. An empty old value could cause differences to appear.
- **Skip Value**: If the new value is None and the value is read-only then it is correct according to the restrictions placed on this property. An empty old value could cause differences to appear.
- **Currency**: This property may appear as ID=USD versus USD in the deployed application. You can ignore this difference.
- **Default Parent**: This property may show differences. This may be empty in the deployed application but correctly displays the primary parent.
- **Maximum Document Attachment Size**: This value can be blank in previous releases. A blank value is equivalent to -1. Although this was corrected in 11.1.1.x, this can display a difference for applications upgraded from 9.3.3.
- **Maximum Number of Document Attachments**: This value could be blank in previous releases. A blank is equivalent to -1. It has been corrected in 11.1.1.x. This may show as a difference for applications upgraded from 9.3.3.
- **Default Member**: This property may show differences. It can be empty in the current state and 0 in the deployed state.
- **Type**: This property may show differences. This may be empty in the deployed application and **Numeric** for the current application. This new property was introduced in 11.1.2.0 to handle text types. The default value is **Numeric** and is correct.

- **Format String**: This property may show differences.

- **Use For Mapping**: This property may show a difference in Currency dimensions in an ASO cube. Currency dimensions are not supported in Essbase ASO and this difference should not be an issue.

- **Hierarchy Type**: This property may show a difference in Essbase ASO applications for top level members when multiple hierarchies are not enabled. The new value can be **Disabled** and read-only. This is correct behavior and can be ignored.

---

**New Properties Added to Performance Management Architect Since Release 9.3.3**

Use the table below to review new properties added to Performance Management Architect since Release 9.3.3.

**Table 48  New Properties Added Since Release 9.3.3**

<table>
<thead>
<tr>
<th>Property Name</th>
<th>Essbase ASO</th>
<th>Essbase BSO</th>
<th>Consolidation</th>
<th>Planning</th>
<th>Profitability</th>
<th>9.3.3</th>
<th>11.1.x</th>
<th>11.1.2.x</th>
</tr>
</thead>
<tbody>
<tr>
<td>ASOMemberFormula</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td></td>
<td>X</td>
<td>X</td>
</tr>
<tr>
<td>ASOMemberFormulaDuplicate</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td></td>
<td>X</td>
<td>X</td>
</tr>
<tr>
<td>AttributeDataType</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td></td>
<td></td>
<td>X</td>
<td>X</td>
</tr>
<tr>
<td>AttributeType</td>
<td>X</td>
<td>X</td>
<td></td>
<td>X</td>
<td></td>
<td></td>
<td>X</td>
<td>X</td>
</tr>
<tr>
<td>AutoGenId</td>
<td>X</td>
<td>X</td>
<td></td>
<td>X</td>
<td></td>
<td></td>
<td></td>
<td>X</td>
</tr>
<tr>
<td>BSOMemberFormula</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td></td>
<td>X</td>
<td>X</td>
</tr>
<tr>
<td>BSOMemberFormulaDuplicate</td>
<td>X</td>
<td>X</td>
<td></td>
<td>X</td>
<td>X</td>
<td></td>
<td></td>
<td>X</td>
</tr>
<tr>
<td>CapexDeployed</td>
<td></td>
<td></td>
<td>X</td>
<td>X</td>
<td></td>
<td></td>
<td>X</td>
<td>X</td>
</tr>
<tr>
<td>Compression</td>
<td>X</td>
<td></td>
<td></td>
<td>X</td>
<td></td>
<td></td>
<td>X</td>
<td>X</td>
</tr>
<tr>
<td>Currency</td>
<td>X</td>
<td></td>
<td></td>
<td>X</td>
<td></td>
<td></td>
<td>X</td>
<td>X</td>
</tr>
<tr>
<td>CurrencyCategoryDuplicate</td>
<td>X</td>
<td></td>
<td></td>
<td>X</td>
<td></td>
<td></td>
<td>X</td>
<td>X</td>
</tr>
<tr>
<td>CurrencyConversionDuplicate</td>
<td>X</td>
<td></td>
<td></td>
<td>X</td>
<td></td>
<td></td>
<td>X</td>
<td>X</td>
</tr>
<tr>
<td>DateFormat</td>
<td></td>
<td></td>
<td>X</td>
<td>X</td>
<td></td>
<td></td>
<td></td>
<td>X</td>
</tr>
<tr>
<td>Description</td>
<td>X</td>
<td></td>
<td></td>
<td>X</td>
<td></td>
<td></td>
<td>X</td>
<td>X</td>
</tr>
<tr>
<td>DimensionDescription</td>
<td>X</td>
<td></td>
<td></td>
<td>X</td>
<td></td>
<td></td>
<td>X</td>
<td>X</td>
</tr>
<tr>
<td>Property Name</td>
<td>Essbase ASO</td>
<td>Essbase BSO</td>
<td>Consolidation</td>
<td>Planning</td>
<td>Profitability</td>
<td>9.3.3.x</td>
<td>11.1.x</td>
<td>11.1.2.x</td>
</tr>
<tr>
<td>--------------------------------------------------</td>
<td>-------------</td>
<td>-------------</td>
<td>---------------</td>
<td>----------</td>
<td>---------------</td>
<td>---------</td>
<td>--------</td>
<td>----------</td>
</tr>
<tr>
<td>DimensionSortOrder</td>
<td>X</td>
<td>X</td>
<td></td>
<td></td>
<td></td>
<td>X</td>
<td>X</td>
<td></td>
</tr>
<tr>
<td>DimTwoPassCalc</td>
<td></td>
<td></td>
<td>X</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>DisplayOption</td>
<td></td>
<td></td>
<td>X</td>
<td>X</td>
<td>X</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>DTSEnabled</td>
<td>X</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>DTSEnabled</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>X</td>
<td>X</td>
<td></td>
</tr>
<tr>
<td>DTSGeneration</td>
<td>X</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>DTSGeneration</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>X</td>
<td>X</td>
<td></td>
</tr>
<tr>
<td>EssbaseDateFormat</td>
<td>X</td>
<td>X</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>FiscalYearStartDate</td>
<td></td>
<td></td>
<td>X</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>FlowMetric</td>
<td>X</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>X</td>
<td>X</td>
<td>X</td>
</tr>
<tr>
<td>FlowMetricDuplicate</td>
<td></td>
<td></td>
<td>X</td>
<td>X</td>
<td>X</td>
<td></td>
<td></td>
<td>X</td>
</tr>
<tr>
<td>FormatString</td>
<td>X</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>X</td>
<td>X</td>
<td>X</td>
</tr>
<tr>
<td>FormatStringDuplicate</td>
<td></td>
<td></td>
<td>X</td>
<td>X</td>
<td>X</td>
<td></td>
<td></td>
<td>X</td>
</tr>
<tr>
<td>HierarchyTypeDuplicate</td>
<td>X</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>X</td>
<td>X</td>
<td>X</td>
</tr>
<tr>
<td>Increment</td>
<td>X</td>
<td>X</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>X</td>
</tr>
<tr>
<td>IsCurrencyPartition</td>
<td></td>
<td></td>
<td>X</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>X</td>
</tr>
<tr>
<td>ItemValue</td>
<td>X</td>
<td>X</td>
<td></td>
<td></td>
<td></td>
<td>X</td>
<td>X</td>
<td>X</td>
</tr>
<tr>
<td>LevelUsageOfAggregation</td>
<td>X</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>X</td>
</tr>
<tr>
<td>LevelUsageOfAggregationDuplicate</td>
<td>X</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>X</td>
</tr>
<tr>
<td>MissingLabel</td>
<td>X</td>
<td>X</td>
<td></td>
<td></td>
<td></td>
<td>X</td>
<td>X</td>
<td>X</td>
</tr>
<tr>
<td>NamedGeneration</td>
<td>X</td>
<td>X</td>
<td></td>
<td></td>
<td></td>
<td>X</td>
<td>X</td>
<td>X</td>
</tr>
<tr>
<td>NamedLevel</td>
<td>X</td>
<td>X</td>
<td></td>
<td></td>
<td></td>
<td>X</td>
<td>X</td>
<td>X</td>
</tr>
<tr>
<td>OutOfRangeName</td>
<td>X</td>
<td>X</td>
<td></td>
<td></td>
<td></td>
<td>X</td>
<td>X</td>
<td>X</td>
</tr>
<tr>
<td>PeriodType</td>
<td>X</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>X</td>
<td>X</td>
<td>X</td>
</tr>
<tr>
<td>PhasedSubStartYear</td>
<td></td>
<td></td>
<td>X</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>PlanningAppType</td>
<td></td>
<td></td>
<td>X</td>
<td>X</td>
<td>X</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>PrimaryLevelWeightingDim (Displayed in the Property Grid as Level Usage for Aggregation)</td>
<td>X</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>X</td>
<td>X</td>
<td>X</td>
</tr>
<tr>
<td>Property Name</td>
<td>Essbase ASO</td>
<td>Essbase BSO</td>
<td>Consolidation</td>
<td>Planning</td>
<td>Profitability</td>
<td>9.3.3.x</td>
<td>11.1.x</td>
<td>11.1.2.x</td>
</tr>
<tr>
<td>--------------------------------</td>
<td>-------------</td>
<td>-------------</td>
<td>---------------</td>
<td>----------</td>
<td>---------------</td>
<td>---------</td>
<td>--------</td>
<td>----------</td>
</tr>
<tr>
<td>PSBWorkforceModel</td>
<td></td>
<td></td>
<td></td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td></td>
</tr>
<tr>
<td>SecondaryLevelWeightingDim</td>
<td>X</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>SharedServicesInstanceId</td>
<td>X</td>
<td>X</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>SmartList</td>
<td></td>
<td></td>
<td></td>
<td>X</td>
<td>X</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>SmartListEntryLabel</td>
<td>X</td>
<td>X</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>SmartListLabel</td>
<td></td>
<td></td>
<td></td>
<td>X</td>
<td>X</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>StartValue</td>
<td></td>
<td></td>
<td></td>
<td>X</td>
<td>X</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Type</td>
<td></td>
<td></td>
<td></td>
<td>X</td>
<td>X</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>TypedMeasureEnabled</td>
<td></td>
<td></td>
<td></td>
<td>X</td>
<td>X</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>WorkforceDeployed</td>
<td></td>
<td></td>
<td></td>
<td>X</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
If you receive validation errors after upgrading to Release 11.1.2.1, you must make these manual fixes:

<table>
<thead>
<tr>
<th>Validation Error</th>
<th>Fix</th>
</tr>
</thead>
<tbody>
<tr>
<td>Dimension cannot have a negative, zero, or empty sort order value: Dimension 'Dimension Name'.</td>
<td>If the sort order is not available or not set correctly in the previous state it is shown as a validation error. Users should correct the sort order in the Performance Settings. See “Modifying Performance Settings” on page 176.</td>
</tr>
<tr>
<td>DataStorage at dimension level may be set to blank in previous versions.</td>
<td>In most cases Essbase defaults to StoreData or LabelOnly. Users should manually select the appropriate Data Storage property value for the dimension.</td>
</tr>
</tbody>
</table>

The following tables describe the validations performed by Performance Management Architect for each application type.

### Table 49  Consolidation Validations

<table>
<thead>
<tr>
<th>Validation Level</th>
<th>Validations</th>
</tr>
</thead>
</table>
| Dimension        | ● Verify that there are no UDA dimensions in the application, since UDA dimensions are not supported in Consolidation applications.  
                  ● Determine if there are any dimensions that use an invalid dimension class in the application  
                  ● Verify that period dimensions are local  
                  ● Verify that the dimension instance does not have more than the maximum allowed levels of dimensional depth  
                  ● Verify that the dimension supports shared members  
                  ● Verify that the dimension supports non-unique members  
                  ● Verify that the dimension has required associations  
                  ● Validate the custom dimension ID  
                  ● Check for static dimensions |
| Application      | ● Verify that all required dimensions are included in the application  
                  ● Validate the allowed number of dimension instances of a dimension class that have been added to the application  
                  ● Enforce application naming rules  
                  ● Check for invalid characters |
<table>
<thead>
<tr>
<th>Validation Level</th>
<th>Validations</th>
</tr>
</thead>
</table>
| Member           | ● Verify that there is a valid account type for the member  
|                  | ● Verify that there is a valid default member property |

**Table 50  Planning Validations**

<table>
<thead>
<tr>
<th>Validation Level</th>
<th>Validations</th>
</tr>
</thead>
</table>
| Dimension        | ● Attribute dimensions can only be associated with sparse dimensions.  
|                  | ● Allowed values for Boolean members are either True or False  
|                  | ● Level-0 date members should conform to the date format property set in application settings  
|                  | ● Level-0 numeric members should be a valid number  
|                  | ● View dimension types are not supported in Planning applications  
|                  | ● Empty Attribute dimensions of type Boolean, Date, or Numeric cannot be associated with a base dimension  
|                  | ● A base dimension can be associated with only one Boolean Attribute dimension  
|                  | ● The Year, Currency, and Alias dimension have limited dimension depth  
|                  | ● The Year, Currency, and Alias dimensions do not have shared members  
|                  | ● Dimensions do not support non-unique members within the dimension  
|                  | ● Each Alias dimension has a Default alias member  
|                  | ● Dimension plan types selected must be the same as or a subset of the plan types selected for the application  
|                  | ● The Alias dimension does not have a disallowed name  
|                  | ● There is no duplication of Alias in Alias table  
|                  | ● For all members of the Version dimension, the Enable Process Management property is not set to True if the Version Type property is set to Target  
|                  | ● Member names and aliases are unique  

**Period and Year Validations:**

|                  | ● Year members must be sequential  
|                  | ● The first year member must be the Fiscal Start Year for the current application  
|                  | ● Each level under the Year Total member in the Period tree must have the same number of children  
|                  | ● The number of leaf members under the Year Total member is correct for the base time period of this application  
|                  | ● The maximum number of periods is 500  
|                  | ● The maximum number of Year members has not been exceeded  
|                  | ● There are no more than 100 years in Year dimensions  
|                  | ● The first year in Year dimensions has the correct format  
|                  | ● For deployed applications, year is not added to the beginning of a range  
<p>|                  | ● The Period dimension member depth is based on Period Type |</p>
<table>
<thead>
<tr>
<th>Validation Level</th>
<th>Validations</th>
</tr>
</thead>
</table>
| **Application**  | ● No dimension associations exist within the application  
                      ● The application has the minimum required dimensions as described in “Creating Planning Applications” on page 164  
                      ● The Scenario, Year, Period, Entity, Account, and Alias dimensions do not have more instances than specified in the application  
                      ● Check that all required dimensions are present based on selected plan types at the application level  
                      ● Verify that the Account Type property contains only valid values for Planning  
                      ● Enforce rules on the application name. The application name can include a maximum of 8 characters and cannot be “Planning.”  
                      ● Verify that the PerfOrder property (for example, RatesPlan1PerfOrder) has a unique value for plan types |
| **Member**       | ● Source Plan Type value is not valid for the member  
                      ● Expense Reporting value for this member is not valid  
                      ● Time Balance can only be set to Last in Essbase applications  
                      ● Plan types for a member are the same as or a subset of its parent. For top level members, the parent plan types are the dimension plan types  
                      ● A valid DTS is used based on Period Type selected  
                      ● Check all members of all dimensions of a particular dimension class have a non-null value for a particular property, and that the property value is one of the allowed values  
                      ● Check Exchange Rate type property value based on Data Type Property  
                      ● Check Two Pass Calculation property based on DataStorage Property  
                      ● If more than one member uses an Attribute property, those members are required to be at the same level in their respective hierarchies |

**Member name validations:**

● Smart List member names cannot have special characters or blank spaces  
● Year member names must be of the format FY10  
● No leading or trailing white space is allowed in member names  
● Must be between 1 and 80 characters  
● Cannot contain special characters or reserved words  
● Cannot start with special characters  
● Cannot be reserved words  
● Cannot match dimension names  
● If Attribute Type is Boolean, the allowed values for member names are either True or False.

**Note:** These requirements are specific to Planning applications that use the Plan1, Plan2, or Plan3 plan type. For Planning modules that use other plan types, the requirements may differ. For information on Oracle Hyperion Public Sector Planning and Budgeting, see the Oracle Hyperion Public Sector Planning and Budgeting User’s Guide. For information on Oracle Hyperion Workforce Planning and Oracle Hyperion Capital Asset Planning, see the Oracle Hyperion Workforce Planning Administrator’s Guide and Oracle Hyperion Capital Asset Planning Administrator’s Guide.
### Table 51  Profitability Validations

<table>
<thead>
<tr>
<th>Validation Level</th>
<th>Validations</th>
</tr>
</thead>
</table>
| **Dimension**    | ● Root members of Business dimensions must have the ASO and BSO data storage set to LabelOnly.  
                   ● Dimension Sort Order is set for all dimensions in the model, excluding Alias and UDA dimensions, and satisfies the following conditions:  
                     ❍ A dimension sort order must be set for every dimension in the model, except Alias and UDA dimensions.  
                     ❝ Note: The Alias and UDA dimensions are ignored for Dimension Sort Order.  
                     ❍ The dimension sort order must be sequential.  
                     ❍ Measures dimension is set to 1, by default.  
                     ❍ AllocationType dimension is set to 2 by default for Standard Profitability applications only. This dimension does not apply for Detailed Profitability applications.  
                     ❍ POV and business dimensions are set to 3 or higher.  
                     ❍ Attribute dimensions are sorted as the last dimensions.  
                       For example, if you have four attribute dimensions in a sequence of 12 dimensions, the attribute dimensions must be set as 9, 10, 11, and 12.  
                     ● Duplicate members do not exist in the same dimension.  
                     ● POV dimensions must have at least one member.  
                     ● Attribute dimensions can only be associated with sparse dimensions.  
                     ● Attribute dimensions must satisfy the following conditions:  
                       ❍ Only a Level-0 member from the attribute dimension may be assigned as an attribute.  
                       ❍ Attributes may be assigned only to members at the same level in the base dimension.  
                       ❍ Attribute dimensions can only be associated with sparse dimensions. |
| **Application**   | ● The name of the application is 7 characters or fewer, and cannot contain special characters.  
                   ● At least one dimension must be set to POV type. Up to 4 dimensions may be marked as POV dimensions. Only one occurrence of each POV dimension class is allowed.  
                   ● At least one business dimension must be defined.  
                   ● At least one Measures dimension must be defined.  
                   ● At least one AllocationType dimension must be defined for Standard Profitability applications. This dimension type does not apply for Detailed Profitability applications.  
                   ● There is only one dimension of type “Account.”  
                   ● There is only one dimension of type “Entity.”  
                   ● Application names do not contain Essbase special characters and reserved words. |
Validation

Level

Member

- Allow only ASO and BSO data storage to be defined
- No shared members are allowed in the first Gen 2 member
- A Shared Member must always appear after its corresponding Base Member in the outline order.
- NoMember must be set as the last generation 2 member for all business dimensions, and must be set to Ignore (~) in the Property Grid.

Note: This requirement does not apply to POV, Measures, AllocationType, Alias, UDA or Attribute dimensions.

- Shared members must reside in a Dynamic hierarchy, using one of the following methods:
  - The Gen 1 member is HierarchyType=dynamic
  - The Gen 1 member is HierarchyType=HierarchiesEnabled, and the Gen 2 ancestor of the shared member is HierarchyType=dynamic
- Ensure no duplicate member names or aliases exist for any members within the dimension
- Member names do not include Essbase special characters and reserved words

Table 52  Common Essbase ASO and BSO Validations

<table>
<thead>
<tr>
<th>Validation Level</th>
<th>Validations</th>
</tr>
</thead>
</table>
| Dimension        | - Attribute dimensions can only be associated with only one other base dimension.  
- Verify that the Dimension Sort Order is sequential, does not have duplicates and the Attribute dimensions are at the end  
- Verify that all smart lists are referenced.  
- Verify that smart list dimensions are not empty.  
- Generation names and level names must be unique in an outline (application). Names cannot be the same as other generation or level names. In addition, names cannot be the same as a member, dimension, Alias property value, or dimension alias property value. | |
| Application      | - Minimum number of dimensions is 1.  
- Verify that the database name is not empty.  
- Duplicates across the dimensions of the following types are not allowed: Time, Account, Generic, Currency and Country.  
- The application name can contain up to 8 characters (non-Unicode) or 30 characters (Unicode) if the Supports Unicode property is enabled.  
- Application names cannot contain the following characters: space * \ [ ] : , = < > . + ? ; ' / |  
- The application description cannot exceed 79 characters.  
- Dimension names, member names, Alias values, and Alias members cannot exceed 80 characters and cannot contain:  
  - Quotes ("), brackets [ ], or tabs  
  - Spaces at beginning or end  
  - The first character of: @ \ { } , - = ( ) . + ' _ .  
- The Database Name property cannot be null.  
- Verify that if the application level TypedMeasureEnabled=false, then Account members cannot have their Type properties set to Text or Date. |
The Time Balance property for all Account dimension members can only have values of None, First, Average, or Last.

Primary members must be present before shared instances.

Verify if an Essbase dimension has the AllowDuplicatesInDimension property set to false and yet contains non-unique members. If a non-unique member is found, an error is logged.

Verify that all member names and aliases are unique in application or in dimension (per properties set in the outline).

If AllowDuplicatesInOutline is set to false all member names must be unique. Alias values must be unique within the alias table and cannot conflict with any of the member names. Alias values can be same as the member name.

If AllowDuplicatesInOutline is set to true uniqueness is checked within the context of dimension. If non-unique members are required in the dimension, the dimension level property AllowDuplicatesInDimension should be set to true.

If a shared member has its DataStorage set to ShareData, then its primary reference member must have its DataStorage set to StoreData.

If a dimension with an attribute association is set to "Label Only," a warning is displayed indicating that all attribute associations will be dropped.

Verify that none of the Smart List members have duplicate values.

Verify that Smart List values are only allowed on base (leaf) members.

---

### Table 53  Essbase (BSO) Validations

<table>
<thead>
<tr>
<th>Validation Level</th>
<th>Validations</th>
</tr>
</thead>
</table>
| **Dimension**    | ● Verify that the dimension is not set to allow duplicates and non-unique members.  
                  | ● Verify that the Data Storage property set at the dimension level is LabelOnly, NeverShare, or StoreData for dimensions of the following types: Time, Account, and Attribute.  
                  | ● Verify that at least one dimension in the cube is set to Dense. |
| **Application**  | ● Ensures that only one (the maximum number allowed) of the following dimensions types are in the application: Time, Period, Account, Currency, Entity, and Country.  
                  | ● Ensures that the Skip property is set when the Time Balance is set for an Account dimension. |
| **Member**       | ● Top members cannot be shared members.  
                  | ● Shared instances of members cannot exist without the primary members.  
                  | ● Base/level 0 members cannot have the Data Storage value of LabelOnly for dimensions of the following types: Time, Account, Generic, Currency, Country, and Attribute.  
                  | ● Verify that if an Essbase dimension has the AllowDuplicatesInOutline and AllowDuplicatesInDimension property set to false and yet contains non-unique members. If a non-unique member is found, an error is logged.  
                  | ● Verifies that the Data Storage property is set to DynamicCalc, DynamicCalcAndStore, LabelOnly, NeverShare, ShareData, or StoreData for members of the following dimensions: Time, Account, Generic, and Attribute. |

**Note:** For Essbase (ASO) and Essbase (BSO), the majority of validations are performed at deployment.
### Table 54  Essbase (ASO) Validations

<table>
<thead>
<tr>
<th>Validation Level</th>
<th>Validations</th>
</tr>
</thead>
</table>
| **Dimension**    | - If “Multiple Hierarchy” is enabled for a dimension, the Data Storage property must be LabelOnly.  
- The Data Storage property at the dimension level can be LabelOnly, NeverShare, or StoreData for dimensions of the following types: Time and Account.  
- Attribute dimensions cannot have shared members. |
| **Application**  | Verifies that there is only one Time or Account dimension. |
| **Member**       | - Top members cannot be shared members.  
- The primary occurrence of each shared member also exists in the application.  
- Duplicates across dimensions are controlled by a flag at the application level. There is also a flag at the dimension level that indicates that duplicates in the dimension are allowed. If duplicates are not allowed at the application level, then duplicates are not allowed at the dimension level.  
- Issue a warning if hierarchy depth is more than 10 levels.  
- If “Multiple Hierarchy” is enabled, member formulas are supported for Dynamic Hierarchy members, and Dynamic dimensions.  
- Stored hierarchy dimensions cannot have shared members. Stored hierarchies within a multiple hierarchies dimension can have shared members, except that the first hierarchy in a dimension where multiple hierarchies are enabled cannot contain a shared member. A shared member cannot be in the same Stored hierarchy as it’s primary member. A stored hierarchy can only have one copy of a shared member.  
- A stored hierarchy can contain a shared instance of a dynamic hierarchy member only if the dynamic hierarchy member is a level-0 member without a formula.  
- The first hierarchy in a multiple hierarchies enabled dimension must be a stored hierarchy.  
- A shared member may not be found before the primary instance of the member. If any are found, an error message is logged for each.  
- The Data Storage property can only be LabelOnly, NeverShare, ShareData, StoreData for members of the following dimensions: Time, Account, and Generic.  
- Attribute members can only have the Data Storage property set to DynamicCalc.  
- Base/level 0 members cannot have the Data Storage value of LabelOnly for the following dimension types: Time, Account, Generic, and Attribute.  
- Check to see if the consolidation operation in stored hierarchies is always set to add(+). If the DataStorage property is LabelOnly then ignore(−) is allowed.  
- Formulas are valid only in dynamic hierarchies  
- LabelOnly members in stored hierarchies should have label only ancestors.  

**Note:** Essbase also requires all members at the same level to be LabelOnly.
Using Member Query Functions

Subtopics

- Special Considerations
- Syntax
- Examples
- Parent
- Children
- Ancestors
- Descendants
- Siblings
- Member
- Match
- AllMembers
- BottomOfHierarchy
- TopOfHierarchy
- Level0

The Performance Management Architect Data Synchronizer supports these member query functions:

- Parent() — Returns the member one level above the member-name in the same branch. See “Parent” on page 418.
- Children() — Returns the members one level below the specified parent. See “Children” on page 418.
- Ancestors() — Returns the members at all levels above the specified member in the same branch. See “Ancestors” on page 419.
- Descendants() — Returns the members all levels below the specified parent. See “Descendants” on page 420.
- Siblings() — Returns the members with the same parent on the same level as the member-name parameter. See “Siblings” on page 420.
- **Member()** — Returns the specified member. See “Member” on page 421.
- **Match()** — Returns the members that match a specified pattern. See “Match” on page 422.
- **Level0()** — Returns the members at the bottom of the hierarchy that do not have children. See “Level0” on page 424.

**Note:** Financial Management does not support the Level0 function.

- **IParent()** — Returns the member one level above the `member-name` in the same branch including parent. See “Parent” on page 418.
- **IChildren()** — Returns the members including the specified parent. See “Children” on page 418.
- **IAncestors()** — Returns the members at all levels above the specified member in the same branch including specified ancestor. See “Ancestors” on page 419.
- **IDescendants()** — Returns the members all levels including the specified parent. See “Descendants” on page 420.
- **ISiblings()** — Returns the members with the same parent on the same level as the `member-name` parameter including specified sibling. See “Siblings” on page 420.

Performance Management Architect uses these technologies to retrieve and load data for Essbase and Planning:

<table>
<thead>
<tr>
<th>Load Data</th>
<th>Retrieve Data</th>
</tr>
</thead>
<tbody>
<tr>
<td>Planning, Essbase BSO, and Essbase ASO use Essbase Java API methods on iESSCube object, namely, beginDataLoad, sendString, and endDataLoad.</td>
<td>Planning and Essbase BSO use calculation scripts. Essbase ASO uses report scripts.</td>
</tr>
</tbody>
</table>

**Special Considerations**

Keep in mind these considerations:

- Financial Management does not support the Level0() function.
- After you select a member in the Pick Member dialog box, you can manually enter the Match(), AllMembers(), BottomOfHierarchy(), and TopOfHierarchy() functions in the Create Filter dialog box.
- Profitability and Cost Management uses the same syntax and code as Essbase BSO.
- When the source is Oracle Hyperion Planning, Essbase BSO, Essbase ASO, or Oracle Hyperion Profitability and Cost Management, follow standard Essbase qualification conventions if any of the arguments to a filter is a duplicate. In addition, if any of the argument passed to any of the function is a duplicate then you must qualify the member as required by Essbase.
- In Essbase ASO applications, the function Siblings() functions the same as ISiblings().

416
You can manually enter the following functions: IParent, IChildren, IAncestors, IDescendants, and ISiblings in the Create Filter dialog box using the following syntax:
function-name(member-name).

Syntax

To use multiple functions, use a semi-colon to separate each function. For example:

Children(Q1); Children (Q2); ISiblings(Jan);

Quotes are not allowed in function syntax. For example:

Siblings ("operating expenses global", Account, true)

returns an error at extraction in the data synchronization log

The correct syntax is:

Siblings (operating expenses global, Account, true)

Some of the strings in the following code examples display on two or more text lines. However, strings must be defined on only one line in your code.

Examples

All of the examples are based on the following Year dimension:
**Parent**

Subtopics
- Syntax
- Examples

Returns the member one level above the *member-name* in the same branch.

**Syntax**

Parent (*member-name*)

IParent (*member-name*)

**Note:** We highly recommend that you use IParent since it is inclusive.

<table>
<thead>
<tr>
<th>Parameter</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>member-name</td>
<td>The member name for the dimension.</td>
</tr>
</tbody>
</table>

**Examples**

Parent (Jun)

returns Q2

IParent (Jun)

returns Jun, Q2

**Children**

Subtopics
- Syntax
- Example

Returns the members one level below the specified parent, which is the *member-name*.

**Syntax**

Children (*member-name*)

IChildren (*member-name*)

**Note:** We highly recommend that you use IChildren since it is inclusive.
Parameter | Description
--- | ---
*member-name* | The member name for the dimension.

**Example**

IChildren (Q1)

returns Q1, Jan, Feb, Mar

**Ancestors**

Subtopics

- Syntax
- Examples

Returns the members at all levels above the specified member in the same branch.

**Syntax**

Ancestors (*member-name*)

IAncestors (*member-name*)

**Note:** We highly recommend that you use IAncestors since it is inclusive.

<table>
<thead>
<tr>
<th>Parameter</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td><em>member-name</em></td>
<td>The member name for the dimension.</td>
</tr>
</tbody>
</table>

**Examples**

Ancestors (Jan)

returns Q1

IAncestors (Jan)

returns Q1, Jan
**Descendants**

**Subtopics**
- Syntax
- Examples

Returns the members at all levels below the specified parent, which is the *member-name*.

**Syntax**

<table>
<thead>
<tr>
<th>Descendants (member-name)</th>
</tr>
</thead>
<tbody>
<tr>
<td>IDescendants (member-name)</td>
</tr>
</tbody>
</table>

**Note:** We highly recommend that you use IDescendants since it is inclusive.

<table>
<thead>
<tr>
<th>Parameter</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td><em>member-name</em></td>
<td>The member name for the dimension.</td>
</tr>
</tbody>
</table>

**Examples**

Descendants (Year)

returns Q1, Jan, Feb, Mar

IDescendants (Year)

returns Year, Q1, Jan, Feb, Mar

**Siblings**

**Subtopics**
- Syntax
- Examples

Returns the members with the same parent on the same level as the *member-name* parameter.

**Syntax**

<table>
<thead>
<tr>
<th>Siblings (member-name)</th>
</tr>
</thead>
<tbody>
<tr>
<td>ISiblings (member-name)</td>
</tr>
</tbody>
</table>

**Note:** We highly recommend that you use ISiblings since it is inclusive.
### Parameter Description

<table>
<thead>
<tr>
<th>Parameter</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>member-name</td>
<td>The member name for the dimension.</td>
</tr>
</tbody>
</table>

### Examples

**siblings (Jan)**

returns Jan, Feb, Mar

**ISiblings (Jan)**

returns Jan, Feb, Mar

**Note:** For Oracle Essbase ASO applications, the inclusive parameter is invalid and returns the member as well as members with the same parent on the same level as the `member-name` parameter. Therefore, Siblings and ISiblings function the same.

### Member

**Subtopics**

- **Syntax**
- **Example**

Returns the member with the name that is provided as a character string.

### Syntax

**Member (member-name)**

**Example**

Member (Q1, Year)

returns Q1
Match

Subtopics

- Syntax
- Examples

Returns the members that match a specified pattern.

Syntax

Match (pattern)

where pattern is text string. You can use any of the following wildcard characters

? - Matches one occurrence of any character

* - Matches zero or more characters. You can use the * at the end of string only.

Examples

Match (Q?)
returns Q1, Q2, Q3, and Q4

Match (J*)
returns Jan

Match (*)
returns all members

Match (F?b)
returns Feb

AllMembers

Subtopics

- Syntax
- Example

Returns all members in the hierarchy.

Note: AllMembers() is supported in Financial Management applications only.

Syntax

AllMembers (hierarchy)
where \textit{hierarchy} is the hierarchy of the dimension.

**Example**

\texttt{AllMembers} (Year)

returns all members of the Year dimension

**BottomOfHierarchy**

Subtopics

- Syntax
- Examples

Returns the members that do not have children in a dimension.

**Note:** BottomOfHierarchy() is supported in Financial Management applications only.

**Syntax**

\texttt{BottomOfHierarchy} (\textit{hierarchy})

where \textit{hierarchy} is the hierarchy of the dimension.

**Examples**

\texttt{BottomOfHierarchy} ()

returns Jan, Feb, Mar, Apr, May, Jun, Q3, Q4

\texttt{BottomOfHierarchy} (Q1)

returns Jan, Feb, Mar

**Note:** Level0 and BottomOfHierarchy functions result in the same behavior. If you enter Level0, Performance Management Architect automatically converts the function to BottomOfHierarchy.

**TopOfHierarchy**

Subtopics

- Syntax
- Example

Returns the members at the top of the hierarchy that have no parent members.
Syntax

**TopOfHierarchy** *(hierarchy)*

where *hierarchy* is the hierarchy of the dimension.

**Example**

TopOfHierarchy (Q1)

returns Year

**Level0**

Subtopics

- Syntax
- Example

Returns the members at the bottom of the hierarchy that do not have children.

**Note:** Oracle Hyperion Financial Management does not support the Level0 function.

Syntax

**Level0** *(hierarchy)*

where *hierarchy* is the hierarchy of the dimension.

**Example**

Level0 (Qtr1)

returns Jan, Feb, Mar
The BPMA_Server_Config.xml file has two main elements, DimensionServer and log4net. The DimensionServer section contains settings that are specific to internal workings of the Dimension Server and other related components. The log4net section contains settings that are used by the log4net module, which is used to log warnings, errors, and so on. You can find the BPMA_Server_Config.xml file in: <EPM_ORACLE_INSTANCE>/config/EPMA. The following is an excerpt of the BPMA_Server_Config.xml file:

```xml
<?xml version="1.0" encoding="utf-8" ?>
<Config>
  <DimensionServer>
    <Data_Access_Layer>
      <ConnectRetries>3</ConnectRetries>
      <ConnectRetryTimeout>30</ConnectRetryTimeout>
      <CommandTimeout>900</CommandTimeout>
      <UseWindowsAuthentication>false</UseWindowsAuthentication>
    </Data_Access_Layer>
    <SessionManager>
      <ClassPath>%EPM_ORACLE_HOME%\products\Foundation\BPMA\AppServer\DimensionServer\ServerEngine\bin\awbutil.jar;%EPM_ORACLE_HOME%\products\Foundation\BPMA\AppServer\DimensionServer\ServerEngine\bin\CASSecurity.jar;%EPM_ORACLE_HOME%\common\jlib\11.1.2.0\epm_j2se.jar;</ClassPath>
    </SessionManager>
  </DimensionServer>
</Config>
```

**Note:** Some descriptions in the following table indicate a default value, which are automatically pre-populated when you install Performance Management Architect. Do not leave settings blank unless noted.

The following table shows the parameter, description, and default setting for settings in BPMA_Server_Config.xml.

<table>
<thead>
<tr>
<th>Parameter</th>
<th>Description</th>
<th>Default Setting</th>
</tr>
</thead>
<tbody>
<tr>
<td>DimensionServer</td>
<td>Contains settings specific to internal workings of the Dimension Server and other related components, such as Session Manager.</td>
<td></td>
</tr>
<tr>
<td>Parameter</td>
<td>Description</td>
<td>Default Setting</td>
</tr>
<tr>
<td>-----------------------</td>
<td>-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------</td>
<td>-----------------</td>
</tr>
</tbody>
</table>
| Data_Access_Layer     | Contains values that are used to create a connection to a database if the connection details cannot be retrieved from Shared Services. All Performance Management Architect components connect to the Performance Management Architect database using the same settings. The following settings are in the Data_Access_Layer:  
  • ConnectRetries—The number of times that a connection to the database will be attempted before an exception (error) is thrown  
  • ConnectRetryTimeout—The number of seconds between each database connection retry.  
  • CommandTimeout—The number of seconds that will elapse after sending a query to the database before a database error is reported. The default value is 900 which is 900 seconds or 15 minutes.  
  • UseWindowsAuthentication—For SQL Server databases only. If set to True, this setting uses Windows authentication. If set to False, SQL Server authentication is used. |
| EPMATempFilePath       | The directory where the following Performance Management Architect temporary files are stored.  
  • If OutputExportDocuments is set to False (default), the final export results are written to: FinishedDeploymentDocument.xml in the folder set in the EPMATempFilePath.  
  • If OutputExportDocuments is set to True, the final export results are written to: FinishedDeploymentDocument.xml in the folder set in ExportXSLPath.  
  The default location is: `<EPM_ORACLE_INSTANCE>	mp\EPMA`. |
<p>| SessionManager        | Contains values that are used by the Session Manager service to connect to Shared Services through the NetUNIBridge Service. Oracle Hyperion Shared Services is used by the Session Manager to retrieve user authentication, group, role, rights information, database connection information, and so on. |
| JavaMinHeap           | Located in the SessionManager section. This setting stores the minimum value for the JVM heap memory at initiation. The maximum value that you can define is 256m.                                                           | 16m             |</p>
<table>
<thead>
<tr>
<th>Parameter</th>
<th>Description</th>
<th>Default Setting</th>
</tr>
</thead>
<tbody>
<tr>
<td>JavaMaxHeap</td>
<td>Located in the SessionManager section. This setting stores the maximum value for the JVM heap memory at initiation. The maximum value that you can define is 1024m.</td>
<td>512m</td>
</tr>
<tr>
<td>EnableNestedGroups</td>
<td>Set to True to indicate that when group memberships are requested for a particular user, any nested groups are returned along with top-level groups. Set this to False to indicate that when group memberships are requested for a particular user, only top-level groups are returned (no nested groups are included).</td>
<td>True</td>
</tr>
<tr>
<td>NetUNIBridgePort</td>
<td>Port number used by the NetUNIBridge service to communicate with the SessionManager service.</td>
<td>5255</td>
</tr>
<tr>
<td>NetUNIBridgeHost</td>
<td>Name of the physical machine where the NetUNIBridge service is running. The name can be localhost if NetUNIBridge is running on the same machine as the Dimension Server.</td>
<td></td>
</tr>
<tr>
<td>Port</td>
<td>Port number that the EPMA Server listens on.</td>
<td>5251</td>
</tr>
<tr>
<td>DimensionServerStartupTimeout</td>
<td>The number of seconds to wait for an instance of the dimension server to start before throwing an exception.</td>
<td>300</td>
</tr>
<tr>
<td>ExportCompressionThreshold</td>
<td>The maximum number of bytes in size for an exported application before the export is compressed.</td>
<td>102400</td>
</tr>
<tr>
<td>ExportXSLPath</td>
<td>The path to the .XSL files that are used to format application exports.</td>
<td></td>
</tr>
<tr>
<td>OutputExportDocuments</td>
<td>Enables or disables the creation of files in the file system during an application export (which is part of deployment). By default, it is disabled and set to False. To enable it, set the value to True.</td>
<td>False</td>
</tr>
<tr>
<td>ProductMetadataPath</td>
<td>The path to the .XML files that define the product metadata. This is used by the Dimension Server to load property definitions, and so on.</td>
<td></td>
</tr>
<tr>
<td>CustomMetadataPath</td>
<td>(Deprecated)</td>
<td></td>
</tr>
<tr>
<td>Validations</td>
<td>Contains values that are used to control validations. Contains the following settings: Application, MaxReportedErrors, MaxReportedWarnings, and DefaultMessages.</td>
<td></td>
</tr>
<tr>
<td>Application</td>
<td>Contains values to are used to control application validations.</td>
<td></td>
</tr>
<tr>
<td>Parameter</td>
<td>Description</td>
<td>Default Setting</td>
</tr>
<tr>
<td>---------------------------------------</td>
<td>-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------</td>
<td>-----------------</td>
</tr>
<tr>
<td>MaxDeploymentHistoryEntries</td>
<td>Add this setting to override the maximum number of application deployment history entries. The value entered must be greater than 1.</td>
<td>10</td>
</tr>
<tr>
<td>MaxReportedErrors</td>
<td>The maximum number of errors that will be recorded when an application is validated.</td>
<td>5000</td>
</tr>
<tr>
<td>MaxReportedWarnings</td>
<td>The maximum number of warnings that are recorded when an application is validated.</td>
<td>5000</td>
</tr>
<tr>
<td>DefaultMessages</td>
<td>The maximum number of combined errors and warnings that are reported to the user when an application is validated.</td>
<td>25</td>
</tr>
<tr>
<td>AutoCleanupTemporaryApplicationsStart</td>
<td>Control how the server automatically cleans up temporary applications.</td>
<td>AutoCleanupTemporaryApplicationsStartTime default is 4:00:00. AutoCleanupTemporaryApplicationsMinimumAge default is 1440.</td>
</tr>
<tr>
<td>ApplicationsMinimumAge</td>
<td>Temporary applications are used by the Application Creation Wizard, and if a temporary application is not properly cleaned up, it might never get removed.</td>
<td></td>
</tr>
<tr>
<td></td>
<td>By default, the server automatically removes any applications marked as &quot;temporary,&quot; at 4:00:00 (4 am).</td>
<td></td>
</tr>
<tr>
<td></td>
<td><strong>Note:</strong> The time is in local time, military format. For example, the format for 2:30 p.m. is entered as 14:30:00.</td>
<td></td>
</tr>
<tr>
<td></td>
<td>You can adjust the time by modifying the AutoCleanupTemporaryApplicationsStartTime setting. By default, applications that are older than 24 hours are included for cleanup. The minimum age of an application can be modified by setting the AutoCleanupTemporaryApplicationsMinimumAge value in number of minutes.</td>
<td></td>
</tr>
<tr>
<td>PurgeBaselineStartTime</td>
<td>Sets the time when the automatic purging of baselines that are no longer needed begins. By default, it is at 3:00 a.m. local time (entered as 3:00:00).</td>
<td>3:00:00</td>
</tr>
<tr>
<td></td>
<td><strong>Note:</strong> The time is in local time, military format. For example, the format for 2:30 p.m. is entered as 14:30:00.</td>
<td></td>
</tr>
<tr>
<td>ImportErrorThreshold</td>
<td>Maximum number of combined errors and warnings that can occur before a running import shuts down.</td>
<td>Default value: 1000 Minimum value: 0 No maximum value defined</td>
</tr>
<tr>
<td>ExcludedMemberLimit</td>
<td>Limits the number of members returned by the EnumExcludedMembers() API call.</td>
<td>Default value: 5000 Minimum value: 0 Maximum value: 5000</td>
</tr>
<tr>
<td>Parameter</td>
<td>Description</td>
<td>Default Setting</td>
</tr>
<tr>
<td>-----------</td>
<td>-----------------------------------------------------------------------------</td>
<td>-----------------</td>
</tr>
<tr>
<td>log4net</td>
<td>Contains settings used by the log4net module to log errors, debug information, and so on.</td>
<td></td>
</tr>
<tr>
<td></td>
<td><strong>Caution!</strong> Do not change values in this section unless specifically directed by Oracle Customer Support.</td>
<td></td>
</tr>
</tbody>
</table>

**Changing the Connection Time Out Setting**

If you are unable to deploy an application because of a connection time out error, you may need to increase the time out setting in the `BPMA_Server_Config.xml` file.

1. **To change the time out setting in `BPMA_Server_Config.xml`:**
   1. **Stop the Performance Management Architect dimension server.**
   2. **Navigate to the `BPMA_Server_Config.xml` file in** `<Middleware Home>
      \EPMSystem11R1\products\foundation\BPMA\AppServer\DimensionServer
      \ServerEngine\bin.`
   3. **Make a back up copy of the `BPMA_Server_Config.xml` file.**
   4. **Edit the logging configuration section of the `BPMA_Server_Config.xml` file so that debug-level messages are logged to the Windows Event Viewer by changing the logging level from INFO to DEBUG:**
   5. **Add the following XML tags under the </Data Access Layer> section of the `BPMA_Server_Config.xml` file:**

```
<ConnectionPooling>
    <PoolingEnabled>true</PoolingEnabled>
    <ConnectionLifetime>0</ConnectionLifetime>
    <!--MaximumPoolSize is the maximum number of connections in the pool.-->
    <MaximumPoolSize>100</MaximumPoolSize>
    <!--MinimumPoolSize is the minimum number of connections in the pool.-->
    <MinimumPoolSize>1</MaximumPoolSize>
    <!--Controls the enlistment behavior and capabilities of a connection in context of COM+ transactions or System.Transactions. This setting must be either "dynamic" or "true".-->
    <Enlist>true</Enlist>
    <!--The following 5 settings are specific to Oracle database
    Connection Timeout is the maximum time (in seconds) to wait for a free connection from the pool.-->
    <ConnectionTimeout>15</ConnectionTimeout>
</ConnectionPooling>
```
HA Events enables ODP.NET connection pool to proactively remove connections from the pool when an Oracle RAC service, service member, database, or node goes down. Works with RAC, Data Guard, or a single database instance:

```xml
<HAEvents>false</HAEvents>
```

Load Balancing enables ODP.NET connection pool to balance work requests across Oracle RAC instances based on the load balancing advisory and service goal:

```xml
<LoadBalancing>false</LoadBalancing>
```

Pool Size Decrement (Decr Pool Size) is the number of connections that are closed when an excessive number of established connections are unused:

```xml
<PoolSizeDecrement>5</PoolSizeDecrement>
```

Pool Size Increment (Incr Pool Size) is the number of new connections to be created when all connections in the pool are in use:

```xml
<PoolSizeIncrement>1</PoolSizeIncrement>
```

Validate Connection validates connections coming from the pool:

```xml
<ValidateConnection>false</ValidateConnection>
```

The following 4 settings are specific to MS SQL Server:

```xml
<ConnectionReset>true</ConnectionReset>
<LoadBalanceTimeout>0</LoadBalanceTimeout>
```

The following setting can be used to add any custom setting not covered by anything else:

```xml
<CustomSetting></CustomSetting>
```

6. Increase the Connection Time out setting to a higher value (for example 600 minutes, or 10 hours).

7. Restart the Performance Management Architect dimension server.

8. Open the Windows Event Viewer to ensure that there is an event that includes the entire connection string you created.

9. Test to make sure that the connection pool time out setting returns to the default value if you remove the section that you created in step 5 from the `BPMA_Server_Config.xml` file and restart the Oracle Hyperion EPM Architect dimension server.