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# Oracle® Fusion Intelligence For PeopleSoft Enterprise 9.0 and JD Edwards PeopleBook

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**January 2007**

Oracle® Fusion Intelligence For PeopleSoft Enterprise 9.0 and JD Edwards PeopleBook  
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# Fusion Intelligence For PeopleSoft Enterprise and JD Edwards PeopleBook Preface

This chapter discusses:

- Fusion Intelligence For PeopleSoft Enterprise applications.
- Related documentation.
- Common elements used in this PeopleBook.

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## Fusion Intelligence For PeopleSoft Enterprise Applications

This PeopleBook refers to these Fusion Intelligence applications:

- Fusion Financials Intelligence For PeopleSoft Enterprise
- Fusion Human Resources Intelligence For PeopleSoft Enterprise
- Fusion Supply Chain Intelligence For PeopleSoft Enterprise
- Fusion Campus Solutions Intelligence For PeopleSoft Enterprise
- Fusion Public Sector Intelligence For PeopleSoft Enterprise
- Fusion Intelligence for JD Edwards EnterpriseOne

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## Related Documentation

The Fusion Intelligence PeopleBook provides you with implementation information for your Fusion Intelligence applications. Additional, essential information describing the setup and design of your system resides in companion documentation.

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**Note.** This PeopleBook documents only the delivered, prebuilt dashboards, reports, subject areas, and security setup for Fusion Intelligence For PeopleSoft Enterprise applications. Before reading this PeopleBook, read the Oracle Business Intelligence Enterprise Edition documentation for information on the underlying architecture of Fusion Intelligence applications. Also read the PeopleSoft Enterprise Performance Management Warehouse PeopleBook for a more detailed, field-level explanation of the data that is used in these applications.

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This table lists the books that are cross-referenced in the *Fusion Intelligence For PeopleSoft Enterprise 9.0 and JD Edwards PeopleBook*:

Document	Description
<i>Oracle Business Intelligence Infrastructure Installation and Configuration Guide</i>	<p>This guide provides information on installing and configuring the infrastructure or platform components of Oracle Business Intelligence on approved operating system platforms and deployments. This release of the guide applies to infrastructure (platform) releases of Oracle Business Intelligence Enterprise Edition.</p> <p><b>Note.</b> The Oracle Business Intelligence Infrastructure Installer installs the platform components, not the applications components. Refer to the <i>Fusion Intelligence For PeopleSoft Enterprise 9.0 Supplemental Installation Instructions</i> to install the Fusion Intelligence For PeopleSoft Enterprise applications.</p>
<i>Oracle Business Intelligence Server Administration Guide</i>	<p>This is an infrastructure guide that contains post-installation and configuration content that pertains to setting up the Oracle Business Intelligence Server (Oracle BI Server). The guide discusses how to plan, create, and administer the physical, business model and mapping, and presentation layers in the Oracle BI Repository. The guide primarily covers tasks that are performed in the Oracle BI Administration Tool utility.</p>
<i>Oracle Business Intelligence Presentation Services Administration Guide</i>	<p>This guide provides post-installation configuration and administration procedures for Oracle BI Presentation Services, Oracle BI Answers, Oracle BI Delivers, Oracle BI Interactive Dashboards, and the Oracle BI Presentation Catalog and Catalog Manager. Additionally, the guide discusses Oracle BI Presentation Services security, logging, user interface, and integrations using HTTP.</p>
<i>Oracle Business Intelligence Answers, Delivers, and Interactive Dashboards User Guide</i>	<p>This guide is for Oracle BI report and dashboard designers and end users of Fusion Intelligence applications.</p>
<i>PeopleSoft Enterprise Performance Management Warehouse 9.0 PeopleBook</i>	<p>This book provides an overview of the PeopleSoft Enterprise Performance Management Warehouse, which serves as the data source for the Fusion Intelligence For PeopleSoft Enterprise applications.</p>
<i>Fusion Intelligence For PeopleSoft Enterprise 9.0 Supplemental Installation Instructions</i>	<p>This guide discusses how to install the components that are required to run Fusion Intelligence For PeopleSoft Enterprise applications.</p> <p><b>Note.</b> Before using this guide, you must install the tools and applications that are listed in the Prerequisites section of the “Understanding Fusion Intelligence” chapter of this PeopleBook.</p>

## Common Elements Used in This PeopleBook

### Connection Pool

An object in the physical layer of the repository that contains information about the connection between the Oracle BI Server and the data source.

<b>Dimensions</b>	<p>Represents the organization of logical columns (attributes) that belong to a single logical dimension table. Examples of dimensions are time periods, products, markets, customers, suppliers, promotion conditions, raw materials, manufacturing plants, transportation methods, media types, and time of day. In dimensions, you can organize attributes into hierarchical levels. These levels represent your business reporting requirements.</p> <p>Common dimensions contain a set of dimensional attributes that can be shared by all subject areas or marts. The PeopleSoft Enterprise Performance Management functional warehouses share seven common dimensions—calendar, time, business unit, time zone, currency, unit of measure, and language.</p>
<b>Facts</b>	<p>A measure or calculated data, such as quantity, sales, and revenue, that can be specified in terms of dimensions. For example, you might want to determine the sum of dollars for a given product in a given market over a given time period.</p>
<b>Filters and Prompts</b>	<p>Filters are built into requests and are used to limit the results that appear on a dashboard. A report that appears on a dashboard shows only those results that match the filter criteria. Filters are applied on a column-level basis.</p> <p>Certain filters inherit the values that users specify in dashboard prompts. A prompt is another kind of filter that can apply to all items in a dashboard. Some prompts, such as date or period, can be common to all dashboards. Other prompts, such as commodity, are unique to a specific dashboard. Prompts are synonymous with parameters.</p> <p>See <i>Oracle Business Intelligence Answers, Delivers, and Interactive Dashboards User Guide</i>, “Filtering Requests in Oracle BI Answers.”</p>
<b>Folders</b>	<p>In the Oracle BI Presentation Services user interface, folders provide the ability to organize an Oracle BI Web Catalog and its contents, such as reports.</p>
<b>Fusion Intelligence For PeopleSoft Enterprise Applications</b>	<p>Refers to these applications:</p> <ul style="list-style-type: none"> <li>• Fusion Financials Intelligence For PeopleSoft Enterprise</li> <li>• Fusion Human Resources Intelligence For PeopleSoft Enterprise</li> <li>• Fusion Supply Chain Intelligence For PeopleSoft Enterprise</li> <li>• Fusion Campus Solutions Intelligence For PeopleSoft Enterprise</li> <li>• Fusion Public Sector Intelligence For PeopleSoft Enterprise</li> </ul>
<b>Guided Navigation</b>	<p>A link to navigate to the transaction processing application, another dashboard, or a URL. This link can be set up to appear conditionally based on the results of a report or key performance indicator.</p>
<b>Key Performance Indicators (KPIs)</b>	<p>Strategic business factors that are used for reporting. KPIs are designed to monitor performance on strategic business factors such as Revenue or Operating Margin.</p>
<b>Oracle Business Intelligence Answers (Oracle BI Answers)</b>	<p>A component within the Oracle BI Enterprise Edition technology that is used to create ad hoc queries into an organization’s data. Oracle BI Answers provide a set of graphical tools to create and execute requests for information. Requests can be saved in the form of reports, and shared, modified, formatted, or embedded in a dashboard.</p>

<b>Oracle Business Intelligence Enterprise Edition (OBIEE)</b>	A comprehensive suite of enterprise business intelligence products that contain the programs, servers, and tools to support broad, self-service access across the organization. OBIEE is the foundation for Fusion Intelligence For PeopleSoft Enterprise applications.
<b>Oracle Business Intelligence Delivers (Oracle BI Delivers)</b>	A proactive intelligence solution that provides business activity monitoring and alerting for out-of-tolerance situations to target owners and subscribers.
<b>Oracle Business Intelligence Interactive Dashboards (Oracle BI Interactive Dashboards)</b>	Collections of content that are designed to meet the needs of particular user roles. A dashboard is the user interface that provides a knowledge worker with intuitive, interactive access to information that is actionable and dynamically personalized, based on the individual's role and identity.
<b>Oracle Business Intelligence Presentation Catalog (Oracle BI Presentation Catalog)</b>	A collection of subject areas that are defined in the metadata repository layer.
<b>Requests (Reports)</b>	The building blocks of business intelligence dashboards. Requests are created by using Oracle BI Answers to retrieve and display an organization's data. Data can be displayed in a variety of graphical formats. Links can be established in the chart or table of a report to launch another report to offer guided analysis.
<b>Star Schema</b>	A data warehouse schema in which a fact table is associated with a series of dimension tables.

# CHAPTER 1

## Getting Started with Fusion Intelligence

This chapter discusses:

- Fusion Intelligence overview.
- Fusion Intelligence integrations.

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### Fusion Intelligence Overview

The Fusion Intelligence For PeopleSoft Enterprise applications contain interactive, comprehensive analytical applications that offer insight into your financials, human capital management, and supply chain operations. Additionally, Fusion Intelligence For PeopleSoft Enterprise extends the vertical functionality for campus solutions operational and analytic reporting. You can deploy all of the Fusion Intelligence For PeopleSoft Enterprise applications together for a complete, integrated analytic solution, or deploy the applications modularly to meet your specific business and budgetary requirements.

The Fusion Intelligence For PeopleSoft Enterprise applications are based on the PeopleSoft Enterprise Performance Management Warehouse 9.0 data model. You must implement PeopleSoft Enterprise Performance Management Warehouse 9.0 before you can use Fusion Intelligence For PeopleSoft Enterprise.

The applications contain prebuilt, role-based dashboards that help you quickly analyze key performance indicators, reports, and metrics to spot trends and determine if your area of the business is on track. The applications also provide a library of prebuilt reports, prompts, and filters that present data in interactive charts, graphs, and grids. From a dashboard or report, you can drill into the source data in the transaction processing application to view transaction details and take corrective action. Security rules ensure that personalized content is generated for specific users and roles.

The dashboards are tailored for an end user's role in an organization. You can grant each role access to specific objects, such as subject areas, dashboards, and reports. Additionally, you can control access to specific data rows by using secured dimensions.

Fusion Intelligence applications include a single, prebuilt repository that contains the metadata for existing marts in the PeopleSoft Human Capital Management Warehouse, Financials Warehouse, Campus Solutions Warehouse, and Supply Chain Management Warehouse. The repository consists of physical, business mapping, and presentation metadata layers that contain common definitions of metrics, hierarchies, and calculations against the data.

The servers, programs, and tools in Oracle BI Enterprise Edition provide the infrastructure foundation for Fusion Intelligence applications. The metadata repository file, and dashboard and report catalog file, are objects in Oracle BI Enterprise Edition. Oracle BI Answers, Delivers, and Interactive Dashboards are used to create the dashboards, reports, and business monitoring activity in analytic applications.

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## Fusion Intelligence Integrations

Fusion Intelligence For PeopleSoft Enterprise applications seamlessly interact with multidimensional business warehouses that are part of the PeopleSoft Enterprise Performance Management suite. The PeopleSoft Performance Management warehouses capture a wealth of data from online transaction applications in PeopleSoft Enterprise, JD Edwards EnterpriseOne, and JD Edwards World, and feed the data to the Oracle Business Intelligence (BI) Repository as integrated analytic content for reporting and analysis.

These PeopleSoft Performance Management warehouses provide data to Fusion Intelligence applications:

- PeopleSoft Enterprise Campus Solutions Warehouse
- PeopleSoft Enterprise Financials Warehouse
- PeopleSoft Enterprise Human Capital Management Warehouse
- PeopleSoft Enterprise Supply Chain Management Warehouse

The key integration points between Fusion Intelligence For PeopleSoft Enterprise applications and PeopleSoft products are:

- Single signon with user identity management.

You can sign onto a Fusion Intelligence application and drill from dashboard reports into source transactions in PeopleSoft transaction applications, without encountering the PeopleSoft signon page.

- Security at the object and data level.

Fusion Intelligence applications honor the data-level security that you set up in PeopleSoft Enterprise Performance Management Warehouse 9.0. Additionally, you can set up object-level security by creating security groups in Fusion Intelligence applications to match user roles in PeopleSoft.

- Drill between dashboards and transaction applications.

You can click a link in an interactive dashboard or report to drill to a transaction page in a new browser window for more details, while maintaining the data and security.

- Synchronized data model.

A guided drill path is built into the analytic model so you can view aggregated data to understand trends. From summary reports, you can drill in place to detailed reports to investigate exceptions or problems. From there you can drill to the underlying transaction system to act upon the source data to resolve problems.

## CHAPTER 2

# Understanding Fusion Intelligence

This chapter lists prerequisites and discusses:

- Fusion Intelligence subject areas.
- Fusion Intelligence architecture.
- Oracle BI Administration Tool.
- Oracle BI Presentation Services.
- Roles.
- Navigation.
- Reporting tools.
- Request filters.
- Fusion Intelligence setup.
- Cache management.

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## Prerequisites

The following software is required to use Fusion Intelligence applications with the PeopleSoft Enterprise Performance Management database. You must complete the installation of this software before you implement Fusion Intelligence For PeopleSoft Enterprise applications:

- PeopleTools 8.48, minimum.

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**Note.** Select the *Oracle Application Server* option.

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- PeopleSoft Enterprise Performance Management Warehouse 9.0.

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**Note.** (Optional) License the PeopleSoft Enterprise Warehouses for Campus Solutions, Financials, Human Capital Management, and Supply Chain Management.

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- Oracle Business Intelligence Enterprise Edition, release 10.1.3.2.

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**Note.** Select the *Oracle Application Server* option.

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- Oracle Application Server.
- Oracle Application Server infrastructure components:
  - Oracle Internet Directory (LDAP Server).

- Oracle Single Signon Server.

See *PeopleSoft Enterprise Performance Management 9.0 Installation Guide*.

## Fusion Intelligence Subject Areas

This section provides an overview of the delivered Presentation catalogs (which are also called subject areas) in Fusion Intelligence applications.

When you click the Answers link from any location in a Fusion Intelligence application, the Oracle Answers start page appears with a list of subject areas in the workspace. A subject area contains columns and filters that represent information about the areas of your organization's business, or about groups of users within your organization. Subject area names correspond to the types of information that they contain, such as Payroll Deduction and Credit Limit.

The metadata in Fusion Intelligence subject areas maps to data in these four functional warehouses:

- Campus Solutions Warehouse
- Financials Warehouse
- Human Capital Management Warehouse
- Supply Chain Warehouse

**Note.** To fully understand subject areas, familiarize yourself with the data models in PeopleSoft Enterprise Performance Management.

See *PeopleSoft Enterprise Performance Management Warehouse 9.0 PeopleBook*, "Understanding the Performance Management Warehouse."

## Campus Solutions Warehouse

The Fusion Campus Solutions Intelligence For PeopleSoft Enterprise application provides insight into information in these warehouse marts and subject areas:

Warehouse Mart	Subject Area
Admissions and Recruiting	Admission Application Admission Application Status External Academic Summary External Test Scores Prospects to Applicants to Enrollees Recruiting



Warehouse Mart	Subject Area
Student Financial Services	Award Disbursement Award Snapshot Bill Summary Pending Payments Student Financials Transactions
Student Records	Academic Plan Summary Academic Program Detail Class Enrollment Class Instructor Institution Summary Term Enrollment

The Performance Management Warehouse PeopleBooks discuss the dimensions, facts, and metrics in Campus Solutions warehouse marts and subject areas.

### See Also

*Performance Management Warehouse CS Warehouse Dimensions*

*Performance Management Warehouse CS Warehouse Facts*

## Financials Warehouse

The Fusion Financials Intelligence For PeopleSoft Enterprise application provides insight into information in these warehouse marts and subject areas:

Warehouse Mart	Subject Area
Advanced Cost Accounting	Cost Analyzer Driver Balance

Warehouse Mart	Subject Area
Enterprise Service Automation	Contract Amendments Contract Distributions Contract Forecast Current Contract Forecast Periodic Contract Renewals Contract Revenue Recognition Contract Transactions Current Projects Employee Forecast Expense Distributions Expense Report Approvals Periodic Projects Project Changes Project Current Activities Project Deliverables Project Issues Project Periodic Activities Project Transactions Proposals Resource Assignments Resource Rates Resource Time Reports Service Orders
General Ledger and Profitability	Aggregated Balance Journal Entries Period Balances Profitability Analysis
Global Consolidations	Consolidation Ledger Flows

Warehouse Mart	Subject Area
Payables	Account Entries Aging Process Ledger Voucher Match Exceptions Vouchers and Payments
Real Estate	Average Rental Rate by Building Budget Rent v/s Actual Rent by Building Expense Billing General Ledger Journal Entries Lease Real Estate Area Real Estate Billing Rent Tenant Sales History
Receivables	Account Entries Aging Process Credit Limit Customer and Vendor Netting Customer Ledger Days Sales Outstanding Items and Receipts

The Performance Management Warehouse PeopleBooks discuss the dimensions, facts, and metrics in Financials warehouse marts and subject areas.

### See Also

*Performance Management Warehouse Financials Warehouse Dimensions*

*Performance Management Warehouse Financials Warehouse Facts*

## Human Capital Management Warehouse

The Fusion Human Resources Intelligence For PeopleSoft Enterprise application provides insight into information in these warehouse marts and subject areas:

Warehouse Mart	Subject Area
Compensation	Absence Absence Accrual Absence Event Absence Request Benefit Enrollment Global Payroll Leave Accrual Payroll Deduction Payroll Deduction Balance Payroll Earnings Payroll Earnings Balance Payroll Other Earnings
Learning	Accomplishment Activity Cost Completion Current Accomplishment Current Competency Employee Appraisal Employee Review Enrollment Learning Objective Learning Resource Person Competency Program Registration Training Training Course Session Expense

Warehouse Mart	Subject Area
Recruiting	Recruitment Expenses Recruitment Tracking
Workforce	Benchmark Survey Employee Job Grievance Injury Illness Time And Labor Workforce Movement Activity Workforce Profile

The Performance Management Warehouse PeopleBooks discuss the dimensions, facts, and metrics in Human Capital Management warehouse marts and subject areas.

### See Also

*Performance Management Warehouse HCM Warehouse Dimensions*

*Performance Management Warehouse HCM Warehouse Facts*

## Supply Chain Warehouse

The Fusion Supply Chain Intelligence For PeopleSoft Enterprise application provides insight into information in these warehouse marts and subject areas:

Warehouse Mart	Subject Area
Spend	Voucher Voucher Line
Fulfillment and Billing	Billing Booking Billing and Backlog Bookings Kit Order To Cash Cycle Time Return Material Authorization Received Sales Order Sales Order Line Sales Order Line Ship

Warehouse Mart	Subject Area
Inventory	History Sum Ledger Inventory Cycle Count Inventory Ledger Inventory Transaction Physical Inventory
Manufacturing	Work Center Master Work Center Resource Unit Work Order Master Work Order Part List Work Order Production Cost Work Order Routing Work Order Time Transaction
Procurement	Matching Analysis Procurement Cycle Time Analysis Purchase Order Disposition Purchase Order Distribution Purchase Order Line Purchase Order Line Multiple Accounts Purchase Order Receipt and Voucher Purchase Order Receipt and Voucher Multiple Accounts Purchase Order Received Shipment Requisition Analysis Requisition Line Return to Vendor Return to Vendor Distribution
Supply Chain Planning	Inventory Inventory Transfer Production Production Capacity Purchasing Sales Actual Sales Forecast

The Performance Management Warehouse PeopleBooks discuss the dimensions, facts, and metrics in Supply Chain Management warehouse marts and subject areas.

**See Also**

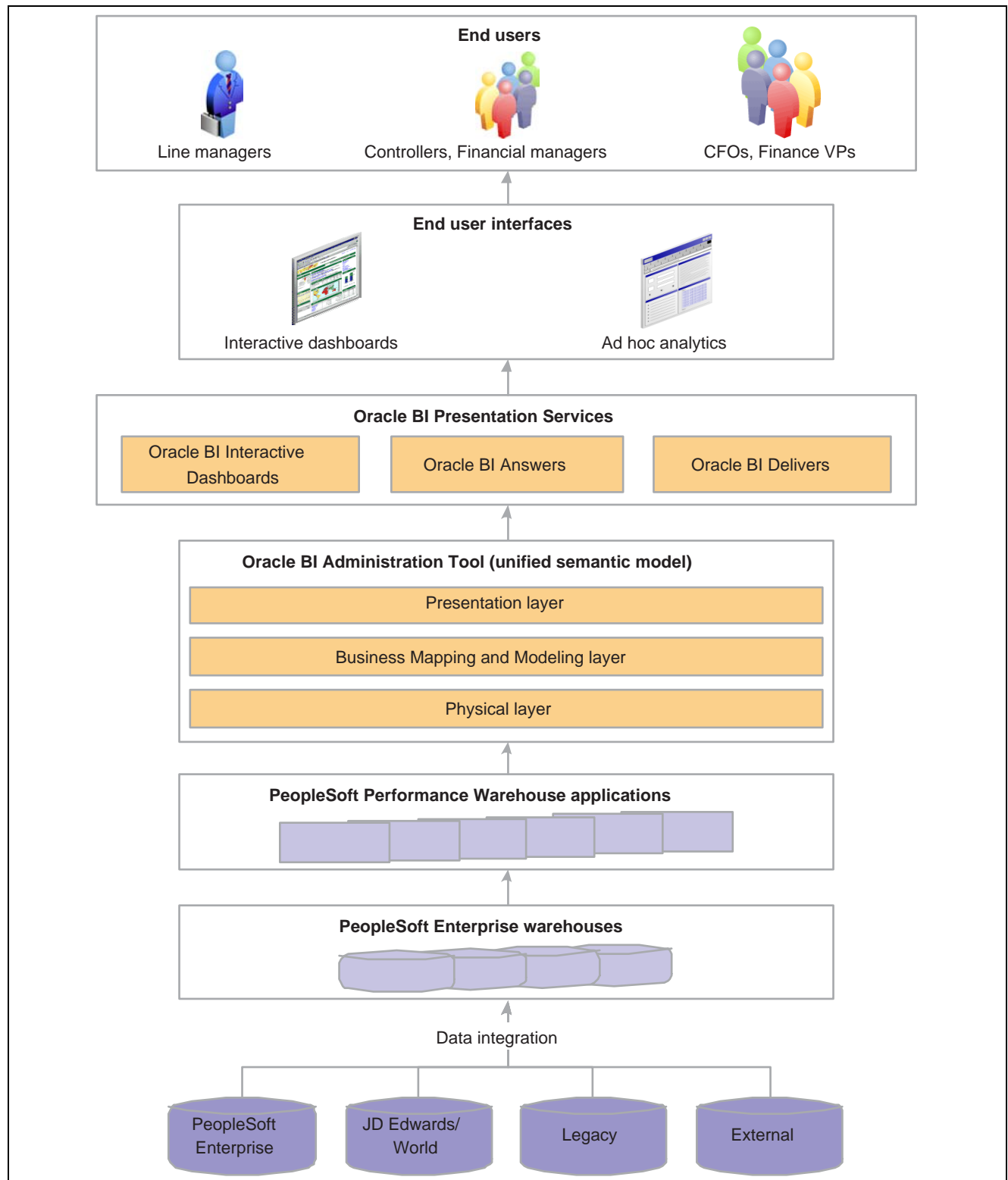
*Performance Management Warehouse SCM Warehouse Dimensions*

*Performance Management Warehouse SCM Warehouse Facts*

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## Fusion Intelligence Architecture

This diagram depicts the relationship between the multidimensional warehouse in PeopleSoft Enterprise Performance Management, Oracle BI components such as Oracle Answers, Oracle Delivers, and the Administrator Tool, and interactive dashboards such as the ones in Fusion Intelligence applications:



Fusion Intelligence architecture



























































## Oracle BI Administration Tool

This section discusses the:

- Repository file
- Physical layer
- Business Model and Mapping layer
- Presentation layer

### Repository File

Prebuilt metadata content is maintained in the metadata repository file named *EPMMaster.rpd* that is shared by all Fusion Intelligence For PeopleSoft Enterprise applications. The repository contains the Physical, Business Model and Mapping, and Presentation layers that are discussed in the following sections. The Oracle BI Administration Tool is the user interface into the layers in the repository, as shown in this example:

Presentation	Business Model and Mapping	Physical
+  FMS-ACA-Cost Analyzer	+  FMS-ACA-Cost Analyzer	-  Enterprise Warehouse
+  FMS-ACA-Driver Balance	+  FMS-ACA-Driver Balance	 MDW Connection Pool
+  FMS-AP-Account Entries	+  FMS-AP-Account Entries	 MDW Init Block Connection Pool
+  FMS-AP-Aging Process	+  FMS-AP-Aging Process	
+  FMS-AP-Ledger	+  FMS-AP-Ledger	+  CS Dimensions
+  FMS-AP-Voucher Match Exceptions	+  FMS-AP-Voucher Match Exceptions	+  CS Facts
+  FMS-AP-Vouchers and Payments	+  FMS-AP-Vouchers and Payments	+  FMS Bridge Tables
+  FMS-AR-Account Entries	+  FMS-AR-Account Entries	+  FMS Dimensions
+  FMS-AR-Aging Process	+  FMS-AR-Aging Process	+  Global Dimensions
+  FMS-AR-Credit Limit	+  FMS-AR-Credit Limit	+  HCM Dimensions
+  FMS-AR-Customer and Vendor Netting	+  FMS-AR-Customer and Vendor Netting	+  HCM Facts
+  FMS-AR-Customer Ledger	+  FMS-AR-Customer Ledger	+  SCM Dimensions
+  FMS-AR-Days Sales Outstanding	+  FMS-AR-Days Sales Outstanding	+  SCM Facts
+  FMS-AR-Items and Receipts	+  FMS-AR-Items and Receipts	+  Security Tables
+  FMS-ESA-Contract Amendments	+  FMS-ESA-Contract Amendments	-  Enterprise Warehouse
+  FMS-ESA-Contract Distributions	+  FMS-ESA-Contract Distributions	+  D_AB_EVENT
+  FMS-ESA-Contract Forecast Current	+  FMS-ESA-Contract Forecast Current	+  D_AB_JNK
+  FMS-ESA-Contract Forecast Periodic	+  FMS-ESA-Contract Forecast Periodic	+  D_AB_MASTER
+  FMS-ESA-Contract Renewals	+  FMS-ESA-Contract Renewals	+  D_AB_MASTER_Origin..

Oracle BI Administration Tool

### Consistency Check

The *Oracle Business Intelligence Server Administration Guide* discusses consistency checks that you must perform on repository metadata before you make the repository available for queries.

**Important!** When you perform a global consistency check on the *EPMMaster.rpd* repository in OBIEE, you may incur this warning message: *[39028] The features in Database 'Enterprise Warehouse' do not match the defaults. This can cause query problems.*

Please disregard this warning message for this release of Fusion Intelligence For PeopleSoft Enterprise. The resolution for this warning is in development and will be available in a subsequent product release.

## Physical Layer

A Physical table is an object in the Physical layer of the Oracle BI Administration Tool that corresponds to an object in a Physical database. The Physical layer folder stores the shortcuts (references) to physical tables. Physical tables are typically imported from a database or another data source, and they provide the metadata necessary for the Oracle BI Server to access the tables. The Physical layer represents the physical structure of the data sources to which the Oracle BI Server submits queries.

A physical object in OBIEE can also be based on an SQL query.

## Connection Pools

In Fusion Intelligence applications, the marts in PeopleSoft Performance Management Warehouse applications provide the data source for the Physical layer. A Physical layer can have multiple data sources. Each data source must have at least one corresponding connection pool, which contains data source information that the system uses to connect to a data source, the number of connections allowed, timeout information, and other connectivity-related administrative details. Connection pools allow multiple concurrent data source requests (queries) to share a single database connection, reducing the overhead of connecting to a database.

Fusion Intelligence For PeopleSoft Enterprise delivers two connection pools—MDW (multidimensional warehouse) Connection Pool and MDW Init Block Connection Pool. For performance reasons, the system uses the MDW InitBlock connection pool exclusively for initialization blocks. The dedicated connection pool contains these default properties:

Property	Value
Name	MDW InitBlock Connection Pool
Call Interface	Default (OCI 8i/9i)
Data Source Name	<customer specific>
Shared Logon	Yes
User Name	<customer specific>
Password	<customer specific>
Enable Connection Pooling	Yes
Parameters Supported	Yes

See *Oracle Business Intelligence Server Administration Guide*, “Creating and Administering the Physical Layer in an Oracle BI Repository,” Setting Up Connection Pools.

## Initialization Blocks

The system uses initialization blocks to initialize dynamic repository variables, system session variables, and nonsystem session variables. This table lists the initialization blocks that are delivered with the Fusion Intelligence applications:

Name	Query	Variable Name	Type
Admission Application PIA page	SELECT A.URI    B.URL FROM PS_SRC_CONFIG A, PS_SRC_COMPONENT B WHERE A.SRC_SYS_ID = B.SRC_SYS_ID AND A.SRC_SYS_ID = 'HCM' AND B.COMPONENT_ID= 'ADM_APPL_PROG_MNT'	ADM_APPL_ PROG_MNT_PG	Dynamic Repository
Job Summary PIA page	SELECT A.URI    B.URL FROM PS_SRC_CONFIG A, PS_SRC_COMPONENT B WHERE A.SRC_SYS_ID = B.SRC_SYS_ID AND A.SRC_SYS_ID = 'HCM' AND B.COMPONENT_ID= 'JOB_SUMMARY'	JOB_SUMMARY_ PG	Dynamic Repository
Journal Entries PIA page	SELECT A.URI    B.URL FROM PS_SRC_CONFIG A, PS_SRC_COMPONENT B WHERE A.SRC_SYS_ID = B.SRC_SYS_ID AND A.SRC_SYS_ID = 'FSCM' AND B.COMPONENT_ID= 'JOURNAL_ENTRY'	JOURNAL_ENTRY_ PG	Dynamic Repository
Overdue Scheduled Payments PIA page	SELECT A.URI    B.URL FROM PS_SRC_CONFIG A, PS_SRC_COMPONENT B WHERE A.SRC_SYS_ID= B.SRC_SYS_ID AND A.SRC_SYS_ID='FSCM' AND B.COMPONENT_ID= 'VNDR_PAYINQ_OVRDUE'	VNDR_PAYINQ_ OVRDUE	Dynamic Repository
None, defaulted to 2006		CURRENT_YEAR	Static Repository
None	CURRENT_YEAR - 1	ONE_YEAR_PRIOR	Static Repository
None	CURRENT_YEAR - 2	TWO_YEAR_ PRIOR	Static Repository
None	CURRENT_YEAR - 3	THREE_YEAR_ PRIOR	Static Repository
None	CURRENT_YEAR - 4	FOUR_YEAR_ PRIOR	Static Repository
None		ROLES	Static Repository

## Global Dimensions

Global dimensions are used by more than one mart within a functional warehouse, and across functional warehouses, to provide you with a consistent view of the data. The Physical layer stores global dimension tables in the Global Dimensions folder. Examples of global dimensions are calendar, time, and business unit.

## System Table

The fact table named *ZZZ* is a logical table that is used for system purposes.

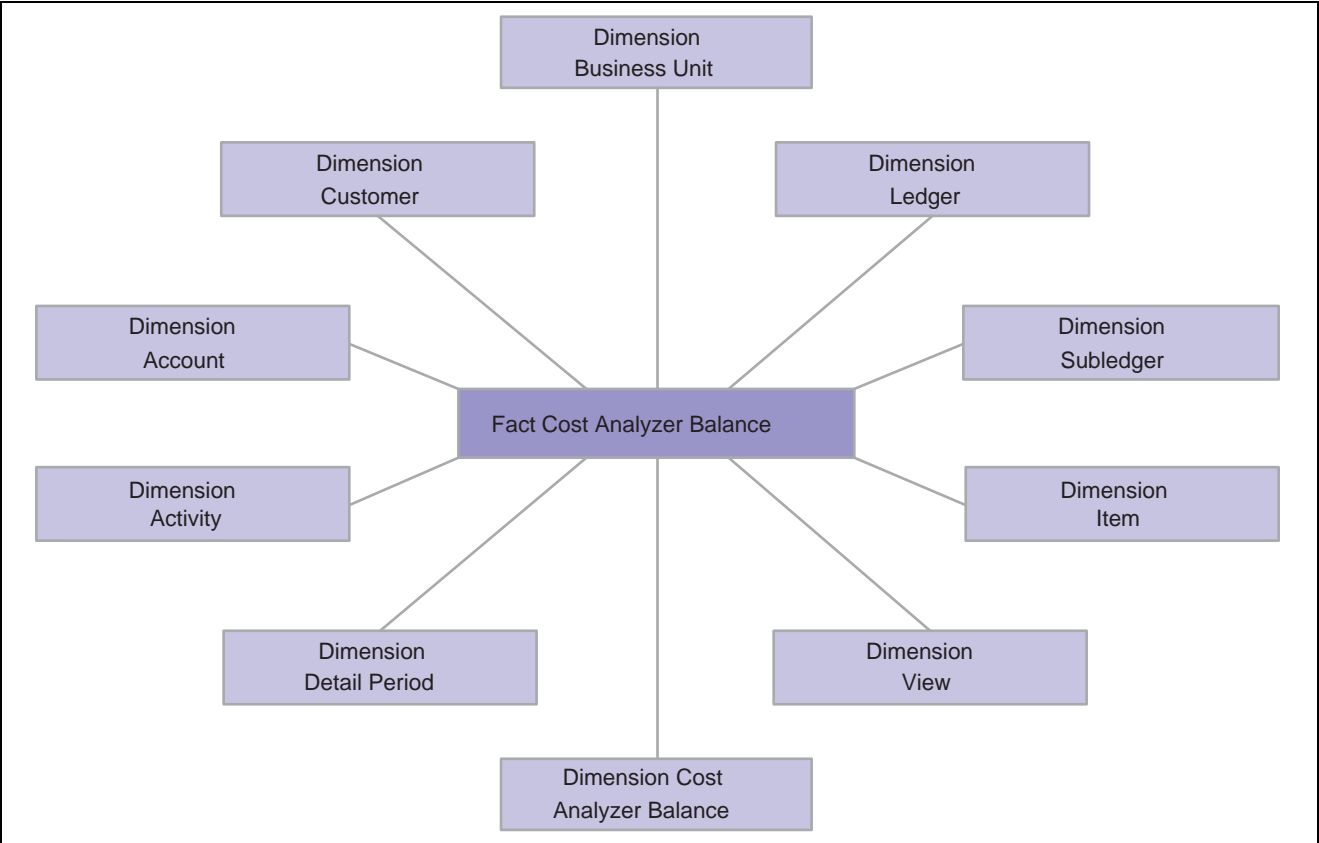
## Business Model and Mapping Layer

The Business Model and Mapping layer represents the logical structure of the information in the repository. The physical schemas are simplified and reorganized based on the users' view of the data. The business models contain logical columns arranged in logical tables (logical dimension tables and logical fact tables), logical joins, and dimensional hierarchy definitions. This layer also contains the mappings from the logical columns to the source data in the Physical layer.

The Business Model and Mapping layer appears in the middle pane of the Oracle BI Administration Tool.

Generally, each logical display folder in this layer represents a business area. Each folder has a shortcut (reference) to all of the logical dimension and fact tables that are joined together in a star schema.

For example, *FMS - ACA - Cost Analyzer* is the name of a logical display folder. It contains the logical fact table named *Fact Cost Analyzer Balance*, and logical dimension tables for *Business Unit*, *Customer*, *Ledger*, *Subledger*, *Account*, *Activity*, *Item*, *View*, *Detail Period*, and *Cost Analyzer Balance*. The logical display folder should contain all of the dimensions and facts that are required for the given star schema. This is an example of the star schema for the *FMS - ACA - Cost Analyzer* logical folder:



FMS - ACA - Cost Analyzer star schema

Dimensional Hierarchies

Many of the results that appear in Fusion Intelligence applications represent hierarchical data structures. A hierarchy is a set of parent-child relationships between certain attributes within a dimension. The hierarchy attributes, called levels, roll up from child to parent. For example, months can roll up to years. Therefore, if an aggregate table exists at the month level, that table can be used to answer questions at the year level by summing all of the month-level data for a year.

The dimensional hierarchies in the Business Model and Mapping layer are either inherited from the dimensional hierarchies that exist in PeopleSoft Enterprise Performance Management data structures, or created specifically to support the delivered Fusion Intelligence dashboard functionality. Fusion Intelligence applications deliver metadata with these prebuilt hierarchies:

Warehouse	Hierarchical Dimension	Table
Campus Solutions	Institution	D_INSTITUTION
	Academic Plan	D_ACAD_PLAN
	Academic Program	D_ACAD_PROG
	Academic Organization	H_ACAD_ORG
	Term	D_TERM
	Day	D_DAY

Warehouse	Hierarchical Dimension	Table
Financials	Account	H_ACCOUNT
	Department	H_DEPT
	Product	D_PRODUCT
	Day	D_DAY
	Business Unit	D_BUSINESS_UNIT
Human Capital Management	Department	H_DEPT
	Geography	H_GEO
	Day	D_DAY
Supply Chain Management	Commodity	D_COMMODITY
	Supplier	D_SUPPLIER
	Business Unit	D_BUSINESS_UNIT
	Day	D_DAY

## Degenerate Dimensions

A fact table may contain columns that cannot be aggregated, such as Status, ID, and Currency Code, that act as dimension attributes. In the Business Model and Mapping layer, these columns reside in a separate logical dimension folder named *Dimension <Fact table name >*. The logical fact folder (named *Fact <Fact table name >*) and the logical dimension folder (named *Dimension <Fact table name >*) both use the same physical source table.

For example, the F\_CST\_ANLYZ\_BAL fact table in the Physical layer contains these columns that cannot be aggregated:

- Transaction Currency Code
- R1 Currency Code
- R2 Currency Code
- System Source ID

In this example, the F\_CST\_ANLYZ\_BAL fact table is represented by two logical tables in the Business Model and Mapping layer: the Fact Cost Analyzer Balance table and the Dimension Cost Analyzer Balance table. Dimension Cost Analyzer Balance is the degenerate dimension. The Dimension Cost Analyzer Balance table contains the currency code and system source columns from the F\_CST\_ANLYZ\_BAL fact table.

The Presentation table that hosts currency attributes is called Currency Attributes. The presentation catalog that hosts other degenerate attributes is called Document Details.

## Presentation Layer

The Presentation layer represents subject areas in Fusion Intelligence applications. This layer provides a way to present a customized view of a business model, known as Presentation catalog, to different sets of users. The Presentation layer appears in the left pane of the Oracle BI Administration Tool. For each subject area that appears in the Oracle Answers pane, facts appear at the top followed by degenerate dimension(s), if any, and the remaining the dimensions sorted in ascending order.

The Presentation layer simplifies the business model and makes it easy for users to understand and query. It exposes only the data that is meaningful to the users, and organizes the data in a way that aligns with the way that users think about the data.

Each subject area must be populated with contents from a single business model; the contents cannot span business models. The name of the subject area is the same as the corresponding logical display folder.

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## Oracle BI Presentation Services

This section discusses:

- Oracle BI Answers
- Oracle BI Dashboards
- Web Catalog Folder

See *Oracle Business Intelligence Answers, Delivers, and Interactive Dashboards User Guide*.

### Oracle BI Answers

Oracle BI Answers is a user interface that is part of the Oracle BI Presentation Services component of Oracle BI Intelligence.

Oracle BI Answers is the embedded reporting tool that allows users with the appropriate permissions to build and modify reports that let end users explore and interact with information, and drill in place to source data. Fusion Intelligence applications contain prebuilt reports that are generated from metadata in the repository, which is mapped to metadata in PeopleSoft Performance Enterprise warehouse marts. You can access these reports either from the delivered dashboards, or from the Oracle Answers Catalog pane on the Oracle Answers page.

On the Oracle Answers page, you can also access the subject area folders that coincide with Oracle BI Presentation Catalog folders. The fact and dimension folders and columns appear in a subject area folder, just as they do in the Presentation Catalog.

#### See Also

*Oracle Business Intelligence Answers, Delivers, and Interactive Dashboards User Guide*, “Basics of Working with Requests in Oracle BI Answers”

### Oracle BI Dashboards

The Oracle BI Dashboards user interface is part of the Oracle BI Presentation Services component of Oracle BI Intelligence.

Interactive Dashboards provide points of access for analytics information. A dashboard is made up of sections of information that can contain items such as results from Oracle BI Answers, external Web content, HTML text, graphics, and links to other dashboards. Dashboard content is logically organized into pages. The pages appear as tabs across the top of the screen in Oracle BI Interactive Dashboards.

A dashboard page is designed to meet the needs of a particular role. For example, the Financial Performance Trend dashboard page is designed for financial executives and managers who want to analyze historical performance for various financial items on a periodic basis.

To access a dashboard, your PeopleSoft user ID must be assigned to the appropriate Presentation Catalog group in Oracle BI Intelligence. Your PeopleSoft application security settings determine the data that you can see on each dashboard. For example, managers can view performance activity only for the business units and departments for which they are responsible.

See *Fusion Intelligence For PeopleSoft Enterprise 9.0 and JD Edwards PeopleBook*, “Setting Up Security.”

Every dashboard or report can have a set of prompts that determine the data that appears. When you change the value of a prompt on a dashboard, and click the Go button, the system automatically refreshes the data on the dashboard. Changing a prompt can affect the amount of data, the column headings, the KPI values, and the graph formats.

### See Also

*Oracle Business Intelligence Answers, Delivers, and Interactive Dashboards User Guide*, “Using Oracle BI Interactive Dashboards”

## Web Catalog Folder

The Oracle BI Web Catalog stores the application dashboards and report definitions, and contains information regarding permissions and accessibility of the dashboards by groups. Prebuilt web catalog content is maintained in the folder named *EPMMaster* that is shared by all Fusion Intelligence For PeopleSoft Enterprise applications.

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## Roles

A user’s role in the organization controls the user’s access to objects (such as dashboards, reports, and catalog folders) in the Oracle BI Presentation Catalog. Presentation Catalog groups are defined by the system or by a Fusion Intelligence administrator. You assign specific users to Presentation Catalog groups, and that group membership determines the users’ access to Presentation Catalog object.

This table lists the delivered sample Presentation Catalog groups, and the subject areas to which the users in those groups have full access to perform any action:

Presentation Catalog groups	Permissible Subject Area Folders
Accounts Payable Manager	Financials - Payables
Accounts Receivable Manager	Financials - Receivables
Business Analyst	Supply Chain
Commodity Manager	Supply Chain
Costing Manager	Financials - Advanced Cost Accounting
CS (Campus Solutions) Administrator	Campus Solutions
Finance Manager	Financials - General Ledger
HCM (Human Capital Management) Executive	Human Capital Management



Presentation Catalog groups	Permissible Subject Area Folders
HCM Manager	Human Capital Management
Line Manager	Human Capital Management
Project Manager	Financials - Enterprise Service Automation
Property Manager	Financials - Real Estate
Presentation Server Administrators	All

All of the Presentation Catalog groups that are listed in this table, with the exception of the Presentation Server Administrators group, have a corresponding Oracle BI Server group with the exact name. Security groups are discussed in more detail in the “Setting Up Security” chapter in this PeopleBook.

### See Also

*Oracle Business Intelligence Presentation Services Administration Guide*, “Managing Oracle BI Presentation Services Security”

## Navigation

Users with the appropriate permissions can log into Fusion Intelligence For PeopleSoft Enterprise and click links to view Dashboards, Answers, More Products, Settings, and My Account. The views that you can access are determined by your membership in a Presentation Catalog group.

See *Oracle Business Intelligence Answers, Delivers, and Interactive Dashboards User Guide*, “Using Oracle BI Interactive Dashboards,” Navigating in Oracle BI Interactive Dashboards.

From dashboards and reports, you can drill in place from summary reports to more detailed reports, and from there to source transactions in the transaction processing application. This table lists the delivered Fusion Intelligence reports from which you can drill into the PeopleSoft transaction processing application, and the target online transaction page:

Dashboard Page	Report Column	Target Online Transaction Page
CSW: Student Administration - Admissions and Recruiting Analysis	Applicant Status Details report - Application Number column	Admission Application page (ADM_APPL_PROG_MNT)
HCM: Workforce Profile - Top Performer Turnover	Top Performer at Risk report - Person Name Drill column	Job Summary page (JOB_SUMMARY)
FMS: General Ledger - Actual vs Prior-Budget-Forecast	Journal Listing report - Journal ID column	Journal Entries page (JOURNAL_ENTRY)
SCM: Spend	Spend By Supplier report - Supplier ID column	Overdue Scheduled Payments page (VNDR_PAYINQ_OVRDUE)

You can set up Fusion Intelligence applications to drill to additional target pages. The “Setting Up Security” chapter in this PeopleBook discusses how to complete the setup tasks that are required to drill to PeopleSoft online transaction systems.

See *Fusion Intelligence For PeopleSoft Enterprise 9.0 and JD Edwards PeopleBook*, “Setting Up Security,” Setting Up Drilling to Transaction Systems.

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## Reporting Tools

Fusion Intelligence For PeopleSoft Enterprise applications deliver more than forty reports that provide end users with key metrics and measures for specific, predefined subject areas. These reports are available in the Oracle BI Answers Catalog and integrated into prebuilt dashboards for Campus Solutions, Financials, Human Capital Management, and Supply Chain Management.

### See Also

*Oracle Business Intelligence Answers, Delivers, and Interactive Dashboards User Guide*, “Basics of Working with Requests in Oracle BI Answers”

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## Request Filters

During the creation of an Oracle BI request, you can use column filters to constrain the request to obtain results that answer a particular question. Together with the columns that you include on the answer, a column filter determines what the results will contain. For example, depending on the industry you work in, you can use column filters to find out who the top ten performers are, sales for a particular brand, most profitable customers, and so on.

A column filter consists of a column to filter, a value to use when applying the filter, and an operator that determines how the value is applied. You can also prevent the filter from being replaced during navigation and prompting.

An example of an Oracle BI request that is built using a filter is the Revenue Summary report that is embedded in the FMS: General Ledger dashboard: Actual vs Prior-Budget-Forecast page. The request is filtered by the Account Type column. The value that the system uses when applying the filter is *R* (Revenue account type). The *equal to / is in* operator tells the system how to apply the value. Therefore in this example, the request considers only data rows that have an account type that is equal to *Revenue*. You can further narrow the results that appear on the Revenue Summary report by using the Calendar, Financial Year, Financial Period, Business Unit, and Manager dashboard prompts that appear on the Actual vs Prior-Budget-Forecast page.

See *Oracle Business Intelligence Answers, Delivers, and Interactive Dashboards User Guide*, “Filtering Requests in Oracle BI Answers” for additional information on using column filters in an Oracle BI request.

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## Fusion Intelligence Setup

The high level steps that you will complete to set up Fusion Intelligence are:

1. Configure OBIEE environment for Fusion Intelligence.

See *Fusion Intelligence For PeopleSoft Enterprise 9.0 Supplemental Installation Instructions* located on Oracle's PeopleSoft Customer Connection website.

2. Configure PeopleSoft Enterprise Performance Management (EPM) for Fusion Intelligence.

See *Fusion Intelligence For PeopleSoft Enterprise 9.0 Supplemental Installation Instructions*.

3. Run the delivered update SQL scripts in EPM to enable the drill in place functionality to PeopleSoft applications.

See *Fusion Intelligence For PeopleSoft Enterprise 9.0 Supplemental Installation Instructions*.

4. Set up EPM data-level security.

See *PeopleSoft Enterprise Performance Management Foundation for Analytical Applications and Performance Management Warehouse 9.0 PeopleBook*, "Securing EPM."

5. Configure desired new dimensional hierarchies in OBIEE as needed.

See *Oracle Business Intelligence Server Administration Guide*, "Creating and Administering the Business Model and Mapping Layer in an Oracle BI Repository."

6. Configure single signon between the online transaction processing application, EPM, and OBIEE.

See *Fusion Intelligence For PeopleSoft Enterprise 9.0 and JD Edwards PeopleBook*, "Setting Up Security."

7. Review the delivered OBIEE dashboard data-level security and enable additional dashboard data-level security in OBIEE as needed.

See *Fusion Intelligence For PeopleSoft Enterprise 9.0 and JD Edwards PeopleBook*, "Setting Up Security."

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## Cache Management

For this release of the OBIEE, if you run an initial or incremental load without first clearing the query cache, it is possible that reports that you run after the load process will reuse the cache that existed prior to the load process. This can result in inconsistencies between reports. There are several alternatives to mitigate this situation, such as:

- Configure the query cache to expire daily.
- Clear the cache tables manually as needed; for example, after you complete a load process.
- Schedule the system to clear the cache tables at same frequency as the incremental load process.

To clear cached queries:

1. Open the Oracle BI Administration Tool in online mode.
2. Access the Cache Manager page (Manage, Cache) and select all cache entries.
3. Click Action, Refresh.

To disable the cache:

1. Locate this configuration file: <root directory>\OracleBI\server\Config\nqscfg.ini.

2. In the `Query Result Cache Section`, change the `[ CACHE ]` setting from `ENABLE = YES;` to `ENABLE = NO;`.
3. Save the `NQSConfig.INI` configuration file and restart the Oracle BI Server service.

See *Oracle Business Intelligence Server Administration Guide*, “Query Caching in the OracleBI Server” chapter for more information on query caching in OBIEE.

## CHAPTER 3

# Setting Up Security

This chapter provides an overview of security configuration types and secured dimensions, and discusses how to:

- Set up user authentication.
- Set up object-level security.
- Set up data-level security.

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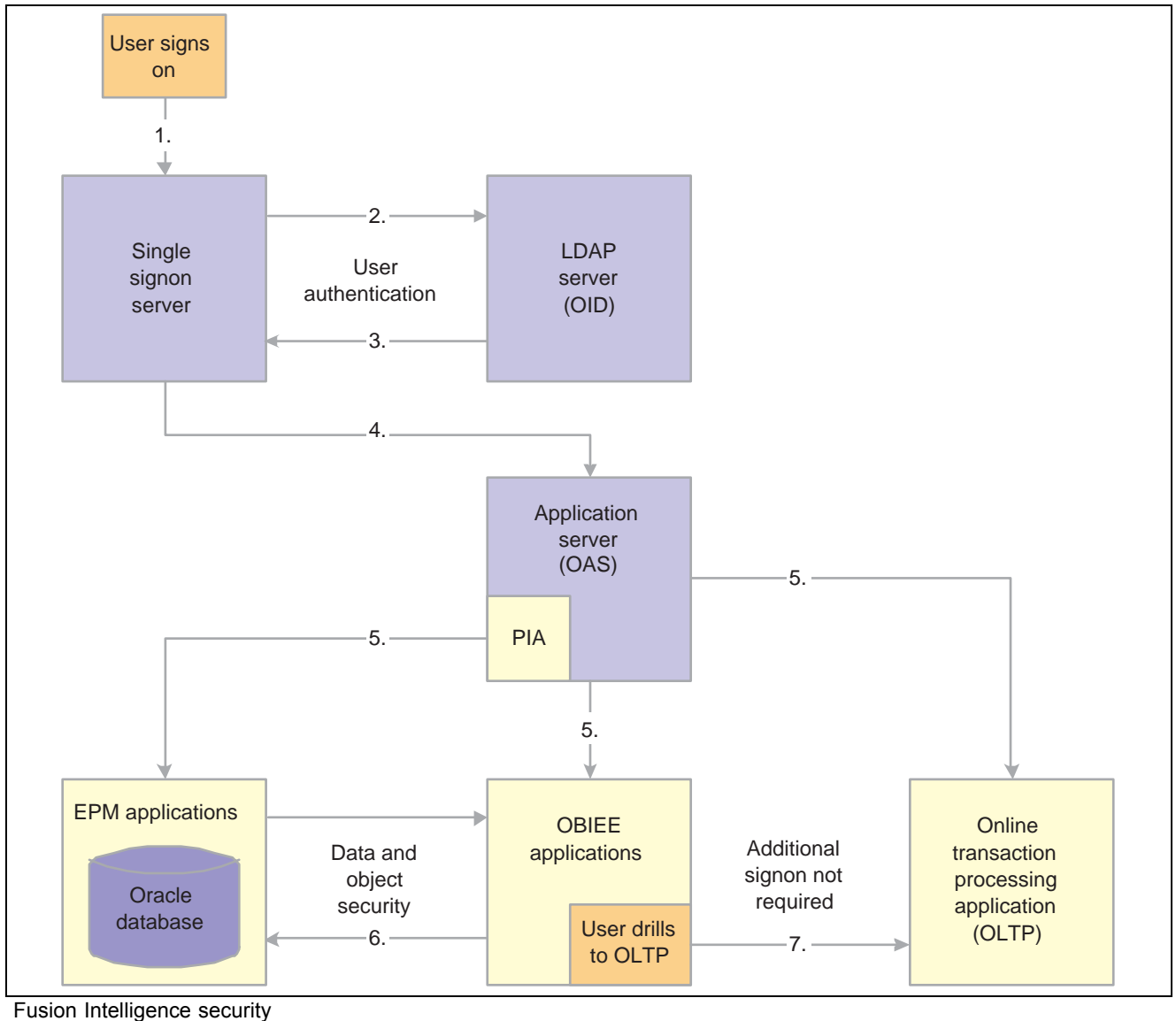
## Understanding Security Configuration Types

Security in Fusion Intelligence applications can be broadly classified into three configuration types—user authentication, dashboard object security, and data access security. All three configuration types play a vital role in securing data. This table discusses the security configurations that are delivered with Fusion Intelligence For PeopleSoft Enterprise applications:

Security Configuration	Description
User authentication	When a user logs into a Fusion Intelligence application to see or build dashboards and answers, the system authenticates the user by using the Single Signon Server and the existing identity management scheme.

Security Configuration	Description
Dashboard object security	<p>The user's membership in Oracle BI Server groups controls the user's access to Oracle BI Administration Tool objects, such as subject areas, presentation tables, and presentation table columns in the repository. The user's membership in Presentation Catalog groups controls the user's access to Oracle BI Presentation Catalog objects, such as dashboards, reports, and catalog folders. When a user logs into the system, and the user's PeopleSoft security role matches an Oracle BI Server group or Presentation Catalog group, the system automatically assigns the appropriate object permissions to the user.</p> <p><b>Note.</b> When you create custom dashboards in OBIEE, you can restrict access to dashboards and dashboard pages, and other Presentation Catalog objects. Use the Oracle BI Repository to restrict access to the underlying data.</p>
Data access security	<p>The user's PeopleSoft security role controls the user's access to data. Data security is synchronized between Fusion Intelligence applications and PeopleSoft Enterprise Performance Management applications by creating Oracle BI Server groups that match user roles. When a user navigates to a report, the data that appears is based on permissions that are granted to the user's security role, and any additional security that is applied to the Oracle BI Server group.</p> <p>If a user's security role does not match an Oracle BI Server group, when the user signs onto the system and navigates to a report, the data that appears is based on permissions that are granted to the user's security role.</p> <p>When an Oracle BI Server group maps exactly to a Presentation Catalog group, the Presentation Catalog group inherits the permissions from the Oracle BI Server group. The system does not require that every Oracle BI Server group map exactly to a Presentation Catalog group.</p> <p><b>Note.</b> OBIEE does not honor data-level security that is setup in JD Edwards or PeopleSoft online transaction applications. OBIEE honors data-level security that is set up in PeopleSoft Enterprise Performance Management.</p>

This diagram shows the relationship of user authentication, dashboard object security, and data access security in Fusion Intelligence applications:



These steps explain the flow of user authentication, dashboard object security, and data access security in Fusion Intelligence applications:

1. The user signs onto the Single Signon (SSO) Server.
2. The SSO server authenticates the user by checking into the LDAP Server.
3. The LDAP server confirms that the user is valid.
4. The Application server is configured to get the user information from the SSO server.  
This eliminates the need for the user to log separately into PeopleSoft Internet Architecture (PIA) and OBIEE.
5. After the user logs in, the system applies object-level security to determine the user's access to objects such as pages, reports, and components.  
Object-level security is controlled by the OBIEE Presentation Catalog security group with which the user is associated.
6. When the user clicks on a report, the system applies data-level (row-level) security.

Data-level security is controlled by the user's security role and the Oracle BI Server group with which the user is associated.

7. When the user clicks a link to drill in place to an OLTP, additional signon is not required.

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## Understanding Secured Dimensions

In PeopleSoft Enterprise Performance Management, you can grant users access to a particular dimension if you indicate during system setup that the dimension requires securing. Each secured dimension is associated with a security join table (SJT) in the PeopleSoft Enterprise Performance Management database that stores the security profiles for users, and the corresponding dimension values to which they have access.

This table lists the delivered, secured dimensions for Fusion Intelligence application areas:

Application Area	Secured Dimension
Campus Solutions	Academic Group Institution
Financials	Business Unit Department
Human Capital Management	Department
Supply Chain	Commodity Business Unit Accounts Payable

### See Also

*PeopleSoft Enterprise Performance Management Foundation for Analytical Applications and Performance Management Warehouse 9.0 PeopleBook*, "Securing EPM"

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## Setting Up User Authentication

For this release of Fusion Intelligence applications, users sign directly into Oracle Business Intelligence Enterprise Edition (OBIEE) to access the Fusion Intelligence applications. By setting up single signon with user identity management, you eliminate the need to maintain multiple user ID repositories. The OBIEE system authenticates the user at signon and associates the user's role with security groups in OBIEE.

The single signon with user identity management feature also enables users to drill in place from Fusion Intelligence dashboards or reports to source data in online PeopleSoft transaction applications without encountering an additional PeopleSoft signon page.

This section discusses how to complete the following tasks to set up Oracle Single Signon with Oracle Internet Directory (OID) for Fusion Intelligence For PeopleSoft Enterprise applications:

- Configure PeopleTools for LDAP authentication.



- Configure the Fusion Intelligence system to use LDAP authentication.
- Register PeopleSoft as a partner application with Oracle Single Signon Server.
- Register the Fusion Intelligence system as a partner application with Oracle Single Signon Server.
- Configure PeopleSoft for Single Signon with Oracle Application Server.
- Configure the Fusion Intelligence system for Single Signon with Oracle Application Server.

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**Note.** PeopleSoft and OBIEE also support third-party single signon authentication systems. For more details, refer to the *Enterprise PeopleTools 8.48 PeopleBook: Security Administration*.

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## See Also

*Enterprise PeopleTools 8.48 PeopleBook: Security Administration*

*Oracle Business Intelligence Server Administration Guide*

## Configuring PeopleTools for LDAP Authentication

To configure the PeopleTools system for LDAP authentication, use the instructions in the *Enterprise PeopleTools 8.48 PeopleBook: Security Administration* to complete these tasks:

1. Configure the LDAP directory.

Use the Configure Directory - Directory Setup page (PeopleTools, Security, Directory, Configure Directory, Directory Setup) to specify the network information of your LDAP directory servers.

Use the Configure Directory - Additional Connect DN's (distinguished names) page (PeopleTools, Directory, Configure Directory, Additional Connect DN's) to specify connect DN's, in addition to the default connect DN specified on the Directory Setup page.

2. Cache the directory schema.

Use the Configure Directory - Schema Management page (PeopleTools, Security, Directory, Configure Directory, Schema Management) to install selected PeopleSoft-specific schema extensions into your directory.

Use the Configure Directory - Test Connectivity page (PeopleTools, Security, Directory, Configure Directory, Test Connectivity) to test the DN's and search criteria that you entered on the previous pages of the Configure Directory component, and view the results.

3. Create authentication maps.

Use the Authentication Map - Authentication page (PeopleTools, Security, Directory, Authentication Map, Authentication) to map to the directory that the PeopleSoft system uses to authenticate users.

4. Create user profile maps.

Use the User Profile Map - Mandatory User Properties page (PeopleTools, Security, Directory, User Profile Map, Mandatory User Properties) to specify the attributes that are required for signon.

---

**Note.** Skip these tasks if you configured the PeopleTools system for LDAP authentication as part of a previous installation.

---

See *Enterprise PeopleTools 8.48 PeopleBook: Security Administration*, "Employing LDAP Directory Services," Configuring the LDAP Directory.

## Verify the Configuration

To verify the correct configuration, perform these steps:

1. Sign onto Oracle's PeopleSoft Enterprise application as a user with administrative rights, such as *VPI*, password *VPI*, and navigate to the Configure Directory component (PSDSSETUP).  
Verify that an LDAP server is configured to match your OID.  
Access the Test Connectivity page and verify that all tests are successful.
2. Navigate to the Authentication Map - Authentication page.  
Verify that a map exists that matches the directory server in the previous step.
3. Navigate to the User Profile Map - Mandatory User Properties page.  
Verify that a user profile map exists for the directory server in the previous step.
4. Navigate to the Signon PeopleCode page (PeopleTools, Security, Security Objects, Signon PeopleCode).  
Verify that the Invoke as button is enabled, and the User ID and Password fields are populated with the person who has the authority to execute the signon PeopleCode.  
Verify that the functions *LDAP\_Authentication* and *LDAP\_ProfileSynch* are enabled.
5. Sign onto the PeopleSoft application as an enterprise user that exists in the LDAP server.
6. If the signon to the PeopleSoft application fails, reboot the associated application server.

---

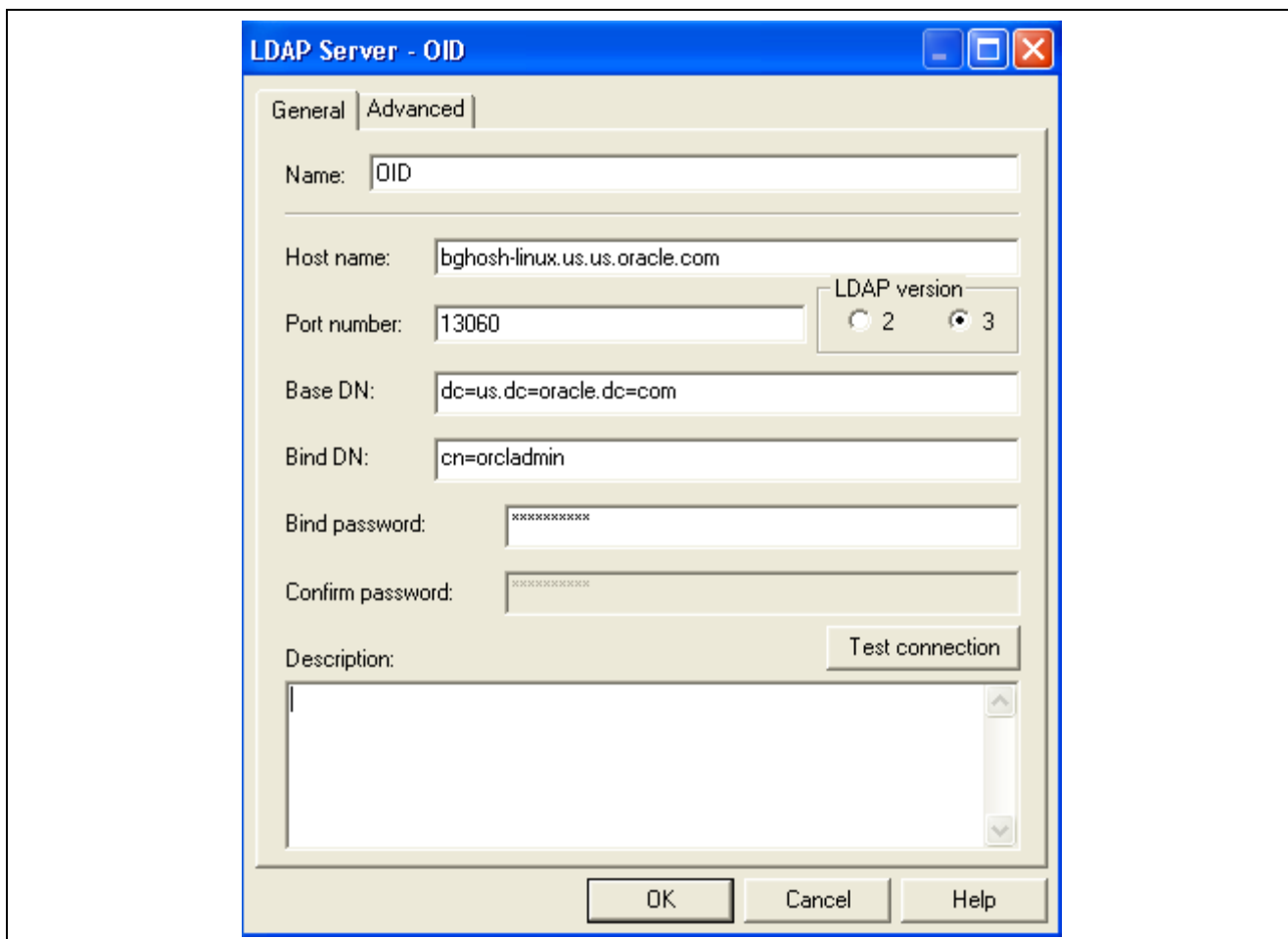
**Note.** The LDAP profiles are synchronized with PeopleSoft user profiles only when users sign onto the application. Therefore, all enterprise users (users that are created in the LDAP server) must sign onto the PeopleSoft application at least once before using Fusion Intelligence For PeopleSoft Enterprise applications.

---

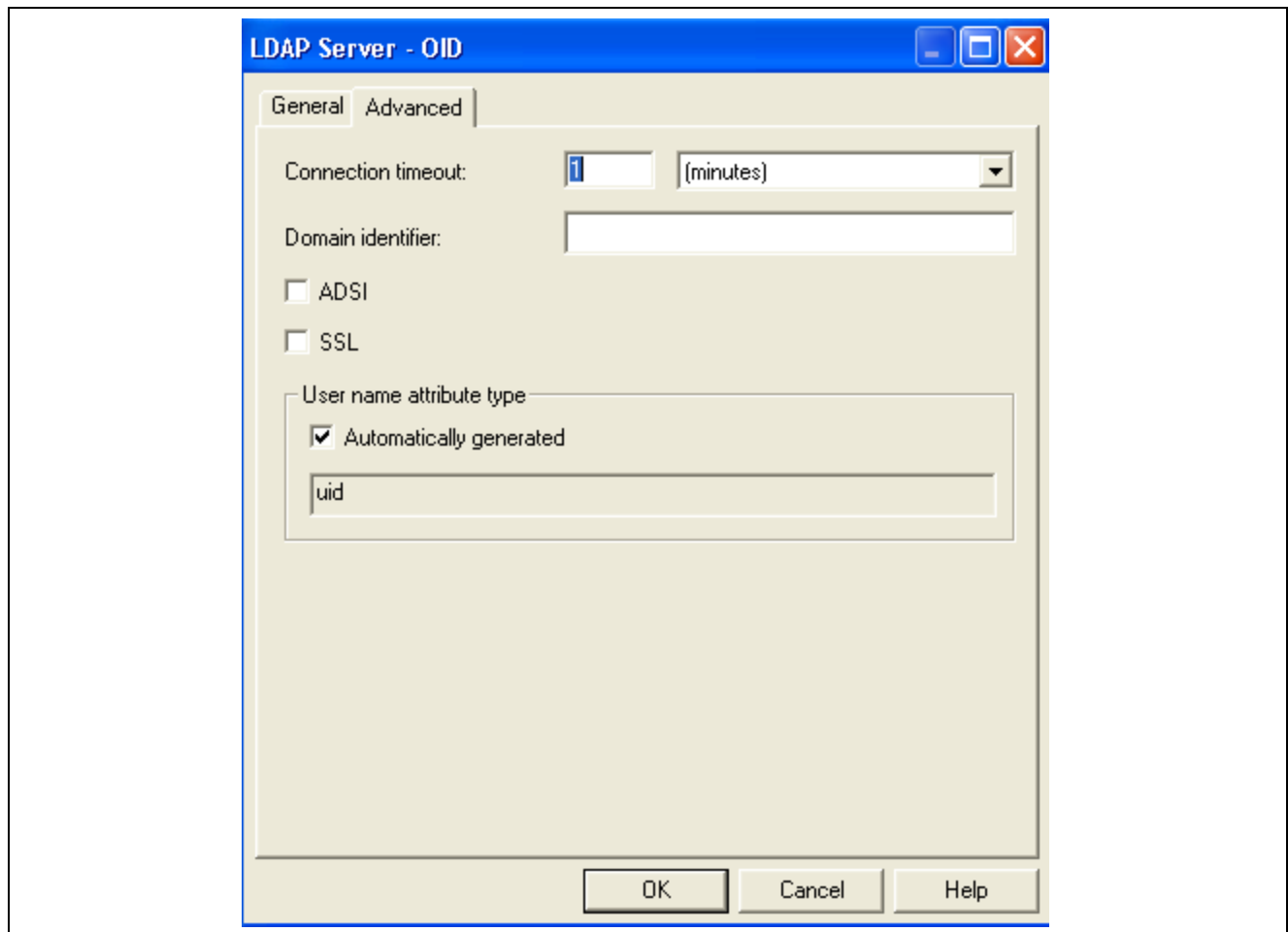
## Configuring the Fusion Intelligence System to Use LDAP Authentication

To configure Fusion Intelligence to use LDAP authentication, complete the tasks that are discussed in this section.

In the Oracle BI Administration Tool, access the Security Manager - LDAP Server page (Oracle BI Administration, Manage, Security, LDAP Servers, Action, New, LDAP Server).



Security Manager - LDAP Server page: General tab



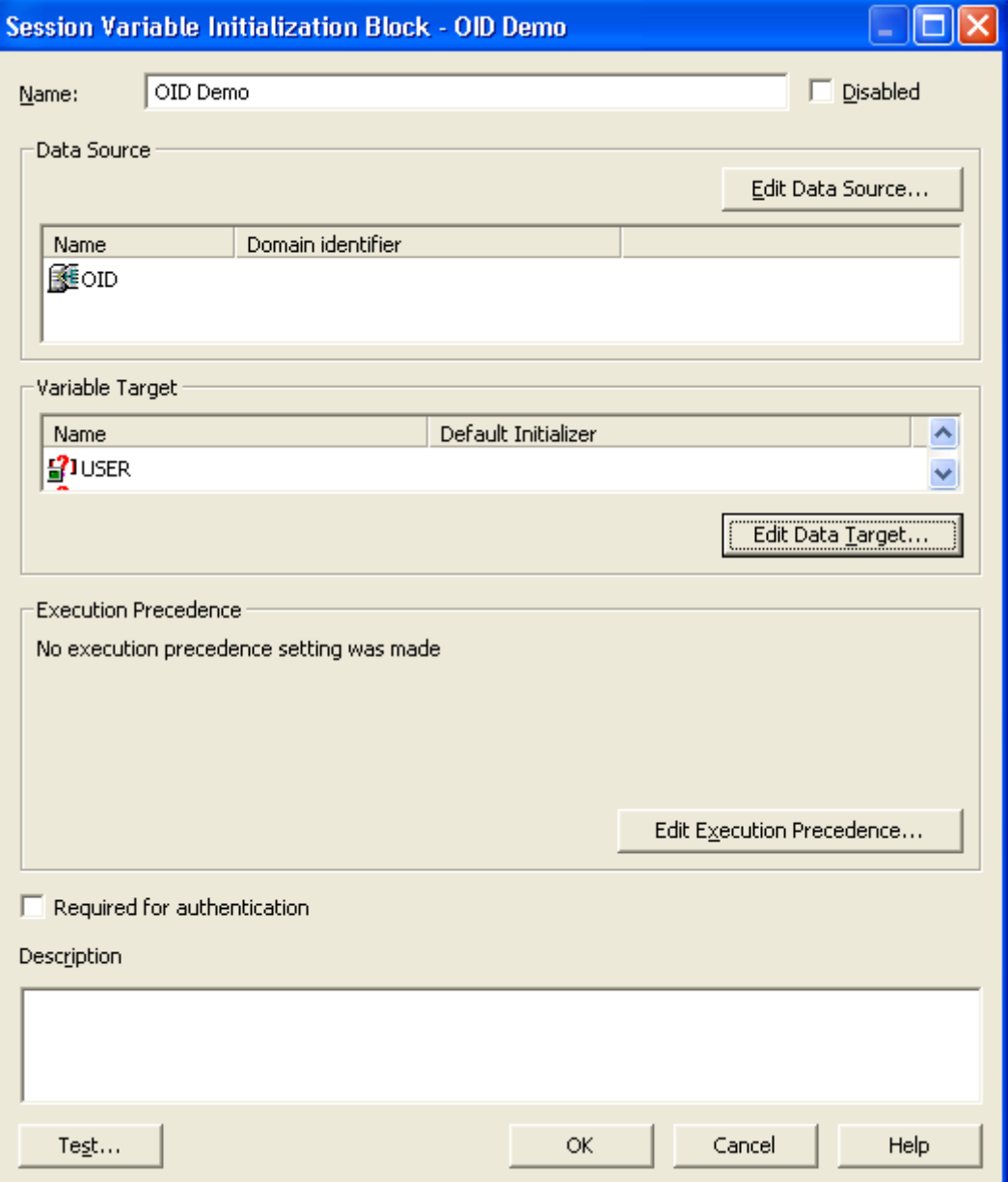
Security Manager - LDAP Server page: Advanced tab

Create a new LDAP server and enter the relevant information. The preceding screen shots show an example of establishing an LDAP server named *OID* (Oracle Internet Directory).

See *Oracle Business Intelligence Server Administration Guide*, “Security in OracleBI,” OracleBI Security Manager, Importing Users and Groups from LDAP.

## Configure Variables

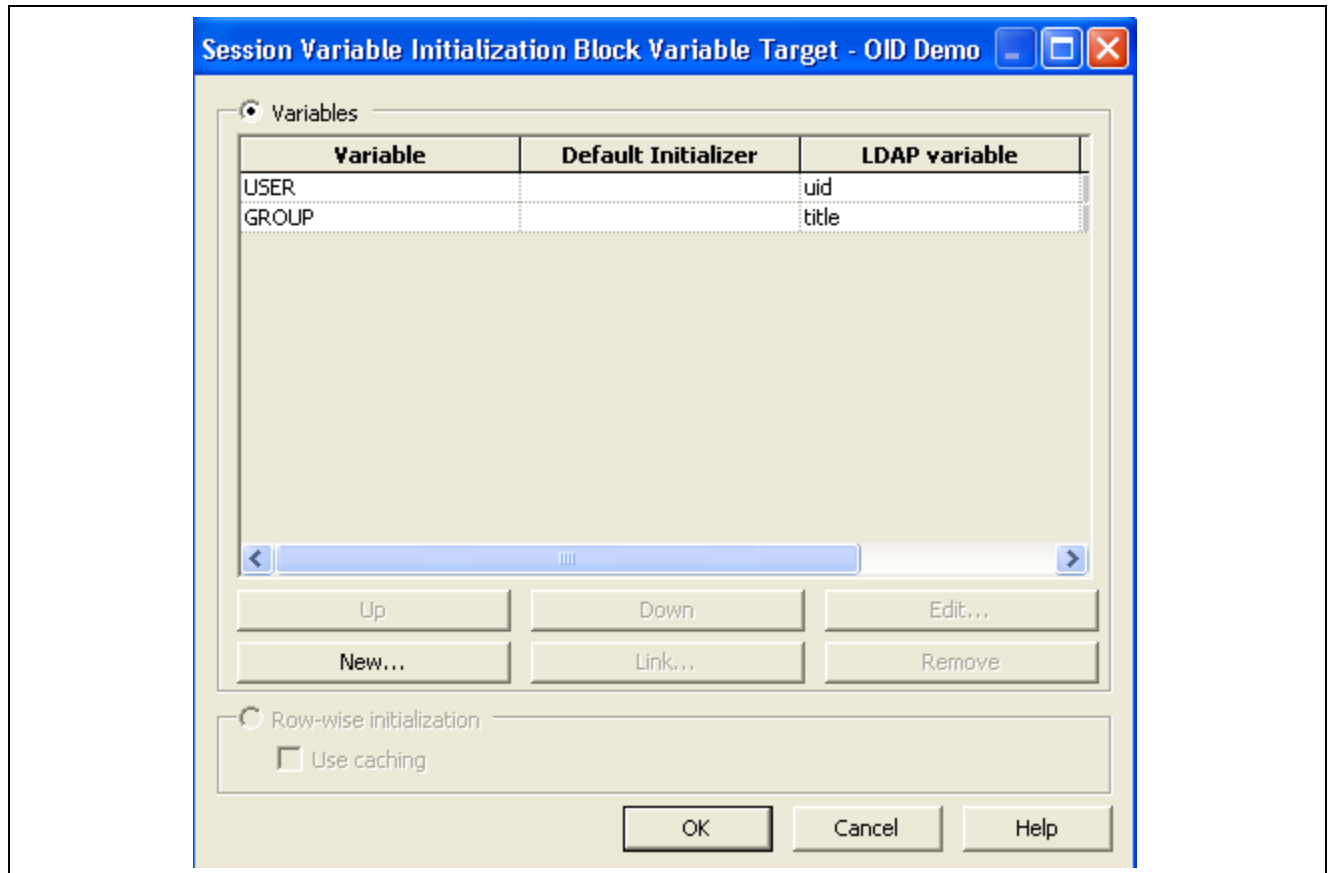
Access the Session Variable Initialization Block page and Session Variable Initialization Block Variable Target page (Oracle BI Administration, Manage, Variables, Session, Initialization Blocks, Session Variable Initialization Block).



The dialog box is titled "Session Variable Initialization Block - OID Demo". It contains several sections:

- Name:** A text field containing "OID Demo" and a ☐ Disabled checkbox.
- Data Source:** A section with an "Edit Data Source..." button and a table with two columns: "Name" and "Domain identifier". The table contains one row with a database icon, "OID", and an empty cell.
- Variable Target:** A section with a table with two columns: "Name" and "Default Initializer". The table contains one row with a user icon, "USER", and "Default Initializer". There are up and down arrow buttons to the right of the table. An "Edit Data Target..." button is at the bottom right.
- Execution Precedence:** A section with the text "No execution precedence setting was made" and an "Edit Execution Precedence..." button.
- Required for authentication:** A ☐ checkbox.
- Description:** A large empty text area.
- Buttons:** "Test...", "OK", "Cancel", and "Help" buttons at the bottom.

Session Variable Initialization Block page



Session Variable Initialization Block Variable Target page

The preceding screen shots show an example of configuring session variables for an initialization block named *OID Demo*. The data source for this initialization block is the *OID* LDAP server as shown on the LDAP Server page example in the previous section.

To configure variables:

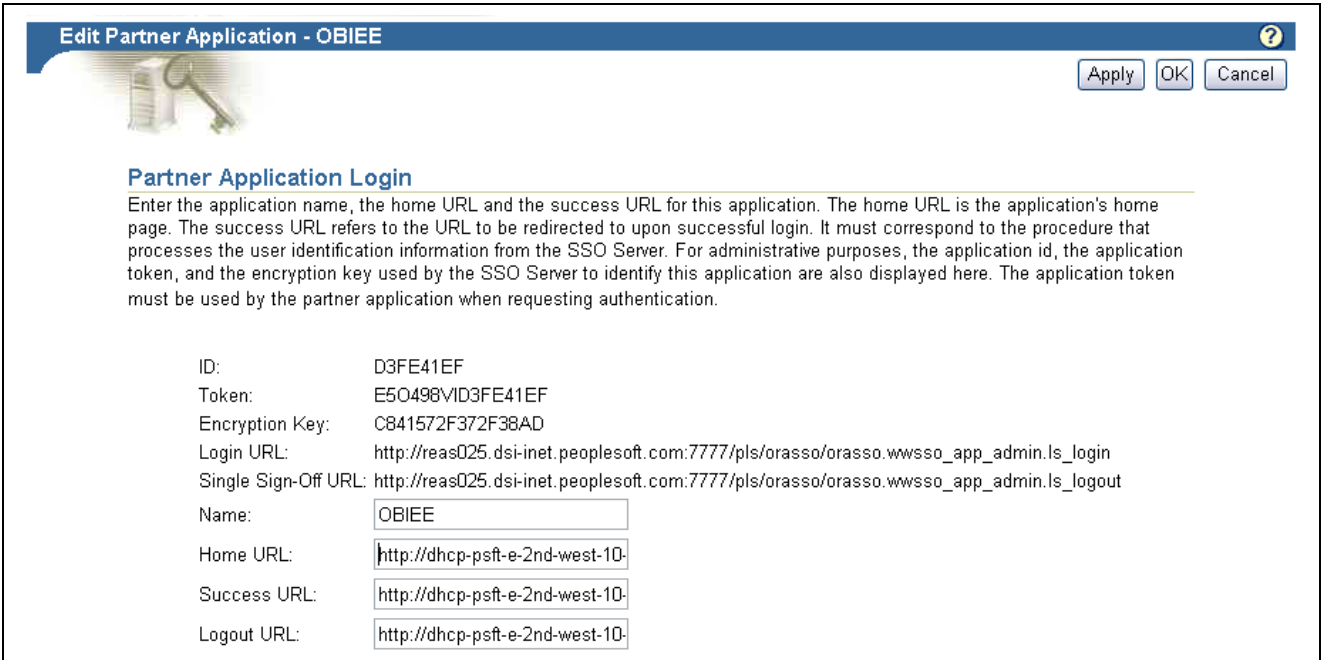
1. Create a new session initialization block and select the LDAP server as the data source.
2. Create a session variable named *USER* and map it to the LDAP variable named *uid*.
3. Create a session variable named *GROUP* and map it to the LDAP variable that reflects the role of the user, such as *role* or *title*.

See *Oracle Business Intelligence Server Administration Guide*, “Using Variables in the OracleBI Repository,” Process of Creating Initialization Blocks.

## Registering PeopleSoft as a Partner Application With Oracle Single Signon Server

To register PeopleSoft as a partner application with Oracle Single Signon Server, complete the tasks that are discussed in this section.

Sign onto the Single Signon Server and access the Edit Partner Application page (Single Signon Server, Access Partner Applications, SSO Server Administration, Administer Partner Applications).



**Edit Partner Application - OBIEE**

**Partner Application Login**

Enter the application name, the home URL and the success URL for this application. The home URL is the application's home page. The success URL refers to the URL to be redirected to upon successful login. It must correspond to the procedure that processes the user identification information from the SSO Server. For administrative purposes, the application id, the application token, and the encryption key used by the SSO Server to identify this application are also displayed here. The application token must be used by the partner application when requesting authentication.

ID: D3FE41EF  
 Token: E50498VID3FE41EF  
 Encryption Key: C841572F372F38AD  
 Login URL: http://reaso025.dsi-inet.peoplesoft.com:7777/pls/orasso/orasso.wwsso\_app\_admin.ls\_login  
 Single Sign-Off URL: http://reaso025.dsi-inet.peoplesoft.com:7777/pls/orasso/orasso.wwsso\_app\_admin.ls\_logout  
 Name: OBIEE  
 Home URL: http://dhcp-psft-e-2nd-west-10  
 Success URL: http://dhcp-psft-e-2nd-west-10  
 Logout URL: http://dhcp-psft-e-2nd-west-10

Edit Partner Application page

Create a new partner application and enter the appropriate values. The preceding screen shot shows an example of setting up PeopleSoft as a partner application with the Oracle Single Signon Server.

See *Oracle Application Server Single Sign-On Administrator's Guide*.

## Registering the Fusion Intelligence System as a Partner Application With Oracle Single Signon Server

The steps to register Fusion Intelligence as a partner application with Oracle Single Signon Server are identical to the steps that you completed when you registered PeopleSoft as a partner application with Oracle Single Signon Server.

## Configuring PeopleSoft for Single Signon With Oracle Application Server

To configure PeopleSoft for single signon with the Oracle Application Server, complete the tasks that are discussed in this section. Refer to the *Enterprise PeopleTools 8.48 PeopleBook: Security Administration* for a discussion and example of this configuration.

See *Enterprise PeopleTools 8.48 PeopleBook: Security Administration*, "Implementing Single Signon," Implementing Single Signon Between PeopleSoft and Oracle Applications, Implementing Oracle as a Partner Application, Setting up Oracle as a Partner Application.

1. Configure the Oracle Application Server to use the Oracle Single Signon Server.

Access the Oracle Enterprise Manager's Infrastructure tab, and click the Change button in the Identity Management section to specify the appropriate Oracle Single Signon Server.

**Note.** Complete this step one time for each Oracle Application Server installation. You do not need to perform this step for each PeopleSoft installation on the Oracle Application Server.

2. Create a default user ID, which is similar to implementing the web server security exit in PeopleSoft.

See *Enterprise PeopleTools 8.48 PeopleBook: Security Administration*, “Employing Signon PeopleCode and User Exits,” Using the Web Server Security Exit, Creating a Default User.

3. Modify the PeopleSoft web profile to contain default user signon information.

Enable the Allow Public Access option for the web profile.

Enter the same user ID that you created in the previous step.

To prevent a user ID from appearing as the default user on the signon page, enter a 0 value for the Days to Auto Fill User ID field.

See *Enterprise PeopleTools 8.48 PeopleBook: Security Administration*, “Employing Signon PeopleCode and User Exits,” Using the Web Server Security Exit, Modifying the Web Profile.

See *Enterprise PeopleTools 8.48 PeopleBook: Internet Technology*, “Configuring the Portal Environment,” Configuring Web Profiles, Configuring Portal Security.

4. Implement signon PeopleCode.

Make sure that the Oracle Internet Directory user information exists in PeopleSoft, which can be accomplished with a delivered Signon PeopleCode function.

This step requires that user profiles are defined in the Oracle Internet Directory and in PeopleSoft. PeopleSoft provides the OSSO\_AUTHENTICATION Signon PeopleCode function to obtain user profile and role information from the Oracle Internet Directory. To use this information, add and enable OSSO\_AUTHENTICATION in the FUNCLIB\_LDAP record definition by using the Signon PeopleCode page.

We recommend that you modify the entry for SSO\_AUTHENTICATION and change the function name to OSSO\_AUTHENTICATION. This action avoids mixing single signon options. In your Signon PeopleCode program, modify the getWWWAuthConfig() function to assign the value of the default user that you created to the &defaultuserId variable.

---

**Note.** OSSO\_AUTHENTICATION must appear before LDAP\_PROFILESYNC in the Signon PeopleCode page grid.

---

See *Enterprise PeopleTools 8.48 PeopleBook: Security Administration*, “Employing Signon PeopleCode and User Exits,” Using Signon PeopleCode, Enabling Signon PeopleCode.

---

**Note.** Alternatively, you can write a custom PeopleCode program to create the user as needed. However, this customization is not supported by Oracle.

---

5. Modify mod\_osso.conf file, located in <ORACLE\_HOME>/apache/apache/conf/, to redirect users to the Oracle Single Signon page.

This is an example of code in the mod\_osso.conf file:

```
<Location /PORTAL> require valid-user
AuthType Basic
</Location>
```

6. Restart the Oracle Application Server and Oracle Internet Directory.



## Configuring the Fusion Intelligence System for Single Signon With Oracle Application Server

To configure Fusion Intelligence for single signon with the Oracle Application Server, complete the tasks that are discussed in this section.

1. Select or create a Fusion Intelligence user for impersonation.

See *Oracle Business Intelligence Server Administration Guide*, “Security in Oracle BI,” Authentication Options.

- In the Fusion Intelligence repository, create a special user for this purpose, and assign this user a password. For example, create a user such as *Impersonator*, and assign a password such as *secret*.
- Add this user to the *Administrators* Presentation Catalog group.

2. Add the username and password that you created in the previous step to the Presentation Servers’ credential stores.

See *Oracle Business Intelligence Presentation Services Administration Guide*, “Customizing the Oracle BI Presentation Services User Interface,” Configuring the Oracle Business Intelligence ReportUI Portlet.

For example, open a command shell and navigate to the directory `<OracleBI>/web/bin`, where `<OracleBI>` represents the root directory of the Presentation Server. Execute the *cryptotools* utility to add or edit the impersonator’s credentials in the Presentation Server’s credential store and supply values for all prompted parameters.

You must specify the credential alias impersonation, such as the one shown in this example:

```
cryptotools credstore -add -infile <OracleBIData>/web/config/credentialstore.xml
>Credential Alias: impersonation
>Username: Impersonator
>Password: secret
>Do you want to encrypt the password? y/n (y):
>Passphrase for encryption: another_secret
>Do you want to write the passphrase to the xml? y/n (n):
>File "<OracleBIData>/web/config/credentialstore.xml" exists. Do you want to
overwrite it? y/n (y):
```

In this example, the `<OracleBIData>/web/config/credentialstore.xml` file contains an entry that looks like this:

```
<sawcs:credential type="usernamePassword" alias="impersonation">
  <sawcs:username>Impersonator</sawcs:username>
  <sawcs:password>
    <xenc:EncryptedData>
      <xenc:EncryptionMethod
Algorithm="http://www.rsasecurity.com/rsalabs/pkcs/schemas/pkcs-5#pbes2">
        <pkcs-5:PBES2-params
Algorithm="http://www.rsasecurity.com/rsalabs/pkcs/schemas/pkcs-5#pbkdf2">
          <pkcs-5:KeyDerivationFunc>
            <pkcs-5:Parameters>
              <pkcs-5:IterationCount>1024</pkcs-5:IterationCount>
            </pkcs-5:Parameters>
          </pkcs-5:KeyDerivationFunc>
          <pkcs-5:EncryptionScheme
```

```

Algorithm="http://www.w3.org/2001/04/xmlenc#tripledes-cbc"/>
    </pkcs-5:PBES2-params>
</xenc:EncryptionMethod>
<xenc:CipherData>
    <xenc:CipherValue>jeThdk8ZklnTlyKIat8Dkw</xenc:CipherValue>
</xenc:CipherData>
</xenc:EncryptedData>
</sawcs:password>
</sawcs:credential>

```

Open the Presentation Server's configuration file, such as `<OracleBIData>/web/config/instanceconfig.xml` in this example, and locate the `<CredentialStore/>` node in this file. If no such node exists, create a new one. The purpose of the node is to specify the passphrase used to encrypt the password in this file. You must protect both the `credentialstore.xml` file and `instanceconfig.xml` file by using the operating system's file system protection, because the combination of these two files can reveal a privileged user's password. Neither file alone provides enough information to expose the password.

This is an example of how to specify the decryption passphrase in the `instanceconfig.xml` file:

```

<?xml version="1.0"?>
<WebConfig>
    <ServerInstance>
        <!-- other settings ... -->
        <CredentialStore>
            <CredentialStorage type="file"
path="<OracleBIData>/web/config/credentialstore.xml"
passphrase="another_secret"/>
            <!-- other settings ... -->
        </CredentialStore>
        <!-- other settings ... -->
    </ServerInstance>
</WebConfig>

```

### 3. Configure Fusion Intelligence for single signon.

- Ensure that the Presentation Server is not running on the machine where you want to set up single signon.
- Create several configuration settings.

These configuration settings tell the Presentation Server how to build up the connection string when it connects to the Oracle BI Server. In this example, the *IMPERSONATE* parameter (the user for which we are trying to establish a session) is required in the connection string. Additionally, include parameters that are supplied by the single signon system that may be passed through, such as locale, default dashboard, and other personalization parameters.

- For each parameter that is passed through in the connection string, you must indicate to the Presentation Server the source of the information to query. Possible sources are HTTP header, HTTP cookie, and server variable.

See *Oracle Business Intelligence Server Administration Guide*, "Using Variables in the Oracle BI Repository."

- When the authentication source is a Microsoft Windows domain, you can specify a special attribute to strip out the domain portion from the username, if necessary.

- When accepting trusted information from the HTTP server or servlet container, you must secure the machines that are permitted to directly communicate with the Presentation Server.

You can secure the machines with the `Listener/Firewall` node in `instanceconfig.xml`. Additionally, you can strongly secure the listener by using mutually authenticated SSL. If you use the `Listener/Firewall` node, the IP addresses of all scheduler instances and HTTP plugins (ISAPI and Servlet) must be added to the `instanceconfig.xml` file. If the scheduler or HTTP plugin is located on the same machine as the Presentation Server, you must also add `127.0.0.1` to the list of IP addresses.

---

**Note.** This setting does not control end-user browser IP addresses. If you use mutually-authenticated SSL, specify the DNS of all trusted hosts in the `Listener/TrustedPeers` node.

---

See *Oracle Business Intelligence Infrastructure Installation and Configuration Guide*.

- These are examples of configuration files. Your actual configuration file will vary from this example:

```
<?xml version="1.0"?>
<WebConfig>
  <ServerInstance>
    <!-- other settings ... -->
    <Listener>
      <Firewall>
        <Allow address="127.0.0.1"/>
        <Allow address="192.168.1.100"/>
        <Allow address="192.168.1.101"/>
      </Firewall>
      <!-- other settings ... -->
    </Listener>
    <!-- other settings ... -->
    <CredentialStore>
      <CredentialStorage type="file"
path="<OracleBIData>/web/config/credentialstore.xml"
passphrase="another_secret"/>
      <!-- other settings ... -->
    </CredentialStore>
    <!-- other settings ... -->
    <Auth>
      <SSO enabled="true">
        <ParamList>
          <!--IMPERSONATE param is used to get the authenticated
user's username and is required -->
          <Param name="IMPERSONATE"
            source="serverVariable"
            nameInSource="REMOTE_USER"/>
        </ParamList>
      </SSO>
    </Auth>
    <!-- other settings ... -->
  </ServerInstance>
</WebConfig>
```

This example results in a connection string that takes on the following form:

```
UID=Impersonator;PWD=secret;IMPERSONATE=rgrayson;
```

See *Oracle Business Intelligence Presentation Services Administration Guide*.

---

## Setting Up Object-Level Security

You achieve object-level security by creating roles, and granting each role access to specific Oracle BI Administration Tool objects and Oracle BI Presentation Catalog objects.

This section discusses how to complete the following tasks to set up object-level security for Fusion Intelligence For PeopleSoft Enterprise applications:

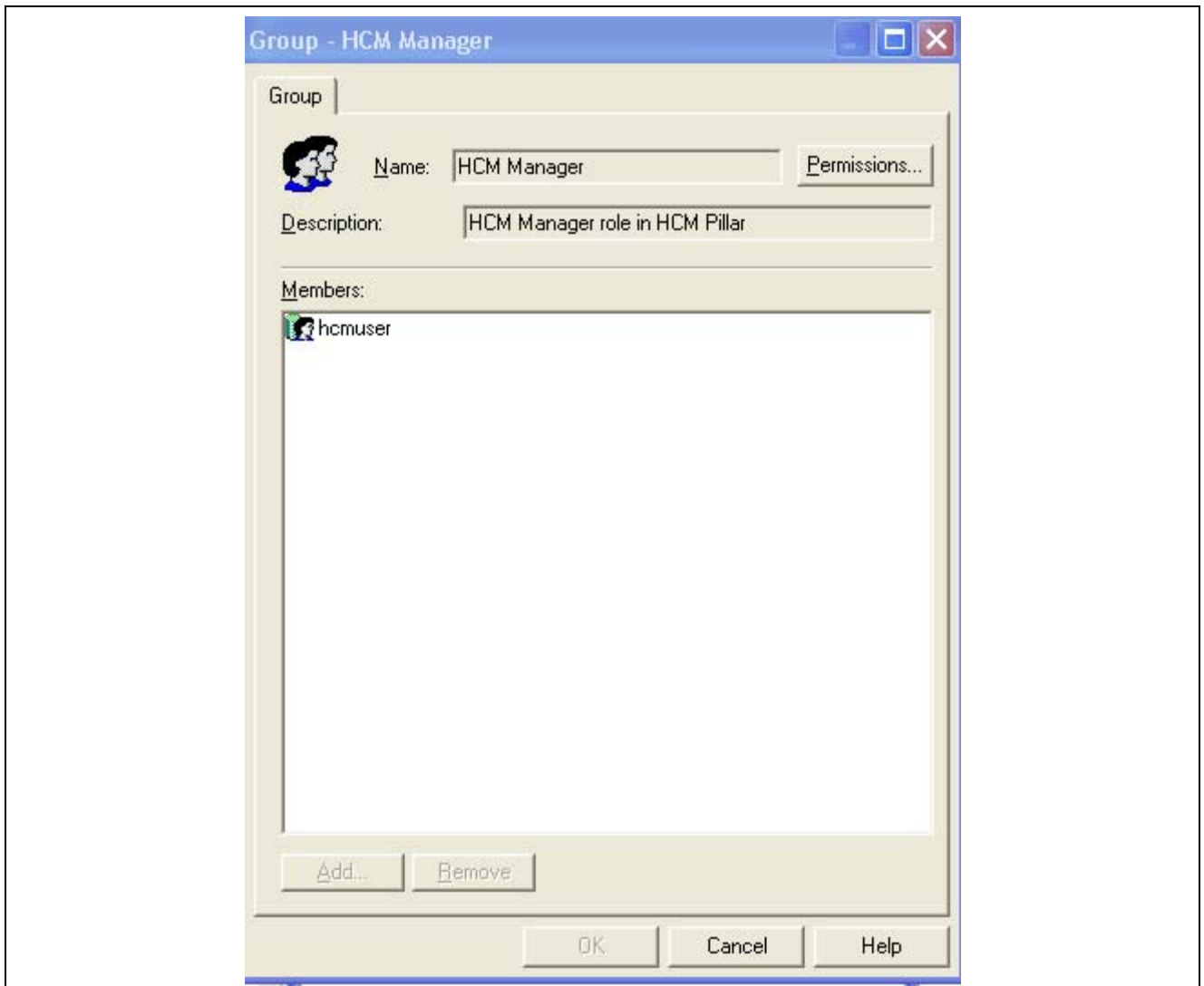
- Set up Oracle BI Server groups.
- Specify Presentation folder permissions.
- Set up Presentation Catalog groups.
- Grant role access to Presentation objects.

See *Oracle Business Intelligence Server Administration Guide*, “Security in Oracle BI,” Oracle BI Security Manager, Working with Groups.

See *Oracle Business Intelligence Presentation Services Administration Guide*, “Managing Oracle BI Presentation Services Security,” Administering Presentation Services Groups.

## Setting Up Oracle BI Server Groups

In the Oracle BI Administration Tool, access the Security Manager - Group page (Oracle BI Administration Tool, Manage, Security, Groups, Action, New, Group).



Security Manager - Group page

Create as many groups as necessary in the Oracle BI repository to represent unique sets of security attributes.

## Specifying Presentation Folder Permissions

Access the Presentation Catalog - Permissions page. (Open Presentation Catalog properties and click Permissions on the General tab.)

On the Presentation Catalog - Permissions page for the folder, enable the Show all users/groups option.

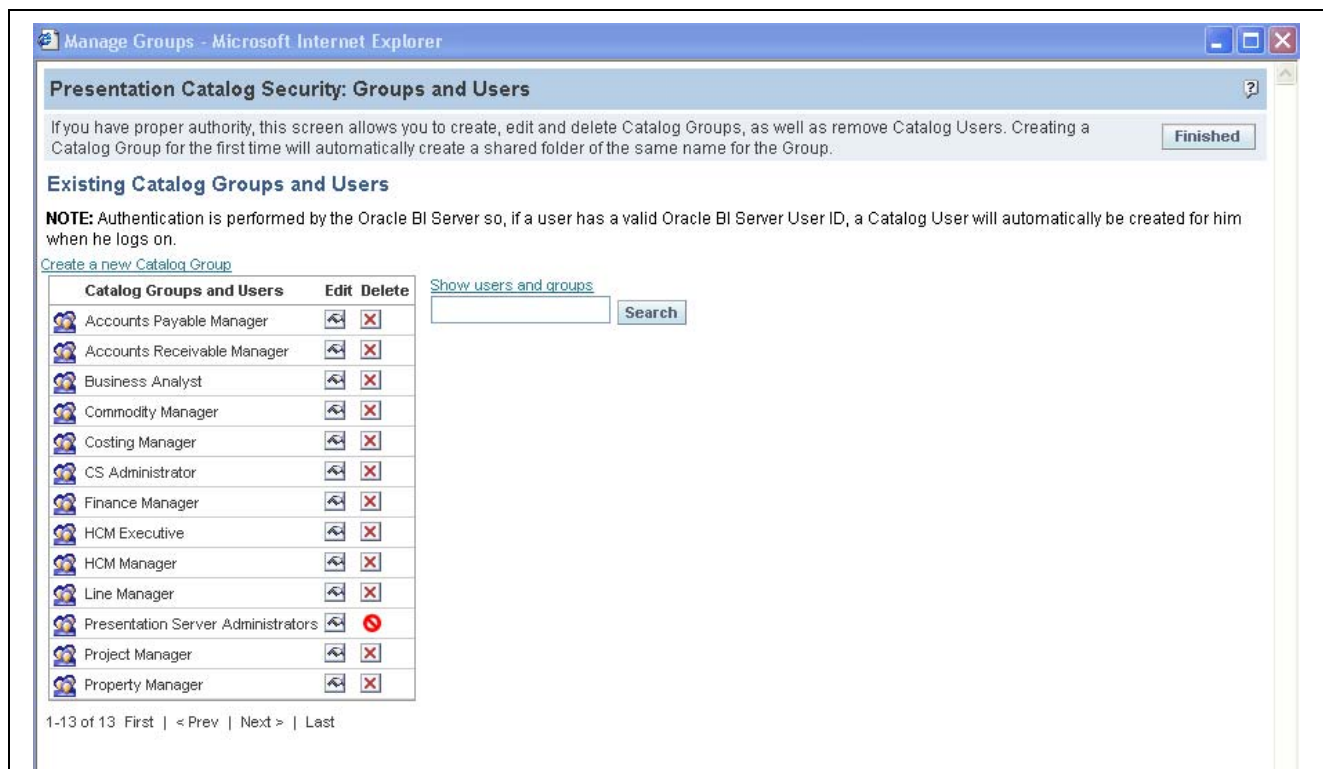
## Setting up Presentation Catalog Groups

Presentation Catalog groups can be thought of as user roles, because the groups avoid ambiguity about which defaults and preferences to assign directly to users. Users can be associated with multiple roles by being members of multiple Presentation Catalog groups.

To secure Presentation Catalog objects for a specific Oracle BI Server group, the Presentation Catalog group name must match the Oracle BI Server group name. To maintain data security, a user's Presentation Catalog group name must match the user's security role in PeopleSoft.

If the Oracle BI Server group name matches the a Presentation Catalog group name, members of the Oracle BI Server group automatically become members of the Presentation Catalog group when they log into the Fusion Intelligence applications.

Access the Presentation Catalog Security: Groups and Users page (Oracle BI Presentation Services, Settings, Administration, Manage Presentation Catalog Groups and Users).



Presentation Catalog Security: Groups and Users page

Create Presentation Catalog groups that you will use to secure Presentation Catalog objects, such as dashboards, pages, and answers.

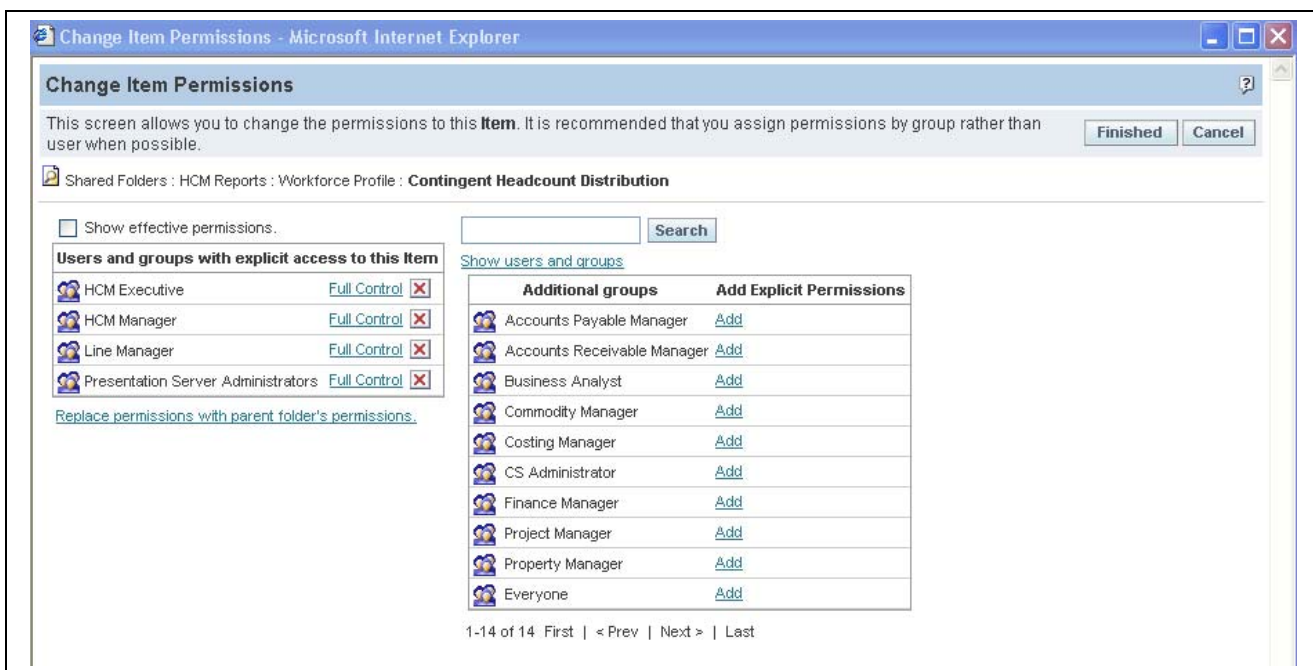
These groups are delivered in Fusion Intelligence For PeopleSoft Enterprise applications:

- Administrators

- Accounts Payable Manager
- Accounts Receivable Manager
- Business Analyst
- Commodity Manager
- Costing Manager
- CS (Campus Solutions) Administrator
- Finance Manager
- HCM (Human Capital Management) Executive
- HCM Manager
- Line Manager
- Project Manager
- Property Manager

## Granting Role Access to Presentation Objects

Access the Change Item Permissions page by clicking the Permissions icon or Page Security icon when the object is in edit mode.



Change Item Permissions page

Use the Change Item Permissions page to assign permissions to a specific object, such as a report, dashboard, or catalog.

To view and administer privileges associated with various components of OBIEE, such as general access to dashboards, answers, subject areas, security features, and so on, access the Change Privilege Permissions page (Oracle BI Presentation Services, Settings, Administration, Manage Privileges).

See *Oracle Business Intelligence Answers, Delivers, and Interactive Dashboards User Guide*, “Managing Content in the Oracle BI Presentation Catalog.”

---

## Setting Up Data-Level Security

This section provides an overview of data-level security, and discusses how to complete the following tasks to set up data-level security for Fusion Intelligence For PeopleSoft Enterprise applications:

- Determine secured dimensions.
- Create physical joins.
- Secure dimensions.
- Secure facts that use specific dimensions.
- Remove data security on facts and dimensions.

See *PeopleSoft Enterprise Performance Management Foundation for Analytical Applications and Performance Management Warehouse 9.0 PeopleBook*, “Securing EPM.”

## Understanding Data-Level Security

The data-level security that you set up during the PeopleSoft Performance Management system implementation is maintained when users access the same data in Fusion Intelligence applications. Data-level security in Fusion Intelligence applications effectively leverages the PeopleSoft Performance Management security framework. You can set up additional data-level security in the Oracle BI Repository by using Oracle BI Server group filters and restrictive conditions in the Logical layer.

These SJTs are delivered with the Fusion Intelligence For PeopleSoft Enterprise applications and are used to store the secured members of a specific dimension:

- *D\_ACAD\_GRP\_SJT* (Academic Group SJT)
- *D\_BUS\_UNIT\_SJT* (Business Unit SJT)
- *D\_COMMODITY\_SJT* (Commodity SJT)
- *D\_DEPT\_SJT* (Department SJT)
- *D\_INSTN\_SJT* (Institution SJT)

The system uses *D\_BUS\_UNIT\_SJT* to secure both the Business Unit and Business Unit Accounts Payable secured dimensions.

The system uses the *PF\_SY\_ROLE\_USER* table to extract information about role user mapping.

All security-related tables are located in the Security Tables folder in the Oracle BI Repository.

## Determining Secured Dimensions

Determine the dimension that you want to secure and identify the underlying table and its corresponding SJT. For example, if you want to secure the Institution dimension, the underlying table is *D\_INSTITUTION*, and the corresponding SJT is *D\_INSTN\_SJT*.

See *PeopleSoft Enterprise Performance Management Foundation for Analytical Applications and Performance Management Warehouse 9.0 PeopleBook*, “Securing EPM.”

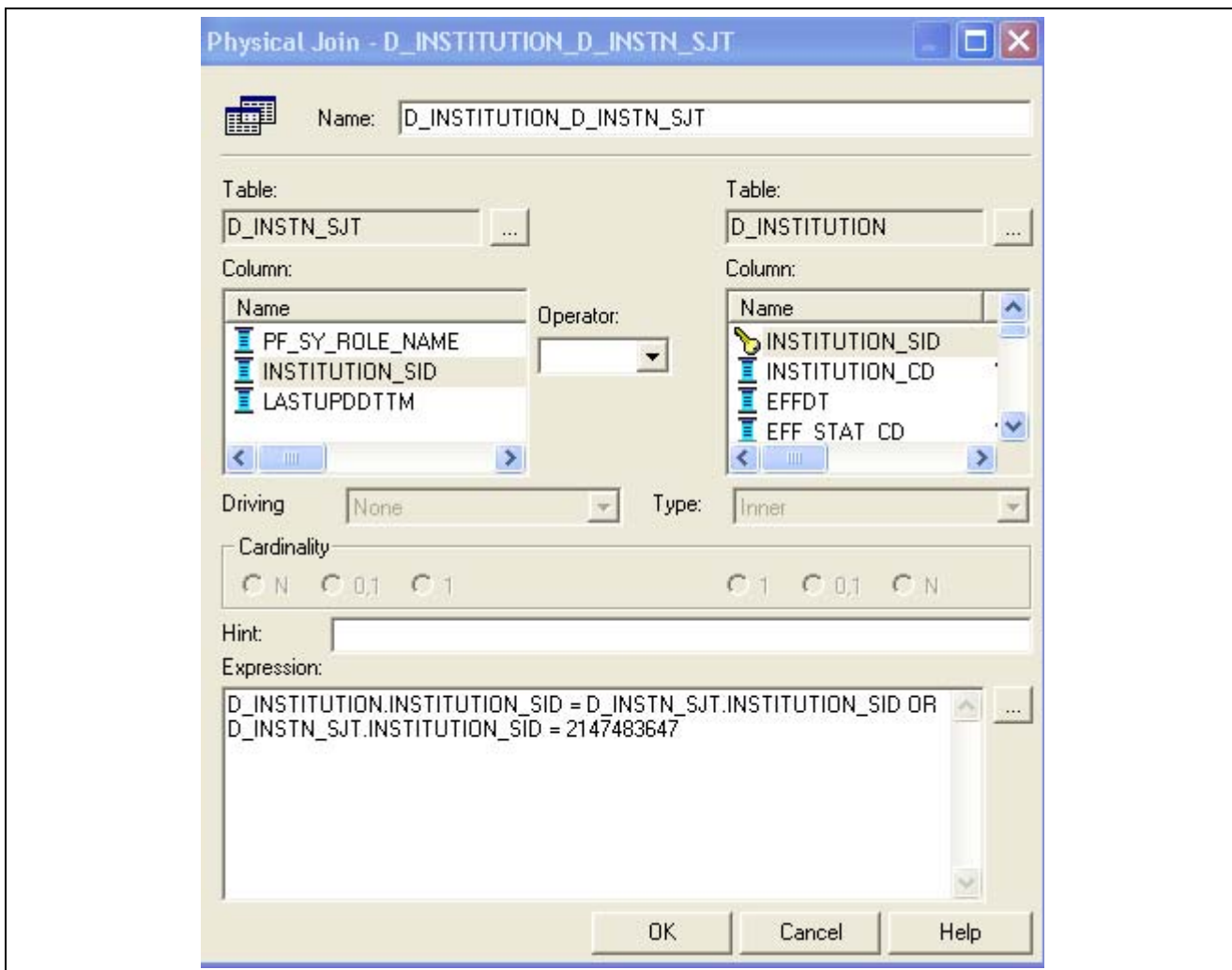
## Creating Physical Joins

Fusion Intelligence For PeopleSoft Enterprise delivers the physical joins for the delivered secured dimensions.



Access the Physical Diagram - Physical Join page (Oracle BI Administration Tool, Manage, Joins, <dimension>) to create physical joins.

This is an example of the Physical Join page showing a join between a dimension table and its SJT:



Physical Diagram - Physical Join page (example 1 of 2)

The WHERE clause that is shown in this example is `D_INSTITUTION.INSTITUTION_SID = D_INSTN_SJT.INSTITUTION_SID OR D_INSTN_SJT.INSTITUTION_SID = 2147483647`. The number 2147483647 can be used for any dimension, and indicates *ALL* access for a role.

Following is an example of a physical join between the same SJT (D\_INSTN\_SJT) and the PF\_SY\_ROLE\_USER table. Because SJT tables are populated with role information, this join will map the role to the enterprise user:

**Physical Join - D\_INSTN\_SJT\_PF\_SY\_ROLE\_USER**

Name: D\_INSTN\_SJT\_PF\_SY\_ROLE\_USER

Table: PF\_SY\_ROLE\_USER

Name	Type
PF_SY_ROLE_NAME	VARCHAR
OPRID	VARCHAR

Operator: Complex

Table: D\_INSTN\_SJT

Name	Type
PF_SY_ROLE_NAME	VARCHAR
INSTITUTION_SID	DOUBLE
LASTUPDDTTM	DATETIME

Driving: None Type: Inner

Cardinality: ☐ N ☐ 0,1 ☒ 1

Hint:

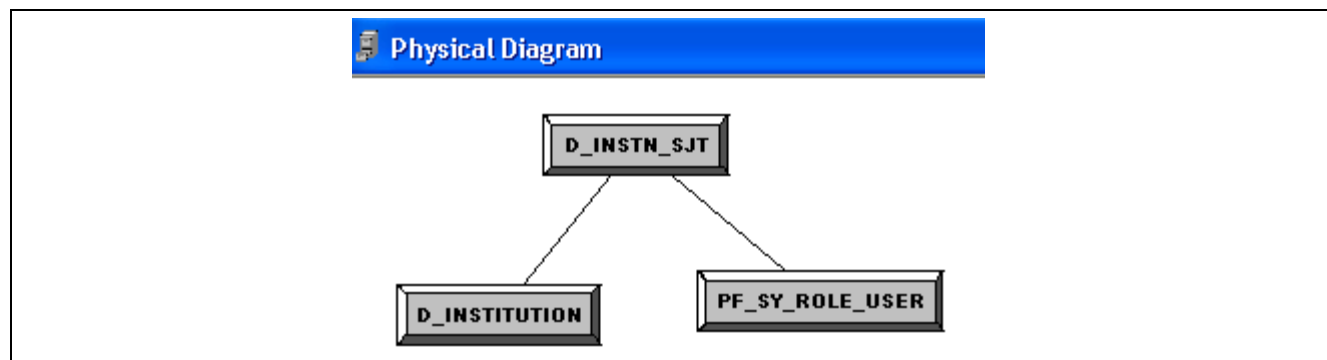
Expression: D\_INSTN\_SJT.PF\_SY\_ROLE\_NAME = PF\_SY\_ROLE\_USER.PF\_SY\_ROLE\_NAME AND PF\_SY\_ROLE\_USER.OPRID IN (VALUEOF(NQ\_SESSION."USER"))

OK Cancel Help

Physical Diagram - Physical Join page (example 2 of 2)

The Where clause that is used in this example is `D_INSTN_SJT.PF_SY_ROLE_NAME = PF_SY_ROLE_USER.PF_SY_ROLE_NAME AND PF_SY_ROLE_USER.OPRID IN (VALUEOF(NQ_SESSION."USER"))`. The variable `NQ_SESSION.USER` is an OBIEE variable that stores the user ID of the person who is currently signed onto the system.

This is the resulting physical diagram from the preceding two physical join examples:



Physical Diagram page

## Securing Dimensions

Access the Business Model and Mapping - Logical Table Source page (Oracle BI Administration Tool, Business Model and Mapping layer, <dimension>, Properties, Sources) to secure dimensions.

This is an example of the Logical Table Source page for the Institution dimension:

Logical Table Source - D\_INSTITUTION

General | Column Mapping | Content

Name: D\_INSTITUTION

☒ Active

Map to these tables:

- "Enterprise Warehouse"."Enterprise Warehouse"."D\_INSTITUTION"
- "Enterprise Warehouse"."Enterprise Warehouse"."D\_INSTN\_SJT"
- "Enterprise Warehouse"."Enterprise Warehouse"."PF\_SY\_ROLE\_USER"

Add... Remove

Joins:

	Table	Table	Type
<input checked="" type="checkbox"/>	D_INSTITUTION	D_INSTN_SJT	Inner
<input checked="" type="checkbox"/>	D_INSTN_SJT	PF_SY_ROLE_USER	Inner

View Details...

Description:

OK Cancel Help

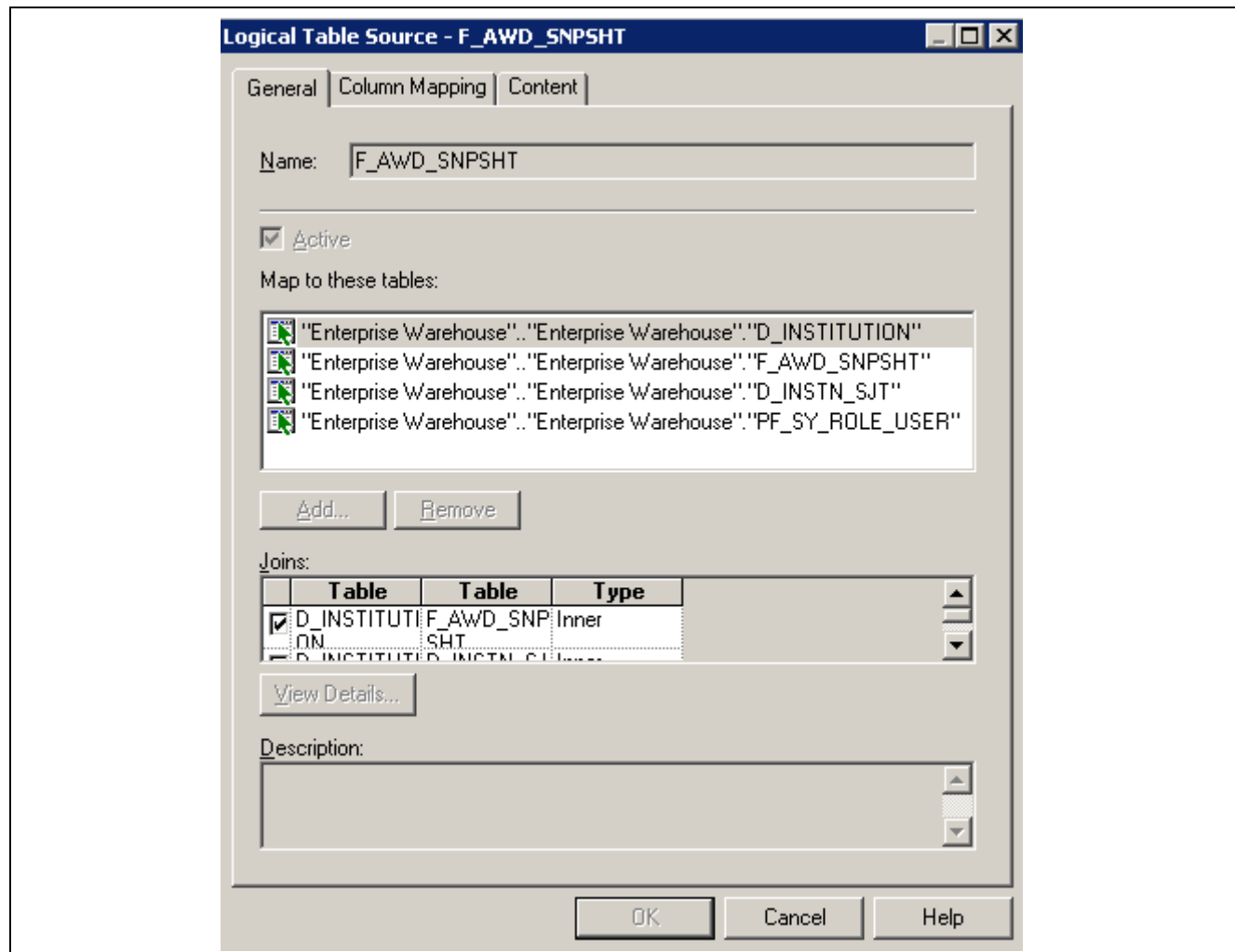
Business Model and Mapping - Logical Table Source page (example 1 of 3)

In this example, to secure the Institution dimension, the tables that are involved are D\_INSTITUTION and D\_INSTN\_SJT. In the Business Model and Mapping layer, open the D\_INSTITUTION dimension properties, and click the Sources tab. Force a join with the D\_INSTN\_SJT and PF\_SY\_ROLE\_USER by first adding the two tables to the Map to these tables region, and selecting the associated rows in the Joins grid.

## Securing Facts That Use Specific Dimensions

Access the Business Model and Mapping layer - Logical Table Source page to secure facts.

This is an example of the Logical Table Source page for the Award Snapshot fact:



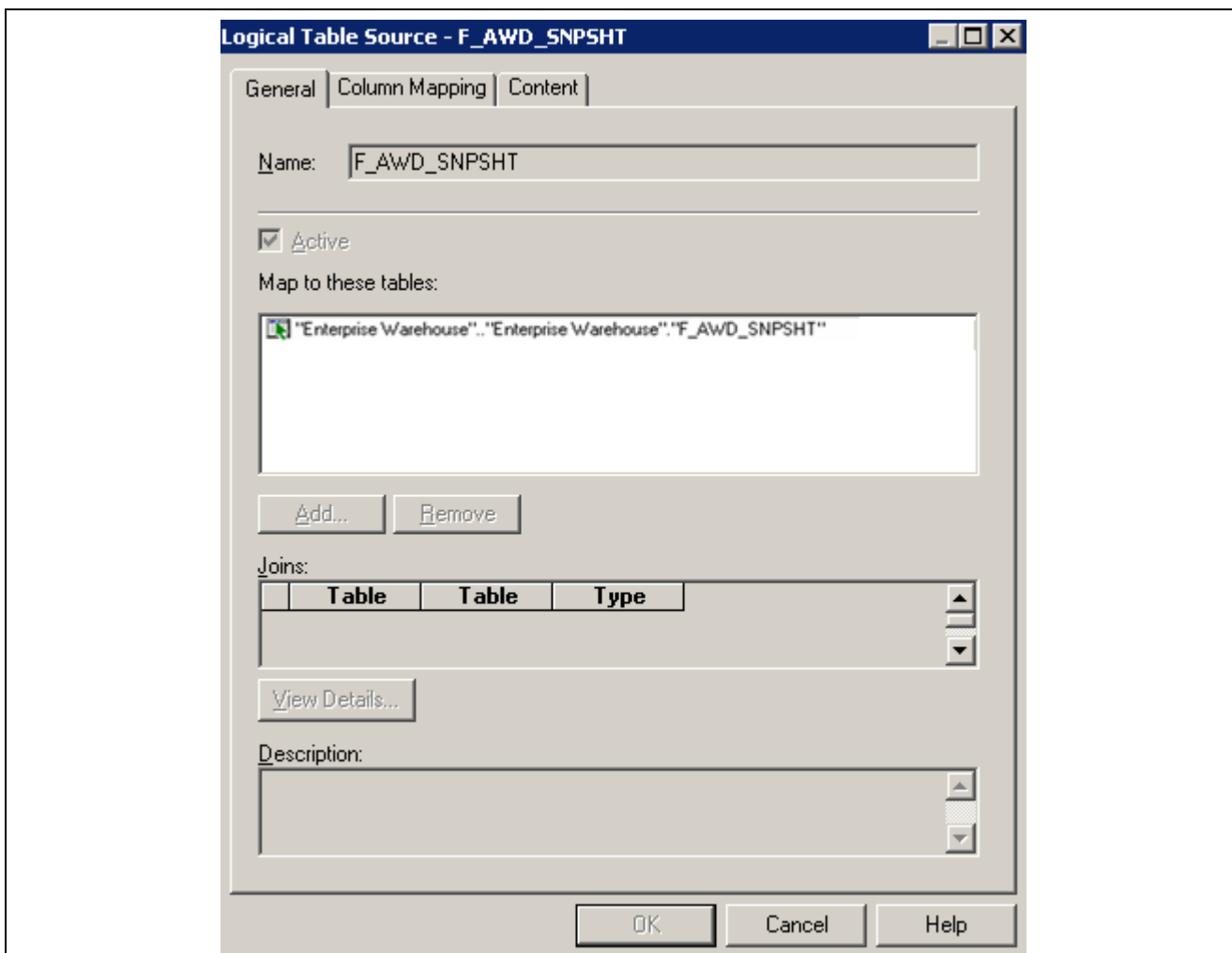
Business Model and Mapping layer - Logical Table Source page (example 2 of 3)

In this example, secure facts that use the Institution dimension in the same way that you secured the Institution dimension. In the Business Model and Mapping layer, open the F\_AWD\_SNPSHT fact properties, and click the Sources tab. Force a join with the D\_INSTITUTION, D\_INSTN\_SJT, and PF\_SY\_ROLE\_USER tables by first adding the three tables to the Map to these tables region, and selecting the associated rows in the Joins grid.

## Removing Data Security on Facts and Dimensions

Access the Business Model and Mapping layer - Logical Table Source page to remove data security on facts and dimensions.

This is an example of the Logical Table Source page for the Award Snapshot fact after you remove the table mapping that you added in the previous example:



Business Model and Mapping layer - Logical Table Source page (example 3 of 3)

To remove the data security on facts or dimensions, select the dimension or fact, access the Sources, and right-click on Properties. Clear the joins and remove the associated tables.

For example, assume that you want to remove the fact security that you set up in the previous section. To disable the security, delete the forced joins with D\_INSTITUTION, D\_INSTN\_SJT and PF\_SY\_ROLE\_USER tables. When you remove the tables from the Map to these tables region, the system removes the joins from the Joins grid, and the data will be unsecured.



## CHAPTER 4

# Setting Up Drilling to Online Transaction Systems

This section discusses how to complete the following setup tasks that are required to drill in place to PeopleSoft online transaction systems from Fusion Intelligence applications:

- Storing URLs for system source IDs and versions.
- Creating initialization blocks and dynamic repository variables.
- Creating logical columns.
- Creating answers with drill in place capability.

---

**Note.** The Drill to Transaction Systems feature is available if you use the Fusion Intelligence system with PeopleSoft Enterprise 8.8 and 8.9 transaction applications. You cannot drill in place from the Fusion Intelligence applications to JD Edwards online transaction applications.

---

## Storing URLs for System Source IDs and Versions

PeopleSoft Enterprise Performance Management 9.0 contains two tables—PS\_SRC\_CONFIG and PS\_SRC\_COMPONENT—that Fusion Intelligence applications use to store the information that is needed to drill into PeopleSoft online transaction applications from Fusion Intelligence applications.

- The PS\_SRC\_CONFIG table stores the URL for the PeopleSoft homepage for a particular source system ID and version.

This is a deployment activity and will vary based on your particular PeopleSoft Internet Architecture (PIA) installation. The URL will be different for each implementation.

Do not add a forward slash to the end of the URL. Add a row if the row does not exist for a particular source, or just update the row.

This is an example of an SQL statement that sets up the functionality to drill into a PeopleSoft Campus Solutions instance:

```
UPDATE PS_SRC_CONFIG
SET URI = 'HTTP://ADNTAS42.PEOPLESOFT.COM:6300/PSP/EM_HC890TS1_TS091824'
WHERE SRC_SYS_ID='HCM'
```

- The PS\_SRC\_COMPONENT table stores the component paths for a particular version of the source system ID.

The component paths may vary for different versions of the same PeopleSoft online transaction application.

Create a URL for the path to the PIA online transaction application component in this table. Add a forward slash to the beginning of the string. Make sure that all the key fields are on the string, and that their parameter value is :1, :2, and so on, based on the number of keys in the component.

This is an example of an SQL statement that sets up the functionality to drill into the Admission Application page in the Campus Solutions instance. In this example, the component path has three parameters:

```
INSERT INTO PS_SRC_COMPONENT
VALUES ( 'HCM' , 'ADM_APPL_PROG_MNT' , 'CS ADMISSION APPLICATION
PIA PAGE' , ' /EMPLOYEE/HRMS/C/PROCESS_APPLICATIONS.ADM_APPL_
MAINTNCE.GBL?PAGE=ADM_APPL_PROG_MNT&EMPLID=&APPL_PROG_NBR=&
ACAD_CAREER=&ADM_APPL_NBR=:1&INSTITUTION=:2&ADMIT_TERM=:3' ) ;
```

Repeat this step to set up drill in place functionality for as many pages as necessary.

---

## Creating Initialization Blocks and Dynamic Repository Variables

Access the Repository Variable Init (Initialization) Block page, Repository Variable Init Block Data Source page, and Repository Variable Init Block Variable Target page (Oracle BI Administration, Manage, Variables, Repository, Initialization Blocks) to create initialization blocks and dynamic repository variables.

These are examples of the Repository Variable Initialization Block pages for the Admission Application page that is referenced in the previous example:



**Repository Variable Init Block - Admission Application PIA page**

Name:  ☐ Disabled

**Schedule**

Start on:

Refresh interval:  (hours)

**Data Source**

Connection Pool:

Data base: Oracle 9i (Initialization string inherited from Default)

**Variable Target**

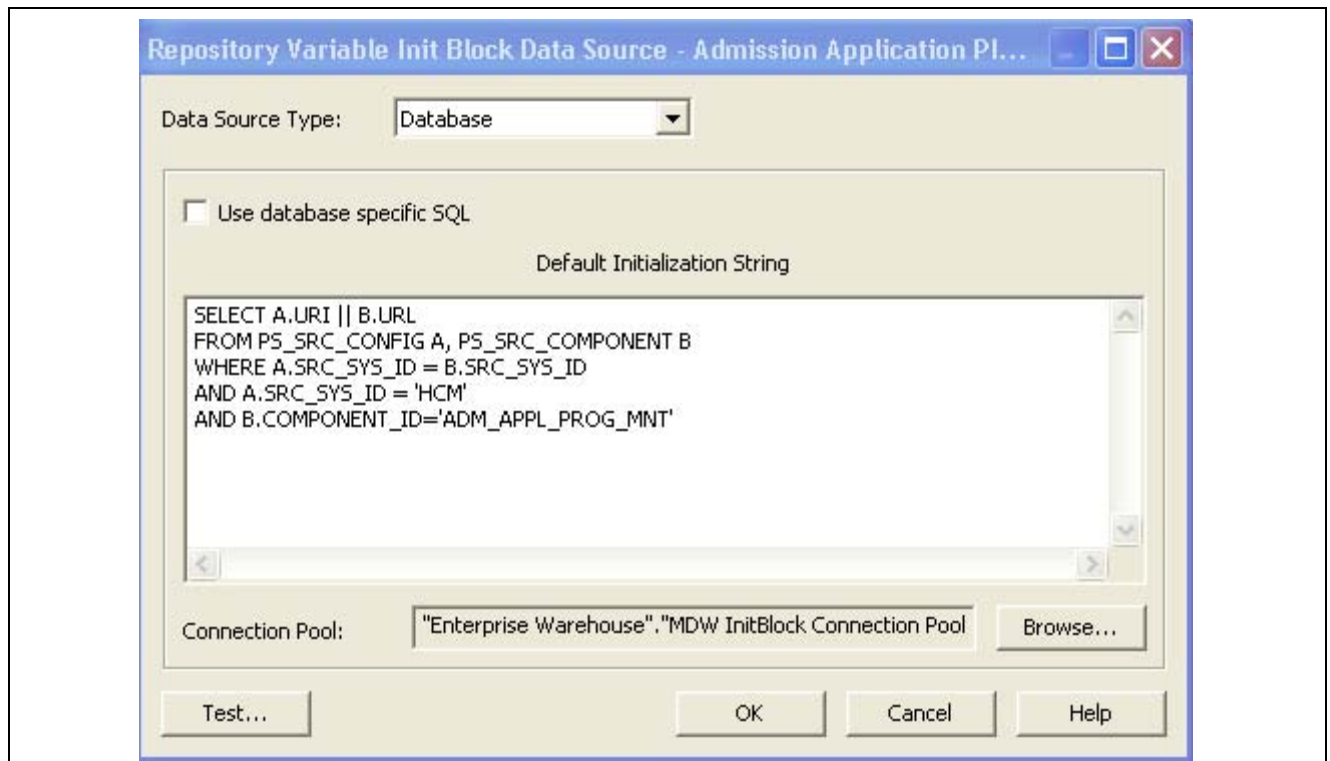
Name	Default Initializer
<input type="text"/>	<input type="text"/>

**Execution Precedence**

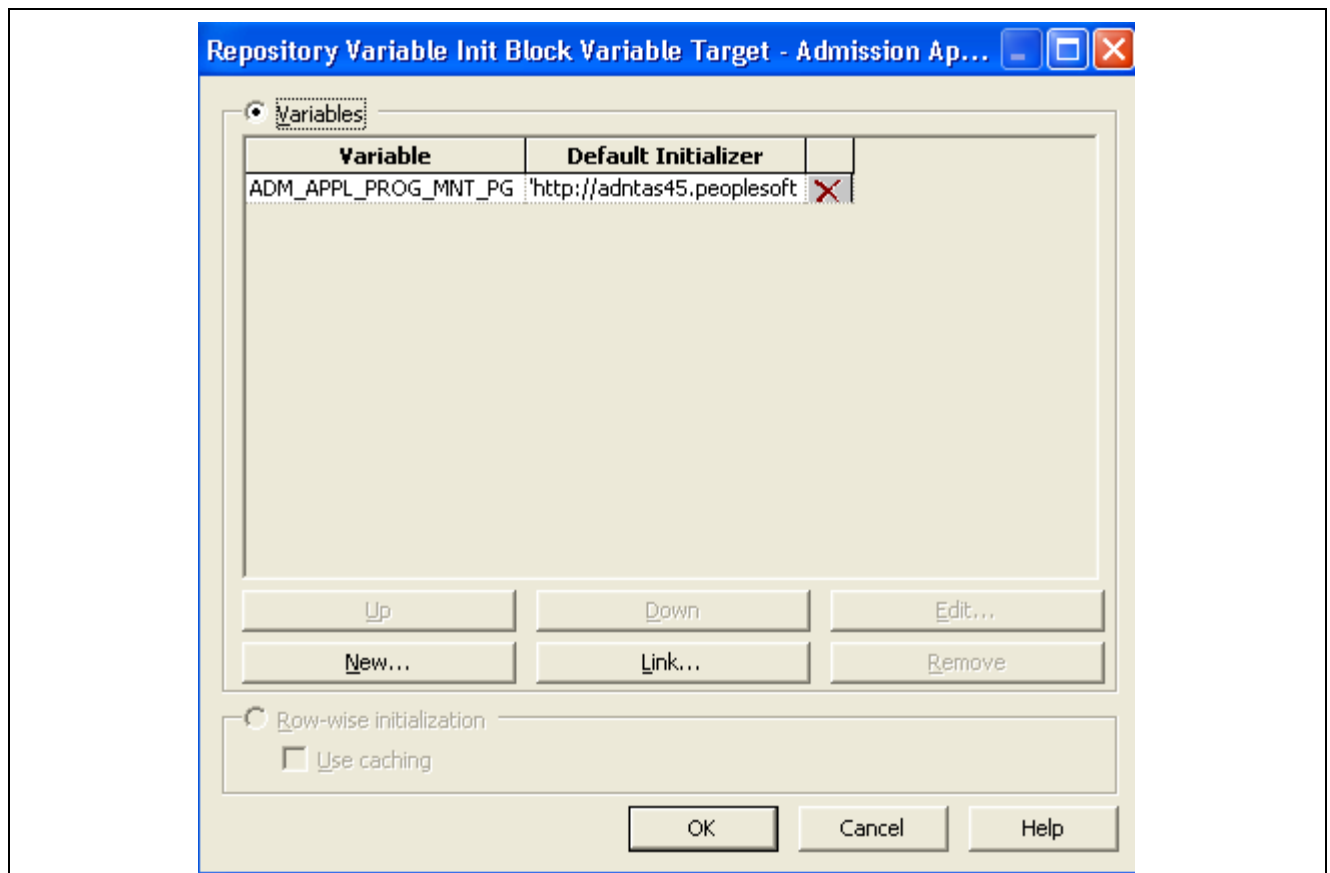
No execution precedence setting was made

**Description**

Repository Variable Init (Initialization) Block page



Repository Variable Init Block Data Source page



Repository Variable Init Block Variable Target page

In this example, you create an initialization block and dynamic repository variable to use to create the URL for the source system. You must create an initialization block for every online transaction system target page to which users will drill to from Fusion Intelligence applications.

This is an example of the data source default initialization string for one initialization block, which is defined with the component ID that was added to the PS\_SRC\_COMPONENT table in the previous step.

```
SELECT A.URI || B.URL
FROM PS_SRC_CONFIG A, PS_SRC_COMPONENT B
WHERE A.SRC_SYS_ID = B.SRC_SYS_ID
AND A.SRC_SYS_ID = 'HCM'
AND B.COMPONENT_ID='ADM_APPL_PROG_MNT'
```

This is an example of the variable target default initializer for the initialization block:

```
'http://adntas45.peoplesoft.com:
6300/psp/EM_HC890DV2_TS104539/EMPLOYEE/
HRMS/c/PROCESS_APPLICATIONS.ADM_APPL_
MAINTNCE.GBL?PAGE=ADM_APPL_PROG_MNT&
ADM_APPL_NBR=:1&INSTITUTION=:2&APPL_PROG_
NBR=:3&EMPLID=:4&ACAD_CAREER=:5'
```

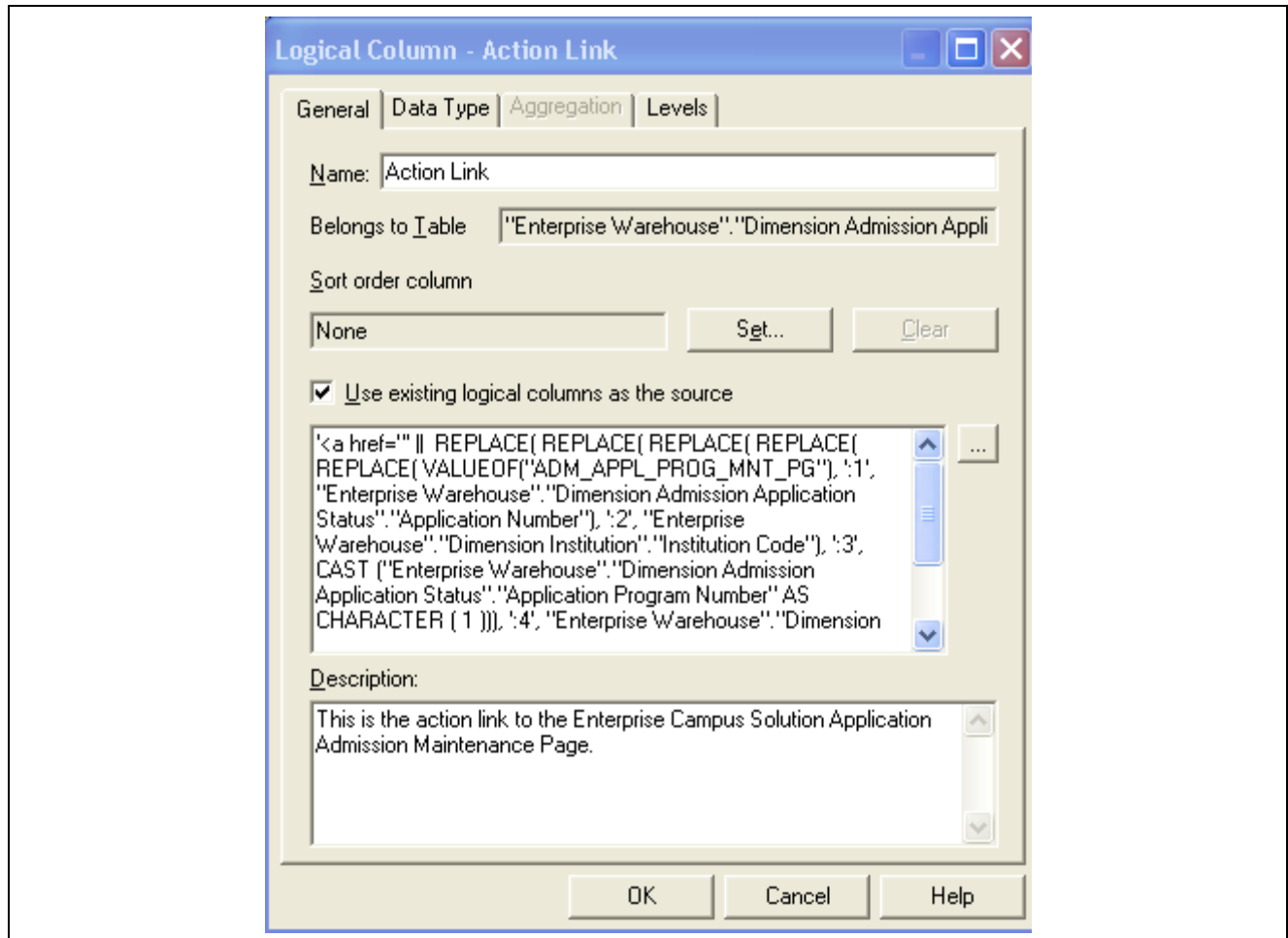
Refer to the *Oracle Business Intelligence Server Administration Guide* for a discussion of initialization blocks and dynamic repository variables.

See *Oracle Business Intelligence Server Administration Guide*, “Using Variables in the OracleBI Repository,” Process of Creating Initialization Blocks.

---

## Creating Logical Columns

Access the Logical Column page Oracle BI Administration Tool, Business Model and Mapping, <subject area folder>, <dimension>.



Logical Column page: General tab

In this example, you are creating the action link so that users can drill from the Admission Application Status dimension to the Admission Application page that is referenced in previous examples. Replace the parameters (such as :1, :2, and so on) with the dynamic key field values for the target page. For multiple parameters, use nested REPLACE functions.

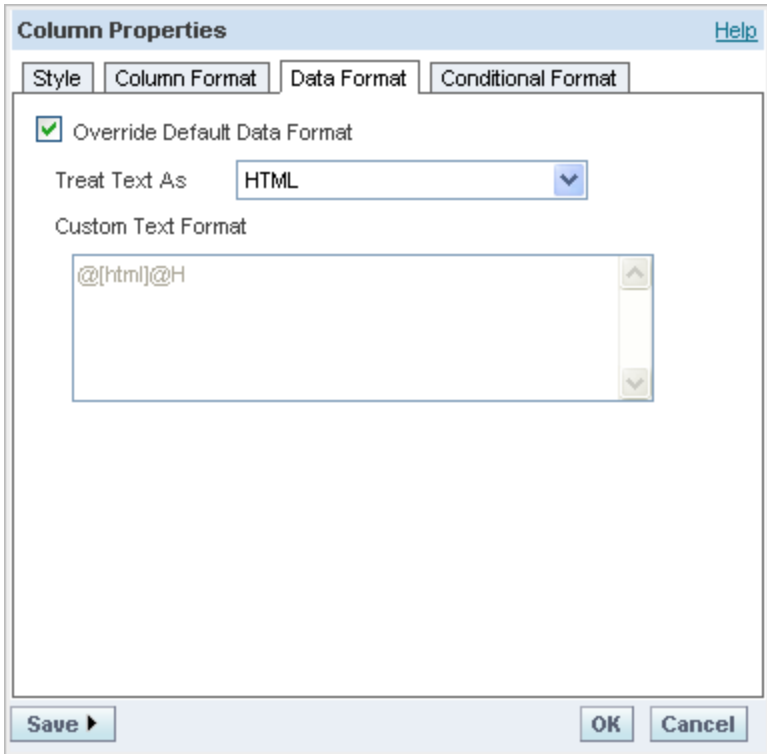
This is an example of setting up the Action Link logical column in the Business Model and Mapping layer so that you can drill to the Admission Application target page that is referenced in previous examples:

```
'<a href=' || REPLACE( REPLACE( REPLACE( REPLACE(
REPLACE( VALUEOF("ADM_APPL_PROG_MNT_PG"), ':1',
"Enterprise Warehouse"."Dimension Admission Application
Status"."Application Number"), ':2', "Enterprise
Warehouse"."Dimension Institution"."Institution Code"),
':3', CAST ("Enterprise Warehouse"."Dimension Admission
Application Status"."Application Program Number" AS
CHARACTER ( 1 ))) , ':4', "Enterprise Warehouse".
"Dimension Person"."Person Id"), ':5', "Enterprise
Warehouse"."Dimension Academic Career"."Academic
Career Code") || ' ' TARGET=mywin>' || "Enterprise
Warehouse"."Dimension Admission Application Status".
"Application Number" || '</a>'
```

## Creating Answers With Drill in Place Capability

Now you are ready to use Oracle BI Answers to create a report that contains the logical column that you created in the previous example. When you run the report, you can drill to the correct transaction application page from a link on the report.

In Oracle BI Answers, after you drag the new logical column into your report layout, access the Column Properties page: Data Format tab for the new column. Change the data format so that the system treats the text as HTML, as shown in this example:

The image shows a screenshot of the 'Column Properties' dialog box in Oracle BI Answers, specifically the 'Data Format' tab. The dialog has a title bar with 'Column Properties' and a 'Help' link. Below the title bar are four tabs: 'Style', 'Column Format', 'Data Format' (which is selected), and 'Conditional Format'. In the 'Data Format' tab, there is a checked checkbox labeled 'Override Default Data Format'. Below this, the 'Treat Text As' dropdown menu is set to 'HTML'. Underneath, there is a 'Custom Text Format' text area containing the text '@[html]@H'. At the bottom of the dialog are three buttons: 'Save', 'OK', and 'Cancel'.

Column Properties page: Data Format tab



## CHAPTER 5

# Understanding Fusion Financials Intelligence

This chapter discusses:

- Prerequisites.
- Fusion Financials Intelligence For PeopleSoft Enterprise.
- Guided navigations.
- Delivered security groups.

---

## Prerequisites

Before you implement the Fusion Financials Intelligence For PeopleSoft Enterprise application, you must implement:

- PeopleSoft Enterprise Financials Warehouse 9.0.
- Oracle's PeopleSoft Enterprise or JD Edwards online transaction applications that supply data to the Financials marts.

---

## Fusion Financials Intelligence For PeopleSoft Enterprise

The prebuilt dashboard and reports in the Fusion Financials Intelligence For PeopleSoft Enterprise application provide an overview of key profit and loss results, and an early warning of a possible revenue shortfall, and cost of sales or expense overrun. You can manage expenses against the budget and forecast, and know immediately if there is an overspending potential.

The Fusion Financials Intelligence For PeopleSoft Enterprise application contains metadata that maps to six PeopleSoft Financials Warehouse marts—Advanced Cost Accounting, Enterprise Service Automation, General Ledger and Profitability, Payables, Real Estate, and Receivables.

This table lists the delivered FMS: General Ledger dashboard pages, and the reports and prompts that are available on each page:

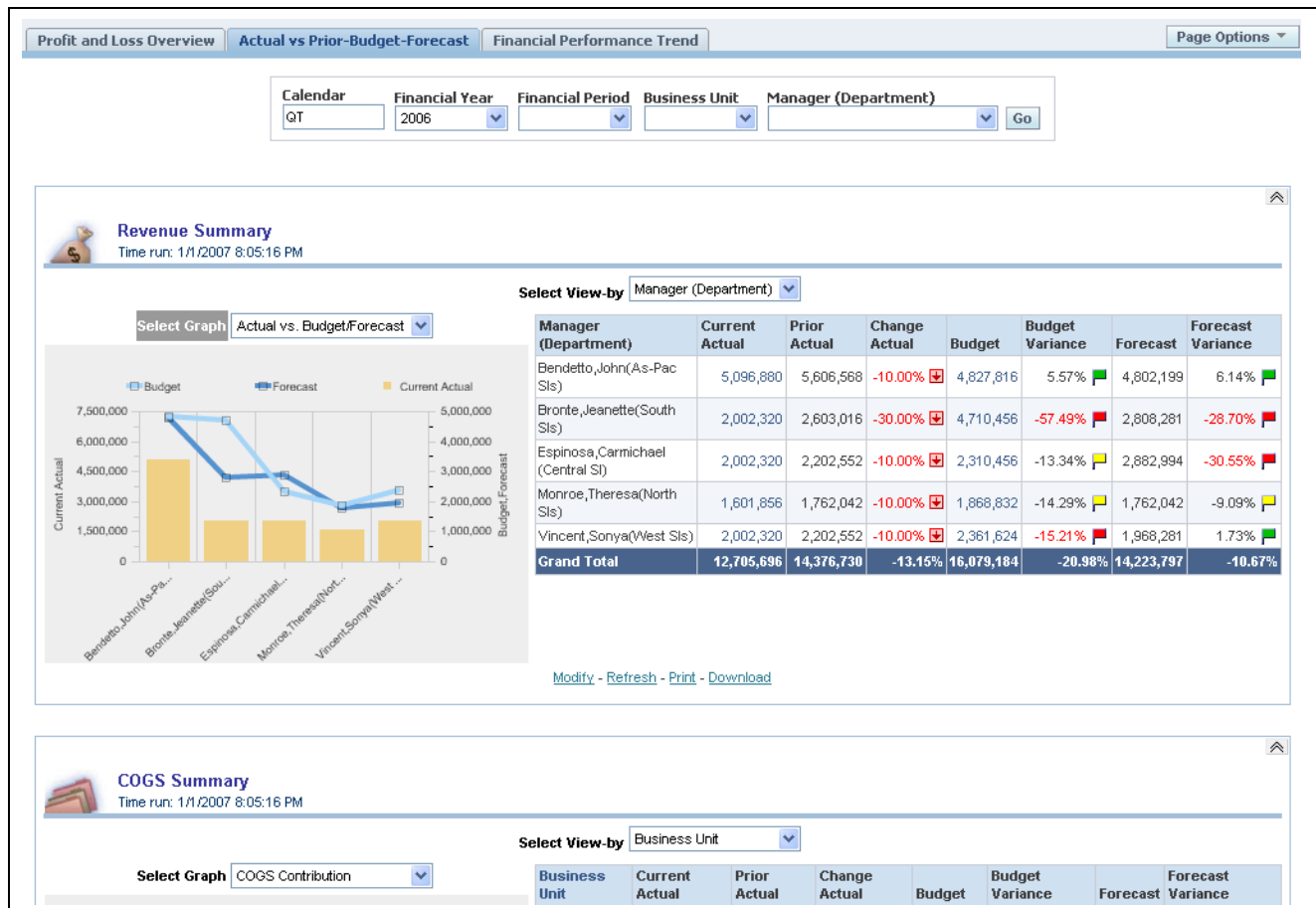
<b>Pages</b>	<b>Reports</b>	<b>Prompts</b>
Profit and Loss Overview	KPIs - Profit and Loss Top Orders - Revenue Pipeline Financial KPI Performance Trend Profit & Loss Statement Revenue Analysis Order Details	Calendar Financial Year Financial Period Business Unit Manager (Department)
Actual vs Prior-Budget-Forecast	Revenue Summary COGS (cost of goods sold) Summary Expense Summary Revenue/COGS/Expense by Account Journal Listing Budget Summary by Account	Calendar Financial Year Financial Period Business Unit Manager (Department) Chartfield1 Chartfield2 Chartfield3 Ledger
Financial Performance Trend	Financial Performance Trend - Yearly Financial Performance Trend - Period Trend Years	Calendar Financial Year Business Unit Manager (Department) Product Category

These are examples of the FMS: General Ledger dashboard pages:

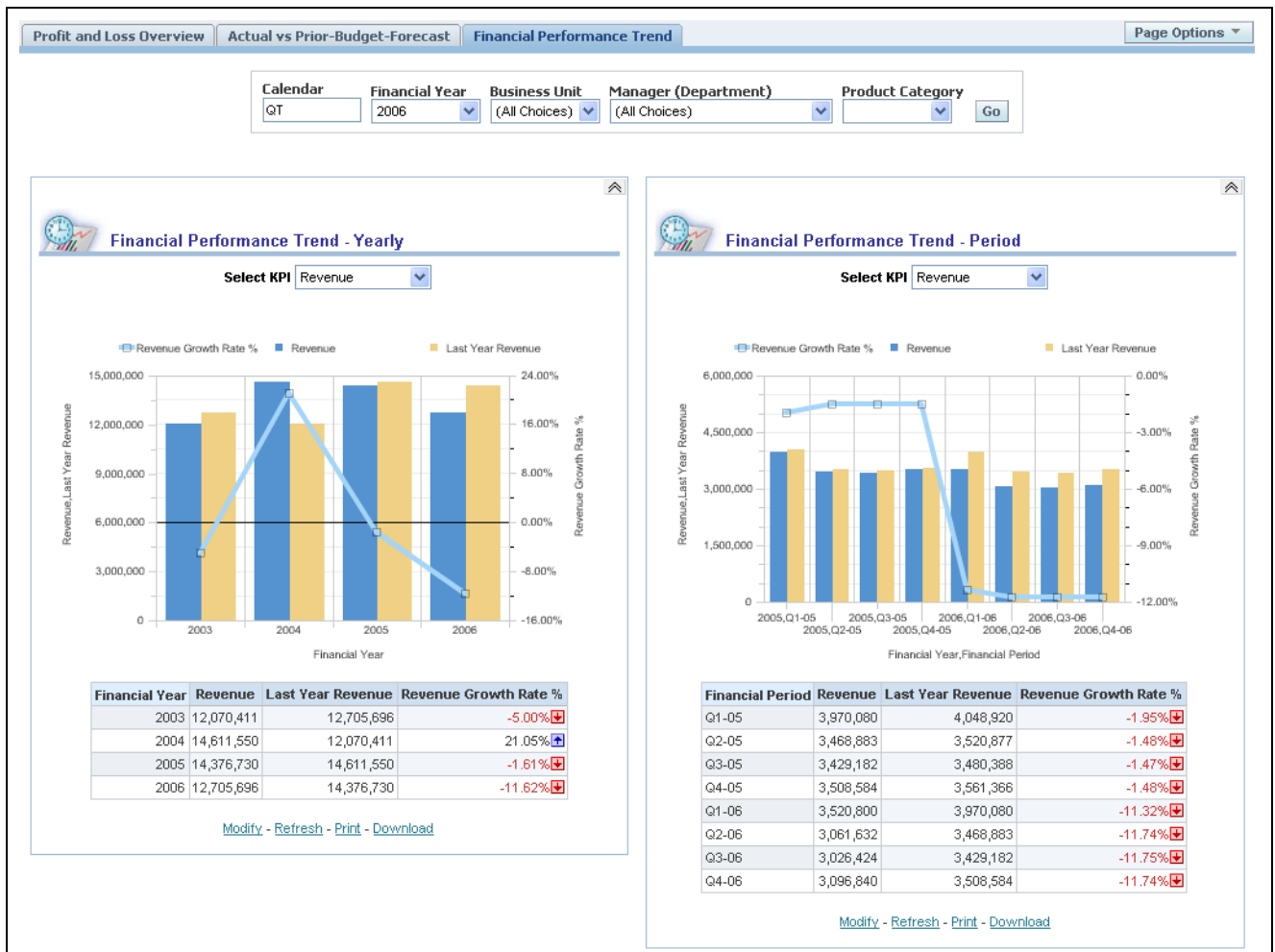




FMS: General Ledger dashboard: Profit and Loss Overview page



FMS: General Ledger dashboard: Actual vs Prior-Budget-Forecast page



FMS: General Ledger dashboard: Financial Performance Trend page

## Guided Navigations

Guided navigations assist users in the exploration of results that appear on dashboards. The Profit and Loss Overview page in the FMS: General Ledger dashboard contains a Guided Navigation section that appears conditionally based on certain COGS, expense, and revenue key performance indicators (KPIs). When the system detects that one of these KPIs has reached its predefined threshold, a link appears in the Guided Navigation section to guide you to a summary report for further investigation.

This table lists the alert names, threshold descriptions, and guided navigation target pages for the alerts that are delivered with the FMS: General Ledger dashboard in the Fusion Financials Intelligence application:

Guided Navigation Name	Threshold Description	Guided Navigation Target Page
Revenue Alert	Revenue is at risk of missing the budget or forecast, based on this calculation:  (revenue ÷ budget ≤ 0.95) and ((period end date – system date) ≤ 10)	Revenue Summary report
Expense Alert	Some business units or departments are at risk of an expense overrun, based on this calculation:  (expenses ÷ budget ≥ 0.60)	Expense Summary report
COGS Alert	Cost of goods sold is at risk of exceeding the budget or forecast, based on this calculation:  (COGS ÷ budget ≥ 0.90)	COGS Summary report

See *Oracle Business Intelligence Answers, Delivers, and Interactive Dashboards User Guide*, “Using Oracle BI Interactive Dashboards,” Adding Content to an Oracle BI Interactive Dashboard.

---

## Delivered Security Groups

This list contains the financials-oriented Oracle BI Server and Oracle Presentation Catalog security groups that are delivered with the Fusion Financials Intelligence application:

- Accounts Payable Manager
- Accounts Receivable Manager
- Costing Manager
- Finance Manager
- Project Manager
- Property Manager

See *Fusion Intelligence For PeopleSoft Enterprise 9.0 and JD Edwards PeopleBook*, “Setting Up Security,” Understanding Security Configuration Types.

## CHAPTER 6

# Understanding Fusion Human Resources Intelligence

This chapter discusses:

- Prerequisites.
- Fusion Human Resources Intelligence For PeopleSoft Enterprise.
- Guided navigation.
- Delivered security groups.

---

### Prerequisites

Before you implement the Fusion Human Resources Intelligence For PeopleSoft Enterprise application, you must implement:

- PeopleSoft Enterprise Human Capital Management Warehouse 9.0.
- Oracle's PeopleSoft Enterprise or JD Edwards online transaction applications that supply data to the Human Capital Management marts.

---

### Fusion Human Resources Intelligence For PeopleSoft Enterprise

The Fusion Human Resources Intelligence application helps you proactively monitor workforce trends and retention. You can optimize your global workforce by capturing and analyzing data regarding workforce demographics, movement, and turnover.

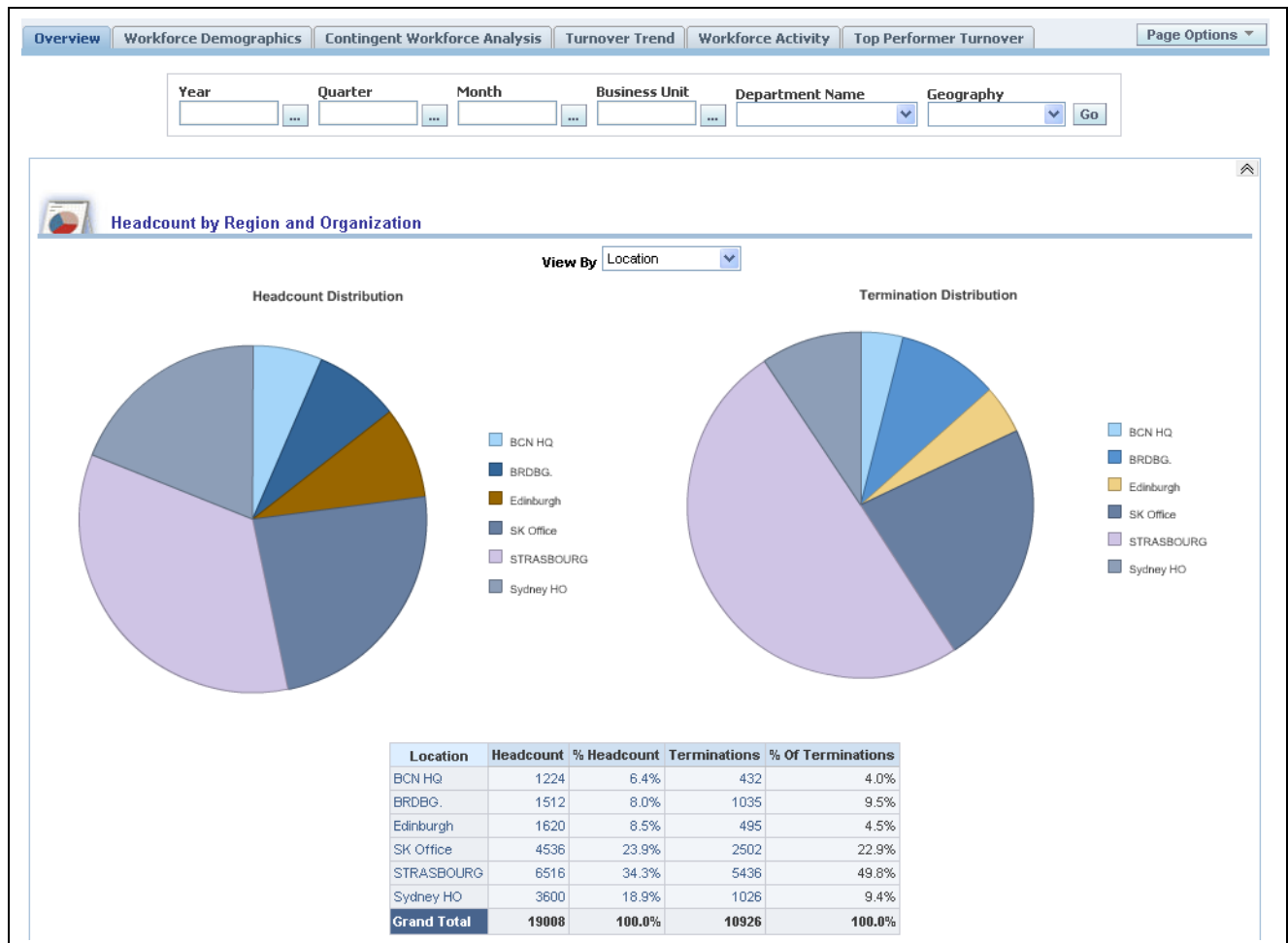
The Fusion Human Resources Intelligence For PeopleSoft Enterprise application contains metadata that maps to four PeopleSoft Enterprise Human Capital Management Warehouse marts—Compensation, Learning and Development, Recruiting, and Workforce Profile.

This table lists the delivered HCM: Workforce Profile pages, and the reports and prompts that are available on each page:

Pages	Reports	Prompts
Overview	Headcount by Region and Organization Headcount Trend Turnover Trend Promotion Trend	Year Quarter Month Business Unit Department Name Geography
Workforce Demographics	Headcount Demographics Headcount Distribution by Job Category Employee Hire Detail Report Termination Demographics Termination Distribution by Job Category Employee Termination Detail report Promotion Demographics Promotion Distribution by Job Category	Year Quarter Month Business Unit Department Name Geography
Contingent Workforce Analysis	Contingent Headcount Distribution Contingent Headcount Distribution Details Contingent Labor Utilization % Trend	Year Quarter Month Business Unit Department Name Geography
Turnover Trend	Employee Termination Detail report Turnover Correlation Position Change Trends Termination Detail Report	Year Quarter Month Business Unit Department Name Geography

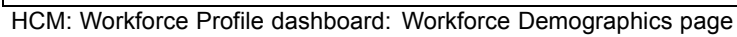
<b>Pages</b>	<b>Reports</b>	<b>Prompts</b>
Workforce Activity	Workforce Movement Activity Employee Detail Report Employee Hire Detail Report Employee Transfer Detail Report	Business Unit Department Name Geography Year Quarter Month
Top Performer Turnover	Recent Regrettable Losses Top Performer Turnover Trends Top Performer At Risk	Year Quarter Month Business Unit Department Name Geography Jobcode Employee Location

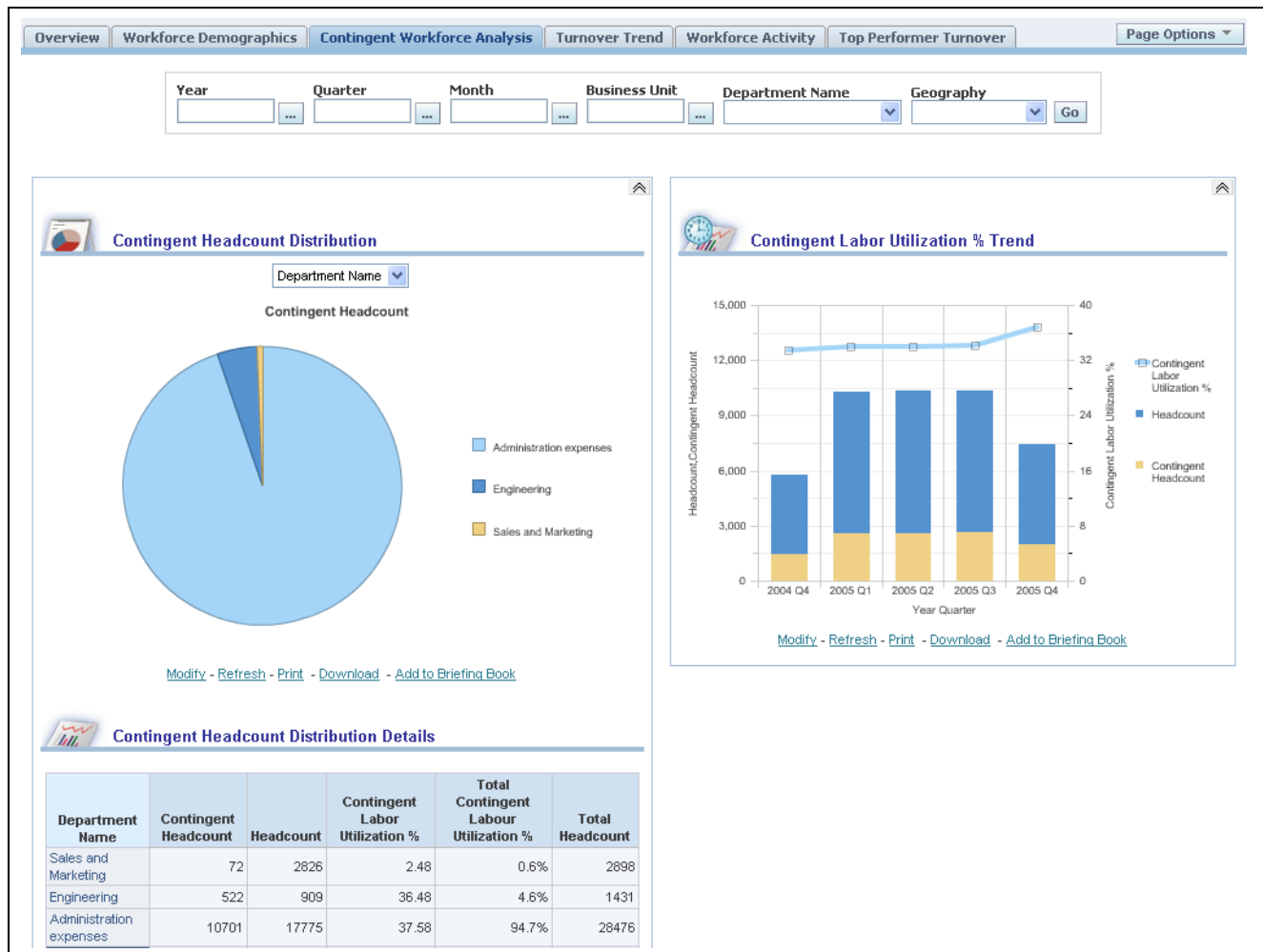
These are examples of the HCM: Workforce Profile dashboard pages:



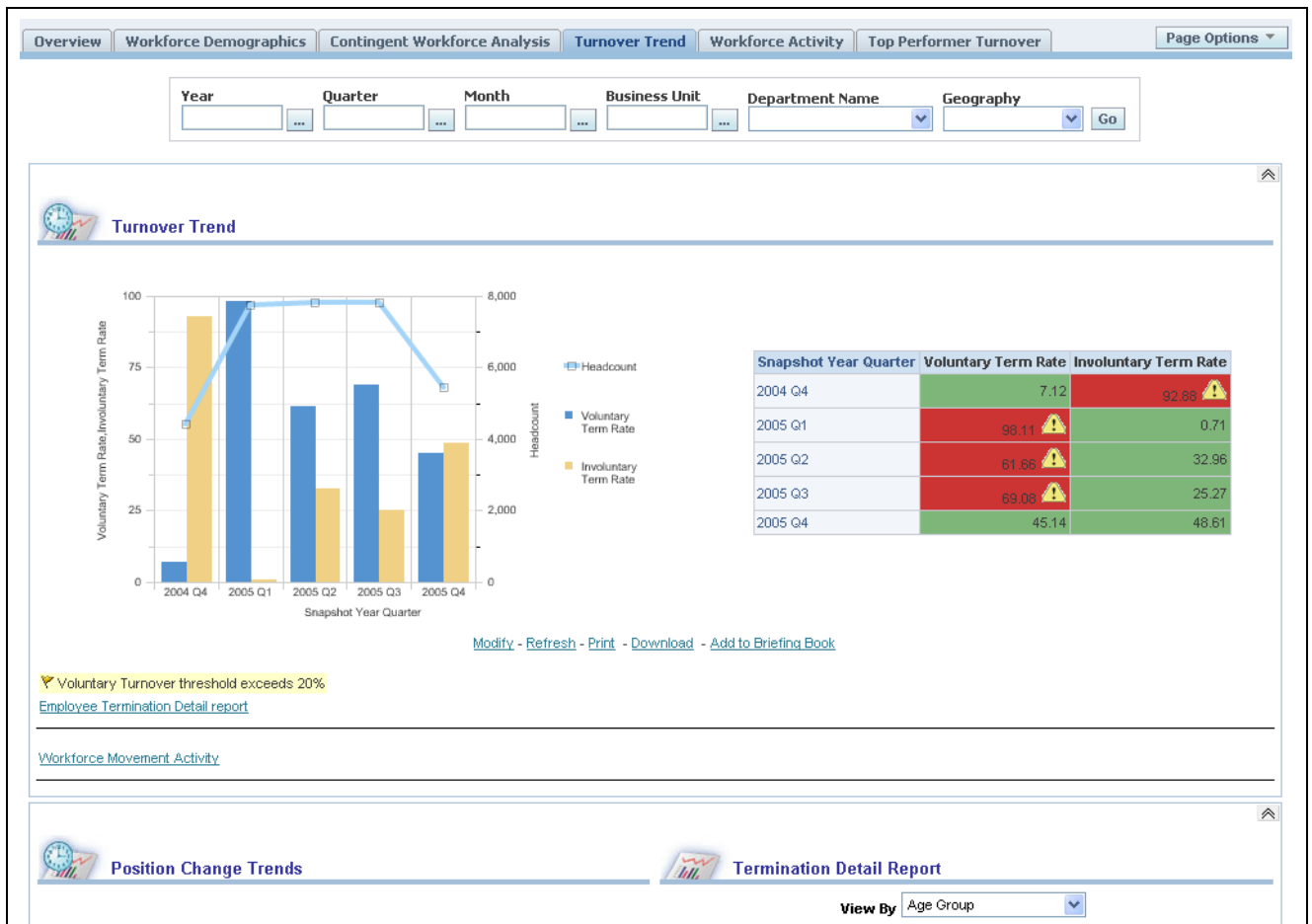
HCM: Workforce Profile dashboard: Overview page



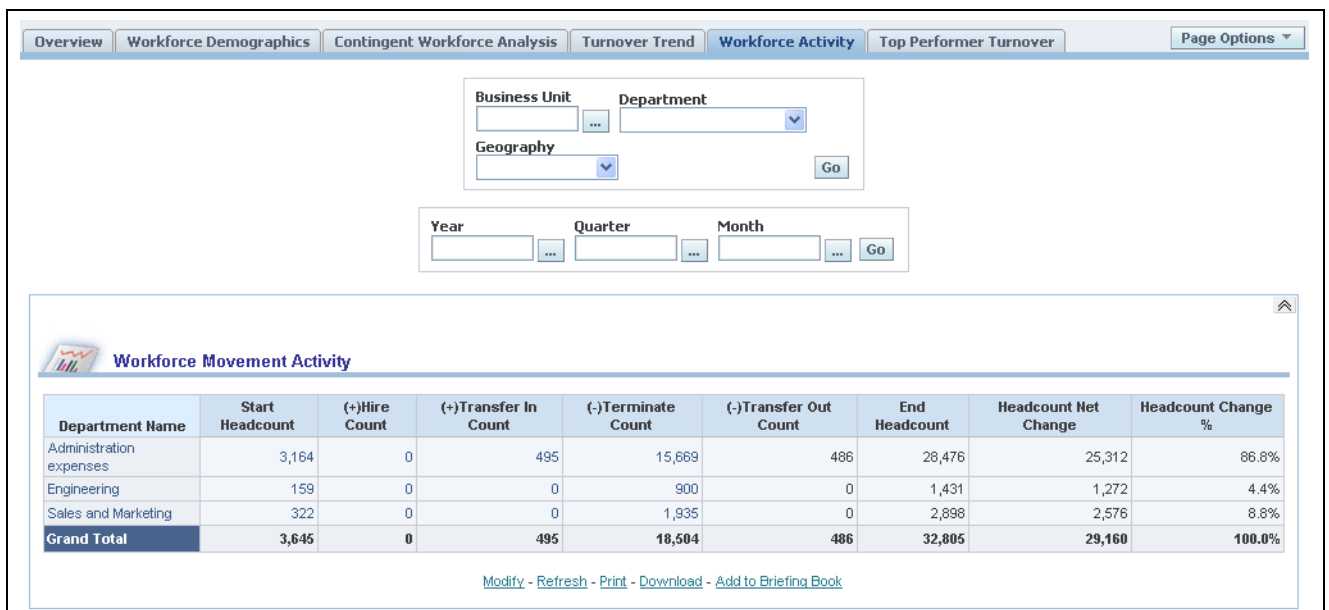




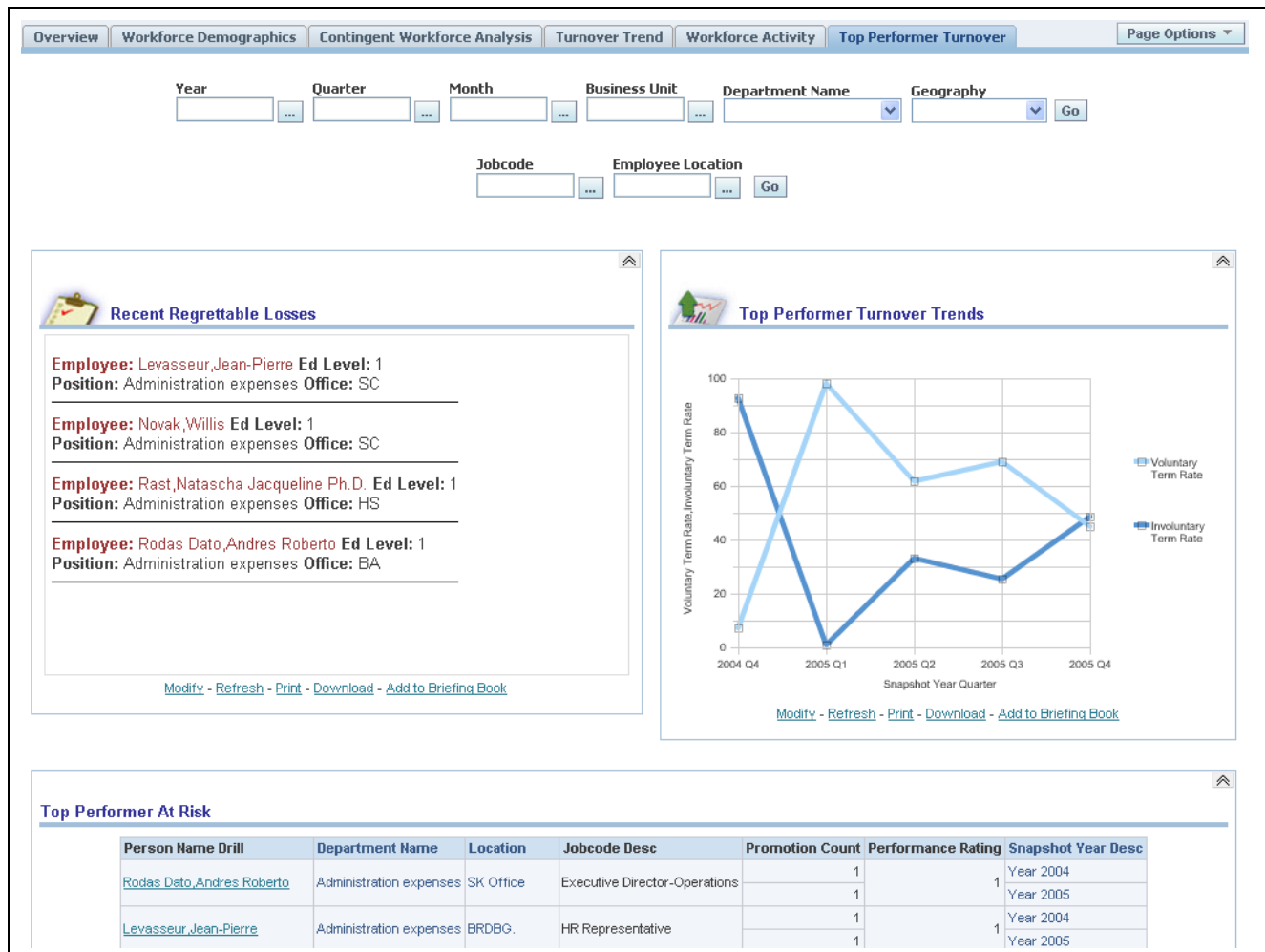
HCM: Workforce Profile dashboard: Contingent Workforce Analysis page



HCM: Workforce Profile dashboard: Turnover Trend page



HCM: Workforce Profile dashboard: Workforce Activity page

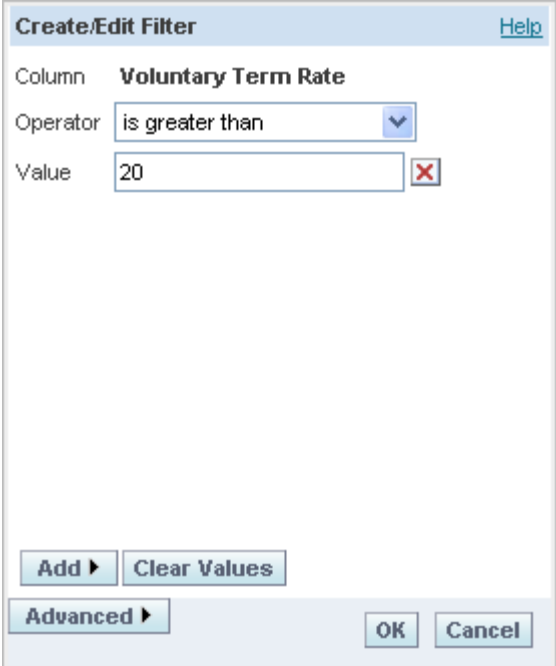


HCM: Workforce Profile dashboard: Top Performer Turnover page

## Guided Navigation

The Turnover Trend page in the Workforce Profile dashboard contains the Turnover Correlation Guided Navigation that appears conditionally based on the voluntary turnover results. When the system detects that voluntary turnover exceeds its predefined threshold of 20%, a link appears in the Turnover Trend section so that you can easily access the Employee Termination Detail report for further investigation.

You can change the delivered threshold value by accessing the Create/Edit Filter page for the Voluntary Term Rate column and editing the filter, as shown in this example:



The screenshot shows a 'Create/Edit Filter' dialog box. The 'Column' field is set to 'Voluntary Term Rate'. The 'Operator' dropdown menu is set to 'is greater than'. The 'Value' text box contains the number '20'. There is a red 'X' icon next to the 'Value' field. At the bottom of the dialog, there are buttons for 'Add', 'Clear Values', 'Advanced', 'OK', and 'Cancel'.

Create/Edit Filter page

See *Oracle Business Intelligence Answers, Delivers, and Interactive Dashboards User Guide*, “Filtering Requests in Oracle BI Answers.”

---

## Delivered Security Groups

This list contains the human resource-oriented Oracle BI Server and Oracle Presentation Catalog security groups that are delivered with the Fusion Human Resources Intelligence application:

- HCM (Human Capital Management) Executive
- HCM Manager
- Line Manager

See *Fusion Intelligence For PeopleSoft Enterprise 9.0 and JD Edwards PeopleBook*, “Setting Up Security,” Understanding Security Configuration Types.



## CHAPTER 7

# Understanding Fusion Campus Solutions Intelligence

This chapter discusses:

- Prerequisites.
- Fusion Campus Solutions Intelligence For PeopleSoft Enterprise.
- Guided analysis.
- Drill in place to online transaction application.
- Delivered security group.

---

## Prerequisites

Before you implement the Fusion Campus Solutions Intelligence For PeopleSoft Enterprise application, you must implement:

- PeopleSoft Enterprise Campus Solutions Warehouse 9.0.
- Oracle's PeopleSoft Enterprise online transaction applications that supply data to the Campus Solutions marts.

---

## Fusion Campus Solutions Intelligence For PeopleSoft Enterprise

The Fusion Campus Solutions Intelligence For PeopleSoft Enterprise application delivers a prebuilt dashboard and reports that provide an at-a-glance analysis of trends in applicant levels, student retention rates, graduation rates, financial aids, and awards. This information gives an overall indication of the institution's performance in various aspects of student administration processes.

The Fusion Campus Solutions Intelligence For PeopleSoft Enterprise application contains metadata that maps to three PeopleSoft Campus Solutions Warehouse marts—Admissions and Recruiting, Student Records, and Student Financials.

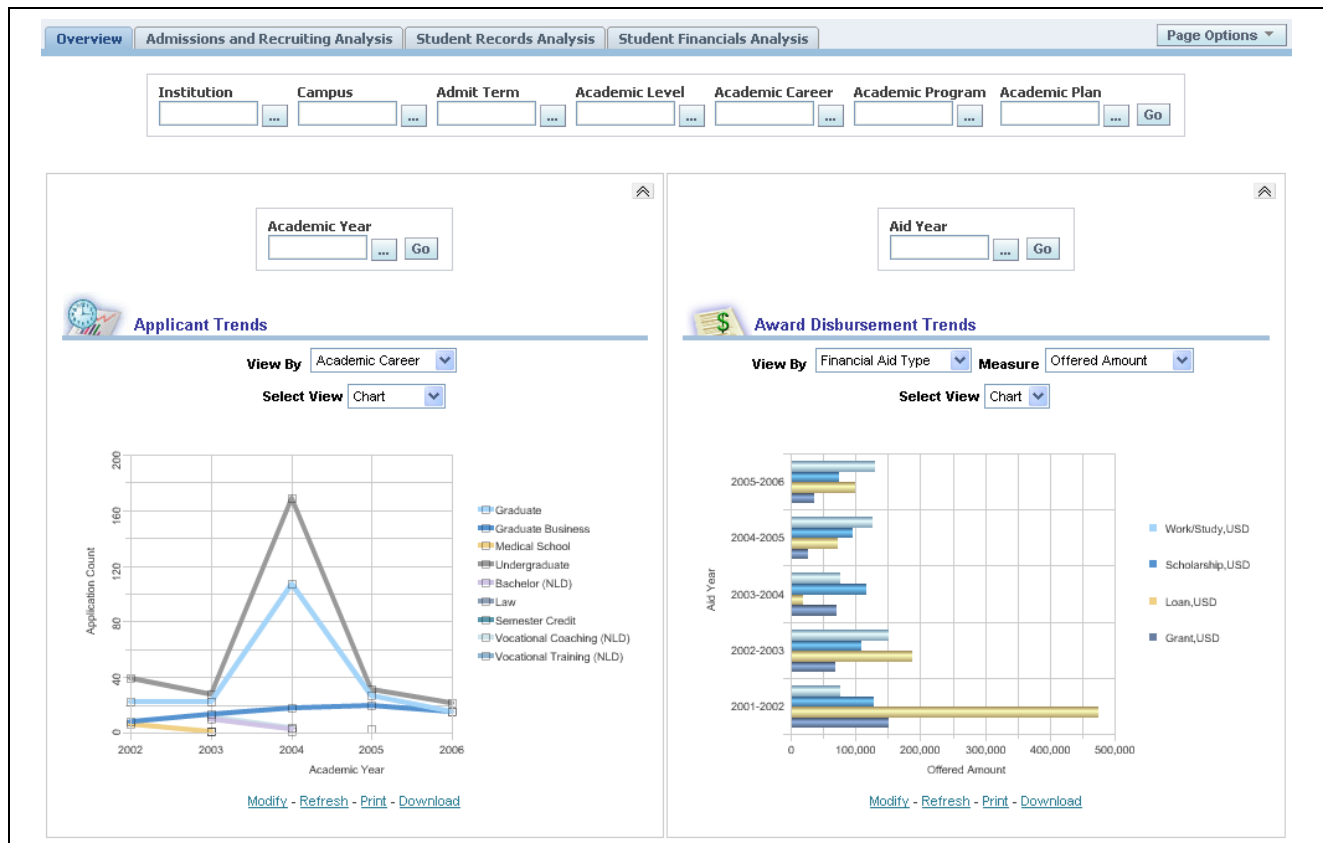
This table lists the delivered CSW: Student Administration dashboard pages, and the reports and prompts that are available on each page:

<b>Pages</b>	<b>Reports</b>	<b>Prompts</b>
Overview	Applicant Trends Award Disbursement Trends Student Retention Trends Student Graduation Trends	Institution Campus Admit Term Academic Level Academic Career Academic Program Academic Plan Academic Year Aid Year Admit Year
Admissions and Recruiting Analysis	Recruiting Effectiveness This Year vs. Last Year Prospect-to-Applicant-to-Student Rates This Year vs. Last Year Applicant Status Details	Institution Campus Admit Term Academic Year Academic Level Academic Career Academic Program Academic Plan

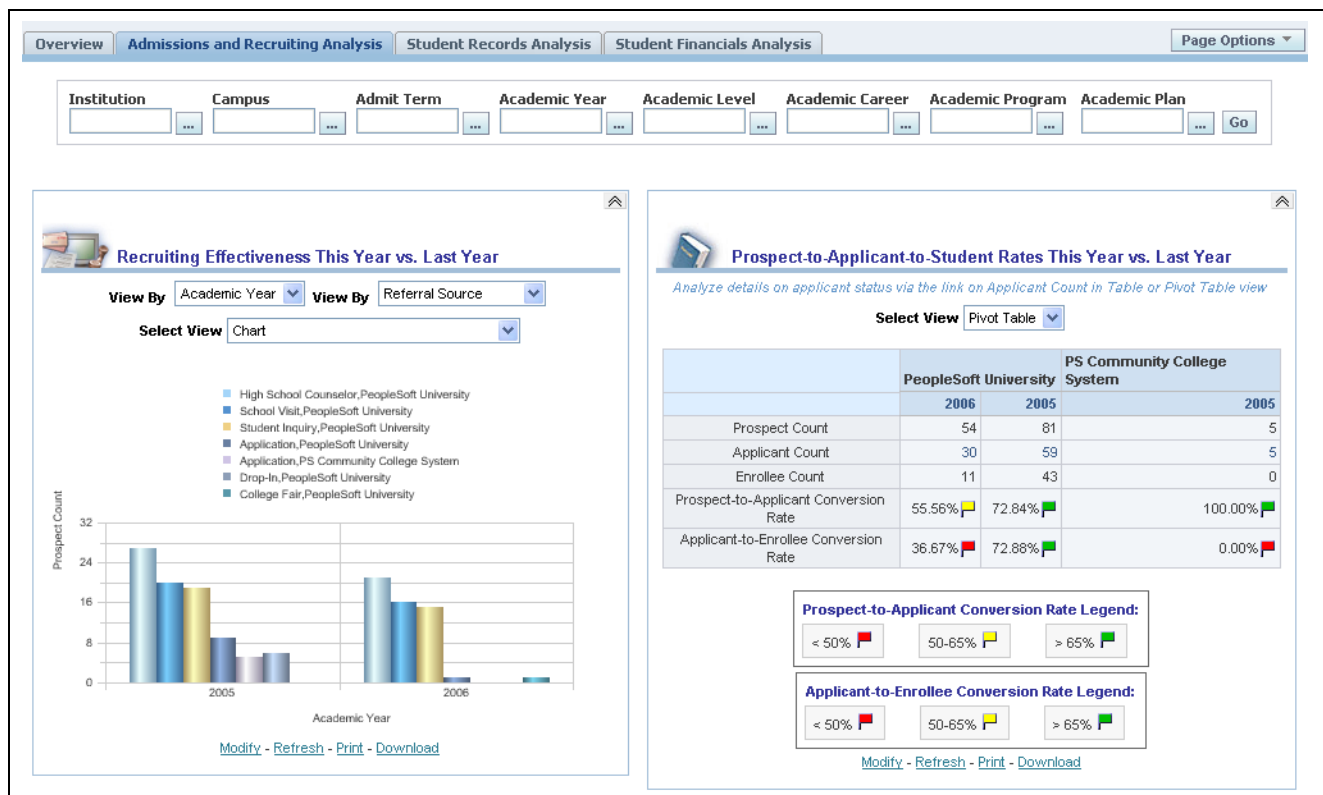


<b>Pages</b>	<b>Reports</b>	<b>Prompts</b>
Student Records Analysis	Class Enrollment Analysis Top Student Academic Standings	Institution Academic Level Academic Career Academic Program Academic Plan Calendar Year Session Term Academic Year Academic Term
Student Financials Analysis	Student Receivables by Type Student Receivables by Program	Institution Academic Career Calendar Year Account Type As of Date Academic Program

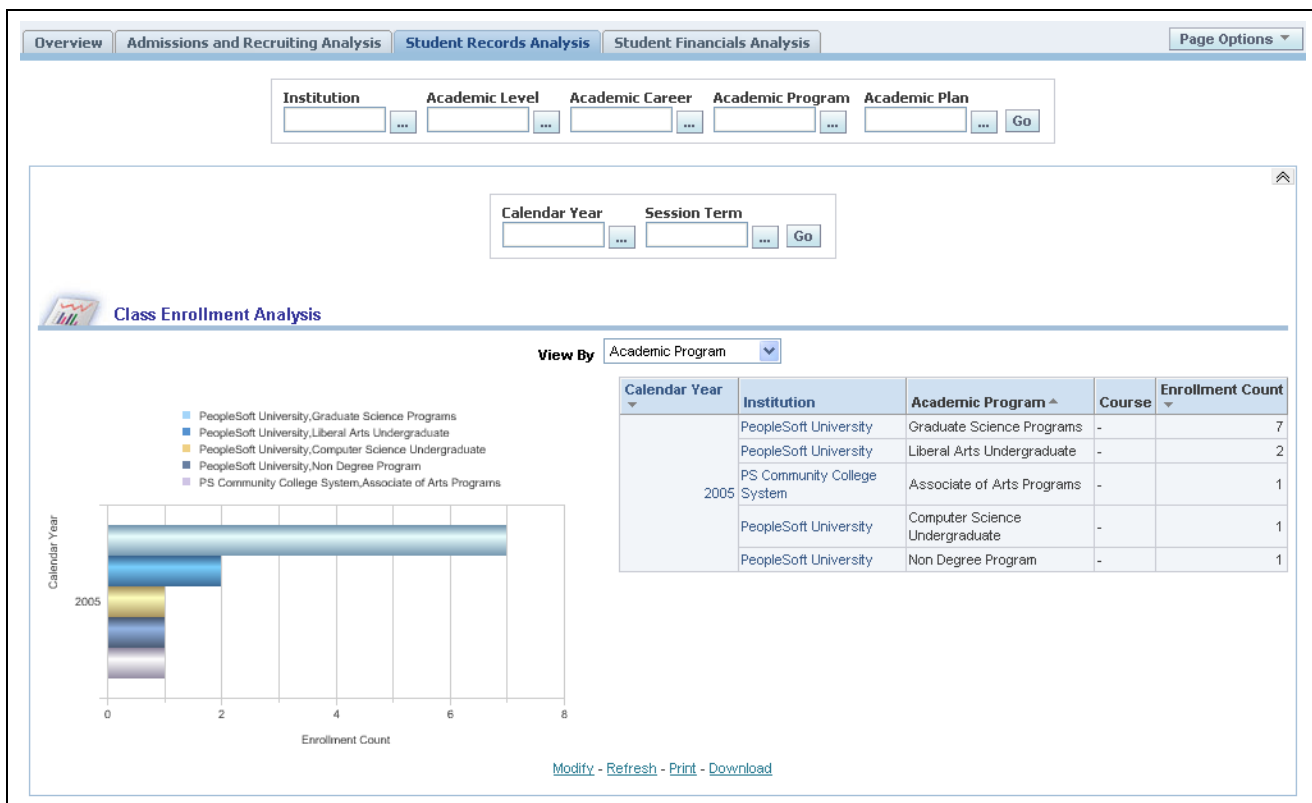
These are examples of the CSW: Student Administration dashboard pages:



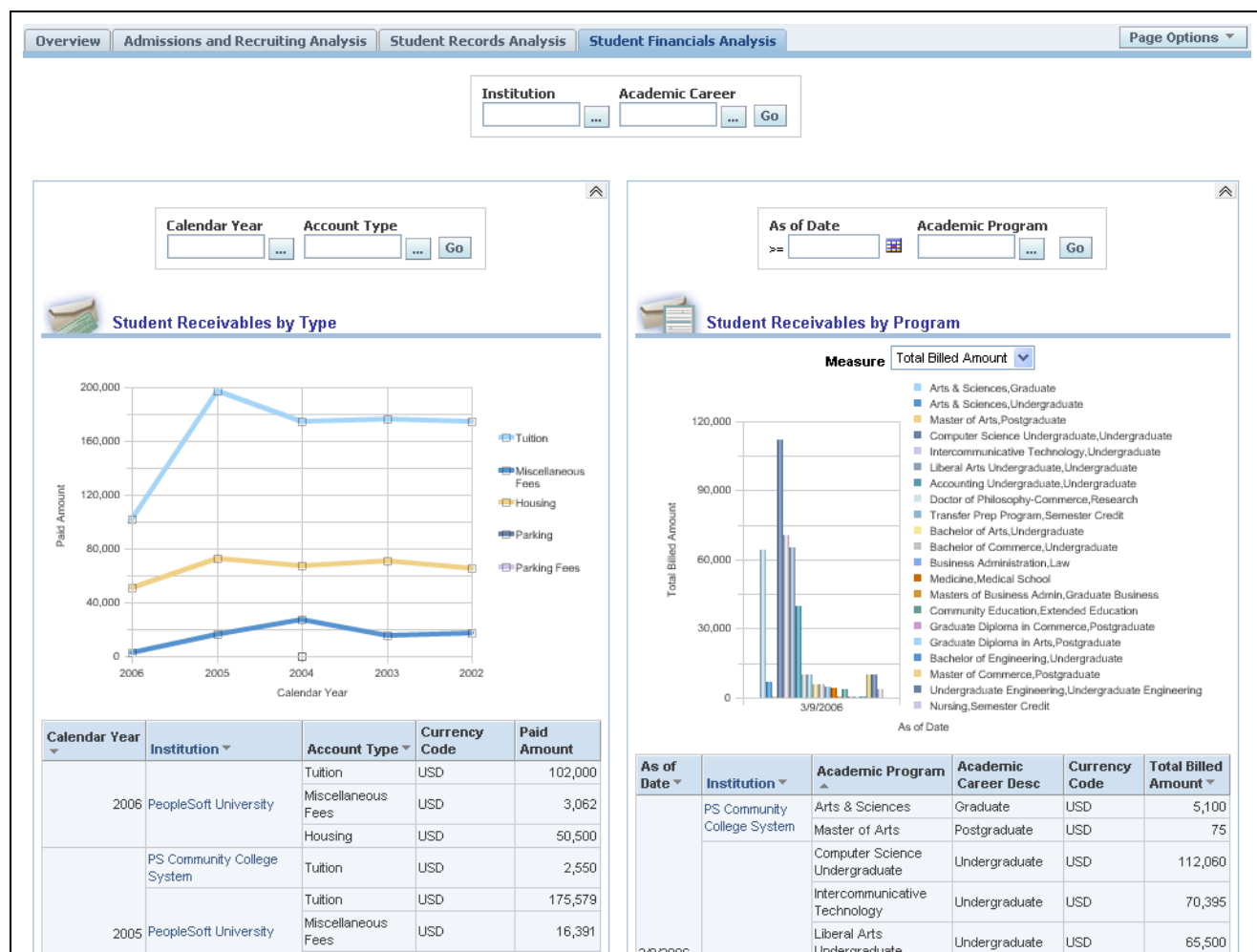
CSW: Student Administration dashboard: Overview page



CSW: Student Administration dashboard: Admissions and Recruiting Analysis page



CSW: Student Administration dashboard: Student Records Analysis page



CSW: Student Administration dashboard: Student Financials Analysis page

## See Also

*PeopleSoft Enterprise Performance Management Warehouse 9.0 PeopleBook*, “Understanding the Campus Solutions Warehouse”

## Guided Analysis

The Fusion Campus Solutions Intelligence For PeopleSoft Enterprise application provides guided analysis in which reports are linked from one to the other to lead users through logical steps of information discovery. In the Admissions and Recruiting Analysis page, the Prospect-to-Applicant-to-Student Rates This Year vs. Last Year report provides instructional text under the report title to indicate the guided analysis. You can click the link in the Table and Pivot Table views to launch the Applicant Status Details report to analyze details on applicant status.

---

## Drill in Place to Online Transaction Application

The Fusion Campus Solutions Intelligence For PeopleSoft Enterprise application delivers the capability to seamlessly interact with the PeopleSoft Enterprise Campus Solutions transactional system to drive insight to action. The Applicant Status Details report provides a link for you to drill in place from the dashboard directly to the Maintain Applications component in the PeopleSoft Enterprise Campus Solutions application. This drill in place functionality enables a recruiter or an admissions director to take the insight derived from the dashboard analysis to drive immediate action to help an applicant resolve pending issues in the application process.

---

## Delivered Security Group

An Oracle BI Server and Oracle Presentation Catalog security group named *CS (Campus Solutions) Administrator* is delivered with the Fusion Campus Solutions Intelligence application.

See *Fusion Intelligence For PeopleSoft Enterprise 9.0* and *JD Edwards PeopleBook*, “Setting Up Security,” Understanding Security Configuration Types.



# CHAPTER 8

## Understanding Fusion Supply Chain Intelligence

This chapter discusses:

- Prerequisites.
- Fusion Supply Chain Intelligence For PeopleSoft Enterprise.
- Delivered security groups.

---

### Prerequisites

Before you implement the Fusion Supply Chain Intelligence For PeopleSoft Enterprise application, you must implement:

- PeopleSoft Enterprise Supply Chain Management Warehouse 9.0.
- Oracle’s PeopleSoft Enterprise or JD Edwards online transaction applications that supply data to the Supply Chain Management marts.

---

### Fusion Supply Chain Intelligence For PeopleSoft Enterprise

The Fusion Supply Chain Intelligence For PeopleSoft Enterprise application delivers a prebuilt dashboard and reports that track procurement operations performance. You can analyze spending by commodity and supplier to discover ways to decrease costs, cycle times, and working capital.

The Fusion Supply Chain Intelligence For PeopleSoft Enterprise application contains metadata that maps to six PeopleSoft Supply Chain Warehouse marts—Fulfillment and Billing, Procurement, Spend, Inventory, Manufacturing, and Supply Chain Planning.

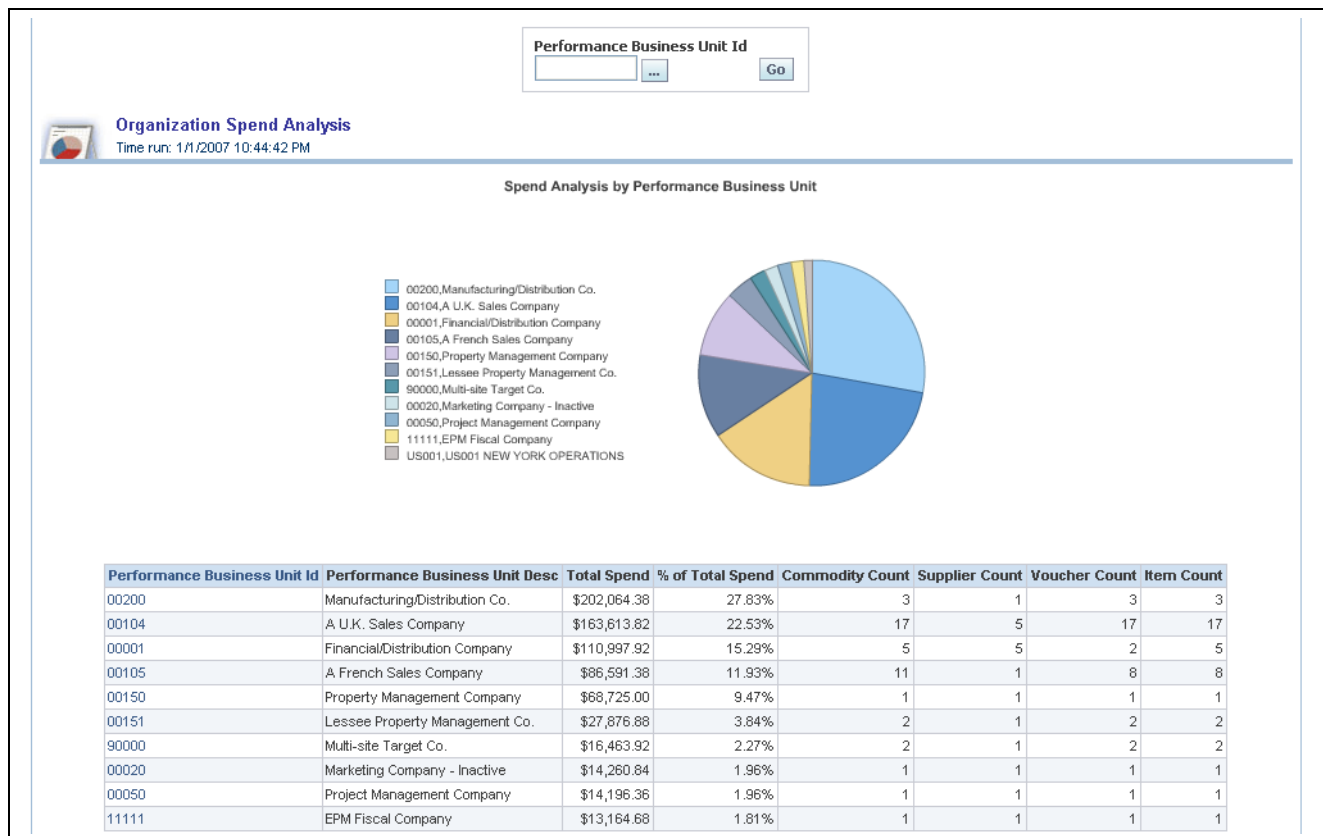
This table lists the reports and prompts that are available on the delivered SCM: Spend dashboard page:

Reports	Prompts
Spend By UNSPSC (United Nations Standard Products and Services Classification) Segment	Buyer
Spend By Remit To Supplier	Invoice Date
Spend By Performance BU	UNSPSC Segment
	Remit To Supplier
	Performance Business Unit Id

You can navigate to these additional reports from links on the SCM: Spend dashboard page:

- Spend By UNSPSC Family
- Spend By UNSPSC Class
- Spend by UNSPSC Commodity
- Spend by Item
- Spend by Item Details
- Spend by Supplier
- Spend by Business Unit

This is an example of the SCM: Spend dashboard page:



SCM: Spend dashboard page

## Delivered Security Groups

This list contains the supply chain-oriented Oracle BI Server and Oracle Presentation Catalog security groups that are delivered with the Fusion Supply Chain Intelligence application:

- Business Analyst
- Commodity Manager



See *Fusion Intelligence For PeopleSoft Enterprise 9.0 and JD Edwards PeopleBook*, “Setting Up Security,” Understanding Security Configuration Types.



## CHAPTER 9

# Understanding Fusion Public Sector Intelligence For PeopleSoft Enterprise

Oracle offers a Fusion Public Sector Intelligence For PeopleSoft Enterprise bundle for the convenience of the public sector community. This bundle maps to these six functional warehouse marts in the PeopleSoft Enterprise Performance Management Warehouse system:

- Financials functional warehouse: General Ledger, Payables, Receivables, Enterprise Service Automation (Projects) marts.
- Supply Chain functional warehouse: Spend and Procurement marts.



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