

# **ER/Studio® Enterprise Portal 1.0.2** User Guide

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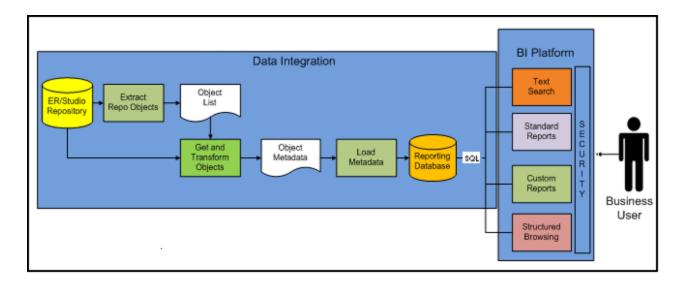
# Welcome to the ER/Studio Enterprise Portal

The ER/Studio Enterprise Portal enables you to search for all kinds of data in your ER/Studio Repository database, create reports, and then read the generated reports in an easy-to-read format.

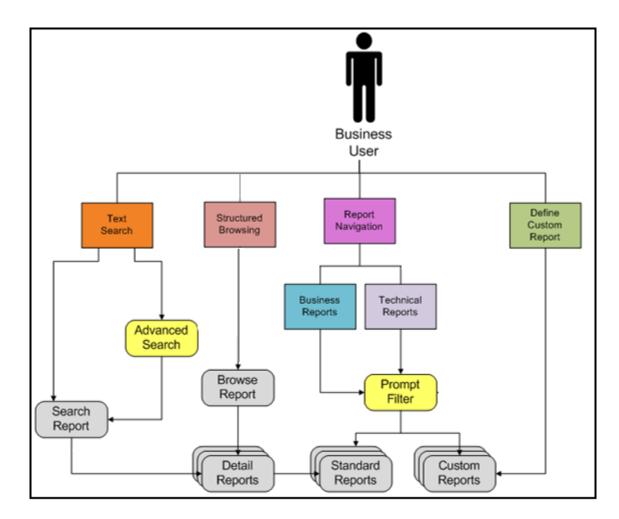
In addition, application development teams can use the portal to see what types of data already exist in the company. This eliminates replicating new data or deviating from the standard format data types needed to be implemented in existing applications.

The Enterprise Portal enables you to communicate all the information you need and lets you view the data model diagram as well. You can search for and save frequently-used reports. You will always know where to get the up-to-date information you need.

The following shows the progression of data integration and the different way to access ER/Studio Repository data.



The following gives an overview of the different ways to search for information and the navigation path through new or existing reports.



# **Product Benefits**

The Enterprise Portal gives access to metadata information stored in ER/Studio models. This browser-based solution allows you to search, browse, and report on ER/Studio Repository information. For example, a business analyst can look up a definition for a business term used in a report or can research data definitions related to a particular project or subject area.

The Enterprise Portal makes it inexpensive, easy, and expedient to access metadata information. With self-service reporting, authorized personnel can have real-time access to data metadata. The Enterprise Portal enables the organization to more effectively visualize, distribute, and communicate their data models and metadata.

Modeling teams of both large and small organizations can share the metadata across their companies. Business analysts, data executives, developers or data stewards no longer have to depend on the Data Modeler to provide access to, reports on, or updated spreadsheets of the latest metadata.

#### This Web interface:

 enables enterprise-wide distribution of the repository metadata to developers, database administrators, business analysts, and data analysts

- has an easy-to-use console to manage connections and maintain access to portal actions and controls
- is easy to use and navigate, with extensive search capabilities
- can be customized and integrated into existing intranet portals
- eliminates the need for spreadsheets and other stand-alone documents
- has standardized HTML reporting of repository metadata
- · has structured browsing and navigation of repository hierarchy
- allows for increased compliance with standards and regulations

The portal has the following features:

Feature	Description	
Home Page	Interact with the Enterprise Portal through the Home Page. You can navigate to the Business and Technical reports, and create a custom report. For more information, see <a href="Dashboards">Dashboards</a> .	
Search	Can search for text within the repository across object properties and object types. Search includes both simple and advanced searches. The simple search searches all text properties of all object types and all diagrams for a match on the search string you supply. The search text you provide is treated as one string by the search engine and is matched accordingly. For more information, see <a href="Search">Search</a> .	
Advanced Search	The advanced search options allow you to refine your query with specific parameters. You can then use these saved queries to create, print, and share reports. For more information, see <a href="Advanced Search">Advanced Search</a> .	
Explore	Browse the contents of the repository. A list of projects and the diagrams contained within each project folder of the repository are available. From this list, browse the contents of any diagram by selecting the diagram you want to navigate. When a diagram is selected, the Diagram Detail Report is displayed for that diagram. From that point, continue to browse the contents of the diagram by navigating the detailed report links. The structured browsing interface allows selection of models and submodels, in addition to diagrams, and provides corresponding detail reports. For more information, see <a href="Explore">Explore</a> .	
Reports  Several standard reports are available that can be executed grouped and organized into folders. These folders include: Reports and Technical Reports. The following standard repavailable:  Business Reports: Attribute Definitions, Business Entity Definitions		
	Technical Reports: Column Data Lineage; Domain Bindings; Entity, Model, Submodel and Diagram Report; Entity Attachments; Reference Values; and Security Classifications.	
	When choosing to run one of the standard reports, you are prompted to supply parameters that filter and format the results of the report. You can format the report output as HTML, PDF or XLS. By default, all standard reports search the entire reporting database. Alternatively, restrict the report contents by Project, Diagram, Model, Submodel, and Table/Entity. The prompts to filter the reports are interdependent, for example the Diagram filter is dependent on the Project filter value and the Model filter is dependent on the Diagram filter. For more information, see Reports	

Feature	Description	
Customized Reports  You can create a report and customize the report based o criteria: content, format, sort, aggregation, and filter. The greports can be saved, shared, and rerun at a later date by users. These are the same directories where standard repand can be added to by an administrator.		
	The content of the Custom Reports is limited to the structured Business Views created using metadata. The Metadata module generates SQL based on Business Views you specified during development. You can modify the business views using the Pentaho Metadata software. For more information, see <a href="New Reports">New Reports</a> .	
Export and Printing	Export and print all standard and created reports.	
Usage Reporting	See who is currently logged in to the Enterprise Portal, as well as a historical chart of Website usage. For more information, see <a href="Activity">Activity</a> .	

# **About this Document**

This guide focuses on the key features and capabilities of the Enterprise Portal. The table below describes the sections this guide is comprised of:

Section	Description
Overview	Provides a basic overview of the available functions. A link to additional information is provided for each function.
Using the ER/Studio Enterprise Portal	Explains how to use the various dashboards to access and view metadata information stored in ER/Studio models.
Administrator's Guide	Discusses the responsibilities and functions that can only be performed by a system administrator.
Glossary	Defines words used in Enterprise Portal and this documentation.

# **Additional Product Resources**

The Embarcadero Web site is an excellent source for additional product information, including white papers, articles, FAQs, discussion groups, and the Embarcadero Knowledge Base.

Go to www.embarcadero.com/support, or click any of the links below, to find:

- <u>Documentation</u>
- Online Demos
- Technical Papers
- Discussion Forums
- Knowledge Base

# **Embarcadero Technologies Technical Support**

If you have a valid maintenance contract with Embarcadero Technologies, the Embarcadero Technical Support team is available to assist you with any problems you have with our applications. Our maintenance contract also entitles registered users of Embarcadero Technologies' products to download free software upgrades during the active contract period.

To save you time, Embarcadero Technologies maintains a <u>Knowledge Base</u> of commonly-encountered issues and hosts <u>Discussion Forums</u> that allow users to discuss their experiences using our products and any quirks they may have discovered.

To speak directly with Embarcadero Technical Support, see <u>Contacting Embarcadero Technologies Technical Support</u> below.

NOTE: Evaluators receive free technical support for the term of their evaluation (14 days).

## **Contacting Embarcadero Technologies Technical Support**

When contacting Embarcadero Technologies Technical Support please provide the following to ensure swift and accurate service:

#### **Personal Information**

- Name
- · Company name and address
- · Telephone number
- Fax number
- · Email address

#### **Product and System Information**

- · Embarcadero product name and version number. This information is found under Help, About.
- · Your client operation system and version number.
- · Your database and version number.

# **Problem Description**

A succinct but complete description of the problem is required. If you are contacting us by telephone, please have the above information, including any error messages, available so that an Embarcadero Technical Support Engineer can reproduce the error and clearly understand the problem.

There are three ways to contact Embarcadero's Technical Support department:

- · Via the Web
- Via Phone
- Via <u>Email</u>

#### Via the Web

Embarcadero Technical Support provides an online form that lets you open a Support case via the Web. To access this form, go to <a href="http://www.embarcadero.com/support/open\_case.jsp">http://www.embarcadero.com/support/open\_case.jsp</a>.

We normally acknowledge the receipt of every case on the same day, depending on the time of submission.

#### Via Phone

# **United States**

Embarcadero Technologies Technical Support phone number is (415) 834-3131 option 2 and then follow the prompts. The hours are Monday through Friday, 6:00 A.M. to 6:00 P.M. Pacific time.

For licensing issues, including Product Unlock Codes, call (415) 834-3131 option 2 and then follow the prompts. The hours are Monday through Friday, 6:00 A.M. to 6:00 P.M. Pacific time.

The Embarcadero Technologies Technical Support fax number is (415) 495-4418.

#### **EMEA**

Embarcadero Technologies Technical Support phone number is +44 (0)1628 684 499. The hours are Monday to Friday, 9 A.M. to 5:30 P.M. U.K. time.

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The Embarcadero Technologies Technical Support fax number is +44 (0)1628 684 401.

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Depending on your needs, send your email to one of the following:

- <u>support@embarcadero.com</u> Get technical support for users and evaluators
- upgrade@embarcadero.com Request upgrade information
- key@embarcadero.com Request a product key
- wish@embarcadero.com Make a suggestion about one of our products

#### **EMEA**

Depending on your needs, send your email to one of the following:

- uk.support@embarcadero.com- Get technical support for users and evaluators
- <u>uk.upgrade@embarcadero.com</u> Request upgrade information
- uk.key@embarcadero.com Request a product key
- <u>uk.wish@embarcadero.com</u> Make a suggestion about one of our products

# **ER/Studio Enterprise Portal Overview**

This overview covers the two key components of the Enterprise Portal: Architectural and Security:

# **Architectural Overview**

The following architectural components are explained with links to related topics:

- ER/Studio Repository
- · Business Intelligence (BI) Platform

# **ER/Studio Repository**

The ER/Studio Repository database (ERSRDB) is the only source of data for the Enterprise Portal. A separate reporting database, created by the database Admin, is synchronized with the ER/Studio Repository. The synchronization is scheduled by the Enterprise Portal's <u>system administrator</u>.

The reporting database is optimized for quick and efficient reporting of business-related metadata. Access to the Reporting database is provided by JNDI (Java Naming and Directory Interface) connections and allows access to SQL Server, and Oracle, DB2 (among others). All queries and reports are sourced from the Reporting database.

The reporting database contains properties for logical and physical model objects.

**NOTE:** Initially, physical properties that are specific to a relational database platform and/or version will not be extracted from the ERSRDB or transferred to the reporting database.

The following ER/Studio object types are synchronized between the two databases:

Model Objects	Dictionary Objects	Data Lineage Objects
Project	Dictionary	Data Lineage Source
Diagram	Attachment type	Data Lineage Table
Model	Attachment	Data Lineage Column
Submodel	Attachment Text List	Data Movement Column
Entity	Bound Attachment	
Entity Display	Domain	
Relationship	Reference Value	
Relationship Display	Reference Value Pair	
Attribute	Security type	
View	Security Property	
View Column	Security Text List	
View Display	Bound Security Property	

#### **Business Intelligence (BI) Platform**

The Pentaho Open Source Business Intelligence Platform (version 1.7 GA) is the heart of the Enterprise Portal. The BI Platform receives and processes all user data requests and sends the results to the browser for presentation. User authentication is performed against the ER/Studio Repository database. Diagram access granted in the ER/Studio Repository is also used by the Enterprise Portal reporting.

Pentaho's reporting capabilities are combined with the Repository Reporting database to build the Enterprise Portal. The following Pentaho BI Platform functionality is in use:

- · Solution Engine Accepts user requests and invokes the required component to satisfy the user request.
- Data Integration Engine Runs the Extract, Transform and Load (ETL) jobs designed using the Data Integration
  Designer.

# **Security Overview**

The Pentaho BI Platform authenticates users prior to running queries and reports. Each user must type in a user name and password that is assigned by the ER/Studio Repository administrator and stored in the ER/Studio Repository database. Authentication is performed against the user name and password.

**NOTE:** The user of the portal does NOT have to be an ER/Studio user. The licensing for the two products are separate.

All authenticated users are granted the ability to access the following pages:

- Home
- Explore
- Reports
- Activity
- · Search and Advanced Search

#### **Security Components**

The primary components of security in the Enterprise Portal are users, groups, and permissions. Users and groups are not defined within the Enterprise Portal itself, but within the ER/Studio Repository. Permissions are granted based on a role.

**NOTE:** Permissions in the Enterprise Portal are specified by role, not user.

## **Default Roles**

Two default roles are provided initially in the ER/Studio Repository. These roles are granted permissions to access actions in the Enterprise Portal.

Role	Definition
User	Users assigned to this role can execute Shared Custom Reports as well as Business and Technical Reports.
Super User	Users assigned to this role has the ability to run any reports or searches and can perform functions in the Administration console.

#### **Action Security**

After authenticated in the platform, each user is restricted to perform actions granted to the user's role, which must be explicitly granted by the Admin. Other users can be assigned to the role of Admin in the Enterprise Portal at the Admin's discretion. A user with Admin permissions must first grant permission to other groups before the member users of those groups can execute actions.

# **Object Security**

Each user is restricted to accessing the data related to the diagrams that they have access to in the ER/Studio Repository. Upon successful user authentication, the BI Platform runs a query against the ER/Studio Repository to determine the list of diagrams that the user has access to.

# **Using the ER/Studio Enterprise Portal**

This chapter discusses how to share, browse, and report on the data contained in the ER/Studio Repository using the various Web pages, information panels, and wizards. The information is divided into the following topics:

- Starting the Enterprise Portal Application
- Dashboards
- Simple Search
- Advanced Search

# **Starting the Enterprise Portal Application**

**NOTE:** If, during the login process, an error message displays such as "Template could not be loaded...", the Enterprise Portal server may need to be restarted. In this case, please contact the Enterprise Portal Administrator.

# **Dashboards**

Your interaction with the Enterprise Portal is via the Business Information (BI) Platform. The dashboard displays various information panels. The information that appears depends on which link you click.

Link	Icon	Information Panel
<u>Home</u>	ð	Gives you access to four frequently used functions in the Enterprise Portal. It also has a My Recent Reports Information Panel. This is the default page that appears when you first start the Enterprise Portal.
Explore	<b>Q</b>	Provides both a tree interface for structured browsing and detailed reports for selected diagrams, models, and submodels.
Reports	P)	Gives your access to existing shared reports: Business and Technical.
		The Solution Browser, available via the Reports menu item, includes not only the "standard" reports provided by Embarcadero but also any custom reports that have been created for shared use.
Activity	*	Displays three information panels displaying login activity, connection activity, and object history. Reports based on this information can be generated and viewed.

**NOTE:** If you signed on as a System Administrator, there is also an Admin dashboard. For more information see the <u>Administrator's Guide</u>.

The following navigational commands appear in the upper right corner of the Web page: Logout and Help. The <u>Search</u> and <u>Advanced Search</u> features also appear on the toolbar.

# Home

The Home dashboard gives you quick access to the major features available in the Enterprise Portal:

Feature	Description
Browse the ER/Studio Repository	You can explore diagrams, models, submodels, and objects of existing ER/Studio Enterprise projects.
Run a Shared Report	Displays the Solution Browser where you can run existing Business and Technical reports. Saved custom reports can also be run.
Create a Custom Report	Create and publish custom reports using a quick and easy wizard.
Perform an Advanced Search	Search the ER/Studio Enterprise Repository with this advanced search feature.

On the Home page there is also an information panel called <u>My Recent Reports</u> that displays a list of the most recently generated reports.

# My Recent Reports

This information panel displays the ten most recently run reports so you can re-execute them easily. The list shows the execution date and time, and is sorted in descending order with the most recently run report displaying first. The times displayed here are based on the time zone of the portal server machine.

NOTE: If you have not run any reports, a message is displayed, "There are currently no data to display."



#### Viewing and Running Recent Reports

- 1 If the My Recent Reports information panel is not showing on the Dashboard, click **Home**.
- 2 Click the name of the report you want to regenerate and the selection Web page appears.
- 3 Select the project from the list and the remaining fields are automatically populated.

The existing diagrams for the project are listed next. Select the diagram you want to report on.

NOTE: Change each of these settings by clicking the arrow in each field.

- 4 Select a model from the Model drop-down list and, if applicable, the submodel and entity fields are populated. Select a different submodel and entity (if applicable) from the drop-down lists.
- 5 Click Run and the report is generated and appears as a separate Web page or tab. The report displays by default in HTML format, which you can save and print as usual. You can also view or save your report in either PDF or XLS formats by clicking the appropriate View as link.

# **Explore**

The Explore dashboard provides a hierarchical-based navigation of the repository projects. This hierarchy displays the project name, diagram, model, and submodel of the report repository. As you click the links in this hierarchy, reports open. From the reports you can then drill down into detailed reports, save these reports in various file formats and view images of models and submodels.

- 1 Click **Explore** and a hierarchy of the projects in the report repository open.
- 2 Click to view Viewing Diagram Reports, Viewing Model Reports, or Viewing Submodel Reports.

# **View Model and Submodel Images**

The actual images of both the models and submodels can viewed after you have opened a basic report from the repository hierarchy.

- 1 Click **Explore** to view the report hierarchy.
- 2 Expand the hierarchy and click a model or submodel in the hierarchy.
- 3 In the report that appears, click **View Image** located on the right side of the page.
  - The submodel diagram, which has been reduced to fit on one page, appears.
- 4 Zoom in to view the details on the diagram.

The zoom behavior is browser-specific. For example, in Internet Explorer, you can use Ctrl + the mouse wheel to zoom to an arbitrary level of detail.

# **Viewing Diagram Reports**

This report displays the diagram name and models in that diagram.

- 1 Click **Explore** to view the report hierarchy.
- 2 Expand the hierarchy and click a diagram name in the hierarchy and a basic report appears.
- 3 Click View as report and the associated report appears displaying the following information:

Field	Description
View As PDF View as XLS	Click the respective link to view the report in PDF format within the browser or save the report in XLS format.
Diagram File	Name of the diagram is displayed.
Author	Creator of the diagram.
Version	Iteration of the diagram.
Company	Name of the company generating the diagram.
File Name	Name of the dm1 file containing the diagram.
Create/Modified Date	Creation date of the diagram. The Modified date displays the last time the diagram was modified.
Related Reports	Click the Attachments link to run a separate "Attachments of Objects" report which can be viewed and/or saved.
Definition	Definition of the diagram.
Logical Model	Lists all logical models associated with the diagram. The Notation, Style, and Platform of each model are also displayed. Click on the Logical Model name to open the report for that model.
Physical Model	Lists all physical models associated with the diagram. The Nation, Style, and Platform of each model are also displayed. Click on the Physical Model name to open the report for that model.

4 Click a <u>Logical</u> and/or <u>Physical</u> model, to drill down to detailed submodel, entity, relationship information, and to view reports.

5 The report displays by default in HTML format, which you can save and print as usual. You can also view or save your report in either PDF or XLS formats by clicking the appropriate View as link.

# **Viewing Model Reports**

This report displays the model name, submodels, entities, relationships, and views associated with the selected model.

- 1 Click **Explore** to view the report hierarchy.
- 2 Expand the hierarchy and click the model name to view the basic model report.
- 3 Click **View as report** and the associated report appears displaying the following information:

Field	Description
View as PDF View as XLS	Click the respective link to view the report in PDF format within the browser or save the report in XLS format.
Model	Displays the model name.
Notation	Displays the type of relationship notation used in the model.
Style	Displays the type of model.
Diagram File	Displays the diagram file name.
	Click the name of the diagram file to open a diagram detail report for the dm1 file containing the diagram.
Related Reports	Related reports displaying additional information. The available reports are:
	Attribute Definitions: Displays the detail report displaying model attributes.
	<b>Entity Definitions</b> : Displays the detail report of entity definitions for the model.
	<b>Business Rules</b> : Displays the detail report of business rules for the model.
	Attachments: Displays the Entity Attachments detail report for the model.
	Security Information: Displays the detail report of security classifications of objects for the model.

- 4 The report displays four sections: Submodels, Entities, Relationships, and Views. You can open detailed reports for the elements listed in each of these sections.
  - The Submodels section displays the Submodel name and image. Click the model name to open a detailed
    report on the selected submodel with information on Entities, Relationships, and Views. Click View Image for
    a selected submodel and a graphic of the submodel appears. Save, copy and/or print this image by
    right-clicking in the image and choosing the desired command from the context menu.
  - The Entities section displays the Name and Definition of each associated entity. Click the entity name and a detailed report appears showing the Name, Definition, Data type, Domain, Key Type and Allow Nulls information for the selected entity.
  - The Relationship Section displays the Parent Entity, Child Entity, Type, Existence, Cardinality, Verb, and Inverse for each associated relationship. Click the Parent or Child Entity name to open a detailed report showing Name, Definition, Data Type, Domain, Key Type, and Allow Nulls information for the selected item.
  - The Views section displays the View and Owner of the associated view. Click the name of the view and a
    detailed report appears displaying the Name, Alias, Expression, and Sequence of the selected item.

## **Viewing Submodel Reports**

The submodel report shows the entities, relationships, and views of the submodel associated with the model.

- 1 Click Explore to view the report hierarchy.
- 2 Expand the hierarchy and click the submodel name to view the basic submodel report.
- 3 Click View As Report and the associated report appears displaying the following information:

Field	Description
View as PDF View as XLS	Click the respective link to view the report in PDF format within the browser or save the report in XLS format.
Submodel	Displays the name of the submodel.
Notation	Displays the type of relationship notation used in the model.
Style	Displays the type of model.
Diagram File	Displays the diagram file name.
	Click the name of the diagram file to open a diagram detail report for the dm1 file containing the diagram.
Parent Model	Displays the parent model. This is linked to the detailed report for that model.
Related Reports	Related reports displaying additional information. The available reports are:
	Attribute Definitions: Displays the detail report displaying the attributes and their definitions for the model.
	<b>Entity Definitions</b> : Displays the detail report of entity definitions for the submodel.
	<b>Business Rules</b> : Displays the detail report of business rules for the submodel.
	Attachments: Displays the Entity Attachments detail report for the submodel.
	<b>Security Information</b> : Displays the detail report of security classifications of objects for the model.

- 4 The report is divided into three sections: entities, relationships, and views.
  - The Entities section displays the Name and Definition of each associated entity. Click the entity name and a
    detailed report appears showing the Name, Definition, Data Type, Domain, Key Type and Allow Nulls
    information for the selected entity.
  - The Relationship section displays the Parent Entity, Child Entity, Type, Existence, Cardinality, Verb and Inverse for each associated relationship. Click the Parent or Child Entity name to open a detailed report showing Name, Definition, Data Type, Domain, Key Type, and Allow Nulls information for the selected item.
  - The Views section displays the View and Owner of the associated view. Click the name of the view and a detailed report appears displaying the Name, Alias, Expression, and Sequence of the selected item.

# **Saving Your Reports**

To save reports in different file formats.

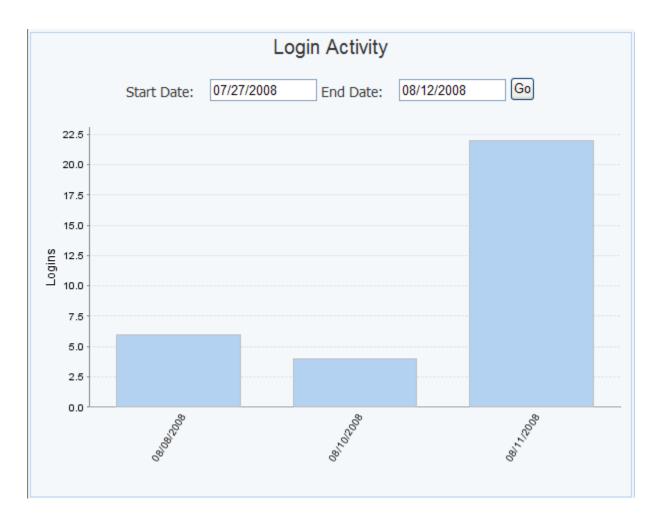
File Format	Description
PDF (Portable Document Format)	Displays an Adobe Acrobat® document.
XLS (Microsoft Excel Spreadsheet)	When you click this format a File Download dialog appears. Click <b>Save</b> and a Save As dialog appears.
	<b>Note</b> : You can also select <b>Open</b> where the report appears in a spreadsheet as a read-only file.
	Select the location, enter a file name, and click <b>Save</b> . The report is saved with an .XLS file extension.

# **Activity**

The Activity dashboard provides three information panels allowing you to track various activities that have taken place by you and other users: <u>Login Activity</u>, <u>Updated Objects</u>, and <u>Connection Activity</u>.

# **Login Activity**

Track and report on all login activity for the Enterprise Portal for a given time period. The Login Activity information panel displays a count of successful users' logins per day for the last 15 days. You can change the time frame by entering the start date and end date criteria and refresh using the browser facility. The results and title of the information panel adjust accordingly. When you click a bar representing a particular day, a detailed report of all user logins is displayed in a new window.



# **Using the Login Activity Feature**

- 1 If the Login Activity panel is not showing on the Dashboard, click Activity.
- 2 Enter the Start and End Dates and click **Go**. A chart displaying a bar for each day is displayed.
- 3 Click the bar for the date you want to view and a report appears showing the User Name and Login Time for all users on that date.
- 4 The report displays by default in HTML format, which you can save and print as usual. You can also view or save your report in either PDF or XLS formats by clicking the appropriate View as link.

View as pdf View as xls

# **Login Activity Details**

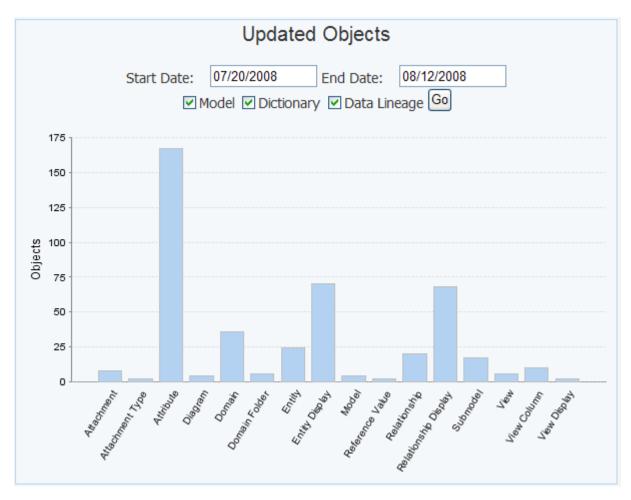
**Activity Date: 08/08/2008** 

User Name	Login Time
Admin	15:03:56.427
Admin	15:12:09.763
Admin	15:26:57.617
Admin	21:46:02.677
Admin	22:53:04.157
Admin	22:53:34.433

5 The report is opened in a separate window, so click Close (X) to return to the Activity page.

# **Updated Objects**

The Updated Object information panel displays a count of each Object Type in the ER/Studio Repository database updated in the time frame specified. The default is 15 days, with the current day as the end date. You can adjust the time frame and the types of objects displayed. If you click on a particular object type in the graph, such as Attachment, a report listing each object of that type, that was modified during the time frame is displayed. From this list, you can drill down into the appropriate detail report for that object.



The filters for the updated objects contain the following objects listed in the following order:

- Model Objects: Attachment, Attachment Type Attribute, Diagram, Entity, Entity Display, Model, Reference Value, Relationship, Relationship Display, Submodel, View, View Column, and View Display.
- Dictionary Objects: Dictionary, Security Property, Security Objects, and User Datatype.
- Data Lineage Objects: Data Lineage Source, Data Lineage Table, Data Lineage Column.

# **Using the Updated Objects Feature**

- 1 If the Object Details panel is not showing on the Dashboard, click Activity.
- 2 In the Updated Objects information panel, enter the Start and End Dates you want included in the report.
- 3 Select the business model object types you want included (model, dictionary, and/or data lineage) and click **Go**. A chart displaying a bar for each updated object appears.
- 4 Click the bar for the object you want to view and a Object Activity page appears. Enter the start and end change date.
- 5 A report appears showing the Event Date, Parent Name, Name, User Name, and Operation for the selected object. The following sample report shows all the Attachment details for the selected time frame.

View as pdf View as xls

# **Updated Object Details**

Start Date: 07/20/2008

End Date: 08/5/2008

Object Type: Attachment

Event Date	Parent Name	Name	User Name	Operation
2008-07-22 23:12:05.0	Data Access	Client	Admin	Add_Object
2008-07-22 23:12:05.0	Data Access	Client Services	Admin	Add_Object
2008-07-22 23:12:05.0	Data Access	Internal IT - BI	Admin	Add_Object
2008-07-22 23:12:05.0	Data Access	Internal IT - DBA	Admin	Add_Object
2008-07-22 23:12:05.0	Data Access	Website Guest	Admin	Add_Object
2008-07-22 23:12:05.0	Entity/Table Properties	Business Unit	Admin	Add_Object

**NOTE:** If there are a large number of objects in the selected type, it may take some time to generate a report.

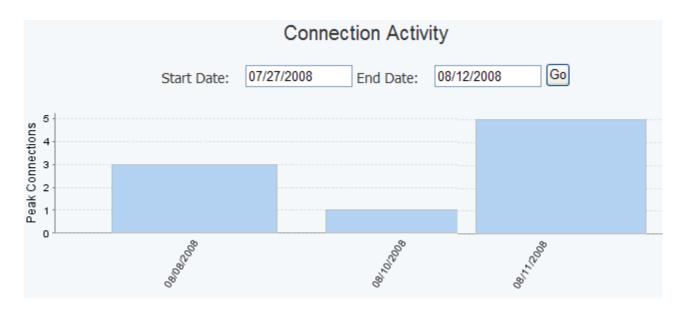
6 Click an object name in the report and an additional report appears showing the detail for that object. The following example shows the report for the object name, "Client".

View as pdf View as xls  Properties of Objects			
Diagram Name: Global Investment Management Object Type: Attachment Object Name: Client			
Property Type DEFAULT_VALUE NAME VALUE_TYPE		Property Value text value alpha Client 5	

7 The report displays by default in HTML format, which you can save and print as usual. You can also view or save your report in either PDF or XLS formats by clicking the appropriate View as link.

# **Connection Activity**

You can track and report on all connection activity for the Enterprise Portal for a given time period. The Connection Activity information panel displays a chart of that activity for the last 15 days. You can change the time frame by entering the start date and end date criteria and refresh using the browser facility. The results and title of the information panel adjust accordingly. When you click on the bar representing a particular day, a detailed report of all connections is displayed in a new window or tab.



# **Using the Connection Activity**

- 1 If the Connection Activity panel is not showing on the Dashboard, click Activity.
- 2 Enter the Start and End Dates you want included in the report, and click Go. A chart displaying a bar for each day is displayed.
- 3 Click the bar for the date you want to view and a report appears showing the User Name, Host, IP, Login Time, and Logout Time for the selected day. The following sample report shows all the details for the selected dates.

NOTE: If there are a large number of connections, it may take some time to generate a report.

View as pdf	View as pdf View as xls				
Connect	Connection Activity Details				
Activity Da	Activity Date: 08/04/2008				
User Name	Host	IP	Login Time	Logout Time	
Admin	towbborbely01.embarcadero.com	10.40.40.26	04/08/2008 07:25	04/08/2008 07:56	
Admin	rowaciocan01.embarcadero.com	10.100.40.23	04/08/2008 08:56	04/08/2008 09:26	
Admin	dewkbrow01.embarcadero.com	10.20.10.20	04/08/2008 09:25		

4 The report displays by default in HTML format, which you can save and print as usual. You can also view or save your report in either PDF or XLS formats by clicking the appropriate View as link.

# Reports

The Reports command displays the Solution Browser. The two sections are:

- <u>Shared Reports</u> which displays pre-prepared reports installed in the portal as well as any reports created for public use.
- User Actions with My Reports which show details of reports that have been scheduled for execution in the background or have already been executed, and New Reports, which are custom reports.

You can change the appearance of this page by clicking on the View options located in the upper right corner of the Solution Browser:

Command	Description
Icons	Displays an icon and the action or report name for each Solution.
List	Displays an icon, the action or report name, and a description of each Solution. It also displays and Author column showing who created the Solution item.
Default	Displays the same information as the List command.

# **Shared Reports**

The Shared Reports section displays standard reports available with the portal as well as any reports created for public use. There are two available activities:

Activity	Description
Business Reports	This section contains business reports for logical models. There are three reports available:
	Attribute Definitions Business Rules Entity Definitions
Technical Reports	This section contains technical reports for ER/Studio objects. There are four reports available:
	Column Data Lineage Domain Bindings Entity, Submodel, Model, Diagram Entity Attachments Reference Values Security Classifications

# **Business Reports**

There are three available business reports for logical models:

Report	Description
Attribute Definitions	This report lists attributes and their definitions.
<u>Business Rules</u>	This report lists the business rules.
Entity Definitions	This report lists the entity names and their definitions.

# **Attribute Definitions**

This report is one of the shared reports. The detail of this report list attribute names and definitions.

- This report is also accessible from the Logical Model and Logical Submodel reports.
- If the report is run from the Shared Reports section, you are prompted to supply values for Project, Diagram, Model, and Submodel. Your selection filters the results of the report. If the report is run from any of the detail reports, the values will come from that report.

Click here for a step-by-step explanation of how to create this report.

View as pdf View as xls

# Attribute Definitions

Project Name: Projects

Diagram Name: Adventure Works.DM1

Model Name: Adventure Works

Submodel Name: Human Resources

Entity: Department			
Name	Data Type	Null Option	Definition
DepartmentID	smallint	NOT NULL	Primary key for Department records.
GroupName	nvarchar	NOT NULL	Name of the group to which the department belongs.
ModifiedDate	datetime	NOT NULL	Date and time the record was last updated.
Name	nvarchar	NOT NULL	Name of the department.
Entity: Employee			
Name	Data Type	Null Option	Definition
BirthDate	datetime	NOT NULL	Date of birth.
ContactID	int	NOT NULL	Identifies the employee in the Contact table. Foreign key to Contact.ContactID.

# **Using the Attribute Definitions Report**

- 1 Click Run a Report in the Run a Shared Report section on the Home page or click Reports on the Dashboard.
- 2 Click Business Reports located in the Shared Reports section of the Solution Browser.
- 3 Click Attribute Definitions to open the Attribute Definitions page.
- 4 Click the drop-down arrow in the Project text box and all available projects are listed.
- 5 Select the project from this list and the remaining text boxes are populated. If you want to change the Diagram, Model, and Submodel selections click the drop-down lists.
- 6 Click Run and the report is generated.
- 7 The report displays by default in HTML format, which you can save and print as usual. You can also view or save your report in either PDF or XLS formats by clicking the appropriate View as link.

#### **Business Rules**

This report is one of the shared reports The detail of this report lists the business rules. This report is also accessible from the Logical Model, Logical Submodel, and shared business reports.

- If the report is run from the shared reports, you are prompted to supply values for Project, Diagram, Model, and Submodel within the project. Your selection filters the results of the report. If the report is run from any of the detail reports, the values will come from that report.
- · By default, the report displays as HTML.

Click here for a step-by-step explanation of how to create this report.

View as pdf View as xls

# **Business Rules**

Project Name: Projects

Diagram Name: Adventure Works.DM1

Model Name: Adventure Works

Submodel Name: Human Resources

# **Business Rules**

Each Department must Relate to Zero or More EmployeeDepartmentHistory

Each Employee must Relate to Zero or More EmployeeAddress

Each Employee may Relate to Zero or More Employee

Each Employee must Relate to Zero or More EmployeePayHistory

Each Employee must Relate to Zero or More EmployeeDepartmentHistory

Each Employee may Relate to Zero or More JobCandidate

Each Shift must Relate to Zero or More EmployeeDepartmentHistory

#### **Using the Business Rules Report**

- 1 Click Run a Report in the Run a Shared Report section on the Home page or click Reports on the Dashboard.
- 2 Click Business Reports located in the Shared Reports section of the Solution Browser.
- 3 Click **Business Rules** to open the Business Rules page.
- 4 Click the drop-down arrow in the Project text box and select a project from the list of available projects. The remaining text boxes are populated.
- 5 If you want to change any of those selections, you can select the Diagram, Model, and Submodel from the drop-down lists.
- 6 Click **Run** and the report is generated.
- 7 The report displays by default in HTML format, which you can save and print as usual. You can also view or save your report in either PDF or XLS formats by clicking the appropriate View as link.

#### **Entity Definitions**

This report is one of the shared reports. The details of this report list entity names and their definitions.

- · This report is also accessible from the Logical Model, Logical Submodel and shared business reports.
- If the report is run from the shared reports, you are prompted to supply values for Project, Diagram, Model, and Submodel within the project. Your selections will filter the results of the report. Otherwise, if the report is run from any of the detail reports, the values will come from that report.

• By default, the report displays as HTML.

Click here for a step-by-step explanation of how to create this report.

View as pdf View as xls

# **Entity Definitions**

Project Name: Projects

Diagram Name: Adventure Works.DM1

Model Name: Adventure Works

Submodel Name: Human Resources

Entities	
Name	Definition
Department	Lookup table containing the departments within the Adventure Works Cycles company.
Employee	Employee information such as salary, department, and title.
EmployeeAddress	Cross-reference table mapping employees to their address(es).
EmployeeDepartmentHistory	Employee department transfers.
EmployeePayHistory	Employee pay history.
JobCandidate	Résumés submitted to Human Resources by job applicants.
Shift	Work shift lookup table.

# **Using the Entity Definitions Report**

- 1 Click Run a Report in the Run a Shared Report section on the Home page or click Reports on the Dashboard.
- 2 Click Business Reports located in the Shared Reports section of the Solution Browser.
- 3 Click Entity Definitions to open the Entity Definitions page.
- 4 Click the drop-down arrow in the Project text box and select a project from the list of available projects. The remaining text boxes are populated.
- 5 If you want to change any of those selections, you can select the Diagram, Model, and Submodel from the drop-down lists.
- 6 Click Run and the report is generated.
- 7 The report displays by default in HTML format, which you can save and print as usual. You can also view or save your report in either PDF or XLS formats by clicking the appropriate View as link.

# **Technical Reports**

When you click the Technical Reports link in the Shared Reports section of the Solution Browser, five different reports are available:

Report	Description
Column Data Lineage	Displays the data lineage for physical columns or logical attributes within a specified entity.
Domain Bindings	Displays information about the attributes or columns bound to a domain within a specified data dictionary.
Entity, Submodel, Model, Diagram	Displays the names of the model, submodels, and entities in a specified diagram.
Entity Attachments	Reports on the attachments bound to a specified entity.
Reference Values	Displays the reference values for attributes within a specified entity.
Security Classifications	Displays information about the security classifications of a specified entity.

## **Column Data Lineage**

This report is part of the technical reports. The details of this report list the column data lineage properties.

- This report is accessible from the Table Detail report and technical reports.
- If the report is run from the technical reports, you are prompted to supply values for Project, Diagram, Model, Submodel, and Entity within the project. Your selection filters the results of the report. Otherwise, if the report is run from any of the detail reports, the values will come from that report.
- · By default, the report displays as HTML.

Click here for a step-by-step explanation of how to create this report.

View as pdf View as xls

# Column Data Lineage

Project Name: Projects

Diagram Name: Adventure Works.DM1

Model Name: Adventure Works

Submodel Name: Human Resources

Entity Name: Department

Attribute: DepartmentID

Direct Source Logic:

Direct Source Description:

InDirect Source Logic:

InDirect Source Description:

**Direct Target Logic:** 

Direct Target Description:

InDirect Target Logic:

InDirect Target Description:

Type Model Table Column

# **Using the Column Data Lineage Report**

- 1 Click **Run a Report** in the Run a Shared Report section on the Home page or click **Reports** on the Dashboard.
- 2 Click Technical Reports located in the Shared Reports section of the Solution Browser.
- 3 Click Column Data Lineage to open the Column Data Lineage page.
- 4 Click the drop-down arrow in the Project text box and select a project from the list of available projects. The remaining text boxes are populated.
- 5 If you want to change any of those selections, you can select the Diagram, Model, Submodel, and Entity from the drop-down lists.
- 6 Click Run and the report is generated.
- 7 The report displays by default in HTML format, which you can save and print as usual. You can also view or save your report in either PDF or XLS formats by clicking the appropriate View as link.

# **Domain Bindings**

This report is one of the Technical Reports. The details of this report list the objects to which the domain is bound.

- This report is also accessible from the Domain detail report.
- If the report is run from any of the detail reports, the values will come from that report.

Click <u>here</u> for a step-by-step explanation of how to create this report.

View as pdf View as xls				
Domain Bindings				
Project Name: samples				
Diagram Name: Embarcad	dero Sales Order	Processing		
Dictionary Name: Orders_D	D			
Attributes Using Domain:	Address			
Attribute	Definition	Entity		
Address		Address Detail		
Address2		Address Detail		
Attributes Using Domain:	Amount			
Attribute	Definition	Entity		
Amount		Sales Order Payment		
Sales Tax		Sales Order		
Shipping Charge		Shipping Method		
Attributes Using Domain:	Area Code			
Attribute	Definition	Entity		
Area Code		Customer Phone		

# **Using the Domain Bindings Report**

- 1 Click Run a Report in the Run a Shared Report section on the Home page or click Reports on the Dashboard.
- 2 Click **Technical Reports** located in the Shared Reports section of the Solution Browser.
- 3 Click **Domain Bindings** to open the Domain Bindings page.
- 4 Click the drop-down arrow in the Project text box and select a project from the list of available projects. The remaining text boxes are populated.
- 5 If you want to change any of those selections, you can select the Diagram and Dictionary from the drop-down lists.
- 6 Click Run and the report is generated.
- The report displays by default in HTML format, which you can save and print as usual. You can also view or save your report in either PDF or XLS formats by clicking the appropriate View as link.

# Entity, Submodel, Model, Diagram

This report is one of the Technical Reports. The details of this report list information about all of the entities in a selected project, diagram, model, and submodel in the diagram.

- You are prompted to supply values for Project and Diagrams within that project. Your selection filters the results
  of the report. Otherwise, if the report is run from any of the detail reports, the values will come from that report.
- You can navigate to the Models, Submodels, and Entities of that diagram by clicking on the model name, submodel name, or entity.

Click here for a step-by-step explanation of how to create this report

View as pdf View as xls			
Entity, Submodel, Model, Diagram			
Project Name:	Projects		
Diagram Name:	Adventure Works.D	M1	
Properties			
Model Name	Submodel Name	Entity Name	
Adventure Works	Human Resources	<u>Department</u>	
	Human Resources	<u>Employee</u>	
	Human Resources	<u>EmployeeAddress</u>	
	Human Resources	<u>EmployeeDepartmentHistory</u>	
	Human Resources	<u>EmployeePayHistory</u>	
	Human Resources	<u>JobCandidate</u>	
	Human Resources	<u>Shift</u>	
	Main Model	Address	
	Main Model	<u>AddressType</u>	

# Using the Entity, Submodel, Model, Diagram Report

- 1 Click Run a Report in the Run a Shared Report section on the Home page or click Reports on the Dashboard.
- 2 Click Technical Reports located in the Shared Reports section of the Solution Browser.
- 3 Click Entity, Submodel, Model, Diagram to open the Entity Submodel Model Diagram page.
- 4 Click the drop-down arrow in the Project text box and select a project from the list of available projects. The remaining text box is populated.
- 5 If you want to change the diagram selection, click the drop-down list.
- 6 Click **Run** and the report is generated. All of the models, submodels, and entities listed in the report are linked to reports displaying all the information connected to that property.
- The report displays by default in HTML format, which you can save and print as usual. You can also view or save your report in either PDF or XLS formats by clicking the appropriate View as link.

#### **Entity Attachments**

This report is one of the Technical Reports. The details of this report list the attachments bound to an object.

- This report is accessible from the Diagram, Logical Model, Logical Submodel, Physical Model, Physical Submodel, Entity, Table, Logical View, Physical View, and Domain reports, and technical reports.
- If the report is run from the technical reports, you are prompted to supply values for Project, Diagram, Model, Submodel, and Entity within the project. Your selection filters the results of the report. Otherwise, if the report is run from any of the detail reports, the values will come from that report.
- This report will contain a grouping by attachment type, with attachment types sorted alphabetically.

Click here for a step-by-step explanation of how to create this report.

View as pdf View as xls			
Attachments of Objects			
Object Type: Entity			
Object Na	ame: BROKER_DIM		
Value	Attachment	Туре	
Business Unit		Entity/Table Properties	
Client Services		Data Access	
Data Quality Steward		Entity/Table Properties	
Design Steward		Entity/Table Properties	
	Internal IT - BI	Data Access	
	Internal IT - DBA	Data Access	

# **Using the Entity Attachments Report**

- 1 Click Run a Report in the Run a Shared Report section on the Home page or click Reports on the Dashboard.
- 2 Click Technical Reports located in the Shared Reports section of the Solution Browser.
- 3 Click Entity Attachments to open the Entity Attachments page.
- 4 Click the drop-down arrow in the Project text box and select a project from the list of available projects. The remaining text boxes are populated.
- 5 If you want to change the remaining selections, click the drop-down list for each one and make a selection.
- 6 Click Run and the report is generated.
- 7 The report displays by default in HTML format, which you can save and print as usual. You can also view or save your report in either PDF or XLS formats by clicking the appropriate View as link.

## **Reference Values**

This report is one of the Technical Reports. The details of this report list the reference values of attributes.

• If the report is run from the technical reports, you are prompted to supply values for Project, Diagram, Model, Submodel, and Entity within the project. Your selection filters the results of the report. Otherwise, if the report is run from any of the detail reports, the values will come from that report.

Click <u>here</u> for a step-by-step explanation of how to create this report.

View as pdf View as xls

# Reference Values of Attributes

Project Name: Projects

Diagram Name: Adventure Works.DM1

Model Name: Adventure Works DW

Submodel Name: Main Model

Attribute:

/alue Description

# **Using the Reference Values Report**

- 1 Click **Run a Report** in the Run a Shared Report section on the Home page or click **Reports** on the Dashboard.
- 2 Click Technical Reports located in the Shared Reports section of the Solution Browser.
- 3 Click Reference Values to open the Reference Values page.
- 4 Click the drop-down arrow in the Project text box and select a project from the list of available projects. The remaining text boxes are populated.
- 5 If you want to change the remaining selections, click the drop-down list for each one and make a selection.
- 6 Click Run and the report is generated.
- 7 The report displays by default in HTML format, which you can save and print as usual. You can also view or save your report in either PDF or XLS formats by clicking the appropriate View as link.

# **Security Classifications**

This report is one of the Technical Reports. The details of this report list the security attachments bound to objects.

- This report is accessible from the Diagram, Logical Model, Logical Submodel, Physical Model, Physical Submodel, Entity, Table, Logical View, Physical View, and Domain reports, and technical reports.
- If the report is run from the Technical Reports, you are prompted to supply values for Project, Diagram, Model, Submodel, and Entity within the project. Your selection filters the results of the report. Otherwise, if the report is run from any of the detail reports, the values will come from that report.

Click here for a step-by-step explanation of how to create this report.

View as pdf View as xls

# Security Classifications of Objects

Object Type: Entity

Object Name: Department

Security Property	Value	Туре
Privacy Level	NA	Data Security Classification
Security Impact	None	Data Security Classification

#### **Using the Security Classifications Report**

- 1 Click Run a Report in the Run a Shared Report section on the Home page, or click Reports on the Dashboard.
- 2 Click Technical Reports located in the Shared Reports section of the Solution Browser.
- 3 Click **Security Classifications** to open the Security Classifications page.
- 4 Click the drop-down arrow in the Project text box and select a project from the list of available projects. The remaining text boxes are populated.
- 5 If you want to change the remaining selections, click the drop-down list for each one and make a selection.
- 6 Click Run and the report is generated.
- 7 The report displays by default in HTML format, which you can save and print as usual. You can also view or save your report in either PDF or XLS formats by clicking the appropriate View as link.

### My Reports

The **My Reports** command displays the collection of reports you have submitted to run in the background on the server.

#### To gain access to these reports:

- 1 Click **Reports** on the dashboard to open the Solution Browser page.
- 2 Click My Reports located in the User Actions section of the page.

The report is divided into three sections:

**Waiting**: These are the reports that you have submitted to run in background on the server. The table shows the following data:

- · Name of the report
- · Date and time the report is scheduled to be run
- Size of the report shown in kilobytes
- Type of report: The completed report can be displayed in either application or PDF
- · Action for each report: Cancel

Complete: The reports that have already run.

- · Name of the report run
- · Date and time the report was run
- · Size of the report shown in kilobytes
- · Type of report: The completed report can be displayed in either text or HTML
- · Action for each report: View or Delete

Subscriptions: You can cancel ones that have not run yet, and you can view or delete ones that have.

There is also a Clear Toolbar Alert command. If you run reports in the background, when the report is finished, a **New Files** message appears. This option removes that message.

### **New Reports**

The **New Report** command displays a wizard which steps you through the creation of a business model report. Custom reports are created using the Web Adhoc Query and Reporting tool (WAQR), a report generation tool designed to help you easily generate adhoc reports using the BI platform.

#### To Create a Custom Report:

- 1 Click Create a Report in the Create a Custom Report section on the Home page or click Reports on the Dashboard.
- 2 Click **New Reports** located in the User Actions section of the page. This displays the creation wizard.
- 3 Follow the four steps required to create a new report.
- Step One Select a Business Model Select a Business Model and apply a template
- Step Two Make Selections Select elements to include in the report
- Step Three Customize Selections Set constraints, formatting, calculations, and column sorting options
- Step Four Report Settings Configure report appearance settings

#### Step One - Select a Business Model

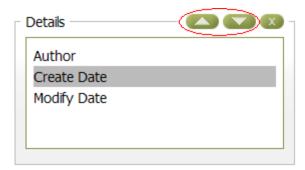
- 1 First, select a business model. Notice that as you select a model, the associated details and descriptions appear in the panels to the right of the Business Models list
- 2 Select a template for your report. A thumbnail of the selected template appears when you select a template type. The template provides pre-selected values for the report header/footer content and colors, page header/footer content and colors, and header/footer font name, size, text color and alignment.

### Step Two - Make Selections

- 1 Click **Next** to advance to Step Two. The Available Items for the Business Model you selected are listed. You can then use the available items to add data to your report.
- 2 To add an item to one of the Groups, Details, or Filters lists, begin by clicking on any of the available items shown. If you want to select more than one item, hold down the Ctrl-key while clicking on the items.
- 3 Then click on one of the arrow buttons next to the Groups, Details, and Filters lists, or drag and drop the item onto the desired list. When you have moved an item, that item appears italicized in the Available Items list boxes.

**NOTE:** In the Groups section, if you want to place items in Levels 2-5, you must drag and drop items into those levels. If you select an item and click the right arrow, all items are placed in Level 1.

 Reorder items in a list by selecting the desired item, and clicking the up or down arrows. You can also drag and drop to reorder items in the list. Use drag and drop if you want to move items between the Groups, Details, and Filters lists.







Select the items you want to include in the Group selections. You can have up to five levels. The group
selection determines how the data is grouped. In the following example Level 1 is *Role Name* and Level 2 is
Datatype.



 The Details selections determine what data is to be generated in each column for the report. In the following example, the Company, Project Name, Create Date, and Modify Date items were selected.

Company	Project Name	Create Date	Modify Date
Embarcadero Technologies	Back Office	5/23/2008 12:29:18 PM	5/23/2008 12:29:39 PM
Embarcadero Technologies	Back Office	5/23/2008 12:32:45 PM	5/23/2008 12:33:09 PM
Embarcadero Technologies	Back Office	5/23/2008 12:35:36 PM	5/23/2008 12:37:32 PM
Embarcadero Technologies	Data Warehouse	5/23/2008 12:25:19 PM	5/23/2008 12:27:51 PM
Embarcadero Technologies	Investments	10/18/2005 12:17:56 PM	5/23/2008 9:59:03 AM
Embarcadero Technologies, Inc.	Back Office	5/23/2008 12:23:56 PM	5/23/2008 12:31:24 PM
Embarcadero Technologies, Inc.	Work In Progress	5/23/2008 12:24:33 PM	5/23/2008 12:30:46 PM

**NOTE:** The only requirement for a valid report is to have at least one column in the Details list. When you add a column to the details list, the Go, Save, and Save As buttons become enabled.

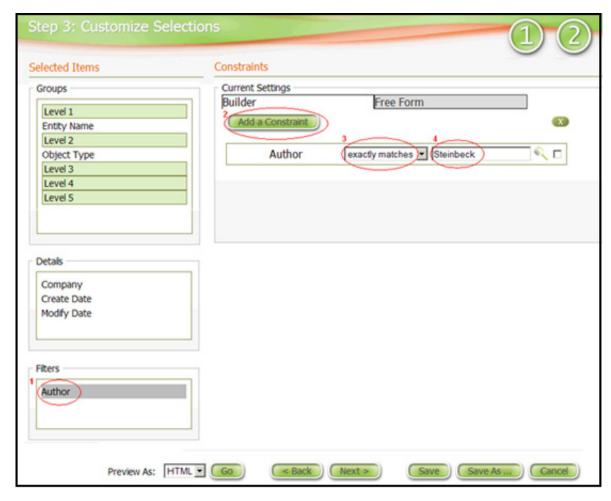
NOTE: You can preview your report as you create it. From the **Preview As** drop-down box, select the type you want the report displayed in (HTML, PDF, Excel, and CSV). When you have selected the **Preview As** type, click **Go** and the report preview appears.

• Filters provide a mechanism for identifying columns that you can apply <u>constraints</u> to, but that do not appear in the report. A constraint limits the set of values returned for the constrained column. You can apply constraints to filters in the next step.

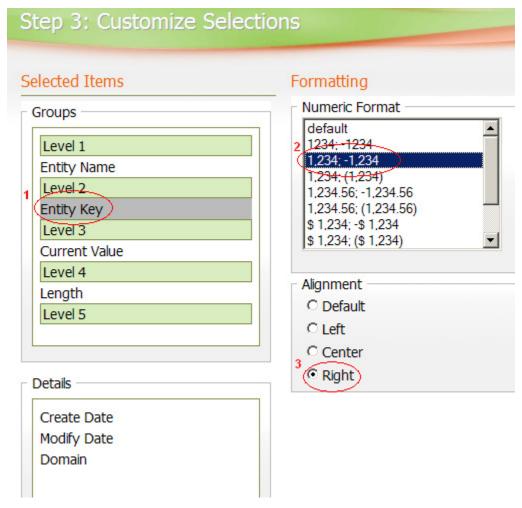
### **Step Three - Customize Selections**

In Step Three you can set constraints, formatting, calculations, and column sorting options. You can also customize the appearance of your selections. Your selected items are shown on the left side of the page.

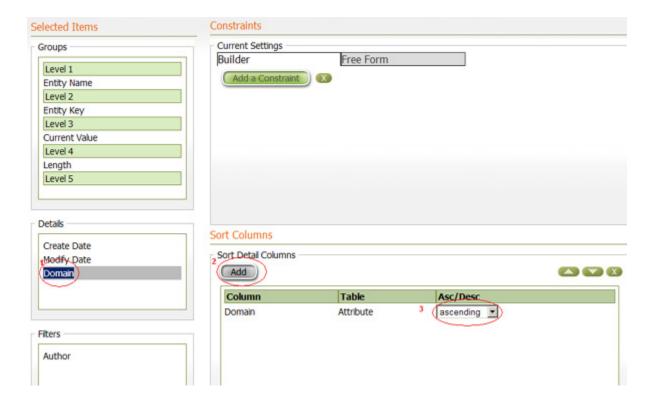
- 1 Click **Next** to advance to Step three.
- 2 Do the following to set constraints for each data item to filter what information appears in the report.
  - · Select the data item in the Filters box
  - Click Add a Constraint
  - Select the constraint you want to set from the drop-down list: exactly matches, contains, ends with, begins with, or does not contain.
  - Enter the information that determines the constraint.



- 3 In the Groups section you can customize how you want each level to appear in the report. Click on a level, for example Level 1, and General options for customizing these levels appears.
- Enter a level name in the text box.
- In the Options section, you can choose to repeat the group header and/or show the group summary. If you select the Show Group Summary option, you can enter a label in the Group Summary Label text box.
- You can format where if you want group page breaks, and if so, where you want those breaks placed.
- 4 You can set formatting and calculations for selected items.
- · Select an item in the Groups box. In the following example "Entity Key" is selected.
- In the Formatting panels, if your item is a number, select the numeric format you want to use.
- · Select Alignment for where you want the Level name (if previously entered), and Level item placed on the report.



- 5 You can also set sort orders for column.
- In either the Groups or Details areas, select the item you want to set sort orders for.
- Click **Add** in the Sort Detail Columns panel and select the sort either ascending or descending from the drop-down box.



### **Step Four - Report Settings**

- 1 Click **Next** to advanced to Step Four where you configure the appearance of the report.
- 2 To configure the appearance of the report:
- Orientation of the report how you want the paper to appear in the portrait or landscape orientation.
- Paper size select the desired size from the drop-down list.
- Report description appears with the report on the Solutions Browser page.
- Header for the report and a header for the page.
- Footer for the report and a footer for the page.
- 3 When you have entered all the information you can do one of the following commands:

Action	Description
Preview As	Select the type you want the report displayed in (HTML, PDF, Excel, or CSV) and click Go.
Back	Returns you to the previous page where you can make changes to the report setup, etc.
Save	Displays the Save As dialog the first time you save the report. After the report has been saved, clicking Save just saves the report.
Save As	Displays the Save As dialog.

Action	Description
Cancel	Cancels the custom report creation
	process.

4 Enter the required information in the **Save As** dialog and click OK.

When you save a report definition, three files are generated:

- An .xreportspec file, an XML file describing the report definition so existing reports can be edited and modified. This file has the extension .xreportspec.
- A JFreereport file, an XML file created from the xreportspec. This file is used by the JFreereport engine to generate the report. This file has the extension .xml.
- An Action Sequence file, an XML file allowing the BI Platform to generate a user interface that facilitates the creation of the report. This file has the extension .xaction.

So if you saved your report as "myReport", three files are created on the server:

- myReport.xreportspec
- myReport.xml
- myReport.xaction.

The saved report now appears on the Solution Browser page in the folder where you saved it, for example, in the Shared Reports > Business Reports.

### Search

The Search feature allows you to search for text strings within the Reporting database across diagrams, object properties, and object types. The search text you enter is treated as one string by the search engine and is matched accordingly. The Search features has both a <u>simple</u> and an <u>advanced</u> search ability.

- Search strings are not saved within the portal but you can save them as favorites or bookmarks in your browser.
- Internet Explorer users can also generate a new search engine using the Keyword Search by following directions provided by Microsoft with Internet Explorer 7.
- Searches can be executed immediately with results returned to the browser.
- Advanced Search can be run in the background.
- Advanced searches can also be executed in the background where the results are saved to your "My Reports" page.

Both simple and advanced searches are executed against the SEARCH\_INDEX table where all searchable text properties are stored as property values. The Admin can place entries into an XML configuration file that will remove object properties from the SEARCH\_INDEX table.

## Simple Search

The simple search will search all text properties of all object types and all diagrams for a partial match on the search string you supply. The only parameter you can supply is the text to search for a match. The simple search will be displayed in the banner and is accessible from all navigation (non-content) pages. The following example displays some of the search results for the text string "Employee".

View as pdf View as xls

# **Search Results**

Result Matches: 325

Search Text: Employee

Diagram File	Object Type	Object Name	Property Type	Property Value
Pubs	Entity	Employee	ENTITY_NAME	Employee
<u>Pubs</u>	Entity	Employee	NAME	Employee
Pubs	Entity	Employee	TABLE_NAME	Employee
<u>Pubs</u>	Entity	employee	ENTITY_NAME	employee

Click on the linked information and the related report appears. For example, when you click "AdventureWorks" under the Diagram File column, the detail report for the diagram file appears.

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Diagram: Adventure Works.DM1

Author: Jason Tiret

Version: 1.0

Company: Embarcadero Technologies

File Name: Adventure Works.DM1

Create Date: 6/9/2006 1:14:09 AM Modified Date: 6/4/2008 5:41:04 AM

Related Reports: Attachments

### Definition

SQL Server 2005 Sample Model

Logical Model			
Name	Notation	Style	Platform
Logical	IE-Crows Feet	Relational	Logical
Physical Models			
Name	Notation	Style	Platform
Adventure Works	IE-Crows Feet	Relational	Microsoft SQL Server 2005
Adventure Works DW	IE-Crows Feet	Dimensional	Microsoft SQL Server 2005

### **Advanced Search**

In the advanced search, you have the following capabilities in addition to those of the simple search. You can:

- · Specify that the property value starts with, contains, ends with, or is an exact match to the text.
- Set the scope to either Projects or Diagrams. The list of files displayed depends on their role assignments as defined in the ER/Studio Repository.
- Set filters to include or exclude specific object types.
- · Set how you want the search results sorted

The results of the advanced search are displayed by default in HTML format. You can also view the results in PDF and XLS formats.

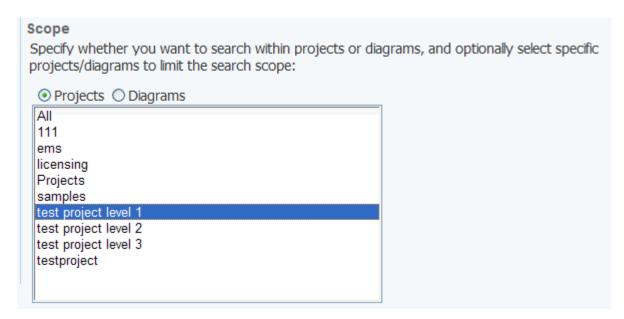
### **Using the Advanced Search**

- 1 Click **Advanced**, located to the right of the Search text box.
- 2 In the Text area, enter the text string you want included in the search. From the drop-down selection list, choose one of the following options: Contains (default), Starts With, Ends With, and Exact Match.
- 3 Enter the text string you want excluded, if any, and choose one of the following options: Contains (default), Starts With, Ends With, and Exact Match.

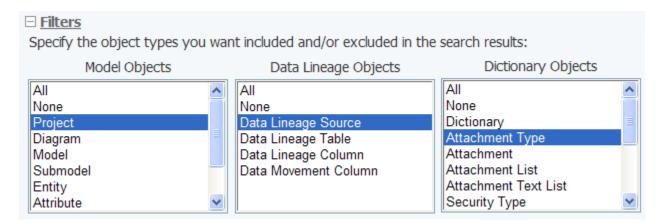


4 You can specify the scope of the search by selecting either the Projects or Diagrams option. All projects or diagrams in the repository are listed. You can select all projects/diagrams or an individual project/diagram.

**NOTE:** You can also select multiple individual items in the list by holding down the Ctrl key and clicking the items you want included.



In the Filters section, select the element(s) you want included from the Model Objects, Data Lineage Objects, and the Dictionary Objects lists.



- 6 In the Sort Order area, specify how you want the search results sorted and displayed. You can sort up to five levels deep.
- 7 Click Run and the report is generated in an HTML format. Or click Run in Background.

### Search Results

The format of the search results is the same for basic searches as it is for advanced. You will see a table with each row representing a match to your search text. When you execute a simple search or choose HTML for an advanced search, all results are rendered as one page in the browser. If you select PDF output, then results are displayed by pages. You can drill down to the details of each diagram from the search results report.

For more information, see **Drill-down to Detail**.

The following fields are displayed for each matching row:

- **Diagram File**: Name of the diagram that contains the matching text. Enterprise Dictionary objects and Projects will not have a diagram associated with their property values. In these two cases, the Diagram File will be blank and the Object Type will be either Enterprise Dictionary or Project as appropriate.
- Object Type: Name of the object type that matches the search text.
- Object Name: Name of the object whose property matches the search text.
- Property Type: Name of the object property that matches the search text
- Property Value: The full text of the property that contains a match for the search text

A sample search result is supplied below for the text "Cust".

View as pdf View as xls

### Search Results

Result Matches: 368

Search Text: Cust

l				
Diagram File	Object Type	Object Name	Property Type	Property Value
activation-db.DM1	Attribute	customer history id	ATTRIBUTE_NAME	customer history id
activation-db.DM1	Attribute	customer history id	COLUMN_NAME	customer history id
activation-db.DM1	Attribute	customer history id	NAME	customer history id
activation-db.DM1	Attribute	customer history id	ROLE_NAME	customer history id
activation-db.DM1	Attribute	customer id	ATTRIBUTE_NAME	customer id
activation-db.DM1	Attribute	customer id	COLUMN_NAME	customer id
activation-db.DM1	Attribute	customer id	NAME	customer id

### **Drill-down to Detail**

In the search results report you can drill down to the detail report for each object type, or display the results in another format. Detail reports are available only for those objects listed below.

NOTE: Object types not listed have a standard report with all of the text properties for that object.

- Diagram Detail
- Logical Model Detail
- Physical Model Detail
- Logical Submodel Detail
- Physical Submodel Detail
- Entity Detail
- Table Detail
- Logical View Detail
- Physical View Detail

Each detail report consists of links to related reports and one or more sections of detail for repeating attributes. You cannot directly execute a detail report. You must locate an object first via search or browse.

#### **Diagram Detail**

This report contains the logical and physical models of the diagram. The listing of models are sorted alphabetically by model name.

- The report consists of a header section with properties of the logical data model, related reports, and one section for the physical models attributes.
- The diagrams author, version, company, copyright, definition, logical model properties, and related reports are displayed at the top of the report.
- The report is accessible from the search results and browse feature.
- This report allows you to navigate to the Entity Attachments report.
- The data for this report is selected for only one diagram at a time.

You open this report from the Search Results report. Click the link of the diagram you want to open from the Diagram File column.

### **Logical Model Detail**

This report contains the entities and relationships of the logical model and the logical submodel properties. The listings of entities, relationships, and submodels are sorted alphabetically by Name.

- The report consists of a header section with properties of the logical model, related reports, and two sections for the model's entities and relationships.
- You can navigate to the Entity Attachments, Security Information, Entity Definitions, Attribute Definitions, and Business Rules reports.
- The data for this report are selected for only one logical model at a time.
- This report is accessible from the search results and the Diagram report.

You open this report from the Diagram detail report. Click the link of the model you want to open from the Logical Model column. The full logical model report appears and displays name and definitions of submodels, entities, relationships, and views.

### **Physical Model Detail**

This report contains the tables, foreign keys, and views of the physical model. The listing of tables, foreign keys, and views are sorted alphabetically by Name.

- The report has a header section with properties of the physical model, related reports, and three sections for the model's tables, foreign keys and views.
- The physical models name, notation, style, platform, and related reports are displayed at the top of the report.
- · This report is accessible from the search results and the Diagram report.
- This report allows you to navigate to the Entity Attachments and Security Information reports.
- The data for this report is selected for only one physical model at a time.

You open this report from the Diagram detail report. Click the link of the model you want to open from the Physical Models column.

#### **Logical Submodel Detail**

This report allows you to navigate to the following related reports: Attribute Definitions, Entity Definitions, Business Rules, Attachments, and Security Information. The logical submodel contains three sections: entities, relationships, and views.

- This report consists of a header section with properties of the logical submodel, related reports, and sections for models entities, relationships, and views.
- The logical submodel name and related reports are displayed at the top of the report.
- This report is accessible from the search results and the Logical Model report.
- The data for this report is selected for only one logical submodel at a time.

You open this report from the Logical Model report. Drill down through **Search Results > Diagram > Logical Model** and click the link of the desired submodel in the Submodels column.

### **Physical Submodel Detail**

This report allows you to navigate to the following related reports: Attribute Definitions, Business Rules, Entity Definitions, Attachments, and Security Information. The physical submodel report contains three sections: entities, relationships, and views. The listing of tables, foreign keys and views are sorted alphabetically by Name.

- This report consists of a header section with properties of the physical submodel, related reports, and three
  sections for model entities, relationships, and views. The physical submodel name and related reports will be
  displayed at the top of the report.
- · This report is accessible from the search results and the Physical Model report.
- The data for this report is selected for only one physical submodel at a time.

You access this report from the Physical Model report. Drill down through **Search Results > Diagram > Physical Models** and click the link of the desired submodel in the Submodels column.

### **Entity Detail**

This report allows you to navigate to the Entity Attachments, Security Information, and Attribute Definitions reports. The report body contains the attributes of the entity.

- This report consists of a header section with properties of the entity, related reports, and one section for the entity's attributes. The entity definition, notes, and related reports are displayed at the top of the report.
- · This report is accessible from the search results, the logical model, and the logical submodel report.
- The data for this report is selected for only one entity at a time.
- The listing of attributes are sorted in ascending order by sequence.

You open this report from either the Physical or Logical Model reports. Drill down through **Search Results > Diagram > Physical Models (or Logical Models)** and click the link of the desired entity in the Entities column.

### Table Detail

This report allows you to navigate to the Entity Attachments and Security Information reports. The report body contains the columns of the table. The listing of columns can be sorted in ascending or descending order.

- This report consists of a header section with properties of the table, related reports, and one section for the table's columns.
- The table definition, notes, and related reports are displayed at the top of the report.
- This report is accessible from the search results, the physical model, or from physical submodel reports.
- The data for this report is selected for only one table at a time.

### **Logical View Detail**

This report allows you to navigate to the Entity Attachments and Security Information reports. The report body contains the columns of the logical view. The listing of view columns are sorted in descending order by sequence number.

- This report consists of a header section with properties of the logical view, related reports, and one section for view columns.
- The logical view owner, platform, view definition, notes, and related reports are displayed at the top of the report.
- This report is accessible from the search results and the physical model report.
- The data for this report is selected for only one logical view at a time.

You open this report from either the Physical or Logical Model reports. Drill down through **Search Results > Diagram > Physical Models** and click the link of the desired view in the Views column.

#### **Physical View Detail**

This report allows you to navigate to the Entity Attachments and Security Information reports. The report body contains the columns of the physical view.

- This report consists of a header section with properties of the physical view, related reports, and one section for the view's columns.
- The physical view owner, platform, view definition, notes, and related reports are displayed at the top of the report.
- · This report is accessible from the search results and the Physical Model report.
- The data for this report are selected for only one physical view at a time.

You open this report from either the Physical or Logical Model reports. Drill down through **Search Results > Diagram > Physical Models (or Logical Models)** and click the link of the desired view in the Views column.

# **Administrator's Guide**

Administrators can manage schedules and refresh the Business Intelligence (BI) Server settings on the Administration page. The Administrator is also responsible for the scheduling and maintenance of <u>data integration</u>.

The Administrative tasks are accessible from the Home dashboard by clicking Admin.

## **Data Integration Overview**

The data shared between the ER/Studio Repository database and the ER/Studio Enterprise Portal Reporting database is synchronized on demand or scheduled with the Pentaho BI platform scheduler and can be run continuously or periodically at the system administrator's discretion. As diagram objects are added, deleted, or updated in the ER/Studio Repository, the most recent version of the diagram is sent to the reporting portal.

You can filter, by diagram, the content that flows from the ER/Studio Repository to the Reporting Database (RDB). This configuration is done by editing an XML file.

#### **Synchronization Steps**

The process of synchronization is broken down into four separate steps:

1 Detect Changes

A list of those diagrams are saved to an XML file with one element per diagram. Changes to the Repository database are identified by additions to the CTL\_OBJECT\_VER and CTL\_OBJECT tables in the Repository. All diagrams in the ER/Studio Repository are processed.

### **Filtering Diagrams**

You can filter the content that flows from the ER/Studio Repository to the RDB by diagram. You can exclude diagrams from processing by placing an entry into the XML configuration file, RepoRpt.xml on the BI Server. Wildcard characters such as \* and ? can be used when specifying diagram names and exceptions to the filters can also be specified. Diagrams that are excluded are not written to the XML file. No further processing is performed on those diagrams, with the exception of removing their data from the reporting database. For example,

To process only diagram names ending with 1, use <Diagram FILE\_NAME="\*1.dm1" FILTER="TRUE" />.
To process only diagram names such as CorDM2\_v6B.dm1, D2.dm1, D1.dm1, and CorDM\_v6B.dm1, use
<Diagram FILE\_NAME="???dm\*.dm1" FILTER="TRUE" />.

You can also create an exception, which uses a filter value of false, such as FILTER="FALSE". Exceptions take precedence over other filters. Using regular filters and exceptions in combination makes it easier, for example, to filter all diagrams whose names start with the letter 'D' except for the diagram named 'Diagram123. For this case, the entries in RepoRpt.xml would be:

```
<Diagram FILE_NAME="Diagram123.dm1" FILTER="FALSE" />
<Diagram FILE NAME="D*.dm1" FILTER="TRUE" />
```

### 2 Extract Latest Diagram Information

- A separate Java Virtual Machine (JVM) invocation is used for the synchronization process. When a diagram
  change is detected, another JVM instance is spawned for each diagram. This allows diagrams to be
  processed one at a time so that access to a given diagram becomes available within the portal as soon as
  possible.
- Diagrams with changes since the synchronization are selected.
- For each diagram in the XML file, the diagram is retrieved from the ER/Studio Repository to a local DM1 file by using the *RepoGetDiagram* function.
- · An XML file is created for each diagram containing the latest data for all in-scope objects in the diagram.
- For each submodel in the diagram, a .JPG image file is created and stored on the application server.
- The image is not stored in the database and is retrievable via the model and submodel detail reports.

The extraction of data from the ER/Studio Repository relies on invoking ERSTUDIO.EXE, or its equivalent, to access the ER/Studio object API. During the data extraction, object metadata is output in XML format by using Microsoft's XML v6 parser.

The following ER/Studio object types are saved into the XML file for synchronization:

Model Objects	Dictionary Objects	Data Lineage Objects
Project	Dictionary	Data Lineage Source
Diagram	Attachment Type	Data Lineage Table
Submodel	Attachment Text List	Data Movement Column
Entity	Bound Attachment	Data Linage Column
Entity Display	Domain	
Relationship	Bound Domains	
Relationship Display	Reference Value	
Attribute	Bound Reference Values	
View	Reference Value Pair	
View Column	Security Type	
View Display	Security Property	
	Security Text List	
	Bound Security Property	
	Defaults	
	Bound Defaults	
	Rules	
	Bound Rule	
	User Datatypes	
	Bound User Datatypes	

### 3 Synchronize Security Objects

Changes made to permissions in the ER/Studio Repository, such as the addition of new users and roles, or modifications to existing users and roles, are not reflected in the Portal until a synchronization of the two Reporting and the Repository databases is performed.

### 4 Synchronize Reporting Repository

Each diagram is represented by an XML file on the server, including items in the search index. Each XML file is processed in the following manner:

- Remove all current data, if any, in the Reporting database for that diagram. This includes purging the submodel image files on the server and the properties from the SEARCH\_INDEX.
- Populate the appropriate table(s) for each object.
- Populate the SEARCH\_INDEX table as appropriate for each text field that is searchable. By default, all text
  properties are searchable. You can exclude object Property Types from being processed by placing an entry
  into the XML configuration file on the server.
- Archive the diagram XML files to a backup folder.

### **Administrative Tasks**

Administrators can manage schedules and refresh the Business Intelligence (BI) Server settings on the Administration page. The Administration functions are available by clicking Admin on the Home Dashboard.

1 Click Admin on the Home dashboard and the Pentaho Administration page appears.

**NOTE:** This command is available only if you are signed on as an Administrator.

2 The following sections describe the features and how they will be used for the Enterprise Portal.

Action	Icon	Description		
Admin Services	Admin Services			
Clean Content Repository		Removes files from the content repository that are more than 180 days old. The content repository consists of temporary files, such as runtime and history information maintained by the Pentaho platform.		
Permissions	6	Maintains Access Control Lists (ACL) for group permissions to content. Content permissions are: subscribe, execute, or write.		
Schedule Cleaning of Content Repository	(i)	Schedules the Clean Content Repository action to run daily.		
Subscription Admin	6	Manages subscriptions, subscription schedules, and scheduled jobs.		
License Admin	*	Manages the ER/Studio Enterprise Portal licenses.		
Restore Solution Repository		Reloads all repository files from the file system and restores all Access Control Lists (ACL) to the defaults stored in Pentaho.xml. This can be used to reset your repository to the default state.		
Scheduler Admin	<u>(i)</u>	Checks the status of the scheduler and gets a list of the current jobs that are scheduled.  From this screen the Administrator can check the status of the scheduler, suspend the scheduler, resume from suspend, or see a list of the schedule jobs.		
Synchronization Admin	6	This page allows you to manage the ER/Studio Repository synchronization. You can schedule or execute the synchronization, and also see and refresh the synchronization status.		
Refresh				
Update Solution Repository	<b>6</b>	Reads all of the solution files and updates the RDBMS repository. This can be used to add new content to your repository or refresh the repository from the file system.		
Global Actions	•	Executes all of the global actions defined in Pentaho.xml. These actions are executed when the system starts up. The need to run this would be if a new action was added and the server could not be restarted.		

Action	Icon	Description
System Settings	0	Refreshes all of the system settings from the file system documents.
Reporting Metadata	0	Refresh the metadata used for ad hoc reporting. This is used if you modify the delivered metadata.xml file and publishes a new version to the server.

3 Click More in the Admin Services section and the Publisher Administration table appears.

Publisher	Description	Actions
Update Solution Repository	Read all of the solution files and re-generate the repository index	Publish
System Settings	Refresh all of the system settings from the documents in C:/Program Files/Embarcadero/ERStudioEnterprise Portal1.0/solutions/system	Publish
Global Actions	Execute all of the global system actions defined in pentaho.xml	Publish
Reporting Metadata	Metadata used for ad hoc reporting.	Publish

4 When you click **Publish** for any of these actions, the action takes place immediately and a message appears telling you that the chosen action has been completed.

### **Scheduling the Synchronization Process**

Synchronizing the ER/Studio Enterprise Reporting database with the ER/Studio Enterprise Repository is necessary to obtain the latest model and configuration information. For example, when a user is assigned to a role in the ER/Studio, the user's new permissions will not be available to that user when he logs in to the Portal, until a synchronization is performed. Similarly, a new user added to the Portal will not have access to Repository models he has permissions to access until the Repository is synchronized with the Portal.

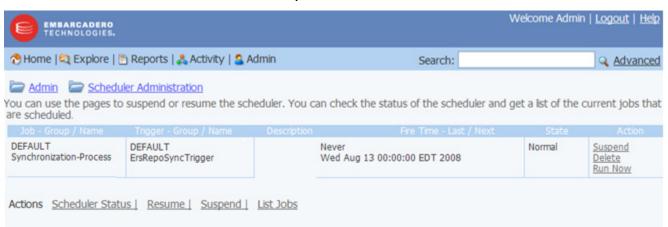
When you select the Schedule Synchronization Process option, a job is created with a built-in schedule of running the synchronization process daily at midnight.

- 1 Click **Admin** to open the Admin Services page.
- 2 Click **Synchronization Admin** and the Synchronization Administration page appears listing the available actions and the synchronization status of existing processes.

The Synchronization Admin page also displays the status of the most recent execution of the synchronization process. Each item listed is a diagram in the ER/Studio Repository that may or may not be (depending on filters) synchronized with the Reporting repository. The list of items is sorted in descending order of status update date, that is, the items whose status have changed most recently appear at the top. Possible statuses include the following:

- Not Processed set when the synchronization process begins
- Filtered synchronization of the diagram was not run because the diagram was filtered
- Processing synchronization of the diagram is in progress
- · Success synchronization of the diagram has completed without error
- Error synchronization of the diagram has completed with an error

- 3 Click Schedule Synchronization Process and message page appears telling you "Job scheduled, check Scheduler Administrator to verify status."
- 4 Close the message and click **Admin** to display the Pentaho Administration page once again.
- 5 Click Schedule Admin to view the scheduled jobs and their status.



You have three different options available for each scheduled job: suspend it, delete it from the schedule, or run it immediately.

The following actions are also available for all scheduled jobs:

- Clicking Schedule Status displays a page indicating the status, running or suspended, for all jobs.
- · Clicking Resume resets any suspended jobs to the status of 'Resumed'.
- Clicking Suspend pauses the running of the job until it is resumed by the Administrator.
- · Clicking List Jobs displays the table of all scheduled jobs.

NOTE: You can view the latest log entries detailing the synchronization commands run and their status, by clicking Latest Logs next to the Synchronization Status area of the Synchronization Admin page. When the databases are synchronized, a new log is created in a separate folder whose name is the timestamp of the log creation and the previous log is archived in a zip file.

## **Executing the Synchronization Process**

Click this command to immediately execute the following steps for populating your reporting database.

- · Extracts data from source databases
- · Transports the data
- · Transforms the data
- · Loads the data into a data warehouse
- 1 Click **Admin** to open the Admin Services page.
- 2 Click Synchronization Admin and the Synchronization Administration page appears listing the available actions and the synchronization status of existing processes.
- 3 Click Execute Synchronization Process and a message displays informing you that a "job is scheduled for background execution. View All Scheduled Content".

4 Click **View All Scheduled Content** and a table showing displays all the reports you have submitted to run in the background.

Any report listed in the Subscriptions or the Waiting portions of the table can be canceled by clicking Cancel in the Actions area. You can also view or delete any reports listed in the Complete portion of the table.



### **Viewing Synchronization Logs**

Depending on the size of the ER/Studio Repository, this action may take many hours to execute. You can view the status of the synchronization on the **My Reports** page.

You can view the logs of the synchronization process via the Synchronization Administration page. There are two types of logs:

• The latest overall synchronization logs. You can view these logs regardless of whether the synchronization process is running or is stopped. If a synchronization is in progress, then the logs are the live logs from the current process. These logs contain only the pre- and post-diagram synchronization information and minimal information about the synchronized diagrams.

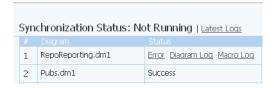


• **Detailed individual logs for failed synchronizations**. These logs are available when a diagram synchronization fails. In this case, the Status column in the Synchronization area would contain the following links to specific logs:

**Error**: The error messages indicating why the synchronization failed.

Diagram Log: The diagram synchronization log

Macro Log: The logs produced during export of the diagram from the ER/Studio Repository

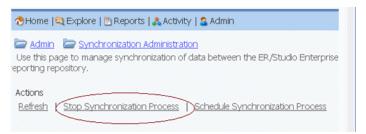


#### **Notes**

- Logs are located in <installdir>\etlvar\log\.
- Each synchronization process has its own directory called log\_<timestamp>, such as <installdir>\etlvar\log\log 20081119210946.
- The previous synronization logs are zipped up in order to save disk space and the respective log directory is deleted. For example, during the next synchronization <installdir>\etlvar\log\log\_20081119210946 becomes <installdir>\etlvar\log\log\_20081119210946.zip
- Because previous synchronization logs are zipped, you can only see the logs for the diagrams in error if the synchronization of the diagram failed in the latest synchronization. Logs from synchronization executions other than the most recent are only accessible from the portal server file system.

### **Stopping the Synchronization Process**

Stopping the synchronization process via the 'Stop Synchronization Process' option on the Synchronization Administration page is the only clean way of stopping the ETL. This option interfaces with the Windows task manager to gracefully kill the two Java processes related to the synchronization.



Once the synchronization process is running (having been started either via the *Execute Synchronization Process* option or as a scheduled synchronization), it can be stopped from the Synchronization Administration page by clicking *Stop Synchronization Process*. Invoking this option changes the synchronization status to Stopping and the synchronization process is stopped as soon as processing of the current diagram is complete. This may take a while, depending on the size of the diagram currently being processed. Once stopped, the synchronization status will then be displayed as Not Running.

### **Administering Schedules**

You can use the page to suspend or resume the scheduler. You can also check the status of the scheduler and get a list of the current jobs that are scheduled.

- 1 Click **Admin** to open the Admin Services page.
- 2 Click **Scheduler Admin**. The Web page appears and the table displays the following information:

Column Name	Description
Job - Group/Name	This is the name of the newly created job.
Trigger - Group/Name	This is the name of the newly defined trigger.
Description	Displays the description of the subscription that was entered at the time the subscription was set up.
Fire Time - Last/Next	Displays the last time the subscription was run and the next time it is scheduled to run.
State	Displays the job process state, either Normal or Paused.
Action	You have three choices:
	<b>Suspend</b> : Immediately suspends the scheduled run. When you select this option, it is replaced by the Resume command.
	<b>Delete</b> : Deletes the scheduled subscription from the table.
	Run Now: Runs the scheduled item immediately

There are four different actions shown at the bottom of the scheduled jobs table:

Action	Description
Scheduler Status	Shows the current state of the scheduler: running, suspended, or stopped.
Resume	If the scheduler has been stopped, restarts all scheduled jobs.
Suspend	Suspends all jobs until they are manually restarted.
List Jobs	Displays a table with all scheduled jobs.

# **Administering Subscriptions**

This page displays the following information:

Information	Description
Scheduler Status	Displays either Normal or Paused.
Actions	Six different actions are available: Suspend, Add Schedule, Set Content, Import Schedules and Content, Refresh, and Show Subscriptions.
Warning	This tells you if you have any subscriptions that are not scheduled to run.

Information	Description
Scheduled Subscriptions	Lists all scheduled subscriptions. You can choose to suspend or run the subscription immediately. You can also edit a subscription.
Subscriptions without scheduled jobs	Displays all subscriptions that are not scheduled to execute. You can choose to schedule them individually or select the <b>Schedule All</b> command to synchronize the schedules with the subscriptions
Subscription Content	This table displays all action sequences. You can choose to edit or delete each subscription. When you click <b>Edit</b> a screen appears where you can modify, delete or add new action sequences. If you have modified an existing subscription, or added a new one you can set the schedules for this content.

You have six different actions you can perform:

Action	Description
Suspend	All scheduled jobs are paused until manually restarted.
Add Schedule	Use this page to add a new schedule. The following information is required: Group Name Title Description Cron Expression
Set Content	You can select subscription content from all available action sequences. All sequences you select can be subscribed. When all desired sequences are selected, click <b>Set Content</b> .
Import Schedules and Content	You can create subscription schedules and content in XML using a template. When you have created this file you can then upload it.
	Note: Schedules can be added and modified via the import but cannot be deleted.
Refresh	Updates the Subscription Content list to show any additions or changes.
Show Subscriptions	Displays the User, Title, Action Sequence, and Schedule of any active subscriptions. You have the option to delete subscriptions here.

For more information, see <u>Setting Up a Subscription</u> and <u>Administering Licenses</u>.

### **Setting Up a Subscription**

- 1 Click **Admin** to open the Admin Services page.
- 2 Click **Subscription Admin** to open the Subscription Administration page.
- 3 Click Add Schedule to add a schedule and a page appears requesting information for the item to be scheduled:
  - Group:
  - · Name:
  - Title:
  - · Description:
  - · Cron Expression

**NOTE:** All fields are required.

4 Enter the requested information and click **Add**. A brief confirmation page appears and then you are returned to the page where you entered the information.

For example, to set up a schedule to run daily at midnight, enter 'Daily' for the Group, 'daily-midnight' for the Name, 'Daily at Midnight' for the Title, 'Runs daily at midnight' for the Description, and '0 0 0 \* \* ?' for the Cron Expression.

- 5 Click Subscription Administration to return to the Subscription Administration page and click Set Content.
- 6 Expand the action sequence you want to subscribe to. For example, if you wanted to run a synchronization action, expand **etl**: **actions** and select the **Synchronize.xaction** option.
- 7 Click Set Content and a page appears telling you that the request has been completed successfully.

NOTE: The page automatically closes and you are returned to the Select Subscription Content page.

- 8 Once again, click **Subscription Administration**. Click the edit link in the Action column. You can modify or delete this schedule. You can also add a new schedule. Click the **Set Content for this schedule** link, select the option for the action sequence you selected earlier (for example dashboards/etl/Synchronize.xaction) and click **Submit**. A page appears telling you that the request has been completed successfully.
- 9 Open
  - http://<HOST\_NAME>:<PORT>/ersportal/ViewAction?&solution=etl&path=actions&action=S yncronize.xaction&subscribepage=yes. The Synchronize Web page appears.
- 10 In the **Schedule This Report** section, click **Show Scheduling Options**, and enter a name for the scheduled report.
- 11 Next, select the name of the schedule you just added from the **Schedule For** drop-down list and click **Save**. You will get a subscription saved/created message page.
- 12 Close this message page and click **Reports->My Reports** to open the My Reports page.
- 13 To view the scheduled Subscription click **Admin -> Subscription Admin** and all scheduled subscriptions are listed in a table format. You can suspend or run immediately the scheduled subscriptions. You can also edit them.
- 14 Click **Show Subscription** to view all the subscriptions you have set up. A table appears showing the user name, title of the subscription report, the action sequence to be used, the report to be run, and the action you can take. The only action available is to delete the subscription.

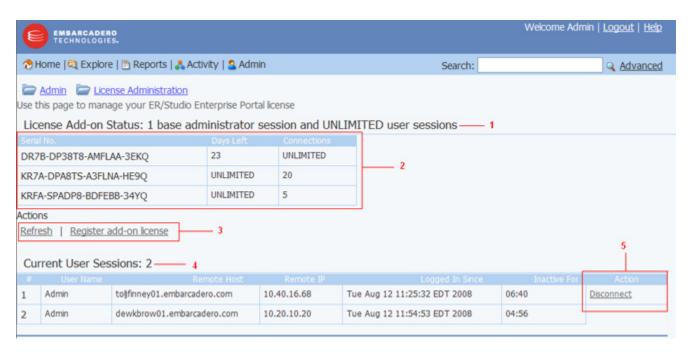
### **Administering Licenses**

As Administrator you can view the status of all user sessions. The Enterprise Portal uses concurrent user connection-based licensing. The total number of connections at one time are restricted to the number purchased. However there is no restriction on a login name being used more than once.

- Inactive users are automatically timed out 30 minutes after the last user interaction. This is so that licenses/connections are freed up even if a user forgets to close the browser or logout.
- The Administrator can view the current sessions logged into the portal on the License Admin interface.
- The License Admin interface displays the amount of time the users have been inactive.
- The user activity is archived so that the Admin can see activity over time and determine if they need to purchase more licenses.

### The License Administration Page

1 Click **Adim->License Admin** ( ) to open the License Administration page.



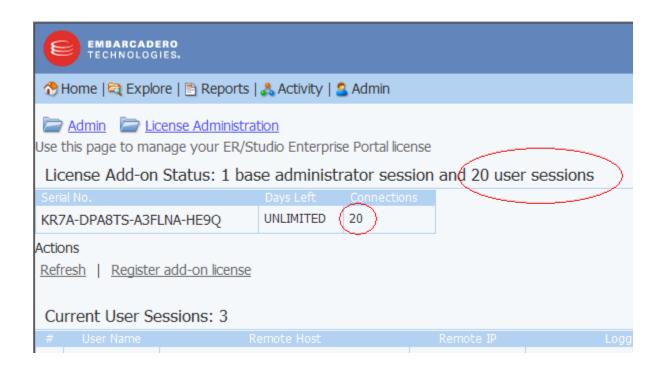
The License Administration page has the following key elements:

- 1 Displays the license Add-on status of how many user sessions are allowed.
- 2 Lists all registered and activated license add-ons.
- 3 There are two functional links:
  - Refresh: updates the licensing module by rereading from the disk the license files.
  - Register add-on license: displays the registration page and populates the registration code field with a unique number that identifies the machine.

- 4 Lists the current users that are using the application. This table also shows the remote host name, remote IP address, the date and time when the user logged in, and how long the user has been inactive.
  - **NOTE:** If the maximum number of connections is reached, the next login attempt will get the following error message: "Too many open sessions, please contact your administrator or <a href="Key@embarcadero.com">Key@embarcadero.com</a> to purchase more licenses."
- 5 Allows to the administrator to log off (disconnect) users. The current user cannot disconnect himself.

#### Register Add-On License

- 1 Log in to the application as an Administrator.
- 2 On the Dashboard, click Admin to open the Admin Services page and then click License Admin.
- 3 Under Actions, click Register add-on license and a Product Registration Page appears.
- 4 Enter the serial number that you received from Key@embarcadero.com and click Next.
  - **NOTE:** You will have a serial number for each add-on. For example, if you bought 25 licenses you would receive two serial numbers, one for 20 connections and one for five. You have to register each serial number in order to have the 25 connections. You must complete all the licensing steps for each serial number to register each add-on.
- 5 The Registration Code is a number that identifies the machine and is generated by the licensing module.
- 6 On the Embarcadero Product Registration Login page, you can login to your existing Developer Network account or create a new account.
  - If you have an existing account enter your Login name or e-mail address, the password, and click Next.
  - Click Create Account if you need a new user account. Fill in the required information and click Next.
- 7 Review the Product, Serial Number, and Registration Code information on the Product Registration page and then select either to download or e-mail the activation file.
- 8 If you select **Download**, a File Download dialog appears. Click **Save** and save the file in the appropriate folder WIndows folder: [product install folder]\text{\text{license}} (for example
  - C:\Program Files\ERStudioEnterprisePortal1.0\license)
- 9 If you select **e-mail**, you will get an auto-generated message from Embarcadero-licensing. Open the e-mail and save the attached *reg\*.txt* file in the appropriate WIndows folder: [product install folder]\license (for example C:\Program Files\ERStudioEnterprisePortall.0\license).
- 10 Close the Product Registration Page.
- 11 Click **Refresh** on the License Administration page and the add-on license information is updated.



### **Administering Permissions**

The Roles to be used in Permissions are read directly from the ER/Studio Repository. Changes to permissions, roles, and users in ER/Studio are not updated until the ER/Studio Repository is synchronized with the Portal Reporting repository.

By default, the Super User is given administrative permissions. The users assigned to the Super User role in ER/Studio can then assign permissions to other groups using this interface. It is recommended that you do not restrict access to anything that isn't a top-level element, for example the Activity dashboard.

**NOTE:** While the Pentaho interface supports Access Control Lists (ACL) entries by user, the Enterprise Portal uses only Roles.

- 1 Click **Admin** to open the Admin Services page.
- 2 Click **Permissions** ( ) and the associated Web page appears.
- 3 In the Solution Repository area, expand the hierarchical table and select the folder or content you want to set the permission for.

**NOTE:** ACL entries can be created at each folder or content item level. Lower level entries override the higher level entries.

- In the **Settings** area you can set the levels of permission for each user. Select **Subscribe**, **Execute**, and/or **Write** options. Click **Update** to set the changes.
- 5 Click **Add** to add another user and the Add New Permission area appears, which displays all Roles and Users available.

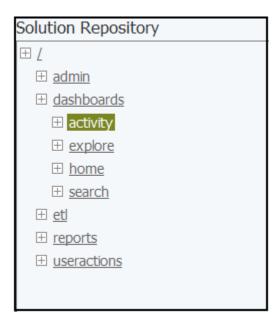
**NOTE:** Users must be first created and assigned to a role in ER/Studio before they can access the Repository through the portal.

- 6 Select the desired role and then set the permission level by selecting the Subscription, Execute, and/or Write options in the same panel. Click **Add** and the new Role has been added to the list of roles in the Setting pane.
- 7 You can also reset the list to the default settings or add a new user at this point.

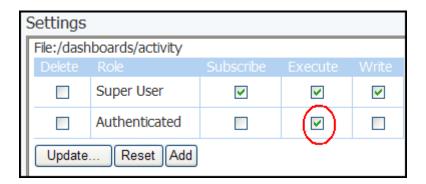
### **Setting a Permission**

A potential use case would be to hide the Activity dashboard from the Authenticated users.

- 1 Click **Admin** to open the Admin Services page.
- 2 Click **Permissions** ( ) and the associated Web page appears.
- 3 In the Solution Repository pane, expand the hierarchical table and select the folder **Activity**.

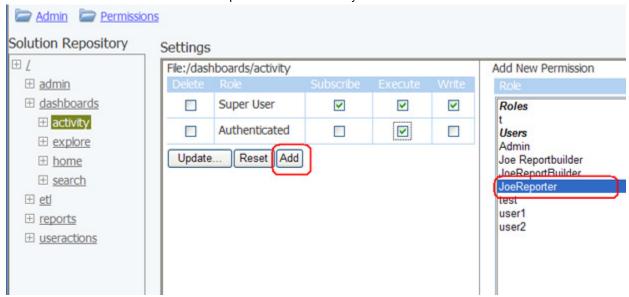


4 In the Settings panel change the levels of permissions for the Authenticated user by deselecting the Execute option (circled in red below).



5 Click **Update** to set the changes.

NOTE: You can also set levels of permission on a user-by-user basis.



#### See Also

**Data Integration Overview** 

Scheduling the Synchronization Process

**Executing the Synchronization Process** 

## **Cleaning the Content Repository**

- 1 Click **Admin** to open the Admin Services page.
- 2 Click Clean Repository ( ) and the associated Web page appears.
- 3 A new Web page appears telling you that your "Action Successful! Found and deleted 0 file(s) more than 180 days old."

# **Glossary**

Business Reports: There are three reports available: Attribute Definitions, Business Rules, and Entity Definitions.

Diagram: A graphical presentation of a collection of model elements.

Extraction, Transformation and Load (ETL): A process in data warehousing that involves extracting data from other sources, transforming it to fit business need, and then loading it into an end target, such as the data warehouse.

**Logical Model:** A logical entity-relationship model conforms to relational theory and contain only fully-normalized entities. For a logical data model to be normalized, it must include the full population of attributes to be implemented and those attributes must be defined in terms of their domains or logical data types.

A logical data model requires a complete schema of identifiers or candidate keys for unique identification of each occurrence in every entity. Since there are choices of identifiers for many entities, the logical model indicates the current identify selection.

Pentaho Business Intelligence Platform: The Business Intelligence (BI) platform fields all user data requests and sends the results to the browser for presentation.

**Permissions:** Gives a user the ability to access the Reporting Database. The Roles to be used in Permissions are read directly from the ER/Studio Repository. By default, the Super User is given administrative permissions. The users assigned to the Super User role in ER/Studio can then assign permissions to other groups using this interface.

**Physical Model:** A complete physical data model includes all the database artifacts required to create relationships between tables and achieve performance goals, such as indexes, constraint definitions, linking tables, partitioned tables, and clusters.

Roles: Default roles are provided in the ER/Studio Enterprise Portal. These roles are granted permissions to access actions. The default roles are Authenticated and Super User.

**Repository:** A database where data is stored and maintained. For the ER/Studio Enterprise Portal, the database, or repository, is associated with the ER/Studio application.

**Security:** All users are authenticated before they are able to run queries and reports. Each user must have a user name and password that is stored in the ER/Studio Repository database.

**Solution:** A set of documents defining the processes and activities required to solve a specific business intelligence problem.

**Solution Repository:** The Solution Repository is the location where solutions and the metadata they rely on is stored and maintained. Requests made to the platform to have actions executed rely on the action being defined in the Solution Repository.

**Scheduler:** Administrative function to schedule and monitor synchronization of the ER/Studio Repository with the Reporting Database.

Technical Reports: The Enterprise Portal has six technical reports: Column Data Lineage; Domain Bindings; Entity, Submodel, Model, Diagram Report; Entity Attachments; Reference Values; and Security Classifications.

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