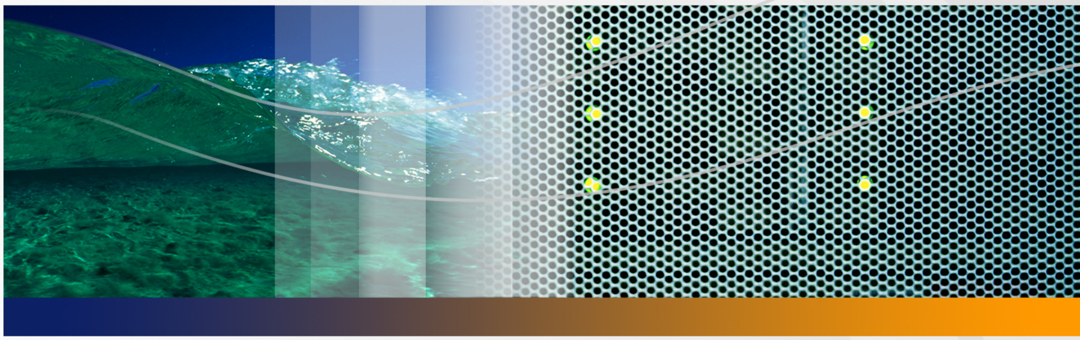
Product Documentation

Peregrine Systems, Inc.

BI Portal 5.2



User Guide

Part No. DBNI-52-EN01

Peregrine Systems

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Contents

PEREGRINE

About this Guide

PEREGRINE

The BI Portal User Guide shows you how to use BI Portal to generate queries and reports.

The following table shows you where in this guide to find the information you need.

This section	Provides information about
Chapter 1, BI Portal reporting functions	BI Portal user interfaces and key concepts of BI Portal
Chapter 2, Base Reports	Types of base reports included in BI Portal
Chapter 3, Working with Reports	How to work with base and custom reports in BI Portal
Chapter 4, Using the RDS Universe	The structure of the Reporting Data Store (RDS) universe in BI Portal
Chapter 5, Advanced Reporting Functions	How to create ad hoc queries and create custom reports in BI Portal
Appendix A, User Exercises	Performing tasks such as accessing report data, reporting, and analyzing data
Appendix B, Base Reports for ServiceCenter	Base reports and queries using sample ServiceCenter data
Appendix C, Base Reports for AssetCenter	Base reports and queries using sample AssetCenter data
Appendix D, Copyright Notices	Additional copyright information

Related documentation

In addition to this guide, the following documentation is available for the BI Portal product and for WebIntelligence. Unless otherwise noted, the documentation is available at *http://support.peregrine.com*.

Manual	Description
BI Portal Administration Guide	Provides an overview of the OAA platform. Describes how you customize the BI Portal and the OAA Administration module. Provides information about security in BI Portal, RDS Universe administration, data connection and transfer, configuring components after a custom installation, and performance tuning.
BI Portal Installation Guide	Describes how to install and configure the application and Web servers for BI Portal.
RDS for ServiceCenter Administration Guide	Provides information about customizing the RDS for ServiceCenter.
RDS for AssetCenter Administration Guide	Provides information about customizing the RDS for AssetCenter.
BI Portal Release Notes	Includes last-minute enhancements, known issues, and closed issues.
WebIntelligence User's Guide	Describes how to use WebIntelligence for building and running queries, reporting, and analysis. This is available using the Help button of the WebIntelligence Java Report Panel, which is accessed when creating or editing reports.

Typographical conventions

This guide uses typeface conventions to indicate special terms and actions.

Convention	Meaning
Bold	Information that you must type exactly as shown appears in bold. The names of buttons, menus, and menu options also appear in **bold**.
Italics	Variables and values that you must provide are in *italics*. New terms and book titles also are in *italics*.

`Monospace`	Code or script examples, output, and system messages are in a `monospace` font.
	`var msgTicket = new Message( "Problem" );`
	...
	`msgTicket.set( "_event", "epmc" );`
	
	An ellipsis (…) indicates that portions of a script have been omitted because they are not needed for the current topic. Samples of code are not entire files, but they are representative of the information discussed in a particular section.
	Filenames, such as `login.asp`, appear in a `monospace` font.

Special elements

This guide uses special elements to help you locate information. These special elements and their uses are in the following table.

Element	Usage
Important:	Information that is required to complete a task
Note:	Information that is of general interest
Tip:	Information that can make a task easier or faster
Warning:	Information that is needed when there is a risk of losing data

Need more assistance?

For further information and assistance with this release, you can download documentation or schedule training.

Customer Support

For further information and assistance, contact Peregrine Systems' Customer Support at the Peregrine CenterPoint Web site.

To contact customer support:

1 In a browser, navigate to *http://support.peregrine.com*

2 Log in with your user name and password.

3 Follow the directions on the site to find your answer. The first place to search is the KnowledgeBase, which contains informational articles about all categories of Peregrine products.

4 If the KnowledgeBase does not contain an article that addresses your concerns, you can search for information by product; search discussion forums; and search for product downloads.

Documentation Web site

For a complete listing of current BI Portal documentation, see the Documentation pages on the Peregrine Customer Support Web.

To view the document listing:

1 In a browser, navigate to *http://support.peregrine.com*.

2 Log in with your login user name and password.

3 Click either Documentation or Release Notes at the top of the page.

4 Click the BI Portal link.

5 Click a product version link to display a list of documents that are available for that version of BI Portal.

6 Documents may be available in multiple languages. Click the Download button to download the PDF file in the language you prefer.

You can view PDF files using Acrobat Reader, which is available on the Customer Support Web site and through Adobe at *http://www.adobe.com*.

Important: Release Notes for this product are continually updated after each release of the product. Ensure that you have the most current version of the Release Notes.

Education Services Web site

Peregrine Systems offers classroom training anywhere in the world, as well as "at-your-desk" training using the Internet. For a complete listing of Peregrine's training courses, refer to the following web site:

http://www.peregrine.com/education

You can also call Peregrine Education Services at +1 858.794.5009.

1 CHAPTER Overview of BI Portal

The goal of Peregrine BI Portal is to help you access, analyze, report, and share information about your organization. BI Portal stores information in a database called the *Reporting Data Store* (RDS) and uses RDS data to create the reports and charts you want to see.

All BI Portal reports are based on data sets created by database queries that you can add, maintain, store, and execute. You can execute a query at any time to refresh the data set. You can copy queries and you can change queries to produce new data sets.

BI Portal includes two report types:

- *Base report*s, which are included in the application, contain data stored in the Reporting Data Store.
- *Custom* reports, which users can create, contain data stored in the Reporting Data Store.

This chapter contains the following sections:

- BI Portal workspaces on page 16
- BI Portal reporting functions on page 19
- Universes, classes, and objects on page 40

BI Portal workspaces

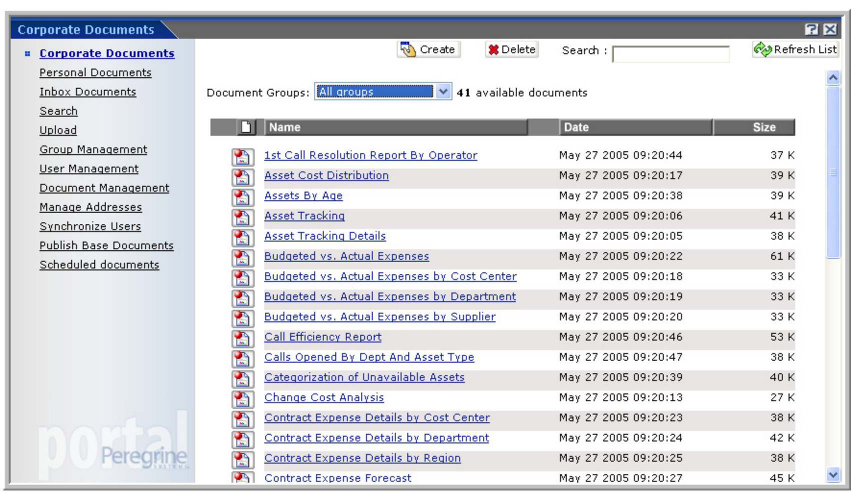
BI Portal has two main workspaces:

- The BI Portal Reporting application opens when you first log on to the BI Portal. Use the BI Portal Reporting application to run all the base reports included with BI Portal, and to make basic changes to them.
- The WebIntelligence Reporting application, which requires users to have permission, or *user capability*, can open from the BI Portal Reporting application. Use the WebIntelligence Reporting application to create custom queries and reports, and to make advanced changes to existing reports.

Note: Refer to the BI Portal Administration Guide for more information about user capabilities.

The BI Portal Reporting application

The BI Portal Reporting application displays base and custom BI Portal reports. Your user capability determines the reports that you see.



The following matrix shows the BI capabilities required for the BI Portal functions on the Reporting application activity menu.

Portal Function	Description	BI_Admin	BI_Create	BI_View
Corporate Documents	View the base reports, based on user capability.	X	X	X
Personal Documents	View the reports that you created.	X	X	X
Inbox Documents	View the reports that are in your inbox.	X	X	X
Search	Find reports based on criteria that you define.	X	X	X
Refresh list	Refresh the document list.	X	X	X
Upload	Send a PDF or Excel report from your hard drive to the BI Portal.	X		
Group Management	Create your own groups where you can place your personal reports.	X		
User Management	Assign users to a document group.	X		
Document Management	Assign your reports to any group that you belong to. You can view reports that other users own.	X		
Manage Addresses	Create e-mail addresses for non-Business Objects users. You can then send reports to these addresses.	X	X	X
Synchronize Users	Synchronize application users with proper BI capabilities between the RDS database and the Business Objects repository.	X		
Publish Base Documents	Copy base reports from the BI Portal server to the Business Objects server.	X		
Scheduled Documents	View the queue of documents that have been scheduled to run.	X	X	X

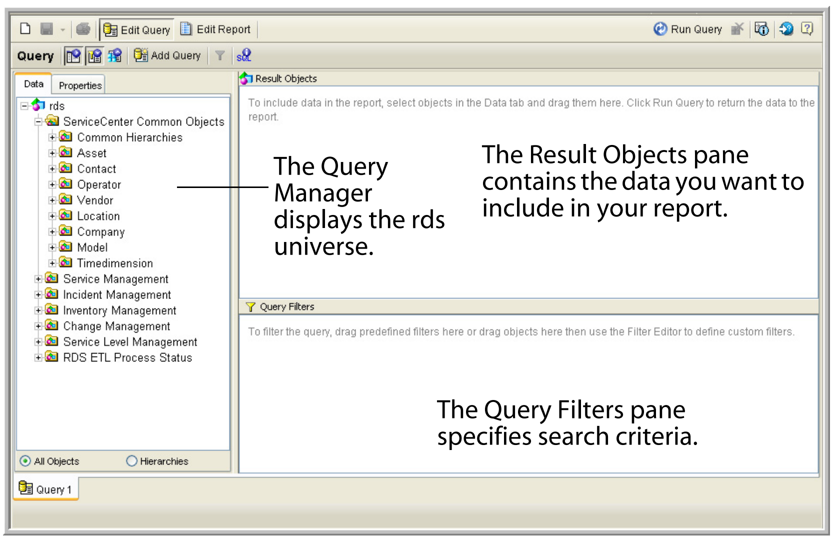
For more information about each function, see BI Portal reporting functions on page 19. For more information about user capabilities and other security-related issues, refer to the BI Portal Administration Guide.

The WebIntelligence Reporting application

The WebIntelligence Reporting application is a powerful, easy-to-use tool that creates queries and reports and performs advanced edits on existing reports. It helps you access and examine your data quickly and easily. For complete information about WebIntelligence, refer to the WebIntelligence User's Guide, which describes how to use WebIntelligence for building and running queries, reporting, and analysis.

WebIntelligence includes:

Element	Description
Query Manager (on the left)	Displays the hierarchy of classes and objects that are available for inclusion in a query. See Universes, classes, and objects on page 40 for more information.
Result Objects pane	Shows those objects selected for a query.
Query Filters pane	Displays filters that limit the results of a query to objects having specified attributes.



To use the WebIntelligence Reporting application, do one of the following:

- From the BI Portal Reporting application, run a report, then click **Edit**.

  The WebIntelligence Reporting application opens and displays the report and its structure. Click **Edit Query** to display all the classes and objects in the RDS that are available for addition to your query and report.

- From the BI Portal Reporting application, click **Create** to create a custom query and report.

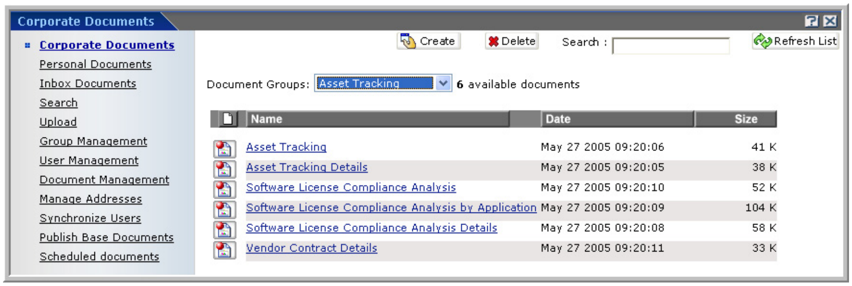
  The WebIntelligence Reporting application displays all classes and objects in the RDS that are available for inclusion in a new query and report.

BI Portal reporting functions

The BI Portal Reporting application activity menu has a list of functions that you can perform based on your user capability. See the matrix on page 17.

Viewing corporate documents

You can select a document group from the Document Groups drop-down list to display only a subset of the base reports.



Note: The report list can contain previously published reports.

Click a report to run it. After you view the report, you can:

- Add objects to, replace objects in, or remove objects from the report to recalculate.
- Sort the report by column.
- Apply filters to limit the data displayed in the report.

Refer to the WebIntelligence User's Guide for more information about these features.

You also can perform the following tasks in the BI Portal Reporting application. The matrix shows the BI capabilities required for the BI Portal Reporting tasks.

Reporting task	Description	BI_Admin	BI_Create	BI_View
Create	Create new reports using the WebIntelligence Reporting application. Refer to the WebIntelligence User's Guide for more information.	X	X	
Delete	Delete published documents. **Note:** Only the user who publishes the document can delete it.	X		
Back	Return to the list of Corporate Documents. Use the browser Back button to return to the previous page.	X	X	X
Download	Download the report to your local computer in Microsoft Excel or PDF format. See page 52 for more information.	X	X	X
Drill	Drill down into the report to examine its details more closely. See page 53 for more information.	X	X	X
Refresh	Refresh the report display. See page 57 for more information.	X	X	X
Edit	Edit the report. See page 58 for more information. **Note:** You can perform only simple reformatting tasks in the BI Portal Reporting application. Use the WebIntelligence Reporting application to perform all advanced report reformatting and editing tasks.	X	X	

Reporting task	Description	BI_Admin	BI_Create	BI_View
Save	Save the report to your Personal Documents folder. When you save a report, it is stored in this folder. You can then regenerate, edit, delete, send, or publish the report. See page 64 for more information.	X	X	X
Publish	Publish or save the report to the Corporate Documents folder, where others in your organization can share it. See page 66 for more information.	X		
Schedule	Schedule reports to run automatically.	X	X	X
Send	Send the report to Business Objects users as well as non-Business Objects users. See page 71 for more information.	X	X	X
PDF View/ HTML View	View and Print reports in PDF and HTML formats. See page 73 for more information.	X	X	X
Maximize	Maximize the report to view it in a new full-screen window. See page 73 for more information.	X	X	X
Page Mode/ Draft Mode	Toggle between viewing the report in Draft mode and Page mode. See page 74 for more information.	X	X	X

Refer to the BI Portal Administration Guide for more information about user capabilities and other security-related issues.

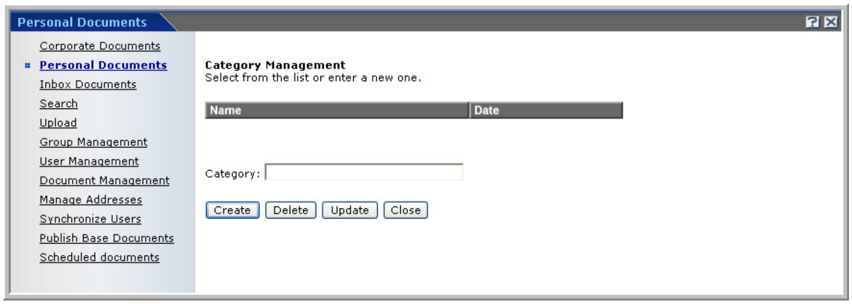
Managing personal documents

Whenever you save a report, it is stored in your Personal Documents folder. You can create categories for your reports.

To manage personal document categories:

1. Log in to BI Portal.

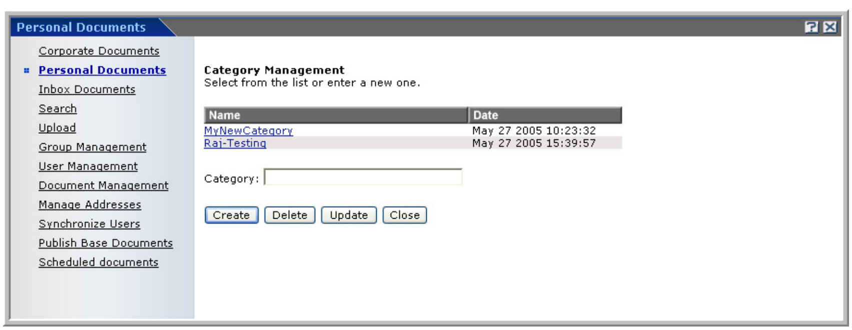
2. From the Reporting application activity menu, click **Personal Documents** > **Categories** to open the Category Management form.



To create a category in Personal Documents:

1. Enter the name of the category you want to create.

2. Click Create to add the category.

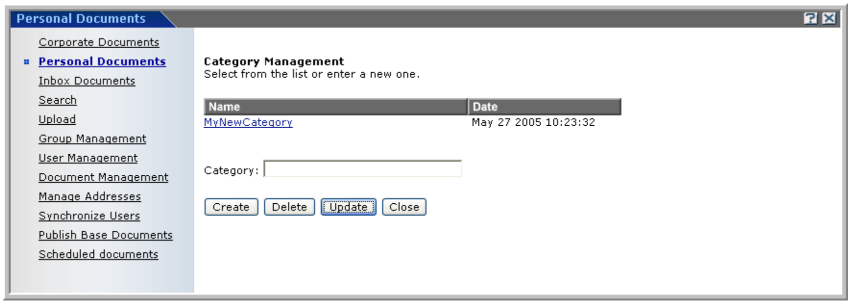


You see a status at the bottom of the page indicating that the category is created.

3. Click **Close** to return to the list of Personal Documents.

To rename a category in Personal Documents:

1. Click the category you want to rename from the Category Management list to display it in the **Category** field.



2. Change the name of the category.

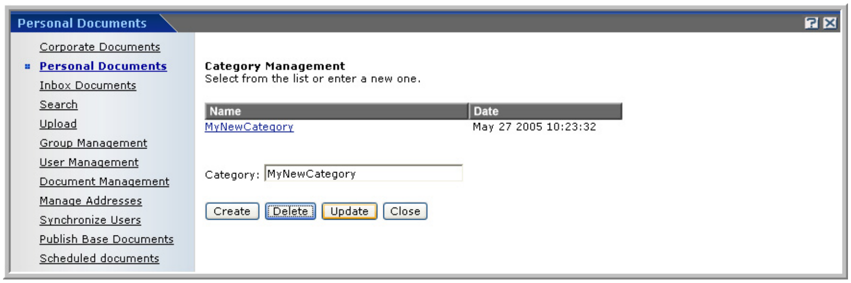
3. Click **Update** to list the new name in the Category Management list.

   You see a status at the bottom of the page indicating that the category is renamed.

4. Click **Close** to return to the list of Personal Documents.

To delete a category in Personal Documents:

1. Click the category you want to delete from the Category Management list to display it in the Category field.



2 Click **Delete**. The category no longer displays in the Category Management list.

   You see a status at the bottom of the page indicating that the category is deleted.

3 Click **Close** to return to the list of Personal Documents.

Viewing inbox documents

You can run reports that other users send to your inbox.

To view inbox documents:

1 Log in to BI Portal.

2 From the Reporting application activity menu, click **Inbox Documents** to display the list of available documents.

3 Click a report to run it.

Searching for reports

You can search for reports in BI Portal according to the following criteria.

Search criteria	Description
Document type	This includes Corporate Documents, Personal Documents, and Inbox Documents.
Document name	You can search for the entire name, or for documents whose name contains a phrase.

Search criteria	Description
Document keywords	You specify keywords when you publish reports. See Publishing reports on page 66 for more information about keywords.
Dates	The search uses the report creation date.

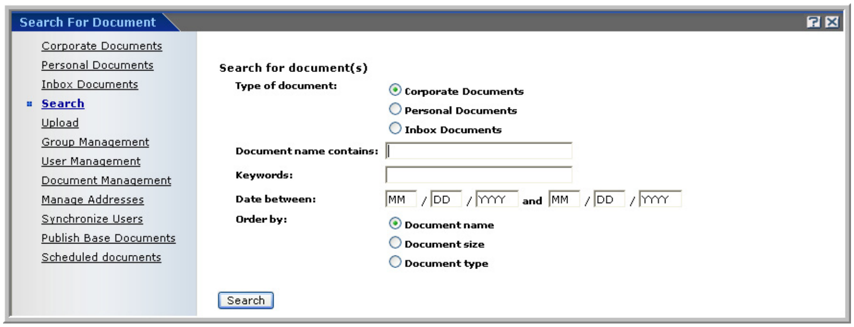
Further, you can sort the results of your search by document name, size, or type.

To search for reports:

1 Log in to BI Portal.

2 From the Reporting application activity menu, click **Search**.

The Search For Document form opens.



3 Specify your search criteria in the following fields:

Document name contains
Keywords
Date between

4 In the **Order by** field, select the order to sort the results.

5 Click **Search**.

The BI Portal Reporting application displays the results of your search.

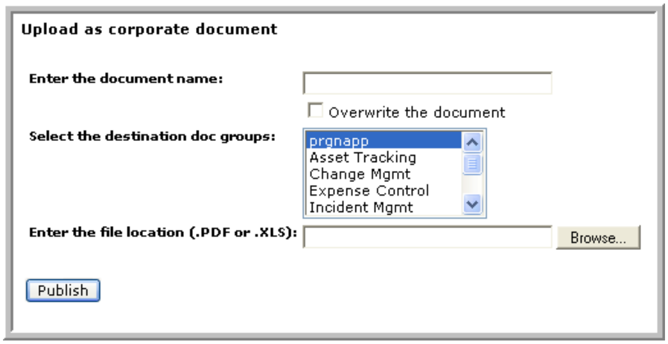
Uploading reports

You can send a PDF file or Excel spreadsheet from your hard drive to the BI Portal and publish it as a corporate document.

To upload reports:

1. Log in to BI Portal.

2. From the Reporting module activity menu, click **Upload**.



3. In the **Enter the document name** field, type the name of the file to upload.

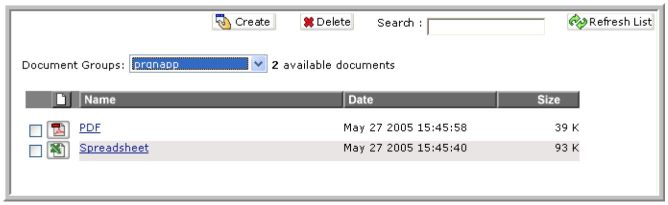
   You have the option to overwrite the document if it already exists.

4. In the **Select the destination doc groups** field, select which group to store the file.

5. In the **Enter the file location (.PDF or .XLS)** field, type, or browse and select, the file name.

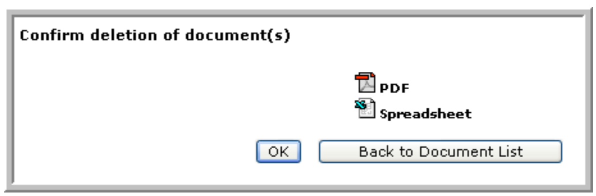
6 Click **Publish**.

The uploaded files appear in the document group list.



7 To delete the files, select the check box next to the file and click **Delete**.

Click **OK** to delete the file.



You see the message `status: Documents successfully deleted` at the bottom of the form.

8 Click **Back to Document List** to return to the main menu.

After you upload a document, you may see a pop-up window when you click the document name in BI Portal to open the document. To avoid getting a pop-up window which prompts you whether or not to open the document, edit the file type options in Windows Explorer.

To set Windows Explorer options to prevent a pop-up window:

1 In Windows Explorer, go to **Tools** > **Folder Options**.

2 Click the **File Types** tab.

3 Highlight the `PDF` or `XLS` file type from the list.

4 Click the **Advanced** button.

5 Clear the **Confirm Open after download** option.

6 Click **OK** twice to close all dialog boxes.

Managing groups

In BI Portal, report data is organized and grouped to facilitate the management of reports and report data. There are system-defined groups and user-defined groups.

Note: You must have `BI_Admin` capability to use this function.
Group names must contain at least one alpha character.

The system-defined document groups are pre-set (out-of-box), and you cannot add, delete, or rename any of the system-defined document groups. These groups are based on the ServiceCenter and AssetCenter applications. The system-defined document groups are:

- Asset Tracking
- Change Mgmt
- Expense Control
- Incident Mgmt
- Inventory Mgmt
- prgnapp
- Root Cause Analysis
- Service Level Mgmt
- Service Mgmt

Important: The `prgnapp` group is a name used for Peregrine applications and is entered on the Admin page. The `prgnapp` group name must match the name you used when you created this group in BO Supervisor tool.

The `prgnapp` group contains all of the BI Portal users in ServiceCenter or AssetCenter. These groups are based on the hierarchy defined in the Peregrine repository in Business Objects (BO). BI Portal uses these groups to manage the reports and data. For a complete description of the repositories in Business Objects, see the Business Objects documentation.

The Group Management function in BI Portal enables you to manage the user-defined groups. With the Group Management function, you can create new groups, delete groups, or rename groups. Once you have created these groups, you can add users and documents to these groups.

Note: You must have `BI_Admin` capability to use this function.

In BI Portal, each report is assigned to a group. All the base reports are assigned to pre-defined groups. In addition, you can create new groups and assign reports to them. When you assign each user to one or more groups, you control the reports that the user can execute and view.

The following table lists the reports and data available for querying and viewing by users assigned various groups.

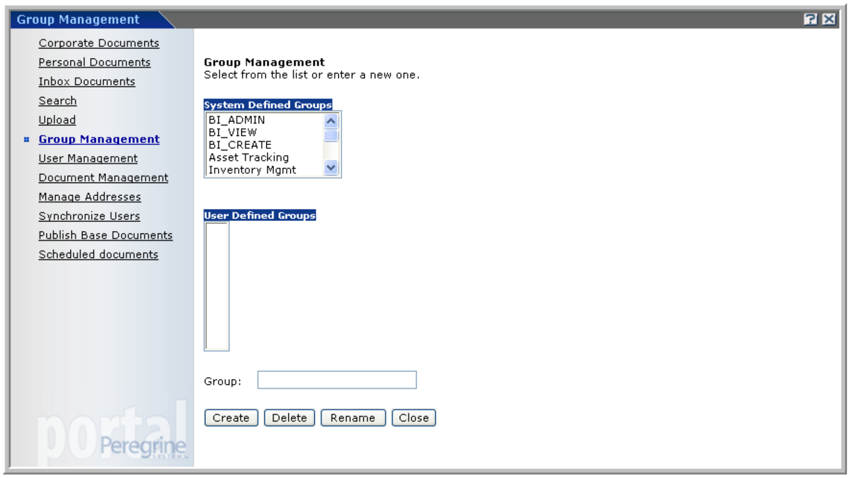
Group	Application	Description
Asset Tracking	AssetCenter	All reports and data related to Asset Tracking. See the Base Reports for Asset Tracking in the BI Portal User Guide for more information.
Change Mgmt	ServiceCenter	All reports and data related to Change Management. See the Base Reports for Change Management in the BI Portal User Guide for more information.
Expense Control	AssetCenter	All reports and data related to Expense Control. See the Base Reports for Expense Control in the BI Portal User Guide for more information.
Incident Mgmt	ServiceCenter	All reports and data related to Incident Management. See the Base Reports for Incident Management in the BI Portal User Guide for more information.
Inventory Mgmt	ServiceCenter	All reports and data related to Inventory Management. See the Base Reports for Inventory Management in the BI Portal User Guide for more information.
Root Cause Analysis	ServiceCenter	All reports and data related to Root Cause Analysis. See the Base Reports for Root Cause Analysis in the BI Portal User Guide for more information.

Group	Application	Description
Service Level Mgmt	ServiceCenter	All reports and data related to Service Level Management. See the Base Reports for Service Level Management in the BI Portal User Guide for more information.
Service Mgmt	ServiceCenter	All reports and data related to Service Management. See the Base Reports for Service Management in the BI Portal User Guide for more information.

To create a group:

1 Log into BI Portal.

2 From the Reporting module activity menu, click **Group Management** to open the Group Management form.



3 In the **Group** field, type the name of the new group.

4 Click **Create** to add the new document group to the **User Defined Groups** list.

The name of the group you created appears in the **User Defined Groups** list.

To delete a user defined group:

1 Log into BI Portal.

2 From the Reporting module activity menu, click **Group Management**.

The Group Management form opens.

3 In the **User Defined Groups** list, select the group you want to delete.

4 Click **Delete**.

The group you selected is removed from the list.

To rename a user defined group:

1 Log into BI Portal.

2 From the Reporting module activity menu, click **Group Management**.

The Group Management form opens.

In the **User Defined Groups** list, select the group you want to rename.

3 In the **Group** field, type the new name of the group.

4 Click **Rename**.

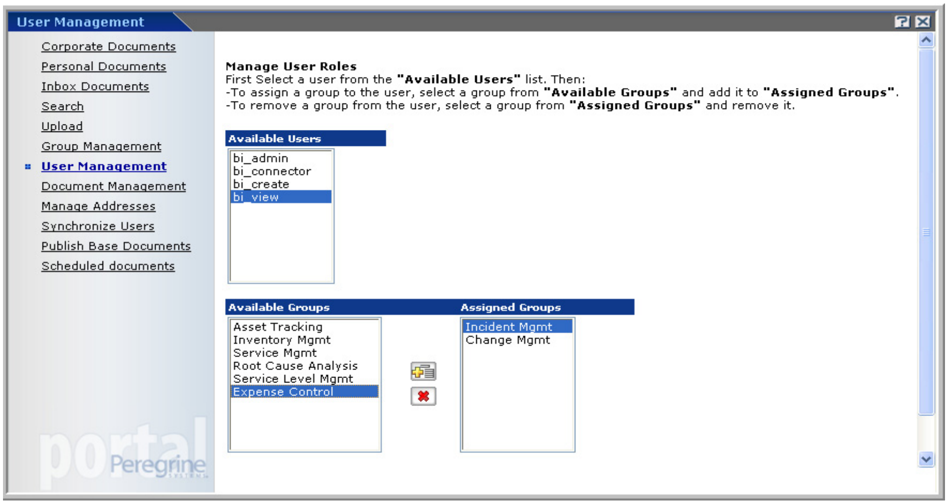
The group you selected is renamed in the list.

Managing users

The **User Management** function allows you to assign each user to as many document groups as required. You also can publish documents to more than one group.

In the following scenario, a document is published to both the **Change Management** and **Incident Management** groups. When a user who belongs to the Change Management group but not to the Incident Management group tries to see the document in the Incident Management group, the document in discussion will be displayed even though the user does not have rights to see the documents in the Incident Management group. This is because the document is attached to multiple groups: Change Management and Incident Management. Since the user can see the documents in the Change Management group, the document will be displayed to the user.

Note: You must have `BI_Admin` capability to use this function.



To assign a user to a document group:

1 Log into BI Portal.

2 From the Reporting module activity menu, click **User Management**.

3 Click a user in the **Available Users** list to highlight the user's name.

4 In the **Available Groups** list, double-click a group to move it to the **Assigned Groups** list.

You can also click a group in the **Available Groups** list and click the Add button to move the group to the **Assigned Groups** list. 

5 To remove a user from a group, double-click the group in the **Assigned Groups** list to move it to the **Available Groups** list.

You can also click the group in the **Assigned Groups** list and click the Remove button to move the group to the **Available Groups** list. 

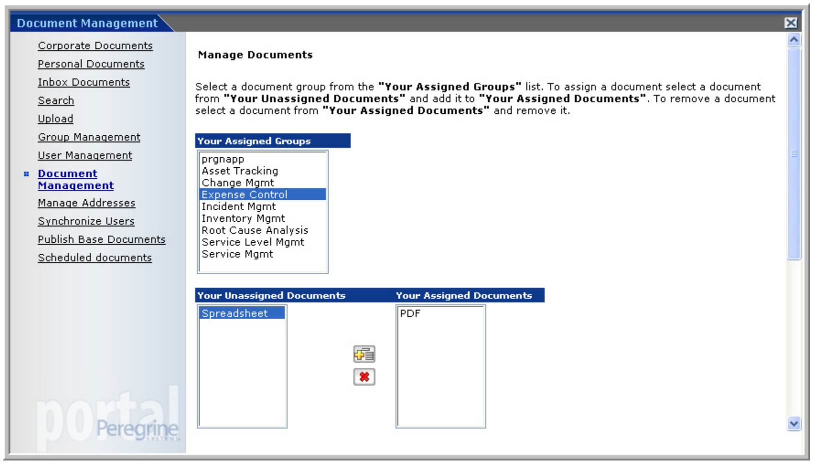
6 Click **Save** to commit the group assignments.

Managing documents

The Document Management function allows you to assign unassigned Corporate documents to a group so that the document is available to all users in that group. Documents that the user already published shows up in the Document Management page. The user can then assign these documents to different groups using this screen.

This form displays the list of groups that you are allowed to assign documents to and your lists of unassigned and assigned documents. You can also view the documents of other users that are unassigned. However, you are not allowed to change these documents since you are not the author.

Note: You must have BI_Admin capability to use this function.



To assign a document to a group:

1 Log in to BI Portal.

2 From the Reporting module activity menu, click **Document Management**.

3 Click a group in **Your Assigned Groups** to highlight the group.

4 In **Your Unassigned Documents**, double-click a document to move it to **Your Assigned Documents**.

You can also click a document in **Unassigned Documents** and click the Add button to move the document to **Your Assigned Documents**. 

5 To remove a document from **Your Assigned Documents**, double-click the document in the list to move it to **Your Unassigned Documents**.

You can also click the document in **Your Assigned Documents** and click the Remove button to move the document to **Your Unassigned Documents**. 

6 Click **Save** to commit the document assignments.

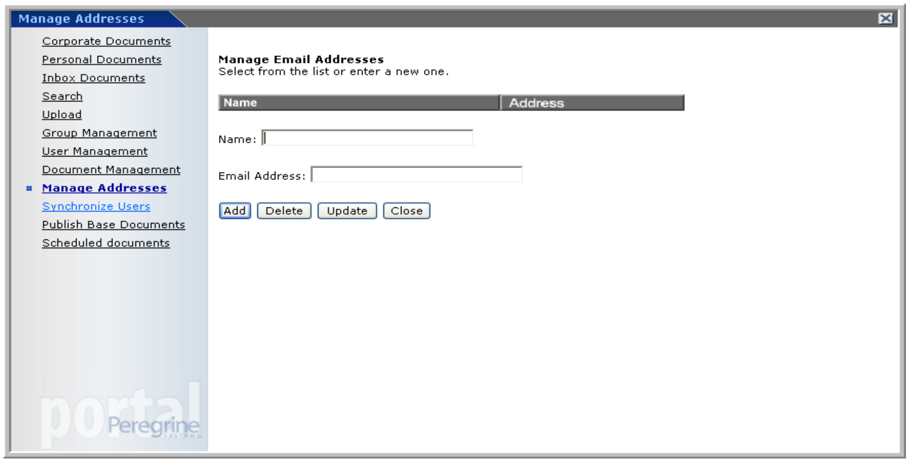
Managing addresses

The Manage Addresses function allows you to create e-mail addresses for non-Business Objects users. Using the reports Send feature (see page 71), you can then send documents to these users.

To add an e-mail address:

1 Log in to BI Portal.

2 From the Reporting application activity menu, click **Manage Addresses** to open the Manage Addresses form.



3 In the **Name** field, type the name of the new user.

4 In the **Email Address** field, type the e-mail address of the new user.

5 Click **Add** to add the new user.

You see the message `status: Added successfully` at the bottom of the form. The new name and e-mail address are displayed in a list.

6 Click **Close** to return to the main menu.

To delete an e-mail address:

1 Log in to BI Portal.

2 From the Reporting application activity menu, click **Manage Addresses**.

3 Click the link of the name you want to delete.

This populates the **Name** and **Email Address** fields.

4 Click **Delete**.

You see the message `status: Deleted successfully` at the bottom of the form. The deleted name and e-mail address are removed from the list.

5 Click **Close** to return to the main menu.

To update an e-mail address:

1 Log in to BI Portal.

2 From the Reporting application activity menu, click **Manage Addresses**.

3 Click the link of the name you want to change.

This populates the **Name** and **Email Address** fields.

4 Edit the fields as needed.

5 Click **Update**.

You see the message `status: Updated successfully` at the bottom of the form. The updated name and e-mail address are displayed in a list.

6 Click **Close** to return to the main menu.

Synchronizing users

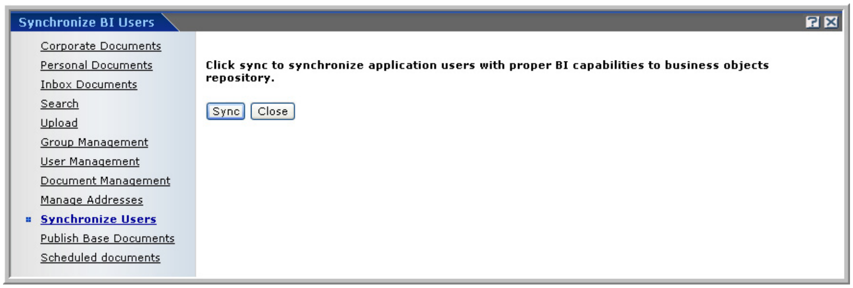
The Synchronize Users function allows you to synchronize application users with the appropriate BI capabilities between the RDS database and the Business Objects repository. User synchronization is for on-demand synchronization, and normally, user data is synchronized automatically for a predefined interval defined by the value specified in **User Synchronization Interval** on the BI Portal Setting page of the BI Administration function.

Note: You must have `BI_Admin` capability to use this function.

To synchronize users:

1 Log in to BI Portal.

2 From the Reporting module activity menu, click **Synchronize Users**.



3 Click **Sync**.

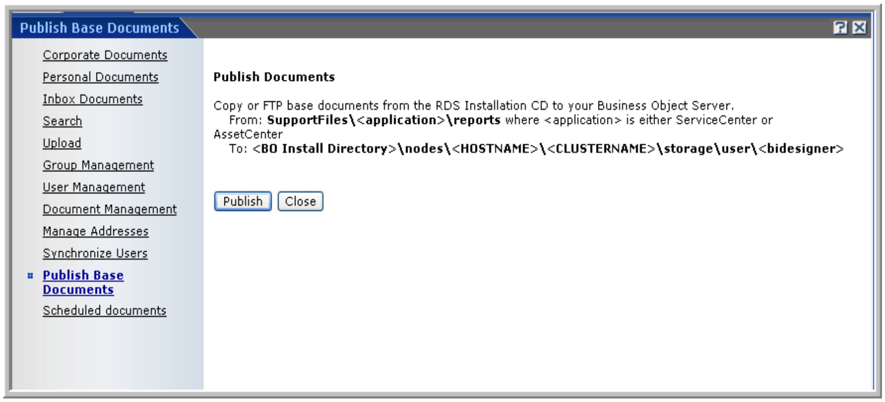
You see the message
`Success: Synchronize Users request is submitted and will be processed immediately.`
at the top of the form.

4 Click **Close** to return to the main menu.

Publishing base documents

The out-of-box version of BI Portal provides a set of sample documents that you can publish. When you publish these documents, you make them available in the Corporate Documents to all BI Portal users. Use the Publish Base Documents link on the Reporting module activity menu to publish the base documents.

Note: You must have `BI_Admin` capability to use this function.



To publish the base documents:

1. Log in to BI Portal.

2. If this is the first time you are publishing the base documents, you must copy the documents from the RDS for AssetCenter or RDS for ServiceCenter Installation CD.

Application	Copy from this location
AssetCenter	`SupportFiles\AssetCenter\reports`
ServiceCenter	`SupportFiles\ServiceCenter\reports`

3. Paste to the Business Objects server.

```
<BO Install Directory>\nodes\<hostname>\<clustername>\storage
\user\<BO designer user name>
```

4. From the Reporting module activity menu, click **Publish Base Documents**.

5 Click **Publish**.

You see confirmation messages.

6 Click **Close** to return to the document list.

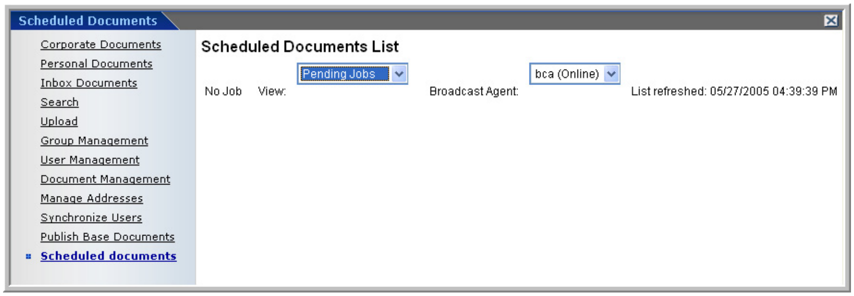
Viewing scheduled documents

The Scheduled Documents function allows you to view the queue of reports that are scheduled to run. You schedule reports (see page 67) to automatically run at specified intervals and be sent to your inbox. You can also schedule the reports to be sent to other users.

To view the list of scheduled documents:

1 Log in to BI Portal.

2 From the Reporting application activity menu, click Scheduled Documents.



You can view all jobs, pending jobs, or failed jobs.

Universes, classes, and objects

The information in the RDS database is stored in a single universe called *rds*. Whenever you run a base report in BI Portal, modify an existing one, or create a custom report, you use the metadata in the RDS universe.

The BI Portal hierarchy consists of *universes*, *classes*, and *objects*. A universe contains classes, which combine similar information into groups. The RDS universe includes a class for common objects in ServiceCenter and AssetCenter called Common Objects. ServiceCenter has other specific classes such as Service Management and Incident Management. Specific classes for AssetCenter include Portfolio/Finance Management and Contract Management. Classes are similar to folders. Classes can contain other classes as well as objects. See Using the RDS Universe on page 75 for more information about the RDS universe.

2 CHAPTER

Base Reports

Peregrine BI Portal includes nineteen base reports for ServiceCenter and twenty reports for AssetCenter that provide a wide variety of information about your organization. This chapter describes the base reports. See Appendix B, Base Reports for ServiceCenter and Appendix C, Base Reports for AssetCenter for a view of the reports with sample data.

In addition to the base reports, you can use the WebIntelligence Reporting application to modify the base reports and to create custom reports that suit the specific requirements of your business.

For more information about creating, saving, running, and publishing base and custom reports, see Chapter 3, Working with Reports. For more information about running ad hoc queries and creating custom reports, see Chapter 5, Advanced Reporting Functions.

ServiceCenter reports

The BI Portal base reports for ServiceCenter are in six categories:

- Change Management
- Incident Management
- Inventory Management
- Root Cause Analysis
- Service Level Management
- Service Management

Base reports for Change Management

These reports provide information to help you manage change requests in your organization.

Report name	Description	Format
Change Cost Analysis	A bar chart listing differences between expected and actual costs for changes, grouped by Company.	Bar chart
Failed Changes	A detailed listing of all Changes that were backed out or given an incomplete Completion Code.	Record detail report
Tasks Under Change	A detailed listing of all Tasks under the user-specified Change number.	Record detail report

Base reports for Incident Management

These reports provide information to help you manage service call incidents in your organization.

Report name	Description	Format
Incident Closure Analysis	A summary of closed incidents based on one of the following fields: Assignment Group, Category, Cause Code, Closed Group, or Resolution.	Bar chart
Incident Cost Analysis	A pair of bar charts listing the Parts and Labor costs associated with Incidents. These costs can be grouped based on user selection by Company, Location, Assignment Group, Category, or Cause Code.	Bar chart
Incident Management Ad Hoc Crosstab	A crosstab summary of all open Incidents grouped by any two of the following user-selectable fields: Assignment Group, Category, Company, Location, and Severity.	Crosstab

Base reports for Inventory Management

These reports provide information to help you manage assets in your organization.

Report name	Description	Format
Assets by Age	An analysis of the outage costs over time for all assets, grouped by the amount of time since installation.	Bar chart with a table
Categorization of Unavailable Assets	A summary of unavailable assets (due to repair, upgrade, or move) grouped by type.	Bar chart with a table
Recurrent Outages	A summary of asset downtime, cross-referenced once by Asset Type and Vendor, and again by Model over time.	3-D bar chart and bar chart

Base reports for Root Cause Analysis

These reports provide information to help you manage incident root causes.

Report name	Description	Format
Root Cause Analysis Recommendations	All Incidents NOT associated with a root cause are grouped by category. Any category comprising more than the user-specified percent of those tickets are flagged as recommended for Root Cause Analysis.	Table
Root Cause Cost Analysis	A listing of the Parts and Labor costs for all Incidents associated with root causes, grouped by cause.	Table

Base reports for Service Level Management

These reports provide information to help you manage service level agreements (SLA).

Report name	Description	Format
Economic Impact of SLA Failures	A pair of bar charts listing the time and money costs incurred by assets that suffered downtime in excess of SLA thresholds, grouped by SLA name.	Stacked bar chart and bar chart
Service Contract Cost Analysis	A table listing each Service Contract, and the monthly Parts and Labor costs for each.	Table
SLA Availability Successes	Measurements of how well SLA availability requirements have been met.	Line graph and stacked bar chart
SLA Response Time Successes	Measurements of how well SLA response times have been met.	Line graph

Base reports for Service Management

These reports provide information to help you manage service calls in your organization.

Report name	Description	Format
1st Call Resolution Report by Operator	An analysis of the percentage of calls solved without creating Incidents or Changes.	Line graph and 3-D bar chart
Call Efficiency Report	An average of the phone call time based on one of the following fields: Asset Type, Assignment Group, Category, Company, Location.	Bar chart
Calls Opened by Dept and Asset Type	A summary of the number of calls in the system cross referenced by the Department making the call and the type of Asset involved.	Bar chart, pie chart, and 3-D bar chart
Service Management Ad Hoc Crosstab	A crosstab summary of all open Calls grouped by any two of the following user-selectable fields: Assignment Group, Category, Company, Location, and Asset Type.	Crosstab

AssetCenter reports

The BI Portal base reports for AssetCenter are in two categories:

- Asset Tracking
- Expense Control

You can drill through some of the AssetCenter primary reports to generate additional reporting information.

Base reports for Asset Tracking

These reports provide information to help you manage assets.

Report name	Description	Format
Asset Tracking	This analysis allows IT management to view a summary of the assets scheduled to retire that are distributed throughout the enterprise. It performs a secondary function by acting as a template for more focused views into asset distribution breakdown for IT knowledge area experts.	Crosstab
— Details	This sub-report of Asset Tracking provides details of the selected asset.	Table
Software License Compliance Analysis	This analysis allows managers to view the degree to which they are out of compliance while not inundating the user with a list of all the installed applications.	Pie chart
— by Application	This Software License and Compliance Analysis sub-report shows the license levels by application.	Bar chart and crosstab
— Details	This Software License and Compliance Analysis sub-report shows the details of the license status by application.	Table
Vendor Contract Details	This analysis provides IT contract managers with insight into the scope and distribution of contracts that are maintained across suppliers.	Pie chart and table

Base reports for Expense Control

These reports provide information to help you manage expenses.

Report name	Description	Format
Asset Cost Distribution	This analysis helps senior IT management to determine the impact on the IT budget of regional or departmental concerns.	Line graph
Budgeted vs. Actual Expenses	This analytic application allows executive management to identify discrepancies in the actual budget spanning across different categories. Once the key areas for concern are identified, this application helps the user to identify when the organization went off budget, to what degree, and for how long.	Line graph and table
— by Department	This sub-report of Budgeted vs. Actual Expenses explains the percentage of budget spent in a particular year by department.	Line graph and table
— by Cost Center	This sub-report of Budgeted vs. Actual Expenses explains the percentage of budget spent in a particular year by cost center.	Line graph and table
— by Supplier	This sub-report of Budgeted vs. Actual Expenses explains the percentage of budget spent in a particular year by supplier.	Line graph and table
Contract Expense Forecast	This analysis allows IT management to reclaim control of their budgets by identifying contracts that are coming up for renewal.	Table
— by Region	This Contract Expense Forecast sub-report gives the shows the contract and expense details by region.	Table
— by Department	This Contract Expense Forecast sub-report gives the shows the contract and expense details by department.	Table
— by Cost Center	This Contract Expense Forecast sub-report gives the shows the contract and expense details by cost center.	Table
IT Expense Distribution	This analysis identifies the categories of assets which are most costly to own and where expenses are being spent across several categories.	Stacked bar chart and crosstab
— Over Time	This IT Expense Distribution sub-report displays the cost distributed over time.	Line graph
— Details	This IT Expense Distribution sub-report displays the details associated with the assets.	Table

Report name	Description	Format
Software Expense Optimization Analysis	This application unlocks the value of information gathered through a controlled workflow process to support SOX compliance to give organizations an understanding of the state of the organization within the scope of a controlled data collection process.	Pie chart
— Details	The Software Expense Optimization Analysis sub-report has two tabs that explains license reductions savings details and maintenance reduction savings details.	Bar chart

3

CHAPTER

Working with Reports

Peregrine BI Portal offers two types of reports:

- Base reports, which are pre-defined reports provided with BI Portal.
- Custom reports, which you design and save using the WebIntelligence Reporting application.

This chapter describes how to run reports and use the reporting tasks that are available.

Overview of reporting tasks

All reports, both base and custom, are assigned to a document group. The base reports reside in one of the following document groups:

Application	Document group	
AssetCenter	Asset Tracking Expense Control	
ServiceCenter	Change Mgmt Incident Mgmt Inventory Mgmt	Root Cause Analysis Service Level Mgmt Service Mgmt

After you create custom reports, you assign them to groups. See Managing groups on page 28 and Managing documents on page 33 for more information.

For more information about base reports in BI Portal, see Base Reports for ServiceCenter on page 117 and Base Reports for AssetCenter on page 139. For more information about creating ad hoc queries and custom reports, see Advanced Reporting Functions on page 85.

Important: The WebIntelligence Reporting application is very complex. It includes both an online help system and a WebIntelligence User's Guide to help you take full advantage of its rich functionality. A comprehensive discussion of the WebIntelligence Reporting application is beyond the scope of this guide. This chapter presents only an introduction to the functionality of the WebIntelligence Reporting application.

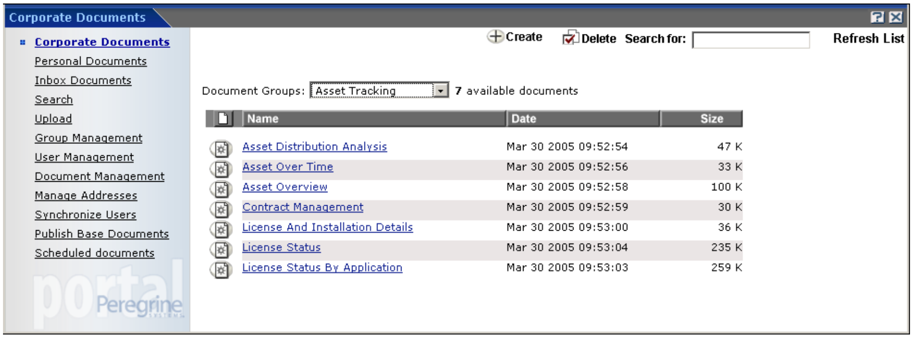
Running base or custom reports

The following procedure describes how to run a base or custom report.

To generate a base or custom reports:

1 Log in to BI Portal.

2 Click the **Reporting** tab to open the Reporting application.



3 Find the report you want to run by doing one of the following:

- Choose any report from the list.
- To narrow your search, choose a type of report from the **Document Groups** drop-down list; only reports in that document group are displayed. For example, choose Asset Tracking to view only those reports associated with assets.
- Click **Inbox Documents** to see only reports in that folder.
- Click **Personal Documents** to see only reports in that folder.

Note: To see information about a report before you run it, click the Document icon to the left of the report name. Read the information, and then click **Back to Document List**.

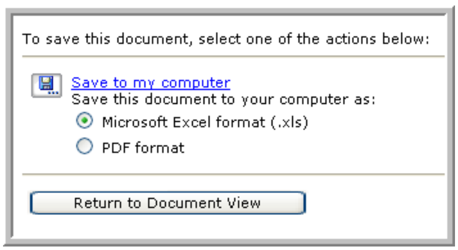
4 Click a report to open it.

Downloading reports

You can take the information from a report and download it to an Excel spreadsheet or to a PDF document.

To download a report:

1 Open the report you want to download and click **Download**.



2 Choose either **Microsoft Excel format (.xls) or PDF** format.

3 Click **Save to my computer**.

4 In the File Download dialog box, select **Save**.

5 In the Save As dialog box, navigate to the location where you want to save the file. If needed, type a new name.

6 Click **Save**.

The file is saved as an Excel or PDF file in the location you specified.

7 Click **Close**.

8 Click **Return to Document View** to see the report.

Note: If you download a report that has a magnifier glass on it that allows you to drill through to another report, the downloaded report does not show the magnifier glass and the drill through is not possible. The drill-through function is only possible in BI Portal.

Drilling into the report

After you generate a report, you can examine the data in more detail. This is called drilling into the report. It takes you to the next level of information.

Drilling down

You can drill down to see the lower-level data behind the visible data in a report. Underlined information in a table cell indicates that you can drill down to another level. This can help explain a certain result. For example, if you are comparing sales results, your report might show that the East region significantly out-performed the West in a particular year or quarter. You can drill down to the state level to analyze the more detailed data behind that result. How far you can drill down along a drill path depends on the scope of analysis you set for that report. If the scope of analysis is set to one level, then you can only drill one level down along that hierarchy's drill path. For example, if your report shows data for year, you can only drill down to Quarter.

Note: Drill down adds a filter AND drops to the next level down.

Drilling up

You drill up on a dimension value to see how the more detailed data aggregates to a higher-level result. For example, if you drill down on Year to examine data for each quarter, you can drill up to see how this data aggregates to yearly results.

When you drill up on a dimension value, you move along a hierarchy's drill path from lower-level to higher-level data. For example, if you drill down on Year to Quarter, you drill up on Quarter to return to Year.

Note: Drill up goes up one level AND removes the filter.

Drilling by

When you drill down or up, you move through a hierarchy's drill path one dimension at a time. However, you might want to skip several dimensions in the same hierarchy or move to another hierarchy altogether. You do this by drilling by.

Note: You can drill by to a dimension in a hierarchy that is not displayed in your report only if that dimension to which you want to drill is included in the scope of analysis or if your security profile allows you to drill beyond the data in the document and thereby edit the query.

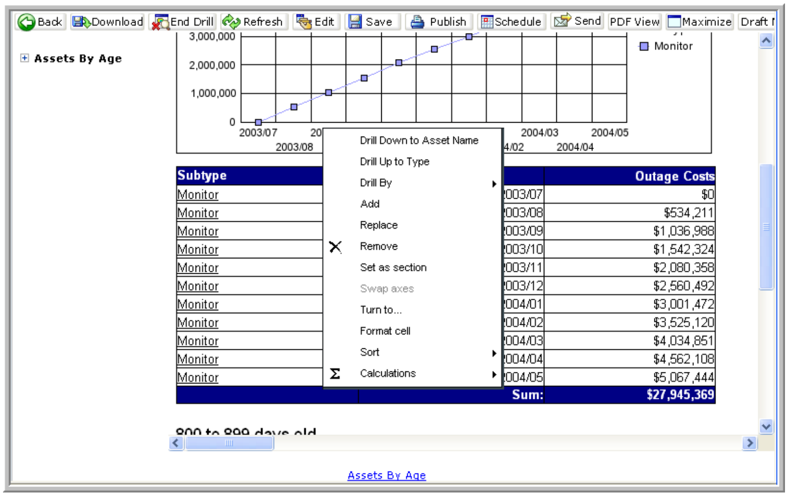
To drill into a report:

1. Run the report.

2. Click **Drill**.

   The report refreshes, and items in the report that contain detailed information are underlined.

3. Place the cursor over the report and choose a drill option from the shortcut menu.



   A report is displayed that shows more detailed information.

4. To end drill mode, click **End Drill**.

If you modify a base report and save it this way, it becomes a custom report.

Drilling and the object hierarchy

There are hierarchies defined in the universe that are applied to most attributes on the reports. When a report is displayed in a tabular format, you can drill upward or downward in fields that are in hierarchies. An arrow next to a field on the report indicates that you can drill on that field within the hierarchy.

For example, if a report contains an Asset Tag column, clicking the Drill link displays an up arrow next to the column heading. Clicking the up arrow causes the field to change to the attribute that is one level higher within the hierarchy; in this case, Subtype.

To view the entire hierarchy of objects and attributes in the RDS universe:

1. Click **Create** in the BI Portal Reporting application to open the WebIntelligence Reporting application.

2. Click the **Hierarchies** option button in the left pane of the WebIntelligence Reporting panel to display the entire RDS hierarchy.

To drill down into a report:

1. Run a report in the BI Portal Reporting application.

2. Click **Drill** to drill down.

   The following example shows a drill-down of the Categorization of Unavailable Assets report.

PRGN

Brazilian Office

Asset Name	Asset Priority	Contact Name	Type	Asset Tag
JoseLPT	Normal	HERRERA, JOSE	computer	L-000012

Corporate Headquarters

Asset Name	Asset Priority	Contact Name	Type	Asset Tag
DavePC	Normal	HENNESEY, DAVID	computer	
DavidHPC	Normal	HENNESEY, DAVID	computer	C-000012
DD-000002	Normal	MANAGER, MAX	displaydevice	DD-000002
JenJoPC	Normal	JOHNSON, JENNIFER	computer	
JoePC	Normal	EMPLOYEE, JOE	computer	L-89341
JohnPC	Normal	EDWARDS, JOHN	computer	L-89321
PRGN Server 0001	CRITICAL	OCONNELL, STACY	computer	72693863-SV
StacyPC	Normal	OCONNELL, STACY	computer	C-28190
SusiePC	Normal	SUPERTECH, SUSIE	computer	
TrainPC 03	Normal	ACEVEDO, JUAN	computer	D-18924

Click computer in the Type column to drill down one level to laptop and desktop.

3 Click an underlined, hyperlink field within the report to examine information specific to that field.

For example, to drill down to computer subtypes in the Categorization of Unavailable Assets report, click computer in the Type column.

The resulting drill-down report shows the type of computer.

PRGN

Brazilian Office

Asset Name	Asset Priority	Contact Name	Subtype	Asset Tag
JoseLPT	Normal	HERRERA, JOSE	Laptop	L-000012

Corporate Headquarters

Asset Name	Asset Priority	Contact Name	Subtype	Asset Tag
DavePC	Normal	HENNESEY, DAVID	Laptop	
DavidHPC	Normal	HENNESEY, DAVID	Laptop	C-000012
JenJoPC	Normal	JOHNSON, JENNIFER	Laptop	
JoePC	Normal	EMPLOYEE, JOE	Laptop	L-89341
JohnPC	Normal	EDWARDS, JOHN	Laptop	L-89321
PRGN Server 0001	CRITICAL	OCONNELL, STACY	Server	72693863-SV
StacyPC	Normal	OCONNELL, STACY	Desktop	C-28190
SusiePC	Normal	SUPERTECH, SUSIE	Laptop	
TrainPC 03	Normal	ACEVEDO, JUAN	Desktop	D-18924

4 To end the drill and return to the original report, click **End Drill** at the top of the form.

Drilling through

The magnifier glass icon on any table indicates that you can drill through to another report. You use the drill through feature when you are not in drill mode.

Note: If you download a report that has a magnifier glass on it that allows you to drill through to another report, the downloaded report does not show the magnifier glass and the drill through is not possible. The drill-through function is only possible in BI Portal.

Refreshing reports

While viewing your report, you can synchronize with current data in the database and recompile the report. You see the new date and time after you refresh the report.

Your administrator assigns you security rights that determine how your reports refresh.

- If you have the Security feature enabled, your report refreshes automatically prior to opening.

  If a report is saved with the **Refresh on Open** option, then each time you click on that report, the report refreshes automatically prior to opening.

- If you have data restriction filters and the Security feature is NOT enabled and the report was not saved with the **Refresh on Open** option, when you click on a report, you see all the data (even data that is restricted). When you manually refresh the report, it generates again and this time the restricted data in the report does not display.

To manually refresh a report:

- Open a report, then click **Refresh**.

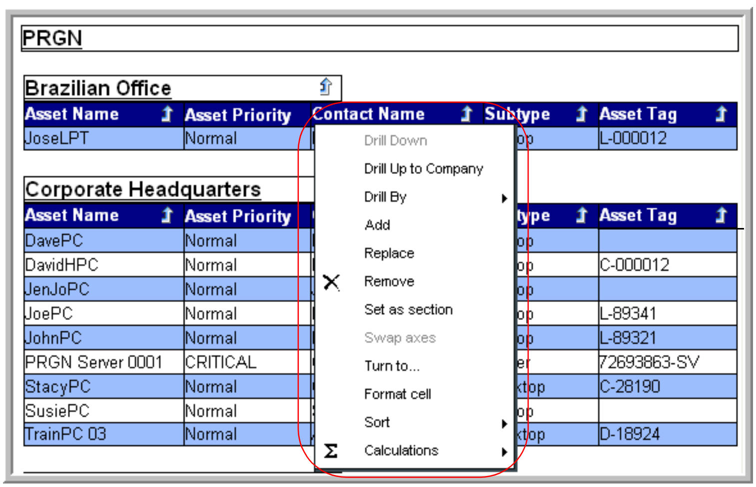
  The report shows the updated date and time.

Editing reports

After you run a report, you can change it in two ways: in the BI Portal Reporting application and in the WebIntelligence Reporting application.

Editing a report in the BI Portal Reporting application

By scrolling the cursor over a column in the report, you access an interactive menu and can perform simple editing tasks in the BI Portal Reporting form. You can then save the report to your Personal documents.



Right-click anywhere in the report to open the interactive edit menu.

Warning: If you add a field through the interactive menu and the field has no value in the database, it will show up with a blank value and you will not be able to remove that field from the report.

Note: Variable names that start with BIP have a URL in the formula definition and are reserved for base reports with links. These variables do not appear in the list of objects when adding or replacing objects using the Interactive Menu. Peregrine Systems recommends that you do not use variable names that start with BIP.

Note: Refer to the WebIntelligence User's Guide for more information about these features.

Adding an object to an axis

Follow these steps to add an object.

To add an object to an axis:

1. Run the report.
2. Place the cursor over a column in the report to view the shortcut menu.
3. Click **Add** to select the axis where you want to add an object.
4. Choose an object from the **Result Objects** > **Objects** list that opens to the left of the report.
5. Click Apply.

   The column is added to the right of the column where you placed the cursor. The report now displays data for the object you chose.

Replacing an object

Follow these steps to replace an object.

To replace an object:

1. Run the report.
2. Place the cursor over a column in the report to view the shortcut menu.
3. Click **Replace** to dynamically display the list of all objects for the report.
4. Select the object to replace.
5. Choose an object from the **Result Objects** > **Objects** list that opens to the left of the report.
6. Click **Apply**.

   The object is replaced in the column where you placed the cursor. The report now displays data for the object you chose.

Removing an object

Follow these steps to remove an object.

To remove an object:

1. Run the report.
2. Place the cursor over the column in the report you want to remove to view the shortcut menu.
3. Click **Remove** to dynamically remove the column from the report.

   The report now displays records without the object you chose.

Applying a filter to a report

Follow these steps to add a filter to a report.

To filter a report in the BI Portal Reporting application:

1. Run the report.
2. Place the cursor over a column in the report to view the shortcut menu.
3. Click **Filter By** to display a Dynamic Filters list that includes all values shown in that column of the report.
4. Choose the values you want to see.

   To choose multiple values, press **Ctrl** and click the values.
5. Click **Apply**.

   The report now displays only records that include the values you chose.

Sorting report data

Follow these steps to sort the data in a report.

To sort a report in the BI Portal Reporting application:

1. Run the report.

2 Place the cursor over a column in the report to view the shortcut menu.

3 Click **Sort** and choose a sort order, either **Default**, **Ascending**, or **Descending**.

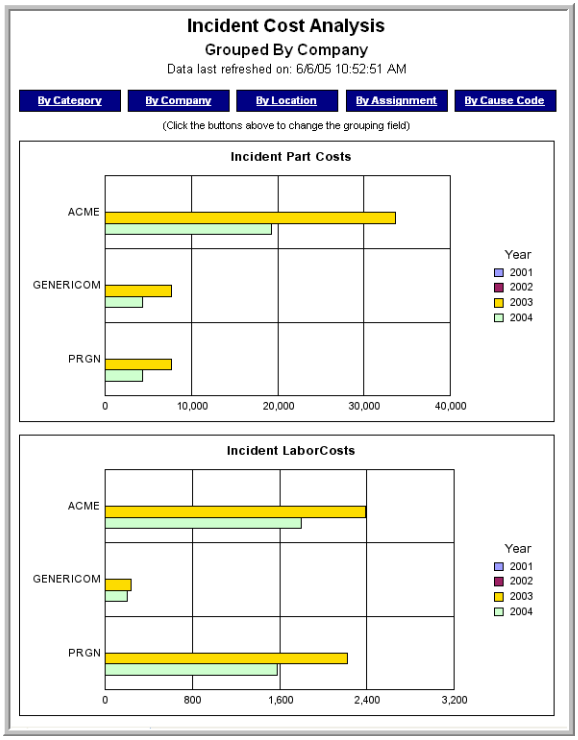
The report is now sorted for that column in the specified order.

Editing a report in the WebIntelligence Reporting application

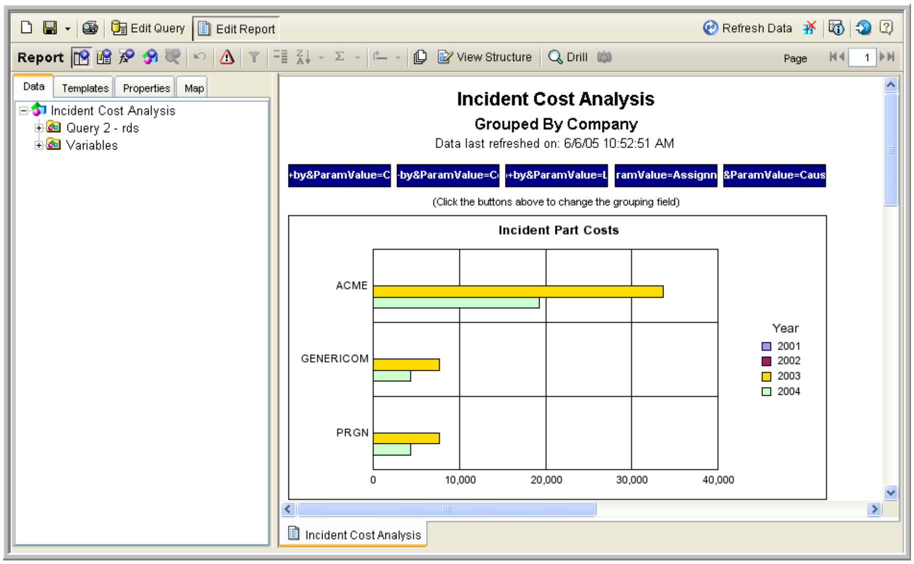
To edit a report:

1 Run a report in the BI Portal Reporting application.

The following is an example of an Incident Cost Analysis report.

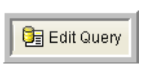


2 Click **Edit** to open the WebIntelligence Reporting application, which opens with the **Edit Report** tab selected.



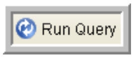
You can drag and drop objects to rearrange columns in the report, right-click to delete columns and rows, clear cell contents, reformat the cell, and more.

Important: The WebIntelligence Reporting application offers extensive functionality that is beyond the scope of this user guide. To learn more about the WebIntelligence Reporting application, click **Help** and read the InfoView User's Guide that opens. You also can refer to the WebIntelligence User's Guide.

3 Click **Edit Query** to change the query and specify information on which the report is based. 

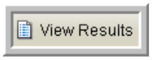
4 Click **View SQL** to open the SQL Viewer and examine the SQL that executes when you run the query. 

5 Click **Close** to return to Edit Query.

6 Click **Run Query** to execute the query and generate the report. 

7 While the report is displayed:

- Click View Structure to examine its structure. 

- Click View Results to return to the report. 

8 To create a section in the report, drag and drop an object onto the report pane, above the report itself.

9 Click **Save**, then choose a location to save the report.

To publish the report, see page 66. To send the report to other users, see page 71.

Saving reports

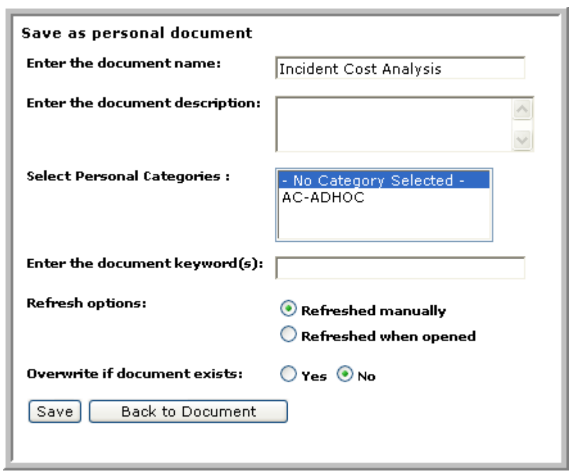
When you generate a base or custom report, you can save it to your Personal Documents folder. Later you can run the same report to update its data.

To save a report:

1 Run the report.

2 Click **Save**.

The BI Portal Reporting application opens the Save as personal document form.



3 Complete the following information.

a In **Enter the document name**, specify the name you want assigned to the document.

- In **Enter the document description**, type a description of the document to help others identify it.
- In **Select Personal Categories**, choose a personal category if you created any and want the document in that category.

- In **Enter the document keywords**, add text to help you find the document later. Use only individual keywords, not phrases. Separate multiple keywords with spaces. For more information about searching for reports, see page 24.
- In **Refresh Options**, select whether to refresh the report manually or when you open the report.
- Finally, choose whether to overwrite an existing version of the document.

4 Click **Save** to save the report to your Personal Documents folder.

   You see the message `status: Document successfully saved` at the bottom of the form.

5 Click **Back to Document** to return to the report.

Note: Base reports that you modify cannot be saved using their original names. You specify a different name for each base report that you modified and want to publish.

To access a saved report:

1 From the activity menu, click the **Personal Documents** link to see a list of your saved reports.

2 Select your report from the list to open and edit it as needed.

Publishing reports

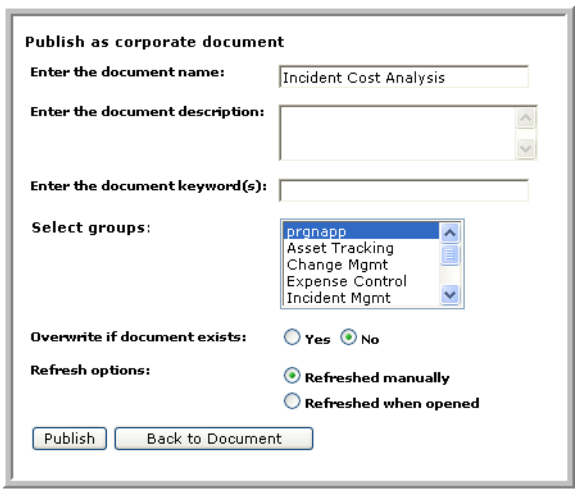
When you publish a report, you assign it to a document group. It becomes part of the list of reports in the Corporate Documents folder. All users assigned to a group that contains the report can then use the report.

To publish a report:

1 Run the report you want to publish.

2 Click **Publish**.

The Publish as corporate document form opens.



3 Complete the following information.

- In **Enter the document name**, specify the report name.
- In **Enter the document description**, type a description of the document to help others identify it.
- In **Enter the document keywords**, add keywords to help other users search for the report. Use only individual keywords, not phrases. Separate multiple keywords with spaces. For more information about searching for reports, see page 24.

- Select the group.

  To select multiple groups, press **Ctrl** and click the groups.

- Choose whether to overwrite an existing version of the document.
- Finally, in **Refresh Options**, select whether to refresh the report manually or when you open the report.

Note: Reports refreshed manually will improve performance but may display out-of-date data when first opened.

4 Click **Publish**.

You see the message `status: Document successfully published` at the bottom of the form. The report is published to the Corporate Documents folder in the groups you chose.

Note: Base reports cannot be published using their original names. You specify a different name for each base report that you want to publish.

5 Click **Back to Document** to return to the report.

Note: If you later want to edit a document's name, description, category, keywords, and groups, or reset its overwrite and refresh options, run the report and publish it again.

Scheduling reports to run automatically

Since the information stored in databases is constantly changing, it is useful to run queries and reports frequently to keep them up-to-date. You can schedule automatic generation of any base or custom reports to which you have access, whether they are stored in your Inbox Documents or Personal Documents folders or Corporate Documents.

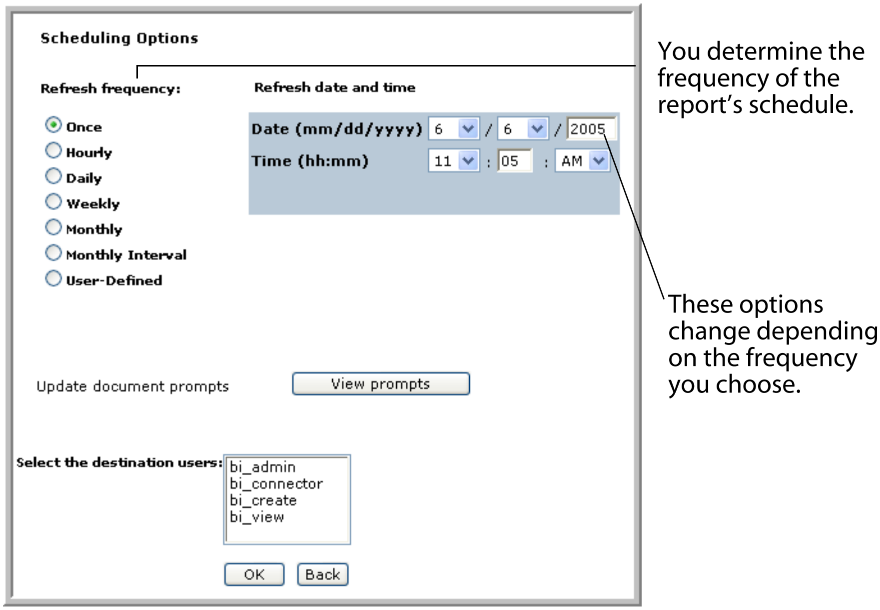
You can view a status log of all your schedule reports from the BI Portal Reporting application activity menu. See Viewing scheduled documents on page 39 for more information.

To schedule a report:

1 Run the report.

2 Click **Schedule** at the top of the form.

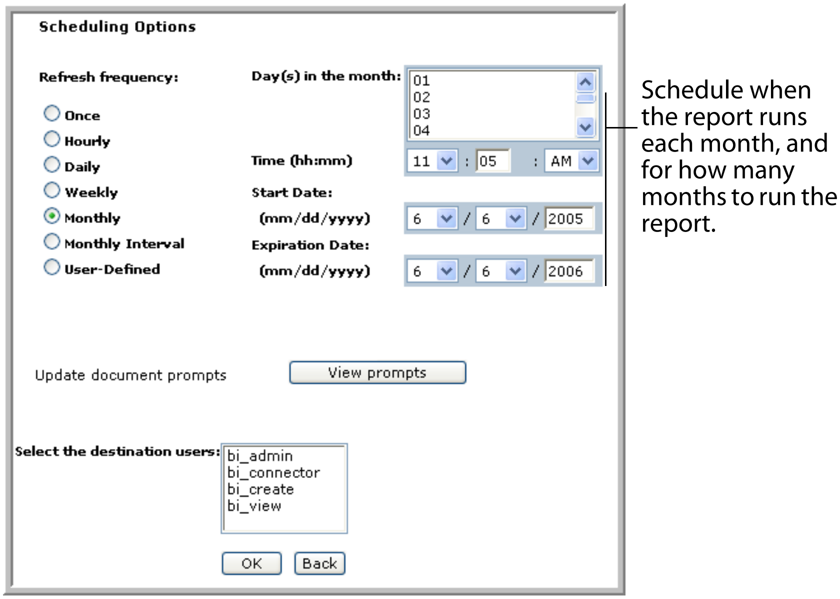
The Scheduling Options form opens where you choose how frequently to generate the report.



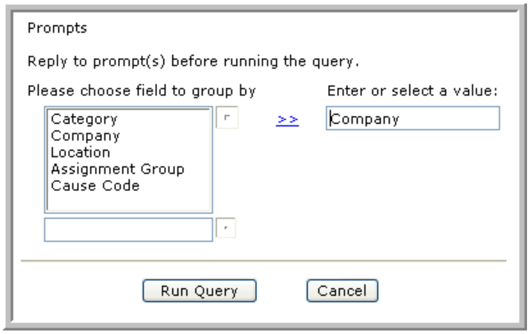
a Choose a refresh frequency from the options on the left.

b Choose additional details on the right.

For example, if you choose Monthly as the Refresh frequency, choose the day of the month, the time of day, and the start and end dates for the generation cycle.



c Click **View prompts** if you want to specify how to group the fields before you run the report, then click **Run Query**.



d Select the users who you want to receive the report.

To select multiple users, press **Ctrl** and click the users.

3 Click **OK**.

You see the message `Status: Document successfully scheduled to be sent to the inbox of the selected users` at the bottom of the form.The regenerated report appears in the Inbox folder according to the schedule you set. The users you selected also see the report in their Inbox folder according to the schedule you set.

Sending reports

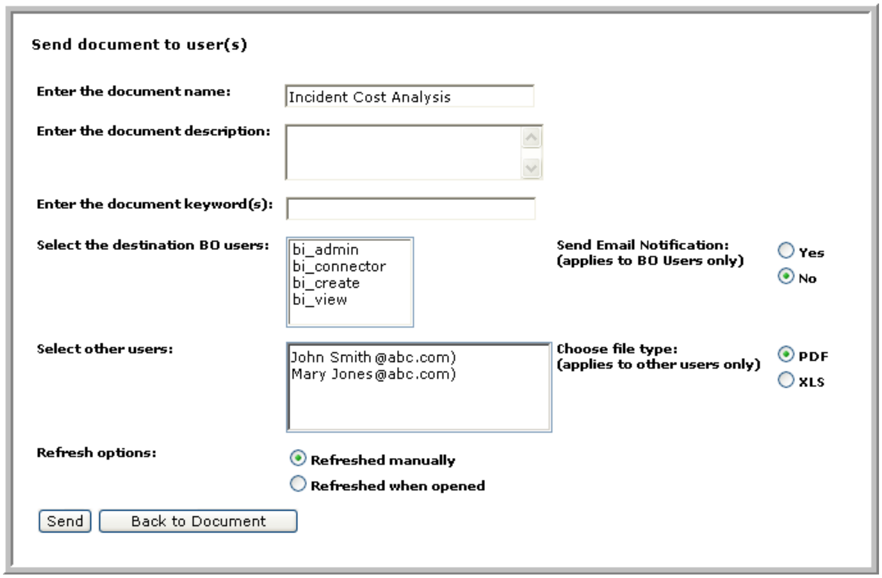
When you send a report, it is forwarded to another user's Inbox Documents folder. You also can send the report to non-Business Objects (BO) users if their e-mail addresses are defined to the BI Portal Reporting application. See Managing addresses on page 34 for more information.

To send a report:

1 Run the report.

2 Click **Send**.

The Send document to users form opens.



3 Complete the following information.

a In **Enter the document name**, specify the name of the document.

b In **Enter the document description**, type a description of the document to help others identify it.

c In **Enter the document keywords**, add text to help you find the document later. Use only individual keywords, not phrases. Separate multiple keywords with spaces. For more information about searching for reports, see page 24.

d In **Select the destination BO users** list, click the names of the users who you want to receive the report.

To select multiple users, press **Ctrl** and click the names.

e Click whether to **Send Email Notification** to the user list.

Note: Non-Business Objects users will always receive an e-mail notification with the document attached to the e-mail. Business Objects users will receive e-mail notification that the document has been sent to their BI Portal Inbox folder only if this option is selected.

f In **Select other users**, click the names of the non-Business Objects users who you want to receive the report.

To select multiple users, press **Ctrl** and click the user names.

g In **Choose file select**, select either PDF or XLS format.

h In **Refresh Options**, select whether to refresh the report manually or when you open the report.

Note: Documents that you send to Business Objects users are viewable only in HTML format, regardless of the format type that you select to send. Non-Business Objects users will see the document in the format that you selected, either PDF or XLS.

4 Click **Send**.

The report is sent to the Inbox Documents folders of the BI Portal users and to the e-mail inbox of other users. The message `status: Document successfully sent` verifies that the report is sent.

5 Click **Back to Document** to return to the report.

Viewing reports in PDF and HTML formats

You have the option to view reports on the screen in PDF and HTML formats.

To view reports:

1. Run the report you want to view.

   The report opens in HTML format.

2. Click **View in PDF** to view the report in Adobe Acrobat reader.

3. Toggle between PDF and HTML views.

Maximizing the viewing screen

Using the Maximize mode, you can open a new instance of the browser with the report displayed in full-screen mode. You can keep the report open in Maximize mode and view multiple reports at one time in different windows.

To maximize the viewing screen:

1. Run the report you want to view.

2. Click **Maximize** to view the report in a new full-screen window.

3. Click **Close** to return to the BI Portal Reporting view.

Note: Only the Close option is available when you open the report in Maximize mode. You must return to the default reporting view if you want to use the other options.

Viewing reports in Page and Draft mode

By default, all documents open in Page mode. When you have long reports, this helps navigate to specific pages. Draft mode does not display documents page-by-page. Instead, the entire document is on one page.

Mode type	Description
Page	In long reports, view the report one page at a time.
Draft	Scroll through the report using vertical and horizontal scroll bars.

To view reports in Page and Draft mode:

1 Run the report you want to view.

The report opens in Page mode.

2 Click **Draft Mode**.

The report changes to Draft mode.

3 Toggle between Page mode and Draft mode as needed.

4 CHAPTER Using the RDS Universe

This chapter describes the structure of the RDS universe in BI Portal, including its hierarchy and the types of objects it contains.

Note: Only users with `BI_Create` or `BI_Admin` capability can create ad hoc reports using the RDS universe.

Refer to the BI Portal Administration Guide for information on scheduling automatic data synchronization.

Topics in this section include:

Security

If you are using ServiceCenter with BI Portal and you are populating users from ServiceCenter to RDS, for BI Portal to work properly in a contact-based authentication environment, users must edit the `rds_user` scenario and turn the flag for transferring contact data into RDS. This causes both Contact and Operator data from ServiceCenter to be pushed to the `RDS_USER` table. Refer to the BI Portal Administration Guide for more information about security issues.

Contact-based authentication environment

Note: Contact-based authentication only applies to ServiceCenter.

In a contact-based authentication environment, the `RDS_USER` table has both `Contacts` and `Operators` data in it. Therefore, the portal users are:

- `Operators` who appear with their user name as usual; for example, `Admin`.
- `Contacts` who appear with a suffix of the operator name they belong to. For example, if the Operator name is `Admin` and the Contact name is also `Admin`, then the user list in the portal shows the following information.

User name	Description
`Admin`	This is the Operator.
`Admin(Admin)`	This is the Contact and the Operator it belongs to is indicated in parenthesis after the Contact name; for example: `contact_name(operator_name)`.

Note: The Operator option in the `rds_user` scenario must never be turned off. Only the Contact option can be turned on or off.

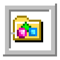
Understanding the structure of the RDS universe

The information in the Reporting Data Store (RDS) database is stored in a single universe called RDS. Whenever you run a base report in the BI Portal Reporting application, modify an existing one, or create a custom report, you use the data in the RDS universe (RDS_AC or RDS_SC).

The BI Portal hierarchy consists of universes, classes, and objects. A universe contains classes, which combine similar information into groups. The RDS universe includes a class for common objects for ServiceCenter called ServiceCenter Common Objects and other specific classes such as Service Management and Incident Management. AssetCenter Common Objects include specific classes such as Portfolio/Financial Management and Contract Management. Classes, which are similar to folders, are represented in the user interface by a folder icon. Classes can contain other classes and can also contain objects.

RDS elements

The RDS structure has four basic elements. You can identify each element by its icon.

Element	Description	Icon
Folders	Folders are a general grouping of data fields that do not map to anything in the database. Use folders to organize fields into meaningful groups.	
Dimensions	Dimensions are non-quantifiable attributes such as Name, Company, and Location. Typically, this data creates report sections or shows detail. Dimensions have folders. One folder contains the common details. These are fields that typically are most important to report designers, such as IDs, status, priority, open and close details, and so on. Other folders are grouped by area, such as relevant asset information, contact information, parts and labor. The Related Records folder maps associated records from other applications; for example, incidents tied to calls.	

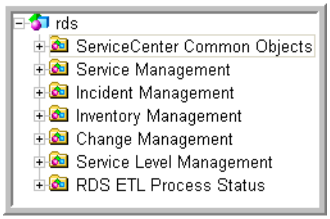
Element	Description	Icon
Measures	Measures contain common numeric data. They are quantifiable attributes that you include in totals, averages, and other metrics. You can use the numeric data (such as counts, summaries, finances, and elapsed times) in the same manner as dimensions. You also can use the data in roll-up or summary operations. The Aggregated Measures folder contains pre-calculated sums and averages, provided to add efficiency for reports only concerned with totals.	
Filters	Filters are pre-made common data screens, used to quickly construct limitations on the data displayed in the report. Most filters are self-explanatory. For example, the Closed Calls Only filter in Service Management shows only those calls that are closed.	

RDS object hierarchy

The RDS uses the basic elements to structure data. The following illustration is a typical RDS hierarchy.

AssetCenter

ServiceCenter

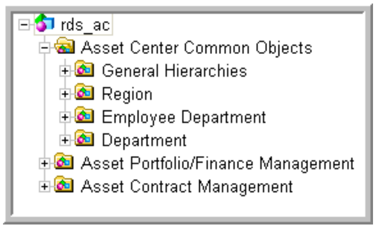


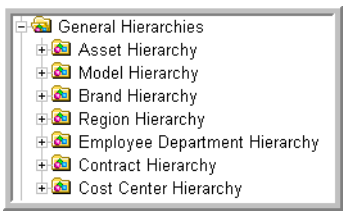
The root of the ServiceCenter hierarchy has seven folders, while AssetCenter has three folders.

AssetCenter RDS object	Description	ServiceCenter RDS object	Description
AssetCenter Common Objects	This folder contains fields from tables that are referenced from AssetCenter applications, such as Contacts, Assets, and Locations. Many of your reports use data from one AssetCenter application, supported by data from the Common Objects (see page 80) area.	ServiceCenter Common Objects	This folder contains fields from tables that are referenced from every ServiceCenter application, such as Contacts, Assets, and Locations. Many of your reports use data from one ServiceCenter application, supported by data from the Common Objects (see page 81) area.
Asset Portfolio/ Finance Management	This data maps directly to the Asset Portfolio/Finance Management system and its supporting tables.	Service Management	This data maps directly to the ServiceCenter call tracking system and its supporting tables.
Asset Contract Management	This data maps directly to the Asset Contract Management system and its supporting tables.	Incident Management	This data maps directly to the ServiceCenter ticket tracking system and its supporting tables.
		Inventory Management	This data contains advanced Asset handling data.
		Change Management	This data maps to the ServiceCenter Software Change Request (SCR) and Task areas.
		Service Level Management	This data maps to the ServiceCenter Service Level Management area, including SLA and contract management statistics.
		RDS ETL (Extracting, Transforming and Loading) Process Status	This data contains information about the mapping of data between ServiceCenter and the RDS. It includes when the data was last updated, relevant keys, and historical updates. Use this folder primarily for troubleshooting and logging, not for day-to-day reporting.

AssetCenter common objects

The Region, Employee Department, and Department folders map directly to their equivalent objects in AssetCenter. Additional Common Objects include General Hierarchies.



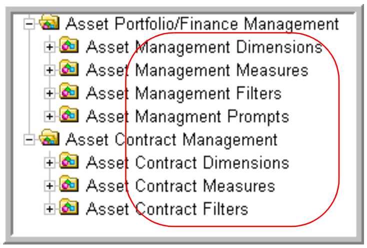
Common object	Description
General Hierarchies 	AssetCenter has six supporting tables that are self-referential; that is, some records are parents of other records in the same table. The Hierarchy folder maps to special tables that only exist in the RDS. In this case, the Asset, Model, Brand, Region, Employee Department, Contract, and Cost Center levels clearly display parent-child relationships. This facilitates OLAP reporting, where you can drill down on these fields. By default, 5 levels are defined. You can customize this, as needed.

AssetCenter applications

Currently, the RDS supports two AssetCenter applications.

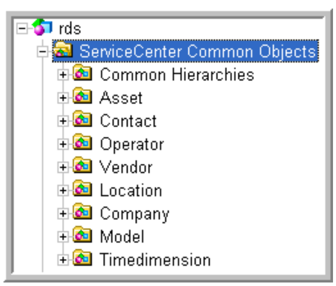
- Asset Portfolio/Finance Management
- Asset Contract Management

The AssetCenter application folders all conform to a basic standard hierarchy. Each main folder has at least three sub-folders: Dimensions, Measures, and Filters. See RDS elements on page 77 for more information about the elements.



ServiceCenter Common Objects

The Asset, Contact, Operator, Vendor, Location, Company, and Model Common Objects folders map directly to their equivalent objects in ServiceCenter. Additional Common Objects include Common Hierarchies and Timedimension.



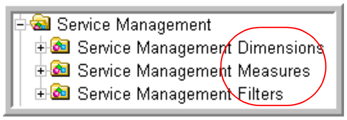
Common object	Description
Common Hierarchies 	ServiceCenter has four supporting tables that are self-referential; that is, some records are parents of other records in the same table. The Hierarchy folder maps to special tables that only exist in the RDS. In this case, the Asset, Location, Department, and Contact levels clearly display parent-child relationships. This facilitates OLAP reporting, where you can drill down on these fields. By default, 5 levels are defined. You can customize this, as needed.
Timedimension	Use this special generic Date–Time field for OLAP drill-downs.

ServiceCenter applications

Currently, the RDS supports five ServiceCenter applications.

- Change Management
- Incident Management
- Inventory Management
- Service Level Management
- Service Management

The ServiceCenter application folders all conform to a basic standard hierarchy. Each main folder has three sub-folders: Dimensions, Measures, and Filters. See RDS elements on page 77 for more information about the elements.



Report writing basics

Before you start designing a report, you must determine the type of report you want to create. To begin, answer the following three questions.

- Which AssetCenter or ServiceCenter application do you want to report on?
- Do you want a Base or OLAP report?
- Do you want to include historical data?

Which application?

This is straightforward. If you want information regarding calls, use Service Management. If you want to track tickets, use Incident Management. If you are looking for information regarding SCRs and tasks, use Change Management. For assets, use Inventory Management. And for response time and outages, use Service Level Agreement. To track assets, use Portfolio/Finance Management. To manage contract expenses, use Contract management.

Base or Online Analytical Process (OLAP)?

A base report is a typical display of data. Data is shown on a single record or a group of records, and usually displays information in detail. Examples of a base report show the full details, including notes, of an Incident, or show a list of all computers sorted by network and domain. This is the most common report to design.

OLAP reports deal with grouping and drilling. High-level information is cross-referenced by one or more dimensions, allowing users to drill on any dimension to show the information in greater granularity. For example, an OLAP report can contain a cross-tabular table showing the number of calls made by company and category, where the user drills down on company into department and contact, and on category into subcategory and product type.

Include historical data?

When an updated record changes a key field (for example, contact name), the RDS creates a new record rather than overwriting the old one. You can then track changes and do reports on these updates. Old records are marked as obsolete to distinguish them from the active data.

You must decide whether you want to exclude this historical data from your report.

Note: In the BI Portal 5.2 release, RDS is unable to keep historical and archived data on AssetCenter Portfolio records. This includes assets, computers, software installs, and portfolios with unique asset tags.

CHAPTER 5

Advanced Reporting Functions

This chapter addresses the following advanced reporting functions:

Who can use advanced reporting functions?

To use the WebIntelligence Reporting application, your system administrator assigns you user *capabilities* that grant you access to the application's various functions. The administrator can assign new capabilities if you need them.

Note: Only users with `BI_Create` or `BI_Admin` capability can create ad hoc reports using the RDS universe.

Running ad hoc queries to create custom reports

To create a custom report, you build and run an ad hoc query in the WebIntelligence Reporting application.

After you create a custom report, you can save it for personal use or publish it for others to see. See Publishing reports on page 66 for more information.

Note: You can migrate custom reports when you upgrade to a new release of BI Portal. Refer to the BI Portal Installation Guide for more information. After upgrading, you must redesign custom reports referring to clock management or root cause analysis attributes because of changes to the universe file.

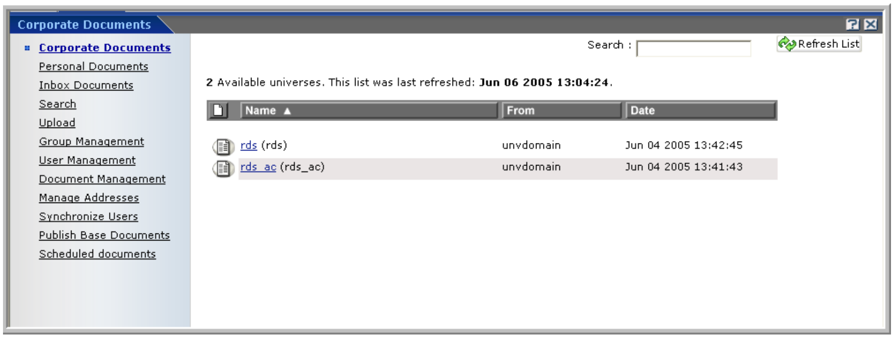
Using the WebIntelligence Reporting application

You can use the WebIntelligence Reporting application to build and run a query, and to view and format the report that shows the information returned by the query.

To use the WebIntelligence Reporting application to run a query:

1 From the **Corporate Documents**, **Personal Documents**, or **Inbox Documents** page, click **Create**.

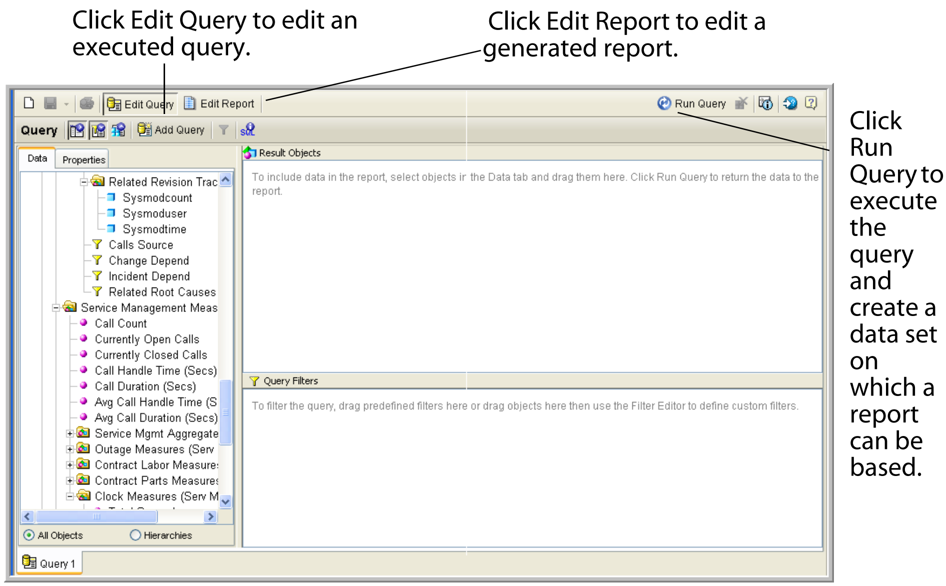
The BI Portal Reporting application lists the universes that are available for queries and reporting. Your BI Portal can have either or both of the following two universes: `rds` for ServiceCenter and `rds_ac` for AssetCenter.



The following examples use the `rds` universe, which is only for ServiceCenter data.

2 Click **rds**.

The WebIntelligence Reporting application opens in a new window in **Edit Query** mode. If prompted to download the java applet, click **Yes**.



In the left pane, the WebIntelligence Query Manager includes all the objects that you can include in your query. Objects are grouped in classes, which are similar to folders. If you do not see an object you want to use, open the folders that contain the object. See RDS elements on page 77 for more information about the types of objects in the WebIntelligence Reporting application.

You can divide the report into subsections according to object categories, or you can simply include objects and display their values in the report.

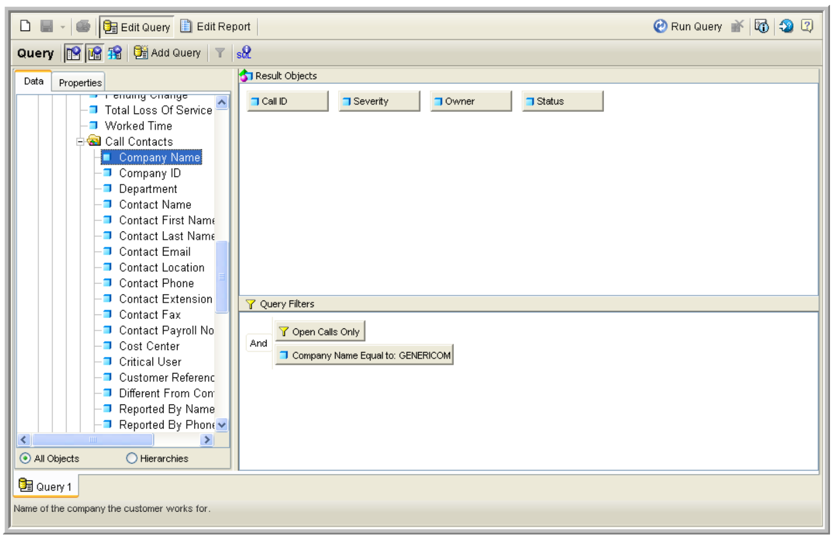
3 From the **Query Manager** left pane:

- Drag and drop the objects you want to include in your query to the **Result Objects** pane.

Note: While the new objects you added show up on the left pane, to see them on the actual report, you must drag the object and place it on the right location on the report in the right pane.

- Drag and drop filters to the **Query Filters** pane.

For example, the following query includes information about Service Management calls: the Call ID, Severity, Owner, and Status. The query filters only calls that are currently open from the GENERICOM company.



Note: The RDS is, by default, configured to keep historical entries for all records updated in the system. You can use these to create tracking and change reports. If you are not interested in historical data (that is, your report is only concerned with statistics about the current state of the system), you MUST add a filter to remove these extra records. If not, you will receive multiple copies of certain records and your results will be skewed.

In the Filters folder for each major application, there are pre-existing filters to remove historical records. Under Dimensions, **Ignore Historical Data** will filter out old records from your dimension objects. Under Measures, **Ignore Historical Data** will do the same for measure objects. To prevent erroneous statistics, add these filters to any report you create.

- Click Scope of Analysis Pane to reveal the analysis pane. 

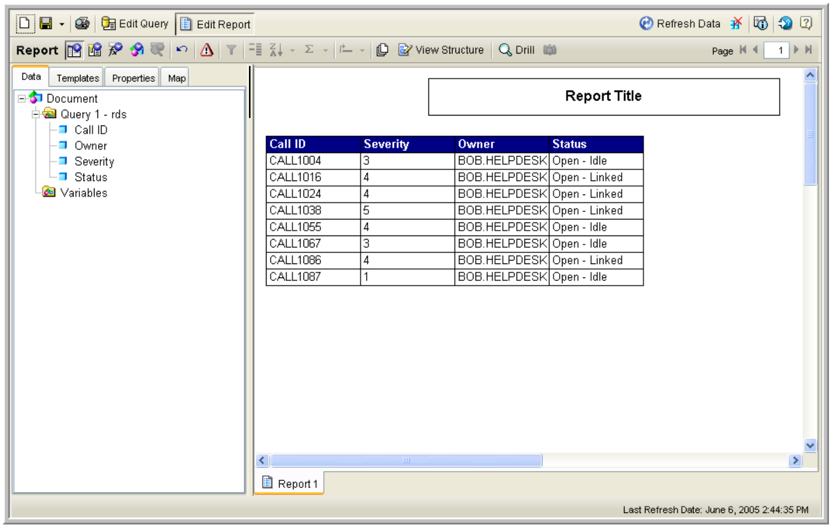
If you want to allow drill-down in your reports, set the drop-down list to the appropriate number of levels. By activating this feature, you can allow users to drill into data for further analysis. For example, the category field in ServiceCenter Incident Management is set to drill into sub-categories.

Note: Adding levels to analysis slows report processing. Always set this to the minimum level required.

4 Click **Run Query** to execute the query.

The report, based on your queries, opens on the right side of the form.

Edit Report is highlighted after you run the query.



The WebIntelligence Reporting application is now in **Edit Report** mode. Only those objects and filters included in the query are available in the Report Manager, which is now in the left pane.

5 To change the information you see in the report, click **Edit Query**, and do one of the following:

- To add objects, drag and drop from **Query Manager** to **Result Objects** and **Query Filters**, then click Run Query.

- To remove objects, drag and drop from **Result Objects** and **Query Filters** to **Query Manager**, then click Run Query.
- To start over, click the **New Document** icon.
    - Build an entirely new query.
    - Click **Run Query**.

Reformatting reports

After you create a custom report or generate a base report, you can change the report's appearance.

Use the BI Portal Reporting application to perform simple reformatting tasks on reports. For more information, see Editing a report in the BI Portal Reporting application on page 58.

To perform more advanced reformatting tasks, or to change the query on which any report is based, use the WebIntelligence Reporting application.

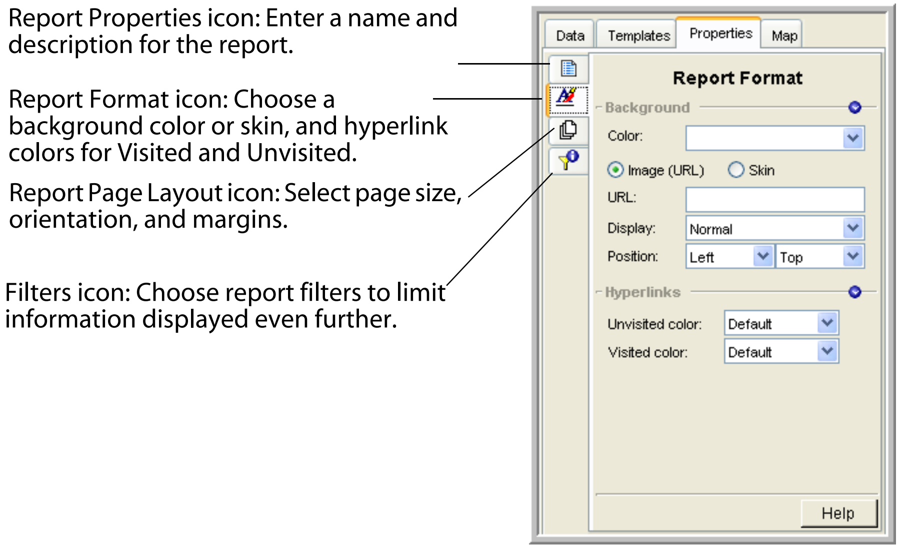
To edit a report in the WebIntelligence Reporting application:

1 Run a base or custom report.

2 Click **Edit** to open the WebIntelligence Reporting application.

In Edit Report mode, you can perform most of your report formatting tasks.

- Click the Properties tab to open the Report Format dialog box.



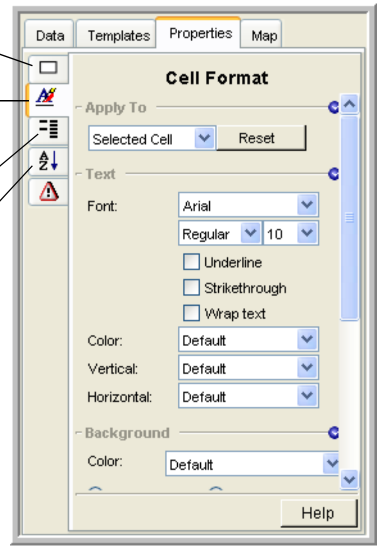
- Click inside the report to open the Cell Format dialog box.

Cell Properties button: Specify cell width, height, and other properties.

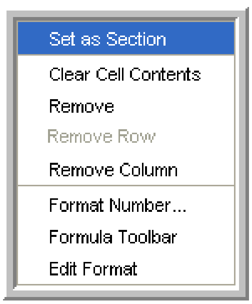
Cell Format button: Select font, style, color, border, and other text properties.

Break Properties button: Create section and page breaks when column values change.

Sort button: Sort the report in descending, ascending, or default sort order.



- Right-click a column to display a cell formatting shortcut menu.



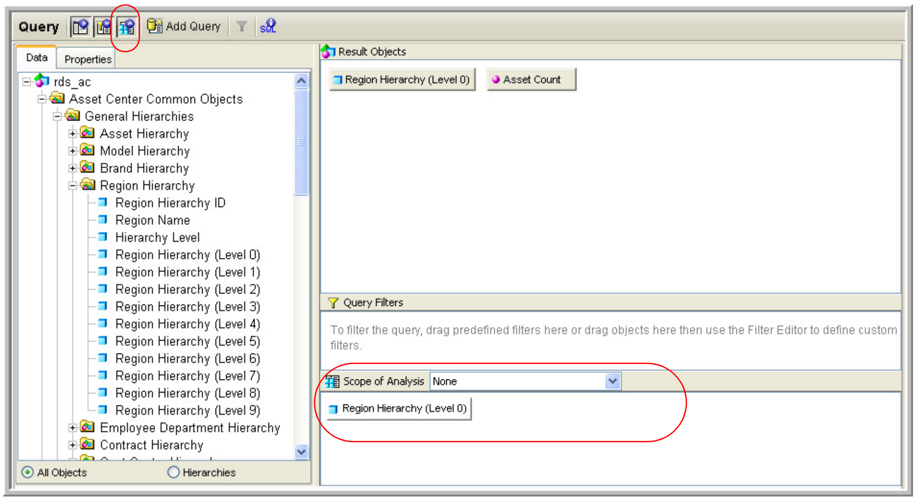
Using drill downs and Scope of Analysis

An important step in optimizing reports is to establish drill-down settings.

To establish drill-down settings:

1 Select the fields and filters for your report.

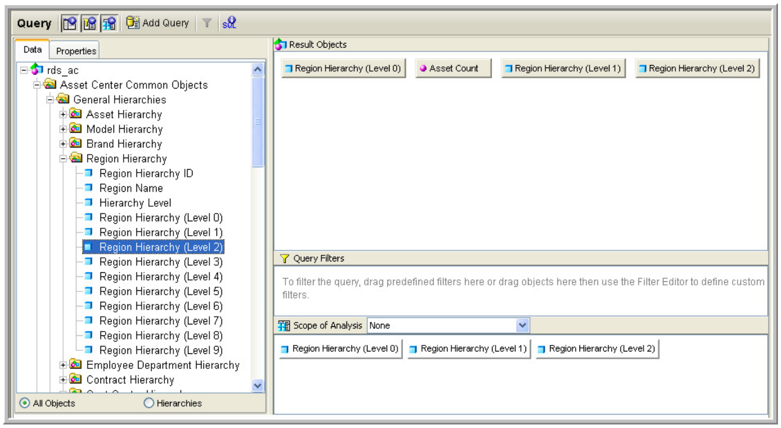
2 From the WebIntelligence Reporting application, click **Show/Hide Scope of Analysis Pane** to open the window where you configure drill-down settings . This example uses the `rds_ac` universe.



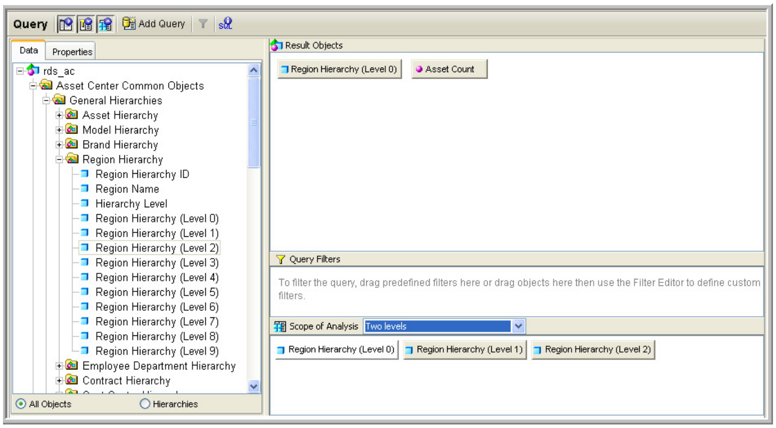
You see all the drillable fields. Refer to the Hierarchy section of the Business Objects documentation for more information about adding drill capability to a field.

The drop-down list has five settings.

Level	Description
None	This setting only uses fields that have been added to the **Result Objects** pane. Using the previous example, dragging **Region Hierarchy (Level 1)** and **Region Hierarchy (Level 2)** to the **Result Objects** pane automatically adds them to the **Scope of Analysis**. **Note:** When in this mode, drills only go as far as the fields chosen in the report. Activating the drill function on this report allows a user to drill from **Region Hierarchy (Level 0)** to **Region Hierarchy (Level 1)** to **Region Hierarchy (Level 2)**, then stop. It is NOT possible to drill to **Region Hierarchy (Level 3)**, even if the hierarchy in the universe allows it. This is the only setting that enforces this restriction.



Level	Description
One Level **Two Levels** **Three Levels**	Select this option to automatically add fields to the **Scope of Analysis** for all hierarchies defined in the universe. Fields shown in white also exist in the **Result Objects** pane. Those in grey are added only to the **Scope of Analysis**.



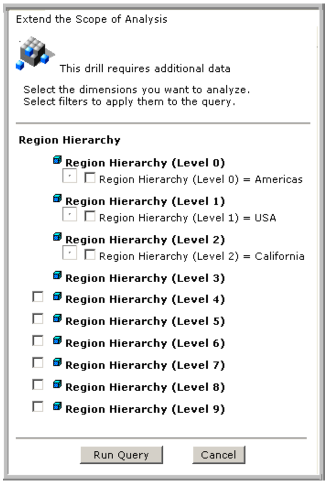
For example:

Selecting **One Level** adds **Region Hierarchy (Level 1)**.

Selecting **Two Levels** adds **Region Hierarchy (Level 1)** and **Region Hierarchy (Level 2)**.

Selecting **Three Levels** adds **Region Hierarchy (Level 1)**, **Region Hierarchy (Level 2)**, and **Region Hierarchy (Level 3)**.

Note: When in this mode, users can continue drilling beyond the fields listed here. When they reach the end of the list, they are prompted for further queries because the report needs to retrieve information not included in the original query.



Level	Description
Custom	Select this option to drag and drop fields on to the **Scope of Analysis** pane to establish customized drills. You automatically switch to this mode if you add or remove an object from this area. For example, you can drag **Region Hierarchy (Level 4)** to the right of **Region Hierarchy (Level 0)**. This creates a drill that skips the intermediate levels. **Note:** When in this mode, users can continue drilling beyond the fields listed here. When they reach the end of the list, they are prompted for further queries because the report needs to retrieve information not included in the original query.

Choosing a method

The setting you select depends on your specific circumstances. Setting scope to **None** prevents your users from seeing complex prompts, but may deny access to potentially valuable levels of granularity. Including all levels of your hierarchies in the scope gives your users full potential, but each new analysis item adds another field to be queried and grouped by. This can have a negative effect on performance.

For best results, do the following:

- Always check the Scope of Analysis pane when creating or altering a query. Purge any unnecessary fields that may remain from previous experiments to prevent querying of unwanted data.
- Set the level of your scope appropriately to the data. If a particular hierarchy almost never goes beyond three levels, add these levels to the scope and set the mode to **None**. If the data goes to the sixth level, but your average user is only concerned with the first three, set the scope to **Three Levels**, leaving open the option to go further, without bogging down your typical user with unwanted data.

Finding additional information about WebIntelligence

The WebIntelligence Reporting application is a very complex and powerful query and report generation tool. This guide demonstrates only a small subset of the functions that are available when building and running queries, and formatting reports. For complete information about the WebIntelligence Reporting application, click the **Help** icon within WebIntelligence or refer to the WebIntelligence User's Guide.

APPENDIX A

User Exercises

This appendix includes exercises that demonstrate how to perform tasks in BI Portal. The examples use the `rds` universe and ServiceCenter base reports. The goal is to show you BI Portal features and functionality, including:

- Accessing report data
- Creating and formatting reports
- Analyzing data

Accessing report data

This section presents a set of tasks that demonstrate how you access report data.

How to access report data:

1 Log in to BI Portal and click the **Reporting** tab to open the Reporting application.

2 From the Document Groups drop-down list, select **Inventory Mgmt**.

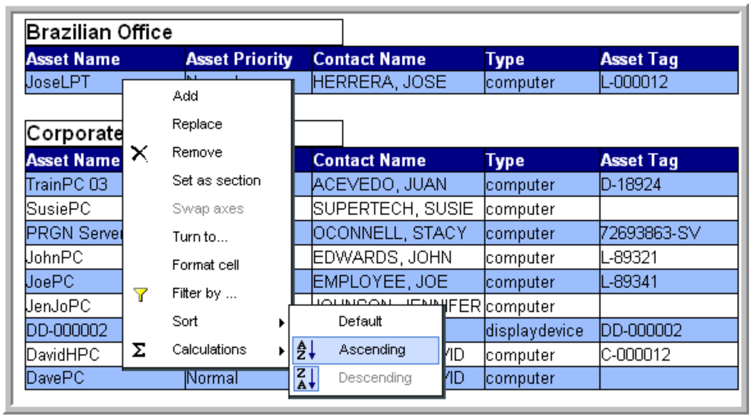
Click the Document Properties icon beside Categorization of Unavailable Assets to view the properties of this report.

3 Click **Back to Document List** to return to the document list.

4 Click **Categorization of Unavailable Assets** to run the report.

5 Scroll to the Corporate Headquarters table and sort the Asset Name column.

a Hold the cursor over the column or title and right-click to open the interactive menu.



b Click **Sort** > **Ascending** to sort the names from the shortcut menu.

6 Click **Refresh** to synchronize with current data in the database and recompile the report.

When you schedule a report to run automatically, you can specify how often you want to refresh the report. See Scheduling reports to run automatically on page 67 for more information about scheduling reports.

7 Click **View in PDF** to open the report as a PDF file.

a Click **View in HTML** to close the PDF and re-display the report in HTML format.

b Click **Refresh** to refresh the data.

The HTML format of the report that opens in your browser is dynamic and its data can be refreshed.

The PDF format is static and is used for printing.

8 Click **Maximize** to open a new instance of the browser with the report displayed in full-screen mode.

Because you open a new instance of the browser, you can leave the report open in Maximize mode and view multiple reports at one time.

9 Click **Close** to return to the report.

10 Click **Back** to display the entire document list.

Note: The browser Back button takes you to the previous page. The Back option at the top menu of the report takes you to the document list.

Creating and formatting reports

This section describes how to create a *Closed Tickets by Severity* query, format the report, generate a report based on the query, and add a chart.

Creating a query

You create a report by defining what objects you want to query. You move the objects from the Query Manager to the Results Objects pane and Query Filters pane.

To create a query:

1 Log in to the BI Portal Reporting application.

2 Click **Create**.

The BI Portal Reporting application displays a list of all available universes. See Universes, classes, and objects on page 40 and the **WebIntelligence User's Guide** for more information.

3 Click **rds** to select the RDS universe.

By default, the Edit Query page opens in the WebIntelligence Reporting application. See Understanding the structure of the RDS universe on page 76 for more information about the WebIntelligence Query Manager.

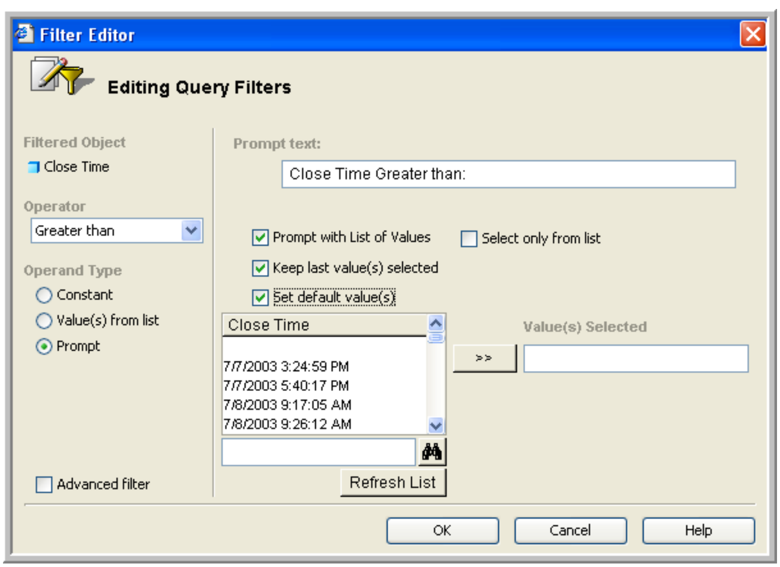
4 From the WebIntelligence Reporting application, do the following.

From Query Manager, expand	Drag this object	Drop to this pane
Incident Management > Incident Management Dimensions > Incident Details	Incident Number Severity Owner Name Close Time	Result Objects
Incident Management > Incident Management Dimensions > Incident Details > Incident Contacts	Company	Result Objects
Incident Management > Incident Management Measures	Incident Count	Result Objects
Incident Management > Incident Management Filters	Closed Incidents Only	Query Filters

5 Create a filter that prompts users to specify a minimum Close Time.

a Drag and drop the Close Time object in the Result Objects pane to the Query Filters pane.

The WebIntelligence Reporting application opens the Filter Editor dialog box.



From the Operator drop-down list, choose **Greater Than**.

In Operand Type, select **Prompt**.

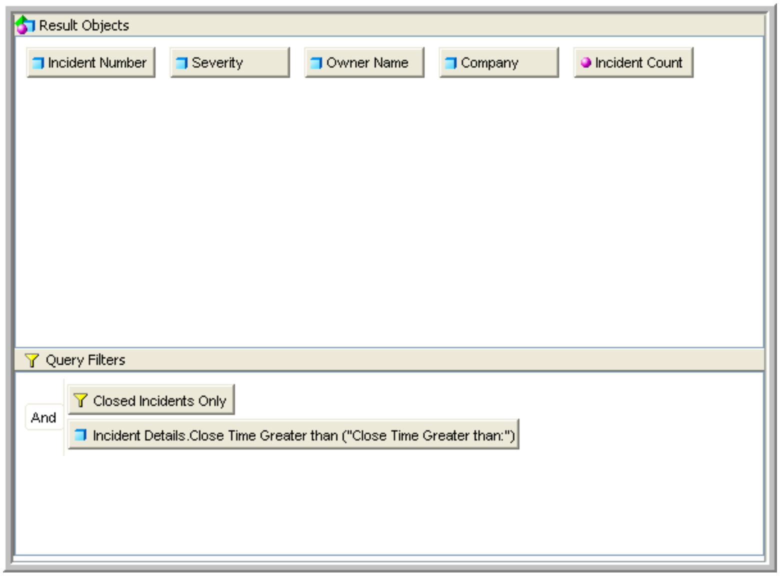
Select **Prompt with List of Values, Keep last value(s) selected, and Set default value(s)**.

In the **Values Selected** field, type a Close Time default value for the filter to use in case the user does not enter a value when prompted.

This example shows a default Close Time of 7/7/2003 3:24:59 PM. If the user does not enter a Close Time when prompted, the query will return information about only those Incidents with a Close Time later than 7/7/2003 3:24:59 PM.

b Click OK.

The Result Objects and Query Filters panes in the WebIntelligence Reporting application contain the following objects.



6 Click the **View SQL** button to examine the SQL code that you generated. 

The SQL Viewer contains the SQL that executes when you run the query.

7 Click **Close** in the SQL Viewer when you are satisfied with the SQL code.

Formatting a report

You can customize a report's appearance by changing the cell and table formats.

To format the report:

1. Using the query in Creating a query on page 102, create a section.

    a. Click **Edit Report** to switch to Edit Report mode.

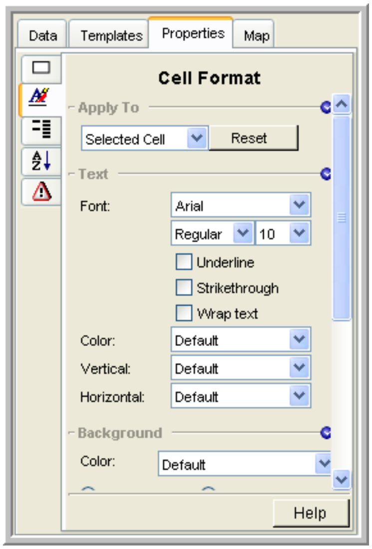
    b. Drag and drop **Owner Name** above the table to create a section.

       Report sections repeat once for each unique value. When you drag a field over to the left top side, you automatically create a section. If you do not want an object in the section, drag and drop it to the Report Manager on the left to remove it, and then delete the section.

2. Make the **Owner Name** section delineator into a section header.

    a. Click the Owner Name box above the table to highlight it.

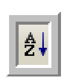
b Click the **Properties** tab in Report Manager to open the Cell Format dialog box.



c In the **Cell Format** dialog box, specify the font, color, and other properties of the section header.

3 Sort the report on the Severity column.

a With the Properties tab in the Report Manager selected, click the Severity column to highlight it.

b From the menu bar, click **Sort**. 

c In the Sort options, click **Ascending**.

4 Create a break on the Severity column.

Note: Whenever the value of a column with a break changes, a blank row and a new title bar are inserted to highlight the changed value. Breaks are used only on sorted columns.

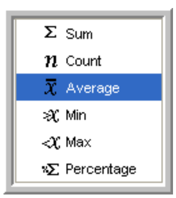
a With the **Properties** tab in the Report Manager selected, click the Severity column to highlight it.

b From the menu bar, click **Break**. 

5 Create a count on the Incident Count column.

a With the **Properties** tab in the Report Manager selected, click the Incident Count column to highlight it.

b From the menu bar, click **Insert Sum** and choose Count from the list.



6 Move the cursor into the table area to highlight the table.

Note: There is an empty row that has **Count:** on the left side. Now that you have the summary option on the Incident count column, it is safe to delete this row. To delete the row:

a Click **Count:** in the empty row to highlight it.

b Right-click to display the menu.

c Click **Remove Row** to delete the row.

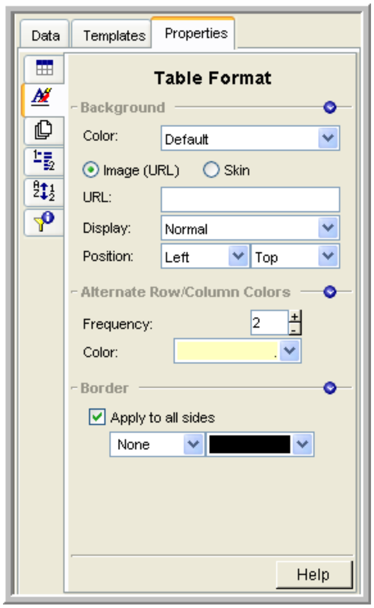
7 Format the table with alternate row coloring.

a With the **Properties** tab in the Report Manager selected, move the cursor near the table, but not within it, so that a border surrounds the table.

b Click to highlight the entire table.

Note: If you click within the table, you select a single field.

The Table Format dialog box opens.



c In the **Frequency** field, select **2** to alternate every other row.

d Choose a color to use in alternate rows.

Generating a report

After you define your query requirements, you are ready to run the report.

To generate a report:

1 Using the example in Creating a query on page 102, click **Edit Query**.

2 Click **Run Query** to run the query and generate a report.

Adding a chart

When you run the query, you see the report in View Results mode. To change the report, you first must switch to the View Structure mode.

1 Run a report (see the previous section, Generating a report).

2 Click **View Structure** to toggle to View Structure mode.

   You create new charts from View Structure mode.

3 To create a bar chart, do the following:

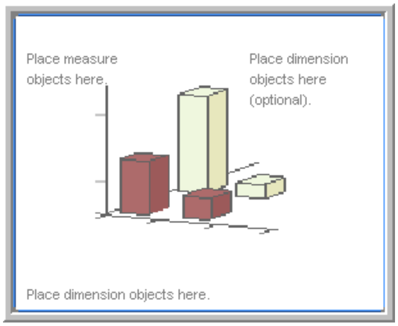
   a Click near, but not inside, the table structure to highlight it.

   b Drag the table structure to a lower location on the screen to make room for a chart.

   c Click the **Templates** tab in the Report Manager.

   d Click **Charts** > **Bar** > **3D Bar**.

   e Drag and drop the 3D Bar object to the space above the table structure.



   f Click the **Data** tab in the Report Manager.

   g Drag and drop the Severity object from the Report Manager to the portion of the bar chart labeled **Place dimension objects here**.

h Drag and drop the Incident Count object from the Report Manager to the portion of the bar chart labeled **Place measure objects here**.

i Click View Results to display the bar chart and reports.

4 Change the chart from a bar chart to a pie chart.

a Click the **Templates** tab in the Report Manager.

b Expand the Pie folder.

c Drag and drop the Pie object to the chart.

The chart becomes a pie chart.

5 Add a blank cell that contains a title for the report.

a Expand the Free-Standing Cells folder.

b Expand the Formula and Text Cells folder.

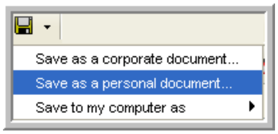
c Drag and drop the Blank Cell object to the report, above the pie chart.

d Re-size the blank cell and center it on the report. When the blank cell is highlighted, the Formula Editor is available.

e Type **Closed Tickets by Severity** as the title for this report.

f Click **Validate** to insert the title into the blank cell. 

6 From the menu bar, click the down-arrow beside **Save** to open the Save menu.



7 Choose Save as a personal document, type a name, and click **OK**.

Analyzing data

This section describes how to create and view Online Analytical Process (OLAP) reports. These reports, which deal with grouping and drilling, present high-level information that is cross-referenced by one or more dimensions. You drill on any dimension to show the information in greater granularity.

Creating an OLAP report

Follow these steps to create an OLAP report where you can drill into the data.

1 In the BI Portal Reporting application, click **Create**.

2 In the WebIntelligence Reporting application, create a new query that contains the following objects.

From Query Manager, expand	Drag this object	Drop to this pane
ServiceCenter Common Objects > Common Hierarchies > Location Hierarchy	Level 0 Name	Result Objects
Service Management > Service Management Measures	Call Count	Result Objects
Incident Management > Incident Management Measures	Incident Count	Result Objects
Inventory Management > Inventory Management Measures	Asset Count	Result Objects

3 Create a new table block by copying the existing one.

  a Click **Edit Report**.

  b To create a new table block, drag and drop the Objects folder in the Report Manager to the report, below the existing table block.

4 Drag and drop one or both table blocks to align them and to make sufficient space for a bar chart.

5 Click the **Templates** tab in the Report Manager.

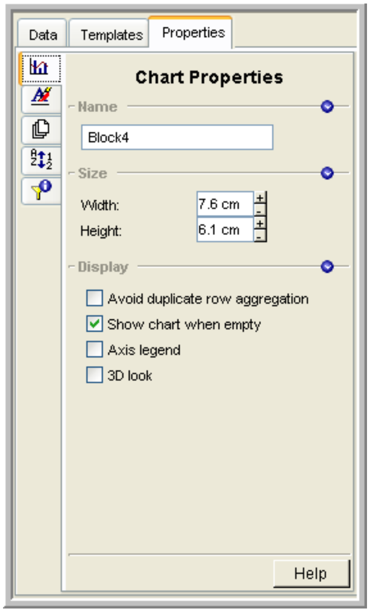
  a Expand the Charts folder.

  b Expand the Bar folder.

  c Drag and drop the Vertical Grouped object to the table block that you want to change into a bar chart.

  d Click the bar chart to select it.

6 Click the Properties tab to open the Chart Properties dialog box.



7 Check **Axis legend** and **3D look**.

8 Click **Edit Query** > **Run Query** to execute the query and generate the report and bar chart.

9 Hide X-axis and Y-axis labels.

  a In Edit Report mode, right-click the chart and choose **Edit Format**.

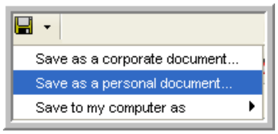
  b From the **Apply To** drop-down list in the Chart Format dialog box, select **X Axis Label**.

  c Clear the **Show Object Name** check box.

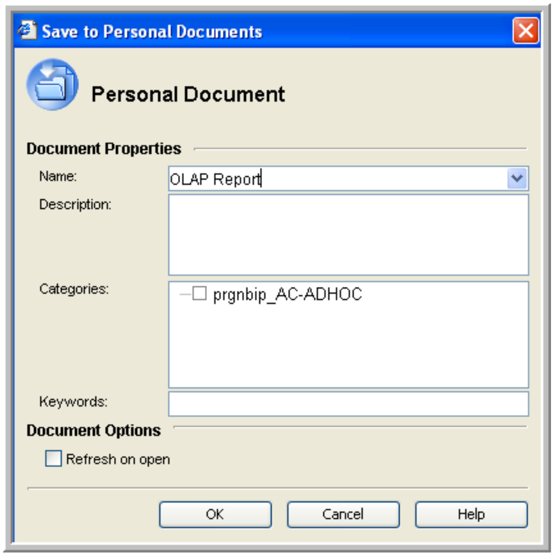
  d From the **Apply To** drop-down list in the Chart Format dialog box, select **Y Axis Label**.

  e Clear the **Show Object Name** check box.

10 From the menu bar, click the down-arrow beside **Save** to open the Save menu.



11 Choose **Save as a personal document**.



a Type **OLAP Report** in the **Name** field.

b Click **OK**.

Viewing the OLAP report

After you run a report, you can drill to the next level of information to view additional data that is not initially displayed when you view a document. See Drilling into the report on page 53 for more information.

To view the OLAP report:

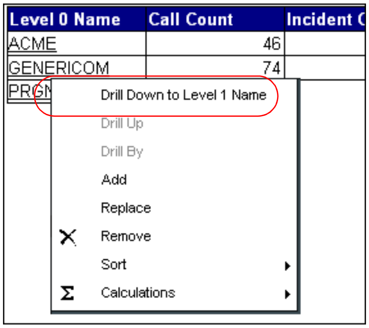
1 Log in to BI Portal.

2 Click **Personal Documents** > **OLAP report** to open the report that you created and saved (see Creating an OLAP report on page 111).

3 Click **Drill.**

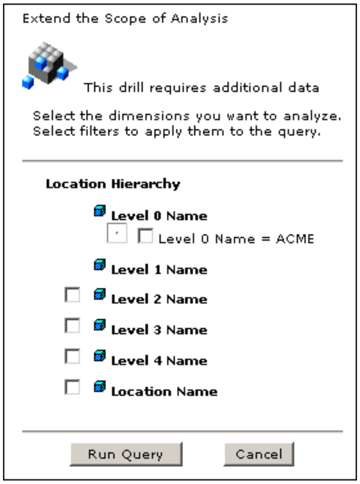
The values in the report are now underlined hyperlinks.

a To drill down, hold the cursor over a hyperlink field and click **Drill Down to Level 1 Name** from the shortcut menu.



Down is the next lower level field.

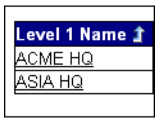
b To drill further, select a **Level** or **Location Name** and click **Run Query**.



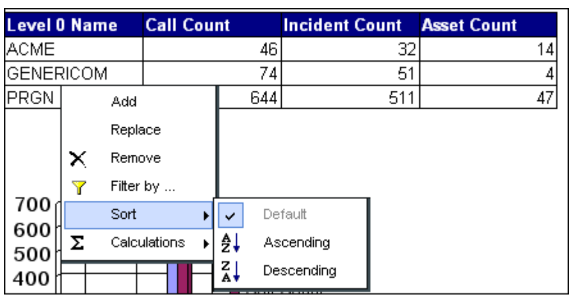
Note: You drill up by levels. When you reach the second-highest level, the context screen does not provide a selection option because only the highest level remains. For example, the location levels might be Continent, Country, State, County, City. If you are at the Country level, you do not see the option to select Continent because by default, that is the only level to which you can drill up.

c To drill up, do one of the following:

- Hold the cursor over a hyperlink field and right-click, then select **Drill Up to Level 0 Name** from the shortcut menu.
- Click the up arrow in the column title.



4 To sort the report by a column, hold the cursor over the column or title, then right-click and select **Sort** > **Ascending** (or **Descending**) from the shortcut menu.



5 To filter the report and display only specified values, hold the cursor over the column, then right-click and select **Filter by** from the shortcut menu.

6 Click **End Drill** to return to the report.

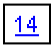
B Base Reports for ServiceCenter

APPENDIX

This appendix contains the base reports and displays the queries using sample data.

The following table contains some of the navigation features in these reports.

Navigation feature	Icon	Description
Banner		The banner at the top of the report contains the report name and page that you are viewing. Click the triangles to the right and left of the page number to advance and go back one page at a time. Click the left-most triangle to return to the first page; click the right-most triangle to go to the last page.
Hand		Right-click the hand at any location to open the interactive menu. When you are at the lowest level of the hierarchy, the hand does not appear.
Magnifier icon		When not in drill mode: Click the magnifier icon to *drill through* to another report. Click the tabs at the bottom of the report to view the report data by different fields. Use the browser Back button to return to the original report. Use the Back option on the report to return to the Corporate Documents list.

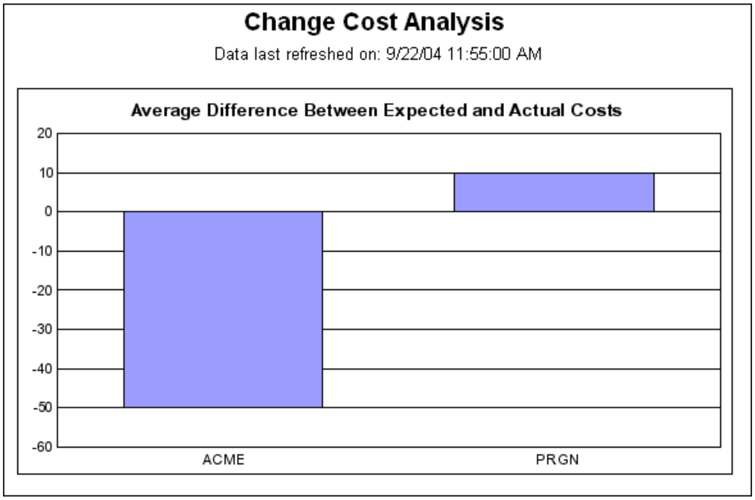
Navigation feature	Icon	Description
Report tabs		Tabs are underlined text at the bottom of the report. Click the tab to view the report.
Underlined text or numbers in tables	 	When in drill mode: Click the underlined area to drill down one level. Click the arrow beside the area to go up one level. **Note:** Underlined information in a table cell indicates that you can drill down to another level.
Up arrow		When in drill mode, go up one level in the hierarchy.

Base reports for Change Management

These reports provide information to help you manage change requests in your organization.

Change Cost Analysis

This bar chart lists differences between expected and actual costs for changes, grouped by Company.



Failed Changes

This report provides a detailed listing of all Changes that were backed out or given an incomplete Completion Code.

Failed Changes

Data last refreshed on: 7/7/04 2:38:10 PM

Change Number: C3

Description: (none)

Category: RFC

Planned Start: Jul 8, 2003 12:00:00 PM

Current Phase: RFC Implementation **Approval Status:** approved

Closing Comments:

(none)

Reason Marked As Failed: Backed Out

Tasks Under Change

This report provides a detailed listing of all Tasks under the user-specified Change number.

Tasks Under Change C11

Data last refreshed on: 7/7/04 2:39:42 PM

T5

Install IIS and update patches.

Planned Dates: Jul 10, 2003 8:00:00 AM -- Jul 11, 2003 12:00:00 PM

Category:	Installation	**Requested By:**	
Priority:	1	**Contact Name:**	
Current Phase:	Installation	**Coordinator:**	MAX.MANAGER
Risk Level:	3	**Assigned To:**	LAN SUPPORT 1
Status:	closed		

Install local web server.

T6

Create user profiles and access rights to wesite.

Planned Dates: Jul 10, 2003 8:00:00 AM -- Jul 11, 2003 12:00:00 PM

Category:	Security	**Requested By:**	
Priority:	1	**Contact Name:**	MUSER, AL
Current Phase:	Security	**Coordinator:**	MAX.MANAGER
Risk Level:	3	**Assigned To:**	SYSTEMS SUPPORT 2
Status:	closed		

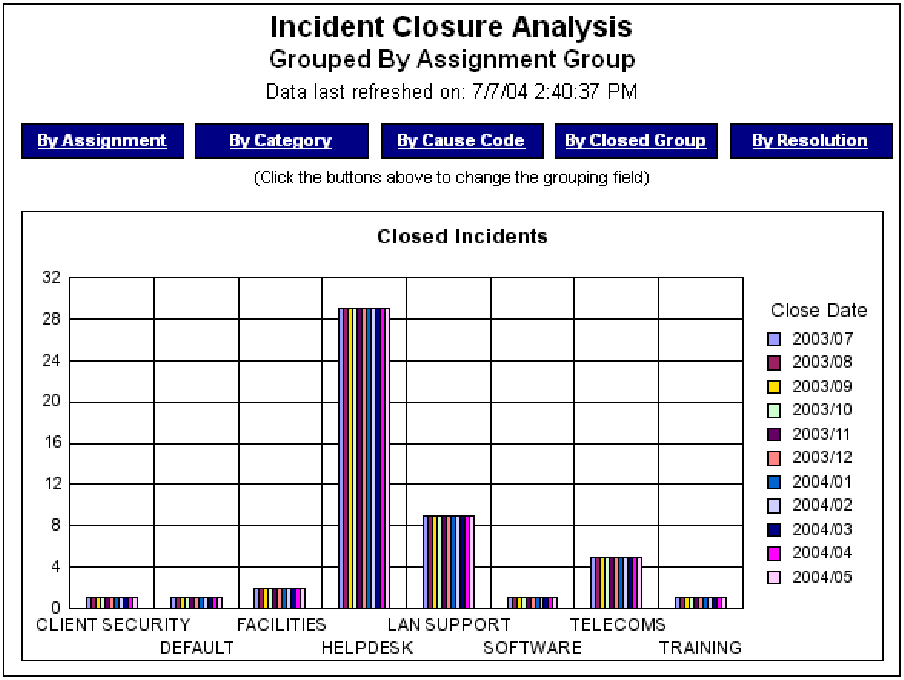
Install local web server.

Base reports for Incident Management

These reports provide information to help you manage service call incidents in your organization.

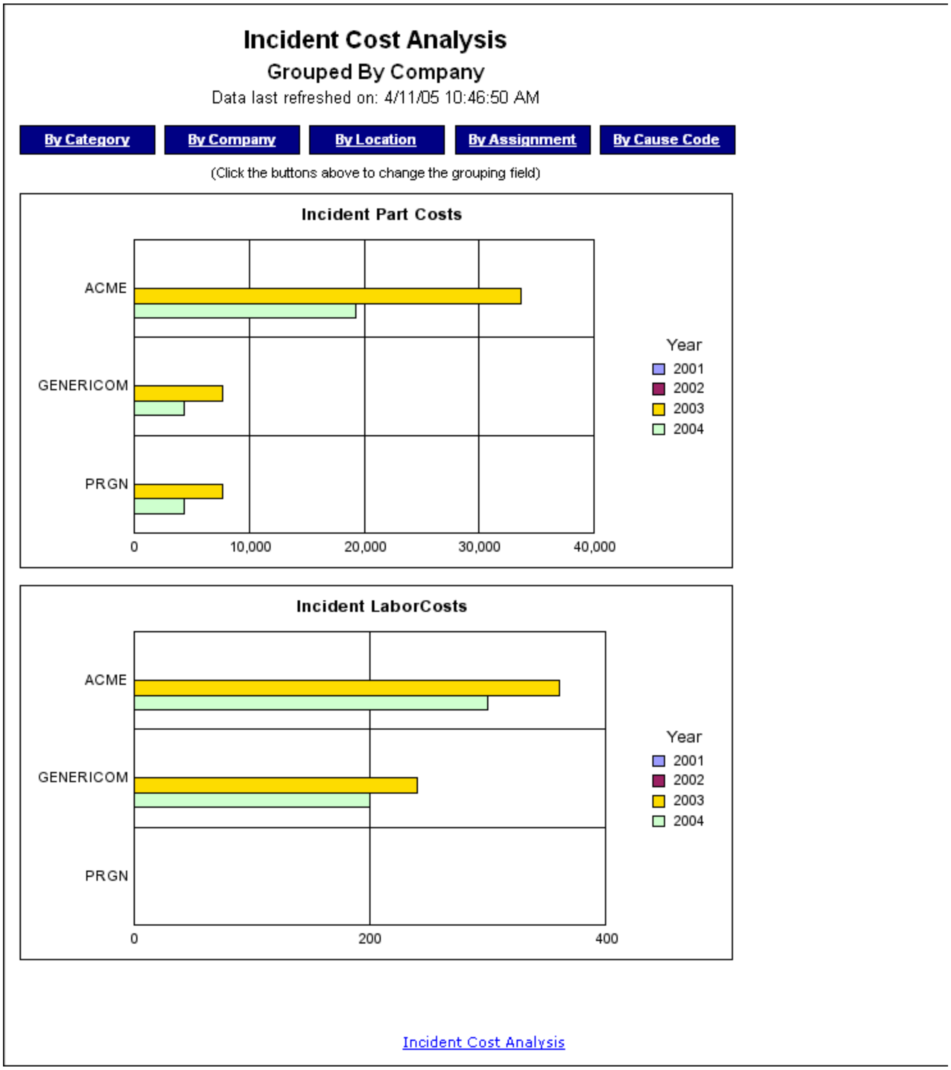
Incident Closure Analysis

This report is a bar chart summary of closed incidents based on one of the following fields: Assignment Group, Category, Cause Code, Closed Group, or Resolution.



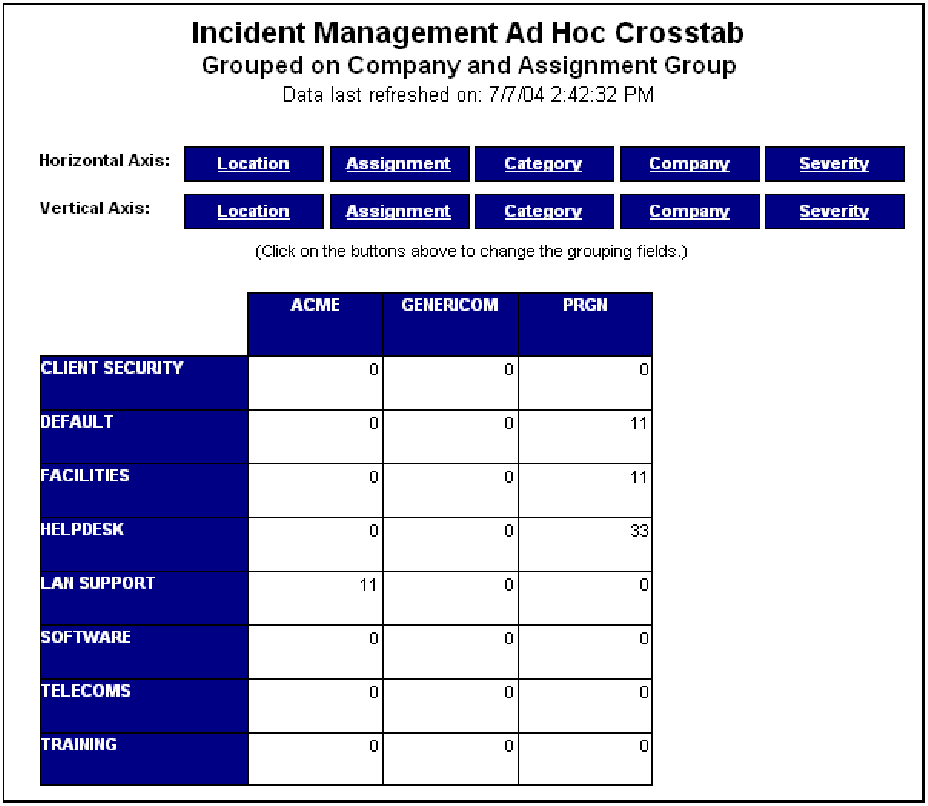
Incident Cost Analysis

This report provides a pair of bar charts listing the Parts and Labor costs associated with Incidents. These costs can be grouped based on user selection by Company, Location, Assignment Group, Category, or Cause Code.



Incident Management Ad Hoc Crosstab

This crosstab report is a summary of all open Incidents grouped by any two of the following user-selectable fields: Assignment Group, Category, Company, Location, and Severity.



Incident Management Ad Hoc Crosstab

Grouped on Company and Assignment Group

Data last refreshed on: 7/7/04 2:42:32 PM

Horizontal Axis: Location | Assignment | Category | Company | Severity

Vertical Axis: Location | Assignment | Category | Company | Severity

(Click on the buttons above to change the grouping fields.)

	ACME	GENERICOM	PRGN
CLIENT SECURITY	0	0	0
DEFAULT	0	0	11
FACILITIES	0	0	11
HELPDESK	0	0	33
LAN SUPPORT	11	0	0
SOFTWARE	0	0	0
TELECOMS	0	0	0
TRAINING	0	0	0

Base reports for Inventory Management

These reports provide information to help you manage assets in your organization.

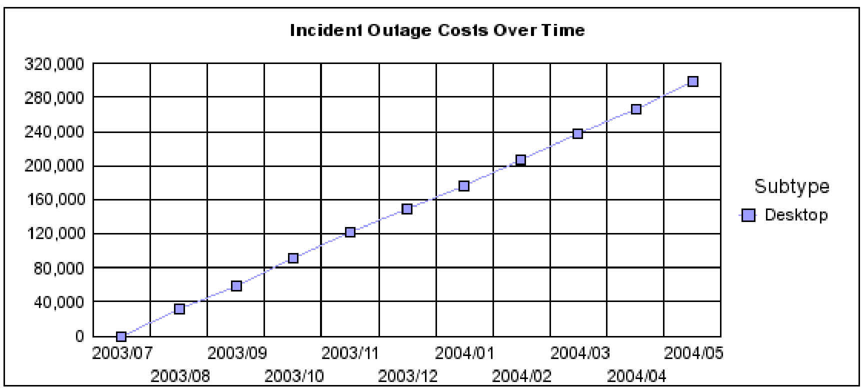
Assets by Age

This report displays a line graph with a table and is an analysis of the outage costs over time for all assets, grouped by the amount of time since installation.

Assets By Age

Data last refreshed on: 7/7/04 3:14:39 PM

700 to 799 days old



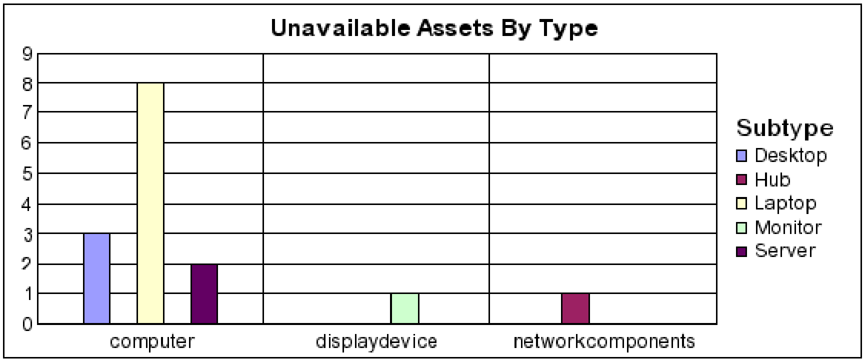
Subtype	Outage Month	Outage Costs
Desktop	2003/07	$0
Desktop	2003/08	$31,680
Desktop	2003/09	$59,040
Desktop	2003/10	$90,720
Desktop	2003/11	$122,400
Desktop	2003/12	$149,760
Desktop	2004/01	$175,680
Desktop	2004/02	$205,920
Desktop	2004/03	$237,600
Desktop	2004/04	$266,400
Desktop	2004/05	$298,080
	Sum:	**$1,637,280**

Categorization of Unavailable Assets

This report displays a bar chart with a table and is a summary of unavailable assets (due to repair, upgrade, or move) grouped by type.

Categorization of Unavailable Assets

Data last refreshed on: 8/10/04 2:11:52 PM



ACME

ACME HQ East

Asset Name	Asset Priority	Contact Name	Type	Asset Tag
ACME PC 0016	Normal	IRWIN, JONATHON	computer	ACM-LPT-0016

Chicago

Asset Name	Asset Priority	Contact Name	Type	Asset Tag
ACMEserver002	Normal	MUSER, AL	computer	

PRGN

Brazilian Office

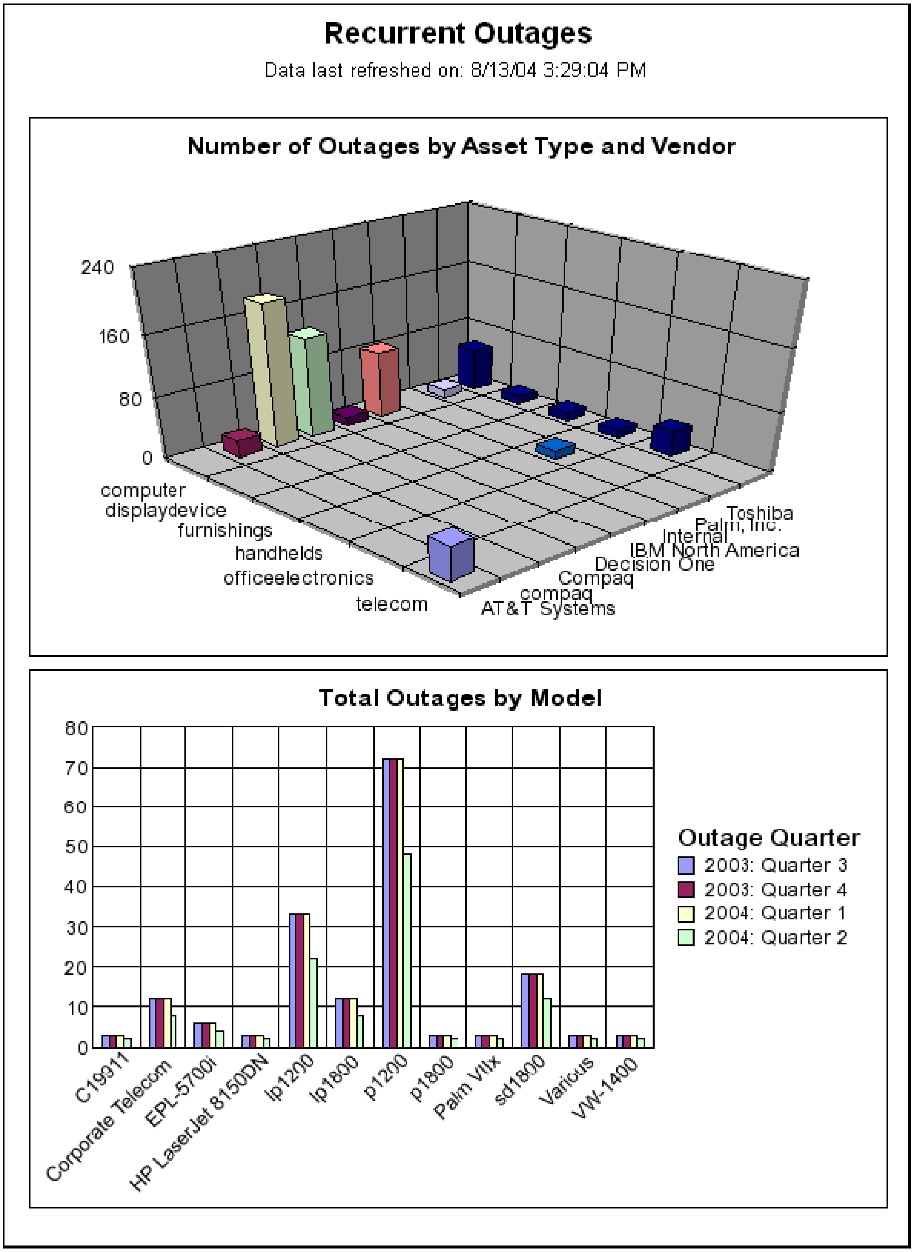
Asset Name	Asset Priority	Contact Name	Type	Asset Tag
JoseLPT	Normal	HERRERA, JOSE	computer	L-000012

Corporate Headquarters

Asset Name	Asset Priority	Contact Name	Type	Asset Tag
DavePC	Normal	HENNESEY, DAVID	computer	
DavidHPC	Normal	HENNESEY, DAVID	computer	C-000012
DD-000002	Normal	MANAGER, MAX	displaydevice	DD-000002
JenJoPC	Normal	JOHNSON, JENNIFER	computer	
JoePC	Normal	EMPLOYEE, JOE	computer	L-89341
JohnPC	Normal	EDWARDS, JOHN	computer	L-89321
PRGN Server 0001	CRITICAL	OCONNELL, STACY	computer	72693863-SV
StacyPC	Normal	OCONNELL, STACY	computer	C-28190

Recurrent Outages

This report displays a pair of bar charts that summarize asset downtime, cross-referenced once by Asset Type and Vendor, and again by Model over time.



Base reports for Root Cause Analysis

These reports provide information to help you manage incident root causes.

Root Cause Analysis Recommendations

This table, grouped by category, displays all Incidents NOT associated with a root cause. Any category comprising more than the user-specified percent of those tickets are flagged as recommended for Root Cause Analysis.

Root Cause Analysis Recommendations

Threshold of 10%

Data last refreshed on: 8/5/04 4:37:14 PM

Category	Subcategory	Percentage	Recommendation
business applications	client dependent	7.92%	Not Required
business applications	enquiry	0.29%	Not Required
client system	hardware	16.72%	Analysis Recommended
client system	software	16.72%	Analysis Recommended
enquiry	business applications	1.61%	Not Required
enquiry	client system	1.91%	Not Required
network	lan	4.11%	Not Required
network	remote communications	3.67%	Not Required
network	wan	0.59%	Not Required
other	client dependent	3.52%	Not Required
printing	consumables	3.23%	Not Required
printing	hardware	3.52%	Not Required
printing	software	1.61%	Not Required
security	virus infection	3.23%	Not Required

Root Cause Cost Analysis

This table is a listing of the Parts and Labor costs for all Incidents associated with root causes, grouped by cause.

Root Cause Analysis Recommendations

Threshold of 10%

Data last refreshed on: 8/5/04 4:37:14 PM

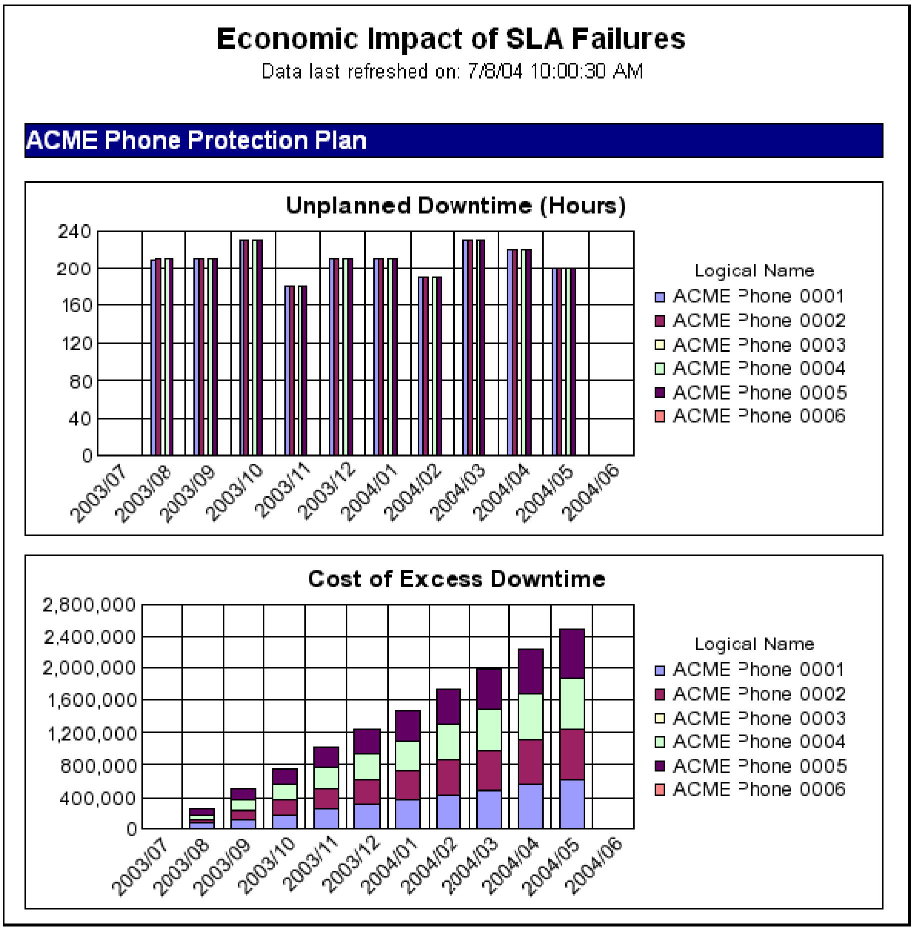
Category	Subcategory	Percentage	Recommendation
business applications	client dependent	7.92%	Not Required
business applications	enquiry	0.29%	Not Required
client system	hardware	16.72%	Analysis Recommended
client system	software	16.72%	Analysis Recommended
enquiry	business applications	1.61%	Not Required
enquiry	client system	1.91%	Not Required
network	lan	4.11%	Not Required
network	remote communications	3.67%	Not Required
network	wan	0.59%	Not Required
other	client dependent	3.52%	Not Required
printing	consumables	3.23%	Not Required
printing	hardware	3.52%	Not Required
printing	software	1.61%	Not Required
security	virus infection	3.23%	Not Required

Base reports for Service Level Management

These reports provide information to help you manage service level agreements (SLA).

Economic Impact of SLA Failures

This report displays a pair of bar charts listing the time and money costs incurred by assets that suffered downtime in excess of SLA thresholds, grouped by SLA name.



Service Contract Cost Analysis

This table lists each Service Contract, and the monthly Parts and Labor costs for each.

Service Contract Cost Analysis

Data Refreshed On 8/24/04 3:27:06 PM

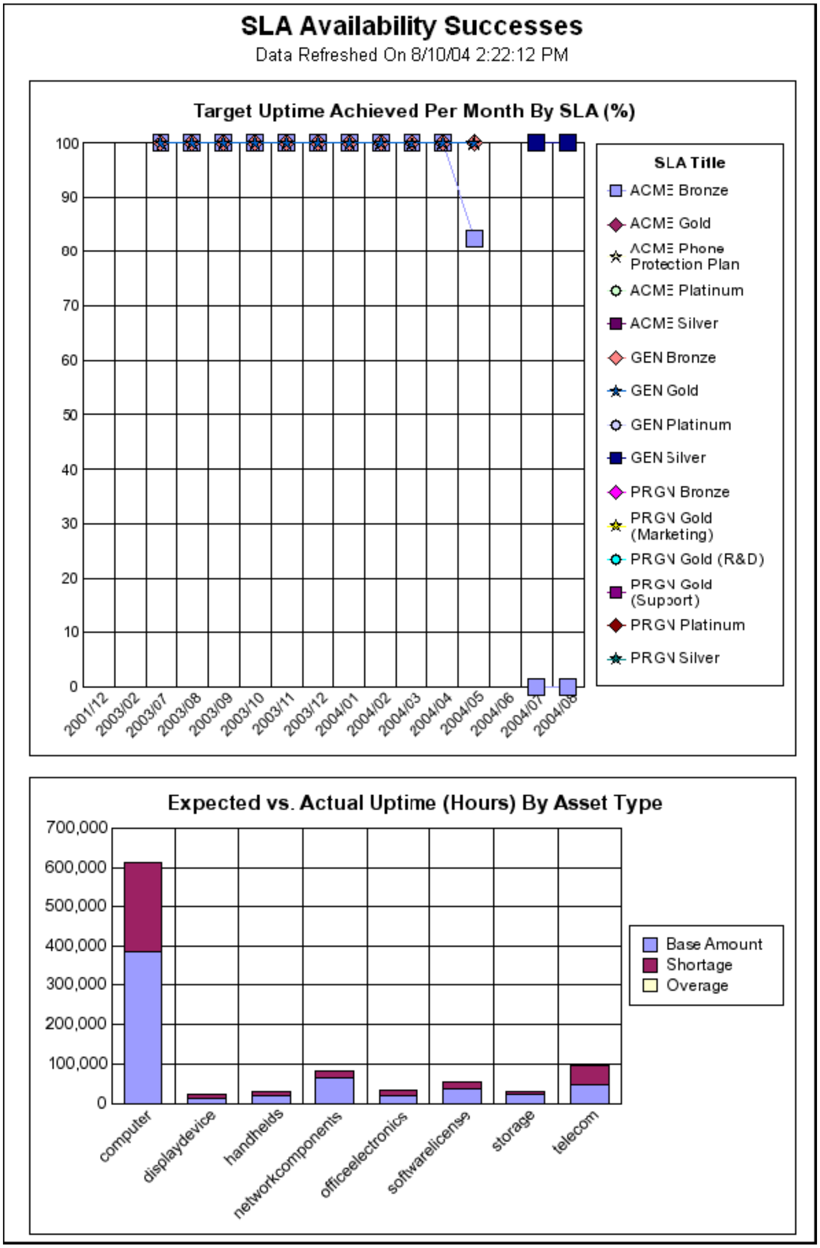
PRGN VIP SERVICE

Month Worked	Labor Cost
2003/07	715
2003/08	815
2003/09	765
2003/10	765
2003/11	915
2003/12	870
2004/01	765
2004/02	765
2004/03	805
2004/04	930
2004/05	305

Month Used	Part Costs

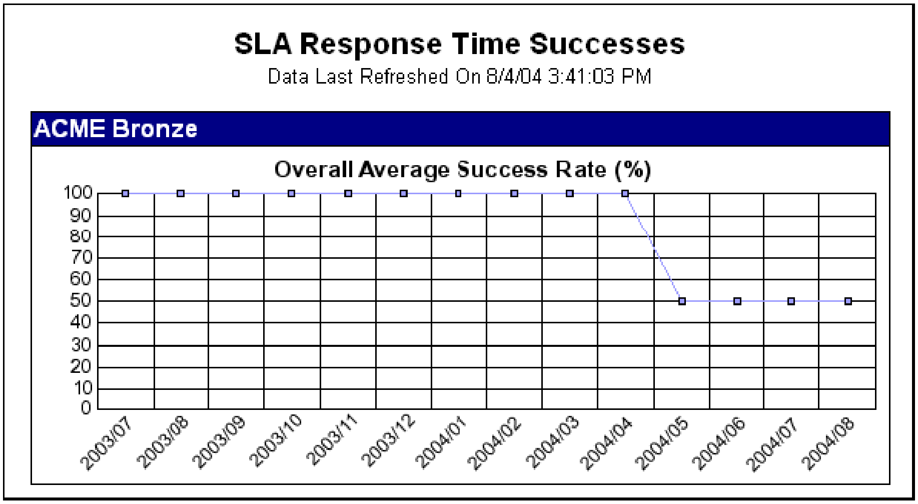
SLA Availability Successes

This report contains a line graph and stacked bar chart with measurements of how well SLA availability requirements have been met.



SLA Response Time Successes

This report is a line graph with measurements of how well SLA response times have been met.

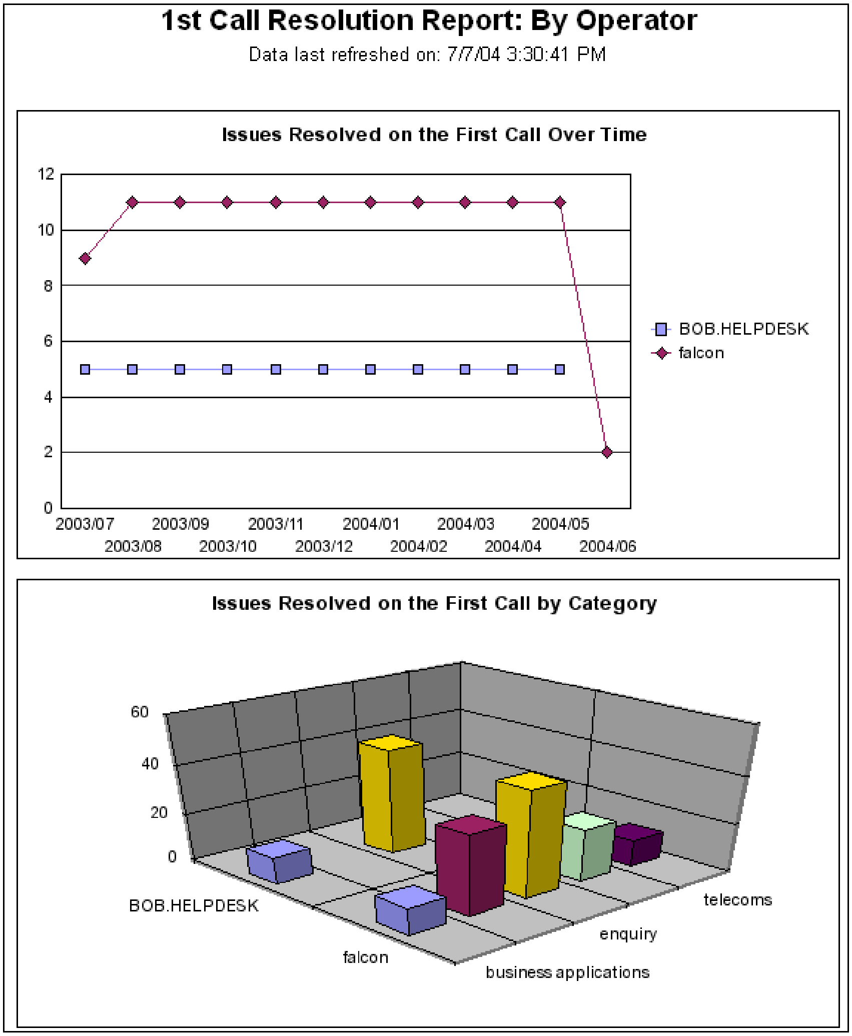


Base reports for Service Management

These reports provide information to help you manage service calls in your organization.

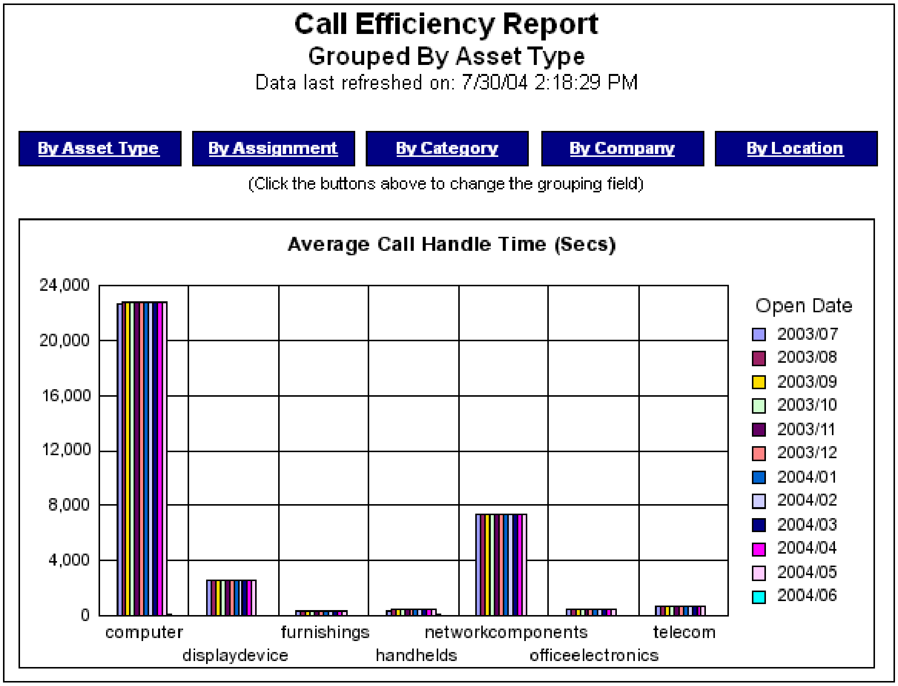
1st Call Resolution Report by Operator

This report displays a line graph and 3-D bar chart of an analysis of the percentage of calls solved without creating Incidents or Changes.



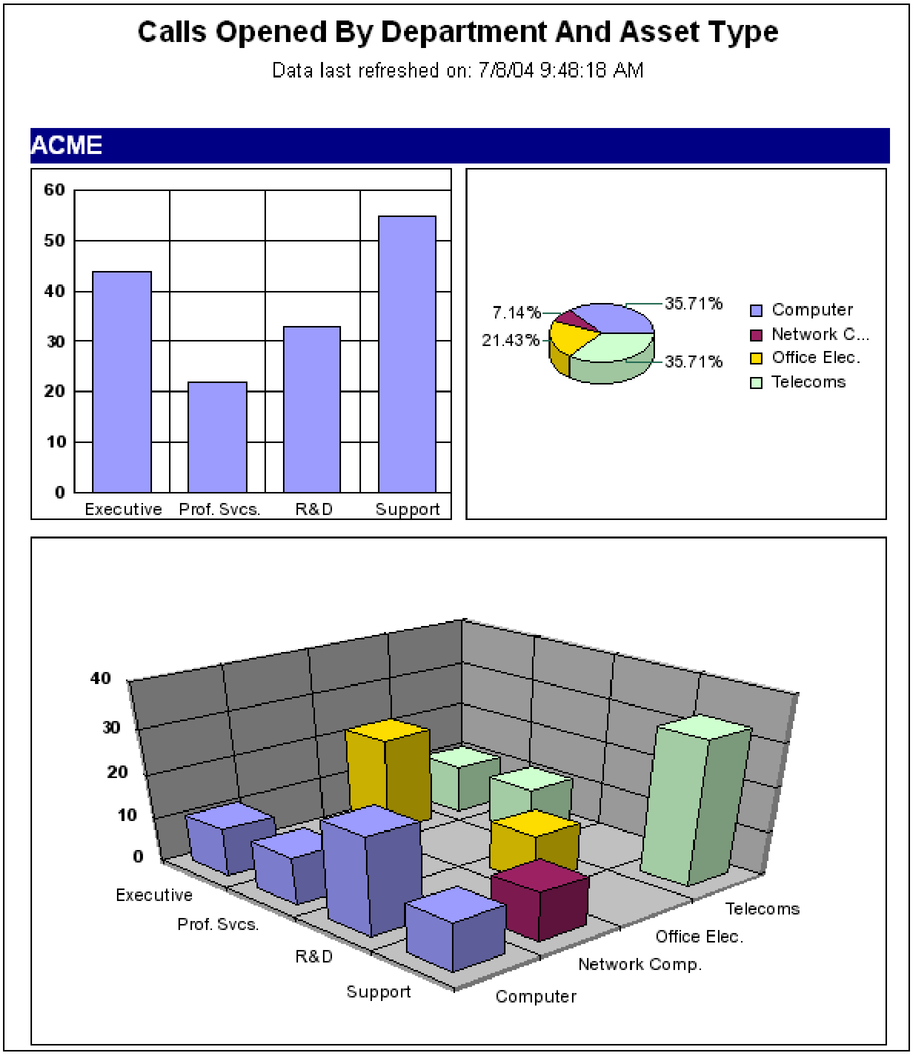
Call Efficiency Report

This bar chart displays an average of the phone call time based on one of the following fields: Asset Type, Assignment Group, Category, Company, Location.



Calls Opened by Department and Asset Type

A bar chart, pie chart, and 3-D bar chart display a summary of the number of calls in the system cross-referenced by the Department making the call and the type of Asset involved.



Service Management Ad Hoc Crosstab

This report is a crosstab summary of all open Calls grouped by any two of the following user-selectable fields: Assignment Group, Category, Company, Location, and Asset Type.

Service Management Ad Hoc Crosstab

Grouped on Company and Asset Type

Data last refreshed on: 8/19/04 4:24:08 PM

Horizontal Axis: Asset Type | Assignment | Category | Company | Location

Vertical Axis: Asset Type | Assignment | Category | Company | Location

(Click on the buttons to change the grouping fields.)

	ACME	GENERICOM	PRGN
computer	11	0	66
displaydevice	0	0	0
furnishings	0	0	0
handhelds	0	0	0
networkcomponents	0	0	0
officeelectronics	0	0	0
telecom	0	0	0

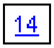
APPENDIX C

Base Reports for AssetCenter

This appendix contains the base reports and displays the queries using sample AssetCenter data.

The following table contains some of the navigation features in these reports.

Navigation feature	Icon	Description
Banner		The banner at the top of the report contains the report name and page that you are viewing. Click the triangles to the right and left of the page number to advance and go back one page at a time. Click the left-most triangle to return to the first page; click the right-most triangle to go to the last page.
Hand		Right-click the hand at any location to open the interactive menu. When you are at the lowest level of the hierarchy, the hand does not appear.
Magnifier icon		When not in drill mode: Click the magnifier icon to *drill through* to another report. Click the tabs at the bottom of the report to view the report data by different fields. Use the browser Back button to return to the original report. Use the Back option on the report to return to the Corporate Documents list.

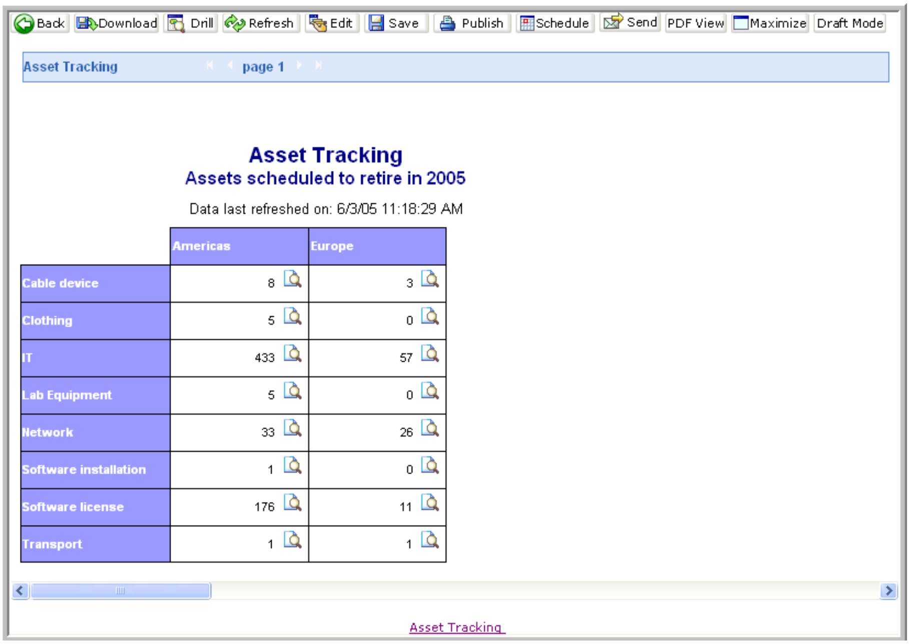
Navigation feature	Icon	Description
Report tabs		Tabs are underlined text at the bottom of the report. Click the tab to view the report.
Underlined text or numbers in tables	 	When in drill mode: Click the underlined area to drill down one level. Click the arrow beside the area to go up one level. **Note:** Underlined information in a table cell indicates that you can drill down to another level.
Up arrow		When in drill mode, go up one level in the hierarchy.

Base reports for Asset Tracking

These reports provide information to help you manage assets in your organization.

Asset Tracking

The first key to understanding how to manage the IT assets that existing within the organization is to understand where they have been deployed and to what extent. This analysis allows IT management to view a summary of the assets scheduled for retirement that are distributed throughout the enterprise. This analysis performs a secondary function by acting as a template for more focused views into asset distribution breakdown for IT knowledge area experts.



	Americas	Europe
Cable device	8	3
Clothing	5	0
IT	433	57
Lab Equipment	5	0
Network	33	26
Software installation	1	0
Software license	176	11
Transport	1	1

Details

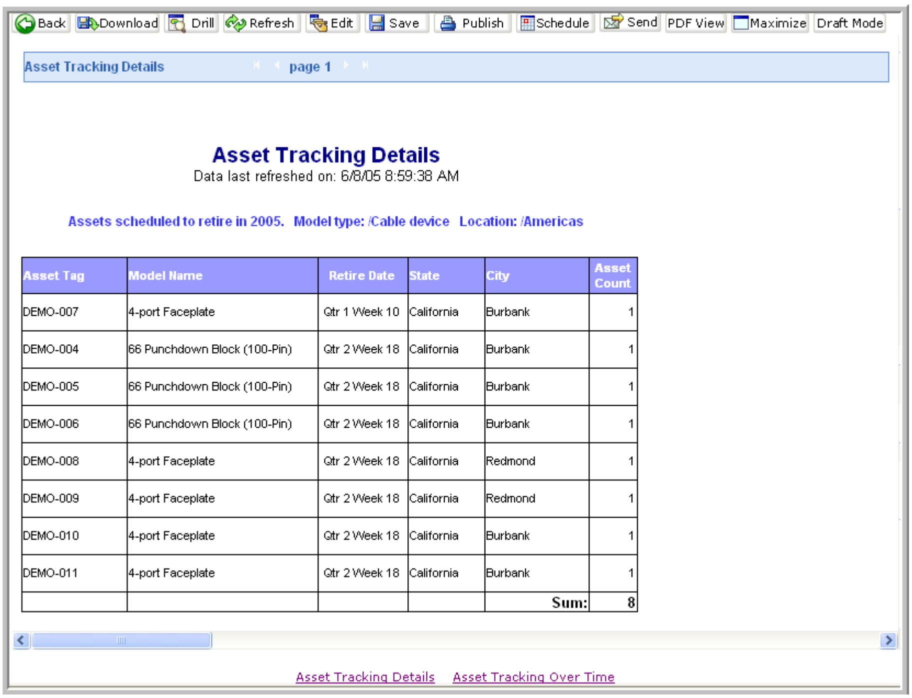
This report has a crosstab that explains the asset count for that particular model across different regions. Clicking the drill-through magnifier icon in any cell takes you to the sub-report, which shows details of the assets for that model and region.

Sub-reports

It has one sub-report, *Asset Tracking Details*, with two tabs that explain the assets scheduled to retire in that particular time and the asset tracking details.

Asset Tracking Details

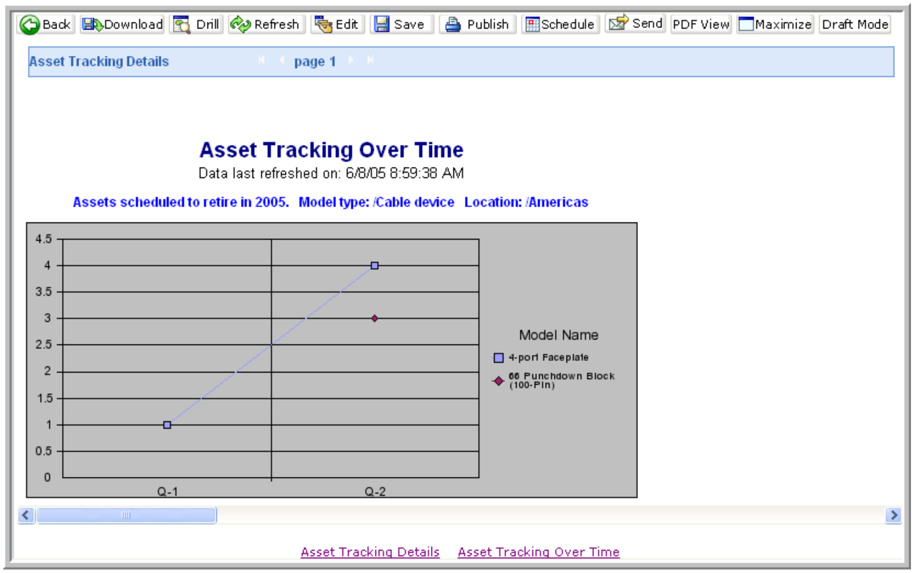
Asset Tracking Details provides a tabular view of the details of each asset scheduled to retire in the specified year.



Asset Tag	Model Name	Retire Date	State	City	Asset Count
DEMO-007	4-port Faceplate	Qtr 1 Week 10	California	Burbank	1
DEMO-004	66 Punchdown Block (100-Pin)	Qtr 2 Week 18	California	Burbank	1
DEMO-005	66 Punchdown Block (100-Pin)	Qtr 2 Week 18	California	Burbank	1
DEMO-006	66 Punchdown Block (100-Pin)	Qtr 2 Week 18	California	Burbank	1
DEMO-008	4-port Faceplate	Qtr 2 Week 18	California	Redmond	1
DEMO-009	4-port Faceplate	Qtr 2 Week 18	California	Redmond	1
DEMO-010	4-port Faceplate	Qtr 2 Week 18	California	Burbank	1
DEMO-011	4-port Faceplate	Qtr 2 Week 18	California	Burbank	1
				Sum:	8

Asset Tracking Over Time

Asset Tracking Over Time provides a line graph plotting the number of assets slated to retire by calendar quarter.



Line graph

X-axis:	Quarter
Y-axis:	Asset Count
Legend:	Model

Functionality

Asset Tracking has drill-down functionality on both Model and Region. Activate drilling, click on row or column headers to drill to the desired set of assets, then click the drill-through icon to see the details behind the summary.

Constraints

- This report only displays assets scheduled to retire. Assets marked as **Retired (or consumed)** or **Missing** or having a blank **Schedule Retire** date will not display.
- The sub-report, *Asset Tracking Details*, only shows data when called from the parent report. Refreshing this report directly returns no data.

Parameters passed

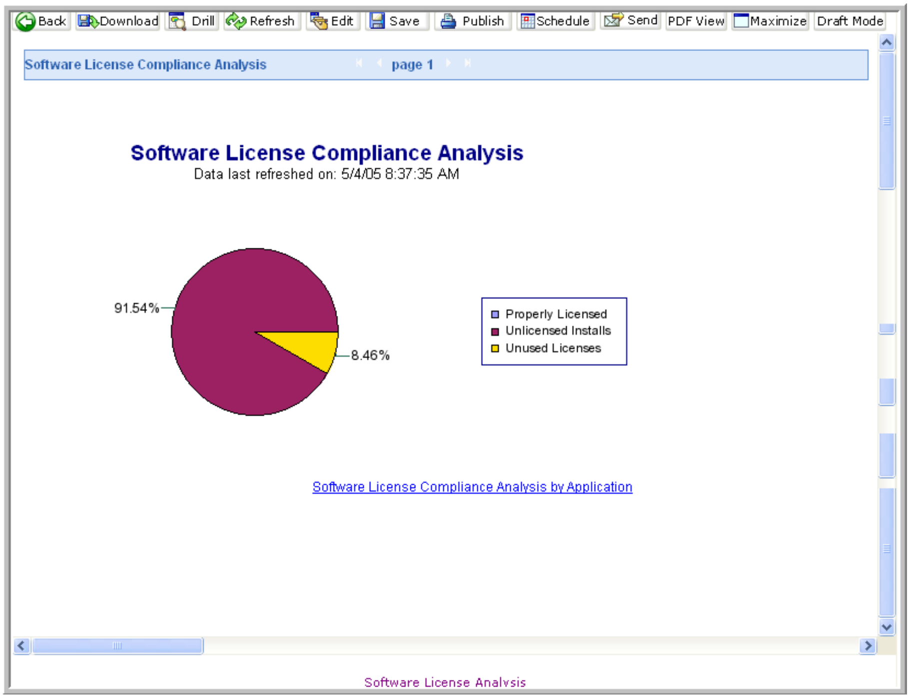
Region full name
Model full name
Year (from Schedule Retire date)

Workflow

Asset Tracking —> Refresh —> drill down on model/region —> drill through to *Asset Tracking Details* —> browse details

Software License Compliance Analysis

It is not enough for organizations to identify whether they are in compliance with their software licenses. This analysis allows managers to view the degree to which they are out of compliance while not inundating the user with a laundry-list of all of the applications that are installed.



Details

This report uses a pie chart that provides information about the percentage of properly licensed, unlicensed installs, and the unused licenses by IT management. Below the graph is the sub-report title that you are going to view.

Sub-reports

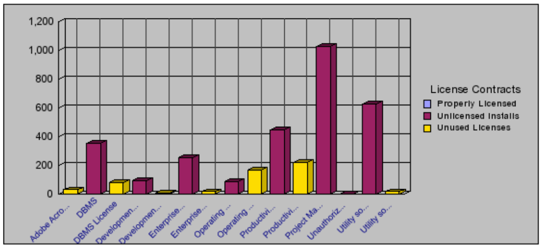
This report has two sub-reports. The first, *Software License Compliance Analysis by Application*, breaks down all licenses/installations by model. A side-by-side bar chart shows properly licensed installations, unlicensed installs (installations in excess of licenses), and unused licenses (licenses in excess of known installs). Below the bar chart is a tabular view showing summaries and a drill-through link to *Software License Compliance Analysis Details*.

Software License Status by Application

Back | Download | Drill | Refresh | Edit | Save | Publish | Schedule | Send | PDF View | Maximize | Draft Mode

Software License Compliance Analysis By Application

Data last refreshed on: 5/31/05 11:37:47 AM



Click on the magnifying glass below to look at the license and install details

	Properly Licensed	Unlicensed Installs	Unused Licenses	Details
Adobe Acrobat Distiller 5.0 Site	0	0	30	
DBMS	0	354	0	
DBMS License	0	0	82	
Development tool	0	92	0	
Development tool license	0	0	4	
Enterprise management	0	254	0	
Enterprise management license	0	0	17	
Operating systems	0	85	0	
Operating systems license	0	0	166	
Productivity tools	0	445	0	
Productivity tools license	0	0	221	
Project Management	0	1,026	0	
Unauthorized-software installation	0	2	0	
Utility software	0	625	0	
Utility software license	0	0	17	
Sum:	0	2,883	537	

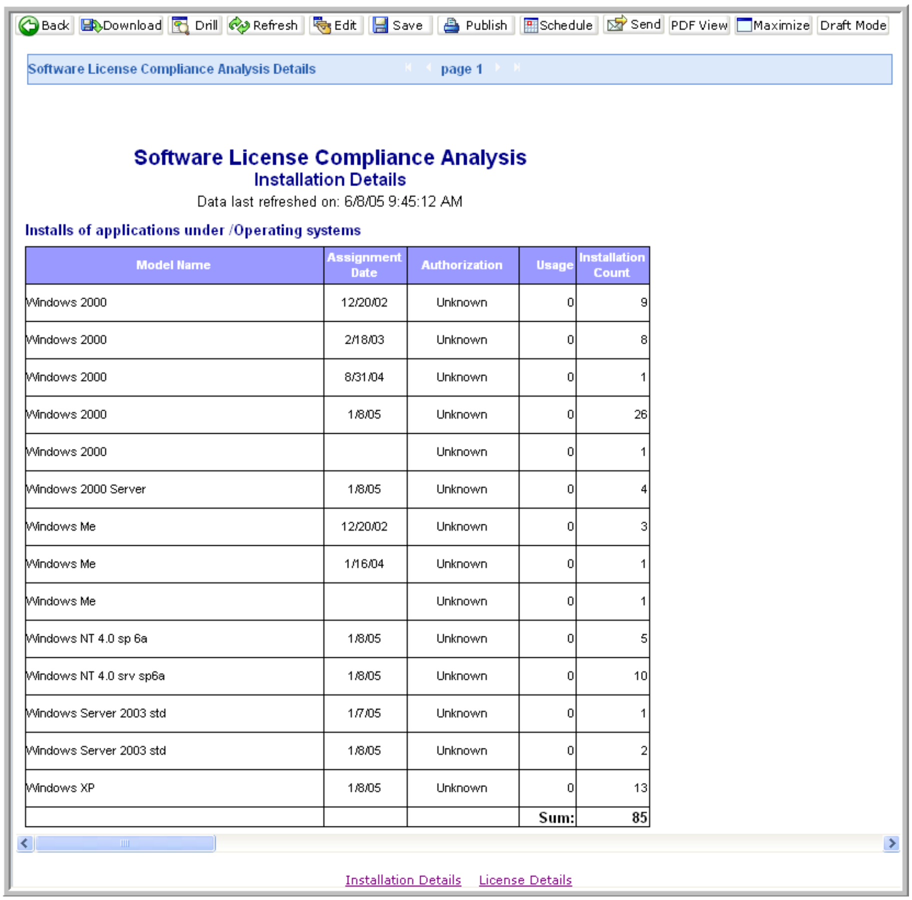
Software License Compliance Analysis By Application

Side-by-side bar graph

X-axis: Model
Y-axis: Asset Count
Legend: License Status

The second sub-report shows specific details for installations and licenses of the model selected.

Installation Details

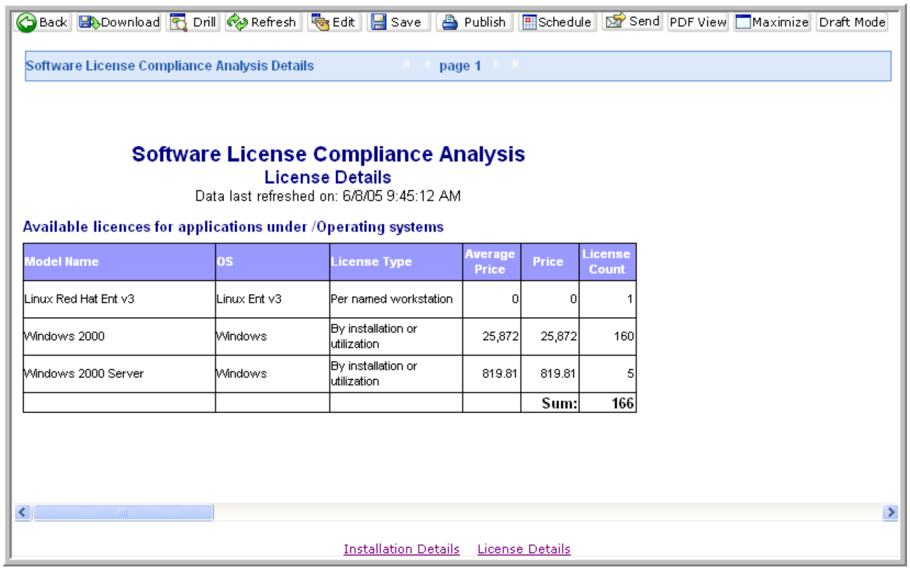


Software License Compliance Analysis
Installation Details
Data last refreshed on: 6/8/05 9:45:12 AM

Installs of applications under /Operating systems

Model Name	Assignment Date	Authorization	Usage	Installation Count
Windows 2000	12/20/02	Unknown	0	9
Windows 2000	2/18/03	Unknown	0	8
Windows 2000	8/31/04	Unknown	0	1
Windows 2000	1/8/05	Unknown	0	26
Windows 2000		Unknown	0	1
Windows 2000 Server	1/8/05	Unknown	0	4
Windows Me	12/20/02	Unknown	0	3
Windows Me	1/16/04	Unknown	0	1
Windows Me		Unknown	0	1
Windows NT 4.0 sp 6a	1/8/05	Unknown	0	5
Windows NT 4.0 srv sp6a	1/8/05	Unknown	0	10
Windows Server 2003 std	1/7/05	Unknown	0	1
Windows Server 2003 std	1/8/05	Unknown	0	2
Windows XP	1/8/05	Unknown	0	13
			Sum:	**85**

License Details



Software License Compliance Analysis

License Details

Data last refreshed on: 6/8/05 9:45:12 AM

Available licences for applications under /Operating systems

Model Name	OS	License Type	Average Price	Price	License Count
Linux Red Hat Ent v3	Linux Ent v3	Per named workstation	0	0	1
Windows 2000	Windows	By installation or utilization	25,872	25,872	160
Windows 2000 Server	Windows	By installation or utilization	819.81	819.81	5
				Sum:	166

Functionality

The main report has only drill through function. Use the drill through in the title below the pie chart.

The first sub-report has drill through and drill down and up functions. You can drill down or up in the higher level of the model to the lower lever of the model. Use drill down or up either in the graph or the crosstab below the graph. To drill through, click the magnifying glass, which creates the second sub-report.

The second sub-report has two tabs that provide the license details and the installation details.

Constraints

- *Software License Compliance Analysis by Application* assumes identical model names under the Software License and Software Installation hierarchies. If the model name for a license and equivalent installation do not match, it cannot calculate proper versus improper installations.
- The sub-report, *Software License Compliance Analysis Details*, only shows data when called from the parent report. Refreshing this report directly returns no data.

Parameter passed

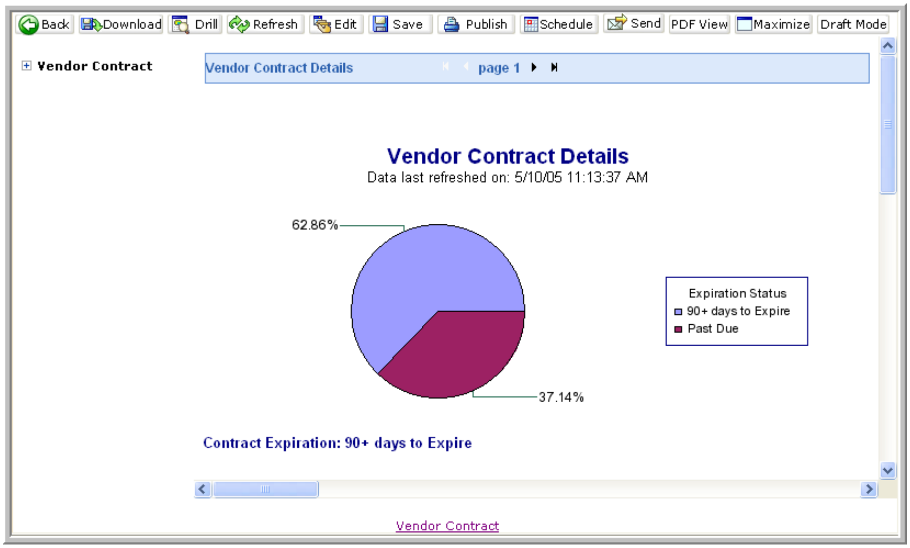
Model

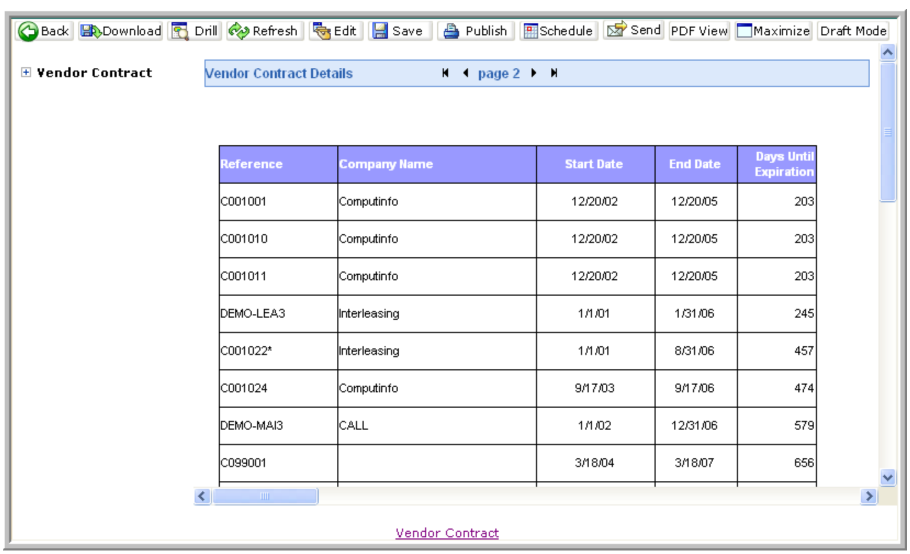
Workflow

Software License Compliance Analysis —> drill through to *Software License Compliance Analysis by Application* —> drill down on model to the desired level —> drill through to *Software License Compliance Analysis Details* —> browse details

Vendor Contract Details

IT contract managers frequently do not have the same information as those in the organization who are responsible for managing physical assets. This analysis provides insight into the scope and distribution of contracts that are maintained across suppliers.





Reference	Company Name	Start Date	End Date	Days Until Expiration
C001001	Computinfo	12/20/02	12/20/05	203
C001010	Computinfo	12/20/02	12/20/05	203
C001011	Computinfo	12/20/02	12/20/05	203
DEMO-LEA3	Interleasing	1/1/01	1/31/06	245
C001022*	Interleasing	1/1/01	8/31/06	457
C001024	Computinfo	9/17/03	9/17/06	474
DEMO-MAI3	CALL	1/1/02	12/31/06	579
C099001		3/18/04	3/18/07	656

Details

This report displays a pie chart which explains the contracts that are expiring in the next 30, 60, or 90 days. The table explains the contract details that are going to expire.

Workflow

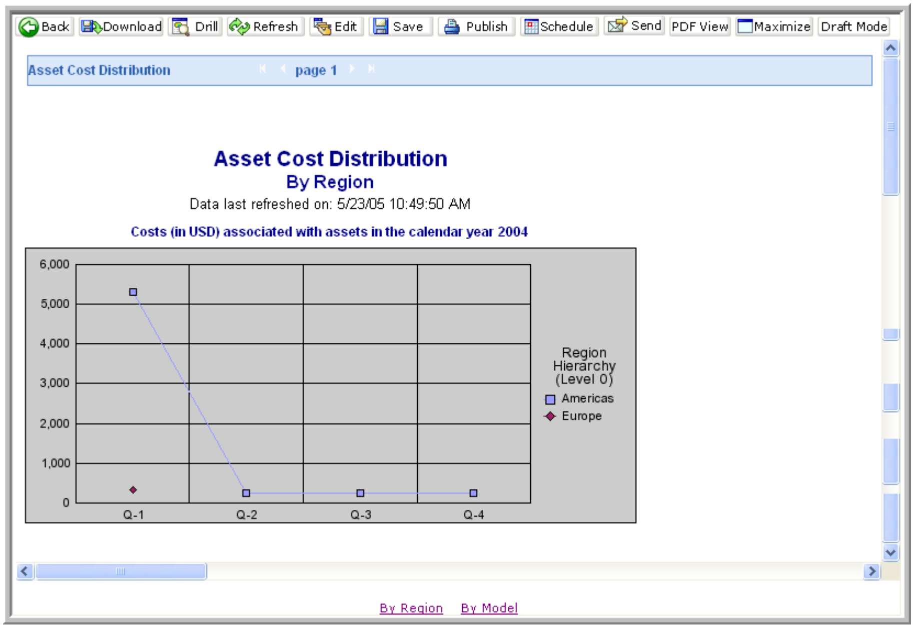
Vendor Contract Details —> view pie chart —> scroll or click on tree to appropriate section —> browse details

Base reports for Expense Control

These reports provide information to help you manage expenses in your organization.

Asset Cost Distribution

Senior IT management can use the information in this analysis to determine the impact on the IT budget of regional or departmental concerns.



Details

This report has two tabs: cost distributed by region and cost distributed by model. This report shows the comparison line graph cost of assets over the region in that particular year and the cost of assets over the model for that particular year.

Line graph

by Region:

X-axis:	Quarters (from billing date)
Y-axis:	Cost
Legend:	Region

by Model:

X-axis:	Quarters (from billing date)
Y-axis:	Cost
Legend:	Model

Functionality

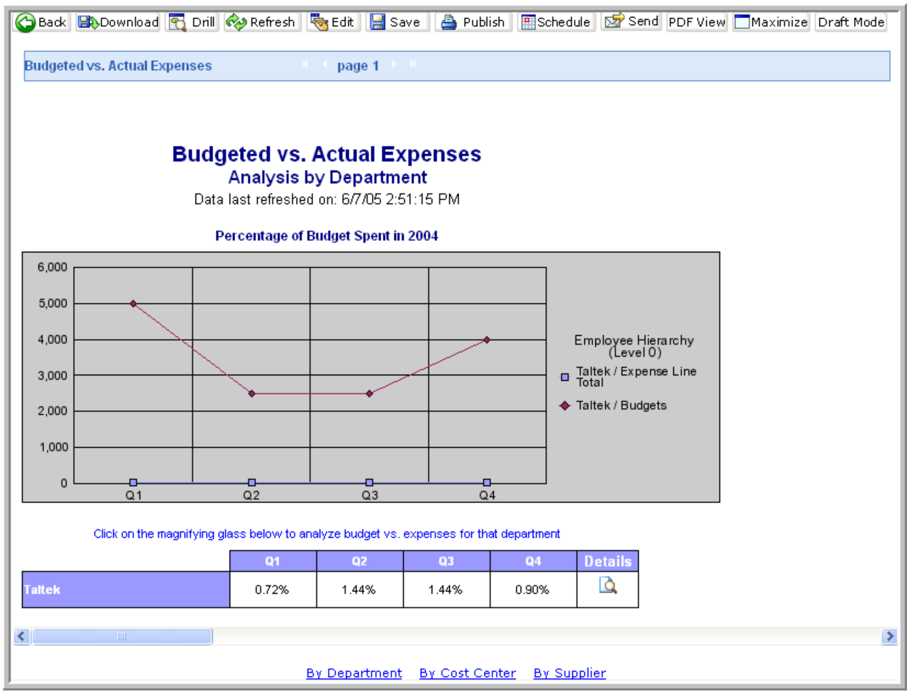
This report has drill-down functionality in the chart legend on both the tabs.

Workflow

Asset Cost Distribution —> Refresh —> prompt for year —> enter a year —> view the cost distribution over region and model —> drill down and up

Budgeted vs. Actual Expenses

This analytic application allows executive management to identify discrepancies in the actual budget spanning different categories. After the key areas for concern are identified, users can identify when the organization went off budget, to what degree, and for how long.



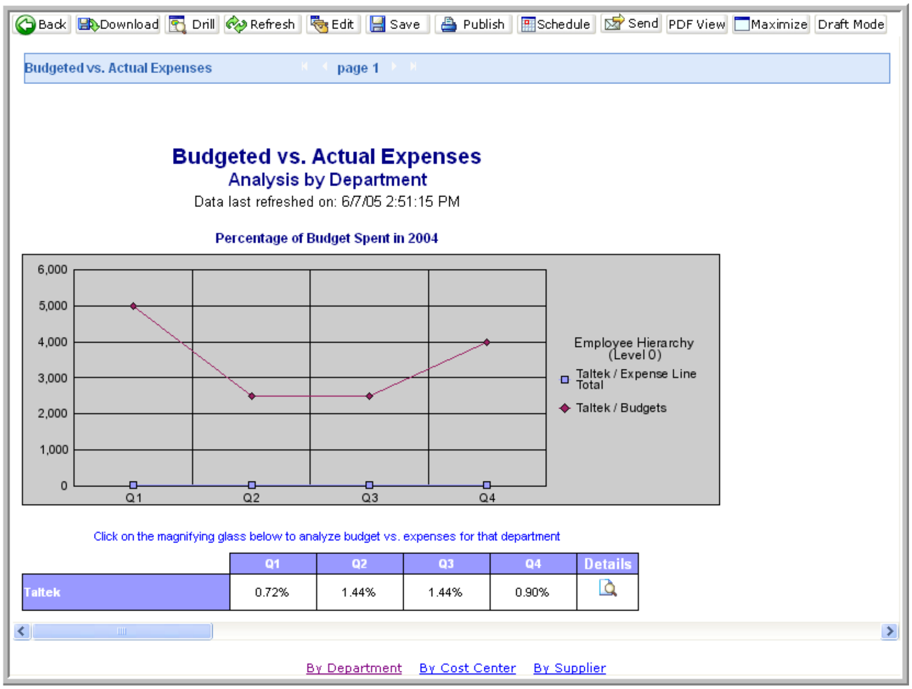
Details

This report explains the percentage of budget spent in the selected year. The three tabs provide details based on company (department), cost center, and vendor (supplier). Each tab has a comparison line graph that shows the percentage of budget spent in that year for all quarters. Below the graph is a crosstab that shows summary data and a drill-through link to the appropriate sub-report.

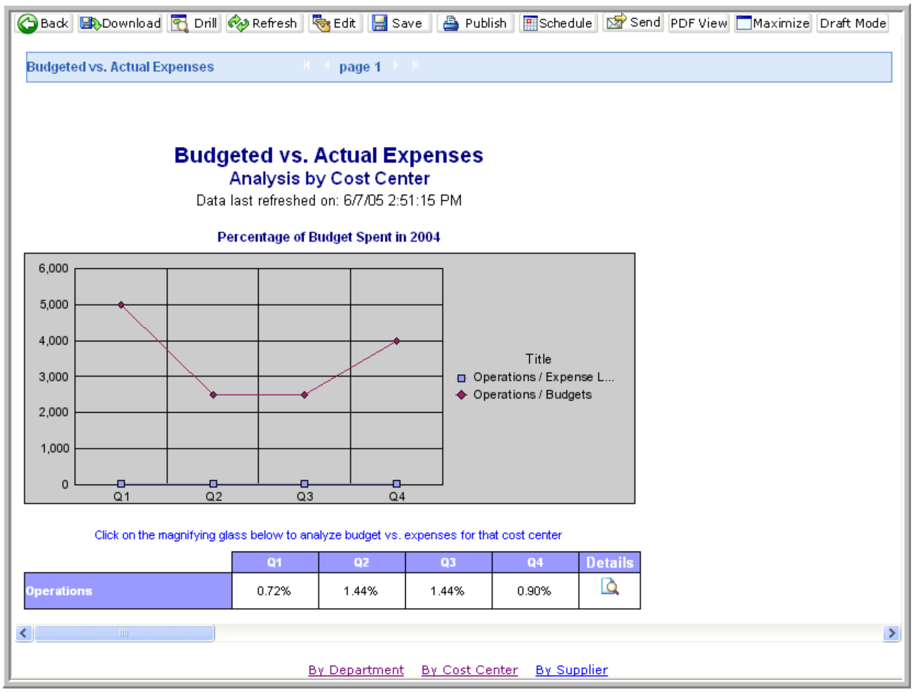
Sub-reports

Three sub-reports provide the comparison line graph of actual and budgeted expenses for a particular quarter. The sub-reports are *by Department*, *by Cost Center*, and *by Supplier*.

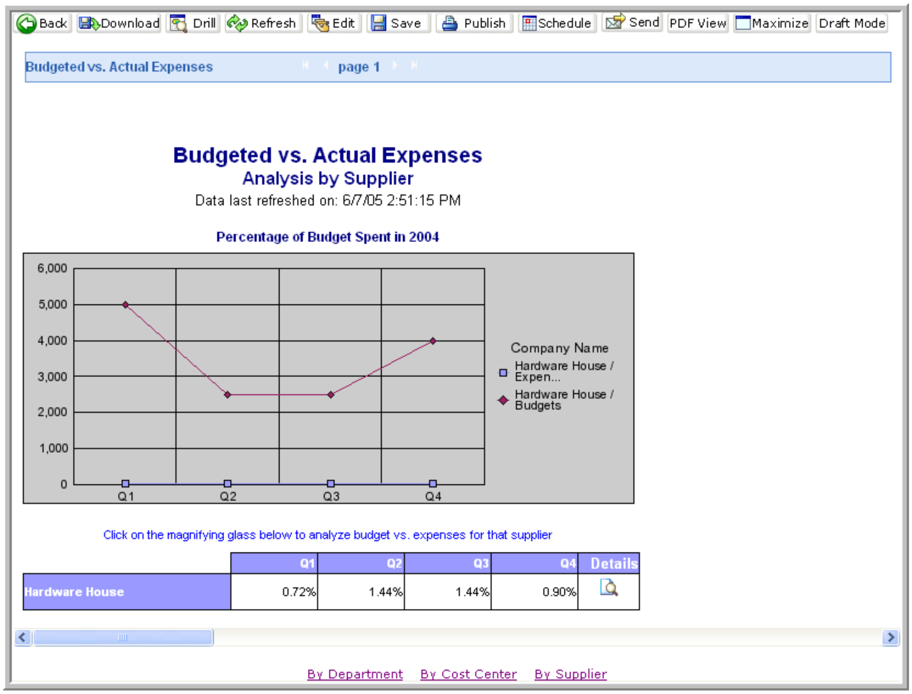
Budgeted vs. Actual Expenses by Department



Budgeted vs. Actual Expenses by Cost Center



Budgeted vs. Actual Expenses by Supplier



Functionality

This report has drill-through functionality from the main report to the sub-reports. Use drill through to pass the particular parameter.

Constraints

- The sub-reports, *Budgeted vs. Actual Expenses by Department*, *Budgeted vs. Actual Expenses by Cost Center*, and *Budgeted vs. Actual Expenses by Supplier*, only show data when called from the parent report. Refreshing these reports directly returns no data.

Parameters passed

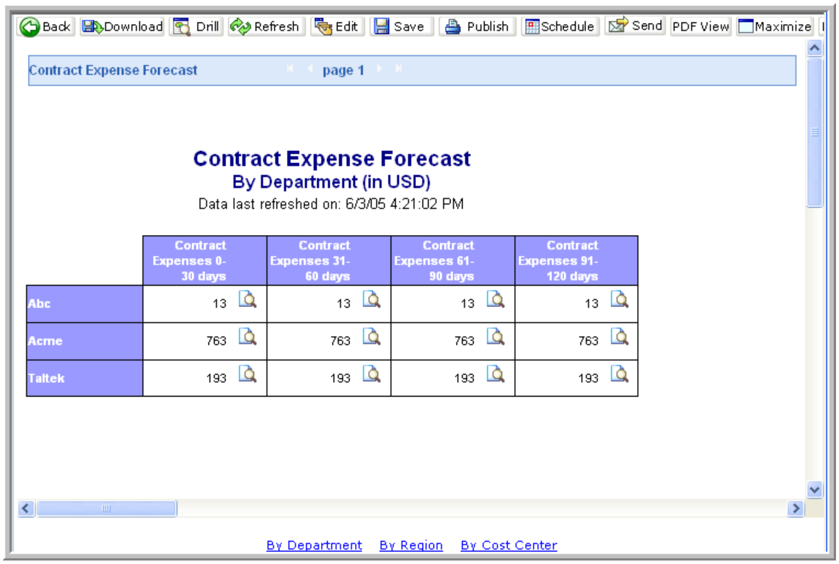
Department full name
Vendor (supplier) full name
Cost center title
Year (from budget)

Workflow

- *Budgeted vs. Actual Expenses* —> first tab (department) —> click on the cell to go the sub-report —> parameter passed —> Department name and Quarters —> *Budgeted vs. Actual Expenses by Department*
- *Budgeted vs. Actual Expenses* —> second tab (cost center) —> click on the cell to go to the sub-report —> parameter passed —> Cost center title and Quarters —> *Budgeted vs. Actual Expenses by Cost Center*
- *Budgeted vs. Actual Expenses* —> third tab (vendor) —> click on the cell to go to sub-report —> parameter passed —> Vendor name and Quarters —> *Budgeted vs. Actual Expenses by Supplier*

Contract Expense Forecast

One of the larger drains on the IT organization is incurring unnecessary contract related costs due to lapses or automatic renewals. This analysis allows IT management to reclaim control of their budgets by identifying contracts that are coming up for renewal.



	Contract Expenses 0-30 days	Contract Expenses 31-60 days	Contract Expenses 61-90 days	Contract Expenses 91-120 days
Abc	13	13	13	13
Acme	763	763	763	763
Taltek	193	193	193	193

Details

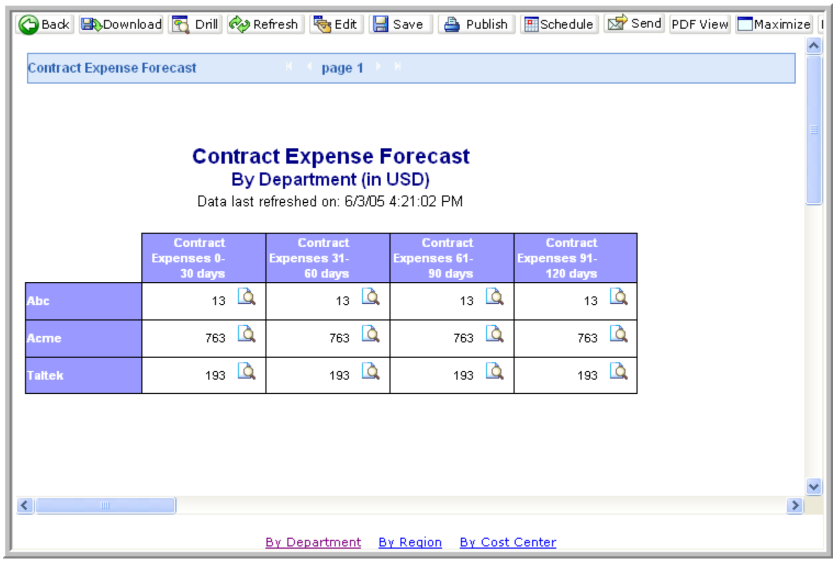
This report has one main report and three sub-reports; the main report has three tabs each for department, region, cost center and three sub-reports which explain the detail for each one. The main report explains the rent due in the next 30, 60, 90, 120 days for that particular department, region and cost center.

Sub-reports

This report has three sub-reports: *Contract Expense Forecast by Department*, *Contract Expense Forecast by Region*, and *Contract Expense Forecast by Cost Center*.

These reports contain the detailed report of the three tabs on the main reports. Each sub-report has two tabs: the details of the contract details and the expense details.

Contract Expense Forecast by Department


Back Download Drill Refresh Edit Save Publish Schedule Send PDF View Maximize

Contract Expense Forecast page 1

Contract Expense Forecast

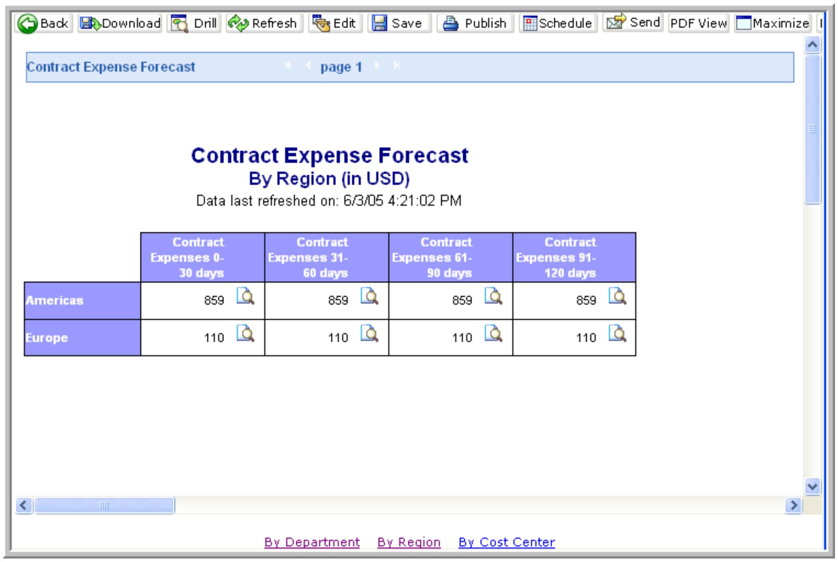
By Department (in USD)

Data last refreshed on: 6/3/05 4:21:02 PM

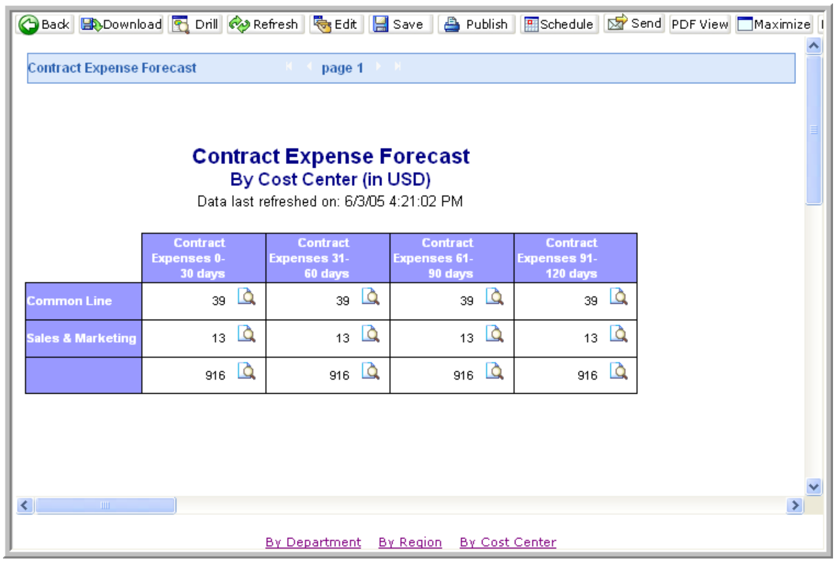
	Contract Expenses 0-30 days	Contract Expenses 31-60 days	Contract Expenses 61-90 days	Contract Expenses 91-120 days
Abc	13	13	13	13
Acme	763	763	763	763
Taltek	193	193	193	193

By Department By Region By Cost Center

Contract Expense Forecast by Region



Contract Expense Forecast by Cost Center



Functionality

The main report has drill down and up as well as drill through functions. The sub-reports provide the details of the three tabs.

Constraints

- The sub-reports, *Contract Expense Forecast by Department*, *Contract Expense Forecast by Region*, and *Contract Expense Forecast by Cost Center*, only show data when called from the parent report. Refreshing these reports directly returns no data.
- Forecast data must be projected in AssetCenter. For any of these reports to show data, you must meet the following requirements:
    - Your AssetCenter data must contain active rent contracts.
    - Each of these contracts must contain assets that are actively leased.
    - Your AssetCenter server must be set to project rents up to 120 days in the future, and this projection must be scheduled for regular updates.

Parameters passed

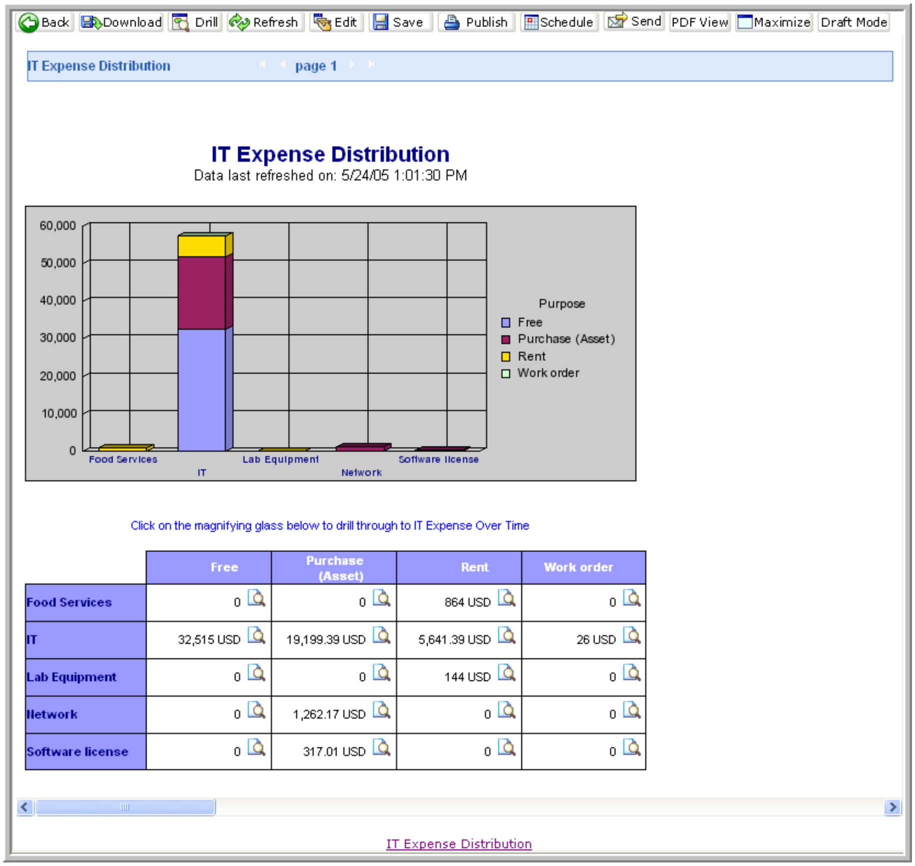
Cost center title
Region full name
Department full name

Workflow

- *IT Expense Distribution* —> drill down and up —> click on the cells —> parameters passed —> Department name, Country name, Cost center title, Rent due —> Contract budget details for Department, Region and Cost Center
- Cost center contract budget details —> two tabs —> Contract details and Expense details
- Region contract budget details —> two tabs —> Contract details and Expense details
- Department contract budget details —> two tabs —> Contract details and Expense details

IT Expense Distribution

This analysis identifies the categories of assets that are most costly to own and where expenses are being spent across several categories.



	Free	Purchase (Asset)	Rent	Work order
Food Services	0	0	864 USD	0
IT	32,515 USD	19,199.39 USD	5,641.39 USD	26 USD
Lab Equipment	0	0	144 USD	0
Network	0	1,262.17 USD	0	0
Software license	0	317.01 USD	0	0

Details

This report has a stacked bar chart of a model with Purpose over Total Cost. The crosstab explains the chart, and the detailed report is a sub-report of the main report.

Stacked bar graph

Main report:

X-axis: Model
Y-axis: Total Cost
Legend: Purpose

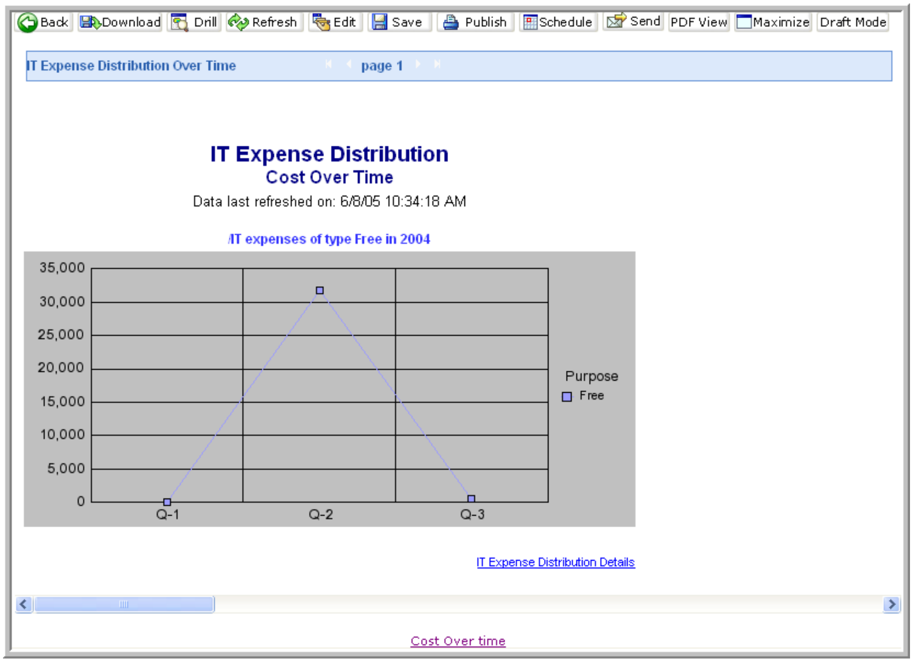
Sub-report:

X-axis: Quarters (from billing date)
Y-axis: Total Cost
Legend: Purpose

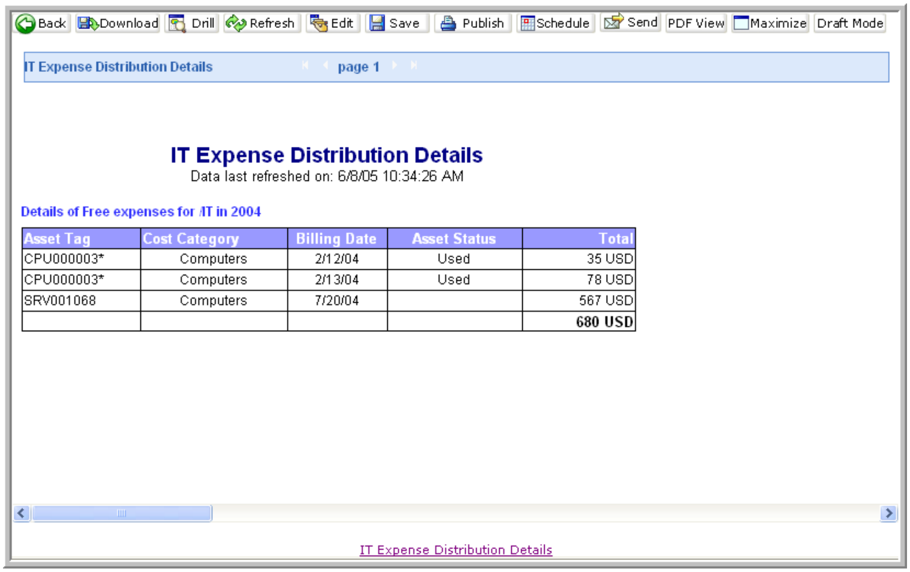
Sub-reports

There are two sub-reports. *IT Expense Distribution Cost Over Time* shows a graph of cost distributed over time for that purpose. The *IT Expense Distribution Details* report provides the details associated with it.

IT Expense Distribution Cost Over Time



IT Expense Distribution Details



IT Expense Distribution Details

Data last refreshed on: 6/8/05 10:34:26 AM

Details of Free expenses for /IT in 2004

Asset Tag	Cost Category	Billing Date	Asset Status	Total
CPU000003*	Computers	2/12/04	Used	35 USD
CPU000003*	Computers	2/13/04	Used	78 USD
SRV001068	Computers	7/20/04		567 USD
				680 USD

Functionality

The main report has drill through and drill down and up functionality. The first sub-report one has drill through function. The second sub-report gives the details of the vendor and the associated items.

Constraints

- The sub-reports, I*T Expense Distribution Cost Over Time* and *IT Expense Distribution Details*, only show data when called from the parent report. Refreshing this report directly returns no data.

Parameters passed

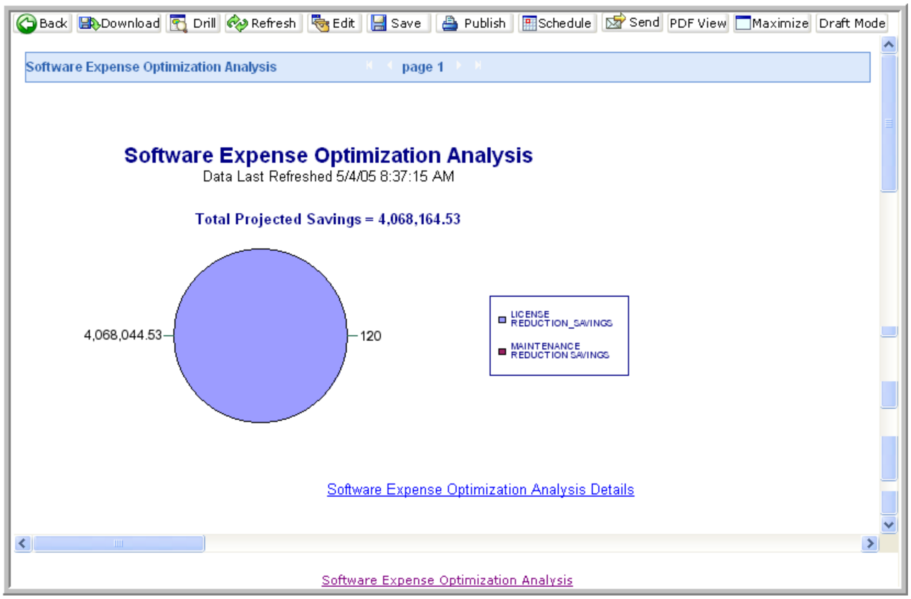
Model full name
Purpose

Workflow

- *IT Expense Distribution* —> click on the cells —> parameters passed —> Model Hierarchy Higher Level and Purpose —> I*T Expense Distribution Over Time*
- Vendor Cost Optimization1 —> Line graph explains the part you clicked —> click on the title —> parameters passed —> No —> *IT Expense Distribution Details*
- Vendor Cost Optimization 2 —> Details of the IT expenses distributed across the Model

Software Expense Optimization Analysis

IT financial managers face challenges in trying to bring together asset costs across the disparate data stores where information might be hidden. This application unlocks the value of information gathered through a controlled workflow process to support SOX compliance to give organizations an understanding of the state of the organization within the scope of a controlled data collection process.



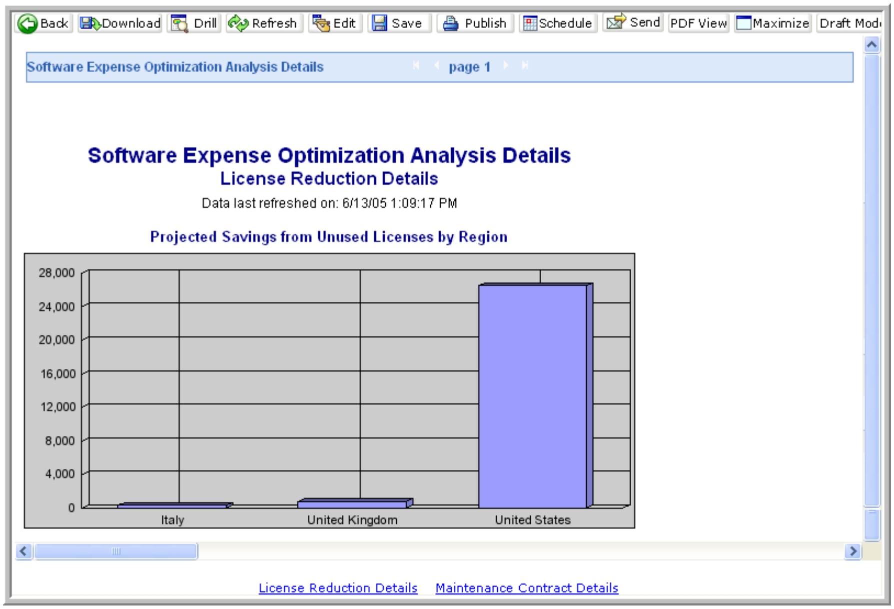
Details

This report shows a pie chart detailing the total amount that can be saved, the cost of unused licenses, and the maintenance contracts' amount saved by reducing the license count and the maintenance fees.

Sub-reports

The one sub-report has two tabs: one explains the license reduction savings details and the other explains the maintenance reduction savings details. License reduction details are based on region. Maintenance reduction savings are based on cost center.

Expense Optimization Details



Functionality

The main report is a drill through report. The sub-report has drill down and up functionality.

The sub-report is a graph that is drillable only in the region level, which shows license reduction savings details based on the hierarchy set. The maintenance reduction savings details is not drillable because the cost center is not hierarchical.

Line graph

Sub-report first tab:

X-axis:	Region
Y-axis:	License reduction savings

Sub-report second tab:

X-axis:	Cost center title
Y-axis:	Maintenance reduction savings

Workflow

- Expense Optimization Analysis —> click on the title —> parameters passed —> No —> Expense Optimization Details
- Expense Optimization Details —> two tabs —> License reduction savings and Maintenance reduction savings

APPENDIX D

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