

Micro Focus®

## Modernization Workbench™

**Managing Application Portfolios** 



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## Glossary

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## **Preface**

he Modernization Workbench is a suite of PC-based software products for analyzing, re-architecting, and transforming legacy applications. The products are deployed in an integrated environment with access to a common repository of program objects. Language-specific parsers generate repository models that serve as the basis for a rich set of diagrams, reports, and other documentation.

The Modernization Workbench suite consists of customizable modules that together address the needs of organizations at every stage of legacy application evolution: maintenance/enhancement, renovation, and modernization.

#### **Audience**

This guide assumes that you are a corporate Information Technology (IT) professional with a working knowledge of the legacy platforms you are using the product to analyze. If you are transforming a legacy application, you should also have a working knowledge of the target platform.

## **Organization**

This guide contains the following chapters:

- Chapter 1, "Introducing Enterprise View Express," provides an overview of the Enterprise View Express product.
- Chapter 2, "Installing Enterprise View Express," describes how to install Enterprise View Express and configure your Web server for Enterprise View Express processing.
- Chapter 3, "Using Enterprise View Express," describes how to use Enterprise View Express to collect business data from surveys and application metrics from workspaces, chart the results, and display the charts on HTML dashboards available throughout your organization. This chapter also describes how to use Enterprise View Express to view, query, and edit repository data over the Web.
- Chapter 4, "Using WebGen," describes how to use WebGen to generate HTML views of the repositories on your workstation and make the resulting pages available in Enterprise View Express.
- The Glossary defines the names, acronyms, and special terminology used in this guide.

#### **Conventions**

This guide uses the following typographic conventions:

- **Bold type**: indicates a specific area within the graphical user interface, such as a button on a screen, a window name, or a command or function.
- *Italic type*: indicates a new term. Also indicates a document title. Occasionally, italic type is used for emphasis.
- Monospace type: indicates computer programming code.
- **Bold monospace type**: indicates input you type on the computer keyboard.
- 1A/1B, 2A/2B: in task descriptions, indicates mutually exclusive steps; perform step A or step B, but not both.

#### Related Manuals

This document is part of a complete set of Modernization Workbench manuals. Together they provide all the information you need to get the most out of the system.

- Getting Started introduces the Modernization Workbench. This guide provides an overview of the workbench tools, discusses basic concepts, and describes how to use common product features.
- *Preparing Projects* describes how to set up Modernization Workbench projects. This guide describes how to load applications in the repository and how to use reports and other tools to ensure that the entire application is available for analysis.
- Analyzing Projects describes how to analyze applications at the
  project level. This guide describes how to create diagrams of applications and how to perform impact analysis across applications. It
  also describes how to estimate project complexity and effort.
- Analyzing Programs describes how to analyze applications at the
  program level. This guide describes how to use HyperView tools to
  view programs interactively and perform program analysis in stages.
  It also describes how to analyze procedure and data flows, search the
  repository, and extract business rules with HyperView.
- *Creating Components* describes how to use Application Architect to extract program components from legacy applications.
- Batch Refresh Process describes how to use the Modernization Workbench Batch Refresh Process utility to batch-synchronize workbench sources with sources at their original location.
- *Transforming Applications* describes how to generate legacy application components in modern languages.
- *Error Messages* lists the error messages issued by Modernization Workbench, with a brief explanation of each and instructions on how to proceed.

## **Online Help**

In addition to the manuals provided with the system, you can learn about the product using the integrated online help. All GUI-based tools include a standard Windows **Help** menu.

You can display:

- The entire help system, with table of contents, index, and search tool, by selecting **Help: Help Topics**.
- Help about a particular Modernization Workbench window by clicking the window and pressing the **F1** key.

Many Modernization Workbench tools have *guides* that you can use to get started quickly in the tool. The guides are help-like systems with hyperlinks that you can use to access functions otherwise available only in menus and other program controls.

To open the guide for a tool, choose **Guide** from the **View** menu. Use the table of contents in the **Page** drop-down to navigate quickly to a topic.

# Introducing Enterprise View Express

nterprise View Express is a Web server-based tool that lets you collect and display a broad range of information about your enterprise. With Enterprise View Express, you can:

- Create, distribute, and gather responses to surveys about your organization's application portfolio and business processes.
- Collect *survey results* and use the data to define interactive charts, graphs and tables.
- Display the charts via Enterprise View Express Dashboards (fully customizable HTML pages), and make them available to any authorized user with internet access.

Enterprise View Express also lets you search, filter, and analyze workspace repository data. With Enterprise View Express, you can:

- Query workspaces for information about repository entities and relationships.
- Search, browse and edit business rules and triggers.

1-2

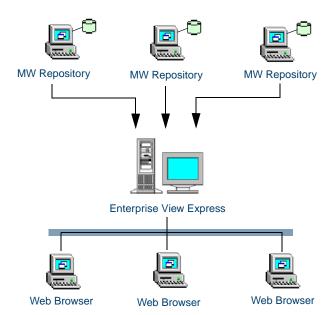
 View detailed analysis of additional repository data (if WebGen and workbench tools have been run. See <u>"Using WebGen" on page 4-1</u> for details).

**Note:** If you are logging in for the first time, please see <u>"Post-Installation Setup Guide" on page 2-6</u> for mandatory initial configuration tasks.

## How Enterprise View Express Works

Enterprise View Express offers company-wide access to any Modernization Workbench repository in your organization, as shown in Figure 1-1 below.

Figure 1-1 How Enterprise View Express Works



## What's Next?

Those are the basic concepts underlying Enterprise View Express. Now let's look at how you install Enterprise View Express.

**1-4** Introducing Enterprise View Express *What's Next?* 

## Installing Enterprise View Express

nterprise View Express is a Web server-based tool that offers HTML views of each local or remote repository to which it has access. This chapter describes how to install Enterprise View Express. It lists the minimum hardware and software requirements for Enterprise View Express installations and describes the contents of the installation CD. It then shows you how to run the installation and configure a Web server for Enterprise View Express processing.

## Hardware and Software Requirements

Apache Tomcat 6.0 or WebSphere Application Server 7.0 and Modernization Workbench must be installed on the machine on which you are installing the Enterprise View Express server. For workbench installation instructions, see the MW EE installation manual (PDF) on the Modernization Workbench CD.

Table 2-1 lists the hardware, disk space, operating system, and software requirements for Enterprise View Express installations.

**Note:** 64-bit machines are not supported.

 Table 2-1
 Hardware and Software Requirements

	Intel-compatible PC	
Operating System	Windows 2000 Server/ Advanced Server Windows 2003 Server	
Web Browser	Internet Explorer 6.0 or higher Firefox 1.0 or higher	
Java Runtime Environment (JRE) (Tomcat sites only)	Version 1.5 (included w/ Enterprise View Express)	
Processor/CPU	2 GHz or higher	
Memory	1 GB minimum 2 GB recommended 1 GB to 3 GB swap space	
Disk Space for Workbench	200 MB	
Disk Space for Enterprise View Express	254 MB (Enterprise View Express application=12 MB; NetCharts Server=242 MB)	
Other	Apache Tomcat 6.0 (included w/ Enterprise View Express) Modernization Workbench at the same level as Enterprise View Express	

Note:

Enterprise View Express can be installed on a Windows 2000 or Windows XP workstation as well as the servers listed in the requirements.

## Running the Installation Program

Enterprise View Express software ships on the same CD as MW. Before running the installation program, make sure you have administrative per-

missions for the server machine on which you are installing the workbench. If you do not have administrative permissions, the installation program will not let you continue.

The installation and configuration of Enterprise View Express consists of the following steps, which you must follow in order. All components must be installed on the machine you will use as the Enterprise View Express server.

Note: Apache Tomcat 6.0 or WebSphere Application Server 7.0 must be installed before installing Enterprise View Express. See "To install Apache Tomcat:" on page 2-4.

- Install the database client. See the MW EE installation manual (PDF) on the Modernization Workbench CD for detailed instructions.
- 2 Install JRE 1.5 by running the jre-1\_5\_0\_14-windows-i586-p.exe program located in the \Tomcat folder of the Enterprise View Express installation directory. Enterprise View Express is supported with this version of the JRE.
- Install the NetCharts Server.

  The NetCharts Server is required for displaying charts, graphs, and tables on Enterprise View Express dashboards. You must install the NetCharts Server first, before proceeding with the installation of Enterprise View Express. See "To install the NetCharts Server:" on page 2-4.
- 4 Install Enterprise View Express. See <u>"To install Enterprise View Express:" on page 2-4.</u>
- 5 If you are using WebSphere Application Server (WAS), deploy Enterprise View Express to WAS. See <u>"To deploy Enterprise View Express to WebSphere Application Server:" on page 2-5.</u>
- 6 Install MW EE as described in the installation manual (PDF).

#### To install the NetCharts Server:

1 Insert the installation CD into your CD-ROM drive. Navigate to the \NetChartsServer folder in the Enterprise View Express installation directory and double-click the install.bat program.

**Note:** This process may take several minutes. The command window will close when installation is complete.

#### To install Apache Tomcat:

Note: If Apache Tomcat 6.0 is already installed on the Enterprise View Express server machine, you can skip this step. Proceed with "To install Enterprise View Express:" on page 2-4.

- 1 Insert the installation CD into your CD-ROM drive. Navigate to the \Tomcat folder in the Enterprise View Express installation directory and double-click the apache-tomcat-6.0.16.exe program.
- 2 Follow the screen prompts and accept the defaults, except for the following steps:
  - On the **Choose Components** step, expand the Tomcat option and check **Service** to have Tomcat startup automatically.
  - On the **Java Virtual Machine** step, specify the path to the folder containing JRE version 1.5, installed in <u>step 2</u> above (C:\Program Files\Java\jre1.5.0 14).
  - On the **Configuration** step, you can optionally change the port. The default is 8080.

#### To install Enterprise View Express:

1 Insert the installation CD into your CD-ROM drive. Navigate to the Enterprise View Express installation directory and double-click the setup.exe program. The Welcome screen opens.

Note: Apache Tomcat 6.0 or WebSphere Application Server 7.0 must be installed before installing Enterprise View Express. See "To install Apache Tomcat:" on page 2-4.

- 2 Click Next. The License Agreement screen opens. Read the License Agreement carefully. Select I accept the terms in the license agreement to accept its terms, then click Next.
- The Custom Setup screen opens. The installation program automatically detects the Web server you have installed, Apache Tomcat or WebSphere Application Server. If both Web servers are installed, you can install Enterprise View Express to both, or deselect one by clicking the icon next to the Web server's name and choosing This feature will not be available. Click Next.
- 4 The Ready to Install the Program screen opens. Click **Install** to begin transferring files to the server machine. A progress meter indicates the progress of the transfer.
- 5 When the transfer is complete, the InstallShield Wizard Completed screen opens. Click **Finish** to dismiss the screen.

#### To deploy Enterprise View Express to WebSphere Application Server:

- Start the WebSphere Application Server. In the Start menu, choose All Programs:IBM WebSphere:Application Server V7.0:Profiles:profile name:Start the server.
- 2 Launch the WebSphere Application Server Administrative console. In the Start menu, choose All Programs:IBM WebSphere:Application Server V7.0:Profiles:profile\_name:Administrative console.
- The Integrated Solutions Console login window opens. Enter your user ID in the **User ID** field and click **Log in**.
- The Integrated Solutions Console window opens. In the left menu items, choose **Applications:Application Types:WebSphere enterprise applications**.
- 5 The Enterprise Applications window opens. Click the **Install** button.
- A screen prompts you to select the war file to install. Select Local file system and ensure the Full path field is set to C:\Program Files\Modernization Workbench\APM\APM.war. Click Next.
- 7 A screen prompts you to select the installation type. Click **Next**.

- 8 A screen prompts you to select installation options. Click **Next**.
- 9 A screen prompts you to map modules to servers. Click Next.
- 10 A screen prompts you to map virtual hosts for Web modules. Click Next.
- A screen prompts you to map context roots for Web modules. In the **Context Root** field, enter /Enterprise View Express. Click **Next**.
- 12 A summary screen opens. Click **Finish**.
- When the installation completes, you are notified that Enterprise View Express was installed successfully. Click **Save** to save the master configuration.
- 14 Enterprise View Express is added to the list of enterprise applications in the Enterprise Applications window. Check the box next to APM\_war and click the **Start** button. You are notified that Enterprise View Express was started successfully.

## Post-Installation Setup Guide

After successful installation, the Enterprise View Express administrator must perform some basic configuration tasks to prepare the application for use throughout your enterprise. The administrator must first set up a configuration workspace, and then complete a set of administrative tasks to prepare Enterprise View Express for initial use.

#### Specifying a Configuration Workspace

Enterprise View Express stores configuration information used throughout the application (user accounts, charts, dashboards, and customized roles) in a *configuration workspace*. Requirements for the configuration workspace are as follows:

- You must designate a . rwp file that resides on the Enterprise View Express server to serve as the configuration workspace.
- You can select an existing .rwp file, create a new, dedicated Enterprise View Express workspace, or build a new connection to a workspace. We recommend you use a dedicated configuration

workspace, since workspaces used to analyze applications may be deleted or moved as business priorities shift. See the *Getting Started* manual in the workbench documentation set for details on creating and/or building connections to workspaces.

The configuration workspace should not be deleted, or all Enterprise
View Express configuration information will be lost. If the file is deleted or corrupted, the next attempt to log in to Enterprise View Express will result in an error. You will be prompted to enter the setup
code and specify a new default workspace.

#### To set up a configuration workspace:

- 1 In a web browser (both Internet Explorer and Firefox are supported), go to http://server name:port/Enterprise View Express where server name is the name of the machine running Enterprise View Express, and port is the port number:
  - For Adobe Tomcat, the port number is specified at installation. The default is 8080. For example: http://localhost:8080/APM.
  - For WebSphere Application Server, the port number is the HTTP transport port for the application server profile. For example: http://localhost:9081/APM. You can find the HTTP transport port in the file AboutThisProfile.txt in the logs folder for the application server profile.

**Note:** Make sure "APM" is in all capitals.

You are prompted to enter the setup code. The default code is "setup" (no quotes). Enter the code and click **Login**.

**Note:** For security purposes, you can (and should) change the default setup code. See <u>step 4</u> below.

The Enterprise View Express Setup page is shown, with a message that the workspace has not been set. On the **Workspace** tab, click **Browse** and specify the location of the .rwp file, then click **Save**. A confirmation message displays the path to the configuration workspace.

- 4 Click the Code tab. Enter and confirm a new code, then click Save. A confirmation message is shown, verifying the setup code has been updated.
- 5 Click the **Options** tab. Set administration options for Enterprise View Express as described in "Configuring Enterprise View Express Setup Options" on page 2-8.
- 6 Click the **Home** menu button to log in to Enterprise View Express, where you will complete the final configuration steps (see "Configuring Enterprise View Express after Installation" on page 2-9).

#### Configuring Enterprise View Express Setup Options

Enterprise View Express setup options control account locking and password expiration. You can also use the options to clear the Repository Query cache after a workspace is modified and to display debugging information for charts

#### To configure Enterprise View Express setup options:

- 1 On the Enterprise View Express Setup page, click the Options tab.
- 2 Select **Show Debug Information** if you want Enterprise View Express to display a text file with chart information in addition to the chart. The text file may be useful in debugging the chart.
- 3 In the Lock User after this many attempts field, enter the number of failed login attempts users are permitted before being locked out of their accounts. A blank, 0, or non-numeric character means that users never are locked out. The administrator can lock or unlock a user account manually on the Enterprise View Express Manage User Accounts page. For more information on locking or unlocking accounts, see "Administration Tasks for User Accounts" on page 3-31.
- 4 In the **Passwords expire after this many days** field, enter the number of days passwords may be used before they expire. A blank, 0, or non-numeric character means that passwords do not expire. Users with expired passwords are prompted to create new ones. The administrator can expire or unexpire passwords manually on the Enterprise View Express Manage User Accounts page. For more

information on changing expired passwords see <u>"Administration</u> Tasks for User Accounts" on page 3-31.

5 Select Clear Query Repository Cache if you want to clear the cache used to store Query Repository information. This information is used to populate drop-downs on the Query Repository page. You should always clear the cache after a workspace has been modified, so that the most recent workspace information is available in the drop-downs. For more information on the Query Repository feature, see "Querying the Repository" on page 3-10.

#### Configuring Enterprise View Express after Installation

Before rolling out Enterprise View Express for use throughout the organization, the administrator needs to perform some basic configuration tasks.

#### To configure Enterprise View Express for initial use:

- 1 Log in to Enterprise View Express using the default administrator credentials (the default username is administrator and the default password is admin).
- 2 On the Administration pane, click Manage Workspaces.
- 3 Grant Enterprise View Express access to at least one workspace.
- 4 On the Administration pane, click Manage User Accounts.
- 5 Create new user accounts, assigning roles and workspace access privileges. Create and/or edit roles as needed.
- 6 Customize the default surveys to meet your business objectives (optional).
- 7 Assign surveys to users to begin the process of collecting business data for use in dashboards.
- 8 Customize the default charts and dashboards (optional).

### What's Next?

You have successfully installed Enterprise View Express and configured your Web server for Enterprise View Express processing. Now let's look at how you access and view repository and business data in Enterprise View Express.

# Using Enterprise View Express

ccess the Enterprise View Express Home Page to begin working with Enterprise View Express (see "Accessing Enterprise View Express" on page 3-2). If you are logging in for the first time, please see "Post-Installation Setup Guide" on page 2-6 for mandatory initial configuration tasks.

This chapter covers the following topics:

"Accessing Enterprise View Express" on page 3-2

"Enterprise View Express Home Page" on page 3-3

"Using the Enterprise View Express Dashboards Pane" on page 3-6

"Using the Surveys Pane" on page 3-9

"Using the Application Profiles Pane" on page 3-10

"Enterprise View Express Administration" on page 3-26

"Troubleshooting and FAQs" on page 3-65

"What's Next?" on page 3-71

## Accessing Enterprise View Express

The Enterprise View Express administrator creates an account for each authorized Enterprise View Express user. Account settings define your user name and password, the role to which you have been assigned, and the workspaces you are permitted to access.

A default account for the administrator is supplied with the product. Edit the default login credentials for the administrator and create additional users as described in <u>"Enterprise View Express Administration" on page 3-26.</u>

#### Important:

By default, the administrator's user name is administrator and the password is admin. Change the password for the default Administrator account immediately after the first login to prevent unauthorized access

#### To login to Enterprise View Express:

- 1 In a web browser (both Internet Explorer and Firefox are supported), go to http://server name:port/Enterprise View Express where server name is the name of the machine running Enterprise View Express, and port is the port number:
  - For Adobe Tomcat, the port number is specified at installation. The default is 8080. For example: http://localhost:8080/APM.
  - For WebSphere Application Server, the port number is the HTTP transport port for the application server profile. For example: http://localhost:9081/APM. You can find the HTTP transport port in the file AboutThisProfile.txt in the logs folder for the application server profile.

**Note:** Make sure "APM" is in all capitals.

2 The Enterprise View Express Login page is shown. Enter your user name in the Username field and your password in the Password field. The fields are case-sensitive. If your password has expired, you are prompted to enter a new one.

**Tip:** You can also change your password in Enterprise View Express by clicking your user name in the upper righthand corner of the page.

3 Click Login. The Enterprise View Express Home page is displayed.

**Note:** Some pages may be unavailable depending on the user's access privileges. See "Managing User Accounts" on page 3-30

for details.

### Enterprise View Express Home Page

The Enterprise View Express home page is displayed after login. The home page consists of four panes, each associated with a distinct set of tasks.

**Note:** Some panes, buttons, and menu items may not be visible, de-

pending on a user's role. Roles determine access privileges to Enterprise View Express features, as described in "Managing

Roles" on page 3-34.

See the following topics for details:

"Tips for Editing Tables in Enterprise View Express" on page 3-6

"Overview: Enterprise View Express Dashboards Pane" on page 3-3

"Overview: Surveys Pane" on page 3-4

"Overview: Application Profiles Pane" on page 3-4

"Overview: Administration Pane" on page 3-5

#### Overview: Enterprise View Express Dashboards Pane

From this pane, you can view dashboards containing charts, graphs, and tables. The charts display business data collected from survey results, and/or metrics collected from workspaces.

The **Role Views** button displays the default dashboards for each Role (CIO, Analyst, etc.). The **Browse All** button displays a table of all dashboards, with links for viewing.

See <u>"Using the Enterprise View Express Dashboards Pane" on page 3-6</u> for details.

#### Overview: Surveys Pane

Each time you log in to Enterprise View Express, a list of all surveys currently assigned to you by the Enterprise View Express administrator is displayed in the Survey Inbox on the Surveys pane.

You can view and submit responses to assigned surveys by clicking the **Respond** link. When you complete a survey, the results are stored and used to provide business data for charts. The **Browse All** button lets you select and preview any survey (including those not directly assigned to you by the Enterprise View Express administrator).

See "Using the Surveys Pane" on page 3-9 for more details.

#### Overview: Application Profiles Pane

From this pane, authorized Enterprise View Express users can query, analyze, and edit repository data, including business rules.

#### Analysis Pages

On this page, authorized Enterprise View Express users can view pages generated by workbench tools and WebGen, as well as Executive Reports previously generated via the **Prepare** menu in Modernization Workbench. See "Viewing Repository Analysis Information" on page 3-13 for more details.

#### **Query Repository**

On this page, authorized Enterprise View Express users can specify entity types and relationships and query one or more workspace repositories. See "Querying the Repository" on page 3-10 for more details.

#### **Business Rules**

On this page, authorized Enterprise View Express users can browse or search business rules and triggers by business function and rule set. Users with appropriate access privileges can edit business rules and save their changes directly to the workspace repository. See "Working with Business Rules" on page 3-23 for more details.

#### Overview: Administration Pane

From this pane, authorized Enterprise View Express administrators can perform advanced configuration and management tasks for Enterprise View Express as summarized below. See <u>"Enterprise View Express Administration" on page 3-26</u> for comprehensive instructions.

#### Manage Workspaces

Administrators specify which workspaces may be accessed by Enterprise View Express. Global workspace access is set here, while individual users' workspace access privileges are set via the "Manage User Accounts" link. See "Managing Workspaces" on page 3-28 for details.

#### Manage User Accounts

Administrators can manage user accounts, assign roles, and control user access to workspaces. See "Managing User Accounts" on page 3-30 for details.

#### Manage Roles

Roles are assigned to users. Each role specifies a default dashboard and a set of access privileges for Enterprise View Express functions. Enterprise View Express ships with several predefined roles, and administrators can edit these and/or create new roles. See "Managing Roles" on page 3-34 for details.

#### Manage Tags

Tags are used to categorize surveys, store survey results, and filter those results in charts. Tags are workspace-specific, which means any tags created for a workspace in the workbench are available for use in Enterprise View Express, and vice-versa. Administrators can create new tags and manage tag structure. See "Managing Tags" on page 3-36 for details.

#### **Configure Questions**

Administrators can configure and categorize questions for use in surveys. Questions and categories can be defined once and reused in multiple surveys. See "Configuring Questions" on page 3-42 for details.

#### **Configure Surveys**

Administrators can configure surveys about your organization's application portfolio, business processes, and workspace data. Surveys are assigned to users, and responses (survey results) are collected by Enterprise View Express for use in charts and dashboards. See "Configuring Surveys" on page 3-46 for details.

#### **Configure Charts**

Administrators can configure various charts, tables, and graphs for use in Enterprise View Express dashboards. See <u>"Configuring Charts" on page 3-52</u> for details.

#### Configure Enterprise View Express Dashboards

An Enterprise View Express dashboard is a web page that displays charts of business and metrics data collected from survey results and workspace repositories. Administrators can configure dashboards, determining which charts are displayed. See "Configuring Dashboards" on page 3-57 for details.

#### Tips for Editing Tables in Enterprise View Express

Many Enterprise View Express pages include tables that can be quite lengthy. Each entry (or row) has a checkbox on the right, allowing you to select the row. The **With Selected: (actions)** drop-down at the bottom of the table lets you quickly apply functions (delete, move up, move down, etc.) to all selected rows. The available actions vary by table.

## Using the Enterprise View Express Dashboards Pane

Note:

You must be assigned a role with appropriate access privileges to view and use this pane. Contact your Enterprise View Express administrator to obtain access.

An Enterprise View Express dashboard is a web page containing up to four interactive charts. Each chart displays business data and/or application metrics collected from survey results and workspace repositories. Chart elements (pie slices, data points on a graph, rows in a table, etc.) may be interactive. Clicking on elements in a chart lets you drill down further into the data.

Enterprise View Express supports a wide variety of chart types, enabling sophisticated representations of your enterprise information.

Note:

The Enterprise View Express Dashboards pane is view-only. Configuring dashboards and charts is done from the Administration pane, as described in <u>"Enterprise View Express Administration"</u> on page 3-26.

#### Viewing Dashboards by Role

Enterprise View Express ships with a customized default dashboard and set of charts for each predefined role. As new roles are added, Enterprise View Express can provide a unique dashboard view for each class of users.

#### To view your role's default dashboard:

- 1 Log in to Enterprise View Express.
- 2 Click Role Views on the Enterprise View Express Dashboards pane. The default dashboard assigned to your role is displayed, or if no default dashboard has been assigned, a message to that effect.

**Note:** If you are logged in as the Administrator, you are shown the default dashboard for the first role to which one has been assigned, in the order CIO, Manager, Analyst, Developer, and custom roles listed alphabetically.

3 *Chart elements* (pie slices, data points on a graph, rows in a table, etc.) may be interactive. Click on an element to drill down further into the data (see "Understanding Drilldown in Dashboards and Charts" on page 3-58).

#### **Browsing Dashboards**

Every dashboard in Enterprise View Express is not necessarily assigned to a specific role. This means you may not be able to access all dashboards from the **Role Views** link.

You can browse the complete list of dashboards and select one to view as described below.

#### To browse all Enterprise View Express dashboards:

- 1 Log in to Enterprise View Express.
- 2 Click **Browse All** on the Enterprise View Express Dashboards pane. The Dashboard List page is displayed.
- 3 The table displays a list of all dashboards and their associated drill-down targets (see "Understanding Drilldown in Dashboards and Charts" on page 3-58).

The **Drills To** column contains comma-separated entries, representing the drilldown target for each chart.

**Tip:** Click the Dashboard column heading to sort the table by dashboard name.

4 Click a name in the Dashboard column to view the dashboard. The selected dashboard and its charts are displayed.

Note: If default dashboards have been created for multiple work-spaces, the name of the workspace is appended to the title of a default dashboard whenever it is displayed: for example, CIO Departments (Workspace).

5 *Chart elements* (pie slices, data points on a graph, rows in a table, etc.) may be interactive. Click on an element to drill down further into the data (see "<u>Understanding Drilldown in Dashboards and Charts</u>" on page 3-58).

## Using the Surveys Pane

Note:

You must be assigned a role with appropriate access privileges to view and use this pane. Contact your Enterprise View Express administrator to obtain access.

Administrators configure surveys about your organization's application portfolio, business processes, and workspace data. Surveys are assigned to users, and responses (survey results) are collected by Enterprise View Express for use in charts and dashboards.

From the Surveys pane, you can view and submit responses to assigned surveys as described in <u>"Responding to Surveys" on page 3-9.</u>

#### Working with the Survey Inbox

Surveys currently assigned to you are displayed in the Survey Inbox. The list is sorted by the date your last response was submitted. New surveys (surveys with no responses) are always displayed at the top of the list.

**Tip:** Click a column heading to resort the table.

The Survey Inbox contains the following information for each survey in the list:

- Title: Survey title.
- **Tag:** The tag under which your responses are stored.
- **Submitted:** The date you last submitted responses to the survey.
- **Respond link:** Click to open a survey and begin submitting answers.

#### Responding to Surveys

You can view and respond to any survey in your inbox by clicking the corresponding **Respond** link. You can answer some or all questions in the survey. The answers you supply are logged as survey results each time you click **Submit**. Once you have submitted at least one response, the Status column in the inbox is updated to "Read."

#### To submit responses to a survey:

- Log in to Enterprise View Express.
- On the Surveys pane, locate a survey in your inbox and click the Respond link.
- The survey is displayed. Input your answers and click **Submit** to store the results.

### Using the Application Profiles Pane

Note:

You must be assigned a role with appropriate access privileges to view and use this pane. Contact your Enterprise View Express administrator to obtain access.

The Analyze Repository Data pane lets you query, explore, and edit data in repository workspaces. From this pane, you can:

- Run queries to retrieve information about repository entities and relationships as described in "Querying the Repository" on page 3-10.
- Generate and view a set of predefined analysis pages as described in "Viewing Repository Analysis Information" on page 3-13.
- Search, browse, and edit business rules and triggers as described in "Working with Business Rules" on page 3-23.

#### **Querying the Repository**

Use the Query Repository page to view the relationships between objects: files that depend on another file, programs that call another program, and the like. You can define your own queries, or use predefined gueries identical to the ones available in the workbench Query Repository tool. Select multiple workspaces to run the same query for each.

Note:

Enterprise View Express populates the drop-downs on the Query Repository page from a cache used to store repository information. Make sure to clear the cache after a workspace has been modified, so that the most recent workspace information is available in the drop-downs. For more information on clearing the cache, see "Configuring Enterprise View Express Setup Options" on page 2-8.

#### To query the repository:

- 1 In the Analyze Repository Data pane, click **Query Repository**. The Query Repository page is displayed.
- 2 Select the workspace(s) you want to query in the Select Workspace drop-down. To select multiple workspaces, press and hold the Ctrl key while making selections.

Note: Each time you make a choice in a drop-down on the Query Repository page a working icon indicates that the remaining drop-downs are being populated with available choices.

3 Select the project you want to view in the **Select Project** drop-down, or select (all projects).

**Note:** If you selected multiple workspaces, the **Select Project** dropdown is disabled.

- 4 Select the type of object whose relationships you want to view in the **Left Object Type** drop-down.
  - To view a list of all objects matching the selected type, click Show All.
  - To view only objects whose names match a string, enter the string in the text box below the drop-down and click **Search**. The search is case-sensitive. Use an asterisk (\*) to match 0 or more characters, a question mark (?) to match any single character.
- Objects that match the search criteria are displayed in a list box below the **Left Object Type** drop-down. Select the objects whose relationships you want to view. To select multiple objects, press and hold the **Ctrl** key while making selections.
  - Predefined queries appropriate for the selected object type are displayed in a list below the **Relationship** field. To run a predefined query, click it in the list.

To define a query, select the right object type for the relationship in the **Right Object Type** drop-down. Relationships appropriate for the selected left and right object types are displayed in the Relationship drop-down. Select the relationship you want to search for and click Query.

Alternatively, you can specify the relationship first, in which case the list of available right object types is narrowed. If you prefer, you can omit the relationship or right object type entirely.

Note: Queries perform better when you specify a value for at least two of the three fields. It is possible to specify a value for only one field, but not recommended.

- The page is updated and the Query Results table is displayed. Figure 3-1 shows the results for a query where "Cobol File" is the left object, "Defines Program" is the relationship, and "Program" is the right object.
- Click **Print** to print the table, or **Save** to save the table as an HTML file. Click a column heading to sort the table by that column.

Figure 3-1 Enterprise View Express Query Results for Cobol\_DefinesProgram\_Program

## **Query Results**



COBOL: DefinesProgram: PROGRAM

Workspace	Left Type	Left Object	Relationship	Right Type	Right Object
DemoSyc4	COBOL	DayOfWeek.cbl	CobolDefinesProgram	PROGRAM	DAYOFWEEK
DemoSyc4	COBOL	GSS.CBL	CobolDefinesProgram	PROGRAM	GSS
DemoSyc4	COBOL	GSS4.CBL	CobolDefinesProgram	PROGRAM	GSS4
DemoSyc4	COBOL	GSS5.CBL	CobolDefinesProgram	PROGRAM	GSS5
DemoSyc4	COBOL	GSS6.CBL	CobolDefinesProgram	PROGRAM	GSS6

# Viewing Repository Analysis Information

Note:

Most Analysis pages are generated by the WebGen utility in Modernization Workbench. Available analysis pages in the table are displayed as blue hyperlinks. If the entry you want is not displayed, you need to run the related tool in the workbench and/or run WebGen. Before using the Analysis Pages link, please consult "Using WebGen" on page 4-1.

The Analysis Pages link lets you view information generated for the repository by the Executive Report, Diagrammer, Glossary, Reference Reports, Change Analyzer, Batch Application Viewer, User Interface, and Database Schema Modernization Workbench tools. You can also view documentation reports generated in tool-specific report formats.

To access and view analysis information in Enterprise View Express, you must first run the desired tool(s) once in Modernization Workbench and/or run WebGen for the desired tool(s) (Table 3-1). You can run the tools and/or WebGen on any Modernization Workbench machine.

Table 3-1 Prerequisites for Viewing Analysis Information in Enterprise View Express

Modernization Workbench Tool	Run Once	Run WebGen
Executive Report	yes	no
Diagrammer	no	yes
Glossary	no	yes
Reference Reports	no	yes
Change Analyzer	no	yes
Batch View	no	yes
User Interface	yes	yes
Database Schema	yes	yes
User Documentation	no	yes
Generated Documentation	no	yes

Table 3-1 Prerequisites for Viewing Analysis Information in Enterprise View Express (continued)

Modernization Workbench Tool	Run Once	Run WebGen
Other Documentation	no	yes

### Viewing Glossary Information

The Glossary tool creates a dictionary, or *glossary*, of meaningful names for items of interest in your application: data elements, paragraphs, programs, screens, tables, and the like. It's especially useful for assigning *business names* to identifiers: natural language names that make it easy to document and retrieve business rules. The field PLC\_NUM, for example, might have the business name Policy Number.

### To view Glossary information:

- 1 In the Analyze Repository Data pane, click **Analysis Pages**.
- 2 Select a project from the drop-down menu.

**Note:** To change workspaces, click the Change Workspace link. The list of available projects is updated.

3 The table displays a list of analysis pages for the workspace and project you selected.

Note: Available analysis pages in the table are displayed as blue hyperlinks. If the entry you want is not displayed, you need to\_run the related tool in the workbench and/or run WebGen.

- 4 In the table, locate and click the Glossary link for the workspace and project you want to view.
- 5 The Glossary window opens in Enterprise View Express. Click:
  - **Files** to display the Files view. The lefthand column shows each source file in the selected project. Click the link for a file to view its source code. Click the Back button in the browser to return to the top of the Glossary window.

• Names to display the Names view. The Names view lists every identifier in the selected project, any business name you may have assigned to an identifier, and the location of the identifier in source. Click the link for a location to navigate to the source file in the Files view.

### **Viewing Reference Reports**

Reference reports identify missing or unneeded files or objects in legacy applications. The reports are based on the parser's analysis of references in verified source:

- An *unresolved report* identifies missing application elements.
- An *unreferred report* identifies unreferenced application elements.
- A *cross-reference report* identifies all application references.

For background, see *Preparing Projects* in the workbench documentation set.

# To view reference reports:

- 1 In the Analyze Repository Data pane, click **Analysis Pages**.
- 2 The Analysis page opens and displays a table of generated information by workspace and project.

Note: Available analysis pages in the table are displayed as blue hyperlinks. If the entry you want is not displayed, you need to\_run the related tool in the workbench and/or run WebGen.

- 3 In the table, locate and click the Reference Reports link for the workspace and project you want to view.
- 4 The Reference Reports window opens in Enterprise View Express. Click the link for the report you want to view.

Table 3-2 describes the columns in each report. Click the link for a file to view its source code.

Reference Report Columns Table 3-2

Column Name	Report Types	Description
Object Name	All	The name of the unresolved, unreferenced, or cross-referenced object.
Object Type	All	The entity type of the unresolved, unreferenced, or cross-referenced object.
Legacy Object	Unreferred Report, Cross-Reference Report	The source file that contains the unreferenced or cross-referenced object.
Source	Unreferred Report, Cross-Reference Report	The location in the workspace folder of the source file that contains the unreferenced or cross-referenced object.
Referred by	Unresolved Report, Cross-Reference Report	The name of the referring object.
Referring Object Type	Unresolved Report, Cross-Reference Report	The entity type of the referring object.
Relationship	Unresolved Report, Cross-Reference Report	The relationship between the unresolved or cross-referenced object and the referring object.
Object Description	All	The description of the unre- solved, unreferenced, or cross-referenced object entered by the user on the Description tab of the Object Properties window.

### Viewing Change Analyzer Information

Change Analyzer identifies the *class* of data items used to perform a business function in a legacy application. Among other uses, it lets you answer the kinds of "What if?" questions posed in the recent past by the industry-wide changes for Y2K, Zip+4, and the Euro dollar: "What if I change the type of this variable, or the length of this field: what *other* fields will I also have to change?"

Change Analyzer results are displayed in three lists:

- *Possible datanames* are fields the analyst has determined may be affected by the proposed change.
- *Affected datanames* are fields the analyst has determined will be affected by the proposed change.
- *Clean datanames* are fields the analyst has determined will not be affected by the proposed change.

Reports show source entities that may require modification, lines of code affected, and the like. For background, see *Analyzing Projects* in the workbench documentation set.

#### To view Change Analyzer information:

- 1 In the Analyze Repository Data pane, click **Analysis Pages**.
- 2 The Analysis page opens and displays a table of generated information by workspace and project.

Note: Available analysis pages in the table are displayed as blue hyperlinks. If the entry you want is not displayed, you need to run the related tool in the workbench and/or run WebGen.

- In the table, locate and click the Change Analyzer link for the workspace and project you want to view.
- 4 The Change Analyzer window opens in Enterprise View Express. Click:
  - Metrics Report to display, for each program in the selected project, the number of declarations that contain possible, affected, or clean datanames, the percentage of declarations that con-

- Possible Datanames to display the possible datanames in each program in the selected project, a comment that identifies the search criterion the dataname matched, the source file in which the dataname is declared, and the line and column numbers of the declaration. The report also displays the status of the dataname:
  - Working means the dataname has not been determined to be affected or clean.
  - Affected means the dataname has been determined to be affected.
  - *Clean* means the dataname has been determined to be clean.
- Affected Datanames to display the affected datanames in each program in the selected project, a comment that identifies the search criterion the dataname matched, the source file in which the dataname is declared, and the line and column numbers of the declaration.
- Clean Datanames to display the clean datanames in each program in the selected project, a comment that identifies the search criterion the dataname matched, the source file in which the dataname is declared, and the line and column numbers of the declaration.

# Viewing Batch Application Information

Batch Application Viewer lets you perform low-level analysis of batch processes. Use Batch Application Viewer diagrams and lists to determine whether batch jobs are dependent on one another, and show the relationships between jobs, procedures, programs, and data stores. For background, see *Analyzing Projects* in the workbench documentation set.

# To view Batch Application Viewer information:

1 In the Analyze Repository Data pane, click **Analysis Pages**.

2 The Analysis page opens and displays a table of generated information by workspace and project.

Note: Available analysis pages in the table are displayed as blue hyperlinks. If the entry you want is not displayed, you need to run the related tool in the workbench and/or run WebGen.

- 3 In the table, locate and click the Batch View link for the workspace and project you want to view.
- 4 The Batch Application Viewer window opens in Enterprise View Express.
- 5 In the Job Dependencies Diagram area, click:
  - **Diagram** to view a diagram that shows dependencies between jobs in the selected project. Jobs are regarded as dependent if one writes to a dataset and the other reads from the same dataset.
  - Windows Extended Metafile (EMF) to display the job dependencies diagram in EMF format.
  - List to display job dependencies information in list format.

Click the Back button in the browser to return to the Batch Application Viewer window.

- 6 In the Job Diagrams area, for each job file in the selected project, click:
  - **Diagram** to view a diagram that shows the relationships between jobs, procedures, programs, and data stores.
  - Windows Extended Metafile (EMF) to display the job relationships diagram in EMF format.
  - **List** to display job relationships information in list format.

Click the Back button in the browser to return to the top of the Batch Application Viewer window.

### Viewing User Interface Information

The User Interface tool lets you view renderings of application screens. For background, see Transforming Applications in the workbench documentation set.

#### To view User Interface information:

- In the Analyze Repository Data pane, click Analysis Pages.
- The Analysis page opens and displays a table of generated information by workspace and project.

Note: Available analysis pages in the table are displayed as blue hyperlinks. If the entry you want is not displayed, you need to\_ run the related tool in the workbench and/or run WebGen.

- In the table, locate and click the User Interface link for the workspace and project you want to view.
- The User Interface window opens in Enterprise View Express.
- On the left side of the window, a diagram shows each screen file in the selected project. Click a file to display a rendering of its screen. Click the link for another screen file to display its screen. Click the Back button in the browser to return to the top of the User Interface window.

# Viewing Database Schema Information

The Database Schema tool lets you generate and edit a database schema for your application. Use it to set up tables, and edit table columns, indexes, keys, and reference keys. For background, see Transforming Applications in the workbench documentation set.

#### To view Database Schema information:

- In the Analyze Repository Data pane, click **Analysis Pages**.
- The Analysis page opens and displays a table of generated information by workspace and project.

Note: Available analysis pages in the table are displayed as blue hyperlinks. If the entry you want is not displayed, you need to run the related tool in the workbench and/or run WebGen.

- In the table, locate and click the Database Schema link for the workspace and project you want to view.
- 4 The Database Schema window opens in Enterprise View Express.
- 5 On the left side of the window, a diagram shows each table generated for the selected project. Click a table to display its contents. Scroll down to view columns, indexes, keys, and reference keys. Click the link for another table to display its contents.

# Viewing Executive Reports

Executive reports offer HTML views of application inventories that a manager can use to assess the risks and costs of supporting the application:

- The Application Summary view gives statistics for industry-standard metrics such as program volume, maintainability, cyclomatic complexity, and number of defects.
- The Code Defects view gives statistics for common defects that mark programs as candidates for re-engineering deeply nested IFs, GOTO non-exits, range overlaps, and the like.
- The Repository Statistics view gives statistics for Modernization Workbench verification results and unresolved or unreferenced application elements.
- The Standard Deviations view displays graphs that plot the deviation of the programs in the application from the means for six key industry-standard metrics.

# To view an Executive Report:

- 1 In the Analyze Repository Data pane, click **Analysis Pages**.
- 2 The Analysis page opens and displays a table of generated information by workspace and project.

Note: Available analysis pages in the table are displayed as blue hyperlinks. If the entry you want is not displayed, you need to\_run the related tool in the workbench and/or run WebGen.

- In the table, locate and click the Executive Report link for the workspace and project you want to view.
- 4 The Executive Report window opens in Enterprise View Express.
- 5 The top page in each view displays the available statistics and graphs. Click the links to view the detail for each type of statistic or graph. In the statistic or graph detail page, click the link for a program to view the detail for that program.

# Viewing Diagrammer Information

The application flow diagrams generated by the workbench Diagrammer use boxes and lines to show the relationships between programs, data stores, screens, and the like. The *scope* of a diagram determines the objects and relationships it displays.

#### To view diagrams:

- 1 In the Analyze Repository Data pane, click **Analysis Pages**.
- 2 The Analysis page opens and displays a table of generated information by workspace and project.

Note: Available analysis pages in the table are displayed as blue hyperlinks. If the entry you want is not displayed, you need to run the related tool in the workbench and/or run WebGen.

- 3 In the table, locate and click the Diagrammer link for the workspace and project you want to view.
- 4 The Diagrammer window opens in Enterprise View Express.
- 5 At the top of the Diagrammer window, click the link for the scope of the diagram you want to view. Enterprise View Express draws a diagram of the scope. In the area above the scope diagram, click:

- Windows Extended Metafile (EMF) to display the compact view of the diagram in EMF format.
- **List** to display relationship flow information in list format.

Click the Back button in the browser to return to the top of the Diagrammer window.

# Working with Business Rules

If your site is licensed to use Business Rule Manager, you can view, edit, and search business rules in Enterprise View Express. You must have appropriate access privileges to use the **Business Rules** page.

A business rule is a named container that identifies and documents a *code segment* according to the task it performs in a business process. A business rule named Calculate Date Difference, for example, might consist of this segment:

```
COMPUTE WS-DATE-VARIANCE = WS-C-CARD-DATE-CCYYMM - WS-TODAYS-DATE-CCYYMM.
```

Business rules are organized in *rule sets*. A rule set typically consists of rules executed together, such that if one rule is executed, all are executed (the statements in a paragraph, for example). You can think of a rule set as a business process, like Validate Input or Update File.

Rule sets are organized, in turn, in *business functions*. A business function typically defines the order in which processes are *triggered*. Think of a business function as a use case, like Insert Customer or Update Order.

Business rule *properties* define the characteristics of a rule: its name, type, audit status, business description, and the like. You can use these properties to search for rules in Enterprise View Express.

**Note:** You need not have run WebGen to view business rules.

# To browse and edit business rule information:

1 In the Analyze Repository Data pane, click **Business Rules**. The Browse/Triggering/Search Business Rules page is displayed. Select the **Browse** tab.

2 Ensure the workspace you want to query is the current workspace. Use the **Change** link in the top right corner of the page to switch to another workspace. The active workspace is changed, and dropdowns are populated with appropriate choices.

**Note:** You cannot select multiple workspaces on this page.

- 3 In the **Business Function List**, choose one of the following options:
  - Click the link for a business function to view its rule sets. Go to step 4.
  - Locate a business function and click the Edit link. Go to step 7.
- 4 In the Rule Set List, choose one of the following options:
  - Click the link for a rule set to view its rules and their properties. Go to step 5.
  - Locate a rule set and click the Edit link. Go to step 7.
- 5 The **Business Rules List** displays the rules defined for the selected rule set. Choose one of the following options:
  - Click the link for a rule to view its source code and properties. Go to step 6.
  - Locate a rule and lick the Edit link. Go to step 7.
- The **Rule Details** page is shown. By default, the **General** tab is selected, displaying the general properties for the selected rule. Click the **Segments**, **I/O Data Elements**, and **Control Conditions** links to view more properties for the selected rule. On the right, a window displays the source code for the rule with the relevant line(s) of code highlighted. Click the **Edit** button.
- 7 On the **Rule Details** page, use the tabs to view and modify rule properties. Click:
  - General (this tab opens by default) to modify the general properties of the rule. When you are satisfied with your changes, click Save. A summary page displays the general properties of the rule.

- **Segments** to view the code segment assigned to the rule and related information.
- I/O Data Elements to view the rule's input/output data elements and related information.
- **Control Conditions** to view the conditions that control the rule's execution and related information

Click links in the Path breadcrumb trail at the top of the page to navigate to other pages.

# To browse and edit triggering rules:

- 1 In the Analyze Repository Data pane, click **Business Rules**. The Browse/Triggering/Search Business Rules page is displayed. Select the **Triggering** tab.
  - The Triggering page lists rules in a hierarchy of triggers, in which each triggering rule can be a parent to triggering rules that depend on it in program logic.
- 2 The left pane contains the **Triggering Rule List**. Expand the hierarchy and click the link for a business function, rule set, or rule to view its properties and source code in the right panes.
- In the Properties pane on the right, the **General** tab opens by default. Click the **Segments**, **I/O Data Elements**, and **Control Conditions** tabs to view more properties for the selected item.
- 4 Scroll to the bottom and click the **Edit** button to modify the properties.

### Click:

- General (this tab opens by default) to modify the general properties of the rule. When you are satisfied with your changes, click Save. A summary page displays the general properties of the rule.
- **Segments** to view the code segment assigned to the rule and related information.
- I/O Data Elements to view the rule's input/output data elements and related information.

- Control Conditions to view the conditions that control the rule's execution and related information.
- Click **Save** to store your changes.

#### To search for a business rule:

- In the Analyze Repository Data pane, click **Business Rules**. The Browse/Triggering/Search Business Rules page is displayed. Select the Search tab.
- Ensure the workspace you want to guery is the current workspace. Use the **Change** link in the top right corner of the page to switch to another workspace. Drop-downs are populated with appropriate choices.
- Specify each property you want to search by and its value. Select:
  - The property in the **Name** drop-down.
  - The operator for the property value comparison in the **Operator** drop-down.
  - The value of the property in the **Values** field. You can use wildcard patterns allowed in LIKE statements by SQL-92.

Click Add. The search criterion is added to the list box below the drop-downs. Repeat this step for each property you want to search by.

When you are satisfied with your entries, click **Find**. Enterprise View Express returns the results of the search in the Rule List field, where you can edit or view the properties of the returned rules.

# **Enterprise View Express Administration**

Note: The Administration pane is only visible and accessible to users with appropriate access privileges.

Global management tasks for Enterprise View Express (user accounts, workspace access, roles, and tags) are accessed via the Administration pane. These tasks, as well as the configuration of dashboards, surveys, and their respective components (charts and questions) are restricted to Enterprise View Express administrators.

From the Administration pane, you can:

- Manage Enterprise View Express's access to workspace repositories.
- Create and manage user accounts.
- View Enterprise View Express reports.
- Create and manage roles, each of which defines a default dashboard and a set of access privileges for Enterprise View Express panes and features. Every user must be assigned a role.
- Create and manage tags, which are used to group surveys and repository objects. Tags are also used to filter survey results in charts.
- Configure survey questions and surveys.
- Configure charts and dashboards.
- Import and export Enterprise View Express content.

#### Important:

We highly recommend changing the password for the default Administrator account immediately after the first login to prevent unauthorized access.

# Using Enterprise View Express Default Templates

Enterprise View Express ships with default templates for the following objects preinstalled:

- User Account: Administrator user account with full access privileges for all Enterprise View Express features. You cannot change the username for this account
- Roles: CIO, Manager, Analyst, and Developer. Each role has a default dashboard view and a predefined set of access privileges.
- Tags: A default tag structure representing a typical enterprise. See "Understanding Tag Structure: Example" on page 3-38 for details.

- Surveys: Department and Application. These include default questions and categories.
- **Dashboards:** Default dashboards for each role, including target dashboards for drilldown. See "Understanding Drilldown in Dashboards and Charts" on page 3-58 for details.
- Charts: A set of default charts used to populate the default dashboards.

Each time you add a workspace to Enterprise View Express, the templates are imported and available for immediate use.

Note:

Default dashboards and charts are not automatically imported when you add a new workspace. You are prompted, and can opt not to create default dashboards and charts.

# Managing Workspaces

Note:

Only users with appropriate access privileges can enable and disable access to workspaces.

Enterprise View Express collects and shares information with repository workspaces. You cannot begin working with Enterprise View Express until you enable access to workspaces via the Manage: Workspaces button on the Administration pane.

#### Administration Tasks for Workspaces

To begin managing access to workspaces, log in to Enterprise View Express with an account with appropriate access privileges. Select a task and follow the instructions below.

Note:

If you have problems accessing workspaces you've added in Enterprise View Express, see "Why can't I access a workspace?" on page 3-69.

#### To add access to a workspace in Enterprise View Express:

Note: To add access to a workspace, you must point to a .rwp file that resides on the Enterprise View Express server. If the workspace is located on another machine, you must build a new connection to the workspace on the Enterprise View Express server.

- 1 Click Manage: Workspaces on the Administration pane. The Manage Workspaces page is displayed. Click the Browse button. The Choose File dialog is displayed.
- In the Choose File dialog, navigate to the workspace (.rwp) file you want to add and click **Open**.
- 3 Click **Submit**. The Manage Workspaces page is updated and the new workspace is added to the list.
- 4 You are prompted to create default dashboards and charts for the workspace.
  - Yes (Internet Explorer)/OK (Firefox): Select to create default dashboards and charts for the new workspace. If you have already added at least one workspace, the default dashboards and charts have the name of the new workspace appended: CIO Enterprise (Workspace).
  - No (Internet Explorer)/Cancel (Firefox): Select to add the workspace without default dashboards and charts. You will need to configure dashboards and charts at a later time in order to display any data in Enterprise View Express.

# To delete Enterprise View Express's access to a workspace:

- 1 Click the **Manage:Workspaces** link on the Administration pane. The Manage Workspaces page is displayed.
- 2 Click the **Remove** link next to the workspace you want to remove from Enterprise View Express.
- 3 You are prompted to confirm deletion. Click **OK** to remove the workspace from Enterprise View Express, or **Cancel** to return to the Manage Workspaces page without removing the workspace.

#### **Important:**

Once you click **OK**, this action cannot be undone. All Enterprise View Express information related to the workspace is permanently deleted.

The Manage Workspaces field is updated and the deleted workspace is removed from the list.

### To change the designated configuration workspace:

- Click the **Manage:Workspaces** link on the Administration pane. The Manage Workspaces page is displayed.
- At the bottom of the page, click the **Change** link next to the path to the configuration workspace. You are prompted to enter the setup code.
- On the Workspace tab, click Browse and specify the location of the . rwp file, then click Save. A confirmation message displays the path to the configuration workspace. See "Specifying a Configuration Workspace" on page 2-6 for details.

Note: Configuration information from the previous configuration workspace is not copied to the new configuration workspace.

# To set administration options:

- Click the **Manage:Workspaces** link on the Administration pane. The Manage Workspaces page is displayed.
- At the bottom of the page, click the **Change** link next to the path to the configuration workspace. You are prompted to enter the setup code.
- Click the **Options** tab. Set administration options for Enterprise View Express as desired.

# Managing User Accounts

Only users with appropriate access privileges can add, edit, Note: and delete user accounts.

To enable Enterprise View Express access for users other than the default Administrator, you must configure additional user accounts. A user account is comprised of login credentials, a role, and permissions for accessing workspaces.

# Accessing the Manage User Accounts Page

To begin working with user accounts, click **Manage:UserAccounts** on the Administration pane. The Manage User Accounts page is displayed.

The table shows a list of all existing user accounts and their properties. You can resort the table by clicking any column heading. Use the links to perform various configuration tasks.

See the following topics for more details:

"Administration Tasks for User Accounts" on page 3-31

#### Administration Tasks for User Accounts

To begin managing user accounts, log in to Enterprise View Express with an account with appropriate access privileges. Select a task and follow the instructions below. For background on account locking and password expiration, see "Configuring Enterprise View Express Setup Options" on page 2-8.

#### To create or edit a user account:

- 1 Click Manage: User Accounts on the Administration pane.
- To create a new user account, click the **Create** link. To modify a user account, click the corresponding **Edit** link in the User Accounts table.
- 3 The User Account fields are displayed.

**Note:** Fields are populated with current details if you clicked **Edit**.

- 4 Enter or change user information as needed. The fields are described below:
  - Username: Login ID, also displayed in various tables to identify the user.

Note: You cannot change the username of the default Administrator account.

- Password: Login password. Passwords are case-sensitive, and may consist of 1-50 characters.
- Confirm Password: Login password confirmation.
- **E-mail:** The user's email address.
- **Full Name:** The user's full name.
- **Role:** Assigns the user to a role, which defines the default dashboard view and a set of access privileges for Enterprise View Express panes and features. To view the properties of a role, or create a new role, click Manage:Roles on the Administration pane.
- **Locked:** Checked when the user account is locked. Accounts are automatically locked when the number of failed login attempts exceeds the number specified on the Enterprise View Express Setup Options page. Check the box to lock an account even when the number of failed login attempts has not been exceeded, or when no number has been specified. Uncheck the box to unlock an account.
- **Password Can Expire:** Visible only when the user account is subject to password expiration, as specified on the Enterprise View Express Setup Options page. The box is checked by default. Uncheck the box to make the user account not subject to password expiration.
- Password Expired. Check to validate/Password Not Expired. Check to expire: Visible only when Password Can Expire is checked.
  - Password Expired is displayed when the number of days the password has been used exceeds the number specified on the Enterprise View Express Setup Options page. Users with expired passwords are prompted to create new ones. You can also change an expired password manually in the Password and Confirm Password fields. Unexpire a password manually by selecting Check to validate.

- Password Not Expired is displayed when the number of days
  the password has been used does not exceed the number specified on the Enterprise View Express Setup Options page. To
  force the user to change the password on the first login attempt, expire the password manually by selecting Check to
  expire.
- Workspace Access: Check the box for each workspace to which
  the user has access. Click **Default** to specify the user's default
  workspace.

Tip: Click Check All to check all the boxes. Click it again to uncheck the boxes.

5 Click Save to store your changes. Click Cancel to return to the Manage User Accounts page without creating (or modifying) the account.

#### To delete a user account:

- 1 Click Manage: User Accounts on the Administration pane.
- 2 In the User Accounts table, locate the user account you want to remove and click the corresponding **Delete** link.
- You are prompted to confirm deletion. Click **OK** to remove the account, or **Cancel** to return to the Manage User Accounts page.

# **Viewing Reports**

**Note:** Only users with appropriate access privileges can view reports.

The Enterprise View Express log lists every attempt to log in to Enterprise View Express. View the report for the log as described below.

# To view Enterprise View Express reports:

- 1 Click **Tools:Reports** on the Administration pane.
- 2 You are prompted to select a report in the **Report** drop-down. Choose Enterprise View Express Log.

- 3 To filter the report by:
  - User name, select the type of comparison you want to perform in the drop-down next to the **Username** field, then enter the text for the comparison in the adjacent text field.
  - IP address, select the type of comparison you want to perform in the drop-down next to the **IP** field, then enter the text for the comparison in the adjacent text field.
  - Message ("Login success"/"Failed login"), select the type of comparison you want to perform in the drop-down next to the Message field, then enter the text for the comparison in the adjacent text field.
- 4 In the **Results as** drop-down, choose HTML to save the report as HTML, CSV to save the report as CSV.
- 5 Click **Submit**. The report is displayed in the specified format.

# Managing Roles

**Note:** Only users with appropriate access privileges can add, edit, and delete roles.

An Enterprise View Express role defines a class of users ("CIO," "Analyst," "Developer," etc.) Roles let you provide different windows into your enterprise data based on the type of user accessing Enterprise View Express. For example, while a CIO may want a "top-down" view, a developer is more likely to be interested in data at the application level.

For each role you define, you can:

- Specify a default dashboard, and customize charts to provide a role-based view of your application portfolio.
- Assign a class of users one common set of access privileges for Enterprise View Express panes and features.
- Modify the look of the user interface by hiding buttons, panes, and menu items from a class of users with restricted access privileges.

Enterprise View Express ships with a set of predefined roles and associated default dashboards as described in "Using Enterprise View Express Default Templates" on page 3-27. You can edit the defaults, and/or create new roles and dashboards that more closely match your enterprise model.

See the following topics for more details:

"Accessing the Manage Roles Page" on page 3-35

"Administration Tasks for Roles" on page 3-35

"Customizing the User Interface with Roles" on page 3-36

# Accessing the Manage Roles Page

To begin working with roles, click **Manage:Roles** on the Administration pane. The Manage Roles page is displayed.

The table shows a list of all existing roles and their properties. You can resort the table by clicking any column heading. Use the links on the right and the **Create** link to perform various configuration tasks.

See the following topics for more details:

"Managing Roles" on page 3-34

"Administration Tasks for Roles" on page 3-35

"Customizing the User Interface with Roles" on page 3-36

#### Administration Tasks for Roles

To begin managing roles, log in to Enterprise View Express with an account with appropriate access privileges. Select a task and follow the instructions below.

#### To create or edit a role:

- 1 Click the Manage:Roles link on the Administration pane.
- 2 To create a new role, click the Create link. To modify a role, click the corresponding Edit link in the roles table.
- 3 The **Role** fields are displayed.

Note: Fields are populated with current details if you clicked **Edit**.

- Enter a name for the role in the **Role** field.
- Select a default dashboard from the list. When a user assigned to this role clicks the Enterprise View Express Dashboards:Role Views button, the dashboard you select here is displayed.
- Make selections in the **Set Access Privileges** field to grant access to a set of Enterprise View Express panes and pages. Any user assigned to this role will have access to all features on the panes and pages you select.
- Click Save to store your changes, or Cancel to return to the Manage Roles page without creating (or modifying) the role.

#### To delete a role:

- Click the **Manage:Roles** link on the Administration pane.
- In the Roles table, locate the role you want to remove and click the corresponding **Delete** link.
- You are prompted to confirm deletion. Click **OK** to remove the role, or **Cancel** to return to the Manage Roles page.

### Customizing the User Interface with Roles

Enterprise View Express automatically hides buttons, panes, and menu items based on the access privileges defined in the user's role.

For example, you may want to provide only limited Enterprise View Express access for users assigned to the **Analyst** role. When you modify access privileges for the **Analyst** and save the changes, the next time a user assigned the Analyst role logs in, the Enterprise View Express home page would be modified. Buttons and menu choices for restricted features are hidden

# Managing Tags

Only users with appropriate access privileges can manage Note: tags.

Tags are used to store and filter survey results, and group repository objects. Tags are workspace-specific, which means any tags created for a workspace in the workbench are available for use in Enterprise View Express, and vice-versa.

Enterprise View Express ships with default tags (see "Using Enterprise" View Express Default Templates" on page 3-27). Administrators can create new tags and manage tag structure.

# Accessing the Manage Tags Page

To begin working with tags, click Manage: Tags on the Administration pane. The Manage Tags page is displayed.

The table shows a list of all existing tags and their properties. You can resort the table by clicking any column heading. Use the links to perform various configuration tasks.

See the following topics for more details:

"Understanding Tags" on page 3-37

"Understanding Tag Structure: Example" on page 3-38

"Creating and Deleting Tags" on page 3-39

"Administration Tasks for Tags" on page 3-39

#### **Understanding Tags**

Enterprise View Express uses tags to store and filter survey results. Tags are also used in the workbench to group repository objects, and in Enterprise View Express to filter complexity metrics by application.

# **Tags and Survey Results:**

When you assign a survey to a user, you also designate a tag under which the user's responses are stored. These tags are used to filter survey results in Enterprise View Express charts.

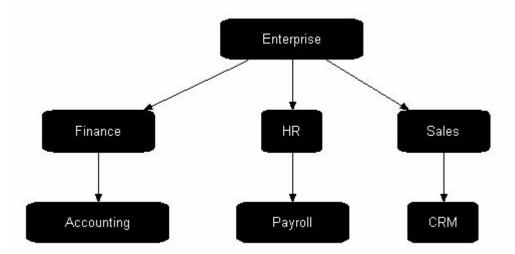
# Tags and Repository Objects:

Tags can be assigned to repository objects in the workbench. You can use these tags to represent applications or business processes, to organize source files by region, etc. In Enterprise View Express, tags assigned to repository objects are used to filter complexity metrics in charts. For example, you might assign the tags "CRM" and "Payroll" to group two different sets of program objects. You can then create a chart comparing cyclomatic complexity for the "CRM" and "Payroll" applications. See *Analyzing Projects* in the workbench documentation set for instructions on assigning tags to objects.

# **Understanding Tag Structure: Example**

Enterprise View Express ships with a default tag structure that represents a typical enterprise. You can use this structure (Figure 3-2) as a template, and add or edit tags to match your own business model. Each time you create a new workspace, the default tag structure is imported and available for use.

Figure 3-2 Enterprise View Express: Default Tag Structure



The default tag structure can also be viewed and modified in the workbench. The Accounting, Payroll, and CRM tags can be assigned to repository objects in your workspace to facilitate charts that filter metrics by tag. Consult *Analyzing Projects* in the workbench documentation set for details.

# **Creating and Deleting Tags**

The procedures for creating, removing, and deleting tags are described in "Administration Tasks for Tags" on page 3-39. To avoid unintended consequences when removing tags, see "Deleting Tags vs. Removing Tag References" on page 3-39.

### Deleting Tags vs. Removing Tag References

A repository workspace has a single tags database, which is shared by Enterprise View Express and Modernization Workbench. It is important to understand the distinction between *deleting* a tag, and removing a *reference* to a tag.

- Deleting a tag, either in Enterprise View Express or in the workbench, means the tag and all its relationships are permanently deleted from the database and will no longer be available to either application. This may adversely affect black-boxing in Diagrammer, and survey results in Enterprise View Express. If you are sure you want to delete a tag, follow the instructions in "To delete a tag." on page 3-41.
- Removing a tag reference, either in Enterprise View Express or in the workbench, removes the relationship between two tags, but the tag **is not** deleted from the database. In Enterprise View Express, for example, when you remove "Payroll" from the list of tags contained by the "HR Applications" tag, the tag "Payroll" (and any other associated relationships) remain intact. To remove a tag reference, follow the instructions in "To remove relationships between tags:" on page 3-41.

### Administration Tasks for Tags

To begin managing tags, log in to Enterprise View Express with an account with appropriate access privileges. Select a task from the list below, and click the link for detailed instructions.

"To create a new tag:" on page 3-40

"To create relationships between tags:" on page 3-40

"To remove relationships between tags:" on page 3-41

"To change the name of a tag:" on page 3-41

"To delete a tag:" on page 3-41

#### To create a new tag:

- Click the **Manage: Tags** link on the Administration pane.
- To create a new tag, click the **Create** link.
- Enter a name for the tag and click **Submit**.
- The Manage Tags page is updated and the new tag is displayed in the list.

# To create relationships between tags:

Follow these steps to add a tag reference to a tag. For example, if you have created a new workbench tag for an application called "Client-Tracker", you can add the ClientTracker tag to the Sales Applications tag, creating a relationship between the tags.

- Click the Manage: Tags link on the Administration pane.
- Select a tag and click the corresponding **Structure** link in the Tags table. The Edit Tag Structure page is displayed.

Note: The **Path** field shows the location of the selected tag in the tag structure. The table shows a list of existing tag references (if any). You can navigate through the tag structure by clicking tag names in either the Path field or the table. Each time you click a link, the page is updated to reflect the new structure.

- In the Add Tag drop-down, select a tag to reference.
- The selected tag is added to the table.
- Repeat to add more tag references if desired.

6 Click **Back to tags list** to return to the Manage Tags page.

### To remove relationships between tags:

Follow these steps to remove a tag reference from a tag. This does not delete the tag from the database (see "Deleting Tags vs. Removing Tag References" on page 3-39).

- 1 Click the Manage: Tags link on the Administration pane.
- 2 Select a tag and click the corresponding **Structure** link in the Tags table. The **Edit Tag Structure** page is displayed.

Note: The Path field shows the location of the selected tag in the tag structure. The table shows a list of existing tag references (if any). You can navigate through the tag structure by clicking tag names in either the Path field or the table. Each time you click a link, the page is updated to reflect the new structure.

- 3 In the table of tag references, click the Remove link for the desired tag. The reference is deleted from the table, and the relationship between the tags is removed.
- 4 Repeat to remove more tag references if desired.
- 5 Click **Back to tags list** to return to the Manage Tags page.

#### To change the name of a tag:

- 1 Click the **Manage: Tags** link on the Administration pane.
- 2 Locate the tag and click the corresponding **Edit** link in the Tags table
- Modify the tag name and click **Submit**. The name is updated on the Manage Tags page.

# To delete a tag:

- 1 Click the **Manage: Tags** link on the Administration pane.
- 2 In the Tags table, locate the tag you want to remove and click the corresponding **Delete** link.

You are prompted to confirm deletion. Click **OK** to permanently delete the tag from the database, or **Cancel** to return to the Manage Tags page.

#### To view survey results for a tag:

- 1 Click the Manage: Tags link on the Administration pane.
- 2 In the Tags table, locate a tag and click the **Survey Results** link to view results stored under that tag.
- 3 The Results table is shown. For each question, the following information is shown:
  - **Question Name**
  - Question Text
  - **Current Value**: the value of the most recent result stored under the tag.
  - Values (link): total number of results stored under the tag.
- 4 Locate a question and click the **Values** link to view details for each result value stored under the tag.
- A table displays each value, the date it was submitted, and the name of the user who submitted the response.
- 6 Use the checkboxes in the **Delete** column to mark values for deletion. Click **Save** to delete marked values.

"Accessing the Manage Tags Page"

"Understanding Tags"

"Understanding Tag Structure: Example"

"Creating and Deleting Tags"

# **Configuring Questions**

**Note:** Only users with appropriate access privileges can add, edit, and delete survey questions.

Survey questions are the building blocks for surveys. Administrators can define questions and categories once and reuse them in multiple surveys. Enterprise View Express ships with default surveys and their associated questions and categories (see "Using Enterprise View Express Default Templates" on page 3-27). You can edit the questions in the default surveys, or create your own.

See the following topics for more details:

"Accessing the Configure Questions Page" on page 3-43

"Understanding Survey Questions and Categories" on page 3-43

"Administration Tasks for Questions" on page 3-44

# Accessing the Configure Questions Page

To begin working with questions, click Configure: Questions on the Administration pane. The Configure Questions page is displayed.

The table shows a list of all existing questions and their properties. You can resort the table by clicking any column heading. Use the links to perform various configuration tasks.

See the following topics for more details:

"Understanding Survey Questions and Categories" on page 3-43

"Administration Tasks for Questions" on page 3-44

# **Understanding Survey Questions and Categories**

The data you collect from responses to surveys is only as useful as the questions you include. We encourage you to review the key concepts described below before creating questions.

# What are the key properties of a survey question?

All survey questions have a *title* (displayed in Administration tables and drop-down lists); question text, (displayed in the body of the survey), and a user input field (a text field, drop-down list, or list of radio buttons).

If a question is included in a category, the parent category is specified when you create the question.

### What are the key properties of a category?

A category is used to group a set of related questions into sections in a survey. The category *title* is displayed as a section label in the body of a survey.

### How do I use categories to group related questions?

If your survey is lengthy, you may find it useful to divide groups of related questions into categories. This is done by creating categories, and assigning questions to a parent category as described in "Administration Tasks for Questions" on page 3-44. Each category is displayed as a separate section in the survey. For example, you might create a category called "Application Assessment" to use as the parent category for questions about the history and viability of an application.

#### Administration Tasks for Questions

To begin configuring survey questions, log in to Enterprise View Express with an account with appropriate access privileges. Select a task and follow the instructions below.

# To create/edit a question or category:

- Click Configure: Questions on the Administration pane.
- To create a new question, click the Create link. To modify a question, click the corresponding **Edit** link in the Questions table.
- The **Question** fields are displayed.

Note: Fields are populated with current details if you clicked **Edit**.

- Enter or change information as needed. The fields are described below:
  - **Title:** Choose a concise name which identifies the question or category. In surveys, the title of a category is displayed as a section label.
  - Create as a Category: Check the box to create a category. All other fields are hidden, as they pertain to questions only.

- Question text(Questions only): Enter the text of the question and any instructions. This is the text displayed to the user in surveys (200 characters maximum).
- **Parent Category:** Specify a parent category for a question (optional).

User Input Field (does not apply to categories)

The information you select here controls how the input field is displayed to the user in a survey, and which values are valid responses.

- Value Type: Select Number or Text to indicate how Enterprise View Express should treat the value associated with the user's response.
- **Display as:** Select Textfield, Dropdown, or Radio Button.

*Textfield*: Prompts the user to type a response in a text box.

*Dropdown*: Prompts the user to select a response from a drop-down list.

Note: The display text for the response is limited to 50 characters.

Use the radio button option if you need to display more text.

If you choose the drop-down option, the **Edit Values** button is shown. Click the **Edit Values** button. An empty table is shown. Click **More**. You are prompted to enter the number of possible responses to the question. Enter the number in the text field and click **OK**.

A table with rows for the specified number of responses is shown. Enter the text for each response in the Display column. These are displayed to the user as selections in the drop-down list. Enter the value for each response in the Value column. These are used by Enterprise View Express to calculate survey results. For example, if the user selects "Low," a value of "1" can be assigned. Click **More** to define additional responses, click **Close** to collapse the table. Click **X** to delete an entry.

*Radio Button*: Prompts the user to select a response from a list of radio buttons.

Note: Use the radio button option if the display text for the response contains more than 50 characters. The display text for a radio button may contain up to 540 characters.

If you choose the radio button option, the **Edit Values** button is shown. Click the Edit Values button. An empty table is shown. Click **More**. You are prompted to enter the number of possible responses to the question. Enter the number in the text field and click OK.

A table with rows for the specified number of responses is shown. Enter the text for each response in the Display column. These are displayed to the user as selections in the list of radio buttons. Enter the value for each response in the Value column. These are used by Enterprise View Express to calculate survey results. For example, if the user selects "Low," a value of "1" can be assigned. Click **More** to define additional responses, click **Close** to collapse the table. Click **X** to delete an entry.

Click Submit to store your changes, or Cancel to return to the Configure Questions page without creating (or modifying) the question.

# To delete a question or category:

- Click the **Configure: Questions** link on the Administration pane.
- In the Questions table, locate the question you want to remove and click the corresponding **Delete** link.
- You are prompted to confirm deletion. Click **OK** to permanently delete the question from the database, or Cancel to return to the Configure Questions page.

Deleting a question also deletes any survey results collected Note: from user responses to the question.

# **Configuring Surveys**

Only users with appropriate access privileges can configure Note: surveys.

Administrators can configure surveys about your organization's application portfolio, business processes, and workspace data. Surveys are assigned to users, and responses (survey results) are collected by Enterprise View Express for use in charts and dashboards. Survey results are stored under tags, and can be accessed from the Manage Tags pane (see "To view survey results for a tag:" on page 3-42).

Enterprise View Express ships with default surveys and their associated questions and categories (see "Using Enterprise View Express Default Templates" on page 3-27). You can edit the default surveys, or create your own.

See the following topics for more details:

"Accessing the Configure Surveys Page" on page 3-47

"Understanding Surveys" on page 3-47

"Administration Tasks for Surveys" on page 3-49

# Accessing the Configure Surveys Page

To begin working with surveys, click Configure: Surveys on the Administration pane. The Configure Surveys page is displayed.

The table shows a list of all existing surveys and their properties. You can resort the table by clicking any column heading. Use the links to perform various configuration tasks.

See the following topics for more details:

"Understanding Surveys" on page 3-47

"Administration Tasks for Surveys" on page 3-49

#### **Understanding Surveys**

Surveys are used to collect business data about your enterprise for use in dashboards and charts. Survey results, combined with metrics data collected from workspace repositories, can provide a powerful and comprehensive representation of your enterprise's application portfolio.

The quality of the data you gather from surveys is determined by the questions you include, the range of values you accept as valid responses, the set of users you assign to complete the survey, and the accuracy of their responses. The following topics answer key questions to help you build better surveys.

# What is the workflow for building surveys?

- 1 Determine the scope of the survey as described in <u>"What is the recommended scope of a survey?" on page 3-48.</u>
- 2 Review existing questions and categories to determine if any are appropriate to reuse in your survey.
- 3 Create new questions and categories to elicit the data you need. See <u>"How do I maximize the value of survey results?" on page 3-49</u> for tips.
- 4 Create the survey.
- 5 Assign the survey to a group of users, designating appropriate tags under which results are stored.
- 6 Review the survey results frequently and delete inaccurate values to prevent the skewing of charts.
- 7 If you find the survey results are consistently inaccurate, or the data you intended to elicit is not being received, try the following steps:
  - Rewrite the survey questions.
  - Adjust the range of values displayed in user input fields.
  - Re-assign the survey to a more appropriate group of users.
  - Verify the survey is assigned to appropriate users and tags.
- **8** Delete all results and re-assign the new version of the survey.

### What is the recommended scope of a survey?

Surveys can be assigned to any combination of users and tags. When you assign the survey to a user, you also designate a tag (i.e. "Sales") under which responses are stored.

Thus, we recommend you tailor the scope of each survey (and the questions you include) to the group of users and tags to which it will be assigned.

## How do I maximize the value of survey results?

You can improve the quality of survey results by following these tips when creating survey questions:

- Provide instructions in the text of the question to add clarity and guide the user. This improves the chances of receiving an accurate and useful response.
- Limit the range of input choices available to the user. Whenever possible, use drop-down fields or radio buttons instead of text fields to avoid unpredictable responses.
- Design drop-down or radio button choices wisely, and keep the values associated with each choice consistent across questions. For example, if you create a drop-down in one question where user choice "Low"= value 1, "Medium"=2, and "High"=3, reuse this schema in every question that offers the choices Low/Medium/High.
- Review survey results frequently, and delete values which are obviously inaccurate, as these may skew your charts (see <u>"To view survey results for a tag:" on page 3-42</u>).
- Last, but not least, assign surveys to knowledgeable users!

# Administration Tasks for Surveys

To begin configuring surveys, log in to Enterprise View Express with an account with appropriate access privileges. Select a task and follow the instructions below.

Note: Survey results are stored under tags, and can be accessed from the Manage Tags pane (see "To view survey results for a tag:" on page 3-42).

**Important:** Changes made on the Create/Edit Survey page are not stored until you click **Save**. Do not navigate away from this page without saving or modifications will be lost.

# To create/edit a survey:

- Click Configure: Surveys on the Administration pane.
- To create a new survey, click the **Create** link. To modify a survey, click the corresponding **Edit** link in the Surveys table.
- The **Survey** fields are displayed.

Note: Fields are populated with current details if you clicked **Edit**.

- Enter or change information as needed. The fields are described below:
  - **Survey Name:** Choose a descriptive name for the survey.
  - Add Question/Category: Select a question or category of questions to add to the survey. If you select a category, all questions in the category are added.
  - **Survey Preview:** A preview of the survey is displayed and dynamically updated as you add and remove survey questions and categories. Use the checkboxes and the (Actions) drop-down to delete and reorder individual questions and categories.

Note: If you remove a category, all questions contained in the category are removed.

**Formulas:** The value of a survey question ("Price with Tax," for example) can be calculated from the values of other survey questions ("Price" plus "Sales Tax").

Place a check mark next to the survey question whose value you want to calculate and choose Make Formulated from the (Actions) drop-down. The question is moved to the Formulas area of the preview.

Place a check mark next to each survey question whose value you want to use in the calculation and click Add Questions next to the text box for the calculated question. The values for the question are added to the text box. Use standard arithmetic notation to edit the formula manually.

**Note:** The value of a calculated question can be used in the calculation of another question as long as it precedes the question in the survey.

5 Click Save to store your changes, or Cancel to return to the Configure Surveys page without creating (or modifying) the survey.

# To assign surveys to users:

- 1 Click Configure: Surveys on the Administration pane.
- 2 Locate the survey and click the corresponding Assign link in the Surveys table. The Assign Surveys page is displayed, and the selected survey is highlighted in the Surveys list. Current survey assignments are listed in the table below.
- 3 Each survey assignment consists of a *user/survey/tag combination*. With the desired survey highlighted in the **Surveys** list, select a user from the **Users** list, and a tag from the **Tags** list. Click **Assign** to assign the survey to the highlighted combination. The table below is updated to include the new assignment.

Tip: You can assign multiple combinations in a single step. Use Shift+Click to highlight multiple users, surveys, and tags. A separate survey assignment is added to the table for every possible combination based on your selections.

# To unassign surveys:

- 1 Click Configure: Surveys on the Administration pane.
- 2 Locate the survey and click the corresponding **Unassign** link in the Surveys table. The Assign Surveys page is displayed, and current survey assignments are listed in the table.
- 3 In the table, check the boxes for each row containing a survey you want to unassign.
- 4 In the **With Selected: (actions)** drop-down, select **UnAssign**. The selected assignments are immediately deleted and the table is updated. Unassigned surveys are removed from the Survey Inbox of all affected users

### To delete a survey:

- Click the **Configure:Surveys** link on the Administration pane.
- In the Surveys table, locate the survey you want to remove and click the corresponding **Delete** link.
- You are prompted to confirm deletion. Click **OK** to permanently delete the survey from the database, or Cancel to return to the Configure Surveys page.

# **Configuring Charts**

Note: Only users with appropriate access privileges can configure charts.

Charts are used in Enterprise View Express dashboards to display business data collected from surveys, and metrics collected from workspaces. Enterprise View Express supports basic chart types (pie, line, bar, table) as well as advanced charts (bubble, heat map, etc.) that provide far more sophisticated windows into your data.

# Accessing the Configure Charts Page

To begin working with charts, click Configure: Charts on the Administration pane. The Configure Charts page is displayed.

The table shows a list of all existing charts and their properties. You can resort the table by clicking any column heading. Use the links on the right to perform various configuration tasks.

See the following topics for more details:

"Planning a Chart" on page 3-53

"Administration Tasks for Charts" on page 3-55

"Chart Types in Enterprise View Express"

# Planning a Chart

The Enterprise View Express Chart Designer guides you through the process of configuring a new chart. It's helpful to understand some key concepts before you begin.

#### Information sources

Enterprise View Express charts have two information sources: business data collected from surveys, and metrics data collected from objects in workspace repositories. Charts can include data from either or both of these sources.

#### • Chart elements

*Chart elements* are the bars, pie slices, table rows, etc. displayed on the chart. You can use tags, questions, objects, object types, or metrics as chart elements.

# Filtering and data aggregation

By specifying a tag or object type as a filter in your chart, you can aggregate survey results and metrics values stored under descendant tags (or objects of the selected type) using various aggregation methods (i.e. sum, average, etc.). For example, you can "roll-up" survey results for all descendants of the "Enterprise" tag, or aggregate metrics values for all objects of type "Cobol File".

# Snapshot vs. Trending

The decisions you make about a chart's scope and filter parameters, and the number of results/metrics included, determine the available chart types (pie, line, bubble, table, etc.). The chart type dictates whether you can display a snapshot using current values in the database, or a trend (line or table) using historical values captured over time.

# Chart Types in Enterprise View Express

Enterprise View Express ships with a variety of chart types. When creating and/or editing a chart, you select from a list of available chart types. The types available for selection vary based on two factors:

- Use of a filter in the chart. When you create a chart, you have the option to include values based on a tag or object filter.
- Number of survey results and/or metrics included in the chart

The chart type dictates whether you can display a snapshot using current values in the database, or a trend (line or table) using historical values captured over time.

Table 3-3 lists chart types and the chart configurations (number of results/metrics, filter/no filter) in which they are available.

Note: New chart types are added frequently, and may not be included in the table below. Contact support for information about additional chart types.

Table 3-3 Chart Type Availability in Enterprise View Express

Chart Type	Chart Configuration
Bar	Available when: # of Results/Metrics: <i>1-50</i> Chart includes filter?: <i>yes</i> Chart with no filter?: <i>yes</i>
Bubble	Available when: # of Results/Metrics: 3 Chart includes filter: no Chart with no filter: yes
Heat	Available when: # of Results/Metrics: I Chart includes filter: no or # of Results/Metrics: any Chart includes filter: yes

Table 3-3 Chart Type Availability in Enterprise View Express

Chart Type	Chart Configuration
Line	Available when: # of Results/Metrics: 1-50 Chart to show metrics or # of Results/Metrics: 1-50 Chart to show metrics Chart filtered for single object (trending only)
Pie	Available when: # of Results/Metrics: I Chart includes filter: no or # of Results/Metrics: any Chart includes filter: yes
Table	Available when: # of Results/Metrics: any Chart includes filter?: yes Chart with no filter?: yes (trending optional)
XY Scatter	Available when: # of Results/Metrics: 2 Chart includes filter?: no Chart with no filter?: yes

# **Administration Tasks for Charts**

To begin working with charts, log in to Enterprise View Express with an account with appropriate access privileges. Select a task and follow the instructions below.

# To create a new chart:

- Plan your chart.
- On the Administration pane, click Configure: Charts. The Configure Charts page is displayed.

- Click the **Create** link to launch the Chart Designer.
- Enter text and make selections in the fields as they are shown. Click Back to return to the previous field, Reset to clear all selections, and **Cancel** to return to the Configure Charts page.

The Chart Designer includes on-screen help for each field, in-Note: cluding links to sample charts based on your selections. Use the Help On/Off buttons to show and hide the on-screen help.

#### To view a chart:

- On the Administration pane, click **Configure:Charts**.
- In the Charts table, locate the chart you want to see and click the View link.
- The chart is dynamically generated and displayed using the latest information in the database.
- 4 Click the **Back** button in your browser to return to the Configure Charts page.

#### To edit a chart:

- On the Administration pane, click **Configure:Charts**.
- In the Charts table, locate the chart you want to modify and click the Edit link.

Click a column heading to sort the table by that column. Tip:

- The Edit Chart page is shown.
- Change selections in available fields as desired. Reorder questions/metrics in the table using the checkboxes and With Selected: (Actions) drop-down. Click Save to store your changes.

Fields that define chart configuration properties cannot be Note: modified. In most cases, you can edit the title and chart type. You can also reorder, add, delete, and change the aggregation method for questions/metrics.

#### To delete a chart:

- On the Administration pane, click Configure: Charts.
- In the Charts table, locate the chart you want to modify and click the Delete link.

Click a column heading to sort the table by that column. Tip:

You are prompted to confirm deletion. Click **OK** to delete the chart or Cancel to return to the Configure Charts page.

If the deleted chart is included on any dashboards, it will be Note: removed. This may leave an empty cell on affected dash-

boards.

# **Configuring Dashboards**

Only users with appropriate access privileges can configure Note:

dashboards

An Enterprise View Express dashboard is a web page that contains charts of business and metrics data collected from survey results and workspace repositories. Administrators can configure dashboard pages, determining which charts and graphs are displayed.

See the following topics for more details:

"Accessing the Configure Dashboards Page" on page 3-57

"Understanding Drilldown in Dashboards and Charts" on page 3-58

"Administration Tasks for Dashboards" on page 3-62

# Accessing the Configure Dashboards Page

To begin working with dashboards, click Configure: Dashboards on the Administration pane. The Configure Dashboards page is displayed.

The table shows a list of all existing dashboards and their properties. You can resort the table by clicking any column heading. Use the links to perform various configuration tasks.

See the following topics for more details:

"Understanding Drilldown in Dashboards and Charts" on page 3-58

"Administration Tasks for Dashboards" on page 3-62

# **Understanding Drilldown in Dashboards and Charts**

In Enterprise View Express, you can navigate from an Enterprise-level dashboard down to a chart of complexity metrics for a specific application. Navigating from one dashboard to another by clicking elements on a chart is called *drilldown*. Before you begin configuring dashboards, it is crucial to understand the way drilldown works in Enterprise View Express.

# What happens during drilldown?

When you click an element on a chart (the *active* chart), the Dashboards page is refreshed and the default drilldown (or target) dashboard is displayed. The target dashboard is always the default drilldown dashboard, unless you have specified an alternative drilldown target for the active chart. For example, the default drilldown dashboard for CIO Enterprise is CIO Departments.

Here's what happens during the drilldown process:

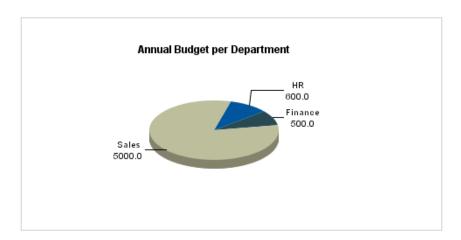
- The chart element you click on the active chart determines a drilldown parameter.
- The drilldown parameter is passed from the active chart to all charts on the target dashboard.
- All charts on the target dashboard are updated using the drilldown parameter.

If the drilldown parameter *type* is incompatible with the native properties of a chart on the target dashboard, that chart is not updated. For example, let's assume you click on an element in a chart showing metrics data, and the drilldown parameter is the object ID for a Cobol file. Any business data charts on the target dashboard are not updated, since they use tags (not object IDs) to filter data.

### Drilldown example

Let's assume you are on the CIO Enterprise dashboard, reviewing a chart that displays annual budgets by department (Figure 3-3).

Figure 3-3 Example: Department Budgets Chart



This is the *active* chart. You click on the "Sales" slice of the pie chart. Here's what happens:

- 1 The target dashboard is determined. For the CIO Enterprise dashboard, the default drilldown target is CIO Departments.
- 2 The drilldown parameter is determined. You clicked "Sales," so the drilldown parameter is a tag.
- The CIO Departments dashboard is shown, and any charts that use tags are updated using survey results stored under the "Sales" tag.

On the **CIO Departments** dashboard, there is a chart called "Employees by Position." The default tag for this chart is "Finance," so before drill-down, the chart might look like this:

**Employees by Position** (Finance) Personnel Bus Analysts 2.0 Personnel Architects Personnel Developers 2.0 5.0 Personnel Sys Analysts Personnel Managers 1.0 1.0 Personnel Support Personnel QA 3.0 4.0

Figure 3-4 Example: Employees Chart Before Drilldown

The active chart passes the drilldown parameter "Sales" to the target dashboard (see "What are drilldown parameters and how do they work?" on page 3-61). This parameter is a tag, so any charts on the target dashboard which use a tag replace their default tag with "Sales" and refresh their data. After drilldown, the "Employees by Position" chart would look like this:

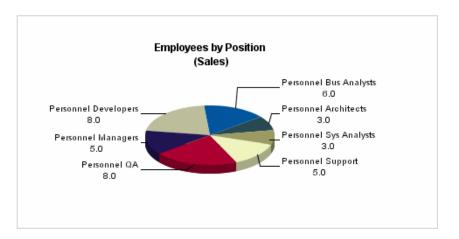


Figure 3-5 Example: Employees Chart After Drilldown

Note that the chart title has been updated, and the data now reflects the Sales department's statistics.

# How does default drilldown vs. chart-specific drilldown work?

Every dashboard has a default drilldown target. This specifies which dashboard is shown when a user clicks a chart. For example, when a user clicks any chart element on the **CIO Enterprise** dashboard, the **CIO Departments** dashboard is shown. All charts on the **CIO Departments** dashboard are updated using the drilldown parameter as described in "What are drilldown parameters and how do they work?" on page 3-61.

In some cases, you may want to override the dashboard default and designate a different drilldown target for a specific chart. This lets you customize the navigation path through the dashboard structure.

# What are drilldown parameters and how do they work?

When you click an element on a chart, the *drilldown parameter* is passed from the active chart to all charts on the target dashboard. The drilldown parameter can be any one of the following:

• **Tag:** The tag assigned to the *chart element* (i.e. "Sales"), or the *tag filter* you applied to the entire chart (i.e. "Include values for Enterprise and all descendant tags").

- **Entity Type:** "Program," or "Cobol File," for example.
- **Object ID:** Name of a specific repository object.

All charts on the target dashboard receive and implement the drilldown parameter to retrieve new data, provided the parameter is valid.

For example, if you click on a chart element that uses the tag "Sales," all charts that use tags on the target dashboard will apply the "Sales" tag and refresh their data. See "What happens during drilldown?" on page 3-58 for an example.

If the dashboard contains a chart which cannot apply the drill-Note: down parameter, that chart is not updated and will display its default data

#### Administration Tasks for Dashboards

To begin configuring dashboards, log in to Enterprise View Express with an account with appropriate access privileges. Select a task and follow the instructions below.

### To create/edit a dashboard:

- Click Configure: Dashboards on the Administration pane.
- To create a new dashboard, click the **Create** link. To modify a dashboard, click the corresponding **Edit** link in the Dashboards table.
- The **Dashboard** fields are displayed.

Fields are populated with current details if you clicked **Edit**. Note:

- Enter or change information as needed. The fields are described below:
  - **Title:** Choose a descriptive name for the chart.
  - **Default Drill:** Select a dashboard to use as the default drilldown target for charts.See "Understanding Drilldown in Dashboards and Charts" on page 3-58 for more information.
- Initially, a dashboard is configured as a grid with four cells, each of which may contain a chart. To add a row to the grid, click Add under

the Row label. To add a column to the grid, click **Add** under the Column label. To remove a row or column, select it and click the appropriate **Remove** button.

To merge cells, click and drag to select the cells and click **Merge**. To unmerge cells, click and drag to select the cells and click **Unmerge**.

Tip: Use the merge feature to create a dashboard with different combinations of large and small charts: a large chart in the top row, for example, and two smaller charts in the bottom row.

- To assign a chart to a cell, click **Edit** in the cell. A dialog opens where you are prompted to select the chart and optional drilldown target. See "<u>Understanding Drilldown in Dashboards and Charts</u>" on page 3-58 for more information. When you are satisfied with your entries, click **Done**.
- 7 Click Save to store your changes, or Cancel to return to the Configure Dashboards page without creating (or modifying) the dashboard.

# To view a dashboard:

- 1 Click the Configure: Dashboards link on the Administration pane.
- 2 In the Dashboards table, locate the dashboard you want to view and click the corresponding **View** link.
- 3 The dashboard is displayed.

Note: If default dashboards have been created for multiple workspaces, the name of the workspace is appended to the title of a default dashboard whenever it is displayed: for example, CIO Departments (Workspace).

# To delete a dashboard:

- 1 Click the **Configure:Dashboards** link on the Administration pane.
- 2 In the Dashboards table, locate the dashboard you want to remove and click the corresponding **Delete** link.

You are prompted to confirm deletion. Click **OK** to permanently delete the dashboard from the database, or Cancel to return to the Configure Dashboards page.

Deleting a dashboard may affect the drilldown structure, Note: breaking links to and from charts.

# Importing and Exporting Enterprise View Express Content

You can import content to Enterprise View Express from an XML file. Figure 3-6 shows a sample XML file used to import account information for a single Enterprise View Express user named "Administrator2" with an administrator role and access to the Training and OrderEntry workspaces.

Figure 3-6 Import User Accounts Entry

```
import.xml - Notepad
File Edit Format View Help
password="admin2"
     password= adminiz
passwordenc="false"
rolename="Administrator"
username="administrator2">
         <workspace
name="Training"/>
<workspace
name="OrderEntry"/>
   </user>
</import>
                                                                            Ln 1, Col 1
```

In this sample, only required fields are specified. On import, Enterprise View Express encodes the password, fills in the reference attributes it uses internally, and supplies empty attributes for the other fields that comprise the account.

If you want to provide information in addition to the required fields, you can export existing content following the procedure described below, then follow the template in the exported file. You can view documentation for the import feature and full schema information for Enterprise View Express content on the Import page.

Note: You cannot use the import feature to update existing content. You can only use it to add new content.

# To export Enterprise View Express content:

- 1 Click **Tools:Export** on the Administration pane.
- 2 On the Export page, check the box for each type of content you want to export, then click **Submit**. You are prompted to save the XML file used to store the content. Click **Save**. A Save As dialog opens, where you can specify the name and location of the file.

# To import Enterprise View Express content:

- 1 Click **Tools:Import** on the Administration pane.
- 2 On the Import page, click **Browse**. A Choose file dialog opens, where you can specify the XML file containing the content you want to import.
- **Tip:** Check **Test Import Only** if you want to view the log for the import only. The log reports errors in formatting the content.
- Click **Submit**. The log for the import is displayed on the Import page. Enterprise View Express adds the content in the import file to the appropriate tables.
- Tip: Click **Download Import Documentation** to view documentation for the import feature. Click **Download XML Schema** to view full schema information for Enterprise View Express content.

# Troubleshooting and FAQs

This section includes a list of frequently asked questions and trouble-shooting tips.

See the following topics for assistance:

"Why do I get an HTTP status 404 error when accessing http://servername:port/apm?" on page 3-66 "Why do I get an "Error connecting to xxx workspace" message when attempting to add a workspace to Enterprise View Express?" on page 3-66

"Why can't I create or edit dashboards and surveys?" on page 3-67

"Why are charts missing?" on page 3-67

"Why doesn't my chart display any data?" on page 3-68

"Why are all my custom tags missing?" on page 3-69

"Why can't I access a workspace?" on page 3-69

"Why can't I view Analysis pages or Business Rule source code?"

"Why can't I access the online help for Enterprise View Express?" on page 3<u>-70</u>

"Why can't I view a saved Query Repository report?" on page 3-70

"Tip: Creating chart elements for child tags" on page 3-70

# Why do I get an HTTP status 404 error when accessing http://servername:port/apm?

Solution: The URL for accessing Enterprise View Express is case-sensitive. Capitalize "APM" in this string.

# Why do I get an "Error connecting to xxx workspace" message when attempting to add a workspace to Enterprise View Express?

**Preface:** Ensure you can open the workspace through the workbench by opening the local . rwp file on the Enterprise View Express server.

Potential Cause: The data source name (DSN) used to connect to the workspace is a user DSN (as opposed to a system DSN), or the specified DSN does not exist.

**Solution:** On the Enterprise View Express server, create the data source as a system DSN so the user running the Tomcat service can access the database.

**Potential Cause:** The workspace or .rwp location does not grant the proper security permissions to the user running the Tomcat service.

**Solution:** Make sure the user running the Tomcat service has read/write access to the location of the workspace or .rwp file.

Other general workspace connection issues may be caused by circumstances such as the database server being inaccessible, or by changes to the username and/or password used to access the database.

# Why can't I create or edit dashboards and surveys?

**Answer:** Your assigned role doesn't permit access to administration tasks.

Users without appropriate access privileges have the equivalent of "view only" access to dashboards and surveys. They can browse dashboards (via the Dashboards pane), and view and respond to surveys (via the Surveys pane). However, they cannot add or edit dashboards and surveys, nor can they change the properties of charts and survey questions.

Management of global settings such as user accounts, workspace access, roles and tags is done via the Administration pane. In addition, configuration of dashboards, surveys, and their respective components (charts and questions) can only be performed if you have sufficient access privileges.

The Enterprise View Express Administration pane is only visible and accessible to users with appropriate access privileges.

#### Why are charts missing?

**Symptom:** When you view a chart you see an empty pane, or a dashboard contains an empty cell (or cells) with no chart displayed.

**Possible cause:** You have not assigned a chart to the cell(s).

**Possible cause:** You do not have access to the workspace associated with the chart.

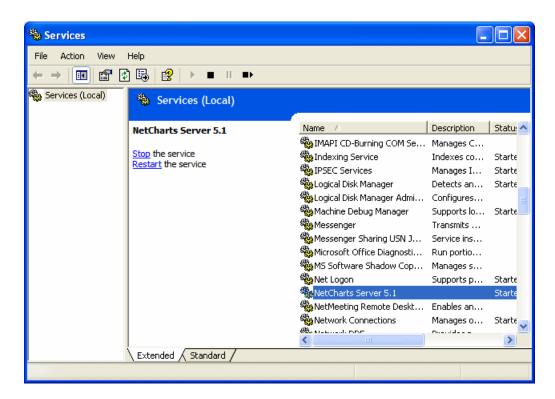
A chart displays information from a single workspace. If the user account you are logged in with does not have permissions to access a workspace, charts associated with that workspace are not displayed. This may result in blank cells on dashboards.

**Possible cause:** The NetCharts Server service has stopped.

To restart the NetCharts Server service:

- In the Windows Start menu, go to the Settings folder. Choose Control Panel. The Control Panel window opens. Double-click **Administrative Tools**. The Administrative Tools window opens.
- In the Administrative Tools window, double-click Services.
- In the Services window (Figure 3-7), right-click the NetCharts Server service and select Restart.

Figure 3-7 Services Window: NetCharts Server Service



# Why doesn't my chart display any data?

Symptom: A dashboard contains an empty chart with the message "no data available."

**Possible cause:** No survey results and/or metrics are available for the chart.

This can occur if, during drilldown, you pass a tag to a chart for which no surveys have been completed. This means no survey results (and thus no data) are stored under that tag. The chart will display the title, the name of the tag, and a message indicating no data is available.

# Why are all my custom tags missing?

**Answer:** You have switched workspaces.

Tags are workspace-specific. Changes made to tags in one workspace (new tags, restructuring, etc.) are not reflected in other workspaces. Each time you create a new workspace, the default Enterprise View Express tags are imported as described in "Using Enterprise View Express Default Templates" on page 3-27.

# Why can't I access a workspace?

**Answer:** The workspace was not configured properly.

**Potential cause:** The workspace does not exist in the location you specified

**Solution:** Verify the location of the workspace, delete and re-add it using the correct path.

**Potential cause:** The user logged in on the Enterprise View Express server is the user under which the Tomcat service runs. This user may not have access to the workspace folder.

**Solution:** Log in and run the Tomcat service under a user account with access permissions for the workspace folder.

Tip: To avoid having to repeat these steps for each folder containing a workspace, put all workspaces in the same folder. When specifying sharing and security permissions, make sure to include the subfolder with the name of the workspace as well as the .rwp file.

## Why can't I view Analysis pages or Business Rule source code?

**Answer:** The relevant files are not located on the Enterprise View Express server, and the user under which the Tomcat service is running does not have access to the computer where these files are stored.

**Solution:** Log in and run the Tomcat service under a user account with access permissions for the computer(s) where the files are stored, or grant access permissions for the relevant computer(s) to the current user logged in to the Tomcat service.

# Why can't I access the online help for Enterprise View Express?

**Answer:** You have enabled popup blocking in your browser.

The online help for Enterprise View Express is Web-based (DHTML). You may need to adjust your browser's security settings to display the help correctly.

**Solution:** Disable popup blocking and enable ActiveX controls

# Why can't I view a saved Query Repository report?

**Symptom:** You run a query on the Query Repository page and save the results. When you open the saved report, you only see the query interface, not the results.

**Possible Cause:** You saved the report in an incompatible format.

**Solution:** In Internet Explorer, save all Query Repository reports in "HTML Only" format. In Firefox, save all Query Repository reports in "Web Page, complete" format.

# Tip: Creating chart elements for child tags

When creating a chart, if you choose to create chart elements for child tags, be sure to select a tag that has one or more children for the Parent Tag selection.

# What's Next?

That completes your tour of Enterprise View Express! Now let's explore how to use the WebGen utility to generate Analysis pages used in Enterprise View Express.

# Using WebGen

he Enterprise View Express *WebGen* tool creates HTML views of the information generated for a repository by Modernization Workbench tools. You can publish the views to Enterprise View Express, where they can be accessed by any member of your organization with a browser.

WebGen generates three types of reports about the repositories on your workstation:

- General reports list Modernization Workbench options and settings.
- *Analysis reports* contain information generated by the Modernization Workbench analysis tools.
- *Document reports* comprise user documents, generated documents, and documents in tool-specific report formats.

Note: You must open the Database Schema and User Interface tools at least once for the project you want to view before generating WebGen Analysis reports for these tools.

Project options control the types of reports the tool generates. You can set options in the WebGen Options window, or directly in the WebGen Wizard.

# Generating WebGen Views

WebGen views are generated for the current project. Project options control the types of reports the tool generates. You can set options in the WebGen Options window, or directly in the WebGen Wizard. For more information, see <u>"Setting WebGen Options" on page 4-3.</u>

# To generate WebGen views:

- 1 In the Repository Browser, select the project you want to view and choose **Application** in the **Profile** menu.)
- 2A To generate complete project information, select Generate all.
- 2B To generate only the project information specified in the Webgen Options window, select Add/Remove components or Change options and click Next. The Wizard displays the option settings for general information and lets you change the settings if necessary. Select Preserve already generated pages to prevent deletion of previously generated WebGen pages. If you do not select this option, previous project information is deleted, and only the pages you've checked are generated.

Click **Next** until you have reviewed the option settings for each type of information. Usage is identical to that for the WebGen Options window, as described in "Setting WebGen Options" on page 4-3.

- Tip: To regenerate the information specified in <u>step 2B</u>, without having to review the options again, select Regenerate previously selected components.
- To generate the repository metamodel in XML, select **Export repository to XML**. You can view the XML file in Internet Explorer 5.0 or later only.

**Note:** Take care in using this feature. You will overwrite previously generated HTML information for the repository.

3 Click Finish.

Tip: To remove WebGen output from your file system, select Remove previously generated content in the WebGen Wizard.

# Setting WebGen Options

WebGen project options control the types of reports the tool generates. You can set options in the WebGen Options window, or directly in the WebGen Wizard. For more information on setting WebGen options in the Wizard, see <a href="step 2B">step 2B</a> on page 4-2.

# To set WebGen options:

- In the Modernization Workbench **Tools** menu, choose **Project Options**. The Project Options window opens. Click the **WebGen** tab. The WebGen tab opens. Click the **General** tab. The General tab opens (Figure 4-1 on page 4-5).
- 2 In the General tab, select:
  - Options Set to generate Modernization Workbench option settings. Double-click the label for the option if you want to generate the settings for specific types of options only. The types correspond to the option sets in the Modernization Workbench Tools menu. Place a check mark next to each type of option you want to generate.
- 3 Click the Analysis tab. In the Analysis tab, select:
  - Complexity to generate application complexity statistics.
  - **Effort** to generate application effort statistics.
  - Glossary to generate project data dictionary information. Select the label for the option and choose Details if you want to generate information only for selected types of data dictionary items.

Place a check mark next to each type of item you want to generate

- Reference Reports to generate unresolved, unreferred, and cross-reference reports.
- Change Analyzer to generate information used to determine the class of data items that need to be changed to accommodate a change to a member of the class.
- **Diagrammer** to generate high-level information on program relationship flows.
- **Batch Application Viewer** to generate low-level information on batch processes.
- User Interface to generate user interface information.
- **Database Schema** to generate database schema information.
- **Hyperview** to generate HyperView information. Select the label for the option and choose **Details** if you want to generate information only for selected HyperView models. Place a check mark next to each type of source file for which you want to generate HyperView information.
- 4 Click the **Documents** tab. In the Documents tab, select the document types you want to generate.

Double-click **Other Documents** to generate documents in tool-specific report formats. The recognized folder locations for the documents are listed in the Other Documents dialog.

Right-click in the Other Documents dialog and choose **Add** in the pop-up menu to add a location to the list. The system displays an empty text field next to a selected check box. Enter the name of the new location in the field and click outside the field. You can use wildcard patterns allowed in LIKE statements by Visual Basic for Applications (VBA).

You can edit a location by right-clicking it and choosing **Edit** in the pop-up menu. You can delete an extension by right-clicking it and choosing **Delete** in the pop-up menu. Deselect a location if you do not want the system to recognize it.

Options - Project properties Global Data Element Flow | A Business Rule Manager | Component Maker |

Querification | Reports | C Generate Copybooks | T Target Database | Export | Database Schema |

Leser Interface | N Publish XML | N WebGen | I mpact | Callie | C Change Analyzer | General Analysis Documents - Actions Options Set Select All Unselect All <u>D</u>etails... Cancel

Figure 4-1 WebGen Options — General Tab

# What's Next?

That's it! You've concluded your tour of WebGen.

**4-6** Using WebGen What's Next?

# **Glossary**

#### **ADABAS**

ADABAS is a Software AG relational <u>DBMS</u> for large, mission-critical applications.

# **API**

API stands for application programming interface, a set of routines, protocols, and tools for building software applications.

# applet

See Java applet.

# **AS/400**

The AS/400 is a midrange server designed for small businesses and departments in large enterprises.

# **BMS**

BMS stands for Basic Mapping Support, an interface between application formats and <u>CICS</u> that formats input and output display data.

#### **BSTR**

BSTR is a Microsoft format for transferring binary strings.

#### **CDML**

CDML stands for Cobol Data Manipulation Language, an extension of the <u>Cobol</u> programming language that enables applications programmers to code special instructions to manipulate data in a <u>DMS</u> database and to compile those instructions for execution.

#### **CICS**

CICS stands for Customer Information Control System, a program that allows concurrent processing of <u>transactions</u> from multiple terminals.

#### Cobol

Cobol stands for Common Business-Oriented Language, a high-level programming language used for business applications.

#### COM

COM stands for Component Object Model, a software architecture developed by Microsoft to build <u>component</u>-based applications. COM objects are discrete components, each with a unique identity, which expose interfaces that allow applications and other components to access their features.

#### complexity

An application's complexity is an estimate of how difficult it is to maintain, analyze, transform, and so forth.

#### component

A component is a self-contained program that can be reused with other programs in modular fashion.

#### construct

A construct is an item in the <u>parse tree</u> for a source file — a section, statement, condition, variable, or the like. A variable, for example, can be related in the parse tree to any of three other constructs — a declaration, a dataport, or a condition.

### copybook

A copybook is a common piece of source code to be copied into many <u>Cobol</u> source programs. Copybooks are functionally equivalent to C and C++ include files.

#### **CORBA**

CORBA stands for Common Object Request Broker Architecture, an architecture that enables distributed objects to communicate with one another regardless of the programming language they were written in or the operating system they are running on.

#### **CSD** file

CSD stands for <u>CICS</u> System Definition. A CSD file is a <u>VSAM</u> data set containing a resource definition record for every resource defined to CICS.

#### database schema

A database schema is the structure of a database system, described in a formal language supported by the <u>DBMS</u>. In a relational database, the schema defines the tables, the fields in each table, and the relationships between fields and tables.

#### dataport

A dataport is an input/output statement or a call to or from another program.

#### DB/2

DB/2 stands for Database 2, an IBM system for managing relational databases

#### **DBCS**

DBCS stands for double-byte character string, a character set that uses two-byte (16-bit) characters rather than one-byte (8-bit) characters.

#### **DBMS**

DBMS stands for database management system, a collection of programs that enable you to store, modify, and extract information from a database.

#### **DDL**

DDL stands for Data Description Language (DDL), a language that describes the structure of data in a database.

#### decision resolution

Decision resolution lets you identify and resolve dynamic calls and other relationships that the parser cannot resolve from static sources.

#### **DMS**

DMS stands for Data Management System, a Unisys database management software product that conforms to the CODASYL (network) data model and enables data definition, manipulation, and maintenance in mass storage database files.

#### **DPS**

DPS stands for Display Processing System, a Unisys product that enables users to define forms on a terminal.

#### **ECL**

ECL stands for Executive Control Language, the operating system language for Unisys OS 2200 systems.

#### effort

Effort is an estimate of the time it will take to complete a task related to an application, based on weighted values for selected <u>complexity</u> metrics.

#### **EJB**

EJB stands for Enterprise JavaBeans, a <u>Java API</u> developed by Sun Microsystems that defines a <u>component</u> architecture for multi-tier client/server systems.

#### **FMF**

EMF stands for Enhanced MetaFile, a Windows format for graphic images.

#### entity

An entity is an object in the <u>repository</u> model for a legacy application. The relationships between entities describe the ways in which the elements of the application interact.

#### **FCT**

FCT stands for File Control Table (FCT), a <u>CICS</u> table that contains processing requirements for output data streams received via a remote job entry session from a host system. Compare <u>PCT</u>.

### **HTML**

HTML stands for HyperText Markup Language, the authoring language used to create documents on the World Wide Web.

#### **IDL**

IDL stands for Interface Definition Language (IDL), a generic term for a language that lets a program or object written in one language communicate with another program written in an unknown language.

#### **IDMS**

IDMS stands for Integrated Database Management System, a Computer Associates database management system for the IBM mainframe and compatible environments.

#### **IMS**

IMS stands for Information Management System, an IBM program product that provides transaction management and database management functions for large commercial application systems.

#### Java

Java is a high-level object-oriented programming language developed by Sun Microsystems.

# Java applet

A <u>Java</u> applet is a program that can be sent with a Web page. Java applets perform interactive animations, immediate calculations, and other simple tasks without having to send a user request back to the server.

#### **JavaBeans**

JavaBeans is a specification developed by Sun Microsystems that defines how <u>Java</u> objects interact. An object that conforms to this specification is called a JavaBean.

# **JCL**

JCL stands for Job Control Language, a language for identifying a job to OS/390 and for describing the job's requirements.

#### **JDBC**

JDBC stands for Java Database Connectivity, a standard for accessing diverse database systems using the <u>Java</u> programming language.

#### iob

A job is the unit of work that a computer operator or a program called a job scheduler gives to the operating system. In IBM mainframe operating systems, a job is described with job control language (<u>JCL</u>).

# logical component

A logical component is an abstract <u>repository</u> object that gives you access to the source files that comprise a component.

#### **MFS**

MFS stands for Message Format Service, a method of processing <u>IMS</u> input and output messages.

#### **Natural**

Natural is a programming language developed and marketed by Software AG for the enterprise environment.

#### object model

An object model is a representation of an application and its encapsulated data.

# object-oriented programming

Object-oriented programming organizes programs in terms of objects rather than actions, and data rather than logic.

#### **ODBC**

ODBC stands for Open Database Connectivity, a standard for accessing diverse database systems.

# orphan

An orphan is an object that does not exist in the reference tree for any startup object. Orphans can be removed from a system without altering its behavior.

#### parsei

The parser defines the <u>object model</u> and <u>parse tree</u> for a legacy application.

#### parse tree

A parse tree defines the relationships between the constructs that comprise a source file — its sections, paragraphs, statements, conditions, variables, and so forth.

#### **PCT**

PCT stands for Program Control Table, a <u>CICS</u> table that defines the transactions that the CICS system can process. Compare <u>FCT</u>.

#### PL/I

PL/I stands for Programming Language One, a third-generation programming language developed in the early 1960s as an alternative to assembler language, <u>Cobol</u>, and FORTRAN.

#### profile

Profiles are HTML views into a <u>repository</u> that show all of the analysis you have done on an application. Profiles are convenient ways to share information about legacy applications across your organization.

#### **QSAM**

QSAM stands for Queued Sequential Access Method, a type of processing that uses a queue of data records—either input records awaiting processing or output records that have been processed and are ready for transfer to storage or an output device.

#### relationship

The relationships between entities in the <u>repository</u> model for a legacy application describe the ways in which the elements of the application interact.

#### relaxed parsing

Relaxed parsing lets you verify a source file despite errors. Ordinarily, the parser stops at a statement when it encounters an error. Relaxed parsing tells the parser to continue to the next statement.

# repository

A repository is a database of program objects that comprise the model for an application.

#### schema

See database schema.

#### SQL

SQL stands for Structured Query Language, a standard language for relational database operations

#### system program

A system program is a generic program — a mainframe sort utility, for example — provided by the underlying system and used in unmodified form in the legacy application.

# TIP

TIP stands for Transaction Processing, the Unisys real-time system for processing transactions under Exec control.

#### transaction

A transaction is a sequence of information exchange and related work (such as database updating) that is treated as a unit for the purposes of satisfying a request and for ensuring database integrity.

# **VALTAB**

VALTAB stands for Validation Table, which contains the information the system needs to locate, load, and execute transaction programs. See also <u>TIP</u>.

#### **VSAM**

VSAM stands for Virtual Storage Access Method, an IBM program that controls communication and the flow of data in a Systems Network Architecture network.

#### **XML**

XML stands for Extensible Markup Language, a specification for creating common information formats.

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