Oracle® Universal Records Management

Oracle Universal Records Management Adapter for Symantec Enterprise Vault Administration Guide 10g Release 3 (10.1.3.3.1)

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Oracle Universal Records Management Adapter for Symantec Enterprise Vault Administration Guide, 10g Release 3 (10.1.3.3.1)

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Chapter 1: Introduction

	Overview	.1-1
	About This Guide	.1-1
	Product Overview	.1-2
	Standard Installation Architecture	
	Audience	
	Installation Requirements	
	About the Adapter	.1-3
	Overview of URM and the Adapter Integration	
	Overview of the Retention Functions	.1-4
	Product Documentation	.1-6
	Online Help System	
	PDF File	.1-8
	Software Requirements	.1-8
	Compatibility with URM and Content Server	
	Operating Systems	
	Supported Databases	
	Conventions	.1-9
Ch	napter 2: Installation	
	Overview	.2-1
	Installation	.2-1
	Create a Configuration Database	.2-2
	Create an ODBC Data Source	
	Setting up the Adapter Accounts	.2-3
	Install the Adapter	.2-3
	Post-Installation Setup	.2-4
	Start the Enterprise Vault Services	.2-6
	Configure the Adapter	.2-6

	Start the Symantec URM Service	2-6
	Define a Content Profile in URM for the Adapter	2-7
	Mapping a String Literal in the Enterprise Vault to the URM Pro	
	Metadata Field	
	_	
	Uninstalling the Adapter	2-17
C	hapter 3: Configuration	
	Overview	3-1
	About Content Retention Management	3-4
	Sources	3-4
	Types of Sources	
	About URM Adapter Sources	
	Metadata Fields	
	Enterprise Vault Archive Metadata Fields	
	Enterprise Vault Custom Metadata Fields	
	URM Custom Metadata Fields	
	Searchable URM Custom Metadata Fields	
	Mapped Metadata Fields	3-8
	Single-Mapped Metadata Fields	
	Double-Mapped Metadata Fields	3-9
	Repository Searches and Search Directions	
	New and Historical Content Repository Searches	
	Chronology of Repository Search Processing	
	Regulatory Compliance Tasks	
	System Logs and Audit Trails	
	Configuration Files	
	About Search Queries	3-18
	Repository Search Queries	3-19
	Construction of Search Queries	
	Expression Grouping Option	
	Expression Option	3-21
	Add Term Option	
	Compound Expressions	
	• •	
	Configuring the Adapter	
	Registering the Adapter	
	Changing the Authentication Information.	
	Changing the Database Connection	
	Sorting Field Data Columns	
	Changing the Enterprise Vault Directory Host	
	Creating an Enterprise Vault Custom Metadata Field	3-28

	Adding a New URM Adapter Source	.3-28
	Mapping Metadata Fields	.3-30
	Defining a URM Custom Metadata Field	.3-31
	Double-Mapping Metadata Fields	.3-31
	Viewing the Configuration Data of a URM Adapter Source	.3-32
	Editing an Existing URM Adapter Source	.3-32
	Defining a New Search Query	.3-33
	Editing a Search Query	.3-34
	Duplicating and Editing a Search Query	.3-34
	Deleting a Search Query	.3-35
	Mapping a Search Query	.3-35
	Activating/Deactivating a Search Query	.3-36
	Modifying the Advanced Settings Values	.3-36
Т	he Configuration User Interface	.3-37
	Adapter Administration Manager	.3-38
	Connection Screen	
	Field Sort Order	.3-41
	Enterprise Vault Screen	.3-42
	URM Sources Screen	.3-44
	URM Sources Screen: Pop-up Menus	.3-48
	URM Sources Screen: Create New URM Source Screen	.3-49
	URM Sources Screen: Create New URM Source Screen - Establish Mappings	
	URM Sources Screen: Create New URM Source Screen - Define Cu Fields	
	Search Creation Screen	.3-59
	Search Creation Screen: Create new search Screen	.3-61
	Search Creation Screen: Equation Editor	
	Equation Editor: Expression Design Pop-up Menus	
	Equation Editor: Field Variable Pop-up Menus	
	Equation Editor: Operator Variable Pop-up Menus Equation Editor: Value Variable Text Field	
	Equation Editor: Value Variable Prop-down Calendar	
	Search Mapping Screen	
	Advanced Screen	
Cha	pter 4: Administration	
0	Overview	4-1
Α	bout Adapter Operation and Administration	4-2
А	Bout Adapter Operation and Administration	
А		4-3

	ile Administration	
	ile Characteristics	
	s and Error Message Severity Codes	
	s	
	Adapter	
	and Restarting the Adapter Service	
_	eclaration Errors and Message Details	
_	isposition Errors and Message Details	
_	ror Results	
	g Search Query Results	
_	tatus Data for the Adapter	
_	tatus Data for the Adapter Service	
•	atus Results	
_	ne Daily Event Records and Error Message Details	
	ation User Interface	
	agement Link	
	agement: Declaration Errors Screen	
	agement: Disposition Errors Screen	
	agement: Error Details Screen	
	agement: Sort Order	
	kk	
	lapter Status Tab	
	ervice Status Tab	
	ort Order	
	er Screen	
•	er: Message Dialog Box	
9		
Appendix A: N	letadata Field Lengths	
Overview		A-1
Lengths for UF	RM Metadata Field Types	A-1
Lengths for Sy	mantec Metadata Field Types	A-2
Displayed Fiel	d Lengths for Mapping	A-4
Field Lengths	and Double-Mapping	A-5
	"	
	hird Party Licenses	
Overview		B-1
Apache Softwa	are License	B-1
W3C® Softwa	re Notice and License	B-2

Zlib License	B-4
General BSD License	B-5
General MIT License	B-5
Unicode License	B-6
Miscellaneous Attributions	B-7

Index

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INTRODUCTION

OVERVIEW

This section contains the following topics:

- **❖** About This Guide (page 1-1)
- **❖** About the Adapter (page 1-3)
- **❖** Product Documentation (page 1-6)
- ❖ Software Requirements (page 1-8)
- **Conventions** (page 1-9)

ABOUT THIS GUIDE

This section contains the following topics:

- **❖** Product Overview (page 1-2)
- ❖ Standard Installation Architecture (page 1-2)
- **❖** Audience (page 1-3)
- **❖** Installation Requirements (page 1-3)

Product Overview

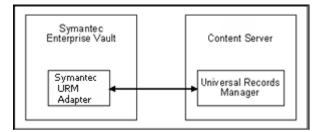
Oracle Universal Records Manager (URM) provides the ability to perform records management, retention management, and litigation support across the entire enterprise. From a single Oracle URM server, organizations can define all their policies for records and retention management, as well as perform legal searches and apply litigation holds. The Oracle URM Adapter for Symantec Enterprise Vault (hereafter abbreviated as the Adapter) obtains these policies from the URM server and applies them to the content items stored in the EnterpriseVault.

The Adapter provides the bridge between URM which manages the retention policies and the EnterpriseVault which stores the content. The Adapter also sends information back to the URM server, so it can maintain an up-to-date catalog of the enterprise's important content. Thus, companies can apply their records and retention policies to more content, more consistently, with less administrative effort, and less disruption for users. These same benefits apply to litigation searches and holds.

Standard Installation Architecture

This section provides a general overview of the relationships between the primary products.

Figure 1-1 Standard Adapter Installation Architecture



The major components involved in a typical installation include:

- ❖ URM—Allows organizations to manage their records and retention policies, disposition processes and litigation or audit holds in a central repository known as a URM Server. These policies, dispositions, and holds are applied to repository content through the Adapter.
- ❖ Symantec Enterprise Vault—Offers a storage repository for content from various sources. It provides a solution for archiving and managing email, files, and other data types. It is capable of performing some retention management and also apply litigation

- and audit holds. However, it performs those functions independently of the corporate retention schedule that is stored in URM.
- ❖ Oracle URM Adapter for Symantec Enterprise Vault—Communicates between URM and the Enterprise Vault. The Adapter enables corporations to control content retention in the Enterprise Vault through URM which deploys the enterprise's policies. The Adapter provides common retention functionality:
 - Identifying the content in the repository that is of interest to URM.
 - Performing searches and declaring the applicable content items to URM.
 - Performing disposition actions on the existing content items when their retention periods end.
 - Establishing holds and freezes on the content items, as necessary.

Audience

This administration guide is intended for system administrators who need to install and configure the Adapter. System administrators will also use this guide to manage the Adapter configuration requirements and generated activity log files. This guide assumes that the product has been installed correctly and that you are familiar with Oracle products and the architecture of Content Server.

Installation Requirements

Typically, there is one instance of the Adapter installed on each Symantec Enterprise Vault installation (except in an active/passive concurrent mode environment—see Concurrent Mode (page 4-3). This ensures that the Adapter performs its functions without consuming too much processing or network bandwidth.

Because it resides directly on the repository, the Adapter is installed from an external executable rather than as a component using Content Server's installation utilities (Component Manager or Component Wizard). Chapter 2 (*Installation*) provides related information and the actual procedures for preparing and installing the Adapter application.

ABOUT THE ADAPTER

This section covers the following topics:

Overview of URM and the Adapter Integration (page 1-4)

Overview of the Retention Functions (page 1-4)

Overview of URM and the Adapter Integration

Universal Records Management (URM) allows organizations to manage their records and retention policies, disposition processes, and litigation holds or freezes in a central repository known as a Universal Records Management Server (URM). They can then apply those policies, dispositions, and holds to content stored in multiple repositories through URM Adapters. The repositories may be any server or application that holds content whose retention is to be controlled.

In this case, the Enterprise Vault holds records that need to be preserved for a retention period, specified in a corporate retention schedule, and then destroyed according to a corporate disposition process. The records are preserved in place since the Enterprise Vault has the ability to ensure that the record will remain unalterable during the retention period. Upon request, the Enterprise Vault is also able to purge the records at the end of the retention period.

The Enterprise Vault may also hold content that is not considered business records (non-records). There is no requirement that the content be preserved for the retention period although it may be desirable for various reasons. When retention of this content is no longer necessary, it can be disposed of according to the disposition processes stored within URM. With both records and non-records, there is an obligation to ensure that any material that is subject to a litigation or audit hold (freeze) is not deleted, either by a user or as part of a disposition process. The Adapters allow URM to ensure that deletion does not happen.

Overview of the Retention Functions

The Adapter is the intermediary between URM and the Enterprise Vault and manages their intercommunications. Content is stored in and remains in the Enterprise Vault while URM simultaneously enforces corporate retention policies, disposition processes, and legal holds on the stored content.

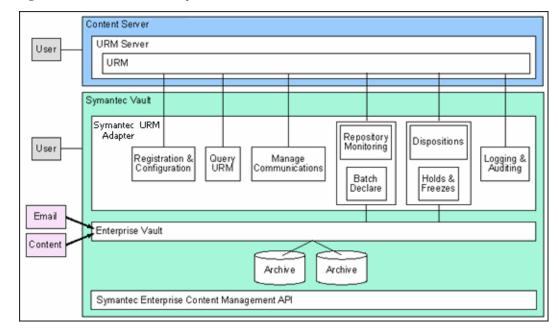


Figure 1-2 Overview of the Adapter Retention Functions

The Adapter provides the following basic retention functions:

- ❖ Registration—The Adapter registers itself with URM. This ensures that URM knows about the Symantec Enterprise Vault and is ready to manage the stored content within the repository.
- Configuration—The Adapter handles all configuration requirements. This includes collecting the proper identification and credentials information for URM security and communications. Configuration information also includes mapping metadata fields and defining searches.
- ❖ Query URM—The Adapter queries URM for certain information. For example, it may need to retrieve retention schedules for specific items of interest. Or, the Adapter may need to request URM metadata for content items and obtain lifecycle information.
- Manage Communications—The Adapter monitors batch processes, handles communication errors with URM, and handles large work requests by grouping them into communication blocks and processing the response in chunks.
- ❖ Repository Monitoring and Batch Declare—The Adapter monitors the Enterprise Vault by periodically searching the repository and informing URM of any changes in the repository that affect disposition processes or audit holds. For example, the Adapter will inform URM about new content checkins that need to be managed.

- ❖ Perform URM Tasks—The Adapter periodically asks URM for tasks that need to be performed within the repository. These tasks enable URM to abide by the corporate retention policies and disposition processes. Typical tasks include:
 - URM may want the Adapter to perform a search within the Enterprise Vault and provide a list of items matching the search criteria.
 - As part of a scheduled disposition process, URM may want the Adapter to purge (or use another disposition method) an item that is stored in the Enterprise Vault.
 - When a litigation hold applies to managed content within the Enterprise Vault,
 URM may want the Adapter to retrieve a list of affected items and preserve them to ensure that they are not edited or destroyed.
 - When a litigation hold is removed, URM may want the Adapter to stop preserving the affected items.
- ❖ Logging and Auditing—The Adapter provides consistent logging for the activities it coordinates. The Adapter contributes event information to the log files that are then uploaded to URM, consolidated, and stored.

PRODUCT DOCUMENTATION

The Adapter is shipped with a comprehensive set of electronic documentation that is available in two formats:

- Online Help System (page 1-6)
- **❖** PDF File (page 1-8)

Online Help System

The Adapter is installed with a full online help system that you can call up from the Adapter user interface. The Help Menu Options on the Adapter Administration Manager (page 3-38) enable you to open either the Main Help Page or the applicable context sensitive help page.

Figure 1-3 Help Menu Options



The Help menu contains two online help entries: Contents and Section. Selecting either option opens one of two pages, respectively:

- **❖** Main Help Page (page 1-7)
- Context-Sensitive Help Pages (page 1-7)

Main Help Page

Selecting the Contents option opens the main help page. This page enables you to look for specific topics using either the table of contents or index from the Oracle Universal Records Management Adapter for Symantec Enterprise Vault Administration Guide. Or, you can search for information by performing a full-text search.

Context-Sensitive Help Pages

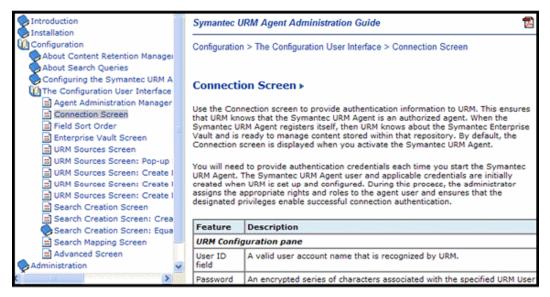
Selecting the Section option opens the context-sensitive help page for the current screen. The Section option also lists the name of the current screen in parenthesis (see Help Menu Options). The help page for the listed screen is displayed when you select the Section option.



Note: If you select a top-level link in the Navigation tree (page 3-39) on the Adapter Administration Manager (page 3-38) (such as Configuration or Error Management), the screen listed in parenthesis next to the Section option is the next screen link in the hierarchy.

For example, if the Configuration link is selected in the navigation tree, then Connection is listed in the Section option's parenthesis—see Help Menu Options. In this case, if you select the Section (Connection) option, the online help system displays the context-sensitive help information for the Connection screen (shown below).

Figure 1-4 Context-Sensitive Help Page



PDF File

The Oracle Universal Records Management Adapter for Symantec Enterprise Vault Administration Guide is also available as a PDF file. After installation of the Adapter software, the PDF file is available on the computer that the software was installed on. You can call up the PDF version of the guide in the online help by clicking the PDF icon in the top-right corner of each help page. See Context-Sensitive Help Pages (page 1-7).



Note: To view and print the documentation files or individual help pages, you need the Adobe Acrobat Reader. This is a free utility that can be downloaded from the Internet at http://www.adobe.com/products/acrobat/readstep2.html.

SOFTWARE REQUIREMENTS

This section covers the following topics:

- **❖** Compatibility with URM and Content Server (page 1-9)
- Operating Systems (page 1-9)
- Supported Databases (page 1-9)

Compatibility with URM and Content Server

Currently, the Oracle URM Adapter for Symantec Enterprise Vault 10gR3 communicates with Oracle Universal Records Manager 10gR3. Currently, this version of URM is supported only on Oracle Content Server versions 10gR3 and later.

Operating Systems

The current version of the Adapter supports the following operating systems:

- Windows 2000 Server with Service Pack 4
- Windows Server 2003, Web Edition

Supported Databases

The current version of the Adapter supports the following databases:

- Microsoft SQL Server 2000 or 2005
- Oracle Database 9i or 10g

CONVENTIONS

The following conventions are used throughout this guide:

- ❖ The notation <*Install_Dir*>/ is used to refer to the location on your system where the content server instance is installed.
- ❖ Forward slashes (/) are used to separate the directory levels in a path name. A forward slash will always appear after the end of a directory name.
- Notes, technical tips, important notices, and cautions use these conventions:

Symbols	Description
?	This is a note. It is used to bring special attention to information.
③	This is a technical tip. It is used to identify information that can be used to make your tasks easier.

Symbols	Description
!	This is an important notice. It is used to identify a required step or required information.
⊗	This is a caution. It is used to identify information that might cause loss of data or serious system problems.

INSTALLATION

OVERVIEW

This section covers the following topics:

- **❖** Installation (page 2-1)
- **❖** Post-Installation Setup (page 2-4)
- Uninstalling the Adapter (page 2-17)

INSTALLATION

This section covers the following topics:

- Create a Configuration Database (page 2-2)
- Create an ODBC Data Source (page 2-2)
- ❖ Setting up the Adapter Accounts (page 2-3)
- **❖** Install the Adapter (page 2-3)



Note: The following installation procedures assume that you have already successfully installed URM on a different server. Refer to the *Oracle Universal Records Manager Installation Guide*.

Create a Configuration Database

You will need to create a configuration database for the Adapter. The connection database stores the configuration data for the system. This includes the created searches, the Enterprise Vault installation instance, and the URM Adapter source names and definitions. During the Adapter installation process, the installation wizard will run database configuration scripts to set up the required database tables. For more detailed information, refer to the applicable user and administration manuals for your database server.

Create an ODBC Data Source

You will need to create an ODBC Data Source that points to the Adapter database.

To create the ODBC Data Source:

1. Open the ODBC Data Source Administrator:

Select Start—Control Panel—Administrative Tools—Data Sources (ODBC)—ODBC Data Source Administrator.

2. Click the **System DSN** tab.

The System Data Source screen is displayed.

3. Click Add.

The Create New Data Source screen is displayed.

- 4. Select the applicable driver for the Adapter's database, and click **Finish**.
- 5. Enter the applicable field values, and click **Next**.
- 6. Select the applicable options, and click **Next**.
- 7. Enter the applicable field values and/or select the applicable options, and click **Next**.
- 8. Select the applicable options, and click **Finish**.

The ODBC *<database*> Setup screen is displayed.

9. To validate the ODBC Data Source, click **Test Data Source**.

The results are displayed on the *<database>* ODBC Data Source Test dialog box.

- 10. Click **OK**.
- 11. Click **OK** to complete the new ODBC Data Source.

The ODBC Data Source Administrator is displayed and the new ODBC Data Source is added to the System Data Source list on the System DSN tab.

Setting up the Adapter Accounts

The Oracle URM Adapter for Symantec Enterprise Vault runs as the Symantec Enterprise Vault administrator account. This account does not have a predefined name. It must be created by the person who is installing and configuring the adapter. The account must be the Enterprise Vault administrator. **DO NOT** confuse this account with Administrator, the local computer administrator account, or a domain administrator account. These accounts may not have the privileges required by the Adapter.

Install the Adapter



Note: Typically, there is one instance of the Adapter installed on each Symantec Enterprise Vault installation (except in an active/passive concurrent mode environment—see Concurrent Mode (page 4-3). You must install the primary instance of the Adapter on the same computer as the Enterprise Vault.

To install the Adapter:

- 1. Locate and double-click the **Oracle_URM_Vault_Adapter.zip** folder.
- 2. Double-click the **setup.exe** application.

The Oracle URM VaultAdapter installation wizard welcome screen is displayed.

3. Click Next.

The License Agreement screen is displayed.

Optionally, you can print a copy of the License Agreement by clicking **Print** and using the displayed **Save As** screen to select a directory.

4. Accept the terms in the license agreement, and click **Next**.

The Customer Information screen is displayed.

5. Enter the applicable information, and click **Next**.

The Setup Type screen is displayed.

6. Select the applicable setup type:

Complete—Installs all the features of the Adapter.

Custom—Enables you to select the features that you want to install and the directory location.

7. Click Next.

The Ready to Install the Program screen is displayed.

8. Click Install.

The Database Initialization screen is displayed and includes the Launch DB Setup Utility check box:

Selected—Enables the installation wizard to launch the database setup utility. This utility automatically configures the Adapter database by running the applicable setup scripts to create the database tables. This is the default setting.

Clear—Requires you to manually configure the Adapter database.

9. Click Next.

The installation wizard completes the Adapter installation process.

If you selected the Launch DB Setup Utility check box in Step 8 above, the install wizard invokes the database setup utility. Continue with Steps 10 through 13 below.

10. Select the Database Type and enter the applicable ODBC Data Source information in the fields—see Create an ODBC Data Source (page 2-2). Click **Next**.

The Script Execution screen is displayed.



Note: Alternatively, if you did not create an ODBC Data Source before using the Oracle URM Adapter for Symantec Enterprise Vault installation wizard to install the Adapter, you can do so now. Clicking ODBC opens the ODBC Data Source Administrator. Follow the steps included in the procedure to Create an ODBC Data Source (page 2-2).

11. Click Execute.

The Status column indicates whether the scripts have run successfully.

12. Click Finish.

The installation wizard completes the database configuration process.

13. Click Finish.

The Adapter is installed and an icon is displayed on the desktop.

POST-INSTALLATION SETUP

This section covers the following topics:

- ❖ Start the Enterprise Vault Services (page 2-6)
- Configure the Adapter (page 2-6)

- ❖ Start the Symantec URM Service (page 2-6)
- ❖ Define a Content Profile in URM for the Adapter (page 2-7)

Start the Enterprise Vault Services

After you have installed the Adapter, you may need to manually start several Enterprise Vault services:

1. Open the Services application:

Start—Control Panel—Administrative Tools—Services

- 2. Scroll down to locate the following services:
 - Enterprise Vault Admin Service
 - Enterprise Vault Directory Service
 - Enterprise Vault Indexing Service
 - Enterprise Vault Shopping Service
 - Enterprise Vault Storage Service
 - Enterprise Vault Task Controller Service
- 3. Select the first service.
- 4. On the **Action** menu, click **Start**.

Services starts the selected Enterprise Vault service and updates its Status to Started.

- 5. Repeat Steps 3 through 4 for each service listed in Step 2.
- 6. Close the Services application.

Configure the Adapter

Chapter 3 (*Configuration*) provides the necessary information to fully configure this instance of the Adapter. This chapter provides conceptual background information in addition to detailed explanations of each user interface screen and their related tasks.



Important: It is recommended that you complete the installation process by defining one or more content profiles in URM before you use any search queries to process new or historical content in the Enterprise Vault.

Start the Symantec URM Service

After you have added a new URM Adapter source during the configuration process, you will need to start the Symantec URM Service. For more information about the sources

used by the Adapter and URM, see Sources (page 3-4) and URM Sources Screen (page 3-44).

To start the Symantec URM Service:

- 1. Open the Services application:
 - Start—Control Panel—Administrative Tools—Services
- 2. Scroll down to locate the Adapter Service named:
 - URM Adapter for Symantec Enterprise Vault
- 3. On the **Action** menu, click **Start**.
 - Services starts the Adapter Service and updates the Status to Started.
- 4. Close the Services application.

Define a Content Profile in URM for the Adapter

The Enterprise Vault will not always have appropriate archive metadata to correspond to all of the required metadata fields in URM. And, it may not always be practical or desirable to create custom metadata fields to use for mapping purposes. As a result, there will be some required URM metadata fields that are not mapped to Enterprise Vault metadata fields.

If Enterprise Vault metadata fields are not mapped to some of the required URM metadata fields, then the declaration data that the Adapter sends will not include values for the required URM metadata fields that remain unmapped. Even when Enterprise Vault metadata fields are mapped to the required URM metadata fields, values for these fields might not exist in the stored content items. In this case, the Adapter would not pass values for these fields in URM.

To resolve this issue, you can create a content profile in URM that will supply default values for the required URM metadata fields if data is not provided. An appropriately configured content profile ensures that the required URM metadata fields will always be populated with valid values. You should design the content profile to:

- ❖ Accept the values that are transferred from the Adapter if the values are not empty strings. This ensures that values derived from repository searches are preserved when the data is forwarded to URM via the declaration process.
- Use the profile's default values for the required URM metadata fields if the Adapter sends empty strings for these fields.

Use the profile's default values for the required URM metadata fields if these fields are not mapped to Enterprise Vault metadata fields and values are not included in the declaration data.

If you set up this profile to include all of the required URM metadata fields, the same profile can be used for all of the URM Adapter sources (defined in the Adapter). That way, all of the URM Adapter sources can use any set of field mappings and URM will always use this content profile to resolve the required URM metadata fields. This ensures that default values for required URM metadata fields are consistent for all of the content items that are declared into each URM repository category.

Alternatively, you can set up a separate URM content profile for each URM Adapter source in the Adapter. Each URM Adapter source could use a unique metadata value to trigger a specific URM content profile. This can be useful if you have different default values that you want to use for different kind of documents (for example, documents originating from different departments or with different security codes). Then, depending on which URM Adapter source is run, a particular content profile is activated in URM and different default values for required metadata fields are used.



Note: It is recommended that you determine all of the required URM metadata fields and their current option list values before you begin defining your profile(s). Then, you must decide what you want to use as default values for each required metadata field. Make any necessary changes for these fields in URM before you begin to define the profile(s).



Note: When you created your URM Adapter source(s) in the Adapter, you may or may not have mapped Enterprise Vault metadata fields to all of the required URM metadata fields. Even if a field is mapped, however, it does not necessarily mean that every Enterprise Vault field will always have a value. In either case, you should still define one or more content profiles in URM.



Note: The two-part procedure included below is meant to be used as a generic example. Therefore, it does not include detailed or comprehensive information. To define a content profile that meets your specific requirements, you will need to refer to the content profile information provided in the *Managing Repository Content Guide*.

This section describes how to define a content profile in URM that will provide default values for required URM metadata fields that are not mapped to corresponding Enterprise Vault metadata fields. To accomplish this, the following procedures are necessary:

❖ Mapping a String Literal in the Enterprise Vault to the URM Profile Metadata Field (page 2-9)

❖ Defining the URM Content Profile (page 2-12)

Mapping a String Literal in the Enterprise Vault to the URM Profile Metadata Field

There are two ways that you can map the string literal:

- ❖ Mapping the String Literal While Creating a New URM Adapter Source (page 2-9)
- ❖ Mapping the String Literal While Editing an Existing URM Adapter Source (page 2-10)

METHOD ONE:

Mapping the String Literal While Creating a New URM Adapter Source

- 1. In the Adapter Administration manager, click the **URM Sources** link. The **URM Sources** Screen (page 3-44) is displayed.
- 2. Click New.
 - The URM Sources Screen: Create New URM Source Screen (page 3-49) is displayed.
- 3. Enter the applicable information, and click **Next**.
 - The URM Sources Screen: Create New URM Source Screen Establish Field Mappings (page 3-52) is displayed.
- 4. Right-click in any column, and select **Add** from the pop-up menu.
 - A new row is added to the Establish Field Mappings pane.
- In the Repository Field drop-down list select Literal Text.
 The Literal Text dialog box is displayed.
- 6. Enter a value for this metadata field.



Important: This value MUST match the trigger value that is assigned to the trigger metadata field when you define the URM content profile. Otherwise, when the Adapter checks in declaration data, the value of this metadata field WILL NOT activate the expected content profile in URM. See Defining the URM Content Profile (page 2-12).

The trigger metadata field for the content profile is selected in Step 4 in the procedure to Select the Profile Trigger (page 2-12). The trigger value for the trigger metadata field is assigned in Step 4 in the procedure to Create the Profile and Add Rule(s) (page 2-15).



Important: The value that you enter in this step is the metadata field value that will activate the content profile when the Adapter declares the content data that is associated with this URM Adapter source. Mapping the correct string literal value ensures that when URM receives the declared batch, this value will invoke the corresponding content profile.



Tech Tip: If you should ever need to edit this string literal (because it is misspelled or you change the corresponding value in the URM content profile), you can click the table cell and re-select the Literal Text option from the drop-down list. The Literal Text dialog box is displayed pre-populated with the previous value. Edit the value as necessary.

7. Click **OK**.

The value is entered into the Repository Field cell.

- 8. In the URM Field drop-down list, select **wwxRMProfileTrigger**.
- 9. Click Next.

The URM Sources Screen: Create New URM Source Screen - Define Custom Fields (page 3-55) is displayed.

- 10. Add information as necessary—see Step 11 in the procedure for Adding a New URM Adapter Source (page 3-28).
- 11. Click Finish.

The Adapter creates the new URM Adapter source. It includes the mapped URM profile metadata field.

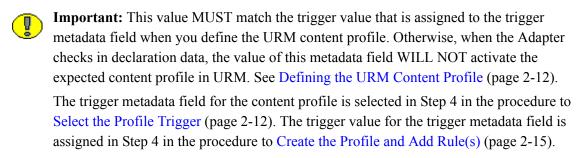
METHOD TWO:

Mapping the String Literal While Editing an Existing URM Adapter Source

- 1. In the Adapter Administration manager, click the **URM Sources** link.
 - The URM Sources Screen (page 3-44) is displayed.
- 2. In the URM Adapter sources drop-down list, select the existing URM Adapter source that needs to have a string literal mapped to the URM profile metadata field.
 - The URM Sources screen refreshes and displays the configuration information for the selected URM Adapter source.
- 3. In the Field Mappings pane, right-click in any column, and select **Add** from the pop-up menu.
 - A new row is added to the Field Mappings pane.
- 4. In the Repository Field drop-down list select Literal Text.

The Literal Text dialog box is displayed.

5. Enter a value for this metadata field.



- Important: The value that you enter in this step is the metadata field value that will activate the content profile when the Adapter declares the content data that is associated with this URM Adapter source. Mapping the correct string literal value ensures that when URM receives the declared batch, this value will invoke the corresponding content profile.
 - **Tech Tip:** If you should ever need to edit this string literal (because it is misspelled or you change the corresponding value in the URM content profile, you can simply click the table cell and re-select the Literal Text option from the drop-down list. The Literal Text dialog box is displayed pre-populated with the previous value. Edit the value as necessary.
 - 6. Click **OK**.

The value is entered into the Repository Field cell.

- 7. In the URM Field drop-down list, select wwxRMProfileTrigger.
- 8. In the File menu, select **Save**.

The Adapter saves the changes to the URM Adapter source. It includes the mapped URM profile metadata field.

Defining the URM Content Profile



Note: You can define a single content profile that deals with of all the required URM metadata fields and is activated for each URM Adapter source in the Adapter. Or, you can define multiple profiles and set up a separate profile for each URM Adapter source in the Adapter. This is useful if you have different default values that you want to use for different kind of documents (for example, documents originating from different departments or with different security codes).

For example, wwxRMProfileTrigger is the trigger metadata field for all URM profiles and the option list values might include: record, nonrecord, and unknown. If you have created three profiles, you could assign the trigger values as follows: ProfileA can use record as the trigger value, ProfileB can use nonrecord, and ProfileC can use unknown.

When the Adapter checks in declaration data and the wwxRMProfileTrigger metadata field has a value of nonrecord, ProfileB is activated for that data. This means that when the data is processed using ProfileB, different default values are assigned to the required URM metadata fields that are unpopulated.



Important: This guide assumes that you are familiar with Oracle products and the URM architecture. Additionally, you should be fairly proficient with Idoc Script and writing necessary statements. For detailed information about content profiles, refer the *Managing Repository Content Guide*. For detailed information about Idoc Script, refer to the *Idoc Script Reference Guide*.

This process consists of the following main steps:

- ❖ Select the Profile Trigger (page 2-12)
- Configure the Rule(s) for the Profile (page 2-13)
- Create the Profile and Add Rule(s) (page 2-15)

Select the Profile Trigger

- In URM, open the Configuration Manager.
 Select Administration—Admin Applets—Configuration Manager.
- 2. Click the **Profile** tab.
- 3. Click **Select**.

The Edit Trigger Field screen is displayed.

4. Select wwxRMProfileTrigger, and click OK.



Note: In URM, you can select only one trigger metadata field and it applies to all content profiles that are defined. If more than one profile is defined, a different value for the trigger metadata field must be assigned to each profile. Then, when checked-in content matches a trigger value for a profile, that profile is evaluated for the checked in content. See Step 4 in the procedure to Create the Profile and Add Rule(s) (page 2-15)—the final step for Defining the URM Content Profile (page 2-12).

Configure the Rule(s) for the Profile



Note: If you have not already done so, before you begin to configure the rule(s) for your profile(s), you should determine all of the required URM metadata fields and their current option list values. You will need to decide what you want to use as default values for each field. When the Adapter checks in declaration data, the values should be appropriate for the corresponding URM metadata fields. You will need to make any necessary changes in URM before you begin to define the content profile(s).



Note: A content profile can have more than one rule. When evaluated, each profile rule determines how the affected metadata fields are configured and resolved. In this case, the rules will provide default values for any required URM metadata fields that are blank or not included in the checked-in declaration data.

- 1. Click the **Rules** tab.
- 2. Click Add.

The General tab on the Add New Rule screen is displayed.

- 3. Enter the name and optional description of the rule.
- 4. Click the **Fields** tab.



Note: It is recommended that you include all of the required URM metadata fields either in a single rule or in multiple rules. This ensures that default values are assigned to the fields if values are blank or not included in the Adapter's declaration data.

5. Click Add.

The Add Rule Field screen is displayed.

6. In the Field Name drop-down list, select one of the required URM metadata fields and click **OK**.

The Add Rule Field *sield_name* screen for the selected metadata field is displayed.



Note: You should not plan to select the optional Use default value check box. This attribute allows you to display a default value for this metadata field on the Check In Form or Search page. Do not confuse this default value with the default value for the trigger metadata field selected on the Profile tab.

7. Select the **Is derived field** check box and click **Edit**.

The Script Properties tabs on the Edit Derived Value screen are displayed.



Note: The Script Properties tabs are used to configure the evaluation conditions for each metadata field included in the rule. These tabs enable you to set specified values to the included metadata fields during check-in. These are the default values that are assigned to the required URM metadata fields that are blank or not included in the Adapter's checked-in declaration data.

The remaining steps in this procedure provide general guidelines rather than explicit instructions for Idoc Script or attribute choices (which is beyond the scope of this guide). For detailed information, refer to the *Managing Repository Content Guide* and the *Idoc Script Reference Guide*.

8. You can choose to configure a customized value or a hard-coded value for the metadata field.



Important: In this step, you will need to build Idoc Script statements that instruct URM how to assign values to each metadata field included in this rule. It is recommended that you assign a default (hard-coded) value to the metadata fields that do not have values included in the Adapter's declaration data. However, if a value is included in this data, that value should be used rather than the default value. This ensures that the original values in the Enterprise Vault are preserved when the data is transferred and checked in to URM.



Tech Tip: It is probably easiest to start with the Conditions tab and allow it to automatically generate the Idoc Script for the hard-coded metadata field values. This is helpful to ensure proper Idoc Script code is used. For example, when you are assigning values to the metadata fields, you cannot use the actual name of the metadata field (such as dDocTitle). Instead, the following syntax must be used:

<\$dprDerivedValue="user1"\$>

After allowing the Conditions tab to build these statements, you can use the Custom tab to build additional Idoc Script code around the generated statements. The custom code is necessary to ensure the integrity of the original values from the Enterprise Vault.

Customized value:

a. If you are proficient with Idoc Script, click the **Custom** tab.

b. Select the **Custom** check box.

The custom text pane is activated.

- c. Enter your customized Idoc Script.
- d. Click OK.

The Add Rule Field *screen* is displayed.

Hard-coded value:

Otherwise, on the Conditions tab, click Add.

The Add Condition screen is displayed.

a. Enter a name for the condition, and click **OK**.

The screen refreshes and displays the lower expression pane with fields that are used to define the attributes of the hard-coded field value.

b. Configure the attributes as necessary for the metadata field. When you have finished the configuration, click **OK**.

The Add Rule Field *sield name* screen is displayed.

9. Click OK.

The Fields tab on the Add New Rule screen is displayed.

- 10. You will need to define a default value for each required URM metadata field. To do this, repeat **Steps 5** through **9**.
- 11. When you have finished defining default values for all of the required fields, click **OK**.

The Fields tab of the Edit Rule <*rule name*> screen is displayed.

Click **OK**.

The Rules tab of the Configuration Manager is displayed.

Create the Profile and Add Rule(s)

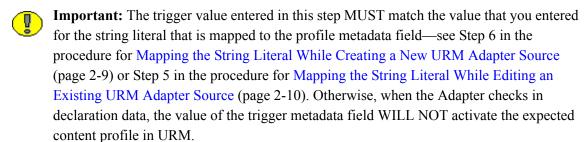
- 1. Click the **Profiles** tab.
- 2. Click Add.

The Add Profile screen is displayed.

3. Enter the profile name, and click **OK**

The Add Profile profile_name screen is displayed.

4. Enter the display label, optional description, and trigger value.



5. Click Add.

The Add Rule screen is displayed.

6. Select a rule to be included in this profile from the Name drop-down list, and click OK.



Note: If you have defined more than one rule for this profile, you will need to repeat Steps 5 and 6 until all of the rules have been added.

7. Click OK.

UNINSTALLING THE ADAPTER

To uninstall the Adapter:

1. Open the Control Panel:

Select Start—Settings—Control Panel.

- 2. Double-click Add or Remove Programs.
- 3. Locate and select the **Oracle URM Adapter for Symantec Enterprise Vault** application.
- 4. Click **Remove**.

You are asked to verify that you want to remove the program.

5. Click Yes.

The **Oracle URM Adapter for Symantec Enterprise Vault** application is removed from your computer.

Installation

C hapter

CONFIGURATION

OVERVIEW

This section covers the following topics:

Concepts

- **❖** About Content Retention Management (page 3-4)
- Sources (page 3-4)
- **Types of Sources (page 3-4)**
- ❖ About URM Adapter Sources (page 3-5)
- **❖** Metadata Fields (page 3-6)
- Enterprise Vault Archive Metadata Fields (page 3-6)
- Enterprise Vault Custom Metadata Fields (page 3-6)
- **❖** URM System Metadata Fields (page 3-7)
- **❖** URM Custom Metadata Fields (page 3-7)
- ❖ Searchable URM Custom Metadata Fields (page 3-8)
- ❖ Mapped Metadata Fields (page 3-8)
- ❖ Single-Mapped Metadata Fields (page 3-9)
- Double-Mapped Metadata Fields (page 3-9)
- Repository Searches and Search Directions (page 3-11)

- New and Historical Content Repository Searches (page 3-11)
- Chronology of Repository Search Processing (page 3-13)
- Regulatory Compliance Tasks (page 3-16)
- ❖ System Logs and Audit Trails (page 3-17)
- Configuration Files (page 3-18)
- **❖** About Search Queries (page 3-18)
- Repository Search Queries (page 3-19)
- Construction of Search Queries (page 3-20)
- **Expression Grouping Option (page 3-21)**
- **Expression Option (page 3-21)**
- **❖** Add Term Option (page 3-22)
- Compound Expressions (page 3-23)
- **❖** Mapped Search Queries (page 3-24)

Tasks

- * Registering the Adapter (page 3-26)
- Changing the Authentication Information (page 3-26)
- Changing the Database Connection (page 3-27)
- ❖ Sorting Field Data Columns (page 3-27)
- Changing the Enterprise Vault Directory Host (page 3-27)
- Creating an Enterprise Vault Custom Metadata Field (page 3-28)
- ❖ Adding a New URM Adapter Source (page 3-28)
- Mapping Metadata Fields (page 3-30)
- ◆ Defining a URM Custom Metadata Field (page 3-31)
- ◆ Double-Mapping Metadata Fields (page 3-31)
- ❖ Viewing the Configuration Data of a URM Adapter Source (page 3-32)
- ❖ Editing an Existing URM Adapter Source (page 3-32)
- ❖ Defining a New Search Query (page 3-33)
- Editing a Search Query (page 3-34)

- ◆ Duplicating and Editing a Search Query (page 3-34)
- ❖ Deleting a Search Query (page 3-35)
- **❖** Mapping a Search Query (page 3-35)
- ❖ Activating/Deactivating a Search Query (page 3-36)
- Modifying the Advanced Settings Values (page 3-36)

Interface

- **❖** Adapter Administration Manager (page 3-38)
- Connection Screen (page 3-40)
- ❖ Field Sort Order (page 3-41)
- **❖** Enterprise Vault Screen (page 3-42)
- **❖** URM Sources Screen (page 3-44)
- ❖ URM Sources Screen: Pop-up Menus (page 3-48)
- ❖ URM Sources Screen: Create New URM Source Screen (page 3-49)
- ❖ URM Sources Screen: Create New URM Source Screen Establish Field Mappings (page 3-52)
- URM Sources Screen: Create New URM Source Screen Define Custom Fields (page 3-55)
- **❖** Search Creation Screen (page 3-59)
- ❖ Search Creation Screen: Create new search Screen (page 3-61)
- ❖ Search Creation Screen: Equation Editor (page 3-62)
- ❖ Equation Editor: Expression Design Pop-up Menus (page 3-64)
- ❖ Equation Editor: Operator Variable Pop-up Menus (page 3-67)
- ❖ Equation Editor: Value Variable Text Field (page 3-69)
- ❖ Equation Editor: Value Variable Drop-down Calendar (page 3-70)
- ❖ Search Mapping Screen (page 3-71)
- **❖** Advanced Screen (page 3-76)

ABOUT CONTENT RETENTION MANAGEMENT

This section covers the following topics:

- Sources (page 3-4)
- Metadata Fields (page 3-6)
- Mapped Metadata Fields (page 3-8)
- Repository Searches and Search Directions (page 3-11)
- Regulatory Compliance Tasks (page 3-16)
- System Logs and Audit Trails (page 3-17)
- Configuration Files (page 3-18)

Sources

This section covers the following topics:

- **❖** Types of Sources (page 3-4)
- ❖ About URM Adapter Sources (page 3-5)

Types of Sources

Within the infrastructure of the corresponding Adapter and URM instances, there are two types of sources. To fully understand the interactions between URM and the Adapter, it is essential that you understand the conceptual attributes and purpose of each type as follows:

❖ URM Source—A URM Source is from URM's perspective. In this case, the term "Source" is intended to represent an external repository that stores documents. The documents in this URM Source (repository) are allocated for retention management under URM. For the Symantec repository, there is a single URM Source that is designated for the entire Enterprise Vault.

Presumably, the Enterprise Vault contains a wide variety of documents. Consequently, when the documents are classified into similar groups, there will be a wide variety of retention categories associated with the content items in the URM Source. Thus, the content items in the URM Source share two characteristics: they are all derived from one repository and the all have the same metadata.

❖ URM Adapter source—A URM Adapter source is from the Adapter's perspective. In this case, the term "source" is more representative of a "target" since the Adapter is pushing data from the Adapter's repository (the Enterprise Vault) into the target URM "container" (the URM Source).

About URM Adapter Sources

The Adapter uses URM Adapter sources to associate groups of similar content items stored in the Enterprise Vault with corresponding retention categories in URM. Each URM Adapter source is configured with exclusive Mapped Metadata Fields (page 3-8) and associated with one or more Repository Searches and Search Directions (page 3-11). This enables you to organize records and non-record content into groups that have the same characteristics.

A search query linked to a URM Adapter source looks through the Enterprise Vault and identifies all the record and non-record items that have the same metadata values. The data for each matching item is transferred to URM and stored as a record in the corresponding URM Adapter source database table. Thus, all of the records and non-records associated with a URM Adapter source have the same retention and disposition characteristics. This means that the same rules and instructions for content retention and disposition are applied to each content item associated with that URM Adapter source.

When you create a URM Adapter source during the Adapter configuration process, additional new user interface elements are added to the URM interface. These include a corresponding URM Adapter source node in the External Content tray and the new links contained in it: Create *sourcename* Item and Search *sourcename* Items. When you click these links, their respective pages open and they enable you to submit a content item record to URM and to find stored content item records that meet your search criteria. For more information, see URM Custom Metadata Fields (page 3-7) and Searchable URM Custom Metadata Fields (page 3-8).



Important: Once you have created a URM Adapter source, it cannot be deleted. However, you can add new entries and selectively modify existing entries using the fully populated URM Sources screen. See Editing an Existing URM Adapter Source (page 3-32) and URM Sources Screen: Pop-up Menus (page 3-48).

Metadata Fields

This section covers the following topics:

- Enterprise Vault Archive Metadata Fields (page 3-6)
- Enterprise Vault Custom Metadata Fields (page 3-6)
- URM System Metadata Fields (page 3-7)
- URM Custom Metadata Fields (page 3-7)
- Searchable URM Custom Metadata Fields (page 3-8)

Enterprise Vault Archive Metadata Fields

When content items are archived into the Enterprise Vault, they are also indexed. The level of indexing (full-text and/or metadata) is flexible and can be defined to match the level of detail that meet the organization's requirements. Generally, the Enterprise Vault is configured to perform basic classification, based on properties such as sender, recipient, and subject. The archive metadata fields are derived from this common set of properties and are provided for each content item stored in the Enterprise Vault.

Enterprise Vault Custom Metadata Fields

During the Symantec Enterprise Vault installation process, the administrator can add custom metadata fields in addition to the archive metadata fields that are available by default. When content is loaded into the Enterprise vault, these values, along with the default metadata, are retained with the stored content items. However, the Enterprise Vault does not support a mechanism to retrieve these custom metadata fields.

Consequently, the Adapter cannot display them for selection during the mapping process. To compensate, you must manually add the custom metadata fields to Adapter records using the Enterprise Vault Screen (page 3-42). After adding the custom metadata fields, they are in included in lists of repository metadata fields on other applicable Adapter Configuration manager screens. Then, these custom metadata fields can be mapped to URM metadata fields.



Note: After you have provided your authentication and connection credentials, the only screen that you can access is the Enterprise Vault screen. When you enter the name of the Directory Host on the Enterprise Vault screen, however, you will have access to the remaining screens.



Important: The Adapter Configuration manager does not specifically require that Enterprise Vault custom metadata fields be created before you access other screens. However, if you want to map an Enterprise Vault custom metadata field to a field within a URM Adapter source, you must add and define the custom metadata fields BEFORE you create the URM Adapter source.

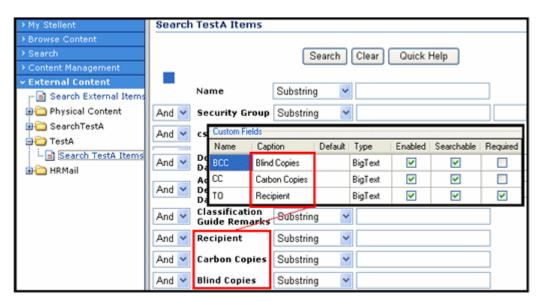
URM System Metadata Fields

During the configuration process, the Adapter requests and receives a list of all the available system metadata fields from URM. These are the metadata fields that must be mapped to the Enterprise Vault metadata fields (both archive and custom).

URM Custom Metadata Fields

In some cases, there may be an insufficient number of appropriate metadata fields in URM to map individually to each of the Enterprise Vault metadata fields (both archive and custom). In this situation, you will need to generate the necessary URM custom metadata fields that can be mapped to the corresponding Enterprise Vault metadata fields. This is done as part of the process to create URM Adapter sources.

On the URM Sources Screen: Create New URM Source Screen - Define Custom Fields (page 3-55) screen, you can enter the names of one or more URM custom metadata fields. The names that you enter convert to actual display names in URM. Depending on how you define the URM custom metadata fields, the names may or may not be displayed, searchable, and/or required. For example, if you create a custom field that is enabled and searchable, it will be listed on the Search *sourcename* Item page in URM—seeSearchable URM Custom Metadata Fields (page 3-8).



Searchable URM Custom Metadata Fields

When you create URM Custom Metadata Fields (page 3-7) using the Adapter's URM Adapter source creation wizard, you can specify whether they are searchable (see the inset above). If you select the searchable check box for new URM custom metadata fields, they can be used as search criteria on the Search *sourcename* Items page in URM. For more information about creating URM custom metadata fields, see URM Sources Screen: Create New URM Source Screen - Define Custom Fields (page 3-55).

Mapped Metadata Fields

The Adapter is aware of the metadata model used in the Enterprise Vault as well as the model used in URM. Part of the configuration process for the Adapter involves mapping corresponding metadata fields and sending that mapping to URM. When there are deficiencies in either metadata model, the administrator can generate custom metadata fields for the Enterprise Vault and URM, as necessary.

Subsequent communications between the Adapter and URM use the metadata labels from the Enterprise Vault model rather than the corresponding URM metadata labels. This ensures that audit trails are intuitively logical to end users. For example, in the audit log, an email field labeled From will retain that name as opposed to dDocAuthor.

This section covers the following topics:

- Single-Mapped Metadata Fields (page 3-9)
- ◆ Double-Mapped Metadata Fields (page 3-9)

Single-Mapped Metadata Fields

URM uses the declaration data supplied by the Adapter to manage the lifecycles and dispositions of repository content items based on the metadata fields and their values. Thus, it is important to carefully map the metadata fields in the Enterprise Vault with applicable URM metadata fields. Many of the existing Enterprise Vault metadata fields can be mapped logically to existing URM metadata fields. These field mapping sets are considered to be single-mapped metadata fields.

Double-Mapped Metadata Fields

Many of the Symantec Enterprise Vault metadata field lengths are greater than 100 bytes. As a result, these fields would either need to be mapped to URM custom metadata fields or be truncated to fit into the corresponding URM system metadata fields. Unfortunately, if oversized Enterprise Vault fields are truncated to fit into shorter URM fields, the original data is lost.

To resolve this problem, you can use the double-mapping feature in the Adapter. This feature ensures that the data values in lengthy repository metadata fields can be retained in their entirety. Double-mapping enables you to map the same Enterprise Vault metadata field twice. That is, a single repository field is initially mapped to a URM system field and then to a URM custom field.

When the Adapter transmits declaration data to URM, the oversized data from the Enterprise Vault field is automatically truncated to fit into the mapped URM system metadata field. If you have established a double-mapping for the Enterprise Vault field, then URM also stores a complete version of the data in the corresponding URM custom metadata field.



Note: If a large repository field is single-mapped to a smaller URM system field, then the Adapter is responsible for pre-truncating the data before sending it to URM. In this case, the Adapter shortens the repository field value to a length that is equal to the maximum length of the mapped URM metadata field.

However, if you use the double-mapping feature, the Adapter automatically transmits the complete repository field value. URM is then responsible for handling the transferred data. Consequently, when the data is sent, depending on the size of the field value, the URM system field receives a truncated value and the URM custom field receives the entire value.



Caution: When you configure a double-mapping for a large Enterprise Vault metadata field, you must ensure that the URM custom metadata field is large enough to hold the original data. Therefore, logically, the size of the URM custom metadata field must be larger than the corresponding URM system field. When fields are double-mapped, the Adapter always uses the length of the URM custom metadata field to truncate the data in the Enterprise Vault field.

If you double-map a large Enterprise Vault metadata field to a URM custom field that is the same length or shorter than the URM system field, both of the URM fields receive data that is truncated at the custom field's length. For example, a typical Enterprise Vault metadata field has an unlimited length. If you single-map it to a URM system field that has a length of 200 characters and then double-map it to a URM custom field that has a length of 100 characters, both of the URM fields receive data that the Adapter has truncated to 100 characters.

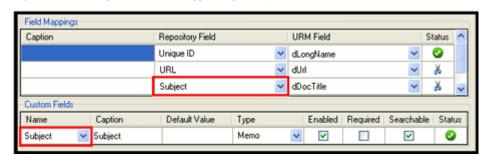


Figure 3-1 Example of Double-Mapped Repository Metadata Field

In this example, the Subject metadata field in the Enterprise Vault is mapped to the URM dDocTitle field. Because the Subject field is of Unlimited size and dDocTitle is limited to 200 characters, the Subject field's text might exceed the dDocTitle field's capacity. See Field Lengths and Double-Mapping (page A-5).

In this case, if you single-mapped the Subject and dDocTitle metadata fields, the Adapter is responsible for truncating the transferred data. However, you can ensure data integrity if you double-map the Subject metadata field to a URM custom metadata field that is large enough to accommodate the entire field value. This way, the Adapter forwards the entire field value. Then, URM is responsible for sending the truncated value to the dDocTitle field (the URM system field) and the entire value to the Subject field (the URM custom field).

Repository Searches and Search Directions

The Adapter performs searches in the Enterprise Vault to find content items whose data would be of interest to URM. If new items have been recently added to the Enterprise Vault, the Adapter finds them during a search interval, applies the applicable mapped metadata to the matching items, and forwards the information to URM.



Important: Content items that match the search criteria are assigned appropriate retention schedules. After the processing is finished, the relevant content items are marked complete and are not returned in future searches because their data has been checked into URM. This ensures that content item data is not duplicated in URM.

Therefore, if you create and run a subsequent search query that has a higher priority, the query will not change the assigned retention schedule of previously declared content items. Furthermore, if two search queries are run and both find the same content item, that item is returned to the search query with the higher priority.

For more information about the priority for search queries, see the Up / down arrows (page 3-75) on the Search Mapping Screen (page 3-71).

This section covers the following topics:

- ❖ New and Historical Content Repository Searches (page 3-11)
- Chronology of Repository Search Processing (page 3-13)

New and Historical Content Repository Searches

The Adapter is designed to distinguish between new and historical content searches. After you have installed and configured the Adapter, you need to set the values for new and historical searches. When the Adapter is started, both the new and the historical search directions are disabled. To perform searches, you must explicitly enable one or both searching directions.

Enabling one or both search directions irrevocably establishes a search start date. That date denotes the division between a new search and a historical search. For more

information about new and historical searching for search queries, see the Advanced Screen (page 3-76). For the Adapter, see Enabled check box: new content (page 3-77) and Enabled check box: historical content (page 3-80).



Important: The first time the Adapter starts, it performs an initial search in the Enterprise Vault and executes all the activated search queries. The Adapter Service looks for content that matches the defined expressions in the activated search queries. Depending on the search direction that is enabled, the Adapter Service will search forward to look for new content item checkins and/or search the repository in reverse chronological order to collect historical data for URM.

Content items that match the search criteria are assigned appropriate retention schedules. After the processing is finished, the relevant content items are marked complete and are not returned in future searches because their data has been checked into URM. This ensures that content item data is not duplicated in URM.

Therefore, if you create and run a subsequent search query that has a higher priority, the query will not change the assigned retention schedule of previously declared content items. Furthermore, if two search queries are run and both find the same content item, that item is returned to the search query with the higher priority.

For more information about the priority for search queries, see the Up / down arrows (page 3-75) on the Search Mapping Screen (page 3-71).



Caution: Due to the permanent nature of the initial and subsequent new and historical searches, it is imperative that you carefully design, configure, and test your search queries before enabling the search directions. If you want all of the historical and new data in the Enterprise Vault to be properly collected, you must be absolutely certain that all of the new and historical search queries are precisely configured and that they are returning the exact data that you expect. For more information about enabling the search directions, see the Enabled check box: new content (page 3-77), Enabled check box: historical content (page 3-80) on the Advanced Screen (page 3-76).



Note: For detailed information about designing and constructing search queries, see About Search Queries (page 3-18) and the Search Creation Screen (page 3-59). To verify that your search queries return the desired results, use the Search Preview Screen (page 4-17) to test and validate them.

Chronology of Repository Search Processing

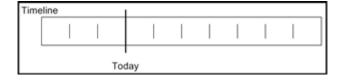
This section describes how the Adapter processes the new and historical repository searches. This section covers the following topics:

- ❖ Basic Timeline Overview (page 3-13)
- ❖ Elapsed Time for Installation and Configuration (page 3-13)
- **Stablish** the Start Date (page 3-14)
- ❖ New Content Search Interval Characteristics (page 3-14)
- Historical Content Search Interval Characteristics (page 3-15)
- **❖** Temporary Search Suspensions (page 3-15)
- **❖** Summary (page 3-16)

Basic Timeline Overview

In general, it is helpful to understand how the function of time is involved in the overall operations of the Adapter—such as the duration of time from installation and configuration to the Adapter's eventual operation. However, it is particularly important to recognize how time is an integral part of the new and historical searching processes. In this section, the following timeline is used as the basis to illustrate how time passage affects repository searching operations.

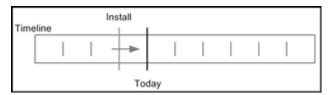
Figure 3-2 Operational Timeline



Elapsed Time for Installation and Configuration

The first significant time increment involves the timespan that occurs between installing and configuring the Adapter. During this period, connectivity and authentication are established, custom metadata fields are created, all metadata fields are mapped, search queries are defined and mapped, and Adapter-level parameters are set. The search preview function is available to optimize and refine the search queries and ensure that the returned results are precise.

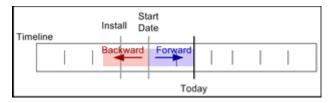
Figure 3-3 Setup Time Span



Establish the Start Date

After the search queries are satisfactorily constructed and verified, they can be enabled (activated) to begin searching the Enterprise Vault to find matching content items and declare their data to URM for retention management. Activating the search queries automatically sets the "start date" that delineates the time periods for new and historical searches. Although the new and historical search functions can be enabled independently, as soon as either of them is enabled the "start date" is set and cannot be altered.

Figure 3-4 Start Date



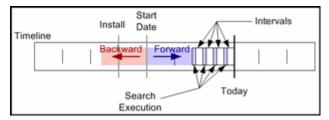
New Content Search Interval Characteristics

On the Advanced Screen (page 3-76), a search interval, with units in hours, is defined to control new content searching. This interval establishes how often the new search mechanism cycles through the search queries that are looking for new content not yet declared to URM. The smaller the interval, the more often the search queries are run and the more quickly new content checked into the Enterprise Vault is added to URM management.

Smaller intervals cause the search queries to run more frequently which increases the load on the Enterprise Vault. Therefore, when the new searching time interval is set, two considerations need to be evaluated: the flow of content checked into the Enterprise Vault versus the urgency of getting the content under URM retention management.

New content search queries are always confined to the current time. They are performed each time the specified interval of time has elapsed since the last interval was completed. If the searches are completed in less time than the set interval, then the Adapter pauses until the current interval has elapsed before rerunning the search queries.

Figure 3-5 New Search Intervals

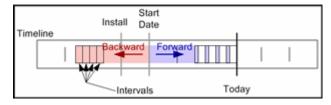


Historical Content Search Interval Characteristics

Historical search intervals are also defined on the Advanced Screen (page 3-76). Like the new search interval, the historical interval specifies the number of hours to be considered when searching backward in time. Unlike the new search, however, the historical search does not pause between search intervals. Rather, it executes the search queries continuously and without interruption.

Uninterrupted historical searching can impose a significant performance penalty on the system. Therefore, the associated scheduling feature can be configured to run the historical searches during off-peak hours. When the Adapter reaches the end of the schedule, it completes the historical search that is currently running. This will cause the Adapter to work beyond the scheduled end time. This aspect should be considered when the historical search schedule is defined.

Figure 3-6 Historical Search Intervals

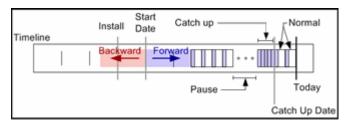


Temporary Search Suspensions

If new content searches are temporarily disabled and later re-enabled, the new searching process works continuously to catch up. The Adapter continues to run these searches until they have caught up with the current time. If historical content searches are temporarily disabled and later re-enabled, the Adapter continues to operate as if an interruption had not occurred.

For more comprehensive information about suspending searches and the implications of doing so, read the descriptions about activating/deactivating search queries and enabling/disabling new and historical content declarations. See Search Mapping Screen (page 3-71) and Advanced Screen (page 3-76) for details.

Figure 3-7 Search Deactivation



Summary

Once the content within a period of time has been processed, by either the new or historical content searching processes, that period will not be reconsidered. Occasionally, existing searches are modified or new searches are added that may alter how content is classified within the Enterprise Vault.

In this case, these search changes are applied during the next search interval. They are not reapplied to the periods of time already processed. Therefore, it is very important that all new and historical search queries are designed, tested, and verified before they are enabled for the production environment.

Regulatory Compliance Tasks

As part of its routine interaction with URM, the Adapter periodically asks URM for tasks that need to be performed within the Enterprise Vault. Those tasks enable URM to abide by the corporate retention policies and disposition processes. The Adapter regularly performs to the following regulatory compliance tasks:

- ❖ Batch Declarations/Confirmations—When the search queries find data that is of interest to URM, it must be forwarded to URM. The Adapter needs to provide enough metadata information to allow URM to manage the content items' retention. Batch declaration and confirmation is the ongoing interactive process between the Adapter and URM that ensures data is forwarded and the receipt is acknowledged.
- ❖ Dispositions—This is the process the Adapter uses to remove managed content from the system when its relevance has expired. At the end of the retention period for a set of items in the Enterprise Vault, URM directs the Adapter to dispose of them. After appropriate disposal, the Adapter informs URM about content items that are deleted to ensure URM stops tracking the retention lifecycle of those content items.
- ❖ Holds/Freezes—As part of the records management process, organizations may need to place a litigation or audit hold/freeze on certain items. URM ensures that affected content items are not edited or deleted. The Adapter assists URM by providing

information about the litigation hold status of these content items and to ensure they are properly reserved. When a litigation or audit hold/freeze is removed, the Adapter unmarks the content items so they can be edited or deleted as necessary.

System Logs and Audit Trails

The Adapter uses log file and error message records to maintain an audit trail that you can view and use to determine whether your corporate retention policies and disposition processes have been met. The audit trail provides information for each managed content item about what disposition actions have been taken, by whom, and when.

You can open the log file and error message records from within the Adapter Administration Manager to search for and view specific records. The log files are also transmitted to URM so that these records can be used and tracked as audit trails. The checked-in log files can be assigned a default retention schedule and maintained as a record that can be produced when needed as part of a legal proceeding.

There are three types of error or message records that you can view and monitor in the Adapter. The generated declaration and disposition error lists enable you to monitor the status and overall operations. System messages provide a means to collect the necessary information for the audit trail requirements. In addition to the table view of log entries, you can view detailed transcripts of the generated messages in pop-up dialog boxes. The error and message lists include:

- ❖ Declaration errors—see Error Management: Declaration Errors Screen (page 4-14)
- Disposition errors—see Error Management: Disposition Errors Screen (page 4-15)
- ❖ System messages and events—see Log Viewer Screen (page 4-27)

Configuration Files

The Adapter uses various configuration files to store database connection and Adapter registration information. All of the configuration files are preconfigured during installation and are updated only when the database location changes or when the user identification and/or password information is modified. Rather than manually editing the applicable configuration file, updates are made using the Connection Screen (page 3-40).

There are three configuration files:

- **❖** Administration.exe.config—Contains the logging level information and the type of Adapter that it is administering.
- ❖ VaultAdapter.exe.config—Contains the logging-level information and the page size (the number of results that a declaration will return in a single batch).
- Oracle.UrmAdapter.dll.config—Contains the database connection information and the web service declaration information.

ABOUT SEARCH QUERIES

This section covers the following topics:

- Repository Search Queries (page 3-19)
- Construction of Search Queries (page 3-20)
- Mapped Search Queries (page 3-24)



Important: The first time the Adapter Service starts, it performs an initial search in the Enterprise Vault and executes all the activated search queries. The Adapter Service looks for content that matches the defined expressions in the activated search queries. Depending on the search direction that is enabled, the Adapter Service will search forward to look for new content item checkins and/or search the repository in reverse chronological order to collect historical data for URM.

Content items that match the search criteria are assigned appropriate retention schedules. After the processing is finished, the relevant content items are marked complete and are not returned in future searches because their data has been checked into URM. This ensures that content item data is not duplicated in URM.

Therefore, if you create and run a subsequent search query that has a higher priority, the query will not change the assigned retention schedule of previously declared content items. Furthermore, if two search queries are run and both find the same content item, that item is returned to the search query with the higher priority.

For more information about the priority for search queries, see the Up / down arrows (page 3-75) on the Search Mapping Screen (page 3-71).

Repository Search Queries

A repository search query consists of a combination of logical expressions that include Enterprise Vault comparison variables to define the selection criteria. One or more searches are linked to a URM Adapter source that, in turn, is associated with a URM retention category. Therefore, the search query for a particular URM Adapter source must define search criteria that can find content items in the Enterprise Vault that match the associated URM retention category requirements.

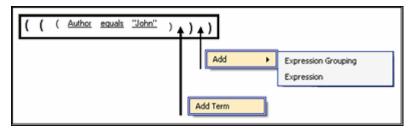
The Search Creation Screen (page 3-59) enables you to create new repository query searches using the equation editor. You can design them to search the Enterprise Vault's multi-layered storage locations to find content items that precisely match the disposition instructions associated with the linked URM search. You construct the search queries using expressions and operators that are based on the native query language of the Enterprise Vault.

Construction of Search Queries

When you design your search query using the Search Creation Screen (page 3-59), you will use expression-based elements. The main elements of a search query include sets of balanced parenthesis, expressions, and boolean operators. These query elements are inserted using the Equation Editor: Expression Design Pop-up Menus (page 3-64).

However, the overall equation architecture determines which pop-up menu is displayed and, subsequently, what element can be inserted. For example, as shown below, right-clicking in one set of parenthesis versus another enables you to add one of the main query equation elements. Mandatory boolean operators link two consecutive expressions together to create compound expressions.

Figure 3-8 Expression Pop-up Menus



Each expression contains the three basic variables that define a set of selection criteria. The expression variables include a metadata field variable, an appropriate operand, and an applicable user-supplied alphanumeric value or date value. The Equation Editor: Operator Variable Pop-up Menus (page 3-67) provide lists of value options for the variables.

Compound expressions are generated with a mandatory boolean operator (AND or OR) that combines two consecutive expressions. When designing your search equations, be especially careful about how the compound expressions are placed within the parenthesis. The Adapter evaluates the entire search equation based on how the expressions are placed within the sets of balanced parenthesis and the connecting boolean operators.

This section covers the following topics:

- **Expression Grouping Option (page 3-21)**
- **Expression Option (page 3-21)**
- **❖** Add Term Option (page 3-22)
- Compound Expressions (page 3-23)

Expression Grouping Option

The initial search equation editor pane contains only a single set of parenthesis that enclose the entire query—see the Initial Parenthesis Set graphic. You begin the equation construction process by right-clicking inside this initial set of parenthesis which displays the Add pop-up menu (page 3-65). Selecting the first menu option (Expression Grouping) inserts an additional set of balanced parenthesis—see the Initial Expression Grouping Option graphic.

You can continue building an indefinite hierarchy of parenthesis sets until you insert the initial expression—see Expression Option (page 3-21). After entering the first expression, subsequent expression groupings include a boolean operator that joins the preceding and following expressions—see the Subsequent Expression Grouping Option graphic. You can choose to combine two expressions using either AND or OR boolean operators.

Figure 3-9 Initial Parenthesis Set



Figure 3-10 Initial Expression Grouping Option



Figure 3-11 Subsequent Expression Grouping Option

```
( ( Author equals "John" ) ) <Operator>
```

Expression Option

When you right-click in the initial set of parenthesis in the search equation editor pane, you have the option to insert an additional set of parenthesis (Expression Grouping) or an option to insert a three-variable expression. Selecting the second option (Expression) inserts an initial expression that consists of three variables: a metadata field, an operand, and an alphanumeric value—see the Initial Expression Option graphic. Some contingencies exist between the variables.

For example, depending on the metadata field option that you select from the Mail Metadata pop-up menu (page 3-67), you will be presented with one of two pop-up menus for the operator variable: either the Date/number pop-up menu (page 3-68) or the Text

pop-up menu (page 3-68). The value variable is also subject to these choices. It will be either alphanumeric text or dates—see Equation Editor: Value Variable Text Field (page 3-69) or Equation Editor: Value Variable Drop-down Calendar (page 3-70).

Similar to the Subsequent Expression Grouping Option (page 3-21), you can only enter the Initial Expression Option once. Then, a subsequent expression must be joined with the initial expression with a boolean operator. To ensure that this occurs, the equation editor automatically prefixes a boolean operator variable to each successive expression that you add. The syntax for a Subsequent Expression Option is identical to the syntax for the Add Term Option (page 3-22).

Figure 3-12 Initial Expression Option

```
( ( <Field> <Operator> <Value> ) )
```

Figure 3-13 Subsequent Expression Option

```
( ( Author equals "John" ) (Operator)

( <Field> <Operator> <Value> ) ) )
```

Add Term Option

The equation editor ensures that all consecutive expressions are joined by boolean operators into compound expressions. It does this by prefixing a boolean operator onto a Subsequent Expression Option (page 3-22) that you insert. Alternatively, depending on the set of parenthesis, the equation editor will provide the option to add a term rather than an expression.

Regardless of whether you add a term or an expression, the syntax is identical. However, the compound expression is evaluated and resolved contingent upon where the term or compound expression is placed—see the Add Term Option vs. Add Subsequent Expression Option graphic. Ultimately, this will influence how the search query equation is resolved and what content items the generated search results will include.

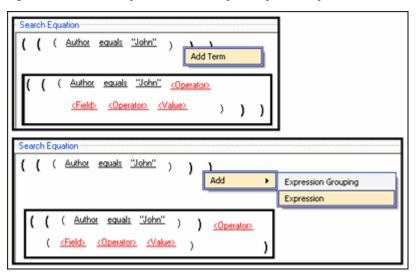


Figure 3-14 Add Term Option vs. Add Subsequent Expression Option

Compound Expressions

When creating a search query, the equation editor requires the use of compound expressions (boolean-connected expressions)—see Expression Option (page 3-21) and Add Term Option (page 3-22). As shown below, the identical expressions can be inserted differently within the balanced sets of parenthesis. Each combination produces a variation of the final search equation and the Enterprise Vault search results will also differ. It is possible to test your final search query using the Search Preview Screen (page 4-17).

Figure 3-15 Compound expression structures

```
( ( Author equals "John" OR

Content contains phrase "vacation" ) AND

( Recipient Address contains any of "HR Human Resources" ) )

( ( Author equals "John" ) OR

( Content contains phrase "vacation" ) AND

( Recipient Address contains any of "HR Human Resources" ) )

( ( Author equals "John" ) OR

( Content contains phrase "vacation" ) AND

( Recipient Address contains any of "HR Human Resources" ) )
```

Mapped Search Queries

After you have defined the URM Adapter sources and constructed your validated search queries, you map the queries to specific URM Adapter sources and URM retention categories. The final mappings ensure that when the Adapter searches the Enterprise Vault, the applicable content items are properly marked and associated with the correct retention category. This ensures that the data is forwarded to URM and the content items are placed appropriately within the retention management scheme.

The Search Mapping Screen (page 3-71) enables you to complete the necessary mappings but also makes it possible to designate which search queries will be activated and which ones will remain temporarily disabled. Search queries must have a search direction assigned before they can be activated. The search direction determines whether the search query will process historic content, new content or both in the Enterprise Vault. See Repository Searches and Search Directions (page 3-11) and the Advanced Screen (page 3-76).

CONFIGURING THE ADAPTER

The Adapter enables you to specify the various configuration options for continuous operation and uninterrupted monitoring of the Enterprise Vault. This section covers the following topics:

- * Registering the Adapter (page 3-26)
- **❖** Changing the Authentication Information (page 3-26)
- Changing the Database Connection (page 3-27)
- ❖ Sorting Field Data Columns (page 3-27)
- Changing the Enterprise Vault Directory Host (page 3-27)
- Creating an Enterprise Vault Custom Metadata Field (page 3-28)
- ❖ Adding a New URM Adapter Source (page 3-28)
- **❖** Mapping Metadata Fields (page 3-30)
- ◆ Defining a URM Custom Metadata Field (page 3-31)
- Double-Mapping Metadata Fields (page 3-31)
- ❖ Viewing the Configuration Data of a URM Adapter Source (page 3-32)
- ❖ Editing an Existing URM Adapter Source (page 3-32)
- ❖ Defining a New Search Query (page 3-33)
- **❖** Editing a Search Query (page 3-34)
- ◆ Duplicating and Editing a Search Query (page 3-34)
- **❖** Deleting a Search Query (page 3-35)
- ❖ Mapping a Search Query (page 3-35)
- ❖ Activating/Deactivating a Search Query (page 3-36)
- Modifying the Advanced Settings Values (page 3-36)

Registering the Adapter

To register the Adapter to URM:

- 1. Open the Adapter Administration Manager (page 3-38).
- 2. Click the **Connection** link in the navigation hierarchy panel.

The Connection Screen (page 3-40) is displayed.

- 3. Enter the applicable information. All fields are required.
- 4. In the File menu, select **Save**.
- 5. In the Service menu, select **Start**.



Important: After you have provided your authentication and connection credentials, the only screen that you can access is the Enterprise Vault Screen (page 3-42). However, when you enter the name of the Directory Host on the Enterprise Vault screen you will have access to the remaining screens. See the Enterprise Vault Screen (page 3-42) for more information.

Changing the Authentication Information

To change the authentication information for URM registration:

1. In the Adapter Administration Manager (page 3-38), click the **Connection** link in the navigation hierarchy panel.

The Connection Screen (page 3-40) is displayed.

- 2. Enter the new information in the URM Configuration pane.
- 3. In the File menu, select **Save**.

The Adapter implements the new configuration information.



Note: In some cases, the authentication changes will not be noticed immediately. In this case, you may need to stop and restart the Adapter Service. See Stopping and Restarting the Adapter Service (page 4-8).

Changing the Database Connection

To change the current database connection:

1. In the Adapter Administration Manager (page 3-38), click the **Connection** link in the navigation hierarchy panel.

The Connection Screen (page 3-40) is displayed.

- 2. Enter the new information in the Database Configuration pane.
- 3. In the File menu, select **Save**.
- 4. In the Service menu, select **Stop**.
- 5. In the Service menu, select **Start**.

The Adapter implements the new configuration information.

Sorting Field Data Columns

To sort the entries listed on the Enterprise Vault screen and the URM Sources screen based on a specific column:

- 1. In the Adapter Administration Manager (page 3-38), open the **Configuration** link in the navigation hierarchy panel by clicking the plus icon.
- 2. Click either the **Enterprise Vault** or the **URM Sources** link.
 - The Enterprise Vault Screen (page 3-42) or the URM Sources Screen (page 3-44) is displayed, respectively.
- 3. Left-click on a column heading to sort the list in a descending or ascending order. The arrow next to the heading indicates which column has been used to sort the list and in what order. See Field Sort Order (page 3-41).

Changing the Enterprise Vault Directory Host

To change the designated Enterprise Vault directory host:

- 1. In the Adapter Administration Manager (page 3-38), click the **Enterprise Vault** link in the navigation hierarchy panel.
 - The Enterprise Vault Screen (page 3-42) is displayed.
- 2. Enter the new Enterprise Vault host name in the Directory Host field.
- 3. In the File menu, select **Save**.

- 4. In the Service menu, select **Stop**.
- 5. In the Service menu, select **Start**.

The Adapter implements the new configuration information.

Creating an Enterprise Vault Custom Metadata Field

To define an Enterprise Vault custom metadata field in the Adapter:

1. In the Adapter Administration Manager (page 3-38), click the **Enterprise Vault** link in the navigation hierarchy panel.

The Enterprise Vault Screen (page 3-42) is displayed.

- 2. Enter the applicable information in the fields.
- 3. In the File menu, select **Save**.

The Adapter creates the Enterprise Vault custom metadata field and applies the configuration settings to the system.

Adding a New URM Adapter Source

To create a URM Adapter source:

1. In the Adapter Administration Manager (page 3-38), click the **URM Sources** link in the navigation hierarchy panel.

The URM Sources Screen (page 3-44) is displayed.



Note: If you select the Add Defaults check box (page 3-51) on the URM Sources Screen, the Adapter will automatically populate the Establish Field Mappings and Define Custom Fields screens with several pre-defined values—see Steps 4 and 9 below. These are suggested rather than mandatory values.

2. Click New.

The URM Sources Screen: Create New URM Source Screen (page 3-49) is displayed.

- 3. Enter the URM Adapter source and database table names in the appropriate fields.
- 4. Click Next.

The URM Sources Screen: Create New URM Source Screen - Establish Field Mappings (page 3-52) is displayed.



Important: The Adapter Administration manager does not specifically require that Enterprise Vault custom metadata fields be created before you access other screens. Only the Directory Host name is required. However, if you want to map an Enterprise Vault custom metadata field to a field within a URM Adapter source, you must add and define the custom metadata fields BEFORE you create the URM Adapter source.



Important: By default, the Adapter includes entries on this screen for required field mappings. Every URM Adapter source must include these completed mappings. You cannot modify or delete the Unique ID—dLongName and URL—dURL field mappings. However, in the repository_field>—dDocTitle field mapping, you may change the Repository Field value but not the URM Field value. The required field mappings include:

Repository Field value
Unique ID
URL

URM Field value
dLongName
dUrl
dDocTitle

You must enter a Repository Field value to correspond with dDocTitle. You cannot insert additional mapping entries until this field is complete. You can include optional captions for each mapping by double-clicking the applicable cell and entering the caption text.



Note: If you selected the Add Defaults check box (page 3-51) on the Create New URM Source screen (Step 1 of the three-part wizard), the Adapter automatically populates the Establish Field Mappings screen with optional, pre-defined field mappings. You may modify or delete any of them. The suggested optional field mappings include:

Repository Field valueURM Field valueAuthordDocAuthorCreated DatedCreateDate

Subject dDocTitle (see the Important notice above)

If you do not want the Adapter to add these optional field mappings, you can de-select the Add Defaults check box.

- 5. In the Repository Field drop-down list, select a value to correspond with dDocTitle.
- 6. Right-click any table cell, and select **Add** from the pop-up menu.
 - A new row is inserted at the bottom of the Establish Field Mappings pane.
- 7. Select corresponding options from the Repository Field and URM Field drop-down lists. Entering a caption for the mapped metadata fields is optional.
- 8. Repeat Steps 6 and 7 to include additional metadata field mappings.
- 9. Click Next.

The URM Sources Screen: Create New URM Source Screen - Define Custom Fields (page 3-55) is displayed.



Note: If you selected the Add Defaults check box (page 3-51) on the Create New URM Source screen (Step 1 of the three-part wizard), the Adapter automatically populates the Define Custom Fields screen with optional, pre-defined URM custom metadata fields. You may modify or delete any of them. The optional custom metadata fields include:

Type value
Date
Memo
Date
Memo
Memo
Memo
Memo

If you do not want the Adapter to add these optional custom metadata fields, you can deselect the Add Defaults check box.

10. Right-click in any table cell, and select **Add** from the pop-up menu.

A new row is inserted at the bottom of the Define Custom Fields pane.

- 11. Enter and/or select the applicable values in the fields to link an Enterprise Vault metadata field to a new URM custom metadata field.
- 12. Repeat Steps 10 and 11 to include additional URM custom metadata fields.
- 13. Click Finish.

The Adapter creates the new URM Adapter source and displays the Field Mappings and Custom Fields panes populated with the configuration information.

Mapping Metadata Fields

The second step in the procedure to create a new URM Adapter source involves mapping applicable Enterprise Vault metadata fields to corresponding URM metadata fields. This is done using the URM Adapter source creation wizard that is launched from the URM Sources Screen (page 3-44) by clicking the New button. The process to map metadata fields is included in Steps 6 through 8 of the procedure for Adding a New URM Adapter Source (page 3-28).

Defining a URM Custom Metadata Field

The third step in the procedure to create a new URM Adapter source involves defining new URM custom metadata fields and mapping them to applicable Enterprise Vault metadata fields. This is done using the URM Adapter source creation wizard that is launched from the URM Sources Screen (page 3-44) by clicking the New button. The process to create the custom URM metadata fields is included in Steps 10 and 11 of the procedure for Adding a New URM Adapter Source (page 3-28).

Double-Mapping Metadata Fields

To double-map an Enterprise Vault metadata field in a URM Adapter source:

1. In the Adapter Administration Manager (page 3-38), click the **URM Sources** link in the navigation hierarchy panel.

The URM Sources Screen (page 3-44) is displayed.

2. Map the applicable metadata fields in the Field Mappings pane. See Mapping Metadata Fields (page 3-30).



Note: If you are changing the field mappings in an existing URM Adapter source, see Editing an Existing URM Adapter Source (page 3-32).

3. Map the same Enterprise Vault metadata field to a URM custom metadata field in the Custom Fields pane. See Defining a URM Custom Metadata Field (page 3-31).



Important: When you use the double-mapping feature, you must select the same Enterprise Vault metadata field from the Repository Field drop-down list in the Field Mappings pane and from the Name drop-down list in the Custom Fields pane. For more detailed information, see Double-Mapped Metadata Fields (page 3-9).

4. In the File menu, select **Save**.

The Adapter establishes the double-mapped metadata field.

Viewing the Configuration Data of a URM Adapter Source

To view the configuration data of an existing URM Adapter source:

- 1. In the Adapter Administration Manager (page 3-38), click the **URM Sources** link in the navigation hierarchy panel.
 - The URM Sources Screen (page 3-44) is displayed.
- 2. Select the desired URM Adapter source from the URM Adapter sources drop-down list.
- 3. The Field Mappings and Custom Fields panes are displayed on the URM Sources screen and are populated with the configuration information of the selected URM Adapter source.

Editing an Existing URM Adapter Source

Once you have created a URM Adapter source, it cannot be deleted. However, you can add new entries and selectively modify existing entries.

To edit an existing URM Adapter source:

1. In the Adapter Administration Manager (page 3-38), click the **URM Sources** link in the navigation hierarchy panel.

The URM Sources Screen (page 3-44) is displayed.

- 2. To add a new field mapping or custom URM field entries:
 - a. Right-click in any table cell in either the Field Mappings pane or the Custom Fields pane, and select **Add** from the pop-up menu.
 - A new row is inserted at the bottom of the pane.
 - a. Enter and/or select the applicable values.
- 3. To add or modify the caption values of new or existing field mappings and/or custom URM fields:
 - a. Double-click any **Caption** cell in the Field Mappings pane or the Custom Fields pane.
 - b. Enter the desired text for the caption.
- 4. To add or modify the default value of a new or existing custom URM field:
 - a. Double-click on the **Default Value** cell in the Custom Fields pane.

- b. Enter the desired text for the caption.
- 5. To enable or disable the attributes of a new or existing custom URM field:
 - a. Locate the desired custom field entry.
 - b. Select or clear one of the following attribute check boxes:
 - Enabled check box
 - Required check box
 - Searchable check box



Important: The changes you make on the populated URM Sources screen can be edited and deleted until you save them (File—Save). After saving, the new field mappings and URM custom metadata fields are permanent.

6. In the File menu, select **Save**.

Defining a New Search Query

To define a new search query:

1. In the Adapter Administration Manager (page 3-38), click the **Search Creation** link in the navigation hierarchy panel.

The Search Creation Screen (page 3-59) is displayed.

2. Click New.

The Search Creation Screen: Create new search Screen (page 3-61) is displayed.

- 3. Enter the name of the new search query in the Search Name field.
- 4. Click OK.

The Search Archives and Search Equation panes are displayed on the Search Creation screen.

- 5. In the Search Archives pane, select the storage locations in the Enterprise Vault that this search query will browse to fine matching content items.
- 6. In the Search Equation pane, right-click in the initial parenthesis to add either an expression grouping or an expression.
- 7. Complete the search query using the search equation functions. for more detailed information about query construction, see Construction of Search Queries (page 3-20) and Search Creation Screen: Equation Editor (page 3-62).

8. In the File menu, select **Save**.

The Adapter creates the new search query and includes it in the defined searches dropdown list.

Editing a Search Query

To modify the variables or structure of an existing search query:

1. In the Adapter Administration Manager (page 3-38), click the **Search Creation** link in the navigation hierarchy panel.

The Search Creation Screen (page 3-59) is displayed.

2. Select the desired search query from the defined searches drop-down list.

The configuration information for the selected search query is displayed in the Search Archives and Search Equation panes.

- 3. Edit the information as necessary—for more detailed information about query construction, see Construction of Search Queries (page 3-20) and Search Creation Screen: Equation Editor (page 3-62).
- 4. In the File menu, select **Save**.

The Adapter saves the changes and implements the new configuration information

Duplicating and Editing a Search Query

To duplicate and then modify the variables or structure of an existing search query:

1. In the Adapter Administration Manager (page 3-38), click the **Search Creation** link in the navigation hierarchy panel.

The Search Creation Screen (page 3-59) is displayed.

2. Select a search query from the defined searches drop-down list or create a new search query—see Defining a New Search Query (page 3-33).

The selected search query is displayed in the Search Equation pane.

3. Click Save As.

The Save search as screen is displayed.

4. Enter the name of the copied search query and click **OK**.

The Adapter duplicates the original search query and displays the new (copied) search query in the Search Equation pane.

- 5. Edit the information as necessary—for more detailed information about query construction, see Construction of Search Queries (page 3-20) and Search Creation Screen: Equation Editor (page 3-62).
- 6. In the File menu, select **Save**.

The Adapter saves the changes and implements the new configuration information.

Deleting a Search Query

To delete an existing search query:

1. In the Adapter Administration Manager (page 3-38), click the **Search Creation** link in the navigation hierarchy panel.

The Search Creation Screen (page 3-59) is displayed.

- 2. Select a search query from the defined searches drop-down list.
- 3. Click Delete.

You are asked to verify that you want to delete the displayed search query.

4. Click Yes.

The default Search Creation screen is displayed.



Note: If you have mapped the selected search query to a URM Adapter source and a URM retention category, the Adapter automatically removes the mapping from the Search Mapping list when you delete the selected search query.

Mapping a Search Query

To map search queries to URM Adapter sources and URM retention categories:

1. In the Adapter Administration Manager (page 3-38), select the **Search Mapping** link in the navigation hierarchy panel.

The Search Mapping Screen (page 3-71) is displayed.

- 2. Enter the applicable values in the fields for each search query.
- 3. In the File menu, select **Save**.

The Adapter saves the changes and implements the new configuration information.

Activating/Deactivating a Search Query

To activate or deactivate a search query:

1. In the Adapter Administration Manager (page 3-38), click the **Search Mapping** link in the navigation hierarchy panel.

The Search Mapping Screen (page 3-71) is displayed.

- 2. Locate the search query that you want to activate or deactivate and select or clear the **Enabled** check box as necessary.
- 3. In the File menu, select **Save**.

The Adapter saves the changes and implements the new configuration information.

Modifying the Advanced Settings Values

To modify one or more of the advanced settings:

1. In the Adapter Administration Manager (page 3-38), select the **Advanced** link in the navigation hierarchy panel.

The Advanced Screen (page 3-76) is displayed.

- 2. Enter the applicable values in the appropriate fields.
- 3. In the File menu, select **Save**.
- 4. In the Service menu, select **Stop**.
- 5. In the Service menu, select **Start**.

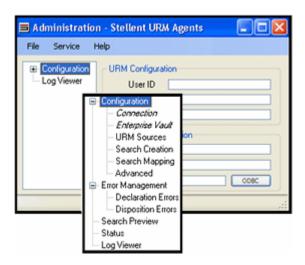
The Adapter implements the new configuration information.

THE CONFIGURATION USER INTERFACE

This section covers the following topics:

- ❖ Adapter Administration Manager (page 3-38)
- **❖** Connection Screen (page 3-40)
- ❖ Field Sort Order (page 3-41)
- Enterprise Vault Screen (page 3-42)
- **❖** URM Sources Screen (page 3-44)
- ❖ URM Sources Screen: Pop-up Menus (page 3-48)
- ❖ URM Sources Screen: Create New URM Source Screen (page 3-49)
- URM Sources Screen: Create New URM Source Screen Establish Field Mappings (page 3-52)
- URM Sources Screen: Create New URM Source Screen Define Custom Fields (page 3-55)
- Search Creation Screen (page 3-59)
- ❖ Search Creation Screen: Create new search Screen (page 3-61)
- ❖ Search Creation Screen: Equation Editor (page 3-62)
- Equation Editor: Expression Design Pop-up Menus (page 3-64)
- ❖ Equation Editor: Field Variable Pop-up Menus (page 3-66)
- Equation Editor: Operator Variable Pop-up Menus (page 3-67)
- ❖ Equation Editor: Value Variable Text Field (page 3-69)
- ❖ Equation Editor: Value Variable Drop-down Calendar (page 3-70)
- ❖ Search Mapping Screen (page 3-71)
- **❖** Advanced Screen (page 3-76)

Adapter Administration Manager



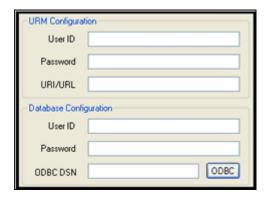
The Adapter Administration manager is the component interface that provides access to the user-controlled functions of the Adapter. You can access the Adapter Administration manager by clicking the Adapter icon located on your computer's desktop.

Feature	Description
File menu	Save—Saves the settings on the current screen. Save All—Saves the settings on all the screens. Exit—Closes the Adapter Configuration manager.
Service menu	Start—Starts the Adapter Service. This option is enabled only if the service is stopped. By default, when you start up the Adapter Service, the Adapter Service is stopped unless you have configured it to start automatically—see Stopping and Restarting the Adapter Service (page 4-8).
	Stop —Stops the Adapter Service. This option is enabled only if the service is started.
	Restart —Restarts the Adapter Service in one step rather than stopping and restarting the service.
	Status —Displays the Service status dialog that displays the current operational state of the Adapter.

Feature	Description
Help menu	Contents—Displays the Main Help Page (page 1-7). Section—Displays the applicable Context-Sensitive Help Pages (page 1-7). About—Displays version, build, and copyright information for the Adapter.
Navigation tree	The navigation tree is an organized hierarchy that lists links to access the configuration and administration screens. Use the plus and minus icons unfold or collapse additional links for related screens.
Connection link	Used to provide authentication information to URM. Displays the Connection Screen (page 3-40).
Enterprise Vault link	Used to add custom metadata fields in the Enterprise Vault. Displays the Enterprise Vault Screen (page 3-42)
URM Sources link	Used to add URM Adapter sources and define their respective field mappings and custom fields. Displays the URM Sources Screen (page 3-44).
Search Creation link	Used to create searches. Displays the Search Creation Screen (page 3-59).
Search Mapping link	Used to assign specific searches for each URM Adapter source. Displays the Search Mapping Screen (page 3-71).
Advanced link	Used to fine tune the Adapter's operations. Displays the Advanced Screen (page 3-76).
Declaration Errors link	Used to view number and types of declaration errors. Displays the Error Management: Declaration Errors Screen (page 4-14).
Disposition Errors link	Used to view the number and types of disposition errors. Displays the Error Management: Disposition Errors Screen (page 4-15).

Feature	Description
Search Preview link	Used to preview the results of a search query. Displays the Search Preview Screen (page 4-17).
Status link	Used to monitor the overall status of the Adapter. Displays the Status: Adapter Status Tab (page 4-22) and Status: Service Status Tab (page 4-25).
Log Viewer link	Used to monitor the daily log files that contain all of the Adapter's generated messages. Displays the Log Viewer Screen (page 4-27).

Connection Screen



Use the Connection screen to provide authentication information to URM. This ensures that URM knows that the Oracle URM Adapter for Symantec Enterprise Vault is an authorized Adapter. When the Adapter registers itself, then URM knows about the Symantec Enterprise Vault and is ready to manage content stored within that repository. By default, the Connection screen is displayed when you activate the Adapter.

You will need to provide authentication credentials each time you start the Adapter. The Adapter user and applicable credentials are initially created when URM is set up and configured. During this process, the administrator assigns the appropriate rights and roles to the Adapter user and ensures that the designated privileges enable successful connection authentication.

Feature	Description
URM Configuration pane	
User ID field	A valid user account name that is recognized by URM.
Password field	An encrypted series of characters associated with the specified URM User Id.
URI/URL field	The URM Server's web address.
Database Configuration pane	
User ID field	A valid user account name that is recognized by the Enterprise Vault
Password field	An encrypted series of characters associated with the specified Enterprise Vault User Id.
ODBC DSN field	The name of the ODBC data source used by the Adapter Configuration manager and the Adapter (when it is running) to connect to the configuration database. Note: The configuration database stores the configuration data. This includes the created searches, the Enterprise Vault installation instance, and the URM Adapter source names and definitions.
ODBC button	Opens the ODBC Data Source Administrator tool.

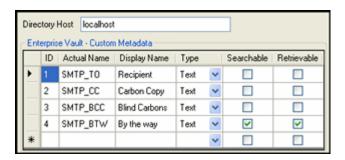
Field Sort Order



On the Enterprise Vault Screen (page 3-42) and the URM Sources Screen (page 3-44), you can click on column headings to sort the lists in either ascending or descending order. When you click on a column heading, the entire list is resorted based on that column. After

you click on a column, a small arrow is displayed next to the heading, indicating which column has been used to sort the list and in what order (ascending or descending).

Enterprise Vault Screen



Use the Enterprise Vault screen to add pre-defined Enterprise Vault custom metadata fields. Because Symantec does not provide a way to automatically detect these custom metadata fields, they must instead be added to the Enterprise Vault metadata table using this screen. You can access this screen by clicking the **Enterprise Vault** link in the navigation hierarchy on the Adapter Administration Manager (page 3-38).



Important: After you have provided your authentication and connection credentials, the only screen that you can access is the Enterprise Vault screen. However, when you enter the name of the Directory Host on the Enterprise Vault screen you will have access to the remaining screens.



Important: The Adapter Configuration manager does not specifically require that Enterprise Vault custom metadata fields be created before you access other screens. Only the Directory Host name is required. However, if you want to map an Enterprise Vault custom metadata field to a field within a URM Adapter source, you must add and define the custom metadata fields BEFORE you create the URM Adapter source.

Feature	Description
Directory Host field	The DNS host name that identifies the machine where the Enterprise Vault's primary directory resides.
ID field	The unique identification number manually assigned to the Enterprise Vault custom metadata field.

Feature	Description
Actual Name field	The repository name of the Enterprise Vault custom metadata field.
Display Name field	The descriptive name of the Enterprise Vault custom metadata field. Entering a value in this field is optional.



Note: If the Searchable check box is selected for this custom metadata field, the Display Name value is included in the Custom Metadata pop-up menu (page 3-67) list that is one of the selectable options on the Equation Editor: Field Variable Pop-up Menus (page 3-66). The Field pop-up menu is part of the equation editor on the Search Creation Screen (page 3-59) screen.



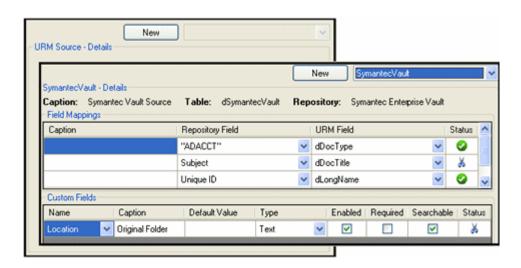
If the Retrievable check box is selected for this custom metadata field, the Display Name value is used for mapping and custom fields in the URM Adapter source creation wizard as follows:

- ❖ If you select a custom metadata field from the Repository Field drop-down list, the Display Name value is automatically used to populate the Caption field. See the URM Sources Screen: Create New URM Source Screen Establish Field Mappings (page 3-52).
- ❖ If you select a custom metadata field from the Name drop-down list, the Display Name value is automatically used to populate the Caption field. See the URM Sources Screen: Create New URM Source Screen - Define Custom Fields (page 3-55).

Type drop-down list	Lists the available data types that can be used as the value for this custom metadata field. Possible values include: Boolean, Currency, Date, Decimal, Float, Integer, and String.
Searchable check box	Selected—Allows the Adapter to search for this custom metadata field during a search in the Enterprise Vault. Also, see Notes above. Clear—Prevents the Adapter from searching for this custom metadata field during a search in the Enterprise Vault.

Feature	Description
Retrievable check box	Selected —Allows the Adapter to retrieve this custom metadata field during a search in the Enterprise Vault. Also, see Notes above.
	Clear—Prevents the Adapter from retrieving this custom metadata field during a search in the Enterprise Vault.

URM Sources Screen



Use the URM Sources screen to create new URM Adapter sources and view the configuration data of existing URM Adapter sources. URM Adapter sources are associated with content categories in the Enterprise Vault. By default, the URM Sources screen is blank when it opens. However, if you select an existing URM Adapter source from the drop-down list, all of the configured data for that URM Adapter source is displayed.

The populated URM Sources screen consists of three information panes: Details, Field Mappings, and Custom Fields (as shown in the inset). This data is derived from the three-part wizard used to create new URM Adapter sources. You can access this screen by clicking the **URM Sources** link in the navigation hierarchy on the Adapter Administration Manager (page 3-38).



Important: You cannot delete a URM Adapter source after it is created. However, you can add new entries and selectively modify existing entries. See Editing an Existing URM Adapter Source (page 3-32) and URM Sources Screen: Pop-up Menus (page 3-48).



Note: The features of existing Field Mapping and Custom Fields entries that you can modify after the URM Adapter source is created include:

- New entries can be added to both the Field Mappings and the Custom Fields panes.
- ❖ Caption values can be added or edited in all of the entries in both the Field Mappings and the Custom Fields panes.
- Default values can be added or edited in all of the entries in the Custom Fields pane.
- ❖ All of the attribute check boxes can be enabled or disabled for all of the entries in the Custom Fields pane.

Feature	Description
Default screen display	
New button	Displays the URM Sources Screen: Create New URM Source Screen (page 3-49).
URM Adapter sources drop- down list	Lists the existing URM Adapter sources. Selecting a URM Adapter source from the lists displays all of its configuration data in the Details pane.
URM Source - Details pane	If a URM Adapter source is selected from the drop-down list, all of the associated configuration data is displayed in this pane. This includes the table and repository names, established field mappings, and defined custom fields.
Populated URM Adapter source	

Feature	Description
Details pane	Caption—The caption assigned to the URM Adapter source when it is created. See Caption field (page 3-50).
	Table —The name of the URM database table created for this URM Adapter source. See Table field (page 3-50).
	Repository —The name of the repository associated with this URM Adapter source where the managed content items are stored. See Repository drop-down list (page 3-50).
Field Mappings pane	Caption—The descriptive name used to identify the mapped pair of metadata fields. See Caption field (page 3-53).
	Repository Field —The name of the source metadata field in the mapped pair of metadata fields. See Repository Field drop-down list (page 3-53).
	URM Field —The name of the target metadata field in the mapped pair of metadata fields. See URM Field drop-down list (page 3-54).
	Status—Icons and tool tips indicate an entry's general condition and whether a particular mapping is acceptable or problematic (i.e. some mapped metadata fields may require data truncation).

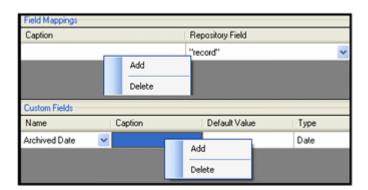


Note: The scissors icon used in the Status column indicates that the data in the Enterprise Vault metadata field could potentially be truncated because the length of this field is larger than the corresponding mapped URM metadata field.

This means that some of the original data could be lost when the Adapter transmits the declaration data to URM. To avoid this, you can use the double-mapping feature. See Double-Mapped Metadata Fields (page 3-9) or Field Lengths and Double-Mapping (page A-5).

Feature	Description
	Name—The name of the source metadata field in the mapped pair of metadata fields. See Name drop-down list (page 3-56).
	Caption—The display name of the URM custom metadata field in the mapped pair of metadata fields. See Caption field (page 3-57).
	Default Value —The assigned value for the URM custom metadata field. See Default Value field (page 3-57).
	Type —The classification type for the data associated with the URM custom metadata field. See Type dropdown list (page 3-57).
Custom Fields pane	Enabled —Indicates whether the URM custom metadata field is displayed on various URM pages. See Enabled check box (page 3-57).
	Required—Indicates whether the URM custom metadata field accepts or rejects managed content data information into URM Adapter source databases. See Required check box (page 3-58).
	Searchable—Indicates whether the URM custom metadata field can be used as search criteria. See Searchable check box (page 3-58).
	Status—Icons and tool tips indicate an entry's general condition and whether a particular mapping is acceptable or problematic (i.e. some mapped metadata fields may cause data truncation).

URM Sources Screen: Pop-up Menus



After a URM Adapter source is created, it cannot be deleted. However, it can be modified by inserting additional field mappings and URM custom metadata fields. You can also edit various field values in the existing URM custom metadata field entries. See URM Sources Screen (page 3-44) and Editing an Existing URM Adapter Source (page 3-32).

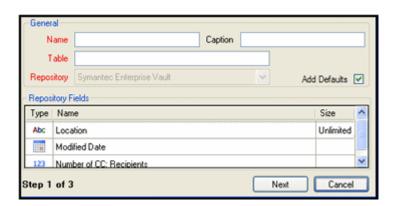


Important: The changes you make on the populated URM Sources screen can be edited and deleted until you save them (File—Save). After saving, the new field mappings and URM custom metadata fields are permanent.

Feature	Description
Add/Delete field mappings pop-up menu	Right-clicking in any table cell opens this menu. Add—Inserts a new entry that enables you to add another complete mapping. The columns are populated in a similar manner as Step 2 when using the URM Adapter source creation wizard. See URM Sources Screen: Create New URM Source Screen - Establish Field Mappings (page 3-52). Delete—Removes the selected entry.

Feature	Description
Add/Delete custom fields popup menu	Right-clicking in any table cell opens this menu. Add—Inserts a new entry that enables you to add another complete mapping. The columns are populated in a similar manner as Step 3 when using the URM Adapter source creation wizard. See URM Sources Screen: Create New URM Source Screen - Define Custom Fields (page 3-55). Delete—Removes the selected entry.
Existing custom field captions and default values	Double-clicking in an existing Custom Fields' caption or Default table cell enables you to enter a new value.

URM Sources Screen: Create New URM Source Screen



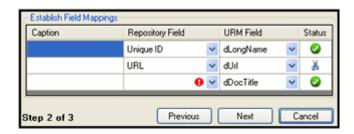
This screen is Step 1 of a three-part wizard used to collect the necessary information to create a new URM Adapter source. In this step, you provide general information about the URM Adapter source. The field values entered on this screen are used to populate the fields in the Details pane (page 3-46). You can access this screen by clicking the New button on the URM Sources Screen (page 3-44).

Feature	Description	
General pane	General pane	
Name field	The descriptive name of the URM Adapter source to be added. This name corresponds to URM's dSource metadata field.	
Caption field	The name assigned to the new URM Adapter source and displayed on the populated URM Sources Screen (page 3-44) for a selected URM Adapter source.	
Table field	A valid URM database table name. This name corresponds to URM's dTable metadata field. During the process of creating a URM Adapter source, a new custom table is created in URM's database to store necessary data and records for the controlled content in the Enterprise Vault that is associated with this URM Adapter source. Each URM Adapter source, then, retains a dedicated database table.	
	Note: The URM Adapter source creation wizard performs basic error checking. However, it is recommended that you avoid using non-characters when naming your URM Adapter source database table. For example, spaces are not allowed.	
Repository drop-down list	Lists the names of available repositories that can be associated with the URM Adapter source being created. The URM-controlled documents associated with this URM Adapter source are stored in the selected repository.	

Feature	Description
Add Defaults check box	Selected—Configures the Adapter to automatically populate the Establish Field Mappings screen (Step 2 of the three-part wizard) with required field mappings along with several additional optional field mappings.
	The Adapter also automatically populates the Define Custom Fields screen (Step 2 of the three-part wizard) with optional URM custom metadata fields. This is the default setting.
	Clear—Configures the Adapter to populate the Establish Field Mappings screen (Step 2 of the three-part wizard) with only the required field mappings.
	For more detailed information about the required and optional mappings, see URM Sources Screen: Create New URM Source Screen - Establish Field Mappings (page 3-52) and URM Sources Screen: Create New URM Source Screen - Define Custom Fields (page 3-55).
Repository Fields pane	
Repository Fields table	For reference purposes, this table lists all of the archive metadata field names along with the custom metadata fields that are created using the Enterprise Vault Screen (page 3-42).
	Type —Icons and tool tips specify the type of data the field holds. For example, string, date, integer, etc.
	Name—The names of the available metadata fields in the Enterprise Vault.
	Size—Specifies the maximum lengths for each field.
Next button	When enabled, proceeds to the next screen (step) in this multistep procedure to create a URM Adapter source.

Feature	Description
Cancel button	Closes the create new URM Adapter source wizard without saving any configuration data and does not add the new URM Adapter source.

URM Sources Screen: Create New URM Source Screen - Establish Field Mappings



This screen is Step 2 of a three-part wizard used to collect the necessary information to create a new URM Adapter source. In this step, you map Enterprise Vault metadata fields to corresponding URM metadata fields. The field values entered on this screen are used to populate the fields in the Field Mappings pane (page 3-46). You can access this screen by clicking the Next button on the URM Sources Screen (page 3-44).



Important: The Adapter Administration manager does not specifically require that Enterprise Vault custom metadata fields be created before you access other screens. Only the Directory Host name is required. However, if you want to map an Enterprise Vault custom metadata field to a field within a URM Adapter source, you must add and define the custom metadata fields BEFORE you create the URM Adapter source.



Important: By default, the Adapter includes entries on this screen for required field mappings. Every URM Adapter source must include these completed mappings. You cannot modify or delete the Unique ID—dLongName and URL—dURL field mappings. However, in the <*repository_field>*—dDocTitle field mapping, you may change the Repository Field value but not the URM Field value. The required field mappings include:

Repository Field value
Unique ID
URL

URM Field value
dLongName
dUrl
dDocTitle

You must enter a Repository Field value to correspond with dDocTitle. You cannot insert additional mapping entries until this field is complete. You can include optional captions for each mapping by double-clicking the applicable cell and entering the caption text.



Note: If you selected the Add Defaults check box (page 3-51) on the Create New URM Source screen (Step 1 of the three-part wizard), the Adapter automatically populates the Establish Field Mappings screen with optional, pre-defined field mappings. You may modify or delete any of them. The suggested optional field mappings include:

Repository Field valueURM Field valueAuthordDocAuthorCreated DatedCreateDate

Subject dDocTitle (see the Important notice above)

If you do not want the Adapter to add these optional field mappings, you can de-select the Add Defaults check box.

Feature	Description
Note: The metadata field mappings are one-to-one only. When a metadata field is selected for a pairing, it cannot be selected again for a different pairing.	
Caption field	The descriptive name used to identify the mapped pair of metadata fields. You can include optional captions for each mapping by double-clicking the applicable cell and entering the caption text.
Repository Field drop-down list	Lists the available Enterprise Vault metadata fields that can be mapped to corresponding URM metadata fields. The list includes the available archive and custom metadata fields.

Feature	Description
---------	-------------



Tech Tip: In the Repository Field, you are allowed to enter a string literal value (the Literal Text value) and map it to a URM metadata field. You do not need to enclose the value in quotes because the URM Adapter source creation wizard automatically enters them.

Example: Select Literal Text from the Repository Field drop-down list, enter the string Email, and map it to the dMediaType URM metadata field. Then, every time content information is reported (declaration data), URM assigns a value of Email to the dMediaType metadata field.

URM Field drop-down list	Lists the available URM metadata fields that can be mapped to the Enterprise Vault metadata field selected from the Repository Field drop-down list.
Status field	Icons and tool tips indicate a particular mapping's general condition and whether it is acceptable or problematic (i.e., some mapped metadata fields may cause data truncation).

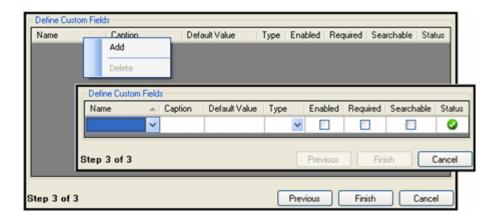


Note: The scissors icon used in the Status column indicates that the data in the Enterprise Vault metadata field could potentially be truncated because the length of this field is larger than the corresponding mapped URM metadata field.

This means that some of the original data could be lost when the Adapter transmits the declaration data to URM. To avoid this, you can use the double-mapping feature. See Double-Mapped Metadata Fields (page 3-9) or Field Lengths and Double-Mapping (page A-5).

Previous button	When enabled, returns you to the previous screen (step) to change values.
Next button	When enabled, proceeds to the next screen (step) in this multistep procedure to create a URM Adapter source.
Cancel button	Closes the create new URM Adapter source wizard without saving any configuration data and does not add the new URM Adapter source.

URM Sources Screen: Create New URM Source Screen - Define Custom Fields



This screen is Step 3 of a three-part wizard used to collect the necessary information to create a new URM Adapter source. In this step, you create URM custom metadata fields that can be mapped to Enterprise Vault metadata fields. By default, the screen displays only the column headings. You must add the first and all subsequent entries.

The inset illustrates a new, unpopulated entry inserted using the Add pop-up menu option. The field values entered on this screen are used to populate the fields in the Custom Fields pane (page 3-47). You can access this screen by clicking the Next button on the URM Sources Screen (page 3-44).



Note: If you selected the Add Defaults check box (page 3-51) on the Create New URM Source screen (Step 1 of the three-part wizard), the Adapter automatically populates the Define Custom Fields screen with optional, pre-defined URM custom metadata fields. You may modify or delete any of them. The optional custom metadata fields include:

Name value	Type value
Archive Date	Date
Author	Memo
Modified Date	Date
BCC Recipients	Memo
CC Recipients	Memo
TO Recipients	Memo
Subject	Memo

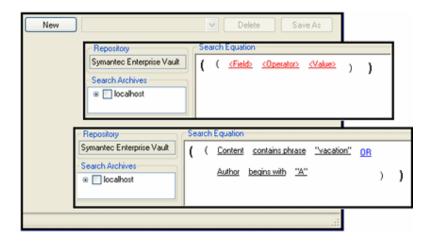
If you do not want the Adapter to add these optional custom metadata fields, you can deselect the Add Defaults check box.

Feature	Description	
of the available URM n mapped. However, this	Note: Some Enterprise Vault metadata fields do not logically correspond to any of the available URM metadata fields and, therefore, cannot be appropriately mapped. However, this screen enables you to create custom metadata fields for URM that can then be mapped to these unique Enterprise Vault metadata fields.	
These URM custom metadata fields are displayed in URM on the Create <i>sourcename</i> Item page for a specific URM Adapter source that is listed in the External Content tray. When enabled, the URM custom metadata fields are also included on the item's Content Information page. For more information about URM custom metadata fields, see URM Custom Metadata Fields (page 3-7).		
Add/Delete pop-up menu	Right-clicking in any table cell opens this menu. Add—Inserts a new entry that enables you to add another URM custom metadata field that is linked to an Enterprise Vault metadata field. Delete—Removes the selected entry.	
Name drop-down list	Lists all of the Enterprise Vault archive metadata field names along with the custom metadata fields that are created using the Enterprise Vault Screen (page 3-42). However, any Enterprise Vault metadata fields that were mapped during Step 2 of the URM Adapter source creation process are not included in this list because they can only be mapped once.	

Feature	Description
Caption field	The descriptive name of the URM custom metadata field that is displayed on the URM Adapter source's Create <i>sourcename</i> Item page and the item's Content Information page in URM. See URM Custom Metadata Fields (page 3-7). Entering a value is optional. However, if you do not enter a value, then, by default, the repository name of the mapped Enterprise Vault metadata field (from the Name drop-down list) is used on the URM pages.
	For example, if the repository name of the metadata field is SMTP_CC and a caption such as Carbon Copy is not entered, then SMTP_CC is displayed on the applicable URM pages.
Default Value field	The assigned value for the metadata field. Some documents do not have a complete set of metadata values associated with them. This field enables you to supply the missing value. For example, you can enter the value "None" in this field and if a value is not available, the value "None" is inserted.
Type drop-down list	Lists the available classification types of information that can be used as the value for this custom metadata field. In this case, this metadata field is not the primary key in the database table. Therefore, you must specify the actual data type to be entered into this field. Possible values include: Text, BigText, Checkbox, Date, Int, and Memo.
Enabled check box	Selected—In URM, configures this field to be displayed on the URM Adapter source's Create sourcename Item page and the item's Content Information page. Clear—This field is not displayed on URM pages. This is the default setting.

Feature	Description
Required check box	Selected—Prevents managed content data from being accepted into URM without entering a value. Clear—Allows managed content data to be accepted into URM without entering a value. This is the default setting.
Searchable check box	Selected—In URM, enables users to use this field as search criteria on the Search sourcename Item page. This means that you can use this field to search the data records for information about specific managed content items. See Searchable URM Custom Metadata Fields (page 3-8). Clear—In URM, this field is not displayed on the Search sourcename Item page. This is the default setting.
Status field	Icons and tool tips indicate a particular custom field's general condition and whether the entry is acceptable or problematic (i.e. some mapped metadata fields may cause data truncation).
Previous button	When enabled, returns you to the previous screen (step) to change values.
Next button	When enabled, proceeds to the next screen (step) in this multistep procedure to create a URM Adapter source.
Cancel button	Closes the create new URM Adapter source wizard without saving any configuration data and does not add the new URM Adapter source.

Search Creation Screen



Use the Search Creation screen to design new repository queries or modify existing repository queries. The queries are used to perform the searches in the Enterprise Vault to gather new or updated information about the managed content items. Each repository query is associated with a specific URM Adapter source. You can access this screen by clicking the **Search Creation** link in the navigation hierarchy on the Adapter Administration Manager (page 3-38).

By default, the Search Creation screen does not display the Search Archives and Search Equation panes when it opens. However, if you select an existing repository query from the drop-down list, the fully configured query information is displayed in two editable panes: Search Archives and Search Equation—see the inserts above.

You have the option to modify an existing query or duplicate it with a new name and modify the copy. Or, you can create a new search using the equation editor. The basic expression is shown in the first insert above. This provides the basis for the new search equation. You can also develop complex boolean expression groupings as shown in the second insert above.



Important: The first time the Adapter Service starts, it performs an initial search in the Enterprise Vault (executing all the defined search queries). During this search, the Adapter Service not only looks for new content item checkins, but it also searches the repository in reverse chronological order to collect historical data for URM.

Content items that match the search criteria are assigned appropriate retention schedules. After the processing is complete, the relevant content items are marked complete and are not returned in future searches because their data has been checked into URM. Therefore, if you create and run a subsequent search query that has a higher priority, the query will not change the assigned retention schedule of previously declared content items.

For more information about the priority for search queries, see the Up / down arrows (page 3-75) on the Search Mapping Screen (page 3-71).

Feature	Description
Default screen display	
New button	Displays the Search Creation Screen: Create new search Screen (page 3-61).
Defined searches drop-down list	Lists the existing search queries that are currently defined. These queries are available for modification as necessary or are ready for search mapping—see the Search Mapping Screen (page 3-71).
Delete button	Removes the selected search query and related data from the Adapter database table. The deleted query is not included in the drop-down list of defined searches nor is it listed in the column of Search Names on the Search Mapping screen.
Save As button	Saves a duplicate of an existing query under a different name.

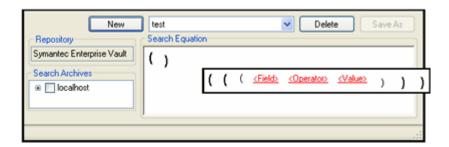
Search Creation Screen: Create new search Screen



Use the Create new search screen to provide a descriptive name for the new search query. You can access this screen by clicking the **New** button on the Search Creation Screen (page 3-59).

Feature	Description
Search Name field	The descriptive name of the new query.
Repository drop-down list	When applicable, lists the available repositories. The selected repository is linked to the search query being created and is displayed on the populated Search Creation screen. See Repository pane on the Search Creation Screen: Equation Editor (page 3-62).
OK button	Generates a new search query with the assigned Search Name and displays the initial equation parenthesis on the Search Creation Screen: Equation Editor (page 3-62).
Cancel button	Closes the Create new search screen without generating a new search query.

Search Creation Screen: Equation Editor



After you generate a new search query, the Search Creation screen refreshes and displays the default components of the equation editor screen: the collapsed Enterprise Vault storage tree and an initial set of empty equation parenthesis. The inset shows the initial basic expression construct.

You use the following menus to build a search query:

- ❖ Equation Editor: Expression Design Pop-up Menus (page 3-64)
- ❖ Equation Editor: Field Variable Pop-up Menus (page 3-66)
- ❖ Equation Editor: Operator Variable Pop-up Menus (page 3-67)
- ❖ Equation Editor: Value Variable Text Field (page 3-69)
- ❖ Equation Editor: Value Variable Drop-down Calendar (page 3-70)

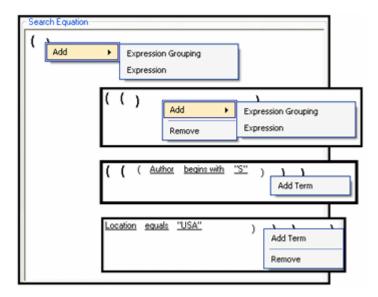
Feature	Description
Repository pane	
Repository name	Lists the repository associated with the search query being created.
Search Archives pane	

Feature	Description
Search Archives storage tree check boxes	By default, only the Enterprise Vault host is initially displayed. This is the top level of the repository storage tree. The repository storage tree is an organized hierarchy that consists of the Vault host, sites, stores, and archives. Use the plus and minus icons in front of the check boxes to unfold or collapse the child locations. Use the check boxes to select the storage locations that this search query will browse to find matching content items.
Note: The storage locations are created and named when the Enterprise Vault is initially configured. There is only one Vault host, but multiple subordinate child storage locations. The Adapter obtains the storage tree names from the Enterprise Vault and displays them in their hierarchical order.	
Search Equation pane	

Search Equation pane	
Equation editor pop-up menus	By default, the only equation components displayed on this screen are the initial set of expression parenthesis. Right-clicking on them displays the Add pop-up menu (page 3-65). Selecting the Expression option generates the construct shown in the inset above. As additional expressions are added to create compound boolean expressions, right-clicking near the internal parenthesis can also display the Add/Remove pop-up menu (page 3-65) and Add Term pop-up menu (page 3-66).
Field variable	Left-clicking the Field variable displays options to select different categorical menus that include the Mail Metadata pop-up menu (page 3-67) or the Custom Metadata pop-up menu (page 3-67). These menus list all the display or caption names of the archive and custom metadata fields in the Enterprise Vault.

Feature	Description
Operator variable	Depending on the option selected for the Field variable, left-clicking the Operator variable displays either the Date/number pop-up menu (page 3-68) or the Text pop-up menu (page 3-68).
Value variable	Depending on the option selected for the Operator variable, left-clicking the Value variable displays either the Equation Editor: Value Variable Text Field (page 3-69) or the Equation Editor: Value Variable Drop-down Calendar (page 3-70).

Equation Editor: Expression Design Pop-up Menus

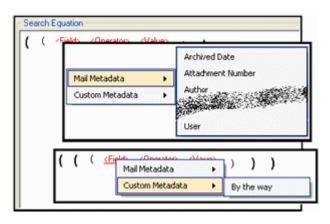


Depending on the state of your search equation (i.e., initial parenthesis, basic expression, or compound expression), right-clicking within a set of parenthesis displays one of three pop-up menus. Use these menus to design the structure of your search query.

Feature	Description
	As shown in the first inset above, the Add pop-up menu provides two options:
	Expression Grouping —Inserts an additional set of parenthesis.
	Expression —If this is the first expression in the search query, this option inserts a basic expression with the following syntax:
Add pop-up menu	(<field> <operator> <value>)</value></operator></field>
Add pop-up menu	Each subsequent expression in the search query has the same syntax as the expression inserted using the Add Term pop-up menu.
	For more detailed information about these elements, see Search Creation Screen: Equation Editor (page 3-62) or Construction of Search Queries (page 3-20)—Expression Grouping Option and Expression Option.
Add/Remove pop-up menu	As shown in the second inset above, the Add/Remove pop-up menu provides two options:
	Add—Displays the Add pop-up menu options.
	Remove —Deletes the added expression grouping or expression, depending on the set of parenthesis where you right-click.

Feature	Description
Add Term pop-up menu	As shown in the third inset above, the Add Term pop- up menu inserts a boolean expression with the following syntax:
	(<operator> <field> <operator> <value>)</value></operator></field></operator>
	In this case, the first <i>Operator</i> variable in this expression is actually a boolean operator. When you left-click on it, the AND/OR boolean pop-up menu (page 3-68) is displayed.
	For more detailed information about these elements, see Search Creation Screen: Equation Editor (page 3-62) or Construction of Search Queries (page 3-20)—Compound Expressions.
Add Term/Remove pop-up menu	As shown in the fourth inset above, the Add Term/Remove pop-up menu provides two options:
	Add Term—Displays the Add Term pop-up menu. Remove—Deletes the added expression grouping or expression, depending on the set of parenthesis where you right-click.

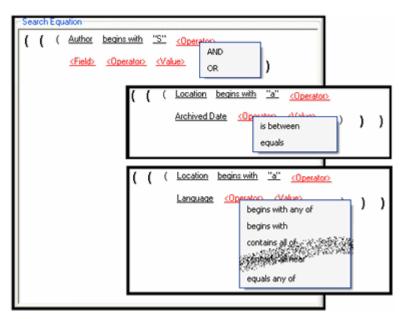
Equation Editor: Field Variable Pop-up Menus



The Field Variable pop-up menu enables you to display additional categorical option lists. Moving your cursor over one of the topic options displays the related metadata lists. These pop-up menus are displayed when you left-click on the Field variable in an expression.

Feature	Description
Mail Metadata pop-up menu	Left-clicking the Field variable displays the field pop- up menu. The first inset above shows a partial list of the menu options. The full list includes the display and caption names of all the Enterprise Vault archive metadata fields.
Custom Metadata pop-up menu	Left-clicking the Field variable displays the field pop- up menu. The second inset above shows the current list of available menu options. The list includes the display names of all the Enterprise Vault custom metadata fields. However, the list only displays the custom metadata fields that have the Searchable check box (page 3-43) selected.

Equation Editor: Operator Variable Pop-up Menus



The Operator variable pop-up menus are lists of options that are displayed when you left-click on the Operator variables in an expression.

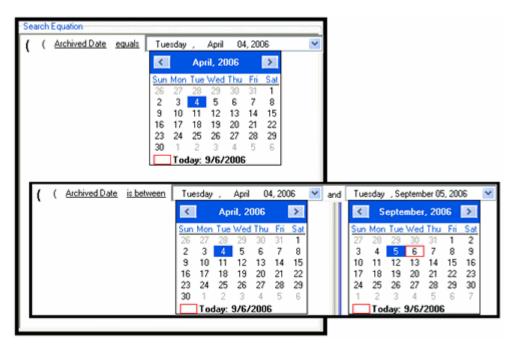
Feature	Description
AND/OR boolean pop-up menu	Left-clicking the first Operator variable in a compound expression displays the boolean pop-up menu. It lists the boolean operators that can be used to combine two consecutive expressions: AND—Configures the search query to find content items that match the both of the combined expressions. OR—Configures the search query to find content items that match at least one of the combined expressions.
Date/number pop-up menu	If the value of the Field variable (page 3-63) is a date or number type, then left-clicking the Operator variable displays the operator date/number pop-up menu. As shown in the second inset above, this menu provides the following options: is between—Configures the search query to filter the results based on the two values that define a range delineated by either two dates or two alphanumeric values. See Dual-entry text field set (page 3-69) and Dual date field set (page 3-70). equals—Configures the search query to filter the results based on the specified alphanumeric value(s). See Single-entry text field (page 3-69) and Single date field (page 3-70).
Text pop-up menu	If the value of the Field variable (page 3-63) is a text type, then left-clicking the Operator variable displays the operator text pop-up menu. The third inset above shows a partial list of the menu options. The full list includes many options that support individual parameter values as well as space-separated lists of multiple parameter values. See Single-entry text field (page 3-69).

Equation Editor: Value Variable Text Field



Either the single-entry text field or the dual-entry text field displays when you select any Operator value (except "is between") from any of the Equation Editor: Operator Variable Pop-up Menus (page 3-67). In this case, left-clicking the Value variable displays a user-editable text field.

Feature	Description
Single-entry text field	Displays a single user-editable text field that accepts any alphanumeric value.
Dual-entry text field set	Displays two user-editable text fields that accept any alphanumeric values.



Equation Editor: Value Variable Drop-down Calendar

If the value of the Field variable is a date type, then left-clicking the Value variable displays the date field that includes an arrow to open the drop-down interactive calendar. This calendar enables users to quickly select dates and easily move between previous and future months and years. It eliminates date-formatting errors and typos because the fields are automatically populated with the user-selected dates.

Feature	Description	
Date Field		
Single date field	Displays a single interactive drop-down calendar.	
Dual date field set	Displays two interactive drop-down calendars.	
Calendar		
Left-facing arrow	Enables you to navigate consecutively to previous months. Each click regresses one month and the calendar adjusts to display the appropriate days for the earlier month.	

Feature	Description
Right-facing arrow	Enables you to navigate consecutively to future months. Each click progresses one month and the calendar adjusts to display the appropriate days for the future month.
Month pop-up menu	Left-clicking the month at the top of the calendar displays a list of months. You can select a month rather than use the left- and right-facing arrows.
Year up and down arrows	Left-clicking the year at the top of the calendar displays up and down arrows. You can increment of decrement the year by clicking either the up or down arrow, respectively. The date ranges are indefinite for both historical years and future years.
Monthly calendar days	Displays the days appropriate for the selected month and year. Click a day on the calendar to select it and it automatically replaces the date in the applicable date field. The highlighted day populates the applicable date field and the boxed day is the current day.

Search Mapping Screen



Use the Search Mapping screen to map a search query to a URM Adapter source in the Adapter and a retention category in URM. You can access this screen by clicking the **Search Mapping** link in the navigation hierarchy on the Adapter Administration Manager (page 3-38).

Feature	Description
Filter By drop-down list	<urmsource_name>—The drop-down list includes the names of all the URM Adapter sources currently defined in the Adapter. Selecting a URM Adapter source from the list generates results that include only the search queries that are currently mapped to the selected URM Adapter source. Show Unassigned—Generates results that include</urmsource_name>
	only the search queries that have not yet been assigned to a URM Adapter source.
	Show All—Generates results that include all of the currently defined search queries regardless of their assigned status. This is the default value.
Search Name field	The name of the search query that matches the filtering criteria selected in the Filter By drop-down list and included in the generated results. A search query can be mapped to only one URM Adapter source and retention category.
URM Source drop-down list	Lists all of the currently defined URM Adapter sources in the Adapter. A URM Adapter source can be mapped to one or more search queries.
	Important: If a search query is not mapped to a URM Adapter source, it cannot be activated and will not execute.
Retention Category drop-down list	Lists all of the retention categories that are currently defined in the URM FilePlan. A retention category can be mapped to one or more search queries. To enter a value into this field, double-click a specific retention category from the drop-down list.
	Note: When you are selecting the mappings for a search query, the URM Adapter source must be assigned before the retention category.

Feature	Description
	Selected—Enables the Adapter to use this search query when it performs historical searches in the Enterprise Vault.
	Clear—Prevents the Adapter from using this search query when it performs historical searches in the Enterprise Vault.
Historical check box	Important: If you have enabled a search query (see Enabled check box below) but you do not select the corresponding Historical check box, then the Adapter will execute the search query only during new content searches in the repository. See also the Important and Caution messages below.
Enabled check box Cleafron lose	Selected —Activates the search query and enables it to execute.
	Clear—Deactivates the search query and prevents it from executing. However, the search query will not lose its URM Adapter source and retention category mappings.

Feature

Description



Important: If a search query is not activated, the Adapter will not run that query during repository searches. The Adapter executes search queries only if they are activated on the Search Mapping screen AND if one or both declaration settings (Enabled check box: new content and Enabled check box: historical content) are enabled on the Advanced Screen (page 3-76).

The Adapter does not run a search query if:

- ❖ The search query is activated but the applicable content declaration setting(s) are disabled.
 - In this case, the Adapter pauses the new and/or historical search and declaration functions. When you reactivate the search query, the Adapter resumes the search processes starting at the prior termination points. Searching continues until all elapsed time intervals are completed.
- ❖ The search query is deactivated. In this case, if the new and/or historical content declaration setting(s) are disabled, the search process is temporarily suspended. However, if the new and/or historical content declaration setting(s) are enabled, the Adapter does not run the search query but continues to process search time intervals. See the Caution message below.



Caution: The Adapter processes a time window *ONLY ONCE*. When the new and/or historical content declaration settings are enabled, the Adapter continues to advance the time windows whether or not search queries are activated and executed.

For example, if you deactivate a search query and the new and/or historical content declaration settings are enabled, the Adapter processes applicable time windows without searching the Enterprise Vault. As a result, the items that might have been returned by the deactivated search query during the processed time interval will *NEVER* be found. A time window cannot be processed again. Therefore, it is recommended that if you want to temporarily suspend a search and declaration process, you should disable the new and/or historical content declaration settings on the Advanced Screen (page 3-76) rather than deactivate the applicable search query.

Feature	Description
Up / down arrows	Used to adjust the specific placement order of the selected entry in the search query list. The position of each search query entry in the list is relevant to its priority in the declaration process. The higher a search query is positioned in the list, the higher its priority is in the hierarchy. Each click on the up or down arrow moves the selected search query up or down one position in the list. Note: You cannot modify the priorities of search queries in the list if you have applied a filter to the list. See the additional Note below.

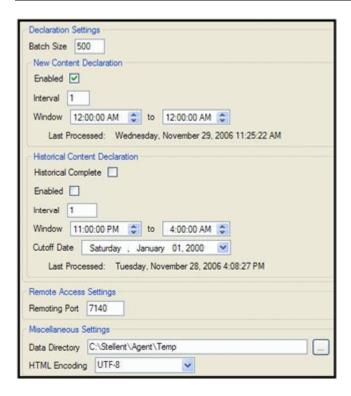


Note: When the Adapter performs searches, it is very likely that two search queries will return the same content item from the Enterprise Vault. It is also probable that the two search queries are mapped to different URM Adapter sources and/or URM retention category.

A content item can only be declared once. However, when the results for two or more search queries include the same item, the Adapter uses the assigned priorities of the search queries to determine which one is allowed to declare the item.

For example, one search query is mapped to source_A, another search query is mapped to source_B, and a third search query is mapped to source_C. If all three search queries find the same content item, and the search query for source_B is higher in the list than the other two, the item is declared into source_B.

Advanced Screen



Use the Advanced screen to configure settings that are used to control various features of the Adapter. These include batch size and search settings for new and historical content items. In particular, the Advanced screen provides the mechanisms to enable or disable content search and declaration functions and configure their respective time intervals. You can access this screen by clicking the **Advanced** link in the navigation hierarchy on the Adapter Administration Manager (page 3-38).

Feature	Description
Declaration Settings	
Batch Size field	The maximum number of content item data records that can be included in a single batch submitted to URM. The range is 100 to 1,000. The default value is 100.
Declaration Settings: New Content Declaration	

Feature	Description
Enabled check box: new content	Selected—Configures the Adapter to perform searches in the Enterprise Vault for new content items. These include items that have been checked in after the Adapter was installed. Clear—Prevents the Adapter from performing searches for new content items. This is the default setting. Note: If you disable the New Content Declaration function, the Adapter will stop declaring new content data to URM. However, when you re-enable this function, the Adapter will resume the search and declaration processes for new content starting at its prior termination point.



Important: If the Enabled check boxes for both new and historical content (see Enabled check box: historical content) are cleared, then all of the search queries are prohibited from browsing through content in the Enterprise Vault. In this case, the search queries are effectively disabled regardless of whether their respective Enabled check boxes are selected. See the Enabled check box (page 3-73) on the Search Mapping Screen (page 3-71).



Caution: When the Adapter is started and the New Content Declaration setting is enabled on the Advanced screen, the Adapter continues to advance the forward time windows. Furthermore, the Adapter processes a time window *ONLY ONCE* whether or not search queries are activated on the Search Mapping Screen (page 3-71) and running.

For example, if you deactivate a search query and the New Content Declaration setting is enabled, the Adapter processes forward time windows but does not use the deactivated search query to look for matching content in the Enterprise Vault. As a result, the items that might have been returned by the deactivated search query during the processed time interval will *NEVER* be found. A time window cannot be processed a second time.

Feature

Description



Important: Occasionally, you might have a need to temporarily suspend the search and declaration process. For example, you may need to test a new search query before using it in a production environment. In this case, it is recommended that you disable the new and/or historical content declaration settings on the Advanced screen rather than deactivate the applicable search query on the Search Mapping Screen (page 3-71).

Disabling the content declaration processes prevents the Adapter from processing new and/or historical content because the time windows stop progressing. Deactivating a search query, however, does not stop the progression of time windows. Instead, it simply prevents the Adapter from processing that particular search query.



Tech Tip: When you start or restart the Adapter, it begins processing all time windows if the new and historical content declaration settings are enabled. (*See the Caution and Important messages above.*) Therefore, before you run your search queries in a production environment, they should be tested to verify their effectiveness and accuracy.

To ensure that your search queries return optimal results, use the following general guidelines for testing:

- ❖ Before starting the Adapter, disable the new and historical content declaration settings on the Advanced screen
- Start the Adapter—see Stopping and Restarting the Adapter Service (page 4-8)
- ❖ Use the Search Preview Screen (page 4-17) to test your search queries.
- ❖ When you are satisfied with the results, stop the Adapter again and enable the new and historical content declaration settings.
- * Restart the Adapter.

Feature	Description	
Interval field: new content	Specifies the number of hours the Adapter remains idle between searches for new content items. For example, if you set this to 4, the Adapter wakes up every four hours and runs a search to find content that has been added within the previous four hours. If the search exceeds the specified interval time period, the Adapter continues the search and will not sleep. The allowed range is 1 to 24. The default value is 1.	
Window time period selection fields: new content	Specifies a range of hours for the Adapter to use for new content searching. Click the up or down arrows to increase or decrease the time in one-hour increments. Tech Tip: Setting both time fields to the same hour enables the Adapter to process new content declarations during each interval (as defined in the Interval field: new content) every 24 hour period.	
Last Processed field	The date and time that the Adapter completed its declaration processing for new content. Right-clicking this value updates it to the most current date/time.	
Declaration Settings: Historica	Declaration Settings: Historical Content Declaration	
Historical Complete check box	Selected—Indicates that the Adapter has completed its declaration processing for historical content up to the selected cutoff date (see Cutoff Date drop-down calendar). This setting disables the other Historical Content Declarations fields. Clear—Indicates the historical content declaration process is not finished. This check box must be clear to enable the other Historical Content Declarations fields.	

Feature	Description
Enabled check box: historical content	Selected—Configures the Adapter to perform searches in the Enterprise Vault for pre-existing content items. These include items that were stored before the Adapter was installed. Clear—Prevents the Adapter from performing searches for legacy content items. This is the default setting. Note: If you disable the historical declaration function, the Adapter will stop declaring legacy content item data to URM. However, when you re-enable this function, the Adapter will resume the search and declaration processes for legacy content starting at its prior termination point.



Important: If the Enabled check boxes for both new (see Enabled check box: new content) and historical content are cleared, then all of the search queries are prohibited from browsing through the Enterprise Vault content. In this case, the search queries are effectively disabled regardless of whether their respective Enabled check boxes are selected. See the Enabled check box (page 3-73) on the Search Mapping Screen (page 3-71).



Caution: When the Adapter is started and the historical content declaration setting is enabled on the Advanced screen, the Adapter continues to process the backward time windows. Furthermore, the Adapter processes a time window *ONLY ONCE* whether or not search queries are activated on the Search Mapping Screen (page 3-71) and running.

For example, if you deactivate a search query and the historical content declaration setting is enabled, the Adapter processes reverse time windows but does not use the deactivated search query to look for matching content in the Enterprise Vault. As a result, the items that might have been returned by the deactivated search query during the processed time interval will *NEVER* be found. A time window cannot be processed a second time.

Feature Description



Important: Occasionally, you might have a need to temporarily suspend the search and declaration process. For example, you may need to test a new search query before using it in a production environment. In this case, it is recommended that you disable the new and/or historical content declaration settings on the Advanced screen rather than deactivate the applicable search query on the Search Mapping Screen (page 3-71).

Disabling the content declaration processes prevents the Adapter from processing new and/or historical content because the time windows stop progressing. Deactivating a search query, however, does not stop the progression of time windows. Instead, it simply prevents the Adapter from processing that particular search query.



Tech Tip: When you start or restart the Adapter, it begins processing all time windows if the new and historical content declaration settings are enabled. (*See the Caution and Important messages above.*) Therefore, before you run your search queries in a production environment, they should be tested to verify their effectiveness and accuracy.

To ensure that your search queries return optimal results, use the following general guidelines for testing:

- ❖ Before starting the Adapter, disable the new and historical content declaration settings on the Advanced screen
- Start the Adapter—see Stopping and Restarting the Adapter Service (page 4-8)
- ❖ Use the Search Preview Screen (page 4-17) to test your search queries.
- ❖ When you are satisfied with the results, stop the Adapter again and enable the new and historical content declaration settings.
- * Restart the Adapter.

Interval field: historical	Specifies, in hours, the time span that the Adapter uses
	when searching for historical content. The supported range is from 1 hour to 168 hours (7 days).

Feature	Description
	Specifies a range of hours for the Adapter to use for historical content searching. Click the up or down arrows to increase or decrease the time in one-hour increments.
Window time period selection fields: historical content	Important: Historical declaration processing can be very resource intensive for the combined operations of the Adapter, the Enterprise Vault, and URM. To optimize the overall process, it is recommended that you restrict the time periods that you choose. for example, choose off hours for historical data processing.
Cutoff Date drop-down calendar	Establishes the cutoff date when the Adapter stops reverse declaration processing. Content items that were checked in or modified before this date are not processes even if a search might have included them in a results file. The date range extends from January 1, 1900 until the
	present. For more detailed information about the drop-down calendar, see the Equation Editor: Value Variable Drop-down Calendar (page 3-70).
Last Processed field	The date and time that the Adapter completed its declaration processing for historical content.
	Depending on the defined interval (see Interval field: historical content), the displayed date may be earlier than the cutoff date (see Cutoff Date drop-down calendar).
	Right-clicking this value updates it to the most current date/time.
	Note: By default, the Last Processed date is updated only once—the first time you open the Advanced tab.
Remote Access Settings	

Feature	Description	
Remoting Port field	Specifies the port that is used by remote applications to access the Adapter. If the port is in use when a remote application tries to access it, the Adapter logs an error and is not available for remote access. The range is from -1 to 65,535. Setting the value to 0 or -1 disables remote access. Setting the value to 1 and higher opens the port and enables remote applications to access the Adapter.	
Miscellaneous Settings		
Data Directory field	Specifies the directory on the local disk where the Adapter creates a file to store data during processing operations.	
Data directory browse button	Opens the standard Browse for Folder dialog box that enables you to navigate to and select the data directory location. If an applicable folder is unavailable, the dialog also provides a Make New Folder button to use as needed.	
HTML Encoding drop-down list	Defines the character encoding that the Adapter uses to communicate with URM which is done via web services. Options include: ASCII, Unicode, UTF-7, UTF-8 (the default value), and UTF-32.	

Configuration

ADMINISTRATION

OVERVIEW

This section covers the following topics:

Concepts

- ❖ About Adapter Operation and Administration (page 4-2)
- ❖ Internal and External Checkins (page 4-3)
- **❖** Concurrent Mode (page 4-3)
- ❖ Stops and Restarts (page 4-4)
- **❖** Log Files (page 4-5)
- **❖** Log File Administration (page 4-5)
- **❖** Log File Characteristics (page 4-6)
- Status and Error Message Severity Codes (page 4-6)
- **❖** Audit Trails (page 4-7)

Tasks

- Stopping and Restarting the Adapter Service (page 4-8)
- ❖ Viewing Declaration Errors and Message Details (page 4-9)
- ❖ Viewing Disposition Errors and Message Details (page 4-10)
- ❖ Sorting Error Results (page 4-10)

- Previewing Search Query Results (page 4-11)
- ❖ Viewing Status Data for the Adapter (page 4-11)
- ❖ Viewing Status Data for the Adapter Service (page 4-12)
- Sorting Status Results (page 4-12)
- ❖ Viewing the Daily Event Records and Error Message Details (page 4-12)

Interface

- Error Management Link (page 4-13)
- ❖ Error Management: Declaration Errors Screen (page 4-14)
- ❖ Error Management: Disposition Errors Screen (page 4-15)
- ❖ Error Management: Error Details Screen (page 4-16)
- Error Management: Sort Order (page 4-17)
- ❖ Search Preview Screen (page 4-17)
- ❖ Status Link (page 4-21)
- ❖ Status: Adapter Status Tab (page 4-22)
- **Status:** Service Status Tab (page 4-25)
- **Status: Sort Order (page 4-27)**
- **❖** Log Viewer Screen (page 4-27)
- ❖ Log Viewer: Message Dialog Box (page 4-29)

ABOUT ADAPTER OPERATION AND ADMINISTRATION

This section covers the following topics:

- ❖ Internal and External Checkins (page 4-3)
- **Concurrent Mode (page 4-3)**
- **❖** Stops and Restarts (page 4-4)
- **❖** Log Files (page 4-5)
- **❖** Log File Administration (page 4-5)
- **❖** Log File Characteristics (page 4-6)

- Status and Error Message Severity Codes (page 4-6)
- **❖** Audit Trails (page 4-7)

Internal and External Checkins

The Adapter uses two types of check in processes for content items stored in the repository:

- ❖ Internal checkin—This involves moving the content items from the repository into URM. This is necessary if the repository is not able to preserve records or non-records over their retention period and ensure they are not altered. Internal checkins are also required if the repository is unable to purge the records properly when it is time for disposal.
 - Internal checkins are not required if the repository can preserve records or non-records over their retention period and purge them properly when necessary. In this case, the content items can remain in place. This is true for the Enterprise Vault. Therefore, internal checkins are not required.
- ❖ External checkin—This involves sending the declaration data to URM. The search queries collect the metadata of qualifying content items and the Adapter forwards this data in batches to URM. The declaration process (external checkin) is performed as new content items are added to the repository. External checkins can be performed regardless of whether the repository can properly preserve and purge content items.

Concurrent Mode

In concurrent mode, two or more Adapters are running and archiving content to the same Enterprise Vault. You can run up to a maximum of six different Adapters simultaneously (preferably, on separate computers). When multiple Adapters are started, only one can be active and the others are in standby mode.

You can check the current mode of the Adapter that you are connected to by looking at the bottom of the Status screen below the Status: Adapter Status Tab (page 4-22). If the status is active, then that Adapter instance is the one currently interacting with the Enterprise Vault. All other instances of the Adapter will then be in standby mode which means they are waiting for the active instance to terminate or be shut down.

For failover support, the Adapters in standby mode are available as backups in case of a software abort or hardware failure in the active Adapter. When all of the Adapter Services are started on multiple servers, one instance becomes the master (active Adapter) and performs all of the tasks. If it fails, the other instances compete for active status and one prevails. For additional information, see the Status Link (page 4-21).

Stops and Restarts

Bydefault, the Adapter Service is running when the Adapter is started unless you have configured it to start manually—see Stopping and Restarting the Adapter Service (page 4-8). When the Adapter Service is running, there are times when it is necessary to stop and restart it. Primarily, there are a number of settings that you can change using the Adapter Administration Manager (page 3-38) that require the Adapter Service to be stopped and restarted to implement the new configuration information. Other setting changes are applied immediately.

Changes that require the Adapter Service to be stopped and restarted include:

- ❖ Database connection information changes—see Changing the Database Connection (page 3-27)
- ❖ Enterprise Vault Directory Host changes—see Changing the Enterprise Vault Directory Host (page 3-27)
- ❖ Any changes on the Advanced screen—see Modifying the Advanced Settings Values (page 3-36)



Important: If more than one instance of the Adapter is installed and running, when a change is made to one Adapter that requires a restart, all of the Adapters in the configuration (both active and passive) must be restarted. For more detailed information about the active/passive roles of installed Adapters, see Concurrent Mode (page 4-3).

Changes that the Adapter implements immediately (without a restart) include:

- URM connection changes—see Changing the Authentication Information (page 3-26)
- Enterprise Vault custom metadata field additions/changes—see Creating an Enterprise Vault Custom Metadata Field (page 3-28)
- ❖ URM Adapter source additions/changes—see Adding a New URM Adapter Source (page 3-28), Viewing the Configuration Data of a URM Adapter Source (page 3-32), Mapping Metadata Fields (page 3-30), and Defining a URM Custom Metadata Field (page 3-31)

- Search query additions/changes—see Defining a New Search Query (page 3-33), Editing a Search Query (page 3-34), Duplicating and Editing a Search Query (page 3-34), and Deleting a Search Query (page 3-35)
- Search query mapping additions/changes—see Mapping a Search Query (page 3-35)
 and Activating/Deactivating a Search Query (page 3-36)

Log Files

The Adapter generates and maintains log files that contain records of all processing information as tasks are performed. The logging information is formatted and displayed in a table view on the Log Viewer Screen (page 4-27). After you upload the log files to URM, they can be checked into URM as documents that are assigned a retention category. Thus, the checked-in log files are maintained as a record.

The Adapter generates the log files using a format that, when converted, is compatible within URM. In addition to viewing the records using the Adapter Log Viewer, they can also be viewed from within URM. Therefore, as stored and managed records in URM, the log files function as an audit trail to document all of the Adapter's activity. And, as records, they are readily available and can be produced when needed as a part of a legal proceeding.

This section covers the following topics:

- **❖** Log File Administration (page 4-5)
- **❖** Log File Characteristics (page 4-6)
- Status and Error Message Severity Codes (page 4-6)

Log File Administration

Once each day (24-hour period), the Adapter invokes a mechanism that converts one or more previous log files into a format similar to that used by URM. (The current day's log file is not converted until the next run time.) Then, the converted log files are automatically uploaded to URM and archived in URM. After they are under URM management, all of the log files remain accessible from within URM and are available as an audit trail.

The Adapter retains a limited number of the daily log files that you can view and are available in the log file tree on the Log Viewer Screen (page 4-27). There is a pre-defined time limit (approximately 18 to 20 days) during which the daily log files are conserved. After reaching this pre-configured age, the oldest log file is permanently deleted and are

not archived within the Adapter database. The maturation time frame for log files is preset and cannot be reconfigured.

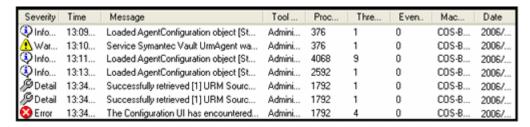
Log File Characteristics

The Adapter stores status information and errors in log files. Log files are used to record system events, together with their date and time of occurrence, detailed information, and other significant data. These log files can be valuable for general activity information and troubleshooting efforts. Not only do log files indicate that specific events have occurred, they also provide important entries that act as clues about a chain of events that led to an error or problem.

The log files associated with the Adapter have the following characteristics:

- ❖ They are generated only once each day at the time that the Adapter is started and the first event occurs that requires logging.
- No empty log files are generated.
- ❖ A limited number of daily log files are available for selection and viewing from the log file tree.
- When the Adapter purges the log files, they are permanently deleted, not archived.

Status and Error Message Severity Codes



The Adapter generates the following types of log file entries:

❖ Information—Displays basic status information about system operation to inform the administrator that an event has occurred. For example, status information is logged if a configuration file is successfully loaded.

❖ Detail—Displays more specific, detailed information about Adapter processing and operations. These messages are intended for debugging purposes. For example, these messages provide operational information in minute detail ("Document Key=12345 declared", "Document Key=12346 declared", etc.).



Note: The primary difference between Information and Detail type messages is the specificity. For example, an Information message may state that a content item has been declared to URM whereas a Detail message states that batches of items have been extracted from the Enterprise Vault and submitted for staging. Or, an Information message may state that a log file has been uploaded to URM while a Detail message would list each of the steps involved in processing the log file before submitting it to URM.

- ❖ Warning—Displays errors that occur but do not stop the Adapter from running. The Adapter believes it can recover sufficiently to continue processing. For example, a warning is logged when the Adapter Service is not found.
- ❖ Error—Displays errors that stop the software from functioning. The Adapter aborts because it is unable to recover enough to continue processing. For example, a fatal error is logged if the Configuration UI encounters a critical internal error and shuts down because it cannot connect to the remote server.

Audit Trails

The Log Files (page 4-5) that the Adapter generates provide chronological lists of all operations and processing activities that occur. Therefore, they can be used as an audit trail mechanism. You can use the detailed event records included in each daily log file to establish that the company has met its obligations.

For example, logged messages indicate whether necessary litigation holds were applied and the information was properly communicated. Other log file entries indicate what actions were carried out and how each user responded to the communications. Also, disposition actions are recorded that include timestamps and information about the types of disposals and the users involved.

Additionally, the recorded messages include all notifications that have been sent and the related actions taken. These, in turn, have corresponding user confirmations that are also recorded. Collectively, the log file entries provide the necessary evidence that a company is meeting its responsibility to apply holds and perform dispositions according to their retention policies.

MANAGING THE ADAPTER

This section covers the following topics:

- ❖ Stopping and Restarting the Adapter Service (page 4-8)
- ❖ Viewing Declaration Errors and Message Details (page 4-9)
- ❖ Viewing Disposition Errors and Message Details (page 4-10)
- ❖ Sorting Error Results (page 4-10)
- Previewing Search Query Results (page 4-11)
- ❖ Viewing Status Data for the Adapter (page 4-11)
- ❖ Viewing Status Data for the Adapter Service (page 4-12)
- **❖** Sorting Status Results (page 4-12)
- ❖ Viewing the Daily Event Records and Error Message Details (page 4-12)

Stopping and Restarting the Adapter Service

To stop and restart the Adapter Service, use one of the following methods:

- Stopping/Restarting From the Adapter Administration Manager (page 4-8)
- Stopping/Restarting From the Services Application (page 4-9)

Stopping/Restarting From the Adapter Administration Manager

- 1. Open the Adapter Administration Manager (page 3-38).
- 2. In the Service menu, select **Stop**.
 - The Adapter Service is stopped.
- 3. In the Service menu, select **Start**.
 - The Adapter Service is started.

Stopping/Restarting From the Services Application

1. Open the **Services** application:

Select Start—Control Panel—Administrative Tools—Services.

2. Scroll to locate the Adapter Service named:

URM Adapter for Symantec Enterprise Vault

3. On the **Action** menu, click **Stop**.

Services stops the Adapter Service and updates the Status to Stopped.

4. On the **Action** menu, click **Start**.

Services starts the Adapter Service and updates the Status to Started.

5. Close the Services application.

Viewing Declaration Errors and Message Details

To view the declaration errors and specific message details:

- 1. In the Adapter Administration Manager (page 3-38), open the Error Management link in the navigation hierarchy panel by clicking the plus icon.
- 2. Click the **Declaration Errors** link.

The Error Management: Declaration Errors Screen (page 4-14) is displayed. By default, the screen opens and displays the most recent messages. These are located at the bottom of the list.

- 3. Scroll up to find the message that you want to examine.
- 4. Double-click either the Data or the Error column of the selected message.

The Error Management: Error Details Screen (page 4-16) is displayed.

5. Click **OK**.

The Error Details screen closes.

Viewing Disposition Errors and Message Details

To view the disposition errors and specific message details:

- 1. In the Adapter Administration Manager (page 3-38), open the Error Management link in the navigation hierarchy panel by clicking the plus icon.
- 2. Click the **Disposition Errors** link.

The Error Management: Disposition Errors Screen (page 4-15) is displayed. By default, when the screen opens, the most recent messages are displayed. These are located at the bottom of the list.

- 3. Scroll up to find the message that you want to examine.
- 4. Double-click the Error column of the selected message.

The Error Management: Error Details Screen (page 4-16) is displayed.

Click OK.

The Error Details screen closes.

Sorting Error Results

To sort the declaration or disposition error lists based on a specific column:

- 1. In the Adapter Administration Manager (page 3-38), open the **Error Management** link in the navigation hierarchy panel by clicking the plus icon.
- 2. Click either the **Declaration Errors** or the **Disposition Errors** link.

The Error Management: Declaration Errors Screen (page 4-14) or the Error Management: Disposition Errors Screen (page 4-15) is displayed, respectively. By default, when the screen opens, the most recent messages are displayed. These are located at the bottom of the list.

3. Left-click on a column heading to sort the list in a descending or ascending order. The arrow next to the heading indicates which column has been used to sort the list and in what order. See Error Management: Sort Order (page 4-17) or Status: Sort Order (page 4-27).

Previewing Search Query Results



Note: Make sure that the Adapter Service is started before you try to preview your search query. Otherwise, the Adapter cannot process the search query. See Stopping and Restarting the Adapter Service (page 4-8).

To test your search query and preview the results:

1. In the Adapter Administration Manager (page 3-38), click the **Search Preview** link in the navigation hierarchy panel.

The Search Preview Screen (page 4-17) is displayed.

- 2. Open the Search drop-down menu and select the search query you want to test.
- 3. Select the date range that you want to use as a search window.
 - a. Open the "Between" drop-down calendar and select a beginning date.
 - b. Open the "And" drop-down calendar and select an end date.
- 4. Click Search.

The Adapter processes the search query and displays the results.

Viewing Status Data for the Adapter

To monitor the status data for the Adapter:

- 1. In the Adapter Administration Manager (page 3-38), click the **Status** link in the navigation hierarchy panel.
- 2. Click the **Adapter Status** tab.

The Status: Adapter Status Tab (page 4-22) is displayed.

3. Click **Refresh** to ensure the most current data is displayed. For more detailed information about any abnormalities, review the log files—see Viewing the Daily Event Records and Error Message Details (page 4-12).

Viewing Status Data for the Adapter Service

To monitor the status data for the Adapter Service:

- 1. In the Adapter Administration Manager (page 3-38), click the **Status** link in the navigation hierarchy panel.
- 2. Click the Service Status tab.

The Status: Service Status Tab (page 4-25) is displayed.

 Click Refresh to ensure the most current data is displayed. For more detailed information about any abnormalities, review the log files—see Viewing the Daily Event Records and Error Message Details (page 4-12).

Sorting Status Results

To sort the Adapter or service status lists based on a specific column:

- 1. In the Adapter Administration Manager (page 3-38), click the **Status** link in the navigation hierarchy panel.
- 2. Click either the Adapter Status or the Service Status tab.

The Status: Adapter Status Tab (page 4-22) or the Status: Service Status Tab (page 4-25) is displayed, respectively.

3. Left-click on a column heading to sort a selected list in a descending or ascending order. The arrow next to the heading indicates which column has been used to sort the list and in what order

Viewing the Daily Event Records and Error Message Details

To view the log file for a specific day and specific message details:

1. In the Adapter Administration Manager (page 3-38), click the **Log Viewer** link in the navigation hierarchy panel.

The Log Viewer Screen (page 4-27) is displayed. By default, when the screen opens, the most recent messages are displayed. These are located at the bottom of the list.

- 2. Scroll up to find the message that you want to examine.
- Double-click any column of the selected message.
 The Log Viewer: Message Dialog Box (page 4-29) is displayed.
- 4. Click **OK**.

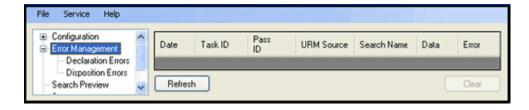
The Message dialog box closes.

THE ADMINISTRATION USER INTERFACE

This section covers the following topics:

- Error Management Link (page 4-13)
- **❖** Search Preview Screen (page 4-17)
- **Status Link** (page 4-21)
- **❖** Log Viewer Screen (page 4-27)
- **❖** Log Viewer: Message Dialog Box (page 4-29)

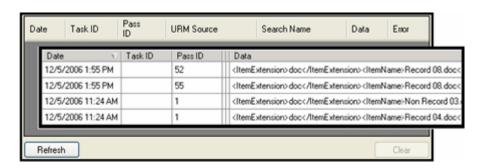
Error Management Link



The **Error Management** link provides access to additional links that enable you to access the declaration and disposition error lists. It is included in the navigation hierarchy on the Adapter Administration Manager (page 3-38). Clicking the plus icon displays the links for the declaration and disposition errors screens.

Feature	Description
Declaration Errors link	Used to view the declaration errors. Displays the Error Management: Declaration Errors Screen (page 4-14).
Disposition Errors link	Used to view the disposition errors. Displays the Error Management: Disposition Errors Screen (page 4-15)
Refresh button	Updates the list to display the most current messages.
Clear button	Truncates the error tables in the Adapter database and purges the error history. This list may contain many rows and you may not need the entire history of errors. Using the clear button conserves database storage space.

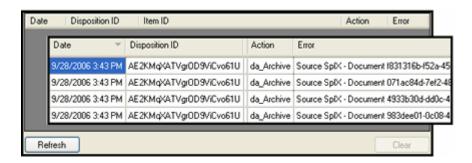
Error Management: Declaration Errors Screen



Use the Declaration Errors screen to view the declaration errors that have occurred in the Adapter. You can access this screen by clicking the **Declaration Errors** link in the navigation hierarchy on the Adapter Administration Manager (page 3-38).

Feature	Description
	Lists all of the errors that have occurred while the Adapter Service was processing declaration tasks. You can sort this list based on a column by clicking on the column heading.
Error records list	The default sort order is by error date (ascending), which means the most recent error is at the bottom of the list. For more information about sorting by columns, see Error Management: Sort Order (page 4-17).
	Double-clicking either the Data or Error column opens the Error Management: Error Details Screen (page 4-16) that contains the complete message pertaining to the declaration data or the failure error.

Error Management: Disposition Errors Screen



Use the Disposition Errors screen to view the disposition errors that have occurred in the Adapter. You can access this screen by clicking the **Disposition Errors** link in the navigation hierarchy on the Adapter Administration Manager (page 3-38).

Feature	Description
	Lists all of the errors that have occurred while the Adapter Service was processing disposition tasks. You can sort this list based on a column by clicking on the column heading.
Error records list	The default sort order is by error date (ascending), which means the most recent error is at the bottom of the list. For more information about sorting by columns, see Error Management: Sort Order (page 4-17).
	Double-clicking the Error column opens the Error Management: Error Details Screen (page 4-16) that contains the complete message pertaining to the disposition failure error.

Error Management: Error Details Screen

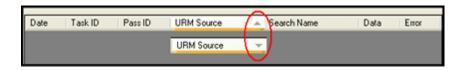


Use the Error Details screen to view the entire message text of any entry contained in either of the error management lists: Error Management: Declaration Errors Screen (page 4-14) and Error Management: Disposition Errors Screen (page 4-15). You can display this screen using one of the following methods:

- Double-clicking either the Data or Error column of a specific error contained in the Declaration Errors list.
- Double-clicking the Error column of a specific error contained in the Disposition Errors list.

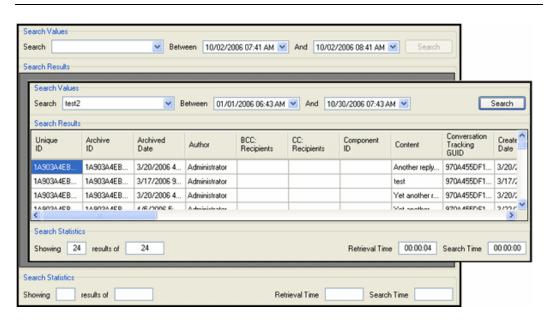
Feature	Description
Message pane	Displays the complete message text.
OK button	Closes the Error Details screen.

Error Management: Sort Order



When the results lists for declaration and disposition errors are displayed in table view pages, you can click on column headings to sort the lists in either ascending or descending order. When you click on a column heading, the entire list is resorted based on that column. After you click on a column, a small arrow is displayed next to the heading, indicating which column has been used to sort the list and in what order (ascending or descending).

Search Preview Screen



Use the Search Preview screen to review the results of a specific search query to evaluate the effectiveness of the query expressions. This previewing screen enables you to test the accuracy of your search query and filter the results using a specific date range. You can access this screen by clicking the **Search Preview** link in the navigation hierarchy on the Adapter Administration Manager (page 3-38).



Note: Make sure that the Adapter Service is started before you try to preview your search query. Otherwise, the Adapter cannot process the search query. See Stopping and Restarting the Adapter Service (page 4-8).



Tech Tip: When you start or restart the Adapter, it begins processing all time windows if the new and historical content declaration settings are enabled on the Advanced Screen (page 3-76). Therefore, before you run your search queries in a production environment, they should be tested to verify their effectiveness and accuracy.

To ensure that your search queries return optimal results, use the following general guidelines for testing:

- ❖ Before starting the Adapter, disable the new and historical content declaration settings on the Advanced Screen (page 3-76)
- ❖ Start the Adapter—see Stopping and Restarting the Adapter Service (page 4-8)
- Use the Search Preview screen to test your search queries.
- When you are satisfied with the results, stop the Adapter again and enable the new and historical content declaration settings.
- * Restart the Adapter

Feature	Description
Search Values pane	
Search drop-down list	Lists all of the currently defined search queries.
Date range drop-down calendars	Provides a range of dates for the search query to use. Only content items that meet the search criteria and fall within the selected dates are displayed in the results. For more detailed information about the drop-down calendar, see the Equation Editor: Value Variable Drop-down Calendar (page 3-70).

Feature	Description
Search button	Activates the selected search query. The search is based on the defined search query expressions and the date range selected from the drop-down calendars.
Search Results pane	
Records list	Displays the search results of the selected search query. The list includes all of the content items that meet the search criteria and are within the specified date range.

Search Statistics pane



Note: The Adapter calculates the results from the search preview based on the number of archives that the search query is configured to run against. The search preview function will never display more than 100 results for each included archive. By default, the results are the oldest matching items rather than the most recent in the specified date range.

Returned results counts	Showing —Displays the total number of results that are displayed in the Search Results pane.
	results of—Displays the total number of results that the search query produced when run against one or more archives. This sum combines the results from all the archives included in the search.
	For example, if you ran a search query on four archives and the first produced 87 results, the second and third produced none, and the fourth produced 4,724, you would see the following: Showing 187 results of 4811
Retrieval Time field	Displays how long it took to retrieve the data for all the displayed results in the Search Results pane.
Search Time field	Displays how long it took to run the search query.

Feature	Description
Search button	Activates the selected search query. The search is based on the defined search query expressions and the date range selected from the drop-down calendars.
Search Results pane	
Records list	Displays the search results of the selected search query. The list includes all of the content items that meet the search criteria and are within the specified date range.
Search Statistics pane	
Note: The Adapter calculates the results from the search preview based on the number of archives that the search query is configured to run against. The	

Note: The Adapter calculates the results from the search preview based on the number of archives that the search query is configured to run against. The search preview function will never display more than 100 results for each included archive. By default, the results are the oldest matching items rather than the most recent in the specified date range.

Returned results counts	Showing—Displays the total number of results that are displayed in the Search Results pane. results of—Displays the total number of results that the search query produced when run against one or more archives. This sum combines the results from all the archives included in the search.
	For example, if you ran a search query on four archives and the first produced 87 results, the second and third produced none, and the fourth produced 4,724, you would see the following: Showing 187 results of 4811
Retrieval Time field	Displays how long it took to retrieve the data for all the displayed results in the Search Results pane.
Search Time field	Displays how long it took to run the search query.

Feature Description



Tech Tip: You can use the retrieval and search times to help you optimize your search query or to simply determine the query's feasibility. For example, you might run a search query over a one-hour window and learn that it takes 20 seconds to run the search and 77 seconds to retrieve the data for 100 displayed results out of 400,000 produced results.

Using this information, you can calculate how long it would take to run the search query and retrieve the data for all of the produced results.

[(400,000 / 100) * 77 seconds] / 60 seconds = ~5133 minutes (~86 hours)

Clearly, this search query is not practical and need to be refined.

Status Link



The Status link provides access to the status screens that display overall general information. It is included in the navigation hierarchy on the Adapter Administration Manager (page 3-38). Clicking the **Status** link displays the tabs to access the status data for the Adapter and the Adapter Service.

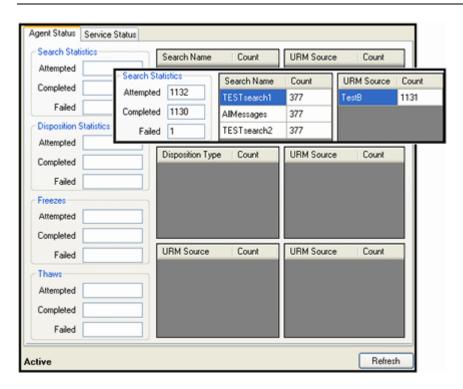


Note: The information provided on the status tabs is profiling data about the Adapter. It is intended to help you detect operational abnormalities. However, more specific information is available in the daily log files. These can be viewed using the Log Viewer Screen (page 4-27).

Feature	Description
Adapter Status tab	Used to view the operating status of the Adapter. Displays the Status: Adapter Status Tab (page 4-22).

Feature	Description
Service Status tab	Used to view the operating status of the Adapter Service. Displays the Status: Service Status Tab (page 4-25).
Adapter state	Active—Indicates that the Adapter instance that you are connected to is the one currently interacting with the Enterprise Vault.
	Standby—Indicates that the Adapter instance that you are connected to is currently waiting for the active instance to terminate or be shut down. See Concurrent Mode (page 4-3)
Refresh button	Updates the data fields and individual lists to display the most current status data for the Adapter and the Adapter Service.

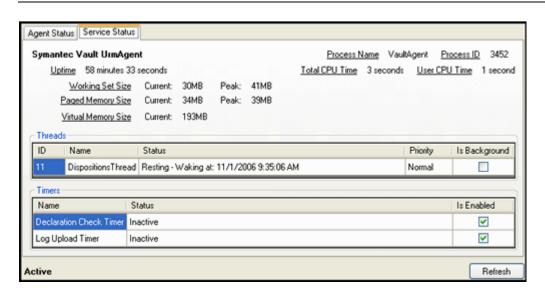
Status: Adapter Status Tab



Use the Adapter Status tab to monitor the status of tasks performed by the Adapter. The data provided on this tab is instantaneously current. As soon as you access the tab or refresh the screen, the Adapter automatically populates the fields with fresh data. The inset illustrates an example of populated data panes for search queries that have executed. You can access this screen by clicking the **Status** link in the navigation hierarchy on the Adapter Administration Manager (page 3-38). By default, the Adapter Status tab is displayed first.

Feature	Description
Note: The data provided on this screen is for the duration of the Adapter's current run. However long the Adapter runs, the values continue to increment and are not reset. However, if you stop and restart the Adapter Service, all of the profiling data that is collected is reset to zero. The data is not persisted across multiple runs.	
Search Statistics pane	Attempted—Displays the total number of search queries that have been invoked. This includes those that are currently running in addition to the completed and failed counts. Completed—Displays the number of search queries that ran successfully. Failed—Displays the number of search queries that failed.
Disposition Statistics pane	Attempted—Displays the total number of dispositions that have been initiated. This includes those that are currently being processed in addition to the completed and failed counts. Completed—Displays the number of dispositions that were processed successfully. Failed—Displays the number of dispositions that failed.

Feature	Description
Freezes pane	Attempted—Displays the total number of holds that have been applied. This includes those that are currently being applied in addition to the completed and failed counts.
	Completed—Displays the number of holds that were successfully applied.
	Failed—Displays the number of holds that failed.
Thaws pane	Attempted—Displays the total number of holds that have been removed. This includes those that are currently being removed in addition to the completed and failed counts.
	Completed —Displays the number of holds that were successfully removed.
	Failed —Displays the number of holds that failed.
Operation status boxes	The data in these status boxes provide information that help to profile overall condition of the Adapter's functions and processes.
	Upper-left —Lists the individual search queries and the number of times each has run.
	Upper-right —Lists the individual URM Adapter sources and the number of search queries that have run for each.
	Middle-left—Lists the individual disposition types and the number of completed disposals for each.
	Middle-right —Lists the individual URM Adapter sources and the number of dispositions performed for each.
	Lower-left —Lists the individual URM Adapter sources and the number of applied holds for each.
	Lower-right —Lists the individual URM Adapter sources and the number of removed holds for each.



Status: Service Status Tab

Use the Service Status tab to monitor the status of the Adapter Service's processes that are currently running. This screen also displays some common performance measures for these processes. The data provided on this tab is instantaneously current. As soon as you access the tab or refresh the screen, the Adapter automatically populates the fields with fresh data. You can access this screen by clicking the **Status** link in the navigation hierarchy on the Adapter Administration Manager (page 3-38). Click the Service Status tab.



Note: Many of the service statistics presented on this screen are derived from the system's Task Manager. This information enables you to monitor the key indicators associated with the Adapter's performance and related processes.

Feature	Description	
Note: The data provided on this screen is for the run of the Adapter. However, if you stop and restart the Adapter Service, all of the profiling that is collected is reset to zero. The data is not persisted across multiple		
Process Name field The Adapter's running process.		
Process ID field The system-assigned numerical identifier that u distinguishes the process while it runs.		

Feature	Description
Uptime field	The length of time that the Adapter has been running without crashing or being stopped.
Total CPU Time field	The total length of time the Adapter has dedicated to a process (rather than "sleeping").
User CPU Time field	The total length of time the Adapter has been running processes in non-kernel mode.
Working Set Size field	Current—The amount of memory the current process is using at this time. Peak—The maximum amount of memory the current process has used during its overall run time.
Paged Memory Size field	Paged memory is the memory that has been swapped out to a disk. Current—The amount of paged memory the current process is using at this time. Peak—The maximum amount of paged memory the current process has used during its overall run time.
Virtual Memory Size field	Current—The total amount of memory the Adapter has available for processing. As the Adapter runs, this value may grow a small amount as it requests access to more memory from the operating system.
Threads pane	
Process list	Displays a list of the processes that are running at the time the Adapter retrieves this status information. Generally, several processes execute concurrently and independently. The system dynamically assigns each process thread a unique identification number. You cannot select the Is Background check box. However, it is selected when a background process is running and included in the list.
Timers pane	1

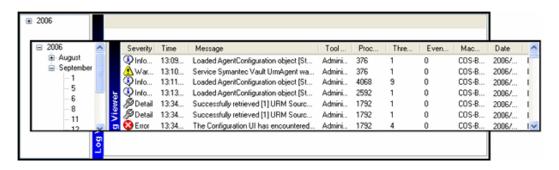
Feature	Description
Functions list	Displays a list of the timer functions that are running at the time the Adapter retrieves this status information. Generally, several timers execute concurrently and independently. The system dynamically assigns each timer thread a unique identification number. You cannot select the Is
	Enabled check box. However, it is selected when a background timer function is running and included in the list.

Status: Sort Order



When the data lists for Adapter and service errors are displayed in status boxes or table view pages, you can click on column headings to sort the lists in either ascending or descending order. When you click on a column heading, the entire list is resorted based on that column. After you click on a column, a small arrow is displayed next to the heading, indicating which column has been used to sort the list and in what order (ascending or descending).

Log Viewer Screen



Use the Log Viewer screen to select and view the event records for a specific day. The inset illustrates the list of messages generated for a day that was selected from the hierarchical log file tree. You can access this screen by clicking the Log Viewer link in the navigation hierarchy panel on the Adapter Administration Manager (page 3-38).

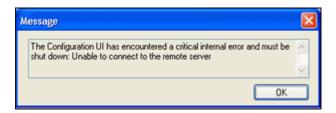
Feature Description Note: Once each day, the Adapter invokes a mechanism that converts the current log file into a format similar to that used by URM. The converted log file is then uploaded to URM. When the log files that you can view in the Log Viewer screen reach a pre-defined age, they are permanently deleted and are not archived within the Adapter. The log file tree is an organized hierarchy that consists of the current year(s), month(s), and days, as applicable. Due to the deletion process for matured log files, two years/months may be listed in the navigation hierarchy—the last one or more days of the previous month and some in the current month. This is also applicable to years (when log files are available for December and January). The Adapter generates a daily log file that stores all of the event records for that 24-hour period. You can drill down the hierarchy to navigate to a specific date to access the processing and status information entries that were recorded that day. Log file tree Use the plus and minus icons in front of the individual years and months to unfold or collapse their contents. The days of the month are listed and are links that,

when clicked, will access and display the log file

contents in the Log entry list.

Feature	Description
Log entry list	Lists all of the recorded event messages for a selected day in chronological order (oldest to newest). By default, the most current records are displayed when the window opens. To view the oldest records, scroll to the top of the file. Information is listed in a table format with standard column headers. The only column that you can fully display is the message text in the Log Viewer: Message Dialog Box (page 4-29). For more information about the status and event messages, see Status and Error Message Severity Codes (page 4-6).

Log Viewer: Message Dialog Box



Use the Message dialog box to view the entire message text of any entry contained in a log file. You can display this dialog box using one of the following methods:

- Double-click the text in any column for a specific record.
- * Right-click the text in any column and select View Message Text from the pop-up menu.

Feature	Description
Message pane	Displays the complete message text.
OK button	Closes the Message dialog box.



METADATA FIELD LENGTHS

OVERVIEW

This section covers the following topics:

- ❖ Lengths for URM Metadata Field Types (page A-1)
- ❖ Lengths for Symantec Metadata Field Types (page A-2)
- Displayed Field Lengths for Mapping (page A-4)
- ❖ Field Lengths and Double-Mapping (page A-5)

LENGTHS FOR URM METADATA FIELD TYPES



Note: If you are using a Microsoft SQL Server 2005 database, the URM Memo field type is a varchar(max). When the Adapter sends a collection of metadata to URM, the field data will be of varying lengths. If the row size does not exceed 8,000 bytes, SQL Server tries to store large value data types in the row along with the other columns. However, it the row size does exceed the 8,000 byte limit, SQL Server stores a 16-byte pointer in the row. The pointer maps to the pages that contain the data comprising the text value of the large-value data types.

When necessary, you can create URM custom metadata fields that can be mapped to any Enterprise Vault metadata field—see URM Sources Screen: Create New URM Source Screen - Define Custom Fields (page 3-55). When you create the custom metadata fields for URM, you can specify the length for each. If you do not specify a length, the default value for the field type is used. the following table lists the applicable default values.

Field Type	Length Range	Default Length
Text field	1 to 100 characters	100 characters
BigText field	101 to 200 characters	200 characters
Memo field (for MS Sql server 2005)	201 characters to 2Gb	1000 characters
Memo field (for Oracle)	201 to 4000 characters	1000 characters
Memo field (for Oracle Japanese)	201 to 2000 characters	1000 characters

LENGTHS FOR SYMANTEC METADATA FIELD TYPES

The following table lists the field lengths for the Symantec Enterprise Vault metadata fields. Where otherwise indicated, the maximum sizes of the fields is very large and understood to be essentially unlimited. You will need to be aware of the metadata field lengths when you are mapping the Enterprise Vault metadata fields to URM metadata fields. See URM Sources Screen: Create New URM Source Screen - Establish Field Mappings (page 3-52).

Description	Type	Max Size
Subject/Title	String	256 chars
Message Priority	String	
Message Importance	String	
Message Sensitivity	String	
Message Security	String	
Original Identifier for the item—SubmissionId for a sent message	String	
Original identifier for this component of the item	String	
Data type of the item—DOC, XLS, MSG	String	
Original location of the item—a sequence of folders	String	
The last or leaf folder of original location	String	
Original location folder names—ordered	String	
The item's Saveset identifier	String	72 chars
Shortcut location	String	
User who archived the item	String	

Retention category Id String 112 chars Retention category name String 32 chars Content String 120 chars Categories/Keywords String The item's original MAPI Message Class—IPM.Note String Reason for missing content String Attachments only: the author of the top-level item String Attachments only: the subject/title of the top-level item String Conversation tracking GUID String TO: Recipient String String TO: Recipient Other e-mail address String String 256 chars TO: Recipient Other e-mail address String String 256 chars TO: Recipient Other Envelope Recipient String 256 chars Other Envelope Recipient display/friendly name String String PP display/friendly name Author—union of audn, auca, ausm, auot, writ, from and ppgn String PP display/friendly name String PP of the message—EXCH, IM.IMLogic, Bloomberg, etc. String Type of He message—EXCH, IM.IMLogic, Bloomberg, etc. String Type of Journal Message, if applicable String Indicator that item was imported from DLM String Indicator that item was imported from DLM String Document title SharePoint defined custom properties Document title String String Document defined custom properties Document title String String Document version String String String SharePoint document editor String Domain name (Windows account name) of document author String Domain name (Windows account name) of document editor String SharePoint Site Id String String String SharePoint Site Id String String String String String SharePoint Site Id String	Description	Type	Max Size
Content Categories/Keywords String The item's original MAPI Message Class—IPM.Note Reason for missing content Attachments only: the author of the top-level item Attachments only: the subject/title of the top-level item String Conversation tracking GUID TO: Recipient T	Retention category Id	String	112 chars
Categories/Keywords The item's original MAPI Message Class—IPM.Note Reason for missing content Attachments only: the author of the top-level item Attachments only: the subject/title of the top-level item String Conversation tracking GUID TO: Recipient TO: Recipient String CC: Recipient String CC: Recipient String BCC: Recipient String Conter Envelope Recipient Other Envelope Recipient display/friendly name Author—union of audn, auea, ausm, auot, writ, from and ppgn PP display/friendly name Author—union of audn, auea, ausm, auot, writ, from and ppgn Prof the message—EXCH, IM.IMLogic, Bloomberg, etc. String String Enterprise Vault defined custom properties Type of Journal Message, if applicable String Enterprise Vault FSA defined custom properties Original Name of file at the point of archival Indicator that item was imported from DLM Enterprise Vault SharePoint defined custom properties Document title SharePoint documentld String SharePoint documentl Display name of document editor Domain name (Windows account name) of document author Domain name (Windows account name) of document editor String String SharePoint Site Id String String String String String String	Retention category name	String	32 chars
The item's original MAPI Message Class—IPM.Note Reason for missing content Attachments only: the author of the top-level item Attachments only: the subject/title of the top-level item Attachments only: the subject/title of the top-level item Conversation tracking GUID TO: Recipient TO: Recipient Other e-mail address CC: Recipient String CC: Recipient String CC: Recipient String CO: Recipient String CO: Recipient Other Envelope Recipient display/friendly name Author—union of audn, auea, ausm, auot, writ, from and ppgn Ph display/friendly name Enterprise Vault defined custom properties Type of the message—EXCH, IM.IMLogic, Bloomberg, etc. String Enterprise Vault FSA defined custom properties Original Name of file at the point of archival Indicator that item was imported from DLM Enterprise Vault SharePoint defined custom properties Document title SharePoint documentId Document version Check in comment Display name of document editor Domain name (Windows account name) of document author String Domain name (Windows account name) of document editor String SharePoint Site Id	Content	String	120 chars
Reason for missing content Attachments only: the author of the top-level item Attachments only: the subject/title of the top-level item Attachments only: the subject/title of the top-level item Conversation tracking GUID TO: Recipient TO: Recipient TO: Recipient Other e-mail address CC: Recipient String CC: Recipient String CC: Recipient String C56 chars BCC: Recipient String C56 chars Other Envelope Recipient Other Envelope Recipient Other Envelope Recipient display/friendly name Author—union of audn, auea, ausm, auot, writ, from and ppgn PP display/friendly name String PP display/friendly name Enterprise Vault defined custom properties Type of the message—EXCH, IM.IMLogic, Bloomberg, etc. String Type of Journal Message, if applicable String Enterprise Vault FSA defined custom properties Original Name of file at the point of archival Indicator that item was imported from DLM String Enterprise Vault SharePoint defined custom properties Document title SharePoint documentId Document version Check in comment Display name of document editor Domain name (Windows account name) of document author String Domain name (Windows account name) of document editor String Domain name (Windows account name) of document editor String SharePoint Site Id	Categories/Keywords	String	
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TO: Recipient TO: Recipient Other e-mail address CC: Recipient String College Recipient String College Recipient College Recipien	Attachments only: the subject/title of the top-level item	String	
TO: Recipient Other e-mail address CC: Recipient String CC: Recipient String String String String String 256 chars Other Envelope Recipient Other Envelope Recipient display/friendly name Author—union of audn, auea, ausm, auot, writ, from and ppgn PP display/friendly name String Enterprise Vault defined custom properties Type of the message—EXCH, IM.IMLogic, Bloomberg, etc. String Enterprise Vault FSA defined custom properties Original Name of file at the point of archival Indicator that item was imported from DLM String Enterprise Vault SharePoint defined custom properties Document title String SharePoint documentId Document version Check in comment Display name of document editor Domain name (Windows account name) of document editor String SharePoint String SharePoint String Domain name (Windows account name) of document editor String String String String String String String Domain name (Windows account name) of document editor String String String String	Conversation tracking GUID	String	
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Indicator that item was imported from DLM Enterprise Vault SharePoint defined custom properties Document title String SharePoint documentId String Document version Check in comment Display name of document editor Domain name (Windows account name) of document author String Domain name (Windows account name) of document editor String SharePoint Site Id String	Enterprise Vault FSA defined custom properties	II.	•
Enterprise Vault SharePoint defined custom properties Document title String SharePoint documentId String Document version String Check in comment String Display name of document editor String Domain name (Windows account name) of document author String Domain name (Windows account name) of document editor String SharePoint Site Id String	Original Name of file at the point of archival	String	
Document title String SharePoint documentId String Document version String Check in comment String Display name of document editor String Domain name (Windows account name) of document author String Domain name (Windows account name) of document editor String SharePoint Site Id String	Indicator that item was imported from DLM	String	
SharePoint documentId Document version Check in comment Display name of document editor Domain name (Windows account name) of document author Domain name (Windows account name) of document editor String String String String String String String String String	Enterprise Vault SharePoint defined custom properties		1
Document version Check in comment String Display name of document editor Domain name (Windows account name) of document author String Domain name (Windows account name) of document editor String SharePoint Site Id String	Document title	String	
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Domain name (Windows account name) of document author Domain name (Windows account name) of document editor String SharePoint Site Id String	Check in comment	String	
Domain name (Windows account name) of document editor String SharePoint Site Id String	Display name of document editor	String	
SharePoint Site Id String	Domain name (Windows account name) of document author	String	
	Domain name (Windows account name) of document editor	String	
SharePoint Site name String	SharePoint Site Id	String	
	SharePoint Site name	String	

Description	Type	Max Size
SharePoint Site URL	String	
Customer configurable properties—any SharePoint property	String	
CA Journal Connector defined custom properties		
The set of CA Department Ids that the item's author is a member of	String	
The set of CA Department Ids that the item's recipients are members of	String	
The union of KVSCA.DeptAuthor and KVSCA.DeptRecips	String	

DISPLAYED FIELD LENGTHS FOR MAPPING

When you are mapping the Enterprise Vault metadata fields to URM metadata fields, the respective drop-down lists include the maximum field lengths for each field in the list. The graphics below illustrates one method used to display field lengths on the URM Sources Screen (page 3-44). The metadata field drop-down lists in both panes include the field lengths for Enterprise Vault and URM metadata fields.



Note: The same metadata fields menu for the Enterprise Vault is displayed in both the Repository Field and Name drop-down lists.

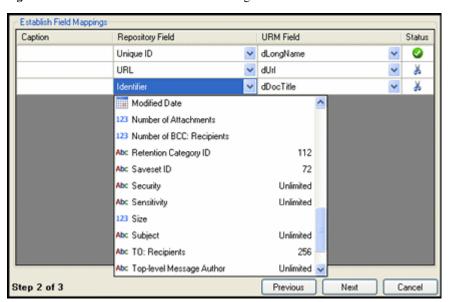


Figure A-1 URM Metadata Field Lists and Lengths

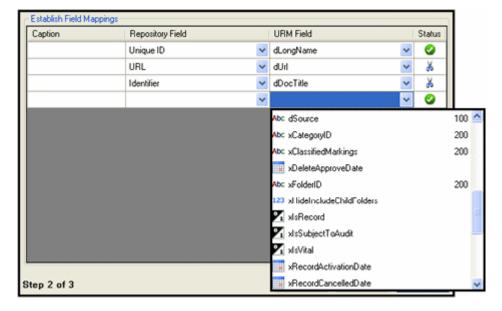


Figure A-1 URM Metadata Field Lists and Lengths



Note: In addition to including the field lengths in the drop-down lists, the field lengths are displayed in pop-ups when you hover the pointer over a selected menu option. See the graphic in Field Lengths and Double-Mapping (page A-5).

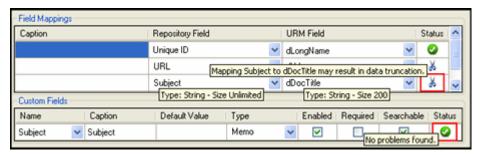
FIELD LENGTHS AND DOUBLE-MAPPING

As described in the section Displayed Field Lengths for Mapping (page A-4), each Enterprise Vault and URM metadata field included in the drop-down lists on the URM Sources Screen (page 3-44) has an associated size. You can view the field length sizes in the drop-down lists and also by hovering over a selected metadata field option (shown below). When you create a field mapping, the Status column indicates whether or not the data may be truncated.

When the Enterprise Vault field has a larger length than the URM system field that it is mapped to, the scissors icon in the Status column indicates that the data could potentially be truncated. However, the double-mapping feature enables you to map the same Enterprise Vault field to a larger-size URM custom metadata field. For more detailed information about double-mapping, see Double-Mapped Metadata Fields (page 3-9).

The graphic below illustrates that the repository's Subject field is significantly larger than URM's dDocTitle field. In this case, the Adapter might need to truncate the value which would result in lost data. To resolve this issue, you can double-map the Subject field to a larger URM custom metadata field which would ensure data integrity. See the examples below.

Figure A-2 Example of Double-Mapped Repository Metadata Field





Important: If you use the double-mapping feature, the field value that the Adapter sends in the declaration data is always truncated to the length of the URM custom metadata field. Therefore, to avoid losing data, you must make sure that the size of the URM custom metadata field is large enough to hold the original data in the Enterprise Vault metadata field.

Good Double-Mapping Example:

You have mapped the following metadata fields:

REP field A, size 500 (Enterprise Vault metadata field)

URM field B, size 200 (URM system metadata field)

In this case, the Enterprise Vault field is larger than the URM field. When the Adapter sends the declaration data to URM, the Adapter truncates the data in REP_field_A to 200 to fit into URM_field_B. However, you can double-map REP_field_A to a larger URM custom field.

For example, you could map REP field A to:

URM_custom_C, size Memo (2000, 4000, or unlimited—see Lengths for URM Metadata Field Types (page A-1)

Then, the Adapter sends the complete value for REP_field_A in the declaration data. When URM sees the double-mapping, it automatically truncates the data from REP_field_A to fit into URM_field_B (200 characters) and enters the entire value from REP field A (500 characters) into URM custom C.

Poor Double-Mapping Example:

You have mapped the following metadata fields:

REP field A, size 500 (Enterprise Vault metadata field)

URM_field_B, size 200 (URM system metadata field)

URM_custom_D, size Text (100 characters)

Because the Adapter always sends data at the custom field's length, the data in REP_field_A is truncated to 100 characters and sent to URM. As a result, both URM fields (URM_field_B and URM_custom_D) receive the 100-character truncated version of the original field value.

Metadata Field Lengths



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* zlib.h -- interface of the 'zlib' general purpose compression library version 1.2.3, July 18th, 2005

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Index

n d e x

A	equation editor, 3-68
	archive metadata fields
Actual Name field	for Enterprise Vault, 3-6
on Enterprise Vault screen, 3-43	audience, 1-3
Adapter Administration manager	audit trails
installation procedure, 2-3	administration overview, 4-7
Adapter Status tab	description, 3-17
overview and feature descriptions, 4-23	log files - overview, 4-5
Add - Delete pop-up menu	retention function overview, 1-6
on Define Custom Fields screen, 3-56	viewing log files, 4-12
on URM Sources screen, 3-48	auditing
Add - Remove pop-up menu	retention function overview, 1-6
equation editor, 3-65	authentication
Add Defaults check box	changing credentials data, 3-26
on Create New URM Source screen, 3-51	registration process - sending credentials, 3-26
Add pop-up menu	,
define custom fields on URM Sources screen, 3-49	
equation editor, 3-65	В
field mappings on URM Sources screen, 3-48	_
add term	batch declarations
inserting into search query, 3-22	retention function overview, 1-5
Add Term - Remove pop-up menu	Batch Size field
equation editor, 3-66	on Advanced screen, 3-76
Add Term pop-up menu	Browse button
equation editor, 3-66	on Advanced screen, 3-83
administration	
	_
previewing search query results, 4-11 sorting error results - declarations and	C
dispositions, 4-10	calendar
sorting status results - adapter and service, 4-12	dual date field, 3-70
stopping and restarting Symantec URM Service, 4-8	for historical searches - on Advanced screen, 3-82
viewing adapter status data, 4-11	for Value variable, 3-70
viewing declaration errors and messages, 4-9	single date field, 3-70
viewing disposition errors and messages, 4-10	Cancel button
viewing service status data, 4-12	on Create new search screen, 3-61
Administration manager	on Create New URM Source screen, 3-52
overview - menus, navigation tree, links, 3-38	on Define Custom Fields screen, 3-58
Advanced screen	on Establish Field Mappings screen, 3-54
overview and feature descriptions, 3-76	Caption field
advanced settings	on Create New URM Source screen, 3-50
modifying, 3-36	on Define Custom Fields screen, 3-57
AND - OR boolean pop-up menu	on Establish Field Mappings screen, 3-53

Clear button	searchable in URM, 3-8
on Declaration Errors and Disposition Errors	Custom Metadata pop-up menu
screens, 4-14	equation editor, 3-67
compound expressions	Cutoff Date drop-down calendar
inserting into search query, 3-23	Historical Content Declarations - on Advanced
concurrent mode	screen, 3-82
displayed state on Adapter Status and Service Status	·
tabs, 4-22	
overview, 4-3	D
concurrent mode state	_
on Adapter Status and Service Status tabs, 4-22	Data Directory field
configuration	on Advanced screen, 3-83
activating search query, 3-36	database
adding new URM adapter source, 3-28	procedure to create for the adapter, 2-2
changing credentials data, 3-26	databases
changing database connection data, 3-27	changing connection data, 3-27
	software requirements, 1-9
changing designated vault directory host, 3-27	date - number pop-up menu
creating custom metadata fields for Enterprise	equation editor, 3-68
Vault, 3-28	date range drop-down calendars
defining URM custom metadata fields, 3-31	on Search Preview screen, 4-18
deleting search query, 3-35	Declaration Errors screen
duplicating and editing search query, 3-34	overview and feature descriptions, 4-14
editing an existing URM adapter source, 3-32	declarations
editing search query, 3-34	Declaration Errors screen, 4-14
mapping metadata fields, 3-30	error messages - using for audit trails, 3-17
mapping search queries to URM adapter sources	regulatory compliance description, 3-16
and retention categories, 3-35	
modifying advanced settings, 3-36	retention function overview, 1-5
registering the adapter, 3-26	sorting overview, 4-17
retention function overview, 1-5	sorting results, 4-10
sorting error results - Enterprise Vault and URM	viewing errors and messages, 4-9
Sources screens, 3-27	Default Value field
viewing data of URM adapter source, 3-32	on Define Custom Fields screen, 3-57
configuration files	Define Custom Fields screen
overview, 3-18	overview and feature descriptions, 3-55
Connection field	defined searched drop-down list
on Connection screen, 3-41	on Search Creation screen, 3-60
Connection screen	Delete button
overview and feature descriptions, 3-40	on Search Creation screen, 3-60
content profile	Delete pop-up menu
defining in URM, 2-7	define custom fields on URM Sources screen, 3-49
Content Server	field mappings on URM Sources screen, 3-48
compatibility with the adapter, 1-9	Detail
Create new search screen	message severity code - description, 4-7
overview and feature descriptions, 3-61	Directory Host field
Create New URM Source screen	on Enterprise Vault screen, 3-42
overview and feature descriptions, 3-49	Display Name field
	on Enterprise Vault screen, 3-43
Custom Fields	disposition Errors screen
on URM Sources screen, 3-47	overview and feature descriptions, 4-15
custom metadata fields	Disposition Statistics pane
displayed in URM Search "sourcename" Items	on Adapter Status tab, 4-23
page, 3-8	dispositions
for Enterprise Vault, 3-6	Disposition Errors screen, 4-15
for URM. 3-7	2.000011011 211010 0010011, 7 10

error messages - using for audit trails, 3-17	on Declaration Errors screen, 4-15
regulatory compliance description, 3-16	on Disposition Errors screen, 4-16
retention function overview, 1-6	Establish Field Mappings screen
sorting overview, 4-17	overview and feature descriptions, 3-52
sorting results, 4-10	expression
viewing errors and messages, 4-10	Add - Remove pop-up menu, 3-65
double-mapping	Add pop-up menu, 3-65
how to, 3-31	Add Term - Remove pop-up menu, 3-66
lengths of fields, A-5	Add Term pop-up menu, 3-66
metadata fields, 3-9	Field variable, 3-63
down arrow	Field variable pop-up menus, 3-67
on Search Mapping screen, 3-75	inserting into search query, 3-21
	Operator variable, 3-64
<u>_</u>	Operator variable pop-up menus, 3-67
E	Value variable, 3-64
_	Value variable drop-down calendar, 3-70
Enabled check box	Value variable text field, 3-69
Historical Content Declarations - on Advanced	expression grouping
screen, 3-80	
New Content Declaration - on Advanced	inserting into search query, 3-21
screen, 3-77	
on Define Custom Fields screen, 3-57	F
on Search Mapping screen, 3-73	Г
	field lengths
Enterprise Vault screen	field lengths
overview and feature descriptions, 3-42	displayed on drop-down menus, A-4
sorting overview, 3-41	for double-mapping, A-5
sorting results, 3-27	for repository metadata fields, A-2
equation editor	for URM metadata fields, A-1
Add - Remove pop-up menu, 3-65	Field Mappings
Add pop-up menu, 3-65	on URM Sources screen, 3-46
Add Term - Remove pop-up menu, 3-66	Field variable
Add Term pop-up menu, 3-66	Custom Metadata pop-up menu, 3-67
AND - OR boolean pop-up menu, 3-68	expression component - equation editor, 3-63
Custom Metadata pop-up menu, 3-67	Mail Metadata pop-up menu, 3-67
date - number pop-up menu, 3-68	pop-up menus - equation editor, 3-67
dual date field, 3-70	File menu
dual-entry text field, 3-69	for Adapter Administration manager, 3-38
expression pop-up menus, 3-64	Filter By drop-down list
Field variable pop-up menus, 3-67	on Search Mapping screen, 3-72
Mail Metadata pop-up menu, 3-67	freezes
Operator variable pop-up menus, 3-67	regulatory compliance description, 3-16
Search Creation screen, 3-62	retention function overview, 1-6
single date field, 3-70	Freezes pane
single-entry text field, 3-69	on Adapter Status tab, 4-24
text pop-up menu, 3-68	functions list
Value variable drop-down calendar, 3-70	on Service Status tab, 4-27
Value variable text field, 3-69	o oooo o.aao .a,
Error	
message severity code - description, 4-7	Н
•	11
Error Details screen	Help menu
overview and feature descriptions, 4-16	for Adapter Administration manager, 3-39
Error Management link	Historical check box
overview and feature descriptions, 4-13	
error records list	on Search Mapping screen, 3-73

Historical Complete check box Historical Content Declaration - on Advanced screen, 3-79 historical content searches basic timeline, 3-13 initial search, 3-12 overview, 3-11 previewing search query results, 4-11 processing overview, 3-13 search direction for the Adapter, 3-80 search intervals, 3-15 start date, 3-14	administration, 4-5 audit trails overview, 4-7 characteristics, 4-6 Detail severity code, 4-7 error and message codes, 4-6 Error severity code, 4-7 Information severity code, 4-6 overview, 4-5 retention function overview, 1-6 using for audit trails, 3-17 viewing daily event records, 4-12 Warning severity code, 4-7
temporary suspension, 3-15 holds	Log Viewer screen overview and feature descriptions, 4-28
regulatory compliance description, 3-16 retention function overview, 1-6 HTML Encoding drop-down list on Advanced screen, 3-83	logging retention function overview, 1-6
•	
	Mail Metadata pop-up menu equation editor, 3-67
ID field	manage communications
on Enterprise Vault screen, 3-42	retention function overview, 1-5
Information	mapping
message severity code - description, 4-6	metadata fields - adding URM adapter source, 3-30
installation	metadata fields - overview, 3-8
configure the adapter, 2-6	search queries - overview, 3-24
create database - procedure, 2-2	search queries - to URM adapter sources and
create ODBC Data Source, 2-2	retention categories, 3-35
define content profile in URM, 2-7	Message dialog box
procedure for, 2-1, 2-3	overview and feature descriptions, 4-29
starting services, 2-6	Message pane
installation architecture	on Error Details screen, 4-17
primary components, 1-2	message pane
installation requirements, 1-3	on Message dialog box, 4-29
Interval field	metadata fields
New Content Declaration - on Advanced screen, 3-79	archive - for Enterprise Vault, 3-6 custom - creating for Enterprise Vault, 3-28 custom - defining for URM, 3-31 custom - for Enterprise Vault, 3-6
L	custom - for URM, 3-7
Last Draggaged field	double-mapped, 3-9
Last Processed field Historical Content Declaration - on Advanced	double-mapping, 3-31
screen, 3-82	lengths displayed on drop-down menus, A-4
New Content Declaration - on Advanced	lengths for double-mapping, A-5
screen, 3-79	lengths for repository fields, A-2
log entry list	lengths for URM fields, A-1
on Log Viewer screen, 4-29	mapping for adding URM adapter source, 3-30
log file tree	mapping overview, 3-8
on Log Viewer screen, 4-28	single-mapped, 3-9
log files	system - for URM, 3-7

IN	P
Name drop-down list	Paged Memory Size field
on Define Custom Fields screen, 3-56	on Service Status tab, 4-26
Name field	Password field
on Create New URM Source screen, 3-50	Database Configuration - on Connection
navigation tree	screen, 3-41
for Adapter Administration manager, 3-39	URM Configuration - on Connection screen, 3-41
New button	pop-up menus
on Search Creation screen, 3-60	Add - Delete on Define Custom Fields screen, 3-56
on URM Sources screen, 3-45	Add - Delete on URM Sources screen, 3-48
new content searches	Add - Remove menu, 3-65
basic timeline, 3-13	Add menu, 3-65
initial search, 3-12	Add menu - field mappings, 3-48
overview, 3-11	Add menu - URM custom fields, 3-49
previewing search query results, 4-11	Add Term - Remove menu, 3-66
processing overview, 3-13	Add Term menu, 3-66
search direction for the adapter, 3-77	AND - OR boolean menu, 3-68
search intervals, 3-14	Custom Metadata menu, 3-67
start date, 3-14	date - number menu, 3-68
temporary suspension, 3-15	Delete menu - field mappings, 3-48
Next button	Delete menu - URM custom fields, 3-49
on Create New URM Source screen, 3-51	equation editor - on Search Creation screen, 3-63
on Define Custom Fields screen, 3-58	for expressions - equation editor, 3-64
on Establish Field Mappings screen, 3-54	for Field variable - equation editor, 3-67
on Establish held Mappings screen, 0-04	for Operator variable - equation editor, 3-67
	Mail Metadata menu, 3-67
0	text menu, 3-68
•	Previous button
ODBC button	on Define Custom Fields screen, 3-58
on Connection screen, 3-41	on Establish Field Mappings screen, 3-54
ODBC Data Source	Process ID field
creating for installation procedure, 2-2	on Service Status tab, 4-25
OK button	process list
on Create new search screen, 3-61	on Service Status tab, 4-26
on Error Details screen, 4-17	Process Name field
on Message dialog box, 4-29	on Service Status tab, 4-25
operating systems	product overview, 1-2
software requirements, 1-9	product overview, 1-2
operation status boxes	
A	
on Adapter Status tab, 4-24	0
on Adapter Status tab, 4-24 Operator variable	Q
Operator variable	Q query URM
Operator variable AND - OR boolean pop-up menu, 3-68	Q query URM retention function overview, 1-5
Operator variable AND - OR boolean pop-up menu, 3-68 date - number pop-up menu, 3-68	Q query URM retention function overview, 1-5
Operator variable AND - OR boolean pop-up menu, 3-68 date - number pop-up menu, 3-68 expression component - equation editor, 3-64	retention function overview, 1-5
Operator variable AND - OR boolean pop-up menu, 3-68 date - number pop-up menu, 3-68 expression component - equation editor, 3-64 text pop-up menu, 3-68	
Operator variable AND - OR boolean pop-up menu, 3-68 date - number pop-up menu, 3-68 expression component - equation editor, 3-64 text pop-up menu, 3-68 Operatorvariable	retention function overview, 1-5
Operator variable AND - OR boolean pop-up menu, 3-68 date - number pop-up menu, 3-68 expression component - equation editor, 3-64 text pop-up menu, 3-68	retention function overview, 1-5 R records list
Operator variable AND - OR boolean pop-up menu, 3-68 date - number pop-up menu, 3-68 expression component - equation editor, 3-64 text pop-up menu, 3-68 Operatorvariable pop-up menus - equation editor, 3-67 overview	retention function overview, 1-5 R records list on Search Preview screen, 4-19, 4-20
Operator variable AND - OR boolean pop-up menu, 3-68 date - number pop-up menu, 3-68 expression component - equation editor, 3-64 text pop-up menu, 3-68 Operatorvariable pop-up menus - equation editor, 3-67	retention function overview, 1-5 R records list on Search Preview screen, 4-19, 4-20 Refresh button
Operator variable AND - OR boolean pop-up menu, 3-68 date - number pop-up menu, 3-68 expression component - equation editor, 3-64 text pop-up menu, 3-68 Operatorvariable pop-up menus - equation editor, 3-67 overview about the adapter, 1-2 retention functions, 1-4	retention function overview, 1-5 R records list on Search Preview screen, 4-19, 4-20 Refresh button on Adapter Status and Service Status tabs, 4-22
Operator variable AND - OR boolean pop-up menu, 3-68 date - number pop-up menu, 3-68 expression component - equation editor, 3-64 text pop-up menu, 3-68 Operatorvariable pop-up menus - equation editor, 3-67 overview about the adapter, 1-2	retention function overview, 1-5 R records list on Search Preview screen, 4-19, 4-20 Refresh button

ragistration	Search Creation screen
registration	
process to register the adapter, 3-26	overview and feature descriptions, 3-59
retention function overview, 1-5	Search drop-down list
regulatory compliance	on Search Preview screen, 4-18
overview of tasks, 3-16	search intervals
Remoting Port field	characteristics for historical searches, 3-15
on Advanced screen, 3-83	characteristics for new content searches, 3-14
repository	Search Mapping screen
historical search intervals, 3-15	overview and feature descriptions, 3-71
initial search, 3-12	Search Name field
new content search intervals, 3-14	on Create new search screen, 3-61
processing search queries, 3-13	on Search Mapping screen, 3-72
searching - retention function overview, 1-6	Search Preview screen
temporary search suspensions, 3-15	overview and feature descriptions, 4-17
Repository drop-down list	search queries
on Create new search screen, 3-61	activating, 3-36
on Create New URM Source screen, 3-50	basic timeline, 3-13
Repository Field drop-down list	constructing - add term option, 3-22
on Establish Field Mappings screen, 3-53	constructing - compound expressions, 3-23
Repository Fields table	constructing - equation editor, 3-62
on Create New URM Source screen, 3-51	constructing - expression grouping option, 3-21
repository monitoring	constructing - expression option, 3-21
retention function overview, 1-5	constructing - expression pop-up menus, 3-64
Repository name	constructing - Field variable pop-up menus, 3-67
on Search Creation screen, 3-62	constructing - new configuration
repository storage tree	constructing new search query, 3-33
equation editor - on Search Creation screen, 3-63	constructing - Operator variable pop-up menus, 3-67
Required check box	constructing - Value variable drop-down
on Define Custom Fields screen, 3-58	calendar, 3-70
requirements	constructing - Value variable text field, 3-69
for installation, 1-3	construction overview, 3-20
for software, 1-8	deleting, 3-35
retention categories	description, 3-19
mapping search queries, 3-35	duplicating and editing, 3-34
Retention Category drop-down list	editing, 3-34
on Search Mapping screen, 3-72 retention management	Field variable in expression, 3-63
	initial search, 3-12
overview of retention functions, 1-4	mapping overview, 3-24
Retrievable check box	mapping to URM adapter source and retention
on Enterprise Vault screen, 3-44	category, 3-35
Retrieval Time field	new and historical content searches - overview, 3-11
on Search Preview screen, 4-19, 4-20	Operator variable in expression, 3-64
returned results counts	overview, 3-11
on Search Preview screen, 4-19, 4-20	previewing results, 4-11
	processing overview, 3-13
c	search intervals, 3-14
S	start date, 3-14
Save As button	temporary suspension, 3-15
on Search Creation screen, 3-60	Value variable in expression, 3-64
Search "sourcename" Items	Search Statistics pane
	on Adapter Status tab, 4-23
displays custom metadata fields for URM, 3-8	search suspensions
Search button	temporary, 3-15
on Search Preview screen, 4-19, 4-20	Search Time field

on Search Preview screen, 4-19, 4-20	equation editor, 3-68
Searchable check box	Thaws pane
on Define Custom Fields screen, 3-58	on Adapter Status tab, 4-24
on Enterprise Vault screen, 3-43	timeline
searching	function in repository searches, 3-13
repositories - overview, 3-11	Total CPU Time field
Service menu	on Service Status tab, 4-26
for Adapter Administration manager, 3-38	Type drop-down list
Service Status tab	on Define Custom Fields screen, 3-57
overview and feature descriptions, 4-25	on Enterprise Vault screen, 3-43
services	on Enterprise vadit sercen, o 40
starting after installation, 2-6	
single-mapping	U
metadata fields, 3-9	O
software requirements, 1-8	uninstall
	procedure for, 2-17
operating systems, 1-9	up arrow
supported databases, 1-9	on Search Mapping screen, 3-75
with Content Server, 1-9	Uptime field
sorting	on Service Status tab, 4-26
filtering results - adapter and service status	URI - URL field
lists, 4-12	on Connection screen, 3-41
filtering results - configuration screens, 3-27	URM
filtering results - declaration and disposition error	overview, 1-4
lists, 4-10	URM adapter sources
overview - adapter and service errors, 4-27	adding, 3-28
overview - configuration screens, 3-41	defining URM custom metadata fields, 3-31
overview - declaration and disposition errors, 4-17	definition, 3-4
sources	
types of, 3-4	editing, 3-32
start date	mapping metadata fields, 3-30
setting for repository searches, 3-14	overview, 3-5
Status field	viewing configuration data, 3-32
on Define Custom Fields screen, 3-58	URM adapter sources drop-down list
on Establish Field Mappings screen, 3-54	on URM Sources screen, 3-45
Status link	URM Field drop-down list
overview and feature descriptions, 4-21	on Establish Field Mappings screen, 3-54
stopping and restarting the adapter - overview, 4-4	URM Source
system logs	definition, 3-4
using for audit trails, 3-17	URM Source - Details
system metadata fields	on URM Sources screen, 3-45, 3-46
for URM, 3-7	URM Source drop-down list
	on Search Mapping screen, 3-72
_	URM Sources screen
T	overview and feature descriptions, 3-44
	sorting overview, 3-41
Table field	sorting results, 3-27
on Create New URM Source screen, 3-50	User CPU Time field
text field	on Service Status tab, 4-26
dual-entry value, 3-69	User ID field
for Value variable - equation editor, 3-69	Database Configuration - on Connection
single-entry value, 3-69	screen, 3-41
text pop-up menu	URM Configuration - on Connection screen, 3-41

V

on Service Status tab, 4-26

Value variable
drop-down calendar - equation editor, 3-70
dual date field, 3-70
dual-entry text field, 3-69
expression component - equation editor, 3-64
single date field, 3-70
single-entry text field, 3-69
text field - equation editor, 3-69
vault directory host
changing designation, 3-27
Virtual Memory Size field

W

Warning
message severity code - description, 4-7
Window time period
Historical Content Declaration - on Advanced
screen, 3-82
New Content Declaration - on Advanced
screen, 3-79
Working Set Size field
on Service Status tab, 4-26