Rhythmyx

Getting Started with Rhythmyx

Version 6.7

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CHAPTER 1

Introducing Rhythmyx FastForward for Web Content Management

The Rhythmyx Content Management System manages content through the automation of content creation, maintenance, and delivery, enhanced with features such as content reuse, delivery to multiple sites, intelligent relationships between content, and simple content assembly for business users.

One of Rhythmyx's key features is content reuse, which it achieves by separating content and formatting, enabling users to create a variety of outputs using the same data. Business users can assemble the same Content Items multiple times using different formats and include the Content Items in the output formats of other content. This enables Rhythmyx output pages to contain many Content Items assembled together.

Another key feature of Rhythmyx is its ability to publish content to multiple sites. Rhythmyx allows any number of applications to be used to present published content to consumers since the content delivery mechanism (a portal, Web server, or other application) is not connected or "coupled" to Rhythmyx. This "decoupled delivery" not only offers companies flexibility in choosing delivery applications, but also simplifies the process of delivering content to multiple media.

This document will help implementers get started with Rhythmyx by installing it with its "FastForward" sample components and Content Items, starting the Rhythmyx Server, and publishing sample content. For more details about content creation, reuse, and delivery, and conceptual information about content assembly and intelligent relationships, see the *Rhythmyx Concepts Guide*.

About FastForward

Rhythmyx FastForward is a reference implementation available with Rhythmyx. FastForward includes a set of pre-built components and applications that allow a company to quickly bring their Web site under management. These pre-built components include definitions for the types of content and outputs most commonly implemented by customers and elements for setting up typical publishing and authentication scenarios. This document includes instructions for installing and reviewing these components.

Implementing FastForward

Install, configure, and implement FastForward in a development environment and then test your features in a test environment. After development and testing is complete, migrate your Rhythmyx components to the production environment where your end users perform their work. This process ensures that end users only have access to completed, tested components and features.

Before reading this document, read the *Rhythmyx Concepts Guide* for a basic understanding of the concepts and operation of Rhythmyx. Then use this to guide you through the process of installing Rhythmyx with FastForward and testing that the installation was successful and that it is publishing content as expected. This document also includes a "guided tour" of Rhythmyx functionality.

After reading this document, use the following documents to guide you through the process of designing and implementing your Rhythmyx Content Management System.

- *Modeling and Design of a Rhythmyx Content Management System*

  This document outlines the process of modeling your content and designing a CMS implementation to meet your needs.

- *Rhythmyx Implementation Guide*

  This document explains the common tasks of implementing a Rhythmyx CMS by illustrating the implementation of selected elements of FastForward.

- *Setting up the Rhythmyx Production Environment*

  This document explains how to set up the production environment and deploy your implementation from your development environment to that production environment.

CHAPTER 2

Installing Rhythmyx in a Development Environment

In the recommended Rhythmyx environment, implementers create new Rhythmyx elements and features on a development server, perform user testing on a testing server, and install tested, new functionality to a production server. In technical terms, this is called a multi-tiered environment, and each Server level represents a tier.

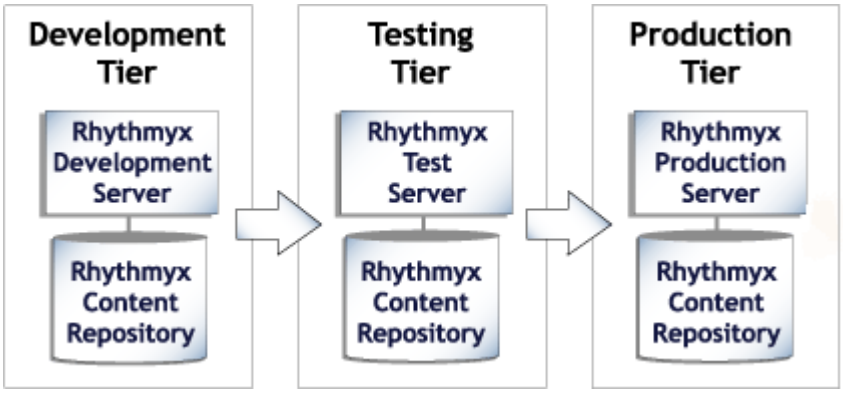


Figure 1: A multi-tiered environment includes development, testing and production tiers.

It is important to implement FastForward on a separate development tier and integrate and test completed development work on a testing tier. On the development tier, configure Site structures and develop Rhythmyx applications and elements. On the testing tier, integrate all development work and determine if it functions as expected. Since features in development and testing states tend to be incomplete and unstable, they should never be accessible on the production tier, where users are creating and publishing actual content. Once testing is complete, move new components to the production tier.

A Web Server must be installed on each tier to test or perform publishing. Implementers should successfully publish the sample content on the development tier before configuration is deployed to an integrated testing tier and then a production tier.

Preparing the Development Environment for Rhythmyx Installation

The following guidelines are suggested for installing Rhythmyx with FastForward. The actual resources required depend on many factors such as the number of contributors, how frequently content is published, and how frequently it is updated.

Server Side

The Rhythmyx Server must be installed on one of the following supported Operating Systems. The size requirements for both the development and production tiers are noted:

- UNIX Certified for Solaris 9 or 10

Development	Production
Processor - UltraSPARC IV (dual core) - 2 GHz	UltraSPARC T1 - 1 Ghz
RAM - 2 GB	RAM - 4 GB
Disk Space - 1.2 GB + 1.2 GB for installation and application data	Disk Space - 1.2 GB + 1.2 GB for installation (and, depending on the amount of application data, 2 - 20 GB more on the server and 2 - 20 GB more on the database machine)

- Windows 2003 (Server and Advanced Server), Windows XP, Windows Vista, Windows Server 2008

Development	Production
Processor - 2 Ghz (dual core)	Processor - 3 Ghz (dual core)
RAM - 1 GB + 1 GB for the database	RAM - 3-4 GB (assuming the database is on a different system)
Disk Space - 1.2 GB + 1.2 GB for installation and application data	Disk Space - 1.2 GB + 1.2 GB for installation (and, depending on the amount of application data, 2 - 20 GB more on the server and 2 - 20 GB more on the database machine)

- Linux (Certified on Red Hat Linux AS v4.0 and Red Hat Linux v5.0; Linux OS certified on Intel-based hardware.)

Development	Production
Processor - 2 Ghz (dual core)	Processor - 3 Ghz (dual core)
RAM - 1 GB + 1GB for the database	RAM - 3-4 GB (assuming the database is on a different system)

Development	Production
Disk Space - 1.2 GB + 1.2 GB for installation and application data	Disk Space - 1.2 GB + 1.2 GB for installation (and, depending on the amount of application data, 2 - 20 GB more on the server and 2 - 20 GB more on the database machine)

Client Side

One of the following browsers must be installed to support content contribution, Workflow, and Publishing:

- Internet Explorer V6.0+
- Firefox 2.0 and 3.0
- Safari 3.12 (Macintosh only)

In order to use the Rhythmyx Connector for Word, your browser must be Internet Explorer and your system must have one of the following versions of Microsoft Office Client installed:

- Word 2002/XP or higher
- Functionality limited in Word 97

Our applet requires Java JRE 1.5.0_07 on all operating systems except Windows Server 2008, which requires Java JRE 1.6.0_7.

In order for implementers to use the Rhythmyx Workbench, one of the following supported environments must be installed:

- Windows XP Professional
- Windows 2003 Server Platform
- Windows Vista
- Windows Server 2008

The following hardware is required to use Development Tools including the Workbench:

- Processor - P4 2.0 GHz or higher recommended
- RAM - MIN 1 GB recommended
- Disk Space - MIN 400 MB to run installed product (800 MB during install)

Rhythmyx supports the following versions and working drafts of standard Web technologies:

- XML V1.0
- XSLT V1.0
- HTML V4.0+
- XHTML V1.0
- Velocity V1.5

Rhythmyx Repository

Rhythmyx stores its data in an external relational database. Your system must include one of the supported Databases:

Oracle 9.2i

Oracle 10g

Oracle 11g

MS SQL Server 2000

MS SQL Server 2005

MS SQL Server 2008

DB2 UDB 8.2

DB2 UDB 9.1

Installing Rhythmyx

Rhythmyx provides Installers for Windows and Unix. The following section demonstrates the sequence for installing Rhythmyx with FastForward for Windows using an MS SQL database; however, you may install with any of the supported databases. You must install your database prior to completing the installation steps in this section.

Use the defaults specified in the installation sequence. To set up your system to use the defaults:

- In your repository, define a new schema or database named RXMASTER. During installation, you will specify RXMASTER as Rhythmyx's backend database.
- If you are currently using port 9992 free it. Port 9992 is the default Rhythmyx Server port.

You must enter your license number and installation code to install Rhythmyx. They are located on the back of your CD jacket.

Installing Rhythmyx on Windows/SQL Server

To install Rhythmyx with FastForward for Windows:

1. Insert your installation DVD. In the Startup folder, double-click on setup.exe, the setup program for Windows.

NOTE: During installation, the installation wizard may return an error indicating that inadequate disk space is available for the installation. If this occurs, open a DOS prompt, set a temporary directory, then run the installation executable from the DOS prompt. To set a temporary directory, use the command `set IATEMPDIR=C:\tmp`, where C:\temp specifies the temporary directory you want to use. This temporary directory assignment is local to the DOS prompt; it does not override the temporary directory specified in your system environment variables.

After a few seconds, the Installer displays an introduction screen:

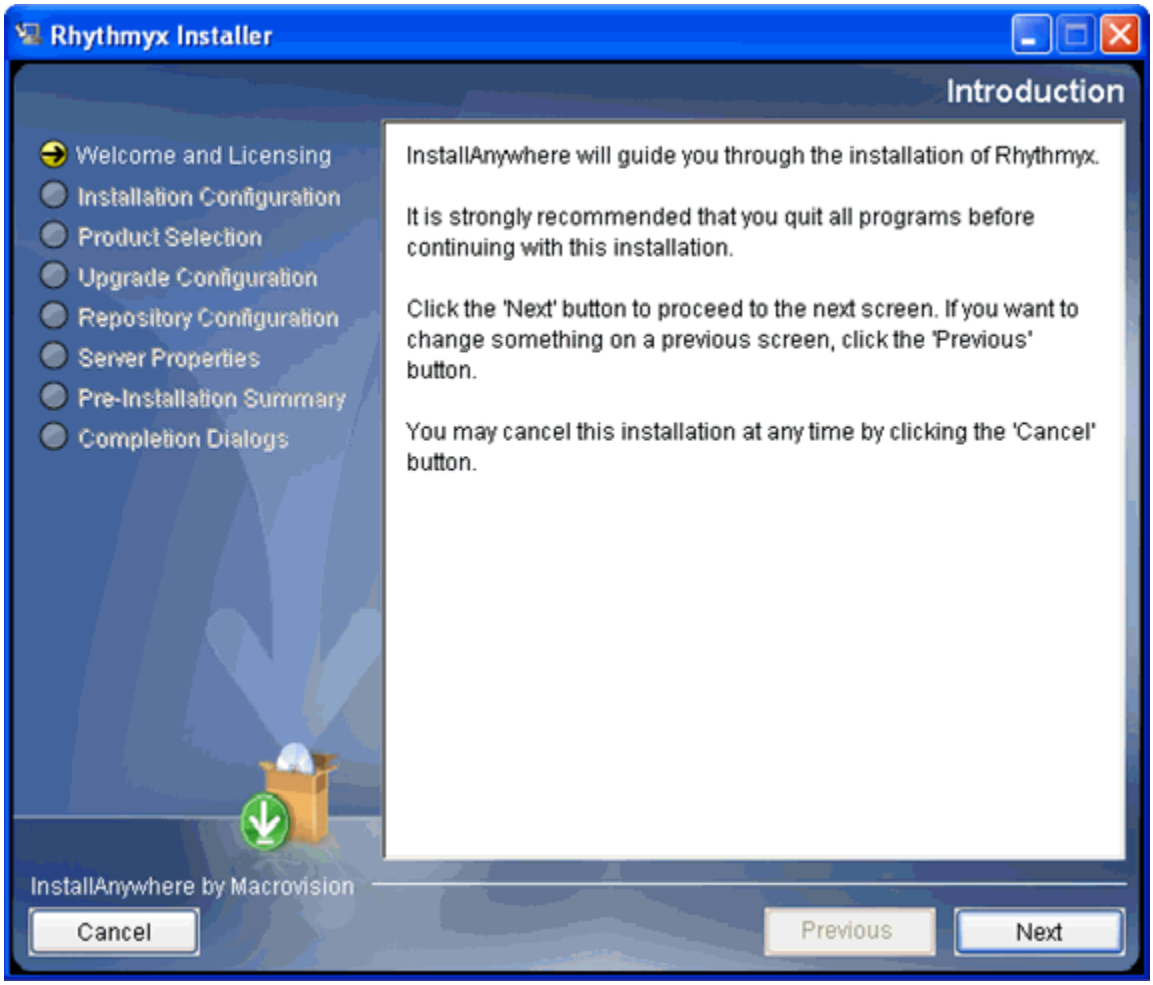


Figure 2: Installation window

2 Click [**Next**].

The installation wizard displays the license agreement dialog.

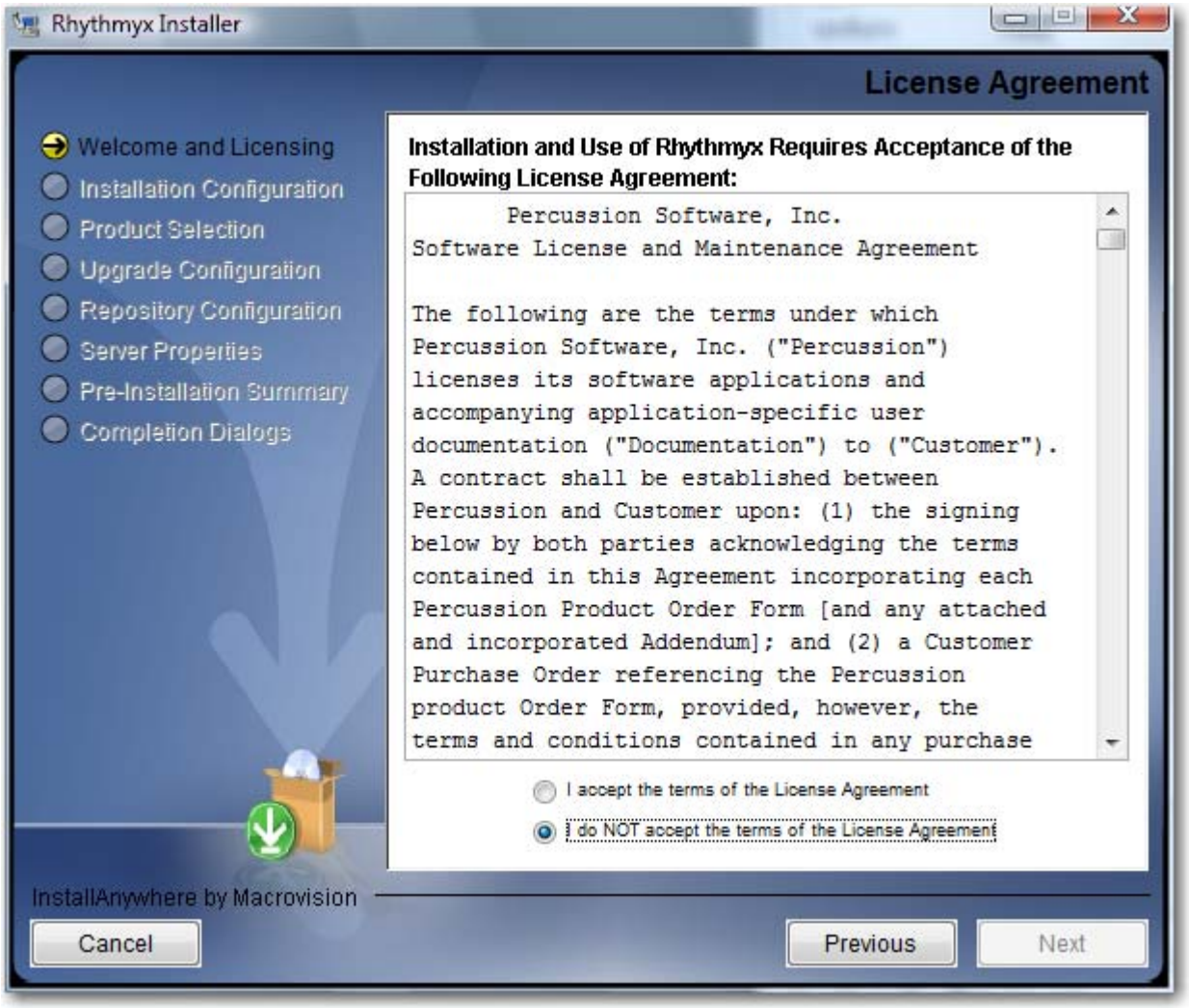


Figure 3: License Agreement

3 Click the I accept the terms of the License Agreement radio button and click the [**Next**] button.

The installation wizard displays the Choose Installation Type dialog.

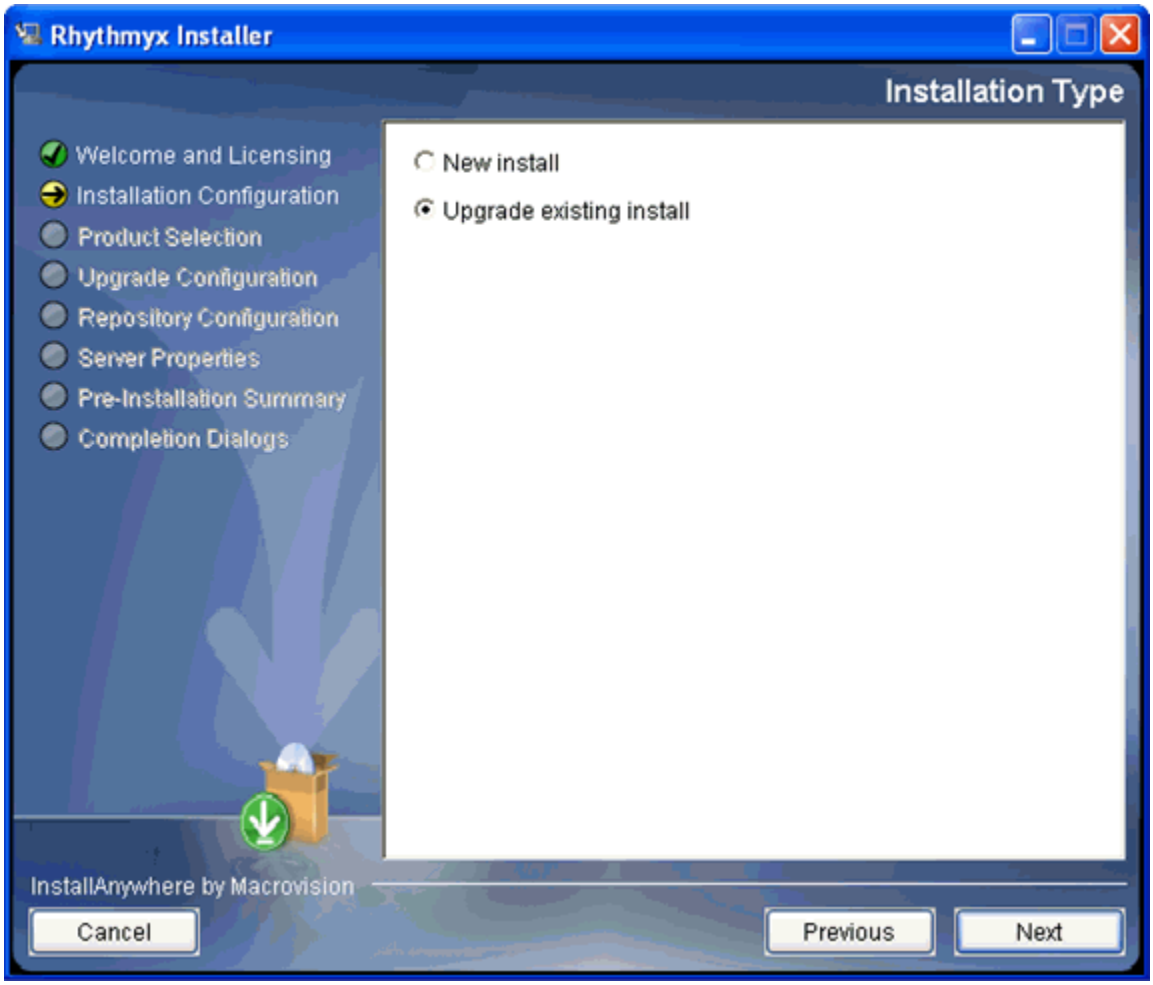


Figure 4: Installation type

4 Choose *New Install* and click [**Next**].

The installation wizard displays the Installation Directory dialog.

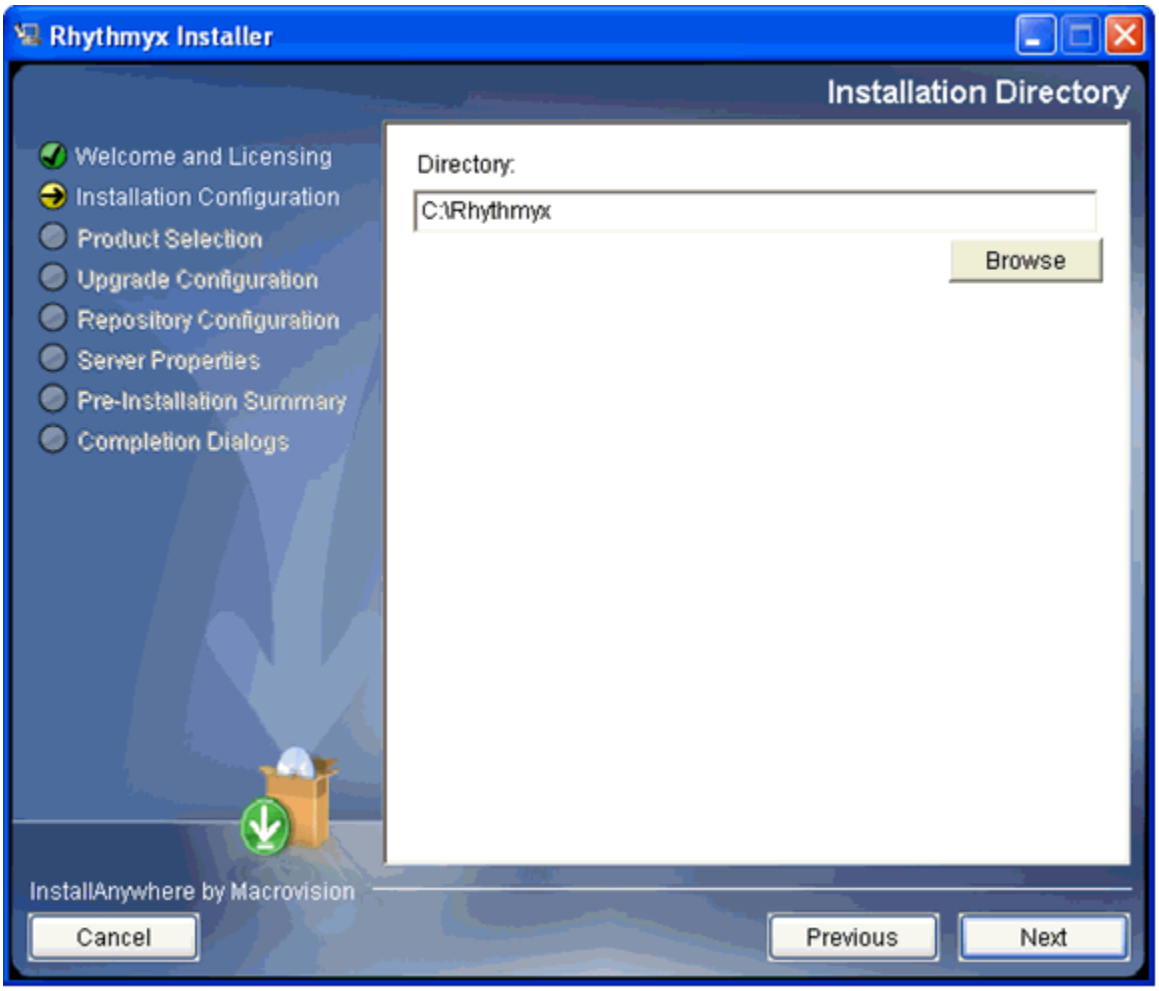


Figure 5: Installation directory

5 The Directory field defaults to *C:\Rhythmyx*. If you want to install to a different directory, you can enter it in the Directory field, or click the [**Browse**] button and browse to the location where you want to install Rhythmyx. Once you have defined the directory where you want to install, click the [**Next**] button.

If the directory does not already exist, the installation wizard will ask if you want to create the directory. Click the [**OK**] button to create the directory.

6 Click the [**Next**] button.

The install wizard displays the Installation Information dialog

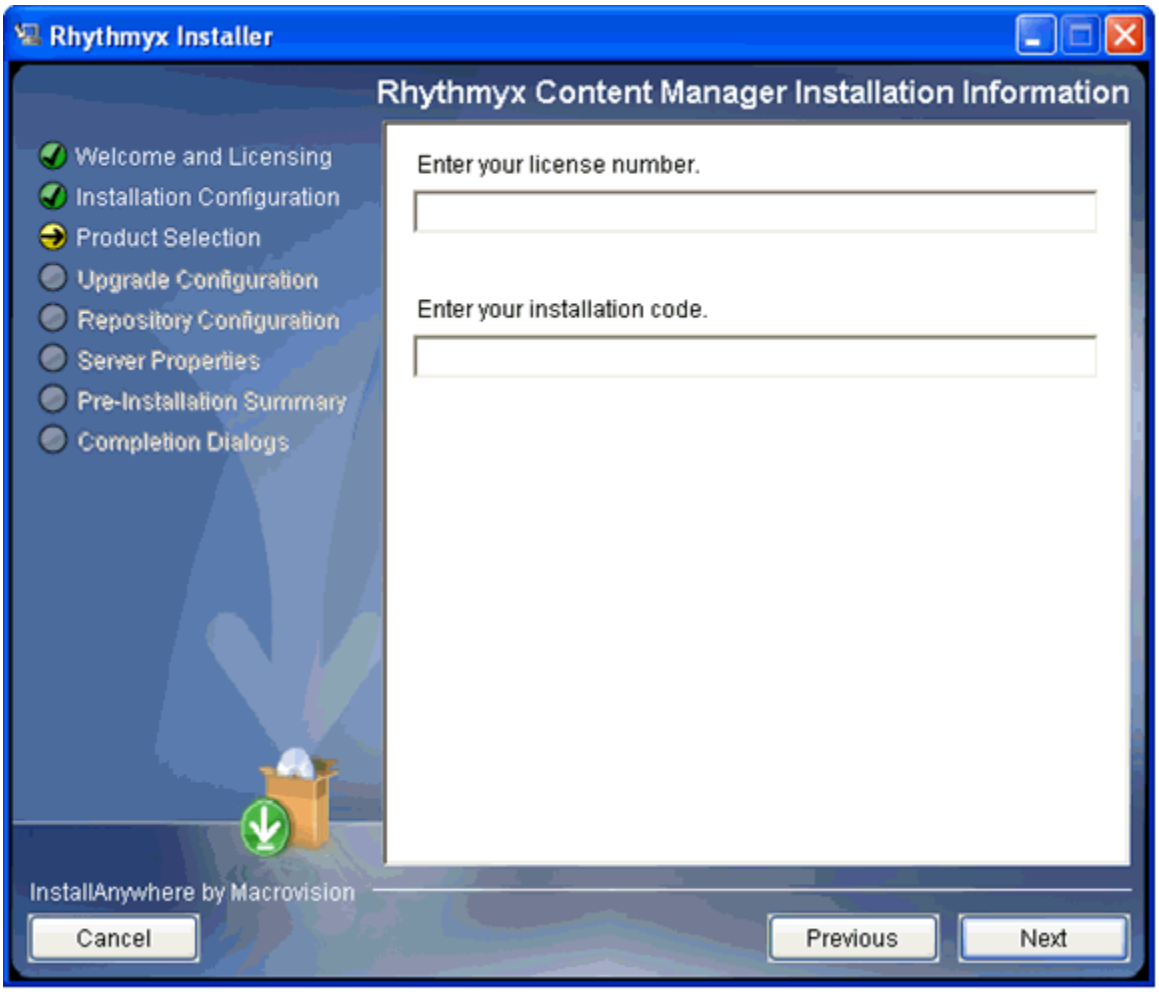


Figure 6: Installation information

7 Enter the license number and installation code, which you can find on the back of the CD jacket. Click the [**Next**] button.

The installation wizard displays the installation type dialog.

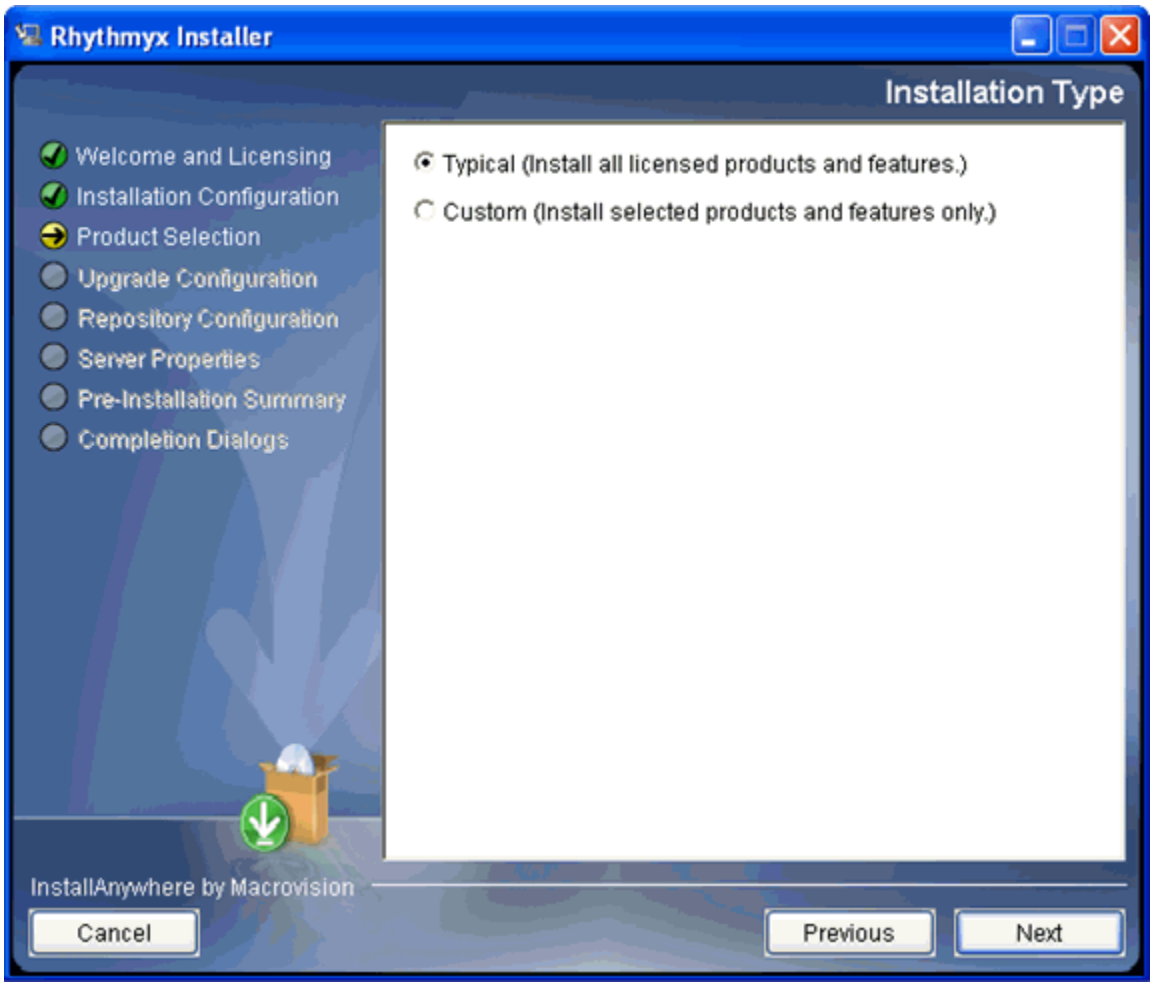


Figure 7: Installation type

8 Leave *Typical* selected. Click the [**Next**] button.

The installation wizard displays the Repository Database Selection dialog.

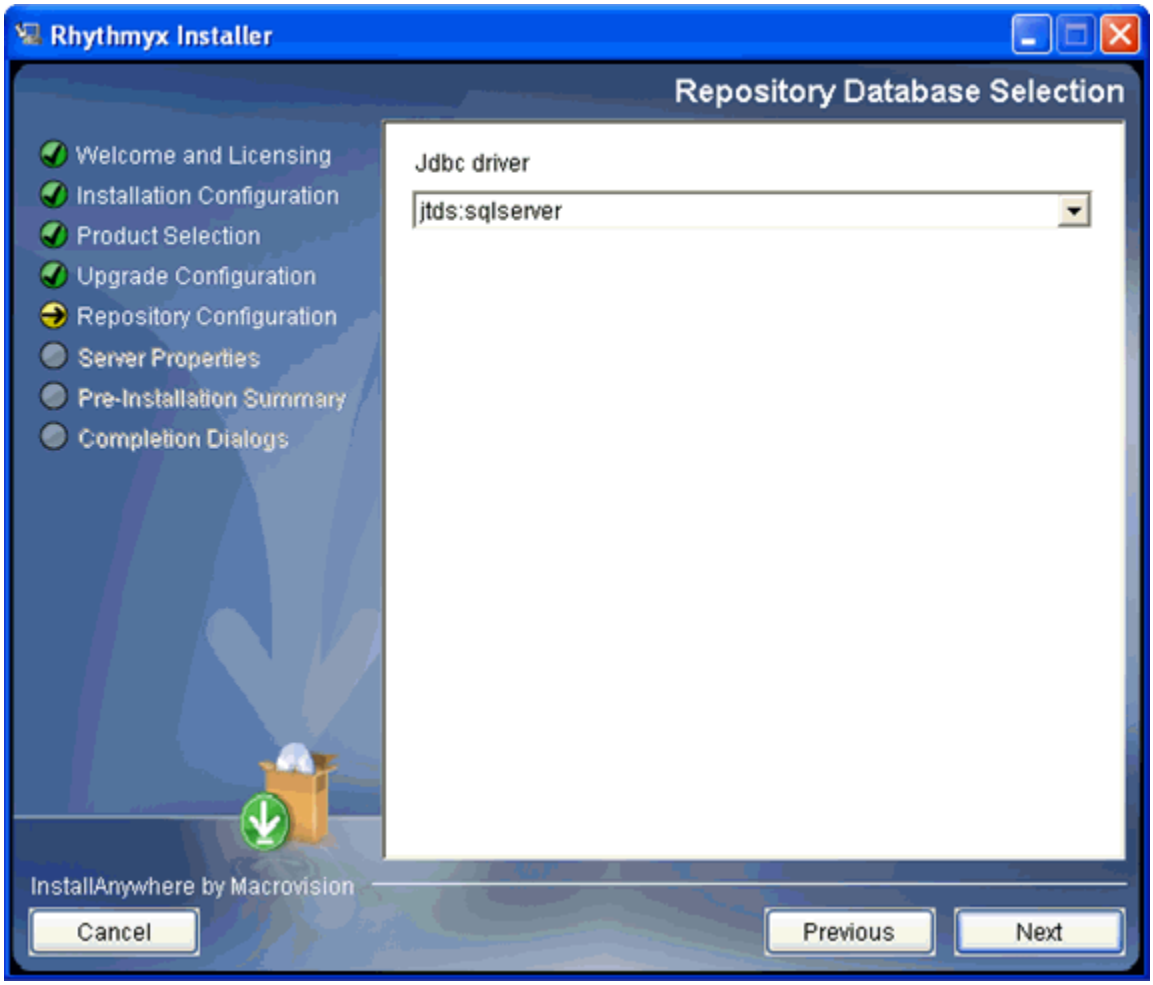


Figure 8: Repository database selection dialog

9 In this example, we choose *jtds:sqlserver*. You should choose the option in the drop list that matches your database. Click [**Next**].

The installation wizard displays the Repository Database Selection dialog.

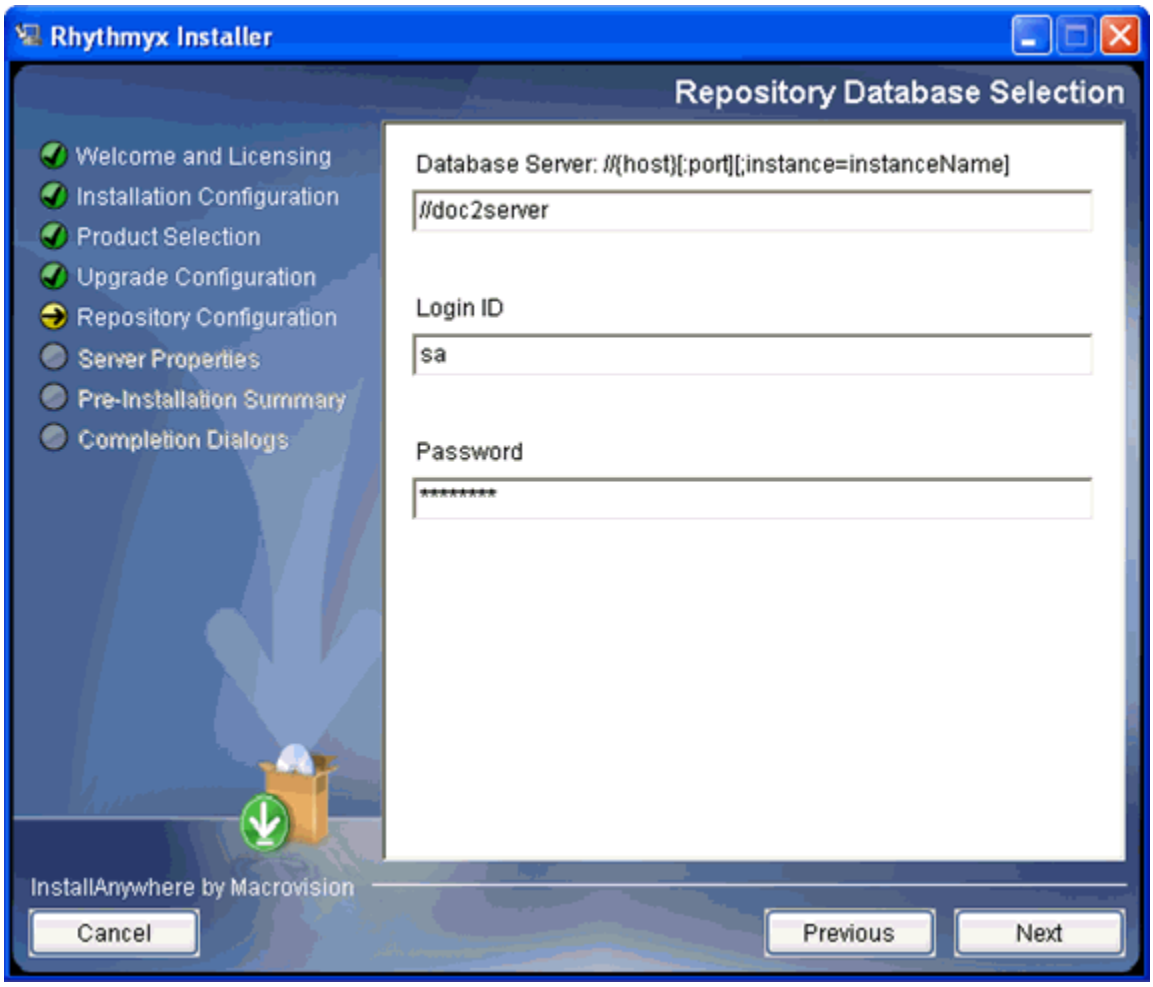


Figure 9: Repository database selection

10 In the Database Server field, enter //*localhost* (or the name or IP address of the machine where the SQLServer database resides if it is not local). (NOTE: The jtds driver requires the double backslashes (//) in the server specification. If you have specified a port other than the default {1433} for your SQL server installation, you must also specify the port {for example: *//localhost:1433*}. If you use a SQL Server instance, you must specify the instance as well: *//localhost:1422;instance=Rhythmyx*.) In the Login ID field, enter the login ID of your SQL Server installation (the default user is *sa*). In the Password field, enter the password of the user used to log in to the database. Click the [**Next**] button.

The installation wizard displays the Schema and Database Definition dialog.

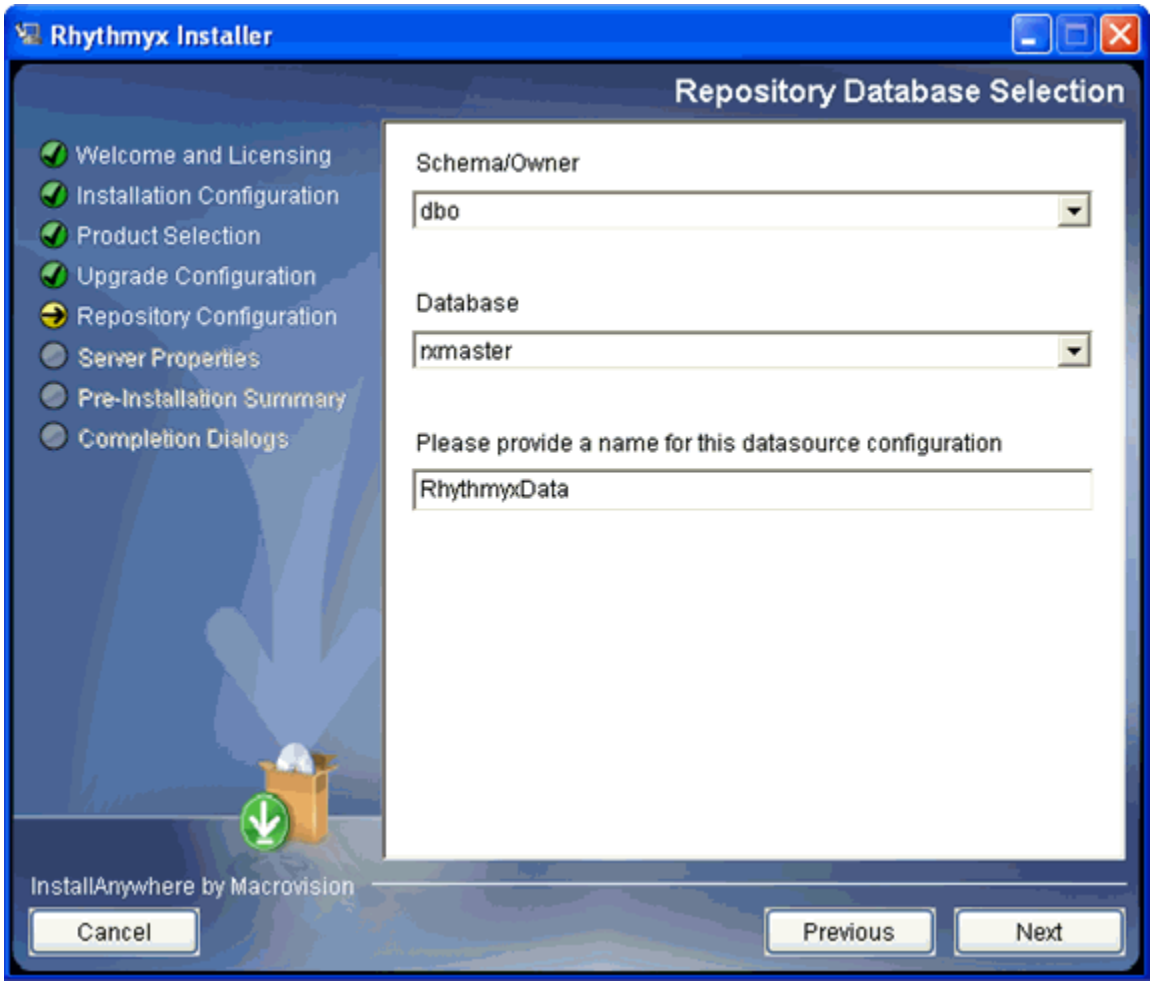


Figure 10: Schema and database definition

11 If you defined a database owner other than the default dbo owner, choose the owner from the Schema/Owner drop list. (In most cases, you can leave the default {*dbo*} selected.) In the Database drop list, choose *rxmaster*. The default name for the datasource configuration used to connect to the database is *RhythmyxData*, but you can change the name if you prefer. Click the [**Next**] button.

12 The installation wizard displays the Rhythmyx Server Type dialog:

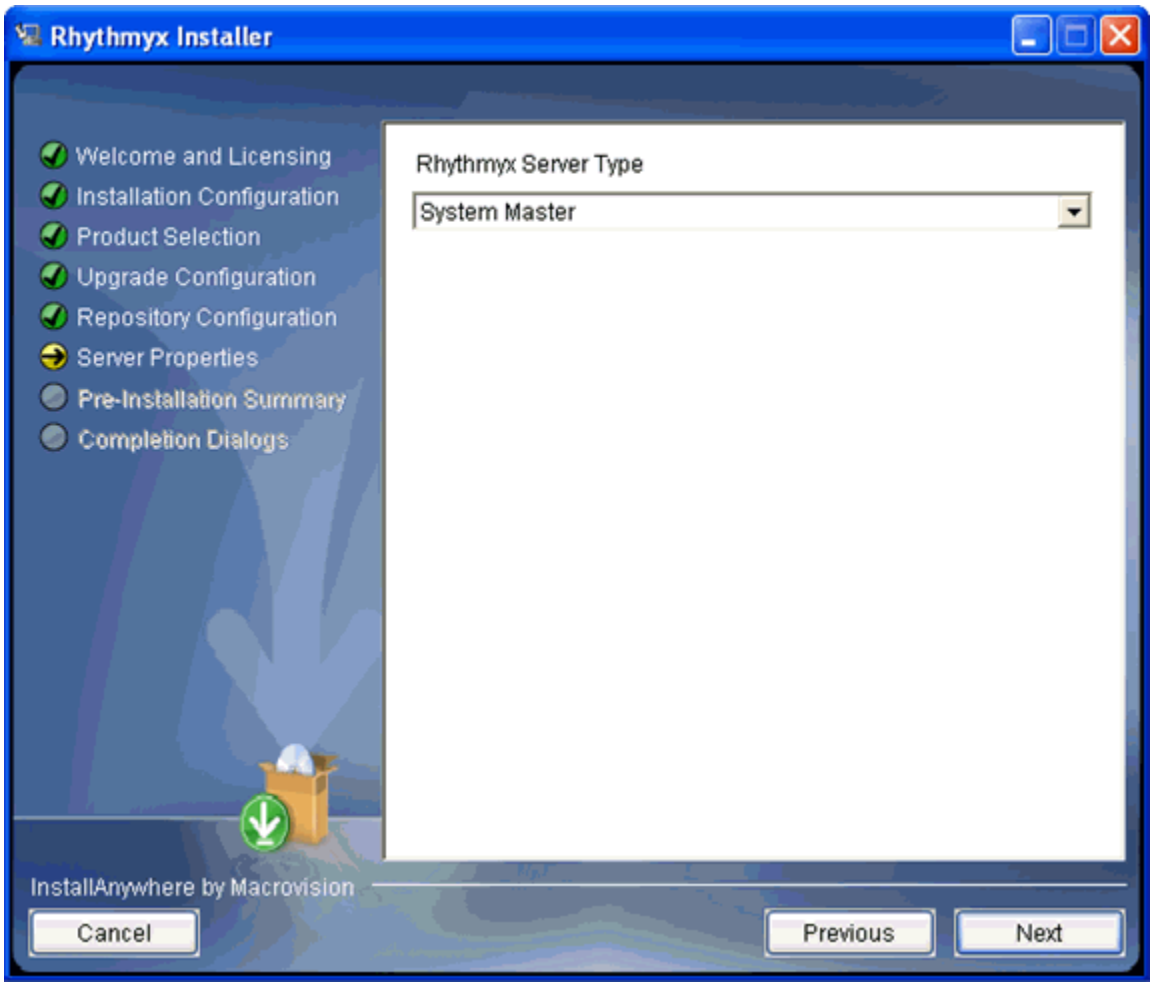


Figure 11: Server Type

13 Leave *System Master* as the Rhythmyx Server Type. The other option (*Publishing Hub*) is not a valid development environment. Click the [**Next**] button.

The installation wizard displays the Server properties dialog

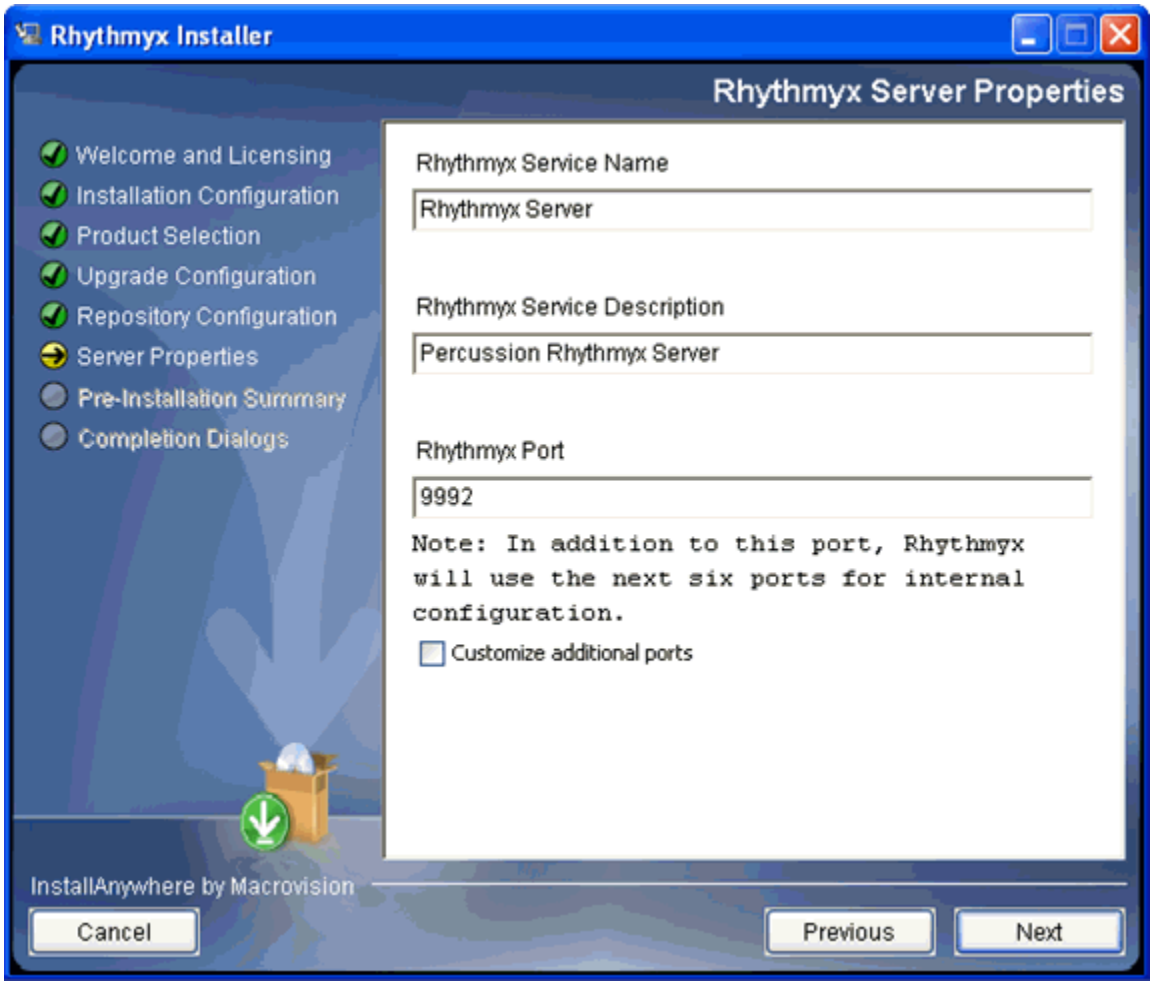


Figure 12: Server properties

14 For the purposes of this procedure, we will use the default name (*Rhythmyx Server*), description (*Percussion Rhythmyx Server*), and port (*9992*) of the Rhythmyx service. Click the [**Next**] button. A warning to use unique ports appears. Click [**No**] so the warning does not appear again.

The installation wizard displays the Pre-installation summary:

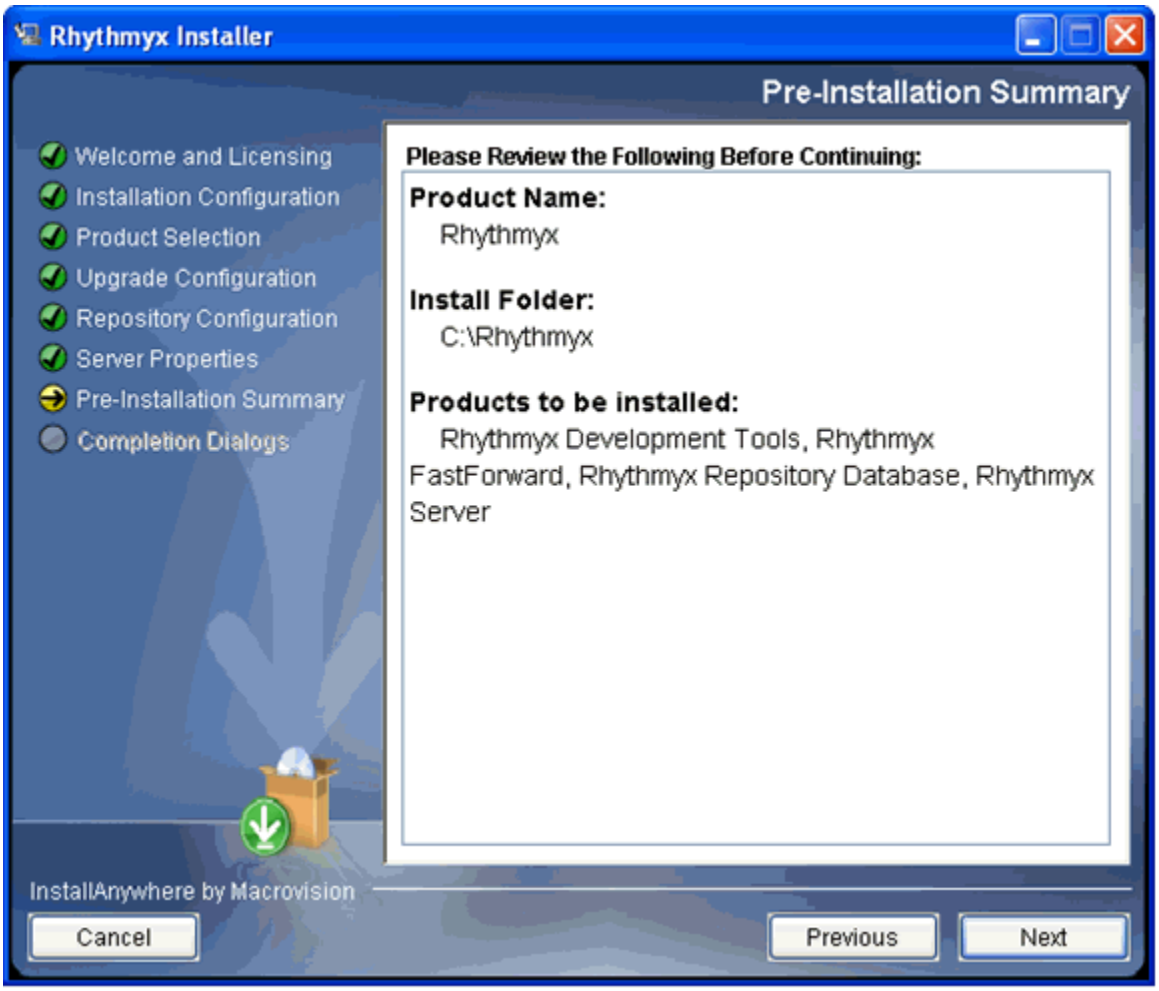


Figure 13: Pre-installation summary

15 Click the [**Next**] button.

The install wizard launches the installation process. When the installation process finishes, the install wizard displays the readme.

16 Review the readme. Click [**Done**] to exit the Installer.

Installing Rhythmyx on Solaris/Oracle

NOTE: Before beginning the Rhythmyx installation, define a schema named rxmaster in Oracle that will serve as your Rhythmyx data repository. You must also have a login ID and password for the Solaris and Oracle servers. Contact your system or database administrator to obtain the necessary Solaris and Oracle accounts.

IMPORTANT REQUIREMENT: To open the Rhythmyx server installed in a UNIX environment, you must install the GNU Compiler Collection (GCC), Version 3.2.2 or higher. You can download GCC from www.freeware.com. Install GCC to either /usr/local/lib or /usr/lib; otherwise, you will have to modify the environment variable LD_LIBRARY_PATH (for the user account under which Rhythmyx is installed) to include the GCC path you use.

To install Rhythmyx with FastForward on a development Solaris platform with an Oracle backend, using the command line:

1. Create (or have your administrator create) a user in Solaris to install and run Rhythmyx. (If you run multiple instances of the Rhythmyx server, create a user for each instance.) The user you create must be the owner of all files copied from the CD-ROM; must have read permissions on all installer files; and must have execute and read permissions on the following files:
   - suite.so
   - SetupConsole.sh

NOTE: You must log in as this same user to run Rhythmyx and perform upgrades.

2. Copy the contents of the installation DVD-ROM to the install user's home directory (/export/home/*username*). (You cannot run the Solaris installation directly from the DVD-ROM. Be sure you include the /resources directory when you copy the files to the target machine. If you do not include this directory, the installation will fail.)
3. From the install user's home directory, change to the directory containing the Rhythmyx setup installation files.
   ```
   $ cd rxinstaller/setup
   ```
4. Run the shell script SetupConsole.sh.
   ```
   $ sh SetupConsole.sh
   ```

NOTE: If you receive a message about insufficient disk space, create a temporary directory under the install user's home directory called `tmp`.

```
$ cd /export/home/username
$ mkdir tmp
```

Then set the temporary directory environment variable used to override the default temporary directory used by the installer:

for csh shells:

```
$ setenv IATEMPDIR /export/home/username/tmp
```

for Bourne, bash shells:

```
$ export IATEMPDIR=/export/home/username/tmp
```

Then run the install script again.

The InstallShield Wizard is launched and displays the following text.

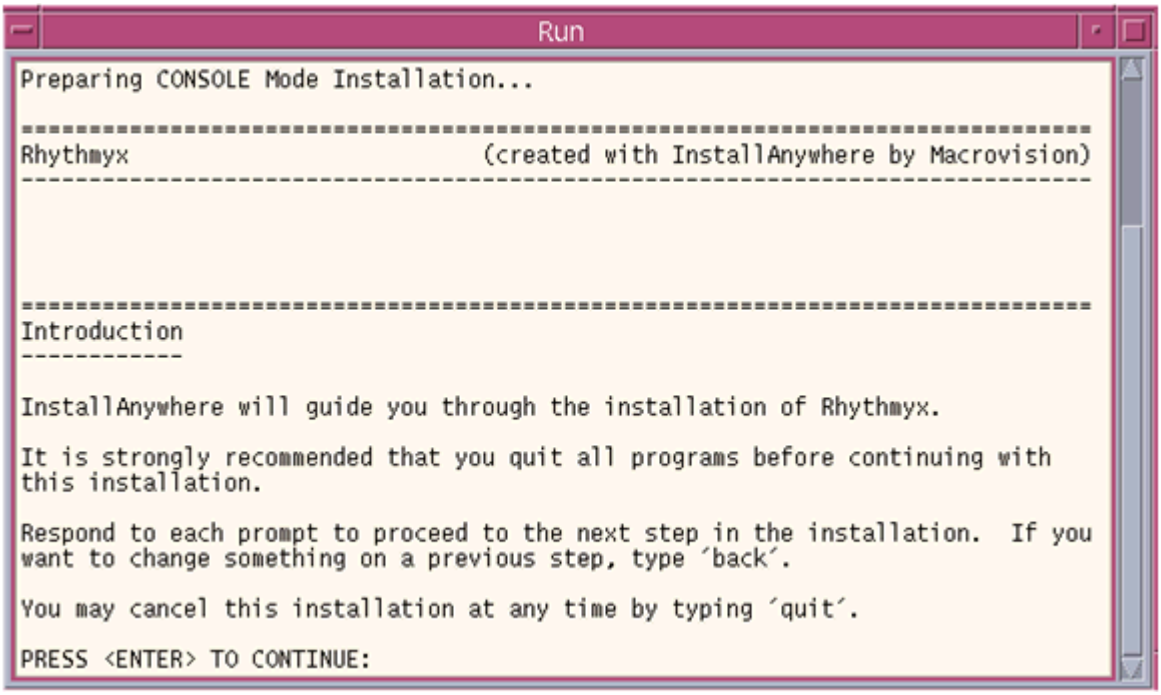


Figure 14: Installation Introduction

5 Press [**Enter**] to continue.

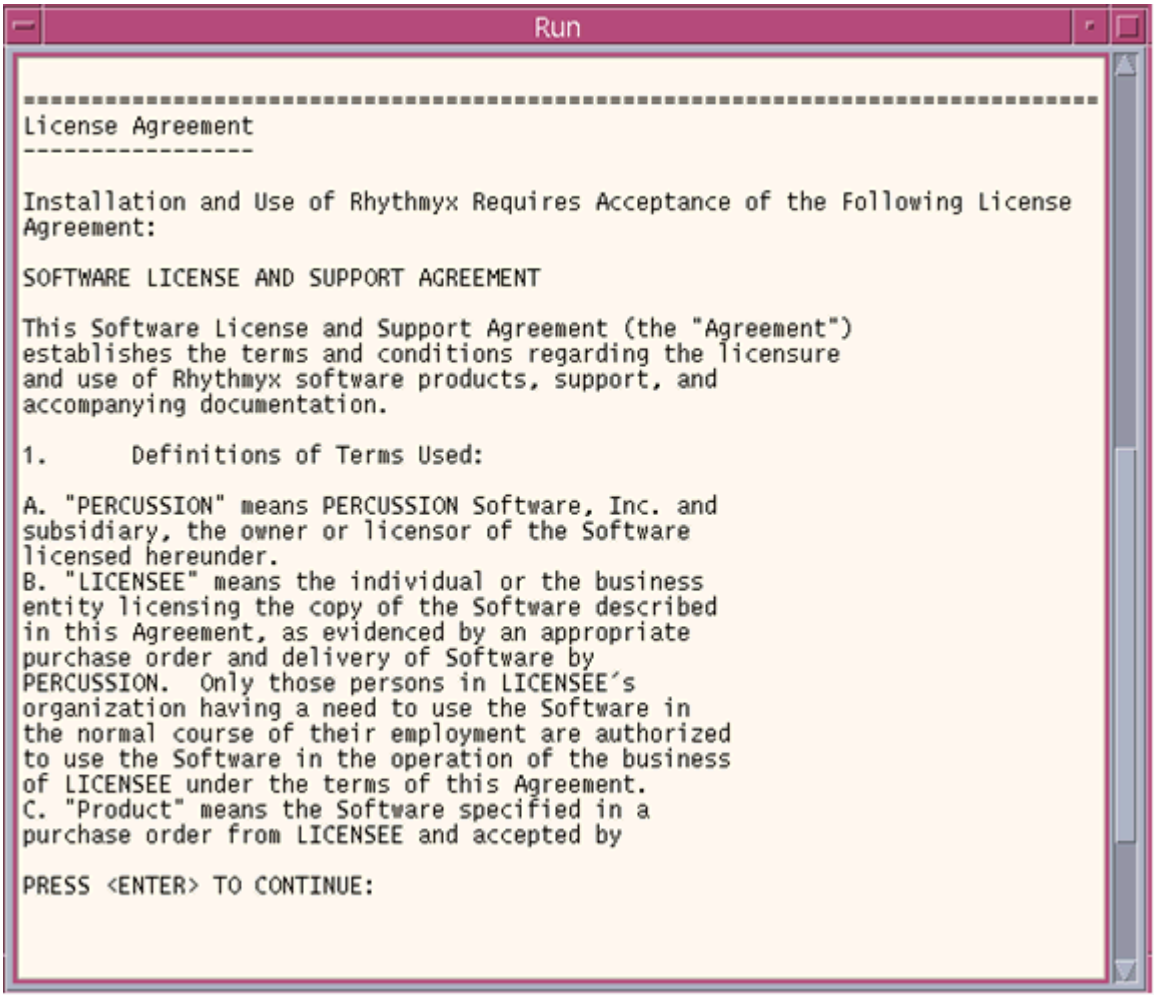


Figure 15: License Agreement

6 Read the portion of the License Agreement that you can see on the page. Continue to press [**Enter**] until you have paged through the entire License Agreement.

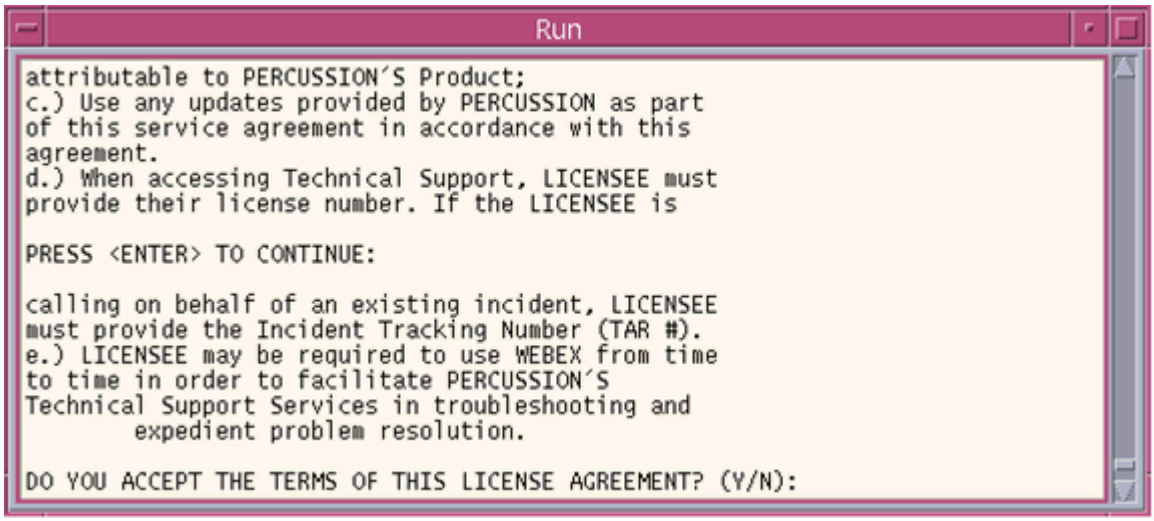


Figure 16: Accept License

7 When you reach the question `DO YOU ACCEPT THE TERMS OF THIS LICENSE AGREEMENT?`, enter `Y` and press [**ENTER**] to accept and continue.

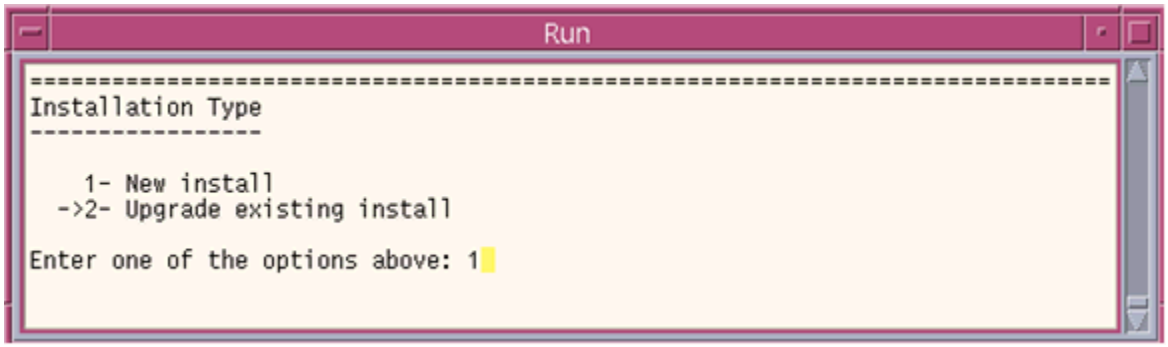


Figure 17: Install Type

8 Since you want to create a new install, enter `1` and then press [**Enter**].

Figure 18: Installation Directory

9 Press [**Enter**] for to use the default directory.

Figure 19: Create directory prompt

10 Type `OK` and press [**Enter**] to create the directory.

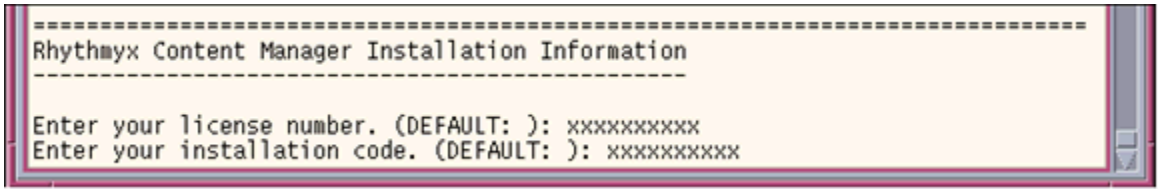


Figure 20: Enter license number and installation code

11 Enter your license number and press [**ENTER**].

12 Then enter your installation code and press [**ENTER**].

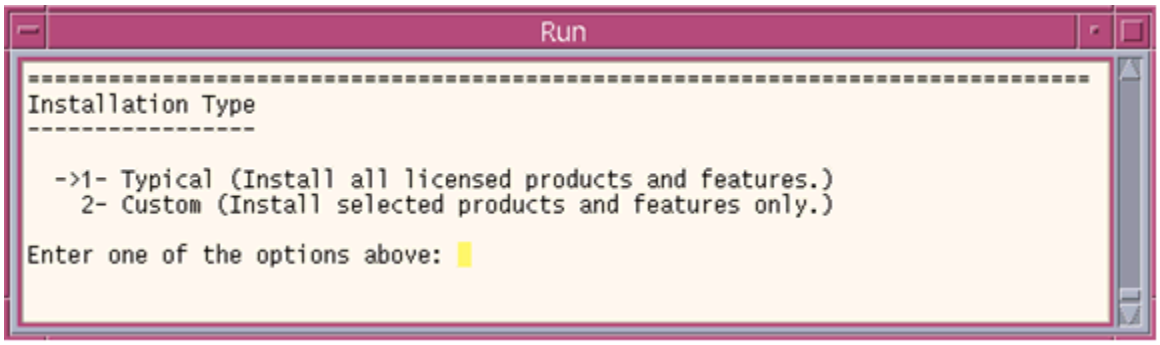


Figure 21: Installation Type

13 To install in *typical* mode, enter `1` and press [**Enter**] or just press [**Enter**], since `1` is the default installation type.

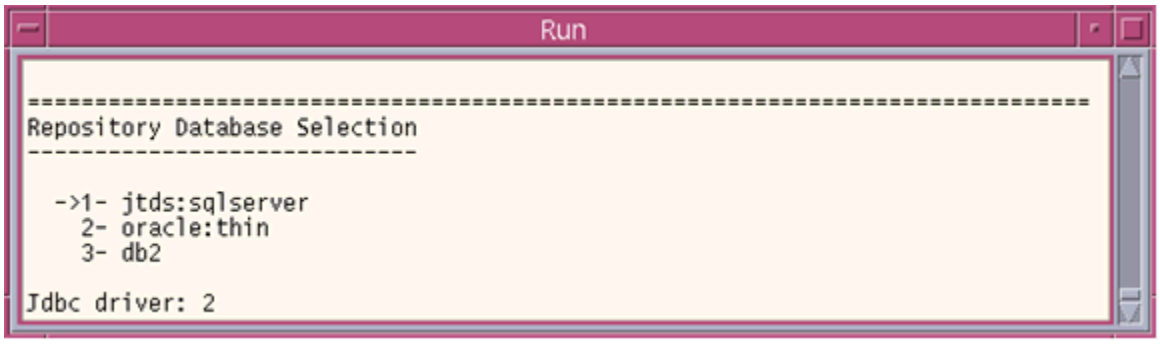


Figure 22: Repository Database Selection

14 Define the type of database you are using. For an Oracle database, enter 2 and press [**Enter**].

15 The installer automatically fills in the name of the server on which you are installing Rhythmyx as the default database server. If this is where your database is, press [**Enter**] to continue. If your database is on a different machine, enter the IP address or host name for that machine, the port number, and the SID and press [**Enter**]. Remember to insert the @ sign before the IP address or host name.

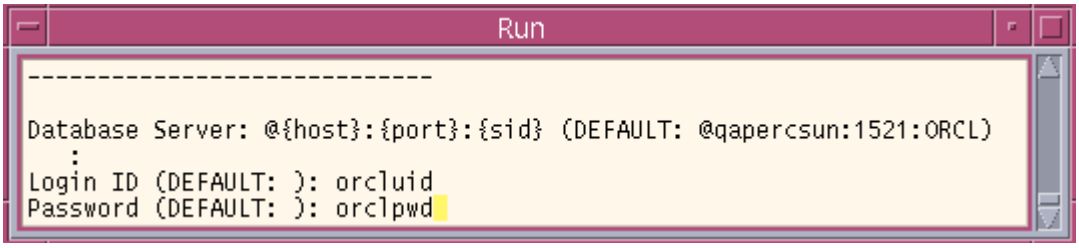


Figure 23: Login ID and Password

16 Enter your Oracle login ID and password and press [**Enter**].

The installer displays a list of schemas on your database server.

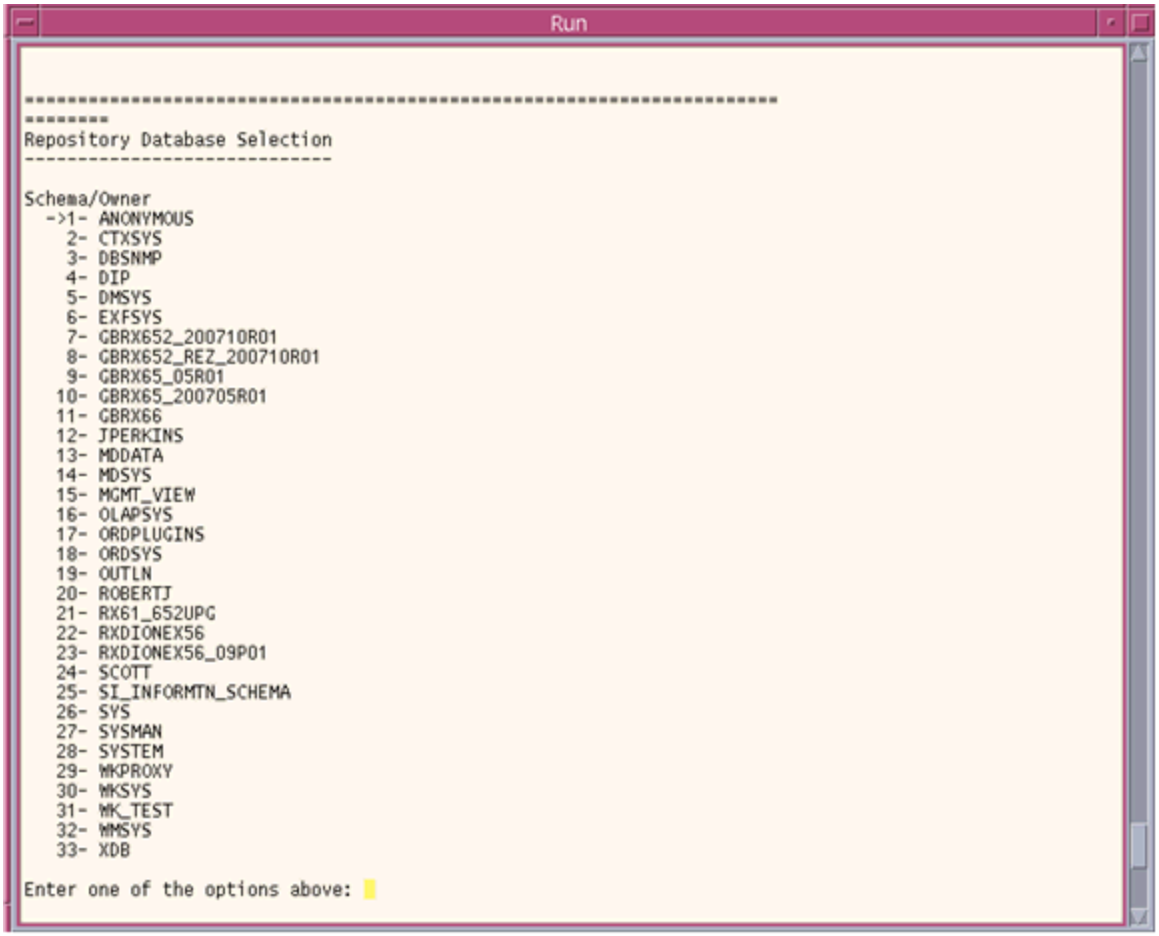


Figure 24: Select Schema

17 Enter the number of the schema that you want to use and press [**Enter**].

You are prompted to enter a name for the datasource configuration:

```
Please provide a name for this datasource configuration (DEFAULT:
   RhythmyxData):
```

Figure 25: Provide datasource name

18 Press [**Enter**] to accept the default datasource name and continue.

```
================================================================================


  ->1- System Master
    2- Publishing Hub

Rhythmyx Server Type:
```

Figure 26: Choose server type

19 Since you want to install a System Master server, type `1` and press [**Enter**] or just press [**Enter**] since `1` is the default server.

```
================================================================================
Rhythmyx Server Properties
--------------------------

Rhythmyx Port (DEFAULT: 9992):
Note: In addition to this port, Rhythmyx will use the next six ports for
internal configuration.
Customize additional ports (Y/N): N
Each port number in this installation must be unique.
    If the port number on this page duplicates any other in this installation,
   then return to this page and change the port number.
    Continue to show this warning? (Yes/No): No
```

Figure 27: Rhythmyx Server Properties

20 Accept the default Port number of 9992 by pressing [**Enter**].

The installer prompts you to indicate if you want to customize additional ports.

21 Type `N` and press [**Enter**].

The installer displays a warning that all port numbers in the installation must be unique and prompts you to indicate whether or not it should continue to show this warning.

22 Type `No` and press [**Enter**] to continue.

The installer lists your install folder and the Rhythmyx products that you are installing.

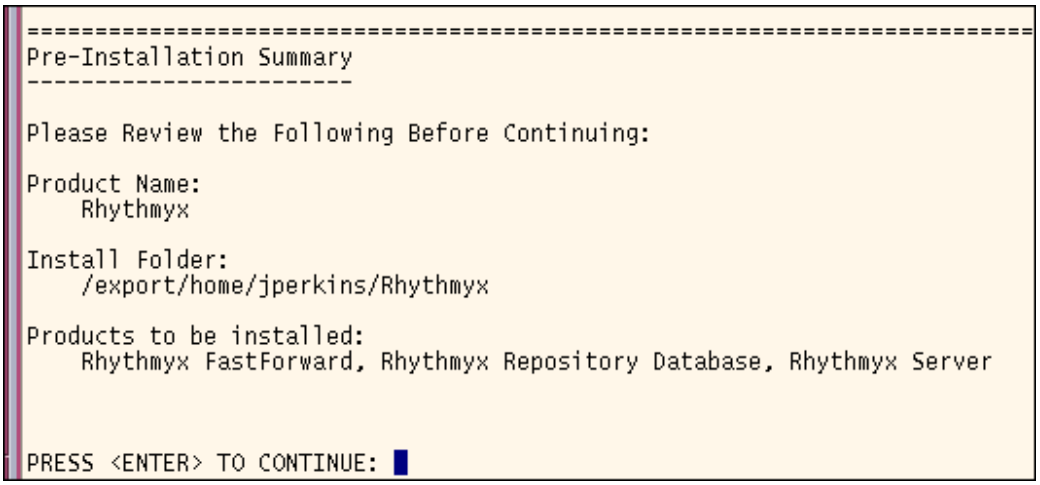


Figure 28: Pre-Installation Summary

23 Confirm that the information listed is correct, and press [**Enter**] to continue.

The installer begins installing Rhythmyx.

Figure 29: Installation messages

24 Once Rhythmyx is installed, the installer displays the readme text. Read the text on the screen by hitting enter when you come to the end of each page, or read the readme.txt file that you downloaded from your Rhythmyx CD.

Post-Installation Steps

When the installation is complete, follow these steps:

1 To enable auto-startup of Rhythmyx, run the InstallDaemon.sh script located in the Rhythmyx root directory. This script must be run as root.

2 Source the .profile file to update the environment variables for the current shell.

Starting the Rhythmyx Server

To start the Rhythmyx Server in Windows, in your Rhythmyx root directory, double-click on the file RhythmyxServer.exe. A terminal window should open and list the progress of the Server initialization. When the terminal window displays the message “Started in...”, the Rhythmyx Server is up and running:

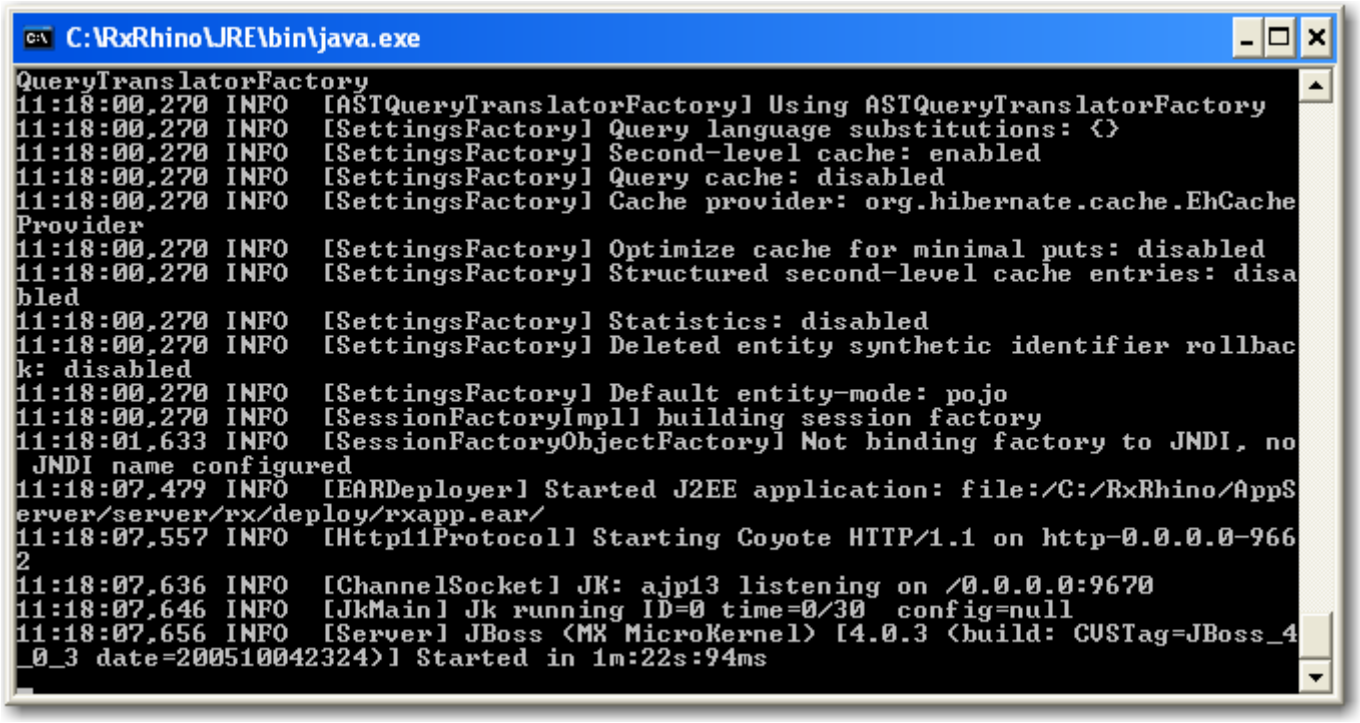


Figure 30: Rhythmyx Server Console

If you have problems starting the Rhythmyx Server, see ***Startup*** (on page 91) in the Troubleshooting section of this document.

CHAPTER 3

Introduction to Content Explorer

Content Explorer is the default home page Rhythmyx displays when any user logs in to the Rhythmyx Content Management System. Content Explorer gives business users access to Content Item administration functions such as create, approve, and copy, and gives implementers and administrators access to Publishing and Workflow setup screens.

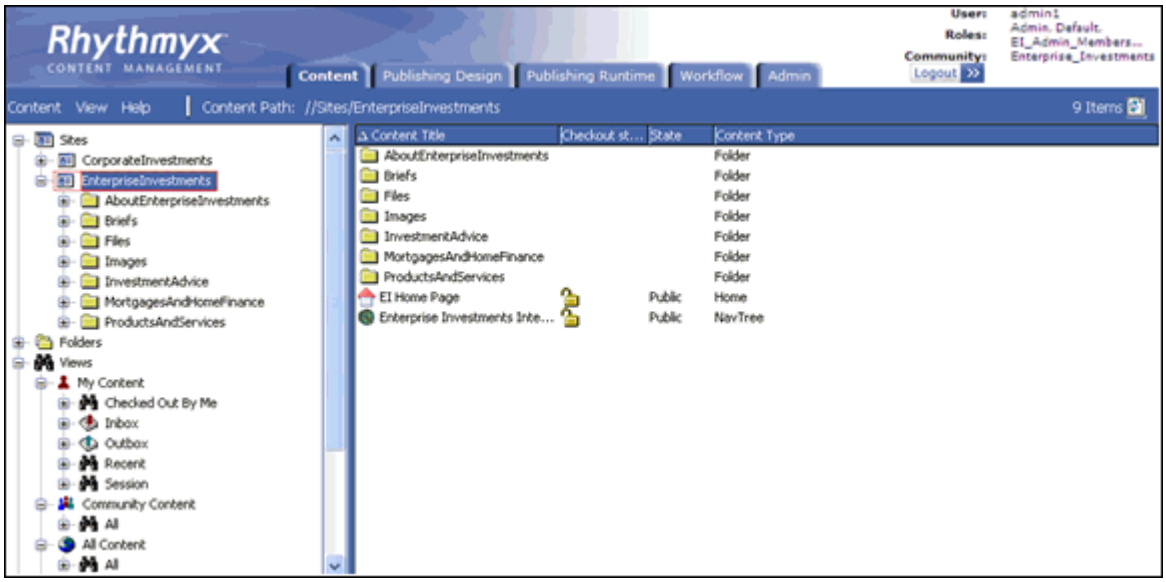


Figure 31: Content Explorer

The following sections explain how to log in to Content Explorer and summarize the functions of each of its tabs.

Logging in to Content Explorer

To log into Content Explorer:

1. Open one of the supported Web browsers and navigate to http://servername:port/Rhythmyx where servername:port describes the location of the Rhythmyx server. For example, if your Rhythmyx Server is named contentmanager and you are using the default port 9992, enter http://contentmanager:9992/Rhythmyx.

   Rhythmyx prompts you to log in.

Figure 32: Login Dialog

2. Enter the User name *admin1* and the Password *demo*, and click [**Login**].

   Rhythmyx opens Content Explorer. The Content tab is selected, and the interface displays all five tabs. In the upper-right corner, the Status Box displays the Login User Name, *admin1*. The Roles that the user belongs to do not fit in the available space, but Rhythmyx displays those that do with an ellipsis (...) to indicate that the user belongs to more Roles. FastForward's only Locale is US English, so the Status Box does not display a Locale.

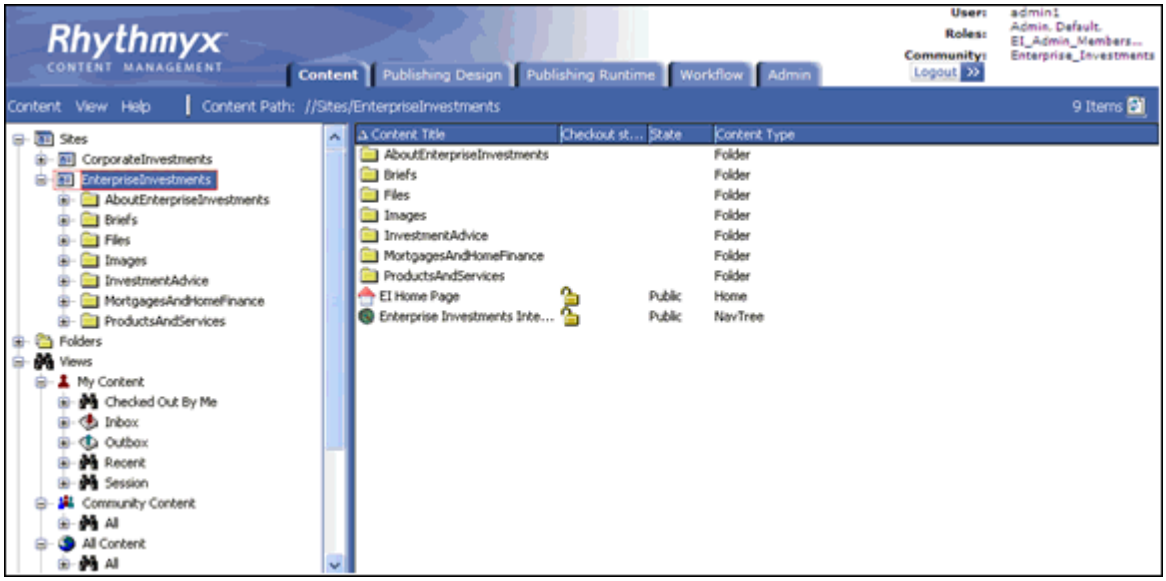


Figure 33: Content Explorer

3. Hold your cursor over the word *Admin* or click on it.

Content Explorer displays all of the User's Roles:

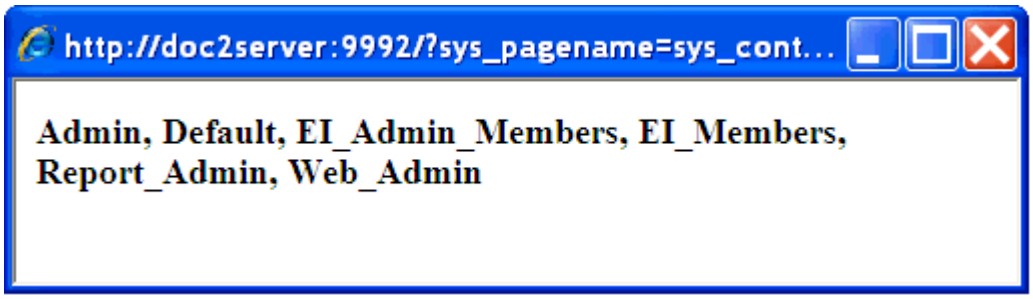


Figure 34: User Roles

The Site Folders in your navigation pane should appear identical to those in the Content Explorer graphic above.

Content Tab

In the Content Tab, business users create and modify Content Items and transition them into Workflow States. This tab also allows users to actively assemble Content Items as pages or portions of pages and preview the results.

The Content tab appears and functions similarly to the Windows Explorer interface: the left pane displays a Navigation Tree and the right pane is a Display pane that lists the contents of the node selected in the Navigation Tree.

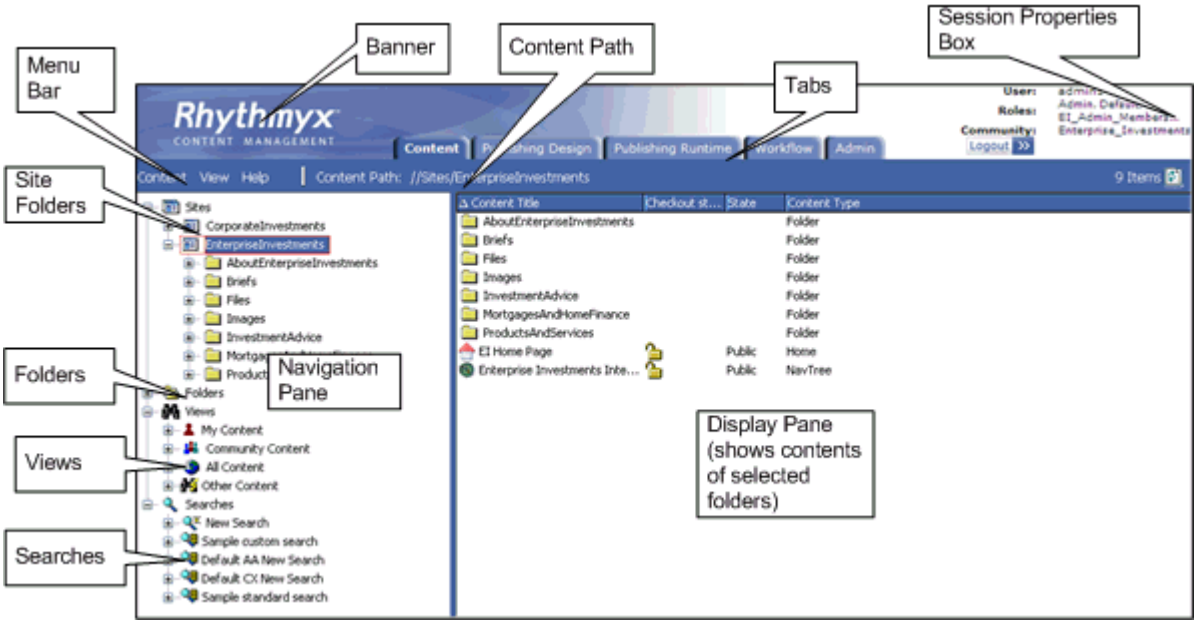


Figure 35: Diagram of Content Explorer

Several of the components labeled on the Content tab graphic above are present in Content Explorer regardless of the tab selected. These components include the Rhythmyx banner, which displays the product name, the Session Properties box, which displays the login User Name, Roles, Community, and Locale (if the system includes more than one Locale), and tabs for accessing other pages. Only the tabs for pages that the user may access are visible. If the user only has access to the Content tab, no tabs are visible.

The Navigation pane includes four main nodes that represent different ways of navigating Content Items:

- Sites – Provides users with a location for setting up a folder tree that resembles the structure of an external site or sites.
- Folders – Contains folders that contain sub-folders or Content Items.
- Views – Contains views that display content sorted and selected according to predefined parameters.
- Searches – Contains search queries.

When a user selects a node in the Navigation Tree, the Display Pane displays it contents. In the Display Pane, users can select a Content Item and right-click to open a menu of options for acting on it. Content items in the Display Pane may be preceded by the default icon or by a custom icon, as in the graphic above.

The Content tab also includes a Menu Bar with drop menus that include the various actions available to users in the Content tab.

To the right of the Menu bar, the Content Path displays the full path of the component selected in the Navigation pane.

For more information about the Content tab, see the online Content Explorer help.

Publishing Design Tab

The Publishing Design table includes links to pages for configuring publishing infrastructure, including:

- Sites, and the Content Lists and Editions associated withe each Site
- Contexts
- Delivery Types

Figure 36: Publishing Design Tab

For more information about the options on this tab, see the Help for the tab, or the following documentation:

- Sites: "Setting Up the Publishing Site and Basic Navigation" in the *Rhythmyx Implementation Guide*.
- Content Lists, Editions, and Context: "Configuring Publishing" in the *Rhythmyx Implementation Guide*.
- Delivery Types: "Configuring a Delivery Type" in the *Rhythmyx Technical Reference Manual*.

Publishing Runtime Tab

The Publishing Runtime tab provides the capability of initiating Publishing of an Edition and of reviewing the results of all Publishing jobs (whether initiated manually or automatically).

Figure 37: Publishing Runtime Tab

For details about publishing Editions and reviewing publishing results, see the *Rhythmyx Administration Manual*.

Workflow Tab

A Rhythmyx Workflow is a set of States that a Content Item progresses through during its lifetime. In general, Content Items are published after they pass through one or more approval States and reach a publish State.

The following graphic shows how the default Workflow tab appears when FastForward is installed. Your Workflow tab should also display the Simple and Standard Workflows.

Figure 38: Workflow Tab

For more information about Workflows and the Workflow tab, see the *CMS Online Help* or the document *Rhythmyx Implementation Guide*.

Admin Tab

The Admin tab includes links to pages used to administer and maintain the Rhythmyx CMS, including:

- Console

  This page is used to issue commands to the Rhythmyx server.

- Variant to Template Migration Tool

  This page is used on systems upgraded from Rhythmyx Version 5.7 or earlier to Rhythmyx Version 6.0 or later to migrate XSLT Variants to Velocity Templates.

- Run RxFix

  This tool should only be used under the direction and guidance of a Percussion Software Technical Support Representative.

- Run Repository Consistency Checker

  This tool should only be used under the direction and guidance of a Percussion Software Technical Support Representative.

- Scheduled Tasks, Task Notifications, and Task Logs

  For details about maintaining Scheduled Tasks and Task Notifications, and reviewing Scheduled Task logs, see the *Rhythmyx Administration Manual*.

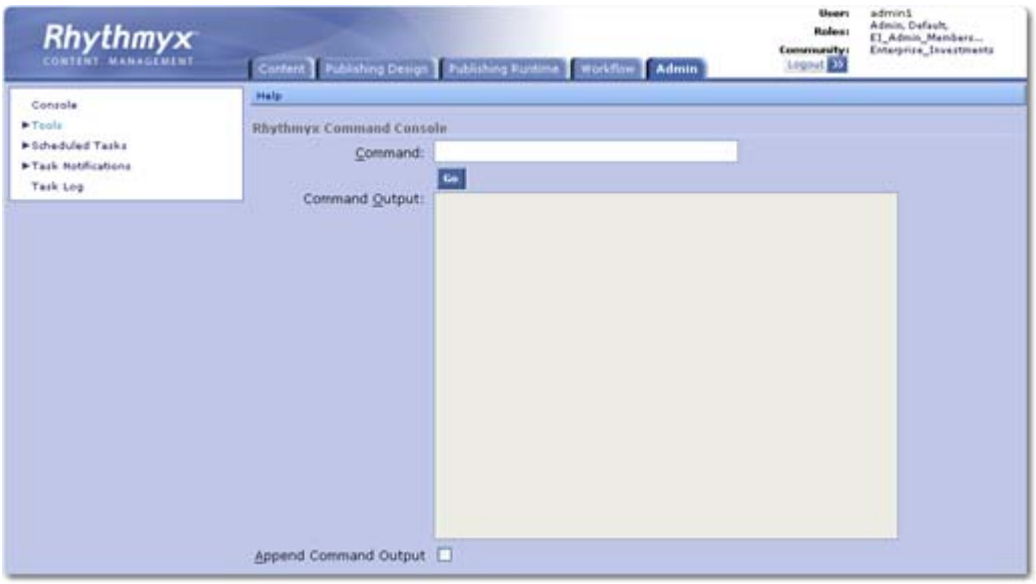


Figure 39: Admin Tab

CHAPTER 4

Publishing FastForward Sample Content

This section shows you how to publish the content of the FastForward Web Site *Enterprise Investments*. The FastForward publishing configuration is set up to publish the content to the JBoss application server installed with Rhythmyx.

Publishing the Enterprise Investments Full Edition

To publish the Enterprise Investments Full Edition:

1. In Content Explorer, click on the Publishing Runtime tab.
2. Expand the *Sites* node; under the Sites node, expand the *Enterprise Investments* node. Expand the Editions node.
3. Click on *EI_Full*.

   The edit and view pane displays the Runtime Edition page.
4. In the menu, choose *Start*.

   The edit and view pane displays Edition progress data, including the following:

   - Progress bar
   - Start Time
   - Elapsed time since the Edition was initiated.
   - Current State of the Edition
   - Number of Content Items Queued
   - Number of Content Items Delivered
   - Number of Content Items for which publishing Failed

   When the publishing job has completed, the results will be displayed in the Logs. The result should resemble the following screenshot:

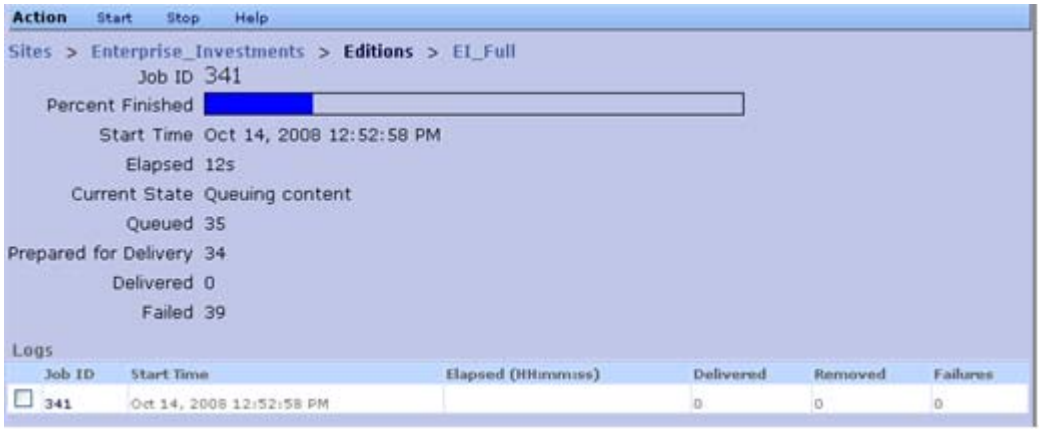
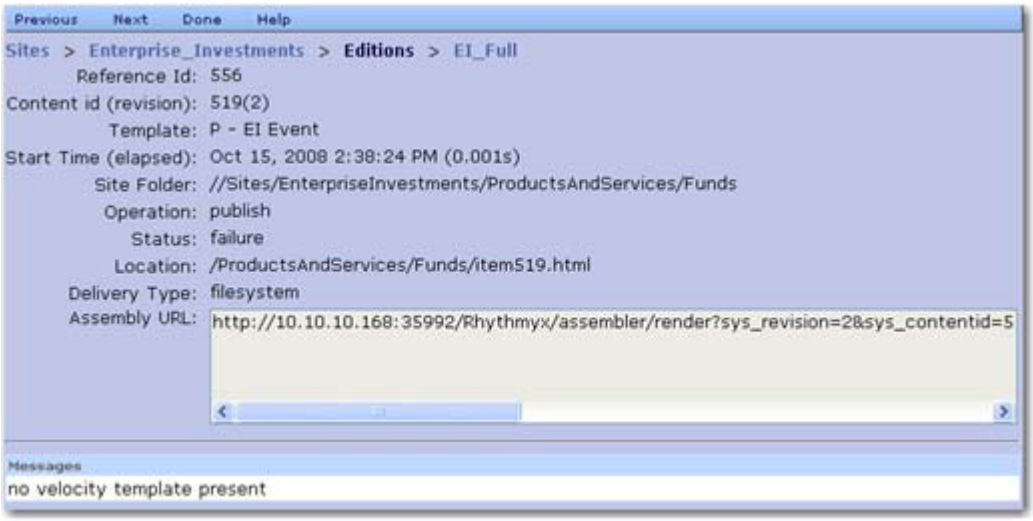


Figure 40: EI_Full Edition while Publishing

Click the log's Job ID to see the results of the publishing job:

Figure 41: Log for the EI_Full Edition publishing run

Click on an individual Content id to see its results in the job. This tool is particularly useful to determine why a Content Item failed.



In this example, the Template that was being published did not include any Velocity code. This error also occurs if a binding on the Content Item has an error.

Publishing and Reviewing the Corporate Investments Site

A second sample Site, Corporate Investments, is also provided. To publish this Site, run the Full Corporate Investments Edition. When the publishing job is complete, the view and edit pane should resemble the following screenshot:

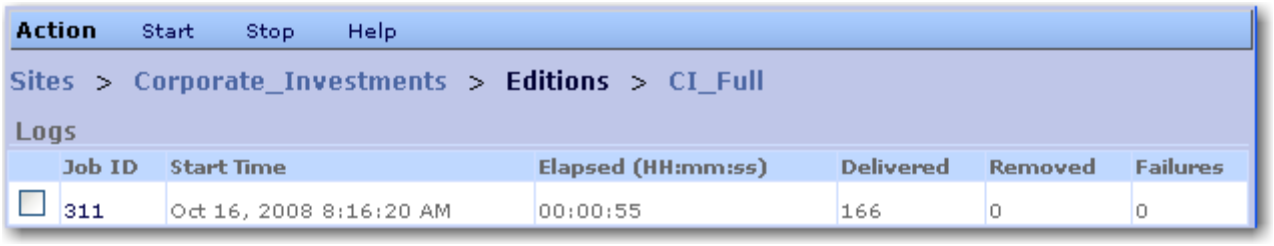


Figure 42: Corporate Investments Publishing Log

The URL for the published Corporate Investments Web Site is:

```
http://localhost:9992/CI_Home/index.html
```

CHAPTER 5

A Brief Introduction to Rhythmyx

Before proceeding with the tasks of customizing your Rhythmyx FastForward installation, you should become more familiar with Rhythmyx and its operations. This chapter provides a brief walk-through of the major functionality of the Rhythmyx Content Management System. We will add several new Content Items to the Enterprise Investments Web site. We will add this content to a new "Education" subsection of the "Investment Advice" section of the Enterprise Investments Web site.

A Brief Introduction to Content Explorer

Begin the walk-through by logging in to Content Explorer.

To access Content Explorer, start your browser and enter the following URL into the address field:

```
http://localhost:9992/Rhythmyx
```

This URL assumes that the server is installed locally and that you are using the default Rhythmyx port. If you are accessing the server from a different machine, replace `localhost` with the name or IP address of that machine. If you chose a different port for Rhythmyx, replace `9992` with your preferred port number. Note too that the URL is case-sensitive, so you must capitalize the "R" in "Rhythmyx. (The case-sensitivity is a characteristic of the underlying Java code used in Rhythmyx.) If you enter the URL using a lowercase "r", Rhythmyx returns a message that `A handler could not be found to handle the request for (/rhythmyx/.xml)`.

When you successfully access the server, your browser displays a login dialog. Use the user name *author1* and the password *demo* to log in to Content Explorer. (The user "author1" is a default user provided by Percussion Software that has authorship rights in Content Explorer.)

Content Explorer uses a Java applet. When installing the applet, your browser displays a security dialog. Click the [**Yes**] button to allow the applet to install on your browser.

When the applet finishes loading, your browser displays the Content Explorer window:

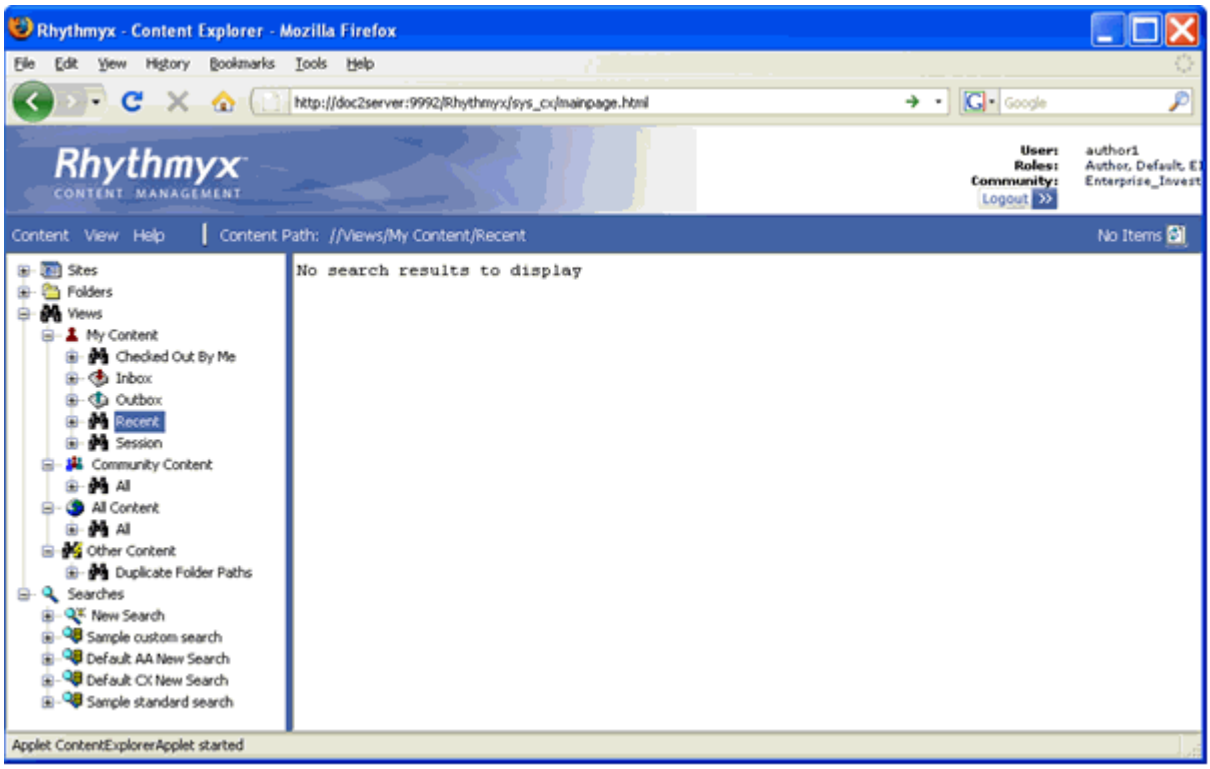


Figure 43: Content Explorer

Content Explorer consists of four sections:

- the banner
- the navigation pane
- the content pane
- the menu bar.

The Content Explorer Banner

The banner consists of the Rhythmyx logo, the Logout button, and the login information at the far right.

Figure 44: Rhythmyx Banner

The login information consists of three pieces of data:

- User: The name of the user logged in to the system, in this case, author1
- Roles: The Roles into which the logged in user has been authenticated. If you hover your mouse over the value of the Roles field, Rhythmyx displays a popup listing all of the Roles into which the user has been authenticated. The value of the Roles field is also a link. You can click on this link to display a popup window with the user's list of Roles as well. The graphics below illustrate both options:

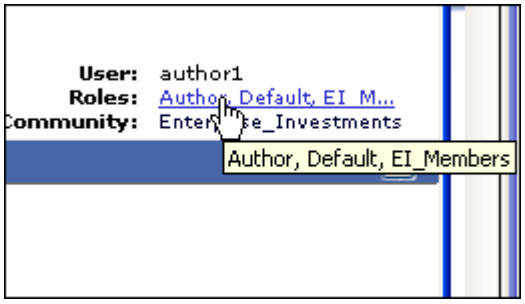


Figure 45: List of user's Roles

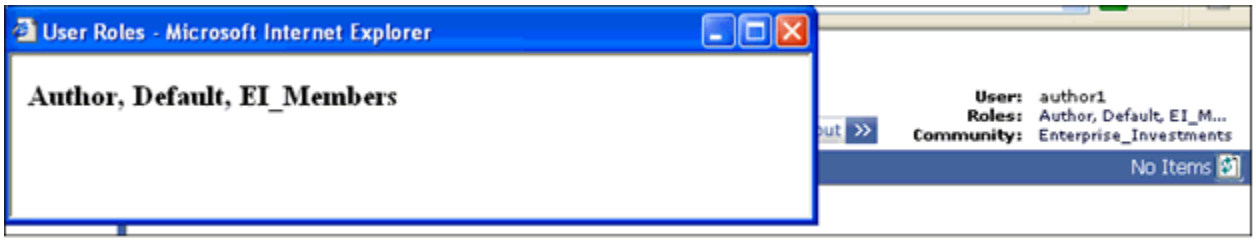


Figure 46: Popup with Roles

- Community: The Rhythmyx Community into which the user is currently logged. The author1 user is initially logged in to the Enterprise Investments Community, as illustrated in the screenshot above.

The Navigation Pane

The Navigation Pane provides you with options for locating and organizing Content Items.

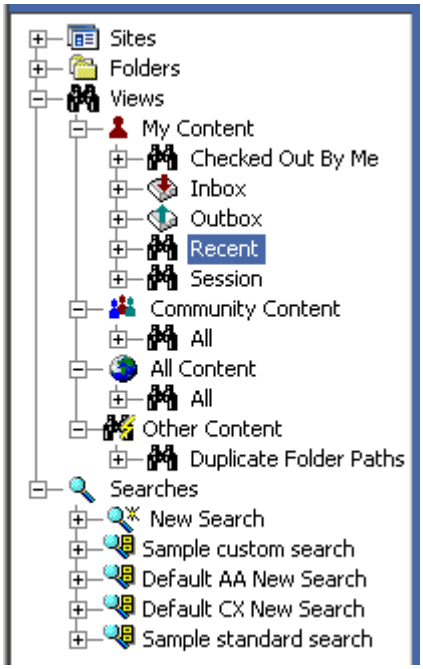


Figure 47: The Content Explorer Navigation Pane as displayed when first accessed

The Navigation Pane consists of four main Nodes:

- The Sites node is used to define Site structures and to assign Content Items to those Sites. When Rhythmyx publishes the content, it creates a directory structure on the target Web server identical to the structure you define under this node. Published pages are output to the directory parallel to the Content Explorer Site Folder to which they have been assigned.
- The Folders node consists of Folders used strictly to organize Content Items. The folder structures created under this node are not used in Publishing but for personalized organization.
- The Views node consists of a set of pre-defined queries that return lists of content. View fall into four categories.
  - My Content Views

    This category is the richest set of default Views. Views in this category list Content Items checked out to the logged user, Content Items assigned to the logged user, Content Items the user has worked on recently, and Content Items created by the user.
  - Community Content Views

    This category consists of Views that list Content Items only in the current Community of the user.
  - All Content Views

    This category consists of Views that can list all Content Items in the system, regardless of their Community or current Workflow State.

- Other Content Views

  This generic category consists of Views that do not fit in any of the other categories.

- The Searches node consists of the New Search query and several pre-defined search queries. Searches are somewhat simpler than Views. Views can query based on system data not available to searches.

For more details about any of these nodes, see the Content Explorer Help, which you can access by choosing *Help > Content Explorer* from the Menu Bar.

The Content Pane

The larger area to the right on the Content Explorer is the Content Pane.

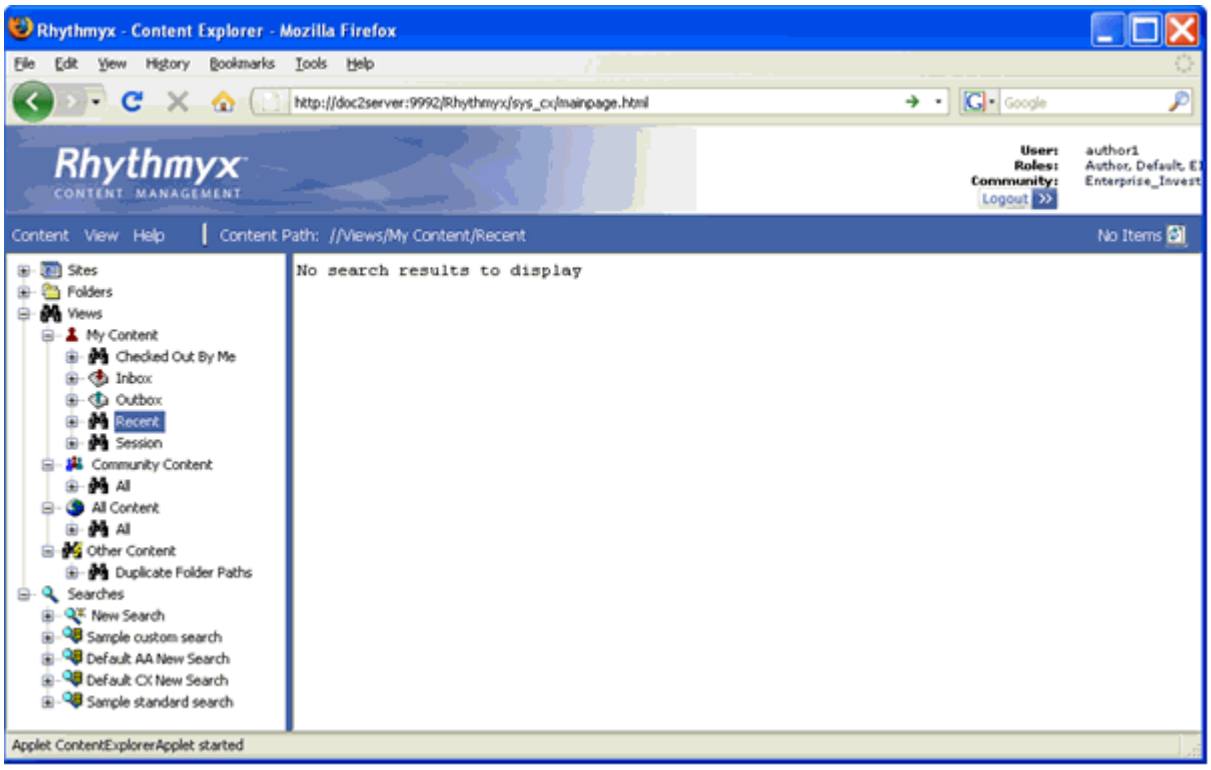


Figure 48: Content Explorer

When you initially log in to Content Explorer, the default navigation selection is always the Recent View. Since you have not logged in before and have not worked with any Content Items to this point, this View has no results, as illustrated in the graphic above, which shows the text "No search results to display".

Expand the Sites node, and select the Enterprise Investments Folder. Now the Content Pane lists the contents of this Folder. This Folder includes a number of Subfolders (such as About Enterprise Investments, Investment Advice, and Products and Services) and a couple of Content Items (EI Home Page and Enterprise Investments Internet Root).

The Menu Bar

The Menu bar separates the banner from the Navigation and Content Panes.

The Menu bar consists of four menu options and the Content Path. The Content Path lists the Navigation path to the object currently selected in the Navigation Pane.

The following Menu options are available:

- Content

  The Content Menu consists of options for managing Content. This menu includes three options:

  - New

    The New Menu consists of two submenus: New Item and Folder. The Folder option is only available if you are in either the Site or the Folder node, or a Subfolder of one of these nodes. The Folder option allows you to create a new Folder. The New Item option lists all Content Types for which the current user has access to create a new Content Item.

  - Search

    This option launches a new Search.

  - <selected Navigation Pane node>

    This name of the selected node in the Navigation pane. Submenu options available from this choice include the right-click options for the node.

- View

  The View Menu includes two choices. The Refresh option refreshes Content Explorer. The Options choice activates the Display Options dialog, where you can modify the display settings for Content Explorer.

- Help

  The Help Menu includes two options. The Content Explorer option activates the Content Explorer Help. The About option activates the About Content Explorer dialog.

Creating Content Items

Content Items are the basic units of content in Rhythmyx. A Content Item is usually a portion of a page, such as a block of text, an image, or a banner, header, or footer. In some cases, such as home pages, a Content Item may be a complete page, but more commonly, a Content Item is a portion of a page.

By defining content in such a granular manner, Rhythmyx provides users greater control over the content. You can use the same Content Item in multiple ways on different pages. Further, if editing is necessary, you only need to change the Content Item that needs to be modified, and do not disturb other parts of the page.

Creating a Generic Content Item

Let us begin by creating a simple Generic Content Item.

You should always create new Content Items in a Folder so you can find them easily. Rhythmyx does not require you to be in a Folder when you create a Content Item, but if you do not create the Content Item in a Folder, you will need to search for it or use a View to find it. We will create our Content Item in a Site Folder.

In the Navigation pane, expand the Sites node, and select the Enterprise Investments Site Folder. Notice that when you select this Folder, the contents of the Folder are displayed in the Content Pane. Double-click on the "About Enterprise Investments" Folder. We will create our new Content Item in this Folder for now.

Percussion Software provides the content for this new Content Item, and several others we recommend that you create in the course of this walk-through. The content is provided in a set of .txt files in the <Rhythmyxroot>/Samples/ffsamples directory. If your Rhythmyx server is on a remote machine, you may want to copy the contents of this directory to your local machine. We are going to use the tuition.txt file to provide the content for our example Content Item. Open this text file in a simple text editor such as Notepad.

To create your new Generic Content Item:

1. In the Menu bar, choose *Content* > *New* > *New Item* > *Generic*.

Rhythmyx pops up a blank Generic Content Editor:

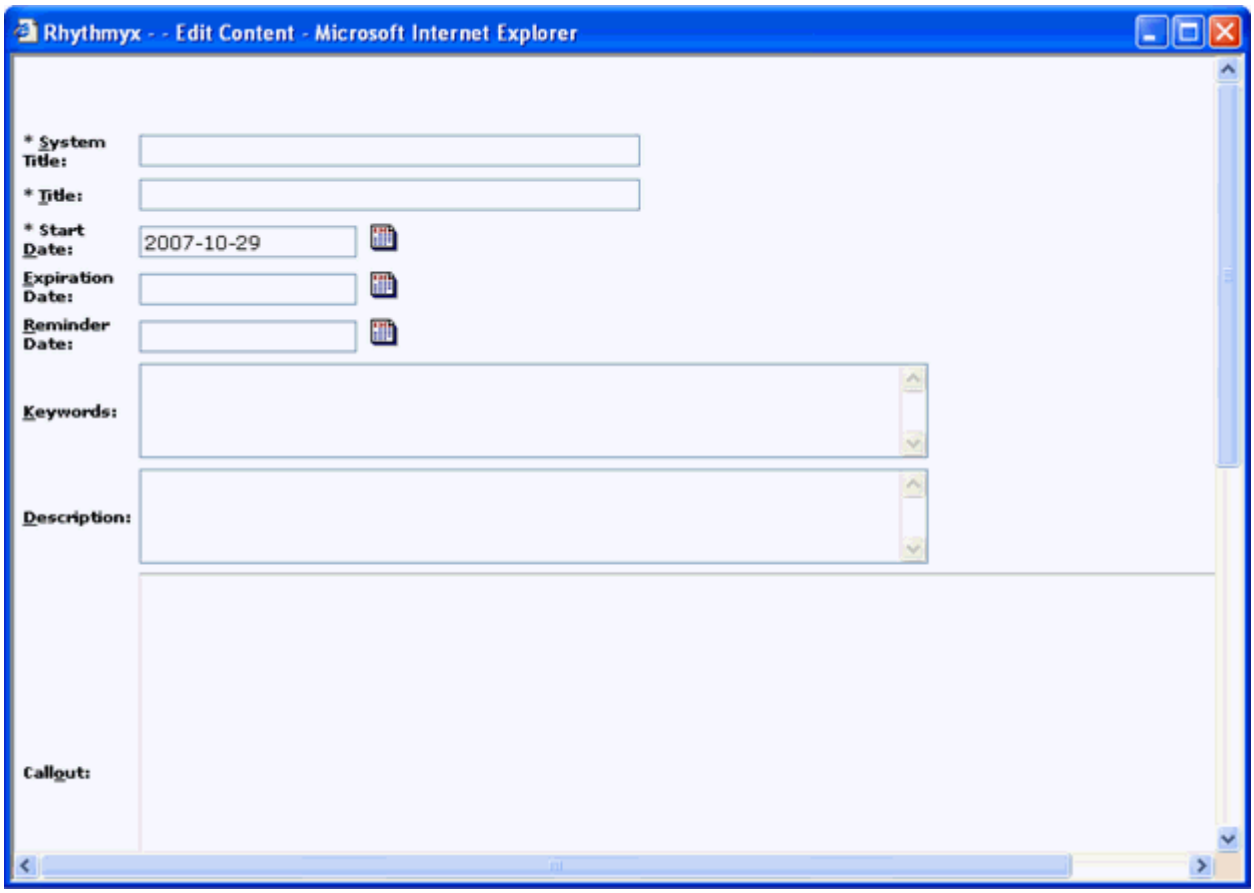


Figure 49: Generic Content Editor

2. Change to the Tuition.txt file, and copy the first line. Change back to Content Editor and paste this text in the System Title field. Paste it again into the Title field.
3. Note that the Start Date defaults to the current date. Do not change the value in this field.
4. Change to the Tuition.txt file and copy the second line. Change back to the Content Editor and paste this text into the Description field.
5. Click the Callout field to enable it. Change to the Tuition.txt file and copy the third line. Change back to the Content Editor and paste this text into the Callout field.
6. Click the Body field to enable it. Change to the Tuition.txt file and copy the text from the beginning of the third line to the end of the file. Change back to the Content Editor and paste this text into the Body field.
7. Click the [**Insert**] button. You will be briefly redirected to a page asking you to wait a moment while your Content Item is uploaded to the repository, then redirected again the Content Editor.

   You have just added a new Content Item to the Rhythmyx Repository.
8. Click the [**Close**] button to close the Content Editor. Note that the new Content Item, "Tuition Tax Credits and Deductions Offer Free Money from the IRS" has been added to the Enterprise Investments Folder.

9 Right-click on "Tuition Tax Credits and Deductions Offer Free Money from the IRS" in Content Explorer. A menu of options opens. Move your cursor to Enterprise Active Assembly. This option includes a set of links you can use to preview different formatted outputs of the Content Item. For example, if you click the P - EI Generic link, Rhythmyx displays a window similar to this:

Figure 50: P - EI Generic Format

This page illustrates how the Content Item would look as a published Web page.

If you click the S - Title Callout Link, you see a window similar to this:

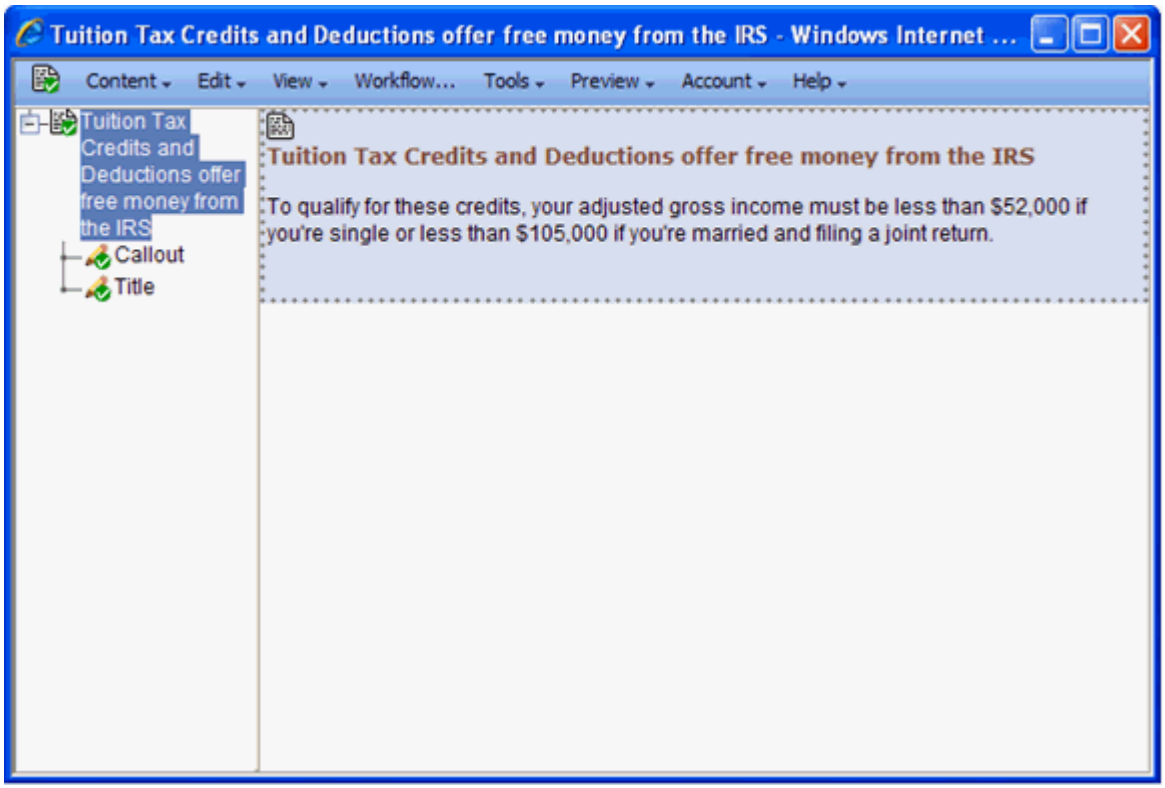


Figure 51: S - Title Callout Link Format

Both links launch the item in Active Assembly. Active Assembly consists of a two-panel interface that lets you edit content items directly on the page. The left panel is referred to as Outline view, and the right panel is referred to as Page view. Later in this document, we will complete various tasks in the Active Assembly interface. For complete information on Active Assembly, see the *Active Assembly Interface Help*.

Creating a Generic Word Content Item

Rhythmyx has been designed with enough flexibility that you can connect to third-party tools as Content Editors. One of the most common tools used for creating content is Microsoft Word word processor. The Generic Word Content Type provides the option of entering and maintaining Content Items using Microsoft Word. We will enter Content from the sample Content File SavingForCollege.txt. You should still be in the Enterprise Investments/About Enterprise Investments Folder to create this Content Item

Note that before you can launch Word from Rhythmyx, you must update your security options. In Internet Explorer choose Tools > Internet Options and click the Security tab:

- Make your Rhythmyx server a trusted site (Click the [**Sites....**] button then the [**Advanced**] button. In the Add this web site to the zone... dialog, enter *http://localhost* (or the name or IP address of the remote machine where your Rhythmyx server resides) and click [**Add**]. Click [**OK**] twice to return to the Security tab.

- Click the [Custom level...] button and on the Security Settings dialog, find the Download signed ActiveX controls entry. Select either Enable or Prompt for this option.
- Refresh the Content Explorer screen.

To create a Generic Word Content Item:

1. In the Menu bar, choose *Content* > *New* > *New Item* > *Generic Word*.

   The Generic Word Content Editor uses an ActiveX control to launch Microsoft Word. Percussion Software has signed that this ActiveX control is safe, so click the [**Yes**] button when asked whether you want to run the control After you click [**Yes**], Rhythmyx pops up a blank Generic Word Content Editor.

2. Change to the SavingForCollege.txt file, and copy the first line. Return to the Content Editor and paste the first line into the System Title field.

3. Click the Callout field to activate it. Change to the SavingForCollege.txt file and copy the second line. Return to the Content Editor and paste this text into the Callout field.

4. Click the Launch Word link.

   Rhythmyx launches Microsoft Word. Content editing using Microsoft Word requires the use of Word Styles to mimic fields in Rhythmyx. These styles are stored in the GenericWord template. The template includes Word macros that convert the styles into Rhythmyx fields during the upload process. You can implement your own Word-based Content Editors. For details see the document *Implementing Word in Rhythmyx*.

5. Change to the SavingForCollege.txt file, and copy the first line again. Switch to the instance of Word and paste it. Notice that the Style for this paragraph is PageDisplayTitle. The content of this paragraph will be entered into that field in the Repository.

6. Hit the <Enter> key on your keyboard. The new paragraph has the Style PageAuthor. In the Style drop list in Word, choose the style PageBody

7. Change to the SavingForCollege.txt file and copy from the beginning of the second line through the end. Paste this text into the Word document.

8. In the Word button bar, click the Save to Rhythmyx button .

9. Word displays a File Name dialog. Enter the text *SavingForCollege*.

10. Click [**Save**].

11. Word displays a confirmation dialog:

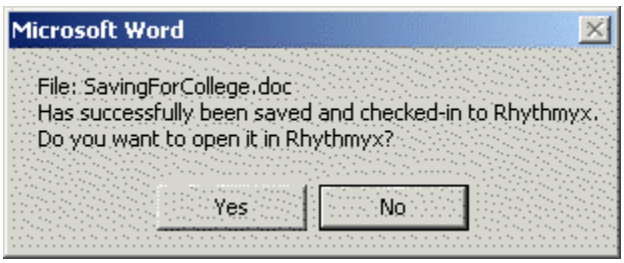


Figure 52: Confirmation dialog displayed when you have successfully uploaded your Content Item into Word

12. Click the [**Yes**] button. You will return to Rhythmyx, with the Saving For College Content Item displayed in the Content Pane. The Content Item is located as the result of a background search; if you do not see it, click the Search Results node in the left pane.
13. Right-click on the Saving For College Content Item and choose *Edit* from the popup menu.

    Rhythmyx displays the Saving For College Content Editor.
14. At the bottom of the Content Editor, you will find links for viewing this Content Item in Active Assembly in different formats. Click on these links to view the formats available for the Content Item.
15. When you have finished, click the [**Close**] button.

Creating an Image Content Item

Image Content Items are used to manage graphics used as content on Web pages.

Note that some graphics are used within the page layout itself. Examples include company logos and spacers used to define page layout. These graphics, which are referred to as *static images*, are not managed by Rhythmyx, but reside on the Web server so they can be included in the Published pages.

Content images, however, are managed as Content Items of the Image Content Type. Once an Image Content Item exists in the system, you can use it in any Slot that allows Image Content Types.

An example graphic (moneyroll.jpg) is included in the FastForward sample directory. If you are connecting to your Rhythmyx server from a remote machine, you might want to copy this file to your local machine.

To create the Image Content Item:

1. In the Navigation Pane, expand the Enterprise Investments Site Folder, then expand the Images Site Folder. Double-click on the People Folder.
2. In the Menu bar, choose *Content* > *New* > *New Item* > *Image*.

Rhythmyx displays the Image Content Editor.

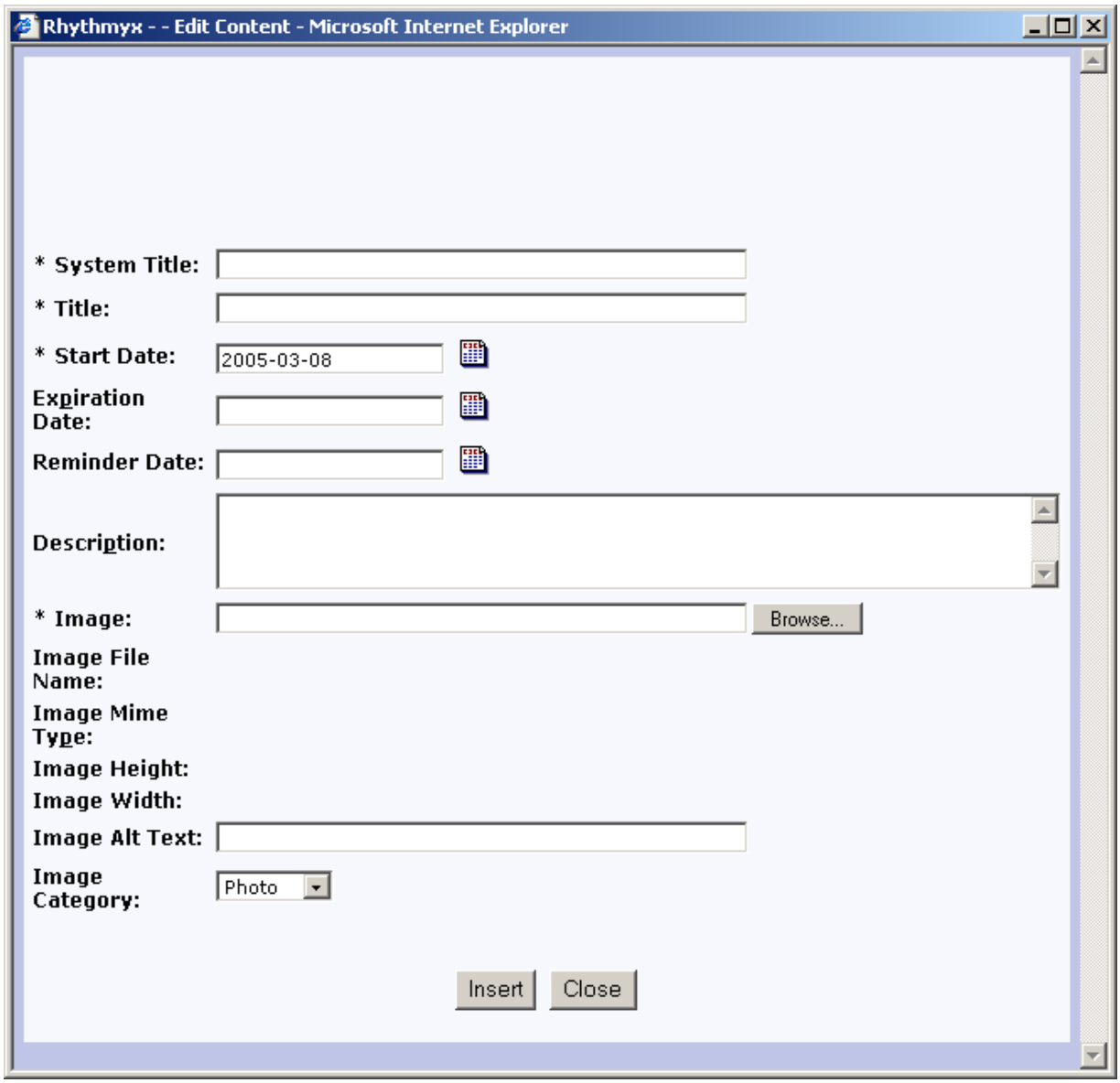


Figure 53: Image Content Editor

3 In the System Title and Title fields, enter *Money Roll*.

4 Click the [**Browse**] button next to the Image field.

Rhythmyx displays a browse dialog.

5 Browse to the <Rhythmyxroot>/Samples/ffsamples directory, select the file *moneyroll.jpg*.and click the [**Open**] button.

Rhythmyx adds the path and filename you specified (for example, C:\Rhythmyx\Samples\ffsamples\moneyroll.jpg).

6 On the Content Editor window, click the [**Insert**] button.

7. Rhythmyx uploads the file and refreshes the Content Editor window. Once the window has refreshed, the read-only fields Image File Name, Image Mime Type, Height, and Width include data.
8. Click the [**Close**] button to close the Content Editor
9. The new Money Roll Image Content Item has been added to the Folder.

Two additional sample image files are included in the FastForward Samples directory, Girllookingatcamera.jpg and taxandglasses.jpg. Add these as Image Content Items to the same Folder.

Working with Site Folders

As discussed earlier, Folders are the fundamental mechanism Rhythmyx provides for users to organize and navigate content. Folders in Rhythmyx are similar to Folders in Microsoft Windows. The major difference is that the folders in Windows are physical directories on the file system. Files in a folder in Windows are physically located in that Folder.

In Rhythmyx, Folders define virtual locations you can use to organize and navigate content. The Content always exists in the Repository, not in the Folders. The Folders merely contain pointers to the physical Content Items stored in the Repository.

The Navigation Pane includes two roots that contain Folders. The Sites Root is used to define Site structures. When you publish a Site, Rhythmyx creates a directory structure on the target server parallel to the Site Folder structure you have defined under this node. Note that you can create a several Sites under this node, each of which can be published separately. The Folders Root contains Folders that are used more generically for organization. The Folders under this root are not published.

Otherwise, Folders function identically regardless of the root to which they belong.

Creating the Education Folder

We want to create a new subsection (Education) for the Investment Advice section of our Web site. This section will require a new directory to store the Web pages for the new section. In Rhythmyx, we create the new section, and the new directory, by creating a new Folder.

To create the new Education Folder:

1. In the Navigation Pane, expand the Enterprise Investments node, and select the Investment Advice node.
2. In the Menu bar, choose *Content* > *New* > *Folder*.

Rhythmyx displays the Create Folder dialog.

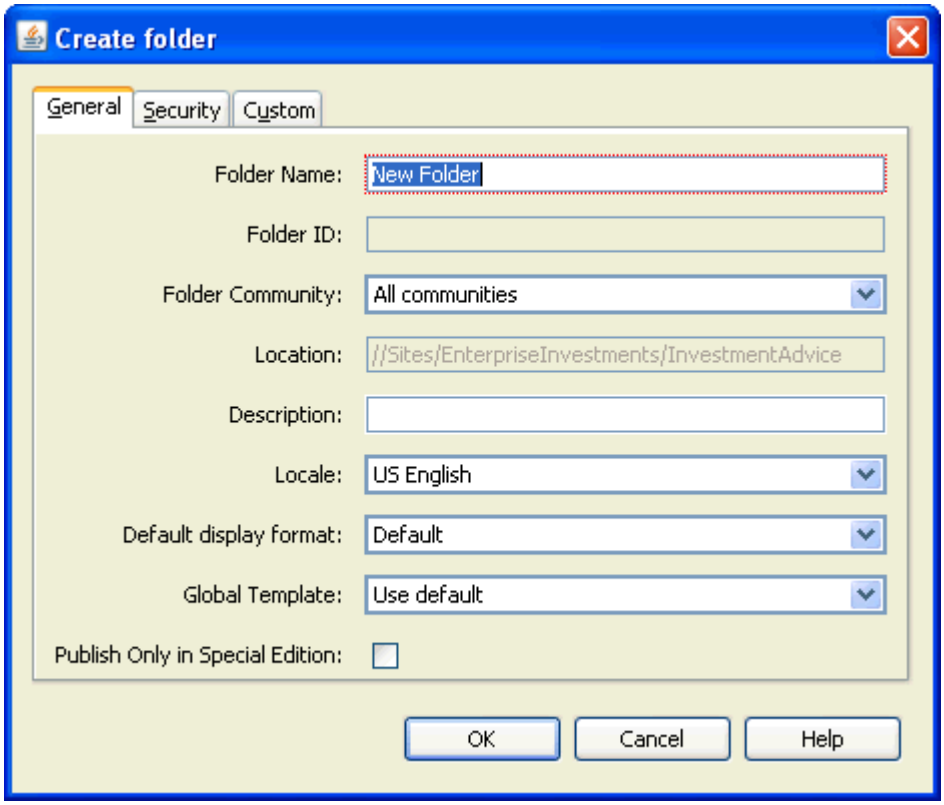


Figure 54: Create Folder dialog

3 In the Folder Name field, enter *Education*. You can enter a free-form Description if you wish, but that is not necessary. Leave the defaults in all other fields.

4 Click the [**OK**] button.

Rhythmyx adds the new Folder under Investment Advice.

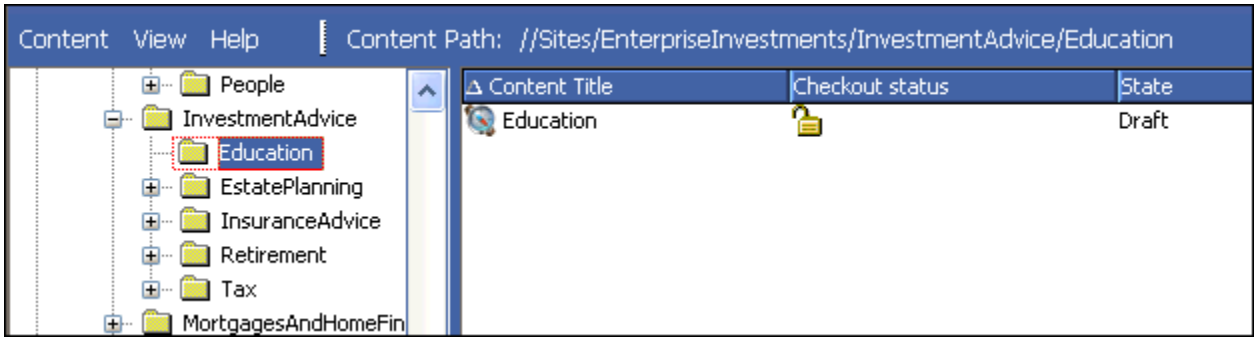


Figure 55: Education folder

Double-click on the Education Folder. Rhythmyx displays the contents of the Folder in the Content Pane. Notice that this Folder already has a Content Item, Education, of the Navon Content Type. This Content Item is created automatically by the Managed Navigation functionality. It is used to generate navigation for the Web site automatically when it is published. For more about Managed Navigation see ***Maintaining Managed Navigation for the Education Folder*** (on page 83).

Moving Content into the Education Folder

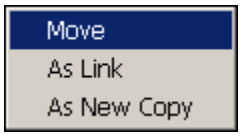
Since Web pages are published to the directory corresponding to the Site Folder in which they are located, we want to move the Content Items we previously created into the new Folder.

Let us move the Tuition Content Item first. To move the Tuition Content Item:

1. Select the EnterpriseInvestments Folder.
2. In the Navigation Pane, select the About Enterprise Investments Folder so you can see its contents in the Content Pane.
3. In the Content Pane select the Tuition Content Item, and drag it to the InvestmentAdvice/Education Folder (as you drag the Content Item, you will notice a small dotted square below the mouse pointer; this square indicates that you are dragging the Content Item.
4. Place the mouse pointer over the Education Folder and release.

   Rhythmyx pops up a dialog with the following options:

   - Move
   - As Link
   - As New Copy



5. Select the *Move* option.

   The Tuition Content Item is removed from the Content Pane.

6. Select the Education Folder. The Tuition Content Item has been moved to the new location.

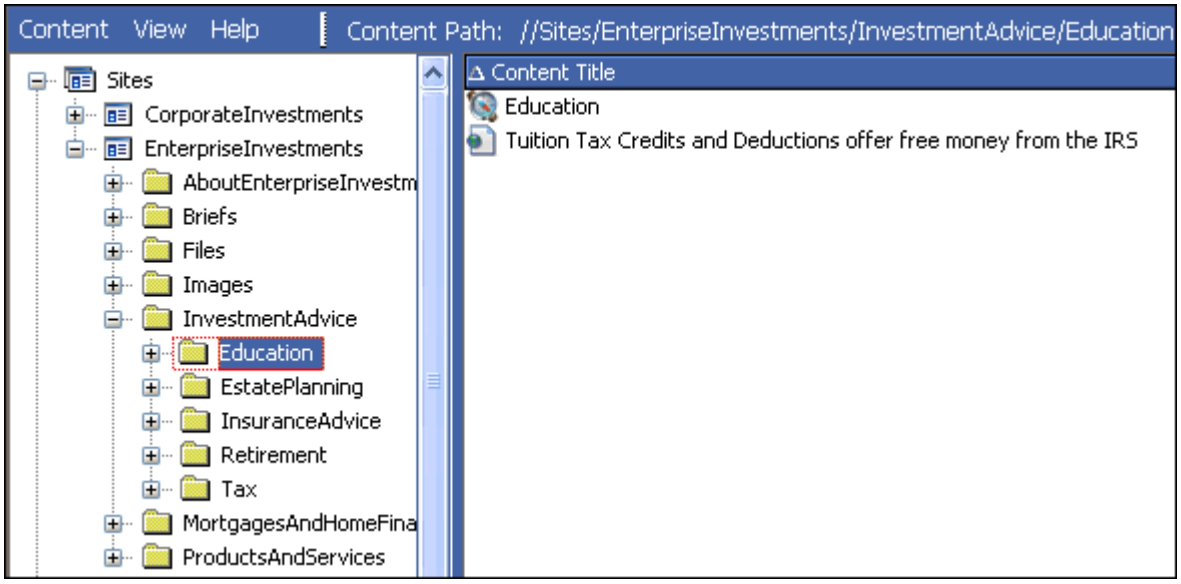


Figure 56: Education Folder with moved item

7 Use the same procedure to move the Saving for College Generic Word Content Item into the Education folder.

8 Now go into the EnterpriseInvestments/Images/People folder and move the Money Roll, Girl Looking at Camera, and Tax and Glasses Content Items into the Education Folder.

Adding Additional Content to the Education Folder

Two additional sample txt files, TenThingstoknow.txt and Section529Plans.txt are included in the Samples directory. Use these to create two more Generic Content Items, "Important Things to Know About Saving for College" and "Section 529" Plans in the Education Folder.

When you have created these Content Items, the Education Folder should resemble the following screenshot:

Figure 57: Education Folder

Active Assembly

Now that we have some Content Items, we want to create links between them. In Rhythmyx, the process of creating these links is called *Active Assembly*. When you use Active Assembly to link one Content Item to another, you are creating an *Active Assembly Relationship* between the two Content Items.

Active Assembly Relationships are one category of associations between Content Items. Rhythmyx provides the ability to create a variety of associations between Content Items. Collectively, these associations are known as Relationships. For more details about Relationships in general, see *Implementing the Relationship Engine*.

An Active Assembly Relationship defines how one Content Item (referred to as the Dependent) will be included in another Content Item (which is called the Owner because it owns the Relationship) when the content is published. Active Assembly is used for one of two reasons:

- to embed one Content Item into another (typically used for graphics, but occasionally also used to embed text from one Content Item into another);
- to create a link from one Content Item to another (such as a hypertext link between two pages, or call to a binary file to be displayed to the user).

We will perform both types of Active Assembly, adding links between the pages we created and adding images to the pages.

Adding Links to Other Generic Pages in the Sidebar Slot

On the P - EI Generic Template, the Sidebar Slot is used to create links to other Content Items that contain content related to the topic on the current page. Let's create a link from the Tuition Content Item to the other new Education Content Items we created.

To create related content in the Sidebar Slot:

1. In the Navigation Pane, select the Education Folder.
2. Right-click on the Tuition Content Item and choose *Enterprise Active Assembly > P -EI Generic* from the popup menu.

Rhythmyx displays the P - EI Generic format of the Tuition Content Item in the Active Assembly Interface.

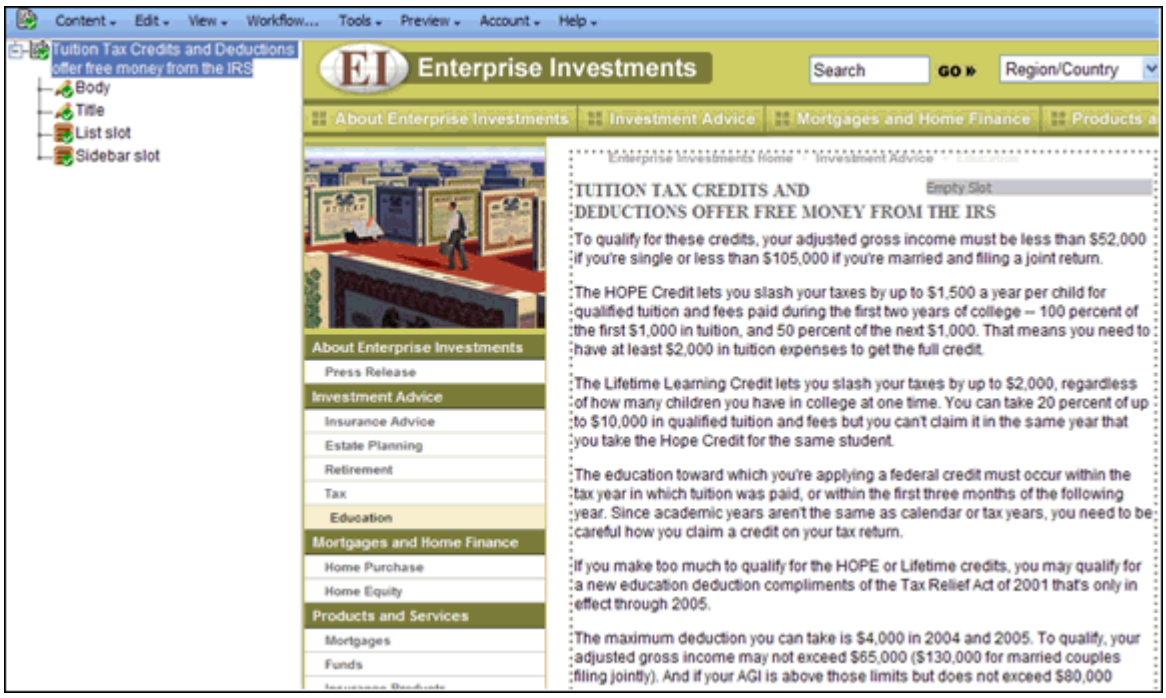


Figure 58: Tuition item in P - EI Generic format

In Active Assembly, you can modify the Snippets in the Slots on this Template.

3 In Outline View, find *Sidebar slot*, and right-click the icon, and choose *Insert Snippet* from the drop menu.

Rhythmyx displays the Content Browser.

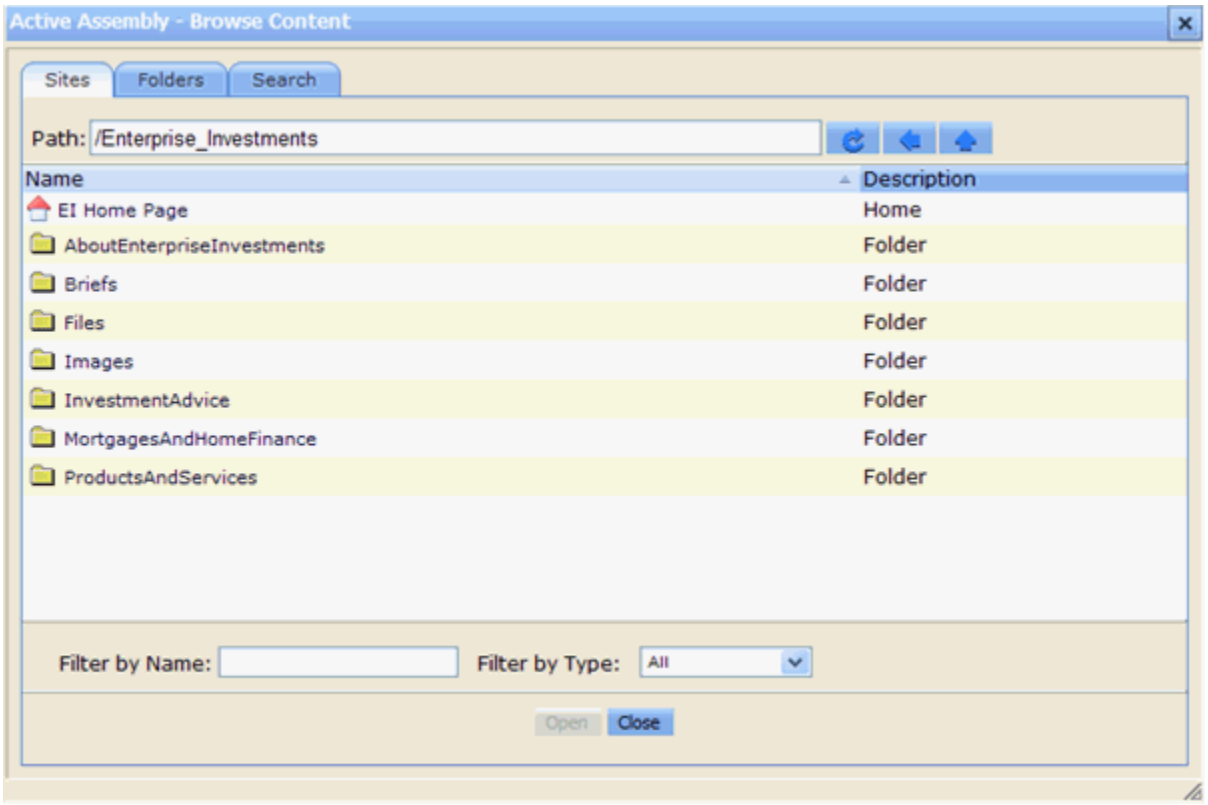


Figure 59: Content Browser

4 Click the Search tab.

Two versions of this tab are available. If you are using the full-text search engine, you will see:

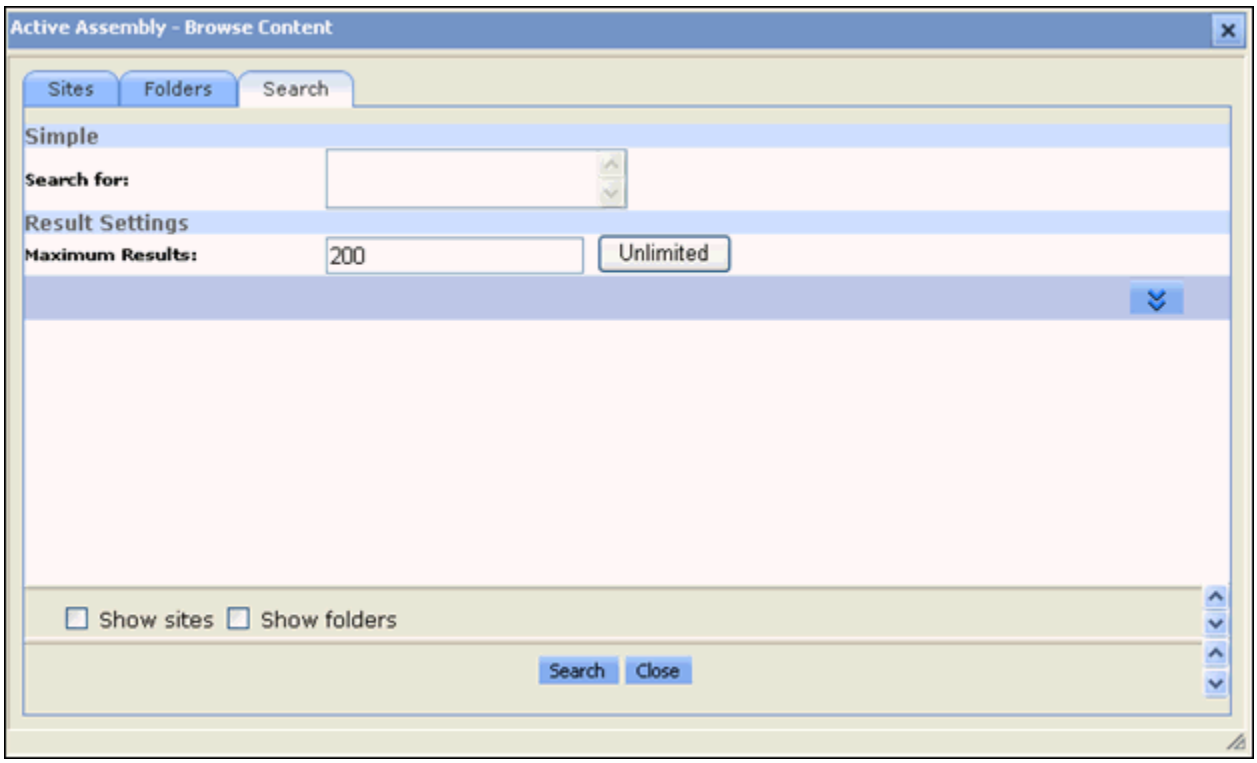


Figure 60: Content Browser, Search Tab

If your system is using the database search engine, you will see:

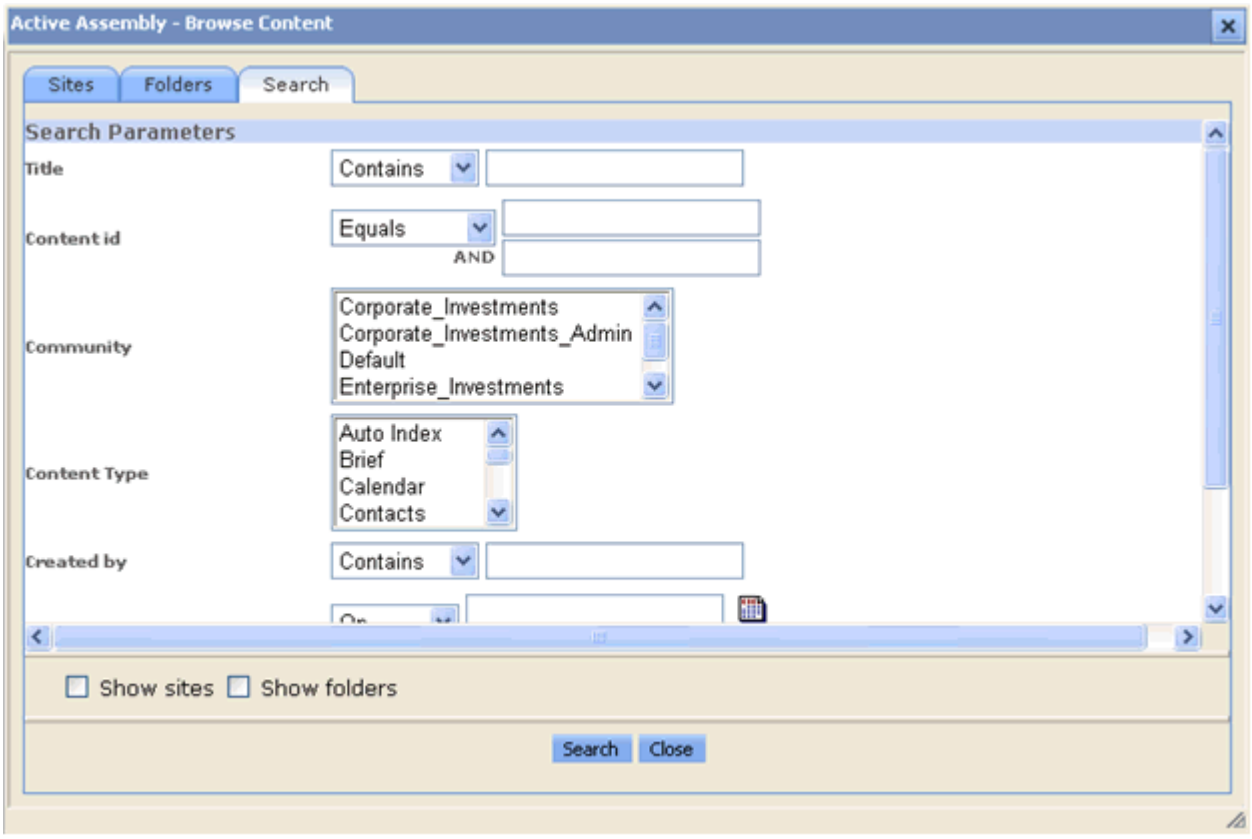


Figure 61: Content Browser, Search tab

5 If you are using the Full-text Search engine, enter *college* into the Search for field. If you are using the database search engine, enter college into the Title field. Click the [**Search**] button.

6 Rhythmyx returns the Search results:

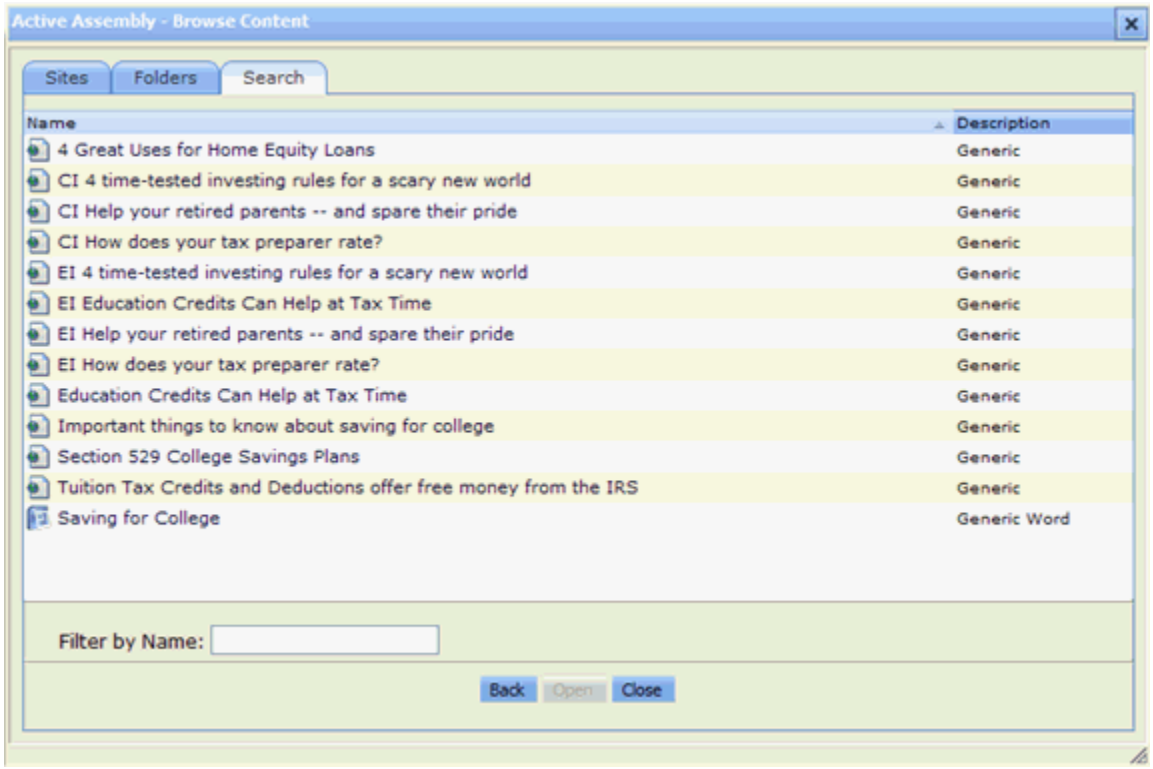


Figure 62: Search results

7 We want to insert the *Section 529 College Savings Plans* content item, so we click it.

A page that lets us choose the Template or format for the content item opens. It lists five Templates with which we can format the item:

- S - Callout
- S - Image Link
- S - Title Callout and More Link
- S - Title Callout Link

- S - Title Link

Figure 63: Template selection page

8 Click each option under Select a template to see in Template Preview how it formats the content item.

We want to create a link to the specified page using the Title and Callout of the target Content Item, so we will use the S - Title Callout Link Template.

9 Select *S - Title Callout Link* and click [**Select**].

The Content Browser returns to the page of search results so you can add another item to the Slot. If you move the Content Browser over so you can see the Sidebar Slot where it appears in Page view, you will see that the *Section 529 College Savings Plans* content item has been added to the Slot.

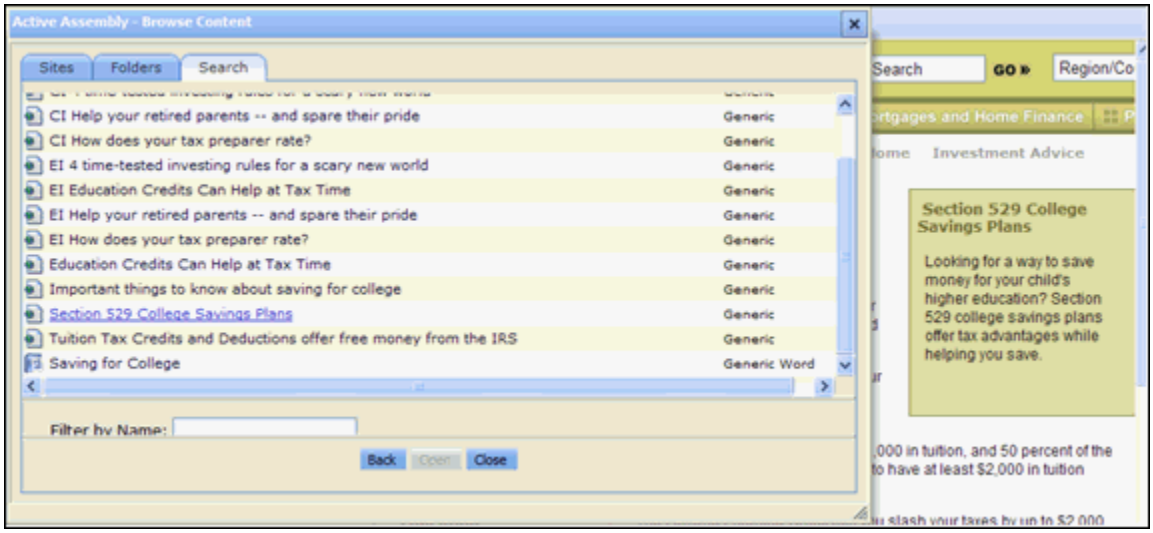


Figure 64: Snippet added to Slot

10 Repeat Steps 7 - 10, adding the *Important things to know about saving for college* content item in the format of the *S - Title Callout Link* template.

11 When you return to the Search results, click [**Back**] to return to the search screen. Since you do not want to enter another search, click [**Close**].

The Content Browser closes and the page for the Tuition Content Item now resembles:

Figure 65: Sidebar Slot with two Snippets added

When you begin with an empty Slot, each new Snippet that you add to the Slot with the Content Browser is inserted at the bottom of the Slot, so the *Important things to know about saving for college* Snippet appears below the *Section 529 College Savings Plans*.

Each of the titles in the Snippets that you have added is a link to the Web page for that item. To see this press ALT and click on one of the Snippet titles.

Rhythmyx opens the page that the title links to.

12 When you have finished, close the Active Assembly window for the Tuition Content Item.

Adding an Image to a Generic Page

Now let us add an image to one of our Education Content Items. In this case, let us add an image to the rich-text Body field of the Content Item.

1 In the Navigation Pane, select the Education Folder.

2 In the Content Pane, right-click on the Tuition Content Item and choose *Edit* from the popup menu.

Rhythmyx displays the Tuition Content Editor.

3 Scroll down to the *Body* field, and place the cursor before the first character in the field.

4 Click the Insert Rhythmyx Image button .

Rhythmyx displays the Content Browser.

5 Click the Search tab.

Two versions of this tab are available. If you are using the full-text search engine, you will see:

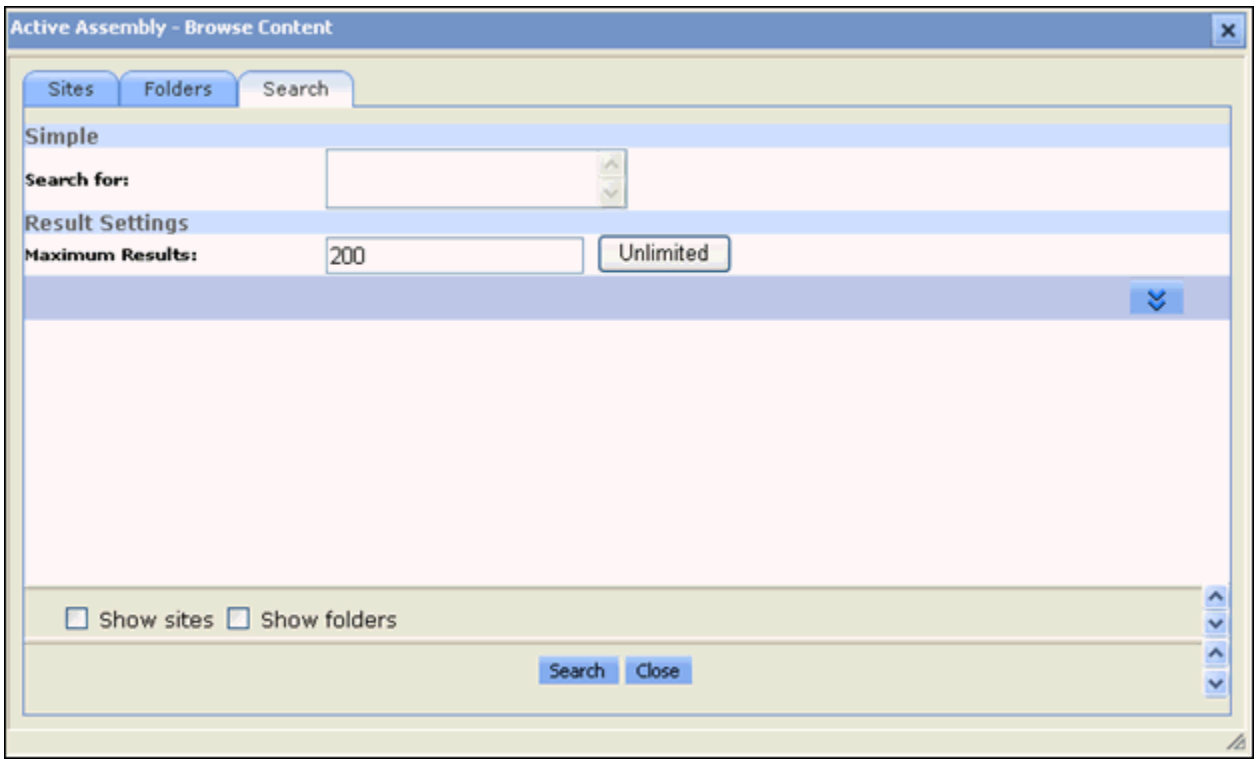


Figure 66: Content Browser, Search Tab

If your system is using the database search engine, you will see:

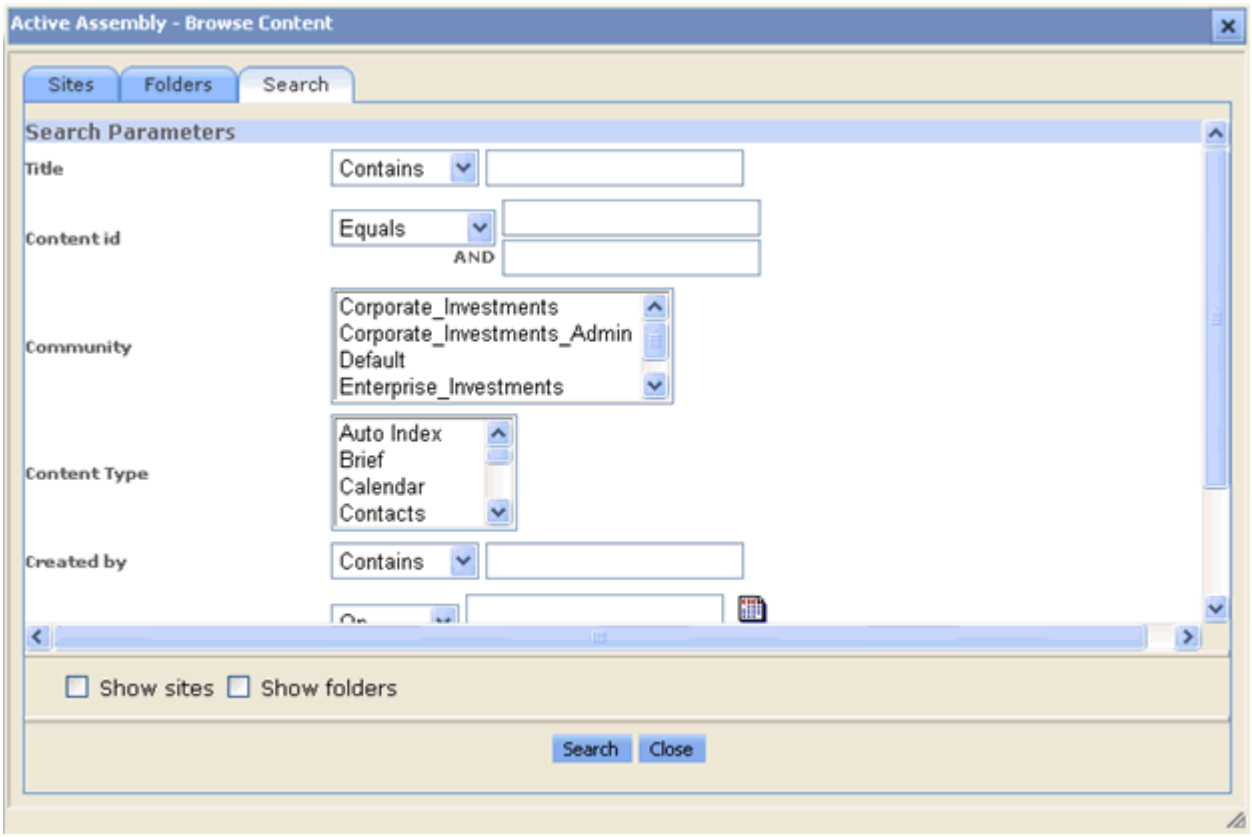


Figure 67: Content Browser, Search tab

6 If you are using the Full-text Search engine, enter *glasses* in the Search for field. If you are using the database search engine, enter *glasses* in the Title field. Click the [**Search**] button.

Rhythmyx returns the search results.

7 We want to insert the *Tax and Glasses* content item, so we click it.

A page that lets us choose the Template or format for the content item opens. In this case, there is only one Template available for the item:

- B - Image

8 Select B - Image and click [**Select**].

The image is added to the Body text. The Content Browser closes.

9 Now let us format the graphic so it merges more smoothly with the text. Click the graphic.

A black border appears around it.

10 Right-click on the graphic and choose *Image Properties* from the popup menu.

Rhythmyx displays the Image Properties window.

11 In the Alignment drop list, choose *Left*.

12 Click the [**OK**] button.

13 The text will now flow around the graphic, similar to the following screenshot:

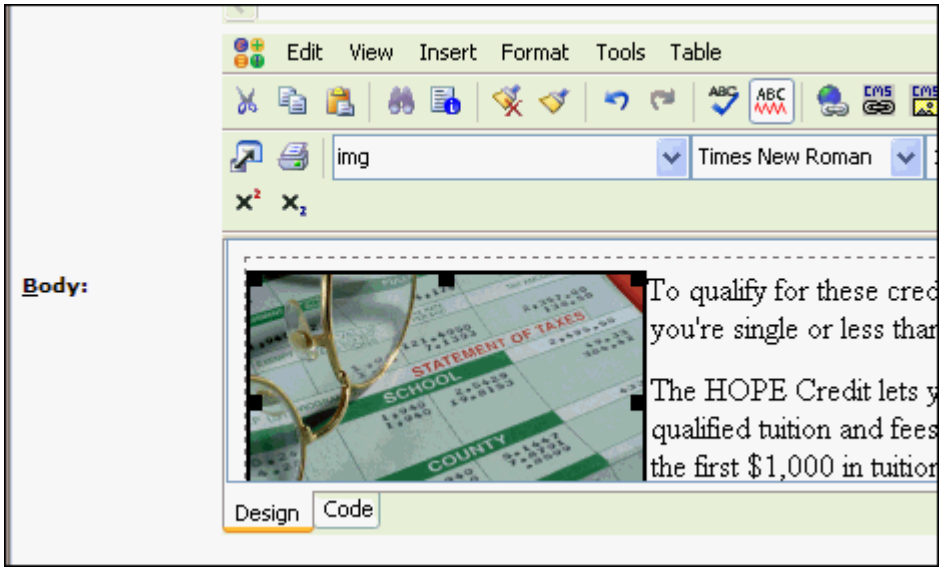


Figure 68: Graphic with text flowing around it

14 Click the [**Update**] button to upload the changes to the Repository.

When the changes have been uploaded, the Content Editor will refresh.

15 Click [**Close**].

Now, add the Money Roll Image to the 529 Content Item and add the Girl Looking at Camera Image to the Important Things... Content Item. You may want to try alternative formatting for these images (for example, aligning right instead of left).

Previewing the Content Item

Now that we have added Snippets to the Slots in our Content Items, let us preview them to see how they will look when published.

To preview the Tuition Content Item:

1 In the Navigation Pane of Content Explorer, open the Education folder.

2 Right-click on the Tuition Content Item and on the popup menu choose *Enterprise Preview* > *P - EI Generic*.

3 Rhythmyx displays a preview of the Tuition Content Item.

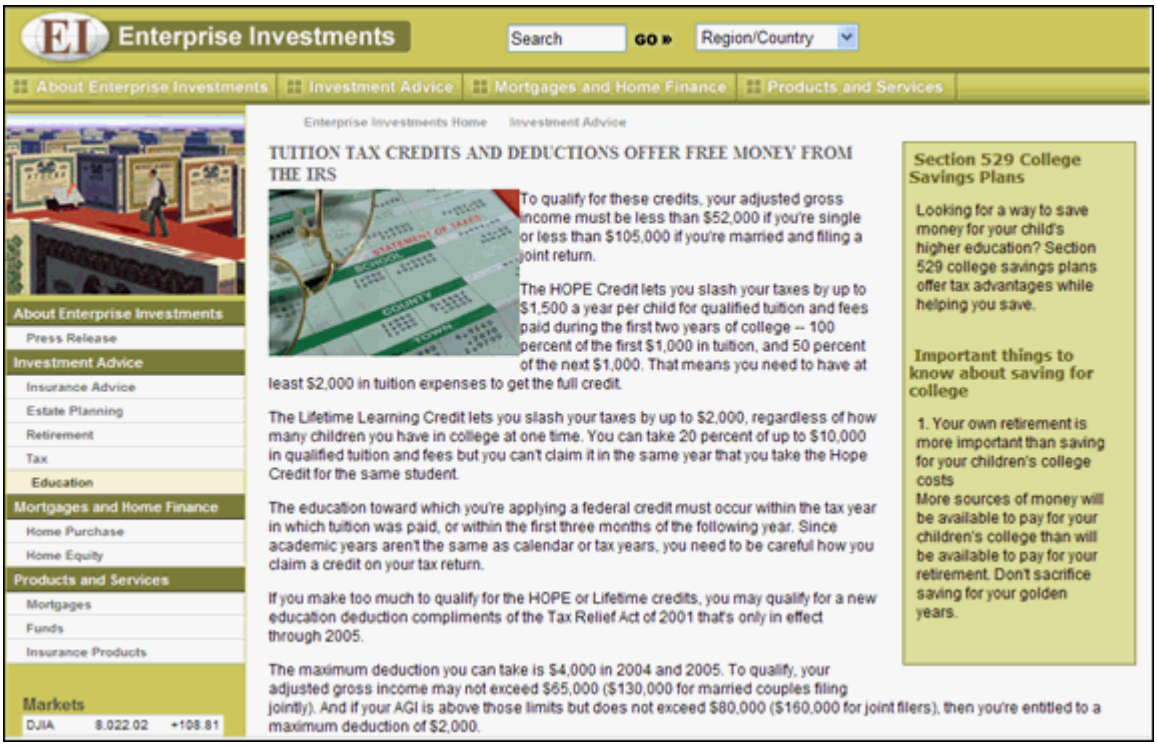


Figure 69: Preview of Tuition content item

Note that the page includes the graphic and the content items in the Sidebar Slot that we added.

Click on the Important Things or Section 529 content item. Rhythmyx displays previews of these pages. These previews give you an idea of how the pages will look when published. Note, however, that when content is published, the Snippets in the Slots will only be included if they are Public. The following section, which describes Workflow, explains how to make these new content items Public.

Workflow

A Workflow is a business process that defines the life cycle of a Content Item. In Rhythmyx, every Content Item must exist within a Workflow. The Workflow defines:

- the steps or stages in the processing of the Content Item;
- which users can access the Content Item at a particular point in its life cycle; and
- what different users can do to the Content Item at each point.

Rhythmyx defines a Workflow as a series of stages, or States, which define the life of the Content Item. In each State, users in specific Roles have access to the Content Item. Users in some Roles can modify the Content Item, while users in other Roles can only see and read the Content Item. Users with the correct access can also Transition Content Items, moving them between States in a Workflow.

Check In and Check Out

The check in and check out functionality in Rhythmyx allows multiple users to have access to all Content Items, but prevents more than one user at a time from modifying a Content Item. When a user checks out a Content Item, only that user can edit the Item; it is unavailable to all other users.

Check in and check out are special types of Transitions. Check in and check out do not move a Content Item from one State to another, as do normal Transitions. Instead, check in sets a lock flag that indicates a user has the Content Item checked out. Check in removes this flag.

In many cases, Rhythmyx checks Content Items in and out automatically. In a few cases (notably when initially creating a Content Item or after modifying the Content Item), you must check the Item in manually.

About Roles

A Role is a collection of users with the same access in Rhythmyx. In Workflows, Roles determine which users can access content in each State and which Transitions they can apply.

Organizing users into Roles helps administrators manage users that have the same permissions. Instead of managing the permissions for each user, they define a Role its permissions, then assign users to it. Users inherit their access rights from the Roles to which they are currently assigned.

About the Standard Workflow

The Generic Page Content Type uses the Standard Workflow, one of two basic Workflows included with FastForward. The Standard Workflow is a common structure that requires one approval before going to Public.

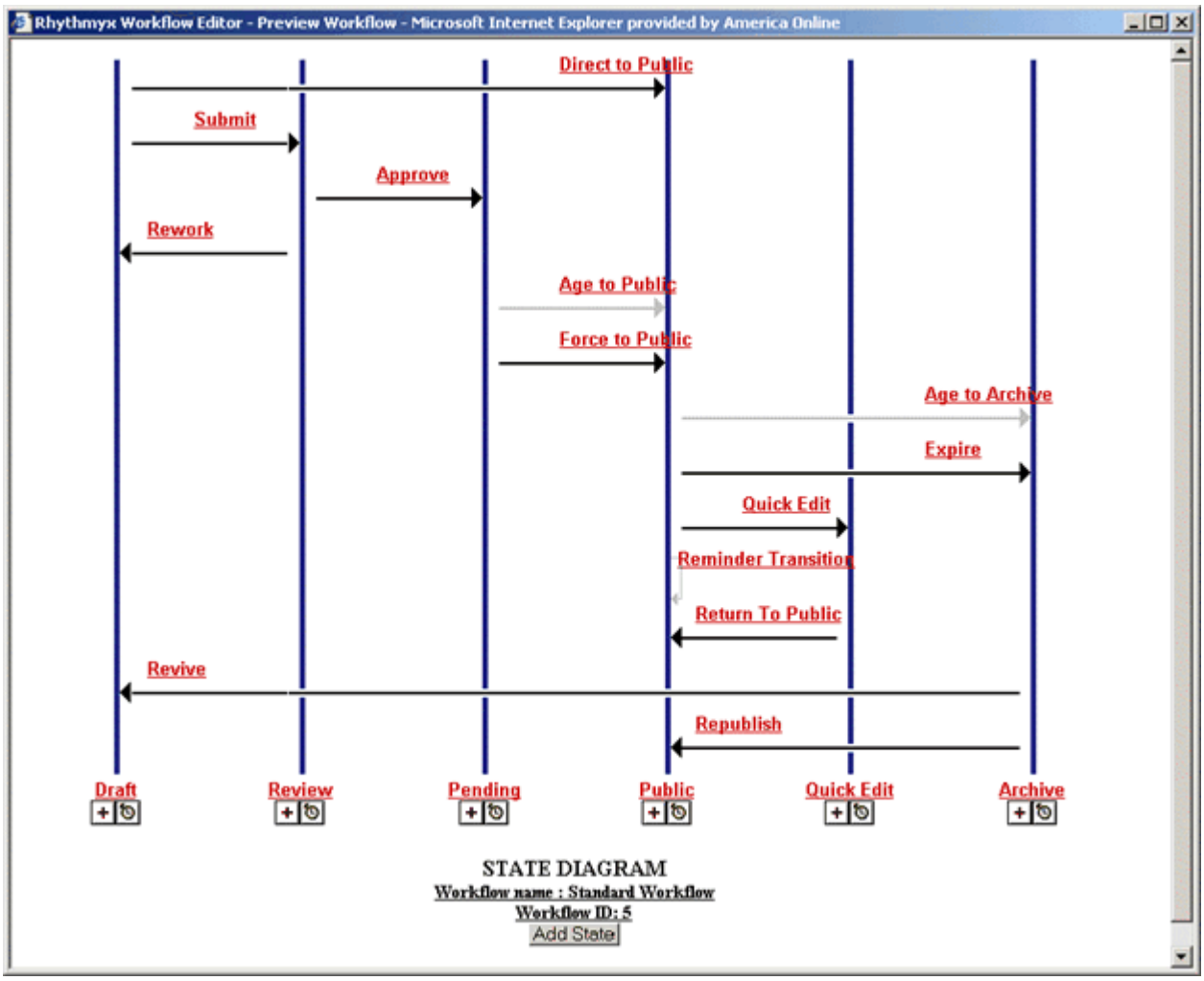


Figure 70: Preview of Standard Workflow

Note that the Standard Workflow includes a Pending State between the Review and Public States. This State is included to support internationalized systems. In some cases, internationalized systems require that Translations of Content Items be Published at the same time as the original. The Pending State provides a holding area" for original Content Items while waiting for the Translations to be completed.

The Public State is the State in which the Content Item is eligible to be Published. When a Content Item reaches this State, it will be published the next time the Publisher runs.

The Quick Edit State is provided to allow quick touch-ups to Content Items without forcing them through the complete Workflow again. For example, if you find a misspelling or minor grammatical error on the Content Item, there is usually no need for it to go back through the complete approval process. Instead, you can move it to Quick Edit, make your change, and return the Content Item to Public immediately. Note that your changes will not be reflected in the published output until the Content Item is re-published.

Finally, the Archive State provides a terminal State for Content Items after they have expired. The Content Items continue to exist in the system, and if necessary can be revived. (In the Standard Workflow, revised Content Items are returned to the Draft State and must go through the complete Workflow before they can return to Public.)

Transitioning Content Items to a New State

Now that we have finished creating our Content Items and adding related content, we want to make them Public so we can publish them. We will need to perform Transitions on the Content Items.

To Transition the Tuition Content Item:

1. In the Navigation Pane, go to the Education Folder.
2. Right-click on the Tuition Content Item and on the popup menu, choose *Workflow* > *Submit*.
3. Rhythmyx displays a Workflow Comment window. You can enter a free-form comment in this window.

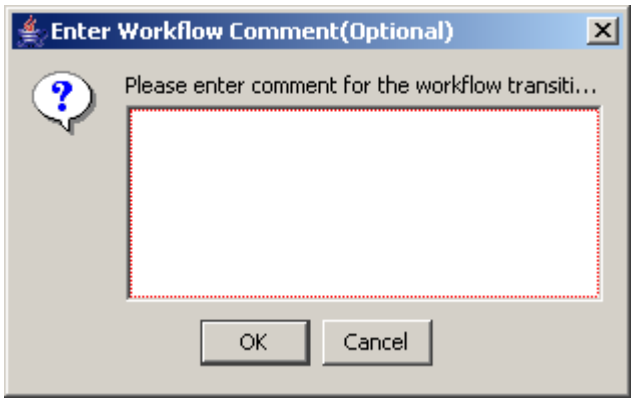


Figure 71: Workflow Comments Popup

4. Click the [**OK**] button to continue making the Transition.
5. Rhythmyx displays a message box informing you that it is processing the Tuition Content Item.
6. When the message box disappears, the Transition is complete, and the Content Item is now in the Review State.

Note that the Author1 user does not have rights to Transition the Content Item in the Review State. If you right-click on the Tuition Content Item now and choose Workflow, the submenu lists *No Entries*.

Repeat the process above for the remaining new Content Items (Important Things to Know, Section 529 Plans, Money Roll, Tax and Glasses, Girl Looking at Camera, Saving for College).

Moving Content Items to Public

As we noted above, when logged in as Author1, you cannot transition the Education Content Items from the Review State. You must log in as a user with rights to Transition the Content Items in this State. In this case, the user Editor1 has these rights. Start a new browser session and log in as Editor1 (this user uses the standard password *demo*).

(Note that you must start a new browser session. While you can change the Community [and in internationalized environments, the Locale] of the user in the current session, each session is associated with a specific user. In order to log in as a different user, you must start a new browser session.)

Once you have logged in, go to the Education Folder.

We are going to assume for our purposes that these Content Items are all ready to go Public. Rather than Transition them individually, we can Transition them all at once.

To Transition multiple Content Items:

1. Select the Content Items you want to Transition. In this case, we want to Transition all the Generic Page Content Items, the Generic Word Content Item, and the Image Content Items. The Content Explorer applet supports multi-select. You can hold down the <CTRL> key while selecting Content Items, or if multiple Content Items are adjacent, select the first Content Item, then hold down the <Shift> key while selecting the last Content Item you want to select. All Content Items in between will be selected as well.
2. Right-click and from the popup menu, choose *Workflow* > *Approve*.

   When you multi-select, Content Explorer displays only the Transitions that all selected Content Items have in common. In this case, the Content Items should have the following Transitions in common:

   - Check-out
   - Approve
   - Rework

   If the selected Content Items have no Transitions in common, when you select Workflow from the popup menu, the submenu option will be *No Entries*.
3. Rhythmyx displays the Workflow Comment window. If you enter a comment in this window, it will be added to the record for all selected Content Items. You cannot enter different comments for different Content Items in the selection. If you want to enter different comments for different Content Items, you must Transition them individually.
4. Click the [**OK**] button.

   Rhythmyx displays a message window showing the Content Items it is Transitioning. When the message window disappears, all selected Content Items have been Transitioned.

The selected Content Items are now in the Pending State. Ordinarily, when using the Standard Workflow, you would allow Rhythmyx to move the Content Items to Public automatically using the Aging functionality. In the Standard Workflow, an Aging Transition has been added from the Pending State to the Public State. This Transition will automatically move the Content Items to Public based on the System Field Start Date. Recall that we preserved the default Start Date, which is the current date, when we created our Content Items. When the aging process on the Rhythmyx server (known as the Aging Agent) runs, it will find our Content Items, and note that their Start Date is the current date (or the past date when you created them). Thus, it will move the Content Items to Public automatically. The Aging Agent runs every ten minutes, so you may have to wait a few minutes for your Content Items to Transition automatically.

If you don't want to wait, another Transition, Force to Public, is also available from the Pending State. The Force to Public State is only available to users in the Admin role, so if you want to force these Content Items to Public, you will have to start another browser session and log in as admin1 to have access to Transition these Content Items.

Maintaining Managed Navigation for the Education Folder

Recall that when we created the Education Folder, Rhythmyx automatically created a Navon Content Item of the same name in the Folder. Navons are Content Items, and act like other Content Items in the system. They include Slots and have related Content Items assigned to them. Navons also exist in a Workflow and can be Transitioned. During assembly, however, Navons are treated somewhat differently. Rhythmyx uses them to create a background XML document that it uses to apply navigation to published pages.

To ensure that our Education Folder and its content are published correctly, we will need to assign a Content Item to the Landing Page Slot of the Education Navon, and we will have to make the Navon Public.

Note that although the users author1 and editor1 can see the Education Navon, this Content Item actually exists in the Enterprise Investments Admin Community. Since the users author1 and editor1 are members of the Enterprise Investments Community, they cannot access the Education Navon. The user admin1, however, can log in to the Enterprise Investments Admin Community and thus can maintain this Content Item. If you still have a browser session for the admin1 user active, you can use that session. Otherwise, you will need to start a new browser session and log in as admin1.

Regardless of whether you use an existing browser session or log in to a new session, you will need to change the Community admin1 is logged in to from Enterprise Investments to Enterprise Investments Admin.

Creating a Landing Page for the Education Folder

A landing page is the page you are directed to when you click on a link in the Navigation part of a Rhythmyx page.

You must specify the landing page.

To add a Landing Page to the Education Navon:

1. In the Navigation Pane, go to the Education Folder.

   Navons generally act like normal Content Items in the system, so they include Slots. However, during assembly, Navons are used to create a background XML document that is used to add navigation to published pages. They are never assembled into Snippets or Pages. Therefore, you cannot use the Active Assembly Preview to maintain the Slots on a Navon. You must use the Active Assembly Table Editor to add related content to the Slots on a Navon.

2. Right-click on the *Education* Content Item and on the popup menu, choose *Active Assembly Table Editor*.

3 Rhythmyx displays the Active Assembly Table Editor.

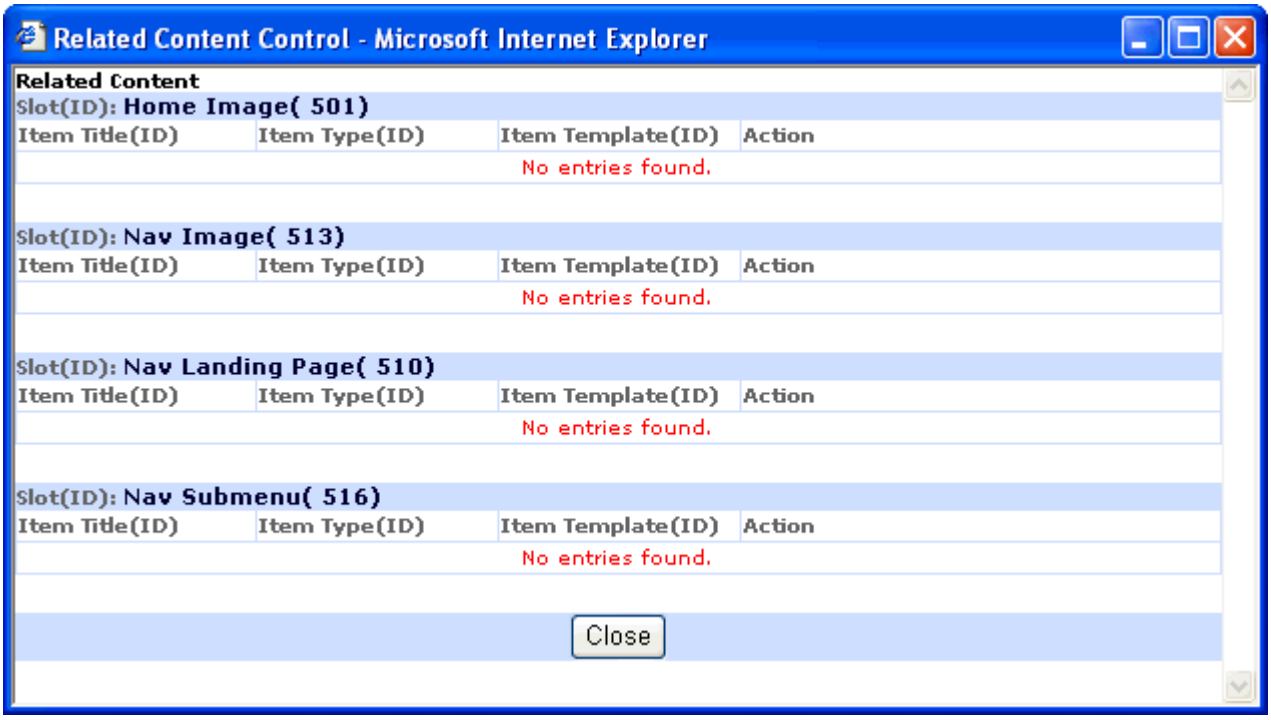


Figure 72: Navon Table Editor

4 Click the nav_landing_page link.

5 Rhythmyx displays the Content Browser.

6 Click on the Search tab.

7 Search on the term "tuition".

8 Click the Tuition content item.

The Select a Template window opens. The only option is the S - Title Link Snippet.

9 Click [**Select**].

10 The Tuition Content Item is added to the Nav Landing Page Slot on the Table Editor.

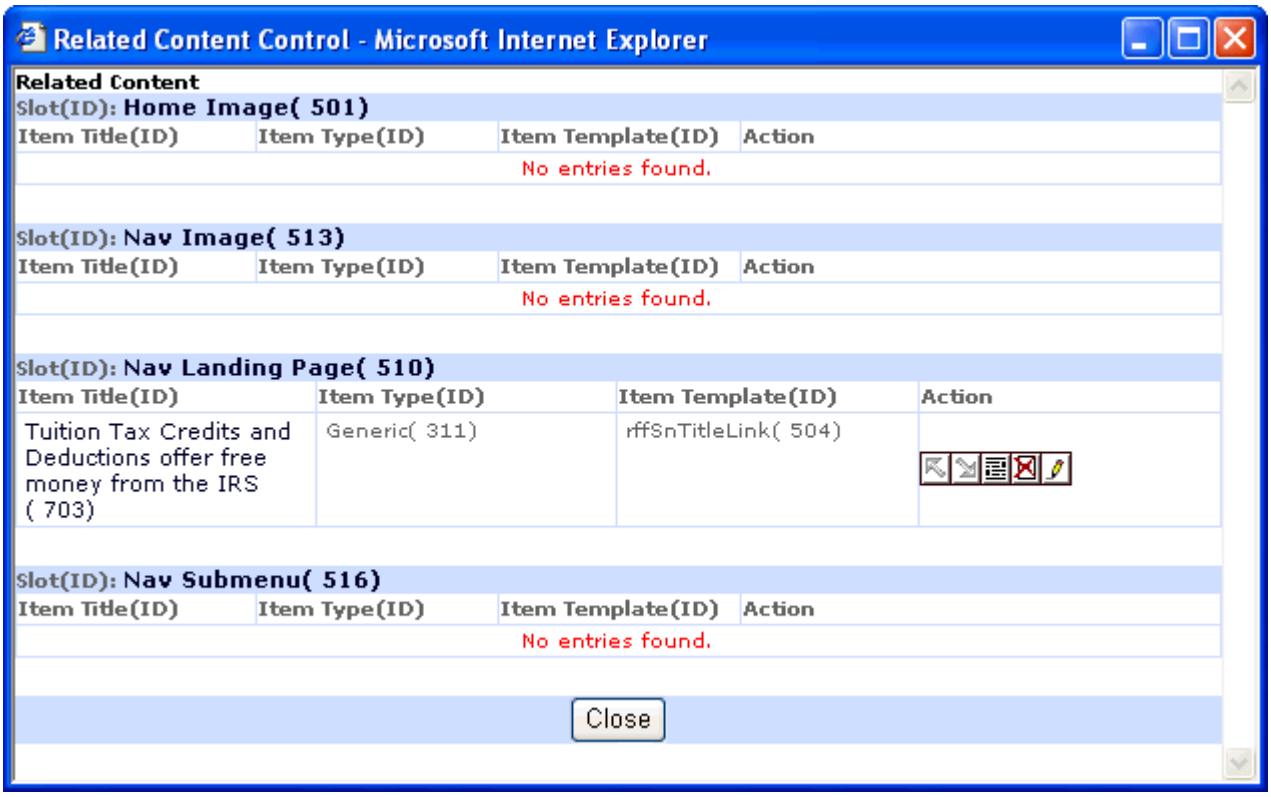


Figure 73: Landing Page Added

11 Close the table editor.

To see how the landing page works, Preview the Enterprise Investments Home Page, which is located in the Enterprise Investments top folder. In the left navigation bar, Education has been added as a section under Investment Advice. Click on this link to go to the Tuition Tax Credits page, which includes links to the Education Content Items we added.

Making the Education Navon Content Item Public.

Before our new Education section can be published correctly, we need to make the Education Navon Public.

Use the same procedure that you used to Transition the other Content Items. Notice that when you choose Workflow from the popup menu, the submenu includes the option Direct to Public. We will not be making any additional changes to the Education Navon, so use this Transition.

When you are finished, all of the Content Items in the Education Folder, including the Education Navon, will be Public. Now you are ready to publish this Site with the new Section.

Publishing the Web Site with the Education Section

Now that we have added our new section, we are ready to publish the Web Site to include it. If you are not still logged in as admin1, log in as the admin1 user.

To publish the Site, repeat the procedure described in ***Publishing the Enterprise Investments Full Edition*** (on page 44).

In Content Explorer, choose the Publishing Runtime tab. Expand the *Sites* node, and under that node, expand the *Enterprise Investments* node. Under that node, expand the *Editions* node and click on the EI_Full Edition. In the Menu bar, click *Start*.

If the new content was published successfully, when you go the Publishing target location (by default: `<Rhythmyx root> \AppServer\server\rx\deploy\EI_Home.war\`) you will see the new Education subdirectory in the Investment Advice directory.

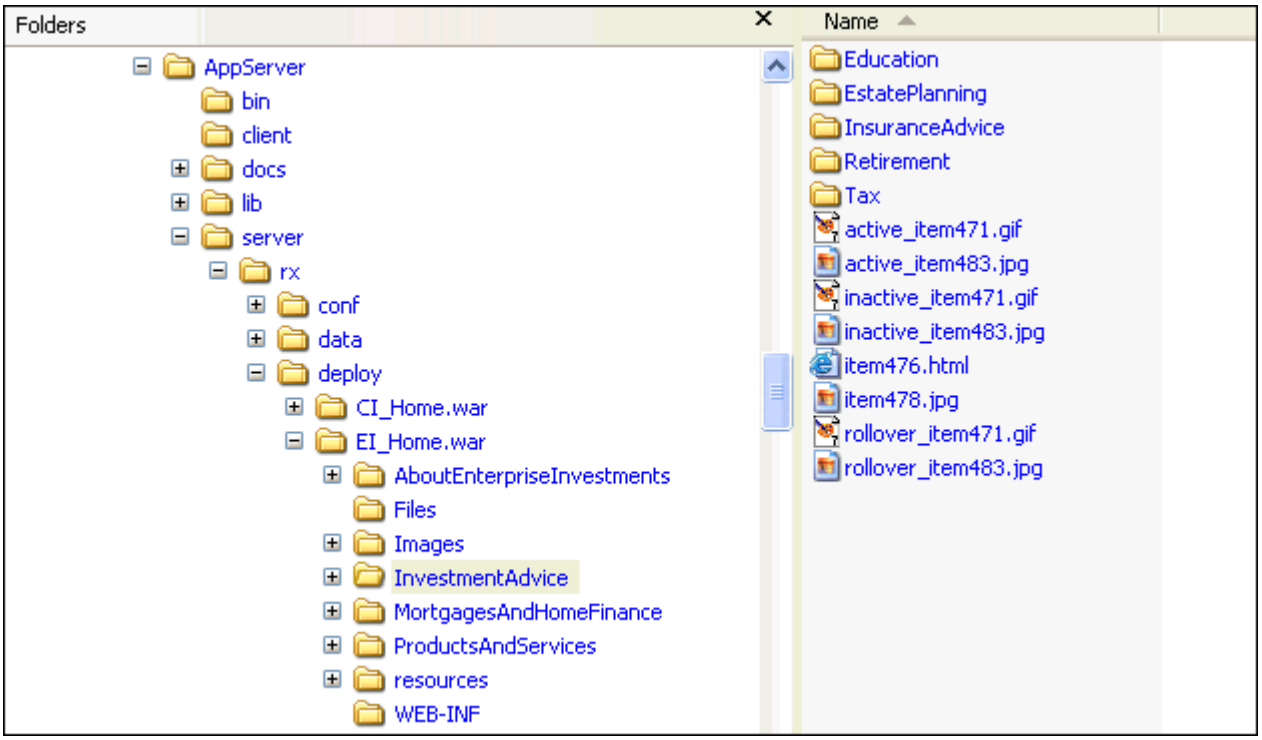


Figure 74: Published Education Folder

If you do not see this directory, none of the Content Items in the Site Folder were published. If you do not see a specific Content Item, it was not published. Review the log for these Content Items to determine why they were not published. The most common reason for Content Items not to be published is that they are not in a Public State. Go back to the Content tab of Content Explorer and Transition all of the Content Items in the Education Folder to Public.

Another reason that the Education directory might not be created is that it does not contain any Content Items. Go back to the Content tab of Content Explorer and move the Education Content Items to the Education Folder.

If you open the Education directory, you will see four new HTML pages. The names of these files will be itemNNN.html. The value of NNN will be the Content IDs of the Generic Page and Generic Word Content Items you created during this walk-through. You will also see three new JPG pages. These are the image Content Items that you created. The values should resemble those in the graphic below:

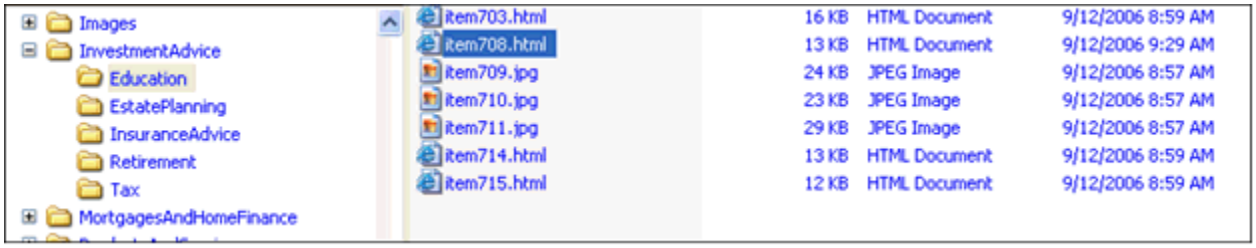


Figure 75: Contents of Education Folder

If any of the Content Items you created are missing, either they are not Public or they are not in the Education Folder.

If you access the home page by entering http://localhost:9992/EI_Home/index.html, and then click the Education link in the right navigation pane, your Tuition page will resemble the following:

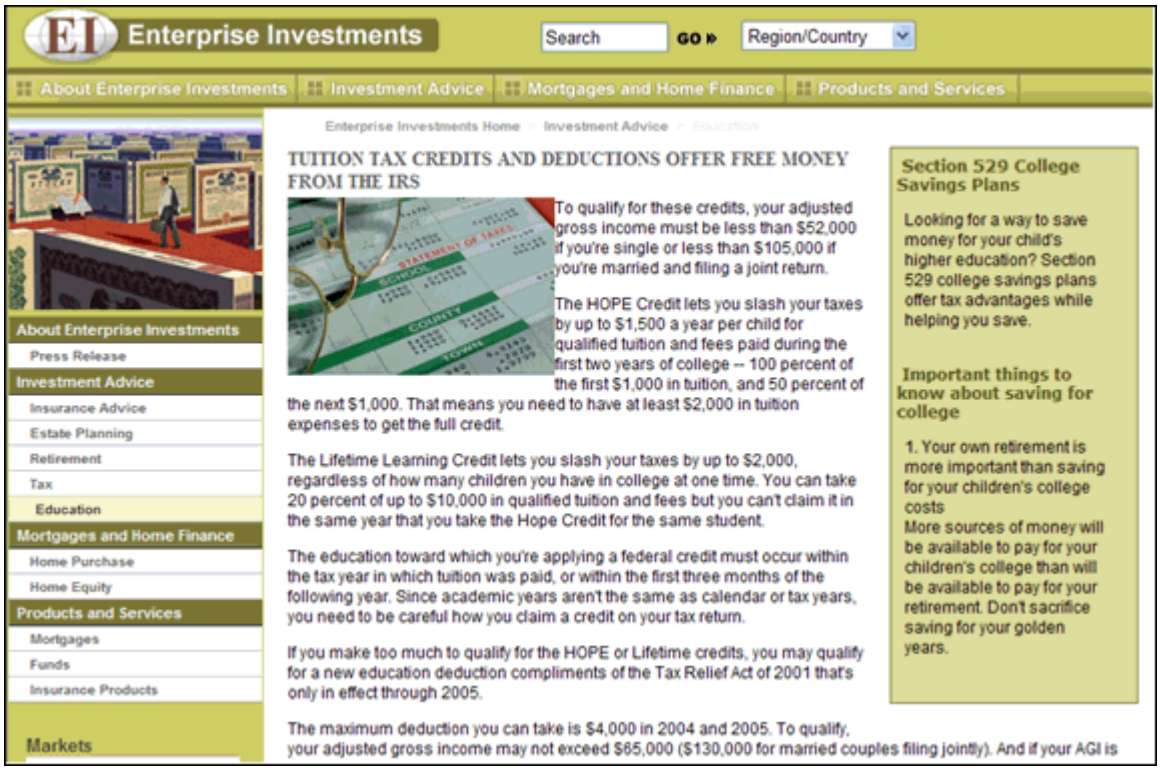


Figure 76: Published Tuition content item

CHAPTER 6

Troubleshooting

Installation

Installer Cannot Connect to the Repository

This indicates improper entry of the Server's IP, User ID, or Password.

Solution:

For SQL Server, follow the next few steps to establish a connection:

- Confirm the existence of the sa account through Microsoft's Enterprise Manager Utility.
- Confirm, and if necessary, change, the sa password.
- Re-attempt connection to the Server. If it still fails, confirm the port on which SQL Server is listening in Enterprise Manager:

  a) Select Tools > SQL Server Configuration Properties.

  The SQL Server Properties dialog opens to the General tab.

  b) Press the [**Network Configuration**] button.

  The SQL Server Network Utility dialog opens to the General tab.

  c) Highlight the TCP/IP protocol and press the [**Properties**] button.

  The Network Protocol Default Value Setup dialog opens.

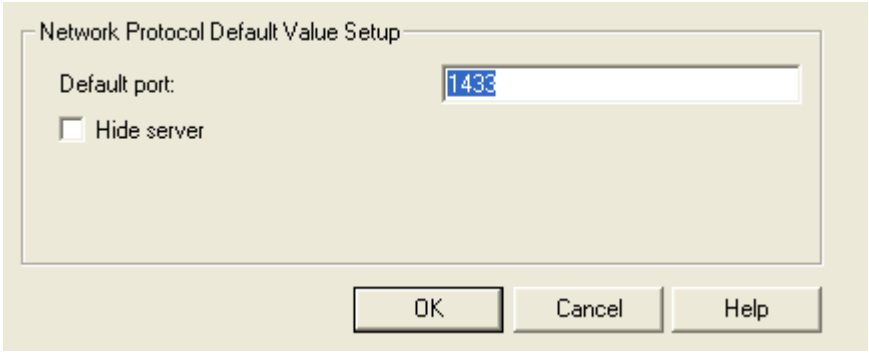


Figure 77: Network Protocol Default Value Setup dialog

  d) If the port number listed is not 1433, change it and press [**OK**].

  e) Exit Enterprise Manager and restart SQL Server.

Startup

Server Shuts Down During Initialization

Server encounters an error and shuts down during initialization

Solution:

Go to <Rhythmyx root>\AppServer\server\rx\log. First open boot.log and look for error messages giving you details about the server shut down. If you still need more information, go to server.log and read through any error messages.

Rhythmyx License Period Expired

On startup, the Rhythmyx Server displays the message, "The evaluation period for this license has expired."

Solution:
This error indicates that your license for Rhythmyx has expired, and you need a new license. Contact Percussion Technical Support for a new license and for instructions about updating your installation.

Out-of-Memory Condition Displayed on Rhythmyx Startup

The Rhythmyx Server console displays an out of memory condition when you attempt to start Rhythmyx.

Solution:
Start the Rhythmyx Server from a command line and specify at least 512 megabytes of RAM.

In Windows, use the following case-sensitive command:

```
RhythmyxServer.exe –Xmx512m
```

In Unix, create a file named RhythmyxServer.ja. In the file, include the line:

```
-Xmx512m
```

Run RhythmyxServer on a command line. The command will automatically check for additional options in the RhythmyxServer.ja file and include them.

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