

Installing Rhythmyx

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Rhythmyx Components

Rhythmyx includes the following components:

Repository Database

Server, including Publishing System

The following remote components:

- Developer Tools
- Remote Publishers
- Multi-server Manager

In a Windows environment all components can be installed. In a UNIX environment you can only install the Repository Database, the Server, and the remote Publishers.

Server System Requirements

The Rhythmyx Server can be installed in the following environments:

Sun Solaris 7, 8, 9

Processor:	V120 or higher
RAM:	2 GB
Disk Space	700 MB

Microsoft Windows 2000 (Professional, Advanced Server, and Datacenter Server), Windows 2003 Server platform

Processor:	2 Ghz or faster
RAM	1 GB
Disk Space	700 MB

Linux (Certified on Red Hat Linux AS 3.0+; Other distributions supported; Linux OS certified on Intel-based hardware.)

Processor:	2 Ghz or faster
RAM	1 GB
Disk Space	700 MB

The Rhythmyx server supports the following web servers:

Microsoft IIS version 4.0

Netscape 4.0

Apache 1.311

Developer Tools System Requirements

The Developer Tools can only be installed in a Windows environment, including:

- Windows 2000
- Windows XP Professional 2003 (NOTE: Note currently certified on Windows XP Service Pack 2)
- Windows 2003 Server platform

Hardware Requirements:

- Processor 1 GHz Pentium or faster
- RAM 256 MB minimum, 512 MB or greater recommended
- Disk Space 200 MB to run installed product (500 MB during installation)

Rhythmyx Publisher System Requirements

The Publisher can be installed in all environments supported by the Rhythmyx server.

Hardware Requirements:

- RAM 128 MB minimum, 512 MB or greater recommended
- Disk Space 30 MB to run installed product

Rhythmyx Full-text Search Engine Requirements

The full-text search engine is an optional component. The server does not require the component. If the full-text search engine is not installed, an alternative, light-weight database search engine is provided. The full-text search engine can be deployed to the same machine as the Rhythmyx server, or to a different machine if desired.

The full-text search engine runs in the same operating systems as the Rhythmyx server.

Hardware Requirements:

- RAM co-located with the Rhythmyx server: 512 MB minimum in addition to the basic RAM of the the Rhythmyx server, 1 GB in addition to the basic RAM recommended; on remote machines, 512 MB minimum; 1 GB recommended.
- Disk Space 256 MB minimum; 1 GB recommended

Installation Options for the Full-text Search Engine

The Rhythmyx full-text search engine is typically installed on the same machine as the Rhythmyx server. However, you may want to install the search engine on a different machine if the demands of running both servers on the same machine degrades the performance of either (or both). You can choose to move both the search engine and search indices to a different machine, or move either independently.

Note that if you deploy the search engine server or indices (or both) to a separate machine, you must share or export the directory where the full-text search indices reside and map or mount this directory on the machine where the Rhythmyx server resides. The following topics discuss deployment options for the full-text search engine and indices.

Note that a prerequisite for all installations is copying the full-text search installer from the Rhythmyx CD-ROM to your local machine.

NOTE: Remote installs are currently being refactored. Only the installations of the full-text search engine on the same machine as the Rhythmyx server work

New Install (Both Servers on the Same Machine)

No special preparation is necessary for this installation. Install normally and accept the defaults.

New Install (Full-text Search Engine on a Different Machine)

Before starting this installation process, you will want to know the name of the directory on the remote machine where you want to install the search engine. You may want to create the directories on both the Rhythmyx server machine and the remote machine where you plan on installing the full-text search engine before beginning the installation. You may also want to give this directory a different name (such as RhythmyxF^TS) so you can distinguish it easily from your Rhythmyx server installation directory.

You should also determine which ports you will use for the search service or daemon on the remote machine. The search engine process uses three ports, which are generally numbered sequentially. The first port is the port on which the search engine will listen for search and index requests. The second port is used internally by the search engine. The third port is the port on which the search engine service or daemon listens for requests to initiate from the Rhythmyx server. The default value for the first port is the port of the Rhythmyx server plus 1 (9993 when using the default Rhythmyx port).

Installing the full-text search engine on a different machine from the Rhythmyx server is a two-step process. In one step, you will install the Rhythmyx server to its target machine. In the other step, you will install the search engine to its machine. The order of installation does not necessarily matter, but you will not be able to start the Rhythmyx server until the remote search engine is installed and running.

When installing the Rhythmyx server:

- On the Select Products to Install dialog, check the Full Text Search checkbox. You must check this box to enable the server to recognize that full-text search is available, even if it is installed on a remote machine. The install wizard will also display the Full Text Search Settings dialog, allowing you to define the initial search configuration.
- When you reach the Rhythmyx Full Text Search Settings of the installation wizard:
 - in the Full Text Search Engine host name field, enter the name or IP address of the machine where you want to install the full-text search engine.
 - in the Full Text Search Engine Install Location field, enter the fully-qualified directory on the remote machine where you want to install the full-text search engine (for example, C:\RhythmyxF^TS\F^TS).
 - enter the Search and Index Port Number. The default port number is your Rhythmyx port plus 1 (9993 if you use the default Rhythmyx port).
- DO NOT start the Rhythmyx server until you have completed the installation of the remote search engine.

To install the full-text search engine, run the standard Rhythmyx installer (not the Publisher or Content Connector only installers) on the remote machine:

- On the Installation Directory dialog, specify the directory where you want to install the search engine. The default directory is C:\Rhythmyx. Change this value if you want to use a different directory.
- On the Select a Product to Install dialog, deselect all options EXCEPT Full Text Search Engine.

- On the Rhythmyx Full Text Search Settings dialog:
 - The value in the Full Text Search Engine host name field defaults to localhost. You can keep this value, or use the name or IP address of the machine where you are installing the full-text search engine.
 - The value of the Full Text Search Target Install Location defaults to C:\Rhythmyx\sys_search. If you want to install the search engine to a different directory, change this value. Note that the location must end with sys_search.
 - The Search and index port number defaults to 9993; if you want to use a different value, enter it here.

When this installation is complete, start the full-text search engine service/daemon. Once the full-text search engine service/daemon is running, start the Rhythmyx server.

Troubleshooting New Installs of Rhythmyx with the Full Text Search Engine on a Different Machine

Problem: The Rhythmyx server fails with the following message:

```
Server          7/7/04 2:55 PM: A non-recoverable error has
been encountered. The server is shutting down.
```

```
Server          7/7/04 2:55 PM: An unexpected error was
encountered.
com.percussion.search.PSSearchException: Connection to remote
process          : manager at
'SEARCHSERVER:9995' failed: Connection refused: connect
```

Solution: Confirm that the remote search engine process manager daemon has been started. When the remote search engine process manager daemon has been started, you should see a terminal window or DOS window with the following message: `Rhythmyx Process Daemon is listening on port 9995`. When you initially install the remote search engine, you must start it manually. After that, it should start automatically whenever you reboot the machine.

Confirm that your port configurations are correct on the Rhythmyx server. In the Rhythmyx configuration XML file (<Rhythmyxroot>\rxconfig\Server\config.xml), check the PSXSearchConfig node. The value of the serverPort attribute of this node should match the value of the procenv.PORT property in <searchengineroot>\rxconfig\server\procd daemon.properties. The value of the <Property> child node with the name=daemonport attribute should match the value of the port property in <searchengineroot>\rxconfig\server\procd daemon.properties (this property is preceded by the comment “Port on which the daemon listens”).

Check the DNS cache for multiple entries of the machine on which the remote search engine process manager is running.

Moving the Full-text Search Engine to a Different Machine

After running your production CMS for some time, you may decide that the performance of your system is not acceptable with both the Rhythmyx server and the full-text search engine on the same machine. To remedy this problem, move the full-text search engine to a different machine. After moving the search engine, you will need to re-index your content, so you should schedule the move in the evening or on a weekend, when server use is low. To move the full-text search engine:

1. On the machine where you intend to run the full-text search engine, create the directory where you intend to install the search engine. Decide which port you want to use to connect to the Rhythmyx server.

2. Install the full-text search engine to the directory you created in step 1. When running this installation:
 - On the Select a Product to Install dialog, deselect all options EXCEPT Full Text Search Engine.
 - When you reach the Rhythmyx Full Text Search Settings of the installation wizard:
 - in the Full Text Search Engine host name field, leave the value as localhost.
 - the Full Text Search Engine Install Location field defaults to the installation you specified for the installation. Do not change this value.
 - The value in the Search and Index Port Number field defaults to 9993; if you want to use a different port, change the value to the port you want to use.
3. Start the Rhythmyx server (if it is not already running) and start the Server Administrator. Choose the Search tab so you can modify the search configuration.
 - Change the value in the Server field from localhost to the name or IP address of the machine on which you installed the full-text search engine.
 - Change the value of the Configuration Directory field to the configuration subdirectory of the directory where you installed the full-text search engine on the remote machine. The path to the configuration directory is <ftsroot>\sys_search\rware\rx\config. For example, if you installed the full-text search engine to C:\RXFTS, the path would be C:\RXFTS\sys_search\rware\rx\config.
 - Change the value in the Port field to match the port you specified when you installed the full-text search engine on the remote machine.
 - In the Custom Properties, change the value of the daemonport property from -1 to the Search and Index Port you specified on the remote machine +2 (in other words, if you used the default value for the Search and Index Port, 9993, you would change the value of the daemonport to 9995. (If the value of this field is -1, the Rhythmyx server looks for the search engine locally on the default port. If this field has any other value, Rhythmyx looks for a remote search engine on the machine specified using the port specified.)
4. Stop the Rhythmyx server.
5. Start the remote search engine process daemon.
6. Restart the Rhythmyx server.

The Rhythmyx server will connect to the remote search engine. You will need to re-index your content using the new full-text search engine installation. This process can take a considerable amount of time, so it is recommended that you plan your change over in the evening or on a weekend when server activity is low.

The command to re-index the content is:

```
search index type (###)
```

where ### is the ID of the content type you want to re-index. If you want to re-index all content, do not include this value.

Troubleshooting Rhythmyx after Porting the Search Engine to a Different Machine

Problem: The Rhythmyx server fails with the following message:

```
Server          7/7/04 2:55 PM: A non-recoverable error has
been encountered. The server is shutting down.
```

```
Server          7/7/04 2:55 PM: An unexpected error was
encountered.
com.percussion.search.PSSearchException: Connection to remote
process          : manager at
'SEARCHSERVER:9995' failed: Connection refused: connect
```

Solution: Confirm that the remote search engine process manager daemon has been started. When the remote search engine process manager daemon has been started, you should see a terminal window or DOS window with the following message: **Rhythmyx Process Daemon is listening on port 9995**. When you initially install the remote search engine, you must start it manually. After that, it should start automatically whenever you reboot the machine.

Confirm that your port configurations are correct on the Rhythmyx server. In the Rhythmyx configuration XML file (<Rhythmyxroot>\rxconfig\Server\config.xml), check the PSXSearchConfig node. The value of the serverPort attribute of this node should match the value of the procenv.PORT property in <searchengineeroot>\rxconfig\server\procdemon.properties. The value of the <Property> child node with the name=daemonport attribute should match the value of the port property in <searchengineeroot>\rxconfig\server\procdemon.properties (this property is preceded by the comment "Port on which the daemon listens").

Check the DNS cache for multiple entries of the machine on which the remote search engine process manager is running.

Desktop Client Components

Rhythmyx supports the following browsers for content maintenance, publishing, workflow, and system administration:

- Internet Explorer V5+ (Windows)
- Mozilla 1.5+ (Windows OS; open source Esker plug-in required on desktop installations to support rich text editing control)
- Netscape Communicator V7.0+ (Windows OS; open source Esker plug-in required on desktop installations to support rich text editing control)
- Safari 1.2.4+ (Apple OS/X 10.3+)

The Sun MicrosystemsJava browser plugin Version 1.4 is required for all users that employ the Content Explorer applet. Plugin Version 1.4.2_05 is recommended. ActiveX support is required for browser-based rich text editing capabilities.

Repository Database Requirements

Before installing any Rhythmyx components, be sure you have a relational database management system installed. Rhythmyx currently supports:

RDBMS	Versions Supported
Oracle	8i, 9i, 10g
	NOTE: When installing the Repository to Oracle 10g, the installation user must have CONNECT, RESOURCE, and VIEW privileges.
MS SQL Server	Ms SQL Server 2000
	NOTE: If the database is installed on a machine running Windows XP SP2 as the operating system, you must use SQL Server 2000 with Service Pack 3
Sybase	12.5
DB2 (UDB)	7.2

Note that Rhythmyx does not perform any escaping or character conversion when inserting characters into the database. Therefore, the character encoding of the underlying database character set should match the encoding of the characters you want to store in the Repository. If the encoding of the database does not match the encoding used in Rhythmyx, some functionality may be lost. For example, if you use Microsoft Word as a Content Editor and Oracle as your database, Word SmartQuotes might not work if your database uses a character set other than UTF-8.

Percussion Software makes the following recommendations:

- Use UTF-8 if the majority of the characters you use match the ASCII character set. This is the recommended option for Western languages.
- Use UTF-16 if the majority of the characters you use fall outside of the ASCII character set. This is the recommended option for most Asian languages.

When defining `PSXBackEndCredential` objects in the Credentials area, use the following syntax for the `serverName` entries:

Driver	Syntax	Sample
Oracle	@<server>:<port>:<SID>	@38.164.160.36:1521:ORCL
Sybase	Tds:<server>:<port>	Tds:DBSERVER:5000
Sprinta	<server>	dbserver
TDS	<>//server>	//dbserver
UDB	Database alias of the database as configured using the Client Configuration Assistant	Alias

Installation Prerequisites

Before beginning installation, be sure to implement the following prerequisites.

Prerequisites for Installation to Unix Environments

Before installing to a Unix environment, you will need to create a user to install and run Rhythmyx. If you run multiple instances of the Rhythmyx server, you must create a user for each instance.

You must install Rhythmyx from the root of the user's directory.

Prerequisites for Installation to Linux Environments

Before installing to a Linux environment, you will need to create a user to install and run Rhythmyx. If you run multiple instances of the Rhythmyx server, you must create a user for each instance.

You must install Rhythmyx from the root of the user's directory.

Before installing to Red Hat AS, download and install G++ compatibility packages required by Rhythmyx. These packages are available from Red Hat (rh.redhat.com) or from rpmfind.net The following packages are required:

- compat-gcc-c++-7.3-2.96
- compat-gcc-7.3-2.96
- compat-libstdc++-devel-7.3-2.96
- compat-libstdc++-7.3-2.96
- compat-glibc-7.x-2.2.4

You should use the latest build of each package, but ensure that the build numbers of all packages match.

Prerequisites for the Sprinta Driver for MS SQL Server

NOTE: The Sprinta driver is deprecated in Rhythmyx 5.5; the SQL Server driver used in Version 5.5 is the JTDS driver. The following information is provided for backwards compatibility for customers using Rhythmyx Version 5.01 and earlier. Customers still using Sprinta are urged to contact Percussion Software Technical Support to discuss migrating to the JTDS driver.

If you are using the Sprinta driver in Microsoft Windows you do not need to create a DSN before installing Rhythmyx components. The Sprinta driver is licensed for the Rhythmyx Server only. Any use of the Sprinta driver other than through the Rhythmyx Server is a violation of the Sprinta license. All questions related to the Sprinta driver should be directed to Percussion Technical Support. The readme and license for the Sprinta driver are in the JDBC/Sprinta directory (..\Rhythmyx/JDBC/Sprinta).

Prerequisites for IBM DB2 (UDB)

If you are using IBM DB2 (UDB) as your database, your system must meet the following prerequisites:

- The UDB client must be installed on any machines running a Rhythmyx server. In Windows, check your Start menu for the UDB client. In Unix, confirm with your system administrator that the UDB client is installed on the machine.

- The connection to the database must be configured. In Windows, use the Client Configuration Assistant to configure the database connection. Note the database alias; it is required during Rhythmyx installation. In Unix:

1. Open a terminal window.
2. Enter *db2* and press the <Enter> key.
3. Enter CATALOG TCPIP NODE *node_name* REMOTE *ip_address* SERVER *port_number*

where:

node_name is the name of the DB2 node on the remote server (in other words, the node to ceonct under Instances in Control Center);

ip_address is the IP address of the remote server; and

port_number is the port number of the DB2 connection service on the remote server. You can check the services file on the remote server for the port number. The file is located in the \etc directory in Unix environments. (In Windows environments, the file is in the winnt\system32\drivers\etc directory.)

4. Enter CATALOG DATABASE *database_name* AT NODE *node_name*

where:

database_name is the name of the database to which you want to connect; and

node_name is the name of the DB2 node.

- The server must be running JDBC service level 2.0. Consult “Getting Started with IBM Tivoli Service Level Advisor” (http://www.tivoli.com/support/public/Prodman/public_manuals/td/TSLA/SC32-0834-00/en_US/HTML/sl11gmst55.htm) for details about verifying your JDBC service level and instructions for updating your service level if necessary.
- To install UDB to Unix, you must be logged in as the user that installed the instance of the DB2 client.

In addition, when installing Rhythmyx, the installer requires tablespace with a page size of at least 8K. Smaller page sizes may result in installation errors. Create a bufferpool, tablespace, and temporary tablespace with a pagesize of at least 8K before installing Rhythmyx and grant appropriate privileges on these tablespaces to the userID that will be used to install the repository.

To create the required tablespace:

7. In Windows, open the DB2 Command Line Processor; in Unix, open a terminal window and enter *db2*.
8. Connect to the database.
9. Create a bufferpool: enter CREATE BUFFERPOOL POOLNAME SIZE 250 PAGESIZE 8K.
10. Disconnect from the database.
11. Enter DB2STOP.
12. Enter DB2START.
13. Connect to the database.
14. Create the tablespace. Enter CREATE TABLESPACE TABLESPACENAME PAGESIZE 8K MANAGED BY SYSTEM USING (PATH) BUFFERPOOL POOLNAME.
15. Create the temporary tablespace. Enter CREATE SYSTEM TEMPORARY TABLESPACE TABLESPACENAME PAGESIZE 8K MANAGED BY SYSTEM USING (PATH) BUFFERPOOL POOLNAME.
16. Grant use of the tablespace to the Rhythmyx userID.

To prepare to run DB2 using your Rhythmyx user:

1. copy the DB2 instance profile (<DB2_INSTANCE_DIR>/sqllib/db2profile, where <DB2_INSTANCE_DIR> is the DB2 instance directory, such as /export/home/db2inst1) to the Rhythmyx user's home directory.
2. Add the following lines to the .profile file of the Rhythmyx user:

```
if [ -f /export/home/mylogin/db2profile ]; then
    . /export/home/mylogin/db2profile
fi
```

Installation Order

For upgrades and reinstallations:

If you are upgrading or reinstalling the Rhythmyx Server or the Rhythmyx Repository Database, shut down the Rhythmyx Server and any running applications first.

If you are upgrading or reinstalling a client component, shut down that component locally. You do not need to shut down the Rhythmyx Server.

Install the components in the following order:

1. Install the Repository Database from the CD-ROM. (Note: You cannot install the Server until you have installed the Repository Database, as the Server's programs and files depend on the tables in the Repository Database).
2. Install the Server from the CD-ROM.
3. Install the client components by browsing to the Server's web pages and downloading their installers.

Note: If you are evaluating Rhythmyx and want to install all Rhythmyx components onto the same machine in one installer use the Suite Installer from the CD-ROM.

Starting Installations

The installation application and process you use depends on the components of the Rhythmyx system you are installing and the environment into which you are installing Rhythmyx.

When installing to Solaris or Linux, the user performing the installation must be the owner of all files copied from the CD-ROM, must have read permissions on all installer files, and must have execute permissions on the following files:

- suite.so
- the setupui.sh and setupconsole.sh scripts that you want to run

When installing into Solaris or Linux, copy the contents of the CD-ROM to a directory on the machine where you want to run the installation. When installing to Windows in command-line mode, it may be more convenient to copy the contents of the CD-ROM to the machine where you want to install Rhythmyx.

The directory for each operating system contains the following installers:

Installer	Use
Setup	Installs the Rhythmyx server and Repository.
PublisherSetup	Installs remote Publishers.
ContentConnectorSetup	Installs the Enterprise Content Connector.

You can launch the installers in either command line (terminal window) mode or using a graphic user interface. The command line installer provides more options for tracking and logging the installation process.

To launch the installer as a GUI in a Windows environment, browse to the Windows directory on the Rhythmyx CD-ROM and double-click on the installation application you want to launch.

To launch the installer in Windows using command-line mode, open a Command Prompt window, change to the directory where the installation application is located, and enter the name of the installer you want to run (`Setup.exe`, `PublisherSetup.exe`, or `ContentConnectorSetup.exe`).

To launch the installer in Linux or Solaris, change to the directory where the installer files reside, and run the shell script for the mode you wish to use. Scripts to run in command line mode use the name `installersetupconsole.sh`, where `installer` is the name of the installer you want to run; for example, `publishersetupconsole.sh`. Scripts to run the installer as a graphic user interface use the name `installerui.sh`, where `installer` is the name of the installer you want to run; for example, `contentconnectorsetupui.sh`.

When using a command line to initiate an installation, you can add the following parameters to the command:

Parameter	Effect
<code>-is:log <file name ></code>	All output to the Java console is logged to the specified file.
<code>-is:javaconsole</code>	Displays the Java console when running the installation application.
<code>-is:tempdir <directory></code>	The installation application writes all temporary files to the specified directory. If the specified directory does not exist, the installation application uses the system temp directory instead.

Installing Remote Client Components

The following remote client components are available:

- Developer Tools
- Enterprise Content Connector

NOTE: Remote Publishers must be installed from the CD.

Remote client components can only be installed on Microsoft Windows operating systems. Use a Web browser to install these components. To install remote client components, start a Web browser and enter:

`server:port/Rhythmyx/Administration/component/Install.html`

Where:

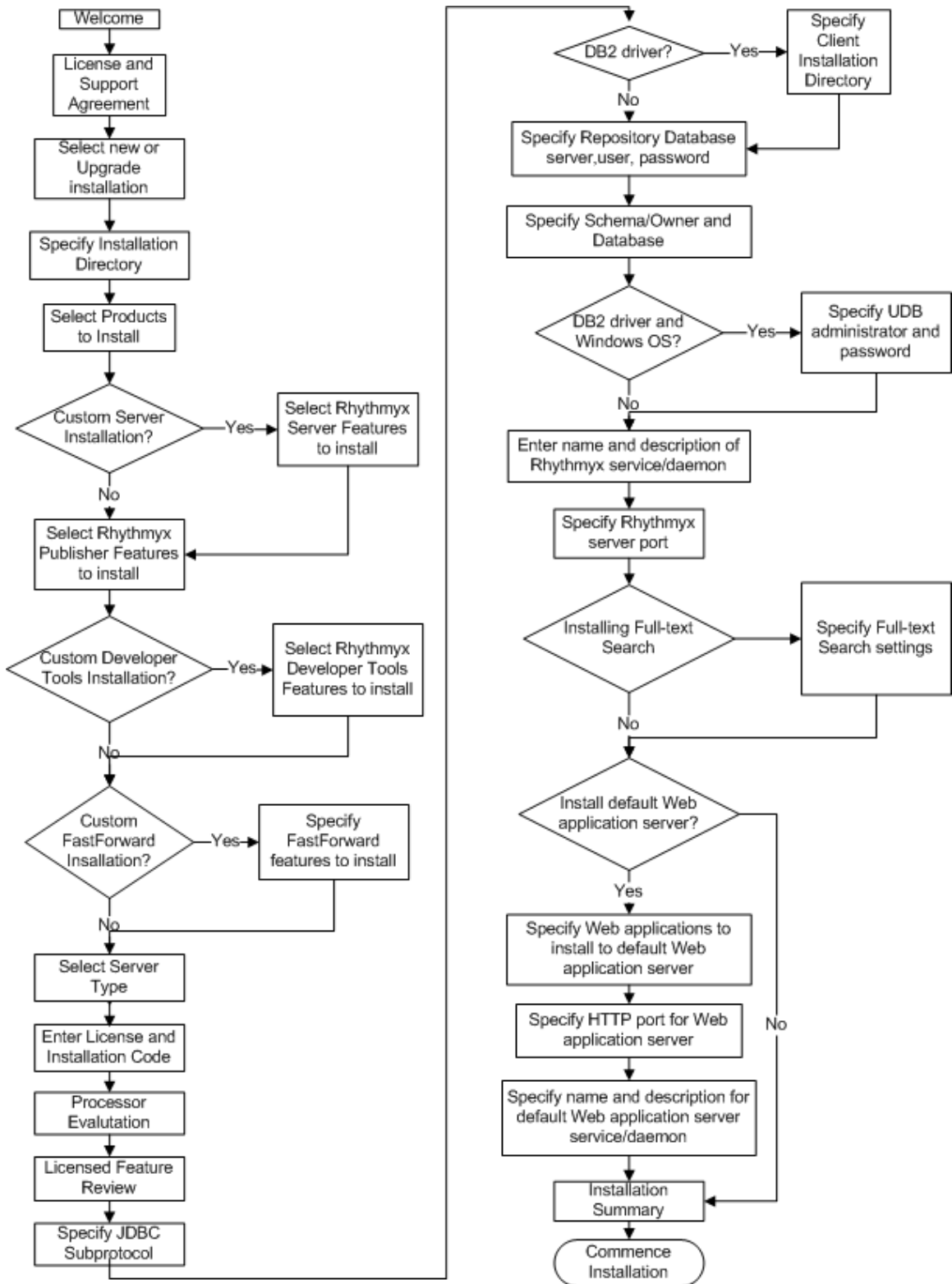
server is the name or IP address of the Rhythmyx server machine;
port is the port the Rhythmyx server listens on; and
component is the name of the component you want to install;

For example:

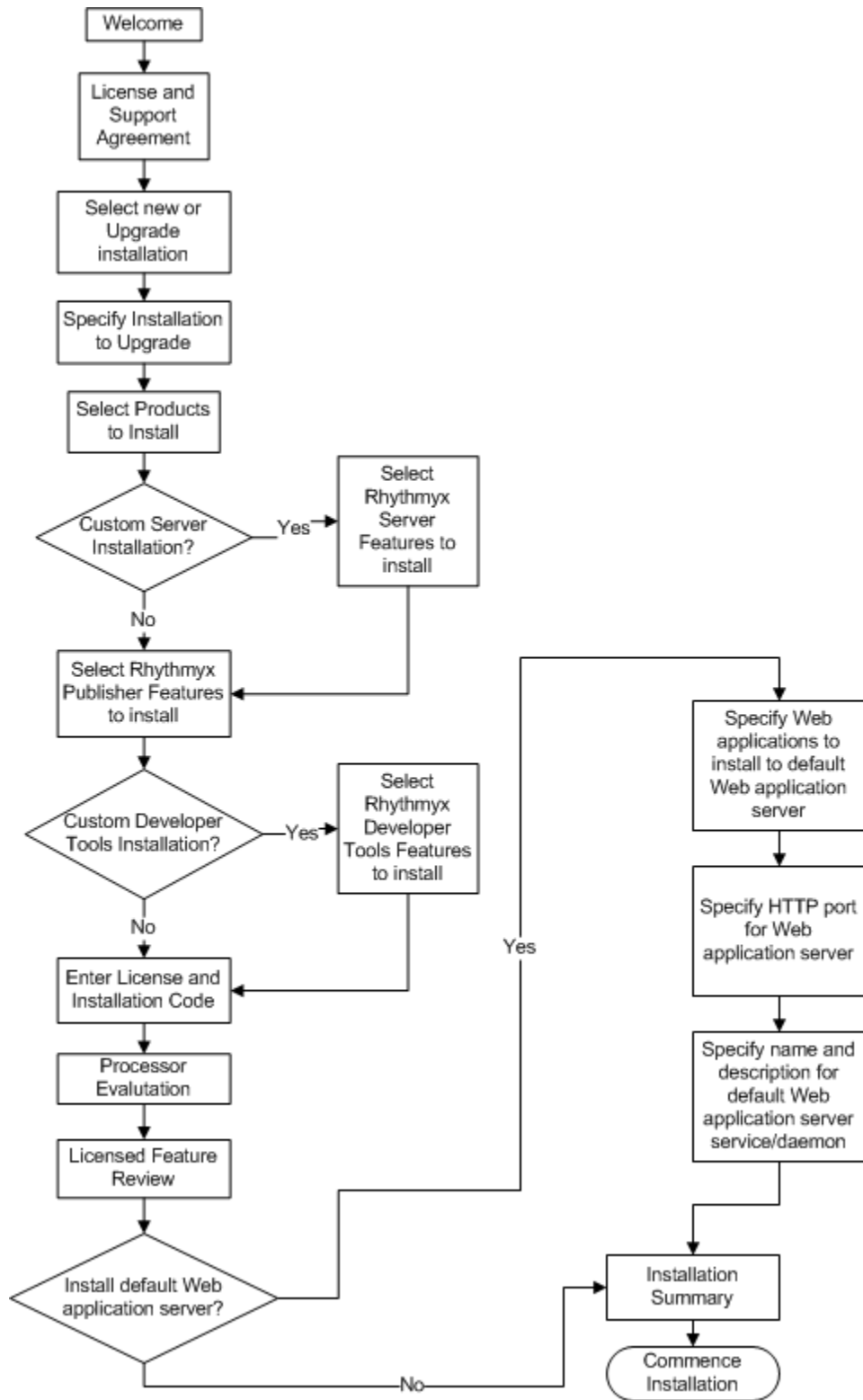
```
FastForward:9992/Rhythmyx/Administration/DeveloperTools/Install.html  
FastForward:9992/Rhythmyx/Administration/Multi-serverManager/Install.html
```

Installation Flow Charts

The following flow charts illustrate the installation sequence for Rhythmyx.



New Installation Sequence

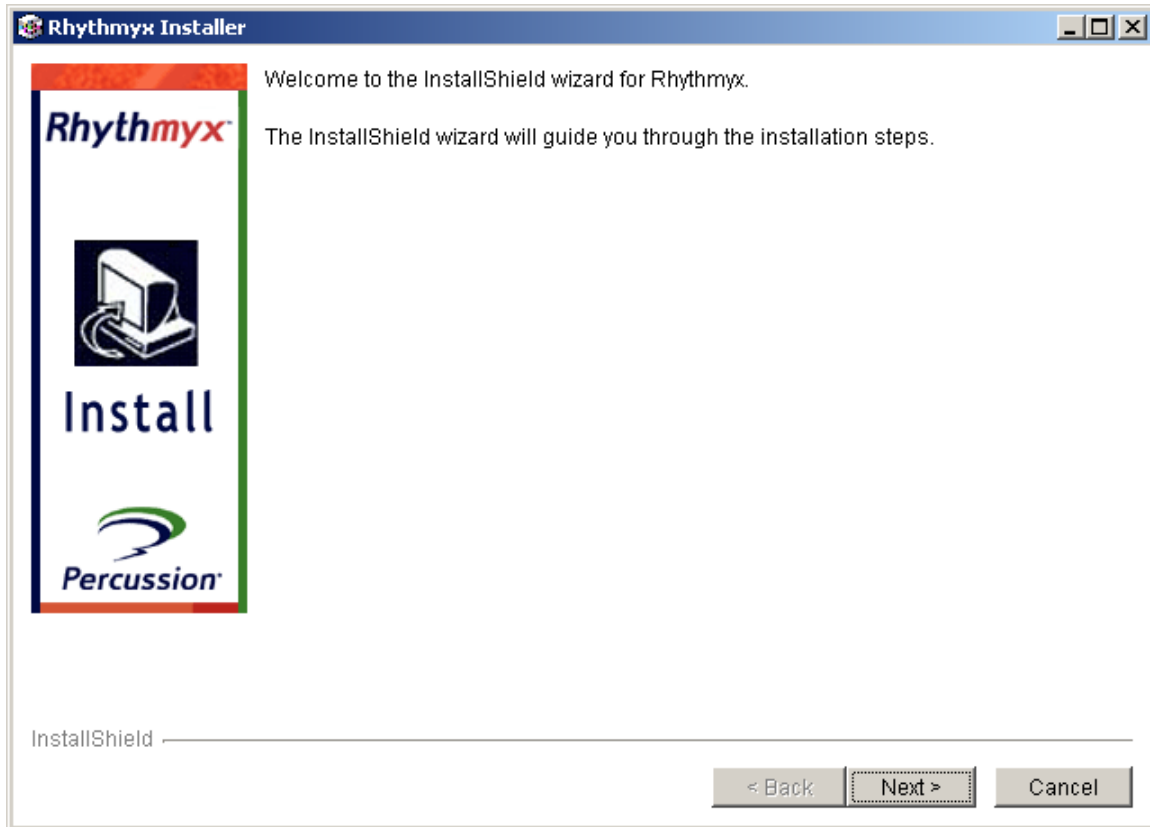


Upgrade Installation Sequence

General Installation Sequence

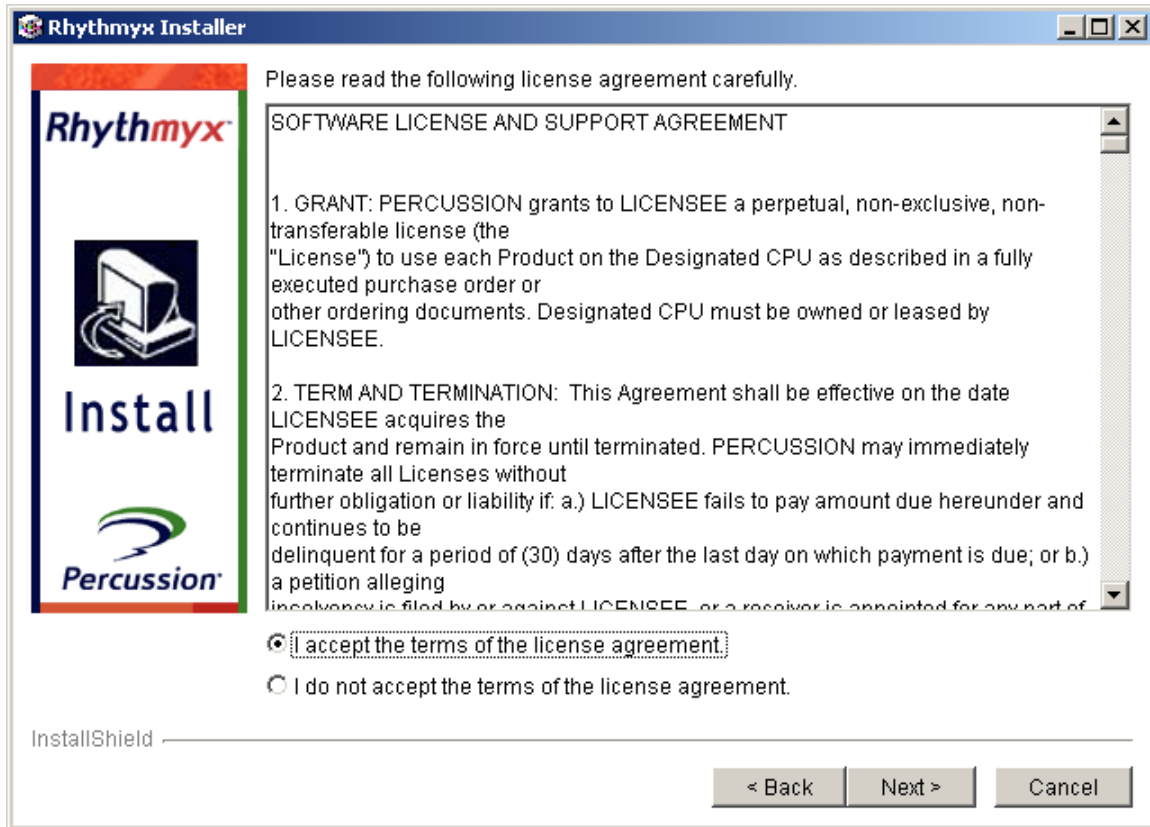
All Rhythmyx components follow a similar installation sequence, whether installed from the CD-ROM Suite Installer or browser.

1. The first page is the Welcome page. Click [Next].



Welcome Page

2. Read the software license and support agreement and click **I accept the terms of the license agreement**.



Software license and support agreement window

```
information by retaining and using the
Product in trust and confidence, solely for its internal use, and using
reasonable care and protection to
prevent the unauthorized use, copying, publication or dissemination of the
Product and PERCUSSION

Press ENTER to read the text [Type q to quit] q

[X]      - I accept the terms of the license agreement.
[ ] 2    - I do not accept the terms of the license agreement.

To select a choice enter its number, or 0 when you are finished [0]: █
```

Software license and support agreement in command line mode

3. If you are installing to Unix, the installer reminds you that you need to create a unique user to install and run Rhythmyx.

If you are performing a new installation of Rhythmyx, then you must create a system account for Rhythmyx, login into the system with that account and then run the installation. You must then use the new account for running Rhythmyx and performing updates to the Rhythmyx installation. If you are performing an update to an existing Rhythmyx installation, then you must login into the system with the same account under which you installed and run Rhythmyx. Also make sure that this account has read and write permissions on all the files under the Rhythmyx root directory.

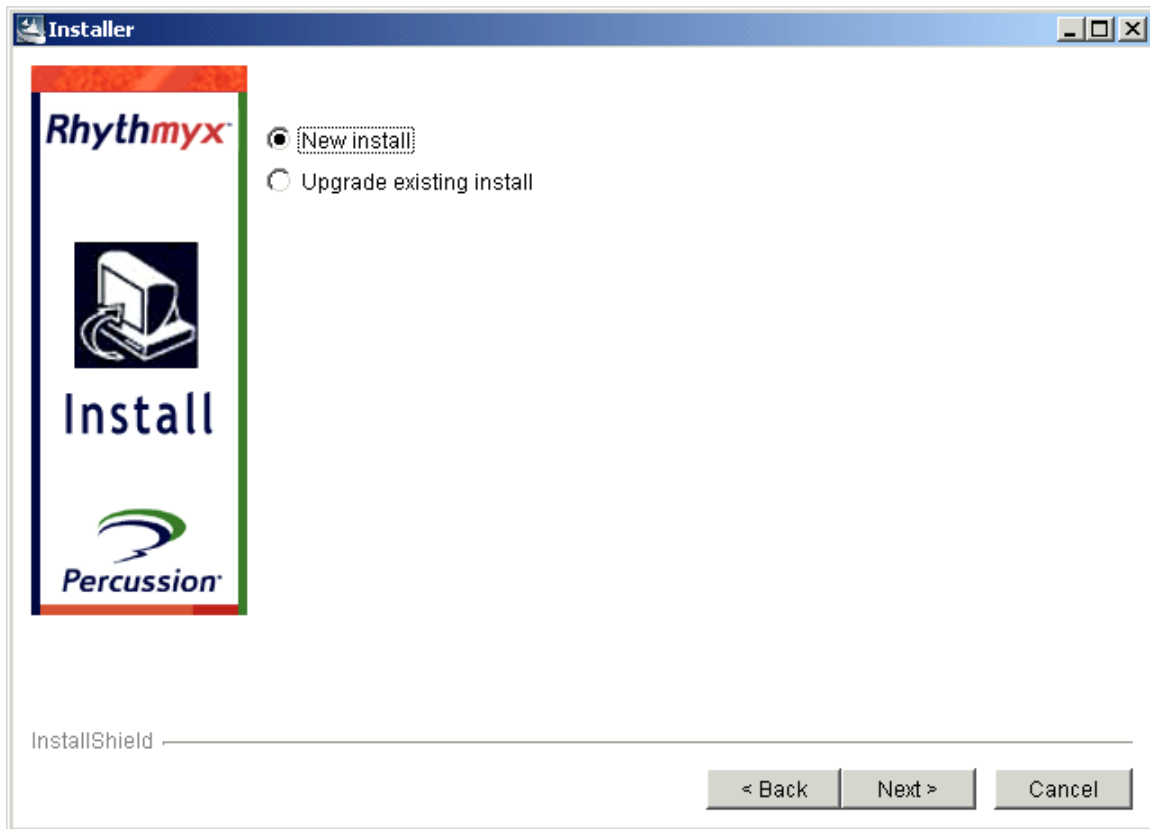
Unix Reminder to Create Rhythmyx User

The installer also reminds you about the permissions this user requires.

The current user must have read and write permissions on all the files under the Rhythmyx root directory. Please reset the file permissions before continuing with the installation.

Unix Reminder about Rhythmyx User Permissions

4. Specify whether you want to perform a new installation or upgrade an existing installation.



Installation Options Dialog

```
[X] 1 - New install  
[ ] 2 - Upgrade existing install
```

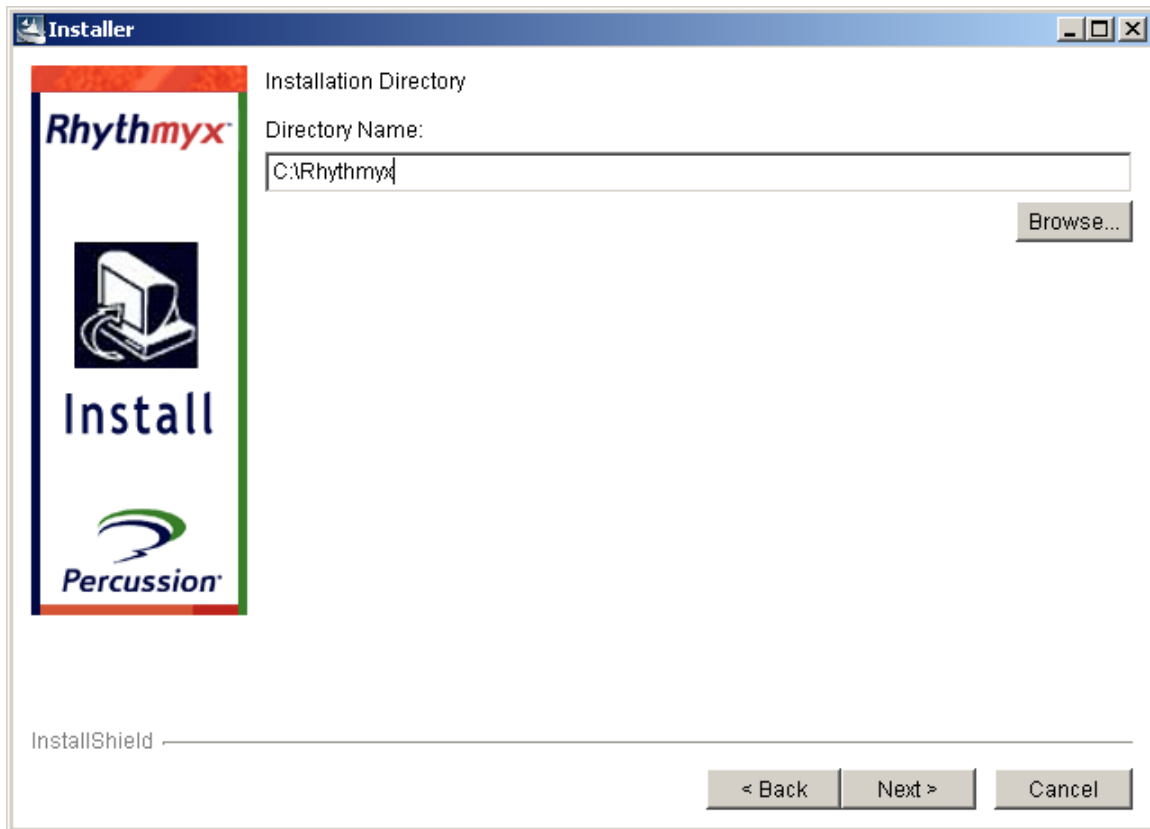
To select a choice enter its number, or 0 when you are finished [0]: █

Installation Options Dialog in command line mode

5. Choose the destination directory.

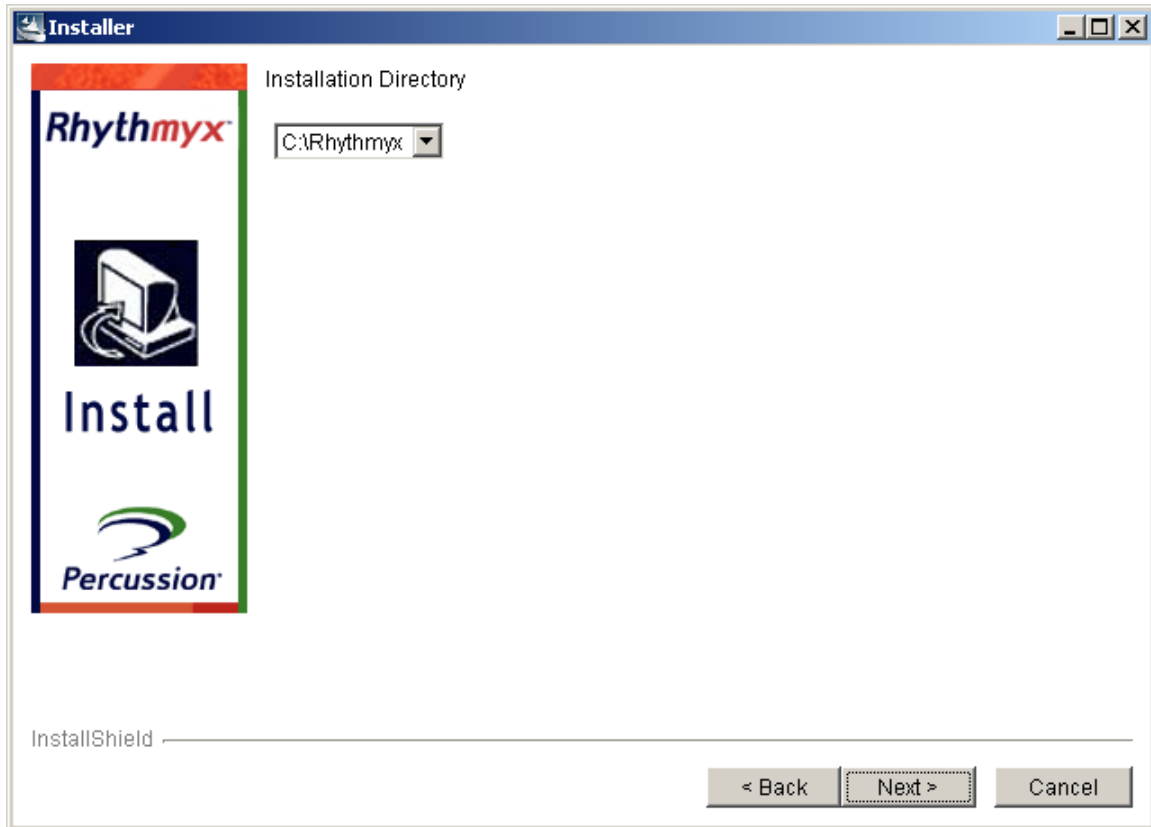
In Windows:

- For new installations Rhythmyx displays the directory name window (below). Either type in the directory path or click the **[Browse]** button to select a directory.



Directory name window for new installations

- For an upgrade of a previous installation, Rhythmyx displays the Installation Directory window. Choose either the current Rhythmyx directory or create a new directory.



Destination directory window

In UNIX:

- For new installations Rhythmyx asks you to specify a directory name.

```
Installation Directory
Please specify a directory name
```

Destination directory for New Installations in command line mode

- For an upgrade of a previous installation, Rhythmyx lets you choose either the current Rhythmyx directory or create a new directory.

```
Installation Directory

[X] - /export/home/joeins/Rhythmyx
[ ] 2 - New Install

To select a choice enter its number, or 0 when you are finished [0]: 2
```

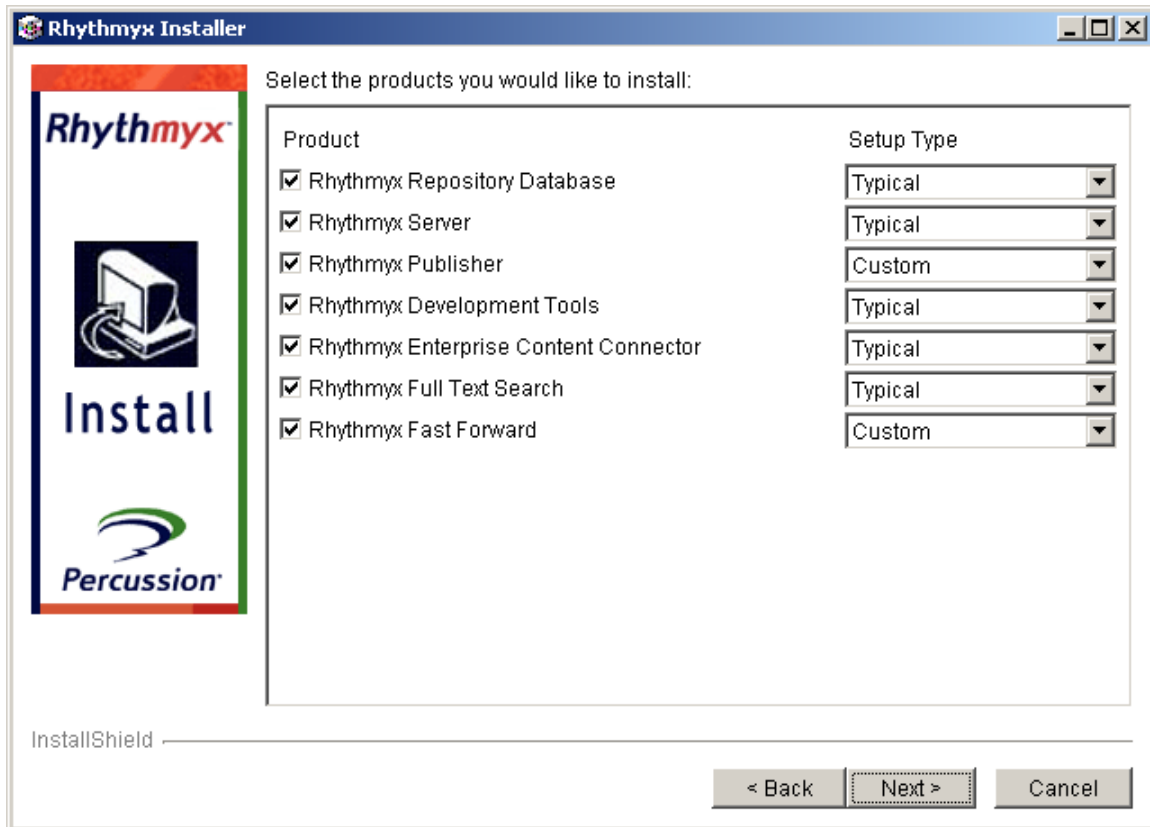
Destination directory in command line mode

NOTE: After you hit <Enter>, the Unix installer displays logging data as it runs.

6. Specify the setup type for the components you want to install. If you choose a custom installation, you must define the component features you want to install.

If you are using the Suite Installer, indicate the components you want to install.

- In Windows, check the box for the components you want to install and select the **Setup Type** from the drop list. Options are *Typical* (the installer decides which modules to install) and *Custom* (you decide which modules to install). The only Setup Type for the Rhythmyx Publisher is *Custom*.



Suite Installer window for selecting multiple products and their Setup Types

- In Unix, mark the components you want to install; then indicate the setup types.

Select the products you would like to install:

To select/deselect a product or to change its setup type, type its number:

Product	Setup Type
1. [x] Rhythmyx Repository Database	Typical
2. [x] Rhythmyx Server	Typical
3. [x] Rhythmyx Publisher	Custom
4. [x] Rhythmyx Enterprise Content Connector	Typical
5. [x] Rhythmyx Full Text Search	Typical
6. [x] Rhythmyx Fast Forward	Custom

```
Choose the setup type for Rhythmyx Repository Database

[X] 1 - Typical
[ ] 2 - Custom

To select a choice enter its number, or 0 when you are finished [0]:
```

```
Choose the setup type for Rhythmyx Server

[X] 1 - Typical
[ ] 2 - Custom

To select a choice enter its number, or 0 when you are finished [0]:
```

```
Choose the setup type for Rhythmyx Publisher

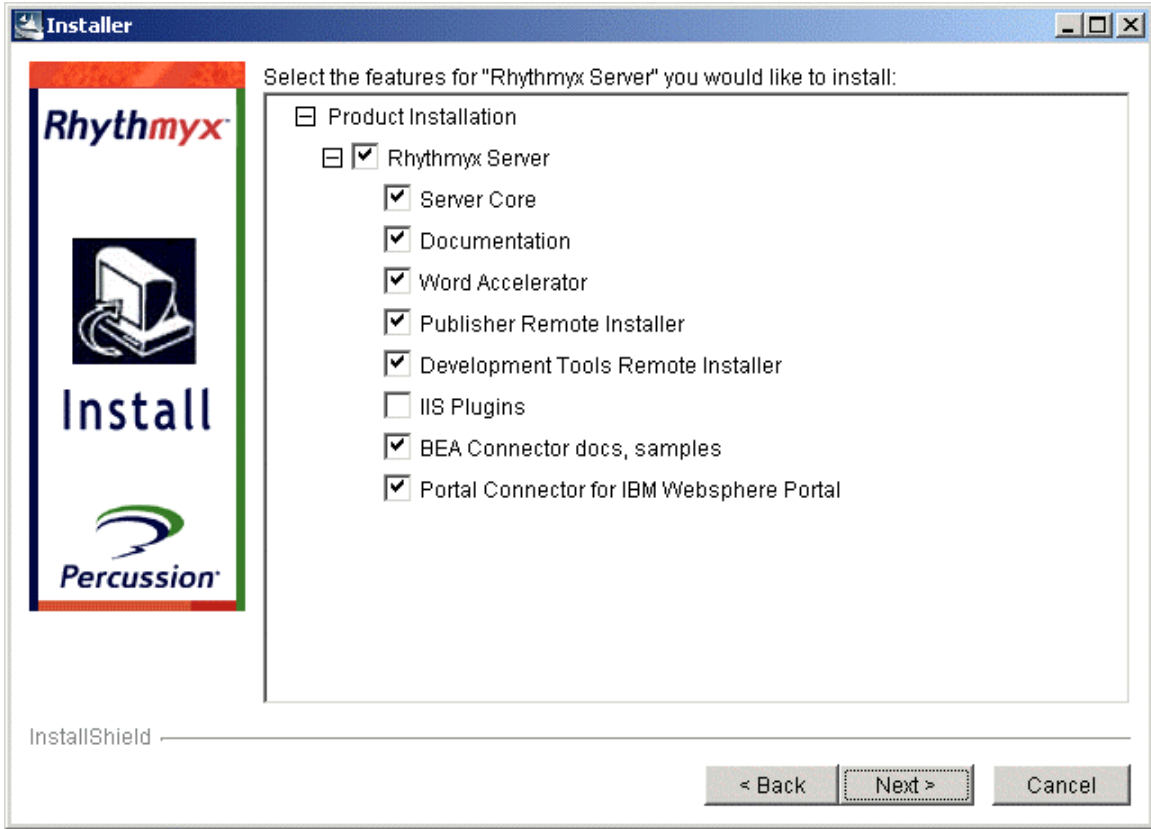
[X] 1 - Custom

To select a choice enter its number, or 0 when you are finished [0]: █
```

Suite installer steps in command line mode

NOTE: After you hit <Enter>, the Unix installer displays logging data as it runs.

If you choose a Custom Setup, you must choose the modules you want to install. By default, the features selected in the following Window are installed for the Rhythmyx Server whether or not you choose *Custom*, but you only see the following Window which allows you to change the features installed, if you choose *Custom* Rhythmyx Server in the previous Window.



Custom Setup Type window with components you can install

```
(04-Jun-01 04:46:44), null, com.installshield.product.conditions.PlatformProduct
BeanCondition, dbg.platform, condition platform: name="Solaris\|SunOS" version="
." arch="."

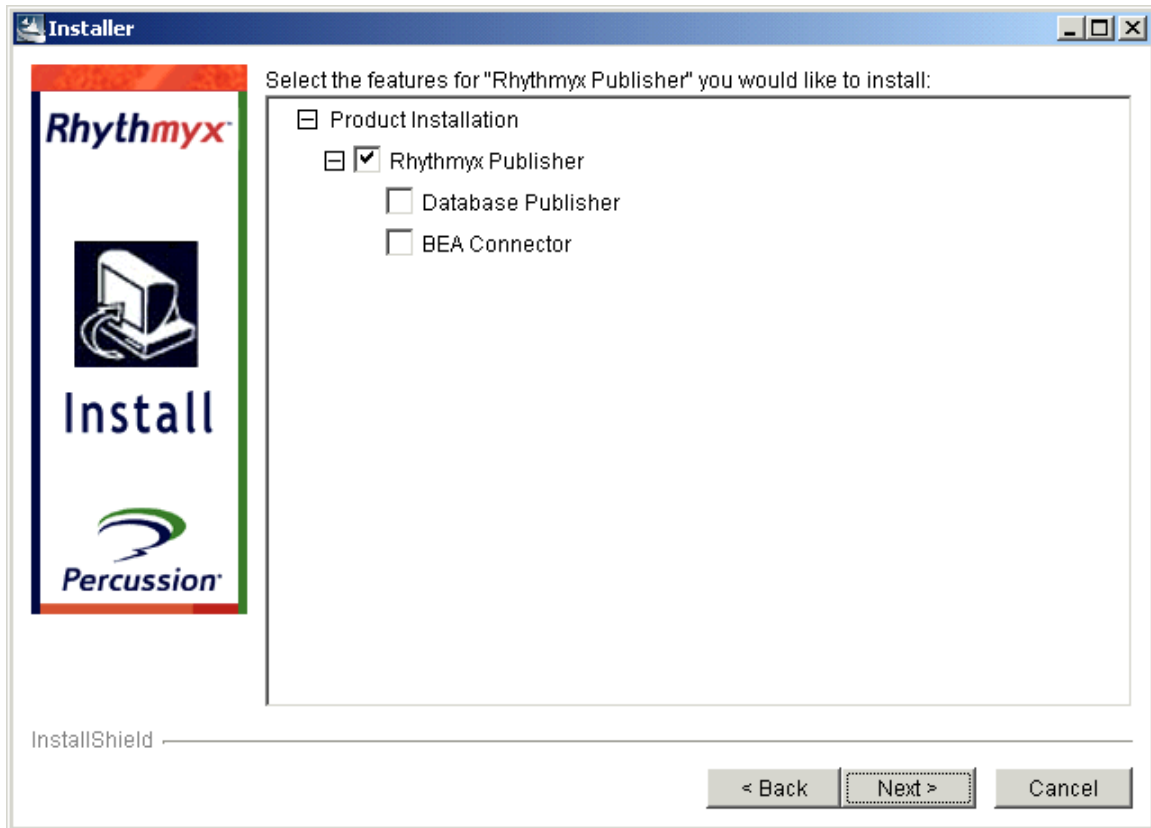
Select the features for "Rhythmyx Server" you would like to install:

[ ] 1 - Server Core (INSTALLED)
[ ] 2 - IIS Plugins ( OKB)
[ ] 3 - System Extensions (INSTALLED)
[ ] 4 - System Applications (INSTALLED)
[ ] 5 - Workflow (INSTALLED)
[ ] 6 - CMS Publisher (INSTALLED)
[ ] 7 - CMS Content (INSTALLED)

To select a choice enter its number, or 0 when you are finished [0]: █
```

Terminal window displaying components you can install

7. Since the only Publisher Setup Type is Custom, Rhythmyx displays the Rhythmyx Publisher Features dialog. You have the following options:
 - Rhythmyx Publisher – Installs the Rhythmyx Publisher. This option is checked by default.
 - Database Publisher –Installs the Rhythmyx Publisher and the Database Publisher. You must have a valid license and brand.
 - BEA Connector – Installs the publishing components for the Connector for BEA WebLogic Portl. You must have a valid license and brand code.



Publisher Features Dialog

In UNIX:

- To install the Database Publisher or BEA Connector:
 - Enter 1 for the Rhythmyx Publisher.
 - Enter 2 to “Visit children of Rhythmyx Publisher.”
 - If you are in a child, enter -1 to return to the parent.
 - Enter the number of each component and then 1 to toggle its install status to “on.”
 - Press [Enter] or 0 to install your selections.

```
1. + [X] Rhythmyx Publisher

To visit an item's children or to toggle its install status, enter
the item number.
Enter -1 to visit the parent or 0 to continue installing. [0] 1

    1. Toggle install status of Rhythmyx Publisher
    2. Visit children of Rhythmyx Publisher
    3. Select a different item

Enter command [1] 2

-----

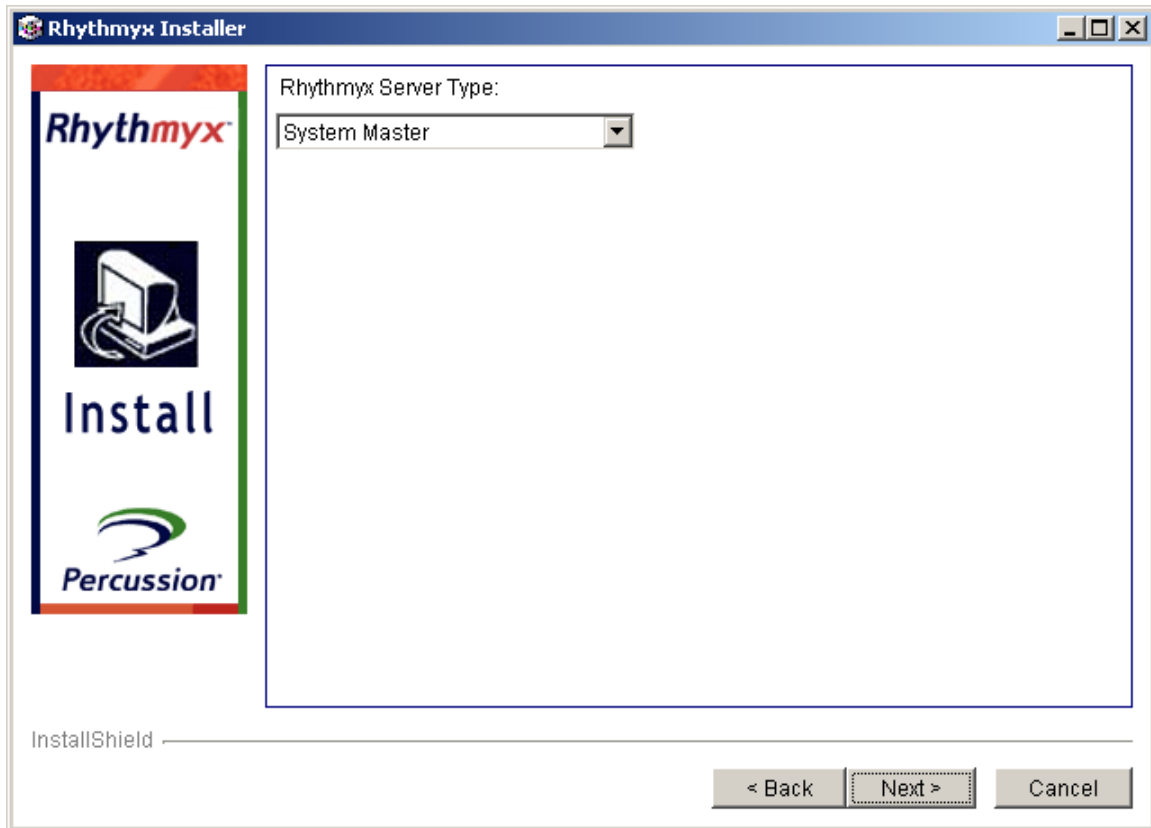
Rhythmyx Publisher->

1.  [ ] Database Publisher
2.  [ ] BEA Weblogic Accelerator

To visit an item's children or to toggle its install status, enter
the item number.
Enter -1 to visit the parent or 0 to continue installing. [0]
```

Publisher Features Installation in command line mode

8. Specify the type of Rhythmyx Server you are installing. Options are:
- System Master (The central Rhythmyx server in the installation. The System Master acts as both a Content Hub and a Publishing Hub.)
 - Publishing Hub (A Rhythmyx server that is used only the publish content. This server cannot be used to maintain content.)

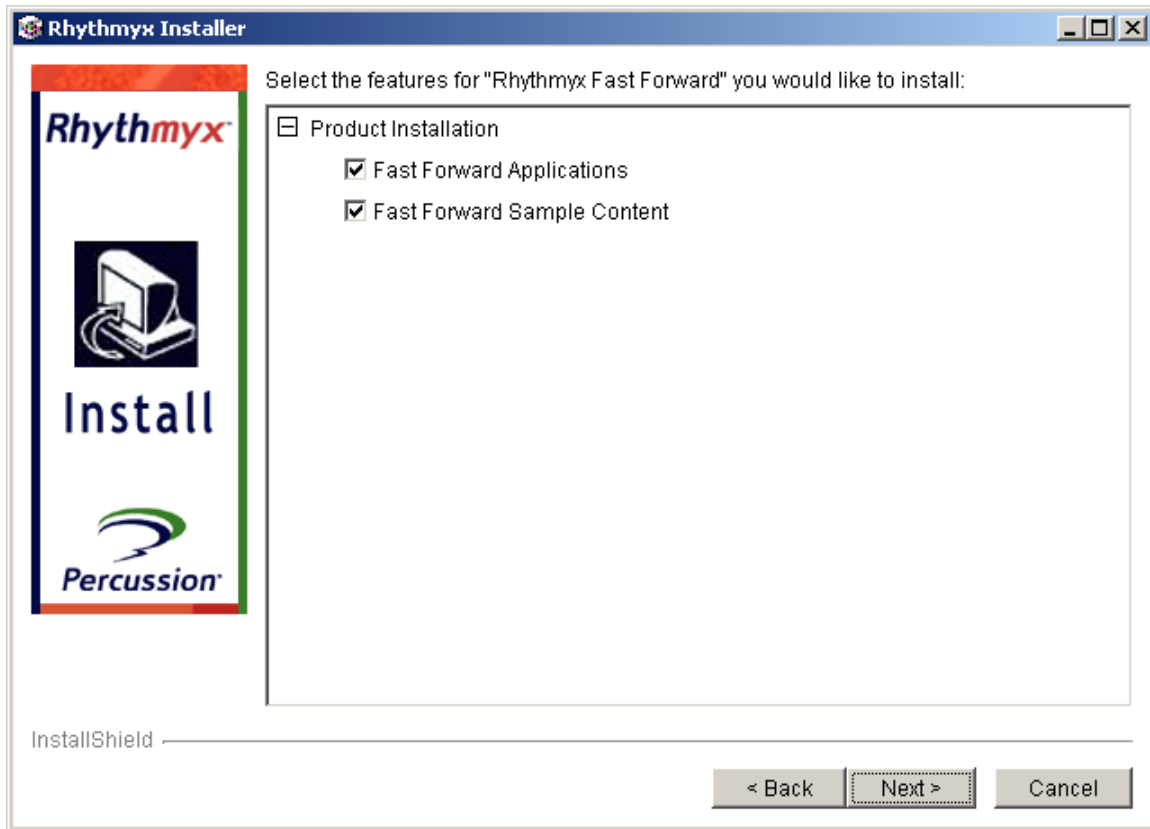


Rhythmyx Server Type Dialog

```
-----  
Rhythmyx Server Type:  
  1. System Master  
  2. Publishing Hub  
[1] █
```

Rhythmyx Server Type Selection in Command-line Mode

9. If you selected the Custom option for the FastForward installation (which is the default option), the installer displays the Select Rhythmyx FastForward Features to install dialog. Note that if you install the FastForward sample content, you must also install the FastForward applications. The installer will not allow you to uncheck the **FastForward Applications** checkbox unless the **FastForward Sample Content** box is also unchecked. Note, however, that you can install the FastForward applications without installing the FastForward sample content.



Select Rhythmyx FastForward Features to Install dialog

Select the features for "Rhythmyx Fast Forward" you would like to install:

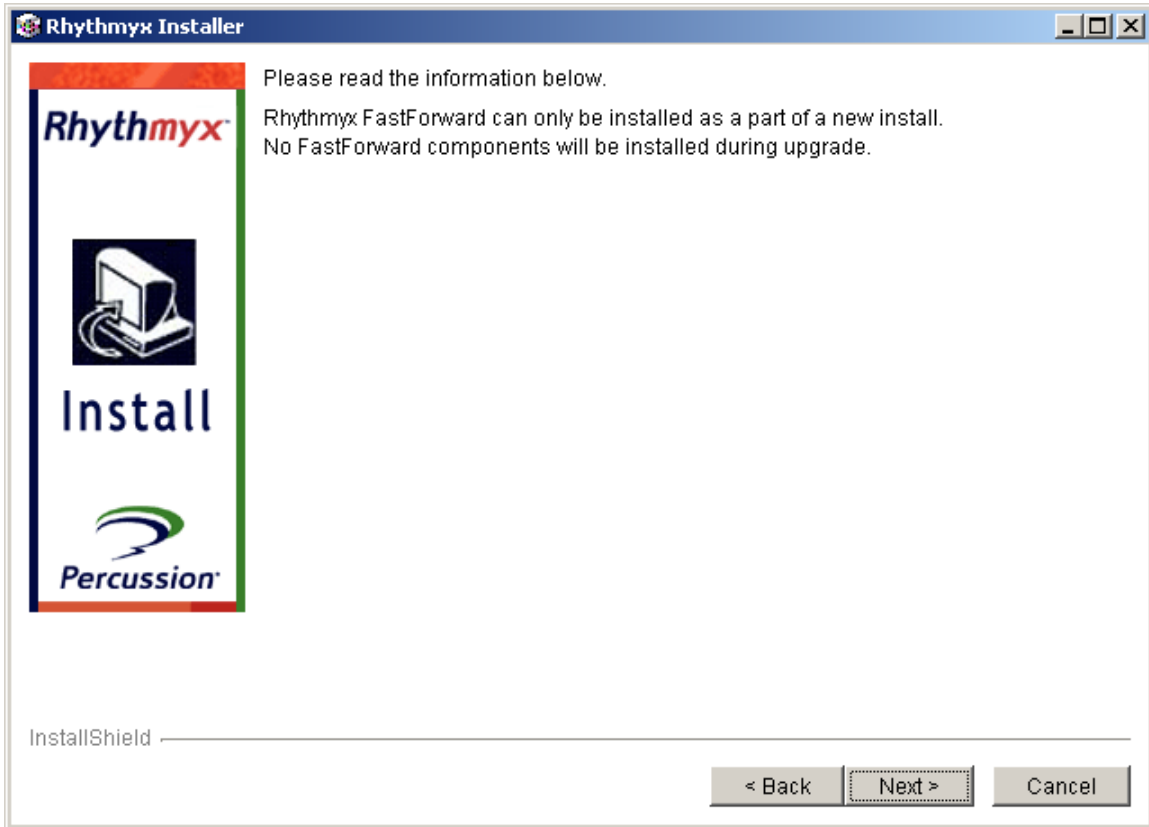
Rhythmyx Fast Forward

To select/deselect a feature or to view its children, type its number:

1. [x] Fast Forward Applications
2. [x] Fast Forward Sample Content

Select Rhythmyx FastForward Features to Install in command line mode

NOTE: FastForward cannot be installed on upgrades. If you attempt to install FastForward while upgrading, the installer will display the following message:

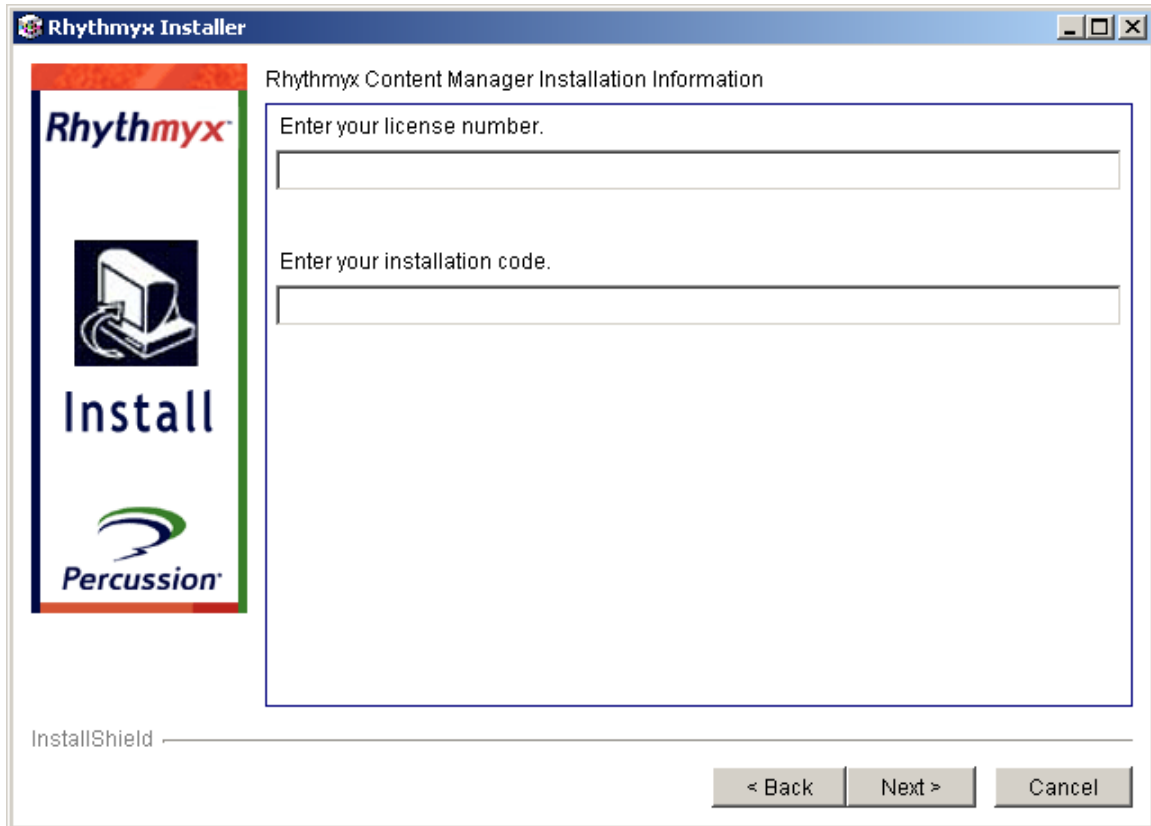


Warning displayed when attempting to install FastForward while upgrading Rhythmyx.

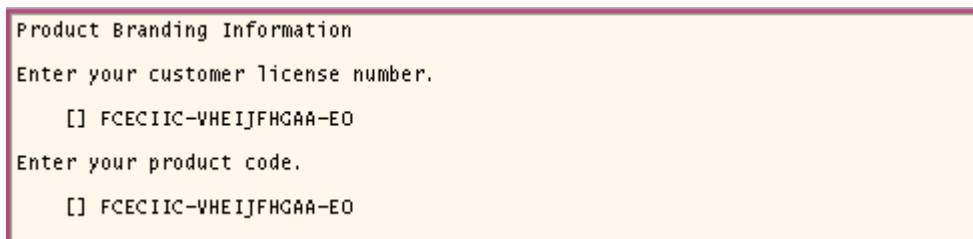
10. On the Product Branding Information window enter the **License Number** and **Product Code**. The License Number and Product Code are located on the installer CD-ROM jacket.

Note: Rhythmyx displays this dialog only if you are installing at least one of the following components:

- Repository database
- Server
- Database Publishing
- BEA WebLogic Connector
- IBM WebSphere Connector



License Number and Installation Code window

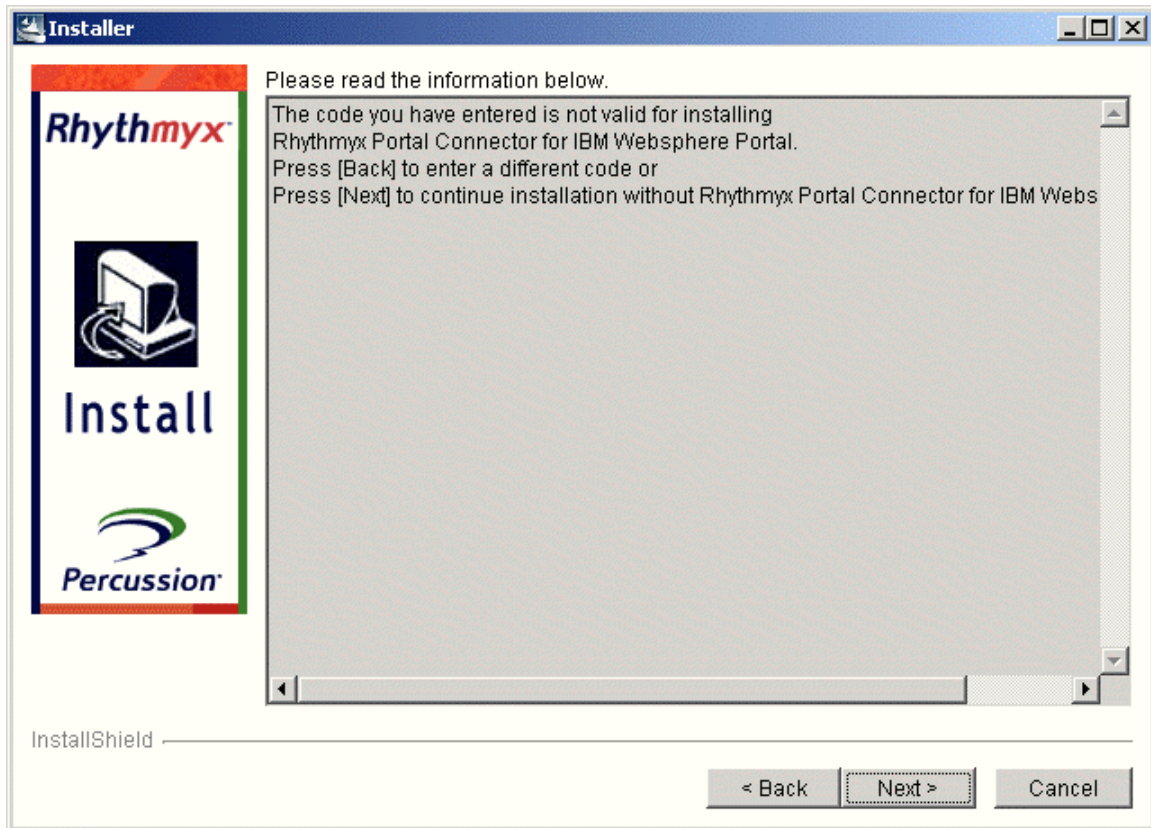


Product Branding Information in command line mode

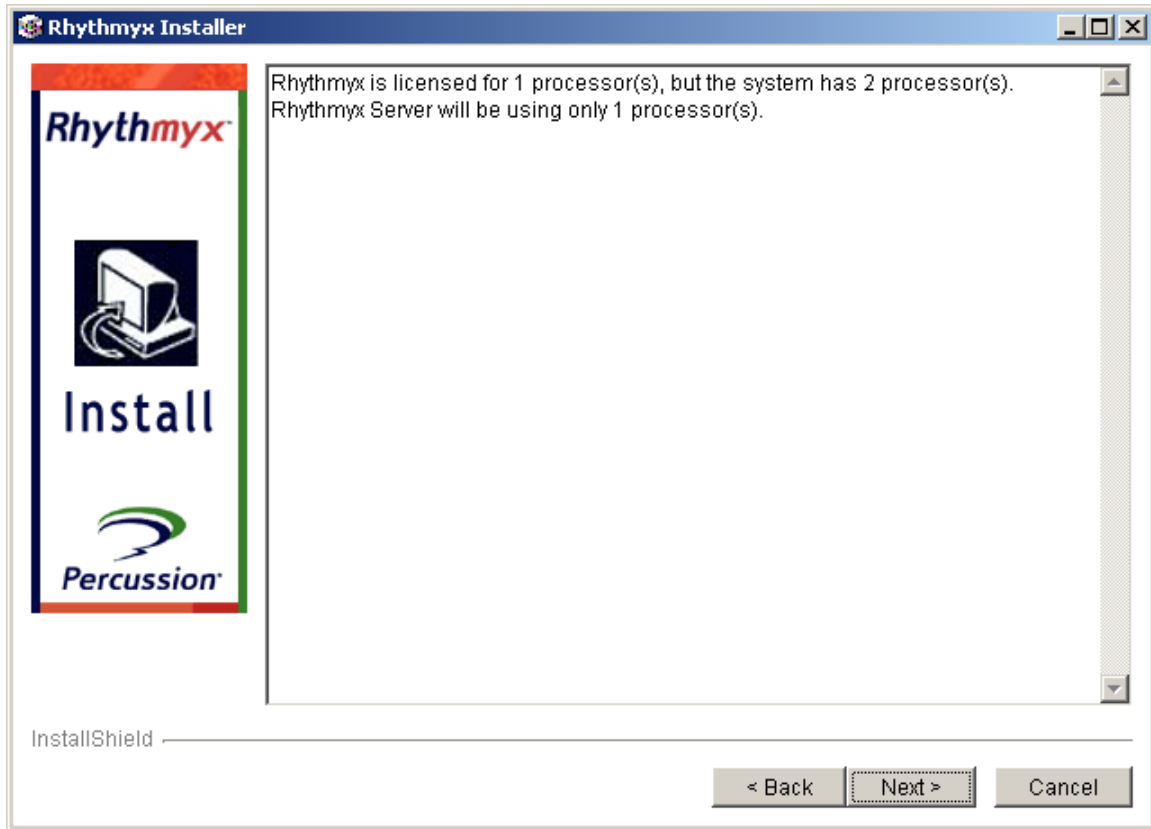
11. By default, the installer attempts to install the Connector for IBM WebSphere. If you enter an installation code that is not for the Connector for IBM WebSphere, and you have not chosen

Custom Rhythmyx Server and unchecked Connector for IBM WebSphere, Rhythmyx gives you to following warning message.

- If you want to install the Connector for IBM WebSphere, press [Back] and enter a new code.
- If you do not want to install the Connector for IBM WebSphere, press [Next].



- Rhythmyx is licensed by physical processor. You can install Rhythmyx to a machine that has more physical processors than your license permits, but Rhythmyx only uses the number of processors you are licensed to use. In that case, the installer displays a message notifying you about the number of processors Rhythmyx will actually use.

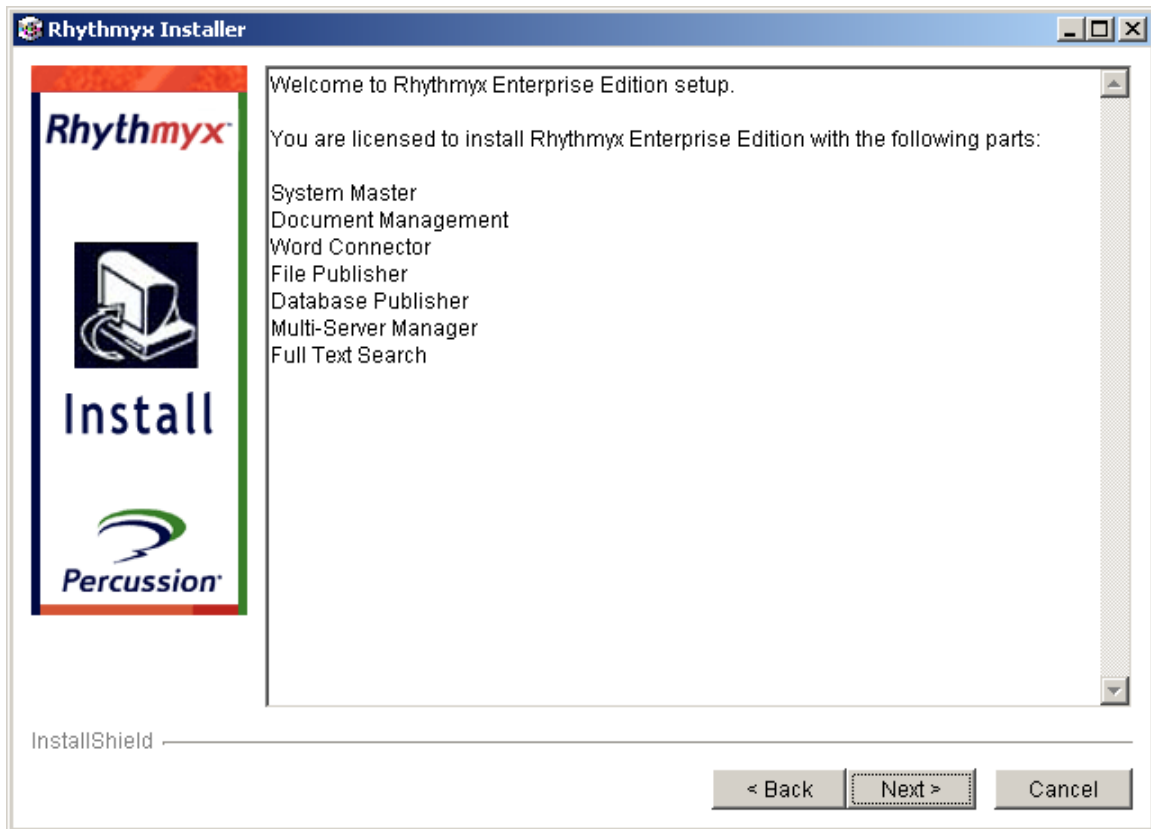


Processor Notification in Windows

Rhythmyx is licensed for 1 processor(s), but the system has 2 processor(s).
Rhythmyx Server will be using only 1 processor(s).

Processor Notification in Unix

13. After displaying any warnings, the installer displays a summary of the Rhythmyx features you are licensed to install.



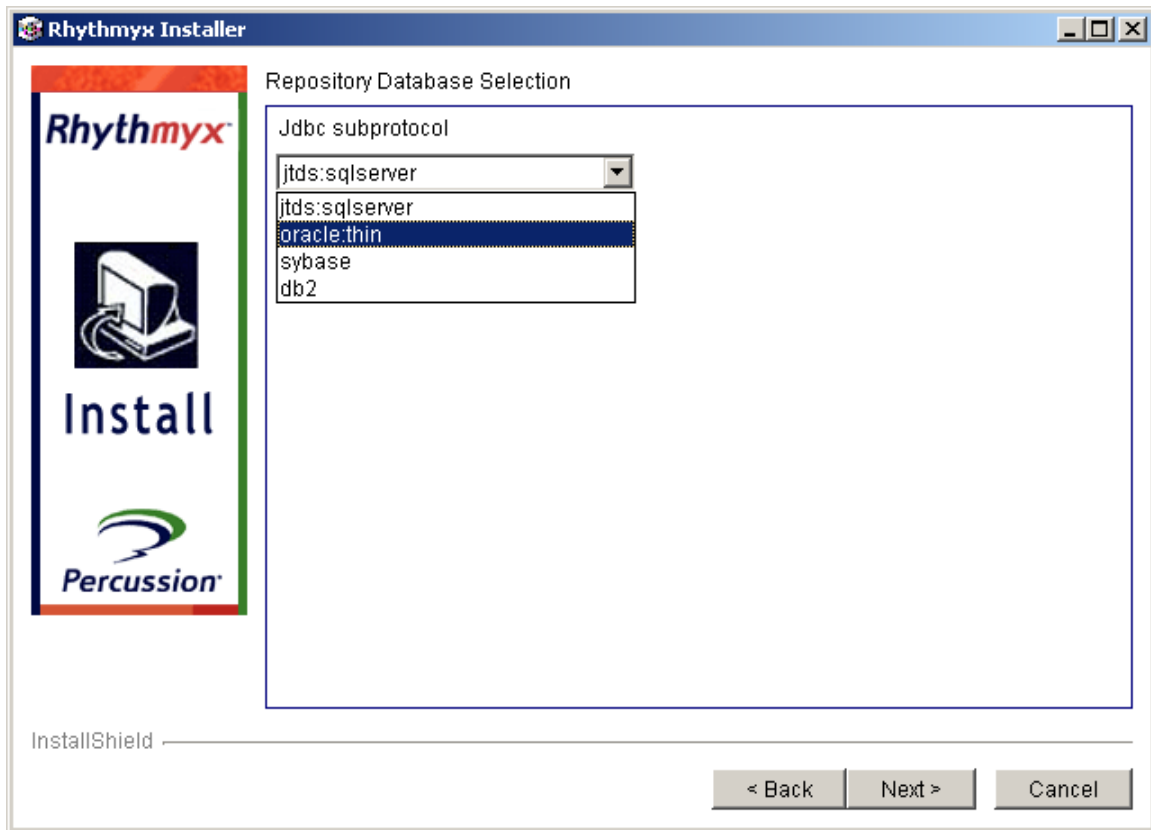
List of licensed features

You are licensed to install Rhythmyx Enterprise Edition with the following parts:

System Master
Document Management
Word Connector
File Publisher
Database Publisher
Multi-Server Manager
Full Text Search

List of licensed features in command line mode

14. If you are installing the Suite, Server, or Repository, define your database connection:
- a. Choose the Jdbc subprotocol used to connect to your database.



Repository Database Selection window for the Jdbc subprotocol

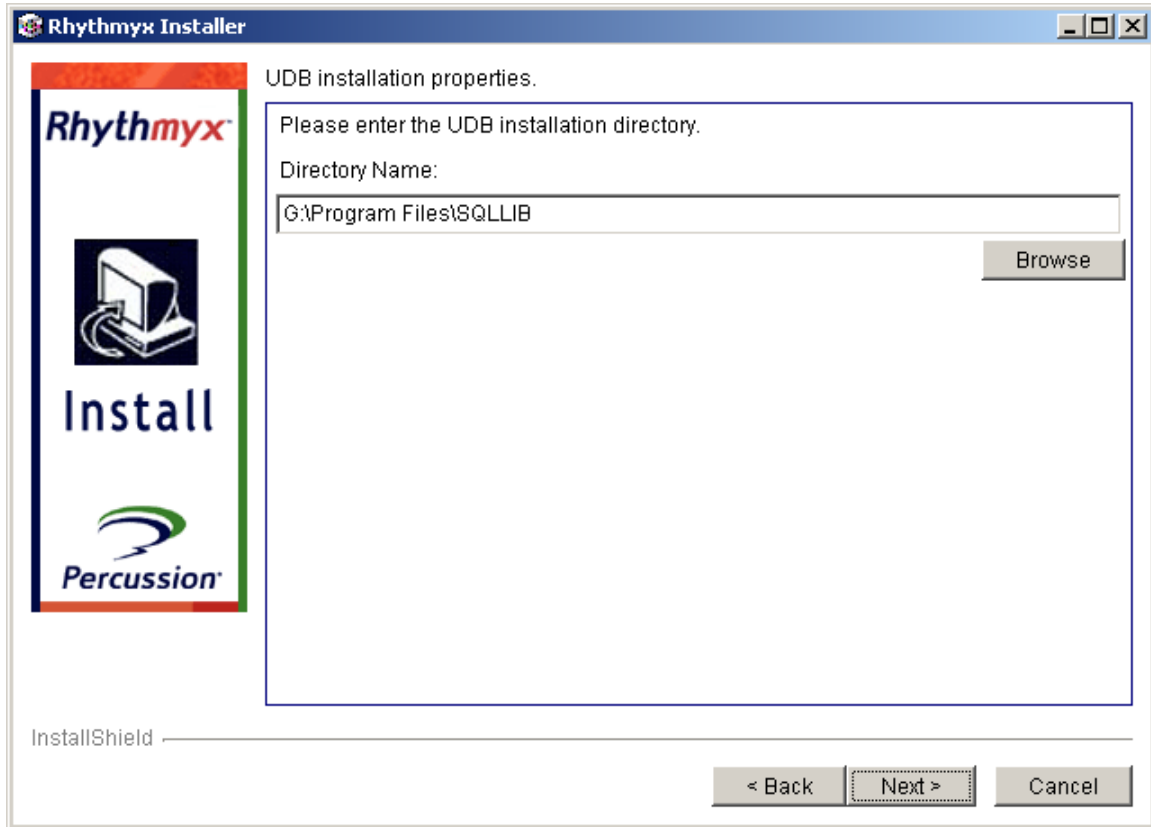
```
Repository Database Selection
Jdbc subprotocol

[X] 1 - oracle:thin
[ ] 2 - sybase
[ ] 3 - db2

To select a choice enter its number, or 0 when you are finished [0]: 3
```

Repository Database Selection in command line mode

- If you chose *db2* as your JDBC subprotocol, Rhythmyx will ask you to enter the UDB installation directory



UDB Installation Directory entry window

When installing DB2 to Unix, be sure you enter the installation directory, not the instance directory. To find the installation directory, open another terminal window and enter `set | grep DB2DIR`. The system will display the value of the DB2 installation directory. Copy this value to the installation console.

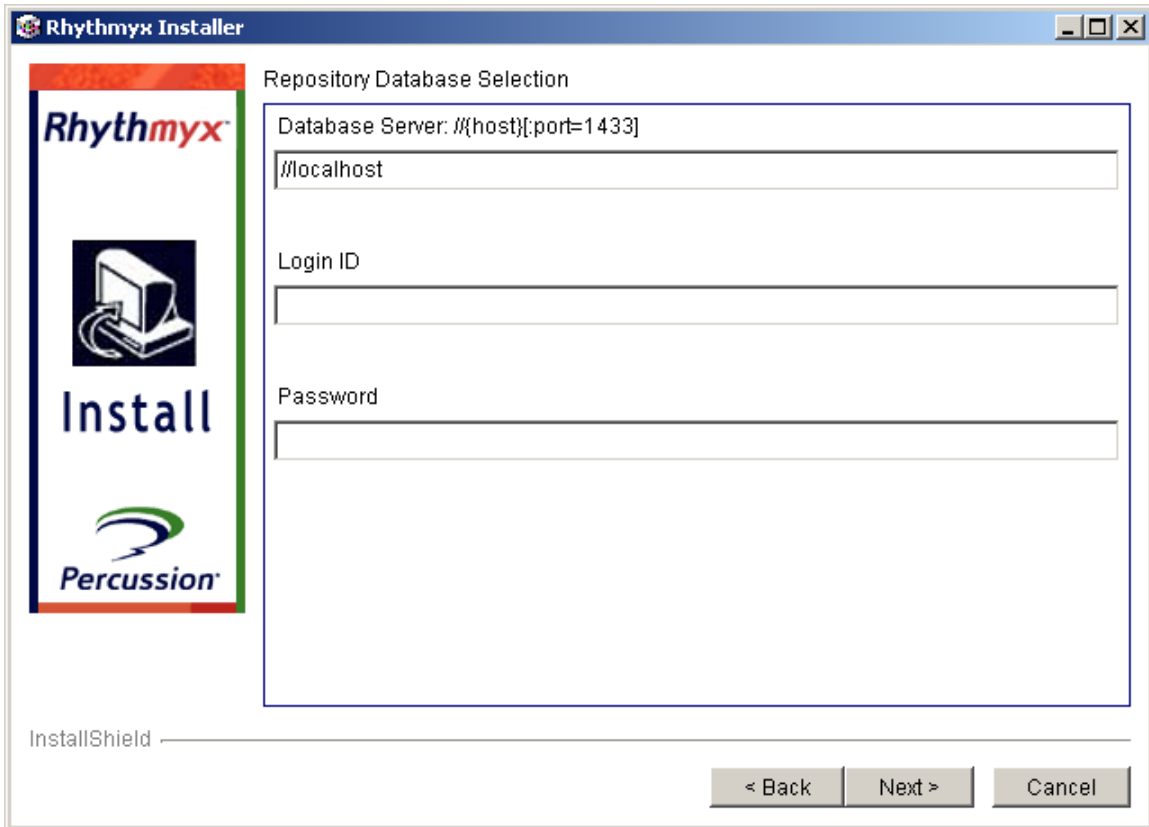
```
Please enter the UDB installation directory.
Please specify a directory name or press Enter [/] /opt/IBMdbs2/V7.1
Please press Enter to Continue
```

UDB Installation Directory entry in command line mode

- If you choose *oracle:thin*, *Sprinta*, or *db2* as your JDBC subprotocol, Rhythmyx will ask you to enter the **Server**, **Login ID**, and **Password**. If you chose *db2*, the **Database** field replaces the **Server** field. When entering the **Server** name, use the following syntax:

Driver	Syntax	Sample
Oracle	@<server>:<port>:<SID>	@38.164.160.36:1521:ORCL
Sybase	Tds:<server>:<port>	Tds:DBSERVER:5000
Sprinta	<server>	dbserver

Driver	Syntax	Sample
TDS	<{//server}>	//dbserver
UDB	Database alias of the database as configured using the Client Configuration Assistant	Alias

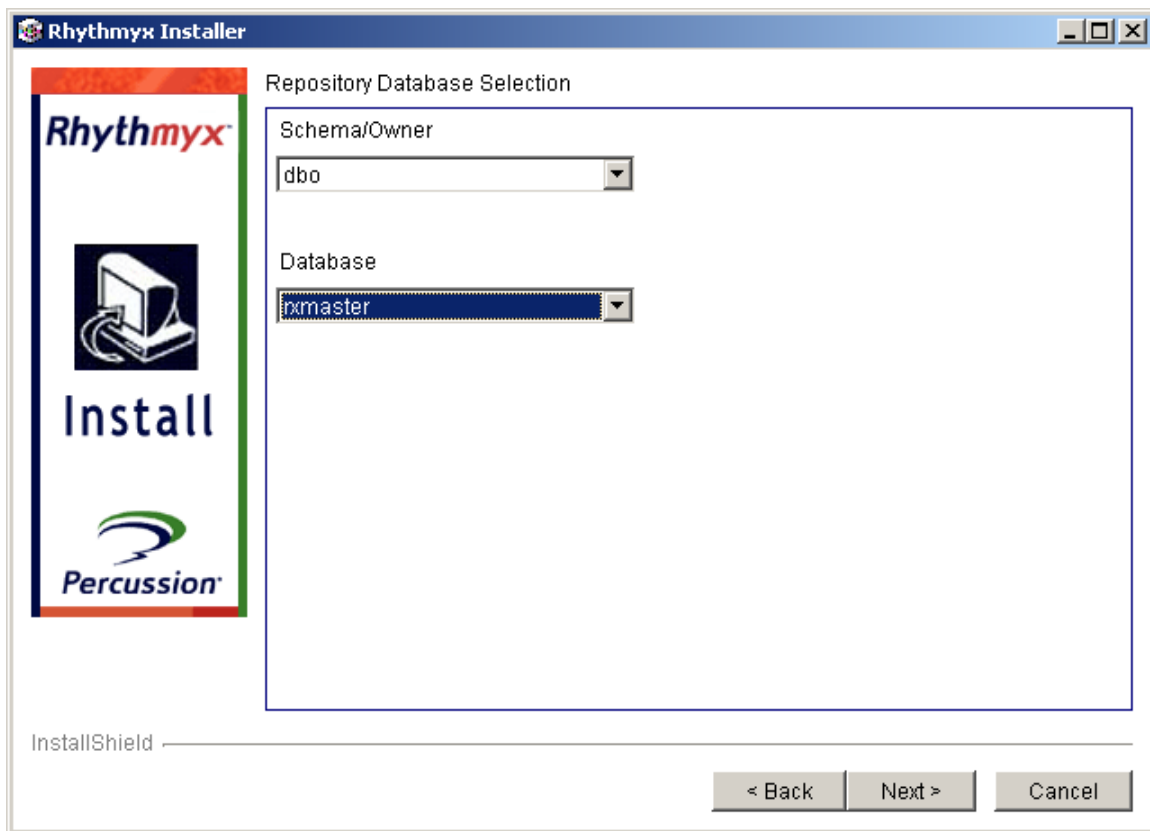


Repository Database Selection window for the Server, Login ID, and Password when the JDBC subprotocol is Oracle or Sprinta

```
Repository Database Selection
Database Server: @{host}:{port}:{sid}
[@DevSo11:1521:ORCL] █
```

Repository Database Selection for the Database, Login ID, and Password in command line mode when the JDBC subprotocol is Oracle

- b. Choose the **Schema/Owner** and **Database**. Note: The **Database** field does not apply in Oracle or DB2, so the dialog does not include it when you select *oracle:thin* or *db2* as the JDBC subprotocol.



Repository Database Selection window for the Schema/Owner and Database

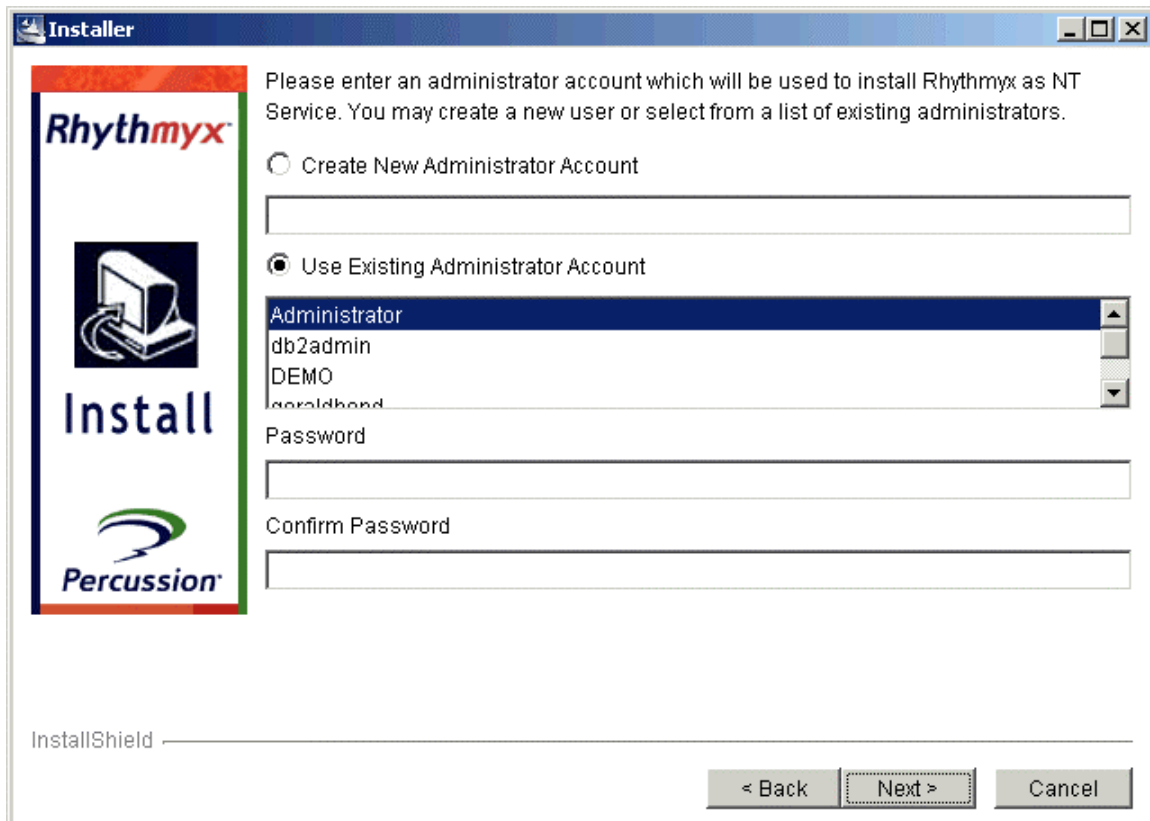
In UNIX:

- The installer displays a list of available databases. To select one, enter its number.

```
To select a choice enter its number, or 0 when you are finished [0]: 25
```

Repository Database Selection in command line mode

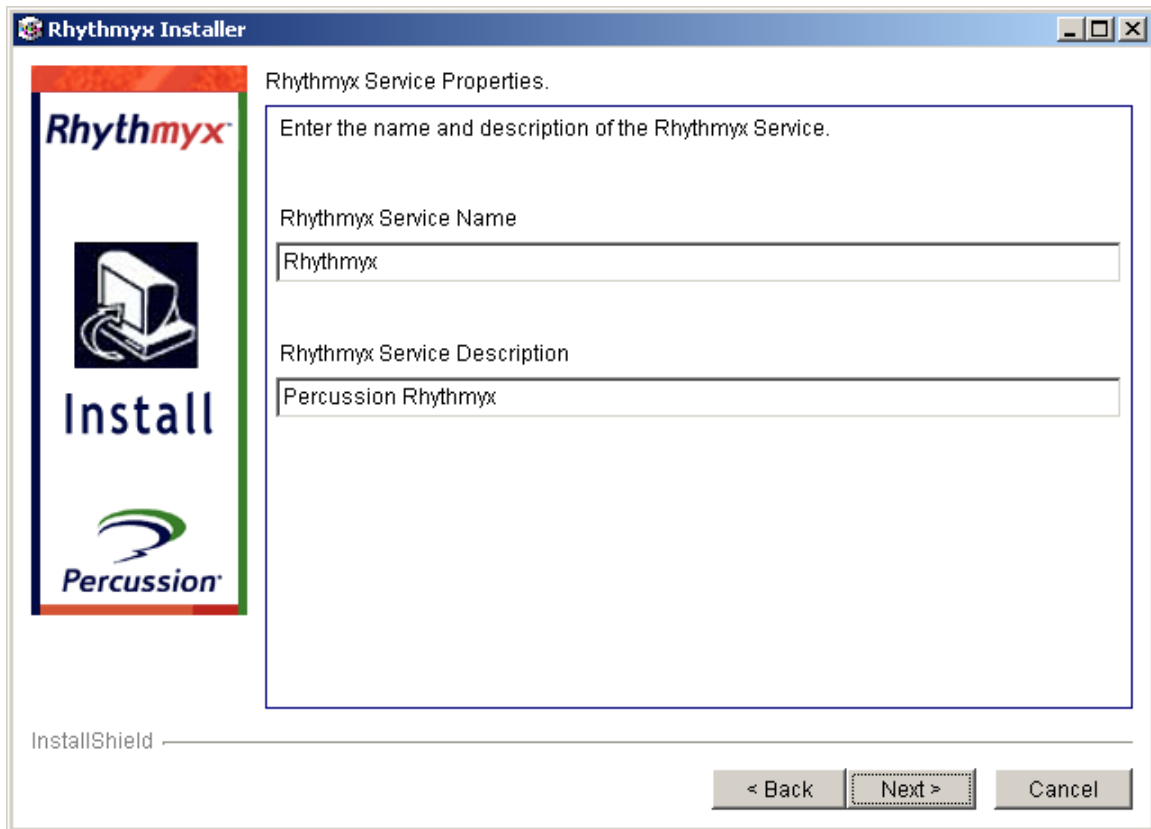
- c. If you are installing to a Windows environment and you choose *DB2* as the JDBC subprotocol, the installer displays the UDB Service dialog. You can create a new administrator account to install the Windows service, or use an existing account. The account must conform to DB2 Naming Rules:
- The account name cannot begin with “SYS”, “sys”, “IBM”, “ibm”, “SQL”, or “sql”.
 - The account name can only contain the characters a-z, A-Z, 0-9. Three other characters are also acceptable: #, @, and \$.
 - The account name cannot be GUESTS, ADMIN, USERS, or LOCAL.



UDB Service Dialog

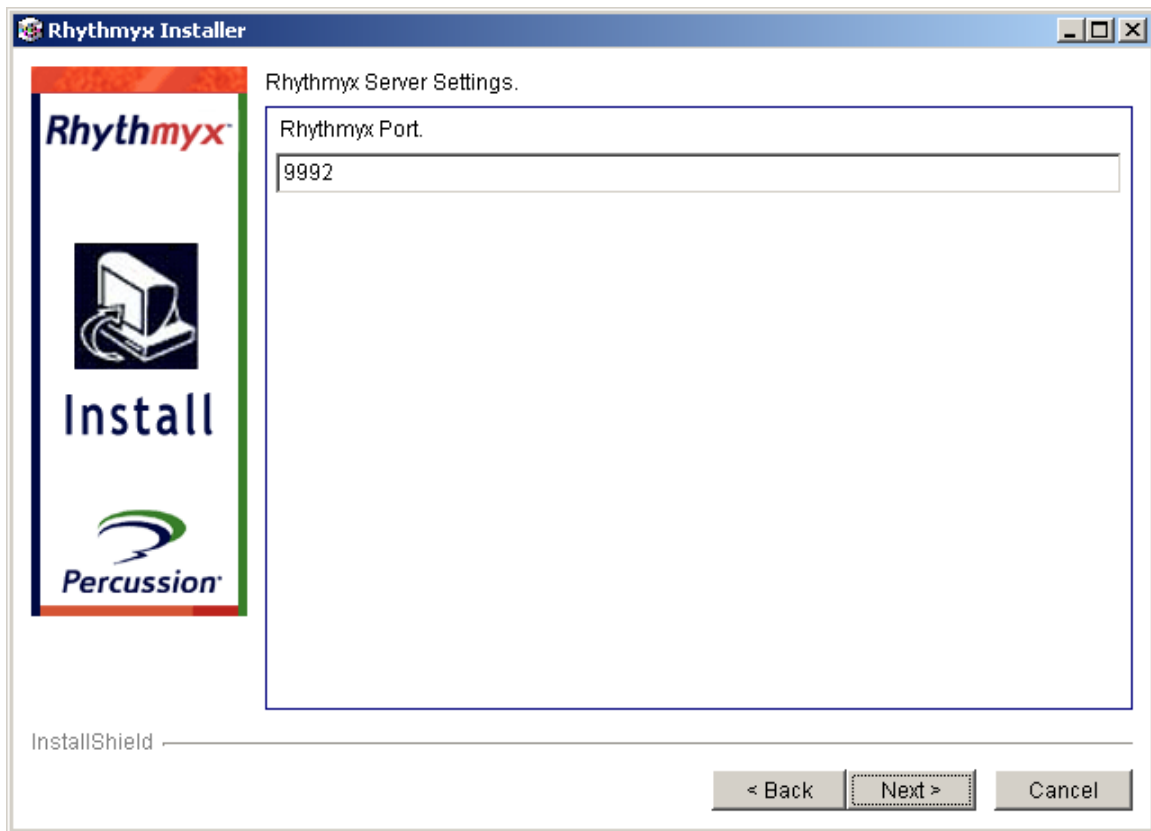
Enter and confirm the password for the account. If you choose to use an existing account, the installer will update the account with the privileges required to install and run the Rhythmyx service.

15. In a Windows environment, the installer displays the Rhythmyx service configuration dialog. Enter the Name and Description of the Rhythmyx service. The default name is *Rhythmyx* and the default description is *Percussion Rhythmyx*.

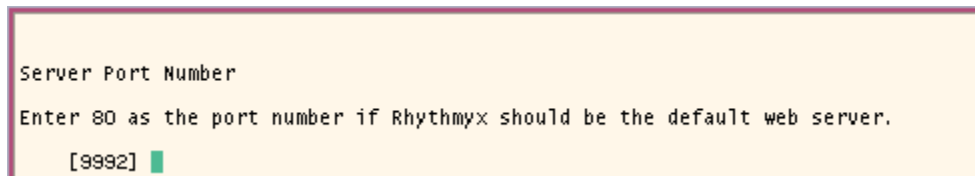


Windows Service Configuration dialog.

16. Enter the **Server Port Number**. Note: This step applies to Server installations only.

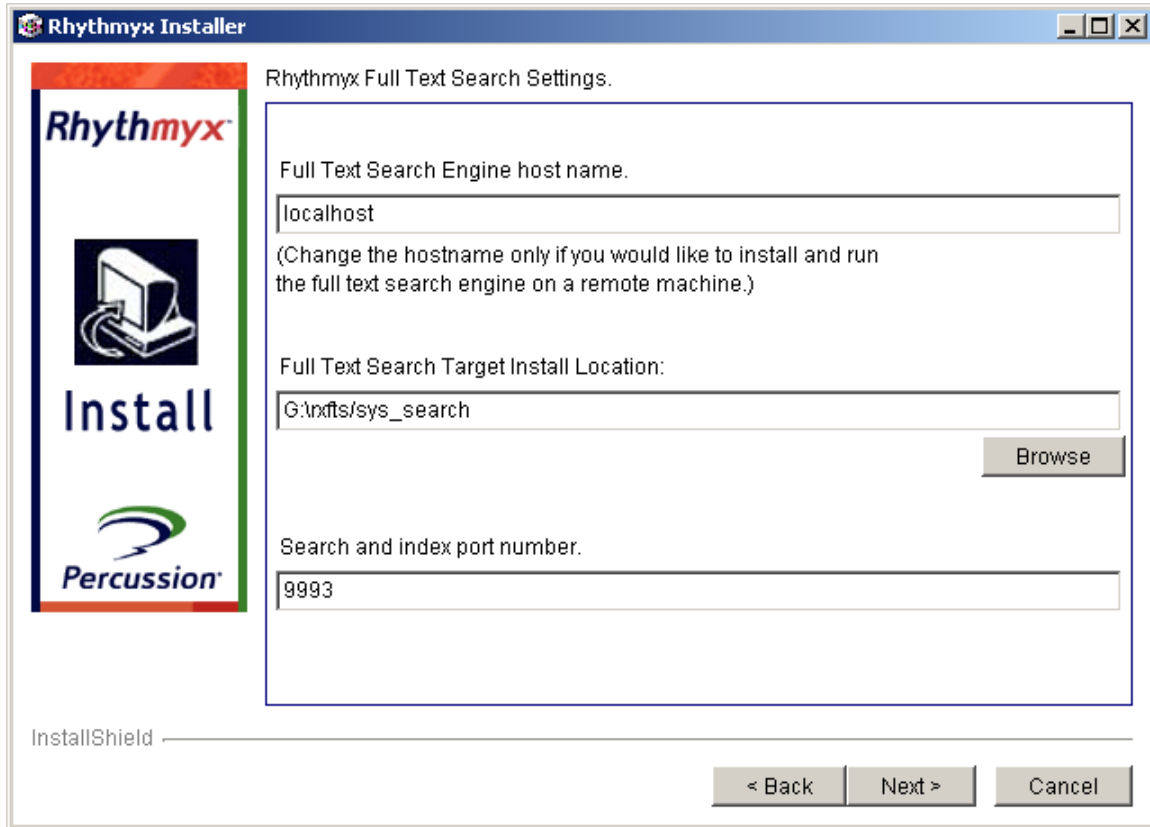


Window for Server Port Number



Server Port Number in command line mode

17. If you have specified that you want to install the Rhythmyx Full-text Search Engine, the installer displays the Full Text Search Settings dialog.



Full-text Search Settings dialog

```
Rhythmyx Full Text Search Settings.  
Full Text Search Engine host name. [DevSol1]  
Full Text Search Target Install Location:  
[/export/home/robert/Rhythmyx/sys_search]  
Search and index port number. [9651]
```

Full-text Search Settings in command line mode

The name of the local machine defaults into the **Full Text Search Engine host name** field. If you want to install to a different machine, you must enter the name of the machine here. Note that the licensing for the full-text search engine requires the use of a valid host name. You cannot use an IP address or any variation of “localhost”; these values will cause the search engine service to fail when attempting to start.

The default location of the full-text search engine (<rhythmyxroot>/sys_search) is automatically entered in the **Full Text Search Target Install Location** field. If you want to install to a different location (such as on a remote machine), enter the fully-qualified path to that location.

The value in the **Search and index port number** field defaults to the value of the Rhythmyx port +1 (in other words, if you accept the default value of 9992 for the Rhythmyx port, the value in the **Search and index port number** field will be 9993). You can change this value to any valid port.

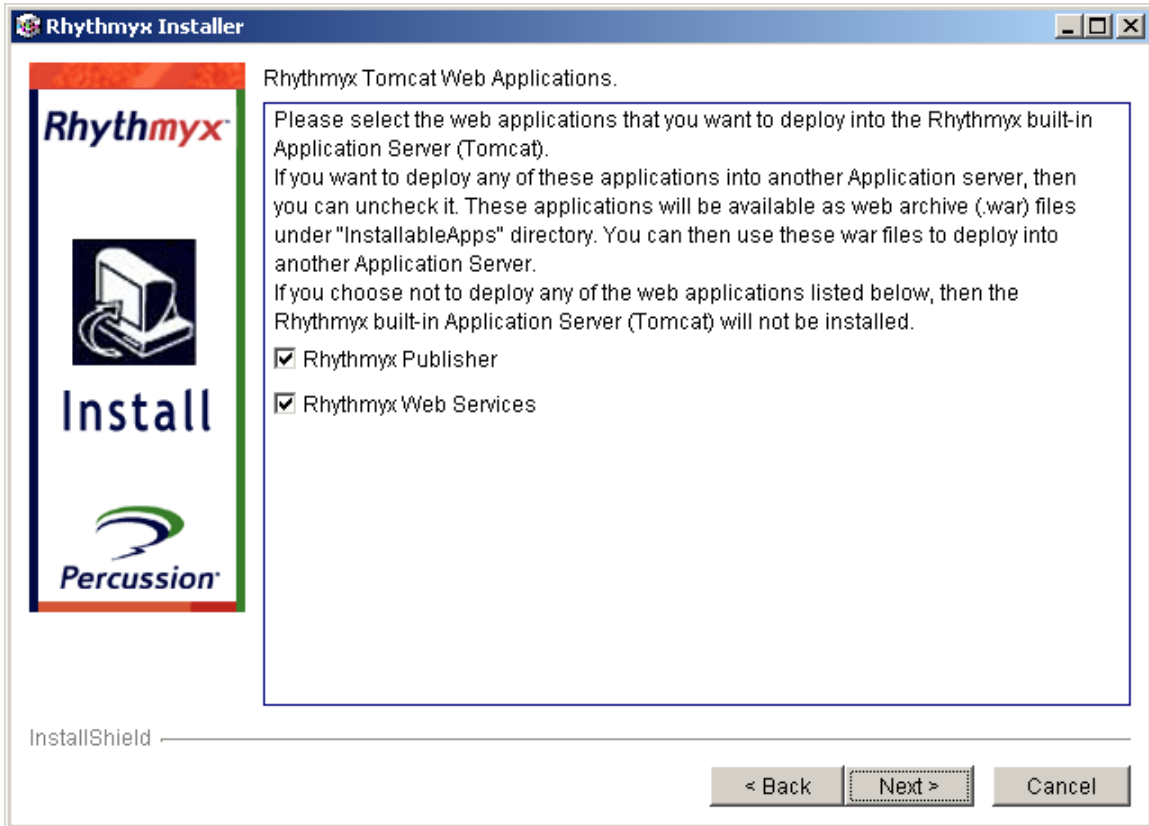
18. Select the applications you want to install into the default Rhythmyx application server (Tomcat). Options include:

- Rhythmyx Publisher
- Rhythmyx Web Services

If you use a different application server (such as BEA WebLogic or IBM WebSphere), you can leave all options unchecked. If you want to run some applications from the default application server and some from a different application server, check only the applications you want to run from the default application server.

If you uncheck all options, the default Tomcat application server is not installed.

NOTE: If you do not install the applications to the default server, the application are available as web archives (.war) files in the (Rhythmyxroot)/Installable Applications directory. You can use these .war files to deploy the application to a different application server.



Application Installation Option Dialog

```
Rhythmyx Tomcat Web Applications.
```

- ```
1. Yes
2. No
```

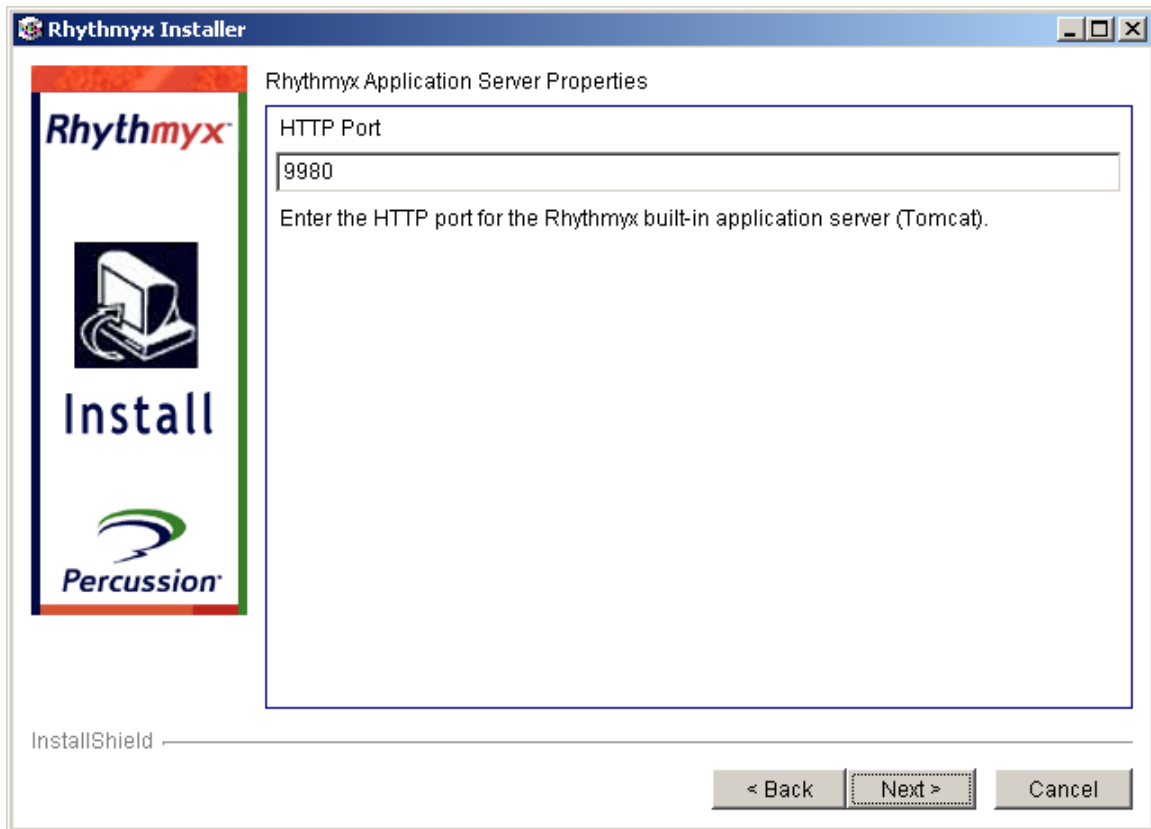
```
Install Rhythmyx Publisher [2] 1
```

- ```
1. Yes  
2. No
```

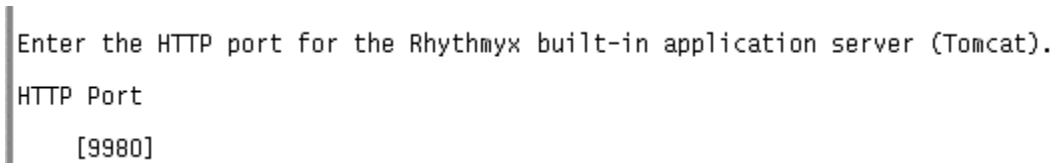
```
Install Rhythmyx Web Services [2] 1
```

Application Installation Options in command line mode

19. If you are installing Tomcat, enter the HTTP port number for the built-in application server. If you choose a port other than the default, you must update the publisher port in RXPUBLISHER.PORT and RXSITES.BASEURL to have a working example.

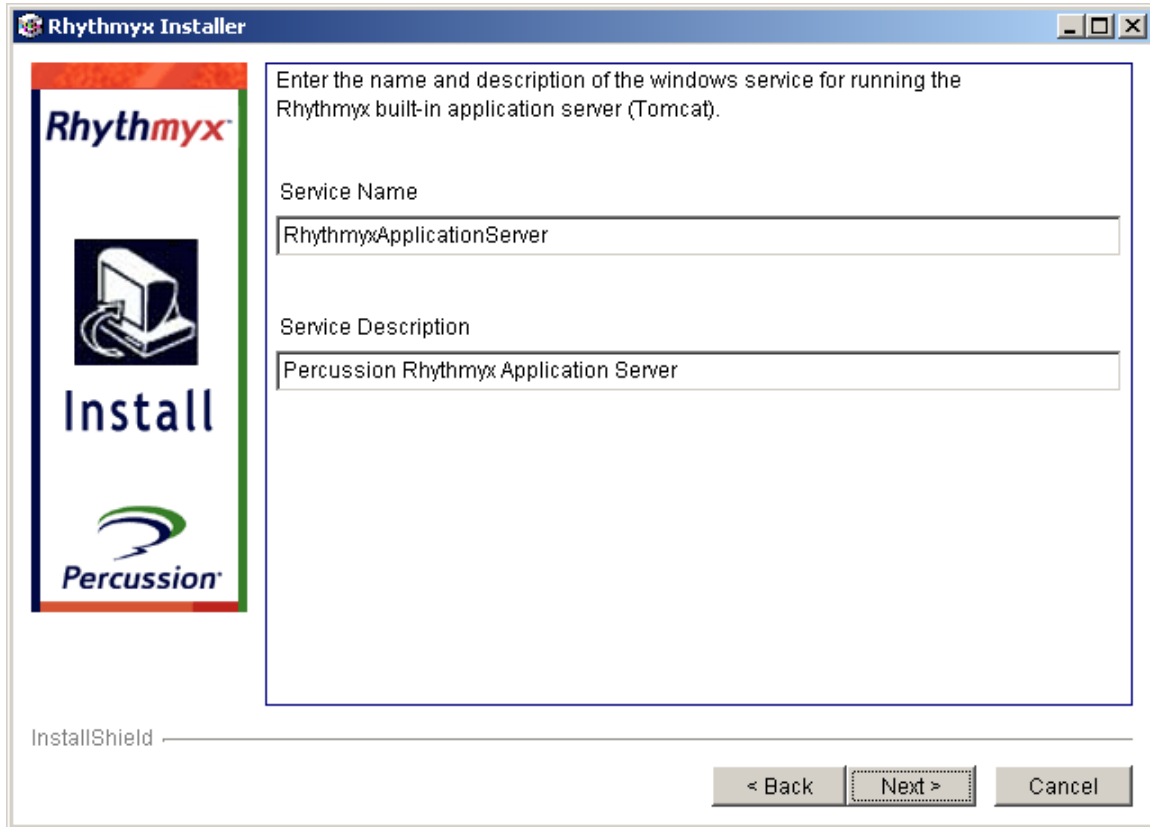


Publisher Service Port Number Window



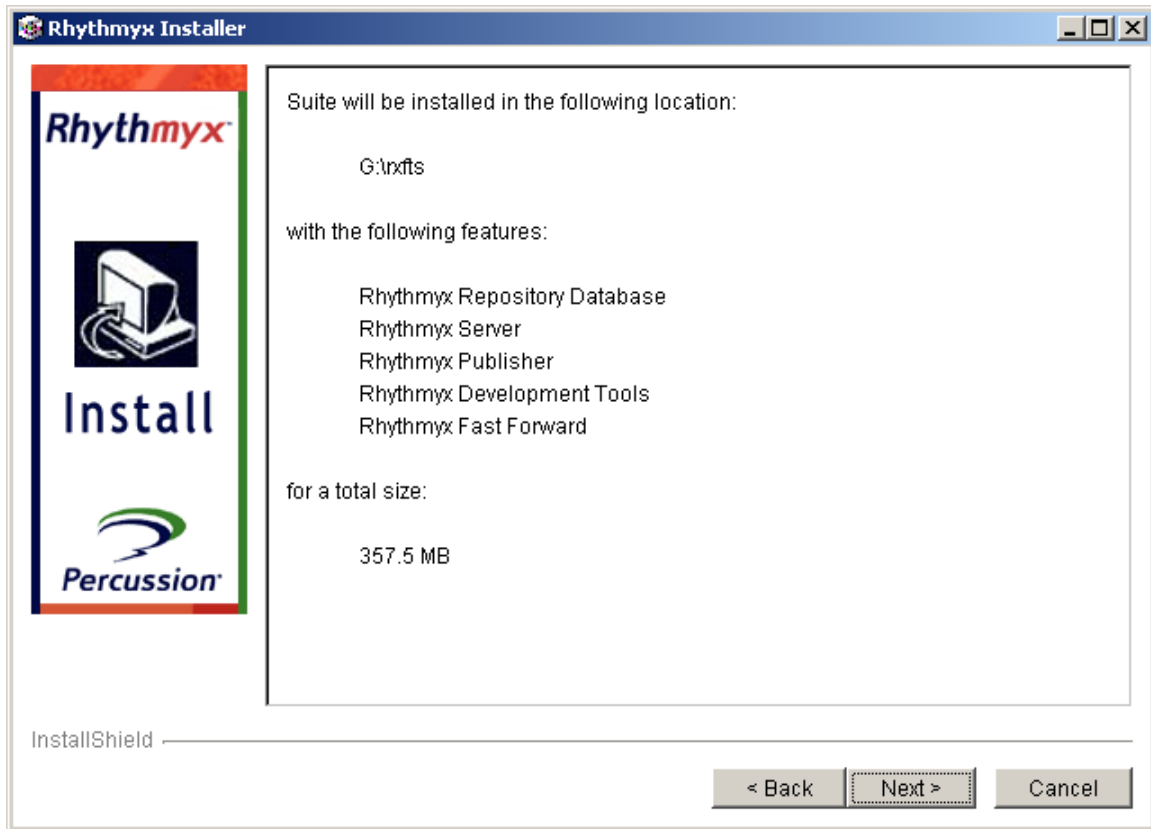
Publisher Server Port Number in command line mode

20. If you are installing Tomcat, enter the NT Service name. This step is required for Windows platforms only.



Publisher Service Window

21. Click [Next] to confirm the location and features you wish to install.



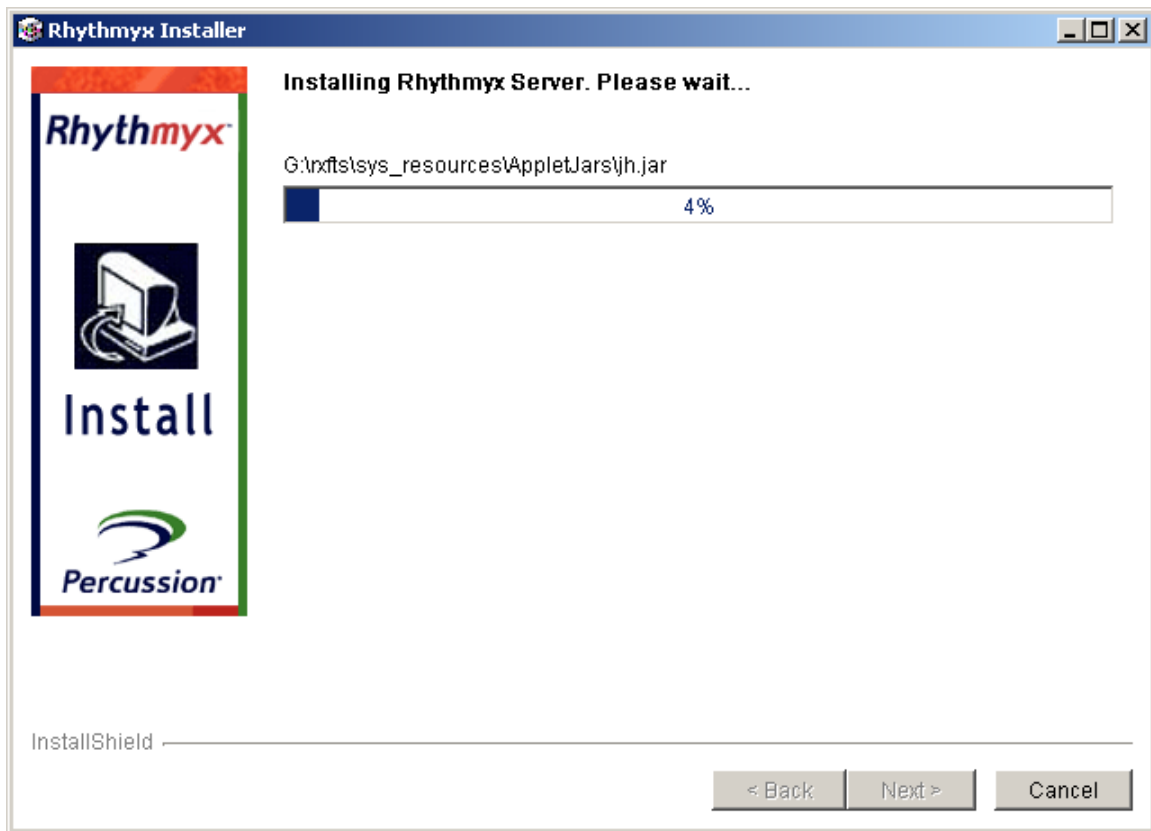
Window confirming features you wish to install

```
Suite will be installed in the following location:
/export/home/Rhythmyx
with the following features:
Rhythmyx Repository Database
Rhythmyx Server
Rhythmyx Publisher
for a total size:
281.5MB

Please press Enter to Continue
```

Confirmation in command line mode of features you wish to install

The installer will display pages for each configuration step and a progress meter while installing files.



Installing progress meter

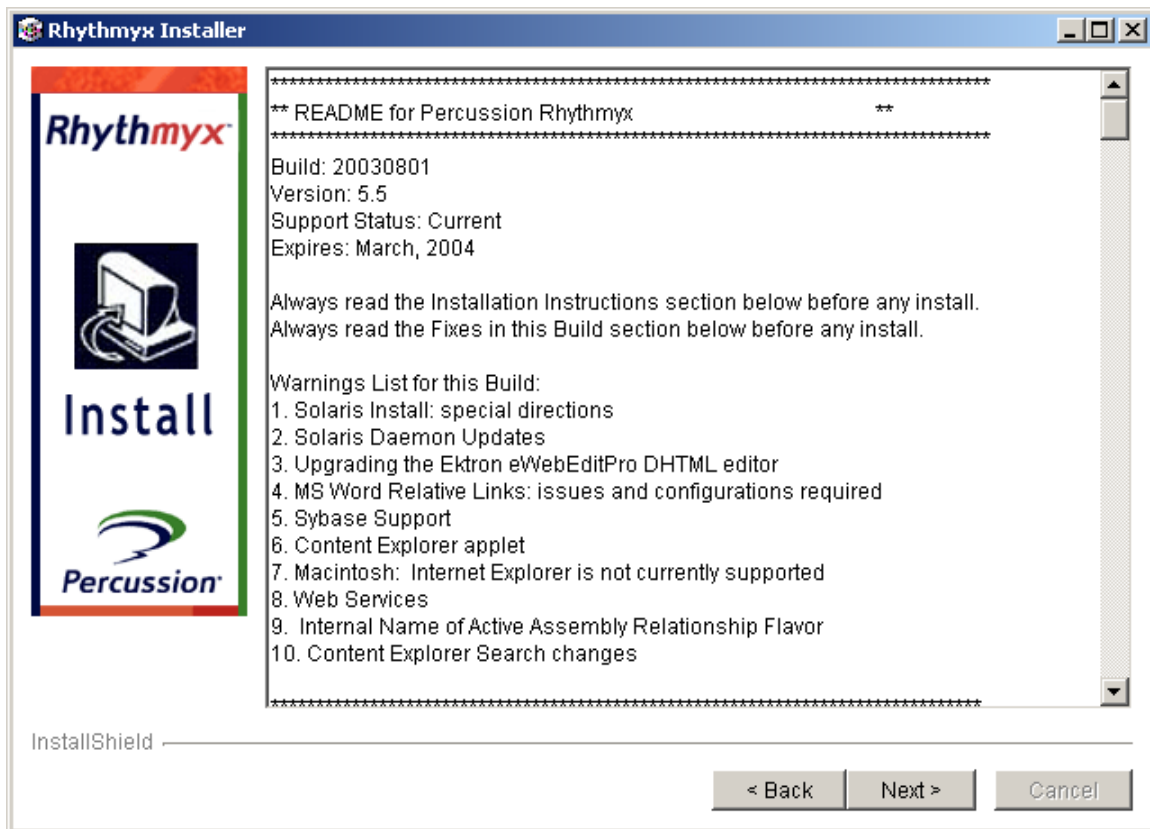
```
features: <blockquote>Rhythmyx Repository Database ( OKB)<br>Rhythmyx Server (-
OKB)</blockquote> for a total size: <blockquote> OKB</blockquote>

Please press Enter to Continue

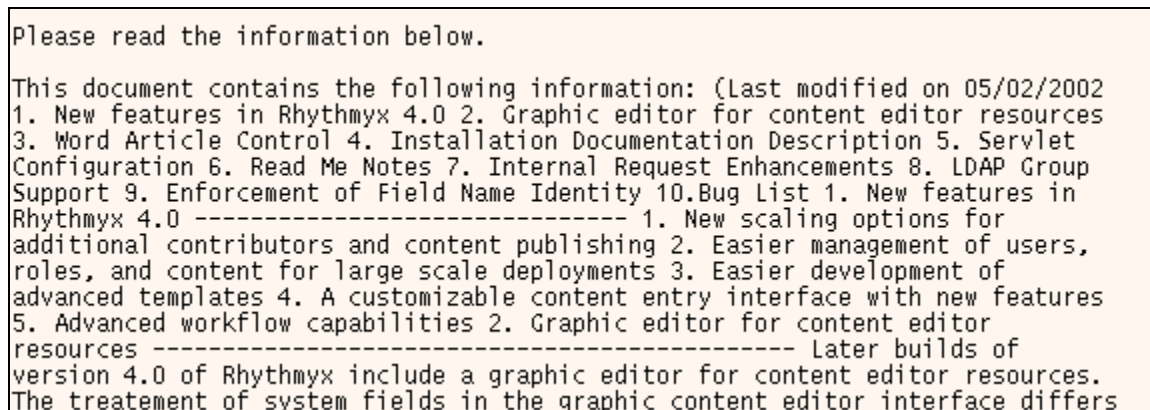
Installing Rhythmyx Repository Database...
```

Progress meter in command line mode

When installation is complete, Rhythmyx displays the readme.

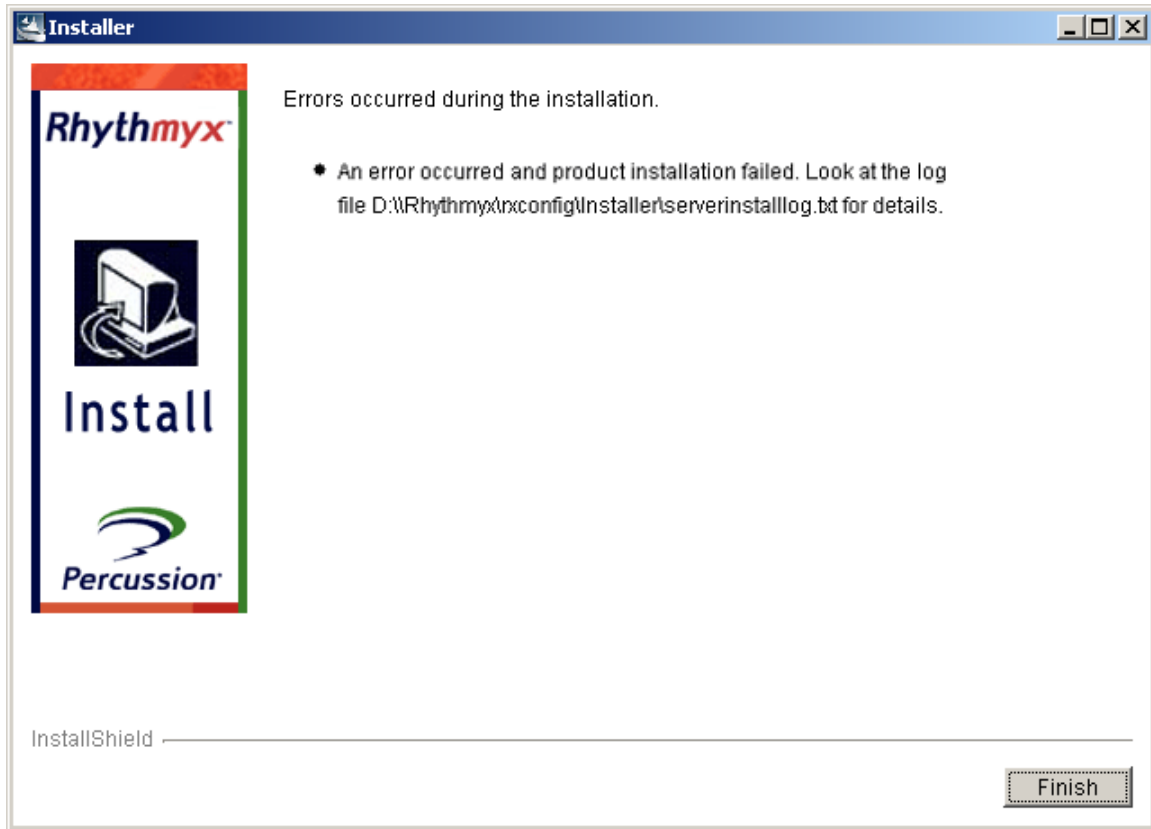


Window displaying the readme



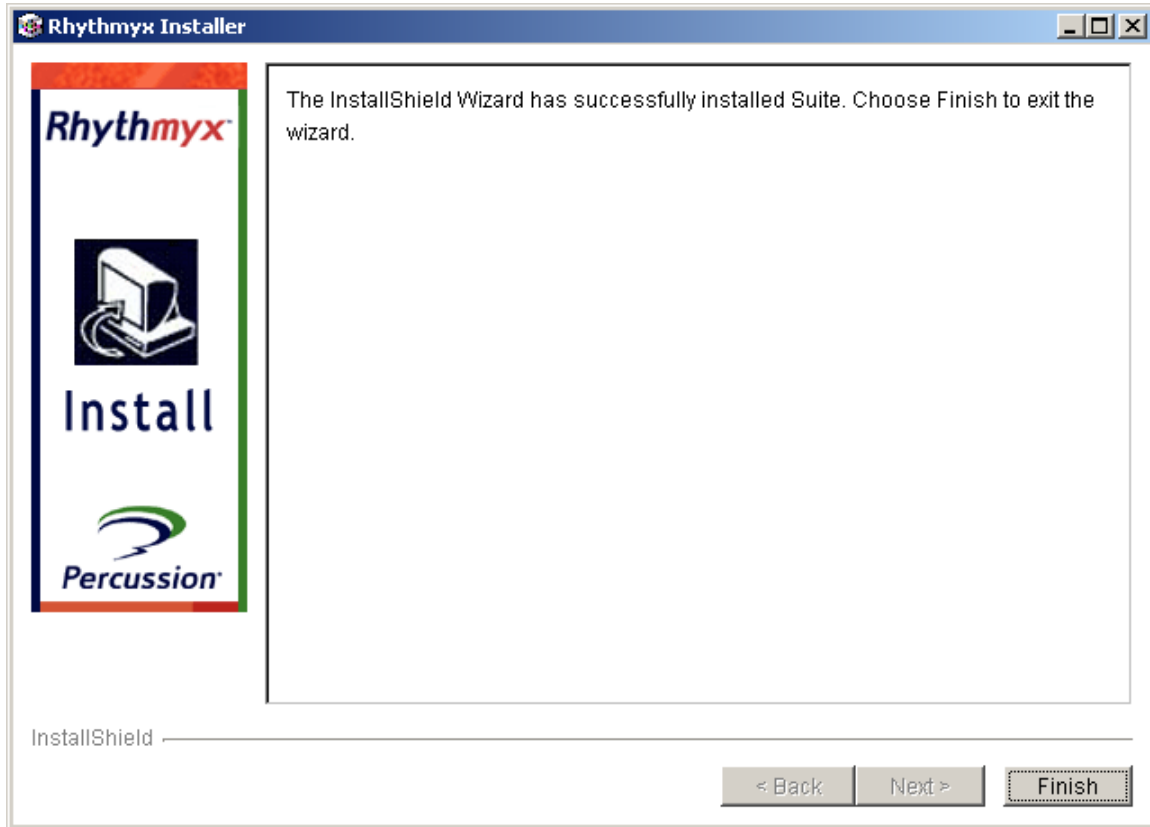
readme in command line mode

If the installer experiences an error while installing files it will display a message informing you of the error and the location of a detailed log file.



Error window

22. If the installation was successful, Rhythmyx will display a confirmation window.



Window confirming successful installation

```
Please press Enter to Continue

The InstallShield Wizard has successfully installed Suite. Click Next to
continue the wizard.

Please press Enter to Continue

Please read the information below.

You must now run the InstallDaemon.sh script located in the root of your
installation directory to complete the install. You must have root privileges
in order to run this script.
```

Successful installation confirmation in command line mode

NOTE: If you are installing to UNIX, you must run the `/Rhythmyx/InstallDaemon.sh` script as the root user to complete the installation.

Indexing Full-text Search

If you install the full-text search engine, you will need to create the search indices following installation. Until you create the search indices, searches will not return results.

Indexing can take several hours. Consider this fact when scheduling your upgrade installation.

To create search indices, enter the command:

```
search index type id
```

Where *id* is the Content Type ID of the Content Type you want to index. If you do not provide a value (in other words if you only enter the command `search index type`) all Content Types in your system will be indexed.

Publishing to a SQL Server Database

Rhythmyx only installs the JDBC driver for oracle:thin and sybase. If you need the SQL server drivers, you must install them manually using the following procedure:

1. Download sqlserver driver from the Microsoft Web site:
<http://msdn.microsoft.com/downloads/default.asp?URL=/downloads/sample.asp?url=/MSDN-FILES/027/001/779/msdncompositedoc.xml>.
2. Install the product to your file system.
3. From the installation directory, copy:
 - msbase.jar,
 - msutil.jar
 - mssqlserver.jarto: <Publisher Root>/Publisher/common/lib directory.
4. Restart Tomcat.

Important Security Measures

Important: Every new Rhythmyx installation includes a backend Database Security Provider. The backend Database Security Provider includes the following default users for each Role:

Role	Admin	Author	QA	Editor	Designer	Artist
DEFAULT USERS	admin1 admin2	author1 author1	qa1 qa2	editor1 editor2	designer1 designer2	artist1 artist2

You can use every default user and the password 'demo' to access the Rhythmyx Server Administrator.

NOTE: The Admin Role also contains the Member *rxserver*. This Member is used internally in Rhythmyx as part of the Aging process. **DO NOT REMOVE THIS MEMBER UNDER ANY CIRCUMSTANCES.**

To prevent unintended access to your system choose one of the following options:

- assign new passwords to the default users, or
- replace the default users with new users.

Assigning New Passwords to Default Users

To assign new passwords to the default users using SQL:

1. Open the USERLOGIN table in the database.
2. In the Password column, change the password for each default user.

Each new password becomes effective as soon as you enter it.

To assign new passwords to the default users using an Oracle SQL*Plus application:

1. At the prompt change the password for the admin1 role by entering the following script:

```
update userlogin set password='somethingnotdemo' where  
userid='admin1';
```
2. Repeat for each default user, changing `userid` accordingly.

Each new password becomes effective as soon as you change it.

Replacing the Default Users with New Users

NOTE: In addition to the default users *admin1* and *admin2*, the Admin Role also contains the Member *rxserver*. This Member is used internally in Rhythmyx as part of the Aging process. **DO NOT REMOVE THIS MEMBER UNDER ANY CIRCUMSTANCES.** If you remove this Member, Workflow authentication will fail.

To replace the default users with new users:

1. Open the USERLOGIN table in the database.
2. Add a new user to each role with the same permissions as the default users, but give the new users different names (such as 'anthonyadmin' and 'dianedesigner') and encrypted passwords.
3. After creating a new user for each role, delete the default users from your database.

Operating the Rhythmyx Server

The procedures for starting and stopping the Rhythmyx server depend on your operating system.

Operating the Rhythmyx Server in a Windows Environment

The Rhythmyx server can run as a Windows service or as an application. The installation sets up the Rhythmyx service to start automatically when you start Windows. Run the server as a service in production environments. Run it as an application in development and test environments.

Starting Rhythmyx Server as a Windows Service

The procedure to start a Rhythmyx service is slightly different depending on whether you are using Windows NT or Windows 2000 as your operating system.

Starting Rhythmyx Server as a Service in Windows NT

To start Rhythmyx server as a Windows service in Windows NT:

4. Click the [**Start**] button, then select Settings > Control Panel. In the Control Panel, double-click the Services icon.
5. Rhythmyx will display the Services dialog.
6. Select the Percussion Rhythmyx Service.
7. Click [**Start**].

Windows will start Rhythmyx server as a Windows service.

Starting Rhythmyx Server as a Service in Windows 2000

To start the Rhythmyx Server as a Windows service in Windows 2000:

8. Click the [**Start**] button, then select Settings > Control Panel > Administrative Tools. In Administrative Tools, double-click the Services icon.

Windows will display the Services dialog.

9. Double-click the Percussion Rhythmyx Service.

Windows will display the Percussion Rhythmyx Service Properties dialog.

10. Click [**Start**].

Windows will start the Rhythmyx server as a Windows service.

Starting Rhythmyx Server as an Application

Run Rhythmyx server as an application in development and test environments. Running Rhythmyx server as an application in production environments is not recommended.

To start Rhythmyx server as an application:

11. Browse to your Rhythmyx\bin folder.
12. Double-click the RhythmyxServer icon.

Windows will start Rhythmyx server as an application.

When starting Rhythmyx server as an application, you may get the message that authentication failed because the user does not have a required privilege. In this case, you need to modify the user's rights so they can act as part of the operating system.

Defining the User to Act as Part of the Operating System in Windows NT

To define a user to act as part of the operating system in Windows NT:

1. Click the [Start] button, then select Programs > Administrative Tools [Common] > User Manager for Domains.
Windows will display the User Manager dialog.
2. Select Policies > User Rights.
Windows will display the User Right Policy dialog.
3. Check Show Advanced User Rights.
You must check this box to display the Act as part of the operating system option.
4. In the Rights field, select Act as part of the operating system.
5. Click [Add].
Windows will display the Add Users and Groups dialog.
6. Select a user to whom you want to grant the right to act as part of the operating system, and click [Add]. Repeat for all users to whom you want to grant this right.
7. Click [OK].
Windows will return to the User Rights Policy dialog, showing the users to whom you have granted the right in the Grant To field.
8. Click [OK] to complete granting the rights to the users.

Defining the User to Act as Part of the Operating System in Windows 2000

To define a user to act as part of the operating system in Windows 2000:

1. Click the [Start] button, then select Settings > Control Panel.
2. On the Control Panel, double-click Administrative tools.
3. In Administrative Tools, double-click Local Security Policy.
4. In Local Security Settings, open the Local Policies folder.
5. Double-click User Rights Assignment.
Windows will display a list of User Rights policies.
6. Double-click Act as part of the operating system.
Windows will display the Local Security Policy Setting dialog.
7. Click [Add].
8. Select the user to whom you want to grant the privilege.
9. Click [Add].
10. Click [OK] to return to the Local Security Policy Setting dialog.
11. Click [OK] to complete granting the user right.

Changing Rhythmyx Server Service Settings

When the Rhythmyx installation application creates the Rhythmyx service, it defines the following settings by default:

Start automatically when Windows starts.

Allow service to interact with the desktop. This setting displays the service as a DOS window on the desktop.

You can change these default settings, requiring the Rhythmyx service to start manually, and eliminating the DOS window display.

Changing Rhythmyx Server Service Settings in Windows NT

To change server settings in Windows NT:

1. Click the [Start] button, then select Settings > Control Panel.
2. In the Control Panel, double-click on Services.
Windows will display the services dialog.
3. Select the Percussion Rhythmyx service, then click [Startup].
Windows will display the Service dialog.
4. To change the Startup Type, click the radio button for the start up type you prefer. Options include Automatic (starts the service automatically when you start Windows), Manual (users must manually start the service), or Disabled (disables the service so it can no longer run).
5. To stop displaying the service in a DOS window, uncheck Allow Service to Interact with Desktop. (NOTE: You will have to stop and restart the server for this option to take effect.)
6. Click [OK] to accept your changes.

Changing Rhythmyx Server Service Settings in Windows 2000

To change Rhythmyx server settings in Windows 2000:

1. Click the [Start] button, then select Settings > Control Panel > Administrative Tools. In Administrative Tools, double-click the Services icon.
Windows will display the Services dialog.
2. Double-click on Percussion Rhythmyx service.
Windows will display the Percussion Rhythmyx Service Properties dialog.
3. To change the Startup Type, select the General tab (this is the default tab) and select the option for Startup Type. Options include Automatic (Starts the service automatically when you start Windows), Manual (users must manually start the service), or Disabled (disables the service so it can no longer run).
4. To stop displaying the service in a DOS window, select the Log On tab, and uncheck Allow Service to Interact with Desktop. (NOTE: You will have to stop and restart the server for this option to take effect.)
5. Click [OK] to accept your changes.

Stopping Rhythmyx Server from the DOS Window

To stop Rhythmyx server in a DOS window, activate the window and type `exit` (or `quit`), then hit <Enter>. Rhythmyx server will shut down.

Stopping Rhythmyx Server from the Services Dialog

If you do not display Rhythmyx server in a DOS window, you will have to stop the Rhythmyx server from the Services dialog. You can also use this method if the server is displayed in a DOS window.

Stopping Rhythmyx Server from the Services Dialog in Windows NT

To stop Rhythmyx server from the Services dialog in Windows NT:

1. Click the [Start] button, then select Settings > Control Panel.
2. In the Control Panel, double-click on Services.
Windows will display the services dialog.
3. Select the Percussion Rhythmyx service, then click [Stop].
The Rhythmyx server will shut down.

Stopping Rhythmyx Server from the Services Dialog in Windows 2000

To stop Rhythmyx server from the Services dialog in Windows 2000:

1. Click the [Start] button, then select Settings > Control Panel > Administrative Tools. In Administrative Tools, double-click the Services icon.
Windows will display the Services dialog.
2. Double-click the Percussion Rhythmyx Service.
3. Windows will display the Percussion Rhythmyx Service Properties dialog.
4. Click [Stop].

Windows will shut down the Rhythmyx server as a Windows service.

Operating the Rhythmyx Server in a Unix Environment

Operating Rhythmyx in a Unix environment requires a user to install and run Rhythmyx. You must create a unique run user for each instance of the Rhythmyx server that you operate.

When you install Rhythmyx, the installer creates the file `rx_user.id`. This file has three entries,

```
SYSTEM_USER_ID=  
RHYTHMYX_USER_ID=admin1  
RHYTHMYX_USER_PWD=demo
```

The value of `SYSTEM_USER_ID` is set during installation. Do not change this value.

The values of `RHYTHMYX_USER_ID` and `RHYTHMYX_USER_PWD` define the user that can shut down the Rhythmyx server. Rhythmyx uses this user as part of the shut-down process. If you change the password of the `admin1` user, you will need to modify the value of the `RHYTHMYX_USER_PWD` to match the new password. If you delete the `admin1` user, you must enter a valid Rhythmyx username and password. Note that this is a user within the Rhythmyx system, not the Rhythmyx user for Unix, and this user must be in a Role that has Administrative access to the server ACL.

Other than these modifications, do not modify this file. In particular, do not change the permissions on the file.

The post-installation process determines whether Rhythmyx runs as a daemon or as a console. If you choose to install Rhythmyx as a daemon, the `InstallDaemon.sh` application creates `S15RhythmyxD` and `K15RhythmyxD` files in the `/etc/rc2.d` directory. The daemon thus starts automatically when you start your system. The daemon is controlled by a script located in `/etc/rc2.d`.

Starting Rhythmyx Server as a Daemon in a Unix Environment

The Rhythmyx server daemon starts automatically when you start your system. If you need to restart the daemon after shutting it down, change to the Rhythmyx `bin` directory and enter the following:

```
./RhythmyxDaemon start <Rhythmyx root directory>
```

When you press <Enter>, Rhythmyx server will start as a daemon.

Starting the Rhythmyx Server as a Terminal Window in a Unix Environment

If you install Rhythmyx server as a console, you must start the server manually. Change to the Rhythmyx bin directory and enter `sh StartServer.sh`. When you press <Enter>, Rhythmyx will start as a console.

Stopping Rhythmyx Server in Unix Environment When Running as a Daemon

To stop Rhythmyx server when running as a daemon, change to the Rhythmyx bin directory and enter the following:

```
./RhythmyxDaemon stop <Rhythmyx root directory>
```

When you press <Enter>, the Rhythmyx server will shut down.

Stopping Rhythmyx Server in a Unix Environment When Running as a Terminal Window

To stop Rhythmyx server when running as a console, change to the Rhythmyx bin directory and enter the following:

```
./Sh StopServer.sh
```

When you press <Enter>, Rhythmyx server will shut down.

Uninstalling the Rhythmyx Daemon Control Scripts

To uninstall all instances of the Rhythmyx daemon control scripts (for all instances of Rhythmyx), execute the following commands as the root user:

```
# rm /etc/init.d/RhythmyxD
# rm /etc/rc2.d/?15RhythmyxD
```

These commands remove the following files:

```
/etc/init.d/RhythmyxD
/etc/rc2.d/S15RhythmyxD
/etc/rc2.d/K15RhythmyxD
```

To remove a single instance from the daemon control scripts, remove the desired installation directories from the `SERVER_DIR` variable in the daemon control script `/etc/init.d/RhythmyxD`. The installation directories are colon (:) delimited. For example:

```
SERVER_DIR=/export/home/RxUser1/Rhythmyx:/export/home/RxUser2/Rhythmyx
```

Troubleshooting Server Initialization

When the Rhythmyx server encounters an error during the initialization process, it pauses exactly where the error occurred and displays a message similar to the following text:

```
Server          10/26/00 4:39 PM: Server initialization error - shutting down
- Press [Enter] in the next 10 seconds to pause -
```

If you press **[Enter]** within the 10-seconds allotted, Rhythmyx will continue to pause while displaying a message similar to the following text:

```
Server          10/26/00 4:39PM: Waiting for your input - Press [Enter] to
continue -
```

When you press **[Enter]** again the server will shut down.

The pause option gives you a chance to see where the error occurred in the initialization process. Without the pause option, Rhythmyx would automatically shut down the server without giving you a chance to see the error.

Common Server Initialization Errors

Common errors during server initialization include:

The evaluation period for this license has expired.

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

Operating the Web Application Server

Just as the Rhythmyx server, the procedures for starting and stopping the Rhythmyx Web Application server depend on your operating system.

Operating the Rhythmyx Web Application Server in a Windows Environment

Use the same procedures to operate the Rhythmyx Web application server as you do to operate the Rhythmyx server. The only difference is the name of the service or application to start or stop. The default name of the application server services is Rhythmyx Application Server.

Operating the Rhythmyx Web Application Server in a Unix Environment

If you install the Web application server with the Rhythmyx server, you will use the same user to install both servers. If you install the Web application server as a stand-alone server, you will have to create a user to install and run the Web application server.

Starting Rhythmyx Web Application Server as a Daemon in a Unix Environment

The Rhythmyx server daemon starts automatically when you start your system. If you need to restart the daemon after shutting it down, change to the `/etc/init.d` directory and enter the following:

```
./RhythmyxApplicationServerD start
```

When you press <Enter>, Rhythmyx server will start as a daemon.

Starting the Rhythmyx Server as a Terminal Window in a Unix Environment

If you install Rhythmyx Web application server as a terminal window, you must start the server manually. Change to the `<Rhythmyxroot>/AppServer/bin` directory and enter `sh startup.sh`. When you press <Enter>, Rhythmyx will start as a terminal window.

Stopping Rhythmyx Server in Unix Environment When Running as a Daemon

To stop Rhythmyx server when running as a daemon, change to the `/etc/init.d` directory and enter the following:

```
./RhythmyxApplicationServerD stop
```

When you press <Enter>, the Rhythmyx server will shut down.

Stopping Rhythmyx Server in a Unix Environment When Running as a Terminal Window

To stop Rhythmyx server when running as a terminal window, change to the `<Rhythmyxroot>/AppServer/bin` directory and enter the following:

```
./shutdown.sh
```

When you press <Enter>, Rhythmyx server will shut down.

Installing the Rhythmyx Sample Application Package

In Rhythmyx 5.01 and earlier, a set of sample Content Editor and Content Assembler applications was installed with Rhythmyx by default. These sample applications are not compatible with Rhythmyx FastForward, and have been deprecated. They are no longer installed by default.

NOTE: Because FastForward and the Deprecated Samples are not compatible, the Deprecated Samples archive should not be installed on a Rhythmyx server on which you have installed or deployed FastForward.

Some Rhythmyx features, such as the Rhythmyx Connector for BEA WebLogic Portal and Rhythmyx Connector for IBM WebSphere portal, are based on these samples. Therefore, a Multi-server Manager archive containing these sample applications is included in the Rhythmyx installation in the following directory: <rhythmyxroot>/Samples. The name of this archive is DeprecatedSamples.pda.

Use Multi-server Manager to install this archive. No special process is required. You can accept all defaults.

Once you have installed the archive, you will need to make some adjustments to your environment before the sample applications will work correctly.

- Add the required Roles to the Rhythmyx server
- Update the Automated Index Keyword Values with the correct Variant IDs for the Article and Brief Content Types.

Adding Required Roles to the Rhythmyx Server

The Deprecated Sample applications rely on a set of standard Rhythmyx Roles (listed below with the standard members for each Role):

- | | |
|-----------|-------------|
| • Admin | • Artist |
| ▪ admin1 | ▪ artist1 |
| ▪ admin2 | ▪ artist2 |
| • Author | • Designer |
| ▪ author1 | ▪ designer1 |
| ▪ author2 | ▪ designer2 |
| • Editor | • QA |
| ▪ editor1 | ▪ qa1 |
| ▪ editor2 | ▪ qa2 |

You must create these Roles in the Rhythmyx server. For details about creating these Roles on the Rhythmyx server, see “Maintaining Server Roles” in the Rhythmyx document *Maintaining Workflows*; or see, from the Workflow tab of Content Explorer, access Help and see “Maintaining Server Roles”.

Updating Automated Index Keyword Values

The value of an Automated Index Keyword is the URL of the Content Assembler used to assemble the snippet output. Multi-server Manager cannot process these values. Therefore, you will need to update the Keywords manually. The URLs are still valid, but the Variant IDs probably changed when you were deploying the Deprecated Samples archive to your server. You will need to update

the Variant IDs in the Automated Index Keywords to ensure that the Automated Index Content Items are assembled correctly.

To update the Automated Index Keywords:

1. Start Rhythmyx Content Explorer and go to the System tab.
2. Under Variants, click Article.
The System tab displays a list of Article Variants.
3. Write down the ID of the Title and Abstract Link Variant (the ID is listed in Parentheses immediately after the name of the Variant; in the following graphic, the ID of the Title and Abstract Link Variant is 3).

Article			
	Variant Name (ID)	Description	Produces
X	Article Inline Link (27)	Snippet Variant for Article Content Type to create inline link.	Snippet
X	BEA 8.1 Portal Article Content (36)	Content variant that packages up a specified article variant for the BEA8 portal	Snippet
X	Published HTML Page (1)	Page Variant for the Article Content Type	Page
X	RX Portal Article Content (37)	Content variant that packages up a specified article variant for the RX portal	Snippet
X	Title and Abstract Link (3)	Snippet Variant for Article Content Type to create link from Title and Abstract to Article Page	Snippet
X	Title Only Link (4)	Snippet Variant for Article Content Type to create link from Title to Article Page	Snippet

4. Under Variants, click Brief.
The System tab displays a list of Brief Variants.
5. Write down the ID of the Abstract Body Variant. In the graphic below, the ID of this Variant is 7.

Brief			
	Variant Name (ID)	Description	Produces
X	Abstract Body (7)	Snippet Variant for Brief content type to generate snippet of Brief body	Snippet

6. Under Keywords, click By Name.
The System tab lists all Keyword types available on the system.
7. Click Automated Index Queries.
The System tab displays the Edit Keyword Page.

Keyword ID	136		
*Keyword Name	Automated Index Queries		
Description	Automated Index Query Lookups		
<input type="button" value="Save"/> <input type="button" value="Cancel"/>			
Choice List			Add Choice
Choice Label	Description	Choice Value	Sort Order
X All Articles	All Articles Automated Index	allvariants.xml?sys_variantid=3	1
X All Briefs	All Briefs Automated Index	allvariants.xml?sys_variantid=7	2

8. Click All Articles.
The System tab displays the Edit Choice page.

- In the **Choice Value** field, change the value of the sys_variantid attribute to match the Variant ID of Title and Abstract Link Variant of the Article Content Type that you noted in Step 3. In the following graphic, the value has been changed to 3.

Choice ID	137
*Choice Label	All Articles
Description	All Articles Automated Index
Choice Value	allvariants.xml?sys_variantid=3
Sort Order	1
<input type="button" value="Save"/> <input type="button" value="Cancel"/>	

- Click the **[Save]** button to save your modification. The browser will return to the Edit Keyword page.
- On the Edit Keyword page, click [All Briefs](#).
- On the Edit Choice Page, in the Choice Value field, change the value of the sys_variantid attribute to match the Variant ID of the Abstract Body Variant you noted in step 5 above, and save your change.

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