SeeBeyond ICAN Suite

eInsight Enterprise Service Bus Installation Guide

Release 5.0.3

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Introduction

This chapter introduces you to the *eInsight Enterprise Service Bus Installation Guide*, its general purpose and scope, and its organization. It also provides sources of related documentation and information.

1.1 Installation Guide Purpose and Scope

This installation guide describes the procedures necessary to install the SeeBeyond® Technology Corporation (SeeBeyond) eInsight Enterprise Service Bus (eInsight ESB) product.

After the product is installed, you must customize it to execute your site-specific business logic and to interact with your other systems as required. The steps necessary to perform those operations are discussed in the eInsight ESB documentation set and online Help systems.

1.2 Intended Audience

This guide is intended for experienced PC users who have the responsibility of helping to set up and maintain a fully functioning ICAN Suite system. This person must also understand any operating systems on which eInsight ESB will be installed (Windows or UNIX) and must be thoroughly familiar with Windows-style GUI operations.

1.3   Organization of Information

This document is organized topically as follows:

- **Chapter 1 "Introduction"** gives a general preview of this document, its purpose, scope, and organization.

- **Chapter 2 "Overview of Installation"** gives you an overview of the installation process.

- **Chapter 3 "Installation Instructions for Repository"** provides instructions on how to upload and install an eInsight ESB Repository.

- **Chapter 4 "Installation Instructions for Uploading Files to the Repository"** provides instructions on how to upload product files to the eInsight ESB Repository.

- **Chapter 5 "Installation Instructions for Enterprise Designer"** provides instructions on how to install the Enterprise Designer on a Windows computer. The Enterprise Designer GUI can only be installed on Windows.

- **Chapter 6 "Installation Instructions for Logical Host"** provides instructions on how to download and install the Logical Host.

- **Chapter 7 "Installation Instructions for ESRs"** provides instructions on how to install ESRs.

- **Chapter 8 "Upgrading from 5.0.x to 5.0.3"** provides instructions on how to update your 5.0.x ICAN Repository to 5.0.3.

- **Chapter 9 "Troubleshooting"** describes issues that may arise during the installation process and provides tips and solutions to resolve these issues.

- **Appendix A** lists the recommended and certified patches for UNIX systems.

1.4   Writing Conventions

The following writing conventions are observed throughout this document.

Table 1   Writing Conventions

Text	Convention	Example
Button, file, icon, parameter, variable, method, menu, and object names.	**Bold** text	- Click **OK** to save and close. - From the **File** menu, select **Exit**. - Select the **logicalhost.exe** file. - Enter the **timeout** value. - Use the **getClassName()** method. - Configure the **Inbound** File eWay.
Command line arguments and code samples	`Fixed` font. Variables are shown in ***bold italic***.	`bootstrap -p `***`password`***

Table 1 Writing Conventions (Continued)

Text	Convention	Example
Hypertext links	**Blue** text	**http://www.seebeyond.com**

Additional Conventions

Windows Systems

For the purposes of this guide, references to "Windows" will apply to Microsoft Windows Server 2003, Windows XP, and Windows 2000.

Path Name Separator

This guide uses the backslash ("\") as the separator within path names. If you are working on a UNIX system, please make the appropriate substitutions.

1.5 Supporting Documents

The following SeeBeyond documents provide additional information about the eInsight ESB system as explained in this guide:

- *eGate Integrator for eInsight Enterprise Service Bus User's Guide*

- *eInsight Enterprise Service Bus User's Guide*

1.6 Online Documents

The documentation for the SeeBeyond ICAN Suite is distributed as a collection of online documents. These documents are viewable with the Acrobat Reader application from Adobe Systems. Acrobat Reader can be downloaded from:

http://www.adobe.com

1.7 Overview of eInsight ESB

eInsight Enterprise Service Bus (ESB) is a streamlined, distributed integration platform that combines Web services support, transformation and content-based routing. eInsight ESB is a rapidly implemented, limited edition version of eInsight Business Process Manager.

The Enterprise Service Bus edition provides a lower-cost alternative to deploy integrated business processes as composite applications built on a services-oriented architecture. eInsight Enterprise Service Bus is sold standalone and supports

SeeBeyond applications and eWay Intelligent Adapters, which can be purchased separately as plug-ins to eInsight ESB to access external applications and data.

1.7.1. SeeBeyond ICAN Suite Integration

eInsight ESB is tightly integrated with the SeeBeyond® Integrated Composite Application Network™ Suite and is compatible with the other ICAN suite products (also, see Figure 1), including:

- eVision Studio
- ePortal Composer
- eBAM Studio
- eTL Integrator
- eView Studio
- SeeBeyond eWay™ Intelligent Adapters

Thus, as your organization's integration needs grow, you can leverage and reuse the eInsight ESB integration components that you have already deployed.

Figure 1 eInsight ESB and the ICAN Suite
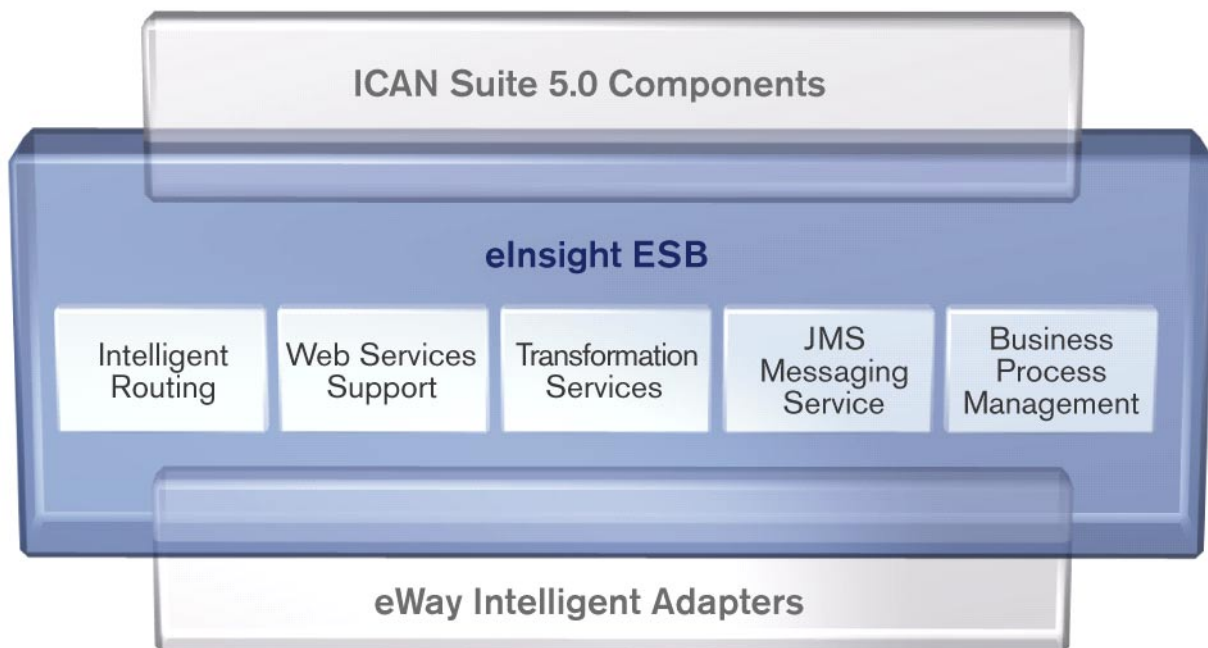
1.7.2. eInsight ESB Architecture

eInsight ESB speeds the design and deployment of business processes by providing an open process modeling environment using BPMN (Business Process Modeling

Notation) for the graphical notation of a business process and by automatically generating the BPEL4WS code needed to implement the business process across all of the participating Web services (e.g. for applications and business partners).

Business analysts drag and drop components into the process model and then specify the additional flow control and business rules that manage what services get called at what time. eInsight supports importing and exporting BPEL4WS to share processes with 3rd party tools.

The technologies that carry out eInsight ESB business process functions are entirely based on industry standards. eInsight ESB uses the following standards:

- Business Process Modeling Notation (**BPMN**), from the Business Process Management Initiative (BPMI) standards body, provides a standard graphical view for Business Process Execution Language for Web Services (**BPEL4WS**).

- Web Services Business Process Execution Language (**BPEL4WS**) is the underlying code generated when creating a business process.

- Web Services Description Language (**WSDL**) is an XML-based language used to define Web services and describe how to access them.

- J2EE Connector Architecture (**JCA**) provides a mechanism to access external applications and data. The JCA engine is implemented as a standard JCA 1.5 module and it plugs into the SeeBeyond Integration Server.

Automated Web Services Description and Discovery

All eInsight business processes are automatically described using generated WSDL, and these services are available for internal and external consumption using SeeBeyond's centralized UDDI registry. This means that configuring an activity within a larger business process to consume a Web service is as simple as selecting the Web service you want to call in the internal or external UDDI registry using the SeeBeyond UDDI Browser.

1.7.3. Business Process Modeling and Design

You can use eInsight ESB to streamline operations by creating business logic that helps you reach outward to include customers and trading partners. Using eInsight ESB to implement business process management removes inefficiencies by orchestrating a unified work flow. This flow can include multiple systems/users, therefore extending to customers.

eInsight ESB allows you to model the business processes that your department or even your entire company performs on a regular basis. The tools provided allow for various scenarios and events that may take place in your process.

1.7.4. Business Process Designer

The Business Process Designer serves as the front-end design tool used to create a visualization of your business workflow and increase understanding of the business

processes involved. As the business user, you are able to integrate logic into the business process. The Business Process Designer includes the following major areas:

- **Enterprise Explorer** - Displays a hierarchical representation of all the business process models and related components. This view shows you what is currently being displayed on the modeling canvas.

- **Business Rule Designer** - Allows you to graphically configure relationships between Input and Output Attributes.

1.7.5. Design Phase Overview

The basic steps that you will perform to design a business process model are as follows:

1 Plan and design a model that represents a business process taking place in your company.

2 Set up a Project and related components necessary to your business process model.

3 Create the new business process model in the eInsight Business Process Designer, using activities, links, decision and exception handling logic, and any other elements that express the actual business process.

4 Validate, generate and save the business process code to the Repository, where business processes configuration and deployment information is stored.

5 Create a Connectivity Map to configure the relationship between your components.

6 Select or create an Environment where your business process will run.

7 Select or create a Deployment Profile and activate it to complete the deployment process.

1.7.6. Runtime Phase Overview

Once all of the design phase tasks are complete and the system is running, you can monitor and manage business process activity and the overall Project with the Enterprise Manager.

In the runtime phase, processes are coordinated that enable the execution of business processes, activities and tasks. Runtime phase tasks:

- Receive messages that instantiate business process instances.

- Write monitoring, persistence and recoverability data to a database.

eInsight ESB Database

eInsight ESB components connect to a database to provide:

- **Persistence** - Instance data is written to a database table to ensure that data is able to persist in the system.

- **Recoverability** - Using the database allows you to recover data from the last state of consistency.

▪ **Monitoring** - Instance data is written to database tables and then read by the Enterprise Manager to provide current and historical system information.

1.7.7. Real-Time Business Process Monitoring and Alerting

Once the automated business processes are up and running, the Enterprise Manager provides a dashboard delivering instant visibility into the state of each business process activity. This allows organizations to monitor all aspects of both internal processes and those involving B2B trading communities. Processes are normally monitored for exceptions using business rules that alert managers as needed. This proactive alerting enables managers to respond instantly to business events such as increased customer demand, inventory shortages and quality problems.

1.7.8. Summary of Features

eInsight ESB provides the following additional features:

▪ Provides reuse and scalable ROI for organizations that want to deploy integrated business processes

▪ Streamlines basic integration services needed by small to medium size enterprises in a cost-effective way as eInsight ESB creates business logic that helps organizations integrate and orchestrate Web services as well as proprietary or legacy applications

▪ Allows business analysts to model, in a graphical drag and drop environment, the business processes that their department or even entire company performs.

▪ eInsight ESB is tightly integrated with the ICAN Suite and leverages over 80 packaged SeeBeyond eWay™ Intelligent Adapters that provide out-of-the-box connectivity to a variety of systems, applications, databases and legacy technologies.

▪ Provides graphical transformation capabilities to drag-and-drop and visualize the mapping of data transformations between the systems being integrated.

▪ Resource Management - eInsight ESB uses a distributed and open architecture that enables components to access system resources (memory and processing power) as needed and in conjunction with other components.

▪ Security - The security module fulfills security needs such as authentication and authorization access to eInsight ESB functions.

▪ Repository storage and access - The setup, component, and configuration information for the elements of a Project, including business process and related eInsight ESB components, are stored in the Repository.

▪ Deployment abilities - Deployment profiles contain the information necessary to activate a Project business processes and associated components. When a deployment profile is activated, active business processes are made available as Web Services and published to SeeBeyond's UDDI Registry.

▪ Monitoring - The Enterprise Manager provides web-based monitoring abilities to observe and correct business process activity.

- Connectivity Mapping - The Connectivity Map maintains the relationships between eInsight and other system components. The Connectivity Map specifies the topology of services that will be invoked, by:

  - Identifying the order and nature that services are invoked.

  - Depicting relationships between the components, including the publish/subscribe information for data routing.

  - Defining the partners fulfilling the services that are invoked.

- Version Control - This feature maintains a history of business process versions, through a check-in and check-out process.

- Impact Analysis - Impact Analysis allows you to view how changes to one component or business process will impact other components or business processes of a Project or all Projects in the Repository.

- Import and Export of Business Process Models - The ability to import and export business process models makes it possible to recreate the processes on other systems or to reuse processes that may be similar in other areas.

1.8 The SeeBeyond Web Site

The SeeBeyond Web site is your best source for up-to-the-minute product news and technical support information. The site's URL is:

http://www.seebeyond.com

Overview of Installation

This chapter gives you an overview of system requirements and the installation process.

This chapter contains

2.1 Overview

The major components of the eInsight ESB installation are:

- Repository Server
- Enterprise Manager
- Enterprise Designer GUI
- Logical Host

Although you can install the Repository and Logical Host on any supported platform, you must install the Enterprise Designer GUI on a Windows computer. After installing and starting the Repository, use your browser to connect to the Enterprise Manager. From the Enterprise Manager you can:

- Upload products to the Repository
- Download components (including Enterprise Designer and Logical Host)
- View product information home pages

Once the Enterprise Manager is installed, use it to download other components required to run eInsight ESB, such as the Enterprise Designer and the Logical Host.

Before installing the Repository, Enterprise Designer, and Logical Host on your system, please read the following sections to ensure a smooth and error-free installation.

2.2   System Requirements

This section lists the system requirements for each platform. The **Readme.txt** file (located in the root directory of the Repository CD-ROM) contains the most up-to-date operating system requirements for the supported platforms. The requirements listed in the following sections are in addition to the operating system requirements.

eInsight ESB is available on the following operating systems:

- Windows Server 2003, Windows XP SP1a, and Windows 2000 SP3 and SP4
- HP Tru64 V5.1A with required patches
- HP-UX 11.0, 11i (PA-RISC), and 11i v2.0 (11.23) with required patches and parameter changes
- IBM AIX 5.1L and 5.2 with required Maintenance level patches
- Red Hat Enterprise Linux AS 2.1 (Intel Version)
- Red Hat Linux 8 (Intel Version)
- Sun Solaris 8 and 9 with required patches

HP-UX

SeeBeyond only supports HP-UX running on 9000/8xx machines. 9000/8xx is 64 bits, but can also run in 32 bits mode. To determine if the system is 32 or 64 bits, type: **getconf KERNEL_BITS**. This returns either 32 or 64. Only 64 bits mode is supported.

IBM AIX

On IBM AIX, SeeBeyond supports both 32- and 64-bit platforms. 64 bits can run on either a 32-bit AIX kernel, a 32-bit AIX kernel with the 64-bit extension enabled, or a 64-bit AIX kernel. ICAN does not detect if the system is 32 or 64 bits. You must determine this prior to installing the product by typing **bootinfo -y** at the command prompt. The default in the bootstrap script is 64 bits. If you are running a 32-bit AIX kernel without the 64 bit extension enabled, you must change the default by typing **bootstrap -32bit** at the command prompt for the directory where bootstrap was downloaded (for example: **<ICAN_install_directory>/logicalhost/bootstrap**).

2.2.1.   Internet Explorer Version

You must use Internet Explorer 6 with Service Pack 1 to access Enterprise Manager.

2.2.2.   Windows System Requirements

The following tables list the minimum requirements for installing and running each of the eInsight ESB components on a Windows system. For the best performance, you should install these components on different computers. However, if you choose to install some or all of these components on the same machine (for example, in a test

environment), keep in mind that the requirements for each of these components is cumulative.

Table 2   Windows GUI System Requirements

Component	CPU	RAM	Disk Space
Enterprise Designer	1.2 GHz Pentium class	512 MB	250 MB
Enterprise Manager	600 MHz Pentium class	128 MB	5 MB

Table 3   Windows Repository and Logical Host System Requirements

Component	CPU	RAM	Disk Space
Repository	1.2 GHz Pentium class	512 MB	1.2 GB
Logical Host	1.2 GHz Pentium class	512 MB	250 MB

Additionally, to use eInsight ESB on Windows, you will need the following:

- A TCP/IP network connection.
- Internet Explorer 6.0 with Service Pack 1.

Additional considerations

- The disk space requirement listed for the Logical Host does not include space for the queues and log files that are created by the user as Integration and Message Services are executed.
- eInsight ESB GUI is supported when using Microsoft Terminal Services©, but not with other "remote" Windows tools.

2.2.3. UNIX System Requirements

The following tables list the minimum requirements for installing the Repository and Logical Host on various UNIX systems. For the best performance, you should install these components on different computers. However, if you choose to install both of these components on the same machine (for example, in a test environment), keep in mind that the requirements for each of these components is cumulative.

Dual (or multi) CPUs are recommended for best performance of the Logical Host, especially if you run the Repository and the Logical Host on the same computer.

Table 4   HP Tru64 System Requirements

Component	CPU	RAM	Disk Space
Repository	667 MHz	512 MB	1000 MB
Logical Host	667 MHz	512 MB	350 MB

Table 5   HP-UX System Requirements

Component	CPU	RAM	Disk Space
Repository	540 MHz	512 MB	1150 MB
Logical Host	540 MHz	1.5 GB	500 MB

Table 6   IBM AIX System Requirements

Component	CPU	RAM	Disk Space
Repository	450 MHz	256 MB	900 MB
Logical Host	450 MHz	512 MB	450 MB

Table 7   Red Hat Linux System Requirements

Component	CPU	RAM	Disk Space
Repository	1.2 GHz	256 MB	900 MB
Logical Host	1.2 GHz	512 MB	350 MB

Table 8   Sun Solaris System Requirements

Component	CPU	RAM	Disk Space
Repository	400 MHz	256 MB	850 MB
Logical Host	400 MHz	512 MB	400 MB

The Enterprise Designer can only be installed on Windows systems.

Additionally, to use eInsight ESB on UNIX, you will need the following:

- A TCP/IP network connection.
- FTP and Telnet capabilities.

Additional considerations

- The disk space requirement listed for the Logical Host does not include space for the queues and log files that are created by the user as Integration and Message Services are executed.

2.3   Pre-Installation

The following sections explain issues to consider before you begin your eInsight ESB installation.

2.3.1. Windows Pre-Installation

Exit from all Windows programs prior to running the setup.

You need Administrator privileges to install eInsight ESB.

Default User Names and Passwords

For eInsight ESB's default user name and password, see the **Readme.txt** file.

2.4   About the Installation

Note: *If you are installing eInsight ESB components on the same computer (including installing upgrades to existing installations), you must install the Repository **first**, followed by the Enterprise Designer and the Logical Host.*

The installation is a multi-stage process that includes the following:

1   Installing the eInsight ESB Repository.

2   Uploading the product files to the Repository.

3   Installing the Enterprise Designer GUI via the Enterprise Manager.

   The Enterprise Designer installation procedure consists of downloading an archive file from a Web site and extracting it to a folder within your local machine.

Important: *The eInsight ESB GUIs must be installed on a Windows systems. See **Chapter 5** for more information.*

4   Installing the eInsight ESB Logical Host(s) from the Repository, via Enterprise Manager.

2.4.1. Overview of the Installation Process

The installation process is divided into phases.

- Step 1 installs the **Repository**, **Enterprise Manager**, and **ICAN Monitor** from CD-ROM. The Repository stores and manages the setup, component, and configuration information for eInsight ESB Projects. Enterprise Manager is the tool from which you upload files to the Repository and download products to your computer.

- Step 2 starts the Repository.

- Step 3 uploads the license and eInsight ESB files to the Repository from CD-ROM via Enterprise Manager.

Note: *Before downloading and installing the Logical Host, add-on applications, and ESRs from the Repository (Steps 6, 8, and 9 respectively), they must first be uploaded to the Repository (Step 3).*

- Step 4 downloads the **Enterprise Designer GUI**, which enables you to configure the eInsight ESB system.

- Step 5 launches the Enterprise Designer, creates a Project, creates a Logical Host, and deploys a Project. See the *eGate Integrator System Administration Guide* and *eGate Integrator for eInsight Enterprise Service Bus User's Guide* for detailed information on how to complete these tasks.

- Step 6 downloads the **Logical Host** to your system via Enterprise Manager and then installs it (you must first upload it to the Repository, see **Step 3**).

Note: *The Windows Logical Host is uploaded "by default" with **eInsightESB.sar**.*

The Logical Host is an instance of the eInsight ESB runtime environment that contains the software and other installed components that are required at run time, such as:

- The **SeeBeyond Integration Server**, which provides middleware services for security and state maintenance, data access and persistence, and transactions.

- The **System Management Service**, which manages and monitors eInsight ESB deployments that may comprise other application servers in addition to the SeeBeyond Integration Server.

- The **SeeBeyond JMS IQ Manager**, which exchanges and tracks JMS messages.

Although the Logical Host installation also includes the components necessary for basic communication between the eInsight ESB system and files, communications with databases and other products will require you to add-on components.

- Step 7 starts the Logical Host from the Bootstrap.

- Step 8 downloads and installs the **add-on** components from the Repository to your computer via Enterprise Manager (you must first upload them to the Repository, see **Step 3**). Depending on your installation, the add-ons include eWay adapters for communication with specific external systems.

- Step 9 downloads and installs **Emergency Software Releases** (ESRs) from the Repository to your computer via Enterprise Manager (you must first upload them to the Repository; see **Step 3**). ESRs are updates that resolve known issues.

Installation Flexibility

eInsight ESB 5.0.3 allows you to:

- Install more than one Logical Host on a single computer.

- Manage multiple Projects on a single environment.

- ◆ The separation of design from deployment makes it possible to use the same components in more than one Project.
- ▪ Centralize your software distribution.
  - ◆ After uploading software (including ESRs—Emergency Software Releases) into "software packages," Administrators select which physical server or groups of physical servers receive the software.
  - ◆ HTTP connections are used to upload and download the software to and from the Repository.

2.4.2. Repository Names and User Names

eInsight ESB maintains its own list of Repository names and user names; it does not poll the operating system or network to obtain or validate user names or Repository names. To simplify system administration, SeeBeyond recommends that you use your current naming conventions for Repository and user names.

eInsight ESB Repository and user names (as well as passwords) are case sensitive, even on Windows systems. Although there is no limitation on the length of the names, SeeBeyond recommends that you limit them to 12 characters. Valid characters include all letters and numbers, dashes, and underscores.

Important: *Periods, spaces, and other punctuation are not valid characters for any eInsight ESB user name, password, or component name.*

Default "Administrator" User Name

For eInsight ESB's default user name and password, see the **Readme.txt** file.

2.4.3. Environment Names

After you complete a Project, you must set up an Environment and deploy it. An Environment is a collection of Logical Host(s) that house Project components and information about external systems. You set up an Environment and deploy it after completing a Project. A deployment Environment includes:

- ▪ Logical Host (an instance of the eInsight ESB runtime environment)
  - ◆ SeeBeyond Integration Server
  - ◆ SeeBeyond JMS IQ Manager
- ▪ External Systems

Environment names can contain letters, numbers, dashes, and underscores. There is no character limit. Spaces and punctuation marks are not valid characters for Project names.

2.5   Preparing for Installation

The following sections list important information that you must decide upon prior to installing eInsight ESB.

2.5.1.   What Must Be Determined Prior to Installing eInsight ESB

Before you install eInsight ESB, you must determine the following:

1   Select the computer that will host the Repository.

2   Select the computer(s) that will serve as Logical Hosts. It is possible for the same system to serve both as a Repository and a Logical Host. Whether you decide to do this depends on the requirements of your installation. Contact SeeBeyond Support if you need assistance making this determination.

3   Select the Windows computer(s) that will host the Enterprise Designer.

4   Determine which add-on applications you will require.

5   Ensure that each system that you select meets the system requirements for eInsight ESB. See the resource requirements in each of the following chapters for more information.

2.5.2.   Information Required Before Installing eInsight ESB

You must have the following at hand before you start the installation process:

1   The default eInsight ESB "Administrator" password for Windows installations (see **"Default "Administrator" User Name" on page 23**).

2   The name of each system where a Repository or Logical Host will be installed (see **"Repository Names and User Names" on page 23**).

3   That you have ports available for the installation (see step 6B in **"To install the Repository on Windows using the GUI" on page 26**)

The installation process will prompt you for the directory in which to install each eInsight ESB component.

2.5.3.   Upgrading from 5.0.x to 5.0.3

If you are upgrading from 5.0.x to 5.0.3, see **Chapter 8** for instructions on how to complete a successful upgrade.

*Note: The **Migration ToolReadme.txt** file is located in the **Utilities** directory on both of the Repository installation discs ("SeeBeyond ICAN Suite Repository Disc 1 for Windows/Solaris/AIX/Linux" and "SeeBeyond ICAN Suite Repository Disc-2 for HP-UX/Tru64"), as are the **MigrationTool.zip** and **MigrationTool.tar** files.*

Installation Instructions for Repository

This chapter provides instructions on how to install the eInsight ESB Repository. If you have any questions or problems, see the SeeBeyond Support Web site at **http://www.seebeyond.com** and select **SERVICES** and then **SUPPORT SERVICES**.

This chapter contains

- **"Installing the Repository" on page 25**
- **"Windows Installation of Repository" on page 25**
- **"UNIX Installation of Repository" on page 33**

3.1 Installing the Repository

This section leads you through the steps to successfully install the Repository on the various platforms.

You can install the Repository on any eInsight ESB supported platform using one of two CD-ROMs mounted on the system on which the Repository is to be installed.

Important: *Underscores are not supported as the host name of the computer running the Repository per specification RFC-1123.*

3.2 Windows Installation of Repository

This section provides instructions for uploading and installing the Repository from a CD-ROM. There are two ways to install the Repository on a Windows computer: using the GUI and using command line prompts.

Important: *For your Repository Server running on Windows XP to receive incoming information from the Web, configure your Windows XP Firewall so that the port to the Repository is open. See your Windows XP documentation for instructions on configuring the Windows XP Firewall.*

There are two firewalls on Windows XP that can be disabled. If you think this option may be right for you, contact SeeBeyond Support.

To install the Repository on Windows using the GUI

1 Exit from all Windows programs.

2 Insert "Repository Disc 1 for Windows/Solaris/AIX/Linux" CD-ROM in the CD-ROM drive.

3 If you do not have Autorun enabled, double-click **install.bat** at the top level of the CD-ROM, otherwise the install wizard will appear shortly after inserting the CD-ROM.

4 The **License Agreement** dialog box appears (see Figure 2). After reading the license and agreeing to its conditions, click **Next**.

Figure 2   License Agreement
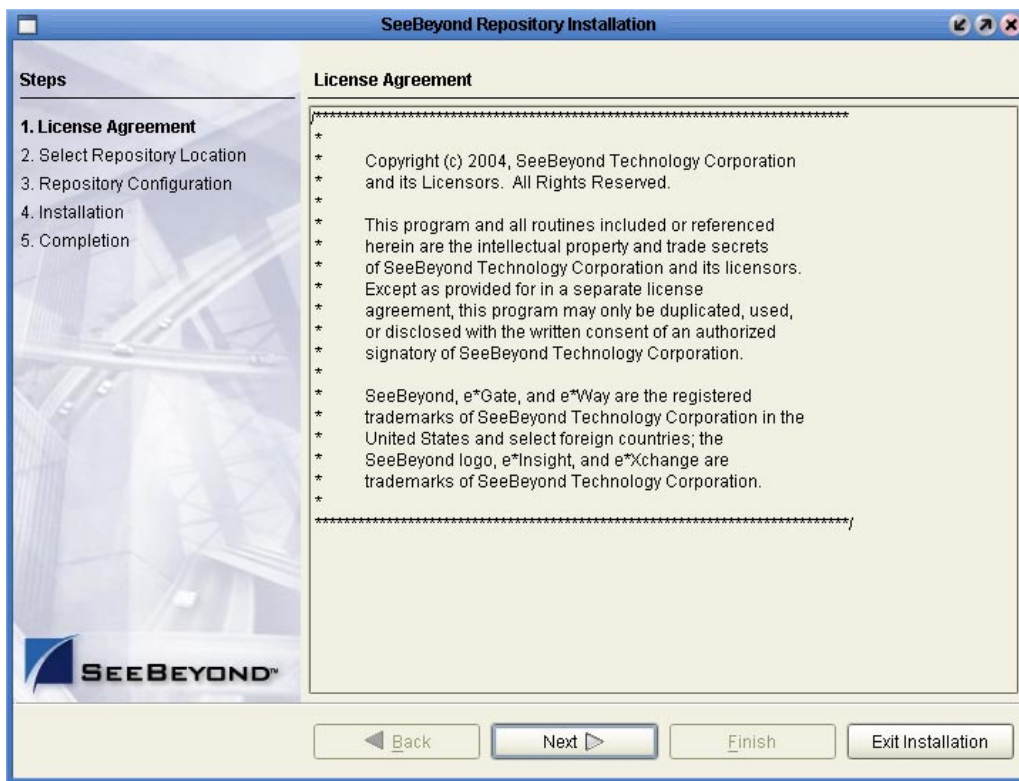
5 The **Select Repository Location** dialog box appears (see Figure 3). The location that you specify here will be used as the "root" for the eInsight ESB installation. For example, if you accept the default (**C:\ican50**), the Repository installation will create the **C:\ican50** directory and install the Repository to **C:\ican50\repository**.

Note: *If you attempt to install the Repository Server to a directory where it already exists, the dialog box informs you that the installation will perform an upgrade. Before proceeding, stop the Repository Server.*

Important: *If you are upgrading version 5.0.1 or 5.0.2 to 5.0.3, you can install to the same directory (for details, see* **Chapter 8**). *However, if you are upgrading version 5.0.0 to 5.0.1, make sure you change the default path to another path (for details, see*

Chapter 8). *For example, change:*

C:\ican50
to:
C:\ican501

If you want to enter another location, click **Browse** or type in a new location.

Note: *This must be a full path, including the drive letter. Also note that there can be no spaces in ICAN path names.*

When ready, click **Next**.

Figure 3   Select Repository Location
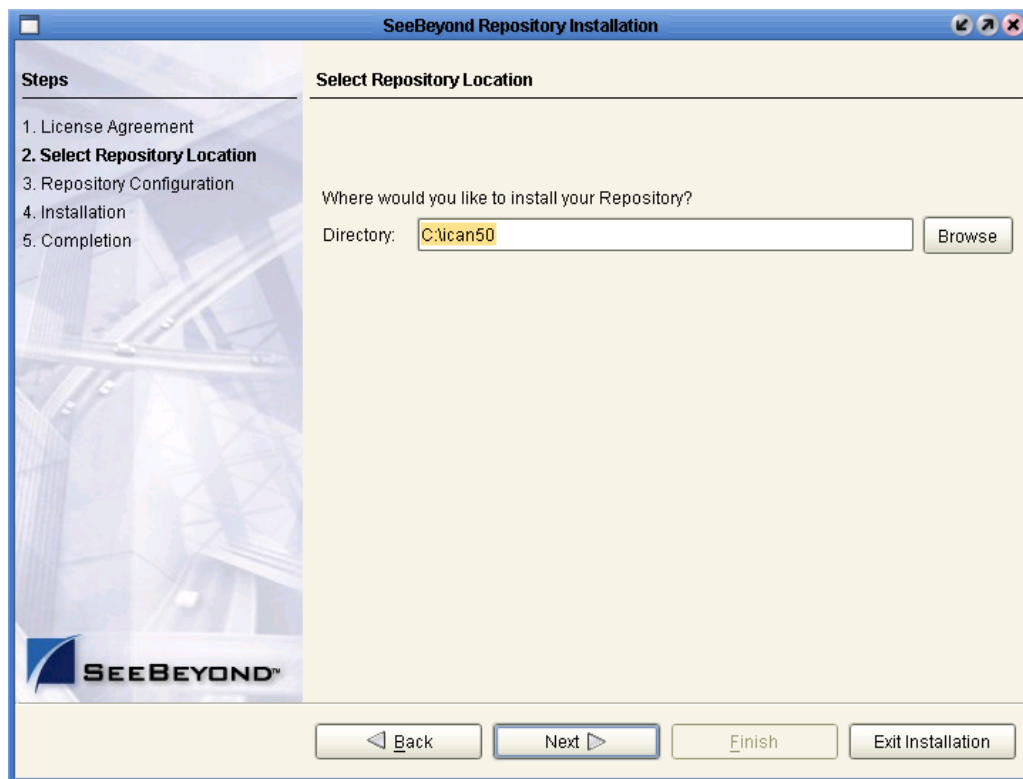
6 The **Repository Configuration** dialog box appears (see Figure 4). Enter the following information:

A A name for the Repository in the **Name** box. The Repository name is the identifier for your eInsight ESB installation.

Note: *Do not name the Repository "repository." For more information, see* **"Naming the Repository" on page 76**.

Record the name that you select. You will need it later.

B   The **Port Number** box automatically lists 10 consecutive available ports (12000–12009 is the default). You will need the base port number later when you connect to the Repository. For more information about the 10 consecutive ports, see the *eGate Integrator System Administration Guide*.

Note: *Make sure that the port number is not in use. To determine which ports are in use, type "**netstat -a**" at a command prompt. During the installation, the system selects nine additional port numbers which are sequentially above the port number you entered (for example: **12001** through **12009**). Be aware that the port checking performed at the time of the installation only detects ports that are in use at the time of the installation. This means that the installation will not detect ports that are configured to be used by other applications which are currently not running.*

C   Select the **Run repository as Windows Service** check box if you want the server to start automatically upon system reboot. If you do not select this option at this time, you can enable it later (see **"Starting the Repository as a Windows Service" on page 32**), but must otherwise start the Repository manually. Use the Repository Service Manager to set the Repository to run as a service after completing the installation.

Note: *After installing, you must either reboot or go to the Control Panel and select **Administrative Tools** and **Services** to start the Repository for the first time.*

D   When ready, click **Next**.

Figure 4   Repository Configuration
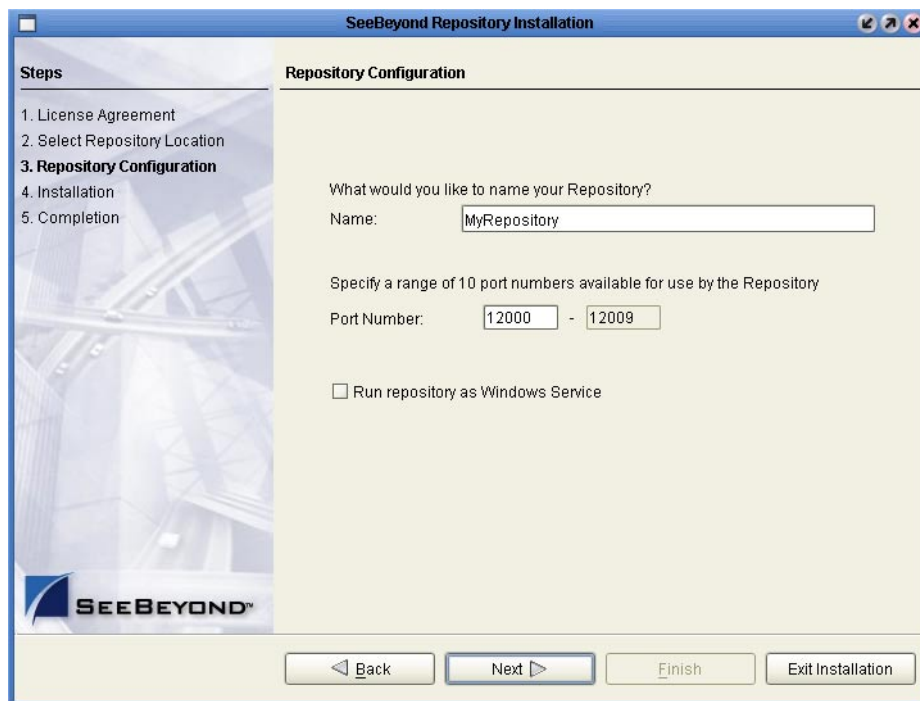
7   The **Installation** dialog box appears (see Figure 5). A progress bar indicates the approximate time remaining. When the installation is complete, click **Next**.

Figure 5   Installation
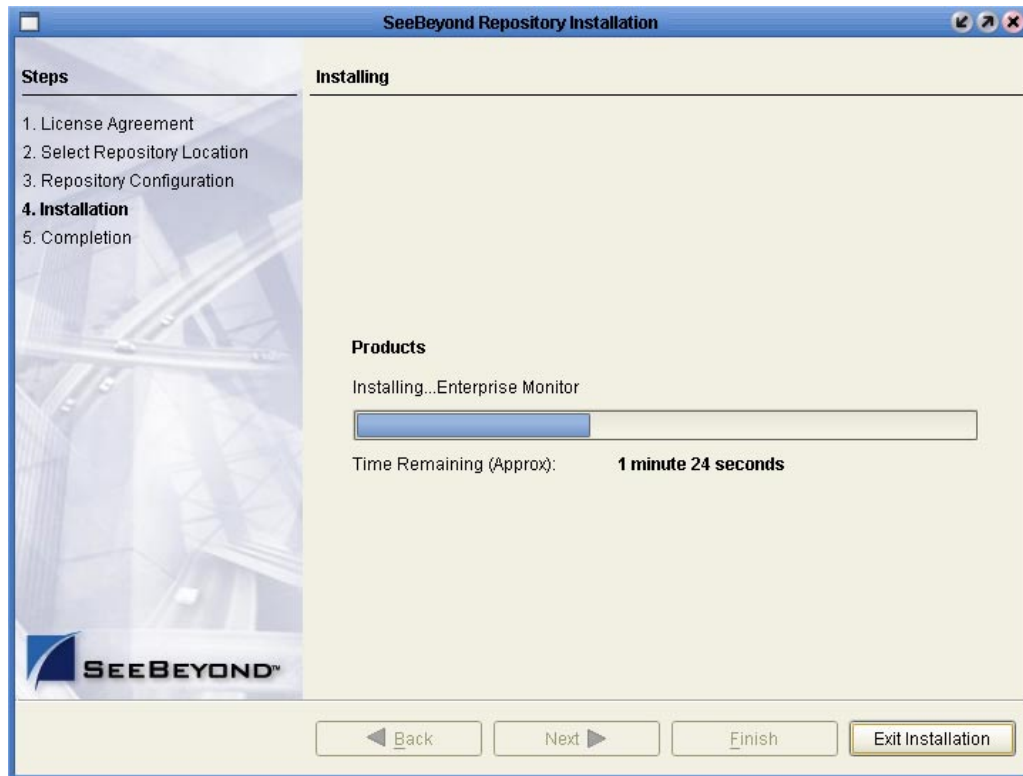
8   The **Completion** dialog box appears and informs you that the Repository installed successfully (see Figure 6), listing your selections during the installation:

  ◆ Repository location

  ◆ Repository Name

  ◆ Server Ports

  ◆ Install as Service

  ◆ User Login ID

Note: *SeeBeyond recommends you record the contents of this screen for future reference.*

The default is set to **Launch Repository Service Manager** (see Figure 7), which allows you to start the Repository Server and set the Repository to run as a service.

When ready, click **Finish**.

Figure 6 Completion
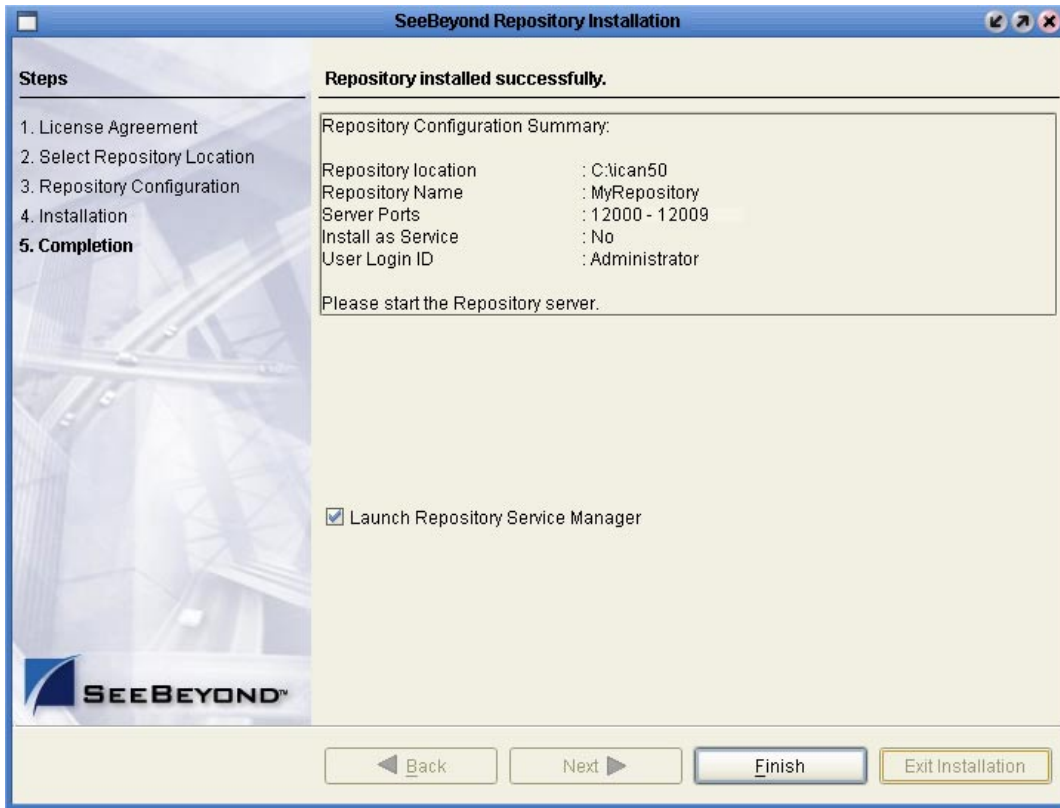
An installation log (**install.log**) is created in *<directory_path>***repository****logs**. Use this log file to view details about any problems you may encounter during the installation process.

9 The **Repository Service Manager** dialog box appears.

Figure 7 Repository Service Manager

The Repository Service Manager gives you the capability to do the following:

- ◆ Start your Repository server without navigating to the directory where the Repository is installed by clicking **Start Server**. The server must be running to complete the installation.

If the Repository is running and you want to shut down the server, click **Stop Server**.

Note: *See* **"To start and stop the Repository on Windows" on page 32** *for an alternate way to start and stop the Repository server.*

♦ Set your Repository to start as a Windows Service by clicking **Install Service**. If you install the Repository to start as a Windows service, the Repository automatically starts at system startup and restarts after an abnormal shutdown. The Repository must be stopped before you can install it as a Windows Service.

If the Repository is installed and running as a Windows service and you no longer want it to run as a service, click **Uninstall Service**.

Note: *See* **"Starting the Repository as a Windows Service" on page 32** *for an alternate way to start the Repository as a Windows service.*

After your system informs you that the Repository server is running, click **Close** to close the dialog box.

To reopen the **Repository Service Manager** dialog box after the initial installation of the Repository, navigate to **<C:\ican50>\repository** and double-click **servicemanager.bat**.

where:

<C:\ican50> is the directory where you installed ICAN.

To install the Repository on Windows using command line prompts

1 Insert the Repository - Disc 1 (Windows/Solaris/AIX/Linux) CD-ROM in the CD-ROM drive.

2 At the command prompt, navigate to the top level of the CD-ROM and enter: **install.bat -text**. The following prompt appears:

```
Please enter the base directory to install the Repository:
```

Type the full drive and path location (for example, **C:\ican50**) and press **Enter**.

The location that you specify here will be used as the "root" for the eInsight ESB installation. For example, if you specify **C:\ican50**, the Repository installation will create the **C:\ican50** directory and install the Repository to **C:\ican50\repository**.

Note: *This must be a full path, including the drive letter. Also note that there can be no spaces in ICAN path names.*

3 The next prompt displays the following message:

```
Please enter name of the Repository:
```

Type the name to be used for your Repository and press **Enter**. The Repository name is the identifier for your eInsight ESB installation.

4 The next prompt displays the following message:

```
The Repository needs a range of 10 consecutive tcpip ports for http
and related services.  Please enter the starting port number:
```

Enter a Repository port number such as 12000. You will need the port number later when you connect to the Repository. For more information about the 10 consecutive ports, see the *eGate Integrator System Administration Guide*.

Note: *Make sure that the port number is not in use. To determine which ports are in use, type "**netstat -a**" at a command prompt. During the installation, the system selects nine additional port numbers which are sequentially above the port number you entered (for example: **12001** through **12009**). Be aware that the port checking performed at the time of the installation only detects ports that are in use at the time of the installation. This means that the installation will not detect ports that are configured to be used by other applications which are currently not running.*

5 The next prompt displays the following message:

```
Would you like to run the Repository as a Windows service? If you
decline, you can always install the Windows service later. (y/n)
[n]:
```

Answer **n** so the Repository server does not start automatically after system reboot.

Note: *If you select **y**, see **"Starting the Repository as a Windows Service" on page 32** to perform the steps necessary to start the Repository as a Windows service.*

To start and stop the Repository on Windows

1 Navigate to the directory where you installed the Repository (for example: **C:\ican50\repository**).

2 Double-click **startserver.bat**. The Repository starts on the port that you specified during installation.

You can redirect Repository Server console messages to a text file by using the following command:

```
startserver.bat > ServerLog.txt 2>&1
```

3 To stop the Repository, double-click **stopserver.bat**.

Wait until the system prompts you that the server has started. You are then ready to upload product files to the Repository. Continue to **Chapter 4 "Installation Instructions for Uploading Files to the Repository" on page 37**.

3.2.1. **Starting the Repository as a Windows Service**

Installing the Repository as a Windows service configures the Repository to automatically start up at system startup. This makes it possible for the Repository to automatically restart after an abnormal system shutdown.

You must have Administrator rights to the local Windows machine in order to configure the Repository to start as a service. The installation script writes to the Windows Registry; this cannot be done without Administrator rights.

Note: *The Repository Service Manager can also be used to install or uninstall the service. See.* **Step 9** *under section 3.2.*

To start the Repository as a Windows Service

1 Use Windows Explorer to navigate to the Repository directory (for example, **C:\ican50\repository**).

2 Double-click **installwinsvc.bat**.

This runs the script that configures the Windows service to automatically run the Repository at system startup. The service will have the same name as the installed Repository.

3 The first time that you use the service, and prior to running Enterprise Manager, you must manually start it.

A Open the Windows **Control Panel**.

B Double-click **Administrative Tools**.

C Double-click **Services**, and then locate *<name_of_repository>*
where:
<name_of_repository> is the name of the Repository that you want to start as a service.

D Right-click *<name_of_repository>* and select **Properties**.

E Ensure that the **Startup type** is **Automatic**, and then click **Start**.

Note: *From this time forward, the Repository will start automatically at system startup or whenever the computer is rebooted.*

To remove the Repository Windows Service

1 Use Windows Explorer to navigate to the Repository directory (for example, **C:\ican50\repository**).

2 Double-click **uninstwinsvc.bat**.

This runs the script that removes the Windows service that automatically starts the Repository at system startup.

You are now ready to upload product files to the Repository. Continue to **Chapter 4 "Installation Instructions for Uploading Files to the Repository" on page 37**.

3.3 UNIX Installation of Repository

This section explains how to install the eInsight ESB Repository on your UNIX system. You can mount the CD-ROM on your UNIX computer or FTP the installation files to your UNIX computer via a Windows computer. See **"UNIX System Requirements" on page 19** for additional information and installation requirements before proceeding.

To install the Repository on UNIX

1 If it is a UNIX computer, log in as either a non-root or root user on the workstation containing the CD-ROM drive, and insert the SeeBeyond ICAN Suite Repository - Disk 1 or SeeBeyond ICAN Suite Repository -Disk 2 CD-ROM (depending on which UNIX platform you are using) into the drive.

Note: *To mount the CD-ROM, you must have root privileges. If the directory that you want to mount over does not exist, you must create it. Once this directory is created, mount the CD-ROM, using the appropriate command. The correct arguments for the mount command vary for each operating platform. See the following table for the recommended mounting commands.*

Table 9   Mounting a CD-ROM Drive Locally

Platform	Mount Command
AIX	**mount -V cdrfs -r /dev/cd<extension>/cdrom**
Solaris 8 and 9	**mount -F hsfs -o ro /dev/dsk/c0t<extension> /cdrom** (On Sun Solaris systems, the CD-ROM drive mounts automatically if the volume manager is running.)
HP Tru64	**mount -t cdfs -r -o noversion -o rrip /dev/rz<extension>/cdrom**
Red Hat Linux	**mount -t iso9660 /dev/cdrom /cdrom** (On Linux systems, you may have to change the CD-ROM drive configuration from read-only to execute. By default, on Linux systems, CD-ROM drives have read-only permission.)
HP-UX	**pfs_mount -t rrip -r /dev/dsk/c0t<extension> /cdrom** where **/cdrom** is the mount point.
Note: Mounting of the CD-ROM on a Solaris machine is automatic; for all other platforms you must be logged in as root to mount the CD-ROM.	

2 Navigate to the root directory of the CD-ROM on your UNIX computer.

3 To install the Repository, type **./install.sh** and press **Enter**. The following prompt appears:

```
Please enter the base directory to install the Repository:
```

Type the full path location (for example, **<install_path>/ican50**) and press **Enter**.

Important: *If you are upgrading version 5.0.1 or 5.0.2, you can install to the same directory (for details, see* **Chapter 8***). However, if you are upgrading version 5.0.0, make sure you change the default path to another path (for details, see* **Chapter 8***).*

For example, if you installed 5.0.0 to:
<install_path>/ican50
change the path to another path, such as:
<install_path>/ican503

The location that you specify here will be used as the "root" for the eInsight ESB installation. For example, if you specify **<install_path>/ican50**, the Repository

installation will create the ***<install_path>*/ican50** directory and install the Repository to ***<install_path>*/ican50/repository**.

Note: *This must be an absolute path.*

4 The next prompt displays the following message:

```
Please enter name of the Repository:
```

Type the name to be used for your Repository and press **Enter**. The Repository name is the identifier for your eInsight ESB installation.

5 The next prompt displays the following message:

```
The Repository needs a range of 10 consecutive tcpip ports for http
and related services.  Please enter the starting port number:
```

Enter a Repository port number such as 12000. You will need the port number later when you connect to the Repository.

Note: *Make sure that the port number is not in use. To determine whether a port is available, type "**netstat -a | grep <port_number>**" at a command prompt; this will return the name of any process using that port number. During the installation, the system selects nine additional port numbers which are sequentially above the port number you entered (for example: **12001** through **12009**). Be aware that the port checking performed at the time of the installation only detects ports that are in use at the time of the installation. This means that the installation will not detect ports that are configured to be used by other applications which are currently not running.*

6 After the installation completes, change the directory to the location where you installed the Repository. For example:

    cd ***<install_path>*/ican50/repository**

7 If you installed on HP Tru64 and the shell is **csh**, you must run the following command *before* starting the Repository:

```
unlimit
```

If you installed on HP Tru64 and the shell is **bash**, you must run the following command *before* starting the Repository:

```
ulimit -Sd 1048576
```

8 To start the Repository, type **./startserver.sh**. The Repository Server starts in the background. To confirm that the Repository Server has started, use your Web browser to type the URL and port number, for example:

```
http://<server_name>:<port_number>
```

where:

<server_name> is name of the UNIX server where you installed the Repository and

<port_number> is the port you specified previously.

To see the Repository Server console messages, use a text editor such as vi to view the contents of ***<install_path>*/ican50/repository/server/logs/catalina.out**. This is a useful way to view the progress of the Repository Server startup process.

Important: *The Repository is a separate process from your shell; unlike Windows, it continues to run after you log off from your UNIX account. To stop the Repository, you must run* ***.lstopserver.sh****.*

3.3.1. Starting the Repository as a UNIX Daemon

You can have the Repository start automatically upon startup of the UNIX system. To do this, create an init script that calls the **nohup** command with the **startserver.sh** script. For example:

```
nohup /home/jsmith/ican50/repository/startserver.sh &
```

The procedure for adding the init script to the init process depends on which UNIX platform you are using. For detailed instructions, see the system administration documentation for the UNIX platform.

You are now ready to upload product files to the Repository. Continue to .

Installation Instructions for Uploading Files to the Repository

This chapter provides instructions on how to upload files to the eInsight ESB Repository. If you have any questions or problems, see the SeeBeyond Support Web site at **http://www.seebeyond.com** and select **SERVICES** and then **SUPPORT SERVICES**.

This chapter contains

4.1 Overview

Before SeeBeyond ICAN Suite products can be installed on client systems, the product installation files must be uploaded from the Products CD-ROMs to the eInsight ESB Repository. This step only needs to be performed one time for each product.

Regardless of what operating system your Repository is running on, you must upload the product installation files from a Windows PC to your Repository.

After you upload the product installation files to the Repository, the products will be available for downloading to the client computers.

4.2   Uploading Files to the Repository

In the following procedures, you will use the Enterprise Manager, a Web-based application, to upload files from the Products CD-ROMs to the Repository.

The product **.sar** files must be uploaded to the Repository in the proper sequence. The following procedures indicate which order to upload the product **.sar** files.

Note: *Before uploading product **.sar** files to the Repository, see* **"Improving Upload Performance" on page 77** *for a tip on how to improve upload performance.*

These **.sar** files are required for all Repositories:

- **license.sar**

- **einsightESB.sar**

- One or more of the following Logical Host **.sar** files:

    ◆ **logicalhost_aix.sar** (required if the Logical Host is running on IBM AIX)

    ◆ **logicalhost_hpux.sar** (required if the Logical Host is running on HP-UX)

    ◆ **logicalhost_linux.sar** (required if the Logical Host is running on Red Hat Linux)

    ◆ **logicalhost_sparc64.sar** (required if the Logical Host is running on Sun Solaris)

    ◆ **logicalhost_tru64.sar** (required if the Logical Host is running on HP Tru64)

Note: *The **logicalhost_win32.sar** file for Windows is automatically installed in the Repository by default.*

- Any product **.sar** files for which you have a valid license (optional)

    ◆ **weblogic.sar** (required if using a BEA WebLogic™ application server in place of the SeeBeyond Integration Server)

Note: *See the **eGate Integrator for eInsight Enterprise Service Bus User's Guide** for information about WebLogic.*

    ◆ **weblogicjmsmessageserver.sar** (required if using a BEA WebLogic™ JMS server in place of the SeeBeyond JMS IQ Manager)

Note: *See the **eGate Integrator for eInsight Enterprise Service Bus User's Guide** for information about WebLogic.*

    ◆ **websphere.sar** (required if using a WebSphere application server in place of the SeeBeyond Integration Server)

Note: *See the **eGate Integrator for eInsight Enterprise Service Bus User's Guide** for information about WebSphere.*

    ◆ **webspherejmsmessageserver.sar** (required if using a WebSphere JMS server in place of the SeeBeyond JMS IQ Manager)

Note: *See the **eGate Integrator for eInsight Enterprise Service Bus User's Guide** for information about WebSphere.*

- The **EnterpriseManagerPlugin-Win98ToXP.sar** file is not required for viewing Connectivity Maps in Enterprise Manager. However, installing this **.sar** file enhances the Connectivity Map's capabilities. See **"Enterprise Manager Recognition of Adobe SVG Viewer Plug-in" on page 78** and **"EnterpriseManagerPlugin-Win98ToXP.sar File" on page 78** for additional information.

Note: *If the Repository is running on a UNIX server, the UNIX server is not running an X Windows server, and the SVG plug-in is not installed in the client (browser), you must add the following command to the **JAVA_OPTS** environment variable (either in the Repository **startserver.sh** or before running the Repository **startserver.sh**):*

-Djava.awt.headless=true

▪ Any Add-on **.sar** files (such as eWays) for which you have a valid license (optional)

- When installing an eWay, include the following:

  ▪ *<name_of>***eWay.sar**

  ▪ *<name_of>***eWayDocs.sar** (includes documentation **.pdf** files, sample Projects, and JavaDocs)

  ▪ **FileeWay.sar**

Note: *Before you can begin this procedure, your SeeBeyond Repository Server must be running. See **Chapter 3 "Installation Instructions for Repository" on page 25** for instructions on starting your Repository Server.*

To start the Enterprise Manager

1 Start Internet Explorer.

2 In the **Address** line, type **http://<hostname>:<port_number>**

where:

hostname is the TCP/IP host name of the server where you installed the Repository—not the name of the Repository itself.

port_number is the port number that you specified during the installation of the Repository.

Note: *The host name must be valid.*

When ready, press **Enter**.

The **SeeBeyond Customer Login** window of the Enterprise Manager appears (see Figure 8). The Enterprise Manager serves as an update center, management center, and a dashboard to gain access to available applications. In addition, system administrators use the Enterprise Manager to upload components to the Repository Server.

Figure 8 SeeBeyond Customer Login window
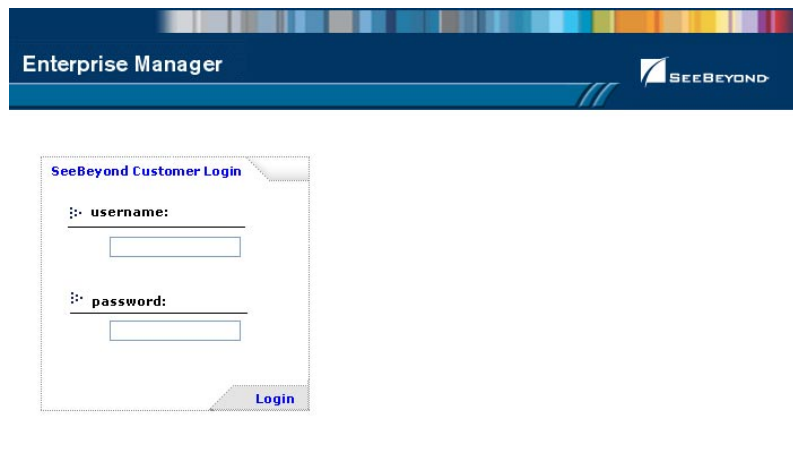
3   Enter your **username** and **password** and click **Login**. Note that this is your ICAN administrator username and password, not your operating system/network username and password. See the **Readme.txt** file on the root directory of the Repository CD-ROM for the default username and password.

The Enterprise Manager appears with the **HOME** tab active.

To upload products to the Repository

1   Click the **ADMIN** tab to begin the process of selecting and uploading files to the Repository.

The License file selection screen appears.

Figure 9 License File Selection
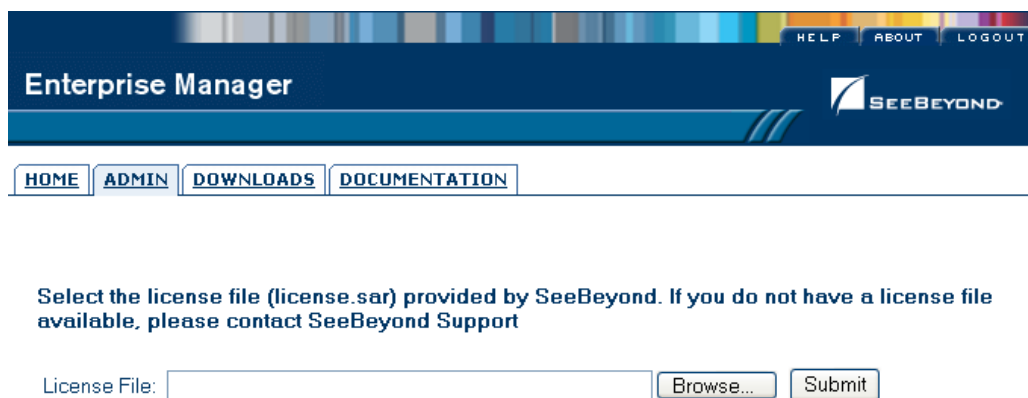
2   Click **Browse** to navigate to **license.sar**. After selecting it, click **Submit**.

Note: *The **license.sar** file is uniquely created for each customer. This file is provided by e-mail. If you do not have this file, contact SeeBeyond Support.*

3   Do not do anything until the license upload finishes; the Upload System Component Manifest screen will indicate when the upload has completed (see Figure 10).

Figure 10   Completed Upload
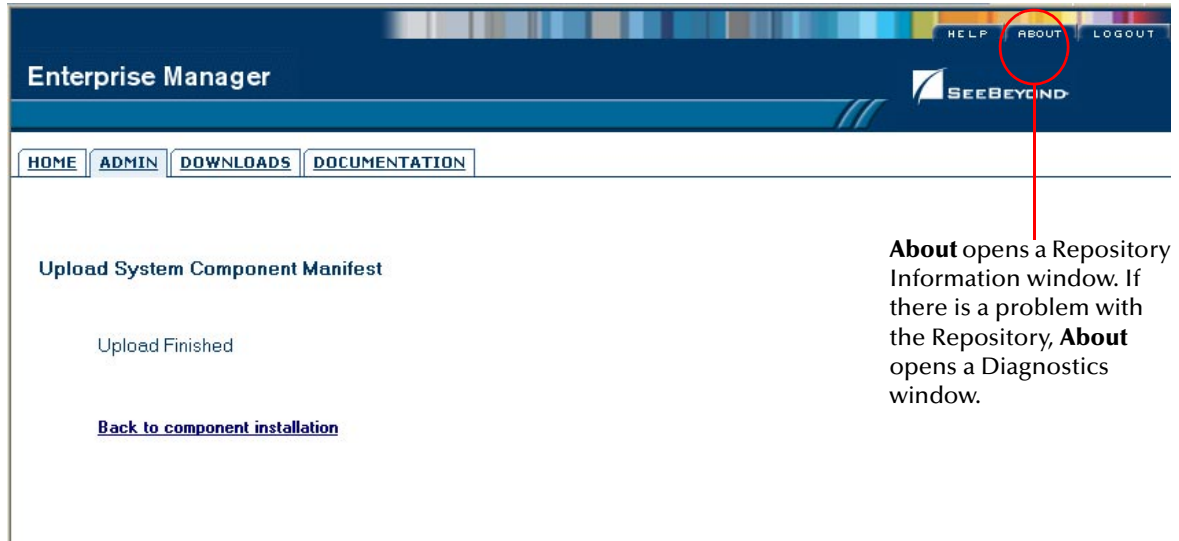
A   To see additional information about your Repository (such as performance, working directory, connection information, and the version of Java), click **About** (see Figure 10).

B   A Repository Information window appears (see Figure 11). When finished looking at the information, click **Close Window** to return to the Completed Upload screen.

Figure 11   Repository Information

Once you have returned to the Completed Upload screen, click **Back to component installation** to continue.

4   The next file to upload is **eInsightESB.sar**. This file is located on the "SeeBeyond ICAN Suite Products - Disc 1" CD-ROM. Click **Browse** to navigate to **eInsightESB.sar**. After selecting it, click **Submit**.

Figure 12 Upload eInsightESB.sar

5 **eInsightESB.sar** is a large file. Uploading **eInsightESB.sar** may take several minutes.

As product **.sar** files are uploaded to the Repository, two actions take place:

- ◆ The product **.sar** file is uploaded to the Repository Server from your installation media. The length of time required for the file transfer depends on the size of the file and the speed of your network.

- ◆ The product **.sar** file is decompressed and installed into the Repository.

6 After the **eInsightESB.sar** upload finishes, the Upload System Component Manifest screen indicates that the upload has completed (as previously seen in **Figure 10 on page 41**). Click **Back to component installation** to continue.

The Admin page displays a list of the files that have been uploaded to the Repository so far (see Figure 13).

Figure 13 Product Manifest Selection
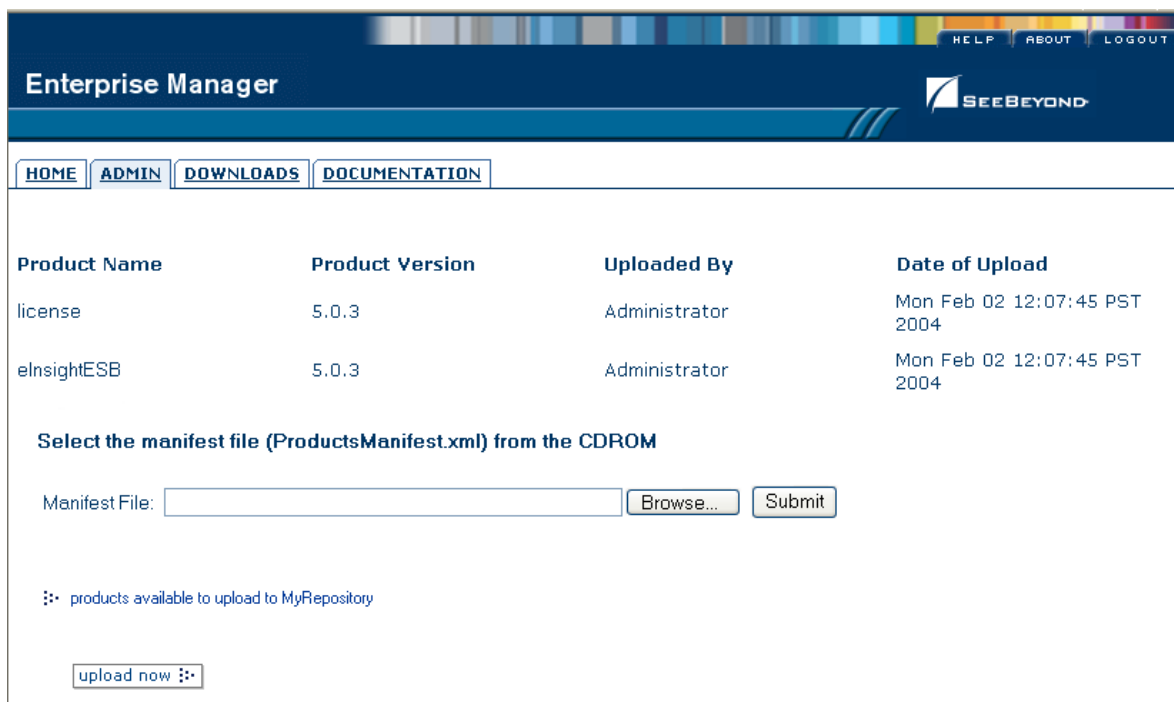
7   The next file to upload is **ProductsManifest.xml**. There are two versions of this file. The version for non-eWay products is located on the "SeeBeyond ICAN Suite Products - Disc 1" CD-ROM. The version for eWay products is located on the "SeeBeyond ICAN Suite Products - Disc 2" CD-ROM. Click **Browse** to navigate to **ProductsManifest.xml**. After selecting it, click **Submit**.

Note: *If you add additional products after your initial purchase, you would use the **ProductsManifest.xml** that was initially sent to you with the **license.sar** file to upload the new license. See* **"Adding a New License File" on page 77**.

The Admin page now displays a list of all the ICAN products based on the contents of the Products Manifest file.

To upload documentation and additional products to the Repository

Each ICAN product requires one or more product **.sar** files to be uploaded to the Repository. For example, to install the File eWay, you must upload **FileeWay.sar**. Follow these steps to upload and install your product **.sar** files.

The product **.sar** files for non-eWay products are located on the "SeeBeyond ICAN Suite Products - Disc 1" CD-ROM. The product **.sar** files for eWay products are located on the "SeeBeyond ICAN Suite Products - Disc 2" CD-ROM.

If you switch from one CD-ROM to the other, you can reload the **ProductsManifest.xml** to display the correct list of products.

1 Click the **Browse** button next to the product that you want to install. For example, to install the File eWay, click the **Browse** button next to the File eWay field.

Note: *You might want to upload the **.sar** files for the ICAN documentation first.*

2 Navigate to the location where the product **.sar** file resides and select the file that you want to install.

Note: *The **.sar** files for non-eWay documentation are located in the **\Documentation** directory on the "SeeBeyond ICAN Suite Products - Disc 1" CD-ROM (the **.sar** file for eInsight ESB documentation is **eInsightESBDocs.sar**). The **.sar** files for eWay documentation are located in the **\Documentation** directory on the "SeeBeyond ICAN Suite Products - Disc 2" CD-ROM.*

Important: *The **EnterpriseManagerPlugin-Win98ToXP.sar** file is required for the Adobe SVG Viewer plug-in for Windows. It is located on the "SeeBeyond ICAN Suite Products - Disc 1" and "SeeBeyond ICAN Suite Products - Disc 1 eInsight ESB" CD-ROMs.*

3 Click **upload now** to upload the product **.sar** file to the Repository.

The Upload System Component page displays. The status bar indicates the progress of the file upload.

4 After the upload finishes, the Upload System Component Manifest screen indicates that the upload has completed (as previously seen in **Figure 10 on page 41**). Click **Back to component installation** to continue.

The Admin page now displays a list of all the ICAN products based on the contents of the Products Manifest file.

5 Repeat steps 1 through 4 to install additional products.

Refer to the product documentation for the product or Add-on **.sar** file names. If you uploaded the documentation, you can access the manuals from the **DOCUMENTATION** tab of the Enterprise Manager.

To upload the Logical Host files

- Repeat the steps in the previous procedure to upload the appropriate Logical Host **.sar** file. See Table 10 to determine the correct Logical Host file(s) for your environment. The Logical Host **.sar** files are located on the Logical Host CD-ROM. Like the Products CD-ROMs, the Logical Host CD-ROM contains a **ProductsManifest.xml** file.

Note: *You can use the **Browse** button next to any product text box to place UNIX Logical Host **.sar** files prior to uploading them.*

SeeBeyond recommends that you upload the Logical Host **.sar** file at this time so that you do not have to return to the uploading process when you are downloading the Logical Host (see **Chapter 6**).

Table 11   Logical Host .sar files

Logical Host Platform	Logical Host .sar file
Windows	No **.sar** file is required for Windows; it is automatically uploaded with eInsight ESB.sar.
HP-UX	logicalhost_hpux.sar
HP Tru64	logicalhost_tru64.sar
IBM AIX	logicalhost_aix.sar
Red Hat Linux	logicalhost_linux.sar
Sun Solaris	logicalhost_sparc64.sar

Continue to **Chapter 5 "Installation Instructions for Enterprise Designer" on page 47** for instructions for installing the Enterprise Designer GUI on your development PCs.

Installation Instructions for Enterprise Designer

This chapter provides instructions on how to install the Enterprise Designer GUI on a Windows system. If you have any questions or problems, see the SeeBeyond Support Web site at **http://www.seebeyond.com** and select **SERVICES** and then **SUPPORT SERVICES**.

Note: *The Enterprise Designer GUI can only be installed on Windows systems.*

This chapter contains

- **"Overview" on page 47**
- **"Installation of Enterprise Designer" on page 48**

5.1 Overview

The Enterprise Designer must be installed on a Windows computer. After uploading the product files to the Repository (see **Chapter 4**), you can download the Enterprise Designer from the Repository and install it on all Windows clients that will be used to build and configure eInsight ESB Projects. Although the Enterprise Designer must be installed on Windows PCs, the Enterprise Designer can connect to Repositories on any supported platform.

Note: *An extraction program, such as WinZip, must be installed on the Windows client prior to beginning the installation of the Enterprise Designer.*

5.2 Installation of Enterprise Designer

This section provides the steps to download the Enterprise Designer from the Repository via the Enterprise Manager.

Note: Before you can begin this procedure, your SeeBeyond Repository Server must be running. See **Chapter 3 "Installation Instructions for Repository" on page 25** *for instructions for starting your Repository Server.*

To log on to the Enterprise Manager

1 Start Internet Explorer.

2 In the **Address** line, type **http://<hostname>:<port_number>**

where:

hostname is the TCP/IP host name of the server where you installed the Repository—not the name of the Repository itself.

port_number is the port number that you specified during the installation of the Repository.

Note: The host name must be valid.

When ready, press **Enter**.

The **SeeBeyond Customer Login** window of the Enterprise Manager appears (see Figure 14).

Figure 14 SeeBeyond Customer Login window

3 Enter your **username** and **password**. See the **Readme.txt** file for the default username and password.

4   Click **Login**. Enterprise Manager appears with the **HOME** tab active.

To install the Enterprise Designer GUI

1   Click the **DOWNLOADS** tab. The **products available to download from <repository_name>** window appears.

2   Click **Enterprise Designer**. When the **File Download** dialog box appears, click **Open**. The **edesigner.zip** file is opened by an extraction program (such as WinZip).

Note: *If you uploaded the **EnterpriseManagerPlugin-Win98ToXP.sar** file, you must download **Enterprise Manager SVG Plugin - Win 98 to XP** from the **products available to download from <repository_name>** window for the Adobe SVG Viewer plug-in to function properly.*

3   Extract all the files to the client directory (such as **C:\ican50**). The **\edesigner** subdirectory is created when the file is unzipped.

4   Close the extraction program and Internet Explorer.

5.2.1.   Starting Enterprise Designer and Installing Required eInsight ESB Modules

After you start the Enterprise Designer for the first time, you must install all the modules required to run the program.

To start the Enterprise Designer and install required modules

1   Navigate to **<C:\ican50>\edesigner\bin** and double-click **runed.bat**.

Note: *You may want to create a shortcut to Enterprise Designer on the desktop.*

2   You must download the modules, check their signatures, and then install the modules. On the **Tools** menu, click **Update Center**. The **Update Center Wizard - Select location of modules** dialog box appears (see Figure 15).

Figure 15 Update Center Wizard - Select location of modules
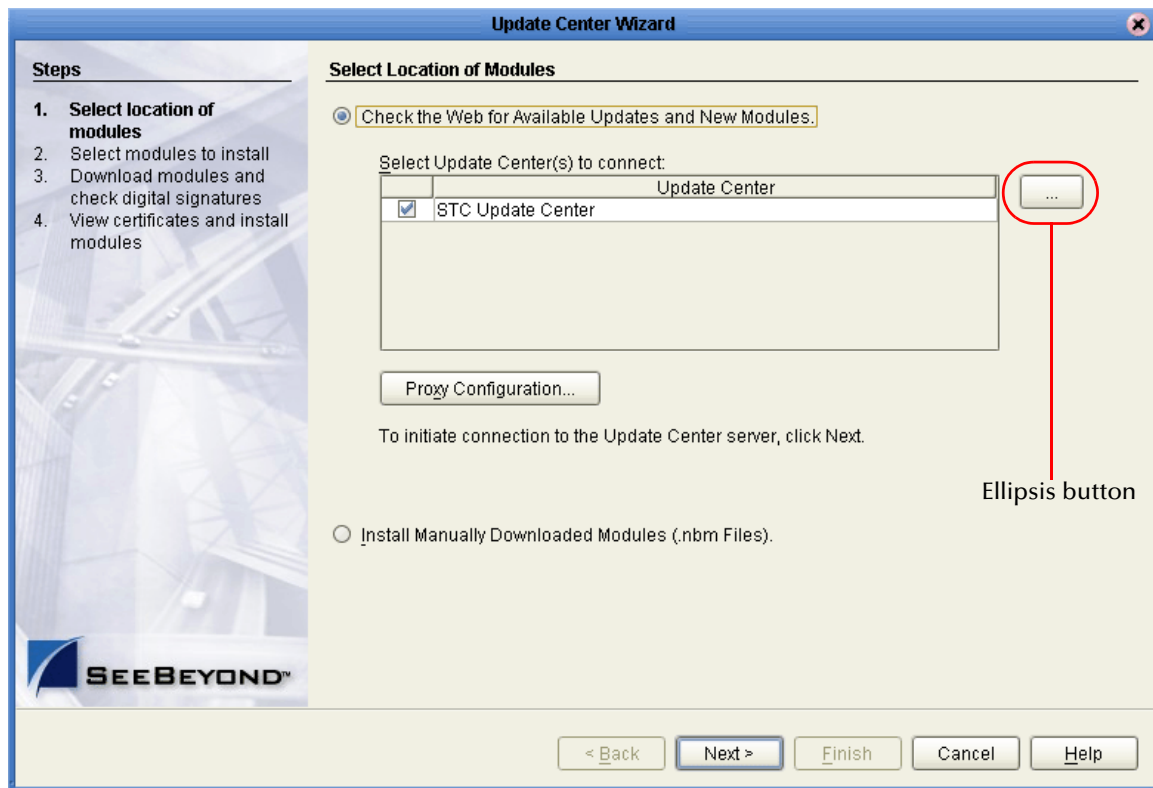
3 If you are installing the Enterprise Designer on the same computer where the Repository Server is running, click **Next**. The **Update Center Wizard - Select modules to install** dialog box appears (see Figure 17).

However, if you are installing the Enterprise Designer on a different computer than the computer where the Repository Server is running:

A Click the **ellipsis** button (**...**) to the right of "STC Update Center." The **Property Editor: Update Center** dialog box appears (see Figure 16).

B Confirm in the **Server URL** box that the Enterprise Designer installation points to the URL of the host where the Repository is installed.

For example:
http://*<hostname>*:*<port>*/repository/*<rep_name>*

where:
hostname is the TCP/IP host name of the server where you installed the Repository—not the name of the Repository itself.

port is the port number of the Repository.

rep_name is the name of the Repository.

Figure 16 Property Editor: Update Center
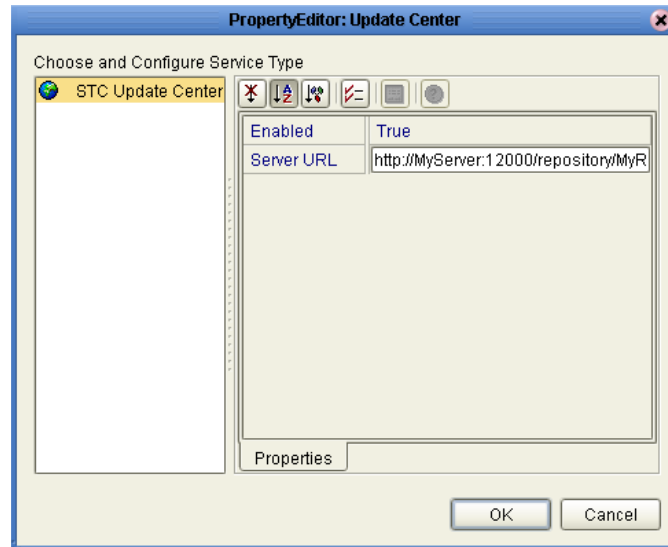
C   After specifying the URL of the Repository Server, click **OK**.

D   When the **Update Center Wizard - Select location of modules** dialog box reappears, click **Next**. The **Update Center Wizard - Select modules to install** dialog box appears (see Figure 17).

4   Click the **Add All** button (double-arrow button that is the third arrow button from top). All of the modules are moved to the **Include in Install** list.

Figure 17 Update Center Wizard - Select modules to install
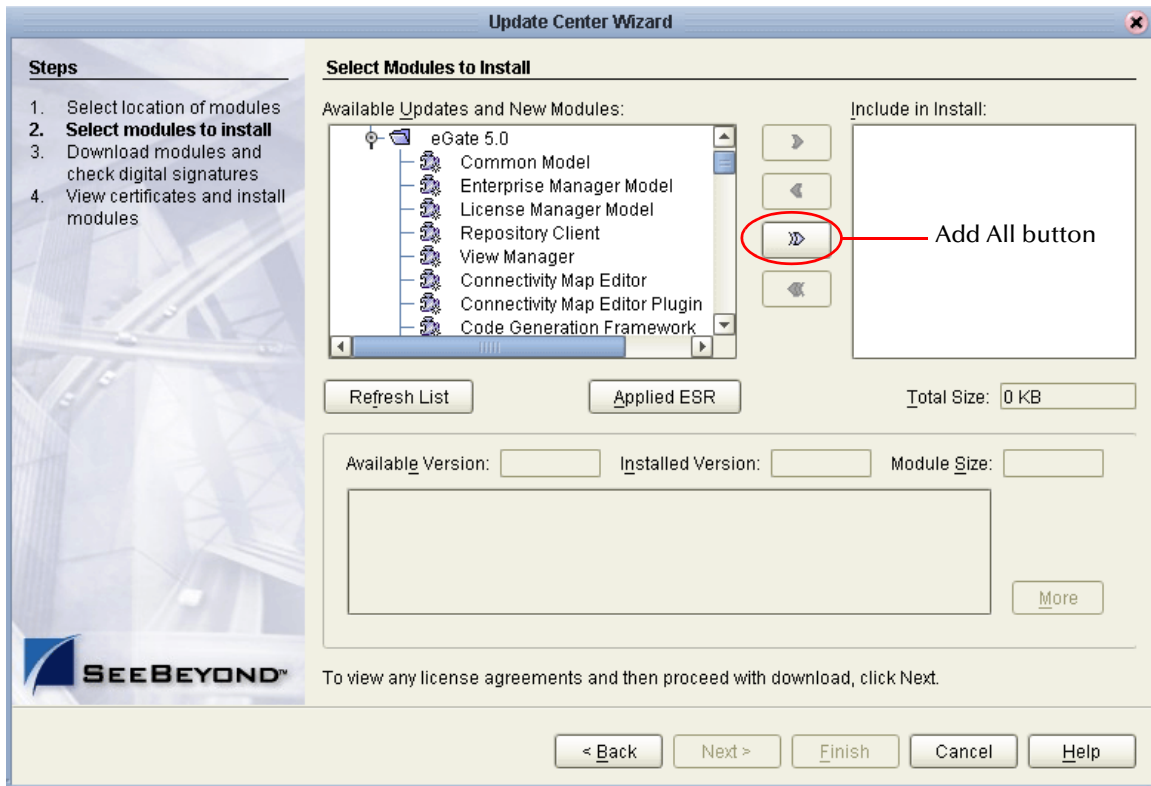
5 Click **Next**.

6 When the **License Agreement** appears, click **Accept**. The **Update Center Wizard - Download modules and check digital signatures** dialog box appears (see Figure 18).

Figure 18 Update Center Wizard - Download modules and check digital signatures
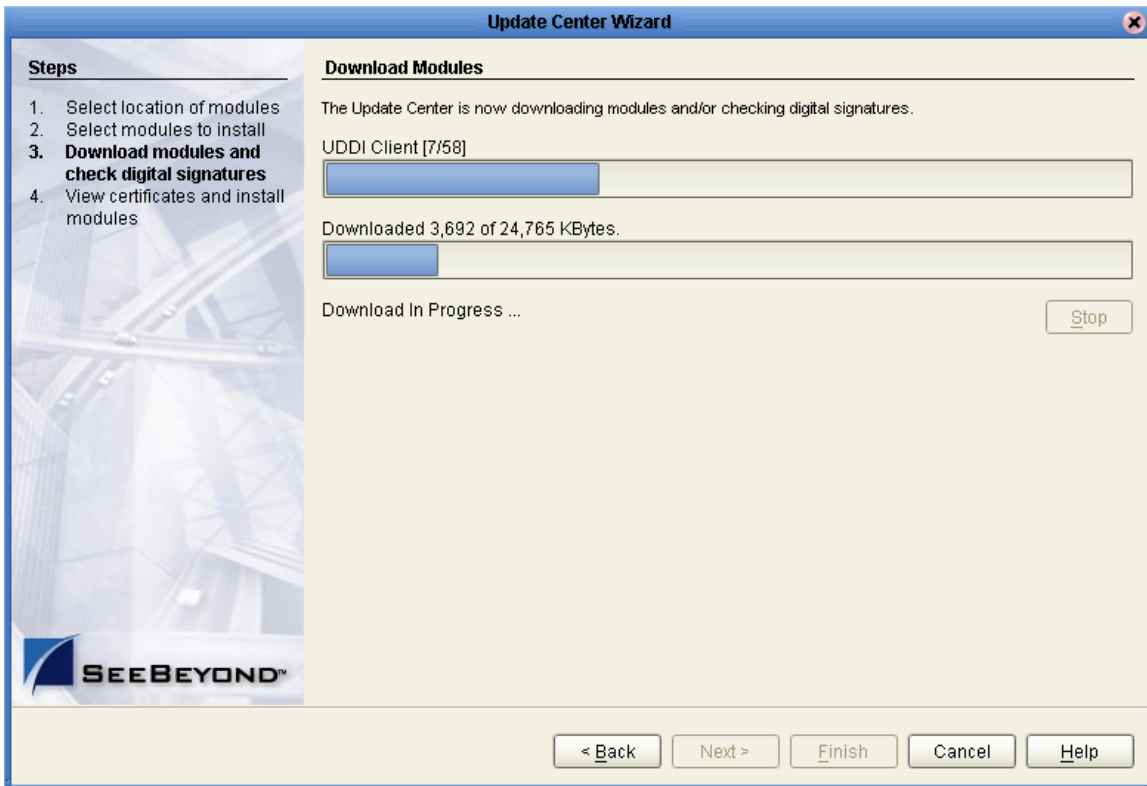
7 When the progress bar reaches 100 percent, "Done" appears below the bar. Click **Next**.

The **Update Center Wizard - View certificates and install modules** dialog box appears (see Figure 19). All of the modules must be installed for Enterprise Designer to fully function.

Figure 19 Update Center Wizard - View certificates and install modules
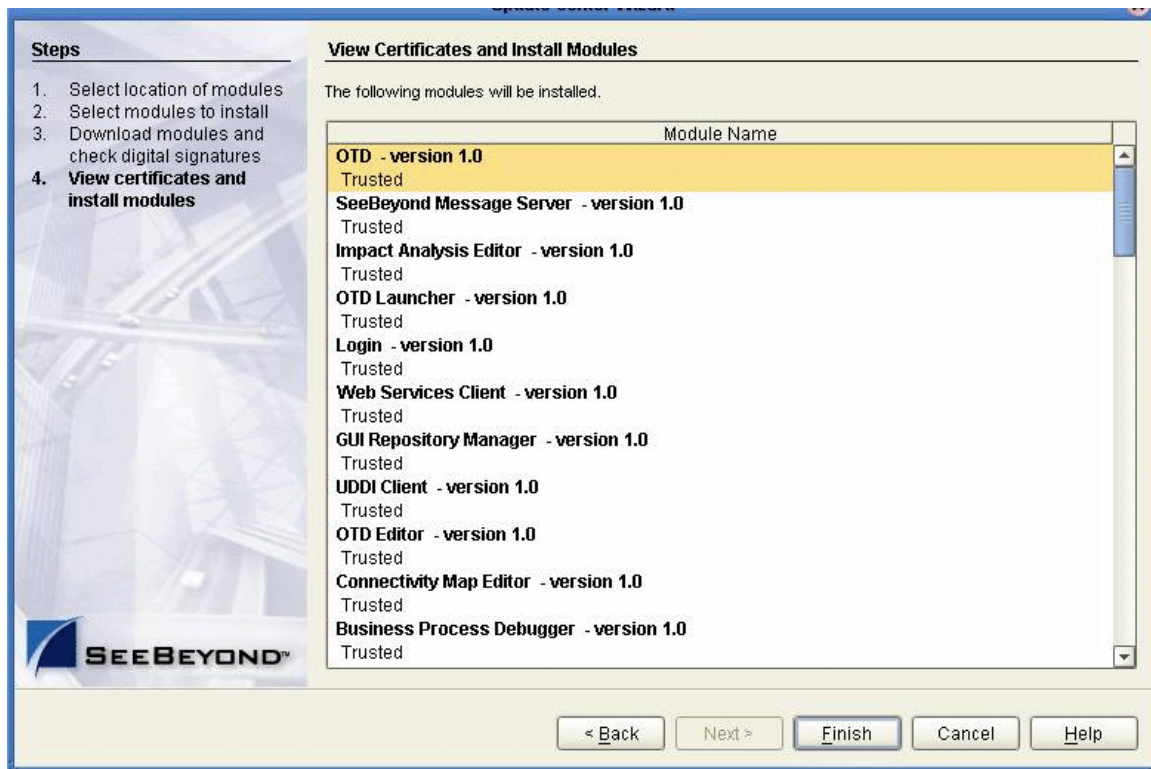
8   Click **Finish** to accept the certificates and install the modules. The **Restart the IDE** dialog box appears (see Figure 20).

Figure 20 Restart the IDE dialog box
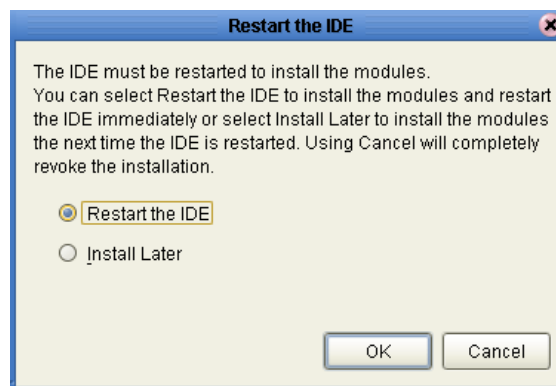
9   The modules that were installed in **step 8** must be reloaded before Enterprise Designer functions properly. To restart the IDE and install the modules, ensure that the **Restart the IDE** option is selected and then click **OK**.

10   The Enterprise Designer **Login** dialog box appears (see Figure 21). Enter your **Login ID** and **Password**, and then click **Login**. The Login ID is the same as the username.

SeeBeyond recommends that you log in as "Administrator" the first time you log in; the Administrator can then create additional Login IDs (usernames).

The **SeeBeyond Enterprise Designer** window appears. You can now begin using the Enterprise Designer.

Note: *See the **eGate Integrator for eInsight Enterprise Service Bus User's Guide** and the **eInsight Enterprise Service Bus User's Guide** for detailed instructions on using eInsight ESB.*

5.2.2. Starting Enterprise Designer GUI After Initial Logon

This section provides instructions for logging in for subsequent sessions of eInsight ESB.

Before logging in for subsequent sessions of eInsight ESB, the SeeBeyond Repository Server must be running.

To start Enterprise Designer GUI

1 Navigate to *<C:\ican50>\edesigner\bin* and double-click **runed.bat**.

The Enterprise Designer **Login** dialog box appears (see Figure 21).

Figure 21 Enterprise Designer Login dialog box

2 Enter your **Login ID** and **Password**, and then click **Login**.

Or, if you specified a URL for the Repository Server (see **Figure 16 on page 51**) on the **Property Editor: Update Center** dialog box, you must enter this URL in the **Repository URL** box before clicking **Login**.

The **SeeBeyond Enterprise Designer 5.0.3** window appears.

To exit Enterprise Designer

- Click the "X" in the upper right corner of the window.

  or

- On the **File** menu, click **Exit**.

Installation Instructions for Logical Host

This chapter provides instructions on how to install the Logical Host. If you have any questions or problems, see the SeeBeyond Support Web site at **http://www.seebeyond.com** and select **SERVICES** and then **SUPPORT SERVICES**.

This chapter contains

- **"Overview" on page 57**
- **"Windows Installation of Logical Host" on page 57**
- **"UNIX Installation of Logical Host" on page 58**

6.1 Overview

The Logical Host can be installed on any eInsight ESB supported platform. The Logical Host is installed after you have installed the Repository and the Enterprise Designer.

Note: *The Logical Host download is via Enterprise Manager, which only runs on Windows systems.*

6.2 Windows Installation of Logical Host

Before deploying a Project created in the Enterprise Designer, you must install a Logical Host. This section provides instructions for downloading and installing the Logical Host from the Repository.

Note: *Before you can begin this procedure, your SeeBeyond Repository Server must be running. See **Chapter 3** for instructions on how to start your Repository Server.*

To install the Logical Host

Note: *If your browser is running and Enterprise Manager is open, skip to step 5.*

1 Start Internet Explorer.

2 In the **Address** line, type **http://<hostname>:<port_number>**

where:

<hostname> is the TCP/IP host name of the server where you installed the Repository—not the name of the Repository itself.

<port_number> is the port number that you gave during the installation of the Repository.

When ready, press **Enter**.

The **SeeBeyond Customer Login** window of Enterprise Manager appears (see **Figure 14 on page 48**).

3   Enter your **username** and **password**. See the **Readme.txt** file for the default username and password.

4   When ready, click **Login**. Enterprise Manager appears with the **HOME** tab active.

5   Click the **DOWNLOADS** tab. The **products available to download from <repository_name>** window appears. Use this window to download and install a Logical Host from your Repository.

6   Click **Logical Host - for win32**. When the **File Download** dialog box appears, click **Open**. The **logicalhost-win32.zip** file is opened by an extraction program (such as WinZip).

7   Extract all the files to the client directory (such as **C:\ican50**). The **\logicalhost** subdirectory is created when the file is unzipped.

8   Close the extraction program and Internet Explorer.

6.2.1. Modifying the Logical Host Startup Configuration File on a Windows System

You must set the arguments for the Logical Host in the **logical-host.properties** file. For information on how to modify the startup configuration file, see the *eGate Integrator System Administration Guide*.

6.2.2. Starting the Logical Host on a Windows System

For information on the following, see the *eGate Integrator System Administration Guide*:

▪ "Starting the Logical Host Manually on a Windows System"

▪ "Starting the Logical Host as a Windows Service"

Note: *If you set the Logical Host to start as a Windows service, it automatically starts each time your computer is rebooted. If the Logical Host is set to start manually, you will have to start it each time your computer is rebooted.*

6.3   UNIX Installation of Logical Host

Before deploying a Project created in the Enterprise Designer, you must install a Logical Host. This section provides instructions for downloading and installing the Logical Host from the Repository.

Note: *Before downloading a specific Logical Host for any UNIX platform, that Logical Host must first be uploaded from the "SeeBeyond ICAN Suite Logical Host" CD-ROM to the Repository.*

To install the Logical Host

Use the FTP feature of the Repository to download the Logical Host **.tar** file for a particular UNIX platform.

1 TELNET into the UNIX system and change to the directory where you want to install the Logical Host.

2 Connect to the Repository FTP server by typing: **ftp** *<repository_hostname>* *<ftp_port_number>*

where:

<repository_hostname> is the TCP/IP host name of the server where you installed the Repository—not the name of the Repository itself.

<ftp_port_number> is the base port number that you entered during the installation of the Repository plus **8**. That is, if the base port number is **12000**, then the FTP server port number would be **12008**.

When ready, press **Enter**.

3 Log in using your ICAN administrator username and password.

A At the prompt, type: *<username>* and press **Enter**.

Note: *This is your ICAN administrator username, not your operating system/network username. See the **Readme.txt** file on the root directory of the Repository CD-ROM for the default username.*

B At the prompt, type: *<password>* and press **Enter**.

Note: *This is your ICAN administrator password, not your operating system/network password. See the **Readme.txt** file on the root directory of the Repository CD-ROM for the default password.*

4 Type: **bin** and press **Enter** to enter binary mode, otherwise you will download in ASCII.

5 To browse for the downloadable Logical Hosts, type: **ls** and press **Enter**.

6 To begin the download, type: **get** *<tar-file-name>*

where:

<tar-file-name> is the name of the .**tar** file name that contains the Logical Host that you want to install (for example: **logicalhost-sparc64.tar**).

7 Quit the FTP session by typing: **quit** and then pressing **Enter**.

8 Decompress the **.tar** file by typing: **tar -xvf <*tar-file-name*>**

where:

<***tar-file-name***> is the name of the **.tar** file name that contains the Logical Host that you want to install (for example: **logicalhost-sparc64.tar**).

When ready, press **Enter**. This creates a directory named "logicalhost" inside the directory where the **tar** command was executed.

6.3.1. Modifying the Logical Host Startup Configuration File on a UNIX System

You must set the arguments for the Logical Host in the **logical-host.properties** file. For information on how to modify the startup configuration file, see the *eGate Integrator System Administration Guide*.

6.3.2. Starting the Logical Host on a UNIX System

See "Starting the Logical Host on a UNIX System" in the *eGate Integrator System Administration Guide* for information on starting a Logical Host.

In addition, be aware of the following:

- If you installed the Logical Host on HP Tru64 and the shell is **csh**, you must run the following command *before* starting the Logical Host:

  ```
  unlimit
  ```

- If you installed the Logical Host on HP Tru64 and the shell is **bash**, you must run the following command *before* starting the Logical Host:

  ```
  ulimit -Sd 512000
  ```

Installation Instructions for ESRs

This chapter provides instructions on how to install Emergency Software Releases (ESR s), which are updates that resolve known issues. If you have any questions or problems, see the SeeBeyond Support Web site at **http://www.seebeyond.com** and select **SERVICES** and then **SUPPORT SERVICES**.

This chapter contains

- ▪ **"Overview" on page 61**
- ▪ **"Uploading ESRs to the Repository" on page 62**
    - ◆ **"Installing Enterprise Designer ESRs" on page 63**
    - ◆ **"Installing Logical Host ESRs" on page 68**
- ▪ **"Installing Repository ESRs" on page 70**

7.1 Overview

The Enterprise Designer has an Update Center that allows you to check for ESRs, which are updates that resolve known issues. Currently there are several interfaces that allow you to install ESRs:

- ▪ **Enterprise Designer**
You install ESRs on each computer that has Enterprise Designer installed.

- ▪ **Logical Host**
You install ESRs on each Logical Host within a Project, and must decide which ESRs you want to install on each Logical Host.

Before beginning the installation of ESRs, SeeBeyond recommends that you create a directory to store the ESRs. Also store the Manifest file you used during the initial installation in this directory—as this allows you to easily access the Manifest file when installing ESRs.

The following are packaged with each Enterprise Designer or Logical Host ESR:

- ◆ **ESR<*number*>.sar**
- ◆ **ESR<*number*>Readme.txt**
- ◆ **ProductsManifest.xml** for the ESR

Note: *See* **"Uploading ESRs to the Repository" on page 62** *for instructions on uploading Enterprise Designer and Logical Host ESRs to the Repository, and then see* **"Installing Enterprise Designer ESRs" on page 63** *and* **"Installing Logical Host ESRs" on page 68** *for the specifics on installing the ESRs.*

- ▪ **Repository**
  ESRs you install to fix the Repository problems are **.zip** files (as opposed to **.sar** files) and the installation procedure is different than Enterprise Designer and Logical Host ESR installations.

The following are packaged with each Repository ESR:

- ◆ **ESR<*number*>.zip**
- ◆ **ESR<*number*>Readme.txt**

Note: *See* **"Installing Repository ESRs" on page 70** *for instructions on installing Repository ESRs.*

7.2 Uploading ESRs to the Repository

Before you can install an ESR, you must upload the ESR to the Repository. ESRs are distributed as **.sar** files.

Note: *Only Enterprise Designer and Logical Host ESRs are uploaded to the Repository.*

To upload ESRs to the Repository

1 If your Repository is not running, start it.

2 Start Enterprise Manager by starting Internet Explorer and typing **http://<*hostname*>:<*port_number*>** in the **Address** line

where:

hostname is the TCP/IP host name of the server where you installed the Repository—not the name of the Repository itself.

port_number is the port number that you specified during the installation of the Repository.

Note: *The host name must be valid.*

When ready, press **Enter**.

The **SeeBeyond Customer Login** window of the Enterprise Manager appears (see **Figure 8 on page 40**).

3 Enter your **username** and **password** and click **Login**. See the **Readme.txt** file for the default username and password.

Enterprise Manager appears with the **HOME** tab active.

4 Click the **ADMIN** tab.

5 You must now upload **ProductsManifest.xml**. This file is packaged with the ESR. Click **Browse** to navigate to the directory where you stored **ProductsManifest.xml**, select it, and then click **Open**.

Note: *It is not mandatory that you use the same Manifest file that you received with the ESR or you used when you first installed eInsight ESB (although it can be). You can save a ProductsManifest.xml file to a directory of your choice and then select it as opposed to selecting the ProductsManifest.xml file that came with the ESR or from the "SeeBeyond ICAN Suite Products - Disc 1" CD-ROM.*

6 When the **Manifest File** box shows the **ProductsManifest.xml** file, click **Submit**.

The Admin page now displays a list of all the ICAN products based on the contents of the Products Manifest file.

7 For each ESR that you want to upload, click **Browse** next to any product, navigate to the ESR **.sar** file (for example, **ESR0000001.sar**), and click **Open**.

Important: *Before you can roll back Enterprise Designer ESRs, you must upload a special ESR called BaseESR (**BaseESR.sar**) to the Repository and then install the BaseESR (see **"To install Enterprise Designer ESRs" on page 64**). You only need to upload this file once. The Base ESR is not required for rolling back Logical Host ESRs.*

Figure 22 shows an example of four selected ESRs.

Figure 22 Example of Selected ESRs

8 When finished selecting ESRs, click **upload now**. The ESRs are uploaded.

7.2.1. Installing Enterprise Designer ESRs

This section describes how to install ESRs for Enterprise Designer components, as well as how to view and roll back installed Enterprise Designer ESRs.

Before you can perform the following procedure, you must have uploaded the ESRs to the Repository. See **"Uploading ESRs to the Repository" on page 62**.

Important: *Before you can roll back Enterprise Designer ESRs, you must upload a special ESR called BaseESR (**BaseESR.sar**) to the Repository (see **"To upload ESRs to the Repository" on page 62**) and then install the BaseESR (described in this section).*

You only need to upload this file once. The BaseESR is not required for rolling back Logical Host ESRs.

To install Enterprise Designer ESRs

1 Start Enterprise Designer (see **"Starting Enterprise Designer GUI After Initial Logon" on page 55**).

2 On the **Tools** menu, click **Update Center**. The **Update Center Wizard - Select location of modules** dialog box appears (see Figure 23). Ensure that the **Check the Web for Available Updates and New Modules** option is active. When ready, click **Next**.

Figure 23 Update Center Wizard - Select location of modules
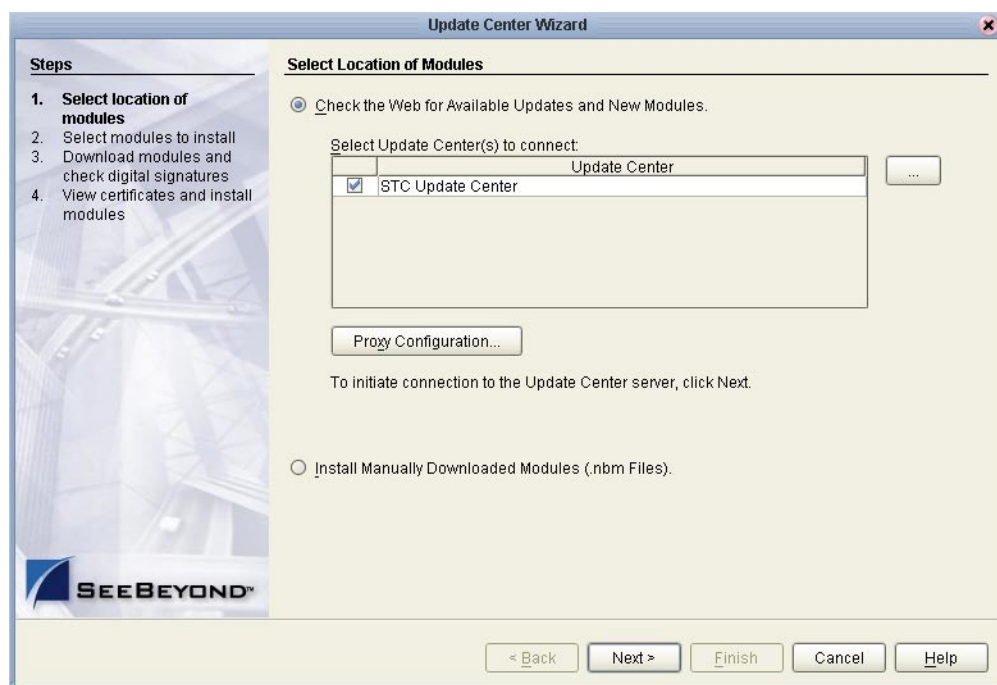
3 The **Update Center Wizard - Select modules to install** dialog box appears (see Figure 24). The available ESRs are listed in the **Available Updates and New Modules** box.

4 You can select an individual ESR by highlighting it and then clicking the single-right-arrow button to move the ESR to the **Include in Install** box. Repeat this procedure to move all the ESRs that you want to install.

or

Click the double-right-arrow button to move all the listed ESRs to the **Include in Install** box.

Figure 24   Update Center Wizard - Select modules to install
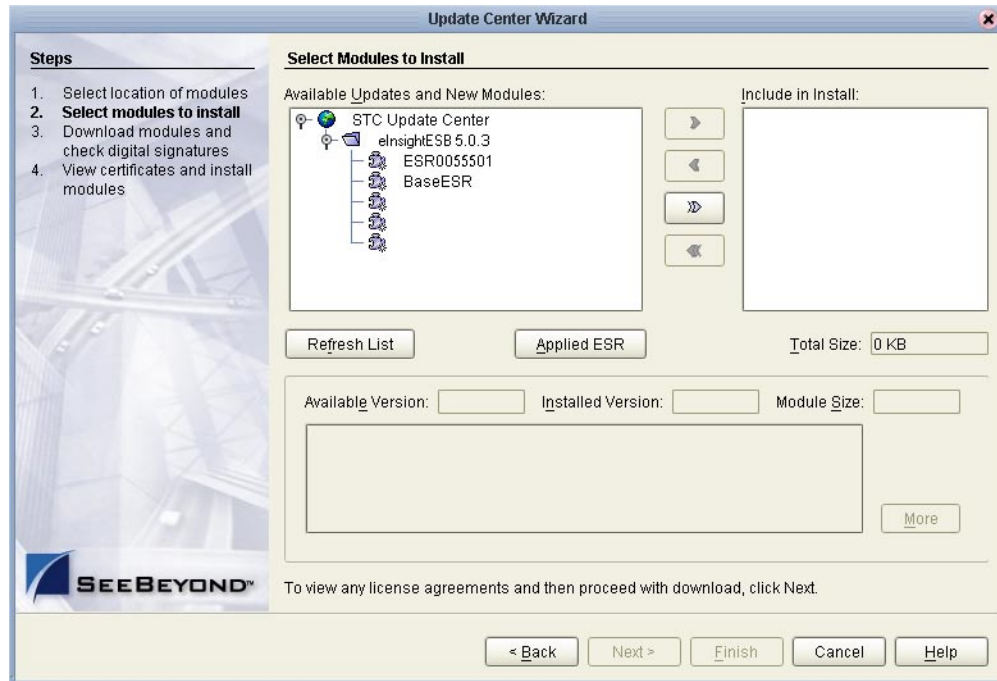
5   If you move an ESR that has dependencies on other ESRs, the other ESRs are automatically moved to the **Include in Install** area.

If you move an ESR that conflicts with another ESR, a message informs you of this situation.

If you move an ESR that supersedes another ESR, a message informs you of this situation.

6   When ready, click **Next**.

7   When the **License Agreement** window appears, click **Accept**.

8   The **Update Center Wizard - Download modules and check digital signatures** dialog box appears (see Figure 25). When the progress bar reaches 100 percent, "Done" appears below the bar. Click **Next**.

Figure 25 Update Center Wizard - Download modules and check digital signatures
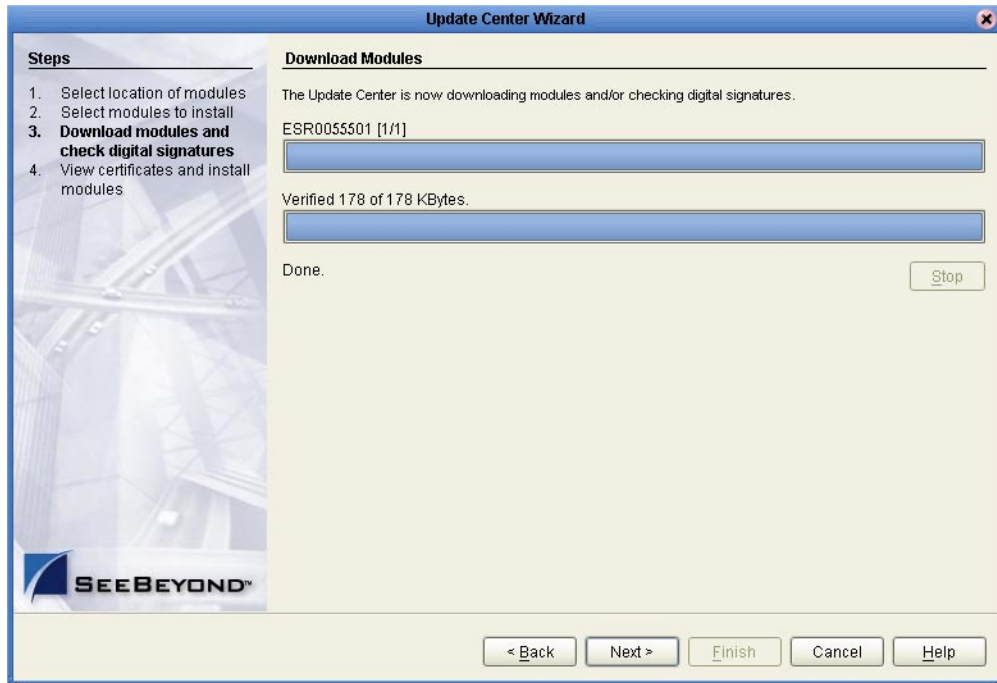
9   The **Update Center Wizard - View certificates and install modules** dialog box
    appears (see Figure 26). "Trusted" means that the file is a sanctioned SeeBeyond file
    and not a rogue file. Click **Finish**.

Figure 26 Update Center Wizard - View certificates and install modules
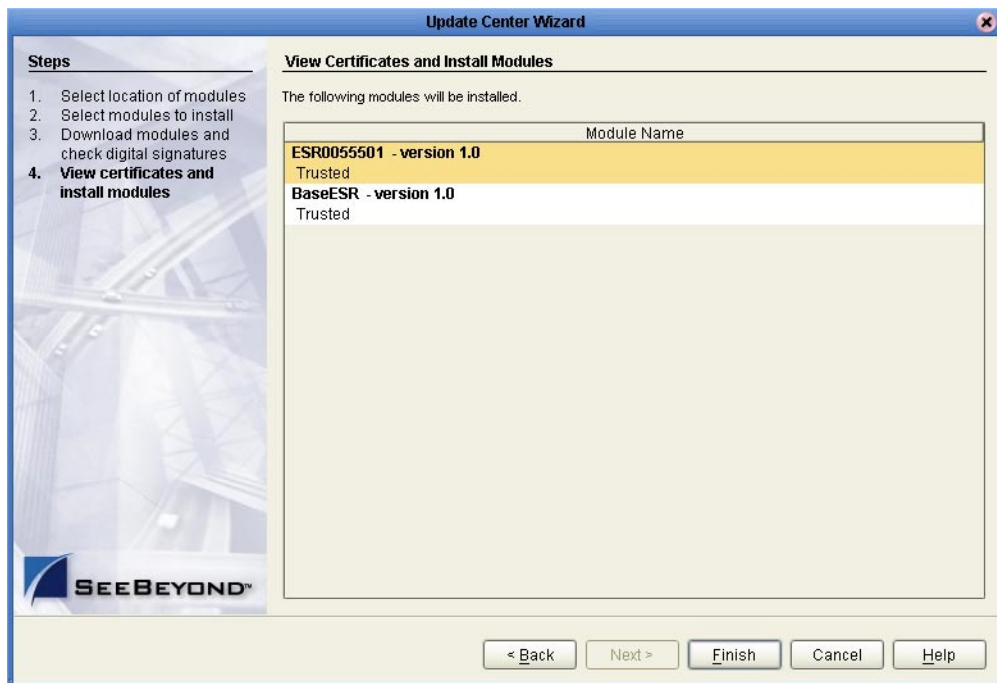
10 The **Restart the IDE** dialog box appears. Make sure that **Restart the IDE** is selected and click **OK**.

11 The Enterprise Designer **Login** dialog box appears (see **Figure 21 on page 55**). Enter your **Login ID** and **Password**, and then click **Login**. The Login ID is the same as the username. Enterprise Designer restarts.

To view and roll back applied Enterprise Designer ESRs

Important: *Before you can roll back Enterprise Designer ESRs, you must upload a special ESR called BaseESR (BaseESR.sar) to the Repository (see "To upload ESRs to the Repository" on page 62) and then install the BaseESR (see "To install Enterprise Designer ESRs" on page 64). You only need to upload this file once. The BaseESR is not required for rolling back Logical Host ESRs.*

1 On the **Tools** menu of Enterprise Designer, click **Update Center**. The **Update Center Wizard - Select location of modules** dialog box appears. Click **Next**.

2 The **Update Center Wizard - Select modules to install** dialog box appears. Click **Applied ESR** (see **Figure 24 on page 65**).

The **Remove Installed ESR** dialog box shows which ESRs have been applied (see Figure 27).

Figure 27 Remove Installed ESR Dialog Box
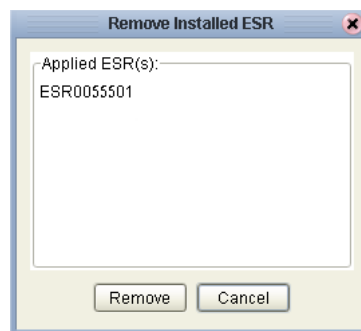
3 If you do not want to roll back ESRs, click **Cancel**.

4 If you do want to roll back ESRs, select the ESRs and click **Remove**.

5 The **Applied ESR(s)** dialog box appears; it lists the ESRs you have marked for removal. Click **OK**.

Note: *If you have not yet installed the BaseESR, an error message appears: "No BaseESR.nbm found. Please upload this file before removing the ESR."*

6 The Enterprise Designer **Login** dialog box appears (see **Figure 21 on page 55**). Enter your **Login ID** and **Password**, and then click **Login**. The Login ID is the same as the username. Enterprise Designer restarts.

7.2.2. Installing Logical Host ESRs

This section describes how to install ESRs for the Logical Host and its components (the Management Agent, SeeBeyond Integration Server, and SeeBeyond JMS IQ Manager), as well as how to roll back installed Logical Host ESRs.

Before you can perform the following procedure, you must have uploaded one or more ESRs to the Repository. See **"Uploading ESRs to the Repository" on page 62**.

To install Logical Host ESRs

1 Start Enterprise Designer (see **"Starting Enterprise Designer GUI After Initial Logon" on page 55**).

2 Click the **Environment Explorer** tab from the Enterprise Explorer.

3 Right-click the Logical Host that you want to update, and then click **ESR Setup**.

The **Logical Host ESR Setup** dialog box appears (see Figure 28). The ESRs that were uploaded to the Repository and that can be applied to this Logical Host appear in the **Available ESR(s)** area.

You can click on an ESR to display a brief description of that ESR. For a detailed description of the ESR, click **Detail Description**.

Note: *If you cannot get to a Logical Host, this is because the Logical Host must first be checked out. Right-click the Logical Host, and then click* **Check Out***. Version control only affects personal Environments; shared Environments will not see your edits until you check them in (see the eGate Integrator for eInsight Enterprise Service Bus User's Guide).*

Figure 28 Logical Host ESR Setup
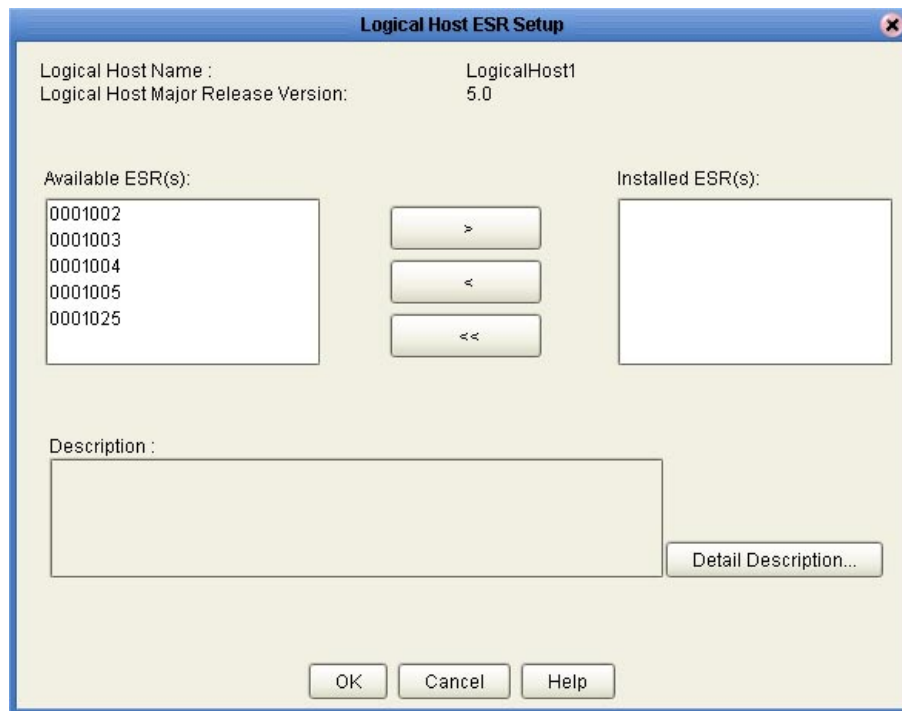
4   Move the ESRs that you want to install from the **Available ESR(s)** area to the **Installed ESR(s)** area. Only one ESR at a time can be moved.

5   If you move an ESR that has dependencies on other ESRs, the other ESRs are automatically moved to the **Installed ESR(s)** area.

    If you move an ESR that conflicts with another ESR, a message informs you of this situation and suggests that you remove the other ESR.

    If you move an ESR that supersedes another ESR, a message informs you of this situation and suggests that you remove the other ESR.

6   Click **OK**.

7   The ESRs will take effect when you reactivate the Deployment Profile or rerun the Logical Host bootstrap script.

    or

    Apply the selected ESR(s) immediately by right-clicking the Logical Host and selecting **Apply**.

Note: *The Logical Host must be running to apply the selected ESR(s) immediately.*

To roll back applied Logical Host ESRs

1   Right-click the Logical Host that you want to update, and then click **ESR Setup**.

    The **Logical Host ESR Setup** dialog box appears.

2   Move the ESRs that you want to roll back from the **Installed ESR(s)** area to the **Available ESR(s)** area.

3   Click **OK**.

4   The rollback will take effect when you reactivate the Deployment Profile or rerun the Logical Host bootstrap script.

or

Roll back the selected ESR(s) immediately by right-clicking the Logical Host and selecting **Apply**.

Note: *The Logical Host must be running to roll back the selected ESR(s) immediately.*

7.3   Installing Repository ESRs

Repository ESRs are delivered as **.zip** files and they are installed manually.

To manually install Repository ESRs

1   Shut down the Repository.

2   Make a backup of the logs/**repository.log** file.

3   Copy the ESR **.zip** file (for example **ESR57119.zip**) to the ESRs directory.

4   Open a Command prompt (or Terminal window in UNIX) and run **ESRInstall <ESR_number>**

where:

<ESR_number> is the number of the ESR you want to apply (for example: **57119**).

The ESR is applied.

To ensure Repository ESRs are applied

1   Restart the Repository.

2   Connect to the Repository using Enterprise Designer.

3   Shut down the Repository.

4   Open a Command prompt (or Terminal window in UNIX), navigate to your ESRs directory, and type: **InstalledESR.txt**.

You will see a list of your applied ESRs (for example: **ESR57119**).

To roll back applied Repository ESRs

1   Open a Command window and navigate to the ESRs folder.

2   To roll back the last applied ESR, run **ESRRollback**.

Note: *Before doing a roll back you might want to back up the logs/**repository.log** file for verification purposes.*

3   Restart the Repository and connect to it using Enterprise Designer.

Upgrading from 5.0.x to 5.0.3

This chapter describes how to update your 5.0.x ICAN Repository to version 5.0.3. If you have any questions or problems, see the SeeBeyond Support Web site at **http://www.seebeyond.com** and select **SERVICES** and then **SUPPORT SERVICES**.

This chapter contains

- **"Overview" on page 71**
- **"Upgrading the Repository from 5.0.1 or 5.0.2 to 5.0.3" on page 71**
- **"Migrating Projects from 5.0.0 to 5.0.1" on page 73**

8.1 Overview

Upgrading 5.0.1 or 5.0.2 to 5.0.3

Upgrading from 5.0.1 or 5.0.2 to 5.0.3 does not require using the ICAN 5.0 Migration utility. For complete upgrade instructions, see **"Upgrading the Repository from 5.0.1 or 5.0.2 to 5.0.3" on page 71**.

Upgrading 5.0.0 to 5.0.3

Before you can upgrade from version 5.0.0 to 5.0.3, you must first migrate to version 5.0.1, and then follow the procedure for upgrading from 5.0.1 to 5.0.3. The ICAN 5.0 Migration utility creates an archive file that can be restored into a newly-installed 5.0.1 Repository. For complete upgrade instructions, see **"Migrating Projects from 5.0.0 to 5.0.1" on page 73**.

8.2 Upgrading the Repository from 5.0.1 or 5.0.2 to 5.0.3

Upgrading your ICAN Repository from version 5.0.1 or 5.0.2 to version 5.0.3 involves backing up your 5.0.1 or 5.0.2 Projects and installing the desired 5.0.3 ICAN product files in the same directory where your 5.0.1 or 5.0.2 Repository is installed.

To prepare for the upgrade from 5.0.1 or 5.0.2 to 5.0.3

1 Check in all 5.0.1 or 5.0.2 objects before upgrading in the same directory.

Note: *See the **eGate Integrator for eInsight Enterprise Service Bus User's Guide** for information about checking in objects.*

2   Back up your 5.0.1 or 5.0.2 ICAN Projects by exporting them. This is just a precaution in case something happens and you have to re-import them.

Note: *See the **e*Gate Integrator for eInsight Enterprise Service Bus User's Guide** for details on exporting.*

3   Before upgrading, perform the following:

   ◆ **Shut down**

      ◆ Enterprise Designer

      ◆ Logical Host

      ◆ Repository

   ◆ **Delete**

      ◆ **deploymentSnapshot.xml** in the **\logicalhost** directory (This is only necessary if you are installing the new Logical Host in the same location as the old Logical Host. The deletion must be done before you bootstrap.)

      ◆ **usrdir** directory under **\edesigner** (You must delete or rename **usrdir** to see updated settings for components that were previously installed before upgrading. If you do not delete this directory or change its name, you will see the settings for newly installed components, but you will not see the new settings for upgraded components.)

   ◆ **Save**

      ◆ **logical-host.properties** file in the **logicalhost\bootstrap\config** directory (If you do not save the **logical-host.properties** file, after you finish upgrading, the next time you bootstrap you will need to retype the Logical Host options. See the *eGate Integrator System Administration Guide* for information on the properties options.)

To install ICAN 5.0.3

1   Follow the steps in **Chapter 3 "Installation Instructions for Repository" on page 25** to install the new Repository on top of the old Repository.

Note: *Install ICAN 5.0.3 to the same location where ICAN 5.0.1 or 5.0.2 is installed.*

2   Start the Repository.

3   Start Enterprise Manager and follow the steps in **Chapter 4 "Installation Instructions for Uploading Files to the Repository" on page 38** to submit **ProductsManifest.xml**, **license.sar** (if new components are being installed), and **eInsightESB.sar**, and upload the necessary 5.0.3 product **.sar** files and accompanying documentation.

Note: *The **.sar** files that were previously uploaded will still be listed in the **ADMIN** tab after the Repository has been upgraded.*

4 Download and install the new Enterprise Designer on top of the old Enterprise Designer, and then start Enterprise Designer, download the modules, check the digital signatures, and install the modules using the Update Center Wizard in Enterprise Designer. For complete instructions, see **Chapter 5 "Installation Instructions for Enterprise Designer" on page 47**.

5 Follow the steps in **Chapter 6 "Installation Instructions for Logical Host" on page 57** to install the new Logical Host on top of the old Logical Host (which saves your data in the old Logical Host) or install the new Logical Host in a different location than the old Logical Host.

6 If you retained your old Logical Host run bootstrap for the Logical Host after returning the **logical-host.properties** file to the **logicalhost\bootstrap\config** directory or entering the Logical Host properties options at a command prompt.

To upgrade other ICAN products

If you are not upgrading your core product but only single or few components, such as eInsight or an eWay, perform the following:

1 Remove the **usrdir** subdirectory under **\edesigner**.

2 In Enterprise Manager upload the new **.sar** file(s).

3 In Enterprise Designer run **Update Center.**

8.3 Migrating Projects from 5.0.0 to 5.0.1

Migrating your ICAN Projects from version 5.0.0 to version 5.0.1 involves installing ICAN 5.0.1, installing all of the desired product files, exporting the 5.0.0 Projects to an archive file, and importing the archive file into the 5.0.1 Repository.

Note: *The **Migration ToolReadme.txt** file is located in the **Utilities** directory on both of the version 5.0.1 Repository installation discs ("SeeBeyond ICAN Suite Repository Disc 1 for Windows/Solaris/AIX/Linux" and "SeeBeyond ICAN Suite Repository Disc 2 for HP-UX/Tru64"), as are the **MigrationTool.zip** and **MigrationTool.tar** files.*

To install ICAN 5.0.1

▪ Follow the steps in Chapter 3, "Installation Instructions for Repository," in the 5.0.1 **ICAN_Install_Guide.pdf** file to install ICAN 5.0.1 to a *different* location than where ICAN 5.0.0 is installed.

Note: *Do not install ICAN 5.0.1 to the same location where ICAN 5.0.0 is installed.*

To install the 5.0.1 product .sar files

1   Refer to the **Admin** page in the Enterprise Manager to determine which product **.sar** files have been installed in the 5.0.0 Repository.

2   Follow the steps in Chapter 4, "Installation Instructions for Uploading Files to the Repository," in the 5.0.1 **ICAN_Install_Guide.pdf** file to upload the necessary product **.sar** files.

3   Do not create any Projects in this 5.0.1 Repository until after importing the archive file as described in the "import" **procedure on page 75**.

To create the 5.0.0 Projects archive file

1   Before creating the Projects archive file, ensure that the 5.0.0 Repository server is running. If the Repository server is not running, follow the instructions in Chapter 4, "Installation Instructions for Uploading Files to the Repository," in the 5.0.1 **ICAN_Install_Guide.pdf** file to start the Repository server.

2   Create the following environment variable to be used by the ICAN 5.0 Migration utility:

    JAVA_HOME=***ICAN_INSTALL_DIR***/repository/jre/***<version>***

where:

ICAN_INSTALL_DIR is the location of your ICAN installation.

<version> is the version of the JRE your operating system uses (most likely 1.4.2).

Consult the documentation for your operating system for instructions on creating an environment variable.

Note: *This environment variable is used by the export and import processes. You can remove the environment variable after you have finished the import and export processes.*

3   Shut down all Logical Hosts for all of the 5.0.0 Projects.

4   With the Repository server running, type the following command to create the export file:

    export ***repository_url user_ID password file_name***

where

repository_url is the root URL for the 5.0.0 Repository where the Projects to be exported are located,

user_ID is the user ID used for accessing the Repository (must have Administrator privileges),

password is the password used for accessing the Repository, and

file_name is the name of the export file to be created.

After creating the export file, you can optionally shut down the 5.0.0 Repository server to prevent users from attempting to connect to the old Repository.

Note: *Make sure that all objects are checked in before creating an export.*

To import the archive file into the 5.0.1 Repository

1 Follow the instructions in Chapter 4, "Installation Instructions for Uploading Files to the Repository," in the 5.0.1 **ICAN_Install_Guide.pdf** file to start the 5.0.1 Repository server.

2 With the Repository server running, type the following command to import the archive file into the 5.0.1 Repository:

```
import repository_url user_ID password path_file_name
```

where

repository_url is the root URL for the 5.0.1 Repository to where the archive file is to be imported,

user_ID is the user ID used for accessing the Repository (must have Administrator privileges),

password is the password used for accessing the Repository, and

path_file_name is the name of the archive file that contains the 5.0.0 Repository information, including the directory path.

Note: *The 5.0.1 Repository must not contain any Projects or user-created data before importing the archive file.*

Post migration steps

1 From the Enterprise Manager, download and install the Enterprise Designer. For complete instructions, see Chapter 5, "Installation Instructions for Enterprise Designer," in the 5.0.1 **ICAN_Install_Guide.pdf** file.

2 In the Enterprise Designer, re-create the following items:

- Environments
- Deployment Profiles
- Logical Hosts

3 You can optionally delete the ICAN 5.0.0 installation.

4 To upgrade to 5.0.3, follow the steps in **"Upgrading the Repository from 5.0.1 or 5.0.2 to 5.0.3" on page 71**.

Troubleshooting

This chapter describes issues that may arise during the installation process and provides tips and solutions to resolve these issues. If you have any questions or problems, see the SeeBeyond Support Web site at **http://www.seebeyond.com** and select **SERVICES** and then **SUPPORT SERVICES**.

This chapter contains

9.1 ICAN Suite Product Dependencies

ICAN Suite products have dependencies, and you must install these dependencies before attempting to upload the **.sar** file for a particular product. This includes installing and running a Repository where you intend to upload the product files. If there are prerequisite **.sar** files, these files must be uploaded to the Repository before attempting to upload the product **.sar** file.

Important: *See the ICAN Suite product documentation for dependencies specific to a particular product.*

9.2 Repository Installation

9.2.1 Naming the Repository

Do not name your Repository: **repository** (all lower case) as this can cause a problem wherein you cannot connect to the bootstrap (even when you use the correct case for the URL).

9.3 Uploading Files in Enterprise Manager

9.3.1. Improving Upload Performance

To improve the upload performance when uploading product **.sar** files to the Repository, see Microsoft Knowledge Base article 329781. Increasing the buffer size to 64 KB will improve the speed of uploading files to the Repository via Internet Explorer.

9.3.2. Problem Uploading .sar Files

If you experience a problem uploading ICAN Suite **.sar** files, it is because you are using a limited version of the ICAN Suite. Contact SeeBeyond Support.

9.3.3. Adding a New License File

If, after first installing ICAN products, you purchase additional products, you must upload a new **license.sar** file prior to installing the products. Use the **ProductsManifest.xml** that is sent with the new **license.sar** file, as this makes the **License File** box available to upload the new license. For details on uploading files, see **"To upload products to the Repository" on page 40**.

9.4 Downloading in Enterprise Manager

9.4.1. Enterprise Designer and Logical Host - win32 Links

Problem

After clicking the **DOWNLOADS** tab in Enterprise Manager, the **Enterprise Designer** and **Logical Host - win32** links are visible. However, when you click on one of the links to open the **.zip** file in WinZip and extract the files, 0 files are available to extract.

Reason

The files have already been extracted. To ensure that this is true, navigate to the appropriate directory, for example:

> **<c:\ican503>\edesigner**

or

> **<c:\ican503>\repository\data\files\InstallManager\logicalhost\downloadables**

Check the directory to confirm that the appropriate files are present. For Enterprise Designer, you will see a number of populated subdirectories; for Logical Host, you will see a number of files.

If the files have not been extracted, you will see the **.zip** file in the directory (for example: **logicalhost-win32.zip**). Extract the files from the **.zip** file.

9.5 Adobe SVG Viewer 3.0 Plug-in for Windows

9.5.1. Enterprise Manager Recognition of Adobe SVG Viewer Plug-in

During startup, Enterprise Manager detects if the Adobe SVG Viewer plug-in is present on your system. If the SVG Viewer plug-in is not present, Enterprise Manager automatically displays a JPEG version of the Connectivity Map, which includes the following monitoring functions:

- View status of components
- Start and stop "stoppable" components
- View details of a component

9.5.2. EnterpriseManagerPlugin-Win98ToXP.sar File

The **EnterpriseManagerPlugin-Win98ToXP.sar** file is not required for viewing Connectivity Maps in Enterprise Manager. However, installing this **.sar** file enhances the Connectivity Map's capabilities by adding features such as:

- Zoom (in, out)
- Fit (all, width, height)
- Return to "Original View" after zooming
- Select "Higher Quality" image
- Find (search for an object within a Connectivity Map)

The **.sar** file is located on the "SeeBeyond ICAN Suite Products - Disc 1" and "SeeBeyond ICAN Suite Products - Disc 1 eInsight ESB" CD-ROMs.

Note: *To successfully install the Adobe SVG Viewer, you need Administrator privileges on the local profile on the local computer.*

9.5.3. Adobe SVG Viewer Plug-in Problem

Some Windows machines, if they have "orphan" files left behind from a previous installation of SVG that is unknown to the Windows Registry, are unable to install the Adobe SVG Viewer 3.0 plug-in via the normal Enterprise Manager download procedure. This component is required for viewing certain graphics over the Web, using the ICAN Monitor. The problem manifests itself by displaying an error dialog resembling the following:

```
Setup Details

Registry error:
    The system cannot find the file specified.
    <filename> [...]
File Error: Remove file
    C:\WINNT\system32\Adobe\SVGInstallTemp\SVG3.reg
Merge registry file:
```

```
C:\WINNT\TEMP\SVGInstallTemp\SVG3.reg
```

This problem is known to Adobe, and a discussion of it can be found within the **www.adobe.com** Web site. Click **Search**, then click the link to **User to User Forums**, and then search on the thread "SVG Viewer Installation problems."

If this problem occurs, take the following steps

1 Leave the error message dialog box open and copy the entire extracted folder:

```
c:\WINNT\TEMP\SVGInstallTemp
```

as listed above to a new location.

2 Exit the installer by closing the open dialog boxes.

3 In the new location, edit the file **Setup.inf** to comment out the **SVG3.ref** entry by making the following change.

Change the line:

```
SVG3.reg=%SourceDir%
```

To (notice the added semicolon):

```
;SVG3.reg=%SourceDir%
```

4 Save your changes and exit the editor.

5 In this same location, run **winstall.exe**.

The plug-in should now install correctly.

9.6   Configuring SSL and HTTPS Support

Secure Socket Layer (SSL) is a technology that allows Web browsers and Web servers to communicate over a secured connection. The HTTPS service of the ICAN Repository server will not run unless a server certificate has been installed. For more information about using SSL and HTTPS in ICAN, see the .

To install and configure SSL support, perform the following steps:

1 Generate a key pair and a self-signed signature.

2 Obtain a digitally signed certificate from a Certificate Authority (a self-signed certificate will also work).

3 Import/install the certificate.

4 Configure the **server.xml** file.

5 Test the new SSL connection.

The following procedures use the **keytool** utility.

To generate a key pair and a self-signed signature

1 From the command prompt, enter the following:

```
JAVA_HOME\bin\keytool -genkey -keyalg RSA -alias ICAN -keystore
    keystore_filename
```

where, for example:

```
keystore_filename =
    ICAN_HOME\repository\server\conf\ssl\mykeystore
```

2   Enter your keystore password (for example, **seebeyond**).

3   The **keytool** program will ask a series of questions, such as the following. Provide the appropriate answers.

   A   What is your first and last name?

   B   What is the name of your organizational unit?

   C   What is the name of your organization?

   D   What is the name of your City or Locality?

   E   What is the name of your State or Province?

   F   What is the two-letter country code for this unit?

   G   Is CN=*first_and_last_name*, OU=*organizational_unit*, O=*organization_name*, L=*city_or_locality*, ST=*state_or_province*, C=*two_letter_country_code* correct?

4   Enter key password for *ICAN*: (RETURN, if same as keystore password)

Note: *The example used the following name for the keystore file to be generated: **ICAN-root\repository\server\conf\ssl\mykeystore**. You can use this name or another name, as long as you use the same name throughout the configuration process.*

To obtain a digitally signed certificate from a Certificate Authority

1   From the command prompt, enter the following to generate a Certificate Signing Request (CSR):

```
JAVA_HOME\bin\keytool -certreq -alias ICAN -keyalg RSA -file
    csr_filename -keystore keystore_filename
```

2   Send the CSR for signing.

   For example, if you are using the Verisign CA, go to **http://digitalid.verisign.com/**. Verisign will send the signed certificate via e-mail.

3   Store the signed certificate in a file.

Note: *You can skip the following step if you are using only the self-signed certificate. If you are using a self-signed certificate or a certificate signed by a CA that your browser does not recognize, a dialog will be triggered the first time you try to access the server. You can then choose to trust the certificate for this session only, or permanently.*

To import the certificate

From the command prompt, enter the following to install the CA certificate:

```
JAVA_HOME\bin\keytool -import -trustcacerts -alias ICAN -file ca-
    cert-filename -keystore keystore_filename
```

Note: *You must have the required permissions to modify the*
JAVA_HOME\jre\lib\security\cacerts file.

To configure the server.xml file

1 If the ICAN Repository server is running, shut it down.

2 Using a text editor, open the **server.xml** file in the
   ICAN_HOME/**repository/server/conf** directory.

3 Locate the **<Connector>** element within the **<Service>** element.

4 Comment out the **<Connector>** element.

5 Add the following **<Connector>** element:

```
<!--  Define an SSL Coyote HTTP/1.1 Connector on port 8443  -->
<Connector className="org.apache.coyote.tomcat4.CoyoteConnector"
   port="8443" minProcessors="5" maxProcessors="75"
   enableLookups="true"
   acceptCount="100" debug="0" scheme="https" secure="true"
   useURIValidationHack="false" disableUploadTimeout="true">
<Factory
   className="org.apache.coyote.tomcat4.CoyoteServerSocketFactory"
   clientAuth="false" protocol="TLS"
   keystoreFile="sbyn.keystore" keystorePass="changeit" />
</Connector>
```

6 Save and close the file.

7 Start the ICAN Repository server.

To test the new SSL connection

1 For testing purposes, and to verify that SSL support has been correctly installed on
   the ICAN Repository server, load the default ICAN Repository server introduction
   page with the following URL:

   ```
   https://localhost:8443/
   ```

   The *https* in this URL indicates that the browser should be using the SSL protocol.
   The port 8443 is where the SSL Connector was created in the previous step.

2 The first time you load this application, the New Site Certificate dialog displays.
   Select **Next** to move through the series of New Site Certificate dialogs, and select
   Finish when you reach the last dialog.

Important: *You should still have the option to use HTTP to connect to Enterprise Designer.*
*System administrators should **not** block the HTTP port.*

UNIX Patches

This appendix lists the required and certified UNIX patches for eInsight ESB 5.0.3.

A.1 HP Tru64 UNIX V5.1A Patches

SeeBeyond has tested the system against the following patches:

- **"Certified HP Tru64 UNIX V5.1A Patches" on page 82**

Even though applications that are developed using the HP C++ compiler are shipped with the Tru64 UNIX operating system, they must be updated. This is because they require functionality that is provided in the C++ Run-Time Library, and newer versions of the run-time library are released with each new version of the compiler. These updates of the libraries provide bug fixes and support for new features in the compiler, and must be installed on Tru64.

If you do not have a compiler installed, SeeBeyond recommends that you download and install the correct libraries for your system from the following location:

> **ftp://ftp.compaq.com/pub/products/C-CXX/tru64/**

Note: A specialized FTP browser is required to access an FTP site from this document.

Certified HP Tru64 UNIX V5.1A Patches

There is one certified patch for HP Tru64 UNIX V5.1A:

- `T64V51AB24AS0006-20031031`

Note: There is a known threading problem with HP Tru64 UNIX V5.1A, in which you may occasionally see components hang. HP is currently working on the problem. If you encounter this problem, contact HP (problem reference number: NA020731023095).

For HP Tru64 UNIX V5.1A patches only

After installing the patches for HP Tru64 UNIX V5.1A, reconfigure the memory allocation from immediate to deferred mode by performing the following:

```
/etc/sysconfigtab

vm:
    vm-swap-eager=0
```

Note: *HP Tru64 UNIX used to be called Compaq Tru64 UNIX.*

A.2 HP-UX System Parameter Changes

If you are installing eInsight ESB on an HP-UX 11.0 or an HP-UX 11i system (see Table 12), make the following changes to system parameters:

Table 12   eInsight ESB Values on an HP-UX 11 System

Parameter	Value
semmni	1024
semmns	16384
semmnu	2048
semume	256
shmmni	1024
shmseg	1024

Note: *Services installed are not autostarted on system boot for non-root users. Startup scripts for services installed will be stored in a directory **rc3.d** under your home directory. It is not recommended to run as root.*

A.2.1 HP-UX Operating System Patches

If you encounter a problem with an HP-UX OS patch while installing eInsight ESB, remove the following HP-UX patch:

PHNE_22397   (cumulative ARPA Transport patch)

and replace it with **PHNE_21767**.

Caution: *If you do not have a problem with the installation of the patches, do not replace the above patch.*

A.3   **HP-UX 11.0 Patches**

Table 13 lists the certified patches for HP-UX 11.0.

Table 13   Certified HP-UX 11.0 Patches

Patch	Version	Explanation
HWE1100	B.11.00.0209.5	Hardware Enablement Patches for HP-UX 11.00, September 2003
QPK1100	B.11.00.60.4	Quality Pack for HP-UX 11.00, September 2003
JDK 1.4	PHCO_23117, PHCO_23651, PHCO_24189, PHCO_26017, PHCO_26089, PHCO_26111, PHCO_27375, PHCO_28425, PHCO_29108, PHKL_18543, PHKL_20016, PHKL_23409, PHKL_24064, PHKL_25613, PHKL_27207, PHKL_27813, PHKL_27980, PHKL_28172 PHKL_28180, PHNE_27651 PHNE_27821, PHNE_28102, PHNE_28538, PHSS_26495, PHSS_26559, PHSS_26637, PHSS_26945, PHSS_27869, PHSS_28368, PHSS_28469, PHSS_28874	Patches with corresponding pre-requisites

For the HP-UX 11 Java patches, go to the following URL:

http://www.hp.com/products1/unix/java/infolibrary/patches.html

A.4   **HP-UX 11i Patches**

Table 14 lists the certified patches for HP-UX 11i.

Table 14   Certified HP-UX 11i Patches

Patch	Version	Explanation
GOLDAPPS11i	B.11.11.0312.4	Gold Applications Patches for HP-UX 11i, December 2003
GOLDBASE11i	B.11.11.0312.4	Gold Base Patches for HP-UX 11i, December 2003
HWEnable11i	B.11.11.0312.4	Hardware Enablement Patches for HP-UX 11i, December 2003

Table 14 Certified HP-UX 11i Patches

Patch	Version	Explanation
JDK 1.4	PHCO_24402, PHCO_27740, PHCO_27958, PHCO_29109, PHKL_25233, PHKL_25468 PHKL_25871, PHKL_25993, PHKL_25994, PHKL_27091, PHKL_27094, PHKL_27096, PHKL_27316, PHKL_27317, PHKL_27686, PHKL_28122, PHNE_28089, PHNE_28103, PHNE_28476, PHSS_26560, PHSS_26971, PHSS_26973, PHSS_26975, PHSS_26977, PHSS_28370, PHSS_28470	Patches with corresponding pre-requisites

For the HP-UX 11i Java patches, go to the following URL:

http://www.hp.com/products1/unix/java/infolibrary/patches.html

A.5 IBM AIX 5.1L and 5.2 Patches

The following patches are certified patches for AIX:

Certified AIX 5.1L Patches

There is one certified patch for AIX 5.1L:

```
5100-05_AIX_ML (Maintenance Level 5)
```

Certified AIX 5.2 Patches

There is one certified patch for AIX 5.2:

```
5200-02_AIX_ML (Maintenance Level 2)
```

A.6 Red Hat Linux Patches

Certified Red Hat Enterprise Linux AS 2.1 Patches

There is one certified patch for Red Hat AS 2.1:

```
2.4.9-e.16smp
```

Certified Red Hat Linux 8 Patches

There is one certified patch for Red Hat Linux 8:

```
2.4.20-20.8
```

A.7 Solaris 8 and 9 Patches

nscd must be running on Solaris to install eInsight ESB successfully

Solaris must have **nscd** running. If it is not running, the default Project fails to import properly during installation, and eInsight ESB cannot be installed.

Required Solaris Patches

Solaris 8 requires the following patch before eInsight ESB can be installed. If the patch is not installed, the setup program will detect it.

```
108435-13
```

This patch is available from Sun, either from a current operating system CD-ROM or downloaded from:

> **http://sunsolve.sun.com**

Certified Solaris 8 and 9 Patches

There are two certified patches for Solaris 8 and 9:

```
Solaris 8 Maintenance Update 7 2-2002
Solaris 9 Maintenance Update 3 4-2003
```

A complete list of the patches included in these Clusters is available from SeeBeyond Support.

Note: *These patches are recommended but not required.*

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