

SeeBeyond ICAN Suite

eGate Integrator Release Notes

Release 5.0.5



The information contained in this document is subject to change and is updated periodically to reflect changes to the applicable software. Although every effort has been made to ensure the accuracy of this document, SeeBeyond Technology Corporation (SeeBeyond) assumes no responsibility for any errors that may appear herein. The software described in this document is furnished under a License Agreement and may be used or copied only in accordance with the terms of such License Agreement. Printing, copying, or reproducing this document in any fashion is prohibited except in accordance with the License Agreement. The contents of this document are designated as being confidential and proprietary; are considered to be trade secrets of SeeBeyond; and may be used only in accordance with the License Agreement, as protected and enforceable by law. SeeBeyond assumes no responsibility for the use or reliability of its software on platforms that are not supported by SeeBeyond.

SeeBeyond, e*Gate, e*Way, and e*Xchange are the registered trademarks of SeeBeyond Technology Corporation in the United States and/or select foreign countries. The SeeBeyond logo, SeeBeyond Integrated Composite Application Network Suite, eGate, eWay, eInsight, eVision, eXchange, eView, eIndex, eTL, ePortal, eBAM, and e*Insight are trademarks of SeeBeyond Technology Corporation. The absence of a trademark from this list does not constitute a waiver of SeeBeyond Technology Corporation's intellectual property rights concerning that trademark. This document may contain references to other company, brand, and product names. These company, brand, and product names are used herein for identification purposes only and may be the trademarks of their respective owners.

© 2004 SeeBeyond Technology Corporation. All Rights Reserved. This work is protected as an unpublished work under the copyright laws.

This work is confidential and proprietary information of SeeBeyond and must be maintained in strict confidence.

Version 20041117151828.

Contents

Chapter 1

Introduction	4
SeeBeyond Web Site	4

Chapter 2

eGate Integrator	5
Overview of Architecture and Features	5
Enterprise Designer GUI	6
Enterprise Explorer (Tree)	6
Project Editor (Canvas)	7
Repository	7
Web-Based Installation, Management, and Monitoring	8
J2EE Architecture	9
SeeBeyond Integration Server	9
SeeBeyond JMS IQ Manager and Message Servers	9
Supported Operating Systems	10

Chapter 3

What's New in This Release	11
Architecture and Compatibility	11
Repository	11
Enterprise Designer	12
Logical Host	14
Documentation	14

Introduction

This document summarizes new features and changes to the SeeBeyond® eGate Integrator (eGate) application.

Note: eGate is one of the products of the SeeBeyond Integrated Composite Application Network (ICAN) Suite™.

1.1 SeeBeyond Web Site

The SeeBeyond Web site is your best source for up-to-the-minute product news, technical support information, and education services. Visit the site online at:

<http://www.seebeyond.com>

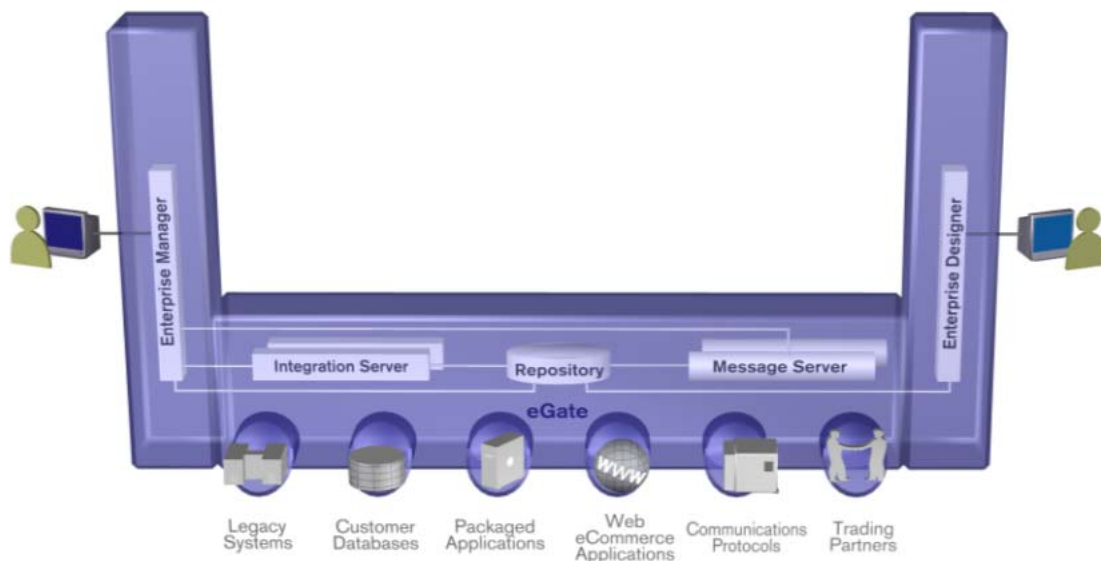
eGate Integrator

This chapter discusses features in eGate Integrator 5.0, compared to previous versions of e*Gate. For features added at 5.0.5, see [“What’s New in This Release” on page 11](#).

2.1 Overview of Architecture and Features

eGate is a J2EE-compliant integration platform supporting all other products in the 5.0.x ICAN suite. The framework GUIs—Enterprise Designer for design time and Enterprise Manager for Web-based installation, management, and monitoring—ensure a unified look and feel across all editors in the suite, with a single sign-on process for access to any product. See Figure 1.

Figure 1 eGate Integration Platform Providing Framework GUIs



Processes for installation, updating, and documentation take maximum advantage of the Repository and the management framework. At design time, projects are made more maintainable by separating views of logical components from views of the physical environment—the Project Explorer view and the Environment Explorer view. Efficiency is improved by making Collaborations easier to scale up or down.

The management and monitoring facilities are now architected as servlet plug-ins to a common framework, providing the capability of browser-based monitoring of all products in the suite. The base Monitor facility supplied with eGate itself allows you to view past, cumulative, or real-time activities from either a project viewpoint (logical business units) or an environment standpoint (physical run-time components).

The run-time environment, which is J2EE-compliant and certified, features high performance and dynamic scalability. The architecture uses EJB (Enterprise Java Beans) with JMS (Java Message Service) and JNDI (Java Naming and Directory Interface). Using JCA (Java Connector Architecture), configurations are deployable to J2EE-compliant implementations, such as WebLogic 8.1 and WebSphere 5.

2.2 Enterprise Designer GUI

The successor to 4.5's Enterprise Manager, Enterprise Designer is the graphical user interface (GUI) used to create and configure the logical components and physical resources of an eGate Project. The components in a Project are then used at run time to process, route, and transform data through the eGate Integrator system.

The Enterprise Designer GUI window is composed of the main menu bar, main toolbar, Enterprise Explorer window (tree), and Project Editor window (canvas).

2.2.1 Enterprise Explorer (Tree)

The **Enterprise Explorer** includes tabs that provide different views of an eGate system. The **Projects** view organizes components into a tree similar to the Windows Explorer. The **Environments** view shows Logical Host, server, and external system information.

- **Projects** are collections of logical components working together to solve some or all of a business problem. Some of the types of logical components displayed in the tree in the **Project Explorer** include: the Repository; subprojects; Connectivity Maps; Deployment Profiles; project variables/constants; Collaboration Definitions; Object Type Definitions; and External Applications.
- **Environments** are collections of physical resources, such as Logical Hosts and External Systems, that are configured to host Project components. Configuration information about these components are stored in the Environment.
 - ♦ An **External System** is a representation of a real external system that exists in an Environment. Its configuration parameters provide information for locating/accessing that system.
 - ♦ A **Logical Host** is one instance of eGate installed on one computer. Each Logical Host is defined by a directory structure, software version, and ESR history, and typically host such resources as integration servers and message servers.

Documentation Resource

For more information about the Enterprise Designer, Projects, and Environments, see the *eGate Integrator User's Guide*. For information on individual External Systems, see the User's Guide for the corresponding eWay.

2.2.2 Project Editor (Canvas)

The **Project Editor** displays details about the item selected in the **Enterprise Explorer** pane. Empty at the start of a new Project, this pane displays editors that operate on the Project's components. Each editor has its own tool palette, and makes extensive use of graphical conventions such as drag-and-drop to use an instance from the tree or to connect two components together.

The following editors display in the Project Editor:

- The **Connectivity Map** contains business logic components of a Project, organized into service invocations, external system representations, and eWays and topics/queues that connect them and contain configuration information. The graphical interface makes it easy to drag components from the tree, connect them to an appropriate topology, and display/configure their properties.
- The **OTD Editor** contains the source files that are used to create the Object Type Definitions (OTDs), the successor to 4.5's Event Type Definitions (ETDs).
- The **Collaboration Editors** allow you to edit the OTD-mediated routing and transformation using either XSLT (Extensible Stylesheet Language Transformations) or Java. Both editors are highly graphical; your simple drag-and-drop operations are translated into corresponding code. Three interaction modes (Standard, Advanced, and Source Code) are designed to accommodate varying styles of business rule designers. In addition, tools are provided to synchronize between graphical and nongraphical modes, as well to test and validate the business logic. Other features include: cut/copy/paste; auto-completion; syntax highlighting; and export/import.
- The **Deployment Editor** displays the logical components in the Project and candidate physical resources in an Environment to give you control over component mapping and deployment.

Documentation Resource

For more information about the various editors and canvases, see the *eGate Integrator User's Guide*.

2.3 Repository

Note: The Repository in 5.0.x subsumes the functions of Registry in 4.5.x.

The Repository is a storage unit serving all ICAN functionality: It stores and manages setup and configuration information, version information, software installations, authentication and authorization, and component information for eGate Projects. Authentication services can be provided either by the Repository or by an external directory service; ACLs are available for every component in the Repository, regardless of project.

Its two branches reflect the two branches displayed in the Environment Designer:

- **Projects** are managed as logical configurations designed to solve some or all of a business problem.
- **Environments** are managed in a directory structure reflecting each logical host (and the application servers and message servers it contains) and each external system (in terms of the information needed to communicate with the ICAN configuration).

This separation between logical configurations and physical resources facilitates change management and migration. The separation also makes it easy for the same component to be used in more than one Project, or to maintain multiple distinct eGate installations on the same physical machine.

The Repository includes a server for UDDI (Universal Description, Discovery, and Integration, an XML-based registry for Internet business listings and interoperability). UDDI uses HTTP and DNS (domain name system) protocols in conjunction with SOAP (Simple Object Access Protocol), to allow external applications to uniformly discover and register web services.

In addition, the Repository provides end-user features:

- **Version Control** provides check-out/check-in/ history information on every component accessible to the end user.
- **Impact Analysis** gives the user a way to test hypothetical situations— for example, to probe the ripple effect of deleting a component without doing any damage to the project. Reports on cross-project dependencies allow users to identify unused or unneeded components.

Documentation Resource

For more information, see the chapters “eGate Projects” and “Environments” in the *eGate Integrator User’s Guide*.

2.4 Web-Based Installation, Management, and Monitoring

Product files and updates can be uploaded to the Repository via the Web browser and downloaded to design-time or run-time clients using the browser’s FTP facility. End users can download documentation, or browse it online, with a few clicks on a Web page.

Through Web-based servlet plug-ins to the Monitor, ICAN 5.0.x has a uniform way to provide browser-based monitoring of all products in the suite, with views as broad as multiple projects on one monitor screen or as narrow as individual messages in mid-queue.

Documentation Resource

In the *eGate Integrator User’s Guide*, see the following chapters: “Enterprise Manager” (which contains information the Schema Runtime Environment and SRE Monitor); and “Web Services.”

2.5 J2EE Architecture

2.5.1 SeeBeyond Integration Server

The SeeBeyond Integration Server, a J2EE-compliant, component-based Java server platform, provides middleware services for security and state maintenance, data access and persistence, and transactions.

At run time, the SeeBeyond Integration Server is a container of business logic that offers the following:

- An execution environment with transaction services
- Distribution mechanisms
- Persistence management
- Load scaling
- Connectivity to externals

After the SeeBeyond Integration Server or other J2EE-compliant application server is installed on a Logical Host, it has the ability, through its connection to the Repository, to run any Project that has been activated by Enterprise Designer.

When running services for Collaboration tasks, the SeeBeyond Integration Server scales up or down automatically according to load. For example, it creates only a small number of Collaboration instances when message loads are light, and creates more instances (up to a user-configurable limit) if more messages put pressure on the queue.

Documentation Resource

For additional information, see the *eGate Integrator User's Guide* and the *eGate Integrator System Administration Guide*.

2.5.2 SeeBeyond JMS IQ Manager and Message Servers

The SeeBeyond JMS IQ Manager, and message servers in general, provide JMS-compliant services for queues and topics. They provide standard JMS (Java Message Service) features such as point-to-point messaging, or publish/subscribe messaging, guaranteed delivery, acknowledgments, and persistence. The **Server Selection** context menu includes several types of message servers that you can add to an Environment.

Documentation Resource

For additional information, see the *eGate Integrator JMS Reference Guide* and the *eGate API Kit Developer's Guide*.

2.6 Supported Operating Systems

eGate Integrator is available on the following operating systems:

- Windows 2000 SP3 and SP4, Windows XP SP1a, and Windows Server 2003
- HP NonStop Server, G06.22
- HP Tru64 V5.1A and V5.1B 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
- IBM z/OS V1.3 and V1.4 (currently supports Logical Host only)
- Red Hat Enterprise Linux AS 2.1 (Intel x86)
- Red Hat Linux 8 (Intel x86)
- Sun Solaris 8 and 9 with required patches
- SuSE Linux Enterprise Server 8 (Intel x86)
- Japanese Windows 2000 SP3 and SP4, Windows XP SP1a, and Windows Server 2003
- Japanese HP-UX 11.0, 11i (PA-RISC), and 11i v2.0 (11.23) with required patches and parameter changes
- Japanese IBM AIX 5.1L and 5.2 with required Maintenance level patches
- Japanese Sun Solaris 8 and 9 with required patches
- Korean Windows 2000 SP3 and SP4, Windows XP SP1a, and Windows Server 2003
- Korean HP-UX 11.0, 11i (PA-RISC), and 11i v2.0 (11.23) with required patches and parameter changes
- Korean IBM AIX 5.1L and 5.2 with required Maintenance level patches
- Korean Sun Solaris 8 and 9 with required patches

eGate also supports Simplified and Traditional Chinese (Big5/GB2312/UTF-8) data using the United States version of Windows with the Chinese locale setting.

For required service packs, patches, and parameter settings, see the **Readme.txt** file and the *SeeBeyond ICAN Suite Installation Guide*.

Documentation Resource

For a complete list of supported platforms, see the “Supported Operating Systems” section of the *SeeBeyond ICAN Suite Installation Guide*.

What's New in This Release

This chapter discusses eGate Integrator features that are new in eGate 5.0.5.

3.1 Architecture and Compatibility

- Several new operating systems are now supported, including:
 - ♦ IBM z/OS V1.3, and V1.4 (currently supports Logical Host only)
 - ♦ HP Tru64 5.1B
 - ♦ Japanese and Korean operating systems

eGate also supports Traditional and Simplified Chinese data using the United States version of Windows with the Chinese locale setting.

For complete details on operating system support, see [“Supported Operating Systems” on page 10](#). For complete IBM z/OS system requirement information, see [“IBM z/OS System Requirements”](#) in the *eGate Integrator Installation Guide*.

3.2 Repository

- The Repository now supports OpenLDAP Directory Server as well as Microsoft's Active Directory and Sun Microsystems's Sun Java System Directory Server. In addition, LDAPS (LDAP over SSL) is supported for encrypted communications between the Repository and all three supported directory servers.

Note: *Sun Java System Directory Server was formerly called Sun ONE Directory Server and (before that) iPlanet Directory Server.*

For information on configuring and working with the OpenLDAP Directory Server, see [“Integration Servers”](#) and [“Message Servers”](#) in the *eGate Integrator User's Guide* and [“LDAP Integration”](#) in the *eGate Integrator System Administration Guide*.

3.3 Enterprise Designer

General improvements to Enterprise Designer include:

- Performance has been improved in validation, building, and packaging, reducing total activation time by up to 50% for large or complex projects.
- Project deployment and activation time is markedly reduced, particularly for the latest versions of certain components such as Oracle eWays, SAP ALE eWays, SQL Server eWays, BATCH eWays, and XSD OTDs.
- In Project Explorer and related dialog boxes, the default **SeeBeyond** folder now has a unique icon to distinguish it from all other projects.
- The **Undo Checkout** option is now available for all eGate components except WSDL OTDs.
- In Environment Explorer, the context menu items under **New** (that is, the list of external systems) are now sorted alphabetically.
- On the Integration Server Properties window, the Default Web Server page now has two new properties for configuring the Secure Sockets Layer (SSL). The new properties are:
 - ♦ SSL Client Authentication Required
 - ♦ SSL Keystore Password

To further support SSL configuration, the WebService External System Properties window has an additional property, **protocol**, that can be set to either "HTTP" or "HTTPS".

- The WebService External System Properties window now has new properties for configuring access to external Web Services that require proxy server authentication. The new properties are:
 - ♦ Proxy Host
 - ♦ Proxy Port
 - ♦ Proxy User Name
 - ♦ Proxy User Password
- To support connections to LDAP servers that store user and role information in a hierarchical structure, new properties were added to the LDAP server Properties pages on the Integration Server Properties window and on the JMS IQ Manager Properties window. The new properties are:
 - ♦ SearchRolesSubTree
 - ♦ SearchUsersSubTree
 - ♦ SearchGroupSubTree (for Integration Server Properties only)

In addition to performance improvements mentioned above, other improvements to project deployment and activation include:

- A prompt for auto-deactivation is now issued before deleting a Project that has one or more active deployment profiles. (All active deployment profiles must be deactivated before the project can be deleted.)
- In the Deployment Editor, the new **Automap** feature automatically assigns components to their matching containers when there is a one-to-one correspondence between them. This feature is supported by all eGate-specific servers (such as the Integration Server for Collaboration or BP services, and the JMS IQ Manager for queues and topics) and by eWays for many external systems.

The Java Collaboration Editor has had the following features added or improved:

- Objects in the canvas of the Business Rules Designer now have tooltips, and the Business Rules Designer toolbar has a more user-friendly layout for better access to methods and operators.
- The Class Browser now displays Javadoc for a selected class, method, or field.
- The properties of an existing method or variable in a Collaboration can now be edited by right-clicking the method or variable, which allows you to display the Properties window.
- New rules can be added to the start of a block (such as a **then** or **else** stanza) by selecting the parent node.
- Automatic type conversion: When you map a data path between OTD nodes, variables, or fields of different data types, if a cast is appropriate, the editor prompts you to have it added automatically. If a cast is not appropriate, and if a conversion method exists for that pair of data types, a dialog box allows you to specify certain properties associated with the conversion. The conversions currently supported are a variety of combinations converting between strings and numbers.
- New OTDs can now be added to an existing Collaboration by right-clicking the Collaboration in Project Explorer to display the Collaboration Definition Properties window.
- The new **Find** feature provides the ability to search for OTD nodes and variables in the scope of a selected business rule.
- Dragging and dropping tree nodes and method arguments within the Business Rules Designer now automatically creates canvas objects at the drop location.
- When input and output values are directly mapped in the Business Rules Designer and the destination node is repeating or optional, the repeating/optional element in which the field is set is now specified by an undefined index. This allows you to set a field in a specific element by defining the index.

The Java Collaboration Tester has had the following features added or improved:

- Testing of both marshalable and unmarshalable OTDs is now supported.
- Editing capabilities have been improved for optional and repeating nodes.

- Java collaborations can be debugged within the tester when it is used in combination with the Java Source Editor. This allows line-by-line debugging of the Java code.

OTDs and the OTD Editor have had the following features added or improved:

- The Properties pane for user-defined OTDs includes four new properties for enhanced character encoding. The new properties are **Antecoding**, **Decoding**, **Encoding**, and **Postcoding**.
- The extended language option now supports additional character sets for Japanese, Korean, and Chinese locales.
- The new **maxOccurs** parameter for repeating nodes in user-defined OTDs places a limit on the number of repetitions allowed for each node. The parameter appears in the Properties pane of the OTD Editor.
- The context menu for OTDs now supports version-control operations such as **Undo Checkout**, **Make Latest**, and **Retrieve Previous Version**.
- The **Save As** command now allows saving an OTD to a different project.

3.4 Logical Host

- The SeeBeyond Integration Server and JMS IQ Manager now support OpenLDAP Directory Server in addition to Microsoft's Active Directory and Sun Microsystem's Sun Java System Directory Server.
- JMS queues and topics are now bound to the Java Naming and Directory Interface (JNDI) context.

3.5 Documentation

The documentation has been improved throughout, most notably with the following changes:

- *eGate Integrator User's Guide*
 - ♦ Chapter 4, "Enterprise Designer", now provides information on the new version control features for OTDs.
 - ♦ Chapter 6, "Object Type Definitions", now includes information on the enhancements to data encoding for international versions and provides instructions on working with the new features.
 - ♦ Chapter 7, "Collaboration Definitions (Java)", was updated with changes to the Collaboration Editor. This chapter also describes the new Collaboration Tester and additional predefined Java methods.
 - ♦ Chapter 8, "Collaboration Definitions (XSLT)" was updated with changes to the Collaboration Editor user interface.

- ♦ Chapter 9, “Environments”, was updated with changes to the menu structure, and now includes sections describing the new SSL configuration properties and support for OpenLDAP.
- ♦ Chapter 10, “Project Deployment”, now provides information and instructions for the new AutoMap feature.
- *SeeBeyond ICAN Suite Installation Guide*
 - ♦ Operating system support information was updated to include IBM z/OS V1.3 and V1.4 (on Logical Host only), HP Tru64 5.1B, and Japanese and Korean operating system support and to include information about support for Traditional and Simplified Chinese data.
 - ♦ Chapter 7, “Installation Instructions for ESRs”, now has a section on verifying ESR installation.
 - ♦ Chapter 10, “Troubleshooting”, now includes a section dealing with difficulties connecting to the Repository from Enterprise Designer. This information was previously included in the installation instructions.
- *eGate Integrator System Administration Guide*
 - ♦ Instructions for configuring Lightweight Directory Access Protocol (LDAP) servers are now in a separate chapter named “LDAP Integration”.
 - ♦ Instructions for working with the Schema Run-time Environment (SRE) Monitor were moved from the *eGate Integrator User's Guide* to the *eGate Integrator System Administration Guide*.
 - ♦ The section “Configuring SSL Support” in Chapter 10, “ICAN Security Features”, now includes more comprehensive information on working with and configuring SSL for authentication.